

## SPECCRETE® G-20 IRON GROUT METALLIC MODIFIED CEMENTITIOUS HIGH STRENGTH GROUT

**Specco Speccrete® G-20 Iron Grout** is a blend of Portland cement, selected processed aggregates, clean, coarse and fine iron particles, and specific chemical additives. **Speccrete® G-20 Iron Grout** is a non-shrink formulation suitable for interior or exterior use and may be used in moist and humid conditions. **Speccrete® G-20 Iron Grout** is designed for grouting applications exposed to continued vibration or impact, and produces a tight surface oxidation and will not allow rusting of the inner iron particles. Due to the elongated shape of the iron particles in **Speccrete® G-20 Iron Grout**, the product produces better vibration resistance than grouts containing round shape iron particles. **Speccrete® G-20 Iron Grout** can be used for anchor bolts, setting machinery structural members, embedding signs or posts in or on fully cured concrete.

## **BENEFITS:**

- > Elongated, coarse iron aggregate add increased vibrational stability
- High compressive strengths at all stages
- Ideal for supporting machinery subject to vibration or movement
- Non-shrink

**LEED CREDIT CONSIDERATIONS:** Materials and Resources: **MR Credits 5.2:** Regional materials- Greater than 20% extracted, processed and manufactured regionally at production location: Lemont, Illinois 60439. 90% Content- Harvested within 500 miles.

**COMPOSITION:** Portland cement, selected aggregates, iron particles and chemical additives.

**TECHNICAL DATA:** The following test results are based on a plastic consistency (120% flow) using a water to powder ratio of 3.85 quarts water per 60# bag. More or less water may be added to **Speccrete® G-20 Iron Grout** to meet the consistency requirements of your application as shown on reverse page, thus increasing or decreasing average yield and strength.

WORKING & PERFORMANCE PROPERTIES @ 70°F (21°C) (APPROXIMATE):	
Yield per 60 lb. / 22.68 kg Bag:	0.47 cubic feet / 0.014 cubic meters
Initial Set per CRD C-C82:	60 Minutes
Final Set per CRD C-C82:	80 Minutes

COMPRESSIVE STRENGTHS PER CRD-227:	PLASTIC CONSISTENCY – PER ASTM C -1437:
1 day:	8,400 psi
3 days:	10,270 psi
7 days:	11,300 psi
28 days:	12,650 psi

**DIRECTIONS FOR USE:** All areas to be grouted shall be clean and free of oil, grease, dirt, and all contaminates. All metal components shall be free of rust, paint or oils. Thoroughly saturate the area to be grouted with potable water for a minimum of six hours prior to the placement of **Speccrete® G-20 Iron Grout**. 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 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. Forms should be tight and left in place for a minimum of twenty four hours to accommodate the positive expansion of the grout. **Speccrete® G-20 Iron Grout** requires only the addition of water. Use cold water, 45° to 60° F for mixing. No other materials should be added. Mix **Speccrete® G-20 Iron Grout** with enough water to make grout placeable. A stiff mix is desired. No water segregation is permitted. Mix only enough material that can be used within twenty minutes.

RECOMMENDED WATER ADDITION PER 60 LB BAG SPECCRETE® G-20 IRON GROUT:		60 LB BAG SPECCRETE® G-20 IRON GROUT:
CONSISTENCY:	WAT	TER REQUIREMENT:







Stiff:	3.30 quarts
Plastic (100-125% flow):	3.85 quarts
Flowable (125-145% flow):	4.30 quarts

<sup>\*</sup>NOTE-Use the minimum water necessary to achieve the required working consistency.

APPLICATION PROCEDURES: Speccrete® G-20 Iron Grout should be placed in accordance with ACI standard grouting procedures. Use chains, rods or tamping devices to compact grout tightly, completely removing all air voids. Do not dry tamp. Place grout quickly and continuously. After Speccrete® G-20 Iron Grout has reached initial set, damp cure for twenty four hours. In deep areas over 2 inches in depth, Speccrete® G-20 Iron Grout can be extended with clean, washed 3/8" pea gravel in the range of 13 to 26 pounds (1-2 gallons) per 60 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.

**APPLICATION CAUTIONS:** 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 unless proper heat protection preparation and methods are used to protect the repair. Refer to ACI 306.1 report "Standard Specification for Cold Weather Concreting" for recommended protection methods of concrete placement in sub-freezing temperatures. Colder temperatures will extend open time and reduce rate of strength gain. Do not add calcium chloride or other accelerator type admixtures to **Speccrete® G-20 Iron Grout**. Note- this grout should **not** be used as a structural repair mortar, as an overlay mortar topping, or in unconfined areas. The temperature of the mixed grout should be between 45° to 70° F. Do not use hot water for mixing. Do not over water. For temperatures below 40° F (4.4° C) use the minimum amount of water for improved strength and set properties. Use warm water and heated aggregates to keep the repaired area temperature above 60° F (16° C) if possible. Refer to ACI 306.1 report "Standard Specification for Cold Weather Concreting" for recommended protection methods of concrete placement in sub-freezing temperatures. Do not apply to frozen, frost filled surfaces. Colder temperatures will extend open time and reduce rate of strength gain. Do not add calcium chloride, bonding agents, or other admixtures to **Speccrete® G-20 Iron Grout**. Use of any extension aggregates will alter physical properties.

## GHS HAZARD RATINGS: DANGER:



**Irritant-Respiratory Tract Irritation.** 



Health Hazard: Known carcinogen



**Health Hazard: Corrosive Material** 

WARNINGS: HEALTH HAZARD & IRRITANT: This product contains both Portland cement & crystalline silica (a known carcinogen). It is established that prolonged breathing of crystalline silica dust over time will increase the risk of serious lung disease (Silicosis). Refer to product S.D.S. (SAFETY DATA SHEET) for FIRST AID INFORMATION, or any related health and safety information before using this product. For medical emergencies only, call INFOTRAC @ 800-535-5053.

**FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.** Avoid Inhalation of these dusts and any prolonged, direct contact with skin. Wear chemical resistant gloves, safety goggles, and O.S.H.A. /N.I.O.S.H. approved respirator during mixing and placement. Keep away from food and drink. Wash hands thoroughly after use and before eating. Do not take internally.

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

**PACKAGING:** 60 lb. (27.27 kg) bags

STORAGE: 40°F to 90°F in a dry

SHELF LIFE: 1 year properly stored

FREIGHT CLASS: Item #42130, Sub 0, Freight Class 50 -Cement based grouting material in bags







WARRANTY: Specco Industries Inc (Specco) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Specco, no other representations or statements made by Specco or its representatives, in writing or orally, shall alter this warranty. SPECCO MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Specco product fails to conform with this warranty, Specco will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Specco does not authorize anyone on its behalf to make any written or oral statements which in any way alter Specco's installation information or instructions in its product literature or on its packaging labels. Specco explicitly excludes any written or oral statements or implied warranty on the performance of an applied/installed product manufactured or sold by or through Specco. Specco has no control over Specco application standards adherence, site conditions, atmospheric variations, installer/applicator skill level or the determination of the suitability of any Specco products for a specific intended purpose. Buyer shall be solely responsible for determining the suitability of Specco's products for the Buyer's intended purposes. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind.



