Summitville

# S-1100 MP (MULTI-PURPOSE) PREMIUM THIN SET LATEX MORTAR

#### **PRODUCT DESCRIPTION:**

S-1100 MP is a premium high quality multi-purpose thin set mortar formulated with special powdered latex, designed to provide superior bond and shear strength, freeze-thaw resistance, impact-resistance and reduced water absorption. The non-reemulsifying resin system in S-1100 MP also provides excellent workability. S-1100 MP meets or exceeds ANSI A118.1, A118.4 and A118.11.

#### USES:

S-1100 MP premium multi-purpose thin set mortar is designed for setting all types of tile, marble, slate and granite. S-1100 can be used in both interior and exterior applications. Acceptable substrates include structurally sound fully cured masonry slabs, properly installed CBU, tile over tile, securely attached and properly cleaned vinyl tile, securely attached cutback adhesive and properly installed exterior grade plywood (interior, non-wet areas only).

#### LIMITATIONS:

High temperature and/or low humidity will reduce open time up to 15 minutes. All traffic should be kept off tile for 48 hours when used as a floor mortar. Grouting operations should not be performed less than 24 hours after setting when used as a wall mortar. When installing porcelain pavers over plywood, flooring must be exterior-grade plywood that meets all ANSI guidelines. Floor deflection cannot exceed "L-over-360" under both dead and live loads.

#### **TECHNICAL DATA: Physical Properties**

Compressive strength, PSI 7 day	3500
Shear bond strength	
after 20 freeze/thaw cycles	
Wall tile, psi	430
Ceramic mosaics, psi	325
Shear bond strength	
Ceramic mosaics, psi 7 day, dry	300
Ceramic mosaics, psi 7 day, in water	200
Ceramic mosaics, psi 28 day, dry	375
Ceramic mosaics, psi 7 day, in water (no prior dry cure)	160
Quarry to Plywood, psi 7 day, dry	280
Quarry to Plywood, psi 28 day, dry	360
Porcelain Shear, psi 7 day, dry	230
Porcelain Shear, psi 28 day, dry	200
Porcelain to Plywood, psi 7 day, dry	320
Porcelain to Plywood, psi 28 day, dry	320
Sag using 4" x 4" x 5/16" ceramic mosaics tile, in.	.000
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:

**Substrates:** All substrate preparation and tile installation must be in accordance with the Tile Council of North America <u>Handbook for Ceramic, Glass, and Stone Tile Installation</u>, ANSI A-108, and any other applicable specifications such as IBC or ICC to insure proper performance and longevity of the installation. Substrates include cured concrete, mortar bed, wood subfloor with mortar bed substrate, exterior grade plywood, dry wall, glass mesh mortar units and masonry.

**Mixing:** S-1100 MP should be mixed with clean, cool potable water only. Add enough water to S-1100MP to give it a paste like consistency which is easy to trowel but will hang on an inverted trowel. Mix using a *slow* speed revolving bucket type mixer or a similar mixer. *Do not mix at high speed*. Re-mix after slaking for the appropriate time (normally 5 to 10 minutes) and add more water or S-1100 MP powder if necessary.

## **APPLICATION:**

Trowel only an area that can be set in 15 to 30 minutes, taking temperature and humidity into consideration. Extremely high temperatures or low humidity, however, can reduce the open time by up to 15 minutes. The pot life of this product is approximately 80 to 90 minutes @ 73° F and 50% RH.

## 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.

## CAUTION:

Per ANSI A 108.02, Do not install in areas where the temperature is not maintained above 50°F (10°C) or the temperature is above 100°F (38°C). Grout, 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 FAILURES CAN OCCUR FROM SETTING TILE ONTO THIN SET WHICH HAS "SKINNED". Check any mortar, which has been on the substrate longer than 10 minutes by pressing a tile lightly but firmly onto the troweled ribs of mortar. To check mortar adhesion, remove tile from mortar and check the back of the tile. If proper coverage isn't obtained, recomb the mortar and retest or remove and trowel new material. ALL TRAFFIC SHOULD BE KEPT OFF THE TILE FOR 48 HOURS WHEN S-1100 MP IS USED AS A FLOOR MORTAR. GROUTING SHOULD NOT BE PERFORMED LESS THAN 24 HOURS AFTER SETTING WHEN USED AS A WALL MORTAR.

### **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

**CLEAN-UP:** Clean spills and tools with water. (Warm water with a small amount of Summitville SL-86 or detergent will ease clean-up operation).

### COLORS:

#910 White and #960 Gray.

### PACKAGING:

S-1100 MP multi-purpose thin set mortar is available in 50 lb bags.

### SPECIFICATIONS:

Material: Thin set latex mortar for setting ceramic tile on vertical and horizontal surfaces shall be S-1100 MP, consisting of Type I Portland cement, specially graded silica aggregates (#7 on M.O.H. Scale of Hardness), water retention aid, anti-sag, anti-skinning aids and a specially blended dry latex with protective colloids; as manufactured by Summitville Tiles, Inc., Summitville, Ohio. Material shall meet or exceed ANSI A118.4 and A118.11.

Color: Color shall be #