# TECHNICAL DATA

SPECSHOT PLUS

Fiber-reinforced micro-silica shotcrete

### DESCRIPTION

**SpecShot Plus** is a fiber-reinforced, air-entrained shotcrete mortar for use in a variety of vertical and overhead repair applications. SpecShot Plus incorporates the latest in fiber technology offering superior durability, performance and ease of application in industrial, commercial, and infrastructure (DOT) applications. **SpecShot Plus** can be applied by dry shotcrete (gunite) method or by mixing with water in a wet mix method.

## **FEATURES/BENEFITS**

- One-component, fiber-modified, just add water
- Micro-silica adds density and low permeability
- Low rebound
- Low shrinkage, low permeability for durable repairs
- Concrete-gray in color
- Designed for vertical and overhead repairs
- Fiber-reinforced for added strength
- Contains integral corrosion inhibitor
- Air-entrained for maximum freeze-thaw durability

#### APPLICATION

**Surface Preparation:** The concrete must be sound and free of all foreign material, including oil, grease, dust, laitance or other surface contaminants. Best results will be obtained by saw cutting the perimeter of the repair and abrasive blasting the area to be repaired, providing a uniform depth, a high surface profile and a firm bonding area. All surfaces to be repaired should be in a saturated-surface-dry (SSD) condition with no standing water on the surface.

**Mixing:** Add potable water to **SpecShot Plus** at a maximum rate of 14% or 10.7 pints per 80 lb bag. Use standard dry process shotcrete methods.

**Placement:** Follow ACI 506-R05 "Guide to Shotcrete" for application and curing methods. Typical application depth are from 1/2" up to 6". If placement depth is greater than 6", cross hatch the initial layer and allow the surface to harden before additional layers are applied.

**Finishing/Curing:** Finish the repair material to the desired texture to match the surrounding concrete. **Spec-Shot Plus** is self-curing under most conditions. In severe drying conditions, use an ASTM C309 compliant, water based SpecChem curing compound.

## PACKAGING

80 lb bag equals approximately .62 cu-ft per bag Also available in 50 lb bags & 3000 lb bulk bags Cured Unit Weight = 135 lbs per cu-ft

### **CLEAN UP**

Tools and equipment may be cleaned with water before SpecShot Plus hardens.

#### SHELF LIFE

Shelf life of unopened bags stored in a dry facility is 12 months. Excessive temperature differential and/or high humidity can shorten the shelf life expectancy. Store in a cool, dry area away from direct sunlight.

## LIMITATIONS/PRECAUTIONS

Do not allow repairs to freeze until the material has reached a min.1000 psi compressive strength.

In adverse temperatures, follow ACI recommendations for hot/cold weather concreting practices.

Minimum surface and ambient temperature of 45°F and rising is required at the time of application.

For optimum results, condition material to between 65  $^{\circ}\text{F}$  and 85  $^{\circ}\text{F}$ .

# TYPICAL TEST DATA

Set Time at 70°F (ASTM C266)	
Initial Set	2 hours
Final Set	4 hours
Compressive Strength (ASTM C109)	
3 day	3000 psi
7 days	4000 psi
28 days	7000 psi
Bond Strength (ASTM C882)	
7 days	1800 psi
Flexural Strength (ASTM C348)	
7 days	500 psi
28 days	900 psi
Rapid Chloride Permeability	
ASTM C 1202	< 1000 coulombs
Average Resistivity	8800 ohm.cm
Scaling Resistance (50 cycles)	
ASTM C 672	No scaling



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### LIMITATIONS/PRECAUTIONS

*Caution:* Contains Portland cement and sand. Cement will cause irritation. Avoid contact. A dust respirator, safety goggles, and rubber gloves are recommended. Avoid prolonged contact with clothing. In case of contact with eyes, immediately flush with water for at least 15 minutes. Get prompt medical attention. Do not wear contact lenses when working with this product. DO NOT take internally. Keep out of reach of children.

Avoid hazards by following all precautions found in the Safety Data Sheet (SDS), product labels, and technical literature. Please read this information prior to using the product.

#### WARRANTY

#### NOTICE-READ CAREFULLY CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

#### WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

#### INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.



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