

MasterBrace[®]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

PROPERTIES

Mixed resin and hardener only	
Compressive Strength @ 23°C	65 MPa @ 7 days
Tensile strength @ 23°C	25MPa @ 7 days
Mixed viscosity @ 25°C	2450 ± 450 cps
Pot life	2 hours @ 25°C
	1 hour @ 40°C
Recoat time	8 hours @ 25°C
	6 hours @ 40°C
Slant shear bond strength (BS 6319 part 4)	>11 MPa (Concrete failure)
Bond strength (ASTM D4541)	>2.5 MPa (concrete failure)
Setting time	150 minutes @ 25°C
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.

	Part A	Part B	Mixed
Supply Form	Liquid	Liquid	Viscous Liquid
Colour	Grey	Amber	Grey
Mix Ratio	83:17 pbw		
Density (Mixed)	1.48kg/L		
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 **MasterBrace 1414** 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**.

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 2-2.7m²/Kg depending on profile of concrete.

MasterBrace®1414

PACKAGING

MasterBrace 1414 comes in 1 kg and 3 kg kit sizes

SHELF LIFE

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

PRECAUTIONS

It is highly recommended to use necessary PPE (Gloves, mask etc.) during installation of the product. In case of Incidents of direct inhalation, causing dizziness/giddiness, loss of consciousness, contact with eyes etc, seek immediate medical advice. The requirements may vary depending on the application areas. Please ensure to have proper ventilation while working in confined areas. Contact Master Builders Solutions representative in case you need further details or

refer to the material safety datasheet of the product to know more.

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