



HI-FLOW METALLIC GROUT

HIGH-TOLERANCE, NON-SHRINK GROUT

EUCLID CHEMICAL

DESCRIPTION

HI-FLOW METALLIC GROUT is specially designed for use where high tolerance, high strength and high fluidity are required. It is formulated as a metallic aggregate system with a shrinkage-compensating binder. It is highly flowable without sacrificing strength or performance capabilities and is formulated to provide consistent and exacting performance.

PRIMARY APPLICATIONS

- Heavy duty grouting of machinery and equipment
- Structural columns
- Crane rails
- Bridge seats
- Bearing plates

FEATURES / BENEFITS

- Reinforced with metallic aggregate for extra heavy duty service conditions
- Highly fluid for easy field use
- High strength for maximum load bearing
- Non-shrink with minimum positive expansion for high-tolerance performance
- Non-bleeding and non-segregating at a fluid consistency
- Does not contain any chlorides or additives which may contribute to corrosion of base structure
- Total shrinkage compensation provides a maximum bearing surface for the greatest overall support
- Rapid strength gain to minimize turnaround time for equipment regrouts

TECHNICAL INFORMATION

The following results were determined at laboratory conditions @ 24°C, 50% RH.

PROPERTY	FLUID CONSISTENCY	
Flow Rate (ASTM C939/CRD C621)	Initial 30 minutes 60 minutes	22 seconds 45 seconds 51 seconds
Compressive Strength (ASTM C109 Modified*) 50 mm cubes	1 day 3 days 7 days 28 days	27 MPa 40 MPa 47 MPa 61 MPa
Volume Change (ASTM C 1090/CRD C 621)	1, 3, 7, and 28 days	+0.03%
Flexural Strength (ASTM C 348)	3 days 7 days 28 days	7 MPa 8 MPa 9 MPa
Split Tensile Strength (ASTM C 496)	28 days	3.7 MPa
Setting Time (ASTM C 191)	Initial Set 3 hrs 50 min Final Set 4 hrs 50 min	

*See ASTM C 1107 Section 11.5

PACKAGING

HI-FLOW METALLIC GROUT is packaged in 22.7kg bags and yields 11L of fluid grout when mixed with 4.5L of water.

GROUTS

HI-FLOW METALLIC GROUT

MASTER FORMAT #:
00 92 09

SHELF LIFE

1 year in original, unopened package.

SPECIFICATIONS / COMPLIANCES

- CRD C 621, Corps of Engineers specification for non-shrink grout
- Shows positive expansion when tested in accordance with ASTM C 1090, “Standard Test Method for Measuring Changes in Height of Cylindrical Specimens from Hydraulic-Cement Grout”
- ASTM C 1107, “Standard Specification for Packaged, Dry, Hydraulic-Cement Grout (non-shrink)”

DIRECTIONS FOR USE

The contractor and engineer are encouraged to consult and review the Euclid Chemical bulletin “Cementitious Grout Application Guide”. The document offers instructions detailing the general installation of Euclid Chemical manufactured cement-based grout products.

General Information: While HI-FLOW METALLIC GROUT is designed to be fluid poured at temperatures ranging from 4.5°C to 38°C, the product is most easily placed at temperatures of 16°C to 21°C.

When HI-FLOW METALLIC GROUT will be placed greater than 12.7cm in depth, contact Euclid Chemical Technical Support.

Mixing Water Guide L/bag

Consistency	Estimated Water Content	Mix Time
Fluid	3.8 to 4.5L	5 Min.
Flowable	3.4 to 3.8L	5 Min.
Plastic	3.0 to 3.4L	5 Min.

Placing: HI-FLOW METALLIC GROUT should be placed continuously.

Curing & Sealing: Proper curing procedures are important to ensure the durability and quality of the grout. Wet cure the grout until the forms are stripped. Cure the grout with a high solids curing compound, such as SUPER REZ-SEAL or SUPER AQUA-CURE VOX.

Note: *More or less water may be required to achieve a 25 second flow or the desired placing consistency, depending on temperature and other variables. Do not add sand or cement to the grout since this action will change its precision grouting characteristics.*

CLEAN UP

Clean tools and equipment with water before material hardens.

PRECAUTIONS / LIMITATIONS

- Store materials in a dry place.
- Proper curing is required.
- Do not add admixtures or fluidifiers.
- Do not add sufficient water to promote bleeding of the grout.
- Do not use this product at a flow cone rate of less than 20 seconds if checking flow rate on the job site.
- Do not use material at temperatures that may cause premature freezing.
- Keep the grout from freezing until a minimum strength of 28 MPa is reached.
- Do not use as a topping.
- Employ cold or hot weather grouting practices per ACI standards as the temperature dictates.
- Shoulder cracking may occur on wide shoulders, improperly cured shoulders, or at stress points such as shimpacks, bolts or plate stiffeners. These cracks are of no structural significance.
- Rate of strength gain is significantly affected at temperature extremes.
- In all cases, consult the Safety Data Sheet before use.

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