V1/50 GP

High Strength Flowable General Purpose Grout



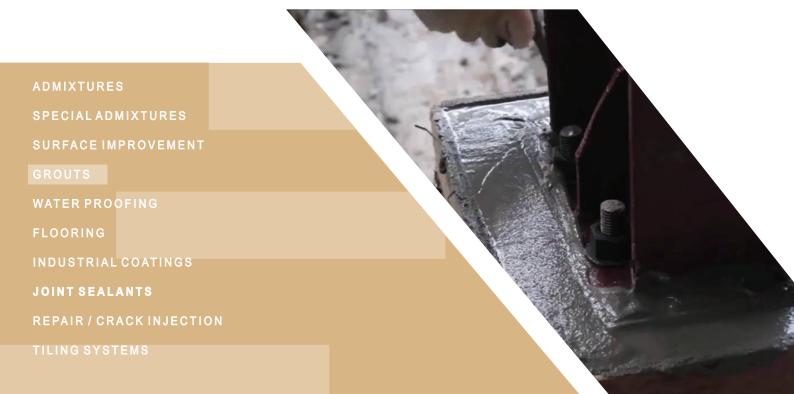
Description

V1/50 GP cementitious grout is supplied as a ready to use dry powder. The addition of a controlled amount of clean water produces an owing non-shrink grout for gap thickness up to 120 mm.

- Good flowability.
- Cement-based and chloride-free.
- Controlled expansion.
- Good early and final strength.
- Low modulus of elasticity in connection with high bending strength.
- Resistant to cracks even when having a low w/c value (0.36-0.38).
- Resistant to freeze/thaw cycles, waterproof, resistant to oil and petrol.
- Good for use in drinking water areas.

Recommended Uses

- Columns in pre-cast construction.
- Concrete anchors, cavities, gaps and recesses.
- Base plates of general machinery.
- General concrete repairs.
- Bridge bearings pads.
- Prefabricated concrete units and structural steel works.



Technical Data

Aggregate Size		Inch	0 - 0.20
		mm	0 - 5
Grouting Height		Inch	0.79 - 4.72
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Amount of Water		%	11 - 13
Material needed (dry mortar)		Kg/dm ³	2.0
Density of freshly mixed mortar		Kg/dm ³	2.29
Workability	at 20°C	Min.	>90
Flowability (Channel)	Immediately	Inch (cm)	21.25 (54)
, , ,	60 Min.	Inch (cm)	17.31 (44)
Extension	24 h	Vol. %	+1
	28 d	Vol. %	+1
Compressive Strength (ASTM C109)	24 h	PSI (MPA)	4550 (32.4)
1.57 x 1.57 x 6.30 inch	7 d	PSI (MPA)	6,960 (48)
	28 d	PSI (MPA)	9,410 (65)
Bending Strength	24 h	PSI (MPA)	650 (4.48)
1.57 x 1.57 x 6.3 inch	4 d	PSI (MPA)	1050 (7.23)
	28 d	PSI (MPA)	1050 (7.23)
Ambiant Air Temperature			+5°C min. / +35°C max.
Substrate Temperature			$+5^{\circ}$ C min. / $+35^{\circ}$ C max.

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

Important Information:

Supplied in: 25 kg bag.

In a dry, frost free area, out of direct sunlight. Storage:

12-13L per 25Kg Bag. Yield:

Shelf-life: 12 months.

Hazard class: No dangerous substances.

Application Guidelines

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.

Mixina:

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 plastic foil or VERTEX RockCure O2 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.

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