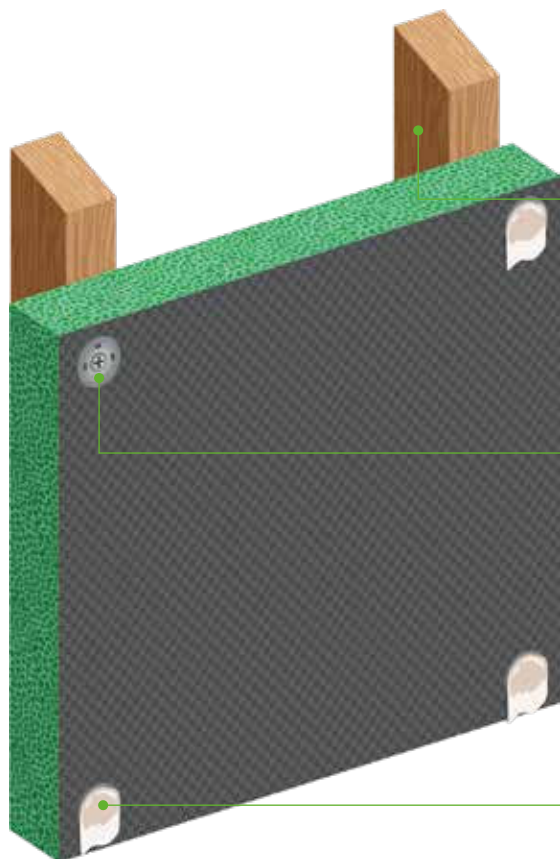




HydroBlok ONE Sheathing is an advanced structural sheathing board engineered to provide superior moisture resistance, thermal insulation, structural performance, and ease of installation. HydroBlok Sheathing is designed for both residential and commercial applications, meeting stringent performance requirements.



System Components Include:

HydroBlok Sheathing Boards:

- Board Dimensions: 4' x 8' sheets.
- Thickness Options: 1/2".
- Core Material: Extruded polystyrene (XPS) foam.
- Surface Coating: Proprietary cementitious coating with embedded fiberglass mesh for enhanced durability.

Approved Mechanical Fasteners:

- HydroBlok screws and washers or HydroBlok washer-less screws for mechanical attachment to wood or metal framing.

Adhesive:

- Optional adhesive provides exceptional strength to wall assemblies where additional load requirements are necessary.

Seam/Base Coat:

- Prevents water and air penetration at board seams.

PRODUCT DATA

Available Sizes:

SKU	DESCRIPTION	UOM	Board Weight
HBWB489612	48" x 96" x 1/2"	75/Pallet	22.8 lbs

KEY FEATURES

High-Performance XPS Core: The XPS core of HydroBlok ONE Sheathing provides an exceptional R-value of 4 per inch of thickness, making it an excellent choice for thermal insulation. This high thermal resistance significantly reduces heating and cooling demands, leading to energy savings over the building's lifespan.

Cementitious Coating with Fiberglass Mesh: A proprietary cementitious coating, embedded with fiberglass mesh, enhances the board's strength and durability. This coating forms a weather-resistant barrier that protects the XPS core from environmental exposure, including UV radiation and physical impacts.

The fiberglass mesh reinforces the sheathing, preventing cracking and maintaining structural integrity under stress.

Moisture Resistance: HydroBlok ONE Sheathing is designed to resist water absorption, unlike traditional wood boards, which swells and deteriorates when exposed to moisture. This property ensures that HydroBlok maintains its structural integrity and thermal performance even in wet or humid conditions.

Lightweight and Easy Installation: HydroBlok ONE Sheathing is significantly lighter than traditional OSB or plywood sheathing, making them easier to transport and install. Boards can be cut with a simple utility knife eliminating the need for power tools. This can reduce labor costs and speeds up construction timelines.

Fire Resistance: HydroBlok features a Class A flame spread rating, ensuring superior surface burning characteristics compared to traditional OSB. This high level of fire performance makes it suitable for applications requiring enhanced fire safety without the need for additional surface treatments.

Fungal and Bacterial Resistance: HydroBlok's cementitious coating is naturally resistant to mold, mildew, and fungi, making it an ideal choice for all environments. This feature ensures healthier indoor air quality and reduces maintenance costs over time.

Structural Integrity: HydroBlok ONE Sheathing maintains its shape and structural integrity under fluctuating environmental conditions, unlike OSB, which can warp, swell, or delaminate. This stability ensures long-term performance and durability in demanding applications.

Sustainability: HydroBlok ONE Sheathing is manufactured using eco-friendly and recyclable materials, free of CFCs and HCFCs. Their lightweight nature reduces transportation emissions, and their high thermal efficiency contributes to reduced energy consumption in buildings.

APPLICATIONS

Residential Construction: HydroBlok ONE Sheathing is ideal for exterior walls in single-family homes, multi-family dwellings, and townhouses. Its lightweight design simplifies handling and installation, while its thermal insulation properties enhance energy efficiency, contributing to reduced utility costs for homeowners.

Commercial Construction: Suitable for office buildings, retail spaces, and mixed-use developments. HydroBlok Sheathing provides the structural strength and durability required for high-traffic environments. Its fire resistance and moisture resistance ensure compliance with stringent building codes for safety and performance.

High-Moisture and Humidity Areas: Perfect for regions with frequent rainfall, snow, or high humidity levels, HydroBlok's moisture-resistant properties prevent swelling, warping, and deterioration. This makes it an excellent choice for coastal buildings, tropical climates, and wet areas.

Renovations and Retrofits: HydroBlok's easy-to-install design makes it a cost-effective choice for upgrading older buildings. It is particularly beneficial for energy efficiency retrofits, where its high R-value can help meet modern energy codes and reduce heating and cooling costs.

TECHNICAL PROPERTIES

Specification	Testing Standard	Result
🔥 Flame Spread	ASTM E84	Class A
🔥 Fire Resistance	ASTM E119	1 Hour
💧 Water Absorption	ASTM C578	Less than 1%
💧 Water Vapor Transmission	Meets ASTM C578	Meets ASTM E96
💧 Freeze/Thaw Resistance	ASTM C666	PASSED
💧 Fungus/Bacteria Resistance	ASTM D4551-12	PASSED
Density	N/A	Min 2LB/FT3
Compressive Strength	ASTM D1621	>36psi
Thermal Resistance	ASTM C518	R4 Per Inch of Thickness
Tensile Strength	ASTM D1623	>33psi
Linear Expansion	ASTM D1037	0.005%
Shear Testing	ASTM E72	PASSED
VOC Emissions	ISO 16000-3: 2021	Zero
Adhesive Compatibility	ASTM C1397	ASTM C1397 Compliant

Disclaimer:

Achieves a 1-hour fire rating in certain wall assemblies. Ask for more details.

PERFORMANCE DATA

Shear Testing (ASTM E72):

Configuration 1 (Fasteners Only):

- Maximum Load: 2084 lbf.
- Shear Strength: 261 plf.

Configuration 2 (Fasteners + Adhesive):

- Maximum Load: 5111 lbf.
- Shear Strength: 639 plf.

BASIC INSTALL

- 1 Substrate Preparation**
Ensure wood or metal framing is level, clean, and free of debris. Use framing members spaced 16 inches on center for optimal support.
- 2 Board Attachment**
Install boards vertically or horizontally as required. Use HydroBlok-approved screws with washers to secure boards, ensuring a penetration depth of at least 1 inch into the framing. Stagger seams at least 24" for optimum strength.
- 3 Seam Treatment**
Apply HydroBlok Joint Sealant or equivalent between all boards to prevent water and air penetration at board seams. Apply Joint Sealant to exposed foam between boards. Push boards together squeezing out any excess sealant and fasten boards as per step 2. Flatten excess sealant on face of board with a putty knife.

DESIGN CONSIDERATIONS

When specifying HydroBlok Sheathing, the following design considerations should be taken into account:

Board Orientation and Layout: Boards can be installed vertically or horizontally, depending on the specific wall assembly requirements.

Stagger vertical seams for increased structural stability and reduced joint stress.

Structural Framing Requirements: HydroBlok Sheathing can be installed on wood or steel framing with studs spaced at 16 inches on center.

Use proper fastening methods, such as screws with washers, to meet structural and shear strength requirements.

For areas with high wind loads, use of adhesive and additional fastening or bracing may be required as per local building codes and standards to ensure adequate attachment.

Thermal Performance: Consider HydroBlok's R-value when designing for energy efficiency and compliance with energy codes such as IECC.

Incorporate insulation continuity to minimize thermal bridging.

Fire Safety Requirements: HydroBlok Sheathing is fire-rated to 1 hour (ASTM E119) when installed as part of specific assemblies. Verify compliance with local fire safety codes and regulations.

COMPLIANCE & STANDARDS

ASTM E72: Racking shear tests for structural boards.

ASTM E119: Fire-resistance ratings for wall assemblies.

ASTM C518: Thermal resistance (R-value) testing.

ASTM C578: Water absorption testing for XPS materials.

LIMITATIONS

Not Intended for Continuous Immersion: HB ONE should not be installed in environments subject to prolonged water immersion, such as below-grade foundation walls or areas where the system would be submerged.

UV Exposure Protection Recommended: While durable, the HB ONE system must be finished with an appropriate UV-protective coating to prevent degradation from long-term exposure to sunlight.

Efflorescence Risk: Cementitious surfaces may experience efflorescence when exposed to prolonged moisture prior to finishing. Proper storage and handling can mitigate this risk and is completely normal and won't affect the board's performance or structural integrity.

Seam Requirements: All seams must be properly taped and sealed to ensure optimal performance. HydroBlok brand or similar mesh tape is recommended. Failure to do so may result in moisture infiltration or reduced structural stability.

Roofing Applications: HydroBlok ONE Sheathing has not yet been tested or approved for use in roofing applications. Use in roofing scenarios is not recommended until further testing and validation are completed.

PACKAGING & STORAGE

Packaging: Boards are shipped on pallets, wrapped for protection.

Storage: HydroBlok ONE Sheathing should be stored in a dry area off the ground prior to use to prevent the formation of efflorescence.

Available Sizes:

Product	HBWB489612
Dimensions	48"x 96"x1/2"
Pieces Per Pallet	75
Sq. Ft per pallet	2,400
Weight per pallet	1,710
Quantity per truck	1,425
Max Pallets/truck	19
Sq. Ft per truck	45,600
Weight Per truck	32,490

WARRANTY

HydroBlok offers a Limited 10-Year Warranty, subject to the conditions and limitations as stated in the full warranty information. HydroBlok warrants that all its foam-based products will be free from all manufacturing defects and will not deteriorate or break down under normal use for 10 YEARS from the date of purchase when the product is used and installed in accordance with the written specifications of HydroBlok's technical data sheets, instructions and industry standard guidelines. Refer to full warranty details on the website for specific conditions and limitations

Job Name _____

Contractor _____ **Date** _____

CONTACT INFORMATION

For technical assistance, installation support, or further inquiries, please contact:
HydroBlok Support Team
sales@hydroblok.com OR 844-588-9559