Resolite
A Division of Stabilit America

Manufacturing Tolerance
Coverage width and length tolerance for all panel profiles is 1/4".

Storage Recommendations
Protect the FRP panels from surface cuts and abrasions. Keep panels dry and protected prior to use. Note that moisture trapped between panels can result in permanent staining. Store under roof in a well-ventilated area where possible. Stack panels off the ground with one end elevated.

Color Notice
Polyester resin products are subject to discoloration when exposed to atmosphere and environmental conditions. Accordingly, seller assumes no liability and expressly disclaims any responsibility for any loss or damage, direct, indirect, or consequential; or for any change of color for any polyester resin product.

Flame Spread
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.

Minumum Order Requirement
Contact Resolite's Customer Service Department to determine if there is a minimum requirement for the product, profile, weight or color panel you have selected.

Statement of Policy
The information provided here is solely based on factual data available to Resolite from many years of experience in manufacturing, field evaluation, testing and research. This is to be used only as a general guide by the designer and builder.

The overall satisfactory performance of any roof or wall system is predicated by proper design and erection of the substructure. Resolite will not assume any responsibility for the design, detailing, or erection of the substructure to which Resolite panels are attached.

Disclaimer
The information contained herein is not intended to be used for design purposes. Resolite reserves the right to change or withdraw such information, or the designs and details of the products upon which it is based, either wholly or in any portion thereof, without further notice. Specific information required for the design and detailing of specific jobs is available upon request and should be obtained from your Resolite sales representative.

Trademarks
Fire Snuf, ResoFLO and Tred-Safe are trademarks of Stabilit America, Inc.

Additional Resolite Catalogs
- General Catalog RE-100
- Structural Shapes Technical Data Guide TD-122
- CR Panels RE-200
- Tred-Safe Panels RE-181
- ResoFLO Ventilators and Louvers RE-212
- FRP Panels for Water/Wastewater RE155

TABLE OF CONTENTS

02 Good Reasons to Specify Resolite FRP Panels
04 FRP Panel Design
06 Fire Resistance & Code Compliance
09 Corrosion & Weathering Guide
11 Product Descriptions
12 Tred-Safe Panels
14 FS25A / CRFS25A '40' Series
16 FS25A / CRFS25A '30' Series
18 Factory Mutual Approved RFM 17, 14, 11
20 Poliacryl / CR-Poliacryl '40' Series
22 Poliacryl / CR-Poliacryl '30' Series
24 Tred-Safe DECK
26 FRP Panel Specification (Long Form)
27 Color, Finish, Light Transmission
28 Fasteners, Sealants, Accessories
31 Profile Selection Guide

LOAD/SPAN TABLES

36 7.2 x 1.5
37 4.2 x 1-1/16
38 7.2 x 1.75
39 7 x 1.5
40 R- Panel
41 2-1/2 x 1/2
42 4 3/16" x 9/16"
43 12 x 3
44 Trafford Tile
45 4 x 1/2
46 7.2 Box Rib
47 7 Box Rib
48 4 x 1
49 4-7/8 V-Beam
50 5.33 V-Beam
51 2.67 x 7/8
53 Flashing Details
56 Installation, Storage, Handing
60 ResoFLO 6" FRP Wall Louvers
61 ResoFLO FRP Continuous Ridge Ventilators
63 FRP Gutters & Downspouts

Chemical & Corrosion Resistant

Resolite fiberglass reinforced polymer (FRP) panels remain virtually unaffected in many chemical environments. They will not rust, rot, scale or mildew. These panels are commonly specified for use as roofing and siding by industrial engineers. In many cases, they have replaced more conventional materials which have proved to be costly and ineffective in corrosive environments. Resolite panels have superior long term resistance to chemical and other corrosive conditions. Products such as Tred-Safe, CR Fire Snuf 25A, Fire Snuf 25A and FRM panels (see following pages) are produced utilizing an isophthalic resin which is superior in corrosion resistance to orthophthalic resin systems.

High Strength

Resolite panels are strong, durable and shatter resistant. They have a high strength to modulus ratio and therefore offer maximum performance coupled with a natural resiliency. Resolite panels are particularly effective in the high impact conditions and repeated (cyclic) loadings associated with normal wind storms.

Diffused Light Transmission

Resolite Fire Snuf 25A (FR) and Poliacryl (Non-FR) panels are translucent panels that provide soft diffused transmitted light. You can also select from a number of colors and a range of light transmissions. And translucent Tred-Safe not only lets light in; it's strong enough to walk on.

Fire Retardant

Trade-Safe, CR Fire Snuf 25A and Fire Snuf 25A all carry the Underwriters' 25 Flame Spread Rating. Resolite RFM panels are isophthalic resin based panels that have passed the Factory Mutual 25 and 50 foot Corner Test and meet the criteria for walls, roofs and ceilings without height or area limitations and without sprinkler protection.

Resilient

Resolite panels are naturally resilient and will withstand large deflections associated with normal load and impact conditions without suffering damage. They return to their original shape when the loading is removed. These resilient panels can withstand deflections well beyond those which will deform a metal panel.

Resolite's unique balance of glass fiber reinforcement and polyester resin permit designs which maximize both panel in place performance and load capacity without sacrificing functional requirements.

Constant quality checks, including small and full-scale structural testing, and over 70 years of successful on-the-job experience have proved that Resolite panels perform even in the most severe windstorms. Leaks and premature panel or fastener related failures are not a problem when panels are properly installed and limited by the L/D criteria established in ASTM D 3841.

Good Weathering Characteristics

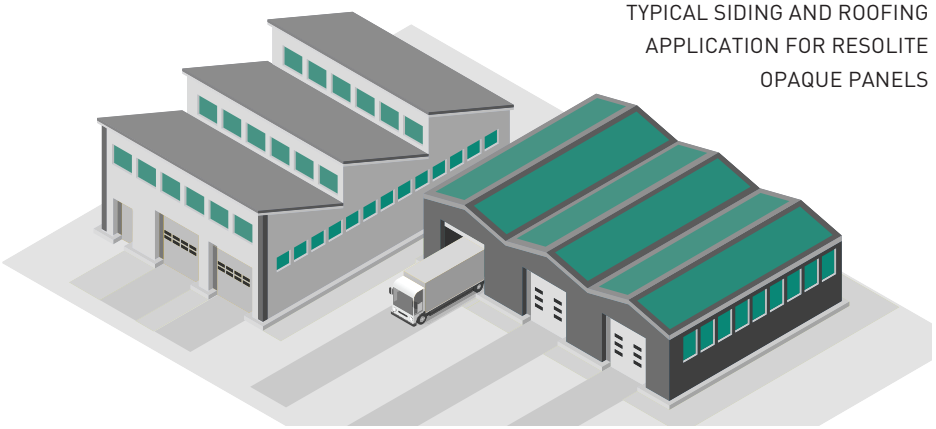
Resolite panels have "built-in" ultra-violet and weather protection. There is no need to apply costly coatings or films. The combination of four decades of production experience, acrylic modification, quality resin components and -more recently- C/W Barrier protection combine to yield a uniquely durable panel.

Versatile

Resolite offers a wide range of manufacturing and technical capabilities to meet specific needs. Panels are available in both polyester and vinyl ester resin formulations combined with a variety of glass fiber reinforcements. We can combine these materials and panel weights to meet various functional or structural requirements. Resolite FRP panels are available in a wide range of colors, finishes and profiles; are adaptable to many building applications for roofs and walls; and are easily installed using conventional construction methods.

FRP Siding & Roofing- Resolite Opaque Panels

Opaque fiberglass reinforced polymer panels from Resolite are the ideal siding and roofing material for industrial and commercial buildings. Resolite premium grade polyester resin fire rated CRFS25A, Tred-Safe, RFM as well as non-fire rated CR-Poliacryl, are available in a range of standard colors and profiles to meet virtually any design criteria.

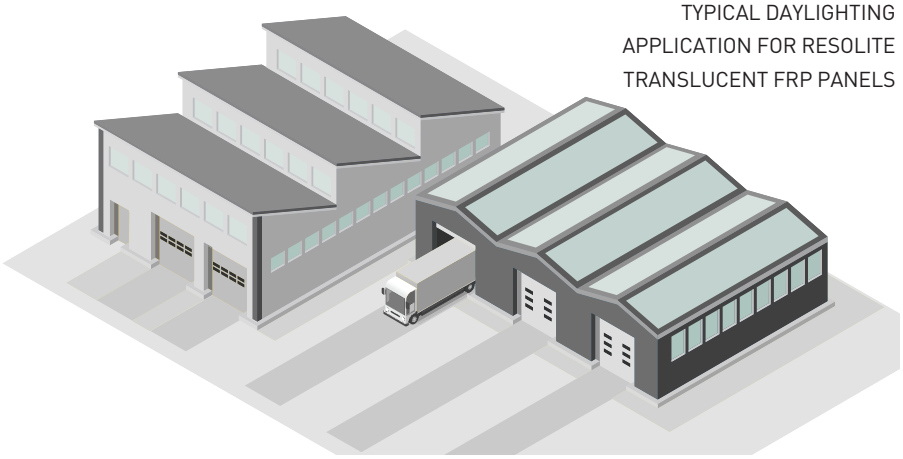


TYPICAL SIDING AND ROOFING APPLICATION FOR RESOLITE OPAQUE PANELS

Resolite opaque FRP is the ideal solution when corrosion resistance and weatherability are critical requirements of the building panels. Consult Profile Selection Guide, Corrosion and Weathering Guide and the Color, Finish and Light Transmission data pages for more information.

FRP Daylighting Resolite Translucent Panels

Translucent fiberglass reinforced polymer panels from Resolite are the ideal solution to daylighting in industrial and commercial buildings. Resolite premium grade polyester resin fire-rated FS25A, translucent Tred-Safe, as well as non-fire rated Poliacryl panels are available in a range of translucent colors and light tranmission precentages. They are also available in a wide variety of profiles that match opaque FRP panels and metal panels.



TYPICAL DAYLIGHTING APPLICATION FOR RESOLITE TRANSLUCENT FRP PANELS

In addition, Resolite translucent FRP panels also provide excellent corrosion resistance and weatherability. Consult Profile Selection Guide, Corrosion and Weathering Guide and the Color, Finish and Light Transmission data pages for more information.

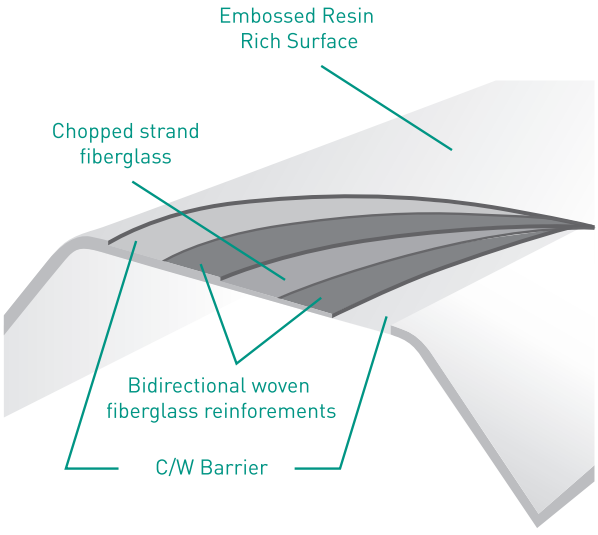
FPR Panel Design Considerations

Resolite FRP panels are designed to meet a wide spectrum of structural and aesthetic considerations. While heavier glass reinforcement permits stronger panels with greater span capabilities, light transmission and aesthetic appearance will be affected in translucent panels. Conversely, FRP panels incorporating only chopped strand glass provide excellent clarity and durability but do not have the longer spanning capability achieved with multiple glass compositions.

With over 70 years as the leader in supplying superior solutions to the industrial construction and corrosion resistant markets, Resolite realizes the need to have alternatives in FRP panel design. Therefore, Resolite offers a variety on resin/glass reinforcement product compositions to meet virtually any requirement.

Tred-Safe

Resolite Tred-Safe, type 1645, utilizes a five layer combination of reinforcement including C/W barriers, bidirectional continuous strand woven and chopped strand glass. Tred-Safe is Resolite's toughest roofing or siding panel with a nominal weight of 16 oz./sq.ft. and approximately 45% glass reinforcement. This heavy combination of fiberglass reinforcement coupled with Resolite's resilient resin provides a panel that is strong, flexible, and truly walkable.



'40' Series

Resolite's high strength '40' Series panels are available in fire-rated CRFS25A opaque and FS25A translucent systems and in many types- 1440 thru 840. These panels incorporate approximately 40% glass reinforcement and have nominal weights of 14 oz. thru 8 oz. per square foot respectively. '40' Series panels utilize a combination of glass reinforcement including bidirectional continuous strand woven and chopped strand glass providing an excellent blend of strength and resiliency.

'30' Series

Resolite's '30' Series panel are available in CRFS25A opaque and FS25A translucent systems and in many types- 1430 thru 830. These panels incorporate approximately 30% glass reinforcement and have nominal weights of 14 oz. thru 8 oz. per square foot respectively. '30' Series panels utilize Resolite's traditional chopped strand glass reinforcement providing a resilient panel with a long history of good performance. They also provide the best clarity in a translucent panel. In addition, '30' Series panels are available in non-fire retardant Poliacryl translucent and CR-Poliacryl opaque systems.

FPR IS NOT STEEL

FPR panels do not perform the same as steel panels and therefore should not be designed to the same requirements. Steel panels are generally 20 times stiffer than an equivalent FRP panel of the same profile. Since steel panels are commonly designed to deflection limits as restrictive as L/360, a proportional deflection for FRP panels would be L/18 or less. Coincidentally, this deflection limitation is in the line with the widely recognized and accepted deflection criteria specified in ASTM D 3841, "Standard Specification for Glass-fiber Reinforced Polyester Plastic Panels". This deflection limit is L/20 for wall panel and L/40 for roof panel applications. Resolite's over 45 years of experience in the production of FRP panels, combined with actual on the job performance, validates the ASTM D 3841 deflection limits for these naturally resilient panels.

The Resin/Glass Composite Matrix

All Resolite products are constructed with a matrix of thermoset polymer resin and fiberglass reinforcement forming a fiberglass reinforced polymer composite panel. The resin system surrounds the glass fiber and under heat and pressure a chemical reaction locks the material into a composite unit. In the finished panel, the resin provides fire resistance, weatherability and corrosion resistance as well as color and aesthetic properties. The fiberglass reinforcement provides impact resistance, strength and stability which are the qualities that determine the structural capabilities of the panel.

Resiliency- A Key to FRP Performance

An FRP panel's ability to absorb forces without damage to its structural integrity is critical to long term performance. In order to achieve desired characteristics, Resolite has studied various combinations of fiberglass reinforcements. Straight continuous glass provides stiffer and longer spanning panels which are susceptible to fracturing along the linear glass under continuous cycling and especially foot traffic. Chopped strand glass reinforced panels span less but provide more resiliency. Over 70 years of field performance have proven that this flexibility allows Resolite '30' Series FRP panels to perform over the long term.

When higher strength, longer spanning panels are required, a combination of glass reinforcement including bidirectional continuous strand woven and chopped strand glass is the ideal solution. The bidirectional continuous strand woven glass reinforcement provides added strength for longer spans. In addition, the woven pattern combined with the chopped strand more evenly distributes stress from cyclic and impact loadings thus allowing an FRP panel to maintain its resiliency. This combination provides excellent performance characteristics in all Resolite '40' Series FRP panels. And, in Tred-Safe, a multi-layered woven construction allows walkability in opaque or translucent roof panels.

The L/D Limit

All Resolite panels are designed in accordance with the L/D limits specified in ASTM D 3841. This standard recognizes the performance capabilities of flexible fiberglass reinforced polyester polymer panels. The natural resiliency of FRP panels accommodates large deflections due to temporary wind loads. When the load is removed, the panels return to their original position with no fastener hole elongation taking place. This phenomenon has been verified by extensive full scale testing and Resolite's over 45 years of field performance.

Testing

Since FRP is a composite material, a number of tests are performed in order to determine the performance characteristics of Resolite panels. The published physical properties are determined from small scale coupon testing. However, these properties can not be simply extrapolated into Load/Span Tables due to the composite nature of FRP. Therefore, Resolite performs full scale tests by the vacuum box method, ASTM E 72, in order to simulate actual field conditions.

Resolite Load/Span Tables are based on the results of the described full-scale tests. The allowable span is limited by panel stress, fastener pullover and deflection limitations. The results are further limited by factors of safety. All Resolite wall and roof panel Load/Span Tables incorporate a factor of safety of 1.88 for wind loads and 2.5 for live loads.

Resolite Load/Span Tables do not consider the effects of elevated temperature or corrosive environments. Over the long term, some reduction in properties is possible and should be factored into the selection of allowable spans, especially when safety is a consideration.

FIRE RESISTANCE & CODE COMPLIANCE

Fire Resistance

Resolite manufactures most of their fiberglass reinforced polymer panels with a fire rated resin system. In fact, Resolite developed and fabricated the first fire retardant FRP panel in 1964. Since then, Resolite has continually been in the forefront of supplying FRP panels in fire retardant resin systems.

Resolite's Tred-Safe FS25A, CRFS25A, and RFM panels are examples of the highest quality fire retardant panel systems available. These product types are fabricated using an isophthalic, halogenated polyester resin with neopentyl glycol, acrylic modification and UV stabilizers. Each has demonstrated a flame spread rating of 25 or less when tested in accordance with ASTM E 84.

Resolite RFM panels have also been approved by Factory Mutual since they have passed the 25' and 50' full scale Corner Test. In accordance with FM standard 4880, Resolite RFM panels have been approved for unrestricted use as a wall, roof or ceiling without height limitations or sprinkler protection. Resolite RFM 11, RFM 14 and RFM 17 panels have also passed ASTM E 108 achieving a Class B burning bran rating with a 3 in 12 roof slope.

The following guide illustrates Resolite's various fire retardant products, panel types, ratings and approvals. Please note that Resolite also manufactures Poliacryl and CR-Poliacryl non-fire retardant panels systems.

Product Type	Panel Type	Surface Burning Characteristics		Approval / Listings	Building Code Classification	
		Flame Spread [1]	Smoke Developed		Flame Spread [1,5]	Rate of burn [6]
Tred-Safe	1645	25	>450	UL	1, I or A	CC1
FS25A & CRF-S25A	1440 1430	25 25	>450 >450	UL UL	1, I or A	CC1
FS25A & CRFS25A	1240 1040 840	25 25 25	≤450 ≤450 ≤450	UL UL UL	1, I or A	CC1
FS25A & CRFS25A	1230 1030 830	25 25 25	500 ≤450 ≤450	UL UL UL	1, I or A	CC1
RFM	17 14 11	15 15 15	≤250 ≤250 ≤250	FMRC FMRC FMRC	1, I or A	CC1
Poliacryl & CR-Poliacryl	Non-fire rated general purpose resin system					CC2

Notes

1. 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.
2. UL- Underwriters Laboratories, Inc.
3. FMRC- Factory Mutual Research Center
4. In accordance with ASTM E84/UL723, NFPA 165
5. In accordance with ASTM D635

Code Compliance

Resolite fire rated FRP panels are manufactured under rigorous standards and meet many code compliance criteria. Resolite FR panels are listed or approved under the following classifications. For additionl information, please contact Resolite Customer Service or your Resolite Sales Representative.

Underwriters Laboratories Listings

Fire Rating

Resolite fire rated product types FS25A, CRFS25A and Tred-Safe have achieved a UL Flame Spread Classification of 25 in accordance with the Steiner Tunnel Test, ASTM E 84 (UL 723). See reverse side for complete listings.

Factory Mutual Approvals

Fire Rating

Resolite RFM panels have passed the 25' and 50' full scale Corner Test. In accordance with Factory Mutual Standard 4880, Resolite RFM panels have been approved for unrestricted use as a wall, roof or ceiling panel without height limitations or sprinkler protection. See reverse side for listing.

Resolite RFM panels were tested and approved for CAN/ ULC-S134-92 (Standard Method of Fire Test of Exterior Wall Assemblies)

Wind Uplift

Resolite RFM panels have passed the Factory Mutual Wind Uplift Test and have achieved the following I-90 Classifications.

PROFILE	PANEL TYPE	CLASS	SPAN
7.2 x 1.5"	RFM 17, 14	I-90	6'6"
7.2D x 1.75"			
7 x 1.5"			
7.2 x 1.5"	RFM 11	I-90	5'0"
7.2D x 1.75"			
7 x 1.5"			
4.2 x 1-1/16"	RFM 17, 14	I-90	5'3"

Insulated Panel System

Resolite RFM panels were tested as part of an insulated panel system and found to meet the FMRC Class 4453/4420 approval requirements for the RFM Insulated Wall and Roof / Ceiling Panel System.

Corrosion Resistance

Since the 1950's, fire retardant polyester resin have been used for building panels in corrosive atmospheres. There are many resin systems available having varying degrees of corrosion resistance. Based on required characteristics and the intended use as an exterior FRP siding or roofing panel, Resolite established guidelines to select the optimal resin system.

First, it had to be flame resistant and able to meet Class 1 flame spread ratings. Second, it had to perform in all types of severe weather conditions. And third, it had to be resistant to a host of various chemical and corrosive elements. These criteria must be satisfied while maintaining an inherent toughness and resiliency and an ability to meet the stringent load/span requirements of the major building codes. Resolite's high quality isophthalic halogenated polyester resin system is the ideal solution.

Isophthalic polyester resin have some major advantages when compared to orthophthalic polyester resin. While orthophthalics offer good corrosion resistance, isophthalics provide higher heat resistance, greater retention of physical properties, better chemical resistance and greater composite strength when bonded to fiberglass reinforcement. In laboratory tests, a fiberglass reinforced isophtalic polyester resin panel showed 10% higher flexural and 20% higher tensile properties than a comparable panel using orthophthalic polyester resin.

Vinyl ester resin are another possible choice. They have good corrosion resistant qualities, in some environments better than polyester resins, and may perform satisfactory at slightly higher temperatures. Fire rated vinyl ester resin systems, however, have a major drawback; they have poor resistance to UV and will weather very quickly. Vinyl ester resin is not recommended for use as an exterior wall or roof panel since severe color change and UV degradation will occur.

Weatherability

The first fire retardant panels had good corrosion resistance in a host of harsh environments. However, they had very poor weather resistance and soon yellowed from ultraviolet attack. Fibers were also becoming exposed in three to five years. Coatings and films were tried but none of these proved to be a long term solution.

Resolite soon realized that weathering, mainly UV degradation, was a major factor that impacted the quality and long term performance of its products. For decades, Resolite has been in the forefront of providing solutions to this difficult problem. We were one of the first FRP producers to utilize SFTS (South Florida Testing Service), an internationally recognized environmental testing company, to evaluate long term outdoor performance. In addition, Resolite has had its own outdoor weather testing program for over 70 years.

Resolite's Research and Development Staff utilizes a Xenon-Arc Weatherometer. This device provides comparable natural outdoor weathering correlation at an accelerated rate. Resolite is able to evaluate the latest resin, pigments, reinforcements and additives in as a little as 6 months instead of the standard 3 years required by traditional outdoor test methods.

The Superior Solution

Over 45 years of FRP evaluation and testing has led Resolite to the fire retardant isophthalic polyester resin system currently utilized. This system with neopentyl glycol, acrylic modification and UV stabilizers provides the best combination of performance characteristics. All Resolite fire-rated products, including FS25A, CRFS25A, Tred-Safe and RFM, utilize this superior polyester resin system. Coupled with a standard embossed resin rich surface, Resolite FRP panels provide the utmost in long term corrosion resistance and weatherability.

C/W Barrier

To further enhance panel corrosion and weathering performance, a C/W Barrier is incorporated by Resolite. C/W Berrier is a protective layer that is fused into the resin/fiberglass matrix to give the panel even greater protection against degradation. C/W Barrier is available as a standard on many Resolite FRP panels and as an option on others. Consult product descriptions or contact Resolite Costumer Service for availability.

CHEMICAL & CORROSION RESISTANCE GUIDE

CHEMICAL ENVIRONMENT	CONCENTRATION (%)	TEMPERATURE (ºF)
Acetic Acid	10 25 50	150 125 90
Alum	Sat'd	250
Alum, Potassium	100	160
Aluminum Chloride	100	120
Aluminum Fluoride[1]	100	90
Aluminum Potassium Sulfate	100	160
Aluminum Sulfate	100	250
Ammonia, Dry & Wet	Gas	90
Ammonium Hydroxide	10	90
Ammonium Nitrate	Sat'd	200
Ammonium Sulfate	Sat'd	200
Anaerobic Sewage	-	85
Arsenic Acid	19ºBe	180
Benzene	100	90
Benzene Sulfonic Acid	30	180
Benzonic Acid	Sat'd	250
Boric Acid	Sat'd	180
Bromine, Wet Gas	100	90
Butyric Acid	70	120
Calcium Hydroxide	Sat'd	160
Calcium Hypochlorite	Sat'd	100
Carbon Dioxide, Wet, Acidic	100	250
Carbon Monoxide Gas	100	200
Carbon Tetrachloride, Vapor	100	90
Carbonic Acid	Sat'd	160
Chlorine Gas, Dry	100	200
Chlorine, Wet Gas	100	90
Citric Acid	Sat'd	200
Copper Sulfate	Sat'd	250
Diesel Fuel	100	100
Ethylene Glycol	100	250
Fatty Acids	Sat'd	250
Fertilizer Fumes	-	100
Flue Gas @ 340º F	-	180
Fluoboric Acid[1]	10 Sat'd	180 90
Fluosilicic Acid[1]	25	90
Formaldehyde @ 150º F	37-44	90
Formic Acid	50	90
Gluconic Acid	50	120
Glycolic Acid	70	120
Hydrobromic Acid	25	160
Hydrochloric Acid[1]	20 32	210 100
Hydrocyanic Acid	Sat'd	200
Hydrofluoric Acid[1]	15	100
Hydrofluosilicic Acid[1]	10	100
Hydrogen Chloride, Anhydrous	100	250
Hydrogen Fluoride, Wet[1]	100	90
Hydrogen Sulfide	100	93
Hypochlorous Acid	Conc.	90

CHEMICAL ENVIRONMENT	CONCENTRATION (%)	TEMPERATURE (ºF)
Kerosene Vapor & Condensate	100	200
Lactic Acid	100	200
Lime Slurry	Sat'd	180
Magnesium Chloride	Sat'd	220
Mercury	100	250
Mineral Oils	100	180
Naphtha	100	200
Nitric Acid	10	175
Nitric Acid Vapor	60%	95
Nitrous Acid	10	90
Oleic Acid	100	200
Oxalic Acid	100	220
Palmitic Acid	Sat'd	160
Phosphoric Acid	85	220
Picric Acid	10	100
Potassium Aluminum Sulfate	Sat'd	160
Potassium Sulfate	100	200
Segage, Municipal, Treated & Untreated	-	90
Sodium Bicarbonate	Sat'd	140
Sodium Bisulfate	100	200
Sodium Carbonate	Sat'd	90
Sodium Chloride	Sat'd	200
Sodium Hydroxide	5	180
Sodium Nitrate	Sat'd	220
Sodium Sulfate	100	180
Stearic Acid	100	200
Sulfamic Acid	Sat'd	160
Sulfite LIquors	-	160
Sulfur	-	200
Sulfuric Acid	50 70	200 150
Sulfuric Acid Vapor	80	140
Sulfurous Acid	10	90
Tannic Acid	Sat'd	200
Toluene	100	90
Turpentine, Pure Gum	100	90
Urea	Sat'd	90
Waste Water Treatment	-	100
ZInc Sulfate	100	200

[1] These recommendations are for vapor, mist, condensate and splash conditions.

General Notes:

1. Temperature data is not necessarily the maximum service temperature. It is the upper temperature at which the resin has been tested, used or evaluated. Actual panel performance at elevated temperature may be lower. Contact Resolite Customer Service.
2. C/W Barrier is recommended for optimum performance. The use of C/W Barrier will enhance performance in all environments.
3. This guide is applicable for all Resolite standard iso-polyester resin system products including Tred-Safe, CRFS25A and FS25A. Due to additives required to retard burning in Resolite RFM Factory Mutual Approved panels the chemical and corrosion resistance of RFM panels should not be considered equal to Resolite's standard iso-polyester panels. For information in the Vinyl Ester Resin used in Tred-Safe DECK, contact Resolite Customer Service.
4. This information is offered as a corrosion resistance guide to design engineers, plant engineers and others who are responsible for selecting building panels. Since conditions vary from project to project, this data is offered as a guide and should not be construed as a guarantee.

PRODUCT DESCRIPTION
TRED-SAFE® PANELS

Tred-Safe FRP Panels

In the industrial and corrosion market, Resolite and Fire Snuf - FS25A are synonymous with high quality fire rated fiberglass reinforced polymer panels. Resolite started production in 1951 and in 1964 developed and produced the first fire-retardant FRP panels.

Resolite Tred-Safe was designed to meet the need for a fire rated, strong, safe, walkable* roof panel. Tred-Safe incorporates the same isophthalic polyester resin as our high performance FS25A and CRFS25A products. The resin is intermixed with a five layer combination of reinforcement including C/W Barriers, bidirectional continuous strand woven and chopped strand fiberglass, making Tred-Safe the optimum FRP walkable panel.

Tred-Safe, Type 1645, is Resolite's toughest roofing or siding panel with a nominal weight of 16 oz./sq.ft. and approximately 45% glass reinforcement. This heavy combination of reinforcement, coupled with Resolite's resilient resin, provides a panel that is strong, flexible and truly walkable. With over 40 years of performance history, Tred-Safe has the proven benefit of safely supporting the concentrated load of maintenance workers. Tred-Safe is also ideal as a siding panel where long spans are required or high impact resistance is needed.

Tred-Safe's resin/glass matrix of isophthalic polyester resin and fiberglass reinforcement provides a long service life in corrosive environments and offers outstanding weathering resistance characteristics. The resin's weathering has been greatly enhanced with neopentyl glycol, acrylic modification and UV stabilizers. 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 Tred-Safe. 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 Tred-Safe 4.2 x 1-1/16" corrugated profile is an ideal replacement for old corrugated cement panels, since both materials have identical configurations.

Tred-Safe Features

- **A Truly Walkable Roof Panel -** Has high impact resistance and is capable of safely supporting normal foot traffic and the weight of maintenance workers.
- **UL Fire Rated -** Flame spread classification of 25*.
- **Corrosion Resistant -** Produced with a high quality isophthalic halogenated polyester resin.
- **Outstanding Weathering -** Our high quality resin incorporates neopentyl glycol, acrylic modification and UV stabilizers.
- **Embossed Surface -** Both exterior and interior surface finishes are embossed creating a resin rich surface to improve performance.
- **C/W Barrier Protection -** STANDARD- a protective barrier in 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 -** Tred-Safe panels utilize a combination of glass reinforcement including bidirectinal continuous strand woven and chopped strand glass. This multi-layered glass fiber reinforcement assures installers and building owners that Tred-Safe provides the safety of a TRULY WALKABLE ROOF PANEL.
- **Standard Stock Colors - Opaque-** 33 Stone White; **Translucent-** 35 Frost (50% light transmission).
- **Standard Profiles -** 7.2 x 1.5", 4.2 x 1-1/16" **Optional profiles:** 7 x 1.5", 7.20 x 1.75"
- **Outstanding Performance -** Backed by over 45 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	1645
Nominal Wt., oz./sq.ft.	16 oz.
Nominal Thickness, in.**	.100
Nominal Glass Content	45%
Hardness, Barcol ASTM D 2583	40
Flexural Strength, psi ASTM D 790	42,000
Flexural Modulus, psi ASTM D 790	1.3×10^{6}
Tensil Strength, psi ASTM D 638	32,000
Cofficient of Expansion (in/in/ºF) ASTM D 696	1.11×10^{-5}
Conductivity (K Factor) ASTM C 177	1.15
Dielectric Strength RMS V. @ 60 cycles ASTM D 149	483 V/Mil.
Fire Resistance Ignition Point ASTM D 1929	820 ºF - 900 ºF
Flame Spread Classification ASTM E 84 (UL 723)	25*

Flamability ASTM D 635

Average Time of Burning less than 5 seconds Average Extent of Burning less than 15 mm
Building Code Classification CC1 or C1

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.

** A Tred-Safe walkable panel is one that is resistant to puncturing and tearing; is rugged and durable; and is capable of safely supporting normal foot traffic and the weight of a maintenance worker. Please note that beyond actual material capabilities, standard construction safety measurements must be observed and are the responsibility of the owner. Under actual service conditions such as elevated temperatures or corrosive environments, some reduction in strength is possible over time, thus limiting the walkability of the panels. This should be considered when selecting the allowable spans and when accesing the roof for maintenance. Maximum walkable spans should be limited to 7'6". Simple spans are not recommended for foot traffic; planks or ladders should be used for these conditions.

Specification (short form)

1. Walkable* fiberglass reinforced polymer wall and/or roof panels shall be Resolite Tred-Safe, type 1645, translucent or opaque corrosion resistant and fire retardant as manufactured by Resolite, a Stabilit America Company, Moscow, TN.

2. Glass reinforcement shall be composed of multiple layers of bidirectional continuous strand woven and chopped strand glass and shall be approximately 45% by weight. Both surfaces shall have a C/W Barrier.

3. Resin shall be high quality isophthalic, neopentyl glycol, halogenated polyester with acrylic modification and UV stabilizers.

4. Finish shall be embossed exterior/embossed interior.

5. Panel weight shall be nominal 16 oz. per square foot.

6. Color shall be No. _____
(Opaque: 33 Stone White or Translucent: 35 Frost).

7. Profile shall be _____
(Standard: 7.2 x 1.5" or 4.2 x 1-1/16")
(Optional: 7 x 15", 7.2 D x 1.75")
Length shall be _____

8. Panels shall be classified by Underwritters Laboratories Inc. witha Flame Spread of 25*. The flame spread rating shall be achieved wothout the use of fillers. **Each panel shall have the underwriters' label.**

FS25A / CRFS25A '40' Series FRP Panels

In the industrial and corrosion market, Resolite and Fire Snuf- FS25A are synonymous with high quality fire rated fiberglass reinforced polymer panels. Resolite started production in 1951 and in 1964 developed and produced the first fire-retardant FRP panels.

The '40' Series FS25A (translucent) and CRFS25A (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.

A FRP panel's ability to absorb forces without damage to its structural integrity is critical to long term performance. Straight continuous glass provides stiffer and longer spanning 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 isophthalic 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 FS25A and CRFS25A panels have over 70 years of longterm performance history. Both have been utilized wherever fire resistance, corrosion resistance and good weathering characteristics are critical. Installations include steel mills, aluminium 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.

FS25A / CRFS25A Features

- **UL Fire Rated -** Flame spread classification of 25*.
- **Corrosion Resistant -** Produced with a high quality isophthalic halogenated polyester resin.
- **Outstanding Weathering -** Our high quality resin system incorporates acrylic modification and UV sabilizers.
- **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	1440	1240	1040	840
Nominal Wt., oz./sq.ft.	14 oz.	12 oz.	10 oz.	8 oz.
Nominal Thickness, in.**	.092	.080	.068	.055
Nominal Glass Content	40%	40%	40%	40%
Hardness, Barcol ASTM D 2583	40			
Flexural Strength, psi ASTM D 790	34,000			
Flexural Modulus, psi ASTM D 790	1.2×10^6			
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)	25*			

Flamability ASTM D 635

Average Time of Burning less than 5 seconds
Average Extent of Burning less than 20 mm
Building Code Classification CC1 or C1

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)

1. Translucent or opaque fiberglass reinforced polymer wall and/or roof panels shall be type _____ (1440 thru 840) corrosion resistant and fire retardant Resolite FS25A (translucent) or CRFS25A (opaque) as manufactured by Resolite, a Stabilit America Company, Moscow, TN.

2. 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 isophthalic, neopentyl glycol, halogenated polyester with acrylic modification and UV stabilizers.

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 _____

8. Panels shall be classified by Underwriters Laboratories Inc. with a Flame Spread of 25*. The flame spread rating shall be achieved without the use of fillers. **Each panel shall have the underwriters' label.**

FS25A / CRFS25A '30' Series FRP Panels

In the industrial and corrosion market, Resolite and Fire Snuf- FS25A are synonymous with high quality fire rated fiberglass reinforced polymer panels. Resolite started production in 1951 and in 1964 developed and produced the first fire-retardant FRP panels.

In very corrosive environments, such as steel mill pickling operations, the maintenance staff discovered that after a few years of exposure their metal cladding was falling. The only things intact were the translucent FRP panels. From that start over 70 years ago, Resolite has become the leading producer of FRP panels for the corrosion market.

FS25A is the translucent and CRFS25A is the opaque version of Resolite's fire retardant panels. Both are available in a wide variety of profiles and in many types (1430 thru 830) and have a nominal weight of 14 oz. thru 8 oz. per square foot respectively.

FS25A and CRFS25A panels are a composite matrix of polyester resin and chopped strand fiberglass reinforcement. This glass reinforcement is multi-directional and provides equal strength in all directions. Although other types of glass reinforcements, such as linear glass, can provide stiffer panel characteristics and longer spanning capabilities, they sacrifice resiliency. The ability to absorb various forces without damage to its structural integrity is critical to the long term performance of FRP panels.

C/W Barrier is an option available on both exterior and/or interior surfaces of '30' 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 FS25A and CRFS25A panels have over 70 years of long term performance history. Both have been utilized wherever fire resistance, corrosion resistance and good weathering characteristics are critical. Installations include steel mills, aluminium 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.

FS25A / CRFS25A Features

- **UL Fire Rated -** Flame spread classification of 25*.
- **Corrosion Resistant -** Produced with a high quality isophthalic halogenated polyester resin.
- **Outstanding Weathering -** Our high quality resin system incorporates neopentyl glycol, 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 -** OPTIONAL- a protective barrier in both exterior and interior surfaces that is fused into the resin/fiberglass matrix to give the panel even greater protection against degradation.
- **Types Available -** 1430 (14 oz.) thru 830 (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 -** 5 standard profiles- 7.2 x 1.5", 7.2 D x 1.75", 7 x 1.5", 4.2 x 1-1/16" and 2-1/2 x 1/2". 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.
- **Meets ASTM D 3841 -** Standard Specification for Glass-Fiber-Reinforced Polyester Plastic Panels.

Physical Properties

MOST COMMON TYPES AVAILABLE	1430	1230	1030	830
Nominal Wt., oz./sq.ft.	14 oz.	12 oz.	10 oz.	8 oz.
Nominal Thickness, in.**	.097	.085	.073	.060
Nominal Glass Content	30%	30%	30%	30%
Hardness, Barcol ASTM D 2583	40			
Flexural Strength, psi ASTM D 790	27,000			
Flexural Modulus, psi ASTM D 790	1.0×10^6			
Tensil Strength, psi ASTM D 638	16,000			
Cofficient of Expansion (in/in/ºF) ASTM D 696	1.11×10^{-5}			
Conductivity (K Factor) ASTM C 177	1.15			
Dielectric Strength RMS V. @ 60 cycles ASTM D 149	483 V/Mil			
Fire Resistance Ignition Point ASTM D 1929	850 ºF - 900 ºF			
Flame Spread Classification ASTM E 84 (UL 723)	25*			

Flamability ASTM D 635

Average Time of Burning less than 5 seconds
Average Extent of Burning less than 20 mm
Building Code Classification CC1 or C1

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)

1. Translucent or opaque fiberglass reinforced polymer wall and/or roof panels shall be type _____ (1430 thru 830) corrosion resistant and fire retardant Resolite FS25A (translucent) or CRFS25A (opaque) as manufactured by Resolite, a Stabilit America Company, Moscow, TN.

2. Glass reinforcement shall be composed of chopped strand glass and shall be approximately 30% by weight. C/W barrier is optional.

3. Resin shall be high quality isophthalic, neopentyl glycol, halogenated polyester with acrylic modification and UV stabilizers.

4. Finish shall be embossed exterior/smooth interior.

5. Panel weight shall be nominal _____ (14 oz/sf - type 1430 thru 8 oz/sf - type 830) 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 _____

8. Panels shall be classified by Underwritters Laboratories Inc. with a Flame Spread of 25*. The flame spread rating shall be achieved without the use of fillers. **Each panel shall have the underwriters' label.**

RFM Factory Mutual Approved panels

In the industrial and corrosion market, Resolite and Fire Snuf- FS25A are names synonymous with fiberglass reinforced polymer panels. Resolite started production in 1951 and in 1964 developed and produced the first fire-retardant FRP panel.

Over 70 years of production and development experience has gone into Resolite's RFM panels. These panels were tested at Factory Mutual Research Center and have passed both the Factory Mutual 25' and 50' foot Corner Test. Both tests were conducted on minimum 6'0" spans to simulate real world conditions.

In accordance with FM Standard 4880/4881, Resolite RFM panels have been approved for unrestricted use as a wall, roof or ceiling without height limitations or sprinkler protection.

Resolite RFM panels also achieved I-90 Wind Uplift Classification and passed the Factory Mutual tough hail damage tests. In addition, Resolite RFM 11, 14 and 17 panels have passed ASTM E 108 and achieved a Class B rating with maximum 3 in 12 roof slope.

The Resolite RFM insulated panel system was also tested and meets the FMRC Class 4453/4420 approval requirements.

RFM fiberglass reinforced polymer panels are formulated using the same halogenated isophthalic resin system as used in Ted-Safe and CRFS25A. All FM approved FRP panels must use additives to retard burning; these additives, however, reduce corrosion and weather resistance. When an FM label is not required, Resolite's FS25A, CRFS25A and Tred-Safe would be the superior choice for utmost corrosion and weather resistance. These panels carry a UL25 flame spread rating and are produced with our unfilled isophthalic resin system.

RFM Features

- **Factory Mutual Approved -** Meets the criteria for approval as a Class 1, fire rated plastic building panel without height or area limitations and without sprinkler protection.
- **FM Wind Uplift Classification -** RFM panels have achieved FM I-90 Wind Uplift Classification.
- **Corrosion Resistant -** Produced with a high quality isophthalic halogenated polyester resin system.
- **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 -** A protective barrier on the exterior surface of RFM panels that is fused into the resin/fiberglass matrix to give the panel even greater protection against degradation.
- **Multiple Glass Reinforcements -** RFM panels utilize a high strength combination of glass reinforcement including bidirectional continuous strand woven and chopped strand glass.
- **Three Types Available -** 17 (17oz.), 14 (14 oz.) ans 11 (11oz.)
- **Three Standard Colors -** Available in three standard opaque colors- Stone White, Gray and Beige. Consult Standard Color Guide for more information.
- **Two Standard Profiles -** 7.2 x 1.5" and 4.2 x 1-1/16"; Two optional profiles 7.2D x 1.75", 7 x 1.5"
- **Outstanding Performance -** Backed by over 45 years of case history in the corrosion and industrial market.
- **Load/Span Data -** Based on full scale tests to simulate actual field conditions.
- **Meets ASTM D 3841 -** Standard Specification for Glass-Fiber-Reinforced Polyester Plastic Panels.
- **Canadian S134 -** Resolite RFM wall assembly has passed CAN/ULCS-134 Full-Scale Exterior Wall Fire Test, which is the Canadian Test comparable to NFPA 285.

Physical Properties

TYPES AVAILABLE	17	14	11
Nominal Wt., oz./sq.ft.	17 oz.	14 oz.	11 oz.
Nominal Thickness, in.**	.105	.090	.075
Nominal Glass Content	25%	25%	25%
Hardness, Barcol ASTM D 2583	45		
Flexural Strength, psi ASTM D 790	21,000		
Flexural Modulus, psi ASTM D 790	1.2×10^6		
Tensil Strength, psi ASTM D 638	14,000		
Cofficient of Expansion (in/in/°F) ASTM D 696	3.2×10^{-5}		
Conductivity (K Factor) ASTM C 177	2.50		
Dielectric Strength RMS V. @ 60 cycles ASTM D 149	403 V/Mil		
Fire Resistance Ignition Point ASTM D 1929	875 °F - 925 °F		
Flame Spread Classification ASTM E 84 (UL 723)	15*		
Smoke Classification	250		

Flamability ASTM D 635

Average Time of Burning less than 5 seconds
Average Extent of Burning less than 15 mm
Building Code Classification CC1 or C1

FACTORY MUTUAL WIND UPLIFT CLASSIFICATION			
Profile	**Panel Type**	**Class**	**Span**
7.2 X 1.5" 7.2D X 1.75" 7 X 1.5"	RFM 17,14	I-90	6'6"
7.2 X 1.5" 7.2D X 1.75" 7X 1.5"	RFM 11	I-90	5'0"
4.2 X 1-1/16"	RFM 17, 14	I-90	5'3"

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)

1. Fiberglass reinforced polymer wall and/or roof panels shall be Resolite RFM 17 / RFM 14 / RFM 11, Factory Mutual Approved, as manufactured by Resolite, a Stabilit America Company, Moscow, TN.

2. Glass reinforcement shall be composed of bidirectional continuous strand woven and chopped strand glass and shall be approximately 25% by weight. Exterior surface shall have a C/W barrier.

3. Resin shall be high quality isophthalic, neopentyl glycol, halogenated polyester with acrylic modification and UV stabilizers.

4. Finish shall be embossed exterior/smooth interior.

5. Panel weight shall be nominal 17 oz. (RFM 17), 14 oz. (RFM 14), 11 oz. (RFM 11) per square foot in order to comply with the maximum loads and spans recommended by Resolite.

6. Color shall beopaque, No. _____ (133 Stone White, 197 Gray or 175 Beige).

7. Profile shall be _____ (Standard: 7.2 x 1.5" or 4.2 x 1 -1/16") (Optional: 7.2D x 1.75" or 7 x 1.5") Length shall be _____

8. Panels shall be Factory Mutual approved per standard 4880/4881 for use without height or area limitations and without sprinkler protection. ALL PANELS SHALL HAVE THE FM LABEL.

9. Panels shall have a flame spread classification of 15* or less and a smoke classification of less than 250 per ASTM E 84.

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	1.2×10^6		
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)

1. 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.

2. 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 _____

Poliacryl / CR- Poliacryl FRP Panels

Resolite Poliacryl and CR-Poliacryl are names synonymous with Fiberglass Reinforced Polymer panels in the corrosion and industrial markets. In very corrosive environments such as steel mill pickling operations, the maintenance staff discovered that after a few years of exposure their metal cladding was failing. The only things intact were the translucent FRP panels. From that start, over 70 years ago, Resolite has become the leading producer of FRP panels for the corrosion market.

Poliacryl is the translucent and CR-Poliacryl the opaque version of Resolite's non-fire retardant (non FR) panels. Both are available in a wide variety of profiles and in many types 1230 thru 830 and have a nominal weight of 12 oz. thru 8oz. per square foot respectively.

Poliacryl and CR-Poliacryl panels are a composite matrix of polyester resin and chopped strand fiberglass reinforcement. This glass reinforcement is multi-directional and provides equal strength in all directions. Although other types of glass reinforcements, such as linear glass, can provide stiffer panel characteristics and longer spanning capabilities, they sacrifice resiliency. The ability to absorb various forces without damage to its structural integrity is critical to the long term performance of FRP panels.

C/W Barrier is an option available on both exterior and/or interior surfaces of '30' Series panels. C/W Barrier es 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, aluminium 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 -** OPTIONAL- a protective barrier on exterior and/or interior surfaces that is fused into the resin/fiberglass matrix to give the panel even greater protection against degradation.
- **Types Available -** 1230 (12oz.) thru 830 (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 -** 5 standard profiles- 7.2 x 1.5", 7.2D x 1.75", 7 x 1.5", 4.2 x 1-1/16" and 2-1/2 x 1/2". 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.
- **Meets ASTM D 3841 -** Standard Specification for Glass-Fiber-Reinforced Polyester Panels.

Physical Properties

TYPES AVAILABLE	1230	1030	830
Nominal Wt., oz./sq.ft.	12 oz.	10 oz.	8 oz.
Nominal Thickness, in.**	.085	.073	.060
Nominal Glass Content	30%	30%	30%
Hardness, Barcol ASTM D 2583	50		
Flexural Strength, psi ASTM D 790	27,000		
Flexural Modulus, psi ASTM D 790	1.0×10^6		
Tensil Strength, psi ASTM D 638	16,000		
Cofficient of Expansion (in/in/°F) ASTM D 696	1.5×10^{-5}		
Conductivity (K Factor) ASTM C 177	1.04		
Dielectric Strength RMS V. @ 60 cycles ASTM D 149	573 V/Mil		
Fire Resistance Ignition Point ASTM D 1929	850 °F - 900 °F		
Flame Spread Classification ASTM E 84 (UL 723)	N/A		

Flamability ASTM D 635

Average Time of Burning 2.94 cm/min.
Building Code Classification CC2 or C2

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)

1. Translucent or opaque fiberglass reinforced polymer wall and/or roof panels shall be type _____ (1230 thru 830) corrosion resistant non-fire retardant Resolite Poliacryl (translucent) or CR-Poliacryl (opaque) as manufactured by Resolite, a Stabilit America Company, Moscow, TN.

2. Glass reinforcement shall be composed of chopped strand glass and shall be approximately 30% by weight. C/W barrier is optional.

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 1430 thru 8 oz/sf - type 830) per square foot in order to comply with the maximum loads and spans recommended by Resolite.

6. Color shall be No. _____ (See Color, Finish, Light Transmission page 12 A).

7. Profile shall be _____ (See Profile Selection Guide page 14A, B and C). Length shall be _____

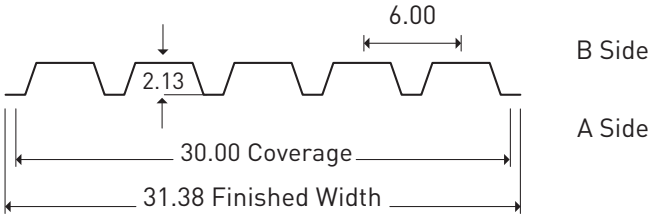
Tred-Safe Deck

After 70 years of experience producing fiberglass reinforced polymer panels for the corrosion and industrial markets, Resolite is now drawing on that knowledge to provide a deck product with a special blend of corrosion and moisture resistant vinyl ester resin and fiberglass reinforcement. Resolite Tred-Safe DECK is an industrial construction unit that integrates corrosion resistance and high strength in a lightweight assembly.

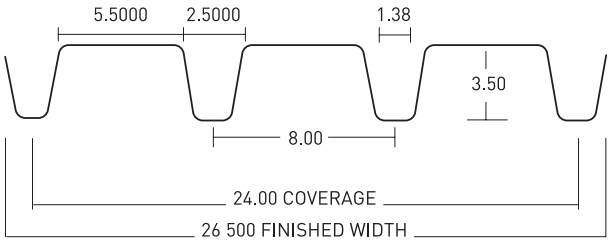
Resolite Tred-Safe DECK is the smart choice for the highly corrosive environments found in pulp and paper mills, galvanizing plants, salt operations, metal processing and chemical plants. Tred-Safe DECK is the ideal replacement for old wood decks, spalling concrete chanel slabs or other deteriorated systems. It can be used either as a support for a built-up or single ply roofing system, or as a form for poured reinforced concrete slabs.

The unique combination of fiberglass reinforcement built into Tred-Safe DECK provides an exceptionally strong unit. Building owners and installers can be assured that Tred-Safe DECK provides a safe working platform and can be used in many of the same applications as light gauge metal roof deck.

Tred-Safe Deck 6 x 2 - 1/8"



Resolite 8" x 3 1/2" Deck



ROOFING WIND OR LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
6x2-1/8" Deck	7'3"	9'8"	8'11"	6'4"	8'5"	7'9"	5'9"	7'8"	7'1"	5'4"	7'1"	6'7"	5'0"	6'8"	6'2"
8x3-1/2" Deck	10'7"	14'2"	13'0"	9'3"	12'4"	11'5"	8'4"	10'11"	10'4"	7'9"	8'9"	9'7"	7'4"	7'3"	8'3"
ROOFING TEMPORARY OR SNOW LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
6x2-1/8" Deck	6'7"	8'9"	8'1"	5'9"	7'8"	7'1"	5'2"	7'0"	6'5"	4'10"	6'6"	6'0"	4'7"	6'1"	5'7"
8x3-1/2" Deck	9'7"	12'10"	11'10"	8'4"	11'3"	10'4"	7'7"	10'2"	9'5"	7'1"	9'6"	8'9"	6'8"	8'11"	8'2"

Tred-Safe Deck Features

- **25 Flame Spread Rating -** Passed the ASTM E 84 Steiner Tunnel Test and achieved a 25* flame spread rating.
- **Corrosion Resistant -** Produced with a high quality halogenated vinyl ester resin.
- **Embossed Surface -** The interior (exposed) surface is embossed creating a resin rich surface to improve performance.
- **Multiple Glass Reinforcements -** Tred-Safe DECK utilizes a combination of glass reinforcement including bidirectional continuous strand woven and chopped strand glass. This multi-layered glass fiber reinforcement assures installers and building owners that Tred-Safe DECK provides a safe working platform.
- **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.

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel Span/Deflection ratios (L/D) shall be limited to L/180 for wind or live loads and L/240 for temporary or snow loads.
3. Factors of safety shall be 1.88 for panels subjected to wind load and 2.50 for panels subjected to live, temporary and snow loads.
4. Load/Span limits are based on fasteners with 3/4" (.729") washers in every low.
5. For heavy sustained loads or unusual load or design conditions, please contact the Resolite Custumer Service Department for more information.

Physical Properties

TYPES AVAILABLE	6X8-1/8" Deck	8X3-1/2" Deck
Nominal Wt., oz./sq.ft.	16 oz.	22 oz.
Nominal Thickness, in.**	.085	.085
Nominal Glass Content	50%	50%
Hardness, Barcol ASTM D 2583	45	
Flexural Strength, psi ASTM D 790	70,000	
Flexural Modulus, psi ASTM D 790	2.8×10^6	
Tensil Strength, psi ASTM D 638	42,000	
Stiffness, EI	2.47×10^6 lb in^2/ft	
Fastener Pull-thru	600 lb/fastener (3/4" washers)	
Moment Capacity	17,000 in lb/ft	
Flame Spread Classification ASTM E 84	25*	

Notes

* 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)

1. Fiberglass reinforced polymer deck panels shall be Resolite Tred-Safe DECK as manufactured by Resolite, a Stabilit America Company, Moscow, TN.

2. Glass reinforcement shall be composed of multiple layers of bidirectional continuous strand woven and chopped strand glass and shall be approximately 50% by weight.

3. Resin shall be high quality halogenated vinyl ester.

4. Finish shall be smooth exterior/embossed interior.

5. Panel weight shall be nominal 16 oz. per square foot.

6. Color shall be No. 237 White.

7. Profile shall be 6 x 2-1/8"; 30" Coverage.
   Length shall be _____

   or

   Profile shall be 8 x 3-1/2"; 30" Coverage.
   Length shall be _____

8. Deck panels shall have passed the ASTM E 84 Steiner Tunnel Test and achieved a 25* flame spread rating.

Due to its excellent corrosive and structural qualities, vinyl ester resin is used to manufacture Tred-Safe DECK. However, vinyl ester resin has a drawback; it has poor resistance to UV and will weather very quickly. Tred-Safe DECK still provides good performance since it is an interior product and not subject to UV degradation. Care should be taken during installation to limit uncovered exposure and units should be stored indoors.

FRP deck units, in general, are not addressed by the major building codes. Therefore, ultimate review and approval of FRP deck applications is the responsibility of the local building official or design agent.

Part 1 General

1.01 Description of work

This specification covers roof and/or walls units and associated flashing trim as indicated on the drawings; including but not necessarily limited to:

A. Fiberglass Reinforced Polymer (FRP)
- roofing panels
- wall/siding panels
- flashing trim

B. Fasteners; required for FRP panels and flashing trim

C. Sealants and closures required for complete installation as indicated on drawings

1.02 Quality Assurance

A. Products of Resolite, a Stabilit America Company, 285 Industrial Drive, Moscow, TN 38057 establish the required level of quality.

1.03 Product Substitutions

A. Any substitution must meet the minimum quality and performance standards specified.

B. Applications for substitution must include technical information including full scale test data, samples and any other information required for evaluation.

1.04 Performance Testing

A. Structural performance criteria shall be determined by full scale test method ASTM E 72 and shall be in compliance with Standard Specification for Glass-Fiber Reinforced Polyester Plastic Panels ASTM D 3841.

Part 2 Products

2.01 Materials

A. Roofing and siding panels shall be manufactured by Resolite and conform to the following specification: (Choose one of the following product specifications located on indicated page).

2.01 Materials (cont.)

Walkable Fire Rated Panels
Tred-Safe Type 1645 Page 13
Fire Rated Panels
FS25A/CRFS25A '40' Series Page 15
FS25A/CRFS25A '30' Series Page 17
Factory Mutual Approved Panels
RFM Types 17, 14, 11 Page 19
Non-Fire Rated Panels
Poliacryl & CR-Poliacryl '40' Series Page 21
Poliacryl & CR-Poliacryl '30' Series Page 23
Deck
Tred-Safe DECK Page 25

Part 3 Execution

3.01 Storage and Handling

A. Protect the FRP panels from surfaces cuts and abrasions. Keep panels dry and protected prior to use. Note that moisture trapped between panels can result in permanent staining. Store under roof in a well ventilated area where possible. Stack panels off ground with one end elevated. Care must be taken when lifting Resolite panels. Use spreader bars when lifting; do not use wire slings unless material is protected.

3.02 Inspection

A. Examine alignment of structural steel and related supports prior to installation and do not proceed until the defects are corrected by the responsible contractor.

3.03 Installation

A. Panels shall be installed plumb and true in proper alignment and relation to the structural framing.

B. Install FRP panels, fasteners, trim and related sealants in accordance with approved shop drawings and/or manufacturing standards.

Color

Resolite FRP panels are available in a variety of standard colors (see guide). These standard colors have been formulated to compliment a variety of aesthetic requirements and have proven to be the most popular. Over 85% of all FRP panels produced by Resolite are manufactured in standard colors.

In addition to the standard colors, Resolite FRP panels can be manufactured in non-standard colors or custom colors to meet specific project specifications.

Finish

All Resolite FRP panels are normally provided in our standard embossed exterior/smooth interior finish. However, Tred-Safe, Type 1645, is provided with an embossed/embossed finish as standard. An embossed exterior finish provides a resin rich surface than enhances the weathering and corrosion resistance characteristics of the panels.

All Resolite FRP panels can also be provided in an embossed exterior/embossed interior finish for certain applications. A smooth exterior finish can also be provided on some Resolite FRP panels.

Light Transmission

Resolite fire rated FS25A and non-fire rated Poliacryl panels are TRANSLUCENT. A translucent panel allows some percetange of natural light to pass through the panel thus providing a light transmission value in accordance with ASTM 1494. Standard ranges of 40% to 90% can be achieved depending on product type and color (see guide). Custom light transmission values from 15% to 60% can be manufactured to meet specific project requirements.

Resolite fire rated RFM, CRFS25A and non-fire rated CR-Poliacryl panels are OPAQUE and are intended not to allow any light passage through the panel. The industry standard definition for an opaque panel is one that allows less than 5% light transmission. All Resolite opaque colors contain full pigment loading to assure light transmission of less than 5%.

For non-standard options reading color, finish or light transmission, contact Resolite Customer Service for availability, minimum quantities, and additional cost that may be associated.

Standard Color Guide

PRODUCT	COLOR	COLOR NUMBER	LIGHT TRANSMISSION **
Tred-Safe	Stone White	33	Opaque
	Frost	35	50%
CRFS25A	Stone White	33	Opaque
	Gray	97	Opaque
	Beige	75	Opaque
FS25A	Clear	11	85%
	White	31	40%
	Green	21	60%
	Glareguard Gray*	99	60%
RFM	Stone White	133	Opaque
	Gray	197	Opaque
	Beige	175	Opaque
CR-Poliacryl	Stone White	34	Opaque
	Gray	96	Opaque
	Beige	74	Opaque
Poliacryl	Clear	10	90%
	White	30	55%
	Green*	20	75%
	Glareguard Gray*	98	60%
Tred-Safe Deck	White	237	Opaque

Notes

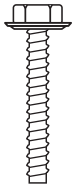
* Non-standard colors are available at additional cost. Please note that special custom color formulations are also available at additional cost premium. Contact Resolite Customer Service Dept. for more information.

** Light transmission percentage based on type 830 panels (nominal 8 oz./sq. ft.) Values for 40 series panels are slightly lower.

FASTENERS, SEALANTS AND ACCESSORIES

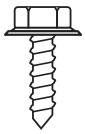
Resolite offers a complete line of fasteners, sealants and accessories for use in conjunction with Resolite FRP panels. These items may be ordered with FRP panels or independently. Many items are in stock for quick delivery. Contact Resolite Customer Service for availability.

Stainless Steel Self-Tapping Screws



Type "B"
14 threads per inch

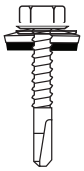
Type 'B' point is used to fasten Resolite panels to steel girts and purlins. These stainless steel fasteners come in various lengths and are 1/4" diameter. The standard fasteners come with a pre-assembled stainless steel backed neoprene washer in 3/4 (. 729") diameter. A 5/8" diameter washer is available when required for certain profiles.



Type "A"
10 threads per inch

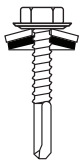
A 1-1/8" diameter washer, designed for high wind and impact loads is also available. The fasteners are available in 300 series stainless steel. For extreme or unusual corrosion conditions, contact Resolite for special fastener availability.

Type 'A' point is similar to a 181 point fastener, except it is used to fasten Resolite panels to wood framing. The 'A' point can also be used to attach Resofite panels to pultruded FRP structural shapes.



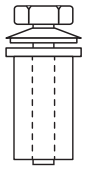
SX5 Self-Drill

Stainless steel fasteners that bond and seal FRP to metal
Drill capacity: .0060- .157
Thickness is based on normal, single thickness purling/girt or multiple material thickness combined for total



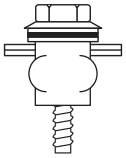
SX14 Self-Drill

Stainless steel fasteners that bond and seal FRP to metal
Drill capacity: .157-.550
Thickness is based on normal, single thickness purling/girt or multiple material thickness combined for total



SB-2 Side lap fastener (before installation)

SB-2 Side Lap Fastener
The SB-2 is a grommet type fastener used to fasten the side laps between two Resolite panels. They are also used to attach a flashing member to a Resolite panel in an area where there is no structural backing.



SB-2 Side lap fastener (after installation)

The SB-2 has a stainless steel hex head machine screw with a neoprene sleeve, 3/8" diameter by 1 1/4" long. As the head is tightened, the grommet expands and provides an effective seal, as well as flexibility, for normal expansion and contraction.

Butyl Tape

Butyl tape is used to seal the side and end laps on opaque Resolite panels. It has an aggressive tack which assures positive positioning and maximum surface contact. It easily conforms to irregular joint areas and provides a tough durable corrosion resistant seal against ingress of water and dirt. Butyl tape is available in 50 ft. rolls 1/8" thick by 3/8" wide.

Clear Silicone Sealant

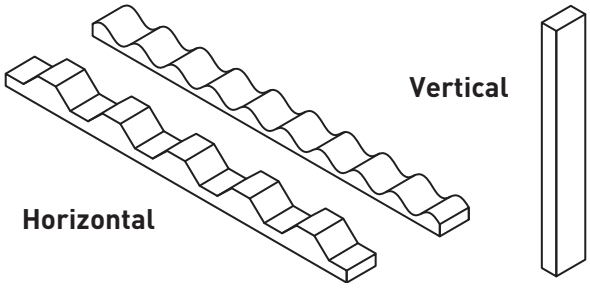
This clear sealant is used to seal the side and end laps on translucent Resolite panels. It is permanently pliable with good application characteristics. It is available in an 10 oz. spouted cartridge and coverage is approximately 25 lineal feet per cartridge using a 1/4" bead.

Closure Strips

To give a better appearance and weather tightness, configurated E.P.D.M. composition closure strips are recommended for sealing openings created at such areas as ridges, eaves, door openings, etc. They are available in both horizontal and vertical types for most Resolite profiles.

FRP Flashing

Resolite manufactures a complete line of FRP flashing to complement opaque and translucent Resolite FRP panels. Please consult pages 53-55 for typical details.



Fastener Guide

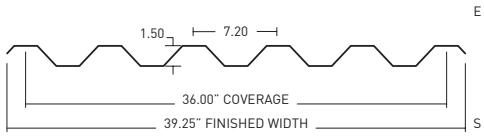
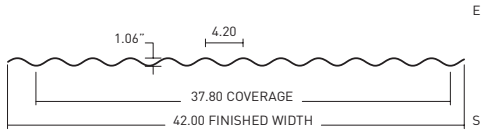
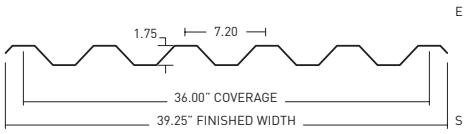
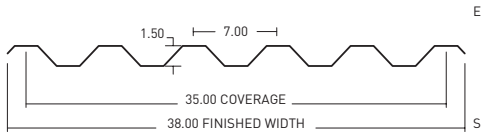
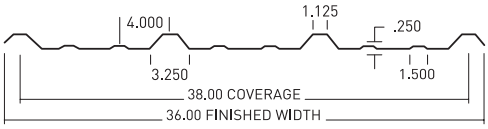
PROFILE	APPLICATION	FASTENER TO PURLING OR GIRT	SIDE LAP FASTENER	SEALANT SIDE & END LAPS
7.2 x 1.5" 7.2D x 1.75" 7 x 1.5" 7.2 Box Rib 4.2 x 1 - 1/16" 4 - 7/8 V - Beam 5.33 V - Beam	Roofing	Every low flute	12" on center	Butyl Tape Opaque panel Clear Silicone - translucent panel
	Siding		18" on center	Not required unless called for on project drawings or specifications
4 x 1/2" 4 x 1"	Roofing	Every other low	12" on center	Butyl Tape - used for opaque panel Clear Silicone - used for translucent panel
	Siding		18" on center	Not required unless called for on project drawings or specifications
2 - 1/2 x 1/2" 2.67 x 7/8"	Roofing	Every other high	12" on center	Butyl Tape Opaque panel Clear Silicone - translucent panel
	Siding		18" on center	Not required unless called for on project drawings or specifications
12 x 3" TraffordTile R-Panel	Roofing	Two every low (wide flute on support)	12" on center	Butyl Tape Opaque panel Clear Silicone - translucent panel
	Siding		18" on center	Not required unless called for on project drawings or specifications
6 x 2 - 1/8"	Deck	Every low	18" on center	Not required unless called for on project drawings or specifications

Notes

1. All roof slopes are a minimum of 1: 12. For slopes less than 1: 12, contact Resolite Customer Service.
2. The minimum end lap for roofing is 6" except for 6 x 2-1/8 deck. Butt ends of deck where possible.
3. The minimum end lap for siding is 4".
4. A #14 fastener with standard 3/4" (. 729") diameter washer is used on all profiles except the following profiles which require a 5/8" washer: 4.2 x 1-1/16, 4-7/8 V-beam, 2-1/2 x 1/2" and 2.67 x 7/8" profiles.
5. For fastening guidelines for unusual or extreme loading conditions, contact Resolite Customer Service.

PROFILE SELECTION GUIDE

Standard Profiles

	Fire rated			Non-FR	Load span data see page listed
		FS25A/CRFS25A		Ac/CR-Ac	
	Tred-Safe	'40' series	'30' series	'30' series	
	✔	✔	✔	✔	36
	✔	✔	✔	✔	37
	OPT	✔	✔	✔	38
	OPT	✔	✔	✔	39
		✔	✔	✔	40
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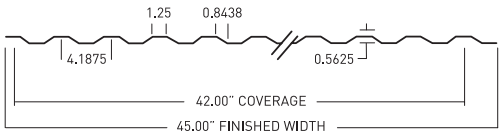
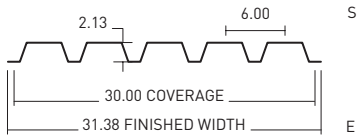
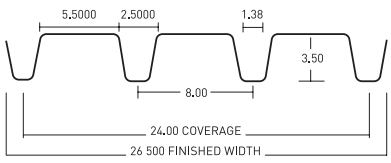
		✔	✔	✔	42
	VINYL ESTER RESIN				24
	VINYL ESTER RESIN				24

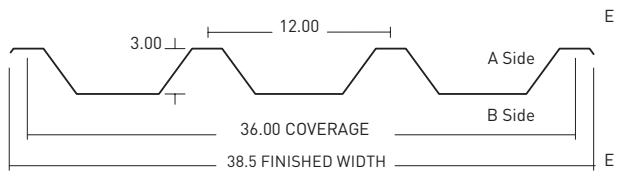
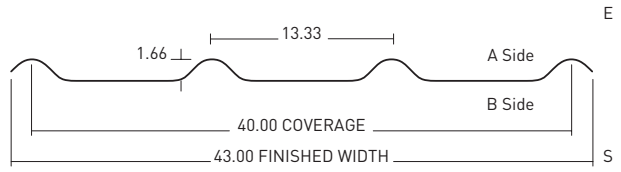
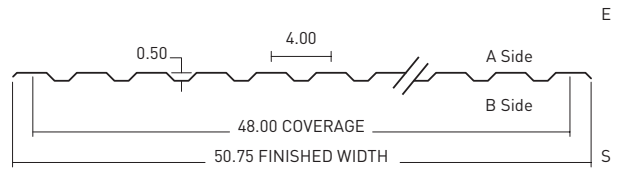
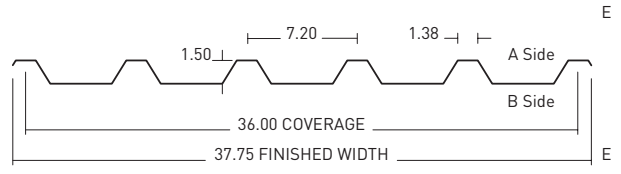
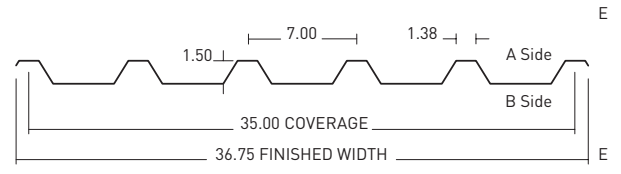
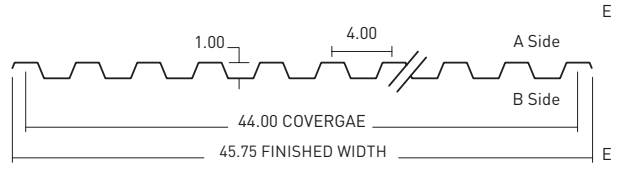
Notes

1. Panels are manufactured in standard lengths from 4' to 40'.
2. Surface texture is designated by E for Embossed and S for Smooth.
3. Coverage width and length tolerance for all panel profiles is 1/4".
4. Stock panels available in 7.2 x 1.5" and 4.2 x 1-1/16". Contact Resolite's Customer Service for availability

The 7.2 x 1.5 and 4.2 x 1 1/16" profiles are the most commonly used and most readily available of the Resolite FRP panels.

For other standard profiles availability and minimum order requirements, contact Customer Service Department.

Standard Profiles

	Fire rated			Non-RF	Load span data see page listed
		FS25A/CRFS25A		Ac/CR-Ac	
	Tred-Safe	'40' series	'30' series	'30' series	
	✔	✔	✔	✔	43
NOT AVAILABLE IN TYPES 830 AND 840					
	✔	✔	✔	✔	44
		✔		✔	45
	✔	✔		✔	46
	✔	✔		✔	47
		✔		✔	48

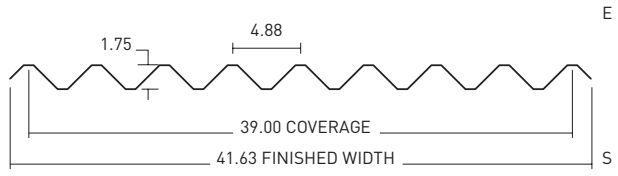
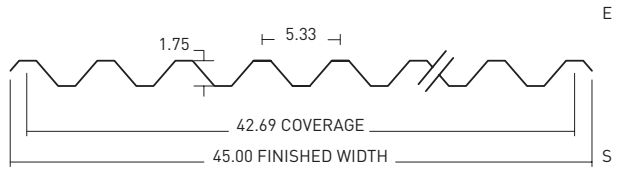
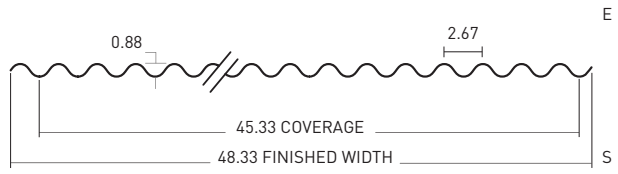
Notes

1. Other profiles and flat panels may be available. Contact Resolite Customer Service for more information.
2. Surface texture is designated by E for Embossed and S for Smooth.
3. Panels are manufactured in standard lengths from 4' to 40'.
4. Coverage width and length tolerance for all panel profiles is 1/4".
5. Non-symmetrical profiles are designed above by showing the 'A' Side and 'B' Side. This information is required when ordering horizontal closure strips.

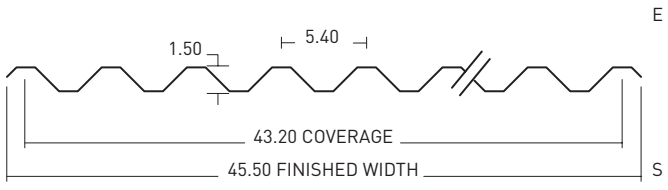
The profiles listed below are not commonly used. Some product, profile, weight and/or color combinations may have minimum order requirements.

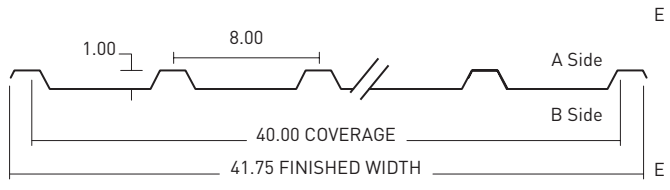
Delivery restrictions may also apply. Contact Customer Service Department with your specific project requirements.

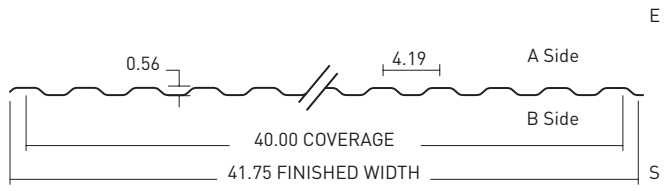
Standard Profiles

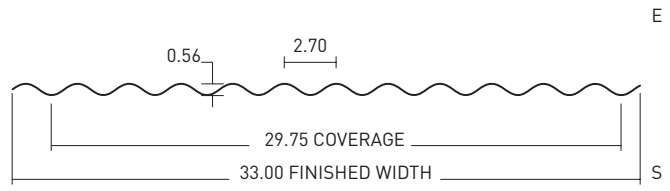
	Fire rated			Non-RF	Load span data see page listed
		FS25A/CRFS25A		Ac/CR-Ac	
	Tred-Safe	'40' series	'30' series	'30' series	
		✔		✔	49
NOT AVAILABLE IN TYPES 830 AND 840					
		✔		✔	50
		✔		✔	51

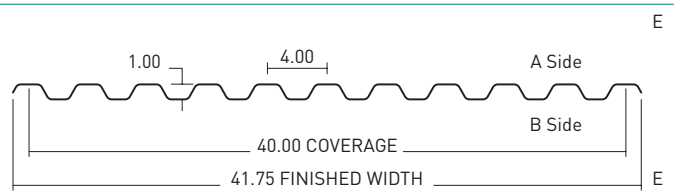
SPECIAL PROFILES (Contact Custumer Service Department for panel availability











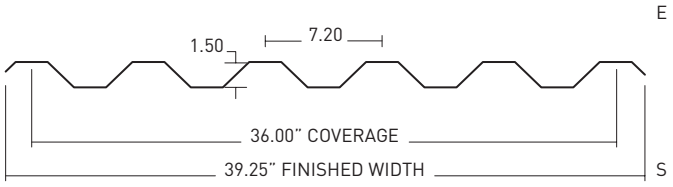
FRP STRUCTURAL PULTRED SHAPES
Are also available. Contact Resolite Customer Service for more information or to request a catalog (TD-122).

Notes
1. Other profiles and flat panels may be available. Contact Resolite Customer Service for more information.
2. Surface texture is designated by E for Embossed and S for Smooth.
3. Panels are manufactured in standard lengths from 4' to 40'.
4. Coverage width and length tolerance for all panel profiles is 1/4".
5. Non-symmetrical profiles are designed above by showing the 'A' Side and 'B' Side. This information is required when ordering horizontal closure strips.

The profiles listed below are not commonly used. Some product, profile, weight and/or color combinations may have minimum order requirements.

Delivery restrictions may also apply. Contact Customer Service Department with your specific project requirements.

LOAD/SPAN TABLES



SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe	10'2"	13'2"	12'7"	8'11"	10'9"	11'0"	8'1"	9'3"	10'0"	7'6"	8'4"	9'3"	7'1"	7'5"	8'6"
1440	9'10"	12'5"	12' 1"	8'7"	10'1"	10'7"	7'9"	8'9"	9'7"	7'3"	7'10"	8'9"	6'10"	6'7"	7'6"
1240	8' 10"	11'11"	10'11"	7'9"	9'1"	9'7"	7'0"	6'10"	7'9"	6'6"	5'5"	6'2"	6'2"	4'6"	5'2"
1040	8'4"	10'10"	10'4"	7'3"	7'7"	8'7"	6'7"	5'8"	6'5"	6'2"	4'6"	5'2"	5'9"	3'9"	4'4"
840	7'9"	9'1"	9'7"	6'9"	6'1"	6'11"	6'2"	4'6"	5'2"	5'8"	3'8"	4'2"	5'4"	3'0"	3'5"
1230	7'8"	10'3"	9'6"	6'8"	7'9"	8'3"	6'1"	5'10"	6'7"	5'8"	4'8"	5'3"	5'4"	3'11"	4'5"
830	6'8"	7'9"	8'3"	5'10"	5'2"	5'10"	5'4"	3'11"	4'5"	4'11"	3'1"	3'6"	4'8"	2'7"	2'11"
RFM 17	10'11"	11'6"	12'10"	9'4"	9'4"	10'6"	8'1"	8'1"	9'1"	7'3"	7'3"	8'1"	6'7"	6'7"	7'5"
RFM 14	10'4"	10'7"	11'10"	8'8"	8'8"	9'8"	7'6"	7'4"	8'3"	6'9"	5'10"	6'8"	6'2"	4'10"	5'6"
RFM 11	9'8"	9'1"	10'4"	7'11"	6'1"	6'11"	6'10"	4'7"	5'2"	6'2"	3'8"	4'2"	5'7"	3'0"	3'5"
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe	7'9"	10'5"	9'7"	6'10"	9'1"	8'5"	6'2"	8'1"	7'8"	5'9"	7'2"	7'1"	5'5"	6'7"	6'8"
1440	7'6"	10'0"	9'3"	6'6"	8'9"	8'1"	5'11"	7'7"	7'4"	5'6"	6'9"	6'10"	5'2"	6'2"	6'5"
1240	6'9"	9'1"	8'4"	5'11"	7'11"	7'4"	5'4"	7'2"	6'8"	5'0"	6'6"	6'2"	4'8"	5'11"	5'10"
1040	6'4"	8'6"	7'10"	5'7"	7'5"	6'10"	5'1"	6'8"	6'3"	4'8"	5'11"	5'10"	4'5"	5'5"	5'5"
840	5'11"	7'11"	7'4"	5'2"	6'10"	6'5"	4'8"	5'11"	5'1""	4'4"	5'4"	5'5"	4'1"	4'0"	5'12"
1230	5'10"	7'10"	7'3"	5'1"	6'10"	6'4"	4'8"	6'3"	5'9"	4'4"	5'9"	5'4"	4'1"	5'5"	5'0"
830	5'1"	6'10"	6'4"	4'6"	6'0"	5'6"	4'1"	5'5"	5'0"	3'9"	5'1"	4'8"	3'7"	4'9"	4'5"
RFM 17	8'4"	9'11"	10'3"	7'3"	8'1"	9'0"	6'7"	7'0"	7'10"	6'2"	6'3"	7'0"	5'9"	5'9"	6'5"
RFM 14	7'11"	9'2"	9'9"	6'11"	7'6"	8'5"	6'3"	6'6"	7'3"	5'10"	5'10"	6'6"	5'4"	5'4"	5'11"
RFM 11	7'5"	8'5"	9'2"	6'6"	6'10"	7'8"	5'11"	5'11"	6'8"	5'4"	5'4"	5'11"	4'10"	4'10"	5'5"

Notes
1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shall be limited to U20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" (.729") washers in every low. Significant span increases may be achieved by utilizing fasteners with 1-1/8" washers.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 39.25"
- Coverage Width: 43.2
- Lengths: 4' to 40'

Optional

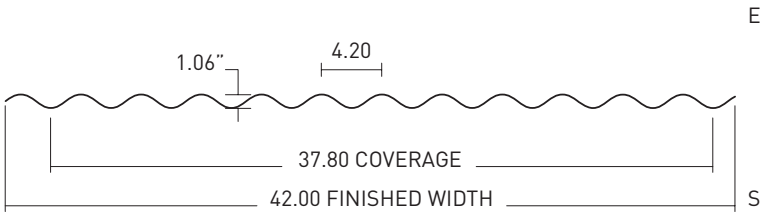
- Finish Width: 46.50"

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	16
1440 thru 840	14 thru 8
1230 thru 830	12 thru 8
RFM 17 thru 11	17 thru 11

ADDITIONAL INFORMATION

Consult Table of Contents for specific information regarding:

- FRP Panel Design
- Fire Resistance & Codes
- Corrosion & Weathering
- Color, Finish, & Light Transmission
- Fasteners & Accessories
- Product Descriptions
- FRP Panel Specifications
- Profile Selection Guide
- Flashing Details
- Installation, Storage, & Handling
- FRP louvers, Ventilators, Gutters & Downspouts



SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe	7'4"	9'5"	9'0"	6'4"	7'8"	7'10"	5'9"	6'8"	7'2"	5'4"	6'0"	6'8"	5'1"	5'5"	6'1"
1440	7'0"	8'11"	8'8"	6'1"	7'3"	7'7"	5'7"	6'3"	6'10"	5'2"	5'7"	6'3"	4'10"	5'2"	5'9"
1240	6'4"	8'6"	7'10"	5'6"	7'0"	6'10"	5'0"	6'0"	6'3"	4'8"	5'5"	5'9"	4'5"	4'11"	5'5"
1040	6'0"	7'10"	7'4"	5'2"	6'4"	6'5"	4'9"	5'6"	5'10"	4'5"	4'11"	5'5"	4'2"	4'6"	5'0"
840	5'6"	7'0"	6'10"	4'10"	5'8"	6'0"	4'5"	4'11"	5'5"	4'1"	4'5"	4'11"	3'10"	4'0"	4'6"
1230	5'6"	7'4"	6'9"	4'9"	6'5"	5'11"	4'4"	5'10"	5'5"	4'0"	5'5"	5'0"	3'10"	4'11"	4'8"
830	4'9"	6'5"	5'11"	4'2"	5'7"	5'2"	3'10"	4'11"	4'8"	3'6"	4'5"	4'4"	3'4"	4'0"	4'1"
RFM 17	7'9"	8'3"	9'2"	6'9"	6'9"	7'6"	5'10	5'10"	6'6"	5'2"	5'2"	5'10"	4'9"	4'9"	5'4"
RFM 14	7'5"	7'7"	8'6"	6'3"	6'3"	6'11"	5'5"	5'5"	6'0"	4'10"	4'10"	5'5"	4'5"	4'5"	4'11"
RFM 11	6'11"	6'11"	7'9"	5'8"	5'8"	6'4"	4'11"	4'11"	5'6"	4'5"	4'5"	4'11"	4'0"	4'0"	4'6"
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe	5'7"	7'6"	6'10"	4'10"	6'6"	6'0"	4'5"	5'9"	5'5"	4'1"	5'2"	5'1"	3'10"	4'9"	4'9"
1440	5'4"	7'2"	6'7"	4'8"	6'3"	5'9"	4'3"	5'5"	5'3"	3'11"	4'10"	4'10"	3'9"	4'5"	4'7"
1240	4'10"	6'6"	6'0"	4'3"	5'8"	5'3"	3'10"	5'2"	4'9"	3'7"	4'8"	4'5"	3'4"	4'3"	4'2"
1040	4'7"	6'1"	5'7"	4'0"	5'4"	4'11"	3'7"	4'9"	4'6"	3'4"	4'3"	4'2"	3'2"	3'11"	3'11"
840	4'3"	5'8"	5'3"	3'8"	4'11"	4'7"	3'4"	4'3"	4'2"	3'1"	3'10"	3'10"	2'11"	3'6"	3'7"
1230	4'2"	5'7"	5'2"	3'8"	4'11"	4'6"	3'4"	4'5"	4'1"	3'1"	4'2"	3'10"	2'11"	3'11"	3'7"
830	3'8"	4'11"	4'6"	3'2"	4'3"	3'11"	2'11"	3'11"	3'7"	2'8"	3'7"	3'4"	2'6"	3'5"	3'2"
RFM 17	5'11"	7'1"	7'4"	5'2"	5'10"	6'5"	4'9"	5'0"	5'8"	4'5"	4'6"	5'0"	4'1"	4'1"	4'7"
RFM 14	5'8"	6'7"	7'0"	4'11"	5'5"	6'0"	4'6"	4'8"	5'3"	4'2"	4'2"	4'8"	3'10"	3'10"	4'3"
RFM 11	5'4"	6'0"	6'7"	4'8"	4'11"	5'6"	4'3"	4'3"	4'9"	3'10"	3'10"	4'3"	3'6"	3'6"	3'11"

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 5/8" washers in every low.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 42"
- Coverage Width: 37.8"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	16
1440 thru 840	14 thru 8
1230 thru 830	12 thru 8
RFM 17 thru 11	17 thru 11

ADDITIONAL INFORMATION

Consult Table of Contents for specific information regarding:

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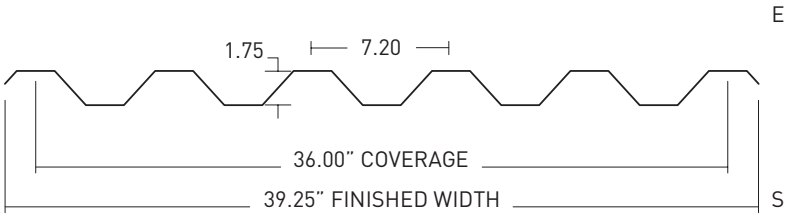

SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe	10'2"	13'2"	12'7"	8'11"	10'9"	11'0"	8'1"	9'3"	10'0"	7'6"	8'4"	9'3"	7'1"	7'5"	8'6"
1440	9'10"	12'5"	12'1"	8'7"	10'1"	10'7"	7'9"	8'9"	9'7"	7'3"	7'10"	8'9"	6'10"	6'7"	7'6"
1240	8'10"	11'11"	10'11"	7'9"	9'1"	9'7"	7'0"	6'10"	7'9"	6'6"	5'5"	6'2"	6'2"	4'6"	5'2"
1040	8'4"	10'10"	10'4"	7'3"	7'7"	8'7"	6'7"	5'8"	6'5"	6'2"	4'6"	5'2"	5'9"	3'9"	4'4"
840	7'9"	9'1"	9'7"	6'9"	6'1"	6'11"	6'2"	4'6"	5'2"	5'8"	3'8"	4'2"	5'4"	3'0"	3'5"
1230	7'8"	10'3"	9'6"	6'8"	7'9"	8'3"	6'1"	5'10"	6'7"	5'8"	4'8"	5'3"	5'4"	3'11"	4'5"
830	6'8"	7'9"	8'3"	5'10"	5'2"	5'10"	5'4"	3'11"	4'5"	4'11"	3'1"	3'6"	4'8"	2'7"	2'11"
RFM 17	10'11"	11'6"	12'10"	9'4"	9'4"	10'6"	8'1"	8'1"	9'1"	7'3"	7'3"	8'1"	6'7"	6'7"	7'5"
RFM 14	10'4"	10'7"	11'10"	8'8"	8'8"	9'8"	7'6"	7'4"	8'3"	6'9"	5'10"	6'8"	6'2"	4'10"	5'6"
RFM 11	9'8"	9'1"	10'4"	7'11"	6'1"	6'11"	6'10"	4'7"	5'2"	6'2"	3'8"	4'2"	5'7"	3'0"	3'5"
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe	7'9"	10'5"	9'7"	6'10"	9'1"	8'5"	6'2"	8'1"	7'8"	5'9"	7'2"	7'1"	5'5"	6'7"	6'8"
1440	7'6"	10'0"	9'3"	6'6"	8'9"	8'1"	5'11"	7'7"	7'4"	5'6"	6'9"	6'10"	5'2"	6'2"	6'5"
1240	6'9"	9'1"	8'4"	5'11"	7'11"	7'4"	5'4"	7'2"	6'8"	5'0"	6'6"	6'2"	4'8"	5'11"	5'10"
1040	6'4"	8'6"	7'10"	5'7"	7'5"	6'10"	5'1"	6'8"	6'3"	4'8"	5'11"	5'10"	4'5"	5'5"	5'5"
840	5'11"	7'11"	7'4"	5'2"	6'10"	6'5"	4'8"	5'11"	5'10"	4'4"	5'4"	5'5"	4'1"	4'10"	5'1"
1230	5'10"	7'10"	7'3"	5'1"	6'10"	6'4"	4'8"	6'3"	5'9"	4'4"	5'9"	5'4"	4'1"	5'5"	5'0"
830	5'1"	6'10"	6'4"	4'6"	6'0"	5'6"	4'1"	5'5"	5'0"	3'9"	5'1"	4'8"	3'7"	4'9"	4'5"
RFM 17	8'4"	9'11	10'3"	7'3"	8'1"	9'0"	6'7"	7'0"	7'10"	6'2"	6'3"	7'0"	5'9"	5'9"	6'5"
RFM 14	7'11"	9'2"	9'9"	6'11"	7'6"	8'5"	6'3"	6'6"	7'3"	5'10"	5'10"	6'6"	5'4"	5'4"	5'11"
RFM 11	7'5"	8'5"	9'2"	6'6"	6'10"	7'8"	5'11"	5'11"	6'8"	5'4"	5'4"	5'11"	4'10"	4'10"	5'5"

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" (.729) washers in every low. Significant span increases may be achieved by utilizing fasteners with 1-1/8" washes.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 39.25"
- Coverage Width: 36"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	16
1440 thru 840	14 thru 8
1230 thru 830	12 Thru 8
RFM 17 thru 11	17 thru 11

ADDITIONAL INFORMATION

Consult Table of Contents for specific information regarding:

- FRP Panel Design
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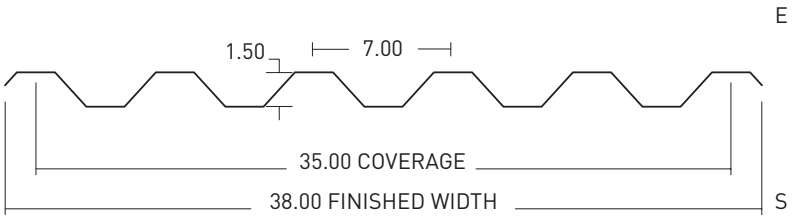
- FRP Panel Specifications
- Profile Selection Guide
- Flashing Details
- Installation, Storage, & Handling
- FRP louvers, Ventilators, Gutters & Downspouts



SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe	10'2"	13'2"	12'7"	8'11"	10'9"	11'0"	8'1"	9'3"	10'0"	7'6"	8'4"	9'3"	7'1"	7'5"	8'6"
1440	9'10"	12'5"	12'1"	8'7"	10'1"	10'7"	7'9"	8'9"	9'7"	7'3"	7'10"	8'9"	6'10"	6'7"	7'6"
1240	8'10"	11'11"	10'11"	7'9"	9'1"	9'7"	7'0"	6'10"	7'9"	6'6"	5'5"	6'2"	6'2"	4'6"	5'2"
1040	8'4"	10'10"	10'4"	7'3"	7'7"	8'7"	6'7"	5'8"	6'5"	6'2"	4'6"	5'2"	5'9"	3'9"	4'4"
840	7'9"	9'1"	9'7"	6'9"	6'1"	6'11"	6'2"	4'6"	5'2"	5'8"	3'8"	4'2"	5'4"	3'0"	3'5"
1230	7'8"	10'3"	9'6"	6'8"	7'9"	8'3"	6'1"	5'10"	6'7"	5'8"	4'8"	5'3"	5'4"	3'11"	4'5"
830	6'8"	7'9"	8'3"	5'10"	5'2"	5'10"	5'4"	3'11"	4'5"	4'11"	3'1"	3'6"	4'8"	2'7"	2'11"
RFM 17	10'11"	11'6"	12'10"	9'4"	9'4"	10'6"	8'1"	8'1"	9'1"	7'3"	7'3"	8'1"	6'7"	6'7"	7'5"
RFM 14	10'4"	10'7"	11'10"	8'8"	8'8"	9'8"	7'6"	7'4"	8'3"	6'9"	5'10"	6'8"	6'2"	4'10"	5'6"
RFM 11	9'8"	9'1"	10'4"	7'11"	6'1"	6'11"	6'10"	4'7"	5'2"	6'2"	3'8"	4'2"	5'7"	3'0"	3'5"
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe	7'9"	10'5"	9'7"	6'10"	9'1"	8'5"	6'2"	8'1"	7'8"	5'9"	7'2"	7'1"	5'5"	6'7"	6'8"
1440	7'6"	10'0"	9'3"	6'6"	8'9"	8'1"	5'11"	7'7"	7'4"	5'6"	6'9"	6'10"	5'2"	6'2"	6'5"
1240	6'9"	9'1"	8'4"	5'11"	7'11"	7'4"	5'4"	7'2"	6'8"	5'0"	6'6"	6'2"	4'8"	5'11"	5'10"
1040	6'4"	8'6"	7'10"	5'7"	7'5"	6'10"	5'1"	6'8"	6'3"	4'8"	5'11"	5'10"	4'5"	5'5"	5'5"
840	5'11"	7'11"	7'4"	5'2"	6'10"	6'5"	4'8"	5'11"	5'10"	4'4"	5'4"	5'5"	4'1"	4'10"	5'1"
1230	5'10"	7'10"	7'3"	5'1"	6'10"	6'4"	4'8"	6'3"	5'9"	4'4"	5'9"	5'4"	4'1"	5'5"	5'0"
830	5'1"	6'10"	6'4"	4'6"	6'0"	5'6"	4'1"	5'5"	5'0"	3'9"	5'1"	4'8"	3'7"	4'9"	4'5"
RFM 17	8'4"	9'11"	10'3"	7'3"	8'1"	9'0"	6'7"	7'0"	7'10"	6'2"	6'3"	7'0"	5'9"	5'9"	6'5"
RFM 14	7'11"	9'2"	9'9"	6'11"	7'6"	8'5"	6'3"	6'6"	7'3"	5'10"	5'10"	6'6"	5'4"	5'4"	5'11"
RFM 11	7'5"	8'5"	9'2"	6'6"	6'10"	7'8"	5'11"	5'11"	6'8"	5'4"	5'4"	5'11"	4'10"	4'10"	5'5"

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" (.729) washers in every low. Significant span increases may be achieved by utilizing fasteners with 1-1/8" washes.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 38"
- Coverage Width: 35"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	16
1440 thru 840	14 thru 10
1230 thru 830	12 thru 10
RFM 17 thru 11	17 thru 11

ADDITIONAL INFORMATION

Consult Table of Contents for specific information regarding:

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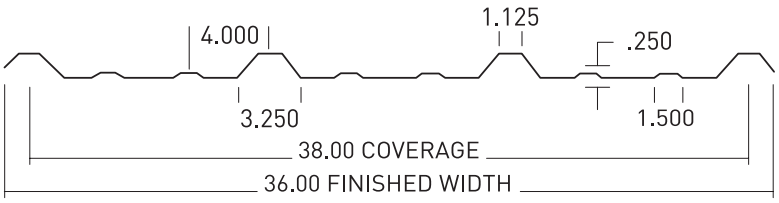

SIDING / ROOFING WIND LOADS (PSF)															
R-Panel	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1440	7'2"	7'6"	8'4"	6'1"	6'1"	6'10"	5'4"	5'4"	5'11"	4'9"	4'9"	5'4"	4'4"	4'4"	4'10"
1240	6'6"	7'2"	8'0"	5'8"	5'10"	6'7"	5'1"	5'1"	5'8"	4'7"	4'7"	5'1"	4'2"	4'2"	4'8"
1040	6'1"	6'7"	7'4"	5'4"	5'4"	6'0"	4'8"	4'8"	5'2"	4'2"	4'2"	4'8"	3'9"	3'9"	4'3"
840	5'8"	5'10"	6'7"	4'10"	4'10"	5'4"	4'2"	4'2"	4'8"	3'9"	3'9"	4'2"	3'5"	3'5"	3'9"
1230	5'8"	7'3"	6'11"	4'11"	5'11"	6'1"	4'6"	5'1"	5'6"	4'2"	4'7"	5'1"	3'11"	4'2"	4'8"
1030	5'4"	6'7"	6'7"	4'8"	5'5"	5'9"	4'2"	4'8"	5'2"	3'11"	4'2"	4'8"	3'8"	3'10"	4'3"
830	4'10"	5'10"	6'0"	4'3"	4'9"	5'3"	3'10"	4'1"	4'7"	3'7"	3'8"	4'1"	3'4"	3'3"	3'8"
RFM 17	6'5"	6'5"	7'2"	5'3"	5'3"	5'10"	4'6"	4'6"	5'1"	4'0"	4'0"	4'6"	3'8"	3'8"	4'1"
RFM 14	5'11"	5'11"	6'7"	4'10"	4'10"	5'5"	4'2"	4'2"	4'8"	3'9"	3'9"	4'2"	3'5"	3'5"	3'10"
RFM 11	5'5"	5'5"	6'0"	4'5"	4'5"	4'11"	3'10"	3'10"	4'3"	3'5"	3'5"	3'10"	3'1"	3'1"	3'6"

SIDING / ROOFING WIND LOADS (PSF)					
R-Panel	20	30	40	50	60

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" (.729) washers in every low. Significant span increases may be achieved by utilizing fasteners with 1-1/8" washes.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 51.5"
- Coverage Width: 48"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	not available
1440 thru 840	14 thru 8
1230 thru 830	12 thru 8

ADDITIONAL INFORMATION

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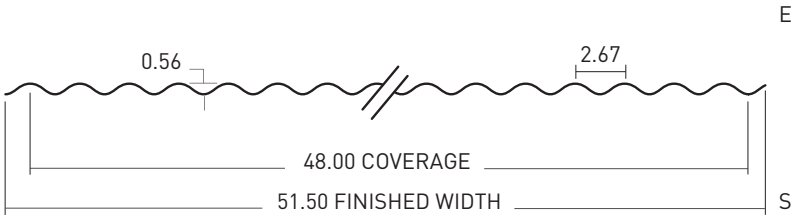

SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240															
1040															
840															
1230	3'7	4'10"	4'5"	3'2"	4'2"	3'10"	2'10"	3'10"	3'6"	2'8"	3'6"	3'3"	2'6"	3'4"	3'1"
1030	3'4"	4'6"	4'2"	2'11"	3'11"	3'8"	2'8"	3'7"	3'4"	2'6"	3'4"	3'1"	2'4"	3'2"	2'11"
830	3'2"	4'2"	3'10"	2'9"	3'8"	3'4"	2'6"	3'4"	3'1"	2'4"	3'1"	2'10"	2'2"	2'11"	2'8"
RFM 17															
RFM 14															
RFM 11															
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240															
1040															
840															
1230	2'9"	3'8"	3'4"	2'5"	3'2"	2'11"	2'2"	2'11"	2'8"	2'0"	2'8"	2'6"	1'11"	2'6"	2'4"
1030	2'7"	3'5"	3'2"	2'3"	3'0"	2'9"	2'0"	2'9"	2'6"	1'11"	2'6"	2'4"	1'9"	2'5"	2'2"
830	2'5"	3'2"	2'11"	2'1"	2'10"	2'7"	1'11"	2'6"	2'4"	1'9"	2'4"	2'2"	1'8"	2'3"	2'1"
RFM 17															
RFM 14															
RFM 11															

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 5/8" washers in every other high.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 51.5"
- Coverage Width: 48"
- Lengths: 4' to 4'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	not available
1240 thru 840	not available
1230 thru 830	12 thru 8

ADDITIONAL INFORMATION

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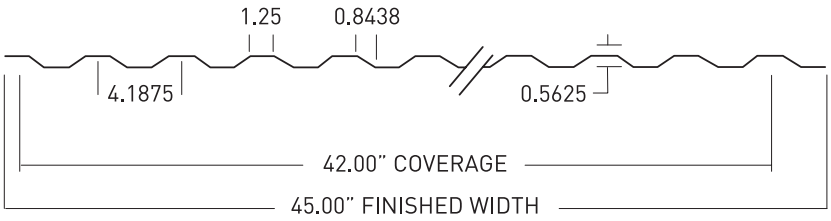

SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1440	8'4"	8'4"	9'4"	6'10"	6'10"	7'8"	5'11"	5'11"	6'7"	5'3"	5'3"	5'11"	4'10"	4'10"	5'5"
1240	8'0"	8'0"	9'0"	6'7"	6'7"	7'4"	5'8"	5'8"	6'4"	5'1"	5'1"	5'8"	4'8"	4'8"	5'2"
1040	7'4"	7'4"	8'2"	6'0"	6'0"	6'8"	5'2"	5'2"	5'9"	4'8"	4'8"	5'2"	4'3"	4'3"	4'9"
840	6'7"	6'7"	7'4"	5'4"	5'4"	6'0"	4'8"	4'8"	5'2"	4'2"	4'2"	4'8"	3'9"	3'9"	4'3"
1230	7'6"	8'1"	9'0"	6'7"	6'7"	8'3"	5'8"	5'8"	6'4"	5'1"	5'1"	5'8"	4'8"	4'8"	5'2"
830	6'7"	6'7"	7'4"	5'4"	5'4"	6'0"	4'8"	4'8"	5'2"	4'2"	4'0"	4'6"	3'10"	3'4"	3'9"
RFM 17	7'9"	7'9"	8'8"	6'4"	6'4"	7'1"	5'6"	5'6"	6'1"	4'11"	4'11"	5'6"	4'6"	4'6"	5'0"
RFM 14	7'2"	7'2"	8'0"	5'10"	5'10"	6'6"	5'1"	5'1"	5'8"	4'6"	4'6"	5'1"	4'2"	4'2"	4'7"
RFM 11	6'6"	6'6"	7'4"	5'4"	5'4"	6'0"	4'7"	4'7"	5'2"	4'2"	4'2"	4'7"	3'9"	3'9"	4'3"
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1440	7'3"	7'3"	8'1"	5'11"	5'11"	6'7"	5'1"	5'1"	5'9"	4'7"	4'7"	5'1"	4'2"	4'2"	4'8"
1240	6'7"	6'11"	7'9"	5'8"	5'8"	6'4"	4'11"	4'11"	5'6"	4'5"	4'5"	4'11"	4'0"	4'0"	4'6"
1040	6'3"	6'4"	7'1"	5'2"	5'2"	5'9"	4'6"	4'6"	5'0"	4'0"	4'0"	4'6"	3'8"	3'8"	4'1"
840	5'8"	5'8"	6'4"	4'8"	4'8"	5'2"	4'0"	4'0"	4'6"	3'7"	3'7"	4'0"	3'3"	3'3"	3'8"
1230	5'9"	7'0"	7'1"	5'0"	5'8"	6'2"	4'6"	4'11"	5'6"	4'3"	4'5"	4'11"	4'0"	4'0"	4'6"
830	5'0"	5'8"	6'2"	4'4"	4'8"	5'2"	4'0"	4'0"	4'6"	3'7"	3'7"	4'0"	3'3"	3'3"	3'8"
RFM 17	6'8"	6'8"	7'6"	5'6"	5'6"	6'1"	4'9"	4'9"	5'3"	4'3"	4'3"	4'9"	3'10"	3'10"	4'4"
RFM 14	6'2"	6'2"	6'11"	5'1"	5'1"	5'8"	4'5"	4'5"	4'11"	3'11"	3'11"	4'5"	3'7"	3'7"	4'0"
RFM 11	5'8"	5'8"	6'4"	4'7"	4'7"	5'2"	4'0"	4'0"	4'6"	3'7"	3'7"	4'0"	3'3"	3'3"	3'8"

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" (.729) washers in every low.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 43"
- Coverage Width: 40"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	16
1440 thru 840	14 thru 8
1230 thru 830	12 Thru 8
RFM 17 thru 11	17 thru 11

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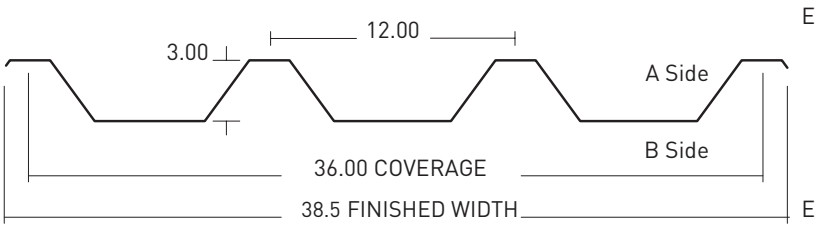
- FRP louvers, Ventilators, Gutters & Downspouts



SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1440	10'10"	14'6"	13'4"	9'5"	12'8"	11'8"	8'7"	11'1"	10'7"	8'0"	8'10"	9'10"	7'6"	7'4"	8'4"
1240	9'9"	13'1"	12'1"	8'6"	10'1"	10'6"	7'9"	7'7"	8'7"	7'2"	6'1"	6'11"	6'9"	5'1"	5'9"
1040	9'2"	12'4"	11'4"	8'0"	8'5"	9'7"	7'4"	6'4"	7'2"	6'9"	5'1"	5'9"	6'4"	4'2"	4'9"
840															
1230	8'5"	11'4"	10'5"	7'5"	8'7"	9'1"	6'9"	6'6"	7'4"	6'3"	5'2"	5'11"	5'10"	4'4"	4'11"
830	7'11"	10'8"	9'10"	6'11"	7'2"	8'2"	6'4"	5'5"	6'1"	5'10"	4'4"	4'11"	5'6"	3'7"	4'1"
RFM 17	12'0"	14'7"	14'10"	10'6	11'11"	12'11"	9'6"	10'4"	11'7"	8'10"	9'1"	10'4"	8'4"	7'7"	8'7"
RFM 14	11'5"	13'6"	14'1"	10'0"	10'10"	12'3"	9'1"	8'1"	9'3"	8'5"	6'6"	7'4"	7'10"	5'5"	6'2"
RFM 11	10'9"	10'2"	11'6"	9'4"	6'9"	7'8"	8'6"	5'1"	5'9"	7'10"	4'1"	4'7"	7'2"	3'5"	3'10"
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1440	9'5"	12'8"	11'8"	8'3"	11'1"	10'2"	7'6"	9'8"	9'3"	6'11"	8'8"	8'7"	6'7"	7'11"	8'1"
1240	8'6"	11'5"	10'6"	7'5"	10'0"	9'2"	6'9"	9'1"	8'4"	6'3"	8'4"	7'9"	5'11"	7'7"	7'4"
1040	8'0"	10'9"	9'11"	7'0"	9'5"	8'8"	6'4"	8'6"	7'10"	5'11"	7'7"	7'4"	5'7"	6'11"	6'11"
840															
1230	7'5"	9'11"	9'1"	6'5"	8'8"	8'0"	5'10"	7'10"	7'3"	5'5"	7'4"	6'9"	5'1"	6'10"	6'4"
830	6'11"	9'4"	8'7"	6'1"	8'2"	7'6"	5'6"	7'5"	6'10"	5'1"	6'10"	6'4"	4'10"	6'5"	5'11"
RFM 17	10'6"	12'8"	12'11"	9'2"	10'4"	11'4"	8'4"	8'11"	10'0"	7'9"	8'0"	8'11"	7'3"	7'4"	8'2"
RFM 14	10'0"	11'9"	12'4"	8'8"	9'7"	10'8"	7'11"	8'3"	9'3"	7'4"	7'5"	8'3"	6'9"	6'9"	7'7"
RFM 11	9'4"	10'8"	11'7"	8'2"	8'9"	9'9"	7'5"	7'7"	8'5"	6'9"	6'9"	7'7"	6'2"	6'2"	6'11"

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/60 for wind loads and L/90 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" washers in every low.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

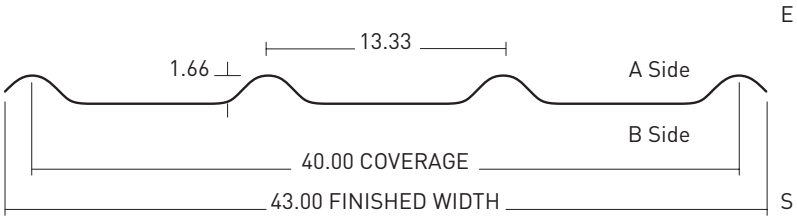
- Finish Width: 38.5"
- Coverage Width: 36"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	not available
1440 thru 1040	14 thru 10
1230 thru 830	12 thru 8
RFM 17 thru 11	17 thru 11

ADDITIONAL INFORMATION

Consult Table of Contents for specific information regarding:

- FRP Panel Design
- Fire Resistance & Codes
- Corrosion & Weathering
- Color, Finish, & Light Transmission
- Fasteners & Accessories
- Product Descriptions
- FRP Panel Specifications
- Profile Selection Guide
- Flashing Details
- Installation, Storage, & Handling
- FRP louvers, Ventilators, Gutters & Downspouts



SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1440	8'4"	8'4"	9'4"	6'10"	6'10"	7'8"	5'11"	5'11"	6'7"	5'3"	5'3"	5'11"	4'10"	4'10"	5'5"
1240	8'0"	8'0"	9'0"	6'7"	6'7"	7'4"	5'8"	5'8"	6'4"	5'1"	5'1"	5'8"	4'8"	4'8"	5'2"
1040	7'4"	7'4"	8'2"	6'0"	6'0"	6'8"	5'2"	5'2"	5'9"	4'8"	4'8"	5'2"	4'3"	4'3"	4'9"
840	6'7"	6'7"	7'4"	5'4"	5'4"	6'0"	4'8"	4'8"	5'2"	4'2"	4'2"	4'8"	3'9"	3'9"	4'3"
1230	7'6"	8'1"	9'0"	6'7"	6'7"	8'3"	5'8"	5'8"	6'4"	5'1"	5'1"	5'8"	4'8"	4'8"	5'2"
830	6'7"	6'7"	7'4"	5'4"	5'4"	6'0"	4'8"	4'8"	5'2"	4'2"	4'0"	4'6"	3'10"	3'4"	3'9"
RFM 17	7'9"	7'9"	8'8"	6'4"	6'4"	7'1"	5'6"	5'6"	6'1"	4'11"	4'11"	5'6"	4'6"	4'6"	5'0"
RFM 14	7'2"	7'2"	8'0"	5'10"	5'10"	6'6"	5'1"	5'1"	5'8"	4'6"	4'6"	5'1"	4'2"	4'2"	4'7"
RFM 11	6'6"	6'6"	7'4"	5'4"	5'4"	6'0"	4'7"	4'7"	5'2"	4'2"	4'2"	4'7"	3'9"	3'9"	4'3"
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1440	7'3"	7'3"	8'1"	5'11"	5'11"	6'7"	5'1"	5'1"	5'9"	4'7"	4'7"	5'1"	4'2"	4'2"	4'8"
1240	6'7"	6'11"	7'9"	5'8"	5'8"	6'4"	4'11"	4'11"	5'6"	4'5"	4'5"	4'11"	4'0"	4'0"	4'6"
1040	6'3"	6'4"	7'1"	5'2"	5'2"	5'9"	4'6"	4'6"	5'0"	4'0"	4'0"	4'6"	3'8"	3'8"	4'1"
840	5'8"	5'8"	6'4"	4'8"	4'8"	5'2"	4'0"	4'0"	4'6"	3'7"	3'7"	4'0"	3'3"	3'3"	3'8"
1230	5'9"	7'0"	7'1"	5'0"	5'8"	6'2"	4'6"	4'11"	5'6"	4'3"	4'5"	4'11"	4'0"	4'0"	4'6"
830	5'0"	5'8"	6'2"	4'4"	4'8"	5'2"	4'0"	4'0"	4'6"	3'7"	3'7"	4'0"	3'3"	3'3"	3'8"
RFM 17	6'8"	6'8"	7'6"	5'6"	5'6"	6'1"	4'9"	4'9"	5'3"	4'3"	4'3"	4'9"	3'10"	3'10"	4'4"
RFM 14	6'2"	6'2"	6'11"	5'1"	5'1"	5'8"	4'5"	4'5"	4'11"	3'11"	3'11"	4'5"	3'7"	3'7"	4'0"
RFM 11	5'8"	5'8"	6'4"	4'7"	4'7"	5'2"	4'0"	4'0"	4'6"	3'7"	3'7"	4'0"	3'3"	3'3"	3'8"

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" (.729) washers in every low.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

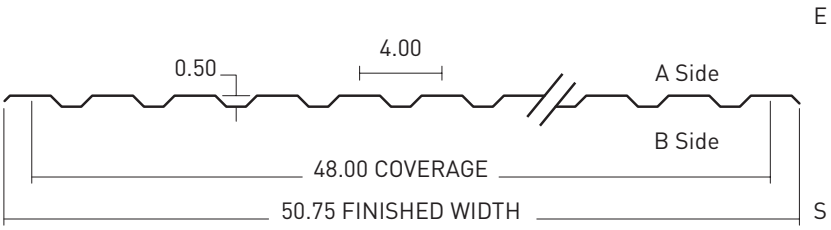
- Finish Width: 43"
- Coverage Width: 40"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	not available
1440 thru 840	14 thru 8
1230 thru 830	12 thru 8
RFM 17 thru 11	17 thru 11

ADDITIONAL INFORMATION

Consult Table of Contents for specific information regarding:

- FRP Panel Design
- Fire Resistance & Codes
- Corrosion & Weathering
- Color, Finish, & Light Transmission
- Fasteners & Accessories
- Product Descriptions
- FRP Panel Specifications
- Profile Selection Guide
- Flashing Details
- Installation, Storage, & Handling
- FRP louvers, Ventilators, Gutters & Downspouts



SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240															
1040															
840															
1230	3'10"	5'2"	4'9"	3'4"	4'6"	4'2"	3'0"	4'1"	3'9"	2'10"	3'9"	3'6"	2'8"	3'7"	3'3"
1030	3'7"	4'10"	4'5"	3'2"	4'3"	3'11"	2'10"	3'10"	3'6"	2'8"	3'7"	3'3"	2'6"	3'1"	3'1"
830	3'4"	4'6"	4'2"	2'11"	3'11"	3'7"	2'8"	3'7"	3'3"	2'6"	2'11"	3'0"	2'4"	2'5"	2'9"
RFM 17	5'5"	6'0"	6'8"	4'9"	4'11"	5'6"	4'3"	4'3"	4'9"	3'9"	3'9"	4'3"	3'5"	3'5"	3'10"
RFM 14	5'2"	5'7"	6'2"	4'6"	4'6"	5'1"	3'11"	3'11"	4'5"	3'6"	3'6"	3'11"	3'2"	3'2"	3'7"
RFM 11	4'10"	5'1"	5'8"	4'2"	4'2"	4'7"	3'7"	3'7"	4'0"	3'2"	3'2"	3'7"	2'11"	2'10"	3'3"
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240															
1040															
840															
1230	2'11"	3'11"	3'7"	2'7"	3'5"	3'2"	2'4"	3'1"	2'10"	2'2"	2'11"	2'8"	2'0"	2'9"	2'6"
1030	2'9"	3'8"	3'5"	3'5"	3'3"	3'0"	2'2"	2'11"	2'8"	2'0"	2'9"	2'6"	1'11"	2'7"	2'4"
830	2'7"	3'5"	3'2"	2'3"	3'0"	2'9"	2'0"	2'9"	2'6"	1'11"	2'6"	2'4"	1'9"	2'4"	2'2"
RFM 17	4'2"	5'2"	5'1"	3'7"	4'3"	4'6"	3'3"	3'8"	4'1"	3'1"	3'3"	3'8"	2'10"	3'0"	3'4"
RFM 14	3'11"	4'10"	4'10"	3'5"	3'11"	4'3"	3'1"	3'5"	3'10"	2'11"	3'0"	3'5"	2'9"	2'9"	3'1"
RFM 11	3'8"	4'5"	4'7"	3'3"	3'7"	4'0"	2'11"	3'1"	3'6"	2'9"	2'9"	3'1"	2'6"	2'6"	2'10"

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" (.729) washers in every low.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 50.75"
- Coverage Width: 48"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	not available
1240 thru 840	not available
1230 thru 830	12 thru 8
RFM 17 thru 11	17 thru 11

ADDITIONAL INFORMATION

Consult Table of Contents for specific information regarding:

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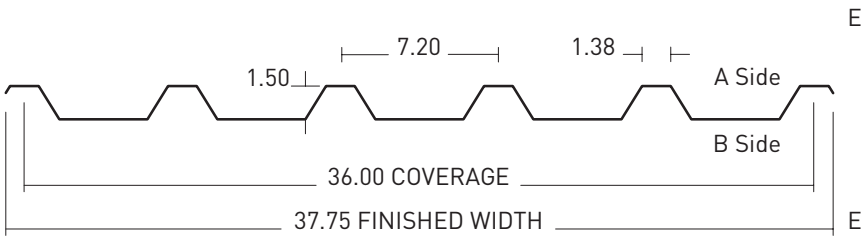

SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1440	9'10"	10'11"	12'1"	8'7"	8'11"	9'11"	7'9"	7'9"	8'7"	6'11"	6'11"	7'9"	6'4"	6'3"	7'0"
1240	8'10"	10'6"	10'11"	7'9"	8'6"	9'7"	7'0"	6'5"	7'3"	6'6"	5'1"	5'10"	6'1"	4'3"	4'10"
1040	8'4"	9'7"	10'4"	7'3"	7'1"	8'1"	6'7"	5'4"	6'1"	6'1"	4'3"	4'10"	5'6"	3'7"	4'0"
840	7'9"	8'6"	9'7"	6'9"	5'8"	6'6"	6'1"	4'3"	4'10"	5'5"	3'5"	3'11"	4'11"	2'10"	3'3"
1230	7'8"	10'3"	9'6"	6'8"	7'3"	8'3"	6'1"	5'6"	6'3"	5'8"	4'4"	5'0"	5'4"	3'8"	4'2"
830	6'8"	7'3"	8'3"	5'10"	4'10"	5'6"	5'4"	3'8"	4'2"	4'11"	2'11"	3'4"	4'8"	2'5"	2'9"
RFM 17	10'1"	10'1"	11'3"	8'3"	8'3"	9'3"	7'2"	7'2"	8'0"	6'5"	6'5"	7'2"	5'10"	5'10"	6'6"
RFM 14	9'4"	9'4"	10'5"	7'8"	7'8"	8'6"	6'7"	6'7"	7'5"	5'11"	5'6"	6'3"	5'5"	4'7"	5'2"
RFM 11	8'6"	8'6"	9'6"	7'0"	5'9"	6'6"	6'0"	4'3"	4'10"	5'5"	3'5"	3'11"	4'11"	2'10"	3'3"
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1440	7'6"	9'5"	9'3"	6'6"	7'9"	8'1"	5'11"	6'8"	7'4"	5'6"	6'0"	6'8"	5'2"	5'5"	6'1"
1240	6'9"	9'1"	8'4"	5'11"	7'5"	7'3"	5'4"	6'5"	6'7"	5'0"	5'9"	6'2"	4'8"	5'3"	5'9"
1040	6'4"	8'3"	7'10"	5'7"	6'9"	6'10"	5'1"	5'10"	6'3"	4'8"	5'3"	5'9"	4'5"	4'9"	5'4"
840	5'11"	7'5"	7'3"	5'2"	6'1"	6'4"	4'8"	5'3"	5'9"	4'4"	4'8"	5'3"	4'1"	4'3"	4'9"
1230	5'10"	7'10"	7'3"	5'1"	6'10"	6'4"	4'8"	6'3"	5'9"	4'4"	5'9"	5'4"	4'1"	5'3"	5'0"
830	5'1"	6'10"	6'4"	4'6"	6'0"	5'6"	4'1"	5'3"	5'0"	3'9"	4'8"	4'8"	3'7"	4'4"	4'5"
RFM 17	8'4"	8'9"	9'9"	7'2"	7'2"	8'0"	6'2"	6'2"	6'11"	5'6"	5'6"	6'2"	5'1"	5'1"	5'8"
RFM 14	7'11"	8'1"	9'1"	6'7"	6'7"	7'5"	5'9"	5'9"	6'5"	5'1"	5'1"	5'9"	4'8"	4'8"	5'3"
RFM 11	7'5"	7'5"	8'3"	6'0"	6'0"	6'9"	5'3"	5'3"	5'10"	4'8"	4'8"	5'3"	4'3"	4'3"	4'9"

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" (.729) washers in every low.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 37.75"
- Coverage Width: 36"
- Lengths: 4' to 40'

Optional

- Finish Width: 44.75"
- Coverage Width: 43.2"

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	not available
1440 Thru 840	14 Thru 8
1230 Thru 830	12 Thru 8
RFM 17 thru 11	17 thru 11

ADDITIONAL INFORMATION

Consult Table of Contents for specific information regarding:

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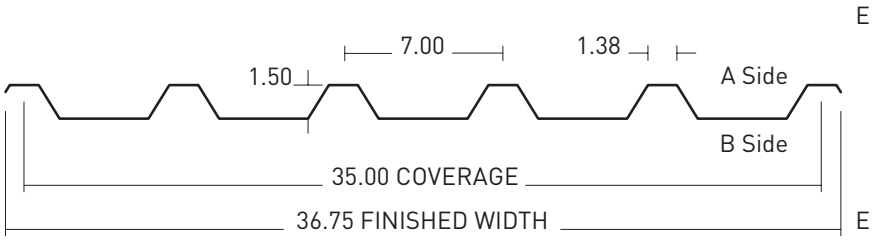

SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1440	9'10"	10'11"	12'1"	8'7"	8'11"	9'11"	7'9"	7'9"	8'7"	6'11"	6'11"	7'9"	6'4"	6'3"	7'0"
1240	8'10"	10'6"	10'11"	7'9"	8'6"	9'7"	7'0"	6'5"	7'3"	6'6"	5'1"	5'10"	6'1"	4'3"	4'10"
1040	8'4"	9'7"	10'4"	7'3"	7'1"	8'1"	6'7"	5'4"	6'1"	6'1"	4'3"	4'10"	5'6"	3'7"	4'0"
840	7'9"	8'6"	9'7"	6'9"	5'8"	6'6"	6'1"	4'3"	4'10"	5'5"	3'5"	3'11"	4'11"	2'10"	3'3"
1230	7'8"	10'3"	9'6"	6'8"	7'3"	8'3"	6'1"	5'6"	6'3"	5'8"	4'4"	5'0"	5'4"	3'8"	4'2"
830	6'8"	7'3"	8'3"	5'10"	4'10"	5'6"	5'4"	3'8"	4'2"	4'11"	2'11"	3'4"	4'8"	2'5"	2'9"
RFM 17	10'1"	10'1"	11'3"	8'3"	8'3"	9'3"	7'2"	7'2"	8'0"	6'5"	6'5"	7'2"	5'10"	5'10"	6'6"
RFM 14	9'4"	9'4"	10'5"	7'8"	7'8"	8'6"	6'7"	6'7"	7'5"	5'11"	5'6"	6'3"	5'5"	4'7"	5'2"
RFM 11	8'6"	8'6"	9'6"	7'0"	5'9"	6'6"	6'0"	4'3"	4'10"	5'5"	3'5"	3'11"	4'11"	2'10"	3'3"
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1440	7'6"	9'5"	9'3"	6'6"	7'9"	8'1"	5'11"	6'8"	7'4"	5'6"	6'0"	6'8"	5'2"	5'5"	6'1"
1240	6'9"	9'1"	8'4"	5'11"	7'5"	7'3"	5'4"	6'5"	6'7"	5'0"	5'9"	6'2"	4'8"	5'3"	5'9"
1040	6'4"	8'3"	7'10"	5'7"	6'9"	6'10"	5'1"	5'10"	6'3"	4'8"	5'3"	5'9"	4'5"	4'9"	5'4"
840	5'11"	7'5"	7'3"	5'2"	6'1"	6'4"	4'8"	5'3"	5'9"	4'4"	4'8"	5'3"	4'1"	4'3"	4'9"
1230	5'10"	7'10"	7'3"	5'1"	6'10"	6'4"	4'8"	6'3"	5'9"	4'4"	5'9"	5'4"	4'1"	5'3"	5'0"
830	5'1"	6'10"	6'4"	4'6"	6'0"	5'6"	4'1"	5'3"	5'0"	3'9"	4'8"	4'8"	3'7"	4'4"	4'5"
RFM 17	8'4"	8'9"	9'9"	7'2"	7'2"	8'0"	6'2"	6'2"	6'11"	5'6"	5'6"	6'2"	5'1"	5'1"	5'8"
RFM 14	7'11"	8'1"	9'1"	6'7"	6'7"	7'5"	5'9"	5'9"	6'5"	5'1"	5'1"	5'9"	4'8"	4'8"	5'3"
RFM 11	7'5"	7'5"	8'3"	6'0"	6'0"	6'9"	5'3"	5'3"	5'10"	4'8"	4'8"	5'3"	4'3"	4'3"	4'9"

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" (.729) washers in every low.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 36.75"
- Coverage Width: 35"
- Lengths: 4' to 40'

Optional

- Finish Width: 43.5"
- Coverage Width: 42"

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	not available
1440 thru 840	14 thru 8
1230 thru 830	12 thru 8
RFM 17 thru 11	17 thru 11

ADDITIONAL INFORMATION

Consult Table of Contents for specific information regarding:

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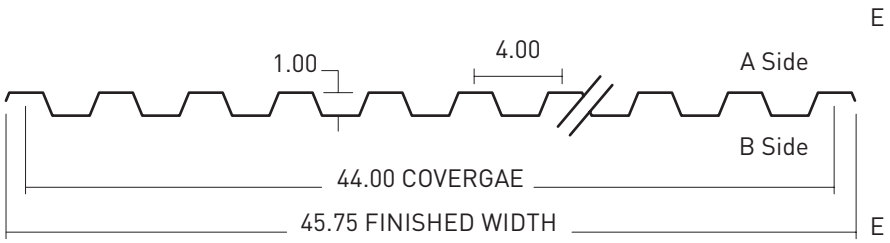

SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240	CAUTION - Because of steep web angle, this panel may not nest well at panel end laps.														
1040															
840															
1230	5'9"	7'8"	7'1"	5'0"	6'2"	6'2"	4'6"	4'8"	5'3"	4'2"	3'8"	4'3"	4'0"	3'1"	3'6"
1030	5'4"	7'2"	6'8"	4'8"	5'2"	5'10"	4'3"	3'10"	4'5"	4'0"	3'1"	3'6"	3'9"	2'7"	2'11"
830	5'0"	6'2"	6'2"	4'4"	4'1"	4'8"	4'0"	3'1"	3'6"	3'8"	2'6"	2'10"	3'6"	2'1"	2'4"
RFM 17															
RFM 14															
RFM 11															
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240	CAUTION - Because of steep web angle, this panel may not nest well at panel end laps.														
1040															
840															
1230	4'4"	5'10"	5'5"	3'10"	5'1"	4'8"	3'6"	4'8"	4'3"	3'3"	4'4"	4'0"	3'0"	4'1"	3'9"
1030	4'1"	5'6"	5'1"	3'7"	4'10"	4'5"	3'3"	4'4"	4'0"	3'0"	4'1"	3'9"	2'10"	3'10"	3'6"
830	3'10"	5'1"	4'8"	3'4"	4'5"	4'1"	3'0"	4'1"	3'9"	2'10"	3'9"	3'6"	2'8"	3'6"	3'3"
RFM 17															
RFM 14															
RFM 11															

Notes
1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" (.729) washers in every low.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 45.75"
- Coverage Width: 44"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	not available
1240 thru 840	not available
1230 thru 830	12 thru 8
RFM 17 thru 11	17 thru 11

ADDITIONAL INFORMATION

Consult Table of Contents for specific information regarding:

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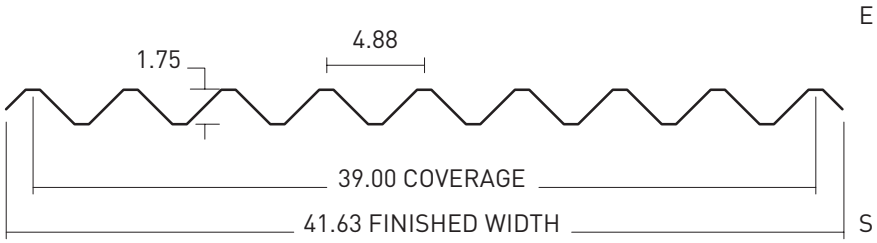
- Installation, Storage, & Handling
- FRP louvers, Ventilators, Gutters & Downspouts



SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240															
1040															
840															
1230	7'9"	10'5"	9'7"	6'9"	9'1"	8'4"	6'2"	7'0"	7'7"	5'9"	5'7"	6'4"	5'5"	4'8"	5'3"
1030	7'4"	9'9"	9'0"	6'5"	7'9"	7'10"	5'10"	5'10"	6'7"	5'5"	4'8"	5'3"	5'1"	3'11"	4'5"
830	6'9"	9'1"	8'4"	5'11"	6'2"	7'1"	5'5"	4'8"	5'3"	5'0"	3'9"	4'3"	4'8"	3'1"	3'6"
RFM 17															
RFM 14															
RFM 11															
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240															
1040															
840															
1230	5'11"	7'11"	7'4"	5'2"	6'11"	6'5"	4'8"	6'4"	5'10"	4'4"	5'10"	5'5"	4'1"	5'6"	5'1"
1030	5'7"	7'6"	6'11"	4'10"	6'6"	4'5"	3'3"	5'11"	5'6"	4'1"	5'6"	5'1"	3'10"	5'2"	4'9"
830	5'2"	6'11"	6'5"	4'6"	6'1"	4'1"	5'6"	5'1"	3'9"	3'10"	5'0"	4'8"	3'7"	4'7"	4'5"
RFM 17															
RFM 14															
RFM 11															

Notes
1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 5/8 washers in every low.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 41.63"
- Coverage Width: 39"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	not available
1240 thru 840	not available
1230 thru 830	12 thru 8
RFM 17 thru 11	17 thru 11

ADDITIONAL INFORMATION

Consult Table of Contents for specific information regarding:

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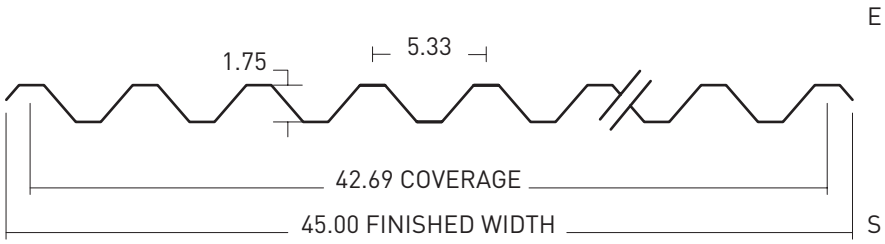

SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240															
1040															
840															
1230	7'5"	9'11"	9'1"	6'5"	8'4"	7'11"	5'10"	7'0"	7'3"	5'5"	5'7"	6'4"	5'1"	4'8"	5'4"
1030	6'11"	9'4"	8'7"	6'1"	7'7"	7'6"	5'6"	5'10"	6'7"	5'1"	4'8"	5'4"	4'10"	3'11"	4'5"
830	6'5"	8'4"	7'11"	5'8"	6'3"	6'11"	5'1"	4'8"	5'4"	4'9"	3'9"	4'3"	4'6"	3'1"	3'6"
RFM 17															
RFM 14															
RFM 11															
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240															
1040															
840															
1230	5'8"	7'7"	6'11"	4'11"	6'7"	6'1"	4'6"	6'0"	5'6"	4'2"	5'7"	5'1"	3'11"	5'1"	4'10"
1030	5'4"	7'1"	6'7"	4'8"	6'2"	5'9"	4'2"	5'8"	5'2"	3'11"	5'1"	4'10"	3'8"	4'8"	4'6"
830	4'11"	6'7"	6'1"	4'4"	5'9"	5'4"	3'11"	5'1"	4'10"	3'7"	4'7"	4'6"	3'5"	4'2"	4'3"
RFM 17															
RFM 14															
RFM 11															

Notes
1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 3/4" (.729) washers in every low.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 45"
- Coverage Width: 42.69"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	not available
1240 thru 840	not available
1230 thru 830	12 thru 8
RFM 17 thru 11	17 thru 11

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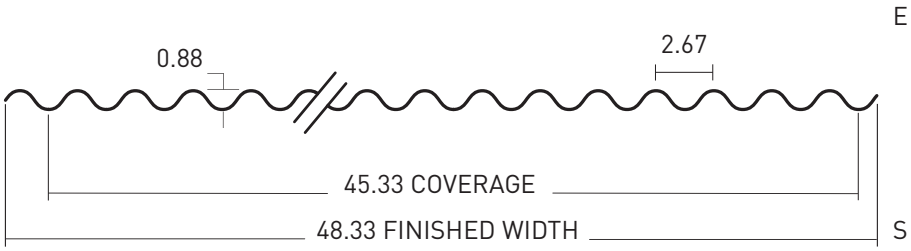

SIDING / ROOFING WIND LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240															
1040															
840															
1230	4'10"	6'6"	6'0"	4'3"	5'8"	5'3"	3'10"	5'2"	4'9"	3'7"	4'9"	4'5"	3'4"	4'4"	4'2"
1030	4'7"	6'1"	5'7"	4'0"	5'4"	4'11"	3'7"	4'10"	4'5"	3'4"	4'4"	4'2"	3'2"	3'7"	3'11"
830	4'3"	5'8"	5'3"	3'8"	4'11"	4'7"	3'4"	4'4"	4'2"	3'1"	3'6"	3'10"	2'11"	2'11"	3'4"
RFM 17															
RFM 14															
RFM 11															
ROOFING LIVE LOADS (PSF)															
	20			30			40			50			60		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Tred-Safe															
1240															
1040															
840															
1230	3'8"	4'11"	4'7"	3'3"	4'4"	4'0"	2'11"	3'11"	3'7"	2'9"	3'8"	3'4"	2'7"	3'5"	3'2"
1030	3'6"	4'8"	4'3"	3'0"	4'1"	3'9"	2'9"	3'8"	3'5"	2'7"	3'5"	3'2"	2'5"	3'3"	3'0"
830	3'3"	4'4"	4'0"	2'10"	3'9"	3'6"	2'7"	3'5"	3'2"	2'4"	3'2"	2'11"	2'3"	3'0"	2'9"
RFM 17															
RFM 14															
RFM 11															

Notes

1. Load/Span limits are based on full scale panel tests representing actual field conditions.
2. Panel span/deflection ratios (L/D) shalt be limited to L/20 for wind loads and L/45 for live loads.
3. Factors of safety shall be 1.88 for panels subjected to wind loads and 2.5 for panels subjected to live loads.
4. Load/Span limits are based on fasteners with 5/8" washers in every high.
5. Other panel types, weights, glass reinforcements, resin types, lengths, fastening options, or special loading requirements may be available; please contact Resolite Customer Service Department for more information.
6. All roof slopes are a minimum of 1:12. For slopes less than 1:12, contact Resolite Customer Service Dept.

Dimensions

Standard

- Finish Width: 48.33"
- Coverage Width: 35.33"
- Lengths: 4' to 40'

PANEL TYPES	NOMINAL WT. (OZ/SQ FT)
1645 Tred-Safe	not available
1240 thru 840	not available
1230 thru 830	12 thru 8
RFM 17 thru 11	17 thru 11

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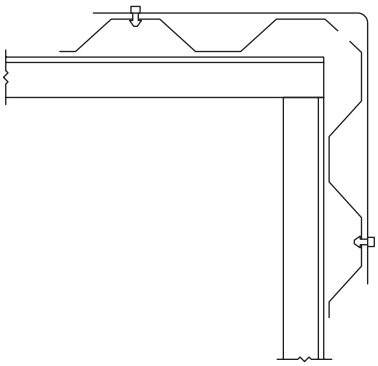
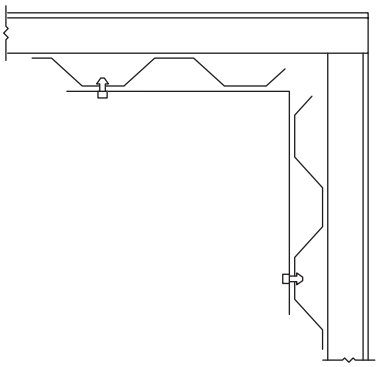
STANDARD FLASHING DETAILS

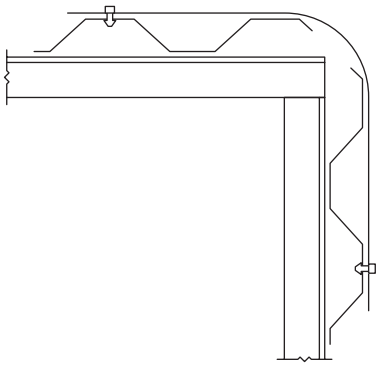
Outside 90° Flash



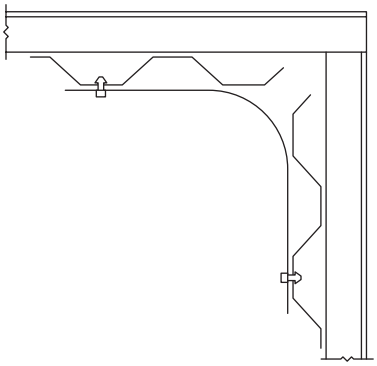
Inside 90° Flash



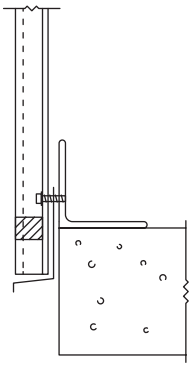
Outside Corner Roll



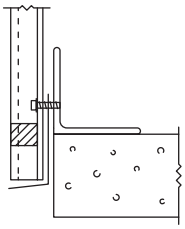
Inside Corner Roll



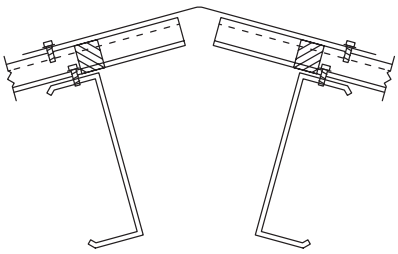
Base Flash (or Head Flash)



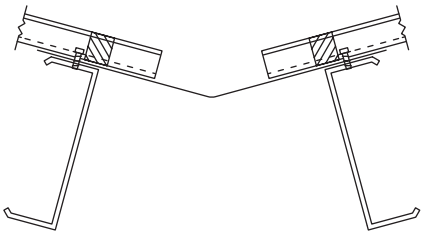
Alternate Base Flash (for non-standard or custom colors)



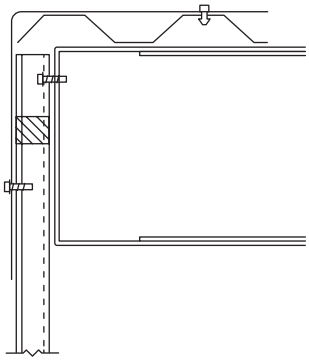
Ridge Cap



Valley Flash



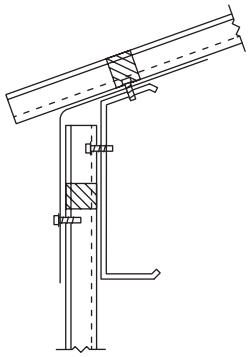
Gable Flash



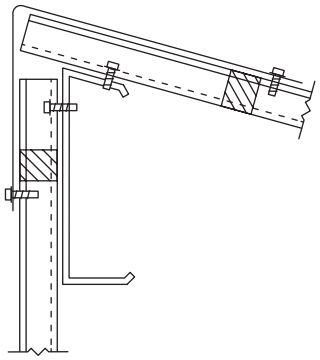
Notes

1. Standard length of all flashing is 1 0'-0".
2. All flashings are nominal 12 oz. per sq. ft.
3. Flashing should be fastened a maximum of 12" on center. Use SB-2 fasteners for attaching FRP flashing to FRP panels. Provide caulking as required.
4. All flashings are furnished with embossed exterior finish.
5. When ordering flashing, specify degree of flashing angle (i.e. 90°, 45°, etc.).
6. Contact Resolite Customer Service Department for availability of other flashing shapes and sizes.

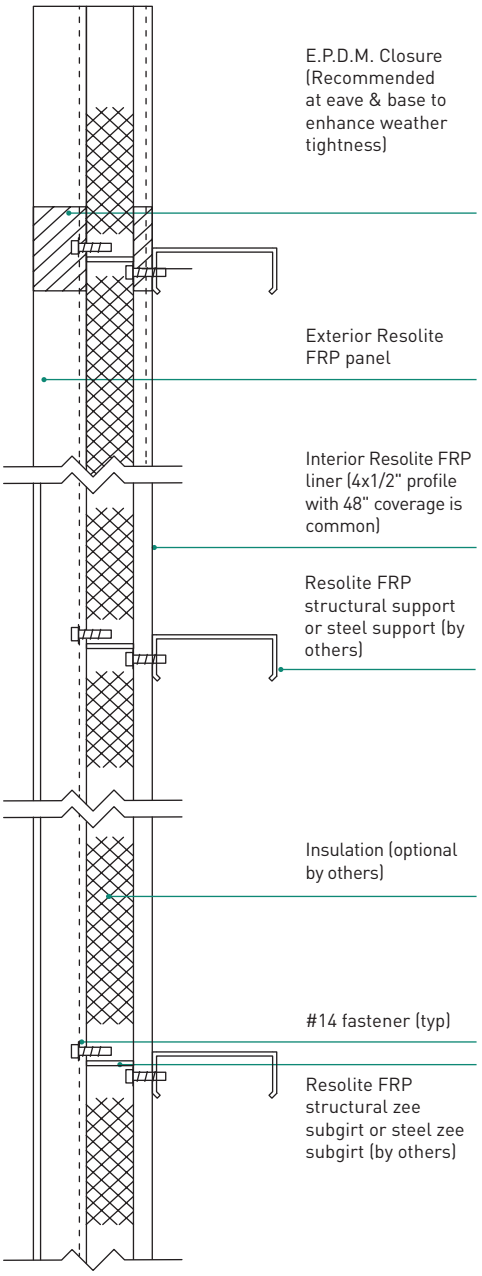
Eave Flash



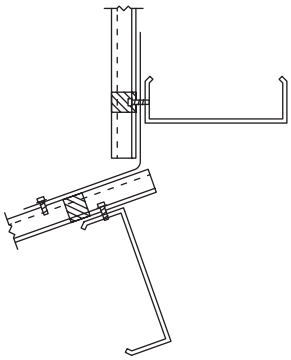
Peak Flash



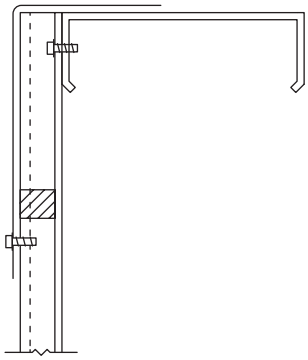
Field Insulated Double Panel Construction



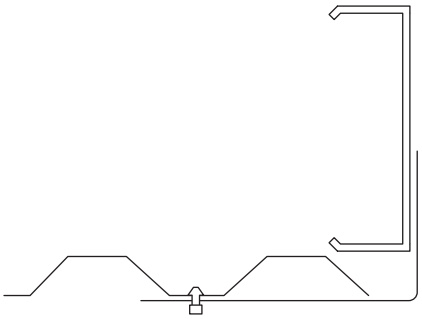
Transition (Headwall) Flash



Sill Flash



Jamb Flash



Notes

1. Standard length of all flashing is 10'0".
2. All flashings are nominal 12 oz. per sq. ft.
3. Flashing should be fastened a maximum of 12" on center. Use SB-2 fasteners for attaching FRP flashing to FRP panels. Provide caulking as required.
4. All flashings are furnished with embossed exterior finish.
5. When ordering flashing, specify degree of flashing angle (Le. 90°, 45° , etc.).
6. Contact Resolite Customer Service Department for availability of other flashing shapes and sizes.

INSTALLATION, STORAGE AND HANDLING

In general, Resolite panels are installed in the same manner as other exterior sheeting, such as metal panels. Resolite, like most FRP panels, is not designed as a walking surface (except Tred-Safe, Resolite's walkable roof panel).

Always use a roof ladder or plank supported by two or more purlins. Also, use care not to overload panels and never use installed panels as a storage platform for construction materials.

Resolite panels can be cut using a power saw or hand saw. Saw teeth should be fine with no set. An abrasive disc (fiber reinforced for safety) is recommended for power saws. Saw operator should wear a dust filter mask and safety glasses. Diagonal cuts (such as wall panels at gables) and all cuts for penetrations, etc. are field cut using the above methods.

Resolite panels may be pre-drilled at a position not less than 1-1 /2" from the edge of the panel. More than one panel can be drilled at one time. Support the panel directly under the drill point; use a high drill speed and light pressure.

Installation of panels should start at the corner of the building opposite the prevailing wind. The minimum end lap is 6" for roofing panels and flashing and 4" for siding panels and flashing.

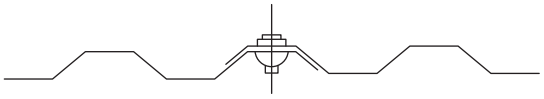
Use #14 stainless steel self tapping screws, with a Type 'B' point and neoprene backed stainless steel washer, for fastening Resolite panels to steel girts and purlins.

A similar screw with a Type 'A' (sharp point) should be used for fastening into wood structures or pultruded FRP framing.

The number of fasteners required, their location and length, and the size of the sealing washer can all vary depending on panel configuration, support spacing, load requirements, etc. Drive screws using a low speed (800 RPM maximum) power screwdriver or drill to prevent overdriving or stripout.

See page 30 for Fastening Guide. SB-2 side lap fasteners should be installed at all side laps, 12" o.c. for roofs and 18" o.c. for walls.

SIDE LAP DETAIL

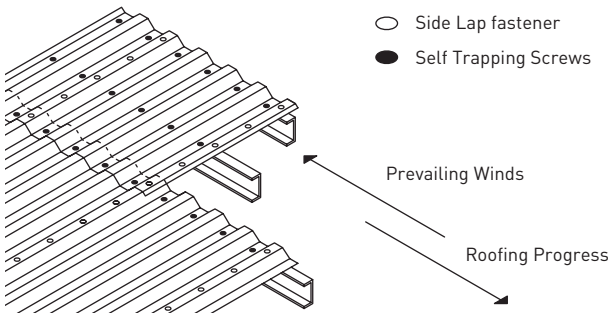


Sidelap one corrugation (minimum)

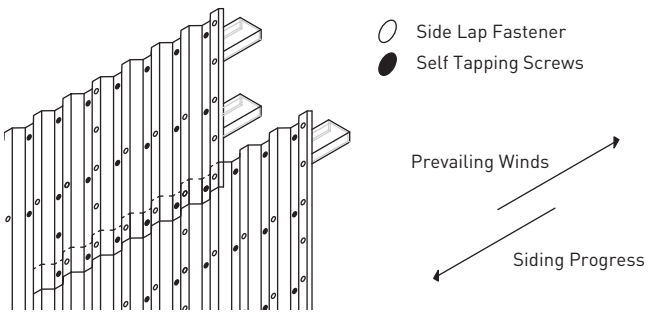
Drill bit guide

Fastener Type	Structural Framing	Drill bit type	Diameter
#14 'B' Point	14 to 10 ga. Steel	No. 8	.199"
	10 ga. to 3/16"	No. 4	.209"
	3/16" to 1/2"	No. 1	.228"
	1/2" and more	.231"	.231"
#14 'A' Point	Wood	5/32"	.156"
	Pultruded FRP	3/16"	.188"
SB-2	Side Lap	3/8"	.375"

TYPICAL FASTENER LOCATIONS ROOFING



TYPICAL FASTENER LOCATIONS ROOFING



Closures and sealants

Use closure strips to close off the perimeter areas to enhance weather tightness. Secure the closures with sealant or fasteners. Roofing panel side and end laps should always be sealed. Use butyl tape for opaque panels and clear silicone for translucent panels. Sealing of side wall panels is normally not required unless called for on the drawings and/or in the specification. For fastener and sealant recommendations see our Fastener Guide, on page 30. See Drill Bit Guide for selection of proper drill bit size.

Sheet layout

Resolite panels are manufactured in accordance with ASTM D 3841. When Resolite panels are installed to nest with other corrugated material, there may be a slight difference in the coverage width of the two materials. Since Resolite FRP is somewhat flexible, the coverage width can be increased or decreased by pushing or pulling the side laps as they are fastened; the extent of gain or loss is entirely dependent upon the installer. In order to maintain coverage, occasional checking of the panel layout is advisable, especially on long runs.

Receiving resolite material

Material shipments should always be inspected for damage and checked carefully against the itemized packing list. Shortages or damage should be reported at once to the carrier's agent and an exception should be noted & signed by the driver on the delivery receipt. This is important in order to properly establish a claim position.

Storage / Handling

Protect the FRP panels from surface cuts and abrasions. Keep panels dry and protected prior to use. Note that moisture trapped between panels can result in permanent staining. Store under a roof in a well ventilated area where possible. Stack panels off the ground with one end elevated. Care must be taken when lifting Resolite panels. Use spreader bars when lifting; do not use wire slings unless material is protected.

Maintenance and cleaning

Resolite panels will give many years of service, however, for best appearance and maximum light transmission of translucent panels, a periodic hose-down is beneficial. Exposure of FRP panels to the elements, pollutants and wind blown particles will cause surface erosion and some loss of color. Occasional cleaning, with a mild detergent, will help to reduce this degradation.

Fire and safety

Regardless of the flammability rating, all FRP panels should be considered combustible. Therefore, to minimize fire hazards during panel installation and while in use, safety precautions should be taken. For complete safety guidelines, request the SPI Fire Safety Guidelines Bulletin, available from Resolite.

Sharp edge warning

Resolite panels have sharp edges. Workers should use clean cotton gloves when handling panels.

Notes

1. Low speed power screwdrivers or drills (800 RPM maximum) are required to prevent overdriving or stripout.
   DO NOT USE IMPACT TYPE TOOLS.
2. Drill bit sizes are approximate. Variations in hardness of supporting materials or other factors may require adjustment in drill bit size to permit proper installation.
3. #14 fasteners can be installed using a 3/8" socket; SB-2 fasteners can be installed using a 5116" socket.

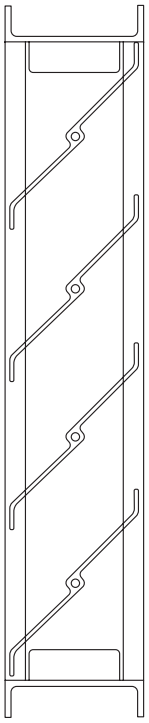
FREE AREA CHART - SQ. FT.					
HEIGHT	WIDTH (INCHES)				
(INCHES)	12	24	36	48	60
24	.413	.996	1.580	2.163	2.746
36	.826	1.993	3.160	4.326	5.493
48	1.240	2.990	4.740	6.490	8.240
60	1.650	3.986	6.319	8.653	10.986
72	2.066	4.983	7.899	10.816	13.733
84	2.479	5.979	9.479	12.979	16.479
96	2.892	6.976	11.059	15.142	19.226
108	3.306	7.972	12.639	17.306	21.972
120	3.719	8.968	14.218	19.468	24.718

Dimensions are out-to-out of frame and include flanges.

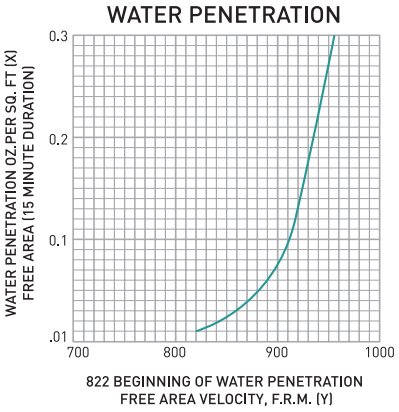
To determine minimum free area required for the louver:
1. Divide the required CFM flow by the maximum recommended free area velocity.
2. Select the most desirable louver size, from the free area chart, that meets the minimum free area requirement.

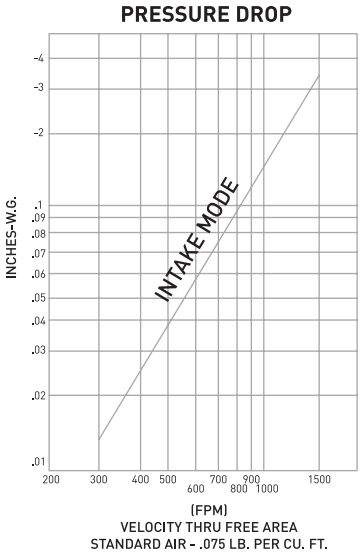
Note: Performance ratings do not include the effect of a birdscreen

Resolite certifies that the Series SBRK6 louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings.



STANDARD FEATURES	
Construction	Hetron ggp® isophthalic polyest:=r resin with a flame spread of 25* or less, UV stabilizers, CM/ Barrier
Frame	6" deep channel, 1/4" thickness
Blades	"K" style, 1/8" thickness
Hardware	304 stainless steel
Minimum Size	12" wide x 24" high
Maximum Size	60" wide x 120" high
Colors	Stone White, Gray or Beige
OPTIONAL FEATURES	
Hardware	316 stainless steel
Screen	1/2" polyethylene mesh (stock) 3/4" polyethylene mesh polyethylene insect screen 1/2" stainless steel
Mullion Covers	For multiple installations
Special Color	(Minimum quantity requirements)





Specification

1. Wall louvers shall be ResoFLO fiberglass reinforced polymer louvers by Resolite, Stabilit America.
2. Glass reinforcement for the louver frame and blades shall include unidirectional filaments to provide high tensile and flexural properties and overall section stiffness. In addition, continuous strand mat shall be included to contribute to the transverse properties of the louver. Glass content shall be approximately 40% by weight. C/W Barrier shall be on all surfaces to provide a resin rich surface to increase corrosion resistance and UV protection.
3. Resin shall be high quality isophthalic halogenated polyester equivalent to Hetron 99P®, having a flame spread classification of 25* or less. Additional protection shall be provided with the use of UV stabilizers.
4. Finish shall be smooth.
5. Color shall be _____ (Stone White, Gray or Beige) and coloring shall be achieved through the use of pigments impregnated through the entire profile.
6. Fiberglass reinforced polymer wall louvers shall bear the AMCA Certified Ratings Seal for air performance and water penetration. Published performance data must be submitted for approval prior to fabrication. Pressure drop and water penetration must be equal to or less than Resolite ResoFLO Model SBRK6.

Stationary louver, model SBRK6 45°

1. Louver profiles shall meet or exceed ASTM physical and mechanical properties. A copy of the testing shall be submitted for approval.
2. Louver frames shall be 6" deep channel type and shall be 1/4" minimum thickness.
3. Louver blades shall be "K" style design and shall be 1/8" minimum thickness.
4. Hardware shall be 304SS.
   (316SS is optional)
5. If required, birdscreen shall be polyethylene mesh mounted in removable PVC frames with a minimum free area of 80% of gross area.

Adjustable louver, model ABRK6 45°/90°

1. Louver frames shall be 6" deep channel type and shalf be 1/4" minimum thickness.
2. Louver blades shall be "K" style design and shall be 1 /8" minimum thickness.
3. Hardware shall be 304SS.
   (316SS is optional)
4. Louver blades shall be adjustable to 45° or 90° (select one) and shall pivot in fiberglass reinforced polypropylene bearings. Fiberglass reinforced polypropylene pivots shall be minimum of 5/8" di ameter. All linkages and brackets shall be fiberglass reinforced polypropylene. Control arms shall be of fiberglass construction.
5. Louver blades shall be operated in the following manner:
   - fiberglass thumbscrew locking quadrant
   - pull cable operation (vinyl-coated cable)
   - electric motor operation

Proven FRP Resin System

Resin is the heart of all fiberglass reinforced polymer materials. That's why Resolite chose the same family of light-stabilized resins for ResoFLO Louvers that are utilized in manufacturing its well-known corrosion resistant FS25A / CRFS25A and high-strength Tred-Safe FRP wall and roof panels.

*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.

The information contained herein is not intended to be used for design purposes. Resolite reserves the right to change or withdraw such information, or the designs and details of the products upon which it is based, either wholly or in any portion thereof, without further notice. Specific information required for design and detailing of specific jobs is available upon request from Resolite Customer Service.

Color Notice - Polyester resin products are subject to discoloration when exposed to atmosphere and environmental conditions. Accordingly, seller assumes no liability and expressly disclaims any responsibility for any ross or damage, direct. indirect, or consequential; or for any change of color for any polyester resin product.

Ventilation in Corrosive Atmospheres

Resolite's ResoFLO FRP ventilation systems are de signed to withstand the extremely corrosive environments often associated with pulp and paper mills, chemical plants, steel mills, metal treatment facilities, chlorine cell buildings, and wastewater treatment plants. Operating conditions at these types of industrial sites typically include the three deadly threats to building components: excess heat, moisture and corrosive gases, liquids and particulates. Working together, they can quickly destroy ordinary ventilation system components and impair critical production processes. Fiberglass reinforced polymer materials, with their excellent resistance to corrosive atmospheres, can substantially increase the ventilators service life.

Series RFVS Gravity Ventilators

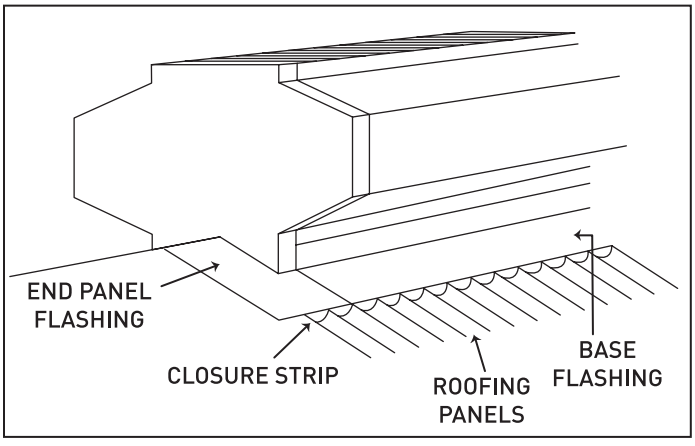
ResoFLO continuous ridge ventilators, employi ng corrosion-resistant FRP components, are designed to produce maximum gravity airflow under a wide range of adverse operating conditions. Internal baffles and the outside windband effectively seal out the elements and prevent backdrafts. Continuous weep openings on each side of the windband provide ample drainage for even large volumes of rainwater and melted snow. Special corrosion resistant bearings permit optional manual chain or motor-driven dampers to always operate freely, even in the most corrosive industrial environments.

RFVS ventilator units are shipped completely assembled and ready for installation in 10-foot sections, which may be linked together with splice plates to provide continuous runs of any length. The hi-efficiency design of ResoFLO FRP gravity ventilator systems offers substantial savings in ventilation costs compared to power ventilators. ResoFLO gravity ventilators operate efficiently requiring virtually no maintenance expense.

Proven FRP Resin System

Resin is the heart of all fiberglass reinforced polymer materials. Thae s why Resolite chose the same family of light-stabilized resins for ResoFLO ventilators that are utilized in manufacturing its well-known corrosion resistant FS25A I CRFS25A and high-strength Tred-Safe FRP wall and roof panels. Adjustable louver, model ABRK6 45°/90°

STANDARD FEATURES	
Construction	Hetron 99P® isophthalic polyester resin with a flame spread of 25* or less, UV stabilizers
Hardware	304 stainless steel
Vent Length	Standard 1 O' modules
En Cap	Two (2) per run
Base	Self flashing ridge mount
Color	Stone White, Gray or Beige
Throat	4 sizes: 9", 12", 18°, 24"
OPTIONAL FEATURES	
Hardware	316 stainless steel
Damper	Manual chain or motor driven
Bird Screen	1 /2" polyethylene mesh
Base	Curb mount
Special resin	(Minimum quantity requirements)
Special color	(Minimum quantity requirements)



Specification

1. Continuous ridge , ventilators shall be ResoFLO fiberglass reinforced polymer ventilators Series RFVS as supplied by Resolite, Stabilit America
2. Construction of the components shall be a minimum of 0.10,. nominal thickness. Glass content shall be approximately 40% by weight.
3. Resin shall be high quality isophthalic halogenated polyester equivalent to Hetron ggp® having a flame spread of 25* or less. Additional protection shall be provided with the use of UV stabilizers.
4. Hardware shall be 304SS (316SS optional)
5. Finish shall be smooth.
6. Color shall be _____ Gray Frame w/ Stone White Blades as standard.
7. Free area of the exhaust opening shall be equal to or greater than the ventilator throat size.
8. If required, the damper shall be one piece center pivot with corrosion resistant bearings and shall be _____ (manual chain operated or motor driven).
9. If required, furnish bird screen consisting of 1/2" polypropolene mesh.

*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.

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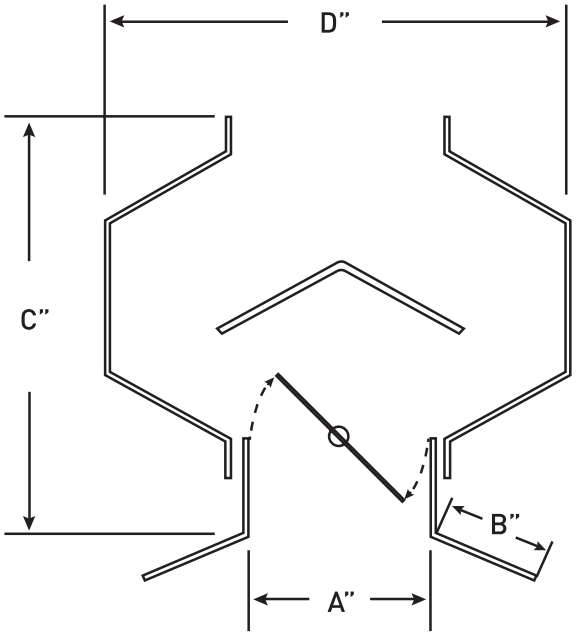


END VIEW

VENTILATOR DIMENSIONS

MODEL	A"	B"	C"	D"	NOMINAL THICKNESS
RFVS-9	9"	6"	16"	21"	0.10"
RFVS-12	12"	6"	20"	28"	0.10"
RFVS-18	18"	6"	31"	40"	0.12"
RFVS-24	24"	6"	36"	54"	0.12"

FRP Gutter & Downspout System for Use in Corrosive Atmospheres

Resolite's FRP gutter and downspout system was developed specifically for FRP-clad buildings in environments which can destroy painted metal and vinyl systems. While rain washes corrosive materials off wall and roof panels, significant amounts of these materials may actually accumulate in gutter sections. Gutter and downspout system components have to withstand even worse corrosive conditions than ordinary FRP panels.

Strength Where it's Needed Most

Gutter and downspout systems are subjected to all of the ravishes of climate and weather. They receive maximum UV exposure and endless thermal shocking. Their position at the roof edge makes them inherently vulnerable to high winds and static loading from accumulations of snow and ice. Resolite's gutter and downspout system are manufactured from pultruded FRP shapes incorporating excellent section properties.

Performance and Aesthetics

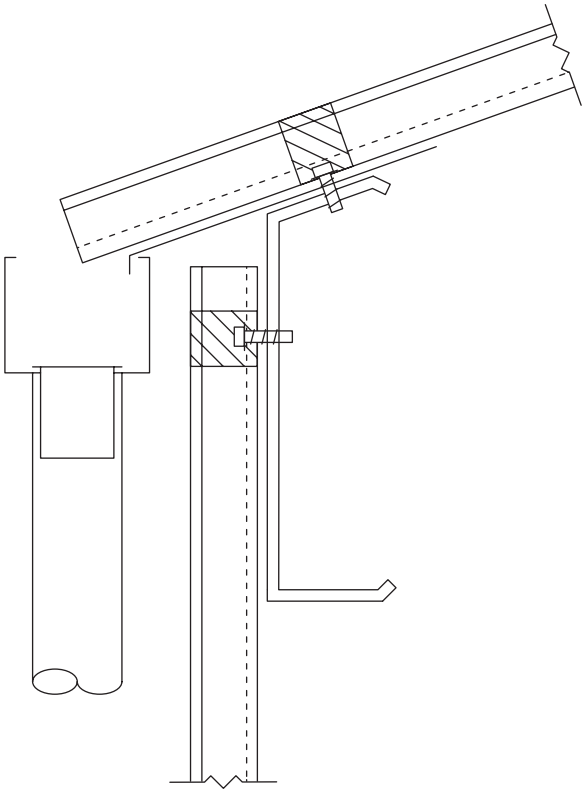
The Resolite gutter and downspout system looks as good as it performs. It is available in three standard Resolite FRP opaque colors: Stone White, Gray, and Beige. Designers may use the system for vertical or horizontal accent, to complement roof and wall colors, or simply blend the gutter and downspout system into the facade. Resolite's FRP system is the ideal choice for a gutter and downspout system in new construction or for retrofitting existing structures, including buildings with protected metal wall and roof panels.

Quick and Easy Installation

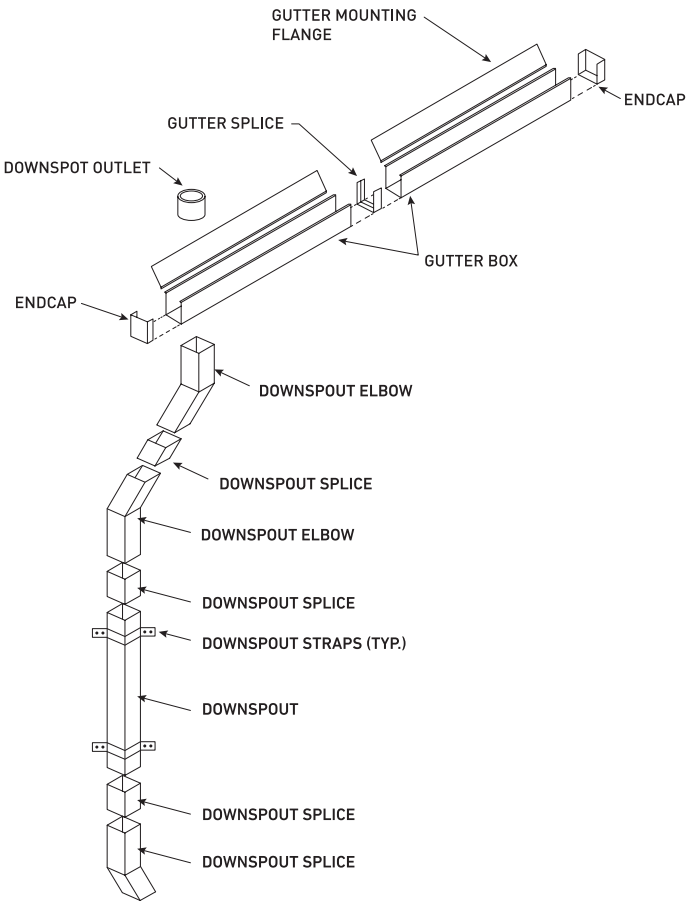
Specifically designed with versatility in mind, this gutter will suit most field conditions. The continuous flange mounts under the roof panel thus eliminating the need for separate eave flashing. Connectors, inserts, and adapters conveniently fit snugly together. Downspouts can be positioned between gutter sections or anywhere along the gutter length. The system includes 45° elbows and left and right endcaps. Components are secured to each other with a two-part adhesive and screwed in place with self-tapping stainless steel screws.

STANDARD FEATURES	
Construction	High quality polyester resin with UV stabilizers, continuous unidirectional fiberglass reinforcement, C/W Barrier
Material	Pultruded for extra strength
Lengths	Gutter and downspout sections - standard 20' lengths
Color	Stone White, Gray or Beige
Connectors	Furnished to match material and color

Gutter & Downspout System



Gutter & Downspout System



Specification

1. The gutter and downspout system shall be fiberglass reinforced polymer by Resolite, Stabilit America.
2. Glass reinforcement for the gutter and downspout system shall include unidirectional filaments to provide high tensile and flexural properties and overall section stiffness. In addition, continuous strand mat shall be included to contribute to the transverse properties of the gutter and downspout sections. Glass content shall be approximately 40% by weight.
3. Resin shall be high quality, light stabilized polyester modified with acrylic monomer.
4. Finish shall be smooth.
5. Color shall be _____ (Bright White, Gray or Beige) and coloring shall be achieved through t):le use of pigments impregnated through the entire profile.
6. Configuration of the gutter and the downspout shall be as shown on the drawings. Standard lengths are 20'.
7. Gutter and downspout system shall be installed in accordance with the manufacturer's recommendations.

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1-800-RESOLITE (737-6548) **www.resolite.com**

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Moscow, TN 38057