



Part of the ARKEMA group of companies.

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# **Important General Safety Information:**

- Keep all products and associated equipment out of sight and reach of children.
- Read all instructions and product safety information carefully before use.
- All chemical products have dedicated Safety Data Sheets which may be downloaded free from the Sovereign website. It is recommended that you access and read this information before using the relevant product.
- Ensure that all personnel working with any product have the relevant training, experience and qualifications to do so and, if appropriate, have suitable supervision.
- Never mix different products, unless specifically directed to do so in the instructions.
- When cleaning up after use, always ensure you follow the recommended procedure.
- Always wear the appropriate Personal Protective Equipment for the product.
- In case of injury, ingestion or chemical burns contact a medical professional immediately.
- It is recommended that you neither eat, drink or smoke whilst using any product.
- If you have any additional questions or queries relating to any Sovereign Chemicals product, please do not hesitate to contact the dedicated Technical Team on 01229 870 800. The advice the Technical Team provides is current, authoritative and free.

# **About Sovereign Chemicals**

Sovereign Chemicals Limited has been researching, developing and manufacturing a market-leading range of over 800 remedial treatments and general building products since 1965.

Each one combines exacting formulation and premium level specifications with an unrivalled technical support service. In addition to being in receipt of the prestigious Royal Warrant, Sovereign has also been accredited to BS EN ISO 9001 for its manufacturing systems and product quality, and was the first company in the damp-proofing sector to achieve BSI approval for its entire range.

Sovereign is committed to continual improvement of its products and service levels and works in close partnership with customers to constantly develop innovative new solutions and technologies. As part of this process, the Company has become a leader in the promotion of environmentally responsible technologies; where possible using recycled raw materials to cut waste and water-dilutable concentrates to reduce transport volumes and the carbon footprint.

Comprehensive information on Sovereign Chemicals' extensive range of innovative building and construction products may be found by visiting the Company's website, www.sovchem.co.uk



#### About Sovereign Chemicals, continued

# The Arkema Group

In 2015 Sovereign became part of Arkema; a global leader in the manufacture of industrial coatings, construction chemicals and adhesives with an exceptional record for delivering innovative client-centred solutions. Membership of the Group offers Sovereign access to substantial financial and technological resources and the opportunity to extend its offering to new markets.

- Global Leader in Construction Products: Operating in more than 40 countries worldwide, Arkema is France's leading chemicals producer, manufacturing a range of top global brands ranging from adhesives to coatings and composites. The Group employs in excess of 19,000 employees at 140 different sites, generating an annual revenue of €7.6 billion.
- Research and Development: Sovereign already has a well-deserved reputation as an international leader in the research and development of highly effective construction and remediation products. However, in joining the Group, the Company now has access to an unrivalled global R&D provision through Arkema's network of THIRTEEN dedicated R&D centres around the globe.
- International Markets: Sovereign now has access to expanding international markets through Arkema's dominance in many regions across the globe. The strong foothold that the Parent Company has will enable Sovereign to expand and diversify internationally; safeguarding British jobs and helping make the development of highly specialised products viable through economies of scale to the benefit of the UK renovation and remediation industry.
- **Huge Resources:** As part of the multinational Arkema chemicals business, Sovereign now has access to the large-scale resources essential to commit to groundbreaking product developments within its key sectors; promising significant advances in building, waterproofing and remediation products for the construction sector.

#### About Sovereign Chemicals, continued

### Sovereign Added Value

In addition to Sovereign's range of market leading products for building and renovation, the Company provides a comprehensive range of 'added value' support services, that play a key role in ensuring the Sovereign solution represents the Gold Standard in Building Products.

- Comprehensive FREE Technical Support: If you have any questions or queries on the performance, use and application of any Sovereign product, our highly experienced and knowledgable Technical Team are just a phone call or email away.
- FREE Specification Service: Our extensive network of Technical Field personnel are available for site visits to advise and help identify the most effective Sovereign solution to your renovation and remediation problems. They are backed-up by dedicated online information such as our authoritative Basement2Rooms.co.uk cellar conversion advice site.

## The Sovereign Range



Sovereign's extensive range of specialist condensation products include preventative solutions, such as highly effective passive and active ventilation systems, as well as mould treatments and high-tech coatings that resist the development of condensation and mould on treated surfaces.



Damp proofing encompasses treatments for above ground damp issues in buildings, such as rainwater penetration and rising damp. Sovereign damp-proofing products include ranges of Water Repellents and Damp Proof Course treatments supplied in either liquid or cream formulations.



Physical barriers to water ingress. Structural waterproofing products include Sovereign's industry-leading K11 Tanking System and 'SovDrain' CDM System. This extensive package of specialist barrier products provide highly effective solutions to serious damp problems, above or below ground.

#### About Sovereign Chemicals, continued

- FREE Product Information: Sovereign publishes a comprehensive package of brochures, leaflets, instructions and technical datasheets; both in printed form and online; for its products, providing specifiers and installers with all the information they require to get the most out of Sovereign's products.
- Seminars and Training Days: Sovereign conducts an extensive range of seminars for specifiers and installers covering key issues, such as internal damp, structural waterproofing and combatting wood rot and infestation.
- Market-Leading Training: In addition to its popular programme of free seminars, Sovereign also provides accredited training for a number of its flagship products. Upon accreditation, installers are able to provide fully independent product guarantees of up to 30 years helping maximise their own business opportunities.
- Investing in Quality: Detailed fully overleaf, Sovereign holds an extensive array of the most demanding industry quality accreditations, including the highly prestigious Queen's Royal Warrant. The Company is also a member of the key industry associations, providing access to cutting edge research and ensuring Sovereign operates to the latest standards.



Sovereign supplies a comprehensive range of high quality general building products and chemicals. Products include a wide variety of paints, admixtures, surface coatings, sealants, silicones and specialist adhesives.



Sovereign manufactures a broad spectrum of treatment solutions for the protection and preservation of timber. These well-proven treatments control and eradicate wood boring insects and the fungi that cause Wet and Dry Rot.



A broad spectrum of quality levelling compounds, grouts, powdered and paste adhesives, surface coatings and shower and wetroom sealing kits manufactured and marketed by Sovereign to meet the most demanding flooring and tiling applications.

# **Quality Built-In**

Sovereign holds a comprehensive range of accreditations and approvals for its products, helping ensure that when you choose Sovereign you choose QUALITY. The Company is also a leading member of the Construction Industry's key professional bodies.



**The Royal Warrant:** The coveted Queen's Royal Warrant was awarded in 1987 in recognition of the great success with which Sovereign building products had been used at Royal residences.



**ISO 9001:** The Company is fully BS EN ISO 9001 accredited for its manufacturing systems and product quality processes.



**BBA Accredited:** Many of Sovereign's key products have received prestigious British Board of Agrément approval, requiring them to pass the most stringent of testing regimes.



**BSI Damp Proofing:** Sovereign's entire range of Damp Proofing products are accredited to the demanding BS 6576 standard. The Company was the first in the UK to achieve this impressive blanket approval.



**BDMA:** The British Damage Management Association is committed to raising industry standards, providing trusted accreditation for professional practitioners and facilitating recognition of specialist services in the recovery and restoration sector.



**PCA:** The Property Care Association exists to represent specialists who can be trusted to resolve a wide range of key problems affecting buildings, including damp issues, condensation, timber decay or insect attack, dampness and water penetration.



**CPD Certified:** The CPD was established in 1996 and is now the industry's leading independent 'Continuing, Professional, Development' accreditation institution. The CPD Certification Service provides support, advice and independent accreditation for Sovereign's training.



**RIBA:** Sovereign is a member of the Royal Institute of British Architects, founded for the advancement of architecture under its charter granted in 1837. Membership provides access to the latest building research carried out by this key body.



**CE Marking:** Where European Technical Standards exist for a given product, Sovereign meet all the test requirements. This can be seen as CE Marking on the product and its corresponding data sheet. Validation of CE Marking is conducted by external test laboratories and Registered Bodies.



# **Bricklaying Products**

Sovereign has developed and manufactures an extensive range of products designed to deliver exceptional quality, excellent value and a superb finish for product specifiers and the bricklaying professional.

- Mortamix: Sovereign Mortamix is a quality plasticiser for use in mortars and renders. The addition of Mortamix improves the workability, reduces water requirement and precludes the need for lime
- Powder Mortar Plasticiser: An air-entraining admixture to improve the workability of cement mixes such as mortar and render. It is available as either a free flowing powder or in a pail of pre-weighed sachets for ease of use.
- Remtox Bonding Agent: Extensively used in the building industry for many years in the modification of cementitious systems. Will not re-emulsify in damp conditions and should therefore be specified for all external situations. Contains anti-foam to help prevent excessive air-entrainment and an antioxidant to give extended durability.
- Admix Concentrate: For over 30 years Admix has been the choice of the professional. Being based on Vinsol Resin and not synthetic resins Admix Concentrate gives mortars excellent working properties.
- Supa Admix Concentrate: Supa Concentrate takes trusted Admix technology further to produce a product that is easier to use, with an integral dosing measure, is easier to transport being only one litre in size, yet giving up to 70 mixes per bottle.
- Antifreeze and Rapid Setter: A combination of calcium chloride and aluminium chloride and is designed to increase the hydration rate of cement in mortars, concrete and renders. Sovereign Antifreeze and Rapid Setter is particularly used in low temperature situations for bricklaying, rendering, blockwork and mortars.
- Mortex, Redtex and Browntex: Sovereign Mortex (black), Redtex (red) and Browntex (brown) are liquid pigment dispersion cement colourants for addition to mortar and concrete mixes that will give a permanent colour.
- Descaler Concentrate: A highly effective acid cleaning solution for tools and equipment. Mortar splashes on brickwork can also be removed to give a neater appearance.
- Waterproofer: A plasticising and waterproofing additive for mortar and external renders. The use of Sovereign Waterproofer improves the workability of sand/cement without the addition of lime. Prevents water separation over time and provides a lovely smooth mix. Particularly suitable for use when pebble dashing.
- Cem-Tech: A biodegradable, low hazard cleaner for the removal of cement stains and splashes from tools, equipment, brickwork, paths and patios. It can also be used for general cleaning of masonry and acid etching of concrete.

# **Mortamix**

Sovereign Mortamix is a quality plasticiser for use in mortars and renders. The addition of Mortamix improves the workability, reduces water requirement and precludes the need for lime.

Form:	Liquid Concentrate.
Pack Sizes:	5 and 25 litres.
Content:	Synthetic surfactant and fumarated rosin.
Approvals:	Sovereign Mortamix is CE marked and has been independently tested to and passes EN 934 – 3: Admixtures for masonry mortar.
Properties:	Sovereign Mortamix is an air-entraining admixture that improves the workability of mortars. Microscopic air bubbles cause the mortar to become 'lubricated' so making the mix plastic and workable. The added advantage of air-entraining admixtures is that they reduce the amount of water required so improving the cure of a mortar. They also help improve protection of the mortar from frost damage both during laying and for the life of the mortar.

Usage: Sovereign Mortamix can be added direct to the mix. The exact quantity of Mortamix required would depend on mix size; mix ratio and the sand being used. As a guide 250 to 500ml will be sufficient for a mix containing 50kg of cement. Coverage: A 25 litre tin will be sufficient for up to 100 mixes. Caution should be taken not to overdose or over-mix the mortar, as this will have a detrimental effect.

**Dilution:** Can be either added straight in to the mix or a gauging solution can be made by diluting 1 litre of Mortamix with 20 litres of water.

**Shelf Life:** A minimum of 12 months in unopened containers stored between  $+5^{\circ}\text{C}$  and  $+25^{\circ}\text{C}$ .









# **Powder Mortar Plasticiser**

Powder Mortar Plasticiser (PMP) is an air-entraining admixture to improve the workability of cement mixes such as mortar and render. It is available as either a free flowing powder or in a pail of pre-weighed sachets for ease of use.

Form:	Powder.
Pack Size:	25kg loose powder and 250 x 21g sachets.
Properties:	Sovereign PMP is an air-entraining admixture that improves the workability of mortars. Microscopic air bubbles cause the mortar to become 'lubricated' so making the mix plastic and workable. The added advantage of air-entraining admixtures is that they reduce the amount of water required so improving the cure of a mortar. They also protect the mortar from frost damage both during laying and for the life of the mortar.
	Sovereign PMP is CE marked and has been independently tested to and passes EN 934 – 3: Admixtures for masonry mortar.

Usage/Preparation: Powder Mortar Plasticiser is normally added to the mixing drum or pile in the case of hand mixing. The use of the pre-measured sachets provides controlled dosage and minimises waste and the possibility of overdosing.

Mixing should be undertaken in the normal manner ensuring an efficient mixing action.

If hand mixing is to be used the mix should be 'turned over' to achieve best plasticising effect.

**Coverage:** PMP should be added at the rate of 1 sachet per bag of cement, or if using the 25kg pails then add 21 grams per 50kg of cement.

This dosage may be adjusted for some sand gradings. Trial mixes are suggested to establish the optimum dosage. Whilst it is undesirable to exceed the recommended dosage, The Sovereign PMP formulation has air-limiting elements, which control the entrained air minimising the effects of overdosing.

**Storage:** A minimum of 12 months in unopened containers stored between +5°C and +30°C. Keep powder dry after opening, as dampness will cause coagulation.







# **Remtox Bonding Agent**

Remtox Bonding Agent is a dispersion polymer of carboxylated styrene butadiene copolymer. It has been extensively used in the building industry for many years in the modification of cementitious systems.

Unlike PVA when used in damp areas Remtox Bonding Agent will not re-emulsify and should therefore be specified for all external situations. Remtox Bonding Agent contains anti-foam to help prevent excessive air-entrainment and an antioxidant to give extended durability.

Form:	Liquid.
Pack Size:	25kg.
Colour(s):	Milky White.
Properties:	Can be used in both renders and floor screeds which then show greatly improved adhesion to the substrate, reduced cracking and surface dusting. Furthermore, resistance to water and the passage of salts is greatly improved making it ideal for external use. Remtox Bonding Agent can also be used as a primer and sealer to improve inter-coat adhesion between successive layers.

#### Uses:

When used in concrete repair the addition of Remtox Bonding Agent greatly enhances the resistance of the concrete to carbonation and protects steel from corrosion. Its use in screeds allows work to be carried out in much thinner sections whilst maintaining performance levels. Incorporating Remtox Bonding Agent into cement-based systems gives numerous advantages, chiefly among these are:

- Greatly improved adhesion to a wide range of substrates including dense concrete, glass, steel, tiles, etc.
- Mixes may be applied in much thinner sections.
- Excellent resistance to water and protection from carbonation
- A high level of resistance to salt permeation.
- Much improved toughness and flexibility
- Reduced surface dusting of concrete
- Greatly improved resistance to many chemicals.
- Reduced water/cement ratio for equivalent workability.
- Improved frost resistance.
- Reduction in cracking and shrinkage.
- Corrosion protection of steel.

#### Primer Systems:

Remtox Bonding Agent can be used to control the suction of highly porous substrates and prevent dusting or as a bonding coat for use over glass, tiles, steel, concrete and brick or timber.

Sealer Coat: One part Remtox Bonding Agent to five parts water. Apply the sealer to porous backgrounds to prevent dusting or reduce porosity. Render can then be applied to the sealer coat as long as Remtox Bonding Agent is incorporated into the mix

Primer Coat: One part Remtox Bonding Agent to three parts water. Apply to the rear and edges of timber before fitting and tiling to reduce moisture ingress. Do not prime the face to be tiled.

Bonding Coat: Two parts Remtox Bonding Agent to two parts water to three parts OPC. Mix the water and Remtox Bonding Agent and then slowly add the cement until a creamy mix is obtained. This can then be applied to surfaces with a brush to vastly improve the adhesion of subsequent coats. Render, screed etc, must be applied whilst the bonding coat is still tacky i.e. within 20 minutes. If the bonding does dry then reapply more before continuing. This mix should have a pot life of at least 1 hour.

All tools and equipment used must be cleaned immediately after use, as the bonding coat is extremely difficult to remove once dry. This bonding coat is also ideal for use in tiling onto difficult substrates such as glazed tiles, vinyl tiles, glass and metal. Again the adhesive must be applied whilst the bonding coat is still tacky.

Remtox Bonding Agent can also be added to cement based adhesive and grout to improve adhesion and wear properties. Dilute the Bonding Agent 1:3 with water and use as the gauging solution.

#### **Remtox Bonding Agent, continued**

#### Concrete Repairs:

For small patch repairs of concrete and steel reinforced concrete using Remtox Bonding Agent will provide:

- Reduced thermal stresses because the coefficient of thermal expansion is similar to that of unmodified concrete
- Protection of background concrete from carbonation.
- Improved durability.
- Improved adhesion to the background.
- Corrosion protection of the steel.

Prepare any unsound concrete to give at least 5mm depth of repair (10mm over reinforcing). Wire brushing or shot blasting may be necessary to remove all signs of corrosion. Where corrosion is excessive the opinion of a structural engineer should be sought.

Repair Mix: Remtox Bonding Agent 0.2 parts to moist sand 2.5 parts to 1 part OPC. This is suitable for most repairs, however where the final covering of steel is less than 15mm or there are known chlorides in the concrete the amount of Remtox Bonding Agent should be increased to 0.3 parts. This level should also be used in extremely exposed conditions

#### Renders:

External renderings commonly provide difficulties and failure rates can be high. Problems associated with external render are usually caused by poor bond to the background, cracking and low durability.

Incorporating Remtox Bonding Agent in to the system, both as a bonding coat and in the render will overcome these problems. As with all coating substrate preparation is key. Clean back the substrate to a sound background. Any loose mortar should be raked out and re-pointed.

Screeds	6 - 12mm	12 - 25mm	Up to 40mm
Cement	50kg	50kg	50kg
Sharp Sand	125kg	150kg	150kg
Bonding Agent	10kg	8kg	6kg
Yield	0.12m <sup>3</sup>	0.12m <sup>3</sup>	0.12m <sup>3</sup>

Spatterdash Mix: One part Remtox Bonding Agent to two parts coarse sand to one part OPC. Mix well and apply by dashing and ensure complete coverage to a thickness of 3mm and allow to dry. This mix can also be used for stippling.

External Render: One to three parts RBA to three to four parts coarse sand to three to four parts OPC. Scratch the first coat and allow to dry. Subsequent coats should be thinner/weaker.

#### Screeds:

Incorporating Remtox Bonding Agent into a floor screed will give enhanced qualities to the floor such as adhesion, flexural strength, water and abrasion resistance and allowing thinner sections to be laid.

When laying screeds the correct surface preparation is absolutely vital to success. All surface contamination must be removed such as paint, oil or grease. Mechanical preparation of the surface is ideal using such techniques as shot blasting, scabbling and planning which should expose the aggregate and leave a stable surface. One point worth mentioning is that these techniques can sometimes leave dust on the surface. If this is the case this should be power washed off.

Apply a bonding coat and lay the screed whilst this is still tacky. The quantity of Remtox Bonding Agent to add to the screed is dependant upon the thickness to be laid and the mix design. The following table gives some guidance.

A screeding bar should be used to spread the mixed materials and produce a well-compacted, level surface. Final smoothing can be achieved using a float. Allow at least 24 hours and preferably 3 days before allowing traffic. In harsh conditions steps should be taken to prevent rapid drying.

Topping	Granite 12 - 25mm	Granite >25mm	Fine Concrete 25mm
Cement	50kg	50kg	50kg
Sharp Sand	75kg	150kg	100kg
Granite Chip	75kg	75kg	
Pea Shingle			100kg
Bonding Agen	t 10kg	6kg	6kg
Yield	0.12m <sup>3</sup>	0.12m <sup>3</sup>	0.12m <sup>3</sup>









# **Admix Concentrate**

Sovereign Admix Concentrate has for over 30 years been the choice of the professional. Being based on Vinsol Resin and not synthetic resins it gives mortars excellent working properties.

Form:	Liquid Concentrate.
Pack Sizes:	5, 25 and 200 litres.
Content:	Vinsol Resin.
Properties:	Sovereign Admix is an air-entraining admixture that improves the workability of mortars. Microscopic air bubbles cause the mortar to become 'lubricated' so making the mix plastic and workable. The added advantage of air-entraining admixtures is that they reduce the amount of water required so improving the cure of a mortar. They also improve protection of the mortar from frost damage both during laying and for the life of the mortar. Sovereign Admix Concentrate has been independently tested to and passes EN 934-3: Admixtures for masonry mortar.

**Dilution:** Can be either added straight into the mix or a gauging solution can be made by diluting 1 litre of Admix with 40 litres of water.

Usage: Sovereign Admix Concentrate can be added direct to the mix. The exact quantity of Admix required would depend on mix size; mix ratio and the sand being used. As a guide 125-250ml will be sufficient for a mix containing 50kg of cement

Coverage: A 25 litre tin will be sufficient for up to 200 mixes. Caution should be taken not to overdose the mix, as this will have a detrimental effect. Similarly do not over-mix as this will introduce excessive air resulting in a weak mix.











# **Supa Admix Concentrate**

For over 30 years generations of builders have used and trusted Sovereign Admix and Admix Concentrate. Because it's based on Vinsol Resin rather than synthetic resins it gives mortars excellent working properties. The new Supa Admix Concentrate takes this trusted technology further to produce a product that is easier to use, with an integral dosing measure, is easier to transport being only one litre in size, yet giving up to 70 mixes per bottle.

Form:	Super Concentrated Liquid.
Pack Size:	1 litre.
Content:	Vinsol Resin.
Properties:	Sovereign Supa Admix is an air-entraining admixture that improves the workability of mortars. Microscopic air bubbles cause the mortar to become 'lubricated' so making the mix plastic and workable. The added advantage of air-entraining admixtures is that they reduce the amount of water required so improving the cure of a mortar. They also improve protection of the mortar from frost damage both during laying and for the life of the mortar.

Usage: Sovereign Supa Admix Concentrate can be added direct to the mix. The measuring cup on the top of the bottle allows accurate dosing to be carried out. First unscrew the lid and then gently squeeze the bottle. Supa Admix will then begin to fill the measure. Stop squeezing when the Supa Admix reaches the required level. The Supa Admix can now be poured in to the mix, without more product escaping. The exact quantity of Supa Admix required would depend on mix size; mix ratio and the sand being used. As a guide 15 to 25ml will be sufficient for a mix containing 50kg of cement.

**Dilution:** Can be either added straight into the mix or a gauging solution can be made by diluting the Supa Admix in a bucket of water. Add 15 to 25ml of the Supa Admix into a bucket containing 10 to 20 litres of water.

Coverage: A 1 litre bottle will be sufficient for up to 70 mixes. Caution should be taken not to overdose the mix, as this will have a detrimental effect.

**Shelf Life:** Minimum 12 months unopened if stored between 5 and 30°C.











# **Antifreeze and Rapid Setter**

Sovereign Antifreeze and Rapid Setter is a combination of calcium chloride and aluminium chloride and is designed to increase the hydration of cement in mortars, concrete and renders. Sovereign Antifreeze and Rapid Setter is particularly used in low temperature situations for bricklaying, rendering, blockwork and mortars.

Form:	Liquid Concentrate.
Pack Sizes:	5 or 20 litres.
Colour(s):	Blue.
Content:	Calcium and Aluminium Chloride.
Properties:	May be used with Ordinary Portland and Rapid Hardening Portland Cement.  Sovereign Antifreeze and Rapid Setter can reduce the setting times of cementitious mixes by up to 50%, depending upon the mix design and site temperature.

**Usage/Preparation:** Mix well before use. Mix with gauging water and add gauging solution to mortar/concrete as required.

For Rapid Hardening in a 1:3 (cement:sand) mix per 100kg cement.

Additional Rate (L)	Set Time	
2	8 hours	
5	6 hours	
10	2 hours	

For Cold Weather in a 1:3 (cement:sand) floor screed mix.

Temperature	Antifreeze: Water	
0 to 4°C	1:30	
-4°C to -8°C	1:20	
-8°C to -12°C	1:8	

All the materials used for mortar and rendering must be free from ice. When calculating ratios it is important to remember that the expected temperature after use should be taken into account, not the existing temperature (e.g. overnight frost can be several degrees lower). After placing the concrete/mortar or rendering we recommend covering the finished work to conserve the heat generated during cure.

**General:** Not recommended for use with High Alumina Cement, Sulphate Resisting Cement or Extra Rapid Hardening Cement.

Sovereign Antifreeze and Rapid Setter cannot and should not be used with steel or other metalwork reinforcements, as corrosion of the metal will be increased.

Do not use in pre-stressed concrete or concrete to be steam cured.

**Clean up:** Tools should be washed with clean water immediately after use. Cured mortar or cement may be removed with Sovereign Descaler.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.











# Mortex, Redtex and Browntex

Sovereign Mortex (black), Redtex (red) and Browntex (brown) are liquid pigment dispersion cement colourants for addition to mortar and concrete mixes that will give a permanent colour.

Form:	Liquid Concentrate.
Pack Sizes:	1 and 5 litres.
Colour(s):	Black, Red and Brown.
Content:	Blend of pigments, surfactants and stabilisers.
Properties:	The use of Sovereign Mortex, Redtex or Browntex will give a permanent colour to cement based mixes. The colour will not fade with time as the pigment becomes intricately bound in to the cured matrix, so ensuring that the colour cannot leach out. The pigments used are also not affected by light, acid, alkali and solvent attack making them suitable for use in areas such as garage forecourts and filling stations.

Usage/Preparation: It is advised that a trial mix is produced and allowed to cure (pigments appear darker when wet) to determine the exact shade required. The level of pigment added should remain constant as should the source and type of aggregate.

Sovereign cement colours should be added directly to the mix and not diluted prior to use. Add the colour to the dry cement/aggregate and mix well before adding water to the desired consistency. It must be remembered that the water content of the mix should be reduced by the same quantity.

General: The addition rate can be varied to obtain varying levels of shade within a series of mixes to give a more natural effect, for instance, to an area of paving. Variation in colour shades can also be achieved by using grey or white cement, by using different coloured sands, and by the amount of water added to the mix.

Coverage: Will depend upon colour required but as a guide we would recommend an addition rate of 10kg of pigment to 50kg of cement.









# **Descaler Concentrate**

Sovereign Descaler Concentrate is a highly effective acid cleaning solution for removal of cement from tools and equipment. Mortar splashes on brickwork can be removed to give a neater appearance.

Form:	Liquid Concentrate.
Pack Sizes:	1 and 5 litres.
Colour(s):	Clear.
Content:	24% Hydrochloric acid.
Properties:	Descaler can be used for the removal of cement, mortar, lime and limescale from building equipment such as barrows, mixers, scaffolding and tools. It can be used to clean brickwork and is ideal for preparing concrete floors prior to the application of levelling compounds, floor paint etc.

Preparation: Dilute Descaler prior to use by adding the concentrate to water and not the other way round. For cleaning equipment a recommended dilution is 1 part Descaler to 4 parts water. For acid etching of floors dilute the Descaler in the ratio of 1 part Descaler to 10 parts water. Apply to the area to be cleaned and leave for 2 hours then rinse off with plenty of clean water.

General: Descaler will give off furnes that can affect metallic finishes. Always use in well ventilated areas and wash off treated areas thoroughly with water after use. Do not apply and leave in enclosed areas overnight.

Most natural stones (e.g. marble) contain calcium and Descaler will therefore attack these surfaces.









# Waterproofer

Sovereign Waterproofer is a plasticising and waterproofing additive for mortar and external renders. The use of Sovereign Waterproofer improves the workability of sand/cement without the addition of lime. Sovereign Waterproofer prevents water separation over time and provides a lovely smooth mix. Particularly suitable for use when pebble dashing.

Form: Concentrated Viscous Liquid. Pack Size: 5 and 25 litre Colour(s): Pink Content: Blend of silicate and fatty acid. Properties: Sovereign Waterproofer gives excellent workability to both mortars and renders. Once cured the cement mix will have a much reduced porosity leading to an extended service life. When building up layers of render the addition of Sovereign Waterproofer will reduce the suction of the initial coat reducing the likelihood of the top coat cracking due to flash drying. This is particularly useful when pebble dashing as the surface remains 'wetter' for longer allowing more time for the aggregate to be placed. Waterproofer can be used with other admixtures, e.g. rapid hardeners, but they should always be added separately, not together. The dilution factors should be adjusted where necessary.

Usage/Preparation: Waterproofer should be diluted with water 1:30 and added to the mix, until the right consistency is obtained. The easiest way to dilute waterproofer is to slowly add water to the waterproofer, and not the other way round. If more than one admix is being used e.g. Waterproofer and Rapid Setter in the same mix then the dilution rate for each should be halved i.e. dilute the Waterproofer 1:15 then add quantities of each gauging solution separately, mixing for a couple of minutes between each addition, until the desired characteristics are achieved.

#### Features:

- Water requirement reduced.
- Slight retardation effect.
- Entrains air.
- Forms tight render backing coats.

#### Benefits:

- Less shrinkage.
- Remains usable longer and allows full cure.
- Easier to work and gives better freeze/thaw stability.
- More durability.
- Prevents flash suction.

This is a virtually fault free product. Only when added in excessive quantities do problems arise. In these circumstances a very aerated and crumbly mix is produced.

#### General:

Ensure that all sand used is washed and guaranteed free from salts. Cement must be fresh and free flowing. Lumpiness of the cement is an indication of poor storage or age and must never be used.

Cement must be of type CEM 1 OPC, standard, sulphate resistant and rapid setting versions are suitable. Cements of type CEM 2 to CEM 5 and Masonry Cement must not be

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened. If the product is inadvertently allowed to become frozen then some separation/solidification may be seen. Gentle warming to room temperature and mixing will reverse this separation, making the product usable.









# Cem-Tech

Sovereign Cem-Tech is a biodegradable, low hazard cleaner for the removal of cement stains and splashes from tools, equipment, brickwork, paths and patios. It can also be used for general cleaning of masonry and acid etching of concrete.

Form:	Liquid Concentrate.
Pack Sizes:	5 and 25 litres.
Colour(s):	Clear.
Content:	Organic acid and surfactant.
Properties:	The blend of acids and surfactants dissolve and help remove cement stains.  Safer to use than traditional hydrochloric acid based cleaners whilst still being highly effective.

**Preparation:** Always wet down the surface to be cleaned first, do not apply Cem-Tech on to a dry surface.

- For cured cement on tools etc first knock off large lumps of mortar then wet the equipment with water and soak in Cem-Tech for 2 – 4 hours. Thoroughly rinse off and for heavy deposits repeat as necessary.
- Stains on walls and for acid etching concrete dilute 1:1 with water.
- For lighter or fresh, uncured stains dilute Cem-Tech 1:3 parts water.
- When used for general cleaning dilute as required up to 1:10 with water.

Always rinse off with copious amounts of clean water and repeat as necessary.

#### Limitations:

Do not use on coloured concrete, limestone, marble and other carboniferous stonework. Do not use on soft metals such as lead, copper etc. Always test on a small inconspicuous area before use on flags, pavers, stone walls and floors.

#### Coverage:

Coverage is dependent on method of use. For example when used for acid etching concrete the coverage is around 6m<sup>2</sup> per litre. For path cleaning the coverage will be around 12m<sup>2</sup> per litre.

**Shelf Life:** The shelf life is a minimum of 2 years when kept frost free.











The Complete Bricklaying Package

With over 50 years of expertise in developing innovative construction chemical solutions, when it comes to a comprehensive range of premium quality brick and block laying and rendering products you can rely on Sovereign for the competitively price, market-leading solutions.

- Mortamix and Powder Mortar Plasticisers.
- Remtox Bonding Agent.
- Admix and Supa Admix Concentrates.
- Antifreeze and Rapid Setter.
- Mortex, Redtex and Browntex Colours.
- Descaler Concentrate, Waterproofer and Cem-Tech.





# Plastering and Rendering Products

Sovereign Chemicals has developed and manufactures a number of market-leading plastering and rendering products; both for use as high-performance standalone solutions, and as part of its respected damp remediation systems. Each one combines quality and value with a superb finish.

- Plasprime®: Green primer for the plastering professional that's environmentally friendly, containing around 20% of recycled material. Can be used on virtually any surface to provide the perfect preparation to which skim plaster is to be applied.
- Plasprime® X: A next generation of primer for the plastering and rendering professional. Using patented Plasprime® technology, 'X' has all the same properties of the original, but is now suitable for EXTERNAL use.
- Rendermix: A waterproofing additive for incorporation into the backing render coat after the insertion of a DPC injection. When used in sand/cement renders it also provides workability so that further admixtures are not required.
- Whitewall Onecoat Plaster: An easy to apply one-coat plaster. It dries to give a hard and durable first class finish.
- Renderlite Renovating Plaster: Ideal for any plastering situation. Allows walls to breathe but prevents the movement of liquid moisture and salts, making it particularly suitable for use on damp walls after the insertion of a chemical DPC.
- Renderlite Finishing Plaster: An impact resistant gypsum-based finish plaster for use after Renderlite Renovating Plaster. When cured it allows the walls to breathe.
- Sulphate Resistant Ready Render: A cementitious single coat render with high sulphate resistance ideal for high levels of salt contamination.
- Contractors' Grade PVA: Ideal for use for a variety of building applications including plaster bonding, dustproofing and screeding etc.

# Plasprime®

Sovereign Plasprime® is a newly developed green primer for the plastering professional. It's not just 'green' in colour - more importantly the product is environmentally friendly, containing around 20% of recycled material.

Plasprime® can be used on virtually any surface to provide the perfect preparation to which skim plaster is to be applied.

Form:	Viscous Liquid.
Pack Size:	10 litres.
Content:	Blend of polymers, additives and 20% recycled material.
Colour(s):	Green.
Properties:	Plasprime® is particularly useful when re-skimming old walls. In such circumstances the walls can be of various materials and surface finish such as old paint or wallpaper paste residues. Furthermore, it is often the case that part of a wall may be porous and others completely sealed. Using Plasprime® helps with these problems and gives uniform drying, making finishing much quicker and easier.

#### Usage/Preparation:

The surface should be clean and sound; prepare any loose or flaking material mechanically to remove. Existing paint should be checked for soundness and adhesion. Do not apply directly on to wallpaper. It is assumed that the surface is sufficiently strong to support the weight of any applied plaster. Take care on artex to ensure plaster is applied in two passes, the first being scraped on to ensure good contact. See limitations for glossy surfaces.

General: Apply Plasprime with a soft brush to give an even texture over the entire surface and allow to thoroughly dry. The drying time is dependant on the surface porosity and environmental conditions.

Once the primer has dried, apply skim plaster in the normal manner. Plasprime can be used over most building materials such as brick, block, concrete, plaster, render, well adhered paint and adhesive residues and plasterboard.

**Coverage:** Dependant on the surface smoothness and absorbency. As a guide 1 litre will cover around 3 to 4 square metres.

Clean up: Clean all tools and splashes in water before the product dries.

Limitations: For internal use only and not suitable for priming prior to adhesive fixing of plasterboards. For glossy surfaces, external use, bonding renders and very high absorbency backgrounds use Sovereign Plasprime X.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.











By Appointment to H.M. the Queen, Building Material Manufacturers Sovereign Chemicals Limited, Barrow in Furness

Sovereign's Plasprime® is a revolutionary patented green primer for the plastering professional. It can be used on virtually any surface to provide the perfect preparation to which skim plaster is to be applied. Not just 'green' in colour, it's also environmentally friendly, containing around 20% recycled material.

Plasprime X® is the next generation of primer that uses patented Plasprime® technology, 'X' has all the same properties of the original, but is suitable for use on virtually any EXTERNAL surface, providing the perfect preparation for rendering.

# Prime it Bond it



Sovereign
the gold standard in building products

# Plasprime® X

Sovereign's Plasprime® X is a next generation of primer for the plastering and rendering professional. Using patented Plasprime® technology, 'X' has all the same properties of the original, but is now suitable for EXTERNAL use, enabling it to be used on virtually any surface to provide the perfect preparation to which plaster and render is to be applied. Whilst 'X' is grey in colour, it still has the green credentials of Plasprime®, with around 20% recycled content.

Form:	Viscous Liquid.
Pack Size:	10 litres.
Content:	Blend of polymers, additives and 20% recycled material.
Colour(s):	Grey.
Properties:	Plasprime® X is particularly useful when dashing on to new block-work where it can replace the coat of water resistant render applied before the receiver coat. Plasprime® X can also be used internally for re-skimming old walls and is particularly useful when ceramic tiles are required to be plastered. May also be used prior to the application of Renderlite on to Sovereign Hey'di K11.

Preparation: The surface should be clean and sound; remove any loose or flaking material mechanically. Existing paint should be checked for soundness and adhesion. Do not apply directly on to wallpaper. If using to bond cement render to the background then it is assumed that the surface is sufficiently strong to support the weight of the render.

#### General:

Apply Plasprime X with a soft brush to give an even texture over the entire surface and allow to thoroughly dry. The drying time is dependant on the surface porosity and environmental conditions.

Once the primer has dried apply plaster or render in the normal manner. Plasprime X can be used over most building materials such as brick, block, concrete, plaster, render, well adhered internal paint and adhesive residues, artex and plasterboard.

**Coverage:** Dependant on the surface smoothness and absorbency. As a guide 1 litre will cover around 2 to 4 square metres.

Clean up: Clean all tools and splashes in water before the product dries.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.









# Rendermix

Rendermix is a waterproofing additive for incorporation into the backing render coat after the insertion of a DPC injection. When used in sand/cement renders it also provides workability so that further admixtures are not required.

Form:	Liquid Concentrate.	
Pack Size:	5 and 25 litres.	
Colour(s):	Blue.	
Content:	Blend of silicate and fatty acid.	
Properties:	The use of Rendermix as described in the Sovereign Re-rendering Specification ensures the hygroscopic salts are prevented from moving to the surface plaster and exhibiting secondary dampness. Rendermix is not a vapour barrier and so will allow the walls to dry out and breathe naturally.	

Preparation: Remove timber skirtings, dado rails and radiators. Hack off old plaster back to the brickwork to a height of 300mm above the last signs of damp, or 1 metre above the level of the DPC, whichever is the higher. Rake out mortar joints and hack the brickwork to provide a key.

If Dry Rot is present then treat the area with Sovereign Fungicidal Wall Solution Extra as detailed in our technical literature.

Re-rendering should not be carried out for at least 3 to 5 days in warm weather. In cold or damp conditions rendering should be left for 10 to 14 days to allow sufficient time for the masonry to begin to dry.

#### Use:

First Render Coat: To be 8 to 12mm thick maximum, waterproofed by the addition of Sovereign Rendermix to the gauging water at the ratio of 40:1.

The first render coat must be of the following design:

- Three parts washed sharp sand
- One part Ordinary Portland Cement

Use the minimum of water to provide workability to ensure that a dense coat is achieved. As the render coat begins its initial set, scratch for a mechanical key. Leave a 25mm channel between rendering and floor, but do not bridge the level of the DPC unless the wall has been tanked.

Second Render Coat: To be 6 to 10mm thick or not less than 16mm overall thickness in coats one and two.

The second coat of render must be of the following design:

- Four parts washed sharp sand
- One part Ordinary Portland Cement

Apply on to the first coat and again scratch up as the render begins to set.

Finish Coat: To be 1 to 3mm thick, porous and not overtrowelled. For best results use Sovereign Renderlite Finish. If an alternative rendering system is desired please refer to our Technical Department. Angle beads must not be fixed with gypsum-based material.

Redecoration: The use of matt emulsion paints is permissible after 3 to 4 weeks, however wallpapering must not be carried out for at least 6 months.

Skirting: Re-fix skirting with Solvent Free Invisible Nails.
Skirting should always be pre-treated with either Sovereign
Remtox Dry Rot paint on the rear, or alternatively by one of
Sovereign's Fungicide/Insecticide Preservatives. Always allow
the preservative to dry prior to fixing and retreat any cut ends.

General: Ensure that all sand used is washed and guaranteed free from salts. Cement must be fresh and free flowing. Lumpiness of the cement is an indication of poor storage or age and must never be used. Cement must be of type CEM 1 OPC, standard, sulphate resistant and rapid setting versions are suitable. Cements of type CEM 2 to CEM 5 and Masonry Cement must not be used.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.

If the product is inadvertently allowed to become frozen then some separation/solidification may be seen. Gentle warming to room temperature and mixing will reverse this and the product usebble.











# **Whitewall Onecoat Plaster**

Sovereign Whitewall is an easy to apply one-coat plaster. It dries to give a hard and durable first class finish.

Form:	Powder.
Pack Size:	25kg sacks.
Colour(s):	White.
Content:	Blend of plaster and speciality additives.
Properties:	An anhydrite based plaster that applies like a backing plaster yet closes and finishes like a finishing plaster. The smooth, white finish surface is hard, durable and easy to decorate, readily accepting all water-based paints. Single coat applications dramatically reduce labour costs, whilst the ability to retemper for up to 2 hours reduces wastage and provides further savings. Ideal for all normal backgrounds including common brick, engineering brick, aerated concrete block, lightweight aggregates, fairfaced and common dense concrete blocks.

#### Typical Performance

Set and air dried density typically	1000 to 1100kg/m <sup>2</sup>	
Wet density typically	1325 to 1480kg/m <sup>2</sup>	
Coverage @ 10mm thickness	2.5m² / 25kg bag	
Flexural strength at 7 days	2.12 N/mm²	
Compressive strength at 7 days	10.0 N/mm²	

Non-combustible as tested to BS 476 part 4:1970

Usage/Preparation: Mechanical mixing is by far the best method as the whisk adds to the quality of the produced material. Mixing should be carried out in a well-ventilated area. Add clean water in the ratio of 10-11 litres per 25kg sack. Allow to rest 3-5 minutes during which time the plaster will stiffen, remix adding small quantities of water if necessary.

One application is applied all over with the trowel approximately 6-10mm in thickness. This coat helps to control the suction and form the first layer of the build up.

Turn back before this application dries and spread a second coat. This should form a total thickness of 10-13mm according to the background being plastered. The second application should be applied as smoothly as possible.

Application onto meshed plaster membranes – apply as two coats up to a thickness of 15mm (first coat 8 to 10mm minimum) and allow to cure between coats and scratch up before applying second coat.

Greater thicknesses may be applied, adopting sensible 'build up' procedures. This product should not be applied to plasterboards.

#### Advantages:

- Single coat application
- Smooth white finish
- Hard and durable
- Easy to decorate
- Reduces waste
- Suits most backgrounds
- Quality assured.

Coverage: 2.5m<sup>2</sup> per 25kg bag at 10mm thickness.

**Storage:** Product must be stored in dry areas clear of the ground, sheeted or undercover. Do not stack more than 2 pallets high.

Shelf Life: Minimum of 3 months when properly stored and could be over 6 months subject to temperature and humidity.







# **Renderlite Renovating Plaster**

Sovereign Renderlite Renovating Plaster is ideal for any plastering situation. Its performance characteristics, which allow walls to breathe but prevent the movement of liquid moisture and salts, make it particularly suitable for use on damp walls or after the insertion of a chemical DPC.

Form:	Powder.
Pack Size:	25kg.
Colour(s):	Grey.
Content:	Cement, lime, aggregate and waterproofing additives.
Properties:	Sovereign Renderlite is an easy to apply internal plaster; it is breathable but will not allow the passage of salts through to the surface. Renderlite also has excellent thermal qualities, with a U value much lower than either sand, cement renders or gypsum based plasters. This makes it particularly useful where condensation may be a problem, such as cold external walls or after tanking basements with Sovereign Hey'di K11.

Usage/Preparation: When used after a chemical DPC remove timber skirtings, dado rails and radiators. Hack off old plaster back to the brickwork to a height of 300mm above the last signs of damp, or 1 metre above the level of the DPC, whichever is the higher. Rake out mortar joints and hack the brickwork to provide a key.

If Dry Rot is present then treat the area with Sovereign Fungicidal Wall Solution Extra as detailed in our technical literature.

Re-rendering should not be carried out for at least 3 to 5 days in warm weather. In cold or damp conditions rendering should be left for 10 to 14 days to allow sufficient time for the masonry to begin to dry.

Renderlite Renovating Plaster can also be used on surfaces tanked with Hey'di K11

If this is the case then the Renderlite must be applied on to a bonding coat and not directly onto the Hey'di K11. The bonding coat consists of one part Sovereign SBR Bonding Agent and one part water mixed with neat cement to produce a slurry. The slurry is brush applied in a thin (1mm) layer on to the surface of the Hey'di K11 and the Renderlite applied whilst the bonding coat is still tacky.

Mixing: This can be done either by hand or machine. When using a machine mixer do not mix for more than 5 minutes. To mix by hand with a plasterer's whisk then add half the contents of the bag to 12.5 litres of water and mix to form a thin slurry. The remainder can then be added. Once mixing is complete allow to stand for 15 minutes before use.

Application: After the insertion of a chemical DPC apply the Renderlite to a depth of 10 to 12mm as a single coat. If greater thicknesses are required to meet existing levels then apply the Renderlite as a dubbing or scratch coat and allow to cure for 24 hours before applying a second coat. Scratch each coat as it dries to provide a key for the following coat. Leave a 25mm channel between rendering and floor, but do not bridge the level of the DPC unless the wall has been tanked.

When used in situations where a DPC has not been installed the following should be taken in to account.

Highly porous substrates will require thorough damping down to prevent flash suction.

#### Renderlite Renovating Plaster, continued

On dense backgrounds such as engineering brick, stone or pre-cast concrete then either of the two following methods must be employed:

- Apply a bonding coat consisting of Sovereign SBR Bonding Agent diluted 1:1 with water and mixed with neat, fresh cement to form a slurry. Brush the slurry vigorously on the wall to 1mm depth and apply the Renderlite whilst the bonding coat is still tacky. If the bonding coat dries apply a further coat.
- Apply a keycoat / spatterdash consisting of one part cement, two parts clean coarse sand mixed to a thick consistency with a gauging solution of SBR Bonding Agent diluted one part to two parts water.

Apply the mix by dashing onto the surface to give complete coverage with a rough texture. The spatterdash should be dampened periodically until it has hardened and then allowed to dry. Renderlite can then be applied in the usual way, however allow 36 hours curing before applying the finish.

**Coverage:** Coverage at 10mm thickness is approximately 3.5m<sup>2</sup> per 25kg bag.

**Shelf Life and Storage:** This product must be stored in a dry place, free from moisture contact. Sovereign Renderlite Renovating Plaster has a shelf life of 6 months in unopened bags. Do not store in direct contact with the ground

**Thermal Efficiency:** Sovereign Renderlite Renovating Plaster has greater insulating properties than sand/cement renders and gypsum plasters. This can be seen from the table below:

Plaster	therma	Coefficient of al conductivity	Thermal resistance at 10mm
Sand:Cement		0.53	0.018
Gypsum Plaster		0.46	0.022
Renderlite		0.17	0.059

**Finishing:** Once the final coat of Renderlite Renovating Plaster has set, usually 24 hours it is ready to receive the finish coat.

Sovereign recommends the use of Sovereign Renderlite Finish Plaster, to a depth of 1.5 to 3.0mm be applied (see TDS 87).

When the Renderlite system is used after the insertion of a DPC then it should be left as long as possible before the application of a paint coating, wallpapering must be delayed for 6 months









# **Renderlite Finishing Plaster**

Sovereign Renderlite Finishing Plaster is a gypsum based plaster for use as the final coat after Sovereign Renderlite Renovating Plaster. When cured it forms a hard wall finish plaster that allows the walls to breathe.

Form:	Powder.
Pack Size:	25kg.
Colour(s):	Dries white.
Content:	Lime, gypsum and fine aggregate.
Properties:	Sovereign Renderlite has excellent adhesion and impact resistance and resists the passage of salts. Once mixed it can be re-tempered and used for up to 80 minutes minimising waste.

Usage/Preparation: Apply on to a suitably prepared background plaster such as Sovereign Renderlite, Ready Render or ordinary sand: cement plaster. It is not however suitable for use on plasterboard.

Mixing: Add Sovereign Renderlite Finishing Plaster to water and bring to a workable consistency. Allow the mix to rest for 5 minutes and remix adding a small quantity of water if necessary. During use Renderlite Finishing Plaster may give the appearance of going off. However this is not the case and the mix can be reworked with the trowel. Renderlite Finishing Plaster will continue to thicken and can be reworked for up to 80 minutes which should allow plenty of time for the material to be used up without waste.

#### Application:

Apply at 1.5 to 3mm thickness to give a smooth surface. Renderlite Finishing Plaster cannot be over polished to give a glazed surface. This is because polished plaster causes problems when painting or tiling onto normal gypsum finishes. Due to its nature the application of Renderlite Finishing Plaster feels different from normal gypsum plaster and this must be considered during use.

Once set the plaster will be very hard and creamy white in colour.

Decoration: When the Renderlite system is used after the insertion of a DPC then it should be left as long as possible before the application of a paint coating, wallpapering must be delayed for 6 months. If tiles are to be applied then these should be fixed directly to the backing coat using one of Sovereign's powdered tile adhesives.

**Coverage:** Coverage at 1.5mm thickness is approximately 12.5m² per 25kg bag.

**Shelf Life and Storage:** This product must be stored in a dry place, free from moisture contact. Sovereign Renderlite Finishing Plaster has a shelf life of 6 months in unopened bags. Do not store in direct contact with the ground.









# **Sulphate Resistant Ready Render**

A cementitious single coat render with wide-ranging uses. It is highly sulphate resistant so suitable for use in areas subject to high levels of salt contamination. It can be used for rendering after the insertion of a chemical DPC, for tanking applications, rendering swimming pool shells and for overcoating masonry, concrete and stone structures.

Form: Grey Powder.

Pack Size: 25kg.

Content: Cement, aggregates and waterproofing additives.

Properties: Ready Render can be either spray or hand applied in both internal and external situations. A single coat can be applied up to 30mm thick without slumping so negating the need to build up the render in layers saving time and money.

Usage/Preparation: As with all renders, it is important that the suitability of Ready Render is assessed for each application with regard to the properties of the substrate and any subsequent coatings. Refer to the relevant codes of practice, BRE Digest and British Standards, e.g. BS5262, which cover the type and application of renders.

Tanking Applications: Prior to tanking existing buildings with Hey'di K11, old coatings must be removed. Once this is achieved the most successful method of tanking is onto a new render coat

First, all walls must be damp – power washing is ideal. Brush apply a bonding coat consisting of one part water, one part Sovereign SBR Bonding Agent and mixed with neat Portland Cement. Work this in well with a stiff br

Whilst this is still tacky (within 20 minutes) apply a thin coat of Ready Render, sufficient to make up any irregularities in the wall and to give a flat, even finish, but do not over trowel as a tight surface will not take further coatings. The Ready Render should be mixed with a gauging solution of one part Sovereign SBR Bonding Agent diluted with three parts water.

DPC Applications: Hack off existing plaster/wall coating to a minimum of 300mm above the maximum level of dampness or salt, or at least 1 metre above floor level, whichever is the greater. Rake out all mortar joints to a minimum depth of 12mm. Mix the Ready Render and compact it in to the joints and render to a minimum depth of 25mm. Walls should be left as long as possible before plastering with Ready Render to allow some of the moisture to dry out. (Where insulation of the building or thickness of plaster is an issue then we recommend the use of Sovereign Renderlite – a cement based waterproof, lightweight thermal plaster with excellent U values and need be applied at only 15mm thickness).

General Rendering Applications: Sovereign Ready Render is designed for machine application by an M-Tech Duo-Mixer or similar. Continuous mixing and accurate control of water addition will allow a very low water/solids ratio to be used. The material is sprayed through a nozzle on to the substrate

and it is possible to apply up to 30mm without slump. The material has an extended working time and it is possible to stop the pump for up to a maximum of 20 minutes and then continue pumping.

Sovereign Ready Render can also be hand applied using traditional methods.

Ready Render can be applied at a rate of approximately 3 to 5 tonnes per hour.

#### Coverage:

0.5m2 per bag at 30mm thickness

0.8m² per bag at 20mm thickness

1.6m<sup>2</sup> per bag at 10mm thickness

For larger contracts the following guide is recommended: 31.2m² per tonne of powder

Protect all new work from direct sunlight and strong winds to prevent flash drying.

Mixing: Ready Render should be mixed mechanically, adding the powder to the water until the desired consistency is reached. The ideal water addition is 4 litres of water per bag of Ready Render. Excess water can lead to slump and shrinkage.

Storage: This product must be stored under cover, in unopened bags clear of the ground in cool dry conditions, protected from frost and excessive draught. When stored correctly, as above, and used within 6 months of the date shown on this packaging, the activity of the reducing agent added will be maintained and this product will contain, when mixed, no more than 0.0002% (2ppm) soluble chromium (VI) of the total dry weight of the cement.







# Contractors' Grade PVA

Sovereign Contractors' Grade PVA is ideal for use in a wide variety of building, plastering and rendering applications. These include plaster bonding, dustproofing and screeding etc.

Form: Viscous Liquid.

Pack Size: 5kg.

Colour(s): White.

Content: Polyvinyl Acetate.

Properties: Can be used for bonding and sealing most building materials internally.

**Preparation:** Ensure surfaces are clean and free of oil, grease and other contaminants before use.

**Usage:** Sovereign Contractors' Grade PVA can be used to bond internal sand/cement renders and repairs.

Bonding: To bond render, Sovereign PVA should be mixed with sand and cement in the ratio 1:3:2:1; PVA to water to sand to cement. This should be stippled onto the background and the render should then be applied whilst tacky.

Sealing: Where sealing of a porous substrate is required, such as plaster and plasterboard, Sovereign Contractors' Grade PVA should be diluted 1 part adhesive to 4 parts of water.

Plastering: Dilute Sovereign Contractors' Grade PVA 1 part to 2 parts water. Brush apply onto the surface to be plastered and apply the plaster whilst the PVA is still tacky.

Coverage: When used as a sealer is approx 30m<sup>2</sup> per litre of diluted PVA. This is dependent on background porosity.

Cleanup: Clean splashes with water. If Sovereign Contractors' Grade PVA has dried onto tools etc, it can be removed by soaking in water and detergent overnight.

Storage: 5 to 30°C.

Shelf Life: 12 months unopened.











### **Construction Adhesives**

### Sovereign markets a complete range of quality adhesives specially formulated for the construction industry.

- D4 PVA: High spec. water resistant EN 204-compliant alternative for D4 classification glues, such as polyurethane.
- Rapid Set PVA Adhesive: Fast setting of wood and laminate adhesive.
- Waterproof PVA: Fast curing, waterproof woodworking adhesive, conforming to BS EN204 Class D3 and BS4071 'Resistance to sustained loading'.
- Duo Fix Adhesive: Fast setting two-part cyano-acrylate adhesive for the rapid bonding of wood, plastic, ceramics, glass, leather and rubber. Particularly useful for joining mitre bonds.
- PU Rapid Construction and Joinery Adhesive: One part component, thixotropic polyurethane adhesive with good gap-filling properties, complies with EN 204.D4 1991.
- **PUR Adhesive:** One-part moisture curing internal and external adhesive.
- One Shot: Urea-formaldehyde powdered resin is a waterproof gap-filling wood glue. Conforms to BS1204 1993 MR parts 1 and 2, BS EN 204 Durability Group D3 and BS EN 302-1 A3 Type II.
- Pro-Stick 2000: A multi-use elastic construction MS-Polymer adhesive and sealant.
- Invisible Nails: A highly versatile, one-part, gunable, SBR rubber-based adhesive with instant grab and high strength.
- Solvent-Free Invisible Nails: A high quality twin polymer adhesive with excellent initial grab and good gap filling properties, suitable for use on most building materials.
- Multi-Purpose Panel Adhesive: One part gunable synthetic, rubber based neoprene adhesive, ideal for panel and batten bonding. Easy to apply and cures rapidly.
- Fast Fix Board Adhesive: A rapid new way of installing dry lining systems. Can be used to bond plasterboard, tile backer board, insulation and timber sheets to masonry backgrounds, metal framing and timber studs.
- Contact Adhesive: General-purpose solvent based synthetic rubber/resin contact adhesive, particularly suitable for bonding laminated plastics to wood, chipboard, plywood, other boards and to metals.
- **Sprayable Contact Adhesive:** A general purpose solvent based synthetic rubber/resin contact adhesive, specifically intended for spray application, particularly suitable for bonding laminated plastics to wood, chipboard, plywood, other boards and to metals.

### **PVA Adhesive**

Sovereign PVA adhesive and bonding agent finds wide use in the Building Industry. The areas of use are generally non-specialised, however, Sovereign PVA does meet the requirements of BS5270 'Bonding Agents for Internal Use with Gypsum Modified Plasters'.

Form:	White Viscous Liquid.
Pack Size:	1, 5, and 25 litres.
Content:	Polyvinyl Acetate.
Colour(s):	Dries clear.
Properties:	Can be used for bonding and sealing most building materials internally.  Viscosity 12000 to 20000 mPa.s.  pH 4.5 - 5.5  For external applications, Sovereign recommend use of SBR.

#### Usage:

As an adhesive: Sovereign PVA should be used neat to bond timber, paper, cardboard and other similar porous substrates. Joints should be clamped until adhesive has set – usually 24 hours. Sovereign PVA is not suitable for load bearing applications where Sovereign Waterproof PVA or One-Shot are recommended.

As a bonding agent: Sovereign PVA can be used to bond internal sand/cement renders and repairs. To bond render, Sovereign PVA should be mixed with sand and cement in the following ratio:

1:3:2:1 PVA:water:sand:cement

This should be applied by brush to the substrate and the render applied whilst tacky.

As a primer/sealer: Where sealing of a porous substrate is required, e.g. plaster, plasterboard and concrete, Sovereign PVA should be diluted one part adhesive to four parts water. For bonding plaster: Dilute Sovereign PVA one part to two

parts water. Brush apply onto the surface to be plastered and apply the plaster whilst the PVA is still tacky.

#### Preparation:

Materials to be joined should be clean, dry and free from dust, oil and grease.

#### Coverage:

As a wood adhesive: 9m²/litre. As a sealer: 30m²/litre Storage: Between 5 and 30°C

Shelf Life: 12 months unopened.

Clean up: Clean splashes with water. If Sovereign PVA has dried onto tools etc, it can be removed by soaking in water and detergent overnight.

**Limitations:** Not for external use. Not for use when rendering after the insertion of a DPC course.









### **D4 PVA**

Sovereign D4 PVA reaches the highest specification for water resistance when tested in accordance with EN 204. Sovereign D4 PVA can be used to replace traditional adhesives meeting the D4 classification such as polyurethane.

Form:	Ready to use Liquid.
Pack Sizes:	1 litre.
Colour(s):	White.
Content:	Cross linking Polyvinyl Acetate.
Properties:	Sovereign D4 PVA is designed to adhere to all types of soft and hard woods, decorative laminates and foils to wood chipboard, plywood, blackboard and MDF. The adhesive bond formed is generally stronger than the substrate. Particularly suitable for use on external timber such as door and window frames, garden furniture and timber/laminate flooring.

Usage/Preparation: All surfaces to be bonded must be clean, dry and free from any oils, grease, dust or loose material. Wood to be joined should be allowed to condition in the workshop before bonding.

Sovereign D4 PVA is applied evenly to one or both surfaces to be bonded and brought together. Clamps should be used to ensure good contact and hence adhesion.

D4 PVA can also be used in many machines operating on Radio Frequency, and hot or cold press systems.

Both surfaces to be bonded must be allowed to acclimatise under the same conditions prior to bonding. Moisture differentials between substrates can lead to cracking and delamination of veneers.

Sovereign D4 PVA must always be used at temperatures above 10°C, otherwise it cannot cure properly.

Sovereign D4 PVA does not usually lead to wood discolouration. However, because of the varied nature of wood components unpredictable discolouration may in some cases appear, eg. iron together with the tannin in wood may cause discolouration.

We recommend you do your own trials.

Storage: Between 5-30°C.

Shelf Life: 9 months from date of manufacture when unopened.

Coverage: Is dependant upon application, as a guide 1 litre should be sufficient to laminate around 5 to 10m<sup>2</sup>.

A Safety Data Sheet is available on request for this product.

#### Recommended working conditions

Room, Material and Adhesive Temperature	18-22°C	
Interior Wood Moisture	6-12%	Exterior Wood Moisture 11-15%
Relative Air Humidity	60-70%	
Coating Weight for Surface Bonding	80-150g/m <sup>2</sup>	Coating Weight for Assembly 100-180g/m <sup>2</sup>
Pressing pressure for Tensionless Work Pieces	0.1-1.0 N/mm <sup>2</sup>	
Min. Pressing Time for Surface Bonding		(HPL/Chipboards) with 70°C Circa 1 min.
		(HPL/Chipboards) with 20°C 30-40 min.
Min. Pressing Time for Decor Finish Film	5-10 sec.	Min. Pressing Time for Assembly 8-15 min.











### **Rapid Set PVA Adhesive**

Sovereign Rapid Set PVA is a specially formulated product for fast setting of wood and laminate assemblies. Rapid Set PVA is supplied ready to use.

Form: Ready to use Liquid.

Pack Size: 1 and 5kg.

Content: Polyvinyl Acetate.

Colour(s): White.

Properties: Bonds formed with Sovereign Rapid Set PVA give good resistance to humidity, as well as good durability. Conforms to BS EN 204. D1 standard on adhesives for wood.

**Usage/Preparation:** All surfaces should be flat and clean with thickness tolerances not exceeding +/- 0.3mm. Joint thickness should not exceed 0.3mm.

Stabilize the materials to be joined several days before bonding at a temperature of 15 to  $20^{\circ}\text{C}$ . The laminates should be stored flat. Moisture differentials between substrates will lead to cracking and de-bonding of laminates.

**Application:** Apply the adhesive onto the substrate in a thin even layer with the help of a glue spreader, brush, spray gun, etc.

Coverage must not exceed 120g/m² to obtain short press times with the laminates. Double sided application is preferable for assemblies and is recommended for the gluing of wood veneers.

Place the laminate on the substrate immediately after applying adhesive (do not exceed the open assembly time).

#### Conoral

The pressing time depends on the following:

- Dimension of the panels
- Porosity of the substrate.
- Nature and the humidity of the wood
- Application temperature and humidity.
- Coating weight.

A preliminary trial is recommended to determine the pressing time for a particular situation.

The pressing time can be reduced to 2-3 minutes with laminates when these are perfectly flat and thin (0.7-0.8 mm max.) and increasing the temperature of the press to 60-70°C. Wood veneer gluing requires only a few seconds at 120-160°C to bond the double-sided coated glue film and 20 to 30 seconds to allow the bond to generate during re-cooling. Leave the bonded pieces stacked if possible to stabilize for at least 2 hours before use. Full cure takes 24 hours.

Coverage: Approximately 10 g/m<sup>2</sup>. Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened













#### Rapid Set PVA Adhesive, continued

Brookfield Viscosity	20 rpm at 23°C – approx. 8500 mPas.	
Working Conditions		
Minimum temperature for use	12°C	
Ambient temperature (Warehouse, wood, laminate	es, glue) 18 to 20°C	
Humidity (wood composites – solid woods)	8 to 12%	
Coating weight (single surface)	120 to 180 g/m <sup>2</sup>	
Open assembly time	4 to 8 minutes	
Recommended Pressure		
Recommended Pressure, wood on wood	2 to 5 bar (Kgf/cm²)	
Recommended Pressure, laminates on wood	1 to 2 bar (Kgf/cm²)	
Pressing Times		
Press Time, wood on wood at 20°C (minimum)	5 to 8 minutes	
Press Time, assemblies with 1 face preheated	2 to 3 minutes	
Press Time, laminates on wood at 20°C	15 to 20 minutes	
Press Time, laminates on wood at 40°C	8 to- 12 minutes	
Stabilisation time	2 hours minimum	

### **Waterproof PVA**

Sovereign Waterproof PVA is a specially developed fast curing, waterproof woodworking adhesive, conforming to BS EN204 Class D3 and BS4071 'Resistance to sustained loading'.

Form:	Ready to use Liquid.
Pack Size:	1, 5 and 25kg.
Colour(s):	White.
Content:	Cross linking polyvinyl acetate.
Properties:	Sovereign Waterproof PVA is designed to adhere to all types of soft and hard woods, decorative laminates and foils to wood chipboard, plywood, blackboard and MDF. The adhesive bond formed is generally stronger than the substrate. Not suitable for adhering rubber or plastics.

Surface Laminate	Coating Weight	Suggested Conditions	
Decorative laminates (e.g. Formica)	100-200g/m²	40min at 17°C, 20min at 20°C 6 min at 70°C, 3 min at 80°C 90 sec at 120°C.	
Polyester foils (e.g. Tacon)	80-100g/m <sup>2</sup>	40 min at 17°C, 20 min at 20°C 6 min at 70°C, 3 min at 80°C 90 sec at 120°C.	
Resin Impregnated papers of 40-120g/m²	50-80g/m <sup>2</sup>	1 min at 90°C, 15 sec at 110°C	
Lightweight printed papers of 20-60 g/m <sup>2</sup>	25-50g/m <sup>2</sup>	3 to 5 sec at 115°C.	
Wood veneers	60-80g/m <sup>2</sup>	60 sec at 90°C	

Usage/Preparation: All surfaces to be bonded must be clean, dry and free from any oils, grease, dust or loose material. Wood to be joined should be allowed to condition in the workshop before bonding.

Sovereign Waterproof PVA is applied evenly to one or both surfaces to be laminated and brought together. Clamps should be used to ensure good contact and hence adhesion. Waterproof PVA can also be used in many machines operating on Radio Frequency and hot or cold press systems.

#### Limitations:

Both surfaces to be bonded must be allowed to acclimatise under the same conditions prior to bonding. Moisture differentials between substrates can lead to cracking and delamination of veneers.

When used for bonding external timber the glue line must be covered with a suitable protective coating.

Over clamping can give rise to lack of adhesion as the adhesive can be squeezed out of the joint. Waterproof PVA should always be used above 6°C otherwise it cannot cure properly.

NOT for use as a bonding agent or sealer when plastering/rendering.

**Coverage:** Is dependant upon application, as a guide 5 litres should be sufficient to laminate around 60m<sup>2</sup>.





### **Duo Fix Adhesive**

Sovereign Duo Fix is a fast setting two-part cyano-acrylate adhesive for the rapid bonding of wood, plastic, ceramics, glass, leather and rubber. Duo Fix is particularly useful for the joining of mitre bonds. It is available as either a two pack where the adhesive and spray activator are included, or both components are available separately.

Form: Two Pack, Spray and Liquid.

Pack Size: Activator 200ml, plus 50gm Adhesive.

Colour(s): Clear.

Content: Ethyl-2-cyanoacrylate.

Properties: Sovereign Duo Fix is an extremely fast, permanent adhesive. It will bond most porous and non-porous materials in seconds.

Liquid Properties:	Description	
Ester Base	Ethyl-2-cyanoacrylate	
Appearance	Clear, colourless	
Flash point	>81°C	
Density	1.05	
Shelf life	12 months, unopened	
Viscosity at 25°C	220-2800cP	

Polymer Properties:	Description	
Appearance	Clear, colourless	
Softening point	Circa 130°C	
Refractive index	1.45	
Full cure time	24 hours	
Solubility	DMF, scetonitrile, acetone	

Usage/Preparation: Surfaces to be bonded must be clean,
dry and free from oil and grease. Duo Fix is not a gap filling
adhesive so there must be intimate contact between surfaces.
Spray the activator onto one surface and allow the solvent to
evaporate. Apply the adhesive to the other surface and press
both surfaces together for at least 10 seconds. The bond is
now formed, however full bond strength will be achieved over

several hours, therefore allow some time before working

bonded material.

Cured Performance:		Time	
Balsa/Balsa		<5 seconds	
Oak/Oak		90-180 seconds	
Nitrile/Nitrile		<5 seconds	
Neoprene/Neoprene		5 seconds	
EPDM/EPDM		7 seconds	
Steel/Steel		10-20 seconds	
PVC/PVC		5-10 seconds	
Polycarbonate/Polycarbonate		10-40 seconds	
Coward Strongsthe	Chass	Tomoilo	

Cured Strength:	Shear	Tensile
Grit Blasted Steel	>15 N/mm²	> 18 N/mm²
Etched Aluminium	>11 N/mm²	-
Nitrile Rubber	>10 N/mm²	> 5N/mm <sup>2</sup>
Polycarbonate	>12 N/mm <sup>2</sup>	-

Storage: Between 5°C-30°C.

Shelf Life: 6 months unopened.

#### Duo Fix Adhesive:

A Safety Data Sheet is available on request for this product.

#### **Duo Fix Activator:**









## PU Rapid Construction and Joinery Adhesive

Sovereign PU Rapid is a one component, thixotropic polyurethane adhesive with good gap-filling properties. Sovereign PU Rapid reacts with moisture giving a highly structured cross-linked permanent and waterproof adhesive bond.

Sovereign PU Rapid complies with EN 204.D4 1991.

Form:	Thixotropic Gel.
Pack Size:	310ml.
Content:	PU Polymer.
Colour(s):	Clear.
Properties:	Sovereign PU Rapid is suitable for bonding dry and moist wood (max. 25%), rubber, foam rubber, PU foam, concrete, glass wool and all porous materials. Suitable for internal and external use.

**Usage/Preparation:** Materials to be bonded must be clean and free from any oil, grease or grime. Non-porous materials should be slightly abraded.

Components must be bonded within 5 minutes of application. Pressing or clamping joints will ensure good final bond.

Please Note: Components may be moved 2 hours after bonding. It is essential that at least one of the components to be bonded is porous and contains moisture.

Storage: Between 5°C-30°C.

Shelf Life: 6 months unopened.

Coverage: 12 running metres per cartridge – 5mm² bead.











### **PUR Adhesive**

Sovereign PUR Adhesive is a one-part moisture curing adhesive designed to adhere wood, MDF, metal, laminates, rubber, some plastics and many other substrates. Suitable for internal and external use.

Form:	Ready to use Liquid.
Pack Size:	0.5 litre Plastic Bottles.
Content:	PU Polymer.
Colour(s):	Brown.
Properties:	The adhesive contains diphenyl methane-4, 4-di-isocyanate. On curing, carbon dioxide is released which causes the adhesive to swell slightly. The cured adhesive has a good degree of flexibility. Sovereign PUR Adhesive conforms to BS EN204:D4:1991.

Usage/Preparation: All surfaces should be clean and free from grease, dirt and loose materials. On certain hardwoods or woods containing natural resins/oils, it is often advisable to wipe down joints to be adhered with methylated spirit prior to gluing and allow to dry. Where the surface is non-porous a light misting of water can be used on that surface to obtain the required cross-linking process.

Always close the container after use. Use up the adhesive as soon as possible as once opened the material has a limited life and may cure in the bottle.

Cure time typically 30 minutes to 1 hour, but depends upon humidity and materials being joined.

Individual substrates should be evaluated for bonding performance prior to any large-scale application. The adhesive can be painted or stained once cured. Certain plastics containing high percentages of monomeric plasticiser will cause deterioration of the bond.

Coverage: 100 to 200 g per square metre.

Clean up: Use Sovereign Gorilla Wipes to remove uncured adhesive. Once cured requires removal by mechanical means.

**Storage:** Between 5 and 30°C. **Shelf Life:** 6 months unopened.









### **One Shot**

Sovereign One Shot urea-formaldehyde powdered resin is a waterproof gap-filling wood glue. Sovereign One Shot conforms to BS1204 1993 MR parts 1 and 2, BS EN 204 Durability Group D3 and BS EN 302-1 A3 Type II.

Form:	Powdered Resin.
Pack Size:	3 and 25kg.
Content:	Urea-formaldehyde.
Properties:	Particularly suitable for interior and exterior joinery, shop fitting, assembly gluing, synthetic laminates, and veneers. Sovereign One Shot will cure quickly but allows sufficient working time for most applications using both hot and cold pressing techniques.

#### Preparation:

Mixing by volume: 3.5 parts One Shot to one part clean water.

Mixing by weight: Two parts of One Shot to one part clean water.

Add the water to the powder gradually and stir until the solution is lump free. The pot life of the mixture in relation to time is given in the data table. The mixing vessel should be made of glass, stoneware or plastic. Metallic containers will discolour the adhesive.

Surfaces to be joined should be thoroughly sanded and free from dust. Joints should be well fitting although One Shot will accommodate small discrepancies.

#### General

Moisture Content: The surfaces to be bonded should ideally have moisture contents between 7 - 13%, but at pressing temperatures above 105°C, moisture content should not exceed 10%. Variation in moisture content between bonded surfaces should not exceed 3%.

Application: The mixed glue should be applied thinly by brush, wooden rod or hand roller to one surface at a rate of 180-250 gm/m². The joint should then be assembled and full clamping pressure applied. Where low clamping pressure is applied then the glue mixture should be applied to both surfaces.

Pressing or Clamping: When wood has been stored in unheated conditions it may be cold and contain excessive moisture thereby causing poor bonding. Prior to gluing the wood should be stored for several days in reasonably warm and dry conditions.

See data table for minimum pressing or clamping times.

Heat Penetration: The setting times refer to glue line temperatures only and the time taken for heat to travel from the press platen must be taken into account. Heat penetration time depends on the wood density, moisture content and distance to the farthest glue line. The extra times required for low and medium timbers are shown in the data table. These pressing times apply when bonding absorbent materials such as low and medium density wood. Pressing times must be greatly extended when bonding less absorbent materials.

Pressure: The clamping pressure applied on joints must be sufficient for good contact between bonding surfaces and must be maintained over the specified clamping time. When veneering or applying thin decorative laminated plastics to surfaces such as particleboard, plywood, or blockboard, pressures of 0.35 to 0.42 MPa (50 to 60 lbt/in²) are adequate.

Clean up: Equipment may be cleaned with warm soapy water before the glue has time to set. Persistent residue may be removed by the addition of isopropyl alcohol to the water.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.

#### One Shot, continued

#### Pot Life Mixed

Temperature of mix	10°C	20°C	30°C	
Pot-Life	10 hours	2 hours	30 min	
Open Time				
Temperature of mix	10°C	20°C	30°C	
Assembly time	60 mins	20 mins	8 mins	
Pressing or Clamping Times	s			
Glue line temperature	10°C	20°C	30°C	
Minimum pressing or clamping time	20 hours	4 hours	2 hours	

Minimum pressing or clamping times are those required to give 1.33 kN dry shear strength on close joints according to BS 1204: Part 2. When joints are strained immediately after removal of pressure the above times should be increased. Sovereign One-Shot will continue to gain strength over several days when full waterproof properties are developed.

#### Hot Pressing Times

Glue line temperature	50°C	70°C	90°C	
Basic set time	9 to 10 mins	3 mins	1 min	

#### **Heat Penetration**

Distance to glue line	Heat p	enetration time in min Distance to glue li	utes per mm ne	
Glue line temperature	80°C	100°C	120°C	
Less than 5mm	1.2	0.9	0.8	
Between 5 and 10mm	1.7	1.2	1.0	
More than 10mm	2.0	1.4	1.2	









### Pro-Stick 2000

Sovereign Pro-Stick 2000 is a universally applicable elastic construction adhesive and sealant, based on MS-Polymer.

Form: Thixotropic Paste.

Pack Size: 290ml.

Colour(s): White, Clear and Black.

Properties:

Sovereign Pro-Stick 2000 adheres without primer on many solid, dry, clean, dust and grease free substrates, such as metals, glass, primed or painted wood, UPVC, glazed surfaces, masonry and brick, epoxy and polyester. Pro-Stick contains no solvents or isocyanates. It has excellent UV and weathering resistance and does not cause corrosion in metal connections. There is no annoying smell during application and after curing. Cures under influence of air humidity to a permanent elastic rubber with good ageing properties. Temperature resistance from -40°C to above 100°C. Compatible with most conventional paint systems. Resistant to sea water.

#### Pro-Stick 2000 Specifications

Specific gravity	1.4	Tensile strength (DIN 53504/ISO37)	>2 N/mm <sup>2</sup>
Elongation at break (DIN 53504/ISC	037) 200%	Skin forming	30 minutes
Tack Free time @ 25°C 50% R.H.	4 hours	Cure Time as an adhesive	24 hours
Cure Time as a sealant	3mm per 24 hours	Movement accommodation	20%
Application temperature	5°C to 35°C	Temperature resistance, long term	-40 to 100°C
Temperature resistance, short term	180°C up to 30 mins	UV and weather resistance	Excellent

#### Uses:

Bonding: Lacquered wooden and synthetic formed strips. Plasterboards and lacquered wooden wall panels. Insulation sheets (PUR, PS) on many substrates. Thresholds and windowsills of lacquered wood and metal. Gypsum ornaments, decorative strips, dado rails. Lead strips. Fixing concrete and terracotta tiles. Mirrors and glass.

Sealing: Roof edges, clamping profiles. Joints at aluminium and other synthetic frames. Connecting joints at aluminium gutters, verandas and sun lounges. U-PVC windows. Seam sealing in automotive industry. Marine joints.

#### Usage/Preparation:

Joint Sealing: Sovereign Pro-Stick 2000 can be extruded easily using a cartridge gun. Smoothing off the joints can be done with a wetted pointing trowel. For the correct joint dimension a backing foam should be used, assuring that the joint depth is two third of the joint width. Both the joint width and the depth should be at least 6mm, depending on the substrates and joint distances.

Bonding: Apply Sovereign Pro-Stick 2000 in strips on the substrate and immediately press the other surface to be joined into the adhesive strips. Between the adhesive strips air channels remain, so that air humidity can reach the total adhesive surface. Air humidity is required for the curing of Sovereign Pro-Stick 2000.

Storage: Between 5°C-30°C.

Shelf Life: 12 months unopened.

Coverage: 11 running metres per cartridge – 5mm² bead.

A Safety Data Sheet is available on request for this product.











### **Invisible Nails**

Sovereign Invisible Nails is a highly versatile, one-part, gunable, SBR rubber-based adhesive with instant grab and high strength.

Form:	Heavy Pale Cream Paste.
Pack Sizes:	310ml tube.
Content:	SB rubber in mixed solvent.
Properties:	Use Invisible Nails for fixing skirting boards, architraves, decorative mouldings, wall panels, plasterboard, covings, picture/dado rails, carpet grippers, work tops, roof tiles, laminates to wood, concrete, brick, renders, ceramics, glass and metal. Sovereign Invisible Nails will also act as gap filler.

Preparation: Surfaces to be bonded should be dry, clean and free from oil, grease, dust and loose material. Cut the tip off the cartridge above the screw thread. Cut the nozzle to size according to the bead size required. Fix tube onto Sovereign Cartridge Gun.

Application: Apply Invisible Nails at maximum 300mm centres on surfaces to be bonded. For light panels where the gap is small, press firmly onto the adhesive immediately and leave to cure. For heavier panels, or rough or uneven surfaces, where gap filling is required, press firmly into place, then break the bond and pull the surfaces apart.

Allow the adhesive to dry for 3 - 5 minutes, depending upon the thickness of the adhesive and the ambient conditions. Remake the bond and press well, preferably twist or slide the item being fixed to ensure maximum adhesion. Heavy items should be supported until the adhesive is completely cured (approximately 24 hours) – carrying out a local trial is recommended. At least one surface must be porous. Not suitable for use with polystyrene or on asphalt floors.

Practical Coverage: 12 running metres per cartridge – 5mm²

Dodo

Clean up: Sovereign's Contact Cleaner or Gorilla Wipes.

Storage: Between 5 and 25°C.

Shelf Life: 12 months unopened.









### **Solvent-Free Invisible Nails**

A high quality twin polymer adhesive with excellent initial grab and good gap filling properties. Suitable for use on most building materials such as wood, concrete, plaster, plasterboard, laminates, coving, polystyrene, plastics and ceramics. Its initial grab and rapid bond strength development make it ideal for rough and uneven surfaces. At least one surface must be porous.

Form: Heavy Buff Coloured Paste.

Pack Size: 380ml.

Properties: Solvent-Free Invisible Nails is a highly versatile adhesive that is suitable for a

wide range of building tasks. It will bond panel materials, carpet grippers, insulation products, skirting etc. to most building surfaces. Eliminates the use of

nails and screws.

**Preparation:** Surfaces to be bonded should be clean, stable and oil free. Very porous or dusty surfaces primed with PVA diluted 5:1 with water.

Clean up: Soap and water.

Usage: For light panels where the gap is small, press firmly onto adhesive immediately and leave to set. For heavier panels or those with pronounced bowing, where gap filling is required, press into place, break the bond and allow to dry for 1 minute. Re-make the bond.

Press well to produce a firm bond. Maximum adhesive performance is dependent on sufficient pressure being applied. Some heavy items may require temporary support until the adhesive has set. A handle-able bond will form within 20-30 minutes and full cure reached within 24 hours.

Solvent-Free Invisible Nails is not suitable for low energy surfaces such as polythene, PTFE etc.

#### Technical Data

Density	1.4kg/m <sup>3</sup>
Application Tempera	ure Between 5 and 30°C
Service Temperature	From -10 to 50°C
Flash Point	>100°C
Shelf Life	12 months
Coverage	15 running metres for a 5 x 5mm bead.











### **Multi-Purpose Panel Adhesive**

Sovereign Multi-Purpose Panel Adhesive is a one part gunable synthetic, rubber based neoprene adhesive, ideal for panel and batten bonding. Sovereign Multi Purpose Panel Adhesive is highly viscous and will fill small gaps. It is easy to apply and cures rapidly.

Form: Heavy Cream Paste.

Pack Sizes: 380ml Tube.

Content: Neoprene rubber in mixed solvent.

Properties: For fixing skirting boards, architraves, decorative mouldings, wall panels, plasterboard, covings, picture/dado rails, carpet grippers, work tops, roof tiles, laminates to wood, concrete, brick, renders, ceramics, glass and metal. Sovereign Multi-Purpose Panel Adhesive will also act as gap filler.

Preparation: Surfaces to be bonded should be dry, clean and free from oil, grease, dust and loose material. Cut the tip off the cartridge above the screw thread. Cut the nozzle to size according to the bead size required. Fix the tube into your Sovereign Cartridge Gun.

Application: Apply Panel Adhesive at maximum 300mm centres on surfaces to be bonded. For light panels where the gap is small, press firmly onto the adhesive immediately and leave to cure. For heavier panels, or rough or uneven surfaces, where gap filling is required, press firmly into place, then break the bond and pull the surfaces apart.

Allow the adhesive to dry for 1 minute, depending upon the thickness of the adhesive and the ambient conditions.

Remake the bond and press well, preferably twist or slide the item being fixed to ensure maximum adhesion. Heavy items should be supported until the adhesive is completely cured (approximately 24 hours) – carrying out a local trial is recommended. At least one surface must be porous.

Multi-Purpose Panel Adhesive is not suitable for use with polystyrene or on asphalt floors.

Coverage: 15 running metres per cartridge when using a 5mm² head

Clean up: Sovereign Contact Cleaner.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.











### **Fast Fix Board Adhesive**

Sovereign Fast Fix Board adhesive is a rapid new way of installing dry lining systems for both new build and refurbishment work. The adhesive can be used to bond plasterboard, tile backer board, insulation and timber sheets to masonry backgrounds, metal framing and timber studs.

Form:	Aerosol.
Pack Sizes:	750ml.
Content:	Polyurethane resin.
Properties:	Sovereign Fast Fix Board Adhesive gives a fast setting; permanent bond. There is no mixing, dust, water required and no waste. The fast setting nature of the foam allows for a final skim finish to be applied the same day.

Preparation: Surfaces should be clean, dry and free from dust, grease and other loose material. Use in well ventilated areas away from sources of ignition. Always wear protective clothing during use, which should include overalls, eye protection and impervious gloves. Cover all carpets and furnishings prior to use.

Application: Shake the can vigorously before use – at least 20 times and fix the aerosol to a Sovereign Foam Applicator Gun. Apply the adhesive in beads every 30cm and around the perimeter of the board. The adhesive can be applied to the background if required and if fixing to studwork. Allow the adhesive to cure for around 5 to 10 minutes. This is important to allow full expansion to take place.

Offer up the board to the wall and press firmly home and support the board for a short time.

Boards should be supported at the base either by the floor or packers. Allow the boards to become firmly bonded, around one hour, and then skim finish as normal. Cure time is dependant on temperature – reduced in hot wea

Cleaning: Spillages can be cleaned up with Sovereign Foam Gun Cleaner or Sovereign Gorilla Wipes before the adhesive has cured. Once cured removal is difficult. Normally the foam applicator gun should be left attached to a can of foam adhesive to ensure the entire system is closed. To reuse simply break off the nib of the foam adhesive at the end of the gun applicator nozzle, shake the can well and start application.

Before replacing cans, close the gun valve and unscrew empty can. Immediately replace with a full can or clean the foam applicator gun thoroughly with Sovereign Foam Gun Cleaner.

Coverage: One can will fix approximately 15m<sup>2</sup> or 5 boards of 2.4 x 1.2 metres.

**Storage:** Store upright in dry conditions between 5 and 25°C. Do not expose to temperatures above +50°C.

Shelf Life: 12 months when stored correctly.









### **Contact Adhesive**

Sovereign Contact Adhesive is a general-purpose solvent based synthetic rubber/resin contact adhesive, particularly suitable for bonding laminated plastics to wood, chipboard, plywood, other boards and to metals. An important feature of the adhesive is the rapid development of the adhesive bond that is obtained, and the good heat resistance of the material in service.

Form: Low Viscosity Solution.

Pack Sizes: 1 and 5 litres.

Colour(s): Natural.

**Content:** A blend of polychloroprene and synthetic resins

in solvent.

**Properties:** Easy to apply by comb or brush.

**Surface Preparation:** All surfaces must be clean, dry and free from dust and grease. Smooth or polished surfaces should be roughened with fine abrasive.

If degreasing is necessary, a detergent/water treatment should first be considered, but if this is not appropriate, a suitable solvent, such as Contact Cleaner, may be used. It is advisable to check the effect of degreasing solvents on plastics and rubber materials and on painted surfaces before carrying out the degreasing operation.

After degreasing, all traces of solvent must be allowed to evaporate before applying the adhesive.

Both surfaces to be bonded must be allowed to acclimatise under the same conditions prior to bonding. Moisture differentials between substrates can lead to cracking and delamination of veneers.

Apply the adhesive to both surfaces by brush or comb and allow to dry. If solvent remains in the adhesive film when the surfaces are bonded then bubbling can occur.

Storage: Stored in sealed containers in a dry place within the temperature range 5°C - 30°C, and in accordance with the requirements of the Petroleum Regulations, the adhesives may be expected to retain their properties for at least 12 months.

Practical coverage: Approximately 5 to 6m²/litre on nonporous surfaces. Surfaces that are porous or rough will require more adhesive and will give a reduced coverage. The overall coverage is a combination of that of the two surfaces forming the bond.

**General:** The adhesive can dry in a little over a minute; however, drying times are dependent upon the ambient humidity and temperature, the degree of atomisation obtained and the film thickness applied.

The dried adhesive on either substrate may be reactivated either by the application of a film of Contact Cleaner or by warming under infrared lamps. The reactivation process must be carried out within 24 hours of the application of the adhesive.

It must be remembered that coated surfaces cannot be slid into position, since they bond on contact; it is often convenient to align the parts along one edge, using pins as location devices, and then bring the two surfaces into contact.

#### Resistant to:

Temperatures -5°C to  $+70^{\circ}\text{C}$ 

Water, Oil and Petrol.

Kerosene; intermittent contact

Solvents; not resistant to esters, ketones, aromatic chlorinated hydrocarbons

Clean up: Use Contact Cleaner or Gorilla Wipes for cleaning equipment.

Storage: +5°C to +25°C.

Shelf Life: 12 months unopened.

Assembly: Bring the two, coated touch-dry surfaces into contact within 30 minutes of application and press together over the whole bond area. To obtain optimum initial bond strength, surfaces should be bonded as soon as possible after drying. Hand pressure is normally sufficient but a suitable press or roller may often be used to advantage. Sustained pressure is unnecessary.









### **Sprayable Contact Adhesive**

A general purpose solvent based synthetic rubber/resin contact adhesive, specifically intended for spray application, particularly suitable for bonding laminated plastics to wood, chipboard, plywood, other boards and to metals. An important feature of the adhesive is the rapid development of the adhesive bond that is obtained, and the good heat resistance of the material in service.

Form:	Low viscosity solution.
Pack Size:	5 litres.
Colour(s):	Natural.
Content:	A blend of Polychloroprene and synthetic resins in solvent.
Properties:	Sovereign Sprayable Contact Adhesive allows rapid turn around when applied by spray as large areas can be covered quickly.

#### Usage/Preparation:

Surface Preparation: All surfaces must be clean, dry and free from dust and grease. Smooth or polished surfaces should be roughened with fine abrasive. If degreasing is necessary, a detergent/water treatment should first be considered, but if this is not appropriate, a suitable solvent, such as Contact Cleaner, may be used. It is advisable to check the effect of degreasing solvents on plastics and rubber materials and on painted surfaces before carrying out the degreasing operation.

After degreasing, all traces of solvent must be allowed to evaporate before applying the adhesive. Both surfaces to be bonded must be allowed to acclimatise under the same conditions prior to bonding. Moisture differentials between substrates can lead to cracking and delamination of veneers.

Application: The adhesive can be sprayed using a variety of standard spray guns. One combination, which has been found particularly suitable, is a Kremlin M18 spray gun with an N3 air cap and size 15 fluid tip and needle. The adhesive may be supplied to the gun either by gravity feed, or from a pressure pot using a pot pressure of 0.7-1.0 bar, and an atomisation pressure of 3.5-4.5 bar. These pressures are recommended as a starting point for large areas, and in practice it has been found that for small areas or filmsy materials satisfactory results are obtained using pressures outside these limits.

Such pressures should be established by experiment in individual instances. Using quoted pressures a fan width up to 450mm can be obtained at a distance of 600mm from the work.

Assembly: Bring the two, coated touch-dry surfaces into contact within 30 minutes of application and press together over the whole bond area. For optimum initial bond strength, surfaces should be bonded as soon as possible after drying. Hand pressure is normally sufficient but a suitable press or roller may often be used with advantage. Sustained pressure unnecessary.

#### General:

The adhesive can dry in a little over a minute; however, drying times are dependent upon the ambient humidity and temperature, the degree of atomisation obtained and the film thickness applied.

The dried adhesive on either substrate may be reactivated either by the application of a film of Contact Cleaner or by warming under infrared lamps. The reactivation process must be carried out within 24 hours of the application of the adhesive.

It must be remembered that coated surfaces cannot be slid into position, since they bond on contact; it is often convenient to align the parts along one edge, using pins as location devices, and then bring the two surfaces into contact.

Coverage: Approximately 9m² single non-porous surfaces. Surfaces that are porous or rough will require more adhesive and will give a reduced coverage. The overall coverage is a combination of that of the two surfaces forming the bond.

**Clean up:** Use Contact Cleaner or Gorilla Wipes for cleaning equipment.

Storage: Stored in sealed containers in a dry place within the temperature range 5 to 30°C, and in accordance with the requirements of the Petroleum Regulations, the adhesives may be expected to retain their properties for at least 12 months

Shelf Life: 12 months unopened.









### Lubricants

A range of quality Spray Lubricants are available from Sovereign for a variety of uses and applications. All are supplied in 400ml.

### Super 6

Super 6 is a universal 'wet' lubricant spray that loosens rusted and seized parts. Super 6 is particularly useful for cleaning and maintaining moving parts, machinery, engines, loosening chains, shutters, locks etc.

### Silco Spray

This multi-purpose silicone-based spray has been developed for lubricating and protecting plastic, rubber and metal. Silco prevents squeaks, creaks and corrosion. Ideal for rubber gaskets and seals in cars to prevent them freezing and sticking.

### **Wood Lube**

A silicone free lubricant specially formulated for use on wood saws and planer beds, also helps prevent corrosion on machine tables. Helps to neutralize resin and also dispels moisture thus preventing chips, splinters, sawdust adhering to machinery parts – especially good for use with resinous timbers such as pine.





# **Surface Preparation, Paints and Coatings**

### Sovereign markets an extensive range of high quality paints and coatings and associated products.

- Masonry Sterilising Wash: A concentrated blend of Quaternary Ammonium Salt, a degreasing agent and other additives in water that will kill off active growths of moulds, lichen and algae. Also highly active against E-coli, Salmonella and Streptococcus.
- Stabilising Solution: A water-based solution for the consolidation of powdery and weather worn surfaces prior to decoration.
- Sprayable Acrylic Primer: Primarily designed for use with automatic vacuum applicators coupled to infrared force drying. Suitable for most interior soft woods, MDF chipboard, hardboard etc.
- Trade Primer: Sovereign Trade Primer is a high quality oil based paint for the professional tradesman. It is suitable for interior and exterior timber, masonry and metal.
- Acrylic Primer: A water-based primer undercoat for use on both new and previously painted timber. Suitable for both interior and exterior use.
- Stain Blocking Primer: A water-based acrylic coating used to mask unsightly stains and prevent bleeding of wood tannins into subsequent coatings.
- Aluminium Primer: Exterior grade wood primer with aluminium flake, which acts as an excellent barrier to water vapour and, in addition, seals resinous knots in timber. The professional's choice for long term protection.
- Trade Emulsion Matt: A high quality, professional interior emulsion. Low odour makes it ideal for large contracts such as shops and offices as well as for domestic use. Filtered to 105 microns making it suitable for airless spray. Particularly suitable for new plaster where moisture is still present.
- Silexine Smoothcote Masonry Paint: Water-based acrylic that is blister proof and gives a durable smooth matt finish with outstanding algaecidal and fungicidal qualities. Suitable for internal and external use on dry smooth/textured cement, plaster renderings, brickwork, blockwork, masonry, asbestos and pebble dash.
- Bitumen Paint: A fast drying, solvent based, full-bodied bituminous paint designed to provide an effective waterproof, weatherproof, corrosion resistant protective coating.
- Gorilla Wipes: Pre-impregnated cleaning wipes designed primarily for use by anyone who needs a very effective and immediate hand-cleaning product.
- Turps Substitute: General purpose solvent for cleaning and thinning of oil based paints.

### **Masonry Sterilising Wash**

Sovereign Masonry Sterilising Wash comprises a concentrated blend of a Quaternary Ammonium Salt, a degreasing agent and other additives in water. It will kill off active growths of moulds, lichen and algae.

Sovereign's Masonry Sterilising Wash is also a highly active against harmful bacteria such as E-coli, Salmonella and Streptococcus.

Form: Concentrated solution.

Pack Sizes: 5 litres.

Colour(s): Clear.

**HSE No:** 6360.

Properties:

Can be used to remove lichen, mould and algae from brickwork, masonry, stone, asbestos roofs, tiles and other building materials. Also as a sterilising solution prior to application of protective coatings (e.g. a masonry paint). Sovereign Masonry Sterilising Wash is also integral to dealing with the aftermath of flood damage. Floodwater often contains sewage and associated bacteria that must be treated prior to re-plastering work.

Please Note: Where Dry Rot is to be treated use Sovereign Sovaq FWS Solution.

**Preparation:** The concentrate should be diluted 1:4 parts clean water for use. Add the concentrate to the water and stir well.

Application: For porous masonry first start by wetting down the area to be treated with water. Then, by brush, work well into the growths to be removed, or apply by low volume spray. Painted or non-porous surfaces do not require pre-wetting. For flood damage it is recommended that the areas affected be treated prior to removal of plastenwork to prevent contamination of workers during the stripping out process. Once the plaster has been removed then the underlying masonry should be treated during the drying out process. Surfaces should be thoroughly saturated with the solution and badly contaminated areas may require a second treatment, alternatively make the solution stronger by diluting only 2 parts water to 1 part Masonry Sterilising Wash.

Vigorous growths of mould/algae should be left for 24 hours. Subsequent scrubbing with a stiff brush or spraying with a power washer should remove the growths. Once the active growths have been removed a light coating of the Sterilising Wash will help to keep the mould and algae at bay. However it will not permanently prevent re-growth. Porous substrates can be treated with one of Sovereign's water repellents, which will then greatly slow down the rate of re-growth.

**Practical coverage:** Brush - 5-9 m<sup>2</sup>/L; Spray - 4-6 m<sup>2</sup>/L - depending on substrate.













### **Stabilising Solution**

Sovereign Stabilising Solution is a water-based solution for the consolidation of powdery and weather worn surfaces prior to decoration.

Form: Ready to use Liquid.

Pack Size: 5 litres.

Colour(s): Clear.

Content: Fine particle size polymer emulsion.

Properties: Stabilising Solution will reconstitute and harden the surface layer of friable masonry. It also seals the surface to prevent excessive suction caused by highly porous and weak substrates. Sovereign Stabilising Solution eliminates the need for solvent based systems, making it particularly suitable for internal use.

Usage/Preparation: Sovereign Stabilising Solution can be used internally and externally to consolidate powdery and worn surfaces. It has exceptional penetrating and binding power; its use ensures that surfaces are well prepared for decoration. Can be used on old whitewash, paint and directly on masonry. Also suitable for use on new plaster prior to painting and tiling to reduce suction and stop dusting.

- Surfaces to be stabilised and painted must always be clean, dry and sound.
- Remove any loose, flaking or peeling paint or other coatings.
- Remove any organic growths (lichen, fungus, algae) by treating with Sovereign Masonry Sterilising Wash.
- Make good any defective surfaces, where necessary using a stiff brush, repair major or surface cracks and any defective gutters and down pipes.
- Dusty or chalky surfaces require stiff thorough brushing.
- New work must be allowed to dry thoroughly and should be free from efflorescent salts.
- Efflorescence must be removed by dry wiping or brushing followed by wiping with a damp cloth. The surface then should be left for 48 hours to see if efflorescence re-occurs.
- DO NOT proceed until efflorescence has ceased.

Application: Brush or spray apply a liberal coat of Sovereign Stabilising Solution onto the masonry substrate. Allow to dry for 12 hours. Exceptionally friable or porous surfaces may require a second coat of Sovereign Stabilising Solution.

#### General:

Do not apply Sovereign Sterilising Solution in wet weather or on to damp surfaces.

Only use in temperatures above 5°C.

Stabilising Solution may slightly darken substrates to which it is applied, and can produce a low level sheen. It can be used without over painting, however this colour change must be considered as to acceptability. A test coating is recommended if in doubt.

Coverage: 6 to 8m<sup>2</sup>/litre, depending on porosity of substrate.

**Clean up:** Equipment should be cleaned with water before the solution dries.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.









### **Sprayable Acrylic Primer**

Sovereign Sprayable Acrylic Primer is primarily designed for use with automatic vacuum applicators coupled to infrared force drying. Suitable for most interior soft woods, MDF chipboard, hardboard etc. May be used with airless - air assisted and conventional spray equipment, or brush and roller.

Form:	Ready to use Liquid.
Pack Size:	10 litres.
Colour(s):	White.
Content:	Acrylic polymer with mineral extenders and titanium dioxide.
Properties:	Sovereign Sprayable Acrylic Primer has outstanding opacity in one coat. It is fast drying and can be overcoated with most decorative, solvent and waterbased materials (a test area is recommended before wholesale use).

Usage/Preparation: Ensure surfaces are clean and dry (timber must be below 18% moisture content) and spot prime by brush all severely knotted woods 2 - 3 hours prior to application.

Application: Stir well before use. Sprayable Acrylic Primer can be applied by spray, vacuum applicator or brush. For all application methods apply un-thinned. For airless spray the typical tip size required is 11 to 13 thousandth's of an inch. Conventional spray will require a 1.4 to 1.6 material nozzle. Coverage will be around 12m²/litre.

Film Thickness per coat:

Dry	Wet	
15 microns	35 microns	
30 microns	70 microns	
e drying times: Touch	Overcoat	
2-5 minutes	2 hours	
	30 microns e drying times: Touch	15 microns 35 microns 30 microns 70 microns e drying times: Touch Overcoat

The air temperature should be at least 5°C with a surface temperature 3°C above dew point and the relative humidity below 90%. The drying times will be significantly extended in cold, damp conditions.

Clean up: Clean equipment with soapy water and rinse with clean fresh water.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.









### **Trade Primer**

Sovereign Trade Primer is a high quality oil based paint for the professional tradesman. It is suitable for interior and exterior timber, masonry and metal.

Form: Ready to use Liquid.

Pack Size: 5 litres.

Colour(s): White.

Content: Long oil alkyd resin and selected fillers and solvent.

Properties: Excellent coverage and hiding power makes it economical to use.

**Usage/Preparation:** Surfaces must be clean, sound, dry and suitably prepared. New timber should be sanded smooth and non durable wood to be used externally first treated with Sovereign Wood Preservative.

Bare metal should be suitably primed. Knots must first be treated with a knotting solution. Alternatively, use Sovereign Aluminium Primer, which should also be used for resinous or oily timber, particularly some hardwoods. When used on masonry, plaster etc. prime with Sovereign Stabilising Solution. Sovereign Trade Primer can be applied by brush, pad or roller.

Drying and Overcoating: Sovereign Trade Primer will be touch dry in around 4 hours and can be over coated in 16 - 24 hours in normal conditions. At low temperatures or high humidity the drying period is extended. Lightly rub down with sandpaper between coats. Once dry apply undergoat and a topcoat.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.

Coverage: Coverage can be up to 12-16 m²/litre. However the coverage is dependant on application method and smoothness of the surface.

**Clean Up:** Clean all brushes and equipment with Sovereign Turps Substitute before the paint dries.



### **Acrylic Primer**

Sovereign Acrylic Primer is a water-based primer undercoat for use on both new and previously painted timber. It is suitable for both interior and exterior use.

Form:	Liquid, ready to use.
Pack Sizes:	5 litres.
Colour(s):	White.
Content:	A blend of emulsion polymer and speciality additives.
Properties:	Easy to apply and fast drying. Sovereign Acrylic Primer is also suitable for use on plaster, concrete and masonry.

Usage/Preparation: All surfaces must be clean, dry and sound. New timber should be sanded in the direction of the grain. Weak, friable surfaces should be treated with Sovereign Stabilising Solution.

Old paintwork should be sanded to provide a key and any mould or algae treated with Sovereign Dentolite Sterilising Solution. Seal knots with knotting solution or Sovereign Aluminium Primer.

Application: Stir well before use. Sovereign Acrylic Primer can be applied by brush, roller or spray. When spraying dilute with up to 10% water to aid application. Further coats of primer can be applied if required.

Coverage: Approximately 10-12m<sup>2</sup>/litre.

Drying and Overcoating: Acrylic Primer is normally touch dry in 1 hour and can be overcoated in 2 hours in normal conditions. At low temperatures or high humidity the drying period is extended. In such conditions allow up to 6 hours between coats. Can be overcoated with both water and solvent-based paint systems.

**Thinning:** Sovereign Acrylic Primer can be thinned with water to aid application. Typically an addition of 10% water is sufficient, however up to 15% can be added if required.

**Clean Up:** Clean brushes and other equipment with soapy water and rinse with clean fresh water.

Storage: Between 5 and 30°C. Shelf Life: 12 months unopened.











### **Stain Blocking Primer**

Stain Blocking Primer is a water-based acrylic coating used to mask unsightly stains and prevent bleeding of wood tannins into subsequent coatings.

Form:	Ready to use emulsion.
Pack Size:	2.5 litres.
Colour(s):	White.
Content:	Acrylic resin and additives.
Properties:	Sovereign Stain Blocking Primer can be used on timber, concrete, plaster, brick and glossy surfaces. When cured the primer seals stains within its film and is suitable for sealing wood tannins, for example cedar, asphalt, bitumen, creosote, graffiti and rust. Can also be used as a general purpose primer.

**Preparation:** Ensure surfaces are dry, sound and free of dust before painting.

**General:** Sovereign Stain Blocking Primer can be applied by brush, roller or spray. A maximum of 5% water may be added to thin down if necessary.

Some heavy stains may require a second coat, users must test this on site to determine if this is necessary.

At 20°C the primer will be touch dry in around 45 minutes and be ready for a second coat where necessary in 1.5 hours. When applying other coatings over the primer it is important to allow at least 24 hours for the primer to cure to ensure that stains are fully sealed. Low temperatures and high humidity will extend the drying and curing times.

Clean up: Clean equipment with water before the primer dries.

Coverage: Approximately 8 to 10m<sup>2</sup>/litre.

Storage: Between 5 and 30°C.

**Shelf Life:** EU limit value for this product (cat A/g): 30 g/l (2010). This product contains max 30 g/l VOC.

VOC Content: 12 months unopened.











### **Aluminium Primer**

An exterior grade wood primer with aluminium flake, which acts as an excellent barrier to water vapour and, in addition, seals resinous knots in timber. It is the professionals' preferred primer for long term protection of timber initially, on repaints and specified work.

Form:	Ready to use Liquid.	
Pack Sizes:	2.5 litres.	
Colour(s):	Aluminium Grey.	
Contains:	Modified alkyd resin, pigmented with aluminium flake.	
Properties:	Good sealing properties against water vapour and resin. Lightly structured and easy to apply, giving excellent brush loading. Good sag resistance on window frames and other vertical surfaces. Good flow and absorption in to timber resulting in a tack free time of around 1 hour.	

Preparation: New wood should be abraded in the direction of the grain with a medium grade paper until a smooth surface is achieved. Previously painted surfaces should be lightly sanded to provide a key. All surfaces must be dry, sound and free from contaminants.

**General:** Sovereign Aluminium Primer can be applied by brush, roller or spray.

When using airless spray up to 5% thinners can be added. Typical tip size is 11 to 13 thou/0.27 to 0.33mm. Fluid pressure should be around 200kg/sq. metre or 2800psi. Stir well before use.

Overcoating: Surface is touch dry in 1 hour and dry to handle after 4 hours. Overcoat after 16 hours minimum and 7 days maximum. After 7 days drying rub down the coating to provide a key. Drying times are significantly extended in cold, damp conditions.

**Coverage:** Is dependent on porosity and surface texture but is typically between 8 – 12 sq. metres/litre.

Thinning: Use Sovereign Turps Substitute.

Clean Up: Use Sovereign Turps Substitute.

Storage: Between 5 and 30°C

Shelf Life: 24 months unopened.









### **Trade Emulsion Matt**

Sovereign Trade Emulsion Matt is a high quality, professional paint for the decoration of interior walls and ceilings. It has low odour making it suitable for use on large contracts such as shops and offices as well as for domestic use. This product is filtered to 105 microns making it suitable for airless spray. Sovereign Trade Emulsion Matt is particularly suitable for new plaster where moisture is still present.

Form:	Ready to use Liquid.
Pack Size:	10 litres.
Colour(s):	White and Magnolia.
Content:	Va/VeoVa copolymer, titanium dioxide and speciality additives.
Properties:	Sovereign Trade Emulsion is low in VOCs. Is very easy to apply with high opacity ensuring that most surfaces can be covered in two coats. It dries quickly to give a matt finish.

**Usage/Preparation:** Apply by brush, roller, pad or spray to dry, sound surfaces. Concrete, brick and plaster must be free of efflorescence, dust, fungi and algal growths.

Areas suffering from black mould or green algae must first be sterilised and cleaned using Dentolite Sterilising Solution.

Challe or frighte surfaces must first be treated with Sovereign.

Chalky or friable surfaces must first be treated with Sovereign Stabilising Solution and allowed to dry before painting. New plaster and other absorbent surfaces can be sealed with a dilute solution of Sovereign PVA to aid application and improve coverage. Alternatively Sovereign Trade Emulsion Matt can be let down with up to 15% water and used as a priming coat.

General: When applying using spray equipment Trade Emulsion Matt can be diluted with up to 15% water. A typical tip size is 15 and 17 thou./0.38 to 0.40mm, with a fluid pressure of 140kg/m² or 2000 psi.

After prolonged periods of storage stir well before use. After use part full containers should have the interior of their lids wiped clean before storage. When used in areas that have historically had problems with black mould then if possible improve ventilation. If this is not possible then add 1 pot of Sovereign Mould Eradication Additive to 10 litres of paint and stir well with a mechanical mixer. Alternatively use Fungi-Chek Emulsion, a premixed biocidal paint.

Drying and Overcoating: Sovereign Trade Emulsion Matt will be touch dry in 1 hour and can normally be over coated in 2 hours. At low temperatures or high humidity the drying period is extended. In such conditions allow up to 8 hours between coats.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.

Coverage: On flat sealed surfaces coverage will be up to 12.5m<sup>2</sup>/litre. Porous or uneven substrates will reduce the coverage rate.

Thinning and Clean Up: Only use potable water for thinning Sovereign Trade Emulsion Matt. Add up to 15% water for a priming coat and for airless spray application. Conventional spray equipment may require up to 25% water added to suit equipment. Use soapy water to clean tools and equipment then flush with fresh, clean water.











### **Silexine Smoothcote Masonry Paint**

A water-based acrylic that is blister proof and gives a durable smooth matt finish with outstanding algaecidal and fungicidal qualities. Suitable for internal and external use on dry smooth/textured cement, plaster renderings, brickwork, blockwork, masonry, asbestos and pebble dash.

Form: Liquid, ready to use.

Pack Sizes: 5 litres.

Colour(s): Brilliant White and Magnolia.

Contains: Acrylic co-polymer, and other speciality additives.

Properties: Provides a highly durable weather resistant and minimal dirt retentive finish. Smoothcote Masonry Paint contains a wide spectrum biocide against organic growth; has good alkali resistance, excellent opacity and good adhesion to general masonry surfaces. Smoothcote Masonry Paint may be used for new or old interior surfaces subjected to harsher treatment than normal emulsion paint.

Application: Can be applied by brush, spray or roller. Prepare surfaces as required (see General Surface Preparation and Priming), paying particular attention to surface defects and cracks other than fine hair line cracks. No primer or undercoat is required unless the surface is

No primer or undercoat is required unless the surface is chalky or friable. In this case apply 1 liberal coat of Sovereign Stabilising Solution.

Apply two coats of Smoothcote by brush, spray or roller, allowing 24 hours between coats.

Clean brushes and equipment with water. Wash Sovereign Stabilising Solution brushes with Sovereign Turps Substitute or White Spirit.

Minimum temperature for application is 5°C and rising.

Storage: Between 5°C-30°C. Shelf Life: 12 months unopened.

Surface Preparation and Priming: Surfaces to be painted must always be clean, dry and sound. Ideally allow 2/3 good drying days and check weather outlook before proceeding. Remove any loose, flaking or peeling paint or other coatings

that will prevent a good bond to the substrate.

Remove any organic growth (lichen, fungus, algae) with a stiff brush and treat the surface with Masonry Sterilising Wash. Make good any defective surfaces; repair major or surface cracks and any defective gutters and down pipes.

Dusty or chalky surfaces require stiff thorough brushing and old paint residues (lime wash, distemper) must be removed before brush applying a liberal coat of Stabilising Solution.

Porous surfaces or surfaces of uneven absorption should also be treated with Sovereign Stabilising Solution.

New work must be allowed to dry thoroughly and should be free from efflorescent salts.

Efflorescence must be removed by dry wiping or brushing followed by wiping with a damp cloth. The surface then should be left for 48 hours to see if efflorescence re-occurs.

DO NOT PROCEED UNTIL EFFLORESCENCE HAS CEASED.

**Practical coverage:** Average coverage 9 to 11 m² per litre, depending upon porosity and roughness of surface.

On rough brickwork, pebble dash, coverage will be reduced to 3 to 4 m²/litre.

Drying times are dependent upon weather conditions. Smoothcote will be touch dry under normal conditions from between  $2-4\ \text{hours}$ .

Additional Information Regarding Coverage: Coverage figures quoted have been found to be generally satisfactory in working practice and may be used as guidance. The rate achieved will be always dependent on the following factors:

- Construction of the surface to be painted.
- The amount by which the coating is thinned.
- Porosity and roughness of the surface.
- Method of application.

The specifier or user should take into account the above factors as well as any direct experience regarding losses when estimating quantities.









### **Bitumen Paint**

Sovereign Bitumen Paint is a fast drying, solvent based, full-bodied bituminous paint designed to provide an effective waterproof, weatherproof, corrosion resistant protective coating.

Form: Ready to use Liquid.

Pack Sizes: 5 litres.

Colour(s): Black.

Properties: Sovereign Bitumen Paint is resistant to low concentrations of alkalis and acids and can withstand prolonged oxidation. It is suitable for application to a wide variety of materials including iron and steel, lead, zinc, aluminium, asbestos, cement, concrete, stone and brick.

Usage/Preparation: As with all surface coatings, preparation of the surface is of great importance and will influence the degree of adhesion obtained and the subsequent life of the coating.

All surfaces must be sound, stable and thoroughly clean and dry. Metal surfaces should be wire brushed to remove rust. Where long-term protection is required an initial treatment of a rust inhibitive product such as zinc phosphate should be used.

**Areas of Use:** Metal protection – corrugated iron sheets, fire escapes, stairways, ladders, storage tanks, gutters, down pipes, fences, railings, gates, etc.

A protective coating for concrete structures, stone, brick, concrete screeds and sand/cement surfaces.

A minimum of two coats of Sovereign Bitumen Paint should be applied by brush or spray. Allow the first coat to completely dry before the second coat is applied.

**Please Note:** Bitumen Paint may bleed through any paints subsequently applied over it. Apply a primer recommended by the paint manufacturer before over-painting.

Since concrete and some stone surfaces may be porous, an initial primer coat of Sovereign Bitumen Paint should be applied. Dilute Sovereign Bitumen Paint 9 parts to 1 part Sovereign Turps Substitute or White Spirit and apply as normal. Allow to dry thoroughly before applying two coats of undiluted Sovereign Bitumen Paint as normal.

#### Coverage:

3-5 m²/litre - porous surface. 8-10 m²/litre - metal surface.

Clean up: Tools may be cleaned by using Sovereign Turps Substitute or White Spirit. Spillages should be wiped off surfaces before the Bitumen Paint has set.

Storage:  $+5^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$ . Shelf Life: 12 months unopened.









### **Gorilla Wipes**

Pre-impregnated cleaning wipes designed for anyone who needs a highly effective and immediate hand-cleaning product. No further need for wet, dirty towels, messy liquid cleaners or water. This is a true all round multi-purpose cleaning product for most types of stains and dirt. Unlike many other competitor products, Gorilla Wipes are dermatologically tested, and comply with the European Cosmetics Standards and contain Vitamin E to protect the skin, making them suitable for use either at home or at work.

Preparation: They are truly unique in their ability to clean general grime, oil and water-based paints, instant grab adhesives, silicone and acrylic sealants, PU foam, oil, tar, grease, permanent marker, glues. They are also a wonderful multi-purpose degreaser. Use them to clean up old paint and sealant rather than having to paint again. They will remove most dirt and grime without affecting old paint.

Please Note: It is always recommended to test on a hidden area before use as this product may not be suitable for some surfaces.

#### Who would have a need to use them?

Anybody involved in construction, maintenance, workshops, mechanics, engineers, electricians, plumbers, welders, farmers, painters, decorators, printers and all DIYers. They are absolutely ideal for the home, office, workshop or factory.

Pack Sizes: 80 wipes per tub (each wipe 20cm x 30cm).

### **Turps Substitute**

Sovereign Turps Substitute is a general purpose solvent for cleaning and thinning of oil based paints.

Form:	Liquid.	
Pack Size:	5 litres.	
Content:	Low aromatic petroleum fraction.	
Properties:	Sovereign Turps Substitute has low odour and excellent solvency. It is suitable for the cleaning and thinning of oil based paints and wood stains can also be used to clean oily or resinous timbers prior to painting.	

**Usage:** When used as a thinner for oil based paints the paint manufacturers' instruction for thinning must be closely followed. Sovereign Turps Substitute can also be used for cleaning brushes and equipment used in the application of oil based paints. The paint to be cleaned must not be allowed to dry as Turps Substitute will have little effect on dried paint films.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.



# Give your home a Warmer Touch

Warm Touch® is Sovereign's highly effective solution to condensation and black mould

Warm Touch is an extremely simple, cost-effective, yet highly effective internal insulation solution to common problems caused by cold and solid walls, such as condensation and black mould.

Easily applied without mess, fuss or major disruption to occupants, Warm Touch can be fitted by decorators, builders and even competent DIYers. Supplied in 5 or 10mm thickness rolls, with associated corner tapes and edge channels, Warm Touch is quickly installed, providing immediate insulation, sound proofing and effective crack or damage coverage.

Finally, once in place, Sovereign Warm Touch lining can be painted, wallpapered or even tiled.



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Part of the ARKEMA group of companies.



### **Sealants**

# Sovereign markets a wide range of premium quality sealants formulated for a broad spectrum of specialised construction and renovation applications.

- Construction Silicone: Low modulus silicone that provides a flexible watertight seal on common building substrates. CE marked.
- All Weather Sealant: A universal co-polymer sealant for a wide range of sealing and weatherproofing applications. Can be applied in wet weather. CE marked.
- Decorfil: A water-based filler and sealant for use prior to painting and decorating to fill gaps where movement may occur such as door/window frames and also along skirting boards. CE marked.
- Flamacryl: Acrylic joint sealant, which in the event of a fire will swell to form an insulting fire and smoke resistant 'char'. Suitable for use in joints where an acoustic seal is required. CE marked.
- Low Modulus Silicone: A neutral curing silicone that will provide a watertight flexible seal on many common building substrates. CE marked.
- Multi-Purpose Silicone: A high modulus acetoxy curing silicone that will provide a watertight flexible seal on many common building substrates. CE marked.
- Mastic: A permanently flexible sealing compound based on synthetic butylene rubber polymers, mineral and vegetable oils, fillers and thickeners. Remarkably versatile, forming a tough, flexible airtight skin around any part of the compound exposed to the air, whilst the mass of material beneath remains permanently soft, accommodating substrate movement. CE marked.
- Lead Sealant: Specifically designed for use in conjunction with lead flashing. CE marked.
- Remtox Multi-Purpose Silicone: A high modulus acetoxy curing silicone that will provide a watertight flexible seal on many common building substrates. CE marked.
- Sanitary Grade Silicone Sealant: Premium quality acetoxy curing silicone containing antifungal compounds to prevent mould growth in areas subject to high humidity. CE marked.
- Silacryl Sealant: High quality, one-part, non-slumping, modified acrylic exterior/interior sealant. Will adhere to glass, wood, metal, brick and many other substrates. Withstands up to 50% total joint movement. Can be over painted and resists mould and mildew. CE marked.
- Trowel Grade Mastic: A blend of fillers, oils and a synthetic rubber designed to give good durability where a limited degree of movement might occur. CE marked.
- Flexi Acrylic K10: A resin and fibre reinforced seamless membrane for waterproofing and repairing roofs. Can be used on asphalt, roofing felt, asbestos, cement, metal, slate and tiles. Can be applied to damp substrates and is water resistant immediately. CE marked.
- Flashing: Self adhesive, long lasting waterproof seal, used on clean, sound surfaces, including metal, roofing felt, wood, glass, asphalt, concrete and brickwork.

### **Construction Silicone**

Sovereign Construction Silicone is a low modulus acetoxy curing silicone that will provide a watertight flexible seal on many common building substrates. CE marked.

Form:	Thixotropic Paste.	
Pack Sizes:	310ml cartridges.	
Colour(s):	Transparent, White and Black.	
Properties:	Sovereign Construction Silicone will cure rapidly to give a long lasting silicone rubber seal around doors and windows. Can also be used for cap glazing, remedial work and for sealing glass to glass (not aquaria).	

**Usage/Preparation:** Surfaces must be dry, clean, and free of dust, rust, grease, oil and other contaminants.

Gun the sealant firmly into the joint to provide a solid fill. Silicone can be smoothed using a slightly wetted stick (soapy solution will make tooling easier) or spatula. Tooling must be carried out within 5 minutes of application. Deep joints must have the depth reduced to 50% of the width using either Sovereign Expanding Foam or joint backer rod.

Sovereign Construction Silicone has a skinning time of 10-15 minutes and will be tack free in around 1 hour. Full cure is reached at a rate of 2-4mm per 24 hours.

Porous or unsound surfaces should be primed before application. Not suitable for use on bitumen or oily surfaces. Construction Silicone Sealant will not accept paint coatings.

Clean up: Clean tools immediately after use with Sovereign Turps Substitute or White Spirit. Never use fingers to tool down silicone sealants.

Storage: Between 5°C - 30°C.

Shelf Life: 12 months unopened.











# **All Weather Sealant**

A universal Co-Polymer Sealant that can be used for a wide range of sealing and weatherproofing applications around the home and in industry. Can be applied in wet weather, CE marked.

Form: Thixotropic Paste.

Pack Sizes: 300ml cartridges.

Colour(s): Black and Clear.

Properties: Provides a superior adhesion to most surfaces such as glass, glazed surfaces, aluminium, lead and zinc. Can be used in building, glazing, roofing and ductwork applications and for emergency repairs in wet weather. This sealant is overpaintable with most paints and stains.

Usage/Preparation: Surfaces must be clean, and free of dust, rust, grease, oil and other contaminants. Gun the sealant firmly into the joint to provide a solid fill. Sealant can be smoothed using a slightly wetted stick (soapy solution will make tooling easier) or spatula. Tooling must be carried out within 5 minutes of application. Deep joints must have the depth reduced to 50% of the width using either Sovereign Expanding Foam or joint backer rod.

Do not use in joints subject to movement in excess of 15%. Do not use with aquaria. On surfaces containing bitumen or asphalt, discolouration can occur. It is user's responsibility to determine suitability.

General: Sovereign All Weather Sealant has a skinning time of 5 minutes and will be tack free in around 10 minutes. Full cure is reached at a rate of 0.5 to 1.0mm per 24 hours under ideal conditions.

Porous or unsound surfaces should be primed before application.

Clean tools immediately after use with Gorilla Wipes. Never use fingers to tool down sealants.

Coverage: 12 running metres for a 5x5mm bead.

Storage: Store in cool, dry conditions.

Shelf Life: 12 months.











# **Decorfil**

Decorfil is a water-based filler and sealant for use prior to painting and decorating to fill gaps where movement may occur. Typical uses are between plaster and door frames or window frames and also along skirting boards. CE marked.

Form:	Thixotropic Paste.
Pack Sizes:	310ml cartridges.
Colour(s):	White.
Content:	Blend of polymers, rheology modifiers and adhesion promoters.
Properties:	Decorfil is easy to apply, dries quickly and can be overpainted in 1 to 2 hours.  Decorfil remains permanently flexible after application.

Usage/Preparation: Surfaces must be clean and free from dust. Highly porous or friable surfaces should be treated with a dilute solution of Sovereign PVA prior to application of the sealant.

Gun the sealant firmly into the joint to provide a solid fill. Decorfil can be smoothed using a slightly wetted stick (soapy solution will make tooling easier) or spatula. Tooling must be carried out within 5 minutes of application. Deep joints must have the depth reduced to 50% of the width using either Sovereign Expanding Foam or joint backer rod.

**Drying and Overcoating:** Sovereign Decorfil will shrink slightly during drying, for this reason it is best to allow the sealant to cure fully prior to painting to prevent the paint from cracking.

Can be overpainted with emulsion paints after 1-2 hours.

Allow 24 hours before using oil based paints. Drying time will be delayed in cold or damp conditions.

Clean up: Uncured material can be cleaned off with water. Clean tools and equipment with soapy water and then rinse with clean water and dry.

**Practical Coverage:** Approximately 12 linear metres for a 5 x 5mm bead, excluding wastage.

**Storage:** Between 5°C and 30°C. **Shelf Life:** 12 months unopened.









# **Flamacryl**

Sovereign Flamacryl is an acrylic joint sealant, which in the event of a fire will intumesce (swell) to form an insulting 'char' that is fire resistant and will resist the passage of smoke and fire. It cures to form a tough seal with movement joint accommodation of +/- 12.5%. Flamacryl is suitable for use in joints where an acoustic seal is required. Can be over painted when cured. CE marked.

Form:	Thixotropic Paste.
Pack Sizes:	310ml cartridges.
Colour(s):	White.
Content:	Blend of acrylic polymer and intumescing agents.
Properties:	Sovereign Flamacryl is used for sealing expansion, contraction and construction joints where compartmentation and movement are factors; as a bedding sealing compound for locating fire resistant board systems; to seal gaps which occur between fire-rated building components and the surrounding structures i.e. window and door frames; and as a service penetration seal system for both cables and pipes.

Certification: Independently tested to BS EN 1366-3: 2004 & BS EN 1366-4: 2006 achieving 4 hour integrity and insulation rating for a range of linear and penetration seals.

Also tested to BS EN ISO 140-3. 1995 Measurement of Airborne Sound Insulation of Building elements, where the sealant maintained the integrity of a plasterboard partition wall with a Sound Reduction Index of 55dB.

**Usage/Preparation:** Surfaces must be clean, dry and free from oil, grease, dust and loose material. Not for external use, or at temperatures below 7°C.

Application: Prepare cartridge by cutting the tip off the sealant tube above the thread. Replace nozzle, cut to form bead to suit joint width, then fit cartridge into gun at a 45° angle, wide enough to cover the gap being filled. Ensure sealant makes contact with sides of joint, tooling if necessary using a wet spatula within 3 to 5 minutes of application.

Coverage: 12 metres for a 5 x 5mm bead

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.

Use only in temperatures of 5°C and rising.









# Low Modulus Silicone

Sovereign Low Modulus Silicone is a low modulus neutral curing silicone that will provide a watertight flexible seal on many common building substrates. Conforms to BS 5889. (Part A) ISO 11600 G-25 LM, DIN 18545 E. CE marked.

Form:	Thixotropic Paste.
Pack Sizes:	310ml cartridges.
Colour(s):	White, Clear, Grey and Anthracite.
Content:	Mixture of dimethyl and polysiloxane.
Properties:	Sovereign Low Modulus Silicone will cure rapidly to give a long lasting silicone rubber seal around doors and windows, glass butt joints, perimeter pointing, sealing around UPVC, cap beading, sealing cladding panels, sealing around worktops. As this product is neutral curing it is also suitable for use on aluminium, zinc, lead and polycarbonate.

Usage/Preparation: Surfaces must be dry, clean, and free of dust, rust, grease, oil and other contaminants. Gun the sealant firmly into the joint to provide a solid fill. Sealant can be smoothed using a slightly wetted stick (soapy solution will make tooling easier) or spatula.

Tooling must be carried out within 5 minutes of application. Deep joints must have the depth reduced to 50% of the width using either Sovereign Expanding Foam or joint backer rod. Sovereign Low Modulus Silicone has a skinning time of around 5 minutes and will be tack free in around 1 hour. Full cure is reached at a rate of 2 to 4mm per 24 hours.

Porous or unsound surfaces should be primed before

application. Not suitable for use on bitumen or oily surfaces. Sealant will not accept paint coatings. Clean tools immediately after use with Sovereign Turps.

Clean tools immediately after use with Sovereign Turps Substitute or White Spirit. Never use fingers to tool down silicone sealants.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.











# **Multi-Purpose Silicone**

Multi-Purpose Silicone is a high modulus acetoxy curing silicone that will provide a watertight flexible seal on many common building substrates. CE marked.

Form:	Thixotropic Paste.
Pack Sizes:	310ml cartridges.
Colour(s):	White, Clear, Rustic, Black and Cream.
Content:	Mixture of dimethyl and polysiloxane.
Properties:	Sovereign Multi-Purpose Silicone will cure rapidly to give a long lasting, weatherproof silicone rubber seal. Use around doors and windows, sealing around worktops, top sealing in glazing applications, sealing metal cladding and curtain walling.

Usage/Preparation: Surfaces must be dry, clean, and free of dust, rust, grease, oil and other contaminants. Gun the sealant firmly into the joint to provide a solid fill. Silicone can be smoothed using a slightly wetted stick (soapy solution will make tooling easier) or spatula. Tooling must be carried out within 5 minutes of application. Deep joints must have the depth reduced to 50% of the width using either Sovereign Expanding Foam or joint backer rod. When used in butt glazing, the sealant should only be allowed to form a bond to two surfaces.

Sovereign Multi-Purpose Silicone has a skinning time of 5 to 10 minutes and will be tack free in around 30 minutes. Full cure is reached at a rate of 2mm per 24 hours.

Always tool down with a spatula or stick wetted with soapy water within 5 minutes of application.

Porous or unsound surfaces should be primed before application. Not suitable for use on bitumen or oily surfaces. Silicone Sealant will not accept paint coatings.

Clean up: Clean tools immediately after use with Sovereign Turps Substitute or White Spirit. Never use fingers to tool down silicone sealants.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.











# **Mastic**

A permanently flexible sealing compound based on synthetic butylene rubber polymers, mineral and vegetable oils, fillers and thickeners. Sovereign Building Mastic exhibits remarkable versatility and forms a tough, flexible skin around any part of the compound exposed to the air. The skin formed is both airtight and waterproof and the mass of material beneath remains permanently soft and plastic, accommodating any substrate movement and ensuring long life. CE marked.

Form:	Thixotropic Paste.
Pack Sizes:	380ml cartridges.
Colour(s):	Neutral.
Content:	A blend of polybutene and polybutadiene rubbers in an oil phase.
Properties:	Building Mastic is a non-curing system. A skin forms which remains flexible. If excessive movement is encountered the skin may split and reform. Can be applied to seal glass, metal, brick, concrete and wood. Sovereign Building Mastic is used around door and window frames. It is also ideal for weatherproofing lap joints in caravans, containers, boats and vehicles.

**Usage/Preparation:** All general pointing and sealing work around doors, window frames, etc.

Application: Application is by caulking gun. The sealant should be extruded into joint ensuring good contact.

After filling the joint tooling can be done using a spatula dipped in Sovereign Turps Substitute or White Spirit. Ideally joint depths should exceed joint widths in a ratio 3:1 to 1:1. Back filling deep joints should be done with Expanding Foam or Foam strip.

Common Faults:

- Poor joint design creating slumping/movement.
- Poor finishing design creating wrinkling.
- Shrinkage caused by using too thin a bead. The Mastic should always exceed 6mm in thickness.

**Coverage:** A 10mm x 5mm bead gives 7.5 running metres per tube.

Clean up: Clean tools with Sovereign Turps Substitute or White Spirit.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.











## **Lead Sealant**

Sovereign Lead Sealant is specifically designed for use in conjunction with lead flashing. It cures to give a flexible, durable and watertight seal between lead and most roofing substrates. CE marked.

Form:	Thixotropic Paste.
Pack Sizes:	310ml cartridges.
Colour(s):	Grey.
Content:	Mixture of dimethyl and polysiloxane.
Properties:	Sovereign Lead Sealant will cure rapidly to give a long lasting rubber seal on brick, concrete, masonry and other building materials.

Usage/Preparation: Surfaces must be dry, clean, and free of dust, rust, grease, oil and other contaminants. Gun the sealant firmly into the joint to provide a solid fill. Sealant can be smoothed using a slightly wetted stick (soapy solution will make tooling easier) or spatula.

Tooling must be carried out within 5 minutes of application. Deep joints must have the depth reduced to 50% of the width using either Sovereign Expanding Foam or joint backer rod. Sovereign Lead Sealant has a skinning time of around 5 minutes and will be tack free in around 1 hour. Full cure is reached at a rate of 2 to 4mm per 24 hours.

Porous or unsound surfaces should be primed before application. Not suitable for use on bitumen or oily surfaces. Sealant will not accept paint coatings.

Clean tools immediately after use with Sovereign Turps Substitute or White Spirit. Never use fingers to tool down silicone sealants.

Storage: Between 5 and 25°C.

Shelf Life: 12 months unopened.









# **Remtox Multi-Purpose Silicone**

Remtox Multi-Purpose Silicone is a high modulus acetoxy curing silicone that will provide a watertight flexible seal on many common building substrates. CE marked.

Form:	Thixotropic Paste.
Pack Size:	310ml cartridges.
Colour(s):	White and Transparent.
Content:	Mixture of dimethyl polysiloxane.
Properties:	Remtox Multi-Purpose Silicone will cure to give a long lasting, weatherproof silicone rubber seal. Use around doors and windows, sealing around worktops, top sealing in glazing applications, sealing metal cladding and curtain walling.

Usage/Preparation: Surfaces must be dry, clean, and free of dust, rust, grease, oil and other contaminants. Gun the sealant firmly into the joint to provide a solid fill. Silicone can be smoothed using a slightly wetted stick (soapy solution will make tooling easier) or spatula. Tooling must be carried out within 5 minutes of application. Deep joints must have the depth reduced to 50% of the width using either Sovereign Expanding Foam or joint backer rod. When used in butt glazing the Sealant should only be allowed to form a bond to two surfaces.

Remtox Multi-Purpose Silicone has a skinning time of 5 to 10 minutes and will be tack free in around 30 minutes. Full cure is reached at a rate of 2mm per 24 hours.

Always tool down with a spatula or stick wetted with soapy water within 5 minutes of application.

Porous or unsound surfaces should be primed before application. Not suitable for use on bitumen or oily surfaces. Remtox Multi-Purpose Silicone sealant will not accept paint coatings.

Clean up: Clean tools immediately after use with Sovereign Turps Substitute or White Spirit. Never use fingers to tool down silicone sealants.

Storage: Between 5 and 25°C.

Shelf Life: 12 months unopened.











# Sanitary Grade Silicone Sealant

Sovereign Sanitary Grade Silicone is a premium quality acetoxy curing silicone containing anti-fungal compounds to prevent mould growth in areas subject to high humidity. CE marked.

Form:	Thixotropic Paste.
Pack Size:	310ml cartridges.
Colour(s):	White and Ivory.
Content:	Acetoxy cure silicone sealant.
Properties:	Provide a long lasting flexible, watertight seal that is ideal for domestic and municipal installations. Suitable for sealing around baths, showers, basins and all types of sanitary ware. Adheres to most non-porous substrates. Conforms to BS5889 (B) and ISO 11.600 LM Construction.

Usage/Preparation: Surfaces must be dry, clean, and free of dust, rust, grease, oil and other contaminants. Do not use on bare metal or polycarbonate. Gun the sealant firmly into the joint to provide a solid fill. Silicone can be smoothed using a slightly wetted stick (soapy solution will make tooling easier) or spatula. Tooling must be carried out within 5 minutes of application.

Deep joints must have the depth reduced to 50% of the width using either Sovereign Expanding Foam or joint backer rod. Sovereign Sanitary Silicone has a skinning time of 10 to 15 minutes and will be tack free in around 1 hour. Full cure is reached at a rate of 2 to 4mm per 24 hours.

Porous or unsound surfaces should be primed before application. Not suitable for use on bitumen or oily surfaces. Silicone Sealant will not accept paint coatings.

Clean up: Clean tools immediately after use with Sovereign Turps Substitute or White Spirit. Never use fingers to tool down silicone sealants.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.











# Silacryl Sealant

Silacryl is a high quality, one-part, non-slumping, modified acrylic sealant suitable for most exterior and interior applications. Silacryl will adhere to glass, wood, metal, brick and many other substrates. It withstands up to 50% total joint movement and can be over painted and resists mould and mildew. CE marked.

Form:	Thixotropic Paste.
Pack Size:	310ml cartridges.
Colour(s):	White and Mahogany.
Content:	Blend of acrylic polymer, silane and functional additives.
Properties:	Easy to apply and tool. Long life expectancy. Silane added for greater flexibility and adhesion. Easy soap and water clean up.

Usage/Preparation: Recommended areas of use include aluminium, UPVC, timber, skylights, brick/masonry, showers, plastics, worktops, sinks, moulding/trim work, glass and ceramic tile.

Surfaces must be dry, clean, and free of dust, rust, grease, oil and other contaminants.

Gun the sealant firmly into the joint to provide a solid fill.
Silacryl can be smoothed using a slightly wetted stick (soapy
solution will make tooling easier) or spatula. Tooling must be
carried out within 5 minutes of application. Deep joints must
have the depth reduced to 50% of the width using either
Sovereign Expanding Foam or joint backer rod.

Porous or unsound surfaces should be primed before application. Not suitable for use on bitumen or oily surfaces.

**Storage:** Between 5 and 30°C. **Shelf Life:** 12 months unopened.

Clean up: Clean tools immediately after use with water. Never

use fingers to tool down silicone sealants.











## **Trowel Grade Mastic**

Sovereign general purpose Trowel Mastic comprises a blend of fillers, oils and a synthetic rubber. It is designed to give good durability where a limited degree of movement might occur. CE marked.

Form:	Thick Paste.
Pack Size:	8kg.
Colour(s):	Buff and Red.
Content:	A blend of fillers, oils and a synthetic rubber.
Properties:	For pointing and weatherproofing around door and window frames. It is also used for bedding doors and windows into their surrounds or in other situations where limited movement is expected.

**Usage/Preparation:** All surfaces must be clean, dry and free from dirt, dust, grease, etc. Any loose material should be removed prior to application.

Application: For fillet pointing, the minimum joint width should be 10mm and minimum depth 6mm. Trowel Mastic should be applied with firm pressure using a putty knife or trowel. Ensure that a solid fill is achieved.

After use, the polythene disc and lid should be replaced immediately. Over painting will improve durability and this should be carried out once the protective skin has formed (approx 48 hours).

Storage: Between 5 and 30°C.

Shelf Life: 6 months unopened.

Coverage: 1kg of material will give 15 metre run of 10 x 10mm

Clean Up: Clean tools with Sovereign Turps Substitute or White Spirit after use.











# Flexi-Acrylic K10

Sovereign Flexi-Acrylic K10 is a resin and fibre reinforced seamless membrane for waterproofing and repairing roofs. It can be used on asphalt, roofing felt, asbestos, cement, metal, slate and tiles. Can be applied to damp substrates and is water resistant immediately after application. CE marked.

Form:	Thixotropic Paste.
Pack Sizes:	5kg and 20kg (Black only).
Colour(s):	Black and Grey.
Content:	Bitumen and natural rubber latex.
Content:	Blend of water resistant resins, fibres and fillers.
Properties:	Can be used for emergency repairs in poor weather conditions or for large remedial waterproofing situations. Applied in a single coat, saving labour time. Flexi-Acrylic K10 cures to form a tough seamless membrane that conforms to every contour of the roof and will bridge hairline cracks. This membrane is flexible, durable and weather resistant and can withstand stresses from structural movement caused by the rise and fall of external temperatures.

Preparation: Where the Flexi-Acrylic K10 is being used for remedial purposes, it is essential any supporting timber decking is dry, in good order and the area below is well ventilated.

All surfaces must be clean, structurally sound and free from oil, grease, loose paint, rust and organic growth. Organic growths such as moss and lichen must be removed using Sovereign Masonry Sterilising Wash. All possible contaminants and debris must be removed i.e. loose chippings. Ferrous metals should be treated with a rust inhibiting primer then coated with a metal primer. Other metals should be treated as required.

#### Application:

Important Note: This product is flammable; sources of ignition must be removed before commencing application of the coating.

Flexi-Acrylic K10 can be applied to damp surfaces, however dry substrates provide the best surface for application. Do not apply in areas where standing water is present or if the temperature is below 5°C or above 35°C.

Stir well before use. Apply by brush in a single coat. The coverage rate must be no less than 1kg per square metre and no more than 2kg per square metre. Check coverage rate attained to ensure sufficient material is being applied.

Flexi-Acrylic K10 takes approximately 2 to 3 days to dry. The exact time is dependant on the coating thickness and weather conditions at the time of application. Flexi-Acrylic K10, is however, resistant to water immediately after application.

**Clean up:** Clean all brushes and tools immediately after use with proprietary brush cleaner.

**Coverage:** Approximately 1 – 2kg per square metre depending on surface topography.

Storage: 12 months when stored unopened in dry conditions of 5 to 35°C. After use clean the edge of the tin and replace the lid firmly and shake the can to ensure an airtight seal is obtained.









# **Flashing**

Sovereign Flashing is a self-adhesive, long-lasting waterproof seal, used on clean, sound surfaces, including metal, roofing felt, wood, glass, asphalt, plastic, concrete and brickwork. CE marked.

Pack Sizes: 100, 150, 225 and 300mm wide rolls 10m in length.

Content:	Bitumen and Metal Sheet.
Properties:	Sovereign Flashing can be used for new work such as flashings on pitched or flat roofs and parapets, sealing round roof lights, extractor vents, etc. and for repair work of all types on roofs, e.g. defective flashing, cracked cement fillets, cracked felt and anywhere water can penetrate.

**Usage/Preparation:** In order to make the most of the selfadhesive properties of Sovereign Flashing store it in a warm place immediately before use.

All surfaces should be dry, clean and dust free. Loose material such as rust or flaking surfaces should be wire brushed. Fill any wide cracks or depressions. Do not apply to surfaces when temperature is below 5°C.

Prime porous surfaces such as brickwork with Sovereign Flashing Primer and allow to dry. Priming may also help adhesion in cold weather.

Check that Sovereign Flashing is of sufficient width to overlap adjoining surfaces by at least 30mm.

Cut off the required length of Sovereign Flashing; remove the backing paper and place in position following the contours as required.

Press home firmly, smoothing down with a cloth, smooth rounded stick, or best of all a decorators' wallpaper roller. Pay particular attention to the edges.

Painting: Sovereign Flashing can be over painted with conventional decorative paints, although slight staining of the paint may occur at the edges.

Movement of Joints: Small movement of joints can be accommodated by applying a strip of release paper 50mm narrower than the flashing along the joint prior to applying the flashing strip. Laying polyurethane foam proud into the joint prior to fixing can cater for larger movement.

Sovereign Flashing consists of aluminium foil 0.05mm thick coated with a layer of self-adhesive bituminous mastic of approximately 1.3mm thickness. As applied, the flashing weighs approximately 1.8kg/m.

**Dimensions:** Sovereign Flashing is supplied in 10 metre long rolls of either 100, 150, 225 or 300mm in width.

**Durability:** 15 years if applied correctly, in accordance with instructions.

Chemical Attack: Flashing may become brittle if enclosed in a cementitious mix. Contact between the foil and alkaline materials or metals, for example, copper, must also be avoided.

# **Epoxy Repair and Anchoring Resin**

Sovereign Epoxy Repair and Anchoring Resin has been specially formulated as a thixotropic, high strength grout for the permanent anchoring of metal into concrete or brickwork.

Form:	Paste.			
Pack Sizes:	380ml cartridges.			
Colour(s):	Grey.			
Content:	Blend of epoxide resin, chemical hardener and speciality additives.			
Properties:	Used for anchoring of machinery, permanent installation of reinforcement, dowelling and starter bars, foundation bolts, hand rails, safety fences, wall ties, rail tracks, tie-back anchors, crack stitching etc. Its rapid set and cure time means that loads can be accommodated in as little as 20 minutes. Sovereign Epoxy Resin is suitable for use in damp masonry and can be used in fully submerged applications and in temperatures down to -10°C.			

General: Anchoring of machinery. Permanent installation of reinforcement, dowelling and starter bars, foundation bolts, hand rails, safety fences, wall ties, rail tracks, tie-back anchors etc.

#### Advantages:

- Excellent adhesion.
- Rapid strength gain.
- High strength.
- Corrosion resistant.
- Resistant to thermal recycling.
- Low temperature cure
- May be used in overhead applications.
- Pre packed ready for use.

Preparation: Holes should be formed a minimum of 2mm greater than the bolt to be inserted, using rotary percussive drilling techniques. If it has been necessary to diamond drill the holes, then they should be roughened or under reamed.

Pre-cast holes should have their sides roughened prior to filling. All dust, drilling debris and other contaminants should be removed, bars and bolts should be de-greased and all rust removed. Remove the cap and protective insert from the cartridge and screw on the static mixer nozzle. Fit the cartridge into the applicator gun and gradually apply pressure by activating the trigger until material exudes from the end of the nozzle. Stop pressurising and allow the resin to flow until a uniform colour is achieved. Insert the nozzle into the base of the hole and activate the trigger, removing the nozzle slowly as the hole fills. Once sufficient resin is in the hole, release the pressure, wipe

Once sufficient resin is in the hole, release the pressure, wipe excess resin from the nozzle and place the stud to be fixed into the hole with a twisting action to ensure all contact between hole side, resin and stud.

Allow the resin to cure before loading. Partly used cartridges are re-useable. Remove the mixing nozzle, wipe away surplus resin and replace the cap.

AND PARAMETERS

Storage: Between 5°C - 25°C.

Shelf Life: 12 months unopened.



#### **Epoxy Repair and Anchoring Resin, continued**

#### Gel and Cure Times, Resin MUST be at 20°C.

Ambient Temp.	Gel Time	Min. cure pre-loading	Ambient Temp.	Gel Time	Min. cure pre-loading
-10°C	60 minutes	180 minutes	-5°C	50 minutes	90 minutes
+5°C	18 minutes	30 minutes	+15°C	8 minutes	20 minutes
+25°C	6 minutes	20 minutes	+35°C	3 minutes	20 minutes

#### Typical tensile and shear strengths in concrete.

Fixing Diameter	Tensile Strength	Shear Strength	Fixing Diameter	Tensile Strength	Shear Strength
M8	19.0 Kn	9.5 Kn	M10	30.2 Kn	15.1 Kn
M12	43.8 Kn	21.9 Kn	M16	61.4 Kn	40.8 Kn
M20	97.6 Kn	63.7 Kn			

#### Approximate number of Fixings per Cartridge.

Bolt Dia.	Hole Dia.	Hole Depth	Fixings	Bolt Dia.	Hole Dia.	Hole Depth	Fixings
8mm	10mm	80mm	110	10mm	12mm	90mm	60
12mm	14mm	110mm	40	16mm	18mm	125mm	20
20mm	22mm	170mm	9	24mm	28mm	210mm	5



# Neoprene-Mechanical 'Auto Torque' Ties

A2 303 grade stainless M5 bar and locking nuts, supplied in various lengths dependent on cavity width. The inner neoprene 'expander' is ridged to create an immediate grip on the wall of the hole to assist with tensioning. A drip ring is also fitted to each tie.

Тіе Туре	Drill Size	Cavity Size	Article	Pack Size
PN 11mm x 150mm	11mm	0 - 50mm	888500	200
PN 11mm x 200mm	11mm	50 - 75mm	888520	200
PN 11mm x 225mm	11mm	75 - 100mm	888521	200
PN 11mm x 250mm	11mm	100 - 150mm	888522	200
PN 11mm x 300mm	11mm	>150mm	888523	200
Setting Tool for Mecha	nical Auto Torque	Ties	888506	One
Typical Pull Out Value	es in Kilo Newto	ns:		
Stock or Accrington br	ricks			7.5kN
Brickwork				5.1kN
Blockwork				3.5kN

# Tie Installation

Soft Blockwork

40N Concrete

30N Concrete

- Using a metal detector, locate and mark out the existing cavity ties. Establish a grid pattern for the installation of the new ties taking care to avoid existing wall ties.
- 2. The grid pattern should be determined as follows:-
  - 900mm apart horizontally and vertically in a diamond pattern.
  - 300mm above ground level or damp-proof course.
  - 300mm spacings around door and window openings.
  - 450mm from the corner of a building (minimum).
- 3. Using a 12mm bit, inclining the drill slightly upwards, and in accordance with BRE Digest 329, to avoid possible ingress of moisture, drill a hole through the brick until you reach the cavity. With the tip of the bit touching the inner leaf, the depth gauge should then be set to 70mm. If the inner leaf is blockwork, the hammer action should be turned off. Drill the inner leaf.

- Check the cavity width at regular intervals to ensure it remains constant.
- 5. Ensure the brickwork/blockwork is dry.

2.7kN

6.8kN

4.9kN

- 6. Thoroughly blow out ALL the dust from the drill holes.
- Remove end screw cap from Resin cartridge and affix nozzle (and also extension nozzle if required), fit cartridge into applicator gun.
- 8. Insert nozzle into hole in inner leaf and fill with Resin.
- Insert tie into the hole ensuring it is pushed fully into the inner leaf.
- Fill outer hole with Resin and wipe off any excess from brickwork/blockwork.
- When finished with Resin release pressure on gun to stop extrusion of material.

# **Crack Tie Helicoidal Bar**

3 metre length of Stainless Steel bar that can be cut to length on site and used in conjunction with polyester resin to repair cracked, unstable masonry / brickwork.



# **Resin-Mechanical Ties**

A2 303 grade stainless M5 bar and locking nuts, supplied in various lengths dependent on cavity width. Fitted with just an outer neoprene 'expander', the inner leaf being fixed with Resin. A drip ring is also fitted to each tie.

Тіе Туре	Drill Size	Cavity Size	Article	Pack Size
PR 11mm x 150mm	11mm	0 to 50mm	888536	200
PR 11mm x 200mm	11mm	50 to 75mm	888537	200
PR 11mm x 225mm	11mm	75 to 100mm	888538	200

# **Resin-Resin Ties**

A2 303 grade stainless M5 bar, supplied in various lengths dependent on cavity width. A drip ring is fitted to each tie.

Тіе Туре	Drill Size	Cavity Size	Article	Pack Size
RR 11mm x 150mm	12mm	0 to 50mm	888560	200
RR 11mm x 200mm	12mm	50 to 75mm	888561	200
RR 11mm x 225mm	12mm	75 to 100mm	888562	200

Setting Tool for Mechanical Auto Torque Ties, pictured below, supplied separately



## **Bower Beams**

Timber in contact with damp masonry is vulnerable to attack from Dry Rot and more particularly Wet Rot.

The most vulnerable timbers in any property are the timber floor joists of suspended ground floors. This is particularly true in older properties where the joist ends bear directly into the retaining walls. Modern construction allows for joists to stop short of retaining walls and rest instead on sleeper walls where they are protected by a damp-proof membrane.

In many older buildings the joist ends are let into sockets in the walls below the damp-proof course. These joist ends are often permanently wet and gradually succumb to slow decay from one of the Wet Rot fungi (usually Cellar fungus - Coniophora puteana). Replacement of decayed joist ends, although only a small part of the joist is affected, can cause a major amount of work because the 'small part affected' is the vital joist end that is supporting the floor.

#### Traditional Methods:

Traditional methods of replacement of rotten joist ends involve:

- Support of the floor from below using props or support crossbeams while the rotten ends are being cut away.
- 2. Cutting additional sockets into the brickwork alongside existing sockets to give bearing to the new joist length being botted to the side of the existing joist OR making provision for the correct size of joist hanger to be fixed to take the end of the new joist length OR building in a crosswise support beam either into side walls or on new support piers.
- Measuring up and then having to go and purchase the correct size and length of replacement joist from stores or a timber merchant, along with fixing bolts.
- Buying replacement joist-length long enough to reach back to first sleeper wall or long enough to give sufficient load bearing when bolted to existing joist.
- Attempting to manoeuvre joist-length in confined underfloor space (sometimes has to be manoeuvred through airbrick space - after knocking out airbrick, or requires wholesale lifting of floorboards).
- 6. As well as preservative treatment the new joist end has to be protected from continued dampness in the wall socket by use of a PVC damp-proof membrane or polythene sleeve or bitumen coating, all of which do not prevent dampness by condensation.

#### Sovereign Bower Beam Method:

The Bower Beam method eliminates most of the work of the Traditional Method and leaves the floor joist as strong as before and clear of the damp wall. It involves:

- Cutting the joist end back to sound wood and applying preservative treatment.
- Fixing Sovereign Bower Beam to joist end and into existing wall socket.

Timber in contact with damp masonry is vulnerable to attack from Dry Rot and more particularly Wet Rot.

The most vulnerable timbers in any property are the timber floor joists of suspended ground floors. This is particularly true in older properties where the joist ends bear directly into the retaining walls.

Modern construction allows for joists to stop short of retaining walls and rest instead on sleeper walls where they are protected by a damp-proof membrane.

#### Sizes and Types of Sovereign Bower Beams:

- BM6 Designed to support joists where decayed timber is cut back up to 150mm (6") from the joist end.
- BM9 Designed to support joists where decayed timber is cut back up to 225mm (9") from the joist end.
- BM17 Designed to support joists where decayed timber is cut back up to 430mm (17") from the joist end.

Sovereign Bower Beams are designed for use on joist widths ranging from 50mm (2") to 150mm (6") approx.

Each unit comprises two 'L' shaped sections supplied complete with fixings.



#### **Advantages of using Bower Beams:**

- 1. If preferred, joist ends can be replaced one at a time avoiding the need to support the floor.
- Existing wall sockets are used thus avoiding the time and labour to cut new sockets
  alongside the old or using joist hangers which are unacceptable to many specifying
  authorities and are often difficult to fix or building a crosswise beam which is expensive
  and labour intensive.
- 3. Sovereign Bower Beams fit all sizes of joists from 50mm to 150mm thickness so timber measurement and collection is eliminated. Each kit is complete with its own fixings and several kits will take up negligible space in the average service van.
- The short length of the Sovereign Bower Beam makes it easy to manoeuvre in confined sub-floor spaces and from a load-bearing point of view it is much stronger than a timber joist (see Test Report).
- 5. The Sovereign Bower Beam is made from 2mm KHR steel with a Supergalv finish and so will not deteriorate in damp conditions.
- 6. The joist end is held clear of the wall (as in modern sleeper-wall construction) and is no longer vulnerable to the dampness in the wall.
- Bower Beams do NOT require grouting-in. The wall socket needs no special DPM, polythene or bitumen treatments (though sometimes making good to level may be necessary), and treatment of the socket is recommended where Dry Rot has attacked.



# **PPE for Construction**

Identifying and wearing the correct, safe, effective PPE is essential in the modern construction environment. Sovereign market a range of high quality PPE items suitable for use with its range of products. Every product is CE marked and fully tested and approved.

It is important to note that it is the user's responsibility to ensure that the correct PPE is selected following the recommendations of a COSHH assessment.

# Bilsom<sup>®</sup> Viking<sup>™</sup> V1 Ear Defenders

The Noise at Work Regulations Act 1989 requires employers to provide hearing protection where noise levels are between 85dBA and 90dBA. Where noise levels are above 90dBA it is mandatory that hearing protection is provided and worn.

Bilsom® Viking™ V1 Ear Defenders are a good quality lightweight earmuff. Their lightweight design permits good comfort levels and when combined with the super soft ear cushions allows 100% wearing time.

The reinforced headband prevents them from being deformed and prolongs usable life. The headband is multi-positional and fully adjustable thus offering more wearing positions and works with helmets, shields, and other protective equipments.

With an SNR rating of 26 the Viking™ V1 Ear Defender provides a cost effective solution in most everyday building /manufacturing situations.



# **Touch N Tuff® Disposable Nitrile Gloves**

Touch N Tuff disposable nitrile gloves set a new standard in comfort, durability and cleanliness. Made from 100% nitrile and although only 0.12mm thick they provide three times the puncture resistance of latex or vinyl disposable gloves. Comply with EN388 (Mechanical Testing).

Resistant to a wide range of acids, alcohols and chemicals as per EN374 (Chemical Testing). We would only recommend Touch N Tuff gloves for intermittent chemical exposure/splash protection.

For more frequent chemical handling use our Sol-Vex® nitrile gloves.

Touch N Tuff gloves are ambidextrous and

are supplied in box dispensers of 100 gloves (effectively 50 pairs).

Comply with FDA Regulations for Food Contact.



# Disposable Latex Gloves

Natural Latex gloves are both convenient and economical. Unlike nitrile disposable gloves they do not conform to EN388 for puncture/abrasion resistance nor do they provide a similar degree of protection against chemical handling. Suitable for more lightweight use in 'non-hazardous' situations, lightly dusted internally to ease 'donning'.

Pack Size: Packs of one hundred (fifty pairs).

It is important to note that it is the user's responsibility to ensure that the correct PPE is selected following the recommendations of a COSHH assessment.



Golden Palm Protector

**Reflex Grip Gloves** 

Seamless knitted cotton/polyamide liner with flexible latex coating.

#### Features:

**Excellent Grip:** In both wet and dry conditions for safe and secure handling.

**Comfort:** The seamless knitted cotton liner provides exceptional comfort and reduces hand fatigue. The back of the glove is uncoated allowing the hand to breathe.

**Durable:** Medium duty offering good puncture and abrasion resistance.

#### Sizes:

Size 9 (large) and Size 10 (extra large).

#### Specification:

CE marked and conform to EN 388 for Mechanical Hazards for Resistance to Abrasion, Blade Cuts, Puncturing & Tearing.



# **Sol-Vex® Premium Nitrile Gloves**



Made from high performance 0.38mm thick nitrile which provides the glove with excellent strength and chemical resistance. When exposed to aromatic and petroleum solvents as well as caustics they have proved to be superior over both rubber and neoprene gloves. Sol-Vex gloves offer a high level of resistance against most solvents, acids, paints, varnishes, cutting oils and good protection against snags, punctures, abrasions and cuts. Sol-Vex gloves comply with FDA regulations for food contact.

Pack Size: Supplied in packs of twelve.

#### Applications:

Suitable for use in a wide variety of industries; Damp-Proofing, Timber Treatment, Manufacturing, Painting/Graphics, Printing, Food Processing, Janitorial/Maintenance, Automotive/ Aerospace, Furniture Making and Chemical Processing.

#### Specifications:

Supplied with a soft cotton flock lining which absorbs perspiration, feels more comfortable and makes them easier to slip on and off. The surface of the glove has an embossed texture to improve grip, especially when handling wet or slippery objects.

# Moldex 2405 FFP2S Valved Mask

- Extremely comfortable, versatile disposable mask.
- Manufactured to EN149:1991 Standard for FFP2S level of protection.
- Suitable for solid particles, fumes and water-based mists.
- Ideal for use when working with hardwood, MDF, glass fibres, plastic (non-PVC), metal working, welding and water-based mists.
- Max. use level 10 x Occupational Exposure Level.



# **Moldex 8000 Respirator**

The Moldex 8000 Series Respirator conforms to the contours of the face, seals comfortably and remains sealed even whilst talking. The low profile provides a larger field of vision and makes it more compatible to wear with safety eyewear. Its lightweight nature also makes it more comfortable to wear.

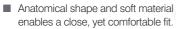
- Soft, durable face piece seals comfortably to face.
- Exhalation valve positioned for better communication.
- Low profile for wide field of vision.
- Cartridges have a snap-in mount for easy replacement.
- New Inhalation valve on each cartridge.

Please Note: The face mask is NOT supplied with cartridges or filters.



Uvex Ultra-Vision 9301-625

The Uvex Ultra-Vision offers the best possible comfort in a full protection goggle:



- Integrated, indirect ventilation allows air movement directly across the lens whilst protecting against splash and dust.
- Lens coated with new Uvex supravision; outside optidur 2002 (anti-scratch, anti-UV);
   and inside optidur 4C+ (anti-mist, anti-scratch, anti-UV, anti-static).
- Frosted top to reduce glare.
- Fits comfortably over most prescription spectacles.
- Specially designed nose bridge, works well with respirator.
- High-quality, easily adjustable headband.
- Panoramic lens shape allows 180° uninterrupted lateral vision.
- Optically correct lens (EN 166-Class 1) does not distort view or cause headaches.
- Simple lens replacement reduces cost.

# Op-Tema Safety Spectacles



- Built in moulded brow-bar
- Full-view lens for unobstructed vision.
- Soft adjustable nose pad for added comfort.
- Fully adjustable side arms and lens angle for optimum fit.
- Abrasion resistant polycarbonate lens that absorbs up to 99.9% of UV radiation.
- Lightweight, weighing only 30gms.
- Supplied with adjustable Flexicord for added security and convenience.

It is important to note that it is the user's responsibility to ensure that the correct PPE is selected following the recommendations of a COSHH assessment.





# Flooring and Tiling Products

High quality specialist Sovereign products for the sealing, preparation and levelling of existing floors prior to tiling or the application of solid wood or laminate flooring

- Neoprene Primer: A high performance adhesion promoter and sealing compound for use with Sovereign Floor Levelling Compound (underlayment) and Sovereign Hi-Tech FLR (wear coat). Can also be used as a primer prior to application of cementitious tile adhesives on to difficult, dusty or porous substrates.
- Latex Polymer Additive: A ready to use emulsion and will improve adhesion, water resistance, salt resistance, integral strength and surface durability of Sovereign Floor Levelling Compound.
- Hi-Tech Rapid FLR: A high quality, polymer modified, cementitious self-levelling compound, designed to give a smooth durable floor finish with excellent abrasion properties for new floors and repairing existing floors.
- Flexible Floor Levelling Compound: A polymer and fibre reinforced smoothing compound for the preparation of uneven subfloors prior to the application of various finishes.
- Floor Levelling Compound: Used for preparing sound subfloors for the installation of new floor coverings. Common absorbent and non-absorbent surfaces can be covered successfully with Sovereign Floor Levelling Compound.
- Rapid Dry Deep Base: A fast track product for situations where floors need to be reinstated with the minimum amount of downtime. Floors can be levelled from 5 to 50mm and floor coverings laid in as little as 6 hours.
- Epoxy Damp Proof Membrane: A solvent free two-part resin that chemically cures to provide a surface membrane. It is used to suppress residual moisture in concrete and sand/cement screeds allowing early installation of floor coverings. Can also be used as a vapour barrier with Sovereign Hey'di K11.
- Flexible Wood Flooring Adhesive: One part moisture curing adhesive with excellent bond strength to engineered wood, laminates and most construction backgrounds.

# **Neoprene Primer**

Sovereign Neoprene Primer is a high performance adhesion promoter and sealing compound for use with Sovereign Floor Levelling Compound (underlayment) and Sovereign Hi-Tech FLR (wear coat). Can also be used as a primer prior to application of Sovereign cementitious tile adhesives on to difficult, dusty or porous substrates.

Form:	Green Liquid Concentrate.
Pack Sizes:	5 litres.
Content:	Neoprene latex.
Properties:	Neoprene Primer is used on non-absorbent surfaces such as steel, epoxy and polyester floors prior to laying a new Sovereign levelling compound. It is also used on dusty or porous surfaces to prevent unacceptably rapid drying of adhesives and underlayments. It is coloured green to provide the user with visual control of coverage uniformity.

Usage/Preparation: Floors must be sound, smooth, dry and free from contaminants that may prevent adhesion. Concrete and sand/cement screeds must be fully cured and any laitance or surface treatments removed. Existing adhesive must be mechanically removed until only a minimal, firmly bonded residue remains before priming. The temperature of the floor must be above 5°C and underfloor heating turned off at least 48 hours before and after application. Ensure that the subfloor has an effective damp-proof membrane.

Application on Non-Absorbent Surfaces: For use prior to applying levelling compounds or adhesives to substrates such as terrazzo, power floated concrete, tiles, asphalt, steel, epoxy and polyester membranes.

Shake well before use and apply Sovereign Neoprene Primer to the entire surface and allow to dry completely.

Application on Absorbent Surfaces: For use prior to applying levelling compounds or adhesives to substrates, such as concrete, sand/cement screed, anhydrite and timber. Dilute Sovereign Neoprene Primer 1 part Primer to 4 parts of clean cold water. Stir until thoroughly dispersed then apply to the entire surface and allow to dry completely.

General: Use either a roller or broom to apply the Primer, making sure to dampen before use. Once applied and after drying avoid trafficking of the subfloor.

Coverage: 5 litres of Sovereign Neoprene Primer mixed with 20 litres of water will cover approximately 100m<sup>2</sup> depending on porosity and condition of the subfloor

When used neat on non-absorbent surfaces 5 litres of Primer will cover approximately 50m2.

Clean up: Use warm soapy water for cleaning tools and equipment.

Storage: Between 5 and 30°C Shelf Life: 12 months unopened.









# **Latex Polymer Additive**

Sovereign Latex Polymer Additive is a ready to use emulsion and will improve adhesion, water resistance, salt resistance, integral strength and surface durability of Sovereign Floor Levelling Compound.

Form:	Ready to use Liquid.				
Pack Sizes:	5 litres.				
Content:	Carboxylated styrene butadiene rubber.				
Properties:	Sovereign Latex Polymer Additive is the easiest, most efficient and accurate way to improve the qualities of Sovereign Floor Levelling Compound, as the exact quantity of polymer is quality controlled in production.				

Usage/Preparation: Surfaces must be clean and free of contamination before the laying of any floor coating. Porous substrates should be primed with a dilute solution of Sovereign Neoprene Primer. Non-porous surfaces must be primed with neat Sovereign Neoprene Primer.

Do not use Latex Polymer Additive as a primer, as the Neoprene Primer will ensure better adhesion is achieved, also using the Latex Polymer Additive may lead to insufficient quantities being available for the mix.

Add the Latex Polymer Additive to the mixing vessel and slowly add the Sovereign Levelling Compound whilst stirring with a mechanical whisk. Add one full bag of Sovereign Floor Levelling Compound to 5 litres of Latex Polymer Additive. The bottle of additive contains the correct addition of polymer for one full bag, however extra water, up to 1 litre, may be required to achieve the correct consistency.

When fully mixed lay the leveller as normal. However it must be remembered that the increased adhesion given by the Latex Polymer Additive will make cleaning of tools difficult if allowed to dry.

Storage: Between 5°C - 30°C.

Shelf Life: 12 months unopened.







# Hi-Tech Rapid FLR

Sovereign Hi-Tech Rapid FLR is a high quality, polymer modified, cementitious self-levelling compound, designed to give a smooth durable floor finish. It has excellent abrasion properties for both a new floor, and repairing existing floors.

Form:	Dry Grey Powder.
Pack Sizes:	25kg.
Content:	Blend of cements, selected fillers, special additives, and a dispersible polymer.
Properties:	Sovereign Hi-Tech Rapid FLR is self-smoothing, dimensionally stable, and fast drying. It is suitable for use in a wide range of industrial environments such as warehouses, food-processing plants etc. subjected to medium to heavy traffic. Typically Hi-Tech FLR can be pumped up to 1800m² per day, alternatively coverage of 600m² can be achieved when hand applied, dependent upon manpower and equipment used. Sovereign Hi-Tech Rapid FLR can be used in conjunction with Sovereign Epoxy Floor Paint or as a stand-alone surface.

Preparation: Floor surfaces must be sound, smooth, dry and free from contaminants that may prevent adhesion. Use propriety cleaners for removing grease, oil, polish, soap etc. from non-absorbent substrates.

Concrete and sand/cement screeds must be fully cured and any laitance or surface treatments must be removed. The temperature of the floor must be maintained above 5°C throughout the application and drying of the underlayment. Under floor heating must be off for at least 48 hours before and after application.

Priming: Application on to sand/cement screeds, tamped concrete and other porous substrates, first seal the prepared surface by applying one coat of Sovereign Neoprene Primer diluted with 4 parts water and allow to dry. Once sealed prime with Neoprene Primer diluted with 3 parts water.

Application onto all other surfaces including Surface Damp Proof Membranes (SDPM's) and non-absorbent surfaces, prime with neat Sovereign Neoprene Primer to ensure that good adhesion is obtained.

Hand Application: Use a power-whisk fitted in a heavy-duty slow speed electric drill. Mix in the proportion of 25kg of powder to 4.5-litres of clean water. Pour the water into a suitably sized bucket and gradually add the powder while stirring, until a smooth, lump free consistency is achieved.

Pump Application: Mix the powder and water according to the method recommended by the pump manufacturers. In the case of pumps having continuous water feed adjust the rate of water flow until the mix is a smooth fluid, uniform grey liquid with no surface separation.

Application: Pour or pump the mixed material onto the prepared surface and allow to attain a smooth finish. The use of a spiked roller will help eliminate entrapped air and smooth out flow lines. Apply at a thickness between of 5mm to 10mm in one pass only.

Clean up: Wash tools with water immediately after use.

Limitations: Do not place when the substrate temperature is below 5°C or when the ambient temperature is 10°C and falling. Protect from frost. Do not exceed the maximum recommended water content and only use clean cold water.

Storage: This product must be stored under cover, in unopened bags clear of the ground in cool dry conditions, protected from frost and excessive draught. When stored correctly, as above this product has a shelf life of 6 months.

#### Hi-Tech Rapid FLR, continued

Feature	Specification		
Flow Properties using 50cc flow ring	170mm		
Shrinkage (µm/m) at 28 days ASTM C490-00a	<550		
Workability	25 minutes		
Abrasion Resistance BS8204:Part 2:2002	Special Class		
Vicat Setting Time	1.5 hours		
BRE Screed Test BS8204:Part 1:1999	1.6mm		
Dry Slip Resistance BS8204:Part 2:1999	60		
Wet Slip Resistance BS8204:Part 2:1999	42		
Foot Traffic	3 hours		
Light Traffic	24 hours		
Heavy Traffic	3 days		
Compressive Strength (N/mm²) BS6319 Part 2	1 Day 7 Days 28 Days	>15.0 >30.0 >40.0	
Flexural Strength (N/mm²) BS6319 Part 3	7 Days 28 Days	>7.0 >10.0	
Coverage: A 25kg bag laid at nominal 5mm thickness	3m²		







# Flexible Floor Levelling Compound

A polymer and fibre reinforced smoothing compound for the preparation of uneven subfloors prior to the application of various floor finishes.

Form:	Dry Grey Powder.
Pack Sizes:	20kg.
Content:	A blend of cements, selected fillers, special additives and a dispersible polymer.
Properties:	Sovereign Flexible Floor Levelling Compound can be used to level timber, concrete, asphalt, tiles, metal and painted floors. Due to its flexible nature, it is suitable for use in conjunction with under floor heating. It is ready to take light foot traffic after 2 to 3 hours and to receive floor coverings in as little as 4 hours.

Preparation: Timber backgrounds – must be rigidly braced and then overlaid with marine grade plywood a minimum of 6mm thick and secured according to the guidelines outlined in BS5325 and BS8203. Prime the face of the timber with Sovereign Neoprene Primer diluted 4 parts water to 1 part Primer. Allow to dry – typically 2 hours.

Concrete: must be clean dry and free of any material that may interfere with adhesion. (Adhesive residues can be left in place as long as they are firmly bonded). An effective DPM must be in place and the concrete be at least 28 days old and below 75% RH moisture content. Prime concrete with Neoprene Primer as above. Damp concrete floors should first be treated with Sovereign Epoxy DPM and Neoprene Primer (neat).

Non/low absorbency floors such as flooring grade asphalt, quarry tiles, terrazzo, natural stone, metal and painted surfaces: Degrease the surface thoroughly and rinse with clean water and allow to dry completely. Prime the surface with Sovereign Neoprene Primer used neat and allow this to dry, typically 3 to 4 hours.

Steel surfaces must be grit blasted to SA21/2 or rotary disc/wire brushed to ST2.

The temperature of the floor must be maintained above  $5^{\rm o}{\rm C}$  throughout the application and drying of the underlayment.

Mixing: Gradually add 1 bag of Flexible Levelling Compound to 4.5 litres of clean water. Sitr with a power whisk fitted to an electric drill until a smooth creamy lump free consistency is achieved. The material should be mixed for a minimum of 2 minutes. Do not add further water.

Do not mix more material than can be applied in 20 minutes. For filling depressions 15-25mm deep in concrete or sand/cement subfloors, add dry sharp sand after the powder. Use in the ratio 10kg of dry sand to 20kg powder. 25mm is the maximum depth recommended for this product

Application Method: Pour the mixed material onto the prepared subfloor and allow to flow and attain a smooth finish; minimal work with a smoothing trowel is required. The mixed material should be applied at a thickness of between 2mm to 15mm, (10mm maximum over plywood) but can be taken down to a feathered edge if required.

For best results, an overall thickness of at least 3mm should be maintained. For filling depressions 15-25mm add dry sharp sand as described above. Any high spots can be removed with an abrasive prior to full set.

Coverage: Approximate coverage values for a 20kg bag are as follows:

Thickness	Coverage	_
3mm	4.1m <sup>2</sup>	
5mm	2.5m²	_
10mm	1.2m <sup>2</sup>	_
15mm	1m <sup>2</sup> (inc. sand mix)	_

Working time/pot life: Approximately 20mins at  $20^{\circ}\text{C}$  / 30mins at  $10^{\circ}\text{C}$ .

**Drying times:** Foot traffic 1-2 hrs at 20°C / 2-4 hrs at 10°C. On absorbent surfaces, at a nominal 3mm thickness, the compound will be ready to receive vinyl, ceramic and textile floor coverings after 4-6 hrs at 20°C / 8-12 hrs at 10°C. For greater thicknesses or for application onto non-absorbent surfaces, we would recommend that vinyl floor coverings are installed after 12 hours at 20°C / 24 hours at 10°C.

Timber floors must be allowed to acclimatise for a minimum of 48 hours in the room in which they are to be laid, but in all circumstances the manufacturer's instructions must be followed.

Shelf Life: This product must be stored undercover, in unopened bags, clear of the ground in cool dry conditions, protected from frost and excessive draughts. When stored correctly the shelf life is 6 months from date of manufacture.

A Safety Data Sheet is available on request for this product.







when gauged with sharp sand.

# Floor Levelling Compound

Sovereign Floor Levelling Compound is used for preparing sound subfloors for the installation of new floor coverings. Both absorbent and non-absorbent surfaces, such as old adhesive residues, asphalt, terrazzo, steel, epoxy and polyester resins, ceramic and some waterproof surface membranes, can be covered with Sovereign Floor Levelling Compound.

Form: Dry Grey Powder.

Pack Sizes: 25kg.

Content: Blend of cements, selected fillers, special additives, and a dispersible polymer.

Properties: Sovereign Floor Levelling Compound is low odour with excellent smoothing properties. It is suitable for biologically sensitive areas and is easy to mix and apply. Where added adhesion, strength or flexibility is required then the addition of Sovereign Latex Polymer Additive is highly recommended.

Preparation: As with all surface coatings the correct preparation is vital to the successful completion of a contract. Ensure that the base is free from all contamination including grease, oil, polish, soap and dust. Use propriety cleaner and rinse thoroughly if required.

Floor surfaces must be sound, and free from contaminants that may prevent adhesion. Concrete and sand/cement screeds must be fully cured and any laitance or surface treatments must be removed. The temperature of the surface must be maintained above 5°C throughout the application and drying of the smoothing underlayment.

Underfloor heating must be off for at least 48hrs before and after application. Subfloors require priming; see below for details.

Damp Bases: Must be treated with a waterproof surface membrane.

Application: Pour the mix onto the prepared surface and spread to the required thickness with a steel smoothing trowel; the use of a spiked roller will help eliminate air and smooth out trowel ridges.

For best results, an overall thickness of at least 3mm should be maintained. Should any trowel marks remain they can be removed by rubbing with a carborundum stone before the underlayment has fully hardened, approximately 4 hours after application.

Tools: Power whisk or hand whisk, clean bucket, steel smoothing trowel. Wash tools with water immediately after use. Setting: Sovereign Floor Levelling Compound should be sufficiently hard to walk on in about 4 hours under good conditions.

Drying: Drying will continue for some time after the underlayment has set. The time taken will be dependent on the absorbency of the subfloor, humidity etc. and the thickness of the underlayment applied. When applied to an absorbent subfloor such as sand/cement screed or concrete,

a 3mm thick layer will be ready to receive most floor coverings after 8 hours under normal conditions. When applied to non-absorbent bases such as asphalt, existing adhesive residues or some power floated slabs, a 3mm thick layer is best left for 24 hours before bonding the floor covering.

Coverage: Approx. 5m<sup>2</sup> at 3mm thickness and 3m<sup>2</sup> at 5mm thickness per bag. Max. thickness should not exceed 6mm.

Storage: This product must be stored under cover, in unopened bags clear of the ground in cool dry conditions, protected from frost and excessive draught. When stored correctly, as above, and used within 6 months of the date shown on this packaging, the activity of the reducing agent added will be maintained and this product will contain, when mixed, no more than 0.0002% (2ppm) soluble chromium (VI) of the total dry weight of the cement.

#### Precautions:

Priming: Absorbent subfloors should be dampened with water and very absorbent subfloors need to be primed with a suitable primer, such as Sovereign Neoprene Primer. Dense, non-absorbent floors and adhesive residue must be primed with neat Sovereign Neoprene Primer.

Mixing: Use a power whisk fitted with a heavy-duty electric drill. (Thorough mixing with a hand whisk is acceptable). Standard Mix: Mix in the proportion of 25kg of Sovereign Floor Levelling Compound to 5 litres of clean, cold water. Latex Modified Mix: Mix in the proportion of 25kg of Sovereign Floor Levelling Compound to 5 litres of Sovereign Latex Polymer Additive. Extra water will be required to provide the correct consistency.







# Rapid Dry Deep Base

Rapid Dry Deep Base is a fast track floor levelling compound for situations where floors need to be reinstated with the minimum amount of downtime. Floors can be levelled from 5 to 50mm and floor coverings laid in as little as 6 hours.

Form:	Dry Grey Powder.
Pack Size:	20kg.
Content:	Special cements and aggregates.
Properties:	Suitable for levelling rigid internal floors of concrete, ceramic tiles, epoxy resin, cement and granolithic screeds. Rapid Dry Deep Base can be used in conjunction with under floor heating and when topped with Sovereign Hi-Tech Rapid can be used in heavy duty areas such as garages and warehouses. Rapid Dry Deep Base can be overlaid with tiles and carpet in as little as 6 hours at 20°C. Where thin section resilient floor covering are to be applied then Rapid Dry Deep Base should be finished with 3mm of Sovereign FLC.

Usage/Preparation: Floor must be clean, dust free and dry. Any contaminants that may interfere with adhesion must be removed. Concrete and cement screeds must be fully cured and have a moisture content of less than 75% RH. Where the moisture content is higher a fast track solution would be to treat the floor with Sovereign Epoxy DPM prior to application rather than waiting for the floor to dry.

Absorbent floors must be primed with Sovereign Neoprene Primer, diluted 1 part Primer to 4 parts water. Non absorbent floors must be primed with neat Neoprene Primer. In either case the Primer must be allowed to dry before application of the levelling compound.

Application: When used up to 15mm deep then mix the powder in the ratio of 3.4 litres of water per bag. For application thicknesses above 15mm the ratio of water should be reduced to 3.2 litres. Mix with a power whisk for a minimum of 2 minutes until a smooth lump free mix is obtained. Pour the compound on to the prepared floor, spread evenly with a smoothing trowel; little work is required to achieve a flat surface

Finishing: Walk on time of Sovereign Rapid Dry Deep Base is 3 hours at 20°C. Where a wearing surface is required a 5 to 10mm application of Sovereign H-Tech Rapid FLR must be applied. Hi-Tech should be applied as soon as the base has hardened, if there is a delay in application of Hi-Tech then prime the surface with Sovereign Neoprene Primer diluted one part primer to four parts water.

Where timber floors are to be installed then test the moisture content first to ensure it is within the limits specified by the flooring manufacturer. When resilient floor coverings are to be applied then finish the floor with 3mm of Sovereign FLC, treating the same as for Hi-Tech i.e. prime as required

Coverage: Around 1.8kg per metre square per mm depth.

Limitations: Not for external use. Subfloors should have an adequate DPM installed below them, otherwise treat with Sovereign Epoxy DPM. Not a wearing surface without topping with Sovereign Hi-Tech Rapid. Set time is extended with age of product.

Storage: Between 5°C - 30°C.

Shelf Life: 6 months unopened.











By Appointment to H.M. the Queen Building Material Manufacturers Sovereign Chemicals Limited, Barrow in Furness

Easy Paving Grout is Sovereign's simple, clean, rapid solution for grouting wide joints in a broad spectrum driveways, terraces, patios and paths.

The 'Natural' or Grey colour options make it perfect for use on all natural stone, brick, pavers and flags. Once set, the finish is permeable allowing paving to drain, reducing standing water.

No mixing required, simply pour onto the paving, brush and compact into the joints... That's it, done!

# Make a Clean Sweep of Perfect Paving



# **Epoxy Damp Proof Membrane**

Sovereign Epoxy DPM is a solvent free two-part resin that chemically cures to provide a surface membrane. It is used to suppress residual moisture in concrete and sand/cement screeds allowing early installation of floor coverings. It can also be used on floors tanked with Sovereign Hey'di K11 when a vapour barrier is required. Also useful in properties where dampness is rising through a floor due to a defective or missing sheet membrane.

Form:	Two Part Blue Liquid.
Pack Sizes:	5kgs.
Content:	Blend of epoxide resin, chemical hardener and speciality additives.
Properties:	Colour coded blue to allow for visual control of coverage. Cures in 3 hour at 20°C. Will isolate residual construction moisture with relative humidity values of up to 92% with one coat, and 100% using two coats.

Usage/Preparation: Floors must be absorbent, sound, smooth, clean, dry and free from dust, grease, old adhesive residues and other contaminants that will prevent adhesion. Bases must be hard and any laitance, surface hardeners or water proofers must be removed. The floor temperature must be above 10°C when the membrane is applied. New concrete or sand/cement screeds must be left for a minimum of 7 days before application of the membrane.

Power-floated subfloors should be shot-blasted to promote adhesion alternatively, power floated floors can be etched with Sovereign Descaler; contact the Technical Department for details.

Bay joints in the subfloor where continual differential movement is not anticipated, or small hollows may be filled with Sovereign Epoxy DPM mixed with dry sand or sharp grit and allowed to fully cure before applying the membrane.

Mixing: Empty all the contents of the hardener container into the resin container and thoroughly stir together using a power whisk fitted to a low speed electric drill, until a uniform colour and consistency is achieved (approximately 2 minutes). Scrape the sides of the container to ensure all the resin component has been mixed. It is important that once mixed the membrane is applied immediately to the floor. If left to stand in the pot the mixed material will have a reduced pot life and rapid curing can occur.

Application: Once mixed and poured on to the floor Sovereign Epoxy DPM will remain workable for around 30 minutes at 20°C. At lower temperatures this time will be extended and reduced at higher temperatures.

Apply the Epoxy DPM to the whole floor and up to the DPC in the wall. Sovereign would recommend that the wall/floor joint should have the  $90^\circ$  angles smoothed out by applying a fillet of Sovereign Barrier Mortar. This should be applied 24 hours before the Epoxy DPM. Alternatively once the Epoxy DPM has cured then a fillet of Pro-Stick 2000 can be used.

Pour the product on to the floor immediately after mixing. Then using a roller pre-wetted with the membrane, obtain an even, pinhole free coating ensuring that the coverage quoted is not exceeded. It is essential that the membrane hardens to form a continuous coating free from pinholes and weak spots.

Once cured the coating should have a glossy blue finish over the whole floor. When applied to very absorbent surfaces, the membrane can be absorbed into the floor leaving a subdued shine; in such circumstances or where pinhole and weak spots are evident, a second application will be required.

### **Epoxy Damp Proof Membrane, continued**

When the membrane has fully cured apply Sovereign Neoprene Primer, before applying Sovereign Floor Levelling Compound or Tile Adhesive. Alternatively if a flexible floor covering is required (carpet, lino, vinyl etc) then a suitable pressure sensitive adhesive may be used – contact the Sovereign Technical Department for advice. Carpet gripper rods should be bonded to the membrane using Sovereign PU Rapid and Construction Adhesive.

Sovereign Epoxy DPM is not a wearing surface.

Failure to ensure that all of the resin and hardener is completely mixed prior to application will leave patches of soft, uncured material on the floor and render the membrane ineffective

Not suitable for floors that incorporate under floor heating. Do not use over synthetic anhydrite subfloors.

Important Information: Where hydrostatic water pressure is an issue then Sovereign Hey'di K11 should be used (on structural concrete floors) prior to application of the Epoxy DPM. Please contact our Technical Department where an individual specification can be prepared.

It is essential that hygrometer readings in accordance with Appendix A of BS 8203 Installation of resilient floor coverings are taken and recorded prior to commencing the installation. Where readings are below 92% then a single coat of Sovereign Epoxy DPM will suffice. Floors with a relative humidity of greater than 92% will require two coats of Sovereign Epoxy DPM. The second coat must be applied as soon as the first has cured – around 3 hours.

Mix only in full packs as the mixing ratio is critical.

Construction joints designed to allow movement of the subfloor must not be bridged with Sovereign Epoxy DPM. These joints must be sealed with a suitable jointing compound after the application of the membrane.

Do not over mix as this can generate heat and shorten the normal working time.

Coverage: Approximately 3m²/kg per coat.

**Shelf Life:** 24 months in unopened containers stored between 5 and 25°C.

Do not store the product above  $25^{\circ}\text{C}$  prior to mixing, as this will shorten the normal working time.

### Precautions:

Hardener:

R34 Causes burns.

R43 May cause sensitisation by skin contact.

R20/22 Harmful by inhalation and if swallowed.

Avoid contact with eyes.

In case of contact with eyes rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell seek medical advice immediately. Use only in well ventilated areas. This material and its container must be disposed of as hazardous waste. See SDS 193.









# Flexible Wood Flooring Adhesive

Sovereign Flexible Wood Flooring Adhesive is a one part moisture curing silyl modified polymer adhesive. It reacts with atmospheric moisture to form a flexible rubber adhesive with excellent bond strength to engineered wood, laminates and most construction backgrounds.

Form:	High Viscosity Paste.				
Pack Sizes:	600cc and 16kg.				
Colour(s):	Natural.				
Content:	Polymers and additives.				
Properties:	Sovereign Flexible Wood Flooring Adhesive can be used to fix engineered boards, wood planks and strips (maximum 1.5m length) to sound concrete, anhydrite screeds, cement screeds and plywood. Suitable for use over normal under floor heating systems.				

Preparation: Timber floors must be installed in accordance with BS 8201. Screeds should be allowed to fully cure. Bases must be sound and dry (<65% RH); laitance or any material that may affect adhesion must be removed. Timber must be properly acclimatised prior to installation. Under floor heating must be switched off at least 48 hours before and after application.

Asphalt floors and those that are not sufficiently smooth and level should be primed with Sovereign Neoprene Primer and given a 3mm skim of Sovereign Floor Levelling Compound. Concrete and cement screeds with a moisture content of >65% should be treated with Sovereign Epoxy DPM prior to application of timber floors (not suitable for under floor heating)

Application: When using adhesive in buckets apply using a V notched trowel, for example 3 x 6mm. Only apply an area of adhesive that can be covered within around 20 minutes. Press timber firmly into place over its whole length so that adhesive is transferred evenly. Long sections of timber may require weighting down whilst the adhesive cures.

When using 600cc foil sausage place the sausage into a Sovereign Bulk Injector Gun and cut the end of the foil. Fit the end piece and nozzle.

Apply 8 - 10mm beads at right angles to the lengths of timber at 250mm centres and bed timber firmly into the adhesive.

Finishing the floor e.g. sanding/staining can commence after around 16 hours in good conditions. However this increases to 3 days if timber is fixed onto a non absorbent background.

### Coverage:

16kg bucket: 18m² approx. 600cc sausage: 2m² approx.

**Clean up:** Clean adhesive off with either a dry cloth or Sovereign Gorilla Wipes.

**Storage:** Between 5 and 30°C. **Shelf Life:** 6 months unopened.







Flooring & Tiling Products | Adhesives | Flexible Wood Flooring Adhesive



# **Tile Adhesives and Grouts**

Sovereign are the recognised UK leaders in the development, manufacture and marketing of high performance adhesives for the tiling professional.

### Adhesives

- Gripmaster Acrylic Wall Tile Adhesive: A twin polymer emulsion polymer based adhesive designed especially for today's tiling professional. Conforms to BS EN 12004 Class D1TE.
- Super Gripmaster Acrylic Wall Tile Adhesive: A high viscosity adhesive with high initial grab, ease of application and excellent non-slip properties. Conforms to BS EN 12004 Class D1TE.
- Fix N Grout White Tile Adhesive: Ready for use, white tile adhesive and grout for all ceramic and mosaic wall tiles to sound interior surfaces. For example render, plaster, plasterboard, tiles, wood and wood composites. Conforms to BSEN 12004 classification D2.
- Goldstar White Flexible Tile Adhesive: A super-white thin bed, waterproof wall tile adhesive that remains flexible after curing. Particularly suited to substrates subject to some movement or vibration, such as timber. Conforms to BS EN 12004 Class D2TE.
- Quick Fix: Thin-bed cement-based ceramic tile adhesive for fixing a range of tiles to concrete, sand/cement screeds, brickwork, blockwork, existing tiled areas and terrazzo etc. Conforms to BS EN 12004 Type C, Class 1FT. Fully water-resistant and frost resistant; suitable for interior/exterior locations subject to regular wetting.
- Flexible Tile Adhesive (Two Part): Specifically designed to fix tiles in areas subject to movement such as timber floors. It will also bond to many other substrates such as concrete, sand/cement screeds, renders, brickwork, blockwork and existing ceramic tiles. Conforms to BS EN 12004 C2TE S2.
- Standard Tile Fix: Thin-bed cement-based ceramic tile adhesive for fixing a range of tiles to concrete, sand/cement screeds, brickwork, blockwork, existing tiled areas and terrazzo etc. Conforms to BS 5980 Type 2 Class AA (BS EN 12004 Type C, Class 1T). Fully water-resistant and frost resistant; suitable for interior/exterior locations subject to regular wetting.
- Porcel-Flex Standard Set: Specially formulated for the rapid fixing of ceramic floor and wall tiles both internally and externally. Built in flexibility and adhesion promoter makes it ideal for fixing direct to timber floors and other areas that may be subject to vibration. Suitable for use in conjunction with under floor heating and in swimming pools. Its standard set formula gives a long pot life and working time. Conforms to BS EN 12004 Type C2TE S1.
- Porcel-Flex Rapid Set: The same high specification as Porcel-Flex Standard, but with a rapid setting that allows light foot traffic after 2 to 3 hours. Conforms to BS EN 12004 Type C2FT S1.
- Waterproof Tile Adhesive: For applications where wall tiles come into frequent contact with water. Suitable for fixing all ceramic and mosaic wall tiles to sound interior surfaces. Conforms to BS EN 12004 Class D2TE.

### Grouts

- Easy Paving Grout: The simple, clean and fast way to grout wide joints in hard landscaping features such as paths, driveways and patios. No mixing is required, simply pour on to the floor and brush into the joints. Once set the grout is permeable allowing paving to drain and can be used on natural stone, brick, block, concrete and clay pavers and flags.
- Wall Tile Grout: A cement-based polymer modified joint filling compound for tile joints up to 3mm wide around all types of ceramic floor and wall tiles. Wall Tile Grout is formulated to provide a non-slump, readily compactible grouting slurry, which can be easily applied across all types of ceramic tiled surfaces using a sponge or rubber squeegee.
- Anti-Mould Flexible Wall and Floor Grout: A flexible joint filling compound suitable for walls and floors in joints up to 15mm wide. It dries to a hard, durable, shrink resistant, mould resistant and water resistant finish, suitable for interior and exterior use.

### Coatings

- SBR Bonding Primer: A concentrated polymer primer, sealer and admixture for use when tiling with cementitious adhesives and grouts. SBR is particularly suitable for areas subject to repeated and prolonged wetting.
- Slate Sealer: A penetrating sealant, which provides a water repellent and oil resistant finish. After application the colour is enhanced and the surface less likely to stain.
- Path and Drive Sealer: A polymeric, clear sealer for application to exterior paving bricks, concrete, flagstones and porous tiles. Sovereign Path and Drive Sealer is a solvent system to allow deep penetration into the substrate.
- Epoxy Floor Paint: A two-part epoxy resin based coating that offers excellent resistance and durability for walls and floors. Sovereign Epoxy Floor Paint is solvent free, hence minimal odour and non-flammable and also exhibits high abrasion and chemical resistance, is easy and quick to apply and greatly improves the aesthetics of a working environment in mid grey. Suitable for walls and floors in both domestic and industrial situations, including garages, factory floors, warehouses, bund walls, food industry. Also ideal for use in hygiene conscious applications such as food preparation or public areas.
- **Dustproofer and Hardener:** A chemical petrification solution produced to harden and dustproof concrete and Terrazzo floors permanently.
- Stone Sealer: A state-of-the-art penetrating sealer for all natural stones, ceramic tiles and grout. It will repel water, oil and dirt, making cleaning easier and staining much less likely. Stone Sealer can be used internally and externally and does not alter the appearance of materials to which it is applied.
- Watertite: Sovereign Watertite is a specialist liquid applied membrane offering a simple method for waterproofing building materials prior to tiling.



# Gripmaster Acrylic Wall Tile Adhesive

Sovereign Gripmaster Acrylic Wall Tile Adhesive is a styrene acrylic emulsion polymer based adhesive designed especially for today's tiling professional.

Form:	High Viscosity Paste.			
Pack Sizes:	7kg and 16kg.			
Colour(s):	Buff.			
Content:	A blend of liquid polymers, selected fillers and rheology control agents.			
Properties:	Gripmaster can be used to fix porous bodied ceramic wall tiles and mosaics to many flat, sound interior surfaces, e.g. plaster, plasterboard, and cement render etc. This adhesive can also be used to fix polystyrene tiles and plaster mouldings. Sovereign Gripmaster conforms to BS EN 12004 Type D Class 1TE.			

Usage: When fixing to timber, in power showers, communal areas or using low porosity tiles (e.g. porcelain, glass and natural stone) then Sovereign Goldstar; a white, flexible and waterproof adhesive; is recommended. Very large format tiles should be fixed with Sovereign Porcel-Flex Adhesive.

Preparation: All surfaces must be sound, smooth and free from contamination and sufficiently true to allow thin bed fixing. New plaster/render should be at least 4 weeks old. Polished plaster should be thoroughly brushed with a stiff brush and primed with Sovereign PVA diluted 1:4. Check for plaster scum and clean down as required. Most surfaces do not require priming; if in doubt contact the Technical Department. Plasterboard must be rigidly fixed.

#### Application

Working in areas of no greater than 2-3m² apply a thin bed of adhesive to 3mm depth and comb through with a 6mm notched trowel or smaller.

Fix tiles with a twisting action within 20 minutes of adhesive application. Remove a tile occasionally to ensure that a minimum of 75% contact is achieved, which increases to full contact for larger tiles and in damp areas. Remove adhesive from the face of tiles immediately with a damp cloth.

Movement joints must be installed in accordance with BS 5385

Grouting: Allow a minimum of 24 hours before grouting when fixing to porous and un-primed surfaces. Primed, low porosity surfaces/tiles and large format tiles greatly extend the drying time of ready mixed adhesives, as do low temperatures and high humidity. Only grout once the tiles have become well bonded to the background, using Sovereign Anti-Mould Grout, which is available in various colours.

Special attention must be paid whenever finished tiling is likely to come into frequent contact with water e.g. non-domestic tile installations, as some backgrounds are not a suitable base for tiling e.g. plaster, plaster/board and timber, as these are moisture sensitive. If this is the case then waterproof the background using Sovereign Watertite and fix tiles using Sovereign Porcel-Flex, a cementitious, flexible and waterproof adhesive.

Practical Coverage: Approximately 2kg/m2.

Clean up: Clean tool immediately after use with water.

Storage: +5°C to +30°C. Shelf Life: 12 months unopened.

Limitations: Sovereign Gripmaster is for thin bed fixing only; the maximum bed depth must not exceed 3mm. Do not use the adhesive to make up differences in the wall and under no circumstances use the "dot and dab" method of fixing. Emulsion paint is not a suitable background for tiling. Not for exterior use, or in areas subject to prolonged dampness. Do not use on floors or as a grouting medium.







# Super Gripmaster Acrylic Wall Tile Adhesive

Sovereign Super Gripmaster Acrylic Wall Tile Adhesive is a high viscosity, acrylic emulsion polymer based adhesive. Offering high initial grab, ease of application and excellent non-slip properties.

Form:	High Viscosity Paste.				
Pack Size:	3.5, 7 and 16kg.				
Colour(s):	Buff.				
Content:	A twin polymer mix with selected fillers and rheology control agents.				
Properties:	Can be used to fix porous bodied ceramic wall tiles and mosaics to many flat, sound interior surfaces, e.g. plaster, plasterboard and cement render etc. This adhesive can also be used to fix polystyrene tiles and plaster mouldings.  Sovereign Super Gripmaster conforms to BS EN 12004 Type D Class 1TE.				

Usage/Preparation: All surfaces must be sound, smooth and free from contamination and sufficiently true to allow thin bed fixing. New plaster/render should be at least 4 weeks old. Polished plaster should be thoroughly brushed with a stiff brush and primed with Soveriap PVA diluted 1:4. Check for plaster scum and clean down as required. Most surfaces do not require priming; if in doubt contact the Technical Department. Plasterboard must be rigidly fixed.

**Application:** Working in areas of no greater than 2 to 3m<sup>2</sup> apply a thin bed of adhesive to 3mm depth and comb through with a 6mm notched trowel or smaller.

Fix tiles with a twisting action within 20 minutes of adhesive application. Remove a tile occasionally to ensure that a minimum of 75% contact is achieved which increases to full contact for larger tiles and in damp areas. Remove adhesive from the face of tiles immediately with a damp cloth.

Movement joints must be installed in accordance with BS 5385.

Grouting: Allow a minimum of 24 hours before grouting when fixing to porous and un-primed surfaces. Primed, low porosity surfaces/files and large format tiles greatly extend the drying time of ready mixed adhesives, as do low temperatures and high humidity. Only grout once the tiles have become well bonded to the background, using Sovereign Anti-Mould Grout, which is available in various colours.

Special attention must be paid whenever finished tiling is likely to come into frequent contact with water e.g. non-domestic tile installations, as some backgrounds are not a suitable base for tiling e.g. plaster, plasterboard and timber, as these are moisture sensitive. If this is the case then waterproof the background using Sovereign Watertite and fix tiles using Sovereign Porcel-Flex, a cementitious, flexible and waterproof adhesive.

Limitations: When fixing to timber, in power showers, communal areas or using low porosity tiles (e.g. porcelain, glass and natural stone) then Sovereign Goldstar – a white, flexible and waterproof adhesive, is recommended. Very large format tiles should be fixed with Sovereign Porcel-Flex Adhesive. Sovereign Super Gripmaster is for thin bed fixing only, the maximum bed depth must not exceed 3mm. Do not use the adhesive to make up differences in the wall and under no circumstances use the "dot and dab" method of fixing. Emulsion paint is not a suitable background for tiling. Not for exterior use, or in areas subject to prolonged dampness. Do not use on floors or as a grouting medium.

Coverage: Approximately 2kg/m<sup>2</sup>.

Clean up: Clean tool immediately after use with water.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.







### Fix N Grout White Tile Adhesive

Sovereign Fix N Grout is a high quality, ready for use, white tile adhesive and grout. Sovereign Fix N Grout is suitable for fixing and grouting all ceramic and mosaic wall tiles to sound interior surfaces, for example render, plaster, plasterboard, tiles, wood and wood composites. Fix N Grout conforms to BSEN 12004 classification D2 TE.

Form:	Thixotropic Paste.			
Pack Sizes:	3.5 and 7kg.			
Colour(s):	White.			
Content:	A blend of cross linking polymer, white fillers, titanium dioxide and rheology modifiers.			
Properties:	When used as a grout special attention must be paid to shower areas. Sovereign Fix N Grout is suitable for areas subjected to prolonged wetting, however, in such situations the background substrates should also be moisture resistant.			

**Usage/Preparation:** Apply a thin bed of adhesive and comb through with a notched trowel. Apply only enough adhesive that can be tiled within 20 minutes; approx 1 to 2m<sup>2</sup>.

Tiles should be bedded in using a slight twisting motion to ensure a minimum 75% coverage of adhesive, and a maximum bed thickness of 3mm.

Allow 24 hours for adhesive to dry prior to grouting. On nonporous surfaces allow up to 72 hours. Do not use in areas of constant water immersion, such as swimming pools, shower bottoms or communal showers.

**Grouting:** This can be carried out as soon as the adhesive has set. This is done by using a grouting trowel, squeegee, damp cloth or sponge. Firmly press Fix N Grout into the joints and compact well with a round edge stick.

Work only small areas at a time and remove any excess Fix N Grout from the surface of the tiles before it dries. Wipe down with a damp cloth and then clean the tiles with a dry cloth.

As Fix N Grout is a water-based product some shrinkage in the grout lines can occur if not fully filled. If this occurs and pinholes appear then reapply more grout to the area and clean off as before.

Coverage as an adhesive: Approximately 2kg/m² depending upon the substrate and bed thickness.

Coverage as a grout: Typically 4m²/kg, depending upon tile size.







### Goldstar White Flexible Tile Adhesive

A super-white thin bed, waterproof wall tile adhesive that remains flexible after curing. Particularly suited to substrates subject to some movement or vibration, such as timber. Conforms to BS EN Type D Class 2TE.

Form:	High Viscosity Paste.			
Pack Sizes:	16kg.			
Colour(s):	White.			
Content: A blend of styrene acrylic polymer, rheology control and other special additives.				
Properties:	Can be used to fix all tile types e.g. mosaic and low porosity tiles such as porcelain to most substrates including plaster, timber, brick and render. Goldstar is suitable for use in power showers.			

Usage/Preparation: All surfaces to be tiled should be sound, smooth and free from oil, grease, flaking paint and dust. New plaster/render should be completely dry prior to tiling and should always be checked for surface dust.

The background must be capable of supporting the weight of the tiles, adhesive and grout, which for finish plaster is around 20kg/m² and 32kg/m² for boards – check exact figure with the board manufacturer.

Gypsum plaster, plasterboard, cement render, tile backer boards and existing tiling does not require priming. However plaster that has been polished must be either coarse sanded or vigorously brushed with a stiff brush to open up the surface. This should then be dusted down and sealed with Sovereign SBR Bonding Primer diluted 1:4 with water.

When tiling to timber in areas subject to dampness water resistant ply should be used. Prime the edges and rear face of the timber with Sovereign SBR Bonding Primer, but do not prime the surface to be tiled.

Application: Sovereign Goldstar should be applied as a 3mm layer and then combed through with a 6mm notched trowel. The Adhesive has an open time of approximately 30 minutes (dependent upon conditions). However, it is important not to spread too great an area at any one time (approximately 1 square metre). Fix tiles into position using a slight twisting motion. A minimum tile/adhesive contact area of 75% must be obtained. When used in wet areas such as shower cubicles and bath surrounds then it is important to obtain 100% coverage. Lift a tile occasionally to ensure that the correct contact is being achieved. Never spot fix tiles.

The maximum bed thickness of adhesive must not exceed 3mm. At thicknesses over 3mm the drying time will be greatly increased and slippage may occur.

Allow 2-3mm joints between tiles for grouting. Wipe away any surplus adhesive before it dries with a damp cloth.

**Drying Time:** Allow 24 hours before grouting, which should be increased to 3 days when tiling onto impervious surfaces or with low porosity tiles.

Use Sovereign Wall Tile Grout and allow to cure for 24 hours before use; 7 days for power showers.

**General:** Not for external use, on floors or swimming pools. Use in temperatures of  $5^{\circ}$ C and rising only. Allow longer drying times in cold weather.

Gypsum plaster and plasterboard are not suitable substrates to receive tiling in areas subject to prolonged periods of dampness, such as shower enclosures and wet rooms. In such areas the walls and floor should be waterproofed with Sovereign Watertite and then tiled with Sovereign Porcel-Flex

Practical coverage: Approximately 1.8kg/m<sup>2</sup>.

Clean up: Clean tools immediately after use with water.

Storage: Between 5°C -30°C.

Shelf Life: 12 months unopened.







### **Quick Fix**

Sovereign Quick Fix is a cement-based, thin-bed ceramic tile adhesive, which conforms to BS 5980 Type 2 Class AA (BS EN 12004 Type C, Class 1FT). Available in grey, for fixing ceramic tiles, mosaics, quarry tiles, slate, marble and granite to concrete, sand/cement screeds, brickwork, blockwork, existing tiled areas and terrazzo etc.

Quick Fix is fully water-resistant and frost resistant; and is suitable for interior/exterior applications in areas subject to regular wetting, such as showers, saunas and bathrooms.

Form:	Powder.				
Pack Size:	5 and 20kg.				
Content:	Blend of cement, selected fillers and special additives.				
Colour(s):	Grey.				
Properties:	Sovereign Quick Fix forms a strong bond with concrete, render, blockwork and brickwork. It will remain workable for 20 to 40 minutes and then reach final set after about 2 to 4 hours. For applications onto timber ply boards or fixing porcelain and vitrified tiles, Sovereign recommend the use of either Porcel-Flex or Flexible Two Part Tile Adhesive.				

Usage/Preparation: All surfaces must be clean, sound and free from dust or grease. New concrete or blockwork should be allowed to cure for 4 weeks. Porous surfaces should be primed with Sovereign SBR diluted 5:1 with water.

Application onto existing surfaces such as ceramic tiles, vinyl tiles and internal asphalt should only be carried out if the floor is solid and stable. Prime the floor with dilute Sovereign SBR or Flexible Polymer, and use this same solution as the gauging water when mixing the adhesive.

If tiles are to be fixed to gypsum surfaces, such as skim finish and plasterboard, they must first be fully sealed with either Sovereign SBR or Flexible Polymer.

Mixing: Use a mechanical stirrer to mix adding approximately four parts powder to one part liquid and mix to a smooth creamy paste. Never add more water once the adhesive has begun to set; discard and mix a fresh batch. When fixing low porosity tiles and natural stone then incorporation of Sovereign SBR or Flexible Polymer is required.

Fixing: For fixing ceramic tiles or mosaics, use a notched trowel to give a ribbed mortar bed, into which the tiles are firmly bedded with a twist and slide action to ensure full contact. Use a  $3\times3$ mm notch at 6mm centres for mosaics and thin flat backed wall tiling, a  $6\times6$ mm notch at 12mm centres for general wall tiling and 20mm round notch at 30mm centres for floor tiling.

The position of the tiles can be adjusted up to 10 minutes after initial fixing. Open time of the exposed mortar bed is approximately 20 minutes, depending on surface porosity and site conditions. It is recommended that tiles with raised or studded back profiles should be buttered to ensure solid bed fixing. Do not trowel out an area of adhesive greater than can be tiled over within a 10 minute period.

Floor tiles must be fixed into a solid bed of adhesive so that no voids remain under tiles. Under no condition should tiles be fixed using the 'dot and dab' method.

Wall tiles must have a minimum 75% contact, rising to 100% when used in wet areas.

### Quick Fix, continued

#### General

Dark adhesives can sometimes discolour pale, or translucent tiles, such as marble. Sovereign recommends the use of White Standard Fix or White Porcel-Flex with these types of tiles.

**Grouting:** Once the adhesive bed has set (min 4 hours) grouting can commence. Sovereign Anti-Mould Grout is recommended for walls and floors.

#### Coverage:

 $\label{eq:model} \begin{tabular}{ll} $3mm$ notched trowel: Approximately $9m^2$ per bag. \\ \begin{tabular}{ll} $20mm$ notched trowel: Approximately $5m^2$ per bag. \\ \end{tabular}$ 

Coverage rates are approximate.

Storage: This product must be stored under cover, in unopened bags clear of the ground in cool dry conditions, protected from frost and excessive draught. When stored correctly, as above, and used within 12 months of the date shown on this packaging, the activity of the reducing agent added will be maintained and this product will contain, when mixed, no more than 0.0002% (2ppm) soluble chromium (VI) of the total dry weight of the cement.

#### Limitations:

All tile fixing should be carried out in accordance of BS5385;1995-Code of Practice for the Installation of Ceramic Wall and Floor Tiles.

Do not use at or below 5°C

Do not use on painted surfaces, timber, metal or backgrounds subject to vibration.

Do not allow adhesive to harden on the face of tiles.

Surfaces such as rutted internal concrete that are rough or uneven may first be levelled with Sovereign Floor Levelling Compound and once hardened tiles fixed with Quick Fix.

Expansion joints should be planned and installed in accordance with the recommendations of BS 5385.

When tiling on to anhydrite (also known as gypsum or flowing screeds etc) then first consult Sovereign Technical Specification H18 before commencing.











# Flexible Tile Adhesive (Two Part)

Sovereign Two Part Flexible Ceramic Tile Adhesive has been specifically designed to fix tiles in areas subject to movement such as timber floors. It will also bond to many other substrates such as concrete, sand: cement screeds, renders, brickwork, blockwork, existing ceramic tiles.

Form:	Twin Pack consisting of Powder and Liquid Polymer.			
Pack Sizes: 15kg.				
Colour(s):	Grey and White.			
Content:	ent: Blend of cement and special additives and flexible polymer.			
Properties:	Sovereign's Two Part Flexible Ceramic Tile Adhesive is a quick-setting product and the floor can be back in service 5 hours after tiling, at 20°C. Can be used on walls or floors.			
Please Note:	Pale coloured marble/porcelain can be translucent and dark coloured adhesive can sometimes show through. If in doubt we would recommend tiling a small trial area or use the white grade of Two Part Flexible Ceramic Tile Adhesive.			

Preparation: Surfaces to be tiled must be clean, dry and firm. Contaminants such as dust and grease must be removed. The surface to be tiled must be sufficiently strong enough to support the weight of the tiles and adhesive. Timber floors must be stable and ventilated. Joists must be at a maximum of 300mm centres, otherwise noggins must be fitted or the area overlaid with 15mm ply. Boards must be screwed down to the joist – nails are not sufficient.

Seal all timber with Sovereign SBR Bonding Agent – one part, diluted with three parts of water. The most rigid parts of a tiling system are the tiles themselves. Although the adhesive and timber floor will flex, the tiles will not. This is particularly important when using large format tiles, where the chances of tiles cracking are increased. If in doubt brace the floor.

Mixing: Mix in the ratio of one bag of powder (5kg) with half the bottle of polymer (2.5 L). Shake bottle of polymer to mix, then gradually add powder to liquid (using bucket as mixing vessel) and stir thoroughly until smooth. The use of a drill and paddle mixer is recommended. When a homogenous mix is achieved allow to "body up" for 5 minutes. Do not use the polymer for any other purpose than mixing the adhesive.

Using the polymer for priming etc. will reduce the polymer content of the mix and lead to failure. The adhesive will not perform adequately if mixing is not undertaken as instructed. Working time is a maximum of 30-45 minutes once mixed, dependent on ambient conditions.

**Grouting:** Grouting can be carried out after approximately 5 hours in ideal conditions - around  $20^{\circ}$ C. In low temperatures, or on low porosity surfaces the adhesive should be allowed to cure for 24 hours before grouting. Use Flexible Floor Grout.

**Please Note:** Do not attempt to re-wet and mix partially cured material.

Application: Spread the adhesive using a 10 x 10mm notched trowel. Do not spread more adhesive than can be tiled in 10 minutes. It is vital that a solid bed is achieved and that no voids remain and no part of the tile is in contact with the substrate. In some instances it may be necessary to 'butter' the tile. Bed tiles firmly into place, sliding or twisting the tile. Tiles can be adjusted up to 10 minutes after being laid. Leave a gap of between 10-20mm for grouting between tiles. Surplus adhesive should be carefully cleaned from the face of tiles and joints with a damp cloth before it has time to set. Once cured the adhesive is extremely difficult to remove. Take care not to exert pressure on tiles to avoid uneven surfaces.

Practical Coverage: Approximately 4m² per 15kg pack

Storage: This product must be stored under cover, in unopened bags clear of the ground in cool dry conditions, protected from frost and excessive draught. When stored correctly, as above, and used within 9 months of the date shown on this packaging, the activity of the reducing agent added will be maintained and this product will contain, when mixed, no more than 0.0002% (2 ppm) soluble chromium (VI) of the total dry weight of the cement.









### **Standard Tile Fix**

Sovereign Standard Tile Fix is a cement-based, thin-bed ceramic tile adhesive, which conforms to BS 5980 Type 2 Class AA (BS EN 12004 Type C, Class 1T). Available in grey or white, for fixing ceramic tiles, mosaics, quarry tiles, slate, marble and granite to concrete, sand/cement screeds, brickwork, blockwork, existing tiled areas and terrazzo etc. Standard Tile Fix is fully water-resistant and frost resistant, and is suitable for interior/exterior applications in areas which are subject to constant water immersion, such as swimming pools.

Form:	Powder.				
Pack Size:	20kg.				
Colour(s):	Grey and White.				
Content:	Blend of cement, selected fillers and special additives.				
Properties:	Sovereign Standard Tile Fix forms a strong bond with concrete, render, block work and brickwork. It will remain workable for over 60 minutes and then reach final set after about 24 hours. For applications onto timber ply boards or fixing porcelain and vitrified tiles, Sovereign recommend the use of either Porcel-Flex or Two Part Flexible Tile Adhesive.				

Usage/Preparation: All surfaces must be clean, sound and free from dust or grease. New concrete or blockwork should be allowed to cure for 4 weeks. Porous surfaces should be primed with Sovereign SBR diluted 5:1 with water.

Application onto existing surfaces such as ceramic tiles, vinyl tiles and internal asphalt should only be carried out if the floor is solid and stable. Prime the floor with dilute Sovereign SBR or Flexible Polymer, and use this same solution as the gauging water when mixing the adhesive.

If tiles are to be fixed to gypsum surfaces such as skim finish and plasterboard they must first must be fully sealed with either Sovereign SBR or Flexible Polymer.

Mixing: Use a mechanical stirrer to mix adding approximately 4 parts powder to 1 part liquid and mix to a smooth creamy paste. Never add more water once the adhesive has begun to set; discard and mix a fresh batch. When fixing low porosity tiles and natural stone then incorporation of Sovereign SBR or Flexible Polymer is required.

**Fixing:** For fixing ceramic tiles or mosaics, use a notched trowel to give a ribbed mortar bed, into which the tiles are firmly bedded with a twist and slide action to ensure full contact. Use a  $3 \times 3$ mm notch at 6mm centres for mosaics and thin flat backed wall tiling, a  $6 \times 6$ mm notch at 12mm centres for general wall tiling and 20mm round notch at 30mm centres for floor tiling.

The position of the tiles can be adjusted up to 10 minutes after initial fixing. Open time of the exposed mortar bed is approximately 20 minutes, depending on surface porosity and site conditions. It is recommended that tiles with raised or studded back profiles should be buttered to ensure solid bed fixing.

Do not trowel out an area of adhesive greater than can be tiled over within a 10 minute period.

Floor tiles must be fixed into a solid bed of adhesive so that no voids remain under tiles. Under no condition should tiles be fixed using the "dot and dab" method. Wall tiles must have a minimum 75% contact, rising to 100% when used in wet areas.

General: Dark adhesives can sometimes discolour pale, or translucent files, such as marble. Sovereign recommends the use of White Standard Fix or White Porcel-Flex with these types of tiles.

### Standard Tile Fix, continued

Grouting: Once the adhesive bed has set (min 24 hours) grouting can commence. Sovereign Anti-Mould Grout is recommended for walls and floors.

#### Coverage:

3mm notched trowel: Approximately 9m<sup>2</sup> per bag. 20mm notched trowel: Approximately 5m2 per bag. Coverage rates are approximate.

Storage: This product must be stored under cover, in unopened bags clear of the ground in cool, dry conditions, protected from frost and excessive draught. When stored correctly, as above, and used within 12 months of the date shown on this packaging, the activity of the reducing agent added will be maintained and this product will contain, when mixed, no more than 0.0002% (2ppm) soluble chromium (VI) of the total dry weight of the cement.

Limitations: All tile fixing should be carried out in accordance of BS5385:1995-Code of Practice for the Installation of Ceramic Wall and Floor Tiles. Do not use at or below 5°C. Do not use on painted surfaces, timber, metal or backgrounds subject to vibration. Do not allow adhesive to harden on the face of tiles.

Surfaces such as rutted internal concrete that are rough or uneven may first be levelled with Sovereign Floor Levelling Compound and once hardened tiles fixed with Standard Tile Fix. Expansion joints should be planned and installed in accordance with the recommendations of BS 5385. When tiling on to anhydrite (also known as gypsum or flowing screeds etc) then first consult Sovereign Technical Specification H18 before commencing.









### Porcel-Flex Standard Set

Specially formulated for the rapid fixing of ceramic floor and wall tiles both internally and externally. Built in flexibility and adhesion promoter makes it ideal for fixing direct to timber floors and other areas that may be subject to vibration.

Suitable for use in conjunction with under floor heating and in swimming pools. Its standard set formula gives a long pot life and working time. Conforms to BS EN 12004 Type C2TE S1.

Form:	Dry Powder.				
Pack Size:	20kg.				
Colour(s):	Grey and White.				
Properties:	Suitable for fixing all types of tiles including porcelain, fully vitrified, marble, mosaics, terrazzo, brick slips, natural and artificial stone, concrete tiles and lightweight polystyrene to most building materials without the need for expensive additives.				
Note:	Pale coloured marble/porcelain can be translucent and dark coloured adhesive can sometimes show through. If in doubt we would recommend tiling a small trial area, or use the white grade of Porcel-Flex.				

Usage/Preparation: All tiling should be in accordance with BS5385 Code of Practice for Floor and Wall Tiling. All surfaces must be sound, clean and free from dust, dirt, grease or other loose materials. New concrete and cement screeds must have matured for at least one month and be fully dry before tiling. If the base is not concrete, sand/cement, blockwork or brickwork, further preparation is required.

Wooden Floors: Timber bases must be rigid. Screw down floorboards to the joists and then overlay with marine grade ply at least 12mm thick and screwed at 300mm centres. Seal rear and edges of timber with one coat of SBR Bonding Agent diluted with water 3:1.

Vinyl Tiles: Ensure tiles are firmly fixed. Prime with one coat of SBR Bonding Agent diluted with water 3:1.

Glazed Tiles: Either roughen the glaze with an abrasive disc or prime with one coat of SBR Bonding Agent diluted with water 3:1.

Internal Flooring Grade Asphalt: Prime with one coat of SBR Bonding Agent diluted with water 3:1.

Painted Surfaces: Gloss paint and floor paint must be sound and well adhered. Prime with SBR Primer diluted 3:1.

Mixing: Sovereign Porcel-Flex should be added to a clean container and mixed with water to give a thick paste. As an approximate guide use one part clean water to five parts adhesive. Once mixed the adhesive is ready to use and has a working time of approximately 2 to 3 hours at 20°C. Set time is dependant on temperature; do not use below 5°C.

### Porcel-Flex Standard Set, continued

**General:** Sovereign Porcel-Flex should be used in small areas at a time due to the fast setting nature of the adhesive.

Thin Bed: Use when surfaces are even. Spread an even layer of adhesive and comb through with a 6mm notched trowel. Bed tiles in with a twisting action to ensure full contact.

Thick bed: Use where surfaces are not sufficiently true to allow thin bed fixing. The adhesive should be applied as a floated coat of 3 to 6mm thickness, or locally up to 12mm. Ensure there are no hollow spaces and that all air is expelled from the back of the tile. It may be necessary to apply a thin layer of adhesive to the back of the tiles.

Movement joints must be placed in large areas of tiling as specified in BS 5385 Parts 1 and 2. ALL structural joints must be carried through the adhesive and tile bed.

Grouting may be carried out as soon as the tile bed is firm, usually 24 hours after fixing at 20°C. Floor will accept traffic once the grout has cured. When fixing tiles to timber floors, Sovereign Flexible Floor Grout must be used.

Coverage: Fixes approximately 5m<sup>2</sup> at 6mm solid bed thickness

**Clean up:** Clean all tools and equipment with water before the adhesive has had time to set.

Limitations: Gypsum plaster must be totally sealed with Sovereign SBR. Sovereign Watertite should be used where damp conditions exist. Anhydrite screeds must be sanded and sealed before application of cement based materials. If in doubt about the product's suitability please contact our Technical Department.

**Storage:** This product must be stored under cover, in unopened bags clear of the ground in cool dry conditions, protected from frost and excessive draught.

When stored correctly, as above, the shelf life is 6 months from the date shown on the packaging.









# **Porcel-Flex Rapid Set**

Sovereign Porcel-Flex is specially formulated for the rapid fixing of ceramic floor and wall tiles both internally and externally. With built in flexibility and adhesion promoter it is ideal for fixing direct to timber floors and for areas that may be subject to vibration. Suitable for use in conjunction with under floor heating. Its rapid setting formula allows for light foot traffic after 2 to 3 hours. Conforms to the requirements of BS EN 12004 Type C2 FT S1.

Form:	Dry Powder.			
Pack Size:	20kg.			
Colour(s):	Grey and White.			
Properties:	Suitable for fixing all types of tiles including porcelain, fully vitrified, marble, mosaics, terrazzo, brick slips, natural and artificial stone, concrete tiles and lightweight polystyrene to most building materials without the need for expensive additives. It is suitable for use as both a thin and thick bed adhesive.			
Note:	Pale coloured marble/porcelain can be translucent and dark coloured adh can sometimes show through. If in doubt we would recommend tiling a sn trial area, or use the white grade of Porcel-Flex.			

Usage/Preparation: All tiling should be in accordance with BS 5385 Code of Practice for Floor and Wall Tiling. All surfaces must be sound, clean and free from dust, dirt, grease or other loose materials. New concrete and cement screeds must have matured for at least one month and be fully dry before tiling.

If the base is not concrete, sand/cement, blockwork or brickwork, further preparation is required:

Wooden Floors: Timber bases must be rigid. Screw down floorboards to the joists and then overlay with marine grade ply at least 12mm thick and screwed at 300mm centres. Seal rear and edges of timber; do not prime the surface, but clean off timber dust.

Vinyl Tiles: Ensure tiles are firmly fixed. Prime with 1 coat of SBR Bonding Agent diluted with water 3:1.

Glazed Tiles: Either roughen the glaze with an abrasive disc or prime with a coat of SBR Bonding Agent diluted 1:1 with water and mixed with fresh cement.

Internal Flooring Grade Asphalt: Prime with one coat of SBR Bonding Agent diluted with water 3:1.

Painted Surfaces: Mechanically remove paint before tiling.

Mixing: Sovereign Porcel-Flex should be added to a clean container and mixed with water to give a thick paste. As an approximate guide use one part clean water to five parts adhesive. Once mixed the adhesive is ready to use and has a working time of approximately 20 to 30 minutes at 20°C. Do not mix more adhesive than can be used in this time. Do not add more water to adhesive that has started to set. Set time is dependant on temperature; do not use below 5°C.

**General:** For fixing ceramic tiles or mosaics, use a notched trowel to give a ribbed mortar bed, into which the tiles are firmly bedded with a twist and slide action to ensure full contact. Use a 3 x 3mm notch at 6mm centres for mosaics and thin flat backed wall tiling, a 6 x 6mm notch at 12mm centres for general wall tiling and 20mm round notch at 30mm centres for floor tiling.

### Porcel-Flex Rapid Set, continued

The position of the tiles can be adjusted up to 10 minutes after initial fixing. Open time of the exposed mortar bed is approximately 20 minutes, depending on surface porosity and site conditions. It is recommended that tiles with raised or studded back profiles should be thinly buttered to ensure solid bed fixing. Do not trowel out an area of adhesive greater than can be tiled over within a 10 minute period.

Floor tiles must be fixed into a solid bed of adhesive so that no voids remain under tiles. Under no condition should tiles be fixed using the 'dot and dab' method. Wall tiles must have a minimum 75% contact, rising to 100% when used in wet areas.

Movement joints must be placed in large areas of tiling as specified in BS 5385 Parts 1 and 2. ALL structural joints must be carried through the adhesive and tile bed.

Grouting may be carried out as soon as the tile bed is firm, usually within 2 hours after fixing at 20°C. Floor will accept light foot traffic after approximately 2 hours and will accept full loading after 12 hours. When fixing tiles to timber floors, Sovereign Flexible Floor Grout must be used.

**Coverage:** Fixes approximately 5 to 9m<sup>2</sup> per bag depending on trowel used.

**Clean up:** Clean all tools and equipment with water before the adhesive has had time to set.

Limitations: Gypsum plaster must be totally sealed with Sovereign SBR. Sovereign Watertite should be used where damp conditions exist. Anhydrite screeds must be sanded and sealed before application of cement based materials. If in doubt about the product's suitability, please contact the Sovereign Technical Department.

**Storage:** This product must be stored under cover, in unopened bags clear of the ground in cool dry conditions, protected from frost and excessive draught.

When stored correctly, as above, and used within 6 months of the date shown on this packaging, the activity of the reducing agent added will be maintained and this product will contain, when mixed, no more than 0.0002% (2ppm) soluble chromium (VI) of the total dry weight of the cement.











# **Waterproof Tile Adhesive**

Sovereign Waterproof Tile Adhesive has been designed to be a high quality water resistant grade of tile adhesive for applications where wall tiles come into frequent contact with water. Waterproof Tile Adhesive is suitable for fixing all ceramic and mosaic wall tiles to sound interior surfaces, e.g. render, plaster, plasterboard, tiles, wood and wood composites. Waterproof Tile Adhesive conforms to BSEN 12004 classification D2TE.

Form: Thixotropic Paste.

Pack Sizes: 7 and 16kg.

Colour(s): Buff.

Content: A blend of cross linking polymer, fillers and rheology modifiers.

Properties: Sovereign Waterproof Tile Adhesive is suitable for areas subjected to prolonged wetting; however, in such situations the background substrates should also be moisture resistant. Do not use in areas of constant water immersion such as swimming pools, for which Sovereign recommends the use of Sovereign Standard Tile Fix Adhesive.

Usage/Preparation: Apply a thin bed of adhesive and comb through with a notched trowel. Apply only enough adhesive that can be tiled within 20 minutes, approx 1m². Tiles should be bedded in using a slight twisting motion to ensure a minimum 75% coverage of adhesive and bed thickness of 3mm.

Grouting: Allow a minimum of 24 hours before grouting, if tiling has been applied to low porosity or impervious surface, e.g. existing tiles etc then setting time of adhesive will be much slower and grouting should not take place for a minimum of 72 hours. Sovereign Waterproof Tile Adhesive is suitable for application onto timber however the substrate must be rigid. Sovereign recommends the use of Sovereign Goldstar Tile Adhesive where movement may be encountered.

Storage: Between 5 and 25°C.

Shelf Life: 12 months unopened.

**Coverage:** As an adhesive approximately 2kg/m² depending upon the substrate and bed thickness.







# **Easy Paving Grout**

The simple, clean, rapid solution for grouting wide joints in driveways, terraces, patios and paths that is permeable, allowing paving to drain. No mixing required, simply pour onto the paving, brush and compact into the joints... That's it, done!

Semi-Flowing Aggregate. Pack Sizes: 20kgs. Colour(s): Grey and Natural. Content: Coloured aggregate and resin. Properties: For use in joints from 5mm wide upwards. Supplied is sealed bags, this grout is a resin bound aggregate that cures on contact with the air. Once cured the grout can be pressure washed when required and is unaffected by road salts and freeze thaw conditions. The colour is consistent throughout the mix so no more patchy areas as seen when using cement.

Preparation: The surface and sub-base must be dry as dampness inhibits the curing mechanism. Surfaces should be clean before commencing

For existing areas, rake out the joints thoroughly and clean the surface with Sovereign Masonry Sterilising Wash and thoroughly rinse and allow to dry for 3 to 4 days. Joints must be a minimum of 5mm wide and 25mm deep.

Deeper joints may be par filled with dry sand or aggregate to leave the top 25mm for filling with Easy Paving Grout. Pour Easy Paving Grout on the surface and use a coarse brush, or squeegee to work the grout into the joints at a 45° angle. For best results compact the grout using a pointing trowel or rounded stick and refill any depressions as required. The surface must be protected from rain for a minimum of 18 hours; longer in cold conditions.

For best results seal all porous materials with the appropriate Sovereign sealer - Stone Sealer, Path & Drive Sealer, Block & Joint Sealer or Slate Sealer. This is best done in two coats, once before and again after grouting; allow the first coat to dry before applying the grout and the grout must be cured before applying the second coat.

Temporary darkening of the surface may occur, but this will weather away after a few weeks. However, when using the grey version it is possible that permanent staining can occur, therefore always test in an inconspicuous area before full application. Sealing the surface before grouting can help prevent staining, but again a test area is recommended.

Coverage: The coverage is very dependent on joint width and paving size. For a 25mm deep joint in 600 x 600mm paving a 20kg pack will cover around 28m2, a 10mm joint width will be half of this etc.

Cleaning: Clean all tools and splashes in soapy water before the product dries.

Storage: Between 5 and 30°C

Shelf Life: At least 12 months unopened.

Limitations: Limestone, particularly Indian Stone, is liable to permanent staining, therefore testing is imperative before application. Low temperatures extend the curing time. On some paving materials the Grey Grout may stain permanently, in which case the paving will take on a grey hue that will not completely disappear. Therefore, we recommend the Grey Grout is tested on a small inconspicuous area before full application.







# Anti-Mould Flexible Wall and Floor Grout

Sovereign Anti-Mould Grout is a flexible joint filling compound suitable for walls and floors in joints up to 15mm wide. It dries to a hard, durable, shrink resistant, mould resistant and water resistant finish, suitable for interior and exterior use.

Form:	Dry Powder.			
Pack Sizes:	4 x 3kg or 1x 10kg (White and Grey only).			
Colour(s):	White, Ivory, Charcoal, Sandstone, Limestone or Grey.			
Contains:	Cement, aggregate powder polymer and mould inhibitor.			
Properties:	Especially suitable for sanitary applications such as kitchens, showers, toile and bathrooms where inhibition of fungal growth is required. Also suitable for application when tiling over under floor heating and timber panels.			

Usage/Preparation: Check that the tile bed is firmly bonded and that the adhesive has dried. Rake excess grout out of the joint lines to allow an even depth of grout to be applied in all areas. Note: some natural stone and porous, unglazed tiles are prone to absorption of grout fines and therefore staining. Always apply grout to a spare tile to determine whether staining is likely and consult the manufacturer if necessary regarding the use of sealers prior to grouting.

Add Sovereign Anti-Mould Grout to clean, fresh water in a clean container and mix using a mechanical stirrer. Mix thoroughly to give a smooth consistant mortar. Around 1 part water to 2 parts powder is required to form the grouting slury. Do not add more water than is necessary as this will prolong the drying and reduce the strength of the dried grout. Under no circumstances should extra water be added to grout that is beginning to set. When the grout begins to loose workability it must be discarded.

When mixed the grout will have a working time of 2 to 3 hours and reach final set after 24 hours. These times will alter

depending on temperature; low temperatures extend the pot life and set time whilst elevated temperatures reduce them. If several bags of grout are to be used then they must be from the same batch and an identical water addition used. Failure to follow these quidelines can lead to colour differences.

Use a rubber squeegee to work the grout thoroughly into the tile joints, removing the excess as work proceeds. Grout residues can be removed with a lightly damp cloth or sponge up to 2 hours after application. Once the grout has hardened and dried the surface of the tiles can be polished clean with a dry cloth. All materials used such as the application tools and cleaning cloths must be clean and free of contamination - likely to cause staining of the grout.

Once cured, Sovereign Anti-Mould Grout will be much more difficult to remove from the face of tiles than ordinary grout. It is therefore essential that residues be removed as the application proceeds and before the grout begins to dry.

A Safety Data Sheet is available on request for this product.

Coverage: This will depend on the tile size, joint width and depth. The following can be used as a guide:

Joint	Tile Size	Grout Required	Joint	Tile Size Gre	out Required
6mm	150 x 200 x 6mm	0.67kg/m <sup>2</sup>	6mm	200 x 250 x 10mm	n 0.86kg/m²
3mm	300 x 200 x 10mm	0.40kg/m <sup>2</sup>	8mm	100 x 100 x 8mm	2.00kg/m <sup>2</sup>
8mm	150 x 150 x 6mm	1.00kg/m <sup>2</sup>	10mm	250 x 200 x 6mm	1.44kg/m <sup>2</sup>

Please Note: Sovereign Anti-Mould Grout contains a fungicide to inhibit black spot mould growth. This fungicide is active at the surface of the grout and any contamination such as soap scum etc will put a barrier between the active ingredient and mould spores therefore allowing mould to develop. It is therefore imperative that the grout is kept clean to realise the full benefit of its anti-mould properties.













### Wall Tile Grout

Sovereign Wall Tile Grout is a cement-based polymer modified joint filling compound for tile joints up to 3mm wide around all types of ceramic floor and wall tiles. Wall Tile Grout is formulated to provide a non-slump, readily compactible grouting slurry, which can be easily applied across all types of ceramic tiled surfaces using a sponge or rubber squeegee.

Form:	Powder.
Pack Size:	8 x 1.5kg or 4 x 3kg, or 1 x 12.5kg (in White only).
Colour(s):	White.
Content:	White cement, aggregate and speciality additives.
Properties:	Sovereign Wall Tile Grout will dry to a hard, durable and water-resistant finish, suitable for internal and external locations. In fully immersed locations, the inclusion of Sovereign SBR Bonding Agent in the grout mix can enhance water repellent properties.

Usage/Preparation: Check that all tiles are securely fixed and that the adhesive has thoroughly dried before applying any load or pressure to the tiled surface.

Ensure all joints are raked clear of any excess adhesive residues to allow an even and consistent depth of grout to be applied in all areas.

Tiling applied to wood panelled surfaces, where slight movement is likely should be grouted with White Tile Grout mixed with Sovereign SBR Bonding Agent diluted 1:3 with water to improve flexural and adhesive strength.

Limitations: Certain types of tile may be porous and hence prone to surface discolouration. Natural stone and porous, unglazed tiles are particularly prone to absorption of grout fines. Apply mixed grout to a spare tile to determine whether staining is likely and consult the tile manufacturer prior as to whether they recommend a suitable sealing compound to protect the surface

Tile adhesives and grouts must not be regarded as a primary waterproofing system. When tiling on to moisture sensitive backgrounds, such as plaster, plasterboard and timber etc then measures should be employed to prevent moisture damage and leakage. An ideal solution is the use of Sovereign Watertite for wet rooms, shower enclosures and bathrooms. For swimming pools and external masonry then the use of Sovereign Hey'di K11 Tanking System should be considered.

Mixing: Sovereign Wall Tile Grout should be added to water in a clean container whilst mechanically stirring and mixing thoroughly to give a smooth, consistent and easily worked mortar. The recommended mixing proportions by volume are approximately one part water to two parts powder (4.2 litres per 10kg of powder). Do not add more water than is necessary as this may prolong drying and significantly reduce the compressive strength of the cured grout. Part-used grout should never be 'freshened up' with later water additions, but should always be discarded once it appears to lose workability. In ideal conditions (20°C), Wall Tile Grout will remain workable for 2 to 3 hours and then reach final set after about 24 hours. When grouting over a large area using several bags of grout, ensure all mixes are from the same batch and that a consistent and identical water addition is used for each mix.

Application: Use a rubber squeegee, or smooth sponge to work the grout thoroughly and consistently into the tile joints, removing the excess as work proceeds across the tiled area. Fine grout residues can be washed away with a lightly damp cloth or sponge up to 2 hours after application, with a final clean finish being achieved using a dry cloth to polish the surface when the joints have dried and hardened. Sovereign Wall Tile Grout mixed with SBR Bonding Agent will be more difficult to remove from tiled surfaces when dry therefore extra care is necessary to ensure residues are completely removed as the application proceeds.











### Wall Tile Grout, continued



# **SBR Bonding Primer**

Sovereign SBR Bonding Primer in a concentrated polymer primer, sealer and admixture for use when tiling with cementitious adhesives and grouts, and is particularly suitable for areas subject to repeated and prolonged wetting.

Form: Liquid Concentrate.

Pack Size: 1 litre.

Colour(s): Dries clear.

Content: Styrene butadiene polymer.

Properties: Sovereign SBR Bonding Primer can be used to prime and seal porous surfaces prior to tiling. It can also be used as an additive for powdered adhesives to increase water resistance, adhesion and flexibility.

Usage/Preparation: Sovereign SBR Bonding Primer can be used to control the suction of highly porous substrates or as a bonding coat for use over glass, tiles, steel, concrete and brick.

#### Sealer Coat:

One part SBR Bonding Primer to five parts water. Apply the primer to porous backgrounds. Polymer modified adhesives can then be applied to either wet or dry primer.

#### Primer Coat:

One part SBR Bonding Primer to three parts water. This mix should be used to prime the edges and rear face of timber boards when tiling floors. After application the timber should be allowed to dry before finally fixing the boards to the floor. This will reduce the amount of movement due to moisture absorption by the timber. Do not prime the face of the timber to be tiled.

Immediately prior to tiling, coat the surface to receive the tiles with the primer. A suitable adhesive should be applied whilst still damp with the primer. If the primer dries apply a further coat. Sovereign recommend the use of Porcel-Flex on rigid timber floors i.e. those where the subfloor has been screwed to the joists and marine ply of 15 to 19mm has been screwed on top. Alternatively Sovereign Two-Part Flexible Tile Adhesive can be used on timber floors where minor movement may be expected. It must be remembered that when tiling on to timber or other surfaces prone to movement that ceramic tiles themselves are not designed to flex under any circumstances, therefore movement should always be minimised within the substrate.

### **Bonding Coat:**

Two parts SBR Bonding Primer to one part water to three parts OPC. Mix the water and Sovereign SBR Bonding Primer and then slowly add the cement until a creamy mix is obtained. This can then be applied to masonry surfaces with a brush to vastly improve the adhesion of subsequent coats. Cementitious adhesive must be applied whilst the bonding coat is still tacky i.e. within 20 minutes. If the bonding does dry then reapply more before continuing.

This mix should have a pot life of at least 1 hour. All tools and equipment used must be cleaned immediately after use, as the bonding coat is extremely difficult to remove once dry.

This bonding coat is also ideal for use in tiling onto difficult substrates such as glazed tiles, vinyl tiles, glass and metal. Again the adhesive must be applied whilst the bonding coat is still tacky.

Sovereign SBR Bonding Primer can also be added to cement based adhesives and grouts to improve adhesion, water resistance and wear properties. Dilute the SBR 1:3 with water and use as the gauging solution. Again it must be remembered that once dry the adhesive or grout is extremely difficult to remove from surfaces. It is therefore important to clean tile faces promptly.

### Coverage:

Sealer Coat:  $30m^2$ Primer Coat:  $12 m^2$ Bonding Coat:  $5 m^2$ 

The above figures are based on the correct dilution rate for 1 litre of product, i.e. a sealer coat diluted 1:5 produces 6 litres of ready for use sealer. These 6 litres will cover approximately 30m², depending on porosity.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.









### **Stone Sealer**

Sovereign Stone Sealer is a state-of-the-art penetrating sealer for all natural stones, ceramic tiles and grout. It will repel water, oil and dirt, making cleaning easier and staining much less likely. Stone Sealer can be used internally and externally and does not alter the appearance of materials to which it is applied.

Form:	Ready to use Liquid.
Pack Size:	1 and 5 litres.
Colour(s):	Clear.
Content:	Fluropolymer in solvent.
Properties:	Provides invisible protection to stone, tiles, worktops and both floors and walls. Does not increase slip and is safe to use on food preparation areas. Suitable for use on marble, granite, limestone, terracotta, slate, travertine, honed or polished. Can also be used on glazed tiles and to protect grout lines.

Usage/Preparation: Areas to be treated must be clean and dry. If cleaning is necessary then ensure that detergent residues do not remain and allow to dry for at least 24 hours before applying Stone Sealer.

There are two application methods depending on the type and porosity of the material being treated.

For porous materials such as slate, some limestone and travertine apply the sealer by brush and allow to penetrate and dry. Very porous materials may require a second application. For dense or polished surfaces such as marble, granite etc, and glazed tiles apply the sealer with either a brush or soft cloth. Allow the sealer to penetrate for 10 minutes, reapply and after a further 10 minutes dry it off with a clean cloth and buff. Do not allow the sealer to dry on the surface of these materials.

### General:

Sovereign Stone Sealer is solvent based and has a strong odour. It should be used in well ventilated areas.

Ideal for protecting tiles in wet rooms and shower enclosures.

The life expectancy of the coating is dependant on the amount of sealer applied and its area of application. External surfaces or those subject to heavy wear such as floors and worktops should be retreated every 1 to 3 years. Other areas will require less frequent reapplication. Once it is noticed that the surface has started to become slightly absorbent again is the time to re-treat.

Do not use abrasive or acidic cleaners. Rinse cleaning agents thoroughly from the surface with clean water.

### Coverage:

For porous materials: 5m²/litre. For low porosity materials: 15m²/litre.

#### Clean up:

Spillages should be dried immediately with absorbent cloths and the area washed down with Sovereign Turps Substitute or White Spirit followed by detergent and water.

Tools such as brushes should be cleaned in Sovereign Turps Substitute, White Spirit or Brush Cleaner before the sealer dries

**Shelf Life:** Minimum of 12 months when unopened and stored between 5 and 25°C.









### **Slate Sealer**

A penetrating sealant, which provides a water repellent and oil resistant finish. After application the colour is enhanced and the surface less likely to stain.

Form: Clear ready to use Liquid.

Pack Size: 1 and 5 litres.

Content: Blend of resins and water repellents in solvent.

Properties:

As slate is a porous material it is prone to staining, and unsealed looks dull and lifeless. After application, the colour is intensified and the surface displays a 'wet look'. The sealant causes water and oils to bead on the surface, allowing them to be cleaned up without penetrating and staining the surface. Application of a coat of sealer prior to being laid will aid removal of grout from the surface. Sovereign Slate Sealer can also be used on other porous material such as brick and concrete. It is suitable for internal and external use.

Usage/Preparation: Shake well before use.

Areas to be treated must be clean and dry. If cleaning is necessary then ensure that detergent residues do not remain and allow to dry for a minimum of 24 hours.

Using a clean, fluff free cloth or decorating pad, apply a thin even coating over the surface and allow this to penetrate for 5 to 10 minutes. After this time dry up any sealant on the surface and huff

Apply a second coat in the same manner after around 30 to 60 minutes.

It is important that no liquid is allowed to dry on the surface as this may lead to an inconsistent appearance and glossy areas. Slate Sealer can also be used to protect porous grout, which must be thoroughly dry before application.

Spillages should be cleaned up immediately by soaking up on absorbent paper/cloth and then washed off with Sovereign Turps Substitute or White Spirit.

Ideal for protecting slate in wet rooms and shower enclosures. The life expectancy of the coating is dependant on the amount of sealer applied and its area of application. Surfaces subject to heavy wear such as floors and worktops will require regular maintenance coats. Other areas will require less frequent reapplication. Once it is noticed that the slate has started to become slightly absorbent again is the time to re-treat. Re-treatment will usually require only a single coat.

### Coverage:

Coverage varies with porosity of the substrate; as a guide 1 litre will treat around 10m<sup>2</sup>.

Clean up: Equipment and spillages should be cleaned with Sovereign Turps Substitute, White Spirit or Brush Cleaner whilst the sealer is still wet. Dried material can be removed using acetone.

**Shelf Life:** Minimum of 12 months when unopened and stored between 5 and  $25^{\circ c}$ .

#### Precautions:

R65 Harmful

Liquid may cause lung damage if swallowed. Repeated exposure may cause skin dryness and cracking. Avoid contact with skin and eyes. Use only in well ventilated areas. If swallowed do not induce vomiting – seek medical advice and show container or label.

Keep out of reach of children.









### Path and Drive Sealer

Sovereign Path and Drive Sealer is a polymeric, clear sealer for application to exterior paving bricks, concrete, flagstones and porous tiles. Sovereign Path and Drive Sealer is a solvent system to allow deep penetration into the substrate.

Form:	Clear ready to use Liquid.
Pack Sizes:	5 and 25 litres.
Content:	Polymer and water repellents in solvent.
Properties:	Path and Drive Sealer penetrates the surface and forms an invisible barrier to prevent staining caused by oils, dirt and water.

Preparation: Ensure all surfaces are clean, dry and free from grease, oil, dust or loose material that may interfere with the penetration of the sealer to be applied. Dirt, moss and lichen and other loose material can be removed by using Sovereign Masonry Sterilising Wash. Allow to dry thoroughly (at least three days after rain or cleaning). Surfaces must be dry to allow maximum penetration.

Application on Non-Absorbent Surfaces: Shake well before use. For best results apply using a long pile roller and a roller tray or an emulsion brush. Ensure the surface is evenly coated and that the coating does not 'pool' in surface depressions. Brush well into the surface re-distributing any excess material.

For best results two coats of Sovereign Path and Drive Sealer should be applied, allowing 3-4 hours between coats. (Two coats are normally recommended, but open, porous substrates could benefit from an extra coat to ensure maximum protection).

Sovereign Path and Drive Sealer contains a solvented product and must be allowed to dry thoroughly. Under normal conditions the treated surface will allow foot traffic after 4 hours. Leave for 24 hours before allowing vehicle trafficking. However, in cold, damp conditions drying, re-coating and inservice times will be extended.

#### General

Precautions: Do not apply to damp surfaces, in conditions of high humidity or when rain is forecast. Protect from rain until dry. Do not apply to non-porous surfaces (e.g. quarry tiles, certain types of dense brick, etc.). Care should be taken to ensure that Sovereign Path and Drive Sealer has cured thoroughly prior to parking vehicles on the driveway.

Please Note: Path and Drive Sealer will not totally prevent reoccurrence of efflorescence. It will also not give a glossy finish. A glossy surface after application is only caused by over application or application on to a very low porosity substrate.

**Maintenance:** Spillages and drips of oils, petrol and hydraulic fluid etc, must be cleaned away as soon as possible.

Coverage: Typically 6 m<sup>2</sup>/litre but will vary according to the porosity and topography of the substrate.

Clean up: Use Sovereign Turps Substitute or White Spirit, or Brush Cleaner for cleaning tools and equipment.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.









# **Epoxy Floor Paint**

Sovereign Epoxy Floor Paint is a two-part epoxy resin based coating that offers excellent resistance and durability for walls and floors. Sovereign Epoxy Floor Paint is solvent free, hence minimal odour and non-flammable. Sovereign Epoxy Floor Paint exhibits high abrasion and chemical resistance, is easy and quick to apply and greatly improves the aesthetics of a working environment in mid grey.

Suitable for walls and floors in both domestic and industrial situations. Areas of use include garages, factory floors, warehouses, bund walls, food industry, as well as many other applications. Sovereign Epoxy Floor Paint is ideal for use in hygiene conscious applications such as food preparation or public areas.

Form:	Two Part Grey Liquid.
Pack Sizes:	5kgs.
Content:	Blend of epoxide resin, chemical hardener and speciality additives.
Properties:	Sovereign Epoxy Floor Paint is very low odour and non-tainting. It provides a durable, long lasting and easy to clean finish with low maintenance costs. The coating has good substrate penetration and is fast drying giving reduced downtime of installation. Chemically resistant to acids, alkalis and other aggressors.

**Usage/Preparation:** Substrate to be treated should be dry, sound and free from loose materials. New concrete should be at least 7 days old and power washed to remove any surface residues often formed during concrete curing.

Existing floors should have oil/grease removed with a proprietary cleaning solution and any damaged or worn areas repaired using Sovereign Hi-Tech Rapid.

Mixing: The base resin (Part A) should be stirred to disperse any settlement, and then the hardener (Part B) should be added to the base. A mechanical stirrer must be used to ensure thorough mixing of the components. Thorough mixing is essential to ensure an even cure and appearance. Only mix sufficient material for area to be treated (see coverage). Mix in ratio 4 parts resin (A) to 1 part hardener (B).

Application: Sovereign Epoxy Floor Paint is a two-coat system. Material should be applied to the floor by brush or suitable roller. The second coat should be applied as soon as the first is dry enough to walk on (normally after 2 hours), and certainly within 24 hours.

It is advisable to thin the first coat with up to 10% water to aid substrate penetration. This is dependent upon the substrate porosity and topography. If required a suitable aggregate can be applied in the second coat to give a textured finish. Sovereign recommend 10-15% by weight fine silica sand. A further coat of Sovereign Epoxy Floor Paint should then be applied. Apply only at temperatures between 5°C and 30°C.

Practical Coverage: Sovereign Epoxy Floor Paint is available in a 5kg combination pack (4kgs resin plus 1kg hardener). One 5kg tin covers approximately 12m² using two coats. Coverage will be lower for coarse or porous surfaces.

Clean up: All equipment should be cleaned immediately after use with water.

### Storage and Curing:

Pot Life	2 hours @ 20°C	
In Service Time	24 hours @ 20°C	
Full Chemical Cure	5 to 7 days	
Application Temp.	5 to 30°C	
Approx Coverage	4 to 6m²/kg	
Specific Gravity	1.20	

 $\label{lem:charge_constraint} \begin{tabular}{ll} Chemically resistant at $20^{\circ}$C to: Concentrated Hydrochloric Acid; Nitric Acid 25%; Sulphuric Acid 50%; Sodium Hydroxide (50%); Ammonia (88%) 10%; White Spirit; Methylated Spirit; Lubricating Oil; Petrol; and Sodium Hypochlorite (bleach). \\ \end{tabular}$ 

Storage: Between 5 and 30°C, 12 months unopened.











# **Dustproofer and Hardener**

Concrete Dustproofer and Hardener solution is a chemical petrification solution produced to harden and dustproof concrete and Terrazzo floors permanently.

Form:	Clear Liquid Concentrate.
Pack Sizes:	20 litres.
Content:	Sodium Silicate.
Properties:	Sovereign Dustproofer increases the abrasion resistance of the concrete and reduces the effects of chemical attack. It is especially useful in garages where the effects of oil are greatly reduced. Once treated, the concrete becomes an impervious crystalline mass.

Usage/Preparation: Sovereign Dustproofer should be used on concrete surfaces that have cured for a minimum of 10 days, or 20 days in winter. The surface should be dry and dust free to enable the material to soak into the surface. The application is in three stages.

First Stage: Mix 1 part Sovereign Dustproofer to 2 parts water and apply to the floor with a soft broom or squeegee. Brush off excess after 10 minutes. Allow to dry for 40-60 minutes.

Second Stage: Mix 1 part Sovereign Dustproofer to 1 part water and apply to the floor as above. Brush off excess after 10 minutes. Allow to dry for 40-60 minutes.

Third Stage: Mix 2 parts Sovereign Dustproofer to 1 part water and apply to the floor as above. Leave for 10 minutes. Hose and brush off, with clean water, until no pools remain on the surface.

**Practical Coverage:** Coverage capacity for the above three stage treatment is 20L neat material treats 44m<sup>2</sup>.

General: Power floating of concrete floors can produce a very tight surface. It is unlikely that Dustproofer will penetrate to any extent under these circumstances and this may give rise to application problems.

Failure to follow the 'hose off' instruction after the third stage may cause white deposits to occur. This can be removed by washing the surface in saturated sodium carbonate solution, after which the full three-stage process will need repeating.











### **Watertite**

Sovereign Watertite is a specialist liquid applied membrane offering a simple method for waterproofing building materials prior to tiling.

Form: Viscous Blue Liquid

Pack Size: 5kg.

**Content:** Water based, water-resistant polymer.

Properties: Sovereign Watertite can be used to protect most building surfaces from the

effect of liquid and water vapour. It is flexible enough to take up any movement encountered within the substrates to which it is applied. It also has the potential

to bridge cracks of up to 2mm.

**Usage/Preparation:** Sovereign Watertite can be used to either protect substrates such as plaster and timber or to prevent leakage from tiled wet rooms.

It is particularly useful when walls are to be tiled in shower enclosures where it will prevent moisture from damaging the substrate and penetrating into the adjoining room.

Watertite can be used on plaster, plasterboard, timber, brick, stone, render and floor screeds. It is suitable for use with under floor heating.

Application: The background surface should be smooth or have a light even texture. Any masonry should be flush pointed and defects in existing surfaces made good. The surface needs to be clean, sound and free of dust, loose material or free surface water. Polished plaster should be abraded to provide a key, dusted down and then sealed with Sovereign SBR Bonding Agent diluted 1 part water to 4 parts SBR. The membrane should not be applied in wet conditions or where these conditions are likely to occur before the membrane has dried. The membrane should not be applied when the temperature of the background, or the air temperature, is helpow 7°C.

Masonry backgrounds should be wet down prior to application so that these are damp but free from any water glistening on the surface, to aid the wetting out of the background.

High stress points such as wall/floor junctions and joints must have Sovereign Flexi Tape embedded in the first coat of the membrane. Areas directly under shower enclosures should have Sovereign Scrim Sheet embedded into the coating. This is achieved by coating the area and bedding the tape/scrim into the wet coating. This should then be over coated with more of the Watertite.

Once all joints have been dealt with, two coats of the Watertite should be applied at right angles to each other over the entire area. The second coat should be applied as soon as the first is touch dry.

Fixings and Penetrations: Where fixings are necessary then the holes should be drilled to twice the width and an extra 50% of the depth. Fill the hole with Sovereign Pro-Stick 2000. Push the fixing plug into the hole so that the Prostick exudes out. This should then be smoothed off to provide a watertight collar. Where pipe work protrudes through the membrane any gaps should be filled with Sovereign Pro-Stick 2000. This must be left to cure overnight prior to coating around the penetration with Watertite. Bed a Sovereign Flexi Collar into the compound whilst it is still wet, apply a second coat when the first is touch dry, this should also be given a collar of Pro-Stick 2000. Flexi Collars are available in two sizes – for inlet pipes and waste water pipes.

Tiling: Tiling can commence as soon as the second coat has become touch dry, usually within 1 to 2 hours. However drying times are extended in low temperatures or areas of high humidity. For both wall and floor tiling use Sovereign Porcel-Flex, which is a single part polymer modified cementitious adhesive. Porcel-Flex can be grouted after 2 hours and the installation in service 24 hours later. For grouting use Sovereign Flexible Grout or Sovereign Wall Grout.

Please Note: When tiling on to wooden floors it is imperative that the floor be rigid and sufficiently strong to take the weight of the adhesive and tiles without deformation. If necessary brace the floor either by overlaying with 12mm marine grade ply (screw fix at 300mm centres) or fixing noggins under the existing floor.

**Coverage:** Sovereign Watertite Shower Kit contains sufficient material to treat an average shower cubicle of around 800 x 1000mm.

Storage: Between 5 and 30°C, 12 months unopened.







### **Watertite Shower Kit**

Sovereign Watertite Shower Kit contains all the materials necessary to waterproof the area within a shower enclosure prior to tiling.

Form:	Viscous Blue Liquid.	
Content:	Waterproof coating, fleece mat, flexible tape, pipe collars, clean mixing bucketile adhesive and a 7" roller.	
Properties:	Sovereign Watertite can be used to protect most building surfaces from the effects of liquid and water vapour. It is flexible enough to take up any movement encountered within the substrates to which it is applied. It also has the potential to bridge cracks of up to 2mm.	

**Usage/Preparation:** Sovereign Watertite can be used to either protect substrates such as plaster and timber or to prevent leakage from tiled wet rooms.

It is particularly useful when walls are to be tiled in shower enclosures where it will prevent moisture from damaging the substrate and penetrating into the adjoining room.

Watertite can be used on plaster, plasterboard, timber, brick, stone, render and floor screeds. It is suitable for use with under floor heating.

**Application:** The background surface should be smooth or have a light even texture. Any masonry should be flush pointed and defects in existing surfaces made good.

The surface needs to be clean, sound and free of dust, loose material or free surface water. Polished plaster should be abraded to provide a key, dusted down and then sealed with Sovereign SBR Primer diluted 1 part water to 4 parts SBR Primer. The membrane should not be applied in wet conditions or where these conditions are likely to occur before the membrane has dried. The membrane should not be applied when the temperature of the background, or the air temperature, is helnw 7°C.

Masonry backgrounds should be wet down prior to application so that these are damp, but free from any water glistening on the surface, to aid the wetting out of the background.

High stress points such as wall/floor junctions and joints must have Sovereign Flexi Tape embedded in the first coat of the membrane. Areas directly under shower enclosures should have Sovereign Scrim Sheet embedded into the coating. This is achieved by coating the area and bedding the tape/scrim into the wet coating. This should then be over coated with more of the Watertile.

Once all joints have been dealt with, two coats of the Watertite should be applied at right angles to each other over the entire area. The second coat should be applied as soon as the first is touch dry.

Fixings and Penetrations: Where fixings are necessary then the holes should be drilled to twice the width and an extra 50% of the depth. Fill the hole with Sovereign Pro-Stick 2000. Push the fixing plug into the hole so that the Prostick exudes out. This should then be smoothed off to provide a watertight collar. Where pipe work protrudes through the membrane any gaps should be filled with Sovereign Pro-Stick 2000. This must be left to cure overnight prior to coating around the penetration with Watertite. Bed a Sovereign Flexi Collar into the compound whilst it is still wet, apply a second coat when the first is touch dry; this should also be given a collar of Pro-Stick 2000. Flexi Collars are available in two sizes – for inlet pipes and waste water pipes.

Tiling: Tiling can commence as soon as the second coat has become touch dry, usually within 1 to 2 hours. However drying times are extended in low temperatures or areas of high humidity. For both wall and floor tiling use Sovereign Porcel-Flex, which is a single part polymer modified cementitious adhesive. Porcel-Flex can be grouted after 2 hours and the installation in service 24 hours later. For grouting use Sovereign Flexible Grout or Sovereign Wall Grout.

Please Note: When tiling on to wooden floors it is imperative that the floor be rigid and sufficiently strong to take the weight of the adhesive and tiles without deformation. If necessary brace the floor either by overlaying with 12mm marine grade ply (screw fix at 300mm centres) or fixing noggins under the existing floor.

**Coverage:** Sufficient material to treat an average shower cubicle of around 800 x 1000mm.

Storage: Between 5 and 30°C, 12 months unopened.









# **Damp Proofing**

Sovereign has developed and markets a fully comprehensive range of market-leading liquid and cream surface proofing treatments for stone, masonry and concrete.

- Weather-Chek Façade Cream: A simple to use water repellent for the protection of external masonry from penetrating damp and freeze-thaw damage. Weather-Chek Façade Cream is a viscous emulsion of silane and siloxanes that penetrate and impregnate porous masonry to produce a water repellent surface.
- Aqua-Chek: A state-of-the-art water based water repellent for masonry substrates that is a novel blend of alkylpolysiloxane in an aqueous dispersion of hydrophobic substances. It is supplied as a concentrate for dilution with water prior to use. Aqua-Chek has zero VOC – NO organic solvent.
- Remtox W290 Alkali Resistant Silicone: A water repellent for surface treatment of above ground exterior masonry to prevent penetrating damp.
- Water Repellent: Based on polyoxoaluminium stearate in an aliphatic solvent, Sovereign Water Repellent can be applied by brush or spray onto brick, stone, concrete, masonry and other porous surfaces. Conforms to BS6477:1992 'Specification for Water Repellents for Masonry Surfaces'.
- Water Repellent, Double Strength: Twice the level of active ingredient as our standard grade, making it more suitable for use on very high absorbency masonry, or for buildings in very exposed locations. Conforms to BS6477:1992 'Specification for Water Repellents for Masonry Surfaces'.
- Radon Barriercoat: Ready for use specialist liquid applied membrane offering basic radon protection and a waterproof membrane complying with requirement C2 and C4 of Schedule 1 of the Building Regulations 1991 for England and Wales.
- Watertite Shower Kit: Sovereign Watertite Shower Kit contains all the materials necessary to waterproof the area within a shower enclosure prior to tiling.

# Weather-Chek Façade Cream

Sovereign Weather-Chek Façade Cream is a simple to use water repellent for the protection of external masonry from penetrating damp and freeze thaw damage. Weather-Chek Façade Cream is a viscous emulsion of silane and siloxanes that penetrate and impregnate porous masonry to produce a water repellent surface.

Form:	Paste.
Pack Size:	5 litres.
Colour(s):	White, dries clear.
Content:	Blend of silane and siloxane.
Properties:	Can be applied by spray, brush or roller to porous masonry such as brick, mortar, render, limestone and sandstone. After penetration and curing the surface has a much lower water uptake, therefore penetrating damp and freeze/thaw damage are prevented. Reducing the porosity of masonry also results in reduced heat transfer, improving the thermal properties of a dwelling. Sovereign Weather-Chek Façade Cream does not prevent a wall from 'breathing'.

Usage/Preparation: Surfaces must be clean and dry before application. Allow at least two full days of rain free weather before application. Dusty surfaces should be dry brushed until a sound background is achieved. Organic growths such as moss and lichen should be treated with Sovereign Masonry Sterilising Wash, and the surface thoroughly cleaned, rinsed and allowed to dry. Make good any defective pointing or cracked masonry.

#### Application:

Apply Sovereign Weather-Chek Façade Cream straight from the bucket; no mixing or dilution is required. For small areas apply using a soft brush. Larger areas should be treated using a roller or spray equipment. Care must be taken to ensure the product is not allowed to come into contact with areas that are not to be treated i.e. paintwork, windows etc.

After application the surface will appear white, but this will fade over a couple of hours. The surface will then appear slightly darker for a period whilst the product fully dries. Once fully dry the surface reverts to its original appearance.

General: Sovereign Weather-Chek Façade Cream is applied in a single coat unlike conventional water repellents. Thus a saving in labour is achieved. As Sovereign Weather-Chek Façade Cream is a viscous paste like emulsion there is no dripping and the chances of overspray are eliminated. After application and drying the surface is left unchanged in appearance and it is still possible to apply decorative coatings such as masonry paint.

Mould and algae growth on surfaces protected with Sovereign Weather-Chek Façade Cream is vastly reduced as is salting and dirt pickup.

Clean up: After use all tools should be cleaned with soapy water and rinsed in fresh water. Splashes of the product should be removed from surfaces before it has dried.

Coverage: 5 litres of Weather-Chek Façade Cream will treat around 20 to 40m<sup>2</sup>, depending on porosity and topography.









### Aqua-Chek

Sovereign Aqua-Chek is a new, state-of-the-art water-based water repellent for masonry substrates. Sovereign Aqua-Chek is a novel blend of alkylpolysiloxane in an aqueous dispersion of hydrophobic substances. It is supplied as a concentrate for dilution with water prior to use. Aqua-Chek has zero VOC – NO organic solvent.

Form: Clear Liquid Concentrate.

Pack Sizes: 5 litres.

Contains: Modified alkyd resin, pigmented with aluminium flake.

Properties: Can be used on a wide variety of porous building materials to impart water repellency. Aqua-Chek is resistant to alkaline attack making it particularly suitable for use on fresh concrete. Aqua-Chek has little effect on the water vapour permeability of substrates, so allowing walls to breath. Aqua-Chek meets the requirements of BS6477:1992 'Specification for Water Repellents for Masonry Surfaces'.

**General:** Sovereign Aqua-Chek has the following advantages over conventional solvent based water repellents:

- Contains NO solvent.
- Pronounced beading effect lasts much longer (years, not months).
- Virtually no change in surface appearance. Solvent based products can darken masonry considerably.
- A milky white emulsion that dries clear on masonry.

Dilution: Sovereign Aqua-Chek must be diluted with water prior to use. First shake the bottle then add the entire contents to 10 litres of clean water and sitr. The dilution is ready to use straight away and can be kept for up to 6 months in a sealed container. Always stir before use.

#### Application: Stir before use

All substrates must be thoroughly clean and dry prior to application. Sovereign would recommend the use of Sovereign Masonry Sterilising Wash on old masonry prior to application. Do not apply to damp walls or if rain is imminent.

Aqua-Chek can be applied by brush or spray. Application is done in two coats, always working from the bottom upwards. Apply Aqua-Chek to the surface using either a brush or low-pressure spray. The second coat should be applied 30 minutes after the first.

Do not attempt second coat if the first has fully dried, as the surface will not accept further coats.

Optimal water repelling performance will only be obtained if a sufficient quantity of Sovereign Aqua-Chek is applied.

Coverage: Coverage is dependent on the porosity of the substrate but as a guide 5 litres of Aqua-Chek when diluted will cover approximately 22m² using a two-coat application.

Clean up: Clean all equipment with detergent and water. Cover windows and doors prior to application. Accidents splashes can be removed with soapy water whilst still wet. Once dry removal can only be done mechanically. General Maintenance: Service life is expected to be 10 years subject to suitability of substrate and exposure. Service life can be extended by a further single application at approx. 5 year intervals. Can be over coated with most conventional paints, however a preliminary test is compulsory.

Storage: Between 5°C - 30°C.

Shelf Life: 12 months unopened.

#### A Safety Data Sheet is available on request for this product.

Caution: Blanching is occasionally encountered when using water repellents. The blanching phenomenon has been investigated in depth and a number of conditions under which this may occur have been determined.

Regardless of the condition, or combination of conditions, the blanching phenomenon can in most cases be related to poor penetration of the treatment. Instances of blanching are rare and often require one or more of the following conditions to become prevalent:

- An application temperature below 10°C.
- Over application.
- Substrate pre-treatment.
- A substrate that contains >25% moisture, above the atmospheric level.

Always check that the surface to be treated is suitable. If in doubt a small test area should be tried. If blanching occurs the building can be returned to its former appearance, this being achieved by wiping the substrate with 2 ethyl hexanol. It should be stressed that all relevant health and safety considerations be applied when using 2 ethyl hexanol as a remedial treatment.









### Remtox W290 Alkali Resistant Silicone

Sovereign Remtox W290 is a water repellent for surface treatment of above ground exterior masonry to prevent penetrating damp.

Form:	Clear ready to use Liquid.
Pack Size:	25 litre cans.
Colour(s):	Clear.
Content:	Silicone in de-aromatised Sovereign Turps Substitute or White Spirit.
Properties:	Specially formulated to be alkali resistant for use on new mortars or renders. It is used to stop external penetrating dampness and its main feature is that it is a water barrier but not a vapour barrier. It therefore allows a building to breathe and reduces the danger of condensation such as can occur if an impervious treatment is used.

Preparation: Allow at least 2 full drying days prior to application to allow maximum penetration of fluid. Remove any moss, lichen or algal growth using Sovereign Masonry Sterilising Wash. Allow to dry out thoroughly. Ensure all mortar and pointing is in good condition and that cracks and fissures are made good.

Flooding, not under pressure, is the best technique for applying W290.

The product can be applied using a low pressure/large particle spray or by brush. However, it is preferable to run the fluid down walls with minimum use of pressure, to avoid loss by misting. A run down of 300mm (12 inches) on surfaces of average porosity should be achieved.

Do not leave long breaks between coats. Apply the next when the substrate has absorbed the previous one and is no longer shiny (wet-on-wet working). The substrate must be dry and not have damp spots. The requisite quantity of W290 depends on the absorbency of the substrate.

Windows, paintwork and vegetation must be protected from splash. Sovereign Turps Substitute or White Spirit can be used to remove wet silicone from glass; once dry removal is difficult and should be done mechanically, i.e. use a scraper blade.

The resin cures after approximately 24 hours and reaches its full water repellency at this stage.

Coverage: Coverage can vary between 0.5 and 4.0m<sup>2</sup>/litre according to the porosity and texture of the surface. As a guide a 25 litre can will treat approximately 35m<sup>2</sup> using two coats on average porosity brickwork.

Storage: Between 5 and 25°C.

**Shelf Life:** 12 months when stored as directed. Replace lid securely after use. Any remaining fluid should be used up as soon as possible after use. Exposure to the atmosphere reduces shelf life considerably.

Clean up: All equipment may be cleaned with water.









### **Water Repellent**

Based upon the active ingredient polyoxoaluminium stearate in an aliphatic solvent and is designed to prevent penetrating damp. Sovereign Water Repellent can be applied by brush or spray onto brick, stone, concrete, masonry and other porous surfaces. Sovereign Water Repellent meets the requirements of BS6477:1992 'Specification for Water Repellents for Masonry Surfaces'.

Form:	Clear ready to use Liquid.
Pack Size:	5 and 25 litres.
Content:	Polyoxoaluminium stearate.
Properties:	After curing, Sovereign Water Repellent will produce an invisible hydrophobic barrier. Treated surfaces will repel water, however the vapour permeability will be unaffected, allowing the walls to breathe. Sovereign Water Repellent will prevent penetrating damp and reduce the risk of damage caused to masonry by the freeze/thaw cycle.

Usage/Preparation: Allow at least 2 full drying days prior to application to allow maximum penetration of Sovereign Water Repellent. Remove any moss, lichen or algal growth using Sovereign Masonny Sterilising Wash. Allow to dry out thoroughly. Ensure all mortar and pointing is in good condition and that cracks and fissures are made good. Cover windows to avoid splashes on glass, U-PVC or paintwork.

Sovereign Water Repellent is not suitable for use on new work. For this application Sovereign Aqua-Chek can be used

Application: Apply by brush or low-pressure spray, working upwards from the bottom. A minimum of two coats is recommended, however, in extremely porous surfaces or exposed sites three may be necessary.

Allow a minimum of 4 hours between coats; ensuring the first coat has soaked in thoroughly. After treatment the wall will exhibit a pronounced beading effect after rain. The beading effect diminishes slowly over 6 months, but the water repellency of the treatment is not impaired.

#### Limitations:

- Do not apply to visibly wet walls, as no penetration of the fluid can be achieved.
- Water Repellent is colourless, but by the nature of drying out the substrate can highlight differences in its make up. If unsure always treat a small area first.
- Remove all splashes on windows, etc. as soon as
  possible. If necessary soften up any splashes using a
  proprietary windscreen car wash and apply vigorous
  rubbing with a cloth. Alternatively, use a razor blade (taking
  suitable precautions).

Coverage: 5 litres gives 12 to 15m<sup>2</sup> coverage, dependent upon porosity and topography of surface.

Storage: Between 5 and 25°C.

**Shelf Life:** 12 months unopened. Replace lid securely after use. Any remaining fluid should be used up as soon as possible after use. Exposure to the atmosphere reduces shelf life considerably.

Durability: It is difficult to assess the life expectancy of Sovereign Water Repellent due to the various types of construction to which it is applied and the aspect and sighting of the building. The important consideration must be surface preparation prior to treatment. All brick or stone should be well pointed and any cracks filled in. As a result of tests and experience a lifespan of 7-10 years could be expected, depending upon site elevation and exposure.









### Water Repellent, Double Strength

Water Repellent Double Strength has twice the level of active ingredient as our standard grade. As such it is more suitable for use on either masonry with very high absorbency, or for buildings in very exposed locations. Meets the requirements of BS6477:1992 'Specification for Water Repellents for Masonry Surfaces'.

Form:	Concentrated Liquid.
Pack Size:	25 litres.
Colour(s):	Clear.
Content:	Polyoxoaluminium stearate.
Properties:	After curing, Sovereign Water Repellent Double Strength will produce an invisible hydrophobic barrier. Treated surfaces will repel water, however the vapour permeability will be unaffected, allowing the walls to breathe. Sovereign Water Repellent Double Strength will prevent penetrating damp and reduce the risk of damage caused to masonry by the freeze/thaw cycle.

Usage/Preparation: Allow at least 2 full drying days prior to application to allow maximum penetration of Sovereign Water Repellent Double Strength. Remove any moss, lichen or algal growth using Sovereign Masonry Sterilising Wash. Allow to dry out thoroughly. Ensure all mortar and pointing is in good condition and that cracks and fissures are made good. Cover windows to avoid splashes on glass, U-PVC or paintwork. Sovereign Water Repellent Double Strength is not suitable for use on new work. For this application Sovereign Aqua-Chek can be used

**Application:** Apply by brush or low-pressure spray, working upwards from the bottom. A minimum of two coats is recommended, however, in extremely porous surfaces or exposed sites three may be necessary.

Allow a minimum of 4 hours between coats; ensuring the first coat has soaked in thoroughly. After treatment the wall will exhibit a pronounced beading effect after rain. The beading effect diminishes slowly over 6 months, but the water repellency of the treatment is not impaired.

#### Limitations:

- Do not apply to visibly wet walls, as no penetration of the fluid can be achieved.
- Sovereign Water Repellent Double Strength is colourless, but by the nature of drying out the substrate can highlight differences in its make up. If unsure always treat a small area first.

Remove all splashes on windows, etc. as soon as
possible. If necessary soften up any splashes using a
proprietary windscreen car wash and apply vigorous
rubbing with a cloth. Alternatively, use a razor blade (taking
suitable precautions).

Coverage: 5 litres gives 12 to 15m<sup>2</sup> coverage, dependent upon porosity and topography of surface.

Storage: Between 5 and 25°C.

Shelf Life: 12 months unopened. Replace lid securely after use. Any remaining fluid should be used up as soon as possible after use. Exposure to the atmosphere reduces shelf life considerably.

Durability: It is difficult to assess the life expectancy of Sovereign Water Repellent Double Strength due to the various types of construction to which it is applied and the aspect and sighting of the building. The important consideration must be surface preparation prior to treatment. All brick or stone should be well pointed and any cracks filled in. As a result of tests and experience a lifespan of 7-10 years could be expected, depending upon site elevation and exposure.









### **Radon Barriercoat**

Sovereign Radon Barriercoat is a ready for use specialist styrene butadiene latex based liquid applied membrane. It offers a simple continuous passive system to the full footprint of new builds, producing basic radon protection and a waterproof membrane complying with requirement C2 and C4 of Schedule 1 of the Building Regulations 1991 for England and Wales.

BR211, Annex A, defines areas where basic or full protection should be provided and Annex B contains maps where a geological assessment should be carried out. For further information contact the Sovereign Technical Department. Saarland University, Hamburg, Germany, confirmed that when applied at 1.0mm, the product will provide a complete barrier to radon (report dated 2 January 2006).

Form:	Viscous Liquid.
Pack Size:	15kg.
Content:	Advanced SBR polymer and special additives.
Colour(s):	Green.
Properties:	Sovereign Radon Barriercoat can be used to protect most building surfaces from the effects of liquid and water vapour, carbonation and as a gas barrier, for example as a barrier to methane gas.

#### Usage/Preparation:

The background surface should be smooth or have a light even texture. Any masonry should be flush pointed and defects in existing surfaces made good.

The surface must be clean, sound and free of dust, loose material or free surface water. The membrane should not be applied in wet conditions or where these conditions are likely to occur before the membrane has dried. The membrane should not be applied when the temperature of the background, or the air temperature, is below 7°C.

Pre-wet concrete or masonry backgrounds so that these are damp, but free from any water glistening on the surface, to aid the wetting out of the background.

Because of the wide variety of background types and site conditions it is always advisable to check adhesion to the background by testing on a sample area before starting any job. The membrane may be applied by brush, roller or airless spray. If necessary the compound can be diluted with up to 10% water. However, care should be taken to ensure that the correct dry coat thickness is applied.

Where multiple coats are being applied it is recommended that the coats be applied at right angles to each other. Before applying the second coat it is necessary to let the first coat become touch dry. The time required to reach this touch dry condition will vary according to site conditions, but will typically be in the order of 1 to 2 hours under favourable conditions.

It is preferable the second coat is applied within 24 hours of applying the first coat.

A check should be made to ensure that the correct quantity of material has been applied to achieve the correct film thickness.

At high stress points, such as wall/floor junctions use Sovereign Flexi Tape reinforcement. The Flexi Tape is rolled into the wet first coat, and then coated with additional membrane after allowing the first coat to dry to a tacky condition. The tape should be cut into lengths of around 1m to aid application and prevent rippling. Each length of tape should be slightly overlapped.

### Radon Barriercoat, continued



Large areas of the UK, particularly those that lie over igneous bedrock, such as Granite, are identified as being at risk of Radon Gas. This naturally occurring radioactive element, which can seep into buildings and cellars has been identified as increasing the risk of the development of some cancers, particularly in children. Sovereign's Radon Barriercoat provides a highly effective solution to the ingress of this dangerous gas.

#### Coverage:

A minimum dried coating thickness of 1.00mm is needed to provide a Radon barrier. To achieve this coating thickness a total of 2kg per square metre is required. A 15kg pack will therefore cover 7.5 square metres.

#### General:

When applying a finish over Sovereign Radon Barriercoat, best practice is to do so whilst the product is still slightly tacky. If this is not possible then apply render, plaster or levelling compounds within 24 hours. If the Radon Barriercoat is to be left unfinished for longer periods then it must be protected from wear and whatever the final coat we recommend the use of Sovereign SBR Bonding Agent be used in the gauging water to improve adhesion. Concrete screeds may be laid over the Radon Barriercoat at any point as long as the surface is clean and dust free.

Clean up: Clean tools immediately after use with water.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.

A Safety Data Sheet is available on request for this product.

Other Sovereign Radon Barriercoat products also available:

#### ■ Fleeced 90° Internal Angle:

A preformed reinforcing fleece to create a seal at internal angles when using Sovereign Watertite or Radon Barriercoat.

#### ■ Flexi-Tape (5m Roll):

Flexi-tape is available in 5 metre rolls to be used with Radon Barriercoat.















# **Damp Proofing**

Sovereign are recognised leaders in the injectable dampproofing sector. It is the Company's work in this demanding area for the Royal households that was originally responsible for the awarding of the coveted Queen's Royal Warrant.

- Aquaject: A water-based concentrate specifically formulated as a chemical DPC injection fluid. It is a true solution of siloxane in water and when used as directed will match the performance of solvent-based systems. On injection into masonry the siloxane reacts to form a water insoluble, water resistant treatment within 24 hours of application.
- Super Concentrated Aquaject: Offering all the benefits of regular Aquaject but even more concentrated, reducing packaging waste and transportation costs.
- Envirotech Injection Fluid: Based on the tried and trusted ingredient of polyoxoaluminium stearate. Sovereign customers have used this active ingredient for over 30 years. Envirotech offers the same level of performance associated with solvent based systems, however, it has the advantage of being virtually odourless. On injection into masonry the active ingredient will react with the atmosphere to form a water insoluble, water resistant treatment within 24 hours of application.
- Low Odour Injection Fluid: A low odour injectable fluid based on the tried and trusted ingredient of polyoxoaluminium stearate; offering the same level of performance associated with solvent based systems, however, it has the advantage of being virtually odourless. On injection into masonry the active ingredient will react with the atmosphere to form a water insoluble, water resistant treatment within 24 hours of application.
- Sovereign Injection Cream: A blended silane/siloxane cream emulsion that reacts with moisture to form a highly effective hydrophobic barrier against rising damp in masonry structures. The viscous cream is superior to paste formulations containing materials that serve no useful long-term purpose and which can leave an unsightly residue.
- Remtox K4 Silicone DPC Fluid: A fluid for forming a horizontal damp proof course in existing walls. On injection into masonry the siloxane reacts with moisture to form a water insoluble, water resistant treatment within 24 hours of application. Manufactured under a quality system assessed by BSI.
- Remtox DPC Cream: A blend of silane/siloxane cream emulsion that reacts with moisture to form a highly effective hydrophobic barrier against rising damp in masonry structures. The viscous cream remains within the drilled hole and does not leave unsightly staining.

### Aquaject

Sovereign Aquaject is a water-based concentrate specifically formulated as a chemical DPC injection fluid. It is a true solution of siloxane in water and when used as directed will match the performance of solvent-based systems. On injection into masonry the siloxane will react with the atmosphere to form a water insoluble, water resistant treatment within 24 hours of application.

	• •
Form:	Liquid Concentrate.
Pack Sizes:	5 litres.
Colour(s):	Yellow, dries clear.
Contains:	Siloxane in water.
BBA Cert:	05/4251.
Properties:	Once diluted, Sovereign Aquaject is non-hazardous, containing no solvents and of low alkalinity. The problem of persistent odour related to solvent-based DPC fluids is completely eliminated. This can be particularly important when injecting party walls.
Important:	When a Sovereign-Approved Contractor carries out installation of a DPC using Aquaject, the work is eligible for the Sovereign 30 Year Protection Scheme Guarantee.

Preparation: Remove internal skirting boards and salt contaminated plaster to at least 1m above the DPC line or 300mm beyond the last signs of damp, whichever is the highest. Holes should be drilled not more than 150mm apart, and typically 2 holes per stretcher and 1 per header. Best results are obtained if holes are drilled at a slight downward angle of 10 - 15°

General: Once Sovereign Aquaiect has chemically reacted it is permanently fixed by a cross linking action within the substrate pores to form a water resistant barrier.

However, although Aquaject stops the passage of rising damp, it is not a vapour barrier and will still allow the wall to breathe

For full information on the installation of a chemical DPC, including the re-plastering, refer to the Sovereign Renovation Manual

New brickwork or mortar is highly alkaline and the normal delay period for injection is six months. This delay can be reduced to two months if Sovereign Aquaject is used. Any remaining concentrate or diluted material must be stored in airtight containers.

#### Coverage Rate:

Typical coverage rates are as follows:

- 4" brick-15 linear metres per 25 litres.
- 9" brick-7.5 linear metres per 25 litres.
- 13" brick-5.2 linear metres per 25 litres.

Dilution: Ensure injection pump has been thoroughly washed out prior to using Sovereign Aquaject, especially if solventbased fluids have previously been used.

Add one container of Sovereign Aquaject to clean tap water to make 25 litres of solution whilst stirring vigorously.

Run the pump for 2-3 minutes to thoroughly mix. Always add Sovereign Aquaject to the water, NEVER the other way round.

Clean up: Wash pump, container and lances with clean water after each use. Spills and splashes should be cleaned up immediately with soapy water.

Storage: 5°C - 30°C.

Shelf Life: 12 months unopened. Diluted material is stable for up to 6 months when kept in airtight containers.











# **Super Concentrated Aquaject**

Super Concentrated Aquaject gives all the benefits of regular Aquaject, but is now even more concentrated. This reduces packaging waste and transportation costs. Aquaject is a water-based concentrate specifically formulated as a chemical DPC injection fluid. It is a true solution of siloxane in water and when used as directed will match the performance of solvent-based systems. On injection into masonry the siloxane will react with the atmosphere to form a water insoluble, water resistant treatment within 24 hours of application.

Form:	Clear Liquid Super Concentrate.
Pack Size:	700ml.
Content:	Fluropolymer in solvent.
Properties:	Once diluted, Sovereign Aquaject is non-hazardous, containing no solvents and of low alkalinity. The problem of persistent odour related to solvent-based DPC fluids is completely eliminated. This can be particularly important when injecting party walls.
Properties:	When a Sovereign Approved Contractor carries out installation of a DPC using Aquaject, the work is eligible for the Sovereign 30 Year Protection Scheme Guarantee.

Usage/Preparation: Remove internal skirting boards and salt contaminated plaster to at least 1 m above the DPC line or 300mm beyond the last signs of damp, whichever is the highest. Holes should be drilled not more than 150mm apart, and typically 2 holes per stretcher and 1 per header. Best results are obtained if holes are drilled at a slight downward angle of 10 to 15°.

General: Once Sovereign Super Concentrated Aquaject has chemically reacted, it is permanently fixed by a cross linking action within the substrate pores to form a water resistant barrier. However, although Sovereign Super Concentrated Aquaject stops the passage of rising damp, it is not a vapour barrier and will still allow the wall to breathe.

For full technical information on the installation of a chemical DPC, including the re-plastering, refer to the Sovereign Renovation Manual.

New brickwork or mortar is highly alkaline and the normal delay period for injection is six months. This delay can be reduced to two months if Sovereign Super Concentrated Aquaject is used. Any remaining concentrate or diluted material must be stored in airtight containers.

#### Coverage:

Typical coverage rates are as follows:

4" brick: 15 linear metres per 25 litres

9" brick: 7.5 linear metres per 25 litres

13" brick: 5.2 linear metres per 25 litres

Dilution: Ensure injection pump has been thoroughly washed out prior to using Sovereign Super Concentrated Aquaject, especially if solvent-based fluids have previously been used. Add one container of Sovereign Super Concentrated Aquaject to 24.3 litres of clean tap water and run the pump for 2 to 3 minutes to thoroughly mix. Always add Sovereign Super Concentrated Aquaject to water; never add the other way round.

Clean up: Wash pump, container and lances with clean water after each use. Spills and splashes should be cleaned up immediately with soapy water.

Storage: Between 5 and 30°C.

**Shelf Life:** 12 months unopened. Diluted Aquaject remains stable for up to 6 months when kept in air tight containers.











### **Envirotech Injection Fluid**

Envirotech is based on the tried and trusted ingredient of polyoxoaluminium stearate. Sovereign customers have used this active ingredient for over 30 years. Envirotech offers the same level of performance associated with solvent based systems, however, it has the advantage of being virtually odourless.

On injection into masonry the active ingredient will react with the atmosphere to form a water insoluble, water resistant treatment within 24 hours of application.

Form:	Clear ready to use Liquid.	
Pack Sizes:	25 litres.	
BBA Cert:	05/4251.	
Content:	Polyoxoaluminium Stearate in synthetic Isoparaffin.	
Properties:	After injection capillary rise of moisture is halted immediately and the drying out process can begin.	
Important:	When a Sovereign Approved Contractor carries out installation of a DPC using Envirotech Injection Fluid, the work is eligible for the Sovereign 30 Year Protection Scheme Guarantee.	

Preparation: Remove internal skirting boards and salt contaminated plaster to at least 1m above the DPC line or 300mm beyond the last signs of damp, whichever is the highest. Holes should be drilled not more than 150mm apart, and typically 2 holes per stretcher and 1 per header. Best results are obtained if holes are drilled at a slight downward angle.

General: Once Envirotech Injection Fluid has chemically reacted it is permanently fixed by a cross linking action within the substrate pores to form a water resistant barrier. However, although Sovereign Envirotech Injection Fluid stops the passage of rising damp, it is not a vapour barrier and will still allow the wall to breathe.

For full technical data on the installation of a chemical DPC, including re-plastering refer to the Sovereign Injection Manual. New brickwork or mortar is highly alkaline and the normal delay period for injection is six months. This delay can be reduced to two months if Sovereign Envirotech is used. Any remaining material must be stored in airtight containers.

Coverage Rate: Typical coverage rates are as follows:

4" brick	15 linear metres per 25 L
9" brick	7.5 linear metres per 25 L
13" brick	5.2 linear metres per 25 L

Ensure injection pump has been thoroughly washed out and dried prior to using, especially if water-based fluids have previously been used.

Clean up: Wash out pump and lances with Sovereign Turps Substitute or White Spirit after each use. Spills and splashes should be cleaned up immediately with soapy water.











### **Low Odour Injection Fluid**

Sovereign Low Odour Injection Fluid is based on the tried and trusted ingredient of polyoxoaluminium stearate. Sovereign customers have used this active ingredient for over 30 years and 15 of these have been in the Low Odour version. On injection into masonry the active ingredient will react with the atmosphere to form a water insoluble, water resistant treatment within 24 hours of application.

Form:	Clear ready to use Liquid.	
Pack Sizes:	25 litres.	
Content:	Polyoxoaluminium Stearate in de-aromatised aliphatic solvent.	
BBA Cert:	05/4251.	
Properties:	After injection capillary rise of moisture is halted immediately and the drying out process can begin.	
Important:	When a Sovereign Approved Contractor carries out installation of a DPC using Low Odour Injection Fluid, the work is eligible for the Sovereign 30 Year Protection Scheme Guarantee.	

Preparation: Remove internal skirting boards and salt contaminated plaster to at least 1m above the DPC line or 300mm beyond the last signs of damp, whichever is the highest. Holes should be drilled not more than 150mm apart, and typically two holes per stretcher and one per header. Best results are obtained if holes are drilled at a slight downward angle.

General: Once Sovereign Low Odour Injection Fluid has chemically reacted it is permanently fixed by a cross linking action within the substrate pores to form a water resistant barrier. However, although it stops the passage of rising damp, it is not a vapour barrier and will still allow the wall to breathe. For full technical data on the installation of a chemical DPC, including re-plastering refer to the Sovereign Injection Manual.

Coverage Rate: Typical coverage rates are as follows:

	,1	
4" brick	15 linear metres per 25 L	
9" brick	7.5 linear metres per 25 L	
13" brick	5.2 linear metres per 25 L	

Ensure injection pump has been thoroughly washed out and dried prior to using, especially if water-based fluids have previously been used.

Clean up: Wash out pump and lances with White Spirit or Sovereign Turps Substitute after each use. Spills and splashes should be cleaned up immediately with soapy water.

Storage and Shelf Life: Sovereign Low Odour Injection Fluid containers must be kept in a dry, stable environment between +5 and +30°C. Unopened containers will have a shelf life of 12 months. Once opened atmospheric moisture can cause gelation of the active ingredient within a short period of time. It is therefore imperative that the lid is firmly replaced and the remaining fluid used as soon as possible.











# **Sovereign Injection Cream**

A blend of silane/siloxane cream emulsion that reacts with moisture to form a highly effective hydrophobic barrier against rising damp in masonry structures. The viscous cream is superior to paste formulations containing materials that serve no useful long-term purpose and which can leave an unsightly residue.

Form: Viscous White Cream.

Pack Size: 5 litres or 600ml 'sausage'.

Content: Silane/Siloxane.

BBA Cert: 05/4251.

Properties: The viscosity allows the operator to use a Bulk Injection Gun to draw off what is required via the blue nozzle supplied straight from the container and pump back any unused material. When the gun is full, switch the end cap and dispense the cream via flexible injector rod. One full pull on the trigger will insert sufficient cream for one 12mm hole in 115mm brick, two pulls of the trigger for 230mm brick etc.

4.5"/110mm	9.0"/220mm	13.5"/330mm	18.0"/440mm	
12mm	12mm	12mm	12mm	
100mm	200mm	310mm	420mm	
0.9 litres*	1.9 litres*	2.9 litres*	3.9 litres*	
	100mm	100mm 200mm	100mm 200mm 310mm	100mm 200mm 310mm 420mm

<sup>\*</sup> Note: Application rates for porous, rubble or highly absorbent masonry may vary.

Preparation: Remove internal skirting boards and salt contaminated plaster to at least 1m above the DPC line or 300mm beyond the last signs of dampness, whichever is the highest.

The damp-proof course is inserted into the mortar bed at perpendicular joints and along the joint at 120mm (maximum) centres at a minimum of 150mm above external ground level, taking into consideration any changes in ground level.

Drill 12mm holes to a depth of 15-20mm from the opposite face. After removing the bore dust fill the cavity with Sovereign Injection Cream.

Solid brick walls can be drilled from one side only to the prescribed depth. Cavity walls can be treated separately by drilling each leaf, at the same height, as for solid construction walls. If required cavity walls may be treated in a single operation. Drilling through one leaf, pass through the cavity and drill into the second leaf to the required depth will achieve this. The Sovereign Injection Cream can then be inserted into the opposite leaf through the cavity, with the viscosity of the product allowing the first leaf to be treated without the material running out.

The vagaries of random/in-filled stone walls make them more difficult to treat but it is possible taking the following precautions. Select an appropriate mortar course and following this drilling into the intersections, at a maximum of 120mm centre, but reducing this where necessary. Where there is a danger of rubble falling and blocking injection holes then the wall should be drilled from both sides, at the same height to half the depth of the wall thickness. If it is problematical to install the DPC into this type of construction then thought should be given to tanking the internal wall to 1.5 metres with Hey'di K11 Grey. A specification for tanking in lieu of a DPC is available from Sovereign Technical Department.

Clean up: Clean tools and equipment with soapy water.

Storage and Shelf Life: 12 months in unopened containers stored between 5 and 25°C. Close containers securely immediately after use. This product must be kept in a heated storage area.











### Remtox K4 Silicone DPC Fluid

A fluid for forming a horizontal damp-proof course in existing walls. On injection into masonry the siloxane will react with moisture to form a water insoluble, water resistant treatment within 24 hours of application. Manufactured under a quality system assessed by BSI.

Form:	Clear ready to use Liquid.
Pack Size:	25 litre can.
Contents:	Oligomeric alkyl-siloxane in de-aromatised White Spirit.
Guarantee:	When a Remtox/Sovereign Approved Contractor carries out installation of a DPC using K4 Silicone DPC Fluid, the work is eligible for the Remtox/Sovereign 30 Year Protection Scheme Guarantee.

#### Preparation:

Remove internal skirting boards and salt contaminated plaster to at least 1m above the DPC line or 300mm beyond the last signs of damp, whichever is the highest.

High pressure injection of brickwork: Holes 10mm to 14mm diameter are drilled to predetermined depths along the selected course (percussion drills should not be used on single-brick thickness walls). Two holes are drilled in each stretcher and one in each header at an average spacing of approx. 120mm (max. spacing 150mm).

If a brick course proves too dense to allow adequate penetration of fluid, drilling may be carried out in the two adjacent horizontal and connecting vertical mortar courses at a spacing of 75mm. Alternatively, holes may be drilled at an angle of depression between 25° and 45°.

The silicone fluid is injected at a nominal pressure of 100psi. Nozzles fitted with pressure-tight seals are inserted into the drilled holes and injection is continued until complete saturation is achieved. The nozzles are removed and subsequent holes are similarly injected.

Low pressure injection of mortar courses: Alternatively drillings are made at 150 to 170mm spacing into the mortar and the fluid injected at pressures between 10 and 50psi.

Please Note: We recommend that low pressure be used initially, because semi-diffusion (low pressure) often achieves better results, whatever the wall construction.

#### Coverage:

Typical coverage rates are as follows:4" brick = 15 linear metres per 25 litres
9" brick = 7.5 linear metres per 25 litres
13" brick = 5.2 linear metres per 25 litres

Clean up: Wash out pump, container and lances with clean Sovereign Turps Substitute or White Spirit after each use. Spills and splashes should be cleaned up immediately.

General: Once Sovereign/Remtox K4 Silicone DPC Fluid has chemically reacted it is permanently fixed by a cross linking action within the substrate pores to form a water resistant barrier.

However, although Sovereign/Remtox K4 Silicone DPC Fluid stops the passage of rising damp, it is not a vapour barrier and will still allow the wall to breathe.

For full technical information on the installation of a chemical DPC, including re-plastering refer to the Sovereign Injection Manual

Storage: Between 5 and 25°C

Shelf Life: 12 months unopened.

Replace lid securely after use. Any remaining fluid should be used up as soon as possible after use. Exposure to the atmosphere reduces shelf life considerably.









### Remtox DPC Cream

A blend of silane/siloxane cream emulsion that reacts with moisture to form a highly effective hydrophobic barrier against rising damp in masonry structures. The viscous cream remains within the drilled hole and does not leave unsightly staining.

Form:	Viscous White Cream.	
Pack Size:	600cc foil 'sausage'.	
Contents:	Silane/Siloxane.	
BBA Cert:	05/4251.	
Properties:	Simple and easy to install. Supplied in 600cc foil 'sausages' with a special Bulk Injection Gun available. The cream is inserted into mortar beds; one full pull on the trigger will insert sufficient cream for one 12mm hole in 112mm brickwork; two pulls of the trigger for 230mm brickwork etc.	

Preparation: Remove internal skirting boards and salt contaminated plaster to at least 1m above the DPC line or 300mm beyond the last signs of dampness, whichever is the highest. Re-plastering, isolating vertical DPCs and associated tanking should be installed to relevant Code of Practice or to Remtox Specification.

Normally the damp-proof course is inserted into the mortar bed at perpendicular joints and along the joint at 120mm (maximum) centres at a minimum of 150mm above external ground level, taking into consideration any changes in ground

Drill 12mm holes to a depth of 15-20mm from the opposite face. It is essential to remove the bore dust before filling the cavity with Remtox DPC Cream. A hole 'puffer' is available for this. If using the 600cc 'sausages' then first pull the piston fully back and remove the nozzle. Make an incision at the top of the foil and insert the 'sausage' into the piston chamber and reattach the nozzle

Solid brick walls can be drilled one side only to the prescribed depth. Cavity walls can be treated separately by drilling each leaf, at the same height, as for solid construction wall if required cavity walls may be treated in a single operation by drilling through one leaf, passing through the cavity and drilling into the second leaf to the required depth. The Remtox DPC Cream can then be inserted into the opposite leaf through the cavity, with the viscosity of the product allowing the first leaf to be treated without the material running out.

Drill holes should be capped off with a sand/cement mix incorporating a waterproofing additive

The vagaries of random/in-filled stone walls make them more difficult to treat, but it is possible taking the following precautions. Select an appropriate mortar course and

following this drilling into the intersections, at a maximum of 120mm centre, but reducing this where necessary. Where there is a danger of rubble falling and blocking injection holes then the wall should be drilled from both sides, at the same height to half the depth of the wall thickness

It is problematic to install the DPC into this type of construction and consideration should be given to applying Sovereign Hey'di K11 Grey slurry on the internal wall to a minimum of 1.5 metres above external ground level.

Specification Tech H8 for using Sovereign Hey'di K11 Grey in lieu of a DPC is available from Sovereign Technical Department.

Wall thickness	110mm	220mm	330mm	440mm
Borehole ø	12mm	12mm	12mm	12mm
Borehole depth	100mm	200mm	310mm	420mm
Application/10m wall length (sausages) 1.5		3.0	5.0	6.5

Clean up: Clean tools and equipment with soapy water.

Shelf Life and Storage: A minimum of 12 months stored between +5°C and +25°C. This product must be kept in a heated storage area.

Protection Guarantee: When installed by a Remtox/Sovereign Approved Contractor long-term 30 year Protection Scheme Guarantees are available. Thereafter should the original contractor become bankrupt, deceased or cease to trade, then Sovereign Chemicals will accept liability for workmanship, for the remaining term of the Guarantee.











### **Aqueous Bitumen**

A bitumen and rubber latex emulsion to be applied cold as a horizontal damp-proof membrane in solid laid concrete floors. Sovereign Aqueous Bitumen can also be used as a vertical membrane on the positive (external) side of a structure. However, for tanking on the negative (internal) side, or where hydrostatic pressure is involved, then use the Sovereign Hey'di K11 Tanking System. When dry the material forms a black, tough, resilient, waterproof coating.

Form: Ready to use Liquid.

Pack Sizes: 25 litres.

Colour(s): Dries Black.

Content: Bitumen and Natural Rubber Latex.

Properties: When correctly applied Aqueous Bitumen provides a sandwich membrane; the dried film thickness of which complies with the appropriate British Standard Code of Practice CP 102:1973. Such thicknesses are considered essential to the adequate performance of the membrane in providing a waterproof and vapour-proof barrier.

Usage/Preparation: Sovereign Aqueous Bitumen, when applied as a horizontal damp-proof membrane, must in all cases be laid so that it overlaps the damp-proof courses in adjoining walls. It should be noted that these damp-proof membranes are recommended for the damp-proofing of floors where there may be capillary rise of moisture, but not with those where water can exert hydrostatic pressure.

See CP.102:1973. Sections 1005 and 1007.

It is essential that if the concrete surface is dry and absorbent it be made non-absorbent by lightly dampening with water. This will assist application. Dusty surfaces must first be cleaned, preferably by power washing. Apply the emulsion undiluted to cover not more than 1.0 m²/litre. Use a soft brush or broom, damping it before and occasionally during use to avoid clogging and assist application. The finished application should be free from weeps and of uniform thickness.

When this coat is dry apply a second in the same way, covering not more than 1.5m². When dry, the membrane should be black and shiny. Any brown colouration or movement between the film and backing should be taken to mean that drying is incomplete.

While moist, blind the second coat with sand to prevent damage and provide a key for the final concrete screed. When the final coat is dry, brush off surplus sand. Further work can then proceed.

**General:** Sovereign Aqueous Bitumen complies with the relevant sections of the following standards:

- British Standard Code of Practice CP:102:1973 'Protection of buildings against water from the ground'.
- The Building Regulations, 1965 'Buildings and Buildings'.
- Building Research Station Digest (second series) No. 54 'Damp-Proofing Solid Floors'.
- Ministry of Public Buildings and Works Advisory Leaflet No. 23 (1963). 'Damp-Proof Courses'.

The actual drying time will depend on the rate of evaporation, air and ground temperatures and humidity. Times quoted are guides only and, in all cases, will be assisted by ventilation. When DPC fluids are used allow a minimum period of 3 weeks (dependent upon conditions) prior to Aqueous Bitumen application to enable any solvents to evaporate. Sovereign Aqueous Bitumen is not recommended for roofing applications since the rubber latex may lead to crazing and cracking of the film surface unless it is covered with sand or other UV shield.

Coverage: 1.3m<sup>2</sup>/litre approx.

Storage: Between 5 and 30°C, 6 months unopened.







# The Hey'di System

The Hey'di K11 System is a sector-leading product based on a well-proven waterproof slurry coating that prevents both damp and water penetration. The chemicals contained in the slurry react, penetrate and fill off or block the capillaries, bonding onto the prepared surface enabling it to resist significant hydrostatic water pressure. The Hey'di K11 System is fully certificated by the British Board of Agrément.

- Hey'di K11: A salt resistant cementitious tanking compound for the protection of structures against water from the ground and which may be potentially subject to hydrostatic pressure. Hey'di K11 can be used on the external side of buildings below ground level where positive pressure exists, or on the internal (negative) side, without the need to build supporting walls.
- SBR Bonding Agent: A dispersion polymer of carboxylated styrene butadiene copolymer. It has been extensively used in the building industry for many years in the modification of cementitious systems. Unlike PVA when used in damp areas Sovereign SBR Bonding Agent will not re-emulsify and should therefore be specified for all external situations. SBR Bonding Agent contains anti-foam to help prevent excessive air entrainment and an antioxidant to give extended durability.
- Hey'di Antisulphate: Used to treat damp, salt affected masonry. It is an essential element of the Hey'di K11 Basement Tanking System and is also useful in the treatment of above ground structures such as chimney breasts and in flood damaged properties.
- **Hey'di Barrier Mortar:** A hydrophobic, non-shrinking repair mortar. An integral part of the Hey'di K11 System, it is used to create a fillet at wall/wall and wall/floor junctures.
- Hey'di Powder X: A rapid setting-plugging compound used to stop water leaks prior to tanking with the Hey'di K11 System and is also used in conjunction with Hey'di Powder No 1 and Hey'di Sealing Liquid as part of the Hey'di Special System.
- Hey'di Rapid Mortar: A quick setting cement based powder which, when mixed with water, becomes a versatile grouting/patching material for the repair, restoration and protection of concrete and masonry.
- Hey'di Flexi Floorcoat: Sovereign Hey'di Flexi Floorcoat is a ready for use liquid applied damp-proofing floor membrane. It can be used in both above and below ground situations.

# Hey'di K11

Hey'di K11 is a salt resistant cementitious tanking compound for the protection of structures against water from the ground and which may potentially be subject to hydrostatic pressure. Hey'di K11 can be used on the external side of buildings below ground level where positive pressure exists, or on the internal (negative) side, without the need to build supporting walls.

Sovereign's Hey'di Tanking System is fully covered by British Board of Agrément Certificate 91/2608.

Form:	Dry Powder.	
Pack Sizes:	25kg.	
Colour(s):	Grey and White.	
Content:	Blend of cement and additives.	
Properties:	Once cured Hey'di K11 is impervious to water and has been independently tested to withstand greater than 10 bars of pressure on the negative side (over 100 metres head of water) with a coating thickness of 4mm in two coats.	

Preparation: Individual specifications are available for each contract using the Hey'di K11 System. This service is free of charge and a 10-year Tanking Treatment Guarantee is available for contracts carried out to a specification from the Sovereign Technical Department.

On new construction mortar joints should be fully filled off and flush pointed flat with the wall surface.

Existing structures usually require mechanical preparation to remove existing coatings or heavy salt deposits. This is best done by the use of a scabbler or needle gun.

**Usage:** Hey'di K11 can be applied direct to the substrate, but in our experience applying a modified rendercoat\* provides an excellent background, as follows:

- Prepare thoroughly to receive a modified rendercoat and then saturate the substrate.
- Apply Hey'di Antisulphate diluted 1:1 with water and leave overnight \*.
- Brush apply a bonding coat consisting of 1 part water, 1 part Sovereign SBR mixed with cement to a yoghurt consistency.
- Whilst the bonding coat is still tacky apply a 4:1 sand/cement render, gauged with 4 parts water, 1 part Sovereign SBR. Use a wooden float finish and allow to cure overnight.

- 5. Apply neat Hey'di Antisulphate and allow to soak in\*\*.
- 6. Thoroughly dampen down the surface with a 9 parts water to 1 part SBR solution.
- 7. Add Hey'di K11 Powder to gauging liquid consisting of Sovereign SBR diluted 2 parts SBR to 1 part water and, using an electric drill and plasterer's paddle, mix to a thick creamy consistency. Thereafter keeping the render damp, apply first 'coating' of Hey'di K11 Grey slurry using a block brush at approximately 2mm thickness.
- Where a solid floor exists the Hey'di K11 should be overlapped 200mm and a 25mm fillet of Barrier Mortar, gauged with water, trowelled to floor to wall juncture.
- When it is possible to do so without pulling off the first coat; apply second coating at right angles to the first and lap over the Hey'di Barrier Mortar fillet and onto the floor, where applicable.
- Where mechanical preparation is difficult or impractical then Stainless Steel Metal Lath may be fixed to the masonry to support the render before tanking.
- \*\* Not required on new builds.















showing you the way when you're going underground

basement2rooms.co.uk is the dedicated website that has been especially developed to provide FREE support for householders and professionals interested or involved in the development of new and existing basements and cellars. The website provides invaluable information relating to the choice of tanking system, correct specification, and all the common issues relating to the development of under-utilised underground space in the home.



# **SBR Bonding Agent**

Sovereign SBR Bonding Agent is a dispersion polymer of carboxylated styrene butadiene copolymer. It has been extensively used in the building industry for many years in the modification of cementitious systems. Unlike PVA when used in damp areas Sovereign SBR Bonding Agent will not re-emulsify and should therefore be specified for all external situations. SBR Bonding Agent contains anti-foam to help prevent excessive air entrainment and an antioxidant to give extended durability.

Form:	Liquid Concentrate.
Pack Size:	5 and 10kg.
Colour(s):	White.
Content:	47% styrene butadiene, pH 9.0 to 11.0, Specific Gravity 1.01.
Properties:	Renders and screeds show greatly improved adhesion to the substrate, reduced cracking and surface dusting. Furthermore, resistance to water and the passage of salts is greatly improved making it ideal for external use. Sovereign SBR Bonding Agent can also be used as a primer and sealer to improve inter-coat adhesion between successive layers. When used in concrete repair the addition of Sovereign SBR Bonding Agent greatly enhances the resistance of the concrete to carbonation and protects steel from corrosion. Its use in screeds allows work to be carried out in much thinner sections whilst maintaining performance levels.

**Usage:** Incorporating Sovereign SBR Bonding Agent into cement-based systems gives numerous advantages, chiefly among these are:

- Greatly improved adhesion to a wide range of substrates including dense concrete, glass, steel, tiles, etc.
- Mixes may be applied in much thinner sections.
- Excellent resistance to water and protection from carbonation.
- A high level of resistance to salt permeation.
- Much improved toughness and flexibility.
- Reduced surface dusting of concrete.
- Greatly improved resistance to many chemicals.
- Reduced water/cement ratio for equivalent workability.
- Improved frost resistance.
- Reduction in cracking and shrinkage.
- Corrosion protection of steel.

The following discusses the use of Sovereign SBR Bonding Agent in more detail. However Sovereign can also provide more detailed specifications for many of these uses on request. When Sovereign SBR Bonding Agent is used in conjunction with Hey'di K11 we strongly advise users to obtain an individually written specification from our Technical Department. This service is free of charge, following the completion of a specification request form. Work carried out to a specification can then be issued with a Sovereign Guarantee.

#### Primer Systems:

Sovereign SBR Bonding Agent can be used to control the suction of highly porous substrates or as a bonding coat for use over glass, tiles, steel, concrete and brick or timber.

Primer Coat: One part SBR Bonding Agent to five parts water. Apply the primer to porous backgrounds. Render can then be applied to either wet or dry primer.

One part SBR Bonding Agent to three parts water. Apply to timber prior to tiling. Adhesive should be tiled whilst still damp with the primer. If the primer dries apply a further coat.

Bonding Coat: Two parts SBR Bonding Agent to two parts water to three parts OCR. Mix the water and Sovereign SBR Bonding Agent and then slowly add the cement until a creamy mix is obtained. This can then be applied to surfaces with a brush to vastly improve the adhesion of subsequent coats. Render, screed etc, must be applied whilst the bonding coat is still tacky i.e. within 20 minutes. If the bonding does dry then reapply more before continuing. This mix should have a pot life of at least 1 hour. All tools and equipment used must be cleaned immediately after use, as the bonding coat is extremely difficult to remove once dry.

This bonding coat is also ideal for use in tiling onto difficult substrates such as glazed tiles, vinyl tiles, glass and metal. Again the adhesive must be applied whilst the bonding coat is still tacky. Sovereign SBR Bonding Agent can also be added to cement based adhesive and grout to improve adhesion and wear properties. Dilute the SBR 1:3 with water and use as the gauging solution.

### SBR Bonding Agent, continued

Screeds	6 - 12mm	12 - 25mm	Up to 40mm
Cement	50kg	50kg	50kg
Sharp Sand	125kg	150kg	150kg
Bonding Agent	9kg	7kg	5kg
Yield	0.12m <sup>3</sup>	0.12m <sup>3</sup>	0.12m <sup>3</sup>

Topping	Granite 12 - 25mm	Granite >25mm	Fine Concrete 25mm
Cement	50kg	50kg	50kg
Sharp Sand	75kg	150kg	100kg
Granite Chip	75kg	75kg	-
Pea Shingle	-	-	100kg
Bonding Ager	nt 9kg	5kg	5kg
Yield	0.12m <sup>3</sup>	0.12m <sup>3</sup>	0.12m <sup>3</sup>

#### Screeds

Incorporating SBR Bonding Agent into a floor screed will give enhanced qualities to the floor such as adhesion, flexural strength, water and abrasion resistance and allowing thinner sections to be laid.

When laying screeds the correct surface preparation is absolutely vital to success. All surface contamination must be removed such as paint, oil or grease. Mechanical preparation of the surface is ideal, using such techniques as shot blasting, scabbling and planning which should expose the aggregate and leave a stable surface. One point worth mentioning is that these techniques can sometimes leave a dust on the surface. If this is the case this should be power washed off.

Apply a bonding coat and lay the screed whilst this is still tacky. The quantity of SBR Bonding Agent to add to the screed is dependant upon the thickness to be laid and the mix design. The following table gives some guidance.

A screeding bar should be used to spread the mixed materials and produce a well-compacted, level surface. Final smoothing can be achieved using a float. Allow at least 24 hours and preferably 3 days before allowing traffic. In harsh conditions steps should be taken to prevent rapid drying.

#### Concrete Repairs:

For small patch repairs of concrete and steel reinforced concrete using Sovereign SBR Bonding Agent will provide:

- Reduced thermal stresses because the coefficient of thermal expansion is similar to that of unmodified concrete.
- Protection of background concrete from carbonation.
- Improved durability.
- Improved adhesion to the background.
- Corrosion protection of the steel.

Prepare any unsound concrete to give at least 5mm depth of repair (10mm over reinforcing). Wire brushing or shot blasting may be necessary to remove all signs of corrosion. Where corrosion is excessive the opinion of a structural engineer should be sought.

#### Repair Mix:

0.2 parts SBR Bonding Agent to 2.5 parts moist sand 2.5 parts to one part OPC.

This is suitable for most repairs, however where the final covering of steel is less than 15mm or there are known chlorides in the concrete the amount of Sovereign SBR Bonding Agent should be increased to 0.3 parts. This level should also be used in extremely exposed conditions.

#### Renders:

External renderings commonly provide difficulties and failure rates can be high. Problems associated with external render are usually caused by poor bond to the background, cracking and low durability.

Incorporating Sovereign SBR Bonding Agent in to the system, both as a bonding coat and in the render will overcome these problems.

As with all coatings substrate preparation is key. Clean back the substrate to a sound background and rake out any loose mortar, then re-point.

#### Spatterdash Mix:

One part SBR Bonding Agent to two parts coarse sand to one part OPC.

Mix well and apply by dashing and ensure complete coverage to a thickness of 3mm and allow to dry. This mix can also be used for stippling.

#### External Render:

One part SBR Bonding Agent to three parts water and one part OPC with three to four parts of sand.

Scratch the first coat and allow to dry. Subsequent coats should be thinner/weaker.











# Hey'di Antisulphate

Hey'di Antisulphate is used to treat damp, salt affected masonry. It is an essential element of the Hey'di K11 Basement Tanking System and is also useful in the treatment of above ground structures such as chimney breasts and in the treatment of flood damaged properties. Various specifications are available from the Technical Department on request.

Form:	Water-Like Liquid.
Pack Sizes:	5kg and 10kg.
Colour(s):	Clear.
Content:	Metal Flourosilicates.
Properties:	Hey'di Antisulphate chemically reacts with salts in masonry, converting soluble salts into water insoluble reaction products, preventing their movement in to newly applied tanking and renders.

General: Hey'di Antisulphate is a deeply penetrating liquid that when applied to salt affected masonry reacts and turns soluble salts insoluble. This prevents the passage of hygroscopic salts from the substrate into any new mineral coating that is applied such as Hey'di K11 Tanking or cement render.

Preparation: All substrates must be clean, absorbent and free from gypsum, bitumen, grease and oils, dust and paints. Existing salt affected plaster must be completely removed. Joints should be raked out

Application: Hey'di Antisulphate is applied in two stages. The first coat must be diluted 1:1 with water. Apply this solution to the entire surface until saturated. After this coat has dried in around 6 to 18 hours a second application using neat Hey'di Antisulphate is required, again until the substrate is saturated.

Hey'di Antisulphate can be applied by brush, however the use of a standard garden sprayer, producing coarse droplets is recommended.

Tanking or rendering can commence as soon as the second application of Hey'di Antisulphate is complete.

 $\begin{tabular}{ll} \textbf{Coverage:} Approximately 35 to $45m^2$ per 10kg for a 2 coat application depending on the absorbency of the substrate. \end{tabular}$ 

**Shelf Life:** 12 months unopened. **Storage:** Between 5 and 30°C.

Limitations: Do not use on gypsum plaster. Not for use on exposed brickwork. Only for use prior to the application of tanking/render. Hey'di Antisulphate is not a lasting salt barrier; additional measures are required.











# Hey'di Barrier Mortar

Sovereign's Hey'di Barrier Mortar is a hydrophobic, non-shrinking repair mortar. It is an integral part of the Sovereign Hey'di K11 Tanking System, used to create a fillet at wall/wall and wall/floor junctures.

Form:	Powder.
Pack Sizes:	25kg.
Colour(s):	Grey.
Content:	Cement and additives.
Properties:	Hey'di Barrier Mortar is a water-resistant mortar that does not shrink and has excellent adhesion to concrete and mortar. Can be used as a general repair mortar where shrinkage must be avoided. Hey'di Barrier Mortar has a long pot life, typically 5 hours ensuring that wastage is kept to a minimum.

Usage: Hey'di Barrier Mortar should be applied to a damp substrate. When using with the Hey'di K11 System apply a 25mm fillet into all vertical and horizontal joints. It should be applied onto the first coat of Hey'di K11 before it has cured. This will typically be around 1 hour application of the Hey'di K11, and care should be taken not to damage the underlying coating.

Allow the barrier mortar to stiffen for 2 to 3 hours and then apply the second coat of Hey'di K11 to the substrate and over the Hey'di Barrier Mortar.

Hey'di Barrier Mortar can also be used as a general repair compound for patch filling of masonry wall and floors.

When cured it has a compressive strength of  $>40N/mm^2$ . Do not use in temperatures below 5°C.

Coverage: When used as a 25mm fillet around 1kg per linear metre will be required. When used as a repair compound 25kg mixed with water will produce around 15 litres of mortar.

**Shelf Life:** 12 months when stored unopened and above ground in cool dry conditions.













# Hey'di Powder X

Hey'di Powder X is a rapid setting-plugging compound used to stop water leaks prior to tanking with the Hey'di K11 System and is also used in conjunction with Hey'di Powder No 1 and Hey'di Sealing Liquid as part of the Hey'di System.

Form:	Dry Powder.
Pack Sizes:	5kg and 15kg.
Colour(s):	Grey.
Content:	Cement and additives.
Properties:	Hey'di Powder X sets in seconds forming a waterproof plug, preventing water ingress.

**Usage:** Use once the masonry has been prepared ready for tanking and where water is permeating through an isolated spot. Plug the leak with Hey'di Powder X prior to tanking.

Use a gloved hand to pick up some powder and, wearing goggles, press firmly over the leak and smooth off. Hey'di Powder X will set in only a few seconds.

If plugging one point creates another leak elsewhere then contact the Technical Department for advice.

If Hey'di Powder X is to be used along a wall/floor joint or overhead then it may be easier to make a thick slurry. Pour about a cupful of water into a clean bucket. With a gloved hand add 2 to 3 handfuls of powder, stir quickly and apply immediately.

Hey'di Powder X should not be used independently of the Hey'di K11 System for long-term leak prevention.

**Shelf Life:** 12 months when stored unopened and above ground in cool dry conditions.











# Hey'di Rapid Mortar

A quick setting cement based powder which, when mixed with water, becomes a versatile grouting/patching material for the repair, restoration and protection of concrete and masonry as part of the Hey'di System.

Form:	Dry Powder.
Pack Sizes:	5 and 15kg.
Colour(s):	Grey.
Content:	Blend of cement and speciality additives.
Properties:	Because it contains neither chloride nor soda, Hey'di Rapid Mortar is ideal for protecting ferrous materials from rust and corrosion when anchoring (machinery equipment, etc.). Has excellent structural strength and after setting becomes extremely durable, hard, dense and watertight. Where lots of fixings are involved, consideration should be given to using Sovereign Hey'di Rapid Mortar to fix boards onto the walls to minimise interruption to the tanked system.

General: Hey'di Rapid Mortar can be used for filling cracks, general repair work on concrete and masonry, anchoring machinery, equipment, pipe work and fixtures, sealing caulking grooves between concrete tunnel lining segments that are under hydrostatic pressure forming 'shoulders' for expansion joints.

The addition of SBR Bonding Agent into the mixing water, in the ratio of 1 part SBR Bonding Agent to 3 parts water, assures greater flexibility and increases flexible strength when anchoring heavy equipment or vibrating machinery.

Sovereign Lab Test Results: A common clay brick was drilled either side to approximately 37mm. Sovereign Hey'di Rapid Mortar was mixed with neat SBR Bonding Agent and was then used to hold engineering bolts in place with each hole. Bolts were slid into place with negligible slump with threaded end outwards.

After 72 hours the bolts were tensile tested and the brick failed at 6.5 N/mm² (1460 pounds force). The bolts were still adhering.

#### Independent Test Properties:

Compressive Strength (N/mm²) ASTM C-109

30 min	6.9	
1 day	12.6	
3 days	22.8	
7 days	31.9	
28 days	35.2	

**Shelf Life:** 12 months when stored unopened and above ground in cool dry conditions.











# Hey'di Flexi Floorcoat

Sovereign Hey'di Flexi Floorcoat is a ready for use liquid applied damp-proofing floor membrane. It can be used in both above and below ground situations.

Form:	Viscous Liquid.
Pack Sizes:	10kg.
Colour(s):	White.
Content:	Modified copolymer emulsion and rheology control agents.
Properties:	Sovereign Hey'di Flexi Floorcoat can be used on concrete floors to provide a damp-proof membrane, where the existing DPM has failed or is missing.

General: In below ground applications Floorcoat should be used in conjunction with Hev'di K11 on the walls. All below ground tanking should be carried out to a Sovereign Specification. Individual Specifications are available from the Sovereign Technical Department free of charge. Sovereign Hey'di Flexi Floorcoat must only be applied to a clean and stable structural floor slab of at least 150mm thickness below ground and 100mm above ground. New concrete or sand/cement screeds must be left for a minimum of 7 days before application of the membrane

Application: The surface must to be clean, sound free of dust, loose material and free of surface water. Adhesive residues, curing compounds or any other surface contaminants must be removed before application. The membrane should not be applied in wet conditions or where these conditions are likely to occur before the membrane has dried. The membrane should not be applied when the temperature of the background, or the air temperature, is helow 7°C

Power floated subfloors should be shot-blasted to promote adhesion, alternatively power floated floors can be etched with Sovereign Descaler - contact the Technical Department

It is often advantageous to pre-wet concrete so that this is damp but free from any water glistening on the surface, to aid the wetting out of the background.

Because of the wide variety of background types and site conditions it is always advisable to check adhesion to the background by testing on a sample area before starting any job

Application Below Ground: When used in conjunction with Hey'di K11, the Hey'di K11 should be applied to the walls in the normal manner, i.e. two coats, each 2mm thick. A fillet of Barrier Mortar must be incorporated at the wall and floor joint between the coats. Apply the Hey'di K11 down the wall and overlap the floor by 200mm.

Once the Hey'di K11 has dried the first task is to incorporate Sovereign Flexi Tape to re-enforce the wall/floor junctions. Apply a thick coat of the Flexi Floorcoat to the corners and immediately bed in the Flexi Tape. Allow the first coat to dry to a tacky condition and then apply a second coat.

Once the taped joints have dried, around 1 to 2 hours the main body of the floor can be treated. Two coats should be applied at right angles, the second coat being applied as soon as the first is sufficiently dry to walk on.

It is essential that the coating is applied to the correct thickness of 0.6mm i.e. 0.3mm per coat. To achieve this the coating must not be brushed out as would paint. Ideally the correct quantity of material should be emptied on to the floor for each coat and then spread out with a roller to give an even coating. This should then be repeated for the second coat.

Application Above Ground: When used in above ground situations where the DPM is missing or defective then the application procedure is as above. However there is no requirement for Hey'di Barrier Mortar. The Flexi Tape must be used at wall floor joints as above and the coverage rate and method are identical to below ground application.

The membrane may be applied by brush, roller or airless spray\*. If necessary the compound can be diluted with up to 10% water. However, care should be taken to ensure that the correct dry coat thickness is applied.

For example the 'Aro' gun, model 651533, on a 'Clemco' pot. Compressed air supply pressure 5.6N/mm2 (800psi) and compression ratio 28:1. Tip size 0.64mm (25/1000"). Fan width 200mm (8").

### Hey'di Flexi Floorcoat, continued

Coverage: A minimum dried coating thickness of 0.6mm is needed to provide a vapour barrier. This should be applied in a minimum of two coats. A 10kg pack will cover around 8m<sup>2</sup> depending on porosity and topography of the substrate.

The concrete below the membrane should be sufficiently dry before the membrane is applied to pass a humidity box test of the type specified in BS 8203 Part 2, but with a maximum relative humidity limit of 90%.

Finishing: Many wet applied cementitious materials bond well to the dried Sovereign Hey'di Flexi Floorcoat, particularly if they contain polymers. When applying polymer free materials, such as screed the highest adhesion results are obtained if the material is applied as soon as the membrane is touch dry. Alternatively the surface of the undried membrane can be blinded with clean sharp sand to provide some mechanical key to the subsequent coating.

Ceramic Tile Adhesives: Sovereign Porcel-Flex must be used and is suitable for all tile types including porcelain, natural stone and fully vitrified.

Floor Screeds: A floor screed modified with Sovereign SBR Bonding Agent bonds well to the dried film of Sovereign Hey'di Flexi Floorcoat. When using unmodified floor screeds, enhanced bond values can be obtained by coating the dried membrane with Sovereign SBR Bonding Agent cement primer system.

Flooring Adhesives: Most flooring adhesives bond well to the membrane, however It is advisable to use adhesive/floor-covering combinations that are low in plasticiser content.

Levelling Compounds: Sovereign Self Levelling Floor Compound gauged with Sovereign Latex Polymer Additive can be used.

In all cases it is imperative that the membrane is not punctured with, for example nails, when fixing carpet grippers. For this Sovereign PU Rapid Construction Adhesive should be used.

Clean up: Clean tools immediately after use with water.

Storage: Between 5°C - 30°C.

Shelf Life: 12 months unopened.









# SovDrain CDM System

SovDrain CDM is a high performance cavity drainage system membrane for applications suffering from serious water ingress. The SovDrain CDM product range includes all the laths, specialist fixings, tapes, sumps and pumps required to deliver a highly effective solution to serious damp.

The SovDrain CDM System provides a robust drainage membrane suitable for use above and below ground on walls, floors and arched/vaulted ceilings. The membrane is strong, yet pliable and is simple to form around corners and is typically finished by dry lining using plasterboards onto battens fixed directly into the SovDrain Membrane Fixing Plugs, or alternatively onto an independent framework within the lined area.

#### Typical areas of usage for the SovDrain System include:

- Below ground level waterproofing in areas such as, basements, cellars and vaults; typically SovDrain CDM lining enables these spaces to be converted into valuable living space.
- Above ground damp-proofing to combat the effects of rainwater penetration.
- To provide an effective barrier against dampness and salt contamination.
- Flood remediation.



### SovDrain CDM 3 Lath

Sovereign SovDrain CDM 3 Lath is a high performance cavity drainage system membrane. It provides a robust drainage membrane which is particularly suitable for use as a damp-proofing membrane above ground. It has a low profile (3mm) thus allowing for minimal loss of space and being ideal for remedial renovation and refurbishment work.

SovDrain Lath is strong but pliable and is simple to form around corners. It is easily cut to shape/size using a knife or scissors. This membrane, having a thermally welded mesh on its face, is typically finished using directly applied Sovereign Whitewall Plaster which is specifically designed for this application. Alternatively, dry lining can be used where plasterboards are fixed using the 'dot and dab' method.

Technical Data			
Roll Size:	1 and 2m x 20m	Stud Height:	2.5mm
Membrane thickness:	0.5mm	Material:	Polypropylene
Colour:	Translucent	Air gap volume:	
Environmental Resistance:	Highly resistant to degradation by all common chemicals. It is resistant to biological attack and does not sustain microbial development. It is compatible with drinking water.		
Penetration Resistance:	Resistant to root penetration		
Fire Resistance:	B2 classification in accordance with DIN 4102		

- Above ground damp-proofing
- Provides a suitable membrane where space is of a
- For plastering direct or 'dot and dab' fixing of plasterboards.

#### Associated Products:

- SovDrain Membrane Lath Plug for fixing
- SovDrain Sealing Rope for Lath Plug fixing seal and joint
- SovDrain Sealing Tape for joint sealing
- SovDrain Mastic for joint sealing
- Sovereign Whitewall Plaster for plastering direct onto the SovDrain Membrane



### SovDrain CDM 3

Sovereign SovDrain CDM 3 is a high performance cavity drainage system membrane. It provides a robust drainage membrane specifically designed for floor applications at or above ground level.

This membrane has a low profile (3mm) thus minimising floor level changes whilst still providing an effective damp-proof membrane with air gap beneath.

SovDrain CDM 3 allows for a fast track application of a floor membrane and is typically finished with either a Sovereign SBR Bonding Agent modified screed (minimum 65mm) or a floating floor.

#### Technical Data

Roll Size:	2 x 20m	Stud Height:	2.5mm
Membrane thickness:	0.5mm	Material:	Polypropylene
Colour:	Translucent		
Environmental Resistance:	Highly resistant to degradation by all common chemicals. It is resistant to biological attack and does not sustain microbial development. It is compatible with drinking water.		
Penetration Resistance:	Resistant to root penetration		
Fire Resistance:	B2 classification in accordance with DIN 4102		

#### Usage

- At or above ground level for damp-proofing
- Providing a fast track membrane on floors to allow quick laying of covering/finished surface.

#### Associated Products:

- SovDrain Sealing Rope for joint sealing
- SovDrain Sealing Tape for joint sealing
- SovDrain Corner Strip for floor/wall juncture sealing



### SovDrain CDM 8 Lath

Sovereign SovDrain CDM 8 Lath is a high performance cavity drainage system membrane. It provides a robust drainage membrane suitable for use above and below ground on walls, floors and arched/vaulted ceilings, as part of the SovDrain Waterproofing System.

SovDrain CDM 8 Lath is strong but pliable and is simple to form around corners. It is easily cut to shape/size using a knife or scissors. This membrane, having a thermally welded mesh on its face, is typically finished using directly applied Sovereign Whitewall Plaster which is specifically designed for this application. Alternatively, dry lining can be used where plasterboards are fixed using the 'dot and dab' method.

Technical Data			
Roll Size:	1.5m x 10m or 2.0m x 20m	Stud Height:	8mm
Membrane thickness:	0.55mm	Material:	HDPE
Colour:	Translucent	Compressive Strength:	>100 kN/m²
Drainage/flow capacity:	4 litres/second	Air gap volume:	5 litres/m <sup>2</sup>
Environmental Resistance:	Highly resistant to degradation by all common chemicals. It is resistant to biological attack and does not sustain microbial development. It is compatible with drinking water.		
Penetration Resistance:	Resistant to root penetration		
Fire Resistance:	B2 classification in accordance with DIN 4102		

#### Usage:

- Above ground damp-proofing
- Below ground waterproofing in areas such as cellars, basements, vaults and tunnels.

#### Associated Products:

- SovDrain Membrane Lath Plug for fixing
- SovDrain Sealing Rope for plug fixing seal and joint
- SovDrain Sealing Tape for joint sealing
- SovDrain Mastic for joint sealing
- SovDrain Corner Strip for floor/wall juncture sealing
- SovDrain Channel and Accessories for drainage facility
- SovDrain Aguaduct for drainage facility
- SovDrain Pump and Sump Stations for water control, collection and discharge
- Sovereign Whitewall Plaster for plastering direct onto the SovDrain Membrane





### SovDrain CDM 8

Sovereign SovDrain CDM 8 is a high performance cavity drainage system membrane. It provides a robust drainage membrane suitable for use above and below ground on walls, floors and arched/vaulted ceilings, as part of the SovDrain Waterproofing System.

SovDrain CDM 8 is strong but pliable and is simple to form around corners. It is easily cut to shape/size using a knife or scissors. This system is typically finished by dry lining using plasterboards onto battens fixed directly into the SovDrain Membrane Fixing Plugs, or alternatively onto an independent framework.

#### Technical Data

Roll Size:	2.0m x 20m or 2.4m x 20m	Stud Height:	8mm
Membrane thickness:	0.55mm	Material:	HDPE
Colour:	Translucent	Compressive Strength:	>200kN/m²
Drainage/flow capacity:	4 litres/sec	Air gap volume:	5 litres/m <sup>2</sup>
Environmental Resistance:	Highly resistant to degradation by all common chemicals. It is resistant to biological attack and does not sustain microbial development. It is compatible with drinking water.		
Penetration Resistance:	Resistant to root penetration		
Fire Resistance:	B2 classification in accordance with DIN 4102		

#### Usage:

- Above ground damp-proofing
- Below ground waterproofing in areas such as cellars, basements, vaults and tunnels.

#### Associated Products:

- SovDrain Membrane Plug for fixing
- SovDrain Sealing Rope for plug fixing seal and joint sealing
- SovDrain Sealing Washer for plug fixing seal in above ground situations
- SovDrain Sealing Tape for joint sealing
- SovDrain Corner Strip for floor/wall juncture sealing
- SovDrain Channel and Accessories for drainage facility
- SovDrain Aquaduct for drainage facility
- SovDrain Pump and Sump Stations for water control, collection and discharge





### SovDrain CDM 20

Sovereign SovDrain CDM 20 is a high performance cavity drainage system membrane. It provides a robust drainage membrane suitable for use on floors, as part of the SovDrain Waterproofing System.

SovDrain CDM 20 is strong but pliable and is simple to form around corners. It is easily cut to shape/size using a knife or scissors. This membrane is typically finished with either a Sovereign SBR Bonding Agent modified screed (minimum 65mm) or a floating floor.

Technical Data			
Roll Size:	2.0m x 20m	Stud Height:	20mm
Membrane thickness:	1.0mm	Material:	HDPE
Colour:	Black	Compressive Strength:	150 kN/m <sup>2</sup>
Drainage/flow capacity:	13 litres/s m	Air gap volume:	14 litres/m²
Environmental Resistance:	Highly resistant to degradation by all common chemicals. It is compatible with drinking water.		
Penetration Resistance:	Resistant to root penetration		
Fire Resistance:	B2 classification in accordance with DIN 4102		

#### Usage:

- Above ground damp-proofing
- Below ground waterproofing in areas such as cellars, basements, vaults and tunnels.

#### Associated Products:

- SovDrain Sealing Rope for joint sealing
- SovDrain Sealing Tape for joint sealing
- SovDrain Corner Strip for floor/wall juncture sealing, for over-joint sealing and sealing around protrusions
- SovDrain Channel and Accessories for drainage facility
- SovDrain Aquaduct for drainage facility
- SovDrain Pump and Sump Stations for water control, collection and discharge



# **SovDrain Corner Strip**

Sovereign SovDrain Corner Strip is a synthetic butyl/rubber based extruded strip sealant laminated with a PVC liner. It is primarily used for creating a seal at the floor to wall juncture where wall membrane meets floor membrane, as part of the SovDrain Waterproofing System.

#### Technical Data

Colour:	Black	Dynamic Tensile Adhesion:	18N/cm <sup>2</sup>
Dynamic Shear Adhesion:	14N/cm²	90° Peel Adhesion:	7N/cm
180° Peel Adhesion:	11N/cm	Service Temp. Range:	-40 to 90°C
Specific Gravity (sealant only):	1.6g/cm <sup>3</sup>	Shelf Life:	12 months
Moisture Vapour Transmission Rate:	0.24g/m <sup>2</sup> /24 hours/mm		

#### Features:

- Excellent adhesion
- Very high tack
- Remains flexible throughout service life
- Easy and accurate to use
- Very little waste and no mess.

#### Preparation:

All surfaces must be thoroughly clean, dry and free from frost, grease and loose material.

#### Application:

Offer direct onto the corner joint and form into position. Then remove siliconised backing paper and apply directly to the joint pressing sufficiently along its length to achieve good adhesion.

#### Packaging:

 Supplied as a single roll of extruded Corner Strip laminated with a PVC liner on a siliconised release paper.

■ Roll Size: 1 x 150mm x 20m
■ Tolerance: Thickness ±0.1mm
Width ±3.0mm





# **SovDrain Fleeceband Strip**

Sovereign SovDrain Fleeceband Strip is a synthetic butyl/rubber based preformed strip sealant laminated with a non-woven polyester fleece. It is primarily used for creating a joint overseal where SovDrain Lath Membrane is used, or as a seal at the floor to wall juncture where SovDrain Lath wall membrane meets floor membrane, as part of the SovDrain Waterproofing System.

#### **Technical Data**

Colour:	Grey	Dynamic Shear	Adhesion: 12N/cm²
90° Peel Adhesion:	8N/cm	180° Peel Adhesion:	9N/cm
Specific Gravity (sealant only):	1.6g/cm <sup>3</sup>	Service Temp. Range:	-40 to 90°C
Moisture Vapour Transmission Rate:	0.24g/m²/24 hours/mm	Shelf Life:	12 months

#### Features:

- Excellent adhesion
- Very high tack
- Remains flexible throughout service life
- Easy and accurate to use
- Very little waste and no mess
- Fleece accepts plaster coatings and dab adhesive

#### Preparation

All surfaces must be thoroughly clean, dry and free from frost, grease and loose material.

#### Application:

Offer direct onto the corner joint and form into position. Then remove siliconised backing paper and apply directly to the joint pressing sufficiently along its length to achieve good adhesion.

#### Packaging:

- Supplied as a single roll of preformed Fleeceband Strip laminated with a non-woven polyester fleece on a siliconised release paper.
- Roll Size: 1 x 150mm x 20m
   Tolerance: Thickness ±0.1mm
  Width ±3.0mm





### SovDrain Geo-Deck

Sovereign SovDrain Geo-Deck is a cavity drainage geo-composite layer comprising a high performance single cuspated HDPE (High Density Polyethylene) core with a geotextile filter thermally bonded to one side. The textile filter has a flap that extends beyond the core on one edge. The product is effectively impermeable one side. It is used as an engineered drainage layer in waterproofing applications.

Sub-grade vertical surfaces will be exposed to hydrostatic pressure whenever seepage water is prevented from draining away immediately.

The geotextile filters a wide range of materials whilst allowing the free ingress of fluids into the core of the geo-composite before draining to a discharge point. The HDPE core of Geo-Deck geo-composite provides a free flowing drainage void within the structure. The studs are designed to support the geotextile which is bonded to the core to ensure that it does not deform into the drainage passage under the pressure of the fill material.

Unlike pipes, this geo-composite drainage core design allows flow in all directions. Geo-Deck is durable and sufficiently robust to resist the mechanical stresses imposed during installation and then on throughout its design life.

Technical Data			
Roll Size:	2.2 x 12.5m	Coverage:	27.5m <sup>2</sup>
Stud Height:	11mm	Membrane thickness:	0.9mm
Material:	HDPE	Colour:	Black
Compressive Strength:	>250kN/m²	Temperature Range:	-20 to 80°C
Drainage/flow capacity:	5 litres/second and 18,000/hour	Air gap volume:	8.9 litres/m <sup>2</sup>
Penetration Resistance:	Resistant to root penetration		
Environmental Resistance:	Highly resistant to degradation by and does not sustain microbial de		
Fire Resistance:	B2 classification in accordance wi	th DIN 4102	



#### SovDrain Geo-Deck, continued

#### Uses:

- Relieve external water pressure from buried structures.
- Drainage on positive side of retaining walls.
- Block paving drainage
- Waterproofing to structural roof decks

#### Features:

- Horizontal or vertical drainage applications
- Thinner drainage layers when compared to traditional solutions.
- Rapid installation.
- Enhances the performance of structural waterproofing by providing an additional barrier that prevents the majority of the water reaching the structure.
- High puncture resistance

#### Preparation:

We would recommend the application of a primary waterproofing layer(s); Sovereign Aqueous Bitumen, prior to applying the Geo-Deck.

It is essential that if the surface is dry and absorbent it must be lightly dampened with water, which will assist application. Ensure a thoroughly clean, sound and stable substrate is achieved.

Apply Sovereign Aqueous Bitumen undiluted to cover 1.0m²/litre. Use a soft brush or broom, damping it before and occasionally during use to avoid clogging and assist application. The finished application should be free from weeps and of uniform thickness. When this coat is dry apply a second in the same way, covering 1.5 m²/litre.

When dry, the membrane should be black and shiny. Any brown colouration or movement between the film and backing should be taken to mean that drying is incomplete.

#### Application:

If the waterproofing is up to 2.0m high, apply the sheet horizontally straight from the roll. On higher walls, apply the sheet vertically from the top to bottom as in a usual wallpaper hanging fashion. Use a carpet knife to cut the sheet to the requisite length across the roll. Each width of sheet membrane is to be butted up, edge to edge and sealed on the membrane side (not geo-textile side) with corner strip to maintain a watertight seal.

The permanent filtration geo-textile should face the soil/backfill. If the exact level of the ground surface is not known, attach the sheets approximately 100mm above the upper edge of the waterproof layer. After backfilling, trim the sheets in parallel with the surface of the soil. At the bottom, sheets should end at the land drain, which should be surrounded on all sides with a layer of permanent filtration material.

Once the ground level is known, sheets may be attached using fixing plugs arranged along a horizontal line, after which a suitable and appropriate flashing detail must be installed at the upper edge and covering any fixings.

#### Associated Products:

- SovDrain Membrane Plug for fixing
- SovDrain Corner Strip for juncture sealing
- SovDrain Aquaduct for drainage facility



# SovDrain Membrane and Membrane Lath Plugs

Sovereign SovDrain Membrane and Membrane Lath Plugs are manufactured from polypropylene, giving a corrosion resistant fixing. They are intended for use in damp-proofing and waterproofing applications, to secure SovDrain Membranes to the substrate, as part of the SovDrain Waterproofing System.

Application requires drilling an 8mm diameter hole through the membrane stud and into the solid base material substrate, and driving home, ensuring an effective seal is achieved using SovDrain Sealing Rope.

Membrane Lath Plug Technical Data			
Plug size:	8 x 70mm		
Plug head:	35mm diameter		
Package:	250 plugs		_
Pull out performance:	Concrete 0.25 kN	Solid brick 0.23 kN	Concrete block 0.18 kN
Membrane Plug Technical Data	l		
Plug size:	10 x 70mm		
Plug head:	35mm diameter		
Package:	100 plugs		
Pull out performance:	Concrete 0.25 kN	Solid brick 0.23 kN	Concrete block 0.18 kN





# **SovDrain Sealing Rope**

SovDrain Sealing Rope is a synthetic butyl/rubber based extruded bead sealant. It is primarily used for sealing membrane joints, and as a sealing collar for fixing plugs where they penetrate membranes, as part of the SovDrain Waterproofing System.

#### Technical Data

Colour:	Black	Dynamic Tensile	Adhesion: 18N/cm²
Dynamic Sheet	Adhesion: 14N/cm²	90° Peel Adhesion:	7N/cm
180º Peel Adhesion: 1	1N/cm	Specific Gravity:	1.6g/cm <sup>3</sup>
Moisture Vapour Transmission Rate:	0.24g/m <sup>2</sup> /24 hours/mm	Service Temp. Range:	-40 to 90°C
Shelf Life:	12 months		

#### Features:

- Excellent adhesion
- Very high tack
- Remains flexible throughout service life
- Easy and accurate to use
- Very little waste and no mess
- Soft composition ensures it is highly conformable
- Good UV resistance

#### Preparation:

All surfaces must be thoroughly clean, dry and free from frost, grease and loose material.

#### Application:

Apply direct from the reel onto one surface and press sufficiently along its length to achieve good initial adhesion. Remove siliconised backing paper and offer other surface to the Sealing Rope and push firmly to ensure an effective joint along the full length. When used as a collar for fixing plugs, cut Rope to length, remove siliconised backing paper and wrap around plug shank against fixing head prior to fixing.

#### Packaging:

Supplied as a single roll of extruded Sealing Rope on a siliconised release paper.





# **SovDrain Sealing Tape**

Sovereign SovDrain Sealing Tape is a synthetic butyl/rubber based extruded strip sealant. It is primarily used for sealing membrane joints, as part of the SovDrain Waterproofing System.

#### Technical Data

Colour:	Black	Dynamic Tensile	Adhesion: 18N/cm <sup>2</sup>
Dynamic Sheet	Adhesion: 14N/cm²	90° Peel Adhesion:	7N/cm
180° Peel Adhesion: 1	1N/cm	Specific Gravity:	1.6g/cm <sup>3</sup>
Moisture Vapour Transmission Rate:	0.24g/m <sup>2</sup> /24 hours/mm	Service Temp. Range:	-40 to 90°C
Shelf Life:	12 months		

#### Features:

- Excellent adhesion
- Very high tack
- Remains flexible throughout service life
- Easy and accurate to use
- Very little waste and no mess
- Soft composition ensures it is highly conformable
- Good UV resistance

#### Preparation:

All surfaces must be thoroughly clean, dry and free from frost, grease and loose material.

#### Application:

Apply direct from the reel onto one surface and press sufficiently along its length to achieve good initial adhesion. Remove siliconised backing paper and offer other surface to the Sealing Tape and push firmly to ensure an effective joint along the full length.

#### Packaging:

Supplied as a single roll of extruded Sealing Tape on a siliconised release paper.

■ Roll Size: 2 x 28mm x 22.5m
■ Tolerance: Thickness ±0.2mm
Width ±2.0mm





### **SovDrain Channel and Accessories**





#### SovDrain Channel

Sovereign SovDrain Channel is a PVC drainage conduit designed for the control of water ingress in below ground situations.

The channel which is pre-formed in a pentagonal shape with pre-drilled 19mm drainage holes set 125mm apart along its 2m length, SovDrain Channel is fitted around the perimeter of the floor at the vulnerable wall/floor junction.

SovDrain Channel can be used in most waterproofing situations, and is particularly suited for use in conjunction with SovDrain Cavity Drainage Membrane systems. Water entering the building through the walls is controlled behind the SovDrain Membrane and diverted to the Channel at the base of the wall. The water enters the Channel through pre-drilled drainage holes and must then be diverted to a suitable drainage point, either natural (gravity fed) or mechanical (sumps and pumps).

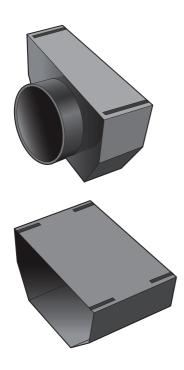
#### SovDrain Channel Outlet

The SovDrain Channel Outlet consists of a pre formed push fit swivel joint 90° PVC bend to allow water to be taken from the channel to the water collection point i.e. sump and pump.

A 40mm PVC pipe can then be fitted into the channel outlet to link it to the sump and pump or water collection point. The swivel action ability of SovDrain Channel Outlet also provides flexibility, which is sometimes needed, when taking into consideration the positioning of the sump and pump.



#### SovDrain Channel and Accessories, continued





Where gravity fed drainage is to be used, the SovDrain Channel End Outlet has been designed to fit directly on the end of SovDrain channel converting the pentagonal shape of the Channel into a round aperture.

Simply solvent weld a 40mm PVC pipe to the outlet this enables any water to be discharged from the Channel into a 'P' trapped gully or to a soakaway.

Note: The Channel End Outlet should not be used to drain water from the Channel directly into foul drainage or into a stack pipe due to a risk of pungent smells entering into the Channel peripheral drainage system. It is not possible to insert a non-return valve, as this cannot operate properly in the horizontal position.

SovDrain Channel Connector is simply used to connect two pieces of SovDrain Channel together.



# SovDrain Jetting Eye and Corner Piece

SovDrain Jetting Eyes (cleaning ports/rodding eyes) should be incorporated into the channel to allow for periodic inspection, maintenance and cleaning of the drainage system.

The jetting eye has a removable screw cap for access this can also be extended with the simple addition of 40mm diameter pipe solvent welded over the existing. It is recommended that 1 Jetting Eye be fitted for at least approximately every 10 linear metre run of SovDrain Channel installed.

SovDrain Corner Pieces are used in a 90° change in direction of the SovDrain Channel. The Corner piece has a jetting eye incorporated for periodic inspection, maintenance and cleaning of the drainage system.



# **SovDrain Sump and Pump Systems**

The SovDrain Sump and Pump Systems are designed to collect and discharge ground water when used with SovDrain Cavity Drainage Membrane Systems.

900 Series Pump			
1.5 metres:	166 litres per minute	3.0 metres:	117 litres per minute
4.6 metres:	58 litres per minute	Shut off head:	Greater than 4.6m
153 Series Pump			
4.0 metres:	175 litres per minute	6.0 metres:	133 litres per minute
8.0 metres:	83 litres per minute	Shut off head:	Greater than 9.8m
510 Series Pump			
1.5 metres:	129 litres per minute	3.0 metres:	83 litres per minute
4.6 metres:	42 litres per minute	Shut off head:	Greater than 6.0m

#### Introduction:

Ground water enters via the drained cavity of the membrane system into a drainage facility with channels/pipes which then direct water to the Sump chamber. This chamber comes complete with perhaps the best sump pump(s) of its type available for discharging the water and subsequently dewatering basements, etc.

#### Features:

Included with every Single Sump and Pump System are:

- Sump Chamber and Sump Chamber Lid
- Chamber Lid Sealing Tape
- Zoeller Sump Pump
- Sump Pump Check Valve
- 1x 'O' seal
- Internal Pipework

#### Zoeller Pumps:

The Pump is a high end cast iron ZOELLER Sump Pump and comes complete with a solid mechanical float switch. The Pump, manufactured in the USA, was chosen due to its legendary reliability and build quality. The standard ZOELLER 900 series Pump Sump has a performance capacity of 117 litres per minute at a dynamic head of 3 metres. It resists clogging and can pump up to 12.5mm solids. This pump will perform reliably for many years and comes with a guarantee of 1 year, which can be extended to 3 years if required (at a nominal additional charge).

Alternatively if the volume of water is large or a greater head is required to remove any water ingress at any stage, then the larger capacity ZOELLER 153 Pump Sump should be considered. The ZOELLER Model153 has a performance capacity of 133 litres per minute at a dynamic head of 6 metres. It resists clogging and can pump up to 19mm solids.

#### Sump Chamber:

The Sump Chamber is made of polypropylene with a Patented airtight lid which prevents odours, moisture and pump noise, etc. from escaping, with the lid being strong enough to withstand foot traffic.

Entry ports for inlet and discharge pipes (external pipework not included) are cut into the sump where required, and then sealed with a suitable 'O' ring.

#### Series 900 Single Pump & Sump Station:

The SovDrain standard Single Pump and Sump Station is designed to collect ground water from a SovDrain Cavity Drainage Membrane System installation.

This station is generally incorporated where water ingress/ running water is not present, or where there is no history of ingress nor any water expected. As such the Single Pump and Sump Station should be used in damp areas only and simply installed as a means of potential protection.

#### Series 900 Twin Pump & Sump Station:

The SovDrain Twin Pump and Sump Station once again is designed to collect ground water from a SovDrain Cavity Drainage Membrane System Installation.

This station is generally incorporated with a Membrane installation for below ground/earth retaining situations, and where water ingress/running water has been or may be encountered.

#### SovDrain Sump and Pump Systems, continued

#### Ultra back up Sump Pump & Power System:

As an addition to the Sovereign Single Sump and Pump we recommend a back-up pumping system. The Sovereign Ultra Pump & Sump station includes a standard primary pump with the addition of a smaller second DC back up pump, a 120amp Marine battery and charger unit.

In the event of a pump failure due to power outage, or if the water ingress is such that the main Pump cannot cope, then the smaller Pump will automatically cut in as required, taking its power from the battery which automatically re-charges (when the power is restored) via a 'Smart' charging system.

The reliable Sovereign Ultrasump System is designed and manufactured specifically for basement applications. If the Primary Sump Pump was to fail, due to power outage, an unlikely Pump failure, or a sudden increase of water ingress and water levels start to rise, then the back up system will automatically cut in. The Ultrasump's DC Pump will pump out a total of up to 41600 litres/9170 gallons on a new, fully charged battery (equal to 7579 litres/1667 gallons per hour), giving time to restore the primary pumping system. The Pump Battery will also automatically re-charge using the electronic 'smart' charger when the mains power is restored.

An additional optional extra, is a battery switcher which allows for two batteries to be hooked up, doubling the pumping capacity of the DC Pump. A high water level alarm is also included which will sound an alarm, if for any reason the water level rises above a predetermined level.

#### Installation Notes:

The chamber should be placed on a minimum 100mm concrete base.

1.5inch/38mm Class C solvent-welded pressure discharge pipe to be used on the Pump's discharge side.

All connections should have PTFE tape (not supplied) to any threaded components to form a water tight seal.

After the positions of the inlet and discharge pipes are determined, and holes are out out of the chamber as required, insert the 1.5 inch class 'C' discharge pipe and seal using suitable 'O' ring seals and connect pipes to the main Pump (and back up Pump, if being used).

Lower into excavation and finish off all pipe and electrical cable connections. The unit is then filled with water to prevent floatation, the excavation hole is then backfilled with a minimum of 100mm concrete around the sump chamber.

The sump chamber lid would normally be flush with the screed/floor covering to be laid on top of the membrane. Where the Ultrasump is specified, the back up Pump sits on a raised nib at the left rear of the standard pump and the pipe work is interconnected.

Where there are no drainage channels/pipes fitted or where there is a high water table: A 100mm wide and 75mm deep drainage gutter/canal to be left around the sump chamber, to be filled at a later stage with approximately 20mm gravel.

A series of 10mm holes to be drilled approximately every 100mm around the circumference of the sump chamber at a height of approx 50mm lower than the top of the floor slab (not the screed/floor covering). This is to allow any water from underneath the floor membrane to flow into the channel and into the sump.





### **Foulmax Pump**

Transfers sewage/grey water from areas where gravity flow is not available. The product is suitable for installations associated with small property extensions, conversions, garden buildings, basements and cellars where wastewater from toilet, washbasin, and/or shower needs to be transferred to foul sewer or treatment plant.

#### Features and Benefits:

- Zoeller Pump System reliability and value guaranteed.
- Cast iron pump for silent running and efficient motor cooling for prolonged working life.
- Non clogging vortex impeller pump has 50mm solids handling capability.
- Automatic pump with robust float operation.
- Cast iron pump.
- Motor has thermal overload protection for extended life.
- Full 185 litre capacity heavy duty moulded polypropylene basin.
- 610 x 610mm basin minimises excavation requirement.
- Anti-floatation device minimises risk of basin 'floating'.
- Additional flat areas for optional inlet installations (drilled on site).
- Pedestrian rated cover.
- Stainless steel bolts and hardware for exceptional corrosion resistance.
- All components included for speedy installation.
- One Year Warranty as standard.

#### The Foulmax Sewage Pumping System includes:

- One 50mm solids sewage handling pump.
- One 610mm x 610mm polypropylene moulded chamber.
- One polypropylene pedestrian rated cover.
- One non-return valve.
- Internal 50mm PVC discharge pipe work.



### **Foulmax Pump 267**

The Foulmax Pump 267 transfers sewage/grey water from areas where natural gravity flow is not available. The product is suitable for installations associated with new builds/large property extensions, conversions, garden buildings, basements and cellars where wastewater from toilet, washbasin/shower needs to be transferred to foul sewer or treatment plant.

#### Features and Benefits:

- Manufactured by Zoeller Pump Company reliability and value guaranteed.
- Durable cast iron construction
- Corrosion resistant powder coated epoxy finish.
- Non clogging engineered thermoplastic vortex impeller design.
- reset thermal overload protected for extended life.
- Upper sleeve bearing and lower ball bearing running in bath of oil.
- Motor 50 Hz, oil filled, hermetically sealed, automatic
- Operates at temperatures to 54°C in effluent applications.
- Carbon/Ceramic seals.
- Auto and Manual options.

- Comes with 10m cord & UK plug.
- Max Head: 4.2 metre.
- Passes 50mm spherical solids.
- Stainless steel lifting handle.
- Assembled with stainless steel bolts.
- Weight: 20 Kilos.
- One Year Warranty as standard.





# **Timber Preservation**

Sovereign's Timber Preservatives provide highly effective preventative and remedial treatments to combat Wet and Dry Rot and infestations of damaging Wood Boring Insects.

- **Deepkill:** A deep penetrating cream emulsion, perfect for use on thick sectioned timbers, but can also be used on all types of timber including floorboards, roofing timbers and furniture. Deepkill will kill off and protect against wood-rotting fungi and wood-boring insects. On application, the cream penetrates into the timber carrying the active ingredients deep below the surface, quickly eliminating existing attack and preserving the timber.
- Sovereign Woodworm Killer (BPR): A concentrated micro-emulsion for the eradication and prevention of wood boring insect attack in both hard and soft woods. It penetrates deeply and has a fast drying time.
- Sovereign Sovaq Fungicidal Wall Solution Extra (FWS Extra): Used for the eradication of Dry Rot (Serpula lacrymans) in both masonry and timber. FWS Extra contains two active ingredients to give rapid and visible results. Being a micro emulsion it will give deeper penetration than conventional products. It can also be used in the gauging water when treated areas are re-rendered.
- Sovereign Sovaq Dual Purpose Timber Treatment (BPR): A super-concentrated microemulsion for the eradication and prevention of wood boring insects and Wet and Dry Rot in both hard and soft woods. It can also be used to prevent blue stain in service.
- Timber Treatment: Contains a resin, pigments in a low odour solvent. The product also contains biocides for the protection of the coating. Sovereign Timber Treatment can be used for pre-treating all types of soft or hard wood. Sovereign Timber Treatments are designed to give a fast drying quality treatment with a UV stable colour that can be subsequently painted or stained.
- Timber Preservative: A ready-to-use solvent based wood preservative for amateur, professional and industrial use against wood rot and blue stain. It can be used on wood components above grounds such as windows, exterior doors, cladding, fences, eaves and carports.
- Woodfiller: Sovereign Woodfiller is a two pack, rapid setting polyester filling compound for timber. It is ideal for repairing old rotten timber and for new work where imperfections or knots require filling.
- Stainable Woodfiller: Sovereign Stainable Woodfiller is a two pack, rapid setting polyester filling compound for timber. It is more absorbent than our the standard Sovereign Woodfiller so it will accept wood stains more readily. It is ideal for repairing old rotten timber and for new work where imperfections or knots require filling.

# Deepkill

Sovereign Deepkill is a deep penetrating cream emulsion, perfect for use on thick sectioned timbers, but can also be used on all types of timber including floorboards, roofing timbers and furniture. Deepkill will kill off and protect against wood-rotting fungi and wood-boring insects. On application, the cream penetrates into the timber carrying the active ingredients deep below the surface, guickly eliminating existing attack and preserving the timber.

Form:	Cream Emulsion.
Pack Sizes:	7.5 litres.
Colour(s):	White, dries clear.
HSE No:	10149.
Content:	0.35% w/w Permethrin, 0.85% w/w Propiconazole, 0.40% w/w IPBC.
Properties:	Used for the curative and preventative preservation of timber from wood-destroying fungi and wood boring insects. Can be used on internal and external timber.

Preparation: Ensure timber is free from any dirt or debris, and that any coatings have been removed. Once dry, the timber returns to its original colour and will accept coatings such as paint and varnish as normal

General: Can be used on all types of soft and hard wood. Particularly useful for thick sectioned timber such as floor ioists and roof supports, especially timber fixed into wall sockets that are not protected with a membrane.

External timber treated with Deepkill must be protected from the weather i.e. with a coating

Application Rate: 250ml per m2 of timber surface.

Application: Can be applied using a Deepkill Gun, brush, spray or palette knife. Gun beads of Deepkill at 3" (75 mm) centres onto the timber. This is especially useful for large cross section timber. For thin-sectioned timber apply as required with a brush etc. Care should be taken to prevent contamination of adjacent plaster.

Clean up: Tools can be cleaned with soapy water.

General Maintenance: No further maintenance regime is required after application. However general building maintenance is required to prevent water ingress

Shelf Life: 24 months when unopened

Note: This product is fully supported under the BPR.















# Sovaq Woodworm Killer (BPR)

Sovereign Woodworm Killer (BPR) is a concentrated micro-emulsion for the eradication and prevention of wood-boring insect attack in both hard and soft woods. It penetrates deeply and has a fast drying time.

Form:	Liquid Concentrate.
Pack Sizes:	1 litre.
Colour(s):	Dries clear.
HSE No:	10125.
Content:	62.5g/L Permethrin.
Properties:	Effective control of wood boring insects. Can be used on damp timber during the drying out process.
Guarantee:	When remedial work is carried out by a Sovereign Approved Contractor the work is eligible for a 30 year Protection Scheme Guarantee.

Preparation: Timbers to be treated should be clean and sound and the source of any dampness permanently cured. Timber must be bare, with all surface coating such as paint and varnish removed. Dust should also be removed, preferably by vacuuming.

Dilution: Sovereign Woodworm Killer (BPR) must be diluted prior to use. A 1 litres should be diluted with water to make 25 litres of ready to use solution. Shake well before use. Always pour the concentrate into water, not the other way round. For best results the concentrate and water should be at room temperature. For both mixing and application the minimum temperature is 5°C.

Application: Sovereign Woodworm Killer (BPR) can be applied by brush or spray. When spraying use a low pressure, non-atomising pesticide sprayer. Ensure the correct coverage is achieved, as application of insufficient material may not prevent future attacks.

The best way to achieve the correct coverage is to make an estimate of the TOTAL SURFACE AREA to be treated. The required quantity of diluted product should then be made to treat this area, which may take two applications depending on the porosity of the timber.

When multiple applications are required to achieve the correct coverage, then a drying time of 30 minutes between coats should be allowed.

Application Rate: Apply at a rate of 1 litre of diluted product per 3.3m2 of timber surface for active attacks and 1 litre per 5m2 as a preventative treatment.

Maintenance: Untreated timber should not be allowed to become damp. For long-term protection treated timber should not be subject to prolonged wetting. External timber must be protected with a waterproof coating such as a paint or stain.

 ${\bf Storage:} \ \ {\bf Between 5 \ and \ 30^{o}C. \ \ Store \ concentrates \ and \ diluted \ products \ correctly \ labelled, in safe, secure \ conditions.$ 

Shelf Life: 24 months when unopened.

Note: This product is fully supported under the BPR.













### Sovaq Fungicidal Wall Solution Extra

Sovereign Sovag Fungicidal Wall Solution Extra (FWS Extra) is used for the eradication of Dry Rot (Serpula lacrymans) in masonry. FWS Extra contains two active ingredients to give rapid and visible results. Being a micro emulsion it will give deeper penetration than conventional products. It can also be used in the gauging water when treated areas are re-rendered.

Form: Liquid Concentrate Pack Size: 1 and 5 litres. Colour(s): Orange, dries clear. Content: 4.8% w/w I.P.B.C. and 24.1% Benzalkonium Chloride. HSE No: 7913

#### General:

Active fungal attacks occur because of the presence of moisture in the building. The location and rectification of the cause of the moisture and subsequent drying out of existing dampness is an essential part of the remedial treatment. When rot in timbers is discovered immediate steps should be taken to determine the full extent of the problem and the species of fungus involved in the decay. The following course of action should be adopted if Dry Rot is discovered in a building:

- 1. Carefully inspect all timbers in the vicinity of the observed fungal attack, taking up floorboards, removing skirtings, etc. where necessary, to identify the full extent of the problem. Examine woodwork in adjoining areas. Confirm retained timber is suitable for treatment. Where there is doubt consult a Structural Engineer.
- 2. Locate and rectify the source(s) of dampness originally responsible for the fungal outbreak. Pay special attention to the outside of the building for potential causes of dampness such as leaking rainwater goods, bridged damp-proof courses etc.
- 3. Inspect adjacent plasterwork for signs of fungal growth or strands. Flaking, bulging or cracking of the plaster should be investigated. Damp patches on plaster should also be investigated. The spread of fungus can be determined by removal of plaster samples at regular intervals
- 4. Cut out and remove all decayed timber extending 300 to 450mm beyond the last visible signs of fungal growth. Remove and isolate affected timber

- 5. Strip off any plaster found to contain or suspected to contain the fungus for some 300mm (1 foot) adjacent to woodwork at risk.
- 6. Remove all built-in timbers (lintels, bonding timbers) within the affected wall areas and replace with steel or concrete, in accordance with Local Building Regulations.
- 7. Random bricks in cavity wall constructions should be removed to assess spread of fungus in this area.
- 8. Remove all dust, dirt, rubble and sawdust, which may contain strands of fungus
- 9. Sub-floor oversites may be treated with Sovaq FWS Extra, but only where such treatment is considered both necessary and justified.
- 10. Check ventilation to hollow or suspended floors. Ensure air bricks and ventilators are cleared and properly placed to allow adequate ventilation
- 11. Thoroughly clean all wall areas and oversites to remove any surface fungal growth or strands, using a stiff brush where necessary.
- 12. Sterilise all exposed wall areas with Sovag FWS Extra fluid through surface application or irrigation via holes drilled in the wall. Surface applications should be made by brushing or by coarse spray (do not use atomiser sprays). Where fungal growth is extensive and has penetrated the structure, the wall should be drilled deeply (two thirds depth) at 230mm (9") staggered centres at a downward angle into mortar beds to ensure full penetration of Sovag FWS Extra.













### Sovaq Fungicidal Wall Solution Extra, continued

#### Irrigation:

Irrigation should only be undertaken when there is demonstrable need for deep penetration of Sovaq FWS Extra fluid as in the following circumstances:

- A. To impose a cordon sanitaire between an outbreak and timbers in the immediate vicinity that are as yet unaffected.
- B. To deal with fungus and protect residual timbers in places where stripping of the wall for full examination and surface treatment is undesirable.
- C. For saturation of the base of an infected wall without a DPC membrane, from which the fungus may have become firmly established on timber debris in adjacent soil.
- D. In certain circumstances in which party walls between properties are infected.

#### Application Rates:

Irrigation: 10 litres/m³
Spray: 3 to 4m²/litre

Dilution: Dilute 1:24 with water. 1 litre of concentrate will

produce 25 litres of ready to use solution. **Storage:** Between 5 and 30°C.

Shelf Life: 12 months unopened.
Clean up: Soap and water.



# Sovaq Dual Purpose Timber Treatment (BPR)

A super-concentrated micro-emulsion for the eradication and prevention of wood boring insects and wet and dry rot in both hard and soft woods. It can also be used to prevent blue stain in service.

Form:	Liquid Concentrate.
Pack Size:	1 litre.
Colour(s):	Dries clear.
HSE No:	10126.
Content:	31.25g/L Permethrin, 93.75g/L Propiconazole and 31.25g/L IPBC.
Properties:	Effective control of wood boring insects, rot and blue stain. Can be used on damp timber during the drying out process.
Guarantee:	When remedial work is carried out by a Sovereign Approved Contractor the work is eligible for a 30 year Protection Scheme Guarantee.

Preparation: Timbers to be treated should be clean and sound and the source of any dampness permanently cured. Timber must be bare, with all surface coating such as paint and varnish removed. Dust should also be removed, preferably by vacuuming.

Dilution: Sovereign Sovaq F/I must be diluted prior to use. A 1 litre bottle should be diluted with water to make either 12.5 or 25 litres of ready to use solution depending on application. Shake well before use. Always pour the concentrate into water, not the other way round. For best results the concentrate and water should be at room temperature. For both mixing and application the minimum temperature is 5°C.

Application: The product can be applied by brush or spray. When spraying use a low pressure, non-atomising pesticide sprayer. Ensure the correct coverage is achieved, as application of insufficient material may not prevent future attacks.

The best way to achieve the correct coverage is to make an estimate of the TOTAL SURFACE AREA to be treated. The required quantity of diluted product should then be made to treat this area, which may take two applications depending on the porosity of the timber. When multiple applications are required to achieve the correct coverage then a drying time of 30 minutes between coats should be allowed.

Application Rate: As a curative for insect attack or preventative blue stain treatment dilute 1 litre of product with 12.5 litres of water. Apply at a rate of 3.3 – 5.0m² per litre.

As a preventative treatment or insects and rot dilute 1 litre of

concentrate with 24 litres of water and apply at a rate of 5m<sup>2</sup> per litre.

Maintenance: Untreated timber should not be allowed to

become damp. For long-term protection treated timber should not be subject to prolonged wetting. External timber must be protected with a waterproof coating such as a paint or stain.

Storage: Between 5 and 30°C.

**Shelf Life:** 2 years when stored as directed. Store concentrates and diluted products correctly labelled, in safe, secure conditions.

Note: This product is fully supported under the BPR.















### **Timber Treatment**

Contains a resin, pigments in a low odour solvent. The product also contains biocides for the protection of the coating. Sovereign Timber Treatment can be used for pre-treating all types of soft or hard wood. Sovereign Timber Treatments are designed to give a fast drying quality treatment with a UV stable colour that can be subsequently painted or stained.

Form:	Liquid Concentrate.
Pack Size:	5, 25 and 200 litres.
Colour(s):	Straw, Mahogany, Red Cedar and Brown (Brown contains Bitumen so cannot be over-painted).
Properties:	Provides protection from initial manufacture to installation. Once installed a full weatherproof timber coating should be applied, such as Sovereign's SX70 Woodstain or primer and paint.

**Preparation:** Timber should be dry, clean and free from sawdust.

**Dilution:** Suitable for all types of soft and hardwood applications such as: Windows, doors/frames, skirting and rails, floorboards, roofing timbers, soffits, sheds, fencing and garden furniture.

#### Dip Tank Application:

- Empty and clean out the tank thoroughly on a regular basis (at least every 6 months).
- 2. Always cover when not in use.
- 3. Stir gently before use.
- Use as much 'old' material up as possible before topping up the tank.
- 5. Do not dip damp wood.
- The wood to be dipped must be free from sawdust, wood shavings, or other extraneous materials.
- Use a grate raised above the bottom of the tank so that any debris, etc. is deposited below.
- Ensure that the tank is not contaminated with, for example, solvent washings from paint brushes, etc. as this can also lead to settlement/separation.
- Do not blend with other products, as they could be incompatible. A gel forming in the tank and/or loss of colour indicates the tank is excessively contaminated with sawdust and requires empting, cleaning and new treatment using.

#### Application Rates:

 Dip:
 3 minutes minimum

 Spray:
 6 - 7m²/litre

 Brush:
 4 - 5m²/litre

Maintenance: Timber coated with Sovereign Timber Treatment should have a further protective coating applied as soon after installation as possible. Traditional wood coatings such as paints, stains and varnishes are suitable.

Brown Timber Treatment should not be covered in paint due to its bitumen content. Once weathered it can be primed with Sovereign Stain Blocking Primer and then painted with e.g. gloss. Normally Brown Timber Treatment is used on rough sawn timber such as sheds and fences and is reapplied as and when required.

Storage: Between 5 and 30°C.

Shelf Life: 12 months when stored as directed.











### **Timber Preservative**

A ready-to-use solvent-based wood preservative for amateur, professional and industrial use against wood rot and blue stain. It can be used on wood components above grounds such as windows, exterior doors, cladding, fences, eaves and carports.

Form: Liquid.

Pack Size: 5, 25 and 200 litres.

Colour(s): Clear.

Content: 0.75% w/w IPBC and 0.24% Propiconazole.

Properties: Sovereign Wood Preservative will prevent the onset of wet rot, dry rot and blue stain. It is based on a non flammable, deep penetrating solvent.

Preparation: Sovereign Timber Preservative can be applied by brush, spray, dip and double vacuum impregnation. Ensure timber is free from any dirt or debris, and that any coatings have been removed.

Timber must be dry (<18% MC) and free of dust and coatings to ensure penetration into the surface.

Timber must be sanded to clean and bright and all workings carried out before application. Do not sand treated timber as this will remove the upper layer with the highest concentration of protection.

After application allow the solvent to fully dry from the timber before applying any further coatings. The drying time is dependant on many factors and we would recommend that a minimum of 24 hours is allowed in good drying conditions and longer in low temperatures etc. Timber should be stacked to allow a good airflow around treated materials.

General: Suitable for all types of soft and hardwood applications, including windows and doorframes; skirtings and rails; floorboards; roofing timbers; soffits; sheds and fencing; and garden furniture. External timber must be protected with a weatherproof coating.

Application Rates:

Brush/Spray: 5m<sup>2</sup>/litre

Dip: 3 minutes minimum

**Dilution:** Timber Preservative must never be diluted.

**Clean Up:** Brushes and equipment should be cleaned with Sovereign Turps Substitute.

Storage: Between 5 and 30°C.

**Shelf Life:** 12 months when stored as directed. **Note:** This product is fully supported under the BPR.

A Safety Data Sheet is available on request for this product.

#### Dip Tank Application:

- Empty and clean out the tank thoroughly on a regular basis (at least every 6 months).
- 2. Always cover when not in use.
- 3. Stir gently before use.
- Use as much 'old' material up as possible before topping up the tank.
- 5. Do not dip damp wood.
- The wood to be dipped must be free from sawdust, wood shavings, or other extraneous materials.
- Use a grate raised above the bottom of the tank so that any debris, etc. is deposited below.
- Ensure that the tank is not contaminated with, for example, solvent washings from paint brushes, etc. as this can also lead to settlement/separation.
- Do not blend with other products, as they could be incompatible. A gel forming in the tank and/or loss of colour indicates the tank is excessively contaminated with sawdust and requires empting, cleaning and new treatment using.















Sovereign has developed and markets a comprehensive range of liquid and cream Water Repellents, including the market-leading Weather-Chek Facade Cream.

Part of a market-leading range of remedial damp-proofing and treatment products, Sovereign Water Repellants offer a highly effective barrier to penetrating damp.

These easily applied, clear drying treatments are ideal for protecting a wide variety of brick, stone, concrete, masonry, render and other porous surfaces.



### Woodfiller

Sovereign Woodfiller is a two pack, rapid setting polyester filling compound for timber. It is ideal for repairing old rotten timber and for new work where imperfections or knots require filling.

Form:	Thixotropic Paste.
Pack Size:	1.5kg pack, extra hardener is available in packs of six tubes.
Colour(s):	Natural, Mahogany, White and Oak.
Content:	Polyester resin and dibenzoyl peroxide.
Properties:	Sovereign Woodfiller cures rapidly and can be sanded in as little as 12 minutes. It forms an extremely strong bond to timber and provides a permanent rot proof repair.

Usage/Preparation: When used in new joinery it is important that all traces of sawdust are removed and that the timber is clean and dry. A much stronger bond will be formed if the timber is roughened with coarse sandpaper before application. Corners or edges should be pinned before the application of Sovereign Woodfiller.

When filling old timber where rot has been a problem the timber must be allowed to dry. Cut back any weak or rotten timber to sound wood and treat with Sovereign Clear Timber Preservative. Allow to dry before filling.

Mixing and Application: Blending the coloured Sovereign Woodfillers can create special shades to match a specific wood, however, this must be done prior to the addition of the hardener.

Stir the paste well before use

As a guide a golf ball size portion of the paste will require a strip of hardener 25mm long. It is essential that the hardener be mixed in thoroughly. Failure to do so will result in uneven cure. Adding more or less hardener as required can vary the working time. Apply Sovereign Woodfiller with a spatula or plastic spreader, filling slightly proud to allow the cured material to be sanded back to the level of the surrounding timber. Once the filler has started to harden it is then ready for sanding. Containers must be firmly closed after opening.

Clean up: Once Sovereign Woodfiller has started to cure it is extremely difficult to remove and can only be done mechanically. Whilst the product is still soft use a dry cloth to wipe of residue from tools.

Storage: Between 5 and 30°C. Shelf Life: 12 months unopened.

#### Technical Data

Mixing ratio	40:1	
Useable life @ 20°C	5 minutes	
Sandable time @ 20°C	12 minutes	
Flash point	31°C	
Impact resistance	5.08 Joules	
Chemical resistance	Good	











### Stainable Woodfiller

Sovereign Stainable Woodfiller is a two pack, rapid setting polyester filling compound for timber. It is more absorbent than our standard Sovereign Woodfiller, so it will accept wood stains more readily. It is ideal for repairing old rotten timber and for new work where imperfections or knots require filling.

Form:	Thixotropic Paste.	
Pack Size:	1 litre pack; extra hardener is available in packs of six tubes.	
Colour(s):	Natural.	
Content:	Polyester resin and dibenzoyl peroxide.	
Properties:	erties: Cures rapidly and can be sanded in as little as 12 minutes. It forms an extreme strong bond to timber and provides a permanent rot proof repair.	

Usage/Preparation: When used in new joinery it is important that all traces of sawdust are removed and that the timber is clean and dry. A much stronger bond will be formed if the timber is roughened with coarse sandpaper before application. Corners or edges should be pinned before the application of Sovereign Woodfiller.

When filling old timber where rot has been a problem the timber must be allowed to dry. Cut back any weak timber back to sound wood and treat with Sovereign Clear Timber Preservative. Allow to dry before filling.

Mixing and Application: Stir the paste well before use.

As a guide a golf ball size portion of the paste will require a strip of hardener 25mm long. It is essential that the hardener be mixed in thoroughly. Failure to do so will result in uneven cure. Adding more or less hardener as required can vary the working

Apply Sovereign Stainable Woodfiller with a spatula or plastic spreader, filling slightly proud to allow the cured material to be sanded back to the level of the surrounding timber. Once the filler has started to harden it is then ready for sanding. Containers must be firmly closed after opening. It should be

noted that whilst Sovereign Stainable Woodfiller will accept a stain, the area filled would never exactly match the surrounding timber. This is due to the differences between timbers and the fact that the grain will be missing in filled areas.

Clean up: Once Sovereign Stainable Woodfiller has started to cure it is extremely difficult to remove and can only be done mechanically. Whilst the product is still soft use a dry cloth to wipe of residue from tools,

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.

#### Technical Data

Mixing ratio	40:1	
Useable life @ 20°C	5 minutes	
Sandable time @ 20°C	12 minutes	
Flash point	31°C	
Impact resistance	5.08 Joules	
Chemical resistance	Good	









# **Timber Finishing**

SX70 and AQ70 offer a complete decorative protection system for wood in a range of popular colours. Both products are easily applied directly to bare wood without need for primer or undercoat. Application of just two coats delivers a superb finish that allows the beauty of the natural grain to shine through.

The products in the Sovereign Decorative Wood Protection range are ideally suited for the treatment of hard or soft wood in external applications. Both SX70 and AQ70 offer superb coverage, delivering an attractive, long-lasting finish to a wide variety of window frames, fascias, doors, cladding, fencing and garden furniture, and can also be used on interior woodwork.

- SX70 Basecoat: Sovereign SX70 Basecoats are solvent-based coatings for use on all types of untreated soft or hard wood. Basecoats are designed to give a good degree of protection from the workshop until fitted on site. As with all SX70 products Basecoat is microporous and as such allows the wood to breathe.
- SX70 Woodstains: Sovereign SX70 Woodstain is a high quality solvent based woodstain, containing a flexible alkyd resin along with water repellents, pigments, flow additives, UV absorbers and a broad-spectrum fungicide. Sovereign SX70 Woodstains are fully compatible with the SX70 range of Basecoats and Topcoat.
- SX70 Topcoat: Sovereign SX70 Topcoat is a solvent based coating for use as a finish coat over SX70 Woodstains, to enhance the colour and give a semi-sheen finish. Sovereign SX70 Topcoat is applied by brush to give a protective, clear topcoat with water repellent, UV resistant and anti fungal properties.
- AQ70 Woodstain: Sovereign AQ70 is a premium quality, high performance, water-based woodstain, based upon a blend of acrylic and polyurethane polymers along with water repellent waxes, pigments, flow additives and a broad-spectrum fungicide.

### **SX70 Basecoat**

Sovereign SX70 Basecoats are solvent-based coatings for use on all types of untreated soft or hard wood. Basecoats are designed to give a good degree of protection from the workshop until fitted on site. As with all SX70 products Basecoat is microporous and as such allows the wood to breathe.

Form:	Ready to use Liquid.
Pack Size:	5 and 25 litres.
Colour(s):	Pine and Mahogany.
Content:	Long oil alkyd resin and speciality additives.
Properties:	As with all SX70 products Basecoat is microporous and as such allows the wood to breathe. SX70 Basecoats can be applied by brushing, dipping or spraying to give a good degree of water repellency and anti fungal growth. SX70 Basecoats, once applied, should be stained or painted as normal with a conventional paint/stain system. This must be done within 3 months of SX70 Basecoat application.

**Usage/Preparation:** New timber should be lightly sanded in the direction of the grain and then dusted off.

Oily or resinous timber must first be washed down with Sovereign Turps Substitute or White Spirit and allowed to dry. Shake well or stir by hand using a wooden stick prior to use. Apply using brush, dip tank or spray. Ensure spray equipment can handle solvent-based coatings. Allow to dry. Only one coat is necessary to protect wood prior to finishing.

When used in a dip tank it is imperative that timber is dry and free from sawdust. Failure to comply will result in sludge formation.

**Limitations:** Sovereign SX70 is NOT a sealer and should not be used as knotting primers etc.

**Drying time:** Typically touch dry in 3 to 4 hours under ideal conditions.

Coverage: Approximately 8 to 10m<sup>2</sup>/litre.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.

Clean up: Use Sovereign Turps Substitute, White Spirit or Brush Cleaner.











### SX70 Woodstain

Sovereign SX70 Woodstain is a high quality solvent-based woodstain, containing a flexible alkyd resin along with water repellents, pigments, flow additives, UV absorbers and a broad-spectrum fungicide. Sovereign SX70 Woodstains are fully compatible with the SX70 range of Basecoats and Topcoat.

Form:	Ready to use Liquid.	
Pack Size:	1 and 5 litres.	
Colour(s):	Teak, Red Cedar, Walnut, Black, Mahogany, Pine, White, Cream, Spruce, Antique Pine, Mid Oak and Light Oak.	
Content:	Long oil alkyd resin and speciality additives.	
Properties:	ties: Suitable for all types of soft and hardwood to give a decorative wood finish which is tough, durable, flexible and water resistant in all types of situations, such as doors, windows, skirtings, dado rails, panelling, soffits and barge boards.	

Usage/Preparation: Surfaces must be sound, clean and dry before coating. Timber must have a moisture content of less than 18%. Existing paint coatings must be fully removed back to clean, bare timber. Previously stained timber should have any loose flaky material removed and then the surfaces lightly sanded in the direction of the grain. Moss, mould and algae should be treated with Sovereign Dentolite, the growths removed and the timber allowed to dry. Clean all surfaces of timber with methylated spirit. Some timbers contain extractives that can bleed through coatings; a trial application is recommended.

Resinous deposits should be scraped off and cleaned with methylated spirits. Do not use knotting solutions, allow knots to 'bleed out' through the coating and remove resin with a scraper when necessary. Non-durable external timber should be treated with Sovereign Timber Preservative.

Stir well before use. Do not use straight from the container, decant a small amount into a suitable receptacle; do not put back part-used material into the can.

Application: SX70 is designed to be applied to bare timber or existing woodstains. A minimum of two coats must be applied. Apply using a high quality woodstain brush, working in the direction of the grain using the minimum number of brush strokes.

On new work the first coat should be applied to all sides prior to assembly. End grains should be sealed and the backs of beads and rebates coated, and special attention should be given to the tops and bottoms of doors and the underside of sills.

Metal fixing must be suitable for external use i.e. stainless steel or galvanised. Nail holes should be filled with Sovereign Woodfiller. Apply the second coat as soon as the first has thoroughly dried; around 24 hours in good conditions. Third and subsequent coats can be applied if a deeper colour or greater protection is required.

Do not apply in temperatures below  $10^{\circ}\text{C}$  in damp conditions or when rain is imminent.

**Drying Times:** Typically touch dry in 8 to 16 hours under ideal conditions.

Maintenance: Timber should be inspected regularly to ensure integrity of coating. When recoating becomes necessary thoroughly clean and dry the surface and apply one or two coats of SX70.

Clean up: Brushes cleaned in Sovereign Turps Substitute or White Spirit.

Storage: Between 5 and 30°C up to 12 months unopened.

Limitations: Due to the natural variance in timbers it is essential that the user prepare the timber in the correct manner. Some timber can exude either solvent soluble resins or water soluble tannins that may stain any subsequent coating. If in doubt a test should be carried out. This is especially the case when using white coatings.

**Coverage:** Sanded Pine 10 to 12 m² typically/litre per coat. Figures for sawn softwood timber will be lower. Hardwood coverage rates may be slightly higher.











### SX70 Woodstain, continued

Teak



Light Oak



Red Cedar



Mid Oak



Walnut



Pine



Mahogany



Antique Pine



Spruce



White



Black



Cream



# **SX70 Topcoat**

Sovereign SX70 Topcoat is a solvent based coating for use as a finish coat over SX70 Woodstains, to enhance the colour and give a semi-sheen finish. Sovereign SX70 Topcoat is applied by brush to give a protective, clear topcoat with water repellent, UV resistant and anti fungal properties.

Form:	Ready to use Liquid.
Pack Size:	1 and 5 litres.
Colour(s):	Dries Clear.
Content:	Long oil alkyd resin and speciality additives.
Properties:	SX70 Topcoat will revive the sheen of partially weathered SX70 or increase the sheen of newly coated timber and provide added protection to the timber without darkening the colour.

Usage/Preparation: When applying on to timber newly coated with SX70 Woodstain then the stain must be allowed to dry for 24 hours prior to applying the Topcoat, if left for longer than 72 hours then rub down lightly with inter-coat sandpaper. Weathered SX70 coated timber must be thoroughly clean and dry. Stir well prior to use. Apply one coat only by brush, pad or airless spray.

General: Only for use over existing coloured woodstains. SX70 Topcoat is not suitable for use on external bare timber. If used on internal bare timber then the colour of the timber may change over time due to the action of UV light. Do not use on floors or over white/pastel coatings.

**Limitations:** Sovereign SX70 is NOT a sealer and should not be used as knotting primers etc.

**Drying time:** Typically touch dry in 3 to 4 hours under ideal conditions.

Coverage: Approximately 10m<sup>2</sup>/litre.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.

Clean up: Use Sovereign Turps Substitute, White Spirit or

Brush Cleaner.









### **AQ70 Woodstain**

Sovereign AQ70 is a premium quality, high performance, water-based woodstain, based upon a blend of acrylic and polyurethane polymers along with water repellent waxes, pigments, flow additives and a broad-spectrum fungicide.

Form:	Ready to use Liquid.	
Pack Sizes:	1 and 5 litres.	
Colour(s):	Teak, Red Cedar, Walnut, Black, Mahogany, Pine, White, Spruce, Antique Pine, Mid Oak, Light Oak.	
Properties:	Derties: Suitable for soft and hardwood to give a decorative wood finish which is toug durable, flexible and water resistant in all types of situations, e.g. on doors, windows, skirtings, dado rails, panelling, soffits and barge boards, etc.	

Usage/Preparation: Surfaces must be sound, clean and dry before coating. Timber must have a moisture content of less than 18%. Existing paint coatings must be fully removed back to clean, bare timber. Previously stained timber should have any loose flaky material removed and then the surfaces lightly sanded in the direction of the grain. Moss, mould and algae should be treated with Sovereign Dentolite, the growths removed and the timber allowed to dry. Clean all surfaces of timber with methylated spirit. Some timbers contain extractives that can bleed through coatings; a trial application is recommended.

Resinous deposits should be scraped off and cleaned with methylated spirits. Do not use knotting solutions, allow knots to 'bleed out' through the coating and remove resin with a scraper when necessary. Non-durable external timber should be treated with Sovereign Timber Preservative.

Stir well before use. Do not use straight from the container; decant a small amount into a suitable receptacle; do not put back part used material into the can.

AQ70 is designed to be applied to bare timber or existing woodstains. A minimum of two coats must be applied. Apply using a high quality woodstain brush, working in the direction of the grain using the minimum number of brush strokes.

On new work the first coat should be applied to all sides prior to assembly. End grains should be sealed and the backs of beads and rebates coated, and special attention should be given to the tops and bottoms of doors and the underside of sills. Metal fixings must be suitable for external use i.e. stainless steel or galvanised.

Nail holes should be filled with Sovereign Woodfiller. Apply the second coat as soon as the first has dried, around 1 hour in good conditions. Do not allow more than 24 hours between coats.

Third and subsequent coats can be applied if a deeper colour or greater protection is required.

Do not apply in temperatures below 10°C in damp conditions or when rain is imminent.

**Drying Times:** Typically touch dry in 30 minutes and thoroughly dry in 2 hours. These figures can vary depending upon temperature and humidity.

Maintenance: Timber should be inspected regularly to ensure integrity of coating. When recoating becomes necessary thoroughly clean and dry the surface and apply one or two coats of AQ70.

Clean up: Wash off from hands immediately with warm soapy water. Brushes can be cleaned in water.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.

Limitations: Due to the natural variance in timbers it is essential that the user prepare the timber in the correct manner. Some timber can exude either solvent soluble resins or water soluble tannins that may stain any subsequent coating. If in doubt a test should be carried out. This is especially the case when using white coatings.

Practical Coverage: Sanded Pine 10-12 m<sup>2</sup> typically/litre per coat. Figures for sawn softwood timber will be lower. Hardwood coverage rates may be slightly higher.











### AQ70 Woodstain, continued

Teak Mid Oak Mahogany

























# The Warm Touch® System

Warm Touch® is a simple solution to problems caused by cold, solid walls, such as condensation and black mould. Solid walls, or those with hard to treat cavities are prone to damp caused by condensation.

Traditional internal insulation is both costly and intrusive to fit, requiring the removal of skirting boards, doors, kitchen and bathroom furniture. This is particularly problematical for social housing where occupants may require alternative accommodation with the associated costs and disruption to family life.

- Warm Touch® Adhesive: Used to bond our revolutionary wall insulation to internal walls of masonry, plaster, brick and concrete etc. Warm Touch Adhesive is also used to bond the Warm Touch Skirting Channel and Warm Touch Corner Tape.
- Warm Touch® Sealant: An integral part of the system and provides continuity of the fire resistance and sound/heat insulation.
- Warm Touch® Corner Tape: An integral part of the System, corner tape provides a smooth, neat transition around external corners.
- Warm Touch® Starter Channel: Pre-formed channel providing a neat finish at skirting board level. Fitted at the start of the process of lining a room with Warm Touch.
- Warm Touch® Insulation: Used to combat black mould growth caused by condensation on cold walls. It does this by increasing the temperature of a wall so that it is above dew point so that condensation cannot form.

### Warm Touch® Adhesive

Warm Touch® Adhesive is used to bond our revolutionary wall insulation to internal walls of masonry, plaster, brick and concrete etc. Warm Touch Adhesive is also used to bond the Warm Touch® Skirting Channel and Warm Touch® Corner Tape.

Form: Ready Mixed Paste.

Pack Size: 5 litres.

Colour(s): Beige.

Content: Polymers and additives.

Properties: Warm Touch is a safe-to-use water-based adhesive for bonding lightweight materials to masonry. Warm Touch Adhesive contains a powerful fungicide to protect it and the background from mould growth.

Usage/Preparation: Ensure walls are clean and sound and that all wallpaper is removed. Walls affected by black mould must be cleaned and sterilised with Sovereign Dentolite. Greasy surfaces should also be cleaned using sugar soap. Porous backgrounds such as bare plaster and masonry or dusty surfaces should first be sealed with Sovereign Warm Touch Stabilising Solution. Allow the Stabilising Solution to dry thoroughly.

General: Where Warm Touch Skirting Channel is being used start by brushing a thin layer of Warm Touch Adhesive on to the back of the channel and fix this in place. Apply adhesive directly to the wall using either a roller or a 3mm v notched trowel. Ensure coverage is complete and even and no more adhesive than is required for one drop of Warm Touch Insulation is applied.

Apply Warm Touch Insulation directly into the adhesive and smooth off ensuring full contact by pushing the insulation firmly against the wall using e.g. a clean dry roller. Make sure the insulation has been pre-cut and is ready to apply and the foam side is the one that is bonded to the wall.

For internal angles e.g. when fitting into window reveals, lightly brush some adhesive onto the metal side of Sovereign Warm Touch Corner Tape and apply this either side of external angles. Clean off any excess adhesive with a cloth straight away.

Allow the adhesive to dry for 24 to 48 hours before decorating, ideally use a heavyweight lining paper and ready mixed wallpaper paste prior to painting with Sovereign Fungi-Chek to give the best results.

**Coverage:** 5 litres of Sovereign Warm Touch Adhesive should be sufficient to bond a 12.5m length of insulation.

Clean up: Clean equipment with soapy water before the adhesive has dried.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.

#### Limitations:

For use with Sovereign Warm Touch products only. For internal use only.











## Warm Touch® Sealant

Warm Touch® Sealant is an integral part of the system and provides continuity of the fire resistance and sound/heat insulation.

Form:	Ready Mixed Paste.
Pack Sizes:	380ml.
Colour(s):	White.
Content:	Polymers and additives.
Properties:	Warm Touch Sealant is a safe to use water-based sealant that is used in between each joint and around the perimeter to maintain the System's integrity. In the event of a fire the sealant will intumesce and can provide up to 4 hours integrity.

**General:** Surfaces must be clean, dry and free from oil, grease, dust and loose material. Not for use at temperatures below 7°C.

At each joint in the rolls of Warm Touch push the nozzle between the two lengths so that it touches the wall. Start at the top and gun the sealant into the joint so that some extrudes above the surface.

After each length is done use a scraper blade to smooth off and remove excess sealant.

Apply the sealant at all other intersections and around protrusions such as electrical boxes.

Some shrinkage of the sealant is expected as it dries and cures. If necessary apply more sealant when required.

**Limitations:** For use with Sovereign Warm Touch products only. For internal use only.

**Coverage:** Each 12.5m roll of Warm Touch will require approximately two tubes of sealant.

**Cleanup:** Clean equipment with soapy water before the adhesive has dried.

Storage: Between 5°C - 30°C. Shelf Life: 12 months unopened.











## Warm Touch® Insulation

Warm Touch® Insulation is used to combat black mould growth caused by condensation on cold walls. It does this by increasing the temperature of a wall so that it is above dew point so that condensation cannot form.

Form:	Fire Retardant Foam with Impregnated Fabric Facing.	
Pack Sizes:	5 or 10mm thick rolls of 12.5 x 1m.	
Colour(s):	White.	
Content:	Polymers and additives.	
Properties:	After application and decoration the wall will feel warmer to the touch and no more black mould will form. Sovereign Warm Touch is fire resistant and does not allow the spread of flames so is safe to use and conforms to building regulations in relation to fire. Sovereign Warm Touch is also a sound insulator.	

Preparation: A major aspect of dealing with condensation and black mould is to make sure that adequate ventilation exists in a property. A check should be made on both bathroom and kitchen extractors to make certain these are working and vented correctly. Cooker hoods must be vented to outside. Sovereign Humidity Tracking Fans are ideal for bathrooms. Where necessary fit Sovereign Passive Vapour Vents in living rooms and bedrooms.

Ensure walls are clean and sound and that all wallpaper is removed. Walls affected by black mould must be cleaned and sterilised with Sovereign Dentolite. Greasy surfaces should also be cleaned using sugar soap.

Porous backgrounds such as bare plaster and masonry or dusty surfaces should first be sealed with Sovereign Warm Touch Stabilising Solution. Allow the Stabilising Solution to dry thoroughly.

General: Where Warm Touch Skirting Channel is being used start by brushing a thin layer of Warm Touch Adhesive on to the back of the channel and fix this in place. Cut lengths of Warm Touch allowing a small amount of overlap which can be trimmed off to provide a neat finish.

Apply adhesive directly to the wall using either a roller or a 3mm v notched trowel. Ensure coverage is complete and even and no more than is required for one drop of Warm Touch Insulation.

Apply Warm Touch Insulation directly into the adhesive and smooth off ensuring full contact by pushing the insulation firmly against the wall using e.g. a clean dry roller. The foam side is the one that is bonded to the wall. Trim off any excess at skirting board and ceiling level using a sharp knife.

Apply adhesive for the next drop, and apply another length of Warm Touch and allow a 1 to 2mm gap between each section. This gap should be filled with Sovereign Flamacryl Sealant. Excess sealant should be removed from the surface and a second application may be necessary after a day or two to accommodate any sealant shrinkage. Flamacryl should also be used to form a neat joint at skirting board and ceiling level. For external angles e.g. when fitting into window reveals, lightly brush some adhesive onto the metal side of Sovereign Warm Touch Corner Tape and apply this either side of external angles. Clean off any excess adhesive with a cloth straight away.

Allow the adhesive to dry for 24 to 48 hours before decorating, ideally use a heavyweight lining paper and add Sovereign Mould Eradication Additive to the wallpaper paste prior to painting using Sovereign Fungi-Chek. The lining paper should be applied horizontally across the wall and not vertically.

**Clean up:** Clean equipment with soapy water before the adhesive has dried.





# **Surface Treatments for Condensation**

## **Scrub Out Black Mould**

Sovereign's Scrub Out Black Mould is a fungicidal cleaner; containing a powerful blend of biocide and detergent to eradicate mould on internal surfaces.

Form:	Ready to use Liquid.	
Pack Size:	500ml.	
Colour(s):	Clear.	
Content:	2% Benzalkonium Chloride.	
HSE No:	4810.	
Properties:	Scrub Out Black Mould is used to sterilise mould-infected surfaces before redecorating. It may also be used as a maintenance wash to control mould or algae where painting is not possible or desired. Scrub Out Black Mould can also be sprayed around bath and shower areas to prevent mould growth on sealants and grout.	

Preparation: Ready to use. A second application allowed to dry on surface will delay return of any mould. When used to prevent mould growth in bathrooms, Scrub Out Black Mould should be sprayed on to surfaces at least once a week. Do not rinse off. Service life depends on local conditions, i.e. condensation will reduce the expected service life.

Application: By sponge, cloth, or spray.

General: There are basic measures to assist in the control of condensation and black mould. These methods are particularly helpful in the domestic environment, but can be applied equally to commercial, catering, leisure or medical establishments. It is always important to reduce the risk of condensation by observing the following simple recommendations.

- Ensure rooms are always warm and properly ventilated, maintaining some low heating throughout the day if possible.
- Always use extractor fans in kitchens and bathrooms.
- When cooking and bathing keep the door closed and the window open. Do not dry clothes on radiators. Tumble dryers must be vented externally unless of the condensing type.
- In cold weather keep some heating on all the time.
- Improve internal/external wall insulation

Use a ventilation system where appropriate, such as the Sovereign ConCure 20/20. When repainting areas, then Sovereign Fungi-Chek Emulsion should be used to prevent the re-appearance of black mould.

**Coverage:** 4 to 6m<sup>2</sup> per bottle, depending on the porosity and roughness of the surface.

Maintenance: Scrub Out Black Mould will not prevent the regrowth of moss or mould in the long term. Its use is to remove active attacks prior to decoration. For long-term eradication of mould etc a Sovereign ConCure 20/20 can be fitted. This device acts to produce a positive air pressure within the domestic environment and will keep the relative humidity below a level that will support condensation.

Storage: Between 5 and 30°C, 12 months unopened.









# Dentolite Sterilising Solution Concentrate

Dentolite contains a powerful biocide that will eradicate moss, mould and algae on internal surfaces.

Form:	Liquid Concentrate.	
Pack Sizes:	500ml (makes 5 litres).	
Colour(s):	Clear.	
HSE No:	4593.	
Content:	7.5% w/w Benzalkonium Chloride.	
Properties:	Dentolite is used to sterilise mould and algae infected surfaces before redecorating or removal of wallpaper. May also be used as a maintenance wash to control mould or algae where painting is not possible or desired. Dentolite is NOT suitable for the remedial treatment of the Dry Rot Fungus. For this application use Sovereign Fungicidal Wall Solution Extra and refer to Sovereign Specification for Dry Rot.	

Usage/Preparation: Prepare surfaces by removing nonwashable and loose material e.g. distemper, grease, dirt, mould or wallpaper. Dentolite Sterilising Solution can be used to soak wallpaper before removal to minimise any further mould infection.

Make good any surface defects and rub down to smooth finish. Wash down with Dentolite Sterilising Solution using scrubbing brush or cloth. Allow to dry thoroughly. Apply second wash in badly affected areas and allow to dry before redecorating or re-painting.

General: There are basic measures to assist in the control of condensation and black mould. The Silexine Dentolite System complements these basic controls and will prevent these problems occurring for many years.

These methods are particularly helpful in the domestic environment but can be applied equally to commercial, catering, leisure or medical establishments.

It is always important to reduce the risk of condensation by observing the following simple recommendations.

- Ensure rooms are always warm and properly ventilated, maintaining some low heating throughout the day if possible.
- When cooking, washing, bathing or drying clothes, keep the door closed and the window open - this prevents warm moist air moving to colder areas of the building.
- In cold weather keep some heating on all the time.
- If a paraffin or flueless gas heater is used ensure a window is open a little (every litre of paraffin produces about 1 litre of water).
- Improve internal/external wall insulation.
- Use dehumidifiers or ventilation systems where appropriate, such as the Sovereign ConCure 20/20.

General Maintenance: Sovereign Dentolite will not prevent the re-growth of moss or mould in the long term. Its use is to remove active attacks prior to decoration. For long-term eradication of mould etc a Sovereign ConCure 20/20 can be fitted in the loft space. This device acts to produce a positive air pressure within the domestic environment and will keep the relative humidity below a level that will support condensation. Unlike other similar systems the Sovereign ConCure 20/20 will not cause cold draughts in the winter.

Coverage: 6-8m² per litre when diluted, depending on the

porosity and roughness of the surface. **Drying Time:** 1-4 hours normally.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.









## **Mould Control Pack**

Contains Dentolite Sterilising Solution Concentrate for removing black mould and two pots of Mould Eradication Additive for stirring into emulsion paint or wallpaper paste to prevent its return. The wash and additive are easy and safe to use and will provide effective protection against mould growth.

Form:	Twin Pack, Liquid Concentrates.		
Pack Size:	500ml Dentolite 1 pair protective gloves 1 paint brush	2x 50g Mould Eradication Additive 1 pair protective goggles 1 sponge.	
Content:	7.5% w/w Benzalkonium Chloride.		
HSE No:	4593.		
Properties:	The pack provides enough materials to treat up to 40m² of walls and ceilings, adequate for most mould growth outbreaks. For larger or very severe outbreaks Fungi-Chek ready mixed paints are available. Sovereign also supplies other fungicidal products including positive input ventilation systems, passive vapour vents and special masonry coatings.		

#### Usage/Preparation:

The pack provides enough materials to treat up to 40m<sup>2</sup> of walls and ceilings.

- Dilute the Dentolite in the ratio of 500ml concentrate to
   4.5 litres of water. Wash affected areas with Dentolite
   Sterilising Wash to remove and kill existing mould.
- Add the Mould Eradication Additive to the chosen emulsion paint, wallpaper paste or cement based tile grout and stir in thoroughly using a mechanical mixer. Use as normal.

General: There are basic measures to assist in the control of condensation and black mould. These methods are particularly helpful in the domestic environment, but can be applied equally to commercial, catering, leisure or medical establishments. It is important to reduce the risk of condensation by observing the following simple recommendations:

- Ensure rooms are always warm and properly ventilated, maintaining low heating throughout the day if possible.
- When cooking, washing, bathing or drying clothes, keep the door closed and the window open - this prevents warm moist air moving to colder areas of the building.
- If a paraffin or flueless gas heater is used ensure a window is open a little to reduce moisture build up.
- Improve internal/external wall insulation.
- Use ventilation where appropriate, such as Sovereign's ConCure 20/20 or Sovereign Passive Vapour Vents.

Local Authorities and Housing Associations: Problems of mould growth caused by dampness and condensation are not always easily solved. Extra ventilation and the proper use of heating are two recommended measures rarely carried out by tenants/occupiers reluctant to let cold air into their homes.

What Can You Do: Whether or not condensation continues to occur after remedial measures is largely irrelevant for most people; what they see and want rid of is the BLACK MOULD. The best treatment is to clean and sterlike affected surfaces with a fungicidal wash and then paint using a fungicidal coating.

Coverage: 40m<sup>2</sup> per pack when diluted Drying Time: 1-4 hours normally. Storage: Between 5 and 30°C. Shelf Life: 12 months unopened.













# **Condensation Control Paints**

Sovereign's Fungi-Chek is an advanced mould and condensation control paint that utilises leading edge technology to deliver a high quality acrylic emulsion containing a powerful fungicide. It is suitable for wall and ceiling surfaces and is resistant to the effects of condensation, black mould and mildew.

Fungi-Chek AntiCon is the second generation advance in mould and condensation prevention. It combines Fungi-Chek properties with cutting-edge thermal insulation technology and diatomaceous moisture balancing additives; providing quick, simple, brush or roller applied condensation prevention.

- Fungi-Chek Emulsion: Fungi-Chek Emulsion is a high quality acrylic emulsion suitable for the usual wall and ceiling surfaces where mould growth is a problem. Contains a powerful and proven fungicide to provide long-term protection of the paint film.
- Fungi-Chek AntiCon: Sovereign Fungi-Chek AntiCon is a biocidal paint that also reduces surface condensation. AntiCon can be used on internal walls, ceilings, pipework and metals to provide protection from fungi and mould growth. Ideal for kitchens, bathrooms, walls and ceilings and anywhere condensation and mould are a problem.



# **Fungi-Chek Emulsion**

Fungi-Chek Emulsion is a high quality acrylic emulsion suitable for the usual wall and ceiling surfaces where mould growth is a problem. Contains a powerful and proven fungicide to provide long-term protection of the paint film.

Form: Ready to use Liquid.

Pack Sizes: 5 litres.

Colour(s): Brilliant White and Magnolia.

Content: 0.28% Propiconazole 0.3% 3-lodo-2-Propynl N-Butyl Carbamate

HSE No: 6477.

Properties: Moderately resistant to attack by salts in new plaster and similar surfaces. Paint film remains fungicidal for the life of the coating. Fully washable and resistant to the effects of condensation once the coating has fully dried.

#### Usage/Preparation:

- Prepare surfaces by removing non-washable and loose material e.g. distemper, grease, dirt, mould or wallpaper. Dentolite Sterilising Solution can be used to soak wallpaper before removal to minimise any further mould infection.
- Make good any surface defects and rub down to smooth finish.
- Wash down with Dentolite Sterilising Solution using scrubbing brush or cloth. Allow to dry thoroughly. Apply second wash in badly affected areas and allow to dry.
- 4. Treat all bare areas with appropriate primer or undercoat/sealer.
- If the surface is chalky or friable apply 1 liberal coat of Sovereign Stabilising Solution.
- Fungi-Chek may be applied by brush, roller or spray. STIR THOROUGHLY BEFORE USE.

Application: Prepare surfaces as described above.

Prime bare areas with one coat Fungi-Chek Emulsion thinned with water and allow to dry.

Apply two coats Fungi-Chek Emulsion, allowing sufficient drying time between coats (approximately 4 hours). Clean brushes with water.

Drying Time: Single coat at normal thickness: up to 4 hours before re-coating. Where condensation is likely to return and be persistent, allow at least 24 hours before removing extra heating or ventilation.

General: There are basic measures to assist in the control of condensation and black mould. The Fungi-Chek System complements these basic controls and will prevent these problems occurring for many years.

These methods are particularly helpful in the domestic environment, but can be applied equally to commercial catering, leisure or medical establishments.

# It is important to reduce the risk of condensation by observing the following simple recommendations:

- Ensure rooms are always warm and properly ventilated, maintaining some low heating throughout the day if possible.
- When cooking, washing, bathing or drying clothes, keep the door closed and the window open - this prevents warm moist air moving to colder areas of the building.
- In cold weather keep some heating on all the time.
- If a paraffin or flueless gas heater is used ensure a window is open a little (every litre of paraffin produces about 1 litre of water).
- Improve internal/external wall insulation.
- Improve ventilation with Sovereign Passive Vapour Vents in living/ bedrooms and Sovereign Humidity Tracking Fans in kitchens and bathrooms.
- The use of a Sovereign Auto ConCure 20/20 positive ventilation system can be used in domestic properties to eliminate condensation and high levels of humidity. See ConCure literature for further details.

#### Practical coverage: 11 to 13m<sup>2</sup>/litre.

Extra allowance should be made for particularly coarse or porous surfaces.

Storage: Between 5 and 30°C.

Shelf Life: 12 months unopened.













# **Fungi-Chek AntiCon**

Fungi-Chek AntiCon is a biocidal paint that also reduces surface condensation. AntiCon can be used on internal walls, ceilings, pipework and metals to provide protection from fungi and mould growth. Ideal for kitchens, bathrooms, walls and ceilings and anywhere condensation and mould are a problem.

Form: Ready to use Liquid. Pack Sizes: 5 litres. Colour(s): Brilliant White and Magnolia. HSE No: 6477. Properties: AntiCon uses proven Fungi-Chek biocide technology to inhibit mould growth whilst also actually reducing surface condensation. It does this with the use of glass nanospheres, tiny glass bubbles of air that reduce heat loss from the surface therefore increasing the dew point – the temperature at which water vapour turns into water droplets. AntiCon also contains diatoms; microscoptic hollow fossilised shells of mineral that can absorb moisture vapour. This prevents liquid water forming on the surface of the paint and releases it back into the atmosphere as vapour when conditions allow.

#### Usage/Preparation:

- Prepare surfaces by removing non-washable and loose material e.g. distemper, grease, dirt, mould or wallpaper. Dentolite Sterilising Solution can be used to soak wallpaper before removal to minimise any further mould infection.
- Make good any surface defects and rub down to smooth finish
- Wash down with Dentolite Sterilising Solution using scrubbing brush or cloth. Allow to dry thoroughly. Apply second wash in badly affected areas and allow to dry.
- Treat all bare areas with appropriate primer or undercoat/sealer.
- If the surface is chalky or friable apply 1 liberal coat of Sovereign Stabilising Solution.
- Fungi-Chek AntiCon may be applied by brush, roller or spray. STIR THOROUGHLY BEFORE USE.

Application: Prepare surfaces as described above.

Apply at least two coats Fungi-Chek AntiCon, allowing sufficient drying time between coats (2 - 4 hours). The more coats that are applied, the better the protection from condensation.

Apply each coat more thickly than you would normal emulsion as this will improve performance.

Please Note: Overcoating Fungi-Chek AntiCon with a normal paint coating will allow re-growth of black mould, as the fungicides and diatoms will no longer be at the surface.

**Practical coverage:** 8-10m<sup>2</sup>/litre. Extra allowance should be made for textured surfaces.

Storage: Between 5 and 30°C. Shelf Life: 12 months unopened.

General: There are basic measures to assist in the control of condensation and black mould. Fungi-Chek AntiCon System complements these basic controls and will prevent problems occurring for many years. These methods are particularly helpful in the domestic environment, but can be applied equally to commercial caterino. Ieisure or medical establishments.

















### Fungi-Chek AntiCon's Advanced Coating Solution:

- Simple to use: AntiCon is ready to use straight from the tin no mixing or extra additives. Applies with a roller or brush just like standard emulsion!
- Fungi-Chek: Contains fungicides that prevent the growth of mould on moist surfaces. These additives remain active throughout the life of the paint.
- AntiCon: Fungi-Chek AntiCon provides an insulating barrier, raising the dew point of surfaces, minimising the risk of condensation build-up.
- Good Looking: Available in Bright White or Magnolia; Fungi-Chek AntiCon is a fine textured matt emulsion.
- Guaranteed: AntiCon is backed up by a FIVE YEAR no quibble guarantee against the growth of Mould on treated surfaces.\*
- Subject to correct preparation and application following Sovereign's specifications.

## Fungi-Chek AntiCon, continued

#### It is important to reduce the risk of condensation by observing the following simple recommendations:

- Ensure rooms are always warm and properly ventilated, maintaining some low heating throughout the day if possible.
- When cooking, washing, bathing or drying clothes, keep the door closed and the window open - this prevents warm moist air moving to colder areas of the building.
- In cold weather keep some heating on all the time.
- If a paraffin or flueless gas heater is used ensure a window is open a little (every litre of paraffin produces about 1 litre of water).
- Improve internal/external wall insulation.
- Improve ventilation with Sovereign Passive Vapour Vents in living/ bedrooms and Sovereign Humidity Tracking Fans in kitchens and bathrooms.
- The use of a Sovereign Auto ConCure 20/20 positive ventilation system can be used in domestic properties to eliminate condensation and high levels of humidity. See ConCure literature for further details.

A Safety Data Sheet is available on request for this product.

#### FIVE Year Guarantee:

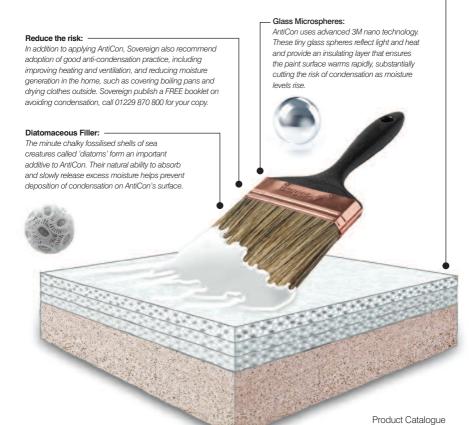
Sovereign are SO sure that Fungi-Chek AntiCon is highly effective that they offer a solid, no-quilbble FIVE YEAR Guarantee against the development of mould on treated surfaces (\*subject to preparation and application in accordance with specifications).

#### Fungicidal:

AntiCon uses the same fully-proven fungicidal additives that make Sovereign Fungi-Chek the industry leading antifungal emulsion.

#### Applies just like ordinary emulsion!

Use AntiCon straight from the tin, no special additives, no fiddly mixing. Just use a roller or brush to apply two, three or more coats for an attractive even, soft grained finish.



# Improving Airflow to Control Condensation

A key factor in reducing condensation and its results in the home is the improvement of airflow around rooms. Cutting moisture levels by covering boiling pans and making a habit of opening windows and doors in damp areas like bathrooms and utility rooms are positive factors, but the use of vents, extractors and positive input ventilation systems will combat the problem effectively.

Sovereign manufacture and market a comprehensive range of both passive and active ventilation solutions that have been proven to substantially reduce ugly black mould and the condensation that causes it in the home.

- Passive Vapour Vent: Air tested by the Building Research Establishment for airflow rates versus applied pressure difference.
- Passive Vapour Vent Mk 2, High Rise, Standard Length and Extendable Options: Contains a permeable membrane within its main plastic circular tube. This encourages moisture migration due to the differences between external and internal temperature and air pressure. The membrane acts as a 'molecular sieve', allowing water vapour to pass to the outside whilst resisting rapid air movement and therefore heat loss. The Passive Vapour Vent Mk 2 High Rise is also fitted with a specially designed cowl which counteracts the detrimental effects of external wind on performance. The Passive Vapour Vent Mk 2 High Rise version is fitted with a special integral rubber seal and compact cowl design which alleviates the need for exterior access and allows its installation from the interior.
- Merlin dMEV Extraction System: Merlin is a leading edge decentralised Mechanical Extract Ventilation system for bathrooms, shower rooms, kitchens and utility rooms that combines the latest advances in digital fan technology, noise reduction and zero maintenance with miserly power consumption. The unit also utilises a Remote Sensor and Intelligent Micro Processor Controls to monitor Relative Humidity; automatically increasing speed when Relative Humidity exceeds 70% RH, slowing down once the elevated moisture levels are reduced. A pull cord can also be used to manually select high speed for fast acting extraction of moisture and odours.
- Auto ConCure 20/20 Roof Space and Flat & Bungalow Options: Costing as little as three pence per day to operate, Sovereign's Auto ConCure 20/20 'Positive Input Ventilation' unit provides a constant stream of warm, fresh, filtered air that raises the Dew Point, ventilates the home and offers a highly effective solution to damp problems caused by condensation. Quickly and easily fitted on an exterior wall in a cupboard or hallway with some simple electrical work, the Auto ConCure 20/20 circulates naturally warm, filtered air from the loft space around the home, mixing up with the warm air near ceilings to raise the 'Dew Point', substantially reducing the risk of condensation.

# **Passive Vapour Vent**

Air tested by the Building Research Establishment for airflow rates versus applied pressure difference. For background ventilation of habitable rooms the Building Regulations require that a ventilation opening should have a total area of not less than 8,000mm² and that openings should be controllable, secure and located in a position that avoids draughts.

#### Description:

The 'Passive' Vapour Vent provides an opening on a section of wall normal to the airflow direction with an effective area well in excess of the minimum requirement.

Airflow through the opening is controlled automatically by the intervening mineral wool slab and thereby avoids undue draughts.

It is important to realise that the release of moisture vapour pressure within a dwelling to avoid condensation does not require a specific ventilation rate.

The moisture vapour pressure within a dwelling is always higher than the outside pressure therefore there will always be an escape of moisture vapour by the diffusion process through the Passive Vapour Vent.

#### Key Features:

- The unit acts as a passive dehumidifier.
- Transparent to water vapour.
- No moving parts.
- Works passively 24 hours a day.
- Makes no noise
  - Low installation cost.

The diffusion process is slow compared with mechanical ventilation and would not cope with the copious amount of water vapour produced in a short time scale without the combined use of mechanical ventilation in kitchens and bathrooms.

Its main use is in habitable rooms where it operates continuously without noise and over a 24 hour period can extract a maximum of 2.5 litres of water/day even at low vapour pressures.

If the relative humidity of the room were 70% at 20°C then each kilogram of air would hold 0.0104kg of water. At a recommended maximum velocity of 0.9 m/sec (maximum velocity recommended by Local Authorities) through the Passive, it would transmit 0.0024 M3/sec (i.e. 2.42kg per day) of air that contains 2.5 litres of water.

#### How does it work?

The Vent contains no moving parts and works on basic principles accepted in building physics.

When a combination of internal room temperatures and humidity is higher than it is externally, the vapour pressure difference causes the moist air to ventilate outwards through the Passifyer's porous membrane into the cooler external air.

#### Key Benefits:

- Affordable, one-off cost.
- Reduces draughts and heat loss.
- No running costs.
- Works at peak condensation times.
- No night time disturbance from compressors or fans.
- Extendable tube fits in standard airbrick hole.

#### Dimensions:

Aperture	ture 230 x 155mm (standard 9" x 6" Airbrick)		
Main tube extend	led 350mm		
Main tube closed	260mm		
Main tube width	220mm		
Main tube height	140mm		



# Passive Vapour Vent Mk 2

## **High Rise Option**

The Passive Vapour Vent Mk 2 'High Rise' contains a permeable membrane within its main plastic circular tube. This encourages moisture migration due to the differences between external and internal temperature and air pressure. The membrane acts as a 'molecular sieve', allowing water vapour to pass to the outside whilst resisting rapid air movement and therefore heat loss.

The Passive Vapour Vent Mk 2 High Rise is also fitted with a specially designed cowl which counteracts the detrimental effects of external wind on performance.

The Passive Vapour Vent Mk 2 High Rise version is fitted with a special integral rubber seal and compact cowl design which alleviates the need for exterior access and allows its installation from the interior.

#### Description:

The 'Passive' Vapour Vent provides an opening on a section of wall normal to the airflow direction. Airflow through the opening is controlled automatically by the intervening mineral wool slab and thereby avoids undue uncomfortable draughts.

It is important to realise that the release of moisture vapour pressure within a dwelling to avoid condensation does not require a specific ventilation rate.

#### Key Features:

- The unit acts as a passive dehumidifier.
- Transparent to water vapour.
- No moving parts
- Works passively 24 hours a day.
- Makes no noise.
- Low installation cost.
- Special cowl design.
- Integral rubber seal.

The moisture vapour pressure within a dwelling is higher than the outside pressure therefore there will always be an escape of moisture vapour by the diffusion process through the Passive Vapour Vent.

The diffusion process is slow compared with mechanical ventilation and would not cope with the copious amount of water vapour produced in a short time scale without the combined use of mechanical ventilation in kitchens and bathrooms.

Its main use is in habitable rooms where it operates continuously without noise and over a 24 hour period can extract up to 1 litre of water per day, even at low vapour pressures.

#### How does it work?

The Vent contains no moving parts and works on basic principles accepted in building physics.

When a combination of internal room temperatures and humidity is higher than it is externally, the vapour pressure difference causes the moist air to ventilate outwards through the Passifyer's porous membrane into the cooler external air.

#### Key Benefits:

- Affordable, one-off cost.
- Reduces draughts and heat loss.
- No running costs
- Works at peak condensation times.
- No night time disturbance from compressors or fans.
- 20% more effective than a conventional cowl/grille.
- Suitable for most wall thicknesses.
- The High Rise version can be fitted from inside only, therefore suitable for high rise buildings.

#### Dimensions:

Main tube diameter	152mm, plus seal	
Main tube length	350mm	_
Core drill required	162mm	



# **Passive Vapour Vent Mk 2**

## Standard Length and Extendable Options

The Passive Vapour Vent Mk 2 features a permeable membrane in its main plastic tube which encourages moisture migration due to the differences between external and internal temperature and air pressure.

The membrane acts as a 'molecular sieve', allowing water vapour to pass to the outside, whilst resisting rapid air movement and therefore heat loss.

The Passive Vapour Vent Mk 2 is also fitted with a specially designed cowl which counteracts the detrimental effects of external wind on performance.

#### Description:

The 'Passive' Vapour Vent provides an opening on a section of wall normal to the airflow direction. Airflow through the opening is controlled automatically by the intervening mineral wool slab and thereby avoids undue uncomfortable draughts.

It is important to realise that the release of moisture vapour pressure within a dwelling to avoid condensation does not require a specific ventilation rate.

#### Key Features:

- The unit acts as a passive dehumidifier.
- Transparent to water vapour.
- No moving parts
- Works passively 24 hours a day.
- Makes no noise.
- Low installation cost.
- Special cowl design.
- Standard length or extendable tube.

The moisture vapour pressure within a dwelling is higher than the outside pressure therefore there will always be an escape of moisture vapour by the diffusion process through the Passive Vapour Vent.

The diffusion process is slow compared with mechanical ventilation and would not cope with the copious amount of water vapour produced in a short time scale without the combined use of mechanical ventilation in kitchens and bathrooms.

Its main use is in habitable rooms where it operates continuously without noise and over a 24 hour period can extract up to 1 litre of water per day, even at low vapour pressures.

#### How does it work?

The Vent contains no moving parts and works on basic principles accepted in building physics.

When a combination of internal room temperatures and humidity is higher than it is externally, the vapour pressure difference causes the moist air to ventilate outwards through the Passifyer's porous membrane into the cooler external air.

#### Key Benefits:

- Affordable, one-off cost.
- Reduces draughts and heat loss.
- No running costs.
- Works at peak condensation times.
- No night time disturbance from compressors or fans.
- 20% more effective than a conventional cowl/grille.
- Suitable for most wall thicknesses.

#### Dimensions:

Main tube diameter	102mm	
Standard tube length	350mm	
Extendable tube length	350mm-600mm	
Core drill required	107mm	



## Merlin

## dMEV Extraction System

Merlin is a leading edge decentralised Mechanical Extract Ventilation System for bathrooms, shower rooms, kitchens and utility rooms that combines the latest advances in digital fan technology, noise reduction and zero maintenance with miserly power consumption. The unit also utilises a Remote Sensor and Intelligent Micro Processor Controls to monitor Relative Humidity; automatically increasing speed when Relative Humidity exceeds 70% RH, slowing down once the elevated moisture levels are reduced. A pull cord can also be used to manually select high speed for fast acting extraction of moisture and odours.

#### Prediction and Anticipation

The Merlin's excellent performance is further enhanced by the use of predictive technology.

- The fan speed normally increases when Relative Humidity exceeds 70%. If there is a sudden, dramatic increase in humidity, caused by a hot water tap left running, or an open pan of boiling water, Merlin will sense this and increase the fan speed to reduce humidity before a significant problem arises.
- 2. At night, when the heating is off, internal air rapidly cools, suddenly increasing Relative Humidity. Merlin's night time 'Set Back' sensor assesses these rapid changes in temperature and RH, and automatically engages to avoid an over reaction and keep the fan speed constant. Once the situation has stabilised the monitoring process returns to the control of the Remote Sensor.

#### Installation

Full Instructions included in the pack. They are supported by Sovereign's FREE Technical Support Line, 01229 870 800. Approved for fitting in Zones 1 or 2 of a bathroom/shower room. However, the Merlin Humidity Sensor/Transformer must be fitted in the room, but outside Zones 1 and 2.

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Where this cannot be achieved then an alternative model, the Merlin RemTran must be fitted, which includes a Remote Transformer that is fitted outside these zones and supplies 12V DC to the Remote Humidistat.

The Merlin SELV fan should be fitted at high level as close as possible to the source of moisture, enabling the Sensor/Transformer to detect increased humidity as soon as it is produced. To achieve this Sovereign recommend siting the Sensor on an internal wall, about 100mm/4 inches down from the ceilling, between moisture source and the door of the room.

Please note: The use of supplementary Sovereign ConCure Positive Input Ventilation Units and Sovereign Passive Vapour Vents should be considered to assist in achieving adequate air changes/ventilation throughout the property.

#### Technical Features

- Suitable for kitchens, utility rooms and Zones 1 and 2 of bathrooms and shower rooms.
- 2. The twin contra rotating fan produces sufficient power for long duct runs.
- Prediction and Anticipation: Below 70% RH, sudden increases in humidity are recognised and the fan automatically reacts to speed up preventing potential problems. At night when heating systems switch off and RH suddenly increases when temperature drops the system prevents over reaction until the situation has stabilised.
- The high technical specification exceeds Building Regulations requirements for dMEV systems.
- Filterless: No replacement cost.
- 6. 5 Year Guarantee.







## **Auto ConCure 20/20**

## **Roof Space Option**

Costing as little as three pence per day to operate, Sovereign's Auto ConCure 20/20 'Positive Input Ventilation' unit provides a constant stream of warm, fresh, filtered air that raises the Dew Point, ventilates the home and offers a highly effective solution to damp problems caused by condensation.

Quickly and easily fitted in the loft with some simple electrical work, the Auto ConCure 20/20 circulates naturally warm, filtered air from the loft space around the home, mixing up with the warm air near ceilings to raise the 'Dew Point', substantially reducing the risk of condensation.

#### Auto ConCure 20/20

Using a unique system that assesses its output every hour, the Sovereign Auto ConCure 20/20 then automatically adjusts the output speed to suit current conditions, ensuring optimum performance all day, every day, year after year.

For an overall view of Positive Input Ventilation, including the features and explanation of its use, please refer to the Sovereign document 'Positive Input Ventilation - The Concept': www.sovchem.co.uk/sovereign-concure-anticondensation-unit.html the heater

Manufactured in a solid tubular metal sheath, complete with a safety cutout, the 'black' heater automatically switches on when the incoming air temperature drops below 10°C, tempering the air and taking the chill off. It continues to operate until the input air temperature rises above 10°C.

#### The Fan

Sovereign use a forward curved EC Centrifugal Fan in the Auto ConCure 20/20. The ultra-low wattage technology can barely be heard, with no motor noise across the entire speed range. 'Phase noise' is also non-existent as a different operating principle is used.

#### Holiday and Second Homes

Auto ConCure 20/20 is also ideal for holiday homes and second homes. These properties often stand unoccupied for extended periods, making them especially susceptible to the build up of internal humidity and odours. Installation of a unit will make a dramatic difference, returning the property to the freshness of a well aired home, whilst also preventing other problems associated with poorly ventilated buildings.

#### **Electrical Requirements**

Auto ConCure 20/20 units require very little power and can be wired into the upstairs lighting circuit, provided that there is 2 Amps of spare power capacity on the circuit. The unit is supplied with two spur boxes; one box with a 3 Amp fuse fitted for the main power to the unit, and a switched box for the Heater Enabler.

The Heater Enabler Switch MUST NOT be wired to the mains and should ideally be positioned where it cannot be easily switched off by mistake. When the Heater Enabler Switch is off, the unit will NOT warm incoming air when required. This will seriously diminish the performance of the Auto ConCure 20/20. Sovereign STRONGLY recommend that the Heater Enabler is always left switched on.

#### Control and Auto Function

maximise efficacy.

The Sovereign Electronic Controller manages the fan speed, heater, sensors and safety cutouts. The standard unit setup speed position is P1 for smaller properties, or P2 for medium to large homes. However the householders' lifestyles and property occupancy should be taken into consideration at this stage. Unlike other units, once operational the Auto function automatically assesses the air flow rate being produced against the variable back pressure it generates within the property. It will reassess this measurement every hour and adjust itself to optimise output and minimise power to

LEDs flash to indicate the automatic re-assessment is underway, with slight incremental adjustments made to speed and output up to a maximum of the next standard speed setting. This output is then fixed for an hour until the next reassessment.

#### Speed settings and running costs

Sovereign's Auto ConCure 20/20 has six speed settings: P1, 2, 3 and 4 are selected for normal use, whilst high output speeds P5 and P6 are used when the demand is for drying or purge ventilation after decoration or floodina.

Using a 15 pence per kW/h unit as a guide, the average costs, without the heater, would be in the order of just 3 pence per day, increasing to 4 pence per day when used at speed P4. If the incoming air temperature is below 10°C, then the unit's economical pulsed heating system automatically raises the output air temperature to an acceptable and more comfortable 10°C, until the temperature recovers.

For flexibility there is an option to disable the heater and a separate switch is provided for this. However, Sovereign recommend that the heater is left on as the system is effective, economic and will only be activated when necessary.

This provides the most economic answer to cold draughts, whereas households with unheated PIV systems may find they have to switch the unit off because it's making their home feel cold just when use of a PIV against condensation is most important. This sporadic use of pulsed heating is the most effective and economic method of achieving this.

If the loft air temperature rises above 20°C then the fan's sensor increases speed to take advantage of the 'Solar Gain'. If the temperature becomes excessive, the process stops until the air has cooled down to comfortable levels.

## Auto ConCure 20/20 Roof Space Option, continued

#### Matching Your Lifestyle

Ordinary PIV units have a set speed that will hit the standard airflow 'goal' for a property under a fixed set of conditions. However, variations in the lifestyle of the property's occupiers will inevitably move the airflow goalposts, reducing or increasing the demand for air movement around the home day-to-day, reflecting variations in humidity caused by factors like washing and bathing.

This changing demand reduces the efficacy of ordinary PIV units which, because they operate at fixed rates regardless of actual requirement at a given time, will usually either be outputting too much or too little air. The advanced sampling technology of the Auto ConCure 20/20 overcomes this common problem by assessing the ACTUAL requirement for air circulation every hour. The unit then automatically adjusts the output speed up or down to match exact requirements, ensuring that ventilation is maintained at optimum levels of efficiency and balance within the home.

#### Fitting

Comprehensive Fitting Instructions are supplied with the unit, supported by friendly, helpful technical advice available free of charge from the Sovereign Technical Team on 01229 870 800.

The unit is normally fitted in the roof void or loft space, across the ceiling joists and directly above the landing in a property with stairs, or in the central hallway of the home in a bungalow. The discrete 200mm diffuser should be located centrally; its external bezel facia enables it to be fitted without any visible disturbance to the decoration. Where space is restricted internal baffles can also be used to direct the airflow to the desired location.

#### Radon Dispersion

Positive Input Ventilation (PIV) is an acknowledged method of successfully dispersing natural background levels of Radon of up to 700 Bq/m³, reducing the requirement for other, much more extensive and expensive solutions. Additional Auto ConCure 20/20 units can be used where this level is exceeded.

#### ConCure 20/20 Specifications

- Dimensions: 320 x 308 x 260mm
- Weight: 3 kg
- Construction:

Control Cover: ABS plastic.

Filter Level: G4

Enclosure: High Grade Polypropylene, with a galvanised metal guard.

Adjustable Diffuser: ABS plastic

- Electrical Input: 230V ~ 50Hz to EC technology
- Motor: Infinite silent variable stepless speed control offering reduced power consumption and integrated intelligent electronic control. There is no requirement for any additional motor protection.
- Compliance: Complies with the statutory Building Regs for the UK and Ireland. ConCure 20/20 is CE marked.
- **Heater:** The heater features an economic 500 watt pulsed heating element.
- Further Information: A dedicated brochure and datasheets are available upon request.









## **ConCure 20/20**

## For Flats and Bungalows

Costing as little as three pence per day to operate, Sovereign's ConCure 20/20 'Positive Input Ventilation' unit provides a constant stream of warm, fresh, filtered air that raises the Dew Point, ventilates the home and offers a highly effective solution to damp problems caused by condensation.

Quickly and easily fitted on an exterior wall in a cupboard or hallway with some simple electrical work, the ConCure 20/20 circulates filtered external air around the home; heating it slightly if required; and mixing it with the warm air near ceilings to raise the 'Dew Point', substantially reducing the risk of condensation.

#### ConCure 20/20

Using a unique system that assesses its output every hour, the Sovereign Auto ConCure 20/20 then automatically adjusts the output speed to suit current conditions, ensuring optimum performance all day, every day, year after year.

For an overall view of Positive Input Ventilation, including the features and explanation of its use, please refer to the Sovereign document 'Positive Input Ventilation - The Concept': www.sovchem.co.uk/sovereign-concure-anticondensation-unit.html the heater

Manufactured in a solid tubular metal sheath, complete with a safety cutout, the 'black' heater automatically switches on when the incoming air temperature drops below 10°C, tempering the air and taking the chill off. It continues to operate until the input air temperature rises above 10°C.

#### The Far

Sovereign use a forward curved EC Centrifugal Fan in the ConCure 20/20. The ultra-low wattage technology can barely be heard, with no motor noise across the entire speed range. 'Phase noise' is also non-existent as a different operating principle is used.

#### Holiday and Second Homes

ConCure 20/20 is also ideal for holiday flats, caravans and holiday bungalows. These properties often stand unoccupied for extended periods, making them especially susceptible to the build up of internal humidity and odours. Installation of a unit will make a dramatic difference, returning the property to the freshness of a well aired home, whilst also preventing other problems associated with poorly ventilated buildings.

#### **Electrical Requirements**

ConCure 20/20 units require very little power and can be wired into a lighting circuit, provided that there is 2 Amps of spare power capacity on the circuit, alternatively a plug fitted, or it can be wired into the mains circuit. The unit is supplied with two spur boxes; one box with a 3 Amp fuse fitted for the main power to the unit, and a switched box for the Heater Enabler. The Heater Enabler Switch MUST NOT be wired to the mains and should ideally be positioned where it cannot be easily switched off by mistake. When the Heater Enabler Switch is off, the unit will NOT warm incoming air when required. This will seriously diminish the performance of the ConCure 20/20. Sovereign STRONGLY recommend that the Heater Enabler is always left switched on.

#### Matching Your Lifestyle

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This changing demand reduces the efficacy of ordinary PIV units which, because they operate at fixed rates regardless of actual requirement at a given time, will usually either be outputting too much or too little air. The advanced sampling technology of the ConCure 20/20 overcomes this common problem by assessing the ACTUAL requirement for air circulation every hour. The unit then automatically adjusts the output speed up or down to match exact requirements, ensuring that ventilation is maintained at optimum levels of efficiency and balance within the home.

## ConCure 20/20 for Flats and Bungalows, continued

#### Fitting

Comprehensive Fitting Instructions are supplied with the unit, supported by friendly, helpful technical advice available free of charge from the Sovereign Technical Team on 01229 870 800.

The unit is normally or in the central hallway of the home in a bungalow or flat. The discrete 200mm diffuser should be located centrally; its external bezel facia enables it to be fitted without any visible disturbance to the decoration. Where space is restricted internal baffles can also be used to direct the airflow to the desired location.

#### Radon Dispersion

Positive Input Ventilation (PIV) is an acknowledged method of successfully dispersing natural background levels of Radon of up to 700 Bg/m³, reducing the requirement for other, much more extensive and expensive solutions. Additional ConCure 20/20 units can be used where this level is exceeded.

#### Auto ConCure Specifications

- **Dimensions:** 320 x 308 x 260mm
- Weight: 3 kg
- Construction:

Control Cover: ABS plastic.

Filter Level: G4

Enclosure: High Grade Polypropylene, with a galvanised metal guard.

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- Compliance: Complies with the statutory Building Regs for the UK and Ireland. ConCure 20/20 is CE marked.
- Heater: The heater features an economic 500 watt pulsed heating element.
- Further Information: A dedicated brochure and datasheets are available upon request.











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