



**PLANIGROUT 755**  
**Cement-Based, General-Purpose Construction Grout**

**SECTION 03 62 13**  
**NON-SHRINK GROUTING**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Surface preparation and field application for a one-component, non-staining, non-catalyzed, mineral-aggregate, non-shrinking cementitious construction grout.

**1.2 RELATED SECTIONS**

- A. Section 03 30 00 - Cast-in-Place Concrete.
- B. Section 03 60 00 – Grouting

**1.3 REFERENCES**

- A. ASTM International:
  - 1. ASTM C1107 – Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Non-shrink)

**1.4 SUBMITTALS**

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C. Verification Samples: For each finish product specified, two samples, minimum size 6" (150 mm) square representing actual product, color and patterns.

**1.5 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Minimum 5 years' experience manufacturing similar products.
- B. Installer Qualifications: Minimum 2 years' experience installing similar products.
- C. Source Limitations: For repair products, obtain each color, grade, finish, type, and variety of product from single source and from single manufacturer with resources to provide products of consistent quality in appearance and physical properties.
- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
  - 1. Finish areas designated by Architect.
  - 2. Do not proceed with remaining work until workmanship is approved by Architect.
  - 3. Refinish mock-up area as required to produce acceptable work.



## 1.6 PRE-INSTALLATION MEETINGS

- A. Convene at least two weeks prior to starting work of this section.

## 1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
- B. Handling: Handle materials to avoid damage.

## 1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

## 1.9 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

# PART 2 PRODUCTS

## 2.1 MANUFACTURERS

- A. Product Performance:

Compressive strength, plastic consistency – ASTM C109

1 day	> 2,300 psi (15.9 MPa)
3 days	> 3,700 psi (25.5 MPa)
7 days	> 4,900 psi (33.8 MPa)
28 days	> 7,100 psi (49.0 MPa)

Flow table – ASTM C230

Plastic consistency 100%

Volumetric change Conforms to ASTM C1107 and CRD-C621 standards

- B. Acceptable Manufacturer:

MAPEI North America  
1144 E. Newport Center Dr.; Deerfield Beach, FL 33442  
Toll-Free for CRS Technical Services: Tel. 888-365-0614  
Email: [CRS@mapei.com](mailto:CRS@mapei.com)  
Web: [www.mapei.com](http://www.mapei.com)

- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
- D. Substitutions: Not permitted.



## 2.2 NON-SHRINK GROUTING PRODUCTS

- A. Cement-Based, General Purpose, Non-Shrink Construction Grout Material: Packaged dry, hydraulic-cement grout.
  - 1. Product: Subject to compliance with requirements, provide MAPEI Corporation; Planigrout 755.
  - 2. Compressive Strength: Not less than 7,100 psi (49,0 MPa) in a plastic consistency within 28 days when tested according to ASTM C109.

## 2.3 MISCELLANEOUS MATERIALS

- A. Portland cement: ASTM C150/C150M, Type I, II or III unless otherwise indicated.
- B. Water: Potable.

## 2.4 MIXES

- A. General: Mix products in clean containers according to manufacturer's written instructions.
  - 1. Do not add water, thinners or additives unless recommended by manufacturer.
  - 2. When practical, use manufacturer's premeasured packages to ensure that materials are mixed in proper proportions. When premeasured packages are not used, measure ingredients using graduated measuring containers; do not estimate quantities or use shovels or trowels as units of measure.
  - 3. Do not mix more materials than can be used within time limits recommended by manufacturer. Discard materials that have begun to set.
- B. Mortar Scrub Coat: Mix dry ingredients with enough water to provide consistency of thick cream.
- C. Dry-Pack Mortar: Mix required type(s) of patching-mortar dry ingredients with just enough liquid to form damp cohesive mixture that can be squeezed by hand into a ball but is not plastic.
- D. Concrete: Comply with Section 03 30 00 - Cast-in-Place Concrete.

# PART 3 EXECUTION

## 3.1 EXAMINATION

- A. Properly prepared concrete at least 28 days old, stable, sound and dry.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

## 3.2 PREPARATION

Reference ACI.1R-12, "Grouting Between Foundations and Bases for Support of Equipment and Machinery"

- A. Concrete surface must be free of loose particles, efflorescence, paints, tars, grease, asphaltic materials, bond breakers, curing compounds, wax, and dry foreign substances or any conditions that may affect product performance or proper bonding.
- B. Concrete surfaces must be mechanically profiled and prepared by needle gun, grit-blasting, sandblasting, waterjetting, scarifying or other engineer-approved methods to obtain +/- 1/4" (6 mm) profile. Reference ICRI CSP Standards 7 to 9 for acceptable profile height.



- C. Ensure that the concrete surface is saturated surface-dry (SSD) before the installation of Planigrout 755. Do not apply over standing water; remove excess of water before to grouting.

### 3.3 MIXING

- A. Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details. Into a clean mixing pail, pour 4/5 of the required amount of cool, potable water (see the technical data sheet's "Application Properties" table for mixing ratios).
- B. Use a low-speed mixer to mechanically mix the material. Slowly add Planigrout 755 to water while mixing; always add the powder to the water. Add as much of the remaining 1/5 of water to achieve the desired consistency. Do not add more water than specified.
- C. Mix for 4 minutes to obtain a smooth, homogenous consistency.

### 3.4 INSTALLATION

Refer to ACI.1R-12, "Grouting Between Foundations and Bases for Support of Equipment and Machinery." Read all installation instructions thoroughly before installation.

Dry-pack consistency: Planigrout 755 must be firmly pressed or rammed into place. Use metal or hardwood tamping tools and mallet.

Plastic consistency: Planigrout 755 may be rodded, strapped, chained or troweled into areas where material cannot flow into place.

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.

- A. Apply to a maximum thickness of 2-3/8" (6 cm) neat. For deeper grouting applications of up to 6" (15 cm) deep, add 30% by weight or 16.5 lbs. (7.48 kg) of clean and SSD 3/8" (10 mm) pea gravel.
- B. To facilitate the filling of hard-to-reach areas, use a wood strip, steel rod or chain.
- C. Do not vibrate Planigrout 755.

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.

### 3.5 CURING

- A. Keep Planigrout 755 from high winds and direct sunlight while it cures.
- B. Moist-cure Planigrout 755 with burlap and polyethylene, a fine mist of water or an appropriate ASTM-C309-referenced curing compound for 72 hours after removal of forms.
- C. Do not use solvent-based curing compounds.



### 3.6 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch up, repair or replace damaged products before substantial completion.

END OF SECTION