# System 900

# **NEWTON 902-P**

# Damp Tolerable Primer For Non-Porous Surfaces



Rev 1.2 - 4 September 2020

PRODUCT CODE - 902-P

### **PRODUCT OVERVIEW**

Newton 902-P is a two-part, solvent-free, damp-tolerable, epoxy-based primer which is applied above Newton 901-P pre-primer as a barrier to residual substrate moisture and vapour within concrete and screeds. The high quality, low viscosity, epoxy formulation of the combined application of the primer and pre-primer is suitable for application onto damp surfaces, allowing for the speedy application of flooring, coatings, membranes, levelling compounds and screeds to damp substrates. Newton 902-P is quick and simple to use and can be applied over cementitious screeds and concrete just 7 days after placement.

It is applied by brush or roller in one coat and is a key component of the <u>Newton NewSeal Flooring System</u> 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

W E C VH

# **PACKAGING**

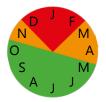


A & B components - within two containers

# **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 of 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, and is suitable for use as both a damp tolerable primer, and a damp tolerable DPM.

# Damp Tolerable Primer For Non-Porous Surfaces

TECHNICAL DATA							
Features	Result				Units		
Form – Two component	Low visco	Low viscosity epoxy resin					
Colour	Carmine I	Carmine Red (RAL 3013)*					
Specific Gravity	1.10						
Pack size (plastic container)	5.0						
Weight	5.2	3					
Yield per kg	0.9					litres	
Application rate - 1st coat over Newton 901-P	0.25					kg/m²	
Application rate - further coats	0.25	3					
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	-					
Service temperature	-15 to +5	50				°C	
Odour	Ammoni	Ammonia smell when mixing					
VOC content	Below 10	Below 100 g/litre %					
Drying**	8°C	10°C	15°C	20°C	25°C	Units	
Drying -	0 0	10 0					
Inter-coat adhesion window	15-48	13-40	12-30	11-28	9-24	Hours	
, 5				11-28 6	9-24 5	Hours Hours	
Inter-coat adhesion window  To not be adulterated by light rain***  To not be adulterated by heavy rain***	15-48	13-40	12-30	_			
Inter-coat adhesion window  To not be adulterated by light rain***	15-48 8	13-40	12-30 7	6	5	Hours	
Inter-coat adhesion window  To not be adulterated by light rain***  To not be adulterated by heavy rain***	15-48 8 14	13-40 8 12	12-30 7 11	6 10	5 8	Hours Hours Hours	
Inter-coat adhesion window  To not be adulterated by light rain***  To not be adulterated by heavy rain***  Ready for temporary foot traffic	15-48 8 14 16	13-40 8 12 14	12-30 7 11 14	6 10	5 8 10	Hours Hours Hours	
Inter-coat adhesion window  To not be adulterated by light rain***  To not be adulterated by heavy rain***  Ready for temporary foot traffic  Cured Performance	15-48 8 14 16 Result	13-40 8 12 14	12-30 7 11 14	6 10	5 8 10	Hours Hours Hours	
Inter-coat adhesion window  To not be adulterated by light rain***  To not be adulterated by heavy rain***  Ready for temporary foot traffic  Cured Performance  Colour	15-48 8 14 16 Result	13-40 8 12 14	12-30 7 11 14 Units	6 10	5 8 10	Hours Hours Hours	
Inter-coat adhesion window  To not be adulterated by light rain***  To not be adulterated by heavy rain***  Ready for temporary foot traffic  Cured Performance  Colour  Membrane thickness - first coat	15-48 8 14 16 Result Red/Grey 0.23	13-40 8 12 14	12-30 7 11 14 Units	6 10	5 8 10	Hours Hours Hours ethod	
Inter-coat adhesion window  To not be adulterated by light rain***  To not be adulterated by heavy rain***  Ready for temporary foot traffic  Cured Performance  Colour  Membrane thickness - first coat  Membrane thickness - further coats	15-48 8 14 16 Result Red/Grey 0.23 0.23	13-40 8 12 14	12-30 7 11 14 Units	6 10 12	5 8 10 Test M	Hours Hours Hours ethod	
Inter-coat adhesion window  To not be adulterated by light rain***  To not be adulterated by heavy rain***  Ready for temporary foot traffic  Cured Performance  Colour  Membrane thickness - first coat  Membrane thickness - further coats  Adhesion to concrete (>B2.0)	15-48 8 14 16 Result Red/Grey 0.23 0.23 3.5	13-40 8 12 14	12-30 7 11 14 Units mm mm MPa	6 10 12	5 8 10 Test M BS EN 13 EN 1504	Hours Hours Hours ethod	
Inter-coat adhesion window  To not be adulterated by light rain***  To not be adulterated by heavy rain***  Ready for temporary foot traffic  Cured Performance  Colour  Membrane thickness - first coat  Membrane thickness - further coats  Adhesion to concrete (>B2.0)  Water vapour transmission rate – UK Perm	15-48 8 14 16 Result Red/Grey 0.23 0.23 3.5 >1.0	13-40 8 12 14	12-30 7 11 14 Units mm mm MPa g/m²/24	6 10 12	5 8 10 Test M BS EN 13 EN 1504- Calculate	Hours Hours Hours ethod	
Inter-coat adhesion window  To not be adulterated by light rain***  To not be adulterated by heavy rain***  Ready for temporary foot traffic  Cured Performance  Colour  Membrane thickness - first coat  Membrane thickness - further coats  Adhesion to concrete (>B2.0)  Water vapour transmission rate – UK Perm  Water vapour diffusion resistance – Sd value	15-48 8 14 16 Result Red/Grey 0.23 0.23 3.5 >1.0 2.066	13-40 8 12 14	12-30 7 11 14 Units mm mm MPa g/m²/24 m	6 10 12	5 8 10 Test M BS EN 13 EN 1504 Calculate	Hours Hours Hours ethod	

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. \*\*Figures are influenced by humidity also and so are indicative. \*\*\*Depending on substrate porosity.

#### **SPECIFICATION**

Newton Waterproofing Systems work in partnership with RIBA NBS who publish our products on <u>NBS Source</u>. 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 <u>case</u> <u>studies</u>, as well as product <u>literature and certifications</u>.

A wide range of drawings are available on our website

#### **ANCILLARY PRODUCTS**

Newton 902-P should be applied to surfaces sealed by 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, the product has a life expectancy that, if fully protected, will be 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.

# **NEWTON 902-P**

# Damp Tolerable Primer For Non-Porous Surfaces

#### 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. Where the product is used as part of a waterproofing specification, knowledge and experience of the waterproofing of retained structures is required, as well as the understanding and training required to use the product as part of a coordinated approach to the waterproofing of the structure, which in many cases will require further waterproofing products so as to achieve the required habitable grade as defined by BS 8102:2009.

## **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 0.25  $kg/m^2$ 

## **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**

Surface laitance should be removed 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.

#### **HEATED FLOORS**

The screed must be left to dry as recommended by the screed manufacturer prior to commissioning the under floor heating system.

Commissioning should be performed as instructed by the heating system and screed supplier. This is typically carried out in small increments over a period of time.

Once the system has reached maximum temperature, this level should be maintained for a minimum of 24 hours before allowing to cool at a controlled rate.

#### 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 to that all of the hardener is mixed into the resin
- · Mix for two minutes using the LX 90 stirrer



#### **APPLICATION**

Apply with a roller or brush to a consistent thickness to give an even and smooth finish.

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

Wet film gauges are available from Newton Waterproofing by request.

# **NEWTON 902-P**

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# SPECIALIST TOOLS REQUIRED

No specialist tools required.

## POT LIFE & WORKING TIME

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 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.

The coating to be applied above the primer 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

#### **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**

# Damp Tolerable Primer For Non-Porous Surfaces





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)		
Water permiability	NPD		]	
Wear resistance	NPD	EN 13892-4	EN 13813:2002	
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.