of Innovative Construction Chemicals

MANUFACTURER

Gemite® Products Inc.

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Gem-GroutTM**Non-Shrink**

E-mail: techinfo@gemite.com Web Site: www.gemite.com

Silica Fume Enhanced Grout

USA CANADA

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FEATURES

- Non-shrink
- Excellent bond strength
- Fast set
- Crack resistant
- Nontoxic
- Nonflammable
- Silica fume enhanced

PRODUCT DESCRIPTION

Basic Use

Gem-Grout Non-Shrink is used in grouting applications and in concrete and masonry repair.

Composition and Materials

A cement based, microsilica enhanced composition is pumpable and has an excellent bond to clean, structurally sound concrete. Supplied as a Premix - mixed with water only and poured or pumped into formed cavities. Also available as a Concentrate that is mixed on site with sand, cement & water. Gem-Grout Non-Shrink Concentrate is suitable for large volume projects.

Limitations

Do not use Gem-Grout Non-Shrink when temperatures may fall below 4°C (40°F) within 48 hours after application. When using Gem-Grout Non-Shrink in winter, use electrical heaters to keep the temperature above 4° C (40° F). Follow "hot weather concreting" procedures when applying Gem-Grout Non-Shrink at temperatures above 25°C (77°F).

Health and Safety

Gem-Grout Non-Shrink is nontoxic. Your skin might be sensitive to hydraulic cement. We recommend use of rubber gloves. Avoid contact with eyes and prolonged contact with skin. If contact occurs, flush immediately with water. Seek medical advice if irritation occurs. Harmful if digested. Keep product out of reach of children. FOR INDUSTRIAL USE ONLY. Consult SDS for additional information.

Color

Cement Gray

Packaging

Gem-Grout Non-Shrink is supplied as a concentrate in 17.6 lbs (8 kg) bags. Gem-Grout Non-Shrink is also supplied as complete premix containing sand and cement in 50 lbs (22.7 kg) bags.

Yield

Gem-Grout Non-Shrink Premix, when mixed with water yields 0.46 ft3 (13 L).

Gem-Grout Non-Shrink Concentrate, mixed with cement and sand yields $2.65 \text{ ft}^3 (0.075 \text{m}^3)$.

Storage and Transportation

Gem-Grout Non-Shrink stored on pallets in a dry, cool area, has a shelf-life of 12 months.

TECHNICAL DATA

Compressive Strength	5,400 to 6300 psi
(ASTM C 109 Modified)	37.2 to 43.4 MPa
Modulus of Rupture	670 to 730 psi
(Gemite ISO TP -test procedure-006)	4.6 to 50 MPa
Plastic Expansion (Volumetric)	3-4%
Flow Test Time	40 to 50 seconds

Note: The above data apply to *Gem-Grout Non-Shrink Premix*. Data for Gem-Grout Non-Shrink Concentrate may vary, depending on sand and cement used.

INSTALLATION

Surface Preparation

The proper surface preparation is essential for successful Gem-Grout Non-Shrink application. Contact Gemite Technical Service, before starting a project to ensure correct surface preparation & application procedures.

Remove all loose concrete, clean off all grease, laitance, dust, dirt and efflorescence. Saturate the substrate with water, but do not leave any free water in the cavities prior to application of Gem-Grout Non-Shrink.

Mixing

Use paddle or helix screw type mortar mixer. Place mixing water in the mixer, slowly add Gem-Grout Non-Shrink powder to the water and mix until suitable consistency is obtained.

for one (1) minute. Add sand, cement and mix for one (1) minute. Convey mixed material to point of placement in clean uncontaminated containers or use grouting pump. Portland Cement Type I can be also used; some evaluation of the cement may be required.

Mix Design - Premix

Gem-Grout Non-Shrink Premix	50 lbs (22.7 kg)
Water	0.85 US gal. (3.3 L

Mix Design - Concentrate

Gem-Grout Non-Shrink Conc. 17.6 lbs (8 kg)

Portland Cement Type I or III 88 lbs (40 kg)

Mortar Sand 220 lbs (100 kg)

Water 5.7 U.S.G. (22L)

APPLICATION

Apply Gem-Grout Non-Shrink by pumping or pouring.

AVAILABILITY AND COST

Gem-Grout Non-Shrink is available worldwide. Contact Gemite for the name of the local Representative/Distributor and prices.

MAINTENANCE

None required.

TECHNICAL SERVICE

For technical advice on the suitability of *Gem-Grout Non-Shrink* for a specific application, specification assistance & application advice contact Gemite Technical Service: USA 800-724-5944 or Canada 905-672-2020.

Short Specification

The grout will be *Gem-Grout Non-Shrink*, silica fume enhanced grout, manufactured by Gemite Products Inc. [USA 800-724-5944], [Canada 905-672-2020]. It will be mixed and applied in accordance with the manufacturer's application instructions. The suitability of the surface preparation method should be consulted with Gemite Technical Service ahead of use.