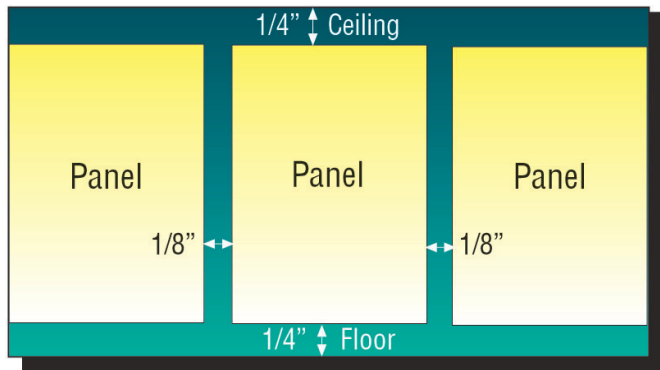


General Installation Instructions For Exceliner Wall & Ceiling Liner Panels



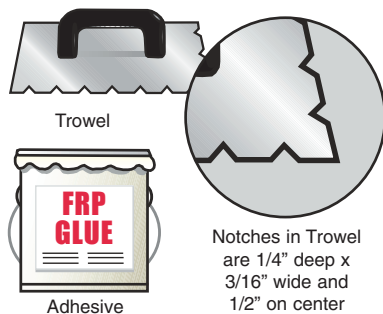
Preparation

Exceliner panels should only be installed over solid wall surfaces (wood, gypsum board, concrete, etc.). Wall surfaces should be clean, flat, dry and smooth. Panels should only be stored indoors, in a dry area and be inspected upon receipt in a well lit area to insure customer satisfaction before installation.



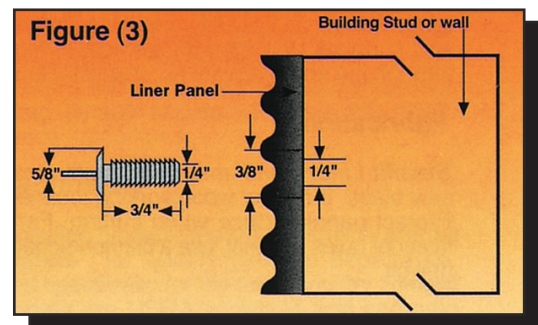
Adhesives

Adhesives are recommended for use on Exceliner Panels. Follow manufacturer's instructions carefully as many adhesives are FLAMMABLE, and some may not be compatible with paneling. When using adhesive, spread over entire back of panel, using the recommended notched trowel method. Make sure that adhesive is in full contact with the backing.



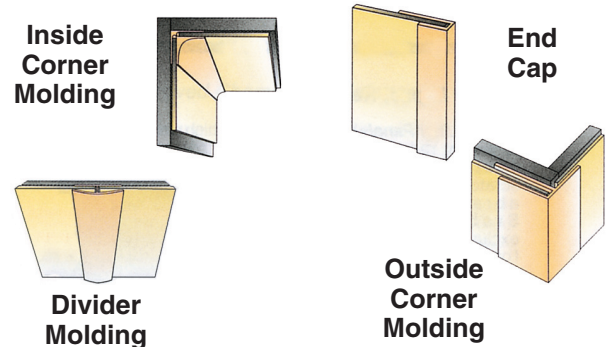
Tools

Panels can be cut using power saws with a carbide tip or masonry blade. Caution: Protect eyes with goggles and cover mouth with filter mask when cutting Exceliner Panels.



Moldings and Sealants

Vinyl moldings should be placed at all joints for proper panel installation. Available color matched moldings are shown below. Use of moldings and silicone sealant with panels is recommended to achieve a moisture resistant installation. Always leave 1/8 inch between panels and molding for expansion and contraction of the panels.



DISCLAIMER and LIMITATION of Liability: The information contained in this literature is presented in good faith, and is believed to be accurate and reliable at time of publication. No representation, guarantee or warranty is made as to the completeness, reliability or accuracy of this information. This also included NO IMPLIED WARRANTY OR MERCHANT ABILITY OR FUNCTIONAL USE FOR SPECIFIC APPLICATION.

For more detailed installation instructions, please contact us at www.grahamfrp.com

Exceliner Panel Technical Bulletin #0741

Maximum Sanitation Protection

Exceliner's advanced liner panel systems are designed to offer maximum sanitation protection and significant cost savings over other materials. Our liner panels are designed to fit any commercial application. Developed specifically for the food industry, Exceliner panels are USDA & Agriculture Canada approved and can help make any area meet today's sanitation standards.

Outstanding Cleanability

Exceliner panels are extremely resistant to moisture and easily cleaned with regular detergents and water. With proper installation, Exceliner panels can make a watertight surface that will protect underlying walls and insulation. Exceliner panels may also be installed to form a bulwark against overhead contamination caused by conveyors, flaking paint and overhead operations. With minimum maintenance, these panels will retain their sparkling clean looks, and never need painting.

Improved Chemical Resistance

The unique antibacterial qualities of Exceliner panels help solve a multitude of sanitation problems. Tested against a wide range of chemicals, they are highly resistant to milk acids, alkalis and most common solvents. In addition, they are rustproof and mildew resistant.

High Impact Resistance

Exceliner panels have an extremely high strength to weight ratio with a tough surface that resists shattering, scratches and abrasions. Because of its "bounce back" quality, our panels are perfect for protecting truck trailer walls from pallets, sliding boxes and crates during shipping operations. They are also used as scuff plates in trucks and as wainscoting in production plants to protect against hand truck and forklift damage.

Approvals & Certifications

- **ISO 9002:** All Exceliner plants are ISO 9002 Certified.
- **ASTM:** All Exceliner Panels are manufactured according to industry standard ASTM D-3841-97.
- **Agriculture Canada:** All Exceliner Panels are accepted for use in Registered Establishments by Agriculture Canada.
- **CAN/ULC-S102-M88:** Standard method of test for surface burning characteristics of building materials
- **USDA Approved**
- **ICBO Approved**

Specifications:

Product: Exceliner Fiberglass Reinforced Interior Grade Wall & Ceiling Liner Panel
Surface: Texture One Side/Smooth Both Sides
Dimensional Tolerances: Width-Length-Diagonal Squareness +/-1/8"(up to 144")
Colors: White, Almond, Light Gray, Dark Gray, Beige, Silver, Ivory & Marble
Thickness Available: (+/-10%)
Series: 1600-.125"
Series: 1200-.090"
Series: 180-.060"
Series: 160-.045"
Width: Standard 4 Ft.
Length: 8,9,10 and 12 Ft.
Accessories: PVC Moldings available
Recommended Adhesive: (water based) Franklin Titebond®#4054

Laminated Panels (plywood, gypsum board & foam, etc.) are also available

Typical Physical Properties (Series 3000)

Property	Test Method	Unit	Exceliner Class C General Purpose Result	Exceliner Class A Fire Retardant Result
Flexural Strength	ASTM D-790	PSI	17,000	10,000
Flexural Modulus	ASTM D-790	PSI	6.0 x 10(5)	3.1 x 10(5)
Tensile Strength	ASTM D-638	PSI	8,000	7,000
Tensile Modulus	ASTM D-638	PSI	9.43 x 10(5)	3.1 x 10(5)s
% Elongation	ASTM D-638	%	1.20	1.80
Water Absorption 21°C @ 72hrs.	ASTM D-570	%	0.17s	0.72
Izod Impact Strength	ASTM D-256	ft.-lbs./in.	7.0	7.16
Coef. of Linear Thermal Expansion	ASTM D-696	in./in./°F	2.22 x 10(-5)	2.39 x 10(-5)
Barcol Hardness	ASTM D-2583	Avg.	30	35
Specific Gravity	ASTM D-792	N/A	1.6138	1.5743
Abrasion Resistance	TABOR W/L	% WT Loss	0.293	0.391
Flash Ignition Temp.	ASTM 1929	°C	430	400
Self Ignition Temp.	ASTM 1929	°C	450	430
Flame Spread	ASTM E-84	N/A	<150	<25
Smoke Generation	ASTM E-84	N/A	<450	<450



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