



Formica® frpSelect™

Decorative Wall Panels

TECHNICAL DATA

Formica Corporation and Kemplite Company, Inc. have partnered to introduce an exciting and innovative decorative wall panel system. This new wall panel combines highly popular Formica decorative and wood grain patterns with a Kemplite fiberglass reinforced plastic impact resistant and durable wall panel. The result - Formica frpSelect - a decorative durable wall panel.

Fiberglass reinforced plastic (frp) paneling has traditionally been used in back room applications such as industrial kitchens, laboratories, and storage areas. Front room applications often need the durability and moisture resistance of frp, but usually ceramic tile, wood paneling, or vinyl wall coverings are used to achieve a more decorative look. New Formica frpSelect does it all - decorative, yet durable and moisture resistant.

Formica frpSelect Class C is an interior wall panel that features thirty-five of the most popular Formica pattern and wood grain designs. Many additional Formica patterns are available by factory order.

PHYSICAL PROPERTIES: TABLE 1

Property	Typical Value		Test Method
Flexural Strength	10,000 psi	79 MPa	ASTM D790
Flexural Modulus	500,000 psi	2724 MPa	ASTM D790
Tensile Strength	8,000 psi	77 MPa	ASTM D638
Tensile Modulus	600,000 psi	7888 MPa	ASTM D638
Barcol Hardness	30-40	30-40	ASTM D2583
Izod Impact	6.8 ft-lbs/in	0.19 J/mm	ASTM D256
Gardner Impact	60 in-lbs	6.78 J	ASTM D5420
Water Absorption (25 cycles CS17 wheel, 1000 g)	0.2242% (24 hrs @77°F)	0.2242% (24 hrs @25°F)	ASTM D570
Surface Burning Characteristics	Class C	Class C	ASTM E84
Coefficient of Linear Thermal Expansion	1.8 x 10 ⁻⁵ in/in•°F	32 µm/m•°C	ASTM D696
Taber Abrasion % weight loss (25 cycles CS17 wheel, 1000 g)	0.008%	0.008%	Taber Abrasion Test

Based on limited trial runs

DESIGN DATA: TABLE 2

Part # Identifier	Nominal Panel Thickness	Nominal Panel Weight	Color	Size
FFS	.09" (2.3 mm)	0.75 psf	5 selected patterns from the Formica line <small>(See brochure for color list.)</small>	4' x 8' (1.2 m x 2.4 m) <small>available from stock</small> 4' x 10' (1.2 m x 2.4 m) <small>made to order</small>

SPECIFICATIONS

The frp panels are manufactured by a continuous laminating process.

Composition:

- Decorative paper made with a melamine finish surface.
- FRP panels
Reinforcement: Random chopped fiberglass roving.
Resin mix: Modified polyester copolymer and inorganic fillers and pigments.

Finished Quality Panel

- The backside shall be smooth. Backside imperfections which do not affect functional properties are not cause for rejection.
- Physical properties shall be as set forth in Table 1.
- Product quality standards and tolerances for panel weight and thickness shall be as set forth in Kemplite's Quality Control Procedures/Standards which are available upon request.
- Dimensions shall be as specified on purchase order, subject to the following tolerances:
Width: ±1/8" (3.2 mm)
Length: ±1/8" (3.2 mm) up to 12' (3.7 m)
Squareness: not more than 1/8" (3.2 mm) out of square.
- Panels shall be installed in accordance with manufacturer's guidelines as set forth in the Formica frpSelect Installation Guide (Form 6419).

Certification

- Meets minimum requirements of the major model building codes for Class C interior wall finishes.
Flame spread less than 200, smoke developed less than 450 per ASTM E-84.
- One thread on back identifies Formica frpSelect Class C panel.

Fabricating Recommendations

Note: Protect your eyes with goggles; cover your nose and mouth with a filter mask when cutting Formica frpSelect panels. When cutting Formica frpSelect, position the panel so that the saw blade enters the decorative side first, to avoid chipping or damage.

Hand fabricating: Drilling - high speed drill bit (60° cutting angle, with 12° - 15° clearance) or hole saw.

Cutting: Swivel head shears or circular saw with reinforced carborundum or carbide-tipped blade.

Storage

Formica frpSelect panels should be stored horizontally indoors. Protect the panels from moisture and never store in contact with the floor or an outside wall. Optimum storage conditions are 75°F (24°C) and 45% to 55% relative humidity.

Preconditioning

Prior to installing Formica frpSelect, remove the packaging and allow the panels to acclimate to room temperature and humidity for at least 48 hours. Ideally, the room temperature and humidity during acclimation and installation should be the same as the final operating conditions.

Product Limitations

Formica frpSelect is not an approved thermal barrier over foam insulation.

Formica frpSelect should be installed between 60°F (16°C) and 75°F (24°C) and relative humidity below 55%, ideally at the same conditions as the room's normal operating temperatures.

Do not install directly over studs.

Cleaning Instructions

Formica frpSelect is easy to clean. In most cases, use a clean, damp, non-abrasive cotton cloth and a mild liquid detergent or household cleaner. Always rinse with clean water and a clean, non-abrasive cotton cloth. Dry the panels with a soft, clean, non-abrasive cotton cloth.

DO NOT USE cleaners with acid, alkali or sodium hypochlorite. They will damage and permanently discolor the surface. Be sure that bottles, rags or other materials with these cleaners never come in contact with the surface.

Examples of harsh cleaners and compounds to avoid include, but are not limited to:

- drain cleaners
- metal cleaners
- oven cleaners
- chlorine bleach
- rust removers
- tub and tile cleaners
- toilet bowl cleaners
- lime scale removers

Removal of Stains

To remove stains, use full strength Fantastik® All Purpose Cleaner, Formula 409®, Pine-Sol®, or other mild household cleaners. Apply it to the stained area and allow it to draw out the stain. Blot with clean, damp, non-abrasive cotton cloth, and rinse with clean water. When a recommended cleaner changes its formulation, the change may be harmful to the surface. Formica Corporation cannot be held responsible for these changes. Solvents such as denatured alcohol can also be used. Follow all directions and warnings on the solvent label because many are extremely flammable.

DO NOT USE ABRASIVE CLEANERS OR ANY CLEANERS WITH BLEACH.

Dyes and pharmaceutical products will permanently stain the panels. These include hair dyes and rinses, silver nitrate, Mercurochrome®, laundry bluing, tannic acid, povidone-iodine, dermatological tar compounds, and peroxide. To reduce these stains, apply a paste of baking soda and water on the area to pull out the stain. Do not rub, as the paste will be slightly abrasive. Wipe up the paste with a clean, damp, non-abrasive cotton cloth, and rinse with clean water.

Stains that are stubborn or even permanent and may not disappear include: wood stains, cash register inks, newsprint, marking pen inks, indelible inks, food pricing ink, and label inks.

Stubborn stains that may disappear on their own after a short time or after repeated cleanings include food stains, glass rings, water marks, coffee and tea stains, food dyes, and fingerprints.

Flame Spread and Smoke Development Rating

The numerical flame spread and smoke development ratings are not intended to reflect hazards presented by Formica 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"). FORMICA PROVIDES THESE RATINGS FOR MATERIAL COMPARISON PURPOSES ONLY. Like other organic building materials (e.g. wood), panels made of fiberglass reinforced plastic 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 necessary for a specific installation.

We believe all information given is accurate. It is offered in good faith, but without guarantee. Since conditions of use are beyond our control, the user assumes all risks. Nothing herein shall be construed as a recommendation for uses that infringe on valid patents or as extending a license under valid patents.

