

TECHNICAL DATA SHEET

HI-BUILD

Updated 25 Nov 2021

Description Hi-Build is a lightweight, polymer modified, cementitious base coat formulated for application to rough surfaces requiring a heavy build-up. Hi-Build can be applied at thickness' ranging between 4-20 mm in a single application.

Coverage 1 - 2 m² per bag at a thickness of 8 - 10 mm



Features & Benefits

- > Factory blended consistency
- > Pre-packaged convenience
- > Lightweight aggregates
- > Just add water, no admixtures *
- > Build up to 20 mm per coat
- > Less sag at thicker build

NOTE: Some situations may require the addition of Macbond performance additive. See below for details.

Application Thickness 4 - 20 mm per coat.

Combustibility Hi-Build is non-combustible in accordance with AS 1530.1. Test report available on request.

Pack Size Hi-Build is available in 16 kg paper sacks. Available in 60 x bag pallet lots.

Bond Strength Very good

Suitable Surfaces Hi-Build can be applied to most rigid masonry based surfaces with sufficient porosity. Suitable surfaces include:

- > Clay/concrete bricks/blocks
- > Aerated concrete (Macrender® Coarse FR recommended)
- > Existing cement renders

Note: Application over Macrender HBS, Dri-Patch, high polymer renders and other low porosity or non-rigid surfaces (including primed surfaces) will require the addition of Macbond performance admixture. See MAC Coating Specifications for details.

Composition Hi-Build is composed of HE class Portland cement, redispersible polymer powders, graded sands, lightweight fillers and workability admixtures. The formulation provides optimum performance, durability and ease of application.

Substrate Condition Hi-Build should only be applied over properly prepared substrata, free of dirt dust, grime or any

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other contaminants which may effect product adhesion.

Do not apply Hi-Build in ambient conditions below 5C or above 35C.

Highly absorbent masonry should first be damped down with fresh water to ensure adequate cement hydration of the applied render. Wait for the wet shine to be absorbed prior to application.

Mix Preparation

Fill a clean 15 litre mixing vessel with approximately 4 litres of clean water and slowly add the Hi-Build powder whilst stirring, preferably with a mechanical mixer. Do not add water directly to powder.

Add entire contents of bag and adjust with more water to achieve the desired consistency. Allow to stand for 2 minutes prior to application. A 20 kg bag of product will require approximately 4 - 4.5 litres of water.

Application to certain substrata may require the addition of Macbond (see MAC Coating Specifications for details).

Macbond

Macbond is a high-performance polymer admixture formulated for addition to cement-based renders and adhesives. Macbond is mixed with water in various ratios then added to the dry-mix to provide the required level of adhesion for each specific job. Macbond is not required for all applications. See Macbond data sheet for suggested additions rates.

Application Method

Hawk & trowel

Application

Apply the Hi-Build to the substrate using a steel float at a thickness of 5-20 mm per coat. Take care to coat evenly. Allow the applied material to firm up sufficiently on the substrate prior to finishing with a large plastic, polystyrene or timber float. Hi-Build can be 'ruled-off' if necessary and must be allowed to cure for a minimum of 4 days prior to the application of a paint or textured finish coat. Areas subject to entrapped moisture will require a substantially longer curing period prior to the application of topcoats. Hi-Build should not be applied during extremely hot or windy conditions and should be protected from rain and running water until set. To assist curing, walls may be dampened with a fine mist spray as soon as the surface is hard.

Drying Time

Initial set time of Hi-Build will depend significantly depending on surface porosity, ambient temperature and coating thickness. May range between 30 minutes and 10 hours.

The strength of the final coating relates directly to the level of hydration of the cement component. Excessively rapid drying will result in a weaker render. If the initial set has occurred rapidly, MAC recommends that the rendered surface be moistened soon after set and again in the days following application. Curing of the render will significantly improve the strength and durability of the final coating.

Initial cure after 4 days with full cure occurring in 28 days from application.

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Precautions & Limitations

- > Not to be used as a top coat
- > Do not apply below 5C or above 35C.
- > Do not apply over 20 mm in thickness per coat.
- > Protect from rain and moisture until hard set has been achieved.
- > Do not apply over FC sheet unless forming part of an approved system.

Clean Up & Disposal

Clean tools in clean water immediately after use. Do not dispose of unused Hi-Build into drains or waterways. Dispose of rubbish in accordance with local government regulations.

Storage & Transport

- > Keep dry during storage and transportation.
- > Keep pack firmly sealed.
- > Avoid breathing powder and avoid skin and eye contact.
- > Use within 12 months of purchase.

Safety

Hi-Build is classified hazardous/non-dangerous goods. Hi-Build contains cement which is alkaline in nature. Any material coming into contact with eyes or skin should be immediately flushed with clean water. This product may also contain trace quantities of silica present only as an impurity. Eye, skin and breathing protection is recommended during preparation and application of this product.

Portland cement is classified as a Hazardous Substance, Non-Dangerous Goods according to the criteria of NOHSC.

Risk phrases for Portland cement are:

- > R36/37/38 Irritating to eyes, respiratory system and skin
- > R40 Possible risk of irreversible effects
- > R43 May cause sensitization by skin contact
- > R48/20 Harmful: danger of serious damage to health by prolonged inhalation

Safety Phrases for Portland cement

- > S22 Do not breathe dust
- > S24/25 Avoid contact with skin and eyes
- > S36/37 Wear suitable protective clothing and gloves

Safety Data

Always refer to safety data sheet (SDS) prior to handling and handling and application of Hi-Build.

Disclaimer

Hi-Build is to be used as part of a MAC Coating Specification. Melbourne Acrylic Coatings Victoria Pty Ltd, its staff and distributors will not accept responsibility for any failure caused as a result of factors beyond our control including but not limited to onsite handling, preparation or application of this product. Application of this product should only be performed by qualified trades people trained in the use of this type of product. Information supplied in this publication is based on our testing and experience and is given in good faith. Suitability of this product should be independently determined prior to use. MAC will not warrant job defects caused as a result of but not limited to, structural/substrate movement or entrapped moisture. Formulation of coating and renders often requires the use of naturally sourced fillers & aggregates. All care is taken by industry

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suppliers to remove trace contaminants, however no guarantee/warranty is provided by MAC against spot marks occurring in naturally sourced aggregates provided by third party suppliers.