



EUUCO HB

SINGLE-COMPONENT, LOW SHRINKAGE, VERTICAL/OVERHEAD REPAIR MORTAR (CONFORMING TO BS EN 1504-3 CLASS R2)

EUCLID CHEMICAL

VERTICAL / OVERHEAD REPAIR

DESCRIPTION

EUUCO HB is a lightweight, high build, low shrinkage repair mortar with unique polymers and fibre reinforcement for trowel applied vertical and overhead repairs requiring high performance.

PRIMARY APPLICATIONS

- Overhead and vertical repairs
- Resurfacing of damaged or deteriorated concrete
- Hand applied repairs
- Spray applied repairs
- For exterior and interior use

FEATURES / BENEFITS

- Single-component for easy mixing and handling
- Spray able by the wet spray method
- Contains no chloride admixtures
- Single application thickness of 100 mm in vertical, horizontal and overhead situations
- Contains an integral corrosion inhibitor
- Low permeability helps protect rebar from corrosion
- High bond strength provides excellent adhesion
- Easily over coated with specialist membranes to provide further protection and aesthetic quality.

TECHNICAL INFORMATION

The following results were obtained at a water: powder ratio of 0.16 and at a temperature of 20°C unless otherwise stated.

PROPERTY	STANDARD	EN 1504 R2 REQUIREMENT	TEST RESULT
Compressive Strength	EN 12190:1999	≥ 15 MPa	1 Day - 10 MPa 28 Days - 33 MPa
Chloride Ion Content	EN 1015-17:2000	≤ 0.05 MPa	<0.01%
Fire Rating	EN 13501-1		Class A2 s1 d0 Non-Combustible
Setting Time	BS 4551 Pt 14:1980		Initial Set: 4 hours Final Set: 6 hours
Fresh Wet Density			Nominally 1,600 kg/m ³
Min Application Thickness			5 mm
Max Application Thickness			100 mm per layer
Min Application Temperature			5° C
Max Application Temperature			40° C
Working Life (Approx)			60 min @ 20° C 30 min @ 40° C

APPEARANCE

EUUCO HB is a free-flowing powder designed to be mixed with water. After mixing and placing, the colour may appear darker than the surrounding concrete. While this colour will lighten as the **EUUCO HB** cures and dries out, the repair may always appear darker than the surrounding concrete.

EUUCO HB

MASTER FORMAT #:
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PACKAGING

EUCO HB is packaged in 25 kg moisture resistant bags. Yield: 18 L, 25 kg bag when mixed with 3.75 L of water

COVERAGE

Approximately 18.0 - 18.3 Litres / 25 kg bag (approximately 1.8 m² at 10 mm thickness)

SHELF LIFE

1 year in original, unopened packaging.

DIRECTIONS FOR USE

Surface Preparation: The concrete shall be thoroughly clean, free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials. De-laminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable mechanical or very high pressure water-blasting techniques. Saw cut the edges of the repair to a depth of at least 5 mm to provide a square edge. Break out the complete repair area to a minimum depth of 5 mm up to the sawn edge.

Priming: Clean and prime exposed steel with DURALPREP AC. Concrete should be primed with a spray or brush coat of DURALPREP AC. The primer coat of DURALPREP AC must be allowed to thoroughly dry prior to the application of **EUCO HB**. Alternatively, a Saturated Surface Dry (SSD) concrete surface can be primed with a scrub coat of **EUCO HB**. The repair must be made before the scrub coat dries out. **EUCO HB** is highly polymer modified and as a result concrete surfaces do not generally require a primer.

Mixing: **EUCO HB** should be mechanically mixed using a forced action pan mixer or in a clean drum using a drill and paddle. Free-fall mixers must not be used. For normal applications, use between 3.75 - 4.25 litres of clean water per 25 kg bag depending upon the desired consistency. For part bags this equates to 6 - 7 volumes of powder to one volume of water. Typically, for high build applications, use 4.2 litres of clean water per bag which gives a water : powder ratio of 16%. Normal mixing time depends on the type of mixer used, 2 - 3 minutes is average. Mix so as to entrain as little air as possible. Use without delay.

Placement: **EUCO HB** can be applied by float or trowel as a render, resulting in application thicknesses of 100 mm, even in soffit situations. If necessary, support with shuttering to allow for compaction if working to reveals. The application thickness achievable is dependent upon the substrate and care must be taken to ensure that an initial thickness of mortar, typically 5-10 mm, is well placed and adhered before building up to larger depths. For repairs which require multi-layer applications score the surface of the placed mortar before it reaches final set. Final profiling of a high quality is easily achieved with a steel float.

Finishing: Finish the repair material to the desired texture. Do not add additional water to the surface during the finishing operation.

Curing and Sealing: **EUCO HB** is a cement-based repair mortar. In common with all cementitious materials, it must be cured immediately after finishing in accordance with good concrete practice. The use of KURESEAL, sprayed on to the surface of the finished mortar in a continuous film, is recommended. A low pressure atomising sprayer is essential for applying the KURESEAL. Any excessive run-off on verticals or drips on soffits should be removed by brush before they harden. If a curing compound is not desired, wet cure for a minimum. Large areas should be cured as trowelling progresses (0.5 m² at a time) without waiting for completion of the entire area

CLEAN UP

Clean tools and equipment with water before the material hardens.

PRECAUTIONS / LIMITATIONS

- Refer to recommendations provided in BS EN 1504-10
- Avoid application in direct sun and/or strong wind and/or rain
- Do not add water over recommended dosage
- Apply only to sound, prepared substrates
- Do not add additional water during the surface finishing as this will cause discoloration and cracking
- Protect freshly applied material from freezing

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