



**46271 184th Street**  
**Castlewood, SD 57223**  
**1-888-295-6330**  
**1-605-793-2356 fax**  
**[www.creativepanelsolutions.com](http://www.creativepanelsolutions.com)**

## CPS FIRE RATED FRP Panels

EMBOSSED WALL PANEL

CLASS A FIRE RATING AS TESTED PER ASTM E-84

CPS FRP Panels designed for interior wall finishes where a Class A, easy to clean, sanitary finish is required. These panels are made of fiberglass reinforced plastic, and are durable, flexible, and will not mold, mildew, rot, or corrode. They provide excellent resistance to mild chemicals and moisture, and have a Class C rating for flame spread and smoke development when tested per ASTM E-84.

### Physical Characteristics

Property	.060"	.090"	0.12"	Test Method
Flexural Strength	12 x 10 <sup>3</sup> psi 83 MPa	13.6 x 10 <sup>3</sup> psi 94 MPa	14.6 x 10 <sup>3</sup> psi 101 MPa	ASTM D790
Flexural Modulus	0.44 x 10 <sup>6</sup> psi	0.60 x 10 <sup>6</sup> psi	0.70 x 10 <sup>6</sup> psi	ASTM D790
Tensile Strength	6.1 x 10 <sup>3</sup> psi	7.1 x 10 <sup>3</sup> psi	7.5 x 10 <sup>3</sup> psi	ASTM D638
Tensile Modulus	0.84 x 10 <sup>6</sup> psi	0.92 x 10 <sup>6</sup> psi	0.94 x 10 <sup>6</sup> psi	ASTM D638
Barcol Hardness	30	40	40	ASTM D2583
Izod Impact Resistance	10 ft-lb/in notched	12 ft-lb/in notched	14 ft-lb/in notched	ASTM D256
Gardner Impact Strength	10 in lbs	45 in lbs	45 in lbs	ASTM D5420
Coefficient of Linear Thermal Expansion	1.7 x 10 <sup>-5</sup> in/in-°F	1.7 x 10 <sup>-5</sup> in/in-°F	1.7 x 10 <sup>-5</sup> in/in-°F	ASTM D696
Water Absorption	0.35%/24 hrs@77°F	0.32%/24 hrs@77°F	0.32%/24 hrs@ 25°C	ASTM D570
R Value	0.15 hr -ft <sup>2</sup> -°F/BTU	0.23 hr -ft <sup>2</sup> -°F/BTU	0.3hr -ft <sup>2</sup> -°C/Kcal	ASTM C1114
Surface Burning Characteristics	Class A	Class A	Class A	ASTM E84
Taber Abrasion Resistance	0.09% Max Wt Loss	0.02% Max Wt Loss	0.03% Max Wt Loss	Taber Test

### Design Data

Part Number	Colors	Finish	Size	Nominal Thickness
CPS-FIRE RATED FRP	White Ivory Beige Pearl Grey Silver Almond	Textured Smooth	4' x 8' 4' x 9' 4' x 10' 4' x 12'	.090"
	White		.120"	

Other sizes and colors are available by special order. Contact us for more information.

### Flame Spread and Smoke Development Ratings:

The numerical flame spread and smoke development ratings are not intended to reflect hazards presented by Creative Panel Solutions products or any other material under actual fire conditions. These ratings are determined by small scale tests conducted by Underwriters Laboratories and other independent testing facilities using the American Society for Testing and Materials E-84 test standard (commonly referred to as the "Tunnel Test"). Creative Panel Solutions provides these ratings for comparison purposes only. Like other organic building materials, panels made of fiberglass reinforced resins will burn. When ignited, FRP may produce dense smoke very rapidly. All smoke is toxic. Fire safety requires proper design of facilities and fire suppression systems, as well as precautions during construction and occupancy. Local codes, insurance requirements and any special needs of the product user will determine the correct fire-rated interior finish and fire suppression system required for a specific installation.

## Specifications

These panels are manufactured by using a continuous laminating process in lengths as required.

## Composition

Reinforcement: Random chopped fiberglass roving.

Resin Mix: Modified polyester copolymer and inorganic fillers and pigments.

## Certification

Meets USDA/FSIS Requirements

Meets Minimum requirements of major model building codes for Class A interior wall and ceiling finishes of flame spread less than 25, and smoke developed less than 450 when tested per ASTM E-84.

FRP does not support mold or mildew when tested per ASTM D3273 and ASTM D3274

ICBO Report #ER-4583

Meets Canadian code CAN/ULC-S102 of <25 flame spread and <300 smoke developed

MEA Approved. MEA 16-85M, Volume II

## Finished Panel Quality

Physical properties as noted in table 1.

Dimensions shall be as specified, and are subject to the following tolerances:

Width +/- 1/8" (3.2 mm)

Length +/- 1/8" (3.2 mm) up to 12'

Squareness not more than 1/8" (3.2 mm) out of square

Panels shall be installed per CPS installation guide.

## Storage

All Creative Panel Solutions Products shall be stored indoors.

## Serviceable Temperature Range

CPS FRP Panels will perform in temperatures from -40° F to 130° F. If you plan to use these panels in conditions outside of these parameters, please contact Creative Panel Solutions for recommendations.

## Product Limitations

**Uneven Surfaces:** Installation of CPS FRP panels over extremely uneven substrates such as concrete block or brick may result in areas of delamination or bulging.

**Heat Sources:** CPS FRP panels may discolor when installed near a heat source radiating temperatures exceeding 130° F such as ovens, fryers, and other cooking equipment.

## Fabrication Recommendations

**NOTE:** Always protect your eyes with goggles and your mouth and nose with a filter when cutting FRP panels.

**Hand Fabricating:** Drill panels with a high speed drill or hole saw.

**Stapling:** Standard pneumatic stapler

**Cutting:** Sheet metal shears or circular saw with reinforced carborundum or carbide-tipped blade

Production Fabrication: Use carbide-tipped tools. Straight cuts can be sheared or sawed. For irregular cuts, use a band saw or die punch.

