

Tile and Stone

UX 500 MICROGUARD

Super Thin Uncoupling Membrane

PRODUCT DESCRIPTION:

UZIN UX 500 MicroGuard is an advanced fabric underlayment system for tile and stone installations. Like traditional uncoupling membranes, it provides outstanding load-bearing performance, crack isolation, and waterproofing. Thanks to its next-generation non-woven textile construction, UX 500 MicroGuard outperforms geometrically profiled membranes by being thinner, easier to install, and requiring up to 50% less thinset mortar.

SUITABLE FOR:

- ▶ Tile and stone interior installations for wet and dry areas
- ▶ Over UZIN priming and surface preparation systems
- ▶ Single-layer tongue-and-groove plywood subfloors 5/8" (15.75 mm) or thicker on joists up to 19.2" (49 cm) O.C., eliminating backerboards (See important notes)
- ▶ Concrete and gypsum substrates to isolate the tile from the floor assembly
- ▶ Once young concrete substrates are walkable and there is no standing water
- ▶ Crack isolation underlayment to handle up to 1/8" (3 mm) in-plane movement
- ▶ Suitable for most radiant heat floor applications (see substrate requirements)
- ▶ Residential, commercial, and industrial applications
- ▶ Compatible with UZIN CX 15, 20, 30, 33, and 38 cement-based tile-setting mortars and UZIN TR 400 resin-based setting mortar
- ▶ For topical waterproof integrity, UZIN WP Seam Tape bonded with UZIN CX 15, 20, 30, 33, and 38 or UZIN HS 200 is recommended for seams and perimeter details. It is also compatible with UZIN HS 100 for seams and perimeter details



FEATURES AND BENEFITS:

- ▶ Installer-friendly - Extremely lightweight, easy to carry, fit, cut, & flatter surface to kneel and trowel on
- ▶ No Memory Effect - Rolls out flat immediately
- ▶ Thin Profile - Reduced overall thickness & uses ~50% less thin-set than geometrically configured membranes
- ▶ Fast-Track Installation - Can be installed over young concrete & gypsum substrates with tile able to be installed immediately on top of the membrane
- ▶ Underlayment Grade - Replaces traditional tile backerboards over single layer plywood or OSB subfloors
- ▶ Waterproof and Vapor Management - Allows vapor to equalize from the underside, but waterproof from the top when seams and perimeter are treated

TECHNICAL DATA:

Packaging	39.3" x 98.4' (1 m x 30 m) 323 sq.ft. roll
Storage	24 months
Application temperature	40 – 90°F (4 – 32°C)
Ready for foot traffic	Tile bond to membrane (approx.): 16 hours – CX 15 & CX 20 12 hours – CX 30 & CX 38 2.5 hours – CX 33
Ready for covering	Time before tiling (1st bond coat): Immediately after placement
Thickness	1/32" (0.9 mm)
Thermal resistance	In-service temperature range is -40 – 194°F (-35 – 90°C)
Fire reaction	Will not contribute to flame spread when installed
Weight	11.25 lbs (5.1 kg) per roll

* At 70 °F (21 °C) and 65% relative humidity.



PRODUCT PROPERTIES:

UZIN UX 500 MicroGuard is a multi-layer polypropylene and polyethylene textile fabric uncoupling underlayment. It's thin profile with superior installation properties and meets ANSI A118.12SV and A118.10 standards for crack isolation and waterproofing membranes.

SUBSTRATE PREPARATION:

- ▶ All substrates should be structurally sound, stable, dry, clean and free of any substance or condition that may reduce or prevent adhesion.
- ▶ For applications involving gypsum substrates and highly porous concrete substrates, it is recommended to prime with UZIN PE 260 or 360 Plus. For applications involving existing floor coverings prime with UZIN PE 280. See applicable product data sheets for complete information.

APPLICATION:

1. Roll material out and trim to fit using a razor knife or scissors. Allow for approximately 1/8" (3mm) - 1/4" gap from all walls and columns.
2. Mix and apply an UZIN thin-set mortar such as CX 15, 20, 30, 33, 38 or TR 400 with a 3/16 x 1/4 (5mm x 6mm) V notch or 3/16 x 3/16 (5mm x 5mm) square notch trowel. Apply the mortar to the substrate with the flat side of the trowel first (key coat). Then comb with the notched side to achieve uniform distribution of mortar in one direction. Avoid troweling in random "swirl" patterns. See applicable product information for water ratios and product use.
3. Roll UZIN UX MicroGuard out and into the wet mortar and lightly butt seams. Then using a trowel, float or floor covering roller (50lbs or less), compact the material into the wet mortar to achieve 100% backing transfer. Care should be taken to install the material into the wet mortar to achieve this. Temperature and substrate porosity are variables that affect this. If installation materials skin pre-maturely, remove mortar and re-apply fresh material to ensure positive transfer and void free installation.
4. Once UZIN UX 500 MicroGuard has been installed, tile can be installed immediately on top of the membrane.
5. When used as interior waterproofing, it must be detailed as a continuous waterproof system:
 - a.) Fill and trowel seams at every joint with UZIN Hydrostop waterproofing seam-tape using a compatible UZIN thin-set mortar
 - b.) Install preformed UZIN Hydrostop inside and outside corners where needed
 - c.) Floor-wall transitions: Use UZIN Hydrostop sealing tape to connect the floor membrane to the wall. Using UZIN Hydrostop seam tape extending a minimum 2" up the wall and 2" onto the floor or alternatively use UZIN HS 100 or HS 200 installed per data sheet.
 - d.) Penetrations and drains: Use UZIN Hydrostop pipe collars for pipe penetrations or run the UZIN UX 500 MicroGuard to the penetration and fill any gaps with 100% silicone sealant. Make connection between plumbing fixture and pipe gap with 100% silicone sealant or alternatively use UZIN HS 100 or HS 200 installed per data sheet.
6. For tile installation, using a recommended notch trowel appropriate for achieving proper coverage based on the size of tile being installed, apply the mortar to the membrane with the flat side of the trowel first (key coat). Then comb with the notched side to achieve uniform distribution of mortar in one direction. Avoid troweling in random "swirl" patterns.
 - a.) Select the appropriate notch trowel for your application, following directional troweling.
 - b.) Back butter using flat side of trowel as needed and press tile into the fresh mortar sliding the tile against the trowel notches to collapse the ridges.
 - c.) Periodically lift tiles to confirm adequate coverage
 - i.) 80% interior
 - ii.) 95% for wet areas
7. Movement Joints
 - a.) Honor all structural and expansion joints through the tile assembly.
 - b.) Provide perimeter and intermediate movement joints per TCNA EJ171 or local standards.
 - c.) UZIN UX 500 MicroGuard can span control or saw cut joints in the substrate allowing for easy movement joint placement.
 - d.) Fill movement joints with flexible sealant or appropriate profiles.
8. Grouting after the mortar is cured (per the mortar data sheet), grout joints with compatible UZIN grout.

IMPORTANT NOTES:

- ▶ Tile shall be installed in strict accordance with ANSI A108.5, TCNA (USA) and TTMAC (Canada) standards. If you are not familiar with industry standards, please contact these organizations. Tile failures occur, and warranties are void when industry standards are not respected.
- ▶ Meets ASTM 627 "Extra Heavy"
 - 14 cycles "Extra Heavy" rating when bonded over concrete
 - 7 cycles "Light Commercial" rating over double layer 1 3/4" plywood floor with joists 19.2" OC
 - 7 cycles "Light Commercial" rating over single layer 5/8" or greater plywood subfloor with joists 19.2" OC
- ▶ ANSI A118.12: Crack Isolation "High Performance"
 - rated up to 1/8" (3mm) of lateral, in-plane crack movement
- ▶ Provide for expansion and control joints as per TCNA Detail EJ171 (USA) or TTMAC Detail 301MJ (Canada).
- ▶ For single layer plywood or OSB Installations – the substrate must meet deflection requirements of ANSI A108.01 (L/360 for tile or L/720 for stone).
- ▶ For exterior installations, it is recommended to use UZIN TR 400 on both sides. This provides the ultimate in exterior performance beyond any cement-based thinset mortar in the world.

- ▶ UZIN UX 500 MicroGuard is less prone to damage than other membranes. However, knowing the surface will be a foundation for bonding tile, protection should be used to ensure material is kept clean and free from contamination, cuts, pilling, and damage.
- ▶ Meets LEED requirements for IEQ Credit 4.1, Low-Emitting Materials – Adhesives and Sealants (LEED v4)
- ▶ Can be used in applications to help mitigate radon where required or specified
- ▶ For technical assistance that pertains to this product, please contact UZIN's technical service department at 1-866-505-4810. We are here to help you achieve the best work possible.

PROTECTION OF THE WORKPLACE AND THE ENVIRONMENT:

Precautions: Carefully read and follow all precautions and warnings on the product label. For complete safety information, please refer to the Safety Data Sheet (SDS) available at uzin.com.

DISPOSAL:

For disposal of products, follow the applicable laws and regulations. Where possible, collect product residues and re-use. Do not allow the material to get into sewers, waterways or unlined ground surfaces. Empty packaging may contain product residue.