

METHOD STATEMENT Filling the Concrete slab penetration holes by SikaGrout[®]-214-11

SIKA LIMITED (VIETNAM)



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1 SCOPE

This method statement describes the procedure for grouting work using shrinkage compensated, pumpable, cementitious grout product SikaGrout[®]-214-11 for slab penetration holes.

2 SYSTEM DESCRIPTION

- Economical
- Easy to use
- Excellent flowability
- Good dimensional stability
- High strength, adjustable consistency
- No bleeding
- Non toxic, non corrosive
- Ready to use, requires only the addition of water
- Impact and vibration resistant
- Can be placed with suitable grout pump

3 MATERIAL

SikaGrout[®]-214-11 is shrinkage compensated, self-levelling, pre-mixed cementitious grouting mortars with extending working time to suit local ambient temperature.

SikaGrout®-214-11 is suitable for the following grouting works:

- Machine foundations
- Rails beds
- Columns in precast construction
- Anchor bolts
- Bridge bearings
- Cavities
- Gaps
- Recesses
- High strength repair



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SikaGrout®-214-11

Bonding primer:

- Sikadur[®]-732: is a solvent-free, 2-component bonding agent, based on selected epoxy resins. After application to old concrete surface, it provides a perfect bond for new concrete.
- Sika MonoTop[®]-610: Bonding slurry and reinforcement corrosion protection.



Sikadur®-732

Sika MonoTop®-610

4 SUBSTRATE PREPARATION

- Concrete substrate shall be thoroughly clean, in a good sound condition and free from dust, loose material, surface contamination.
- Remove all dust and debris from the substrate area using compressed air and/or water jet. Soak the substrate thoroughly with clean water before application approx ~ 12- 24 hours (For using Sika MonoTop®-610).
- Before pouring Sikagrout 214-11, the bonding primer as Sikadur[®]-732 or Sika MonoTop[®]-610 is applied on the surface of old concrete (after thoroughly cleaning).
- For old concrete surface should be used the chipping or grinding to exposed good textures for bonding.



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5 FORMWORK

- Forming: The flowable consistency of the Sikagrout material requires the use of permanent or temporary forms to contain the material until it has hardened as required.
- In order to prevent leakage or seepage, all of these formers must be sealed.

6 MIXING OF SIKAGROUT®

 Powder should be added to the pre-gauged water to suit the desired consistency (3.25-3.75 liter per 25 kg bag). Mix mechanically for at least 3 minutes with a low speed electric drill (max. 500 r.p.m.) with a disc agitator attached, until a smooth consistency is achieved.

Mixing equipment such as two arms, forced action basket/pan type mixer can also be used.

• After 2 to 3 minutes of mixing, stir lightly with a spatula for a few seconds - to release any entrapped air. Sikagrout 214-11 is then poured immediately into the prepared formwork.

7 APPLICATION OF OF SIKAGROUT®

When the bonding primer as Sikadur[®]-732 or Sika MonoTop[®]-610 are still wet, immediately pour SikaGrout [®]-214-11 which is mixed and reached homogeneous compound.

While pouring should be ensured that air entrapped into the grout is allowed to escape. To ensure sufficient pressure head is maintained to keep mortar flow uninterrupted.

Make sure that necessary form work is firmly in place and watertight. To achieve optimum expansion result, apply mortar as quickly as possible.

Grouting of large cavities / large volume

Depending on the volume to be filled and thickness of gap, large aggregates, e.g. 4-8 mm, 8-16 mm or 16-32 mm may be added to the SikaGrout[®]-214-11 at a ratio of between 50-100% by weight of SikaGrout[®]-214-11 powder. Round aggregates are more suitable than crushed ones.

As a rule of thumb, minimum thickness of gap to be grouted shall be 3 times max. grain size diameter of aggregate.

For grouting large section thicker than 60 mm, addition of large aggregate and/or use of cold water (approximately 15°C to 20°C) will minimize temperature rise generated during early hardening period.

Please contact to Sika Technical Department for special and detail cases for consulting.

8 CURING

- Adequate precautions must be taken with all cement-based mortars to prevent premature loss of moisture through evaporation.
- Exposed surfaces should be treated with a curing compound (i.e. Antisol E) or covered with plastic sheeting or damp cloth/ wet hessian immediately after placing. This covering should be left in place for approx. three days or more (depending on climatic conditions).

(Would you please contact our technical department in case of any queries?)



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LEGAL NOTE

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. in practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the products suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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