TECHNICAL BULLETIN #125

Regarding: Curing and Set Times on Liquid Applied Membranes.

General Overview:

Merkrete liquid membranes have been successfully installed on millions of square feet. Occasionally, we receive a concern that the membrane is not drying. Cool weather, high humidity, low absorption and wet substrates will delay the dry times of the membranes. The following suggestions should be taken into consideration to minimize drying time concerns.

Job Site Conditions

Do not use liquid membranes below 40ºF (4ºC); do not allow membrane or substrate to be below 40ºF (4ºC) for the first 72 hours after application. Cool and wet weather may delay the set times of the membranes. Do not leave any Merkrete membrane unprotected or exposed to weather for more than 30 days. Do not use membrane as an adhesive or wearing surface, membrane must be covered with ceramic or stone tile.

Surface Inspection and Preparation

Surfaces must be clean, free of dust, oil, grease, coatings, wax, paint, tar, curing agents, primers, sealers, flooring adhesives, or any deleterious substance and debris which may inhibit bond.. Surfaces must also be exempt of acids, concentrated alkali or chemical cleaning agents. Surfaces must be mechanically sanded, scarified or shot blasted to completely remove all paint, loosely bonded toppings, loose particles and construction debris. Do not install where hydrostatic conditions exist. Gypsum Mortar Beds; Merkrete has partnered with Maxxon Corporation to provide the tile industry's most comprehensive warranty over Maxxon Gypecrete or gypsum mortar bed substrates. All gypsum mortar beds must be primed with Maxxon's 101 Overspray. Then install the Merkrete membrane following the "Membrane Application" directions included in this data sheet using TCNA method# F125A for Full Coverage.

Merkrete Liquid Membrane Installation Procedures

These membranes air dry from the top down. Lack of air movement in the structure can slow membrane drying. The installation of liquid applied membranes is reliant on the loss of water from the product. The first coat of the Merkrete liquid membrane should be applied and allowed to dry. When membranes like Hydro Guard 2000, BFP, Hydro Guard 1 and SP 1 is used, fabric reinforcement should be in a first layer of liquid membrane while wet. After the first coat is dry, apply the second coat. When reinforcement is used, an additional layer of liquid membrane should coat or "sandwich" the fabric entirely.

When applying a liquid membrane over a mortar bed or fresh underlayment, the moisture in the substrate can also slow the drying time of the membrane. ANSI 4.2.2.1 states "Under normal job conditions, a minimum of 20 hours cure at 70°F (21°C) is adequate, but longer mortar bed cures up to 10 days are desirable".

Use of a temporary fan to move air in the area can aid in the set time. Caution; the fan should only be used to move air in the area. Do not point any fan at the installation. Fans will cause failures if used during any other part of the tile installation.

Installers should use caution to not build up the membranes too thick. Applying the membranes too thick will delay the drying times and often cause pinhole leaks when water tested too early.

Merkrete's Fast Drying Membranes; SP1 and Fracture Guard FD

The faster drying membrane like Merkrete's SP1 Waterproofing and crack isolation membrane and Fracture Guard FD will assist in the set times of the membranes. However, even fast setting membranes will have delayed set times when moist substrates, low absorption substrates, cool, and or wet weather are present.

Installer/Owner Responsibility

The installation of ceramic tile must be done following installation standards published in the current (TCA) Tile Council of America handbook, ANSI (American National Standards) 108 specification and our data sheets.

Visit our website at www.merkrete.com or call the Technical Department at 1-(800) 226-2424 for additional information or to request Product Data sheets on Hydro Guard 2000, BFP, Hydro Guard 1, SP 1, Fracture Guard 5000 and Fracture Guard FD.

Parex USA, Inc.
4125 East La Palma Avenue, Suite 250
Anaheim, CA 92807
Phone: 866.516.0061
Fax: 714.774.2079
Email: info@parexusa.com
www.parexusa.com