

## Product Description

FRP is the wall and ceiling panel from Panolam Surface Systems for those high traffic installations requiring durability and high sanitary standards as well as moisture, mold, mildew and chemical resistance. This is the hardworking, easy-to-clean surface you need for utility and service areas. Available in a range of colors, FRP easily fits with any interior style. Panolam FRP is a product that resists extreme changes in temperature and humidity. Manufactured in standard building product sizes, it can be installed on most common substrates and finished with readily available seam and trim materials.

## CLASS C EMBOSSED, .090”

### Typical Uses

FRP is manufactured and tested to perform in locations such as: commercial kitchens, public restrooms, hospitals, schools, correctional facilities, restaurants, car washes, meat and dairy facilities, coolers and freezers, supermarkets, clean rooms and laboratories.

### Physical Properties

Property	Typical Value	Test Method
Flexural Strength, psi	14,000	ASTM D790
Flexural Modulus, psi x 10 <sup>6</sup>	0.69	ASTM D790
Tensile Strength, psi	10,000	ASTM D638
Tensile Modulus, psi x 10 <sup>6</sup>	1.08	ASTM D638
Izod Impact, ft-lb/in notched	4	ASTM D256
Barcol Hardness	53	ASTM D2583
Coefficient of Linear Thermal Expansion (x 10 <sup>-5</sup> in/in/°F)	3.51	ASTM D696
Water Absorption, %	0.2	ATSM D570
Surface Burning	Class C	ASTM E-84

### Specifications

Panels are produced in a continuous laminating process in various widths and lengths as required.

### Composition

1. Random chopped fiberglass roving reinforcement.
2. Resin mix: Polyester copolymer, inorganic fillers, pigments and catalysts.

### Finished Panel Quality

1. The top/outer side of the panels available in an embossed (pebble). Color specified is uniform throughout. The bottom/inner side of the panels are smooth. Imperfections on the inner side that do not affect panel performance are not cause for rejection.

2. Product quality standards:
  - a. Thickness: +/- 10%
  - b. Width and length tolerance: 1/8” up to and including 12’ lengths
  - c. Squareness less than or equal to 1/8”

### Fabricating Recommendations

1. Protective eyewear and a filtering mask should be worn when cutting FRP panels.
2. When drilling holes in panels, a high-speed carbide drill bit should be used.
3. When cutting panels, sheet metal shears may be used along with a circular saw with carbide-tipped blade.
4. Machine punch, band saws and table shear may also be used.

### Storage

All FRP Panels should be stored indoors.

### Temperature Range of Use

Panels will not be adversely affected in temperatures ranging from -40° F to 150° F. Uses beyond this range should be preapproved by the manufacturer.

### Inspection/Installation of Panels

Panels should be inspected on-site, prior to installation. If there are any defective areas that make the panels aesthetically unfit for use, contact Panolam immediately. Upon verification, the defective panel will be replaced by Panolam. Panolam’s sole responsibility is the replacement of defective material only, but not for labor or any other installation expenses.

Panels to be installed per manufacturer’s installation guide on web site.

## Chemical and Stain Resistance

Chemical and stain testing was completed on Panolam FRP panels using SEFA procedure 8, Section 8.1. Test panels were cleaned with soap and water and blotted dry prior to conditioning. Panels were conditioned for 48 hours at 73° ± 3°F (23° ± 2°C) and 50 ± 5% relative humidity (or the currently accepted ASTM guidelines). The panels were then tested using one of the following methods:

Method A: Volatile chemicals are tested by placing a cotton ball saturated with the reagent in the mouth of a 1-ounce bottle and inverting the bottle on the surface of the panel.

Method B: Non-volatile chemicals are tested by placing five drops of the reagent on the surface of the laminate and covering with a 24mm watch glass.

For both methods, the reagents are left of the panel for a period of 24 hours. The panel is then washed with water, cleaned with detergent and naphtha, rinsed with deionized water and dried with a towel. The effect of the different reagents is evaluated according to the rating system below, after the laminate has equilibrated at a temperature of 73° ± 3°F (23° ± 2°C) and relative humidity of 50% for 24 hours. SEFA criteria for laboratory grade finishes are no more than four Level 3 conditions. Please note that all testing was completed on white panels; non-white panels could show additional visual changes.

<b>Acids</b>	<b>Level</b>	<b>0 - No Effect</b>	<b>1 - Slight change in color or gloss</b>	<b>2 - Slight surface etch or surface stain</b>	<b>3 - Surface deterioration</b>
Acetic Acid	5.0%	X			
Acetic Acid	10.0%			X	
Acetic Acid, Glacial	99.5%			X	
Citric Acid	10%	X			
Hydrochloric acid	10%	X			
Sulphuric acid	3%	X			
Sulphuric acid	30%	X			
Nitric acid	10%		X		
Nitric acid	40%			X	
<b>Bases</b>					
Ammonium Hydroxide	10%		X		
Ammonium Hydroxide	28%		X		
Sodium Hydroxide	1%	X			
Sodium Hydroxide	5%	X			
Sodium Hydroxide	10%	X			
<b>Organic Chemicals</b>					
Formaldehyde	37%	X			
Hydrogen Peroxide	3%	X			
Hydraulic Fluid		X			
<b>Salts</b>					
Sodium Chloride	10%	X			
Sodium Chloride	60%	X			
<b>Solvents</b>					
Ethyl Alcohol	50%			X	
Naptha		X			
Hexane		X			
Toluene		X			
<b>Food and Household</b>					
Bleach	<3%	X			
Vegetable Oil		X			
Crayon				X	
Mustard		X			
Tea		X			
Shoe Polish (Black)				X	
Soap Solution		X			

\*All test results based on our knowledge of testing procedures

\*Tests results may differ by color

## Certifications

1. Meets requirements for Class C per ASTM-84.
2. NSF/ANSI 35 certified
3. Does not support mold or mildew and meets USDA/FSIS requirements
4. GREENGUARD certified
5. GREENGUARD Gold certified
6. Meets certification requirements for CAN/ULC S102.

## Cleaning and Maintenance

Cleaning FRP wall and ceiling panels on a regular basis is recommended in order to avoid soil or dirt build-up. Recommended cleaners and cleaning methods apply to both embossed and smooth finishes. FRP panels can withstand repeated cleanings without adverse effect.

A 5 - 10% solution of trisodium phosphate (TSP) and water, not to exceed 130° F, can be used successfully for routine cleaning. Most national home product stores will have TSP in stock. If TSP is not readily available, a 5 - 10% solution of household automatic dishwashing detergent or a mild commercially available cleaner can be used. If a USDA or FDA approved cleaner is required, a neutral cleaner (pH range 6.5- 7.5) is preferred. Do not use strong cleaners or stain removers that contain chlorinated hydrocarbons or acetone as these will dull the surface finish. Do not use abrasive cleaners or steel wool as these will mar the surface.

The surface of the FRP panels is best cleaned using a sponge or soft bristle brush. Apply the cleaning solution by working it across the surface in a scrubbing or circular motion. Thoroughly rinse the area with clean warm water to remove all traces of the cleaning solution otherwise there is a possibility of a film build up which will give the panels a dull, dirty appearance. When using a specialty cleaner, follow the manufacturer's instructions. Test a small area prior to applying to the entire surface.

For hard water deposits, a 10% solution of acetic acid in cold water may be applied in a scrubbing motion using a sponge or soft bristle brush. Thoroughly rinse the area after cleaning.

For oily deposits or difficult substances, mineral spirits may be used with a clean soft cloth in the affected area. **DO NOT USE** strong solvents such as acetone or xylene.

## Limited Warranty

Subject to the limitations set forth below, Panolam® Industries International Inc. (Panolam) expressly warrants that our products are reasonably free of defects in material and workmanship, and when properly handled and fabricated will conform, within accepted tolerances, to applicable manufacturing specifications as set forth in our technical brochure. This warranty shall extend to the original buyer for a period of twelve (12) months from the date of shipment of this product by Panolam, and shall not be assignable by the original buyer. This warranty does not cover damage resulting from accident, misuse, alteration, abuse or lack of reasonable care.

Due to the variety of uses and applications to which this product may be put, and because the manufacturer has no control over the end products fabricated, the warranty set forth above is exclusive and in lieu of all warranties, expressed or implied, in fact or by operation of law or otherwise, or arising by course of dealing or performance, custom or usage in the trade, including, without limitation, the implied warranties of fitness for a particular purpose and merchantability, and Panolam shall have no obligation or liability to any person or entity in connection with or arising from the furnishing, sale, installation or repair, use or subsequent sale of any product supplied by it.

Our maximum liability arising out of the sale of the products or their use, whether based upon warranty, contract, tort or otherwise, shall not exceed the actual payments received by us in connection therewith. In no event shall we be liable for special, incidental or consequential damages, including, but not limited to, arising hereunder or from the loss of profits, or loss of use damages, sales of the products.

## Headquarters

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