



Gun-Rite™ Cement-W

Enhanced for wet method shotcrete applications

Repair Thickness

Tapered to 5"

Set Time

45 minutes

Application Technique

Spray

Where to Use

- Large and small structural repairs
- Bridge repairs
- Parking garage restoration
- Interior or exterior surfaces
- Wastewater tanks
- Slope stabilization
- Mines or manholes

Features

- Proven "Gun-Rite Durability"
- Very low rebound & low waste
- High strength—Over 6000 psi
- High reactive pozzolan enhanced
- Fiber reinforced
- Factory blended
- Add to locally supplied sand (low cost)
- Easy pumping, shooting & finishing

Packaging and Yield

70 lb bag

2.65 cu ft

Product Description

Gun-Rite Cement-W is a complete high performance shotcrete cement that is simply mixed with locally supplied aggregate to give durability and consistency. **Gun-Rite Cement-W** contains cement and the widely used "**Gun-Rite**" formulation to assure quality and durability.

Gun-Rite Cement-W is a special blend of cements, high reactive pozzolans, alkaline resistant fibers, water reducers, air entrainment, and exclusive modifiers. Designed for general purpose and high performance wet method shotcrete applications.

Suggested Mix Design

One 70 lb bag **Gun-Rite Cement-W** + 300 lb concrete sand
+ Approximately 2 $\frac{2}{3}$ to 3 gal water

For Best Results

Use concrete sand that conforms to ASTM C-33. Apply Gun-Rite enhanced shotcrete above 40° F. Follow ACI guidelines for preparation, shooting and curing. Use approximately 3 to 3.5 gal of water per bag of product. Water may vary depending on equipment and aggregate moisture.

Surface Preparation

Remove all unsound or delaminated concrete and provide a $\frac{3}{4}$ " minimum clearance behind reinforcing steel. The perimeter of the area to be patched should be tapered toward the center at approximately 45° or saw-cut to a minimum depth of $\frac{1}{4}$ ". After concrete removal and prior to placement, mechanically abrade the concrete surface by sand blasting to remove all bond-inhibiting materials from the concrete substrate. Apply **JE Tomes B-1 Rebar Coating** or approved coating to any exposed reinforcement if a coating is specified. Presoak prepared concrete surface to provide a saturated surface dry (SSD) condition.

Mixing Guidelines / Dosage Rate

For Wet-Method Shotcrete: Add approximately 2 $\frac{2}{3}$ to 3 gal of clean water and up to 300 lb of concrete sand per 70 lb bag of **Gun-Rite Cement-W**. Actual water will depend on moisture content in sand. Add **Gun-Rite Cement-W** into water and sand to achieve a uniform mix. Mix with mortar mixer or force action mixer. Hold back 1 part water and mix for 2 to 3 minutes. Add remaining water to the mix as needed and mix until desired consistency is achieved. For Dry Method Shotcrete: Pre-dampen mixer. Add 300 lb sand per 70 lb bag of **Gun-Rite Cement-W**. Mix and Shoot in accordance to ACI 506 Guidelines.

Application

Apply in accordance with ACI 506R "Guide to Shotcrete." After achieving a SSD condition, apply product while taking into consideration rebound and compaction



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around reinforcing steel. Shoot material at 90 degrees to the surface whenever possible. If multiple lifts are being used, apply the succeeding lift after the first lift has reached final set. If the succeeding lift is not promptly placed, keep the surface moist. Cut off or level as required.

Curing

Rapid drying of cement-based products may cause cracking or de-bonding. Avoid applications in high winds, excessive heat or blowing air directly on freshly placed product. Apply approved curing compound, or moist cure a minimum of 7 days. Contact JE Tomes if you have any questions or particular concerns with your application.

Technical Data

Compressive strength, 28 day	Exceeds 6000 psi	ASTM C39
Compressive strength, 7 day	Exceeds 4000 psi	ASTM C39
Compressive strength, 3 day	Exceeds 3000 psi	ASTM C39
Flexural strength, 28 day	Exceeds 1200 psi	ASTM C78
Freeze/thaw durability	Excellent, 300 cyl	ASTM C666
Shear bond stress	Exceeds 1500 psi	ASTM C1042
Rapid chloride permeability	Below 1000 coulombs	
Resistivity	Below 7000 cm	
Air content	4% to 7%	

Reasonable variations for the above data can be expected depending on field conditions, surface preparation, curing, contractor expertise and evaluation and/or handling of test cylinders. Contact JE Tomes for additional details.

Applicable Standards

Cement	ASTM C150
Water-reducing	ASTM C1141
Air-entraining	ASTM C260
High reactive / Natural pozzolans	ASTM C618
Fibers	ASTM C1116

LIMITED WARRANTY

JE Tomes & Associates, Inc. warrants its products to be free from manufacturing defects and will deliver, at no charge, an equal amount of packaged product as that amount proven to be defective when applied in accordance with manufacturer's written directions by contractors experienced in this application, and used in applications recommended by the manufacturer as suitable for the product. All claims concerning product defects must be made within twelve (12) months of use of the product. THERE ARE NO OTHER WARRANTIES BY JE TOMES & ASSOCIATES, INC. OF ANY NATURE WHATSOEVER, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IN CONNECTION WITH PRODUCTS WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. Buyer's sole and exclusive remedy for breach of any warranty shall be replacement of defective product. JE Tomes & Associates, Inc. shall not be liable for any damages, including consequential damages, except as otherwise set forth therein.