

CemBond Datasheet

August 2019

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CemBond contains resin with exceptional adhesive qualities. It has been proven over the past couple of decades to be a reliable general-purpose adhesive for the building and decorative industry.

Purpose

To dispense with hacking when plastering, tiling or painting onto smooth or friable surfaces. It can be used as an adhesive, a bonding liquid for friable surfaces, as a primer for PVA and acrylic paints, as a cement additive to improve adhesion, mixed with cement as a crack filler and mixed with propriety crack fillers to limit ghosting of filled spots when over coating with paint. It can be used in plaster mixes to improve the strength and integrity of the plaster and is invaluable for improving the adhesion of cement based decorative coatings to difficult surfaces.

Technical Data

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|----------------------------|---|
| Type | Non-hazardous polymer-based resin |
| Colour | Thick milky white liquid |
| Bonding time | Bonded layer can be applied after 4 hours but not later than 7 days |
| pH | ± 5 |
| Ambient temperature | Avoid extreme temperatures and store above 5°C |
| Boiling point | 100°C |
| Density | ± 1kg/litre |
| Other properties | The base polymer is slowly biodegradable |
| Properties | Open drums will skin Stable when mixed with cement |
| Safety | See MSDS |

Advantages

- Eliminates hacking
- Can be diluted with water
- Lime fast
- Compatible with cement, lime, sand and gypsum
- Non-flammable
- Translucent when dry
- Adheres to concrete, brick, tiles cement plaster and stone

Limitations

- Does not bond to plastic, rubber or gypsum plaster
- Cannot be used in freezing weather (below 5°C)
- Priming or bonding coats are not recommended without the addition of cement for permanently damp conditions
- Not for use in water containing structures

Suitable Surfaces

Dry stack brickwork, breeze blocks, stock and face bricks, concrete, hard clean bag wash, scratch plaster, previously painted surfaces, tiles etc. Surfaces are to be hard (no crumbling or structural cracking and have good compressive strength). They should also be clean and free of contaminants, grease and oil which may impair bond.

Cemcrete provides a comprehensive technical service based on over 4 decades of experience in the field of surface applications and cement technology. Cemcrete believes, to the best of its knowledge, that the information contained herein is true and accurate at the date of issuance and is subject to change without prior notice. For further clarification of these instructions, contact Cemcrete.

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Surface preparation

New floor and wall surfaces must be allowed to cure for the minimum periods detailed below to ensure that the overcoat/tile installation is not compromised by drying shrinkage movement in the substrate.

New concrete – 6 weeks

New screed – 4 weeks

New brickwork – 4 weeks

New render – 2 to 3 weeks depending on weather

The substrate must have a moisture content of 5% or less before applying any overlay/tiles to the substrate. All surface beds (floors) should have a damp-proof membrane. Where this is not the case a suitable vapour barrier should be used to eliminate potential problems associated with excessive moisture in the substrate (e.g. slow- or non-curing of micro-toppings, adhesives etc.). Any screed or rendering must be firmly attached to the underlying concrete or brickwork, and the substrate must be structurally sound (no crumbling, cracking, etc.) and of a quality and consistency suitable for any form of micro-coating/topping or tiling. All damaged, defective, deteriorated or hollow sounding areas must be removed and made good before proceeding.

Applications

Plastering onto smooth concrete surfaces

Prime with a solution made up from 1 volume **CemBond** and 1 volume water. While this solution is still tacky flick on a slush comprising 1 volume cement, 1 volume plaster sand and 1 volume river sand mixed to a thick slush using a solution made up of 1 volume **CemBond** and 5 volumes water (spatter dash). Allow this to set for at least one day before plastering (10mm thick). Where variances in the surface level exceeds 10mm, the plaster should be applied in 10mm layers allowing each layer to set.

Plastering onto painted surfaces that are hard and firm

The surface should be abraded using a cup brush fitted to an angle grinder or with a p60 grit sand paper (if hand sanded). Prime with a solution made up of 1 volume **CemBond** and 1 volume of water. While this solution is still tacky flick on a slush comprising 1 volume cement, 1 volume plaster sand and 1 volume river sand mixed to a thick slush using a solution made up of 1 volume **CemBond** and 5 volumes water. Allow this to set for at least one day before plastering (10mm thick). Where variances in the surface level exceeds 10mm, the plaster should be applied in 10mm layers allowing each layer to set.

Key for tiling onto glazed ceramic tiles or firm, hard oil paint

Wash and scrub the tiles so as to remove all traces of soap scum, organic growth and other contaminants that may impair bond. Using a cup grinder fitted to an angle grinder, proceed to remove all glazing from the tiles/oil paint. Where grinding is not possible mix tile adhesive using a solution comprising 1 volume **CemBond** and 3 volumes water to a bag wash consistency. Brush this onto the tiles or painted surfaces horizontally using a block brush. Allow this to set properly before attempting to fix the tiles using tile adhesive.

CemBond primer/bonding liquid for PVA paints and Cemcrete's Thermoplastic Coating

CemBond is a very effective and economical water-based bonding liquid for most painting systems. For absorbent surfaces dilute 1 volume **CemBond** with 3 - 5 volumes water depending on the condition of the plaster in terms of friability and extent of hairline cracking observed. Brush or roller apply this solution onto dry, well cured surfaces. Depending on prevailing weather conditions it should be touch dry after 4 hours.

Coverage: 30m²/litre of concentrated **CemBond** mixed 1:5 with water per coat, depending on surface porosity.

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Improving the adhesion of brush coats to smooth concrete, plaster, tightly bonded paint or firm face brick surfaces

Should surfaces show signs of laitance or be stripped of lime wash, wire brush the entire area and prime with a solution comprising 1 volume **CemBond** with 3 - 5 volumes water depending on the condition of the substrate in terms of friability and extent of hairline cracking observed. Brush or roller apply this solution onto dry, well cured surfaces. When mixing CemWash First Coat, use the **CemBond** solution mixed to a ratio of 1 volume **CemBond** to 5 volumes water and brush this into the surface with criss-cross strokes using a block brush. Each coat must be dry and properly cured in accordance with the CemWash datasheet before applying the next coat.

Coverage: Approximately 2 litres of **CemBond** per 25kg bag of CemWash First Coat.

Mixed with Portland Cement as a crack filler

If the surface is dusting or friable, prime with a solution of 1 volume **CemBond** and 5 volumes water. When prime coat is dry (approximately 60 minutes), knife into the crack a paste of white or grey Portland Cement mixed with a solution of 1 volume **CemBond** and 5 volumes water. If the crack or hole is large, mix the cement with equal parts of sieved plaster sand. The larger the hole or patch, the more sand is needed to avoid cracking.

Weather

Avoid use of **CemBond** during freezing weather.

Storage

Store in a cool, dry area protected from freezing. Use within 12 months of purchase. Stir well from the bottom if storage is prolonged.

Packaging

Supplied in 1, 5 & 20 litre containers.

Manufacturer's Warranty

Cemcrete warrants that the products manufactured by it shall be free from material defects and will be consistent with its normal high quality. Should any of the products be proven defective, the liability to Cemcrete shall be limited to replacement of the product ex-factory. Cemcrete makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties expressed or implied. The user shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith.