

TECHNICAL DATA | RESOLITE

Fiberglass Reinforced Polymer Panels





Poliacryl / CR- Poliacryl FRP '40' Series Panels

Poliacryl (translucent) and CR-Poliacryl (opaque) '40' Series are Resolite's high strength version of non-fire retardant (non FR) panels. Both are available in a wide variety of profiles and in many types 1440 thru 840 and have a nominal weight of 14 oz. thru 8oz. per square foot respectively. The '40' Series Poliacryl (translucent) and CR Poliacryl (opaque) panels were developed to meet a growing requirement for a high strength FRP panel. A combination of glass reinforcement consisting of bidirectional continuous strand woven and chopped strand fiberglass is the ideal solution for longer span capabilities without sacrificing resiliency and impact resistance.

An FRP panel's ability to absorb forces without damage to its structural integrity is critical to long term performance. Straight continuous glass provides stiffer panels which are susceptible to fracturing along the linear glass under continuous cycling and especially foot traffic. The bidirectional continuous strand woven glass provides added strength for longer spans and more evenly distributes stress from cyclic and impact loading thus allowing the FRP panels to maintain their resiliency.

Resolite's unique balance of multiple glass fiber reinforcements and acrylic modified polyester resin permits designs which maximize both panel in place performance and load capacity without sacrificing functional requirements.

Resolite takes corrosion resistance and good weathering one step further by providing a C/W Barrier as standard on both exterior and interior surfaces of '40' Series panels. C/W Barrier is the long range solution to better weathering FRP panels and is far superior to highly volatile sprayed on coatings that erode and fade away in a short time.

Resolite Poliacryl and CR-Poliacryl panels have over 70 years of long term performance history. Poliacryl and CR-Poliacryl have been utilized wherever corrosion resistance and good weathering characteristics are critical. Installations include steel mills, aluminum production and other nonferrous manufacturing, pickling operations, cooling towers, fertilizer plants, chemical producers, pulp and paper mills, mining operations, water/wastewater facilities and a host of other industrial building applications.

Poliacryl / CR-Poliacryl Features

- **Corrosion Resistant** Produced with a high quality non-fire rated polyester resin system.
- Outstanding Weathering Our high quality resin system incorporates acrylic modification and UV stabilizers
- Embossed Exterior Surface The exterior surface is embossed creating a resin rich surface for improved performance. The interior surface is smooth.
- C/W Barrier Protection STANDARD- A protective barrier on both exterior and interior surfaces that is fused into the resin/fiberglass matrix to give the panel even greater protection against degradation.
- Multiple Glass Reinforcements '40' Series panels utilize a high strength combination of glass reinforcement including bidirectional continuous strand woven and chopped strand glass.
- Types Available 1440 (14 oz.) thru 840 (8oz.).
- Choice of Colors Available in two standard translucent colors- Clear and White; and three standard opaque colors- Stone White, Gray and Beige. Consult Standard Color Guide for more information.
- Choice of Profiles 4 standard profiles 7.2 x 1.5", 7.2 D x 1.75", 7 x 1.5" and 4.2 x 1-1/16". Consult Profile Selection Guide for non-standard profile availability and additional information.
- Outstanding Performance Backed by over 70 years of case history in the corrosion and industrial market.
- Load/Span Data Based on full scale tests to simulate actual field conditions.
- Exceed ASTM D 3841 Standard Specification for Glass-Fiber-Reinforced Polyester Plastic Panels.

Physical Properties

TYPES AVAILABLE	1240		1040	840
Nominal Wt., oz./sq.ft.	12 oz.		10 oz.	8 oz.
Nominal Thickness, in.**	.080		.068	.055
Nominal Glass Content	40%		40%	40%
Hardness, Barcol ASTM D 2583		50		
Flexural Strength, psi ASTM D 790		34,000		
Flexural Modulus, psi ASTM D 790		1.2 x 10 ⁶		
Tensil Strength, psi ASTM D 638		27,000		
Cofficient of Expansion (in/in/°F) ASTM D 696		N/A		
Conductivity (K Factor) ASTM C 177		1.15		
Dielectric Strength RMS V. @ 60 cycles ASTM D 149		N/A		
Fire Resistance Ignition Point ASTM D 1929		850 °F - 900 °F		
Flame Spread Classification ASTM E 84 (UL 723)		N/A		

Notes

- * All thickness based on flat material. Nominal thickness varies with profile.
- Resolite advises that the numerical flame spread classification is not intended to reflect hazards presented by this or any other material under actual fire conditions.

Specification (short form)

- Translucent or opaque fiberglass reinforced polymer wall and/or roof panels shall be type (1440 thru 840) corrosion resistant non-fire retardant Resolite Poliacryl (translucent) or CR-Poliacryl (opaque) as manufactured by Resolite, a Stabilit America Company, Moscow, TN.
- Glass reinforcement shall be composed of bidirectional continuous strand woven and chopped strand glass and shall be approximately 40% by weight. Both exterior and interior surfaces shall have a C/W Barrier.
- 3. Resin shall be high quality light stabilized polyester modified with acrylic monomer.
- 4. Finish shall be embossed exterior/smooth interior.
- 5. Panel weight shall be nominal (14 oz/sf type 1440 thru 8 oz/sf type 840) in order to comply with the maximum loads and spans recommended by Resolite.
- 6. Color shall be No. ______(See Color, Finish, Light Transmission page 27).
- 7. Profile shall be ______ (See Profile Selection Guide page 31 to 34). Length shall be ______