

### S-810 FLEXIBLE MORTAR SYSTEM

### PRODUCT DESCRIPTION:

S-810 is copolymer latex formulation. When mixed with S-777 thin-set mortar, it is a flexible polymer mortar system for setting all types of ceramic tile, marble, granite and slate over various substrates. The S-810 system is used for floors, walks and ceilings in interior and exterior installations. Meets or exceeds ANSI A118.4 and A118.11 when mixed with approved mortar.

### **USES:**

S-810/S-777 mortar system is designed for use over existing ceramic tile (glazed or unglazed), cement backer board, cured concrete, cement block masonry, for non-wet areas only, drywall, exterior grade plywood (horizontal surfaces only), vinyl floor covering (except cushion foam vinyl), old cutback adhesive, vinyl asbestos tiles and Formica countertops, properly prepared aluminum, steel, galvanized steel or stainless steel. S-810 improves the physical properties of non-latex modified thinset mortars.

#### LIMITATIONS:

Do not use S-810 at temperatures below 40°F or above 104°F. Do not use over pressed wood, particleboard, asbestos board, masonite and similar composition materials.

# **TECHNICAL DATA: Physical Properties**

(S-810/S-777 System)	
Pot life @ 72°F	1 hour
Skin time @ 72°F	40 to 45 minutes
Hardness after 24 hrs. @ 72°F (Shore D)	70
Shear strength to ceramic tile	
7 days	300 psi
28 days	415 psi
20 freeze/thaw cycles	150 psi
Shear strength to cut back adhesive	
7 days	Substrate failed before bond
28 days	Substrate failed before bond
20 freeze/thaw cycles	Substrate failed before bond
Shear strength to vinyl tile	
7 days	Substrate failed before bond
28 days	Substrate failed before bond
20 freeze/thaw cycles	Substrate failed before bond
Shear strength to asbestos tile	900
7 days	200 psi
28 days	350 psi
20 freeze/thaw cycles	325 psi
Shear strength to stainless steel	275 poi
7 days	275 psi 460 psi
28 days 20 freeze/thaw cycles	430 psi
Shear strength Porcelain to Porcelain tile	430 psi
7 days	220 psi
14 days	330 psi
Shear strength Porcelain tile to plywood	300 pai
7 days	320 psi
14 days	350 psi
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### **INSTALLATION:**

**Substrate**: Substrate must be structurally sound and level, free from dust, oil, grease and wax or any coating or treatment that would impair the mortar bond.

**Mixing:** Pour entire contents of S-810 into a clean mixing vessel. Then slowly add the contents of one 50 pound bag of S-777, mixing with a low speed drill mixing at 150RPM max. Mix thoroughly to a smooth consistency. Let slake 5-10 minutes and remix. Do not add any additional powder or liquid after slake. *DO NOT MIX AT HIGH SPEED*.

### **APPLICATION:**

Apply S-810/S-777 mortar system to prepared substrate and trowel an area that can be set in 20 to 25 minutes, taking temperature and humidity levels into consideration. Be sure to use a square notched trowel per the trowel guide shown on the S-777 bag. On exterior applications, it is recommended that tiles be back buttered to ensure 100% coverage of the tile back. Full coverage of the setting material on the back of the tile is desirable to prevent broken and cracked tile. The National Tile Contractors Association recommendation to accomplish full coverage is as follows: Apply mortar to substrate using the flat side of the trowel to fill any voids and "key" the material to the substrate. Using the proper sized notched trowel, comb the mortar evenly in one direction only. Do not "swirl". Set the tile in the mortar with the edge of the tile parallel to the comb lines. To remove air voids, push the tile back and forth in the mortar perpendicular to the comb lines.

### PROTECTING NEW TILEWORK:

To avoid damage to finished tilework, schedule floor installations to begin only after all structural work, building enclosure and overhead finishing work, such as ceilings, painting, mechanical and electrical work are completed. Keep all traffic off of finished tile floors until it has fully cured or provide up to 3/4" thick plywood protection over Kraft paper to protect floors before installation materials have fully cured.

### **COVERAGE:**

Same as S-777 coverage.

### **CLEAN-UP:**

Remove any mortar from tile immediately with damp towel. Cured polymer mortar is difficult to remove from Tile. Summitville's SL-86 will help to remove 24 hour cured polymer mortar. Clean tools immediately after use with water.

# COLOR:

S-810 is available in #910 White.

### **PACKAGING:**

S-810 is packaged in 2 gallon and 5 gallon containers. Also available in 55 gallon drums.

### **SPECIFICATIONS:**

Material: S-810 shall be an acrylic copolymer latex resin system as manufactured by Summitville Tiles, Inc., Summitville, Ohio. Material shall meet or exceed ANSI A118.4 and A118.11. S-777 shall be added to S-810 resin system at the rate of 50 pounds of S-777 to 2 gallons of S-810. S-810 shall be for interior or exterior floor or wall applications as stated in base product specifications.