

TechBoard®

MgO Sheathing, Backing Board & Underlayment



**MANUFACTURED IN
NORTH AMERICA**

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Protective Magnesium Oxide (MgO) Sheathing Sheathing, Underlayment & Backing Board

TechBoard® is a high-performance sheathing, backing board and underlayment engineered with ZS2 Technologies' proprietary Magnesium Oxide (MgO) cement technology. Combining advanced material science with environmental responsibility, TechBoard™ delivers exceptional strength and climate resilience without compromising on performance.

The Benefits

- Fire Protection. Flame spread index of 10 or less and a smoke developed index of 5 or less meeting Class A requirements
- When added to wall studs, significantly reducing the risk of twisting and bending caused by external forces such as wind, seismic activity, and building shifts
- Withstands extended exposure to moisture and does not delaminate

The Applications

- Eliminates the need for conventional OSB or plywood sheathing
- Lends structural support to walls in Type I, II, III, IV and V construction
- Enhances the structural integrity of wall assemblies by reinforcing and binding wall studs together

TechBoard® Designed For:

- Interior and Exterior Sheathing
- Fire-rated walls
- Ceilings
- Subfloor
- Tile Backer board
- Wall Sheathing for Wet-Rated Areas



Multiple Edge Profiles

- Square
- Tongue & Groove

Structural Core

Reinforced with 4 layers of alkaline resistant fibreglass mesh



TechBoard® Advantages

Material Properties

Leading MgO cement technology to safeguard your investment

- MgO Technology
- Fire Resistant
- Water Resistant
- Mold Resistant
- Humidity Control
- Pest Resistant

Onsite Benefits

Where the benefits of offsite construction meet onsite efficiency

- Less Waste
- Quality Control
- Reduced Schedule
- Reduced Labor
- Cost Certainty

Sustained Value

Long term support

- Sustained Structural Integrity
- Climate Resilient
- Reduced Operational Costs
- Sustainable Material

Available Sizes

Nominal Product Thickness	Edge Profile	Standard Sizes	Weight Per Board*	R-Value per inch
1/4"	Square	4' x 8' (1219 mm x 2438 mm)	40 lbs	1
1/2"	Square	4' x 8' (1219 mm x 2438 mm)	80 lbs	1
1/2"	Square	4' x 9' (1219 mm x 2750 mm)	90 lbs	1
1/2"	Square	4' x 10' (1219 mm x 3050 mm)	100 lbs	1
3/4"	Tongue & Groove	4' x 8' (1219 mm x 2438 mm)	150 lbs	1

*Average board weight may vary

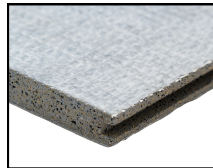
Edge Profiles



**Square
Edge Profile**

Best for:

- Wall sheathing
- Backing board



**Tongue & Groove
Edge Profile**

Best for:

- Subfloor
- Underlayments



CERUS-1009

Meets Requirements

Most Commonly Specified



48" x 96" x 1/2"

1219 mm x 2438 mm x 12.7 mm



48" x 108" x 1/2"

1219 mm x 2743 mm x 12.7 mm



48" x 120" x 1/2"

1219 mm x 3048 mm x 12.7 mm

Have a project in mind? Get in touch.

ZS2's building materials are available across North America. We have regional TechPartners and construction experts ready to support and help you **cement** the details.

info@ZS2technologies.com | zs2technologies.com

Physical Properties

Property	Method	Value	MAX Supporting Spacing	Edge / Field Spacing	Code Evaluation Report		
Flame Spread / Smoke Development Index (TechBoard™)	ASTM E84	0 / 0			<u>CERUS-1009</u>		
	CAN/ULC S102	0 / 7					
Fire Resistance (TechBoard™)	NFPA 286	PASS					
	ASTM E119 CAN/ULC S101	1hr & 2hr					
	CAN/ULC S135	PASS					
Mold & Mildew (TechBoard™)	ASTM C1138	PASS					
	ASTM C1138	PASS					
Vapour Permeance (TechBoard™ 1/2")	ASTM E96 (Procedure A)	2.2 US Perms (125.02 ng/Pa·s·m ²)				10 ft	2.5" ring shank nail @ 3" o.c / 12" o.c
Transverse (TechBoard™)	ASTM E72	45 lbf				24'	Staples @ 3" o.c
	ASTM E72	57 lbf				24'	#8 screw @ 6" o.c
Racking (TechBoard™)	ASTM E72	162 lbf	16'	Staples @ 3" o.c			
	ASTM E72	178 lbf	16'	#8 screw @ 6" o.c			

*The links embedded under the *Code Evaluation Report* column will redirect to their respective published reports.

Testing Standards

- **CAN/ULC-S101** - Standard Test Methods for Fire Tests of Building Construction and Materials.
- **ASTM E119** - Fire Endurance Tests of Building Construction and Materials.
- **CAN/ULC S102** - Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.
- **ASTM E84** - Standard Test Method for Surface Burning Characteristics of Building Materials.
- **CAN/ULC S135** - Standard Test Method for the Determination of Combustibility Parameters of Building Materials Using an Oxygen Consumption Calorimeter (Cone Calorimeter).
- **NFPA 286** - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth.
- **ASTM C1138** - Standard Test Method for Abrasion Resistance of Concrete (Underwater Method).
- **ASTM E96** - Standard Test Methods for Water Vapor Transmission of Materials.
- **ASTM E72** - Standard Test Methods of Conducting Strength Tests of Panels for Building Construction.

Handling & Use

All materials should be delivered and stored in their original unopened package and stored in an enclosed shelter providing protection from damage and exposure to the elements.

Please refer to ZS2 Install Drawings, Specifications and Instructions for installation of your individual project.

Visit zs2technologies.com/construction-solutions/techboard/technical-documents or contact a ZS2 representative for more details.

Fastening

Mechanical fastener: Cement board screws, stainless steel staples, stainless-steel wood screws, or coated wood screws with a minimum salt spray coating of 800 should be used. Proper spacing and installation methods should be followed to avoid damaging the sheathing.

Finishing

All interior and exterior finishes must be approved by the local building authority with jurisdiction. ZS2 defers to traditional finishing methods, ensuring that all internal and external finishes comply with local building codes. Standard industry practices should be followed, integrating appropriate supplementary materials as required by conventional construction methods and specific project needs. Refer to project architect, or envelop engineer for specifications of exterior finishes.

Warranty

10 Year Limited – Prorated – Nontransferable Warranty.

Visit www.zs2technologies.com/warranty or contact a ZS2 representative for details.

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