Product Datasheet

Premium - Tile & Stone Waterproof Membrane

UZIN HS 100

Flexible acrylic polymer waterproofing membrane

DESCRIPTION:

UZIN HS 100 is a flexible, ready to use acrylic polymer based waterproofing membrane for tile and stone in interior & exterior non-submerged applications. Used as crack-isolation membrane UZIN HS 100 also reduces crack transmission in tile and stone floors

SUITABLE FOR:

- Over properly prepared concrete, masonry, cement mortar beds and leveling coats
- Over tile backerboards (with approved seam tape)
- Over gypsum wallboard (interior)
- Over industry standard plywood (interior, dry conditions)
- Over radiant heated substrates
- Over UZIN brand surface preparation products where applicable
- With UZIN WP Accessories for a complete waterproofing system. See UZIN WP Accessories PDS for items and additional installation detail
- For floor, wall and ceiling applications in residential, commercial and institutional conditions
- Suitable applications include showers, tub surrounds, bathrooms, laundry, food service, exterior walls and building facades, shower pans, staircases, staircase landings and wet rooms
- For use in steam rooms and steam showers providing there is an intact vapor barrier behind the backerboard. If unsure, use UZIN WP Hydrostop
- For contact with plumbing rated PVC, copper, brass and stainless steel pipe penetrations, lightly abrade the surface
- For overlapping contact with Schluter® Kerdi series products such as Kerdi Drain, Kerdi Curb, Kerdi Board and other Schluter® components
- For immersion applications such as pools, spas and fountains, use UZIN HS 200
- For preventing in-plane floor cracks from transmitting through tile or stone
- For filling gaps and changes in plane to floor and wall joints up to 1/8" (3 mm)
- For use in conjunction with breathable fiber reinforcing meshes

FEATURES AND BENEFITS:

- Smooth texture and easy handling - Fast, seamless application with roller, trowel or brush
- Ready-mixed one-component - No mixing, use only what is necessary
- UPC Listed for Shower pan liner - Plumbing code performance validation
- No mesh required to meet ANSI A118.10 - Labor and cost savings, Surface uniformity
- Fast curing - Same day tile installation
- Rectangle pails - No paint tray required, just dip and go
- Light green color - Easy to see reference marks
- Non-sag, filling properties - Use as a gap filler up to 1/8” (3mm)

TECHNICAL DATA:

Packaging	1 gal (5.49 kg /3.78 liters) 2.5 gal (13.72 kg /9.46 liters)
Storage	minimum 24 months
Color	light green
Coverage	45 – 47 sq. ft. (4.0 – 4.5 m²) per gallon
VOC	< 1 g/L
Application temperature	40 – 95 °F (5 – 30 °C)
Setting time / cure time	1st coat approximately 30 – 60 minutes 2nd coat approximately 1 – 2 hours Flood test 4 hours after 2nd coat has dried

* At 70 °F (21 °C) and 65 % relative humidity. Temperature, conditions and surface porosity will affect dry time.

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UZIN HS 100

PRODUCT PROPERTIES:

UZIN HS 100 is a flexible, fast-drying, waterproofing membrane that has outstanding adhesion and flexibility. Applicable standards are ANSI A118.10 and ANSI A118.12. IAPMO listed for use as a shower pan liner. ASTM E96 (Vapor Permeability- 1.8 perms. SCAQMD rule 1168 VOC-0.3 g/L calculated.

ANSI A118.10 & A118.12 Performance Data:	
Fungus Resistance:	No Growth
Seam Strength:	27 lbs/2" width
Breaking Strength:	269 psi (transverse)
Dimensional Stability:	– 0.01% (–15 °F transverse)
Waterproofness:	No water penetration
100 day wet shear strength:	126 psi
4 week shear strength:	214 psi
Point load:	1500 –1900 psi

SUBSTRATE PREPARATION:

- See UZIN's Surface Preparation Requirements document for tile and stone installation systems. All substrates should be structurally sound, stable, dry, clean and free of any substance or condition that may reduce or prevent adhesion.
- Today's large format tile and stone demand flatter floors than ever before. Look to UZIN's industry leading range of self-levelling and patching systems to prepare the surface to meet today's installation tolerances.
- For applications involving high substrate moisture vapor, look to UZIN PE 414 Turbo and UZIN PE 460 as moisture vapour emissions reducing solutions.
- For challenging jobsite conditions over gypsum, weak surfaces, smooth surfaces, cracks, coatings, wood and existing floor coverings, UZIN has some unique primers and reinforcing systems that solve problems and save time.
- Where slopes to drain are required, sloping can be done on top, or underneath UZIN HS 100. UZIN NC 182 may be used for this purpose. Ensure, slopes are at least ¼" per linear foot (6 mm per 30 cm) and flat in plane for the type of tile being installed.

APPLICATION:

1. Pre-treat wall coves, board seams and corners: Where necessary, fill to a consistent finish using UZIN CX 20, 30, 33 thinset mortars or UZIN NC 886, 888, 890 or 182 patching compounds. Alternatively, a liberal coat of UZIN HS 100 with a paint brush, heavy nap roller or trowel may be used to fill gaps less than 1/8" (3 mm). For additional reinforcing, the use of UZIN WP Accessories such as WP SeamTape, WP Inside Corners and Outside Corners are recommended.

2. Pre-treat drains:

a. Standard drains with clamping collars and weep holes:

i. Remove drain and clamping collar from the drain assembly base

ii. Apply bead of 100 % silicone on to the lower part of the clamping collar assembly.

iii. Apply HS 100 as the primary membrane in the drain recess cavity up to the drain flange. For added reinforcing in this area, the use of UZIN WP Drain Fitting or a 16" (40 cm) diameter cut piece of UZIN WP Hydrostop may used and bonded with UZIN CX 33, HS 200, CX 30 or CX 20.

iv. Once set, apply more 100 % silicone to the upper part of the clamping collar and clamp the collar down.

v. If using UZIN WP Drain Fitting or UZIN WP Hydrostop fabric, proceed with applying a 2" (50 mm) overlap of UZIN HS 100 when waterproofing the field.

b. Schluter® Kerdi Drain:

i. Connect drain to the pipe as per manufacturer's recommendation and where required, set with UZIN CX 20, 30, 33 or backfill with UZIN NC 182.

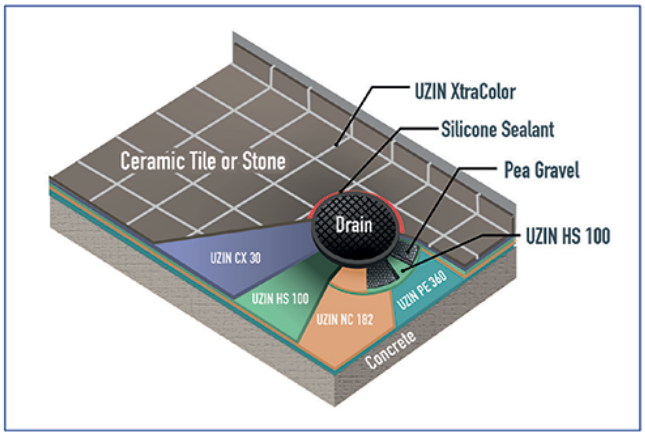
ii. Then topically waterproof the sloped basin with HS 100 overlapping the drain fabric strip by at least 2"(50 mm).

c. Linear Trench Drains: HS 100 may be used with these. But due to varying types and connections, you may need assistance. Please contact UZIN Technical Service for direction.

3. Waterproof the field:

- Wait until all pre-treated areas are dry.
- Apply UZIN HS 100 by roller, trowel or brush in 2 –15 mil (0.4 mm) thickness applications so there is a minimum dried thickness at any point of 20 mil (0.5 mm). The use of a coating thickness gauge is a helpful tool to quality check thickness builds. It is important to get uniform coats that are void and pin hole free. Very irregular surfaces such as bush hammered concrete should be filled in advance with UZIN CX 20, 30, 33 thinset mortars or UZIN NC 886, 888, 890 or 182 patching compounds prior to waterproofing. The use of fiber reinforcing mesh is not required in field areas.
- Overlap UZIN Waterproofing Accessories or other reinforcing material by a minimum of 2" (50 mm) 3
- Expect drying time of the first coat to be 30 – 60 minutes and 1 – 2 hours for the second coat

UZIN Shower Pan System Crossover Drawing TCNA Detail B421 (TTMAC 326DR-B)



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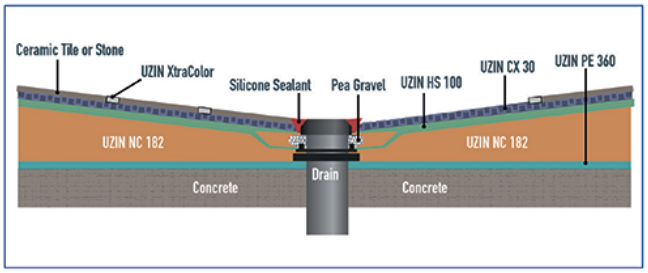


4. Cracks & Crack Control:

- Cracks shall be “in plane” and to a maximum of 1/8” (3 mm) in width. Hair line shrinkage cracks that are approximately 1/16” (1.5 mm) or less shall be vacuumed clean. Wider joints 1/16 –1/8” (1.5 – 3 mm) shall be inspected and where required “chased” to remove loose and separated particles
- The use of open fiber reinforcing mesh is recommended for crack control. Cut fabric to be 1.5 x the longest width of each tile on each side of the joint
- With roller or 1/32” notched trowel or squeegee, apply coat of UZIN HS 100 to floor and embed mesh into the wet material.
- Then topically roll to flatten out material to completely embed mesh into the first coat and allow to dry.
- Once dried, apply a second coat at a minimum 15 mil (0.4 mm)

5. Expansion & Control Joints

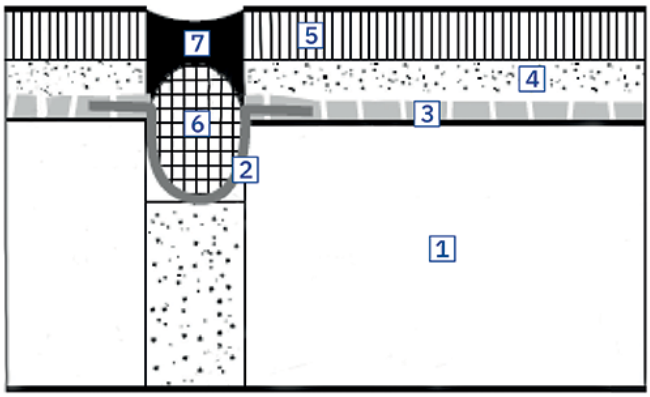
a. Do not cover any substrate expansion joint or control joint with mortar or tiles. Provide for expansion and control joints where specified per the most current TCNA handbook, Detail EJ-171 or TTMAC (Canada) Detail 301MJ

b. Saw Cuts: Fill saw cuts with UZIN CX 33, CX 30, CX 20, NC 886, NC 888 or NC 890. Then install movement joint to the closest grout joint to the saw cut.

c. If waterproofing integrity is required in expansion and control joint (see detailed drawing below), UZIN WP SeamTape or WP SeamTape Peel & Stick shall be used and bonded to both top sides of the joint and joint filled with appropriate sealant or an expansion moulding system.

d. Protect tilework with metal strips (or other specified system) along both edges of structural building expansion joints.

e. Install the specified compressible bead and sealant into all expansion and control joints. The use of grout is not recommended. See TCNA Detail EJ-171 or TTMAC (Canada) Detail 301MJ for sealant specifications.



1. Concrete floor
2. UZIN WP SeamTape or UZIN WP SeamTape Peel & Stick
3. UZIN HS 100 with fiberglass mesh
4. UZIN Thinset Bonding Mortar (CX 20, 30, 33, TR 400)
5. Tile or Stone
6. Backer rod with no bond to sealant
7. Sealant (depth 1/2 width)

IMPORTANT NOTES:

- Storage: Minimum 24 months in original packaging when stored in relatively cool conditions. Tightly reseal opened packaging and use the contents as quickly as possible. Stir prior to use.
- UZIN HS 100 is a water based pre-mix that dries based on evaporation. Low temperature will delay setting, high temperature will accelerate setting. In addition, it will dry quicker under porous and open conditions. Warming up the work area and circulating the airflow with a fan will accelerate the drying process without being detrimental to the product performance.
- Applying UZIN HS 100 between 2 impervious surfaces such as a waterproof backer board and waterproof reinforcing tape is not recommended.
- If using UZIN HS 100 with waterproofing accessories such as UZIN WP SeamTape, WP Inside Corners and WP Outside Corners, the installation of the accessory can be done over porous substrates including standard gypsum drywall, cement backer boards and porous concrete. The use of UZIN CX 20, CX 30, CX 33 and HS 200 are recommended for installing UZIN WP Accessories over all conditions including low porosity substrates and waterproof backer boards.
- UZIN HS 100 is compatible with open weave reinforcing meshes & fabrics that allow for drying out over low porosity substrates and waterproof backer boards.
- Priming: Under most conditions, UZIN HS 100 does not require primer, it simply requires a clean surface. However, where highly porous conditions exist, priming may be necessary with UZIN PE 260 or PE 360 to prevent flash drying of the membrane.
- For waterproofing gypsum floors, prime with UZIN PE 414, PE 360 or PE 260. Compressive strength and surface hardness of gypsum floors will vary. A priming and bond test is recommended.

- UZIN HS 100 is freeze /thaw stable to 25 °F (– 4 °C) and 5 cycles to 28 °F (– 2 °C). Caution should be used when storing in cold conditions. Storing above freezing is recommended
- UZIN HS 100 is waterproof, but is not recommended as a “roofing” or “roof deck” membrane by building code definitions. Tile assemblies in applications involving structural waterproofing must respect local code regulations for such. UZIN BalkuSlim System is a recommended system for tile assemblies over such structural membranes.
- Substrate shall be dry during application and protect from rain and wet exposure for at least 6 hours at 70 °F (21 °C) and 65 % relative humidity. Longer protection will be required for applications cooler and more humid.
- Warming up the work area and circulating the airflow with a fan will accelerate the drying process without being detrimental to the product performance.
- Not recommended for use in conditions where negative hydrostatic pressure and/or high substrate moisture exists. Maximum allowable moisture level is 8 lbs per 1000 sq. ft. (3.63 kg /92.9 m²) per 24 hours as per ASTM F1869 or up to 85 % relative humidity as measured with moisture probes. For these conditions, contact UZIN for technical support and recommendations.
- UZIN HS 100 is a membrane and not recommended to be left exposed. Light foot traffic is acceptable during tile installation, but protection from abrasion, point loading and surface damage should be taken. It is recommended that tile be installed within 7 days of installation.
- For radiant heated applications, run and test system in advance to ensure it is working properly. Then turn off or below 75 °F (24 °C) for 72 hours after setting and grouting.
- Irregular substrates should be smoothed out in advance of using UZIN HS 100. Any of UZIN’s patching compounds or thinset mortars may be used for this purpose.
- For technical assistance that pertains to this product and the jobsite conditions, 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 www.uzin.us.

DISPOSAL:

For disposal and recycling, follow the applicable laws and regulations. When possible, avoid or minimize waste generation. Do not allow the material to get into sewers, waterways or unlined ground surfaces. Empty packaging can be recycled.

INDOOR AIR QUALITY INFORMATION

Certification: SCS Indoor Advantage™ Gold

VOC content: < 1 g/L, Compliant with SCAQMD 1168

VOC emission: Conforms to the CDPH Standard Method (CA 01350) V1.2-2017; 5.0 mg/m3 or less TVOC emission.