Marlite
simply amazing

Marlite FRP Ceiling Panels

Technical Bulletin

Marlite Ceiling Panels are made of fiberglass reinforced plastic (FRP). They are tough, durable, and will not rust, rot, mildew or corrode. High Strength-to-weight ratio makes them the choice for most ceiling applications.

Maximum Sanitation Protection
- Meets USDA Requirements
- Significant cost savings over other materials

Outstanding Cleanability
- Resists moisture
- Cleans with regular detergents and water

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

Improved Chemical Resistance
- Resists stains
- Rust proof
- Mildew resistant
- Minimum maintenance and never needs painting

MARLITE CEILING PANELS DEFLECTION POTENTIAL CHART

Indentification Code	Nominal Thickness	Color	Surface	Fire Rating	Calculated Deflection Potential	
					2' x 2' Panel (0.6m 0.6m)	2' x 4' Panel (0.6m 1.2m)
1300TOS	.090"(2.29mm)	White	Pebbled	Class A	0.188" (4.8mm)	0.472" (12.0mm)
1300TOS	.090"(2.29mm)	White	Pebbled	Class C	0.132" (3.3mm)	0.330" (8.4mm)

All fiberglass panels are prone to deflection, otherwise known as "sag" or "pillowing", when suspended in a grid system. Room conditions (extreme temperatures and high level humidity) are contributing factors. Insulation on top of panels, and certain lighting conditions can exaggerate the perception of deflection. To minimize warping caused by moisture absorption, the ceiling panel must be well ventilated to prevent moisture from occurring on back of panel.

Features

*Meets USDA requirements

*Meets ASTM D -3841-97 Standards

PANEL SIZES
23 3/4" X 23 3/4"
23 3/4" X 47 3/4"

Code Acceptability, Certification

General Purpose (Class "C" Marlite FRP 0.090" (2.29mm) Ceiling Panel

- Meets USDA Requirements
- Class C, Flame Spread 200 or less, smoke developed 450 or less (per ASTM E-84 - independent testing laboratory).

SPECIFICATIONS

These panels are manufactured by a continuous process.

COMPOSITION

1. **Reinforcement:** Random chopped fiberglass roving.
2. **Resin Mix:** Unsaturated polyester with fillers and pigments.

FINISHED PANEL QUALITY

1. Panels shall have wear side with a pebble-like embossed finish . Color shall be uniform throughout, as specified. Other colrs can be manufactured. The backside shall be smooth. Backside imperfections which do not affect functional properties are not cause for rejection.

2. Product quality standards and tolerances for panel weight and tolerances for panel weight and thickness shall be set forth in Marlite's Quality Control Procedures/Standards.

3. Dimensions shall be as specified on purchase order, subject to the following tolerances:
   Width: ± 1/8" (3.2mm)
   Height: ± 1/8" (3.2mm) up to 12' (3.7m)
   Squareness: not more than 1/8" (3.2mm) out of square

INSTALLATION

Installation of ceiling panels should not begin until building is enclosed, permanent heating and cooling equipment is in operation, and residual moisture from plaster or concrete work has dissipated.

FABRICATING RECOMMENDATIONS

Note: Protect your eyes with goggles: cover your nose and mouth with a filter mask when cutting FRP panels.

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

Cutting: Circular saw with reinforced carborundum or carbide-tipped blade.

Production fabricating: Use carbide-tipped tools. Straight cuts can be sheared (90° cutting edge with 0.002" (0.05 mm) clearance) or sawed. For irregular cuts, use die punch or band saw.

STORAGE

All Marlite products should be stored indoors.

PRODUCT LIMITATIONS

Panels will provide a clean aesthetically-pleasing finished installation. However, by nature, fiberglass reinforced plastic panels may occasionally have small areas that are aesthetically unacceptable for use. Panels should be inspected on-site prior to installation. If any portion of material will not provide an acceptable appearance, Marlite should be notified at once. Upon verification of unacceptability, that portion of material will be replaced by Marlite. Marlite's sole responsibity is for the the replacement of defective material but not for labor or other handling or installation expenses.

Near heat source: Marlite's FRP panel products may discolor when installed near a heat source which radiates temperatures exceeding 130°F (55°C) such as cookers, ovens, and deep fryers.

FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS

The numerical flame spread and smoke development ratings are not intended to reflect hazards presented by Marlite's 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").

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 potentially 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.