



Glasliner

**WALL AND CEILING
LINER PANELS**



RESIDENTIAL



INDUSTRIAL



COMMERCIAL



ARCHITECTURAL



QUALITY, COMMITMENT AND INNOVATION

Glasteel, with more than 60 years of experience, is one of the largest manufacturers of Fiberglass Reinforced Panels in the North American Market supported by three state-of-the-art manufacturing plants (all ISO 9001:2008 Certified) and three strategically located distribution centers. Our mission is to offer value added products with the highest quality standards, competitive pricing and best customer service of the industry.

Glasliner FRP meets many of today's demanding applications that require high sanitation needs. These applications range from restaurants and supermarkets to restrooms and storage areas. Glasteel's process uses a special type of high strength polyester resin combined with fiberglass reinforcement to produce liner panels offering superior quality and durability. The result is a panel with a resin rich surface that is tough, strong and easy to clean.

The best products, service, price and selection all under one brand.

RESIN RICH SURFACES THAT ARE TOUGH, STRONG AND EASY TO CLEAN



Maximum Sanitation Protection

- Meets USDA Standards
- Maximum sanitation protection
- Significant cost savings over other materials



Excellent Quality

- Years of dependable performance
- Resin rich surface that is tough & easy to clean
- Meets today's high sanitation standards



Moisture Resistant

- Does not support mold or mildew
- Will not rust or corrode



Highly Impact Resistant

- Extremely high strength to weight ratio
- Tough surface that resists shattering, scratches and abrasions



Outstanding Cleanability

- Cleans with regular detergents and water



Low Cost Installation

- Easy to handle and install in any type of construction, and over any type of existing wall surface
- No special tools needed
- More economical than stainless steel or ceramic tile



Improved Chemical Resistance

- Resists stains
- Rust proof - will not corrode
- Minimum maintenance and never needs painting



Superior Flexibility

- Panels are flexible enough to lay flat, allowing a better fit into areas with close tolerance seams



Custom Designed Liner Panels

- Available in 5 different standard panel thicknesses
- Shipped in standard 4 foot width and in 8, 9, 10 and 12 foot lengths

WALL PANEL SPECIFICATIONS

Glasliner FRP is available in the following sizes:

Series	Nominal Thickness
1600	0.120"
1200	0.090"
180	0.060"
160	0.045"

Width: Standard 4'

Length: 8', 9' and 10'



APPROVALS AND CERTIFICATIONS

- **ISO 9001:2008** All Glasteel plants are ISO 9001:2008 Certified
- **Meet USDA/FSIS requirements**
- **Canadian Food Inspection Agency (CFIA) accepted**
- **ASTM:** All Glasliner FRP liner panels are manufactured according to industry standard ASTM D-5319-2008
- **Fire Ratings:** Glasliner panels are available in multiple fire ratings, such as Class C (general purpose) and Class A (fire retardant). Please contact your Glasteel representative for test results.

Typical Physical Properties for 0.090" Contractor Grade				
Property	Test Method	Unit	Glasteel Class C General Purpose Result	Glasteel Class A Fire Retardant Result
Flexural Strength	ASTM D-790	PSI	17,000	10,000
Flexural Modulus	ASTM D-790	PSI	6.0x10 ⁵	3.1x10
Tensile Strength	ASTM D-638	PSI	8,000	7,000
Tensile Modulus	ASTM D-638	PSI	9.43x10 ⁵	3.1x10 ⁵
% Elongation	ASTM D-638	%	1.20	1.80
Water Absorption 21° C 72 hrs.	ASTM D-570	%	0.17	0.72
Izod Impact Strength	ASTM D-256	ft. - lbs.	7.0	7.16
Coef. of linear Thermal Expansion	ASTM D-696	in./in./°F	2.22 x10 ⁻⁵	2.39x10 ⁻⁵
Barcol Hardness	ASTM D-2583	Avg.	30	35
Specific Gravity	ASTM D-792	N/A	1.6138	1.5743
Abrasion Resistance	TABER	% 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	≤200	≤25
Smoke Generation	ASTM E-84	N/A	<450	<450



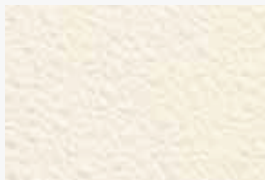
STORAGE RECOMMENDATIONS

- Store panels indoors in a cool, dry, well-ventilated area
- Panels should be stacked in skids no more than 5 skids high
- Do not allow moisture to collect on or in-between panels

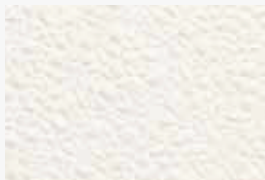
Color Selections



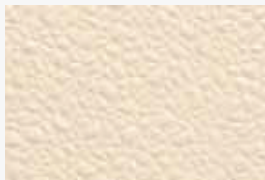
Bright White



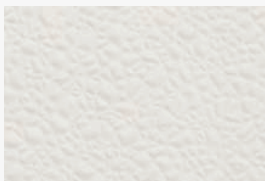
Almond



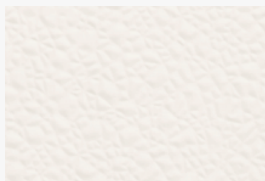
Ivory



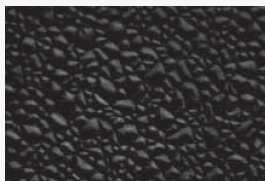
Beige



Light Gray

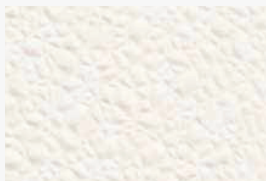


Silver

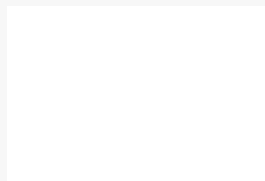


Black

Finish Selections



Traditional
Pebbled Finish



Premium Gel Coat
White only. Colors are
Special Order



INSTALLATION INSTRUCTIONS

Safety

- Use eye protection
- Wear filter mask to cover nose and mouth, especially when cutting
- Refer to our web site for recommended sealants and adhesives

Tools Needed

- Power or hand saw (fine tooth or carbide blade)
- Power or hand drill (carbide tip recommended)
- Carpenter's square
- Hammer, tape measure and level
- Adhesive and notched trowel
- Silicone sealant and caulking gun
- Vinyl moldings and 3/4" nylon fasteners
- Eye and Nose/Mouth Protection

PREPARATION

- It is important to store Glasliner FRP flat, on a clean, dry surface for 24 hours before installation. It is preferable to store them inside the actual area of installation or, at least, under similar climate conditions.
- Walls must be clean and free of all substances.
- Level any high or low spots on walls. Concrete block walls may require a leveling coat of plaster or other similar material.

CUTTING GLASLINER FRP FOR FLOOR TO CEILING HEIGHTS OF 8 FEET OR LESS

- Subtract 1/2" from height measurement to allow for expansion
- Allow for 1/8" expansion gap around pipes and other projections

DRILLING FASTENER HOLES:

- Pre-drill fastener holes before applying adhesive
- Fastener holes should be slightly oversize to allow for normal expansion and contraction
- Drill holes no further than 8" apart and 1" from outside edge, 16" apart on intermediate and on 16" centers

INSTALLATION REMINDERS:

1. Follow safety and fire guidelines during installation and use of panels
2. First panel installed should be set true with plumb line
3. Wall must be clean and flat
4. Use moldings, silicone, nylon rivets and adhesive for best installation
5. Apply adhesive per manufacturer's instructions
6. Install panels and moldings
7. Seal edges and moldings
8. Remove excess silicone
9. Clean panels after installation with light detergent



Installation of FRP Panels, in any application, should be approved by local building code officials before panels are ordered. Glasliner cannot ensure local code compliance in any or all situations. **NOTICE:** Panels and components made of fiberglass (FRP), wood, vinyl or foam may be combustible. **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 includes NO IMPLIED WARRANTY OR MERCHANT ABILITY OR FUNCTIONAL USE FOR SPECIFIC APPLICATION

ACCESORIES



Outside Corner



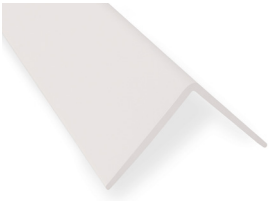
Division Bar



Inside Corner



End Cap



Outside Corner



Nylon Rivets



FRP Adhesive



Panel Adhesive
Allows new FRP panels to be applied over existing FRP panels



CEILING PANELS

APPLICATIONS

- Food processing areas
- Restaurants
- Bathrooms
- Storage rooms
- Schools
- Hospitals
- Many other applications where sanitation is required

CEILING PANEL SPECIFICATIONS

Sizes	23-3/4" x 23-3/4" 23-3/4" x 47-3/4"
Thickness	0.100"
Finishes	Textured or Smooth
Color	Standard Colors
Sag Tolerance	← 0.25"
Fire Rating	<ul style="list-style-type: none"> • Class C: General Purpose • Class A: Fire Retardant

EASY TO INSTALL

- Cut to size for easy installation
- Lightweight and easy to handle

MINIMAL DEFLECTION

- Panel formulation makes for a strong, rigid ceiling panel

CHARACTERISTICS



Moisture resistant - does not support mold or mildew



Rust proof - will not corrode



Stain resistant



High strength-to-weight ratio

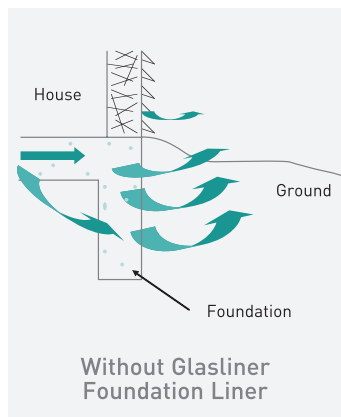
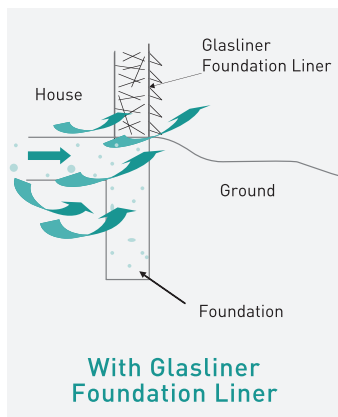
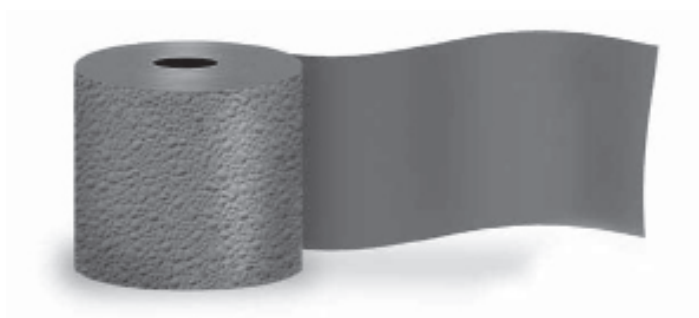


Easily removable for cleaning



FOUNDATION LINER

Glasliner can be installed directly to solid walls or over insulation. As an extra barrier of protection against moisture and insects, Glasliner also traps in the energy used to heat and cool your home.



FEATURES

- UV Resistant
- 0.060" thickness
- Stain, odor and moisture resistant
- Insect and pest resistant
- Shatter resistant
- Energy efficient
- Attractive gray pebbled finish adds value to your property
- Protects basements and crawlspaces from flooding
- Easy to install on both existing buildings and new construction
- Can be installed directly to solid walls or over insulation
- Stays strong and sturdy in any season
- 10 year Limited Warranty

SIZES

- Standard 50' lengths
- 1', 2' and 4' widths

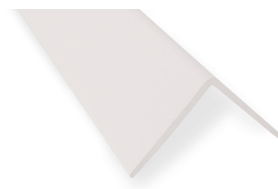
RECOMMENDED ACCESORIES



Division Bar



Inside Corner Angle
1 1/4" x 1 1/4"



Outside Corner Angle
1 1/4" x 1 1/4"



Nylon Rivets 1/4" Plastic Pins
Available up to 2"

* Savings from insulated foundations vary with fuel prices, heating equipment, performance and climate.



ISO 9002: All Glasteel plants are ISO 9002 Certified • ASTM D3841: Standard Specification for Glass Fiber Panel
• UL #R5214 Recognized Component Manufacturer • ICC ER-2364



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