

**Fast-setting high strength resin
 flowing bedding grout**

BT resin bedding



Uses

- Rapid installation of BT carriageway manholes, frames, drainage channels and jointing chambers

About this product

BT resin bedding is a two-component system comprising a low-viscosity liquid resin and a powder hardener/filler which mixes easily to give a flowing grout which readily fills gaps down to approximately 5 mm thickness. It is used to fill narrow gaps around and under manhole frames at between 5 mm and 50 mm application.

Features and benefits

- ▲ Fast setting with rapid strength gain allowing loads to be applied in two hours
 - ▲ Easy to mix and place
 - ▲ Winter and summer grades for use all year round
 - ▲ Suitable for use down to 0°C (Winter grade)
 - ▲ Good chemical and abrasion resistance
 - ▲ Better dynamic resistance than cementitious bedding
 - ▲ Not affected by vibration of traffic
 - ▲ Does not disintegrate
 - ▲ Uses polyester resin with over 30 years proven performance
 - ▲ Complies with BT Specification LN 550
 - ▲ Manufactured under BSI Quality Assurance scheme BS 5750-2, ISO 9002, EN 29002
 - ▲ Fully compliant with HA 104/09
 - ▲ Supplied in a pack size of 17.4 kg, comprising:
 Resin tin: 2.8 kg
 Hardener bag: 14.6 kg
- Also available in bulk**
 Bulk resin: 80 tins on pallet
 Bulk hardener: 2 pallets, each containing 40 x 14.6 kg bags

Technical data

Property	BT resin bedding	BT Specification LN 550
Workability set time	Winter grade 30 mins at 4°C Summer grade 32 mins at 16°C	Minimum 25 mins Initial set time 25 to 40 mins
Compressive strength	Winter grade 2 hrs 65 N/mm ² at 1°C 24 hrs 90 N/mm ² at 1°C 2 hrs 80 N/mm ² at 4°C 24 hrs 100 N/mm ² at 4°C Summer grade 2 hrs 75 N/mm ² at 16°C 24 hrs 95 N/mm ² at 16°C	To BS 6319-2 Minimum 25 N/mm ² at 2 hrs at 4°C and 16°C
Bond/tensile strength	Winter grade 12 kN at 1°C 14 kN at 4°C Summer grade 14 kN at 16°C	Minimum 5 kN Minimum 5 kN Minimum 5 kN
Flow index	Winter 75 mm at 1°C 120 mm at 4°C 120 mm at 16°C Summer 120 mm at 20°C	Flow plate method Minimum flow 65 mm Minimum flow 65 mm Minimum flow 65 mm Minimum flow 65 mm

BT resin bedding

Preparation

The shaft or joint box walls should be levelled off and finished at a depth of 165 mm below the carriageway surface.

Where the opening of the frame is longer by 150 mm to that of the chamber, the top course of the end walls should be demolished to enable a course of engineering bricks to be laid as headers.

During refurbishment of an existing installation, the excavation should be cut to be 50 mm greater than the outside frame dimensions, to provide an outside shutter.

Before starting the covers should be marked to ensure that they are put back in the original frame positions.

The underside of the frame and the top surface of joint box walls or manhole shaft must be clean and dry. **BT resin bedding** should be mixed using a resin mixer spiral head attachment for use with any suitable drill having a 13 mm chuck capacity, a minimum power rating of 420 watts and a nominal no-load speed of 1000 rpm.

Mixing

For optimum mixing, use a mechanical mixer.

Pour the contents of one can of resin into a clean, dry polyethylene bucket. Add the white powder hardener/filler. Place the spiral mixer head into the mix and switch on. The material will mix very quickly and will be ready for use in approximately 1 – 2 minutes.

Ensure that the material is uniform in colour, indicating that the components are fully blended.

Application

Pour the **BT resin bedding** in successive batches around the frame until the level reaches just above the lower flange of the frame.

Any rebuilding work should be carried out using **BT resin mortar** together with dry clean engineering brick or quarry tile to bring top surface to 165 mm below road level.

Lower the frame into position on the chamber. Raise the frame until its top edge is level with the carriageway. A thin bed of **BT resin mortar** should then be trowelled on the inside face of the frame. The purpose of the mortar bead is to provide an inside shutter to contain the resin bedding.

Where necessary position external shuttering all round the frame approximately 50 mm from the outside edge of the bottom flange. This shuttering should extend to within 125 mm of the carriageway level and may be constructed of timber (which subsequently must be removed) or of bricks or quarry tiles set with resin mortar (which may remain in situ).

Set times

Temp.	Winter grade	Summer grade
0°C (32°F)	40 minutes	Do not use below 7°C
5°C (41°F)	30 minutes	Do not use below 7°C
7°C (45°F)	25 minutes	60 minutes
10°C (50°F)	20 minutes	50 minutes
15°C (59°F)	15 minutes	30 minutes
20°C (68°F)	Do not use above 16°C	20 minutes
25°C (77°F)	Do not use above 16°C	15 minutes

Finishing

The minimum period of time which must elapse before backfilling and reinstatement may commence depends upon the type of material used in either the construction of a new manhole shaft or joint box walls.

Where **BT resin bedding** and **BT resin mortar** have been used to install the frame and cover, backfilling can commence 2 hours after the resin has been placed.

Packaging

BT resin bedding is supplied in a pack size of 17.4 kg, comprising:
Resin tin: 2.8 kg
Hardener bag: 14.6 kg.

Also available in bulk

Bulk resin: 80 tins on pallet
Bulk hardener: 2 pallets, each containing 40 x 14.6 kg bags.

Yield

17.4 kg pack yield is 8.8 litres.

Storage and shelf life

Store in dry conditions at a temperature below 25°C. Shelf life of unopened and undamaged containers in correct conditions is 12 months.

Resin component has a flash point of 30°C.

Health and safety

Flash point 30°C.
Harmful by inhalation.
Irritating to eyes and skin.
Keep away from food, drink and animal feeding stuffs.
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed, seek medical advice immediately and show this data sheet.
Use only in well ventilated areas. Do not smoke.
In the event of fire, use foam, dry chemical, carbon dioxide (CO₂) extinguishers or water fog appliances.
Keep out of the reach of children.

For further information, please request the Material Safety Data Sheet for this product.

Technical services

Weber's Customer Services Department has a team of experienced advisors available to provide on-site advice both at the specification stage and during application. Detailed specifications can be provided for specific projects or more general works. Site visits and on-site demonstrations can be arranged on request.

Technical helpline
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Sales enquiries

Weber products are distributed throughout the UK through selected stockists and distributors. Please contact the relevant Customer Services Team below for all product orders and enquiries.

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