

# **CPS FRP Panels**

EMBOSSED WALL PANEL CLASS C FIRE RATING AS TESTED PER ASTM E-84

CPS FRP Panels designed for interior wall finishes where a Class C, 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.

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#### **Physical Characteristics**

Property	.090″	2.3″	Test Method
Flexural Strength	8.5 x 10 <sup>3</sup> psi	59 MPa	ASTM D790
Flexural Modulus	0.35 x 10 <sup>6</sup> psi	2413 MPa	ASTM D790
Tensile Strength	5.0 x 10 <sup>3</sup> psi	34 MPa	ASTM D638
Tensile Modulus	0.6 x 10 <sup>6</sup> psi	4137 MPa	ASTM D638
Barcol Hardness	35	35	ASTM D2583
Izod Impact Resistance	6 ft-lb/in notched	0.32 J/mm	ASTM D256
Gardner Impact Strength	30 in lbs	34 J	ASTM D5420
Coefficient of Linear Thermal Expansion	1.6 x 10 <sup>-5</sup> in/in- <sup>0</sup> F	29 um/m. ⁰C	ASTM D696
Water Absorption	0.16%/24 hours@77 <sup>0</sup> F	0.16%/24 hours@ 25 <sup>°</sup> C	ASTM D570
R Value	0.23 hr –ft <sup>2-0</sup> F/BTU	0.047hr –ft <sup>2_0</sup> C/Kcal	ASTM C1114
Surface Burning Characteristics	Class C	Class C	ASTM E84
Taber Abrasion Resistance	0.01% Max Wt Loss	0.01% Max Wt Loss	Taber Test

#### **Design Data**

Part Number	Colors	Finish	Size	Nominal Thickness	
CPS-FRP	White Ivory Almond Beige Pearl Grey Silver Black	Textured	4'x 8' 4'x 9' 4'x 10' 4' x 12'	.090"	
Other sizes and colors are available by special order. Contact us for more information					

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#### 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 C interior wall and ceiling finishes of flame spread less than 200, 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 Meets FMVSS 302 Requirements 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<sup>°</sup> F to 130<sup>°</sup> 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<sup>°</sup> 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.



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