SPECPATCH SHOTCRETE

1-888-SPECMIX





Superior Bond. Fast Setting.

SPEC MIX[®] SPECPATCH is a preblended, high early strength, cement-based product designed to be used for wet or dry process repair applications. It can be custom designed and packaged to meet specific properties and/or project requirements and

SPEC MIX[®]

MATERIALS USED

PORTLAND CEMENT FLY ASH SILICA FUME FIBERS (EITHER STEEL OR SYNTHETIC) AGGREGATES SPECIAL CHEMICAL ADMIXTURES is also available as an air-entrained shotcrete mixture. This preblended shotcrete mixture is specially formulated to produce a finishable and fast-setting material with good shooting, adhesion and strength characteristics.

SPECPATCH is produced under strict manufacturing standards and complete quality control measures are implemented with each batch. A digital printout displaying the proper proportions per batch may be kept as a permanent record. Each SPEC MIX[®] manufacturer certifies that SPEC MIX[®] shotcrete products are designed to meet the project specifications and applicable ASTM and ACI standards.



TOTAL QUALITY CONTROL WITH EVERY BAG REDUCED LABOR COSTS AND STORAGE SPACE CONSISTENCY BATCH TO BATCH GREAT STICKING CHARACTERISTICS LESS SAG THICKER LAYERS WITH ONE PASS LESS REBOUND EXCELLENT DURABILITY AND STRENGTH FINISHABLE

U. S. A

INSTALLATION/APPLICATION

SPEC MIX® SPECPATCH is a dry preblended product that may be used in either wet or dry processes. SPEC MIX®, Inc., recommends predampening of the shotcrete materials for dry-process applications. If predampening is not feasible, a SPEC MIX® representative should be contacted prior to project setup. Shotcrete should be installed in accordance with the provisions of the national or local building code and The American Concrete Institute's recommended practices (ACI 506R-90, "Guide to Shotcrete"). Shotcrete products should be applied only by an experienced, certified nozzleman.

Substrate preparation is critical for promoting good bond. When applying SPECPATCH to concrete surfaces, any deteriorated concrete should be removed until sound concrete is exposed. The exposed surface should be free of loose and/or friable material, and dust.

When combining water with the shotcrete mixture, either during mixing for wet process application or at the nozzle for dry process applications, use clean, potable water.

Once the water is combined with the shotcrete mixture in wet process applications, SPECPATCH should be installed before a loss of consistency is experienced. This time period may be shorter in hot weather conditions. Hot and/or dry conditions may cause the shotcrete to harden more rapidly; therefore, a fog mist may be required to ensure proper curing. Prior to application of the shotcrete, the substrate should be cleaned and evenly moistened, but not saturated.

Although SPECPATCH shotcrete reduces rebound, some rebound is to be expected. Do not incorporate rebound material back into the applied shotcrete.

Once the shotcrete is applied, a variety of finishing techniques can be used to achieve the desired surface texture. Some applications may require a finish (flash) coat. After the desired finish is achieved, provide sufficient moisture to permit continuous hydration of the cementitious materials for optimum curing.

SIZES AND EQUIPMENT

SPEC MIX[®] shotcrete mixes are available in 80 lb. (36 kg.) or 94 lb. (42 kg.) packages for easy hand loading, or in 3000 lb. (1362 kg.) reusable bulk bags to be used with the various patented SPEC MIX[®] silo systems. When using the silo system, once the bulk bags of shotcrete mix are delivered to the project site, the portable silo is loaded with a jobsite forklift and the product is dispensed into the shotcrete machine as needed. Just add water at the nozzle or concrete mixer and the shotcrete is ready to shoot.

WARRANTY

Seller warrants that its Product will conform to and perform in accordance with the product specifications when properly installed. The

TYPICAL AGGREGATE GRADATION DATA

AGGREGATE GRADATION PLAYS A CRUCIAL ROLE IN THE PERFORMANCE OF SHOTCRETE. MOST SPEC MIX[®] PLANTS PRODUCING SHOTCRETE MATERIALS NATIONWIDE ARE ABLE TO PROVIDE COMBINED AGGREGATE GRADATIONS THAT MEET GRADATION NUMBERS 1, 2 OR 3 AS SPECIFIED IN TABLE 2.1 OF ACI 506R. WHERE LOCAL MATERIALS DO NOT ALLOW MEETING OF THE COMBINED AGGREGATE GRADATION REQUIREMENTS, PRECONSTRUCTION TESTING CAN BE PERFORMED TO SHOW COMPLIANCE TO PROJECT SPECIFICATIONS.



TYPICAL PRODUCT DATA

	SFLOFATOR MS-FULL	SFLOFATOIT WSA
COMPRESSIVE STRENGTH (ASTM C 42)		
1-DAY	1340 PSI	1960 PSI
7-DAY	4060 PSI	7170 PSI
28-DAY	5760 PSI	8720 PSI
FLEXURAL STRENGTH (ASTM C 78)		
28-DAY	990 PSI	1080 PSI
HARDENED AIR CONTENT (ASTM C 457) (WET PROCESS)	-	6.0% (±2%)
SPACING FACTOR (WET PROCESS)	-	300 µm
RAPID CHLORIDE PERMEABILITY (ASTM C 1202) IN COULUMBS	593 (VERY LOW)	500 (VERY LOW)
VOLUME OF PERMEABLE VOIDS (ASTM C 642)	-	12%
RAPID FREEZE/THAW (ASTM C 666) DURABILITY FACTOR	88	92

DATA WAS COMPILED FROM IN-HOUSE LABORATORY AND FIELD TRIALS AND REPRESENTS ACHIEVABLE RESULTS. ACTUAL RESULTS MAY VARY DUE TO WORKMANSHIP, REGIONAL MATERIAL VARIATIONS, AND JOBSITE CONDITIONS.

APPLICABLE STANDARDS: ASTM AND ACI

ASTM C 1116 STANDARD SPECIFICATION FOR FIBER-REINFORCED CONCRETE AND SHOTCRETE: ASTM C 42 STANDARD METHOD FOR OBTAINING AND TESTING DRILLED CORES AND SAWED BEAMS OF CONCRETE: ASTM C 78 STANDARD TEST METHOD FOR FLEXURAL STRENGTH OF CONCRETE [USING SIMPLE BEAM WITH 3RD POINT LOADING]: ASTM C 348 STANDARD TEST METHOD FOR FLEXURAL STRENGTH OF MORTAR: ASTM C 642 STANDARD TEST METHOD FOR DENSITY, ABSORPTION, AND VOIDS IN HARDENED CONCRETE: ASTM C 666 STANDARD TEST METHOD FOR RESISTANCE OF CONCRETE TO RAPID FREEZING AND THAWING: ASTM C 1202 STANDARD TEST METHOD FOR ELECTRICAL INDICATION OF CONCRETE'S ABILITY TO RESIST CHLORIDE ION PENETRATION: ACI 506 SPECIFICATION FOR SHOTCRETE

foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to, those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that, except for claims from bodily injury, Seller's liability to the Buyer or any third party, arising out of the purchase of the Product from the Seller by Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder.

LIMITATIONS

Since variation in the properties of shotcrete-making materials can be significant, trial shoots using test panels must be performed to verify the properties of each mixture. Properly mixed and installed shotcrete requires little to no maintenance.

PRECAUTIONS

For safety reasons, avoid contact with fresh shotcrete as it will cause irritation of the skin. If contact does occur, the affected area should be flushed with water. Eye protection and other personal protective equipment must be provided and worn properly. If contact with the eyes occurs, flush vigorously with water and seek medical attention.

TECHNICAL SUPPORT

- CONTACT YOUR LOCAL SPEC MIX® MANUFACTURER
- VISIT WWW.SPECMIX.COM
- CONTACT SPEC MIX[®], INC. PHONE: 888-SPEC-MIX FAX: 888-FAX-SPEC

SPEC MIX, INC. IS THE LICENSOR TO 42 LICENSED MANUFACTURERS LOCATED IN THE U.S. EACH LICENSEE ADHERES TO A STRICT QUALITY ASSURANCE PROGRAM TO ENSURE COMPLETE QUALITY CONTROL IN EVERY BATCH, THROUGHOUT THE PROJECT.

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