

Fiberglass Reinforced Polymer Panels

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Technical Data

Installation, Storage, Handling

INSTALLATION

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.

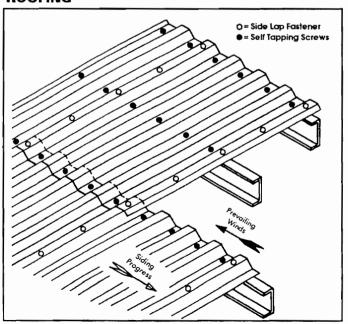
Resolite panels can be cut using a power saw or hand saw. Saw teeth should be fine with no set. An abrasive disc (fiber reinforced for safety) is recommended for power saws. Saw operator should wear a dust filter mask and safety glasses. Diagonal cuts (such as wall panels at gables) and all cuts for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

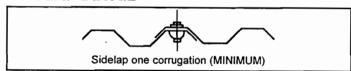
Installation of panels should start at the corner of the building opposite the prevailing wind. The minimum end lap is 6" for roofing panels and flashing and 4" for siding panels and flashing.

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 13B 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.

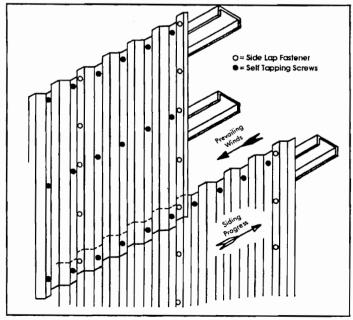
TYPICAL FASTENER LOCATIONS ROOFING



SIDE LAP DETAIL



TYPICAL FASTENER LOCATIONS



Installation, Storage, Handling (continued)

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 13B. See Drill Bit Guide below 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.

DRILL BIT GUIDE (see notes below)

Fastener	Structural	Drill Bit	Diameter
Type	Framing	Type	
#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" & more	.231"	.231"
#14 'A' Point	Wood	5/32"	.156"
	Pultruded FRP	3/16"	.188"
SB-2	Side Lap	3/8"	.375"

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 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 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:

- 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.
- #14 fasteners can be installed using a 3/8" socket; SB-2 fasteners can be installed using a 5/16" socket.

