

SPECCRETE® SUPERB GROUT 611 HIGH STRENGTH NON-SHRINK CEMENTITIOUS GROUT

PRODUCT DESCRIPTION: Speccrete® Superb Grout 611 is a pre-blended, non-shrink, non-ferrous, high strength multiple use material, which can be mixed from dry pack to flowable consistencies. Some common grouting applications for Speccrete® Superb Grout 611 include: structural columns, pump equipment and machinery bases, bearing plates, dowel and rebar placements, rail posts, seating bolts, precast tee joints and post tension cables. Speccrete® Superb Grout 611 may also be used to patch horizontal concrete surfaces.

BENEFITS: MAY BE USED FROM DRY PACK TO FLOWABLE...CONTAINS NO ADDED CHLORIDES... CONTROLLED EXPANSION...HIGH STRENGTH...NON-CORROSIVE...NON-STAINING...NON-METALLIC

COMPOSITION: Portland cement, selected aggregates and chemical additives. This product contains no calcium chloride or intentionally added chlorides that contribute to reinforcement steel corrosion.

TECHNICAL DATA: Speccrete® Superb Grout 611 complies with ASTM C-1107 Grade C, CRD C-621, ASTM C109, ASTM C-348, CRD –C588, CRD C-226, CRD C-266, ASTM C-588, AASHTO T-161B.

WORKING & PERFORMANCE PROPERTIES @ 70°F (21°C) (APPROXIMATE):	
Yield per 50 lb. / 22.68 kg Bag:	0.46 cubic feet / 0.013 cubic meters
Initial Set per CRD C-C82:	70 Minutes
Final Set per CRD C-C82:	120 Minutes

COMPRESSIVE STRENGTH PER ASTM C-227	PLASTIC PER ASTM C-1437	FLOWABLE PER ASTM C-1437	FLUID PER ASTM C-939
1 day	4810 psi 33.67 mpa	4980 psi 34.86 mpa	5240 psi 36.68 mpa
3 days	8360 psi 58.52 mpa	7030 psi 49.21 mpa	7440 psi 52.08 mpa
7 days	8710 psi 65.38 mpa	8450 psi 60.97 mpa	8270 psi 57.89 mpa
28 days	11290 psi 79.03 mpa	11060 psi 77.42 mpa	10820 psi 75.74 mpa

FLEXURAL STRENGTH PER ASTM C-348 - PLASTIC CONSISTENCY:	
7 days:	1470 psi 10.29 mpa
28 days:	1560 psi 10.92 mpa

TENSILE STRENGTH PER ASTM C-190 - PLASTIC CONSISTENCY:	
7 days:	530 psi 3.71 mpa
28 days:	585 psi 4.09 mpa

PULL OUT TEST #9 GRADE 60 REBAR @ 60,000 LBS. FOR 1 MIN.:	12" DEPTH:	18" DEP TH:	CONTROLLED EXPANSION (PLASTIC) PER CRD-621:
3 days	Pass	Pass	+0.02%
14 days	Pass	Pass	+0.02%
28 days	Pass	Pass	+0.03%

DYNAMIC MODULUS OF ELASTICITY PER AASHTO T161:	102% average at 300 cycles
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CHLORIDE CONTENT PER AASHTO T260-PROCEDURE C:	250 ppm or 1.0 Cl lb/ yd3
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DIRECTIONS FOR USE: Refer to ACI 351 guidelines “Grouting for Support of Equipment and Machinery” for a detailed review of grouting procedures. All areas to be grouted or patched shall be clean and free of oil, grease, dirt and all contaminants. All metal components shall be free of rust, paint or oils. Thoroughly saturate the area to be grouted with potable water prior to the placement of Speccrete® Superb Grout 611. Remove excess water from holes and voids just prior to grout placement. Where required, air relief openings shall be provided to avoid entrapment of air. Forms for base plates and machinery bases should be set to allow for rapid and continuous placement and complete filling of the space to be grouted. Wooden surfaces that can absorb moisture should be pre-treated with form oil. Support elements should be anchored so that no movement is possible. Edges of concrete to be grouted which are less than one inch deep shall be cut back to form a uniform butt. Forms should be tight and left in place for the positive expansion of the grout. Small quantities may be mixed by hand larger quantities may be mixed using a slow speed motor and paddle mixer or a rotary mixer with rubber tip blades. Speccrete® Superb Grout 611 should be placed immediately after mixing.

Recommended water ratio per 50 lb. bag Speccrete® Superb Grout 611:	
CONSISTENCY:	WATER REQUIREMENT:
Dry Pack:	5.80 pints (2.74 liters)
Stiff:	6.30 pints (2.97 liters)
Plastic:	6.80 pints (3.21 liters)
Pourable:	7.45 pints (3.52 liters)
Fluid:	7.65 pints (3.61 liters)

Speccrete® Superb Grout 611 should be placed in accordance with ACI standard grouting procedures. Use chains, rods or tamping devices to compact grout tightly, removing all air voids. Place grout quickly and continuously. Finished Speccrete® Superb Grout 611 should be cured by standard ACI methods. For grouting deep fills, greater than 2", Speccrete® Superb Grout 611 may be extended with clean, washed 3/8" pea gravel in the range of 13 to 26 pounds (1-2 gallons) per 50 lb. bag. If adding dry pea gravel, additional water should be added at a rate of 0.4 gallon per gallon of aggregate. If adding “pre-wet” or damp gravel, then no additional water should be added

CAUTIONS: Mix Speccrete® Superb Grout 611 no more than 3-4 minutes. Do not mix more material than can be placed in 10 minutes. The temperature of the mixed grout should ideally be between 45° F to 70° F. Do not use hot water for mixing. Use only potable water for mixing. Clean mixing equipment between batches. When mixing Speccrete® Superb Grout 611, the water-to-powder ratio is very critical, do not vary the specified water amount or over water. When frothing or foaming occurs on the wet mix surface, the mix is too wet for any application. Do not re-temper. Use of any extension aggregates will alter physical properties as listed. Do not exceed a length to width ratio of 2 to 1 for the repair area. Clean mixing equipment between batches. Protect from excessive sun, low humidity, rain and wind exposure, as well as temperature extremes that could prevent inadequate curing. Do not apply to frozen, frost filled or hot surfaces. Do not apply during freezing weather. Colder temperatures will extend open time and reduce rate of strength gain. Do not add calcium chloride or other accelerator type admixtures to Speccrete® Superb Grout 611.

WARNINGS: Contains cement and silica, avoid inhalation of dust. Wear gloves, safety goggles, and OSHA approved dust respirator during mixing and placement. Refer to product M.S.D.S. (Material Safety Data Sheet) for additional safety information. Do not take internally. Avoid prolonged contact with skin. **FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.**

NPCS HMIS SAFETY RATINGS: HEALTH = 2, FLAMMABILITY = 0, REACTIVITY = 0, PROTECTION = E

PACKAGING: 50 lb. (22.70 kg) bags

STORAGE: 40°F to 90°F in a dry **SHELF LIFE:** 1 year properly stored

FREIGHT CLASS: Item #42130, Sub 0, LTL 50 Cement base grouting material in bags or pails

LIMITED WARRANTY: This product is warranted to be of merchantable quality when used according to the instruction herein. It is not warranted to be suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of the product as purchased, if found to be defective upon inspection by the manufacturer. This limited warranty is issued and accepted in lieu of all other expressed warranties and explicitly excludes liability for consequential damages. Buyer assumes all risk and liability resulting from the use of this product. Revised – 12-11-09