Sikagrout® 215 (new)
High Precision, General Purpose, Non-Shrink Cementitious Grout

Description
A non shrink, cementitious premixed grout with extended working time to suit local ambient temperatures. Flowable grout with high resistance to cement wash-out when placed under water.

Complies to Corps of Engineer’s specification CRDC-621 and ASTM C-1107

Use
For grouting over a wide range of applications:
- Anchor bolts
- Machine bedding/base plates
- Supporting bridge bearing pads
- Pre-cast concrete sections
- Dry pack applications
- Cavities, gaps and recesses.
- For grouting method of concrete repair
- Marine structure:
  also recommended for repairing structure underwater and in tidal zone grouting.
  Application repair of:
  - Bridge piers.
  - Concrete piles.
  - Harbour walls.
  - Jetty pillars.

Advantages
- Easy to use, just add water
- Good flow characteristic
- Adjustable consistency
- Rapid strength development
- Shrinkage compensated
- High final strength
- Non-Corrosive
- Non-Toxic

Consumption
~ 1.920 kg/m³ of mortar.

Instruction for Use

Surface Preparation
Remove dirt, oil, grease, loose material and other bond-inhibiting materials. Anchor bolts to be grouted must be degreased with suitable solvent. Concrete must be sound and roughened to promote mechanical adhesion. Prior to pouring, surface must be wetted to saturated surface dry

Forming
For flowable grout, construct forms to retain grout without leakage. Forms should be lined or coated with bond-breaker for easy removal. Forms should be sufficiently high to accommodate head of grout. Where grout tight form is difficult to achieve, use Sika Grout 215 (new) in dry pack consistency.

Mixing
Put appropriate quantity of water (depend on the required consistency) into a mixing vessel. Add slowly the total contents of Sikagrout® 215 (new) while mixing. Mix continuously for 3 minutes to achieve an even consistency. Use a mechanically low speed drill (400–600 rpm) with mixing paddle or appropriately sized mortar mixer.

Application
Within 25 minutes after mixing, place grout into forms from one side to avoid air entrapment. Do not vibrate. Use a suitable head box of 150–200 mm and maintain the grout head at all times to ensure a continuous flow. Gentle tapping or pulling loops of wire from one side may assist the flow of the mortar under difficult working conditions.
Curing

Wet cure for a minimum 3 days with wet hessian, plastic sheet or apply a curing compound (Antisol).

Limitation

Minimum application thickness: 10 mm
Recommended thickness of Sika Grout 215 (new) in one pour is 20 mm to 50 mm. If the application thickness exceeds 100 mm, special procedure must be taken to anticipate temperature rise. Iced water, add coarse aggregate to the mix (max. 50% by powder weight), or both of them may be used to eliminate temperature rise. Keep the materials and substrate temperature lower than 30°C. Variations in cement could cause shade differences in colour of the mortar. In the case of addition with coarse aggregate, it is advised to conduct trial mix to check influence of coarse aggregate addition on grout workability and strength. 8 to 10-mm size aggregate is found to be the most suitable size for this addition.

Contact Sika Technical Service for underwater application.

Technical Data

<table>
<thead>
<tr>
<th>Form</th>
<th>Powder</th>
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<tbody>
<tr>
<td>Color</td>
<td>Grey</td>
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<tr>
<td>Flow Condition</td>
<td>Flowable</td>
</tr>
<tr>
<td>Flow (Mod J cone: 6-12 sec)</td>
<td>4.00</td>
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<tr>
<td>Water requirement (Litres per 25 kg bag)</td>
<td>4.00</td>
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<tr>
<td>Yield (Litres per 25 kg bag)</td>
<td>13.00</td>
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<tr>
<td>Mix Density</td>
<td>Approx. 2.26 kg/ltr</td>
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<tr>
<td>Compressive Strength (ASTM C-109)</td>
<td>240 kg/cm²</td>
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<tr>
<td>1 days</td>
<td>240 kg/cm²</td>
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<tr>
<td>3 days</td>
<td>410 kg/cm²</td>
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<tr>
<td>7 days</td>
<td>530 kg/cm²</td>
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<tr>
<td>28 days</td>
<td>650 kg/cm²</td>
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<tr>
<td>Flexural Strength (ASTM C-348)</td>
<td>&gt;60 kg/cm²</td>
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<tr>
<td>Tensile Strength (ASTM C-496)</td>
<td>&gt;35 kg/cm²</td>
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<tr>
<td>Bond Strength</td>
<td>&gt;15 kg/cm² (concrete failure, over mechanically roughened concrete surface)</td>
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<tr>
<td>to concrete 28 days</td>
<td>&gt;15 kg/cm² (concrete failure, over mechanically roughened concrete surface)</td>
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<tr>
<td>to grout 28 days</td>
<td>&gt;25 kg/cm² (over mechanically roughened grout surface)</td>
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<tr>
<td>Expansion (ASTM C-940)</td>
<td>0.30 – 1.40 %</td>
</tr>
<tr>
<td>Initial Setting Time (at 27°C)</td>
<td>4 – 8 hours</td>
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<tr>
<td>Shelf Life</td>
<td>9 months when unopened and stored in dry condition.</td>
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<tr>
<td>Packaging</td>
<td>25 kg bag</td>
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</tbody>
</table>
| Handling Precautions: |}

- Avoid contact with skin and eyes
- Wear protective gloves and eye protection during work
- If skin contact occurs, wash skin thoroughly
- If in eyes, hold eyes open, flood with warm water and seek medical attention without delay.

Legal Notes

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 product 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 product’s 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.