

# Rooflite<sup>®</sup> MB

## CORRUGATED POLYCARBONATE SKYLIGHT & SIDELIGHT INSTALLATION GUIDE

### STORAGE REQUIREMENTS

RoofliteMB sheets should be stored in a well ventilated, dry location (preferably a warehouse area) free from direct sunlight or heat. Sheets should be stacked horizontally, on a flat surface with shorter sheets stored on top of longer sheets and with supporting boards underneath to prevent sagging. Any outdoor storage is at the customer's own risk.

### HANDLING REQUIREMENTS - SAFETY PRECAUTIONS

Wear heavy gloves when working with RoofliteMB sheets to avoid cuts from sharp edges. When cutting or drilling the sheets, always wear safety glasses and sweep away polycarbonate particles to prevent eye injury from blowing, or flying fragments.

While RoofliteMB sheets are durable, stepping on sheets in storage may cause abrasions to the surface. RoofliteMB is not intended to carry the weight of a human so never step on installed panels.

### EASY TO FABRICATE

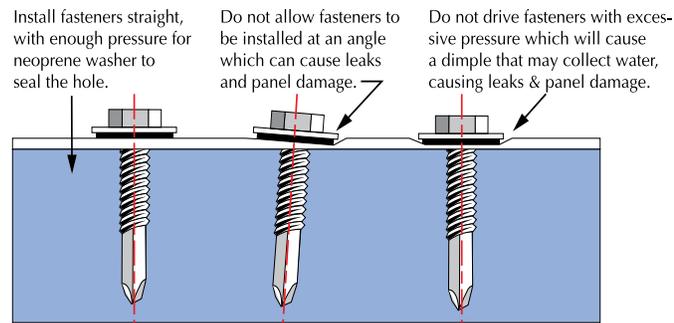
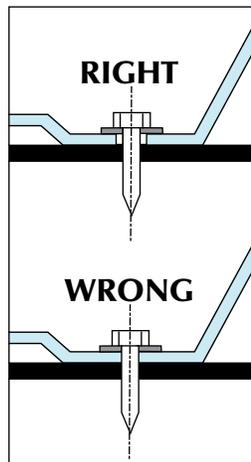
Structure should be true and square before panel installation to insure the panels seal properly at the side lap.

RoofliteMB won't crack or split when cut or drilled and can be easily fabricated using standard tools.

It is important to allow for thermal expansion and contraction when drilling holes. Hole diameter should be drilled 5/64" larger than the diameter of the fastener.

**DRILLING:** CO-EX self drilling screws do not require pre-drilling, but pre-drilling may improve the finished appearance or your project. Drill holes, if desired using standard metal drills. Support RoofliteMB panel from beneath during drilling.

**SAWING:** Cut RoofliteMB with shears, razor knife, hand saw or circular saw with fine tooth blade. Make sure the sheet is held securely in place (or clamped) when cutting to avoid vibrations which may cause surface streaks. To avoid stresses and over-cutting, drill a hole where two cut lines will intersect, then make the cuts to that drilled point.



### PROPER FASTENING

**SCREWS:** Use CO-EX Woodmate Screw fasteners or a 1-1/2" to 2" double washed wood screw for fastening RoofliteMB to hardwood. CO-EX also offers a self drilling/self tapping screw for fastening RoofliteMB to aluminum and steel.

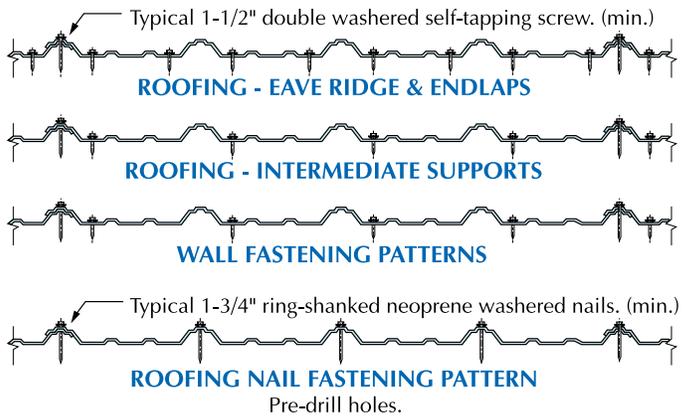
Fasteners should be secured without excessive tension which would deform the RoofliteMB, and lead to leakage problems. Make sure that fasteners are put in perpendicular to the sheet to make a secure seal, and to avoid deforming the sheet. Fasteners should be applied at every purlin. Fastener length should allow a minimum of 1" penetration into wood.

**NAILS:** If panels are to be nailed, it is recommended that they be pre-drilled. Use 1-3/4" ring shanked neoprene washed nails, and nail into the crown of the major ribs of the panels (see below). Do not over-drive nails which will deform the RoofliteMB sheet, and lead to leakage problems. Make sure that nails are put in perpendicular to the sheet to make a secure seal and to avoid deforming the sheet. Avoid green or damp lumber as nails installed in wet lumber may back out.

**FASTENING:** For both sidelites & roofing, fastening is best through the crest of the material, at overlapped edges, and through the valleys at the ridge and gutter. Neoprene washers should be used with RoofliteMB. Use the following fastening pattern guide:

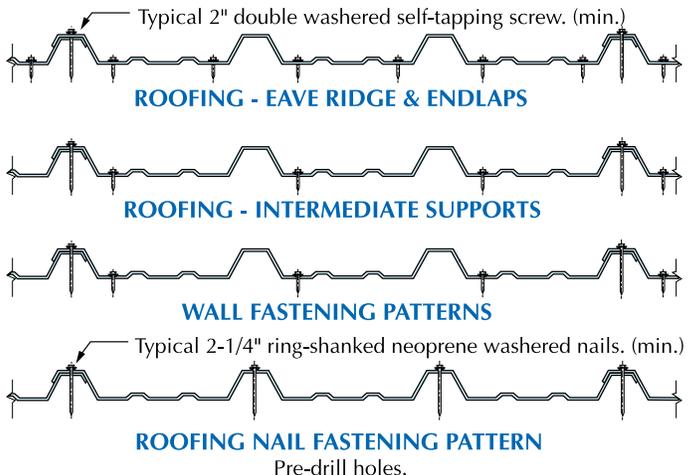
### Rooflite MB 9" Recommended fastening pattern

Shown with typical fastening on outside ridges and in valleys.



### Rooflite MB 12" Recommended fastening pattern

Shown with typical fastening on outside ridges and in valleys.



These instructions provide a general guide for installing fasteners, however, your application may require alternative fastening patterns. Consult your own individual specifications for your project, or consult with an engineer before beginning installation.

## GENERAL INSTALLATION

**UV RESISTANT SURFACE:** Sheets should be installed with label side to the exterior for optimal co-extruded UV resistance.

**SEALANTS:** Stiff fixing by means of adhesive or putty is to be avoided. Certain chemicals, paints, and paint thinners can attack the *RoofliteMB* sheet's integrity. Contact your CO-EX distributor for recommended sealants, and chemical compatibility. To properly seal roofing applications, apply a 1/4" (minimum) bead of approved silicone along all joint edges to prevent wind/rain penetration. We also recommend application over metal screws. EPDM strips and gray butyl tape may also be used.

## ROOFING INSTALLATION

Slopes of less than 4" in 12" (18°) are not recommended. End lap panels 6" for slopes of 4:12 or greater. To avoid expansion buckling, clear spans should not exceed 5'.

In order to provide a drip edge at the eave, allow an overhang of 2". To prevent bird and insect infestation at openings use an inside closure at the eave. Apply the same rake trim or other standard gable trim which is being used for the metal roofing panels. Fasteners should be located at 8" intervals in the run of the sheet length. A 14" ridge roll or ridge cap should be applied to prevent leakage at *RoofliteMB* panels, and seal using outside closure strip.

Closure strips must be placed on each horizontal purlin. Gray butyl tape is recommended between metal purlins and *RoofliteMB*. Metal cap strips should be used on the purlins over the panels.

## SIDING INSTALLATION

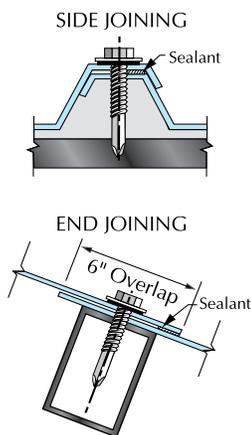
Utilize trims, base moldings, eave trim as for metal panels and seal utilizing silicone (1/4" minimum bead) or butyl sealing tape.

## SEALING

The use of butyl sealing tape or approved silicone sealants are critical for preventing water infiltration. Find recommended sealing for individual locations below:

**JOINING SHEETS:** When joining two *RoofliteMB* sheets, or joining a *RoofliteMB* sheet to a corrugated metal sheet, an overlap of one corrugation is recommended. The upper sheet in the overlap should be upwind so that the joint is protected from the prevailing wind. The use of 1" x 3/32" butyl sealing tape, or a 1/4" (minimum) bead of approved silicone is critical for preventing water infiltration at the meeting corrugation.

If an overlap is required in the sheet length, we recommend a 6" minimum overlap with appropriate use of sealant tape or silicone. All overlaps must be structurally supported with wooden closure strips to prevent excessive deflection of corrugation. 3/4" x 3/4" for *RoofliteMB* 9" and 7/8" x 1-1/4" for *RoofliteMB* 12". Fastening is best through the crest of the material at overlapped edges and through the valleys. Closure strips must be placed on each horizontal purlin.



**EAVE:** Proper closure strips must be placed beneath the *RoofliteMB* panel, with sealant (of butyl tape or silicone) on the top and bottom of the closer strip to form a weather tight seal. If other sealants or fasteners are used for customized applications, they should be silicone, neoprene or EDPM based.

**RIDGE CAP:** Properly sealed closure strips must be placed beneath the ridge cap and on top of the *RoofliteMB* panel to form a weather tight seal. The ridge cap should overlap the *RoofliteMB* panel by 6 inches. If other sealants or fasteners are used for customized structural ridge members, they should be silicone, neoprene or EDPM based.

## RECOMMENDED LOADING

Loading requirements will vary with purlin spans and pitch of installed sheets. A minimum angle of 18° (4 inch height with a 12 inch run) is recommended.

A wide range of applications is available with *RoofliteMB* polycarbonate sheet. The following recommended loading chart is provided as a guideline only. Actual testing and verification by a licensed engineer is recommended to avoid premature failure.

LOAD vs DEFLECTION	10 psi	20 psi	30 psi	40 psi	50 psi	55 psi
3 panel 36" span	.5"	1"	1.4"	1.5"	1.6"	2.0"
3 panel 48" span	.8"	1.5"	1.8"	2.25"	2.7"	2.8"
3 panel 60" span	1.6"	2"	3"	4.5"	—	—
1 panel 60" span	—	2.25"	2.7"	3"	—	—

## CLEANING AND MAINTENANCE

After installation, panels should be washed with mild soap or detergent and lukewarm water using only a clean sponge or soft cloth, then rinsed with clean water. Fresh paint, grease, and smeared glazing compounds may be removed before drying by rubbing lightly with a good grade of naphtha or isopropyl alcohol followed by a final wash with mild soap or detergent and final rinse. Do not use ammonia or glass cleaner containing ammonia.

## MATCHING SYSTEMS

*RoofliteMB* 9" matches: Century Drain (*Wheeling*), Classic Rib (*Metal Sales*), CS Roof (*Chief Industrial*), Grand Rib III (*Fabral*), Imperial Rib (*ABC*), Max Rib (*McElroy Metal*), Max Rib (*Stockade Buildings*), Panel Lok Plus (*Central States*), Vic West Best Panel (*Vic West*).

*RoofliteMB* 12" matches: Amerib 90 (*American Steel*), Kirby Rib (*Kirby Building Systems*), Multi-Rib II (*Mesco Buildings*), Multi-Rib (*Stockade Buildings*), "R" Panel (*ACS Pacific*), "R" Panel (*Corrugated Industries*), "R" Panel (*Kenrod Steel*), "R" Panel (*Ludwig Steel*), "R" Panel (*Norcor Corp.*), R-or-PBR Panel (*MBCI*), R-or-PBR Panel (*Ruffin Buildings*), Span Line 36 (*Metal States*), SR-Panel (*Southern Structures*), Superspan (*Whirlwind Steel Buildings*), Type R (*Alliance Steel*), Type "R" (*Jannock Steel*), U.S.A.-R (*United Structures*), Vic West Hi-Rib (*Vic West*).