



# SPECPOOL SHOTCRETE

1-888-SPECMIX

DIVISION **03**  
SHOTCRETE PRODUCTS



## High Durability. Easy Finishing.

SPEC MIX® SPECPOOL is a preblended, high early strength, cement-based product designed to be used for wet or dry process applications for in-ground pool construction. It can be custom designed and packaged to meet specific properties and/or project requirements and is also available as an

### MATERIALS USED

PORTLAND CEMENT  
FLY ASH  
SILICA FUME  
FIBERS (EITHER STEEL OR SYNTHETIC)  
AGGREGATES (ACI GRADATION 1, 2 OR 3)  
SPECIAL CHEMICAL ADMIXTURES

air-entrained shotcrete mixture. This preblended shotcrete mixture is specially formulated to produce a cohesive and fast-setting material with good shooting, adhesion and strength characteristics. It can be used for single coat or two-coat applications.

SPECPOOL 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 AND REBOUND  
THICKER LAYERS WITH ONE PASS  
EXCELLENT DURABILITY AND STRENGTH  
VERY LOW PERMEABILITY  
CAN BE APPLIED TO MODERATELY WET SURFACES

## INSTALLATION/APPLICATION

SPEC MIX® SPECPOOL 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.

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, all of the batched SPECPOOL 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.

SPECPOOL shotcrete reduces rebound, however 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 coat. After the desired finish is achieved, provide sufficient moisture to permit continuous hydration of the cementitious materials for optimum curing.

## SIZES AND EQUIPMENT

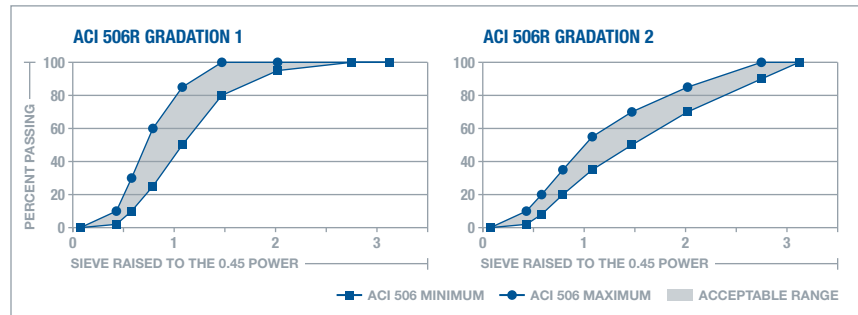
SPEC MIX® shotcrete mixes are available in 80 lb. (36 kg.) or 94 lb. (42 kg.) packages for easy hand loading or in 3000 lb. (1362 kg.) reusable bulk bags to be used with the various patented SPEC MIX® silo systems. When using the silo system, once the bulk bags of shotcrete mix are delivered to the project 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, provided the mixture is not altered and is applied properly according to project requirements. The foregoing warranty is in lieu of all other warranties, expressed or implied,

## 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 PERMITTED TO SHOW COMPLIANCE TO PROJECT SPECIFICATIONS.



## TYPICAL PRODUCT DATA

	SPECPOOL MS	SPECPOOL MSA
COMPRESSIVE STRENGTH (ASTM C 42)		
1-DAY	3200 PSI	1260 PSI
3-DAY	3270 PSI	3010 PSI
7-DAY	6100 PSI	4720 PSI
56-DAY	6660 PSI	6380 PSI
FLEXURAL STRENGTH (ASTM C 78)		
7-DAY	900 PSI	720 PSI
28-DAY	1200 PSI	960 PSI
HARDENED AIR CONTENT (ASTM C 457)	-	6.0% (±2%)
SPACING FACTOR	-	300 µm
RAPID CHLORIDE PERMEABILITY (ASTM C 1202) IN COULUMBS	90 (NEGLIGIBLE)	545 (VERY LOW)
VOLUME OF PERMEABLE VOIDS (ASTM C 642)	12%	12%
RAPID FREEZE/THAW (ASTM C 666) DURABILITY FACTOR	93	93

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 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

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 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.

## WARNING

This product contains greater than 0.1%

crystalline silica. Avoid breathing dust; use a NIOSH-approved dust respirator and use only with adequate ventilation to keep dust levels below permissible levels. Also contains cementitious materials. Injurious to eyes. Contact with freshly mixed product can cause severe burns. Avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. In case of eye contact, flush with plenty of water for 15 minutes. Consult a physician. Keep out of the reach of children.

## TECHNICAL SUPPORT

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