



## S-777 THIN SET MORTAR

### PRODUCT DESCRIPTION:

S-777 is a dual-purpose thin set mortar for floors and walls. S-777 has good compressive strength, high bond strength, is easy to trowel and meets or exceeds ANSI A118.1 requirements. S-777 exhibits superior bond strength, excellent freeze-thaw stability, increased flexural strength and water resistance when mixed with S-800 in place of water. In addition, when mixed with S-810, the S-777 exhibits superior flexibility. When S-777 is mixed with S-800 or S-810 the system meets or exceeds both ANSI A118.4 and A118.11 specifications.

### USES:

S-777 is recommended to set any type of ceramic tile specified for floor and wall installation when tile is set in accordance with ANSI A 108 and the Tile Council of North America's Handbook for Ceramic, Glass, and Stone Tile Installations. S-777 may be used over concrete, dry walls, glass mesh mortar units and wood subfloor with mortar bed substrate, masonry, ceramic tile or brick.

### LIMITATIONS:

S-777 should cure 48 hours before pedestrian traffic is permitted. If installation is in a high moisture area 14 days to 28 days is required. Extremely high temperatures or low humidity can reduce open time by as much as 20 minutes.

### TECHNICAL DATA: Physical Properties

S-777 meets or exceeds ANSI A118.1 specifications.

Open time (up to)	40 min.
Pot Life	1 hour
Shear Strength to Quarry Tile	
7 day dry	104 psi
7 day water immersion	88 psi
7 day dry, 7 day water immersion	89 psi
4 week dry	146 psi
Shear Strength to Wall Tile	
7 day dry	238 psi
7 day water immersion	163 psi
7 day dry, 7 day water immersion	260 psi
4 week dry	272 psi
4 week freeze thaw	284 psi
Shear Strength to Mosaic Tile	
7 day dry	249 psi
7 day water immersion	118 psi
7 day dry, 7 day water immersion	161 psi
4 week dry	204 psi
4 week freeze thaw	127 psi
Compressive strength (28 days)	greater than 3000 psi

### S-777/S-800 MORTAR

7 day dry Shear Strength to Quarry Tile	151 psi
7 day dry Shear Strength, Quarry Tile to Plywood	278 psi
7 day dry Shear Strength, Quarry Tile to Stainless Steel	101 psi
7 day dry Shear Strength, Porcelain Tile to Plywood	145 psi
7 day dry Shear Strength, Porcelain Tile to Porcelain	190 psi

Open time of up to 30 minutes @ 73°F and 50% RH.

Pot life approximately 80 to 90 minutes @ 73°F and 50% RH.

**INSTALLATION:**

**Substrate:** Substrate must be free from dust, oil or grease and meet ANSI and TCNA specifications.

**Mixing:** Mix S-777 slowly into clean, cool, potable water or latex additive (for superior bond strength, excellent freeze-thaw stability, increased flexural strength and water resistance). Mix thoroughly until a workable (paste like) consistency is obtained. **NOTE:** For best results, add S-777 to water or latex additive, not water or latex additive to S-777. Allow to slake for 5 to 10 minutes depending on temperature or humidity and then re-mix adding liquid or S-777 powder as necessary. Liquid to S-777 ratio should be approximately 4 fluid ounces of water per pound or 6 quarts water per 50 pounds of S-777, 8 fluid ounces of latex additive per pound or 2 gallons latex additive per 50 pounds S-777. Amount of water will vary with temperature and humidity. Mix using a slow speed revolving bucket type mixer or similar mixer. *DO NOT MIX AT HIGH SPEED.*

**APPLICATION:**

Apply S-777 to substrate and trowel an area that can be set in 20 to 45 minutes taking temperature and humidity levels into consideration.

**SETTING:**

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. **NOTE:** Extremely high temperatures or low humidity can reduce the open time by up to 20 minutes. Always make sure mortar is soft and sticky before applying tile. The pot life of this product is approximately 2 to 3 hours at 70°F and 50% RH.

**CAUTION:**

Per ANSI A 108.02, Do not install tile in areas where the temperature is not maintained above 50°F (10°C) or the temperature is above 100°F (38°C). Mortar, substrate, tile, brick and stone temperatures must all be maintained between 50°F (10°C) and 100°F (38°C) before install and until cure is completed. **JOB FAILURE WILL RESULT FROM SETTING TILE ONTO THIN SET MORTAR THAT HAS "SKINNED".** Check any mortar, which has been on the substrate longer than 15 minutes by pressing a tile gently but firmly onto the troweled ribs of mortar. Remove the tile from the mortar and check the tile back for proper coverage per ANSI A 108. If proper coverage is not obtained, re-comb the mortar and retest or remove and trowel with new mortar. **ALL TRAFFIC SHOULD BE KEPT OFF THE TILE FOR 48 HOURS AT 70°F.**

**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:**

Sq. ft./Lb. at 3/32" to 1/8" bed thickness

2.0 to 2.5 sq. ft

**CLEAN-UP:**

Clean spills and tools with water before material dries. Cured S-777 latex film is practically impossible to remove with water.

**COLORS:**

S-777 is available in #960 Gray and #910 White.

**PACKAGING:**

S-777 is available in 50-pound bags.

**SPECIFICATIONS:**

Material: Thin set mortar used for setting most types of ceramic tile on vertical or horizontal surfaces shall be S-777, consisting of Type I Portland cement, specially graded silica aggregate (#7 on M.O.H. Scale of Hardness), water retention agents, anti-skinning agents, anti-sag and adhesion-promoting agents as manufactured by Summitville Tiles, Inc., Summitville, Ohio. Material shall conform to ANSI A118.1.

Color: Color shall be # \_\_\_\_\_.