

# MasterBrace<sup>®</sup> 1414

Solvent free long pot life epoxy bonding agent

## DESCRIPTION

**MasterBrace 1414** is a solvent free, high performance, long pot life, versatile epoxy bonding agent. **MasterBrace 1414** can be applied to both dry and damp surfaces and adheres to most substrates after proper preparation.

## RECOMMENDED USES

- Structural bonding of new to old concrete
- Steel bonding
- Grouting dowels

## FEATURES AND BENEFITS

- **Adheres to wet or damp surfaces** – Wide application area
- **Solvent free** – Low VOC and non-shrink
- **Pre-proportioned packaging** – No job site errors
- **Multi-purpose binder** – Many uses
- **Low viscosity** – Easy to apply as primer
- **High abrasion and chemical resistance** – Can be used as wearing surface

## PERFORMANCE DATA

Mixed resin and hardener only	
Compressive Strength @ 23°C	65 MPa @ 7 days
Tensile strength @ 23°C	25 MPa @ 7 days
Mixed viscosity @ 25°C	2450 ± 450 cps
Pot life - @ 25°C	2 Hours
@ 40°C	1 Hour
Recoat time - @ 25°C	8 hours
@ 40°C	6 hours
Slant shear bond strength (BS 6319 part 4)	>11 MPa (Concrete failure)
Bond strength (ASTM D4541)	>2.5 MPa (Concrete failure)
Setting time 25°C	150 minutes @
Meets the requirements of ASTM C881 Type 2, Grade 2, Class B & C	

## Chemical Resistance

**MasterBrace 1414** resists most common organic and inorganic acids in diluted form, also resistant to alkalis, water, oils, grease, etc. Chemical resistance depends on the chemicals involved, their concentration, temperature, and degree of exposure. Good housekeeping practices such as immediate clean-up of all spillages will greatly extend the service life.

## PROPERTIES

	Part A	Part B	Mixed
Supply Form	Liquid	Liquid	Viscous Liquid
Colour	Grey	Amber	Grey
Mix ratio (pbw)	83	17	
Density (Kg/L)			1.48
Application Temperature	15°C - 35°C		

## APPLICATION

### Surface preparation

Remove all grease, oil, dust, residual curing compound, mould release agent or other contaminant that could impair adhesion. Laitance should preferably be removed by light sweep blasting or hydro-jetting. Mechanical wire brushing may be appropriate for small areas.

Spalled concrete should be cut back to sound concrete and spall filled with a **MasterBrace 1414** sand filled mortar. Conventional concrete curing compounds should be removed before application.

### Mixing

Thoroughly stir Part A, add Part B and blend thoroughly using a slow speed mixer fitted with a suitable paddle.

### Application

The **MasterBrace1414** may be placed using a brush or roller and applied evenly across the whole surface. Subsequent coats should be placed within 30-45 minutes and the **MasterBrace 1414** should still be tacky. For bonding fresh concrete this should be applied into a still tacky surface if the tack has gone reapply the **MasterBrace 1414**.

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## CURING

Cure time will vary depending on the ambient temperature, quantity mixed and placed. **MasterBrace 1414** will have fully cured after 7 days at 23°C.

## ESTIMATING DATA

Priming: coverage 2-2.7m<sup>2</sup>/litre depending on profile of concrete.

## PACKAGING

**MasterBrace 1414** comes in 1 kg and 3 kg kits.

## SHELF LIFE

**MasterBrace 1414** can be stored in tightly closed original containers for 12 months at moderate temperature.

## PRECAUTIONS

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the Master Builders Solutions Material Safety Data Sheet (MSDS) from our office or our website.

## STATEMENT OF RESPONSIBILITY

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