

# Epoxy Mortar

A two part, low-slump easy-mix epoxy mortar specially formulated to allow hand mixing.



TECHNICAL GUIDE: **TA4.3**

## Applications

Use EasyChem Epoxy Mortar when a strong adhesion is required to bond dry or damp concrete, steel, glass, aluminium, etc.

## Product Attributes

Non-shrink  
Chemical resistant  
Fast set time and standard options available

## Approvals/Standards

AS/NZS 4020:2005, Testing of products for use in contact with drinking water

Adheres strongly to dry or damp concrete, steel, glass, aluminium, etc. EasyChem Epoxy is non-shrink, has excellent chemical resistance and is waterproof.

### Uses

1. Assembly and repair of precast concrete units.
2. Repair of spalling concrete and protection of steel reinforcement.
3. Levelling and patching of concrete floors under heavy load or impact.
4. Grouting of starter bars and bolts particularly horizontal or overhead.
5. Fabrication of concrete pipe intersections and general drainage work, including underground work.

### Instructions

#### Surface Preparation

Thoroughly clean the jointing surfaces of all extraneous matter, especially oil and grease. Laitance should be removed from concrete surfaces mechanically or by acid etching. For best results, steel surfaces should be prepared by sand blasting or grinding. All surfaces should be dry.

#### Mixing

Mixing proportions are 1 : 1 by volume or weight.

Wear protective gloves and apply a barrier cream to exposed skin. Wet gloves in water to prevent sticking of EasyChem Epoxy to gloves when hand mixing. Shake off excess water. Mix the two parts THOROUGHLY by machine, spatula, or by hand until a uniform, streak-free grey colour is obtained. Avoid mixing water with EasyChem Epoxy as this may interfere with the final set and hardness.

**Important:** In cold weather the resin and hardener may be softened by placing the closed containers in hot water for 15 minutes.

### Application

EasyChem Epoxy should be worked well into the surface to be filled or bonded. Initially a thin smear should be applied to ensure the surface is properly 'wet' with epoxy. After applying this initial layer more EasyChem Epoxy may be applied to the desired thickness. Both surfaces should be coated with EasyChem Epoxy before being joined.

A smooth surface for the final finish can be obtained by wiping with a wet cloth, trowel or gloved finger before initial cure.

If being placed under water, avoid involving water into the mixed epoxy. Use the minimum amount of handling when placing and finishing.

### Additional Information

For optimal performance it is important to:

- Proportion the hardener and resin accurately. Don't add extra hardener as this won't make the epoxy set faster but will lead to other setting issues.
- Thoroughly mix together until of an even colour without streaks of white or black. Avoid using excess water on gloves (shake off excess) or mixing water into the epoxy.
- Don't disturb the joint or repair until the epoxy has hardened sufficiently. If a faster initial cure is required for complex joints, then use EasyChem Fast.
- Equipment should be washed with soap and water before curing is advanced. Hands should be washed with soap and water immediately after use. Reapply barrier cream. Refer to Material Safety Data Sheet for handling information.

**TABLE 1** Product Range

Hygrade code	Description
EASYBF.01	Epoxy Mortar Fast - 1 Litre (2x500ml)
EASYBF.02	Epoxy Mortar Fast - 2 Litres (2x1Litre)
EASYBF.08	Epoxy Mortar Fast - 8 Litres (2x4Litres)
EASYBF.20	Epoxy Mortar Fast - 20 Litres (2x10Litres)
EASYBS.01	Epoxy Mortar Standard - 1 Litre (2x500ml)
EASYBS.02	Epoxy Mortar Standard - 2 Litres (2x1Litre)
EASYBS.08	Epoxy Mortar Standard - 8 Litres (2x4Litres)
EASYBS.20	Epoxy Mortar Standard - 20 Litres (2x10Litres)

**TABLE 2**

Properties	
Viscosity	Non Slump
Mix Ratio	1:1 by weight or volume
Pot Life (Easychem Standard)	1-5 hours at 20°C
Pot Life (Easychem Fast)	15 minutes at 25°C
Initial Cure Time	8-16 hours at 15°C
	12-16 hours at 7°C
Final Cure Time	5 days at 20°C
Minimum Application Temperature	7°C
Shelf Life	1 year in original unopened containers

**TABLE 3**

Cured Properties (at 20°C)	
Colour	Grey
Specific Gravity	1.8
Compressive Strength	1 day - 63 MPa
	7 days - 85 MPa
	14 days - 99 MPa
Tensile strength	20-23 MPa
Thermal Expansion	5 x 10 <sup>-5</sup> mm mm <sup>-1</sup> °C <sup>-1</sup>



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