

MasterBrace® ADH 1414RS

Epoxy bonding agent for concrete repairs, bonding concrete to concrete, steel and granolithic toppings

DESCRIPTION OF PRODUCT

MasterBrace ADH 1414 RS is a slow set permanent epoxy adhesive for internal or external bonding of renderings, granolithic toppings and concrete to concrete.

It tolerates a degree of moisture before and during curing and is insoluble when cured. The ultimate bond strength is greater than the tensile

strength of concrete. **MasterBrace ADH 1414 RS** does not shrink and provides an even and stress-free bond.

PRIMARY USES

MasterBrace ADH 1414 RS may be applied to clean, sound and durable surfaces, i.e. steel, glazed tiles and bricks, ceramic and quarry tiles, terrazzo tiles and floors. Also, it could be applied to smooth and worn granolithic paving, old and worn concrete, engineering and semi-engineering bricks.

ADVANTAGES

- High strength
- Non-shrink
- Moisture tolerant
- Durable
- Resistant to chemical attack
- · Supplied in pre-weighed units

PACKAGING

MasterBrace ADH 1414 RS is available in 5kg units containing the base resin and reactor.

TYPICAL PROPERTIES

Mixed density at 20°C:	1250kg/m³	
Pot life:	30°C	2 hours
Tack-free time:	20°C	10 hours
	30°C	8 hours
Full cure:	7 days	

STANDARDS

ASTM C881 Type II Grade 2, Class B and C

APPLICATION PROCEDURE PREPARATION:

All surfaces must be thoroughly cleaned and prepared. All loose particles, laitance, dust, curing compounds, floor hardeners, oil, grease, fat, bitumen and paint must be removed if good bond strength is to be achieved. Gloss surfaces must be abraded.

If oil, grease, fat, etc. are present, they should be removed before starting any other form of preparation. All laitance, weak or friable concrete should be removed by chipping, grit blasting, or

All laitance should be removed by mechanical scarification, grit blasting, or by acid etching. Visible signs of mould growth, lichen, or algae should be removed and treated with a fungicidal wash.

New concrete should have cured until the shrinkage and moisture movement is low. Surfaces heavily impregnated with mould oil should be degreased and grit blasted or

mechanically scarified to remove the contaminated surface. All curing compounds should have disintegrated or be removed and application carried out only onto a clean, dust-free surface.

MIXING

Carefully transfer the entire contents of the reactor component container of **MasterBrace ADH 1414 RS** to the base component tin and thoroughly mix for 1 minute. Do not attempt to mix only part of the contents. Do not attempt to thin **MasterBrace ADH 1414 RS**.

GUIDE TO APPLICATION:

MasterBrace ADH 1414 RS should be applied evenly across the whole surface with a clean, short-haired paint brush or a laying-on trowel.

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After application, the **MasterBrace ADH 1414 RS** must be left to stand before over-coating. The time delay will depend on surface and prevailing conditions but will typically be 60 minutes at 25°C or 45 minutes at 40°C. The **MasterBrace ADH 1414 RS** should be protected during this time to prevent contamination. This is particularly necessary on horizontal surfaces.

RENDERINGS AND SCREEDS

Once the render or screed has been applied over the MasterBrace ADH 1414 RS, recognised methods of working may be adopted. It is essential that granolithic paving and sand cement renders and screeds are cured. This can be achieved by curing with a fine spray of clean water and polythene sheeting. More effective is to spray the surface with a curing membrane from the MASTERKURE range. Failure to observe these precautions may cause the render or screed to crack and craze. Expansion joints formed in the substrate should be carried through the rendering or screed and may be filled with MASTERFLEX 720, a two part polysulphide joint sealant.

TEMPERATURE

Since low temperatures retard the setting and curing of **MasterBrace ADH 1414 RS**, avoid working in cold weather if possible. Although **MasterBrace ADH 1414 RS** will cure slowly at low temperatures, a temperature of 7°C to 10°C can be considered to be the lowest at which work on vertical rendering may proceed satisfactorily without shuttering.

EQUIPMENT CARE

Use solvent to clean tools when MasterBrace ADH 1414 RS is still wet or tacky. Once MasterBrace ADH 1414 RS has set hard, it can only be removed by chipping or burning.

COVERAGE

1.0-2.0m²/kg dependent on substrate profile.

STORAGE

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates, the product must be stored in an air-conditioned environment. Failure to comply with the recommended storage

conditions may result in premature deterioration of the product or packaging. For specific storage and disposal advice, consult Master Builders Solutions's Technical Services Department.

SHELF LIFE

Up to 12 months if stored according to manufacturer's instructions in unopened containers.

SAFETY PRECAUTIONS

As with all chemical products, care should be taken, during use and storage, to avoid contact with eyes mouth, skin and foodstuffs (which can also be tainted with vapour until product has fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. For further information, refer to the material safety data sheet.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information, contact your local Master Builders Solutions representative.

Master Builders Solutions reserves the right to have the true cause of any difficulty determined by accepted test methods.

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QUALITY STATEMENT

All products manufactured by Master Builders Solutions Egypt, or imported from Master Builders Solutions affiliate companies worldwide, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 standards.

- * Properties listed are based on laboratory controlled tests.
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Hotline: 15560, Phone: +202 2128 7800, Fax: +202 2128 7801 Website: https://www.master-builders-solutions.com/en-eg