



# Polymer-Modified CPM-Flex Pro™ 920

## Crack Prevention Mortar

### PRODUCT DESCRIPTION

CPM-Flex PRO™ 920 is formulated for superior flexibility and bond strength for the most demanding tile installation requirements. CPM-Flex PRO 920 uses a blend of polymers and inorganic chemicals to increase the contact between the mortar and tile for excellent bonds on a wide variety of new and remodeling substrates. Extended open and adjustment times and a creamy consistency provide excellent handling characteristics. It offers up to 20% more coverage than other thin-sets. Isolates cracks up to 1/8" (3.2 mm). Exceeds ANSI A118.4 and A118.11 without the need for additives.

### DIRECTIONS

#### ▶ BASIC USE

CPM-Flex Pro 920 is used as a bond coat for setting absorptive, semi-vitreous, vitreous and impervious ceramic tiles such as porcelain and natural stone for service in residential and commercial use. It is used in a mortar bed from 3/32" to 3/16" (2.4 to 4.8 mm) after the tiles have been properly embedded. CPM-Flex Pro 920 has excellent water and impact resistance, is water cleanable, nonflammable, good for exterior work and requires no presoaking of tiles. CPM-Flex Pro 920 mortar is not affected by prolonged contact with water, but does not form a waterproof barrier. CPM-Flex Pro 920 provides a permanent installation with higher bond and flexural strength and lower material and labor costs over conventional Portland cement mortar beds.

#### ▶ AREAS OF USE

CPM-Flex Pro 920 is formulated to bond vitreous, semi-vitreous or absorptive tile including ceramic, mosaic, quarry, porcelain and glass tile, cement-based precast terrazzo, brick, mini-brick and gauged natural stone tile. For interior or exterior floors, walls or countertops. Apply over concrete, mortar beds, masonry, cement backerboards, Portland cement plaster, drywall (dry areas), existing ceramic tile, Exterior Grade Plywood (interior dry areas), sheet vinyl flooring, VCT, plastic laminates or cutback adhesive (see preparation instructions).

#### ▶ LIMITATIONS

CPM-Flex Pro 920 must not be applied directly to hardwood, Luan plywood, particle board, parquet, cushion or sponge-back vinyl flooring, metal, fiberglass, plastic or OSB panels. Not for controlling vertical movement cracks. Do not use to install resin-backed stone.

When setting glass tile over 6" x 6" (15 x 15 cm) or when setting dimensional stone larger than 12" x 12" (30 x 30 cm), contact Technical Services for recommendations regarding subfloor deflection requirements.

#### ▶ APPLICABLE STANDARDS

Conforms to requirements for latex-Portland cement mortars found in ANSI A118.4 and A118.11.

#### ▶ PACKAGING

50 lb. (22.7 kg) multi-wall bags.

### INSTALLATION

#### ▶ PREPARATORY WORK

Detailed installation procedures may be found in the T.C.A. Handbook and ANSI A108.5. Surfaces must be structurally sound, clean, dry and free from grease, oil, dirt, curing compounds, sealers, adhesives or any other contaminant that would prevent a good bond. Glossy or painted surfaces must be sanded, stripped and cleaned of waxes, dirt or any contaminants. Ambient temperature, surfaces and materials should be maintained at a temperature above 50° F (10° C) or below 100° F (38° C) for 72 hours.

#### ▶ CEMENTITIOUS SUBSTRATES

Concrete or plaster must be fully cured and accept water penetration. Test by sprinkling water on various areas of the substrate. If water penetrates, then a good bond can be achieved. If water beads, surface contaminants are present and loss of adhesion may occur. The contaminants should be removed before installation. Concrete must be free of efflorescence and not subject to hydrostatic pressure. Concrete slabs should have a broomed or brushed finish to enhance the bond. Smooth concrete slabs must be roughened to ensure a good bond.

#### ▶ NON-CEMENTITIOUS SUBSTRATES

Surfaces such as old plaster and painted surfaces that provide bonding problems should be covered with a 3/8" to 3/4" (9.5 to 19 mm) reinforced mortar bed for walls and a 1 1/4" (32 mm) reinforced mortar bed for floors. After a minimum of 20 hours, the dry-set mortar may be applied to the mortar bed.

#### ▶ PLYWOOD SUBSTRATES

Plywood flooring including those under resilient flooring must be structurally sound and meet all ANSI and deflection requirements. For questions about proper subfloor installation, call Technical Services.

#### ▶ CERAMIC TILE SUBSTRATES, RESILIENT FLOORING OR PLASTIC LAMINATES

Plywood floors must be built to industry standards. Resilient flooring or plastic laminates must be well bonded, clean and free of all contaminants. Roughen the surface by sanding or scarifying, rinse and allow to dry. Do not sand flooring containing asbestos. For existing well-bonded ceramic tile, mechanically abrade with carborundum stone. Rinse and allow to dry. When sanding we recommend the use of an approved respirator.

#### ▶ MOVEMENT JOINTS

Expansion joints, control joints and cold joints should never be bridged with setting material. They must be brought through the tile work and filled with an appropriate elastomeric sealant.

#### ▶ MIXING

Thoroughly mix approximately 6 quarts (4.73 L) clean, cool water and 50 lb. (22.68 kg) of CPM-Flex Pro 920 together to a smooth, paste consistency. Mix by hand or use a low speed (150 - 200 RPM) 1/2" (13 mm) drill. Let slake or stand 5 - 10 minutes, stir again and use. Stir occasionally to keep fluffy, but do not add more water. When properly mixed, troweled ridges will stand with no slump.

#### ▶ APPLICATION

INSTALLATION TO CONFORM TO ANSI A108.5. Use a properly-sized notched trowel to ensure 100% coverage under tiles. Using flat side of trowel, apply skim coat of mortar to the surface. Apply additional mortar with notched side of trowel held at a 45° angle to the surface, combing in one direction. Press tile firmly into place in a perpendicular motion across ridges, moving back and forth. Perpendicular pressing flattens ridges and closes valleys allowing maximum coverage. With some tiles, back-buttering is advisable. Adjust tile promptly and beat in with a beating block and rubber mallet. Periodically pull up a tile and check the back to ensure complete coverage with the adhesive. Do not spread more material than can be tiled in 15 minutes or while material has wet tack (sticky to the touch). If material has skinned over (not sticky), recomb with notched trowel. If too dry, remove and replace with fresh material. Material in bucket will remain workable approximately 4 hours.

#### ▶ CLEANING

Clean with water before material dries.

