

## W-S BOARD

**Description:** Lightweight ready to tile backerboard to be used in showers, tub surrounds and steam showers installations. It is made with a high-density XPS foam core and faced with WATER-STOP waterproof membrane. W-S BOARD is designed to be cost effective providing quick and easy waterproof installation and simplifying joints banding labor thanks to its unique 2 ½" WATER-STOP membrane overlap.

WATER-STOP load bearing, bonded waterproof membrane is a IAPMO Listed Product: File Number 9205 9990.

Normative References: IAPMO PS 106, ANSI A118.10, ASTM E96, TCNA Handbook



PROPERTY	TEST METHOD	VALUE
Nominal density	ASTM C303	2.5 pcf
Compressive strength	ASTM D1621	48 psi
Flexural strength	IAPMO Z24	Pass
Area Impact Load Test	IAPMO Z24	> 1.1 %
Waterproofness	ASTM D4068	Pass
Water Vapor Transmission	ASTM E96 Proc. E	0.3 Perm
Fungus and Mold Growth Resistance	PS 106 - 5.5	Pass
Thermal resistance (R-value)	ASTM C518	2.2
Shear Strength between the tile and the backing surface		
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

### W-S BOARD SIZES:

- W-S BOARD 4' x 8' x 1/2"
- W-S BOARD 3' x 5' x 1/2"
- W-S BOARD 3' x 5' x 1/2" Pre cut at 3' x 2.5'

## **AREAS OF APPLICATION / USES**

W-S BOARD is suitable for interior applications to be used in ceramic and stone tile installation on walls, floor and ceilings. Residential and commercial shower stalls and tub surrounds, steam rooms and steam showers. Creating shower niches, curbs, shelves, back splashes and counter tops.

Use under floor heating mats as an insulating layer.

# TECHNICAL DATA SHEET



#### **SUITABLE SUBSTRATES**

- Brick, masonry surfaces, concret.
- Wood or metal studded walls.
- Wood Studs: Nominal Dimensions 2" x 4" (5 x 10 cm) minimum with maximum span of 16" o.c. (41 cm).
- Steel Studs: Minimum Thickness 20 gauge with maximum span of 16" o.c. (41 cm).
- Wood Floors: Framing maximum 16" (41 cm) on center joist spacing. Subfloor: Minimum thickness 3/4" nominal (19 mm) exterior grade plywood or OSB fastened and glued to joists.

#### **LIMITATIONS / CAUTIONS**

- Not for use in exterior applications.
- Do not expose unprotected W-S BOARD to sun for more than 30 days.
- W-S BOARD must be covered with ceramic tile, stone, or other hard finish. If WATER-STOP facer on the board is punctured during installation, treat with W-S Sealant or polyurethane sealant. Apply sealant and spread to cover the punctured area and 2" (50 mm) around.
- If installing bathroom fixtures such as grab bars in showers or other heavy objects, the fixtures must be anchored in the structure or solid blocking behind W-S BOARD.

### **INSTALLATION**

#### Cutting:

Use a utility knife to cut to size and to make cutouts for pipes and fixtures.

#### Fastening:

Fasten boards directly to studs using W-S Board Screw and corresponding W-S Board tab washers. Use wood screws for wood studs and self-tapping screws for metal studs. The selected screws must be of sufficient length to reach a depth of at least 3/4" (19 mm) in wood studs and at least 3/8" (10 mm) in metal studs.

- Walls: Screws should be maximum spaced 12" o.c. (30 cm) vertically and 16" o.c. (41 cm) horizontally.
- Ceilings: Screws should be maximum spaced 6" o.c. (15 cm).

Beginning at the bottom of the wall, install W-S Board to the wall studs by using the appropriate fastener.

About the individual panels over the center of the studs.

Drive fasteners into field of panel first, working towards ends with perimeter screws at least 5/8" from ends. Hold panel in firm contact with framing while driving fasteners.

Note: For tub walls first apply a bead of W-S Sealant adhesive along the top edge of the tub and immediately install the W-S Board.

#### Joining and waterproofing:

W-S Board is waterproof, but for a waterproof installation all joints, corners, pipe penetrations and fasteners must be sealed.

The unique 2 1/2" WATER-STOP membrane overlap of W-S BOARD allows treat panel joints and transitions with adjacent areas.

Apply modified thin-set mortar with a 1/4" x 3/16" (6 mm x 5 mm) V-notched trowel. Use polymer modified thin-set C2 class per ISO 13007-1 or meeting without additives ANSI A118.4, A118.11, or A118.15.

Lay the overlap and press firmly into the adhesive. Remove any trapped air and guarantee full adhesion to the material by spreading the adhesive from the inside out using a margin trowel or similar. All excess adhesive should be spread thin ensuring a continuous seal.

Treat fastener penetrations with W-S Sealant or polyurethane sealant. Apply only enough sealant to succinctly cover the screw head and then strike flush using a margin trowel or similar.

Use W-S BAND sealing tape, inside or outside W-S CORNERS, W-S Mixing Valve Seal and pipe collars to complete sealing treat.

The tiles can be installed immediately using polymer modified thin-set C2 class per ISO 13007-1 or meeting without additives ANSI A118.1, or A118.15. Choose a notched trowel to match the tile format.