

Gantrail® Standard Grout

High Performance Precision Non-shrink Grout



www.gantrail.com



Gantrail® Standard Grout is the industry's leading cement-based, non-metallic, non-shrink grout for supporting machinery and equipment. It is formulated with Air Release technology that combines high performance with the greatest reliability. When test in accordance with ASTM C 827, Gantrail Standard Grout exhibits positive expansion. Gantrail Standard Grout meets the performance requirements of ASTM C 1107-02 Grades A, B and C, ASTM C 1107-07, and CRD-C 621-93 specifications for non-shrink grout over a wide temperature range, 40°F - 90°F (4°C - 32°C).

ADVANTAGES

- Air release technology per ACI 351.1 R
- 95% Effective Bearing Area (EBA) is typically achieved following proper grouting procedures
- Provides placement versatility: pour, pump or dry pack
- 45 minute working time
- Permanent support for machinery requiring precision alignment
- Does not contain gas generating additives, such as aluminium powder
- Non-shrink from the time of placement

USES

- Grouting of machinery and equipment to maintain precision alignment
- Non-shrink grouting of structural steel and precast concrete
- Grouting of anchors and dowels
- Support of tanks and vessels

PACKAGING & YIELD

Gantrail Standard Grout is packaged in heavy-duty, polyethylene lined bags and is available in 50 lb (22.7kg) units yielding approximately 0.5 cubic feet (14.1 litres), or 100 lb (45.4kg) units yielding approximately 1.0 cubic foot (28.3 litres) of hardened material at maximum water content.

SHELF LIFE

One year in original unopened packaging when stored in dry conditions; high relative humidity will reduce shelf life.

TYPICAL PROPERTIES AT 70°F (21°C)

Early Height Change, ASTM C 827	0.0 to 4.0%		
Hardened Height Change, ASTM C 1090	0.0 to 0.3%		
Effective Bearing Area	95%		
Bond Strength, ASTM C 882 / 28 Days	2,000 psi (13.8 MPa)		
Pull-out Strength, Shear Bond with #5 deformed bar, 7 days	2,400 psi (16.6 MPa)		
Compressive Strength, ASTM C 942 (C109 Restrained)	Minimum Water psi (MPa)	Maximum Water psi (MPa)	
	1 Day	4,000 psi (27.6 MPa)	2,500 psi (17.3 MPa)
	3 Days	5,500 psi (38.0 MPa)	3,500 psi (24.1 MPa)
	7 Days	6,500 psi (44.9 MPa)	5,000 psi (34.5 MPa)
	28 Days	8,000 psi (55.2 MPa)	6,500 psi (44.9 MPa)
Working Time at 70°F (21°C)	45 minutes		

The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown may result. Test methods are modified where applicable.

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PLACEMENT GUIDELINES

- SURFACE PREPARATION:** All surfaces in contact with Gantrail Standard Grout shall be free of oil, grease, laitance and other contaminants. Concrete must be clean, sound and roughened to ensure a good bond. Soak concrete surfaces for 8 to 24 hours prior to application with liberal quantities of potable water, leaving the concrete saturated and free of standing water.
- FORMWORK:** Formwork shall be constructed of rigid non-absorbent materials, securely anchored, liquid-tight and strong enough to resist forces developed during grout placement. The clearance between formwork and baseplate shall be sufficient to allow for a headbox. The clearance for remaining sides shall be 1 to 2 inches (25 - 50 mm). Areas where bond is not desired must be treated with form oil, paste wax or similar material. Isolation joints may be necessary depending on pour dimensions. Contact the Gantrail Technical Department for further information.
- MIXING:** Mix Gantrail Standard Grout thoroughly for approximately four to five minutes to a uniform consistency with a mortar mixer (stationary barrel with moving blades). A drill and paddle mixer is acceptable for single bag mixes. For optimum performance, maintain grout at ambient temperatures between 40°F and 90°F (4°C and 32°C). Use heated or chilled water to help adjust working time. Mix Gantrail Standard Grout with 7 to 11 quarts (8 to 12.5 litres) potable water per 100lb. bag (45.4kg). 3.5 to 5.5 quarts (4 to 6.25 litres) per 50 lb. bag (22.7kg). Do not exceed maximum recommended amount of mixing water as stated on the package or add an amount that will cause segregation. Working time is approximately 45 minutes at 70°F (21°C). Follow printed instructions on the package. Always add mixing water first to mixer followed by grout.
- PLACEMENT PROCEDURES:** Gantrail Standard Grout may be dry packed, poured or pumped into place. Minimum placement thickness for Gantrail Standard Grout is 1 inch (25 mm). For pours over 6 inches (150 mm) in depth Gantrail Standard Grout should be extended with a clean, damp coarse aggregate meeting the requirements of ASTM C 33. Contact the Gantrail Technical Department for further information.
- POST-PLACEMENT PROCEDURES:** Gantrail Standard Grout shall be wet cured for a minimum of three days, or coated with an approved curing compound meeting the requirements of ASTM C 309 after a minimum 24 hour wet cure. In-service operation may begin immediately after the required grout strength has been reached.

NOTE: PRIOR TO APPLICATION, READ ALL PRODUCT PACKAGING THOROUGHLY.
For more detailed procedures, contact the Gantrail Technical Department

CONSIDERATIONS

- If temperatures of equipment and surfaces are not between 40°F and 90°F (4°C and 32°C) at time of placement, contact the Gantrail Technical Department for further information.
- Never exceed the maximum water content as stated on the bag or add an amount that will cause segregation. Construction practices dictate concrete foundation should achieve its design strength before grouting.

CAUTION

Contains cementitious material and crystalline silica. International Agency for Research on Cancer has determined that there is sufficient evidence for the carcinogenicity of inhaled crystalline silica to humans. Take appropriate measures to avoid breathing dust. Avoid contact with eyes and contact with skin. In case of contact with eyes, immediately flush with plenty of water for at least 15 minutes. Immediately call a physician. Wash skin thoroughly after handling. Keep product out of reach of children.
PRIOR TO USE, REFER TO MATERIAL SAFETY DATA SHEET.

For more information on the complete product line or for technical assistance, please contact Gantrail.

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A world of crane rail expertise.

www.gantrail.com



Gantry Railing Ltd
Sudmeadow Road
Hempstead
Gloucester GL2 5HG
ENGLAND

Tel: +44 (0) 1452 300688
Fax: +44 (0) 1452 300198
E-mail: info@gantrail.com

Gantrail (Middle East) Ltd
P O Box 61428
Jebel Ali Free Zone
Dubai
United Arab Emirates

Tel: +971 4 8812 935
Fax: +971 4 8812 936
E-mail: gme@gantrail.com

