

# **TURBO GROUT LT-12**

### PRODUCT DESCRIPTION

An expansive cement based grout designed for use in cooler temperatures to provide faster set times and quicker strength gain than normal cement based non-shrink grouts. Ideal for use in cooler temperatures, as low as 35°F. Develops high compressive strength, 12,000 psi in 28 days even at low temperatures.

### **USE**

Designed for the grouting of base plates for Wind Turbine towers, machinery and equipment base plates, columns, crane rails etc.

### **BENEFITS**

- Sets Quickly, Even In Cooler Temperatures
- Fast Strength Gain
- 12,000 psi ultimate strength
- Non Metallic/Non Corrosive
- Plastic Or Flowable Consistency
- Can Be Installed In Temperatures As Low As 35°F (1.7°C)

### **PROPERTIES**

Compressive Strength: ASTM C 109 modified as per ASTM C 1107

@ 35°F (1.7°C)

2 Hours: 3,000 psi (20.6 MPa) 3 Hours: 4,500 psi (31.0 MPa) 24 Hours: 6,500 psi (44.8 MPa) 28 Days: 12,000 psi (82.7 MPa)

Set Times: ASTM C 266 @ 35°F (1.7°C),

Approximately 30 minutes work time

Initial set: > 30 minutes Final set: < 60 minutes

Expansion: ASTM C 827 Pre-hardening 0.18%, ASTM C 1090 Post-hardening 0.2%

Meets the requirements of ASTM C 1107 placed at  $35-40^{\circ}F$  (1.7 –  $4.4^{\circ}C$ ) @ Flowable consistency

### **APPLICATION**

**SURFACE PREP:** Thoroughly clean all contact surfaces. Existing concrete should be strong and sound. Surface should be roughened to enhance bond. Metal base plates should be clean and free of oil and other contaminates. Maintain contact areas between 35°F and 70°F before grouting and during curing period. Thoroughly wet concrete contact area 24 hours prior

to grouting, keep wet, and remove all surface water just prior to placement. If 24 hours is not possible, saturate with water for at least 4 hours. Forms must be sealed to prevent water or grout loss. On the placement side, provide an angle in the forms high enough to assist in grouting and maintain head pressure on the grout during the grouting process. Forms should be at least 1" (2.5 cm) higher than the bottom of the base plate.

MIXING: A mechanical mixer with rotating blades is best. Small quantities can be mixed with tools by hand. Place approximately 3/4 of the anticipated mix water into the mixer; add the grout and mix, adding the minimum additional water necessary to achieve the desired consistency. Mix for a total of five minutes ensuring uniform consistency. For placements greater in depth than 3" (7.6 cm), up to 25 pounds (11.3 kg) of washed pea gravel 3/8" (1 cm) maximum size may be added to each 50 pound (22.7 kg) bag of grout. The approximate working time (pot life) is 30 minutes @ 35°F (1.7°C).

**WATER REQUIREMENTS:** Per 50 lb. Bag (22.7 kg): Flowable – 5.5 pints (2.6 L) Plastic – 4.5 – 5.0 pints (2.1—2.4 L)

PLACEMENT: Grout should be placed so as to avoid entrapped air pockets. Grout should not be overworked causing segregation. Vent holes should be provided where necessary. Forms must be sealed to prevent water or grout loss. When possible, grout bolt holes first. Placement and consolidation should be continuous for any one section of the grout. When nearby equipment causes vibration of the grout, such equipment should be shut down for a period of 3-4 hours after grout placement. Do to fast set times, use only short hose lengths when pumping.

**CURING:** Forms may be removed when grout is completely self supporting. Cut away where grout excessively restricts movement of steel, i.e., edges of base plates, etc. For best results, grout should extend downward at a 45° angle from the lower edge of the steel base plates or similar structures. Exposed grout surfaces should be cured using Dayton Superior curing

Refer to www.daytonsuperior.com for latest Technical Data Sheet and MSDS 7777 Washington Village Dr., Suite 130, Dayton OH 45459 Customer Service: (888) 977-9600 Technical Assistance: (866) 329-8724

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or cure and seal products. Maintain the temperature of the grout and contact area at above 35°F (1.7°C) for a minimum of 8 hours.

**CLEAN UP:** Use water to remove fresh material. Hardened material will require abrasive methods.

**ESTIMATED YIELD:** 0.41 Ft<sup>3</sup> per 50 lbs (0.011 M<sup>3</sup> per 22.7 kg) bags

### PACKAGING:

50 pound (22.7 Kg) bags, part number 309013 2500 pound (1134 Kg) supersacks, part number 309016

STORAGE: Store in a cool, dry area

LIMITATIONS: Do not retemper after initial mixing. Do not add other cements or additives to material. Set times will vary depending on temperatures. Do not mix more than can be placed in 15 minutes @ temperatures above 50°F (10°C). Temperatures above 50°F (10°C) will greatly decrease the pot life and work times. Contact manufacturer for specific recommendations. Exposed grout surfaces should be cured. Store in a cool, dry area that is free from moisture and direct sunlight.

PRECAUTIONS: Avoid direct contact with skin and eyes. Product contains Portland Cement. Wash exposed skin area promptly with water. May cause skin irritation and possibly cement burns. In case of eye contact, flood eyes repeatedly with water and call physician. Do not take internally. Harmful if ingested. Keep product out of reach of children.

### MANUFACTURER

Dayton Superior Corporation 7777 Washington Village Dr., Ste. 130 Dayton, OH 45459

Customer Service: 888-977-9600 Technical Services: 866-329-8724 Website: www.daytonsuperior.com

### WARRANTY

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sale information received by the customer during the sales process. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED. INCLUDING WARRANTIES OF MERCHANTARII ITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

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