



Planigrout 755[®]

Cement-Based, General-Purpose Construction Grout



DESCRIPTION

Planigrout 755 is a one-component, nonmetallic, nonstaining, nonshrinking, cementitious construction grout consisting of select fine aggregates and special additives. *Planigrout 755* requires only the addition of water to produce consistencies varying from dry pack to flowable.

FEATURES AND BENEFITS

- Highly versatile grout producing consistencies from dry pack to flowable
- Specially formulated to achieve high compressive and flexural strengths
- Ideal for structural grouting and anchoring

INDUSTRY STANDARDS AND APPROVALS

- Conforms to the physical requirements of ASTM C1107 Grade C and CRD – C621 standards

LEED v4 Points Contribution

LEED Points

Health Product Declaration (HPD)*Up to 2 points

* Using this product may help contribute to LEED certification of projects in the category shown above. Points are awarded based on contributions of all project materials.

WHERE TO USE

- For load bearing and stabilization of base plates for columns and machinery
- For anchoring bolts and handrails
- For grouting under precast, cast-in-place, post-tensioned and pre-stressed concrete members

- For interior or exterior applications 1/2" to 2-3/8" (12 mm to 6 cm) on clean, properly prepared concrete substrates
- For jointing structural precast components and for filling rigid joints and keyways up to 2-3/8" (6 cm) thick

LIMITATIONS

- Do not install over substrates containing asbestos.
- For thicker applications up to 6" (15 cm), extend 30% by weight (16.5 lbs. [7,48 kg]) with clean, washed and saturated surface-dry (SSD) 3/8" (10 mm) pea gravel
- *Planigrout 755* is prepackaged for easy field use and control, requiring only the addition of water. Add pea gravel for deeper applications. Do not add other additives or cements to *Planigrout 755*.
- *Planigrout 755* must be protected from freezing during its setting and hardening time. The minimum temperature during and 72 hours after application is 41°F (5°C).

SUITABLE SUBSTRATES

- Properly prepared concrete at least 28 days old, structurally sound, stable and solid, with all loose materials removed

Consult MAPEI's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

SURFACE PREPARATION

Reference ACI 351.1R-12, "Grouting between Foundations and Bases for Support of Equipment and Machinery"



- Thoroughly clean the surface of any substance that could interfere with the bond including dirt, paint, tar, asphalt, wax, oil, grease, curing compounds, form release agents, laitance, loose mortar, toppings, foreign substances and any other residues.
- Concrete surfaces must be mechanically profiled and prepared by needle gun, grit-blasting, sandblasting, waterjetting, scarifying or other engineer-approved methods to obtain a +/- 1/4" (6 mm) profile. Reference ICRI CSP Standards 7 to 9 for acceptable profile height.
- Concrete substrate and ambient room temperatures must be between 41°F and 95°F (5°C and 35°C) before application. Temperatures must be maintained within this range for at least 72 hours after the installation of *Planigrout 755*.
- Thoroughly saturate the concrete contact area for 24 hours before grouting. Do not apply over standing water; remove excess water prior to grouting. If a 24-hour period is not possible, then saturate with water for at least 4 hours, ensuring that surface water is removed before product placement.

MIXING

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details.

1. Into a clean mixing pail, pour 4/5 of the required amount of cool, clean potable water (see "Application Properties" table for mixing ratios).
2. Slowly add *Planigrout 755* to water while mixing, using a low-speed mixer. Add as much of the remaining 1/5 of water to achieve the desired consistency. Mix for up to 4 minutes, scraping down any unmixed powder after 1 to 2 minutes, and remix to a smooth, homogenous consistency.
3. Do not overmix.
4. Place immediately after mixing. Do not hand-mix *Planigrout 755*.
5. Do not mix more material than can be applied within 1 hour.

PRODUCT APPLICATION

Reference ACI 351.1R-12, "Grouting between Foundations and Bases for Support of Equipment and Machinery." Read all installation instructions thoroughly before installation.

- 1a. Dry-pack consistency: *Planigrout 755* must be firmly pressed or rammed into place. Use metal or hardwood tamping tools and mallet.
- 1b. Plastic consistency: *Planigrout 755* may be rodded, strapped, chained or troweled into areas where material cannot flow into place.
- 1c. Flowable consistency: *Planigrout 755* may be used with a low-pressure, mechanical cement grout pump or poured in a flowable state into a proper head box for

the area to be grouted, and hand-rodded or chained into place.

2. Apply to a maximum thickness of 2-3/8" (6 cm) neat. For deeper grouting application of up to 6" (15 cm) thick, add 30% by weight (16.5 lbs. [7,48 kg]) of cleaned and SSD 3/8" (10 mm) pea gravel.
3. To facilitate the filling of hard-to-reach areas, use a wood strip, steel rod or chain.
4. Do not vibrate *Planigrout 755*, as any required vibration should take place only on the construction forms.
5. Because *Planigrout 755* is designed for various consistencies and certain characteristics such as workability and mechanical strengths, a preliminary test or mockup should be performed to verify installation capabilities.

CURING

- Curing is recommended for 72 hours after removal of forms using wet curing, damp burlap, polyethylene sheeting or a quality water-based curing compound.
- Protect from excessive heat and/or wind.
- Do not use solvent-based curing compounds.

CLEANUP

- Wash hands and tools promptly with water before material hardens.
- Cured material must be mechanically removed.

PROTECTION

- For at least 72 hours during initial curing, protect from direct sunlight, air movement and temperatures beyond application range.

Product Performance Properties

Laboratory Tests	Results		
	Dry-pack consistency	Plastic consistency	Flowable consistency
Flammability	This product is certified by MAPEI as "noncombustible" in accordance with IMO FTP Code requirements. Contact MAPEI's Technical Services Department for details.		
Compressive strength – ASTM C109 (CAN/CSA-A5)			
1 day	> 5,900 psi (40,7 MPa)	> 2,300 psi (15,9 MPa)	> 1,750 psi (12,1 MPa)
3 days	> 8,200 psi (56,6 MPa)	> 3,700 psi (25,5 MPa)	> 3,000 psi (20,7 MPa)
7 days	> 9,600 psi (66,2 MPa)	> 4,900 psi (33,8 MPa)	> 3,800 psi (26,2 MPa)
28 days	> 11,000 psi (75,9 MPa)	> 7,100 psi (49,0 MPa)	> 6,150 psi (42,4 MPa)
Flow table (ASTM C230)	Forms a ball	110%	135%
Volumetric change	Conforms to ASTM C1107 Grade C and CRD – C621 standards		
VOCs (Rule #1168 of California's SCAQMD)	0 g per L		

Shelf Life and Product Characteristics (before mixing)

Shelf life	1 year when stored in original, unopened packaging at 73°F (23°C)
Physical state	Powder
Color	Gray

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

Application Properties

	Dry-pack consistency	Plastic consistency	Flowable consistency
Mixing ratio (water per 50-lb. [22,7-kg] bag)	6.75 U.S. pints (3,19 L)	9.9 U.S. pints (4,68 L)	10.75 U.S. pints (5,09 L)
Pot life	Not applicable	60 minutes	60 minutes
Initial set – ASTM C191	2.5 hours	4.5 hours	6 hours
Final set – ASTM C191	3 hours	6 hours	7.5 hours
Application temperature range	41°F to 95°F (5°C to 35°C)		
Thickness per lift (neat)	1/2" to 2-3/8" (12 mm to 6 cm)		

Packaging

Size
Bag: 50 lbs. (22,7 kg)

Approximate Coverage* per 50 lbs. (22,7 kg)

Consistency	Coverage
Dry pack	0.41 cu. ft. (0,0116 m³)
Plastic	0.45 cu. ft. (0,0127 m³)
Flowable	0.47 cu. ft. (0,0133 m³)

* Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions and setting practices.

Planigrout 755



RELATED DOCUMENTS

Grouting between Foundations and Bases for Support of Equipment and Machinery	ACI 351.1R-12
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Refer to the SDS for specific data related to health and safety as well as product handling.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at

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Before using, the user must determine the suitability of our products for the intended use,

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