

Concrete

Section 03600 or 03 62 13 Shrinkage Compensated Grout

C/G GROUT

PART I: GENERAL

1.01 DESCRIPTION

Provide labor, materials, equipment and supervision necessary to complete the application of product.

1.02 QUALITY ASSURANCE

Products shall be installed by a trained applicator with a minimum of five years experience and meet the requirements of the specifier.

1.03 SUBMITTALS

Manufacturer's current product data bulletin.

1.04 PRODUCT DELIVERY, STORAGE & HANDLING

- A. Deliver all products and accessories in original labeled, sealed, and undamaged containers or bundles.
- B. Store all products in accordance with manufacturer's printed instructions.
- C. Handle products in accordance with manufacturer's printed instructions

1.05 JOB CONDITIONS

All products shall be applied at substrate and ambient temperatures of 40°F or above. A minimum temperature of 40°F shall be maintained 24 hours after completion of work. Protect products from weather and other damage for a period of 24 hours after installation. Do not apply products to frozen surfaces.

1.06 COORDINATION & SCHEDULING

The work requires close coordination with related sections and trades.

PART II: PRODUCTS

2.01 MANUFACTURERS

The following manufacturers are approved for the project.

Conproco Corporation

2.02 MATERIALS

Conpro C/G Grout: A high Strength, non-metallic, Portland cement based, multi-purpose construction grout.

2.03 PERFORMANCE CHARACTERISTICS

General Physical Properties: The products shall meet or exceed the following performance standards:

Physical state and appearance		Gray powder			
Base		Portland cement			
pH	Wet mix	>12			
Water/cement ratio		0.46*			
Density	Hardened	139 lbs./ft. ³			
Flow table and cone procedures	ASTM C230/ ASTM C939	12 inch flow – minor bleeding			
Standard for masonry grout	ASTM C476	Fine grout			
Length change – wet cure	ASTM C157	169 µstrains @ 28 days			
Modulus of elasticity	ASTM C469	4.1 x 10 ⁶			
		1 Day	1 Day	7 Day	28 Day
Compressive strength-psi	ASTM C109	2880	7300	8500	9125

*Data tested using 3 quarts water per 50 lbs. bag.

PART III: EXECUTION

3.01 GENERAL

- A. Installation shall be performed strictly in accordance with manufacturer's current product data bulletin.
- B. Examine conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.
- C. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas and landscaping from contact due to mixing, handling, and application of materials.

3.02 SURFACE PREPARATION

- A. All surfaces coming into contact with C/G Grout must be clean of rust, paint or oils.
- B. Provide air release opening to prevent entrapped air where required.
- C. Pre-treat wood surfaces that can absorb moisture with forming oil.

3.03 PRIMING

No priming is required under normal circumstances.

3.04 MIXING

- A. Mechanically mix using a low speed drill (400 - 600 rpm) and mixing paddle or mortar mixer.
- B. Pour 3 - 4 quarts of potable water into a clean mixing vessel and slowly add all of the powder. 3 quarts provides as plastic mix, 4 quarts a flowable mix.
- C. Mix continuously for 3 minutes to a uniform, lump-free consistency.
- D. Allow "breathing" for 1 minute and remixing for 1 minute. This will improve workability and open time.
- E. Do not over mix, as this will entrain excess air.

3.05 APPLICATION

- A. At the time of application, surfaces should be saturated surface dry (SSD) but hold no standing water.
- B. Pre-treat forms with release agent.

- C. Place material within 15 minutes of mixing in accordance with ACI 351.1R-99.
- D. Place continuously from one side to avoid air entrapment.
- E. Properly consolidate material, vibrate if necessary.
- F. Place vent at high point to allow air to escape.
- G. Add a maximum of 30 lbs. of 3/8 inch aggregate per 50 lbs. bag. Aggregate must be non-reactive, low absorption, graded and high density.

3.06 CURING

- A. Dampen the repair with a fine mist of water for 24 hours or moist cure with wet burlap and polyethylene. Alternatively, apply Conpro C309 Cure & Seal.
- B. Protect repair from direct sunlight, wind, rain and frost during the curing process.

3.07 JOB SITE CLEANUP

- A. Material left over at the job site by the approved applicator shall be removed.
- B. Clean tools and equipment with water immediately after use.
- C. Cured material must be removed mechanically.

*****END OF SECTION*****



17 PRODUCTION DRIVE, DOVER, NEW HAMPSHIRE 03820
TELEPHONE 800.258.3500 FAX 603.743.5744 WEB ADDRESS www.conproco.com