

DuPont™ ArmorBoard Plus Fire-Rated (FR) Structural Sheathing Returns

Precision Cut Returns for DuPont™ ArmorWall Systems

FEATURES/BENEFITS

Description

For Professional Use Only. DuPont™ ArmorBoard Plus Fire-Rated (FR) Structural Sheathing Returns are a 1/2" Magnesium Oxide (MgO) board utilized in punched opening applications, or where field returns vary from standard provided sizes. **ArmorBoard Plus FR Structural Sheathing Returns** offer a rapid plane transition to the structural surface while providing fire, air, and water-resistant barrier surfacing.

ArmorBoard Plus FR Structural Sheathing Returns come coated with a factory-applied, high quality air and water-resistive barrier on the exterior sheathing layer.

Product Benefits:

- **Fire-Resistant:** Can be used in fire-rated assemblies as required.
- **Air and Water-Resistant:** Passes ASTM E331 and ASTM E283 as part of a water and air barrier assembly, respectively.
- **Saves Labor Time and Costs:** Precision cut in the factory to help reduce installation time around punched openings.

Available Sizes

- **ArmorBoard Plus FR Structural Sheathing Returns** are offered in 8-0' lengths, with widths to match the depth of the assembly.



PROPERTIES

Typical Physical Properties for DuPont™ ArmorBoard Plus FR Structural Sheathing

| Property | Test Method | Value |
|------------------------------------|--------------------|---------|
| Flexural Strength (psi) | ASTM C1185-08 | 1,800 |
| Tensile Strength (psi) | ASTM D3500-90 | 425 |
| Compressive Strength (psi) | ASTM D3501-05a | 1,440 |
| Fastener Pull Through (lbf) | ASTM D1761 | 300 |
| Fastener Lateral Capacity (lbf) | ASTM D1037-12 | 245 |
| Flame Spread/Smoke Developed Index | ASTM E84 | 0 / 0 |
| Water-Resistant | ASTM D2559-10a | Yes |
| Vapor Permeable | ASTM E96, Method B | 8 perms |

TESTING

Applicable Standards

DuPont™ ArmorBoard Plus FR Structural Sheathing Returns, when used with an approved DuPont™ ArmorWall System, meets various ASTM Testing Standards. Applicable standards include:

- ASTM C1185-08, Section 5 - Flexural Strength (Modulus of Rupture) after exposure to:
- ASTM C1185-08
- ASTM D7032-14, Section 4.5.1 - Temperature Effects
- ASTM D2559-10a, Section 15.3 - Water Soak Cycles
- DOC PS 2-10, Section 7.17 - Six-Cycle Test
- ASTM C666-03(2008), Method B
- ASTM D7032-14, Section 4.6 - Ultraviolet (UV) Resistance Test
- ASTM C1185-08, Section 6 - Density
- ASTM C1185-08, Section 10 - Moisture Content
- ASTM D2718-00(2006), Method B - Planar Shear by Five-Point Bending
- DOC PS 2-10, Section 7.10 - Linear and thickness expansion measured by exposure to relative humidity
- ASTM D3500-90(2009), Method A - Tensile Properties of Small Specimens
- ASTM D3501-05a, Method B - Compression Test for Large Specimens
- ASTM D1037-12, Section 13 - Fastener Lateral Resistance
- ASTM D1037-12, Section 14 - Fastener Withdrawal
- ASTM D1037-12, Section 15 - Fastener Head Pullthrough
- AWPA E12-94 - Corrosion of Metals
- ASTM D6815-09(2015) - Duration of Load and Creep Effects modified by ASTM C1185-08 and ASTM D2990-09, Section 10.2.1
- ASTM E228-11 - Linear Thermal Expansion
- ASTM G21-15 - Resistance to Fungi
- ASTM E84-15a - Surface Burning Characteristics

Contact your DuPont sales representative or local authorities for state and local building code requirements and related acceptances.

Notice

DuPont™ ArmorBoard Plus FR Structural Sheathing Returns comply with the following codes:

- NFPA 285 - Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components

Warranty

Ten-year limited warranty may be applicable when used as a component in the DuPont™ ArmorWall System. Visit www.ArmorWall.DuPont.com or contact your DuPont representative for details.

HANDLING

WARNING: For Professional Use Only – Read and follow the entire Handling section and the Safety Data Sheets carefully before use. The information below is designed to protect the user and allow for safe use and handling of DuPont™ ArmorBoard Brand products. Follow all applicable federal, state, local and employer regulations.

Handling and Use

- **ArmorBoard Plus FR Structural Sheathing Returns** can be cut and installed using standard jobsite hand tools.
- When being cut to size, it is recommended to wear safety gloves, glasses, and a mask to avoid breathing dust and minimize contact with eyes.
- **ArmorBoard Plus FR Structural Sheathing Returns** should be stored off the ground in original shipment condition until ready for installation.
- Avoid ground contact or continuous exposure to moisture and direct sunlight.
- Some cupping of the panel is expected during shipment and can be rectified during installation by beginning installation from the center of the panel and working outward per the fastener standard of the designed application.

Product Limitations

- Do **NOT** use an impact drill to fasten cladding or attachments to the panel.
- First fastener must be within 2" of the edge with subsequent fasteners to be 12" O.C. staggered into framing of opening.
- Direct applied mortar/base/bond coat stucco applications require utilization of a slip sheet or drainage plane for capillary break.
- **ArmorBoard Plus FR Structural Sheathing Returns** can remain uncovered once installed on the wall assembly for a period **not to exceed 30 days**.



**For more information visit us at
armorwall.dupont.com
or call 1-800-448-9835**

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