

HydroCoat LiquaBond

Acrylic Bonding Agent & Admixture

Rev 6.4 -24th August 2023

Code - 908-25 & 908-5

PRODUCT OVERVIEW

Newton HydroCoat LiquaBond is a formulated acrylic admixture used both as a primer for significantly increasing the bond in wet-to-dry cementitious systems, and as a high performance admixture which waterproofs cement-based mixes as well as greatly increasing the adhesion of the product to the substrate.

APPLICATION



PACKAGING



COVERAGE



KEY BENEFITS

- High bond strength - Provides excellent adhesion when used as a bonding agent or as an admixture in cement-based mixes
- Resilient - When used as an admixture, an acrylic lattice is formed throughout the mix, greatly reducing brittleness and enhancing resistance to impact damage
- Water resistance - Combines low permeability with resin stability in continuously wet conditions when used in cement-based mixes
- Versatile - Easy to use with a high bond to a wide range of materials such as brick, stone, concrete as well as a number of different metals and plastics
- Delayed bonding - When used as a bonding agent, subsequent toppings may be applied immediately or up to 7 days later
- Eliminates the need for water curing
- Product stability - Specially formulated for maximum performance under alkaline conditions of cement mixes. Unlike PVA systems, the bond film will not hydrolyse under wet conditions

SUITABLE SUBSTRATE

- Concrete
- Mortar
- Stone
- Cement-based waterproofing slurries
- Screed
- Render
- Metals



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TECHNICAL DATA

Features	Result	Units				
Form	Liquid					
Colour	Milky White / Cloudy when cured					
Density/Specific Gravity	1.04					
Pack size	5 & 25	Litres				
Shelf life	12	Months				
Pot life @ 20°C & RH of 40%	N/A					
Coverage – As tack coat – Concrete	0.15 to 0.40	l/m ²				
Coverage – As admix	100	l/m ³				
Application method – Tack coat	Brush or Roller					
Application temperature	+5 to +35	°C				
Service temperature	As product used with or within	°C				
Toxicity	None					
VOC content	None					
Curing – Tack coat ²	5°C	10°C	15°C	20°C	25°C	Units
Ready for application over	60	30	20	15	10	Minutes

The above data, even if carried out according to regulated tests are indicative and they may change when specific site conditions vary. ¹See the coverage section below. ²Figures are influenced by humidity and the porosity of the surface and so are indicative.

TYPICAL APPLICATIONS

- As a primer to increase the adhesion of [HydroCoat Tanking Slurry](#) as well as those from other manufacturers
- As a primer to increase the adhesion of render to cement/acrylic waterproofing membranes such as [HydroCoat 103 2K](#) and [HydroCoat 107 Elastic 2K](#)
- As an admixture and primer to increase the adhesion of render to nonporous surfaces
- For priming of construction elements prior to sealing and lapping with butyl tapes
- Increases the bond of internal angle fillets
- As an admixture to sand/cement screeds to provide a fully bonded screed
- As an admixture to sand/cement repair mortar providing greater workability and adhesion
- Bonding agent between new and old concrete
- Bonding agent between render and brick and concrete walls
- Sealing walls and ceilings prior to painting in high humidity areas such as bathrooms and kitchens

METHOD OF APPLICATION

Roller or Brush.

LIFE EXPECTANCY

The product is fully taken up into the materials it is applied to or mixed with and therefore has a life expectancy that is the same as these materials.

ANCILLARY PRODUCTS

There are no ancillary products.

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](#).

SPECIALIST TOOLS REQUIRED

No specialist tools required.

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TRAINING AND COMPETENCY OF THE USER

The application of HydroCoat LiquaBond requires no special skill sets, but is often used within exacting specifications and with products that require particular skill sets, such as waterproofing. It should therefore only be used by those who have experience with the products containing or applied to HydroCoat LiquaBond.

SUBSTRATE PREPARATION

Prepare the substrate as recommended for the product to be applied to the HydroCoat LiquaBond or that the HydroCoat LiquaBond will be mixed into, but generally the substrate should be free from laitance, grease, oils, dust and debris. Only apply to substrate that has cured as required by the products that HydroCoat LiquaBond is used with.

COVERAGE & YIELD

Coverage is determined by the density and porosity of the substrate. The figures below are for guidance.

Yield is determined by the ratio of cement within the mix and by the required consistency. The figure below is a fairly rough guide based upon a dense, medium to dry, 4:1 sand/cement screed/render mix.

- As a tack coat - dense, smooth concrete - 0.15 litres/m²
- As a tack coat - medium density concrete - 0.25 litres/m²
- As a tack coat - older or rough concrete - 0.4 litres/m²
- As a tack coat - smooth and impervious materials - 0.10 litres/m²
- As an admix – 1:10 which is 100 litres/m³, 10 litres/100 litres and 1 litre/10 litres of screed/render

MIXING RATIO - TACK COAT

Mix one part HydroCoat LiquaBond with one part water to achieve a ratio of 1:1.

LIMITATIONS

- Do not apply prior to rain
- Do not apply at temperatures lower than +5°C or higher than +35°C
- If the product to be applied to the tack coat is not applied within 7 days, re-apply the tack coat

COLOUR

Milky-white.

APPLICATION - TACK COAT

Apply with brush or roller in one single coat, spreading the mix as evenly as possible. Avoid ponding.

Bond to vertical surfaces can be increased by adding small quantities of OPC to the mix. Brush well into the vertical surface.

- When rendering over waterproofing slurries, add OPC to the mix as described above and apply a 5mm bonding coat of render that includes HydroCoat LiquaBond to the mix, lightly scratching and roughing up the surface ready for the main scratch coat.

CURING - TACK COAT

Please refer to curing table above. Open tack time is 7 days. After 7 days, re-apply the tack coat.

MIXING RATIO - ADMIX

Mix one part HydroCoat LiquaBond with two parts water to produce a gauging liquid with a ratio of 1:2.

1m³ (1000 litres) of mix = 100 litres of HydroCoat LiquaBond.

1m² x 10mm (10 litres) of mix = 1 litre of HydroCoat LiquaBond.

25mm x 25mm x 10m smoothing fillet (3.3 litres) = 0.33 litres of HydroCoat LiquaBond.

The above calculations are based upon the following mix ratio:

50kg cement; 125kg sand; 20 litres of water and 10 litres of HydroCoat LiquaBond which creates a mix of 100 litres.

ADMIX

HydroCoat LiquaBond can be mixed with water to create a gauging liquid that is suitable for all cement-based mixes and results in a mix that is more flexible, waterproof and exhibits increased adhesion.

Do not mix with other additives.

CURING - ADMIX

Please refer to the curing information of the product the HydroCoat LiquaBond is mixed into.

Generally, cure with damp hessian and plastic.

DO NOT spray directly with water. If a sprayed water cure is required, mix two parts clean water with one part HydroCoat LiquaBond.

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POT-LIFE & FURTHER USE

HydroCoat LiquaBond is a single-component liquid with low viscosity and no chemical cure, so it has no pot-life. When some product is unused, simply re-seal the packaging and use within shelf-life parameters.

PACKAGING

5 litres.

STORAGE & SHELF-LIFE

Store in dry conditions at temperatures between 10°C and 35°C with containers fully-sealed. Do not expose to freezing conditions.

When stored in the correct environment a shelf-life of 12 months can be expected.

HEALTH & SAFETY

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

Newton Waterproofing Systems reserve the right to update product literature at any time. Please always refer to our [website](#) for the latest versions.