

ARCHITECTURAL BID SPECIFICATION  
RICHARD JAMES SPECIALTY CHEMICALS CORP.  
StoneLok MLT Plus™ PENETRATING SEALER

The specific surfaces of this bid ---

shall be sealed with a penetrating sealer with each and all of the following demonstrated characteristics:

- 1.a. The sealer shall be aqueous in fluid basis with a VOC that shall not exceed 80 g/L and shall not contain any CFC rated solvents.
- 1.b. The sealer shall, until cured, be water cleanable on treated surfaces and spills; and all application vessels and tools shall be cleanable with soap and water without any septic system contamination of solvents.
- 1.c. The sealer shall have a very low, non-noxious odor so as to be usable indoors without significant notice or objection to those in immediate proximity and no protective enclosures or personnel suiting/respirators shall be required. For spray, NIOSH respirator is recommended but not required.
- 1.d. The sealer shall have, to effect maximum surface penetration, adhesion and protection, pre-coalesced resin chains dominantly 38nm in molecular size.
- 2.a. Sealer shall be applicable by brush, roller or HVLP spray onto surfaces appropriately prepared to be free of dust, grease, dirt, salts, or other contamination by the use of compatible cleansers.
- 2.b. Sealer shall typically, on surfaces of porosity absorption [ASTM C-97] of less than 0.8%, require only a single coating/application; but double or triple coatings shall be possible by election for heavy traffic areas; are advisable for higher porosity surfaces; substrates of uneven porosity; and when RJSC Colloidal Dyes are added; and recommended for self-leveling cements. A primer coat of TekSeal is also recommended.
- 2.c. Sealer shall be available, by manufacturers formulation type and spec, in Matte finish [typically gloss of 12 or less at 60° incidence]; Low Gloss finish [typically gloss of 20 or less at 60° incidence]; or Gloss finish [typically gloss of 30 or more at 60° incidence].

more →

- 2.d. Sealer shall cure to touch in one hour and be walkable in 4 - 8 hours and light traffic suitable in 8 - 12 hours or less after completion of final coat. Full cure, hardness and resistance develop over 5 - 7 day cure time.
- 2.e. Sealer shall be clear and shall not yellow or discolor to UV exposure for protracted periods of time [WSTM C1378].
- 2.f. Sealer shall be selectively capable of "color toning" using formulated sub-micron RJSC Type "S" Colloidal Dyes by special order so as to even up and/or shift the color of applied surfaces; and this coloring shall be permanently/ chemically locked into the surface with the chemistry of the sealer.
- 2.g. Typical slip readings [ASTM C-1028 and D-2047] as monitored with a Brungraber Mark II meter of the applied/cured sealer on cleft or flamed stone or conventional cementitious surfaces shall be 0.7 or better; typically 0.6 or better on honed quarry tile surfaces and smooth cements. Slip readings of surfaces shall be essentially unchanged.
- 3.a. Sward hardness of the barrier shall typically be 48 or better.
- 3.b. Tensile strength of cured film [ASTM D412] shall typically be 6,500 psi or better. Elasticity shall be a minimum of 180%.
- 3.c. Permeability of the cured sealer in the stone/cement shall typically be 4-5 ASTM permeability units so as to exchange vapor pressure differentials and not risk surface or stone/cement buckling or delamination.
- 3.d. Cured sealer shall add significant physical integrity and strength and resistance to staining to exposed grout lines and expansion joints, which will not typically diminish with time.
- 4.a. Sealer shall provide a penetrating sealant coating which forms, in the stone/cement in its cured form, a chemically resistant barrier of high integrity.
- 4.b. Fully cured sealer shall be substantially unharmed by 20 min. wet drop test exposure to acetone, toluene, gasoline, isopropyl alcohol, acetic acid, mixed terpenes, and 6-N sodium hydroxide. The sealer shall sustain 100 double rubs with MEK.
- 4.c. Physical/chemical resistance of the cured sealer in the stone/cement shall demonstrate continued integrity, with continued resistance to soiling, after 100 sequential 20-scrub cleansings with a soft nylon brush using a mild commercial cleaner/degreaser.

The sealer shall be StoneLok MLT Plus Penetrating Sealer, made by Richard James Specialty Chemicals Corp, Hastings-on-Hudson, NY.

Equivalents can be substituted only by meeting or exceeding the preceding specifications.

StoneLok is a trademark of Richard James Specialty Chemicals Corp. Hastings on Hudson, NY 10706 © 1993 - 2003