

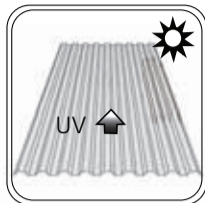
INSTALLATION GUIDELINES

Corrugated Roofing Panels



HANDLING & STORAGE:

Stack short sheets on top of longer ones. Store sheets in a cool and dry place out of direct sunlight. To prevent solar heat buildup, avoid covering the stack of sheets with a dark tarp or other heat absorbing material.



THIS SIDE UP:

The UV-protected side of the sheet has a product label indicating the exterior side of sheets that must face towards the sun.



CLEANING:

Normal dirt and dust accumulation is washed off by periodical rains. Regular rinsing of the sheets with clean lukewarm water is sufficient in dry areas. Mild household detergent may be used with a soft rag. Never use aggressive or abrasive cleaning agents or glass window cleaners; they can chemically attack the sheets.



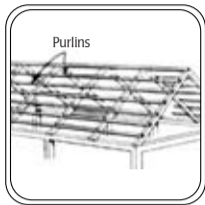
CUTTING:

Use a circular saw with a fine tooth blade at a high speed but a low advance rate to cut 3-4 sheets at a time. For curved cutting, use a jigsaw or metal cutting shears. During cutting, secure sheets to insure clean cuts. Clean sheets of any debris before installation.



INSTALLATION:

Begin installation on side away from wind/rain direction. Continue to work to left or right accordingly. Never start from both sides and work to middle. Minimum recommended roof pitch of 2/12. Only one corrugation overlap is required on sides of sheets. Do not stretch or force sheet to overlap. Cover long spans by overlapping sheets a min. of 4".



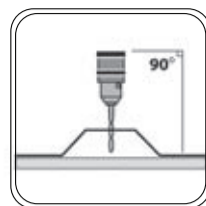
PURLINS:

Max distance between purlins is listed below for a 25 lb load:

- PVCLite - 24" • FiberLite - 36"
- PVCLite Plus - 24" • CoverLite - 48"

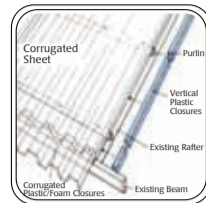
FASTENERS:

- Wood - #10 Woodgrip
- 1/2" Neoprene bonded washer
- Metal - #12 Self-Drilling/Tapping
- 1/2" Neoprene bonded washer
- Roof Application - 2" or 2 1/2" screw
- Wall Application - 1" or 1 1/2" screw



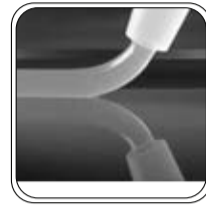
DRILLING:

Pre-drill holes 3/32" larger than screw diameter to allow for expansion and contraction. Start fastening sheets at bottom moving toward top of sheet. Do not fasten at both ends and move towards middle. Over tightening screws may cause sheet distortion leading to cracks & fractures. Sheets should be fastened at the peak of every third corrugation on plastic horizontal closure strips for roof applications. Fasten sheet every 3rd valley for wall applications.



CLOSURE STRIPS:

Plastic or foam closure strips can be used horizontally under the panels as fastener supports. Plastic vertical closures are recommended for finishing the outside edges. Foam closures can be stretched slightly to align with the panels to form a compression fit. Foam closure strips can be used under top and bottom of sheets to prevent leaks.



SILICON SEALANTS:

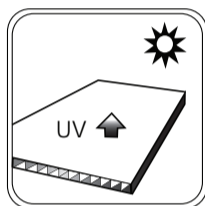
Use silicon as a sealant. Other caulking or sealants may attack sheets. Check silicon product label to insure compatibility. 100% silicone is compatible with polycarbonate.

Multiwall Polycarbonate Panels



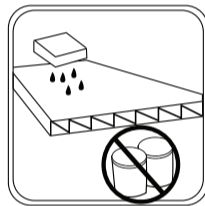
HANDLING & STORAGE:

Stack short sheets on top of longer ones. Store sheets in a cool and dry place out of direct sunlight. To prevent solar heat buildup, avoid covering the stack of sheets with a dark tarp or other heat absorbing material.



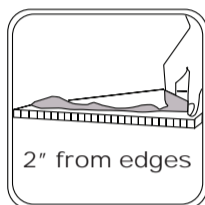
THIS SIDE UP:

The UV-protected side of the sheet is covered with printed film and must face towards the sun.



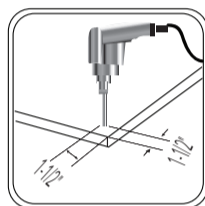
CLEANING:

Normal dirt and dust accumulation is washed off by periodical rains. Regular rinsing of the sheets with clean lukewarm water is sufficient in dry areas. Mild household detergent may be used with a soft rag. Never use aggressive or abrasive cleaning agents or glass window cleaners; they can chemically attack the sheets.



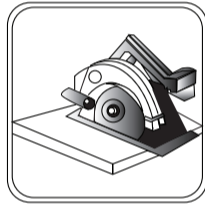
REMOVING FILM:

Remove approximately 2 inches of film from sheet edges before installing. Remove all film immediately after sheet installation is complete.



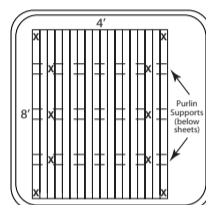
DRILLING:

Use only new or sharply ground steel or carbide tipped drills. The diameter of drilled holes must be 50% larger than the screws diameter to allow for thermal expansion, providing enough space to allow for seasonal temperature fluctuation.



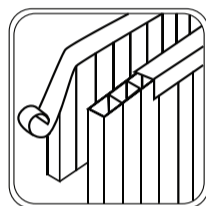
CUTTING:

Masking film should remain on the sheet to prevent scratching. Utility knives can be used to cut. Sheets should be clamped for hand saw cutting to prevent vibration. Sheets can be cut with a circular saw using carbide triple-chip fine tooth panel blades. Remove dust from the surface with compressed air or a vacuum.



INSTALLATION:

Use H-Channel to connect two sheets. Fasten supports at all four corners 1 1/2" from edges. At purlin supports, fasten 6" from edge. When cold bending, min. radius is 41" for 6mm / 110" for 16mm. Bend sheet longitudinally, never across sheet width. Flutes must run on at least a 2/12 pitch. Maximum purlin spacing is 24" for 6mm / 36" for 16mm. Do not walk on sheets at any time.



END CLOSURE:

Structured polycarbonate sheets must always be installed with ribs positioned vertically. Seal ends with anti-dust tape and a U channel. Drill weep holes every 12" with a 1/8" drill bit to allow condensation to drain out the bottom of the U channel.



SILICON SEALANTS:

Use silicon as a sealant. Other caulking or sealants may attack sheets. Check silicon product label to insure compatibility. 100% silicone is compatible with polycarbonate.

FASTENERS:

- Wood - MultiLite 1" Screw for 6mm / 2" Screw for use with 16mm
- 1/4" Hex head w/neoprene washer
- Metal - #12 Self-Drilling/Tapping
- 1/2" Neoprene bonded washer

Tough Rib PVC Liner Panels

STORAGE AND HANDLING:

1. Panels should be transported and stored horizontally on a flat, sturdy pallet.
 - Cover panels stored outside with a white opaque polyethylene sheet
2. Panels should be stored inside interior space in which they will be installed.
 - Install panels after they have acclimated to the inside structure temperature
 - This will prevent warping through changes of thermal expansion/contraction

BASIC INSTALLATION:

1. Panels may be installed vertically on walls or horizontally sloped on ceilings.
 - Maximum recommended panel length is 20' 4"
 - In lieu of longer panels, lap panels to achieve desired length
 - Place a plumb line to mark starting panel starting position and direction
2. It is possible to cut panels with a circular saw, using a blade intended for hardwood or a special one for plastics, rotating at a high speed.
 - Advance the saw at a slow feed rate
3. Predrill holes 1/16" larger in diameter than the fastening screw.
 - Drilling should be carried out with a metal drill bit
 - Drill holes perpendicular to the face of the panel
4. Start installation at panel bottom and work towards wall eave or ceiling top.
 - Start at bottom edge, at right or left side, and proceed to left or right and up
 - Never fasten both edges first and then work towards the middle
 - It is possible to begin installation in middle of panel and proceed to both sides
 - Maintain correct fastening sequence
 - Keep panel flush and taut during positioning and fastening to avoid deformation and a wavy appearance
 - Installations with purlin spacing greater than 24" may result in increased deflection.

** Do not leave partly installed panels unattended until all the required fasteners have been placed and properly tightened.

OVERLAP:

1. Minimal recommended end lap is 4"
 - Install lower panels first
 - Lap with upper panels to avoid drip into ceiling or wall
 - Maximum overlap 8"
2. Side lap is one corrugation
3. Panel's edge overhang shouldn't extend more than 4"
4. Overlap should be sealed with silicone in wash areas or extremely wet conditions.
 - Install butyl-rubber sealing strip along length of side or end lap corrugations

FASTENER DETAILS:

1. Fastener should be installed every third corrugation in the valley, screwed into the centerline of each support.
 - If the panel is going to be used in conjunction with insulation, a fastener should be used in every 2nd corrugation in the valley
2. Careful attention should be given to assure perpendicular insertion of fasteners.
 - Never use an impact wrench or driver for fastening
3. Recommend using corrosion resistant #12-14 x 1" fastening screw with 3/4" special washer with profiled EPDM rubber gasket.

DISTANCE BETWEEN SUPPORTS:

Panel Thickness	Theoretical Weight	Ceiling Supports Distance (ceiling purlins)	Wall Supports Distance (wall girts)
Inches	Oz. / Ft. ²	Inches	Inches
1/32	4.6	24 - 48	24

CLEAN 16 PVC Liner Panels

PREPARATION:

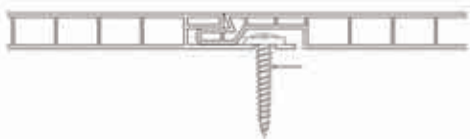
1. Check surfaces for straightness and install strapping where necessary.
 - Make sure all vapor barriers should be installed to code
2. It is recommended that panels run parallel to ceiling joists, roof trusses, or wall studs.
 - Minimum additional strapping: 1" x 4" or 2" x 4"
 - Install strapping perpendicular to framing members every 24"
 - Load tables available for larger spans (contact local distributor for details)
3. Install wood blocking around all openings to properly support trims.
4. When planning to suspend lighting or other items, install adequate backing.

BASIC INSTALLATION:

1. To allow for expansion and contraction, panels should slide free after nailing.
 - Always fasten in center of slots
 - Allow minimum of 1/16" between fastener head and nailing flange
 - Leave 1/4" minimum clearance at ends of all panels and trims
 - Do not over tighten fasteners
2. Fasteners should penetrate a minimum of 1" into solid backing, 24" apart, at least 4" from the end of the panel.
 - Before fastening, make sure panel is interlocked along its entire length
 - Keep joints uniform to ensure all joints remain parallel
 - Nail properly by starting at center of panel and work outwards
3. Use a vinegar neutral sealant to seal corners, fixtures, and repair small holes
 - Use off-white sealant color to match panel

** Use a fine tooth blade (12 to 16 teeth per inch) with the blade installed in the reverse direction. Some applicators prefer hand-held circular saws with a similar blade installation.

FASTENER DETAIL:



WALL INSTALLATION:

1. Install panels on walls in a similar manner to ceiling installation.
2. Begin by installing Base Trim along bottom on wall.
 - If using J-Trim, drill 1/4" drain holes in bottom of trim for drainage
3. At corners, either install J-Trim vertically to finish ends of butt joints.
 - Or install Inside Cove Trim when panel comes to corner
 - Proceed with rest of wall installation, starting at inside cove moulding
4. If ceiling is not finished or an Inside Cover Trim is not used, install a J-Trim at top of panel.

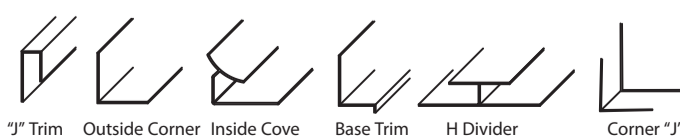
CEILING INSTALLATION:

1. Begin by installing necessary trim on perimeter of the ceiling.
 - Fasten trim at 24" maximum to wood strips of ceiling members
2. Cut width and length of first panel for the first course.
 - Install necessary trim at one corner of the ceiling
 - Leave room in trim for 1/8" expansion at side and 1/4" expansion at end
 - Fasten every 24" maximum, position fasteners in center of slots
 - Do not fasten tightly or within 4" of end of panels
3. Install H-Trim on end of first panel, leaving room for 1/4" expansion.
 - Fasten H-Trim on other side to wood supports at 24" on center
4. As installation proceeds, install J-Trim around all openings.

CLEANING:

1. Remove common dirt and grime using a long handled sponge or soft bristle brush and a mild cleaning solution. Protect eyes and skin from direct contact with cleaning agents.

TRIMS AND FLASHING:



Have a question or request? Contact Us: See back of brochure for a list of branch offices Or send an email to: info@westmansteel.ca