

WATER-STOP MEMBRANE

Description: Load bearing bonded waterproofing and crack isolation sheet membrane with non-woven fibers on both sides.

Installation: Under tiling suitable for thin-bed and thick-bed installations.

Normative References: ANSI A118.10, ANSI A118.12, TCNA Handbook; IAPMO Listed Product File Number 9205 9990.



PROPERTY	TEST METHOD	VALUE
Seam Strength	ASTM D 751	24 lbs./in.
Breaking Strength Transverse	ASTM D 751 Proc. B	1420 psi
Breaking Strength Longitudinal	ASTM D 751 Proc. B	1160 psi
Dimensional Stability	ASTM D 1204	±0.2%
Waterproofness	ASTM D 4068	Pass
Water Vapor Transmission	ASTM E96 Proc. E	0.3 Perm
Crack Resistance	ANSI 118.12	Rated Standard Performance
Service Requirement	ASTM C627-10	Rated Light commercial (TCNA)
Shear Strength		
7- Day Dry		119 psi
7- Day Water Immersion		83 psi
4- Week	ASTM C482	133 psi
12- Week		138 psi
100- Day Water Immersion		85 psi
Resistance to temperature		-22°F / +176°F
Total thickness (approximate)	EN 1849-2	20 mils

Checks during production and/or on the finished product:

System 2+ of assessment and verification of constancy of performance according to Directive 89/106/CEE.

Checks on every production batch:

- Water penetration resistance
- Traction properties: tearing, elongation and tensile stress
- Geotextile adherence
- Visible defects, length, width and weight

Water-Stop roll sizes:

- Water-Stop Roll 3' 3" x 16' 5" = 54 ft² (1 m x 5 m = 5 m²)
- Water-Stop Roll 3' 3" x 33' = 108 ft² (1 m x 10 m = 10 m²)
- Water-Stop Roll 3' 3" x 99' = 324 ft² (1 m x 30 m = 30 m²)
- Water-Stop Roll 6' 7" x 65' 8" = 430 ft² (2 m x 20 m = 40 m²)

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Water-Stop Waterproofing Accessories:

Materials and components used when installing WATER-STOP membrane to ensure that waterproofing is complete and all critical points are sealed:

- W-S BAND 14 Roll 5-1/2" x 65' 8" (14 cm x 20 m)
- W-S BAND 34 Roll 13-1/3" x 65' 8" (34 cm x 20 m)
- W-S DIN preformed, seamless 90° inside corners
- W-S DEX preformed seamless 90° outside corners
- W-S TUBO section of WATER-STOP with preformed gasket to seal pipe protrusions
- W-S DRAINFLASH preformed section of WATER-STOP to flashing connection to drain
- · W-S BUTIL Pre-formed butyl flashing tape
- Mixing Valve Seal. WATER-STOP membrane section with 4 1/2" -diameter integrated rubber gasket to mixing valve seal.
- ¾" Pipe Seal ¾" to seal around inlet and outlet pipes

Areas of application

WATER-STOP is suitable to be used in conjunction with ceramic and stone tile covering for wall and floor surfaces where protection against the penetration of moisture is necessary in new construction and renovation projects. It is suitable for interior applications and for exterior floors and walls over suitable substrates.

WATER-STOP isolates common shrinkage cracks found in residential and commercial construction from telegraphing to finished surface.

Applications include showers, tub surrounds, bathrooms, commercial and residential kitchens, backsplashes and areas surrounding swimming pools.

WATER-STOP membrane should be bonded to substrate with modified thin-set mortar. Thin-sets must be appropriate for the substrate and conform to ANSI A118.4, ANSI A118.11 and ANSI A118.15, or the appropriate standards and TCNA Handbook recommendations.

Substrate Requirements

Substrate must meet requirements set forth by the TCNA and ANSI standards.

Surfaces shall be structurally sound, stable and rigid enough to support ceramic tile, stone, thin brick and similar finishes. Substrate deflection under all kind of loads, must not exceed L/360 for thin bed ceramic tile/brick installations or L/720 for thin bed stone installations where "L" = the span length in inches.

Concrete and masonry:

It must be free of curing agents, sealers, water repellents or other treatments that prevent membrane bonding. The maximum amount of moisture in the concrete substrate should not exceed 5 lbs./1000 sq. ft. (2.26 kg/92.9 m²)/24 h per ASTM F-1869 or 75% relative humidity as measured with moisture probes per ASTM F2170 and should be between 45°F (7°C) and 90°F (32°C).

- Plywood floors (interiors only) minimum construction for direct bond:
 - 1. Subfloor: 5/8" (15 mm) thick, exterior glue, tongue and groove plywood over bridged 2" x 10" (40 mm x 240 mm nominal) joists spaced 16" (400 mm) o.c. maximum; fasten plywood 6" (150 mm) 4 o.c. along sheet ends and 8" (200 mm) o.c. along intermediate supports with 8 d (65 mm) ringshank nails or screws; allow 1/8" (3 mm) between sheets; all sheet ends must be supported by a framing member; glue sheets to joists with construction adhesive.
 - 2. Underlayment: 5/8" (15 mm) thick exterior glue plywood fastened 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. in the panel field (both directions) with 8d (65 mm) ring-shank nails or screws; allow 1/8" (3 mm) between sheets and 1/4" (6 mm) between the underlayment and any abutting surfaces; offset underlayment joints from joints in subfloor and stagger joints between sheet ends; glue underlayment to subfloor with construction adhesive. The fasteners used to fasten the underlayment to the subfloor should not penetrate beyond the underside of the subfloor nor into the joints.

In floors waterproofing the surface need a minimum slope to drains of 1/4" per 1' (2%). As shower pan liner WATER-STOP membrane should be installed over properly prepared sloped fill or pre-sloped substrates.

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Suitable Substrates

Interiors:

Concrete, concrete & brick masonry, cement mortar beds, cement plaster, gypsum wallboard, exterior glue plywood, ceramic tile & stone, cement terrazzo, cement backer board, poured gypsum underlayment, fiber-cement underlayment, fiber-reinforced water-resistant gypsum backer board/underlayment

Exteriors:

Concrete, ceramic tile & stone, cement terrazzo

Limitations

Do not use as a primary roofing membrane over occupied space.

WATER-STOP cannot accommodate deflection greater than industry guidelines for the flooring surface.

Do not use over dynamic expansion joints, structural cracks or cracks with vertical differential movement. Do not use over cracks >1/8" (3 mm) in width.

Do not bond to particle board, OBS, interior glue plywood or hardwood surfaces.

Do not expose to negative hydrostatic pressure.

WATER-STOP is not designed for use as a wearing surface or exposed roof membrane. It must be covered with ceramic tile, stone, brick, concrete, screeds, terrazzo or other protective surface. For temporary cover, use protection board.

Do not expose membrane directly to sun or weather for more than 5 days.