

Rev 1.6 - 22 December 2014

PRODUCT CODE - CW101

PRODUCT OVERVIEW

Newton 101F is a two-component acrylic modified cementitious coating. The ideal product to waterproof and re-surface concrete and masonry. 101F is very user friendly with simple on-site mixing methods. Newton 101F creates an effective barrier to waterborne salts and atmospheric gases. Newton 101F provides a hardwearing, seamless, waterproof membrane.



BENEFITS

- Potable water certified
- 2mm coating provides an anti-carbonation cover equivalent to over 80mm of concrete
- Waterproof - resists up to 15 bar (150 metre head) of positive pressure. Resists up to 3 bar (30 metre head) of negative pressure
- > 100% elongation
- High resistance to carbon dioxide and chloride ion diffusion
- Unlike conventional coatings, which require the concrete to cure for 7 - 28 days, Newton 101F can be applied to 24 hour-old concrete thereby giving immediate protection
- Environmentally friendly water based product. No solvents and no VOC's

TYPICAL APPLICATIONS

- Waterproof lining for lift pits, swimming pools etc.
- Coating seawater channels
- Bathroom and wet areas
- Fixing tiles in water retaining structures
- Protection against carbonation and chloride attacks
- Application in marine areas

NEWTON 101F		
	COMPONENT A	COMPONENT B
Form	Powder	Liquid
Colour	Grey/White	Milky White
Density	N/A	1.03
Bulk Density	1.36	N/A
Mixing Ratio (A+B)	2.5 to 1 by weight	
Density (mixed)	1.8	
Toxicity	Non-Toxic	

CURED PROPERTIES	
Adhesion to concrete	> 1.1N/mm ²
Resistance to water pressure (2mm coating)	15 bar positive
Taywood Test	3 bar negative
Elongation - ASTM D2370	> 100%
Tensile strength unreinforced - ASTM D2370	1.6 N/mm ²
Water permeability coefficient - K m/s	5.84 x 10 ⁻¹³
Oxygen diffusion coefficient	2.89 x 10 ⁻⁵
Carbon dioxide diffusion coefficient	9.12 x 10 ⁻⁶

All technical data stated herein is based on test results carried out under laboratory conditions

APPLICATION GUIDELINES

- All surfaces must be thoroughly cleaned and free from laitance, loose material, dust, dirt, oil, grease, general grime, all contaminants, mould oil, etc
- When there is evidence of fungus or mould growth, a suitable fungicide should be used prior to application
- Fill all non-structural cracks above 1mm wide
- All structural cracks should be repaired or treated
- Any holes or indentations should be filled with a suitable filler such as Newton 107 QuickFillet prior to application of Newton 101F
- Brick pointing should be made flush
- All renders, coatings, and tiling should be removed back to the structure to be waterproofed
- Any loose pointing should be raked out and re-pointed flush with the surface of the bricks or block work
- Any loose friable concrete or brickwork should be cut out and properly repaired
- All old repairs should be inspected and repaired where necessary
- Newly laid concrete should be smooth and not a tamped down finish
- Newly laid concrete can be coated after 24 hours or as soon as it can be walked on
- Leaking construction joints or cracks should be treated and sealed before coating
- Apply 45° fillets to all internal angles with Newton 107 QuickFillet

NEWTON 101F

Cementitious Flexible Waterproofing Membrane

MIXING

Newton 101F consists of two components part A powder and part B liquid. Pour the part B into a clean suitable mixing vessel ie. Bucket, then gradually add the Part A into the Part B while mixing with a low speed paddle mixer until a smooth lump free mixture is obtained. DO NOT ADD WATER.

Only mix a suitable amount that can be applied in 10 - 30 minutes and stir mixture frequently. Do not remix with additional liquid. Clean all equipment and tools immediately after use with clean water.

Brush application: use 2.5 Part A to 1 Part B by weight. Mixing the same ratio by weight as above can be used for smaller quantities.

SURFACE APPLICATION

Dampen (not wet - no free standing water) all surfaces with clean water prior to application. Particular attention should be made at expansion joints and over movement cracks.

The total application should not exceed 3mm thick otherwise splitting or cracking may occur. Do not apply over bitumen or other surface coatings.

New Expansion Joints: Newton 101F should be applied into the rebate below the level of the expansion media (i.e. Mastic).

Old Expansion Joints/moving cracks: These should be inspected and repaired prior to application. Mask over the media (mastic / crack) with de-bonding tape. One coat of Newton 101F should now be applied over the joint / crack to at least 100mm on either side. Reinforcing mesh should be embedded into the first coat while it is still wet. Second coat should be applied only after the first coat is touch dry.

APPLICATION OF THE MAIN COAT

Apply the first coat of Newton 101F using a brush, roller or trowel at a coverage rate of 1.8kg per m² making sure it is evenly coated. Do not paint-on but spread on 1mm thick. Second coat should be applied when the first coat is still green / tacky. Apply the second coat at right angles to the first coat to ensure proper coverage at a coverage rate of 1.8kg per m². Allow the Newton 101F coating to dry completely before subjecting to light foot traffic. For heavier usage protect with a floor screed. Water bearing structures can be filled with water 24 hours after the Newton 101F has fully cured. Once touch dry additional coatings (as required) can be applied.

Newton 101F requires protection from the weather elements together with necessary space for it to breath, until it has reached its initial curing stage (approximately 3 days).

COVERAGE

Newton 101F is applied in two coats of 1mm each to give a total thickness of 2mm. Each 1mm coat requires a coverage rate of 1.8kg per m² to give a total coverage rate of 3.6kg per m². One 35kg pack of Newton 101F will treat between 9m² to 10m².

CLEANING

Thoroughly clean all tools and equipment with water after use.

PACKAGING

Newton 101F is supplied in 35kg packs (25kg Component A Powder & 10kg Component B Liquid).

STORAGE

Newton 101F should be stored at room temperature (min 10°C and max 38°C), kept dry and out of direct sunlight. 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

Newton 101F is alkaline. Protect hands with rubber gloves. Avoid contact with skin and eyes. Should this occur, flush with water. If irritation persists, contact a physician.

Newton 101F should only be used as directed. We always recommend that the Material Safety Data Sheet (MSDS) is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The MSDS is available upon request from John Newton or online via our web site. Please see contact details below.

OTHER NEWTON SYSTEM 100 PRODUCTS

Newton 101F is a core product within the Newton System 100 range of cement based waterproofing products. Other System 100 products are listed below:

Newton 102 WaterPlug
For sealing of leaks prior to application of Newton 101F or Newton 105F

Newton 103 SBR
SBR waterproofing additive

Newton 106 Lime Inhibitor
Spray applied or admixture preventing the leeching of free lime from concrete in contact with water

Newton 107 QuickFillet
Rapid setting mortar for the creation of angle fillets for use with Newton System 100 cement based renders and Newton System 200 liquid applied deck and roofing products