



## ULTRA X GUARD® Instructions

**General:** Ultra X Guard® is a versatile, self-curing liquid polymer membrane that offers seamless waterproofing and anti-fracture protection of up to 1/8" (3 mm) without the use of fabric. Its quick-drying formula allows it to dry in 1-3 hours, depending on temperature and humidity, and it darkens to a deep gold color when cured. To install tile or stone, use a Polymer Modified Mortar that meets ANSI A118.4 or A118.16 standards based on the specific application requirements.

### Drying and Curing Time:

Ultra X Guard® typically dries in 1-3 hours, depending on temperature and humidity. When the membrane is dry, it will turn dark gold. Curing time is 24 hours. Please note that the drying time may vary depending on temperature and humidity. After application, allow Ultra X Guard® to cure for at least 24 hours before exposing it to water or other elements. The drying and curing time for concrete, cement backer board, and all other substrates is also 24 hours, with an initial 1-2 hour drying time before applying the first coat.

Substrate	Drying Time	Curing Time
Concrete	2-3 Hours	24 Hours
Cement	2 Hours	24 Hours
Cement Backer Board	2-3 Hours	24 Hours
All Other Substrates	2-3 Hours	24 Hours

\*Please note that the drying time may vary depending on temperature and humidity. When the membrane is dry, it will turn dark gold.

**Quality Standard:** Meets ANSI A118.10 for waterproofing membranes and ANSI A118.12 for crack isolation membranes. Meets Uniform Plumbing Code (UPC) specifications and IAPMO for use as a shower pan liner. Passes ASTM E96 E for steam room vapor barrier applications.

**Limitation:** When using Ultra X Guard®, it is important to consider the limitations of the installation process to ensure a successful application. The product should not be used over substrates containing asbestos, in-plane cracks beyond 1/8" (3 mm), plank flooring, particleboard, oriented strand board (OSB), treated plywood, Masonite, gypsum-based floor-patching compounds, vinyl, glazed tile, laminate, fiberglass, or epoxy floors, or storage tanks. It should not be used as a roof membrane, wet surface, or primary waterproofing on balconies or decks over occupied space or where vertical out-of-plane movement occurs. Additionally, the ambient and surface temperatures must be above 40°F (4°C) at the time of installation and for 72 hours after application, and the membrane must be tiled over within 72 hours in exterior applications or protected with sun-blocking sheeting. It should not be applied over wet surfaces or surfaces subject to hydrostatic pressure, and pre-mixed adhesives and solvent-based materials should not be used over the membrane. The product must not be used over pressure-treated wood surfaces or surfaces that may go below 4.5°C (40°F) during the first 72 hours after application. Finally, unused or leftover material and empty containers should be disposed of in an environmentally friendly manner.

**Surface Preparation:** All surfaces must be structurally sound, clean, dry, and free from contaminations. Use appropriate cleaning agents or techniques for different types of contaminants. For example, use a degreaser for oily surfaces or a mold and mildew remover for moldy surfaces. All exterior and wet areas must have proper sloping to drain. Concrete must be fully cured and not subject to hydrostatic pressure. Concrete surfaces should accept water penetration. Plywood floors should be built to industry standards, and existing surfaces should be smooth and level with all defects repaired.



Do not use to bridge or cover over existing expansion joints. Cracks in excess of 1/8" (3 mm) should be treated as expansion joints. Ultra X Guard®, should not be used as finished product, and it must be covered with other protective surfaces.

**Suitable Substrate:** Concrete free of moisture problems, cement block, brick walls, cured cement mortar beds, cement backer units, and self-leveling compounds. Interior only: wallboard, cement terrazzo floors, unglazed ceramic tile, plumbing penetrations (PVC, copper, brass, stainless steel—all abraded by sandpaper), exterior-grade plywood for interior residential floors, and countertops.

**Exterior Applications:** Ensure the substrate is structurally sound, clean, and free from any contaminants that could prevent proper adhesion. Remove any loose materials or debris and repair any defects or cracks. The substrate should be sloped to allow for proper drainage. Use a brush or roller to apply a primer evenly and allow it to dry for at least 2 hours before applying Ultra X Guard®. Use a brush, roller, or spray gun to apply the first coat of Ultra X Guard®, covering the entire surface area. Allow it to dry for 4-6 hours or until it has a tacky feel. Apply a second coat in the same manner, perpendicular to the first coat. The second coat should be applied within 24 hours of the first coat. Allow Ultra X Guard® to cure for at least 24 hours before exposing it to water or other elements. Protect the Ultra X Guard® membrane from any physical damage or punctures during and after installation. Cover the membrane with a layer of mortar or tile within 72 hours of application.

**Applications:** When applying Ultra X Guard®, start with a clean and structurally sound surface that is free of dust, debris, and contaminants. The substrate should be properly sloped to allow for drainage, and any cracks or joints should be repaired. Before applying Ultra X Guard®, shake the container thoroughly to ensure uniformity of color and consistency. Apply the first coat of Ultra X Guard® with a brush or roller, and allow it to dry completely before applying subsequent coats. Two coats are recommended for optimal performance, and each coat should be applied in a perpendicular direction. Once the final coat is dry, the membrane should be inspected for any pinholes or areas of insufficient coverage. These areas can be touched up with additional Ultra X Guard®. After allowing the membrane to cure for at least 24 hours, it can be flood tested to ensure its effectiveness. It is important to note that the product has several limitations, including temperature and substrate requirements, and should not be used as a wear surface or adhesive. Proper disposal of any unused or leftover material is also important for environmental considerations. WEAR CHEMICAL-RESISTANT GLOVES, such as nitrile, and eye protection. Must be used in accordance with the proper ANSI applications.

**As a Crack Prevention Membrane:** Dampen all porous surfaces, and force Ultra X Guard® into cracks with the flat side of the trowel, roller, or brush. Then, using a 3/16" × 1/4" (5 × 6 mm) V-notch trowel or 3/4" (19 mm) rough-textured roller, generously apply additional Ultra X Guard® onto the substrate and beyond both sides of the crack at a minimum of the diagonal measurement of the tile. Gaps between plywood sheets and where they meet walls should also be pro-filled with Ultra X Guard®. For continuous crack isolation, cover the entire substrate with Ultra X Guard®, and it should be applied at a rate of 100 sq. ft. per gallon for each coat. Apply the recommended number of coats, waiting the recommended time between coats.

**As a Waterproofing Membrane:** All cracks in concrete up to 1/8" (3 mm) should be pre-filled with Ultra X Guard® prior to application. Apply with a 3/4" (19 mm) rough-textured synthetic roller or a 3/16" × 1/4" (5 × 6 mm) V-notch trowel. If using a trowel, spread Ultra X Guard® with the trowel held at a 45° angle, and then flatten the edges. If using a roller, generously apply Ultra X Guard® to the surface, and then spread with the roller, applying a continuous, even film with overlapping strokes. Pre-coat corners and where floors and walls meet, extending it 6" (15 cm) on either side. For an exterior change of plane, embed 6" (15 cm) wide fiberglass mesh into the membrane. Many commercial waterproofing installations require reinforcing of the interior change of plane. For general waterproofing, apply Ultra X Guard® at a rate of 120 sq. ft. per gallon (11 m<sup>2</sup>) for each coat. After the first coat has dried 1 to 1 1/2 hours, check for voids or pinholes, and fill with additional materials. Then apply a second coat at right angles to the first. To meet IAMPO requirements, two coats should be applied at a rate of 80 sq. ft. per gallon for each coat. In all cases, the wet membrane thickness should not exceed 125 mils. Apply the recommended number of coats, waiting the recommended time between coats.



**Drains:** To install Ultra X Guard® at drains, ensure the drains are securely fastened to prevent movement. Prior to applying the product, slope the substrate towards the drain flange and remove any contaminants that might inhibit bonding. Protect threaded bolt holes with tape or inserting bolts before applying liquid. Cut and fit pieces of reinforcing fabric to contour and encompass the drain flange. Apply a coat of Ultra X Guard®, overlapping the transition from substrate or mortar bed to drain flange using a brush. Embed the reinforcing fabric into the Ultra X Guard® and overlap saturated fabric, using the brush to keep it flat. Continue applying Ultra X Guard® to adjacent areas designated to be waterproofed. Allow the first application to dry, then recoat all areas to create a monolithic membrane. After the final coat is dry, clamp the collar to the membrane and tighten.

**Understanding the Gauge Thickness for Ultra X Guard®:** For those installers who prefer to use a gauge to measure membrane coverage, the Ultra X Guard® instructions provide a thickness gauge with notched “teeth” representing mil depth that appears on the face of the gauge.

1. Hold the gauge at a 90-degree angle to the surface.
2. Press the teeth marked with the desired mil thickness into the fresh, wet Ultra X Guard®.
3. Pull straight back to prevent adjacent product from clinging to the teeth.
4. Note the deepest tooth with Ultra X Guard® on it, as well as the next highest tooth that is not coated with Ultra X Guard®
5. The true Ultra X Guard® mil thickness lies between these two readings.
6. Wipe the gauge with water after each use.
7. Readings should be repeated in different areas and averaged to achieve the most accurate measurement of the mil thickness and ensure proper coverage.
8. Ensure that no voids or pinholes are left in the dried membrane from the testing process.

Refer to the Ultra X Guard® chart below to determine the correct coverage rate based on square footage and the corresponding wet and dry film thickness.

Coverage Sqft Per Gallon	Wet Film Thickness (mils)	Dry Film Thickness (mils)
200	8.0	4.7
150	11.0	7.0
100	17.0	10.0
50	34.0	23.0
20	80.0	47.0
10	130.0	80.0

**Safety Precautions:** WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION when handling Ultra X Guard®, Store in a cool, dry, well-ventilated area. Avoid getting the material into contact with your skin and eyes. In case of eye contact, immediately flush eyes with plenty of water for at least 20 minutes. If irritation persists, seek medical attention. In case of skin contact, flush with large amounts of water. If irritation persists, seek medical attention. Ingestion should be avoided, but if ingestion of a large amount does occur, seek medical attention. DO NOT INDUCE VOMITING. Ultra X Guard® contains a chemical known to the state of California to cause cancer and should be kept out of the reach of children. Please refer to the Material Safety Data Sheet (MSDS) for more information.

By following these instructions and safety precautions, you can achieve the best possible results when using Ultra X Guard®, If you have any questions or concerns, please contact Technical Services for further assistance.