

ROAD
SOLUTIONS

ROAD MAINTENANCE



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An independent family group since 1908, **SOPREMA** has established itself as one of the world's leading waterproofing companies and also as a specialist in roofing, sound sublayers and insulation. Over the years, the **SOPREMA** Group has grown and diversified around the world, integrating complementary activities into its original business: waterproofing. Having become a world leader in waterproofing solutions, the Group is now a key player in the construction and civil engineering sector.

With a workforce of more than 9,200 people and a turnover of more than 3 billion euros in 2020, **SOPREMA** has a global commercial industrial presence with 81 factories, more than 100 operating subsidiaries and a presence in 90 countries, as well as 17 highly focused sustainable development R&D centres and 22 training centres in 8 countries

The result of a close collaboration between the Marketing and the R&D departments, the **SOPREMA** products range is innovative and in perfect harmony with market requirements and current standards. **SOPREMA's** success is built on a basic principle: to focus on the idea. The one who dares, and moves forward.

SOPREMA's products and services aim to meet the most demanding needs of building professionals, in terms of waterproofing of roof terraces, civil engineering works, insulation, roofing, natural lighting, green and photovoltaic roofs and reinforced geomembranes for swimming pools.

SOPREMA offers original, high-performance and high-tech solutions that address all building problems. Constantly optimised by the research and development services in a logic ecodesign, **SOPREMA** systems today display exceptional performance in terms of strength, reliability and longevity.

All **SOPREMA** plants are ISO 9001 certified. Some plants are ISO 14,001, ISO 16,001 and ISO 18,001.

ROAD INFRASTRUCTURE

The importance of road infrastructure maintenance poses a major challenge: to guarantee both the sustainability of the works, whilst also meeting the safety and comfort of the users.

In order to meet this challenge, **SOPREMA** has developed a range of specific solutions based on its know-how in different types of materials.

- SOPREMA's Road** products range is designed to meet the maintenance needs of these works:
- Reinforcement
 - Joining
 - Crack filling
 - Repairs
 - Floor paints

Three main areas currently guide the strategic choices for road network maintenance:

- **Quality:** Repairs must be durable with materials that can withstand operating conditions.
- **The delay:** Work must be quickly achieved with materials allowing movement as soon as possible.
- **The cost:** it often depends on the outcome of the other areas.

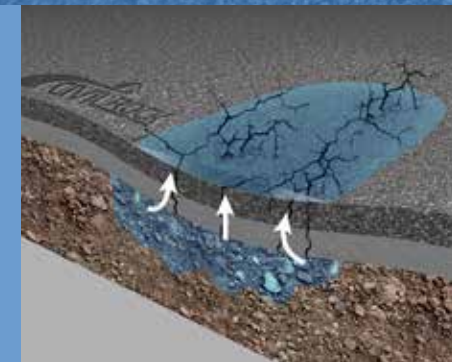
By offering a range of products from different technologies, **SOPREMA's Road** products range provide solutions for these different strategies.

SOPREMA supports its clients and partners throughout their projects. Both commercially and technically, the team ensures that their projects are carried out in the best conditions to meet the needs of customers.

REINFORCEMENT: HOW DOES IT WORK?



Problem: The road structure is settled and weakened by the creation of cracks in the wearing course.



"Pumping" phenomenon: Infiltrations of water and raising of fine particles under the effect of passing vehicles.



Solution: Strengthening the asphalt layers with a waterproof geocomposite. This is the **"anti-pumping"** function.



Installation of asphalt on Stratos R5

REINFORCEMENT

The settlement of a road is a common phenomenon that occurs on a wearing course: bus stop, recurring pothole, road extensions... They are usually due to the local repetition of load and discharge cycles (eg when a bus always stops at the same place) which can cause a settlement and weakening of the road structure. This is called a **"pumping"** phenomenon.

The solutions in **SOPREMA's Road** products range help to reinforce the road structure in order to solve the causes of damage and settlement (existing or future) of the wearing course.

The **SOPREMA** reinforcement geocomposite solution is ideal to repair and prevent the following problems:

- Road settlement due to localised load cycles.
- Recurrent potholes.
- Cracking in curves.
- Cracking at junctions (manholes, repairs...) and road extensions...

The reinforcement work will allow:

- To increase the load distribution cone.
- To reinforce the asphalt layers.
- To ensure that the layers of the pavement are watertight, thus avoiding the rising of water in the asphalt and the deconstruction of the road structure. This is the **"anti-pumping"** function.



Stratos R3 installation

JOINING

These products are solutions to repair the joints, junctions and all the grouts between the different elements encountered in the context of road, rail and airport works.

These solutions come in prefabricated form (based on elastomer bitumen) or in a canway form (based on elastomer bitumen or resins) to adapt to all geometries and applications.

SOPREMA JOINT SOLUTIONS ARE ADAPTED FOR THE FOLLOWING WORKS:

- Concrete/asphalts joints: for the junctions of the bearing layers with the edges, manholes, the covering slabs of expansion joints.
- Asphalt/asphalt: for extensions, potholes in pavement repairs.
- Metal/asphalts: for junctions with metal rails, manholes covers and sewerage grids.

- Kerosene-resistant airport runway joints.
- Hydrocarbon-resistant parking joints.
- Joints for de-tanking, emptying and cleaning areas.
- Filling joints between different pavement elements.



Concrete/asphalt junction (Stratos R1)



Asphalt/asphalt junction (Stratos R1)



Kerosene resistant joint on a heliport (Stratos R4)



Manhole joint installation (Stratos R1)



Asphalt crack filling (Stratos R2 with installation tool)



Asphalt crack filling (Stratos R2 with installation tool)



Cold asphalt crack filling (Stratos R2)

CRACK FILLING

There are several types of cracks. They can be cross-sectional (perpendicular to the pavement), or longitudinal (on layers courses or not).

Crack filling products are used for road maintenance. They help to block cracks on a roadway. Repairs can be directly circulated, they do not require any mechanical protection.

These solutions are delivered in prefabricated form (based on elastomer bitumen) or in a canway form (based on elastomer bitumen or resins) to adapt to all geometries and applications. To help during the installation, mechanised solutions facilitate their implementation.

SOPREMA's Roads range for filling cracks brings together a set of products to respond to all situations encountered. Both for large-scale or smaller renovation projects and for interventions requiring near-immediate re-release, **SOPREMA** offer suitable solutions.

REPAIRS

In addition to the construction of reinforcement, joining or crack filling, **SOPREMA's Roads** range recommends, when it is necessary to repair the support, with the application of specific products:

- Cold-asphalt.
- Fast-hardening resins.
- Cold asphalt repair products.



Hot asphalt crack filling (Transifal C40)



FLOOR PAINTS

The **SOPREMA Roads** range also offers floor paint products that create coloured areas on asphalt:

- In car parks: lineage, specific places, pedestrian traffic areas, etc.
- On roads: narrowing zones, cycle paths, etc.
- On sports fields: lineage and marking of areas, etc.
- In pedestrian areas: decorative parts, event markings, etc.

The specific solutions developed by **SOPREMA** allow the production of paints that are durable over time with rapid recirculation. The products are UV resistant with a wide choice of colours to be defined in the RAL colour chart.



Parking lineage with Stratos 71

SOPREMA Road floor paints are based on PMMA resins which offer many advantages:


- Speed, as it can be driven over, a few minutes after application.
- Resistant, PMMA is the technology used for all road markings.
- Possibility of being applied manually or mechanically thus facilitating the application.
- Possibility of having different types of finishes by adding aggregates thus leaving the choice of finish texture and meeting anti-slip requirements
- Extensive range of colours that can be applied in large areas with different colour effects.



Heliport lineage with Stratos 72

PRODUCTS

REINFORCEMENT



Anti-pumping function

STRATOS R5

Stratos R5 is a geocomposite waterproofing layer used to repair and/or reinforce the wearing layers of asphalt, minimising the possibility of future cracks. It reinforces the wearing layers in asphalt on settlements due to repeated loadings, on potholes, where cracks appears or on road extensions.

Packaging:

- Size: 20 ml x 1 m (individual box)
- Number of rolls per pallet: 25
- Storage: vertical on pallet
- **Ref:** 00119768


Installation

The geocomposite is unrolled, adhesive side on the asphalt areas to be treated. After removing of the protective film, the installation of asphalt on the top of the geocomposite allows a perfect bonding between wearing layers and the product.

Main advantages

- High resistance and waterproof for an **“anti-pumping”** effect.
- Easy and fast installation due to its self-adhesive side.
- Size of rolls to allow easy handling.

JOINING



Junctions / antiroot strip

STRATOS R1

Prefabricated and self-adhesive modified bitumen strip used to join elements on roads and railways. It joins existing elements (curbs, manholes...) and the add-on pavement layers in asphalt. It is anti-root treated, which prevents the appearance of weeds on the curbs / edges.

Packaging:

• High (mm):	30	40	50	60
• Length of rolls (ml):	10	10	10	10
• Number of rolls per box:	3	2	2	1
• Number of boxes per pallet:	54	54	54	54

• **Ref:** 00119774 / 00119775 / 00119776 / 00119777

Installation

The strip is cold applied vertically on the element (curb, rail, asphalt...) all around the area in which the asphalt will be poured.

Main advantages

- Easy and quick to install with its self-adhesive side.
- Prefabricated and cold applied without primer.
- Anti-root treatment.



Airport joint filling

STRATOS R3

High performance bituminous sealant, resistant to oils including kerosene used on road and airport surfaces. It offers a solution for joints on airport courses, parking decks, storage areas, roads and to fill joints between wearing course parts.

Packaging:

- Weight of each box (kg): 17
- Number of boxes per pallet: 40
- **Ref:** 00119780

Installation

The filler is pre-heated in a melter which is fitted with a stirring device and temperature control. It is then poured in the joint with dedicated equipment fixed for the area, the quantity and the size of the joint to be treated.

Main advantages

- Oils and kerosene resistant.
- Patented formula.
- Single component product.



Joint filling

STRATOS R4

Pourable sealant based on single component polyurethane elastomer cold applied for filling joints in traffic areas.

Packaging:

- 5 kg tin - 120 tins per pallet - • **Ref:** 00011597
- 15 kg tin - 30 tins per pallet - • **Ref:** 00011598


Installation

The filler is cold applied directly into the joint. A compressive joint may be necessary to maintain the filler.

Main advantages

- Oils resistant.
- Single component and cold applied.
- High elongation on break.

CRACK FILLING



**Crack filling
Prefabricated strip**

STRATOS R2

Prefabricated self-adhesive bitumen strip used to fill cracks in the wearing courses under circulation. It fills cracks in asphalt wearing courses and blocks any water infiltration damaging the road structure. It is particularly interesting for repairs requiring a short traffic break.

Packaging:

- Width (mm): 40
- Roll length (ml): 20
- Rolls per box: 2
- Boxes per pallet: 54
- **Ref:** 00119778

Installation

The self-adhesive tape is unrolled along the crack (or joint) by connecting it with approx. 10 mm each side. A specific tool may be used to facilitate the handling. The traffic going over the tape will help settle the bituminous filler inside the crack (or joint).

Main advantages

- Minor disruption in terms of traffic.
- Specific and easy tool for the application.
- Easy and quick to install with its self-adhesive side.



Crack filling

TRANSIFAL C-40

Hot pourable sealing joint. It allows the filling of cracks in the roadways and can absorb movements of the joints of bridge panels up to 40 mm.

Packaging:

- Weight of silicone carton boxes (Kg): 25
- Boxes per pallet: 24
- **Ref:** 00110797

Installation

The filler is pre-heated in a melter which is fitted with a stirring device and temperature control. It is then poured in the joint with dedicated equipment fixed for the area, the quantity and the size of the joint to be treated.

Main advantages

- Single component.

REPAIRS



Cold asphalt

STRATOS R6

The cold asphalt can treat larger holes such as potholes in successive 50 mm layers maximum, without exceeding a total thickness of 100 mm.

Packaging:

- Weight of buckets (Kg): 25
- Buckets per pallet: 48
- **Ref:** 00110359

Installation

The asphalt is cold placed on the area to be treated by successive layers of 50 mm maximum then tamped up to the maximum level of 100 mm.

Main advantages

- Easy and quick to install.
- Cold applied.
- Traffic can be open straight away for circulation.



Cold repairs of mastic asphalt

ALSAN® 052RS

Bitumen-polyurethane resin mortar allowing the repair of small parts of mastic asphalt or the surfacing of gutters over asphalt layers.

Packaging:

- 7.5 kg kit – 126 kits per pallet - • **Ref:** 00104760
- 45 kg kit – 30 kits per pallet - • **Ref:** 00104761

Installation

It is done by trowel or roller. Pre-dosed kit, cold applied.

Main advantages

- Installation directly on asphalts.
- UV resistant.
- No flame.



Repair mortar based on a PMMA resin

STRATOS 77

Fast repair mortar resin based on a bi component PMMA (Poly Methyl Methacrylate) pre-filled. It is a filled repair mortar that can be used to patch and smooth the defects and cracks in the support, make junctions around manholes, repair small potholes.

Packaging:

- Weight of buckets (Kg): 15
- Tins per pallet: 45
- **Ref:** 00153709

Installation

Pour the mortar onto the prepared surface. Compact and finish with a smoothing trowel. The application must be completed within 5 minutes after the end of mixing.

Main advantages

- Fast recirculation.
- Resistance to de-icing salts, UV, acids, bases and oils.
- Elastic behaviour similar to coated materials.



PMMA resin to be filled

STRATOS 78

Fast repair mortar resin based on a bi component PMMA (Poly Methyl Methacrylate) to be filled. It can be used to patch and smooth the defects and cracks in the support, make junctions around manholes, repair small potholes.

Packaging:

- Weight of buckets (Kg): 15
- Tins per pallet: 45
- **Ref:** 00153710



Installation

Pour the mix onto the prepared surface. Compact and finish with a smoothing trowel. The application must be completed within 5 minutes after the end of mixing.





Main advantages

- Fast recirculation
- Resistance to de-icing salts, UV, acids, bases and oils.
- Elastic behaviour similar to coated materials.

FLOOR PAINTS

	<p>STRATOS 71 (low solicitation)</p> <p>Flexible resin based on a bi component PMMA (Poly Methyl Methacrylate) used as a coloured surface finishing or marking. It may be applied on all types of asphalts.</p> <p>Packaging:</p> <ul style="list-style-type: none">• Weight of bucket (Kg): 15• Buckets per pallet: 45• Ref: 00153707	<p>Installation</p> <p>Pour the mix onto the prepared surface. Fast finishing. The application must be completed within 5 minutes after the end of mixing.</p> <p>Main advantages</p> <ul style="list-style-type: none">• Fast recirculation.• Resistance to de-icing salts, UV, acids, bases and oils.• Elastic behaviour similar to coated materials.
	<p>STRATOS 72 (high solicitation)</p> <p>Flexible resin based on a bi component PMMA (Poly Methyl Methacrylate) used as a coloured surface finishing or marking. Pre-filled with quartz of different sizes, it may be applied on all types of asphalts as an anti-slip surface finishing. It is used on all surfaces which are heavy solicited: parking desks, ramps and all surfaces which require a high resistance to abrasion.</p> <p>Packaging:</p> <ul style="list-style-type: none">• Weight of bucket (Kg): 15• Buckets per pallet: 45• Ref: 00153708	<p>Installation</p> <p>Pour the mix onto the prepared surface. Fast finishing. The application must be completed within 5 minutes after the end of mixing.</p> <p>Main advantages</p> <ul style="list-style-type: none">• Fast recirculation.• Resistance to de-icing salts, UV, acids, bases and oils.• Abrasive resistance.

ACCESSORIES

	<p>AQUADERE® TP</p> <p>Solvent-free elastomer bitumen primer in emulsion.</p> <p>Packaging:</p> <ul style="list-style-type: none">• Buckets of 25l – 27 buckets per pallet• Ref: 00011010	<p>Installation</p> <p>It is applied by brush, roller or squeegee, in one coat, onto a clean, dry substrate. The quantity may vary as the substrate between 200 g/m² to 350 g/m².</p> <p>Main advantages</p> <ul style="list-style-type: none">• Easy to install.• Fast curing time by dry weather.
	<p>ELASTOCOL® 500 TP</p> <p>Elastomer bitumen and solvent-based cold primer.</p> <p>Packaging:</p> <ul style="list-style-type: none">• Buckets of 30l – 24 buckets per pallet• Ref : 00097324	<p>Installation</p> <p>It is applied by brush, roller or squeegee, in one coat, onto a clean, dry substrate. The quantity may vary as the substrate between 150 g/m² to 250 g/m².</p> <p>Main advantages</p> <ul style="list-style-type: none">• Easy to install.• Possible use on all type of substrate.
	<p>REKU P 70</p> <p>Bi-component PMMA resin used as primer before repair with Stratos 7.</p> <p>Packaging:</p> <ul style="list-style-type: none">• Buckets of 25 kg – 16 buckets per pallet• Ref: 00104722	<p>Installation</p> <p>After homogenization of the mix resin and quartz (volume 1/1), the addition of the Alsan® CAT catalyst allows the reaction to start. The mixture is spread on the substrate within 10 minutes. Stratos 71 or Stratos 72 may be installed directly to the resin.</p> <p>Main advantages</p> <ul style="list-style-type: none">• Fast curing.• Large range of temperature of application.
	<p>ALSAN® CAT</p> <p>The addition of the Alsan® CAT catalyst allows the start of the reaction of PMMA resins. The mixture is spread on the substrate within 10 minutes.</p> <p>Packaging:</p> <ul style="list-style-type: none">• 100g bag - • Ref: 00156654• 200 bags per box	<p>Installation</p> <p>Add the catalyst in the resin and mix.</p>

	<p>SOPRACLEANER</p> <p>Degreaser and tar cleaner. New generation of cleaning product formulated on a vegetable basis, ensuring high efficiency, health and safety for users, protection of the environment.</p> <p>Packaging:</p> <ul style="list-style-type: none">• Bucket of 5l• Ref: 00011361																			
	<p>STRATOS R2 TOOL</p> <p>The tool makes the installation of Stratos R2 in a easy way.</p> <ul style="list-style-type: none">• Ref: on request.																			
	<p>TILTEX</p> <p>TILTEX® is a geocomposite made with two polypropylene non woven geotextiles (350 g/m² for the carrier layer and 200 g/m² for the cover layer) embedding a cement-sand mix. The hole is maintained by an intense needling process made in the plant.</p> <p>Packaging:</p> <ul style="list-style-type: none">• Mass per unit area (Kg/m²): 7, 9, 10, 12• Length/width: 20 ml / 5 m – 20 ml / 2.5 m – 5 ml / 1 m• Ref: 00118648 to 00118671	<p>Installation</p> <p>Once unrolled, the product is hydrated with water to set the mortar and form a thin layer of fiber cement.</p> <p>Main advantages</p> <ul style="list-style-type: none">• Easy and quick to install.• Easy to adapt.• High resistance to erosion and static or dynamic punctures.																		
	<p>GEOLAND HT</p> <p>Non-woven needle punched geotextiles made of 100% polypropylene high tenacity fibres used for construction projects such as tunnels, foundations and hydraulics.</p> <p>Packaging:</p> <ul style="list-style-type: none">• Colour: white.• Width: 2.20 m, 3.30 m or 6.60 m.• Weight: 120 g/m² (125 ml), 150 g/m² (125 ml), 200 g/m² (100 ml), 300 g/m² (65 ml), 400 g/m² (55 ml), 500 g/m² (50 ml), 700 g/m² (50 ml), 800 g/m² (50 ml).• Other weights on request.• Ref: 00103465 to 00103485 and 00104524 / 00105807 / 00105808	<p>Installation</p> <p>Geoland HT is loose laid in direct contact with the ground. Junction can be done by light hot air welding. UV exposure has to be limited.</p> <p>Main advantages</p> <ul style="list-style-type: none">• High tenacity.• High resistance to alkalinity and inert towards the various chemical elements present in the soil.• Possibility of roll widths up to 6.6 m and length on request.• CE marking for separation, filtration, drainage and protection.																		
	<p>STRATOS P20</p> <p>Stratos P20 comes as a black butyl strip. It is extruded, preformed and then rolled industrially on a peelable film. Stratos P20 is used as a compressible joint between concrete elements.</p> <table><tr><td>Packaging:</td><td></td><td></td></tr><tr><td>• Size - triangle - (mm):</td><td>36 x 20</td><td>45 x 22</td></tr><tr><td>• Length of rolls (ml):</td><td>3.5</td><td>1.75</td></tr><tr><td>• Rolls per box:</td><td>3</td><td>4</td></tr><tr><td>• Boxes per pallet:</td><td>45</td><td>36</td></tr><tr><td>• Ref: 00153731 / 00153724</td><td></td><td></td></tr></table>	Packaging:			• Size - triangle - (mm):	36 x 20	45 x 22	• Length of rolls (ml):	3.5	1.75	• Rolls per box:	3	4	• Boxes per pallet:	45	36	• Ref: 00153731 / 00153724			<p>Installation</p> <p>Stratos P20 is cold applied and must be pressed to adhere. Once compressed, the Stratos P20 fill the space between elements.</p> <p>Main advantages</p> <ul style="list-style-type: none">• Easy and fast to install.• Prefabricated and cold applied without primer.• Filling under compression.
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SOPREMA at your service:

Do you have a question about a specific project, the products or application possibilities? Then contact our technical team.

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