

System 900

NEWTON 902-P

Damp Tolerable DPM

Rev 2.0 - 22 February 2021

PRODUCT CODE - 902-P

PRODUCT OVERVIEW

Newton 902-P is a two-part, solvent-free, damp-tolerable, epoxy-based damp-proof membrane that suppresses residual construction moisture and rising dampness in concrete and sand/cement screeds and can be used in situations where the relative humidity level is above 85%. It is applied by brush or roller in two coats and can be applied just 7 days after concrete placement. Where the concrete surface is very open, or where the screed is dusting slightly, apply one coat of the [Newton 901-P](#) pre-primer to reduce suction and consolidate the surface first.

The high quality, low viscosity, epoxy formulation is suitable for application onto damp substrates, allowing for the speedy application of flooring, coatings, membranes, levelling compounds and screeds. Newton 902-P is quick and simple to use as it is applied by brush or roller in one or two coats, dependent on substrate relative humidity, and is a key component of the [Newton NewSeal Flooring System](#) for the sealing, coating and protection of exposed screed and concrete surfaces.

APPLICATION



PROPERTIES

H - Hardness and Durability; E - Elasticity and Flexibility; V - Vapour Resistivity; C - Curing and Drying; W - Working Time

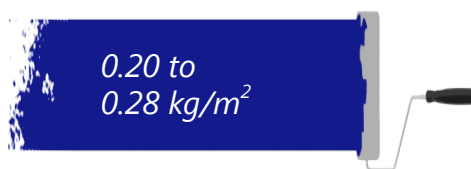


PACKAGING

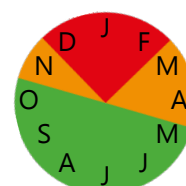


A & B components -
within two containers

COVERAGE



OUTDOOR SEASON



KEY BENEFITS

- Very damp-tolerable
- Can be applied to concrete and screed 7 days after placement
- Solvent-free
- Excellent vapour barrier
- High-bond DPM that provides a barrier to vapour and prevents osmotic blistering

METHOD OF APPLICATION

- Brush
- Short hair roller
- Squeegee (application only, not finishing)

SUITABLE SUBSTRATE

Indoor or outdoor floors, correctly formed, compacted and prepared:

- Concrete of at least 7 days old
- Screed of at least 7 days old

TYPICAL APPLICATIONS

Priming of damp, non-porous concrete and screed to provide a DPM and vapour barrier, prior to the application of moisture-sensitive flooring, coatings, membranes, levelling compounds and screed:

- Podium decks
- Car parks
- Warehousing and storage
- Garages
- Plant rooms

SYSTEMS

Newton 902-P is a component of:

The **Newton NewSeal System** for the sealing, coating and protection of exposed screed and concrete surfaces that are subject to mechanical and chemical wearing agents from above and from dampness from below.

Also suitable as both a damp-tolerable primer, and a damp-tolerable DPM.

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TECHNICAL DATA

Features	Result					Units
Form – Two component	Low viscosity epoxy resin					
Colour	Carmine Red (RAL 3013)*					
Specific gravity	1.10					
Pack size (plastic container)	5.0					kg
Weight	5.2					kg
Yield per kg	0.9					litres
Application rate - First coat	0.25 to 0.28**					kg/m²
Application rate - Further coats or over 901-P	0.20					kg/m²
Shelf life	12					Months
Pot life @ 20°C & RH of 40%	30					Minutes
Minimum application temperature - Substrate	+5 (and rising)					°C
Maximum application temperature - Air	+30					°C
Service temperature	-15 to +50					°C
Odour	Ammonia smell when mixing					
VOC content	Below 100 g/litre					%
Drying**	8°C	10°C	15°C	20°C	25°C	Units
Inter-coat adhesion window	15-48	13-40	12-30	11-28	9-24	Hours
To not be adulterated by light rain***	8	8	7	6	5	Hours
To not be adulterated by heavy rain***	14	12	11	10	8	Hours
Ready for temporary foot traffic	16	14	14	12	10	Hours
Cured Performance	Result		Units		Test Method	
Colour	Red/Grey					
Membrane thickness - First coat	0.23		mm			
Membrane thickness - Further coats	0.23		mm			
Adhesion to concrete (>B2.0)	3.5		MPa		BS EN 13892-8	
Water vapour transmission rate – UK Perm	>1.0		g/m²/24 hrs		EN 1504-2	
Water vapour diffusion resistance – S _d value	2.066		m		Calculated from UK Perm	
Water vapour diffusion resistance – μ value	11478		μ		Calculated from UK Perm	
Water vapour diffusion resistance	10.331		MN/g		Calculated from UK Perm	
Reaction to fire classification – Not determined	F				Euroclass	

The above data, even if carried out according to regulated tests are indicative and they may change when specific site conditions vary. *Colours are based on the RAL colour pigment used, not the finished product. The exact colour is slightly lighter. **Depending on substrate porosity. ***Figures are influenced by humidity also and so are indicative.

SPECIFICATION

Newton Waterproofing Systems work in partnership with RIBA NBS who publish our products on [NBS Source](#). The platform integrates seamlessly into project workflows, providing all product data from Newton's NBS BIM Objects, NBS Plus Clauses and RIBA Product Selector into one single source of product information.

NBS Source also hosts a large selection of Newton [case studies](#), as well as product [literature and certifications](#).

A wide range of drawings are available [on our website](#)

ANCILLARY PRODUCTS

Dusting or very porous surfaces should be first sealed with a single coat of Newton 901-P pre-primer.

LIFE EXPECTANCY & PROTECTION

Life expectancy is equal to that of the surface it is applied to or the coating applied above. If used as a DPM and fully protected, the product has a life expectancy equal to the substrate it is applied to.

If the wear expectations are high or wear is visible, a protective coating of [Newton 701-HB](#) is recommended and we suggest the O&M manual requests inspection at appropriate intervals. Please speak with the installing contractor or our Technical Team for advice.

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TRAINING AND COMPETENCY OF THE USER

Newton 902-P should only be used by those with an understanding and experience in the use of two-part resins applied to floors.

PACKAGING

The product consists of two parts, A and B, both of which are measured and ready to be mixed:

- Part A (Tin of resin) 2.5 kg
- Part B (Tin of hardener) 2.5 kg

APPLICATION RATE

To a thickness of 0.23 mm (230 microns) per coat, which requires an application rate of 0.20 to 0.28 kg/m² depending on surface porosity.

COVERAGE

To grit blasted and textured surfaces, approximately 3.5 m² per kg per coat for the first coat and up to 5 m² per kg per coat for the second coat or where applied over Newton 901-P primer. Coverage will vary according to the texture, porosity and evenness of the surface on which the 902-P is being applied.

NUMBER OF COATS REQUIRED

Two coats of 902-P are required where the relative humidity level of the screed is higher than 85%. For RH levels between 75% and 85%, use two coats of 902-P or one coat, if already primed with Newton 901-P.

CONSTRUCTION

The construction should conform with current Building Regulations, British Standards and relevant Codes of Practice. New concrete and screed must be at least 7 days old.

SURFACE PREPARATION - CONCRETE FLOORS

With both new and existing concrete surfaces, the surface should be ground with floor grinding machines to remove laitance.

Vacuum clean after grinding.

All surface cracks should be repaired and filled.

In all cases the surface must be clean, and free from dust, laitance, oils, paints or other forms of contamination. Large holes or indentations should be filled with [Newton 203-RM](#).

SURFACE PREPARATION - SCREEDS

Remove surface laitance by light sanding with a suitable pad or disc. All dust must be removed by vacuum.

Newton 902-P may be applied to screeds with a moisture level of less than 87% RH. If the moisture level in the screed is above this, further drying must be carried out according to the manufacturer's instructions.

SURFACE PREPARATION - METAL

Surfaces should be cleaned and abraded to give a mechanical key.

Ferrous metals should be free from rust and primed with an anti-oxidation primer.

MIXING

Newton Waterproofing supply the full range of [Collomix Mixing Equipment](#) that includes Hand Mixers, Stirrers, Mixing Stands, Buckets, Transport Carts and the Mixer Clean mixing bucket.

Newton 902-P can be mixed with the LX 90 stirrers, matched to the Xo 1 Hand Mixers. A low-speed drill can also be used.

- Place the hardener (Part B) into the resin (Part A). Scrape the bottom and sides so that all of the hardener is mixed into the resin
- Mix for two minutes using the LX 90 stirrer



APPLICATION

Once mixing is complete, transfer the mixed 902-P into roller tray and, using a medium-pile simulated sheepskin roller, apply it evenly over the surface

For best results, pour the mixed product onto the substrate in small quantities and quickly roller it out.

Alternatively, a squeegee can be used to place the product.

- Pour mixed material evenly within marked bays
- Use a squeegee to evenly distribute the product material over the specified area. Check thickness with a wet film gauge
- Use a roller to ensure an even finish
- Brushes can be used for detailing

Wet film gauges are available from Newton Waterproofing by request.

SPECIALIST TOOLS REQUIRED

No specialist tools required.

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POT LIFE & WORKING TIME

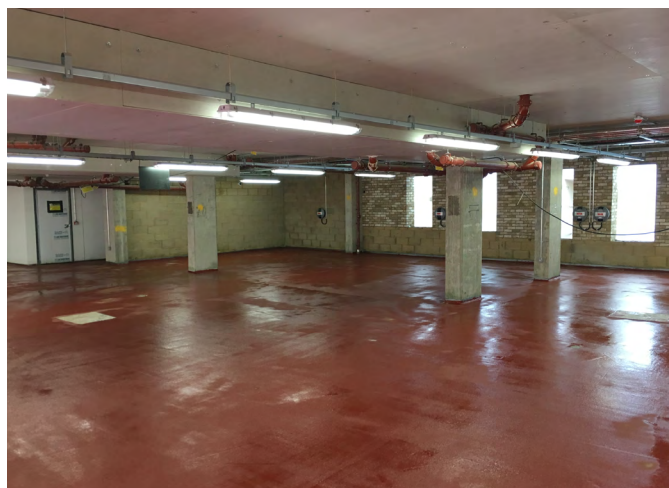
At 20 °C Newton 902-P has a working time of 30 minutes but a pot life of only 15-20 minutes. If the product is not used within 20 minutes, decant it into smaller tins.

WARNING: Mixing of the hardener with the resin results in an exothermic chemical reaction. Leaving too much product in the tin for too long will result in the product and the tin becoming very hot.

NOTE: Although the exothermic reaction is the main determinant of pot life, the ambient temperature will also have an effect, with the pot life reducing further in warmer and hotter conditions.

DRYING TIMES

For curing/drying times please see the Technical Data Table on page 2.



OVER-COATING

Application of further coats of Newton 902-P should be at 90° to the first coat and must be carried out within the inter-coat adhesion window confirmed on page 2.

If it is not possible to apply the Newton 902-P within that window, a mechanical key is required. This can be achieved by lightly abrading the surface of the 901-P. Please bear this in mind when planning the project.

Where 902-P is applied over a primer of Newton 901-P, this must also be applied within the inter-coat adhesion window. If this is not achieved, abrading or 100% broadcasting with sand, to create a mechanical key, will be required.

CLEANING

Wipe excess product from tools and equipment with a rag and then clean with xylene.

Hardened product can only be removed mechanically.

LIMITATIONS

The product is seasonal and it is unlikely that two full working days will be warm enough or dry enough for successful external application during December, January and February. Careful planning and some luck with the weather may allow for use in November, March and April.

Regardless of the time of year, do not apply prior to rain - please see information within the curing table on page 2.

Internal spaces may be space-heated to ensure the correct working temperature is achieved.

- Minimum substrate temperature must be of +5°C and rising
- Do not apply at temperatures higher than +30°C
- Do not apply if rain, mist, fog or cold weather are expected the day after application

WARNINGS

- Monitor the product in the tin to ensure it is not overheating
- Do not leave the tin upside down on the substrate

COLOUR

Carmine Red (RAL 3013).

Other colours are available on request. Lead times will vary so please provide as much notice as possible.

Variable minimum order quantities will also apply, so please check with the Newton Sales Team.

Colours are based on the RAL colour pigment used, not the finished product. The exact colour is slightly lighter.

STORAGE

Store in dry conditions at temperatures between +10°C and +30°C with containers fully sealed. Do not expose to freezing conditions.

If these conditions are maintained and the product packaging is unopened, then a shelf life of up to 12 months can be expected.

HEALTH & SAFETY

Product should only be used as directed. The Safety Data Sheet (SDS) should be carefully read prior to application of the material.

The SDS is available upon request from Newton Waterproofing or online via our website. Please see contact details below.

Use appropriate PPE for the environment the system is installed within. Use products only as stated within this Technical Data Sheet and the SDS.

NEWTON 902-P

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Newton Waterproofing
Systems
Newton House
17-20 Sovereign Way
Tonbridge
Kent TN9 1RH

902-P
EN 13813:2002

Two component moisture tolerant
epoxy resin primer. According to
EN 13813: SR-B2.0

Essential characteristics	Declared performance	Test standard	Harmonised Technical Standard
Release of corrosive substances	SR	(EN 13813, 5.3.5)	EN 13813:2002
Water permeability	NPD		
Wear resistance	NPD	EN 13892-4	
Bond strength	>B2.0	EN 13892-8	
Impact resistance	>IR10	EN ISO 6272	
Reaction to fire	NPD		
Sound absorption	NPD		
Thermal resistance	NPD		
Chemical resistance	NPD		

Any specification/advice provided is only valid if used with products supplied by John Newton and Company Ltd (trading as Newton Waterproofing Systems). Newton Waterproofing Systems reserve the right to update product literature at any time. Please always refer to our [website](#) for the latest versions.

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Newton House, 17-19 Sovereign Way, Tonbridge, Kent, TN9 1RH

T: +44 (0)1732 360 095 W: www.newtonwaterproofing.co.uk E: info@newtonwaterproofing.co.uk