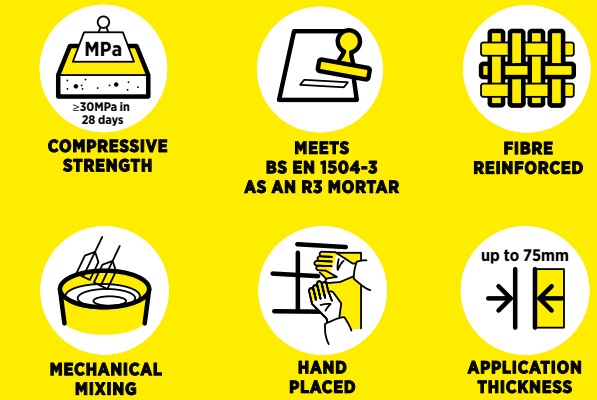
webercem HB30

Acrylic-polymer modified, highbuild facade repair mortar

- Lightweight mortar ≥30 MPa for soffit and vertical repairs
- Complies with BS EN 1504-3 as an R3 mortar
- High build mortar to repair concrete building facades



About this product

webercem HB30 is a single-component, polymer-modified, high build cementitious mortar, designed for concrete repairs to facades where high compressive strength is not the major consideration. It requires only the addition of clean water to produce a lightweight, low permeability, medium strength mortar suitable for both soffit and vertical repair situations.

This product has been formulated to comply with the requirements of BS EN 1504-3 as an R3 mortar.

Features and benefits

- High build properties - up to 75mm vertically and 50mm overhead, without formwork depending on size of the repair
- Achieves 30 MPa in 28 days
- Easy to apply, with excellent application properties
- Low permeability to water, carbon dioxide and chlorides
- Contains fibres and spray dried acrylic polymer

Uses

- High-build mortar to repair building facades
- Overhead and vertical repairs to soffits, decks and columns
- Repair of voids and honeycombed areas

Preparation

Concrete substrates

Concrete substrates must be adequately prepared by use of scabbling, needle gunning or other means, as appropriate. Oil and grease must be removed by suitable means. Any contaminated concrete must be removed. All damaged concrete should be cut back to a sound surface and at least 15mm behind any exposed reinforcement. The edges of the repair should be cut perpendicular to the surface of the repair..

New concrete must be at least 14 days old.

Thoroughly saturate the concrete but remove excess water.

Steel substrates

Steel substrates should be prepared in accordance with BS EN 1504-10 immediately prior to application. Where corrosion is absent, wire brushing to a clean, bright surface may be adequate. Care must be taken not to polish the rust.

Note: Preparation of both concrete and steel must achieve a clean, sound, roughened surface.

Mixing

Mixing of bonding slurry

Mix 2.5 parts of **webercem bondcoat** powder to 1 part of clean water. Mix vigorously to a brushable, slurry consistency. For detailed application instructions, see separate **webercem bondcoat** data sheet.

Mixing webercem HB30

A low-shear, forced-action mixer must be used e.g. Mixal Mixer or Creteangle. Alternatively a double headed mixing drill and paddle can be used. Hand mixing of the mortar is not recommended.

Pour 2.4 litres of clean water into the mixing bucket and slowly add the powder component whilst mixing. Mix for approximately 2 - 3 minutes. When mixing, the product may appear dry however this will change colour when the polymers activate and start to become more cohesive.

Add a further 100mm of water if required to achieve a workable consistency . Add another 100mm at a time if needed to get the correct workability, do not exceed 2.7L of water overall.

Over mixing will entrain air and reduce compressive strength. Do not over mix.

Application

Priming of steel reinforcement

Apply one full, unbroken coat of **webercem bondcoat**, ensuring the back of the cleaned reinforcing bars are coated.

Priming of concrete substrate

Ensuring the prepared concrete substrate is saturated but surface damp, use a stiff brush to scrub the slurry well into the surface.

Apply the mortar to the substrate whilst the bonding slurry is still tacky and compact well into place, ensuring no air is trapped.

The minimum application thickness is 20mm. Where very thick sections are required multiple applications may be necessary. Intermediate surfaces should be scratched to give a good mechanical key. Successive applications require the use of **webercem bondcoat**.

Finishing

If subsequent materials or coatings are to be applied, finish with a wooden or plastic float or a sponge to present a lightly textured surface.

Curing

Unless a levelling mortar, coating, inhibitor, sealer or other system is to be applied to the surface, cure immediately after finishing with a suitable membrane.

Before application of a coating or a levelling mortar, cure the repairs by covering with closely-fitting polyethylene sheeting. **webercem HB30** can be overcoated by **webercem fairing coat** or **webercote smooth** an anti-carbonation coating. Overcoating times are dependent on weather conditions.

When cured, **webercem HB30** and **webercem bondcoat** are stable to freeze/thaw conditions but, following good concreting practice, they should not be applied in freezing weather or onto frozen surfaces. All application should only be carried out where temperatures are a minimum of 5°C and rising.

Packaging

webercem HB30 is supplied in 20kg polythene lined bags.

Yield

webercem HB30

Approximately 13.0 litres per 20kg bag, i.e. 77 bags per m^3.

webercem bondcoat

Approximately 5kg per $1m^2$.

Storage and shelf-life

When stored unopened in a dry place at temperatures above 5°C, shelf life is 12 months from date of manufacture.

Health and safety

For further information, please request the Material Safety Data Sheet for this product.

Technical data

These results were obtained under laboratory conditions. Batch to batch results may fluctuate due to common cause variation.

EN1504	All tests carried out at 20°C unless otherwise stated		
Performance characteristic	**Method**	**Requirement**	**Result**
Compressive strength	EN 12190	≥25 MPa	≥30 MPa
Chloride ion content	EN 1015-17	≤0.05 %	0.01 %
Adhesive bond	EN 1542	≥1.5 MPa	≥1.5 MPa
Carbonation resistance	EN 13295	dk ≤ control concrete	dk ≤ control concrete
Elastic modulus	EN 13412	≥15 GPa	≥15 GPa
Thermal compatibility Part 1 Freeze-thaw	EN 13687-1	Bond strength after 50 cycles ≥1.5 MPa	≥1.5 MPa
Capillary absorption	EN 13057	≤0.5 $kgm^{-2}h^{-0.5}$	≤0.5 $kgm^{-2}h^{-0.5}$
Reaction to fire	EN 13501-1	Declared class	A2-s1, d0
Coefficient of thermal expansion	EN 1770	Declared value	2 x 10^{-6} /°C

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