

Core Set

Non-Shrink, High-Strength
Precision Grout

Description

V1/50 /4"- 4"/ 20-120 mm grouting thickness.

V1/10 < 1 /16"/ < 30 mm grouting thickness.

V1/160 > 4"/ > 100 mm grouting thickness.

- High flowability, even after 90 minutes.
- Cement-based and chloride-free.
- Controlled and even expansion with a rigid bond between concrete foundation and machine base plate.
- High early and final strength.
- Low modulus of elasticity in connection with high bending strength.
- Resistant to cracks even when prepared with a low water/cement ratio (0.36-0.38).
- Resistant to freeze/thaw cycles, waterproof, resistant to oil and petrol.
- Pumpable and easy to pour even during low temperatures.
- Good for use in drinking water areas.

Recommended Uses

- Universal grout for precision machines of all kinds.
- Turbines, generators, compressors, diesel engines and other power equipment operating with heavy vibration.
- Anchor screws, levelling units and sole plates.
- Steel and concrete columns.
- Pre-fabricated concrete units and structural steel works.
- Bridge bearings and construction joints.
- Crane rails and radio telescopes.
- Steel and blast-furnace plants as well as mines.



SERVICES

Cementitious coating

Crystalling Coating

Addmixture

Sealant

Grout

Epoxy primer

Repair Mortar

Flooring

PU flooring

PU coating

Bitumen Coating

Latex

Waterstopper



Technical Data

| TYPE | | Inch | V1/10 | V1/50 | V1/160 |
|---------------------------------------|-------------|-----------|---|---|--|
| Aggregate Size | | mm | 0 - 0.04 0 - 1 | 0 - 0.02 0 - 5 | 0 - 0.63 0 - 16 |
| Grouting Height | | Inch | | | |
| Amount of water | | mm | 0.20 - 1.18 | 0.79 - 4.72 | 3.94 |
| | | % | 5 - 30 12-13% 3 ¼ - 3½ QTS(3-3.25L) | 20 - 120 10-12% 4 - 4¼ QTS(3.25-4L) | >100 11%-25/8 - 3 QTS(2.5-2.75L) |
| Material Needed (dry mortar) | | Kg/dm3 | 2.0 | 2.0 | 2.1 |
| Density of freshly mixed mortar | at 20OC | Kg/dm3 | 2.28 | 2.3 | 2.33 |
| Workability | Immediately | Min. | >90 | >90 | >90 |
| Flowability (channel) | 60 Min. | inch (cm) | 21.65 (55) | 21.65 (55) | - |
| | Immediately | inch (cm) | 20.47 (52) | 17.71 (45) | - |
| Measure of extension | 60 Min. | Vol. % | - | - | 21.65 (55) |
| (DIN 1048) | 24 h | Vol. % | - | - | 17.71 (45) |
| Extension | 28 h | PSI (MPA) | + 0,5 | + 1,0 | + 1,0 |
| | 24 h | PSI (MPA) | + 0,5 | + 1,0 | + 1,0 |
| Compressive strength | 7 d | PSI (MPA) | 4,930 (34) | 5,510 (38) | 5,655 (39) |
| V1/10, V1/50: 1.57 x 1.57 x 6.30 inch | 28 d | PSI (MPA) | 6,960 (48) | 8,120 (56) | 8,120 (56) |
| V1/160: 3.943.943.94 inch | 90 d | PSI (MPA) | 10,005 (69) | 10,440 (72) | 10,440 (72) |
| | 24 h | PSI (MPA) | 10,875 (75) | 11,310 (78) | 11,310 (78) |
| Bending strength | 7 d | PSI (MPA) | 652.5 (4.5) | 797.5 (5.5) | 797.5 (5.5) |
| 1.57 x 1.57 x 6.3 inch | 28 d | PSI (MPA) | 797.5 (5.5) | 942.5 (6.5) | 942.5 (6.5) |
| | 90 d | PSI (MPA) | 1,087.5 (7.5) | 1,160 (8.0) | 1,160 (8.0) |
| Pot Life at 30OC | | min | 120 | 120 | 120 |

Application Guidelines

All test data are derived under normal climate conditions. 23/50-2

Surface preparation:

Clean thoroughly, remove loose or unsound material and cement slurry by means of hydraulic water-blasting or similar till carrying capacity of grain structure is reached. Prior to grouting, the surface must be wetted continuously for approx. 6 hours till saturation.

Formwork:

Must be of rigid construction, with sand or dry mortar being placed around the concrete base carefully to prevent leakage.

Mixing:

The grout is ready for use, only water is to be added (10–12 % or 2.5–3 l per bag). Measure out the correct quantity of water and fill two thirds of this into a concrete mixer. Add the dry mortar and mix for about 3 minutes. Then fill in the remaining water and mix for another 2 minutes. Grouting then should take place immediately.

Placing:

Place the mixed grout from one side or corner only in one continuous pour. When grouting large areas, we suggest to pour starting from the middle – using a pipe or funnel. On machine installations fill the anchor bolt pockets first (up to approximately top of anchor bolt pockets) and then the underside of the machine. Open areas must be protected against wind, draught and premature evaporation by using for example a plastic foil or Curing Compound.

Grouting shoulders:

Height and shoulders around base plates must not exceed 2 inches or 50 mm.

Temperature:

Apply between 5° - 35°C. Low temperature working conditions retard the strength development and reduce the flowability while high temperatures accelerate the same.

Non-Iron-Metals:

Cement as well as all cement-bound building materials may under certain circumstances cause a coming-off of non-iron-metals in the application area (for example aluminum, copper, zinc), please ask for our technical service.

The information contained in this brochure reflects our current knowledge and experience and is intended to assist designers, contractors and end users. It does not release the purchaser from carrying out their own tests and verifications to ensure the product is suitable for the specific application. All data presented are based on tests under normal laboratory conditions; actual values may vary on site. Recommendations are given in good faith but without warranty, as conditions beyond our control may affect product performance. Core Chemicals reserves the right to modify specifications without prior notice. The purchaser is responsible for ensuring the product is used in accordance with current standards and regulations. Our technical service team is available to provide guidance at any time.

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