Chemind Product Data Sheet

Chembond

High Performance Latex Modifier for Cement

Description

Chembond is a synthetic latex which, when added to adhesives mortar and concrete mixes, enhances their basic properties.

The cured compound has exceptional adhesion to brick, concrete, ceramic tiles and to most other building materials such as timber, many metals, expanded polystyrene foam and rigid polyurethane foam.

Chembond increases flexural strength.

Uses

Chemind Chembond is used to repair or patch cementicious, brick and other appropriate substrates before the installation of Chemind waterproof membrane systems.

It is used to produce premium quality, high performance polymer modified cement mixes for external or internal applications including:

- Adhesive binder for render systems
- Adhesion slurry coat over Chemind Aquagard M polyurethane membranes
- Repair of concrete and masonry
- Thin topping or levelling screeds
- Moisture proof sealer for concrete, render, FC and CFC
- Modifier for Chem-Fix powder adhesives
- Bonding agent for Crystalseal slurry
- Waterproof grouts and render coatings

Features

- No toxic or hazardous ingredients
- Water cleanup
- Resists spalling - moves with substrate
- Boosts tensile and compressive strength
- Increases flexural and adhesive strength
- Resists acids, alkalis and fats
- Excellent exterior durability
- Totally waterproof
- Multi-purpose and easy to use
- Single pack
- Economical with high performance
- Systems for Total Project Specification

Typical Properties

Property	No Chembond	Chembond @ 25% wt Cement
Adhesion to concrete (N/mm^2)	0.07	2.1
Adhesion to dry steel (N/mm^2)	0.0	2.0
Tensile strength (N/mm^2)	2.0	4.0
Compressive strength (N/mm^2)	56.0	50.0
Flexural strength (N/mm^2)	7.1	13.2
Flexural strength after 1 year @ 70°C (N/mm^2)	5.2	14.3
Adhesion to concrete after 6 months @ 70°C (N/mm^2)	0.0	1.9
Shrinkage during drying (% shrinkage)	0.07	0.01
Water vapour permeability (g/m^2/24 hrs)	46.9	4.0
Water penetration (kg/m^2/24 hours)	100	30

Preparation

All surfaces must be sound, smooth, dry and free from dust, debris, oil or other contaminants.

Bony concrete should be removed.

Any exposed steel and porous or very smooth surfaces should be first carefully cleaned and then sealed with a slurry of Chembond:Water:Cement:Sand in the ratio of 1:1:2:1 applied by short bristled brush.

Fine sand may be deleted depending on surface finish required. Porous concrete may be dampened prior to applying slurry.

NOTE

Application to porous substrates at elevated temperatures or in windy conditions may result in trowelling difficulties, poor surface adhesion and fine shrinkage cracking.

Application

- Renders
  - Do not exceed 7 mm per coat. Thicker layer may cause sagging or separation from wet primer coat.
  - Scratch surface of each coat and leave for at least 6 hours before applying further coats.
  - Trowel final coat to required finish.
- Floor Toppings
  - Toppings based on Chembond can be laid to any thickness (12 mm min.) depending on the sieve grading of the sand.
  - Feather edging is permissible for non-critical areas but use of 24 hr damp curing is particularly important.
- Chem-Fix cement based adhesives
  - Dilute Chembond with 3 parts water and add to dry ingredients.
- Trowelling
  - Use semi-dry mix - consistency must allow total compaction by methods used.
  - Chembond mortar should be placed on wet priming coat, then levelled, well compacted and floated smooth - finish as required.
  - Thick toppings (>50 mm) do not require Chembond additive, place topping directly onto wet Chembond priming coat.

Special Use Mixing Ratio

- Moisture Sealer – Dilute with equal parts of water and apply 1 or 2 coats 5-6m²/litre by brush or roller.
- Waterproof Render – Dilute Chembond with 2 parts water and add to dry cement blend mix.
- Crystalseal Waterproofing – Mix 5 parts water to Chembond - add to CrystalSeal powder to obtain required consistency.

Concrete, Mortar & Render Mix Design

✦ Quantity of Chembond diluted with 5 parts of water required for 1m³ in:

• Standard Concrete – 160 - 170 litres

• Mortar/Screed – 200 litres

✦ Concrete Patching and Repair Mortar – 1 pbw cement to 3 pbw sand – add Chembond/water 1 : 1 mix, to achieve required consistency.

✦ Topping < 10mm thick – 1 pbw cement to 2 pbw sand – add Chembond/water 1 : 1 mix, to achieve required consistency.

✦ Topping < 20mm thick – 1 pbw cement to 5 pbw sharp sand – add Chembond/water 1 : 5 mix, to achieve required consistency.

✦ Key coat for Chemind Aquagard M PU waterproof membrane – Mix slurry of Chembond:Water:Cement:Sand in ratio 1:1:1:1 and apply with stiff bristle brush.

✦ Bagging render/texture – 1 pbw cement: 4 parts fine sand – add Chembond/water 1 : 2 mix, to required slurry consistency.

Packaging

Chembond is packed in 20 litre pails and 200 litre drums.

Shelf Life

Unopened or resealed pails of Chembond will have a shelf life of 2 years, when stored in a dry, cool place. Protect from frost.

Clean-up

Clean with water before final cure occurs. Chemind GP Solvent may assist with the removal of partially cured product. Exercise care when using solvents. Please review all MSDS before use.

Chemind CONSTRUCTION PRODUCTS

HEAD OFFICE
74 Annie Street
ROCKLEA QLD 4106
AUSTRALIA
Ph: (+617) 3255 5755
Fax: (+617) 3255 5991
ABN: 63 250 804 992