



SPECgrout E12

FREE-FLOW EPOXY RESIN GROUT

DESCRIPTION

SpECgrout E12 is a two part, solvent-free, low viscosity epoxy resin system and when mixed in the proportions supplied, forms a strong permanent bond and seals cracks in concrete and masonry. **SpECgrout E12** is designed to be injected into static cracks using suitable resin injection equipment provided by specialist installers.

TYPICAL USE

- For injecting into static cracks in concrete or masonry, to form a permanent bond or seal.

ADVANTAGES

- Low viscosity allows penetration into the finest cracks
- Formulated for hot climates
- Suitable for structural repairs
- Excellent bond to concrete, brick and masonry
- Minimum creep under sustained load
- Resistant to wide range of chemicals
- Non-shrink, adheres with no loss of bond

DESIGN CRITERIA

SpECgrout E12 is designed to seal and bond static cracks in concrete and masonry. Crack widths of between 0.25mm and 12mm can be treated.

TECHNICAL DATA

Typical results at 25 ± 3°C

Compressive Strength (BS6319)

3 days	65 N/mm ²
7 days	85 N/mm ²

Tensile Strength (BS6319)

7 days	30 N/mm ²
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Flexural Strength (BS6319)

7 days	92 N/mm ²
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Pot life

20°C	60 mins
30°C	30 mins
40°C	15 mins

APPLICATION

Surface preparation

Clean the surface and remove any dust, unsound or contaminated material, plaster, oil, paint, grease, corrosion deposits or algae.

Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser.

Blow the cracks and treated surface with oil free air to ensure complete removal of all dust and loose particles. Ensure that the surfaces are blown dry.

Fixing Injection Packers

The injection packers shall be inserted into pre-drilled holes at intervals along the length of each crack. The distance between each packer shall be close enough to ensure that the resin will penetrate along the crack to the next point of injection.

The surface of the cracks between the packers shall be sealed with a thick band of **SpECcoat BC**, typically 50mm wide x 2mm thick. Cracks that go all the way through a wall or slab must have packers located on both sides with those at the back placed at midway points between those at the front.

SpECcoat BC shall be allowed to cure for 8 hours at 20°C but at lower temperatures, the curing time will be extended and the applicator should ensure that the surface sealant has adequately cured prior to continuing. One end of the injection hose shall be attached to the lowest packer on vertical cracks or to either end of the horizontal cracks.

If alternative methods are proposed then please contact **SpEC Technical Department** for their comments.

Application

Thoroughly mix the entire hardener and base resin contents until the liquid becomes clear.

SpECgrout E12 should be used with standard injection equipment having closed containers. The injection pressure should be at least 0.4 N/mm² (4 bar).

Only mix sufficient resin that can be used within the pot life of the material.

Following completion of the injection works, the injection system shall be allowed to cure for 24 hours and shall be left undisturbed for this time.

When using two-component injection machine, mixing takes place in the injection machine.

CURING

Remove the packers and make good any holes or voids with **SpECcoat BC** and allow to cure. The **SpECcoat BC** can be ground off or softened with a blow lamp and peeled off. Do not allow to burn.

EQUIPMENT CLEANING

SpECgrout E12 and **SpECcoat BC** should be removed tools, equipment and mixers with **SpECTop Cleaning Solvent** immediately after use. Hardened material can only be removed mechanically.

PACKAGING AND YIELD

SpECgrout E12 is supplied in 1.5 litre pack.

SpECcoat BC is supplied in 3 and 5 kg packs which yield around 1.7 and 3.0 litres respectively of mixed product.

STORAGE AND SHELF LIFE

SpECgrout E12 has a shelf life of 12 months if stored in dry, original and unopened containers.

HEALTH AND SAFETY

SpECgrout E12 contains resins, which may cause sensitisation by skin contact.

Avoid contact with the skin and eyes.

Wear gloves and eye protection.

Accidental contact with the skin should be cleared immediately with soap and water and any eye contact should be treated by rinsing with copious amount of clean water. DO NOT use solvent.

SpECcoat BC and **SpECTop Cleaning Fluid** should not come into contact with eyes or skin or be ingested.

When using **SpECTop Cleaning Fluid** ensure adequate ventilation and avoid inhalation of vapour. Wear adequate protective clothing including gloves and eye protection.

If contact with skin occurs, rinse with water then clean using soap and water.

If eye contact occurs, rinse with copious amounts of water and seek medical assistance.

If swallowed, DO NOT induce vomiting. Seek medical attention immediately.

FLAMMABILITY

SpECgrout E12 is non-flammable.

FLASH POINT

SpECTop Cleaning Solvent 34 °C

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If it is proven that the product does not perform as described in our TDS, SpEC's liability extends solely to the free replacement of product, once the claim has been accepted after due investigation by SpEC. SpEC will not entertain any claims involving any form of consequential costs or damages such as shipping costs, custom duties, damages to third parties, damages to structures, penalties from delay of a project or any other form of consequential damage.

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