S-3000 One Step Crack Isolation/Anti Fracture Mortar

PRODUCT DESCRIPTION:
S-3000 One Step flexible mortar is a high quality multi-purpose thin set mortar formulated with special powdered latex designed to provide flexibility, superior bond strength, freeze-thaw resistance, impact resistance and reduced water absorption. The non-reemulsifying resin system in One Step flexible mortar also provides excellent workability. One Step meets or exceeds ANSI A118.1, A118.4 and A118.11.

USES:
One Step flexible thin setting latex mortar is recommended for setting all types of ceramic tile, marbles, slate and granite and a 1/8" (3mm) horizontal crack isolating membrane in a single application. One Step flexible mortar is recommended for interior and exterior floor applications.

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. When installing porcelain pavers over plywood, flooring must be exterior grade plywood that meets all ANSI guidelines. Floor deflection can not exceed "L-over-360" under both dead and live loads.
Do not install porcelain over non-breathable surfaces with water reactive products, Use 100% solids epoxies such as Summitville S-400, 500, 600, 4500 and S-5000.

TECHNICAL DATA: Physical Properties @ 73°±3 ° F & 50% RH

Shear bond strength in PSI	7 day dry cure	28 day, dry
Quarry to concrete	200	300
Quarry to plywood	300	350
Porcelain to plywood	300	350
Porcelain to concrete	210	210

Sag using 4"x4"x1/2" quarry tile in inches	.000"
Open time	30 to 40 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's Handbook for Ceramic, Glass, and Stone Tile Installation, 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. Expansion joints in the tile work must be in accordance with the Tile Council of North America's Handbook for Ceramic, Glass, and Stone Tile Installation elevation EJ171.
Mixing: One Step flexible mortar should be mixed with clean, cool potable water only. Place water in mixing container and add powder to water. Add enough water to One Step flexible mortar to give it a paste like consistency (after slake) 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 flexible mortar powder if necessary. Do not continue to retemper mortar after initial adjustment.

APPLICATION:
Trowel only that area which can be set in 15 to 30 minutes, taking temperature, porosity and humidity into consideration. Extremely high temperatures, high porosity and/or low humidity can reduce the open time by up to 15 minutes. The pot life of this product is approximately 80 to 90 minutes at 70° 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 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 FAILURES CAN OCCUR FROM SETTING TILE ONTO THIN SET WHICH HAS "SKINNED". Check any mortar that has been on the substrate longer than 10 minutes by pressing a tile lightly but firmly onto the troweled ribs of mortar. Remove the freshly set tile and inspect the tile back for proper transfer and coverage per ANSI A-108 requirements. If proper coverage is not obtained, re-comb the mortar and retest, or remove and trowel down new mortar. If retroweling mortar, reset a tile and recheck for proper coverage and transfer. Repeat the process throughout the installation every few tiles. ALL TRAFFIC SHOULD BE KEPT OFF THE TILE FOR 48 HOURS WHEN S-3000 ONE STEP FLEXIBLE MORTAR IS USED AS A FLOOR MORTAR.

PROTECTING NEW TILEWORK:
To avoid damage to finished tile work, 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 SL-86 or detergent will ease clean-up operation.)

COLORS:
#910 White and #960 Gray.

PACKAGING:
S-3000 One Step flexible mortar thin set mortar is available in 35 pound bags.

SPECIFICATIONS:
Material: Thin set mortar for setting ceramic tile on horizontal surfaces shall be S-3000 One Step flexible Mortar, consisting of Type I Portland cement, specially graded silica aggregates (#7 on M.O.H. Scale of Hardness), water retention aid and anti-sag and anti-skinning aids, and a specially blended dry latex with protected colloids; as manufactured by Summitville Tiles, Inc., Summitville, Ohio. Material shall meet or exceed ANSI A118.4 and ANSI A118.11.
Color: Color shall be
#_____.