High-strength, better flowing chemically-resistant grout

webertec EP pourable grout

Capable of withstanding high dynamic loads

High compressive and tensile strength

Very good chemical resistance

Cure within the temperature range 5°C to 35°C

Negligible shrinkage factor allows use for underplate or rail grouting. Grout remains in contact with the underside

Can be placed in much thinner sections than cementitious grouts resulting in cost savings

Suitable for gap sizes 5 – 75 mm

Uses

webertec EP pourable grout finds a wide application in the grouting-in of:
- Bearings
- Starter bars
- Dowels
- Balustrading
- Crane rails
- Machine baseplates
- Setting-in bolts
- Fixing runway lights
- Situations where tight clearances add to the difficulties of obtaining secure fixings

Features and benefits

- Capable of withstanding high dynamic loads
- High compressive and tensile strength
- Very good chemical resistance
- Cure within the temperature range 5°C to 35°C
- Negligible shrinkage factor allows use for underplate or rail grouting. Grout remains in contact with the underside
- Can be placed in much thinner sections than cementitious grouts resulting in cost savings
- Suitable for gap sizes 5 – 75 mm

Chemical resistance

webertec EP pourable grout is shown to be unaffected by a wide range of acids, alkalis and industrial chemicals.

The results of immersion at 20°C to a typical range of chemical solutions and solvents are:
- Caustic Soda 20% Unaffected
- Hydrochloric Acid 20% Unaffected
- Sulphuric Acid 20% Unaffected
- Detergent Unaffected
- Petrol and Oil Unaffected
Concrete surface
Concrete must be suitably prepared by scabbling, needle gunning or grit blasting to remove all cement laitance, grease, oil and other contaminants. The surface should be roughened to provide a bond and have a minimum surface texture of ± 1 mm. Wet surfaces should be dried by using a hot, compressed-air lance. The advantages of this are: it dries the surfaces of both the concrete and the shutter, and it warms the surfaces of concrete and steel, allowing the grout to flow better in colder conditions. It also ensures better drying under the plate.

Steel plate
Bearing plates must be degreased with a suitable solvent such as methyl alcohol, acetone etc. The adhesive bond to grit-blasted steel is in excess of 10 MPa. This bond is reduced by coatings or galvanising on the steel plate; this will depend on the bond of the applied coating to the steel and the bond of the coating to the resin grout. Plug any holes in the steel plate and apply grease or silicone wax to any removable bolts and nuts.

Shutter design
Place and fix greased shuttering around the plate. There should be no gaps at the sides, just one at each end, one for air release (5 mm to 10 mm) and the other for grout filling (min. 25 mm). The hopper providing the pressure head must be at least 100 mm high. Normal ratio is 1:3 (height of hopper: length of pour).

To reduce wastage, construct a moveable hopper that can be shut off and placed over the next filling gap. This hopper can be made of thin steel sheet or aluminium and should have handles on the side. The bottom should be at least 25 mm wide and the top of the hopper should be about 75 mm wide to aid pouring.

Mixing
A forced-action mixer such as a Mixal or Creteangle is recommended. Alternatively, use a powerful drill (> 800 W) at a slow rotational speed (< 400 rpm) with a Refina MR4 mixing blade, which improves mixing efficiency of resin mixtures.

Pour the contents of the bottle of hardener into a suitable bucket and add the contents of one can of resin. Mix for at least 30 seconds then add one full bag of powder gradually while continuing to mix for 1 minute. Ensure that the mixing blade is below the grout level at all times and has fully mixed all the contents especially at the bottom of the bucket. The mixed material must be uniform in colour, indicating that the components are fully blended.

When pumping, place the end of the hose under the centre of the plate so the grout radiates from the centre. When the grout has reached the far side, start to withdraw the hose very slowly with the pump running to avoid forming air pockets.

Pumping
Pump the grout into place, using a spatula to aid transfer of contents if necessary.

Pumping is best using a peristaltic pump. Weber can recommend suitable machinery.

Pouring
Immediately after mixing, pour the mixed grout into place, using a spatula to aid transfer of contents if necessary.

It is imperative that a hopper is used to help the grout to flow quickly. Removable hoppers with valves are recommended. As soon as the grout has reached and has filled the small air slit at the opposite end of the shutter, close off the valve in the hopper and move the hopper to the next plate. Remove excess grout and any grout that has spilled onto the plate with a palette knife or scraper.

Health and safety
Contains epoxy constituents. Refer to information supplied by manufacturer (see Material Safety Data Sheet). All skin contact with epoxy resin products should be avoided. Barrier creams should be used and operatives should wear protective clothing including gloves. Working areas should be well ventilated.

The hardener content is alkaline and labelled as corrosive. The resin content is labelled as an irritant. The flash point of all components is in excess of 100°C. In the event of fire use foam, dry chemical, carbon dioxide (CO₂) or water fog extinguishers.

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