AmeriLux *LLC* 888-602-4441

Storage & Installation Guide

Storage Requirements

AmeriLux crates or sheets should be stored in warehouse areas not exposed to direct heat or light which could make the removal of protective film difficult. Supported, sloped stacking recommended, but sheets may be stacked up to 3' high on a flat, even supported surface.

Protective Film

All AmeriLux panels are supplied with a protective PE film on both sides which should be kept on until the panel is fastened. The U.V. protected side is to be faced towards the sun and is marked with a white or clear printed film with a stick saying “UV resistance side”.

Fabrication

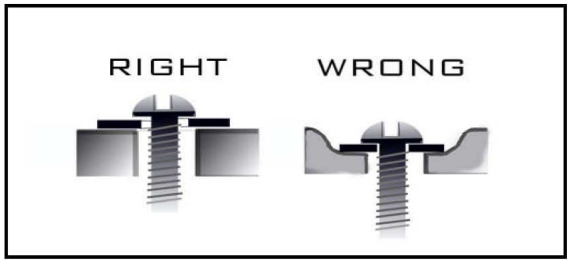
AmeriLux won't crack or split when cut or drilled. It is able to stand extreme abuse, its impact strength is 200 times greater than glass and 10 times greater than acrylic.

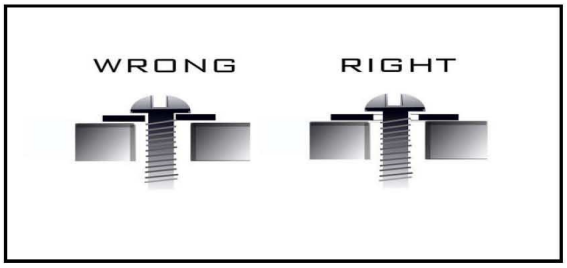
AmeriLux may be cut using a circular saw with a fine tooth blade for sizes up to 16mm, with a razor knife cut on both sides of the material. Compressed air may be used to remove dust from the channels.

Use self-tapping screws directly through the panels.

Do not drill within 1 ½'' from the edge of the AmeriLux sheet.

When fastening screws, do not tighten below the surface of the panel.





Installation

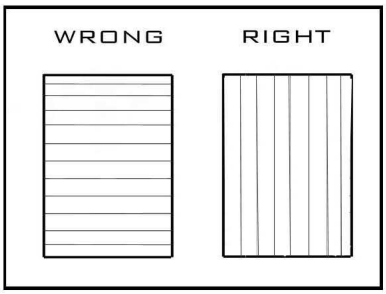
Stiff fixing by means of adhesive or putty is to be avoided. If using sealants, contact your AmeriLux distributor for recommended sealants.

Exposed top and bottom ends of a sheet must always be sealed by means of the proper polycarbonate "U" profiles or an adhesive aluminum tape to prevent dust and dirt penetrating inside the ribs.

It is advisable to drill small weep holes every 12 inches in the bottom "U" profile for condensation drainage.

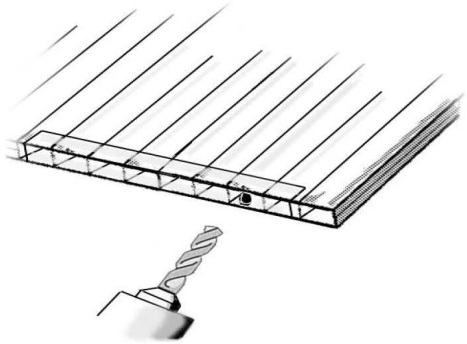
Extruded ribs shall be installed in a vertical direction for drainage.Glazing sheets should be joined by AmeriLux extruded polycarbonate profiles and be installed with their protective U.V. stabilized surface towards the exterior. AmeriLux should not be used with PVC profiles. However, a variety of aluminum systems may be used. Consult with your local AmeriLux Distributor for approved systems.

The use of Horizontal bars should be avoided. Instead, order AmeriLux in the proper length (up to 39 ft.)



For proper application of AmeriLux in roofing conditions, a slope of at least 5^{o} is required.

It is advisable to drill small weep holes every 12 inches in the bottom U profile for condensation drainage



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Bending Radii

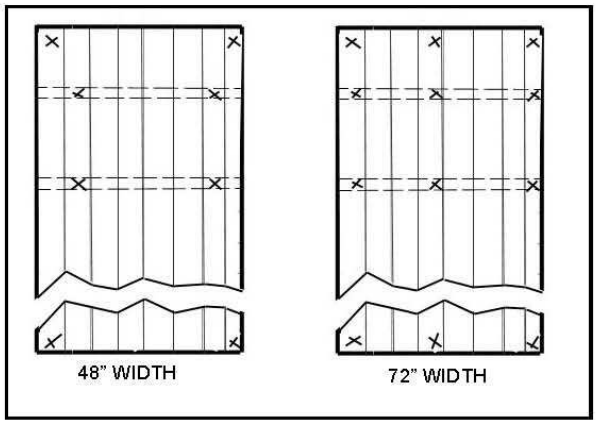
AmeriLux panels can be readily cold formed to many bending radii and can be fabricated on site to precise dimensions. It is important to avoid over tensing of the sheet. Therefore, the minimum bending radius must be 150 times the thickness of the panel. Minimum Bending Radius = Ft. /1 inch

SHEET THIKNESS	4 mm	4.5 mm	6 mm	8 mm	10 mm
MIN BEND RADIUS	1' 11"	2' 2"	2' 11"	3' 11"	4' 11"

SHEET THIKNESS	16 mm	20 mm
MIN BEND RADIUS	7' 10"	9' 10"

Fastening

For proper point fastening, 1" neoprene bonded washers should be used with screws. Be sure the washers are large enough to cover the thermal expansion difference.



48 inch wide sheets should be all fastened to supports at all four corners and at points 6" in from the edges of each purlin support.

72 inch wide sheets should be fastened to supports at all four corners, and at 6" in from the edges of each purlin support and in the center of the purlin supports.

Thermal Expansion

Allow for thermal expansion during installation at a rate of 1/8" per 3 feet at 100^0 temperature differentials in both width and length. The Bronze panels will require an additional 30% space.

Impact Resistance

Among the thermostatic products used in the building industry, AmeriLux Co extruded Thermo glazing has the highest impact resistance. You can be assured that from transport to installation. AmeriLux will maintain its durability. Even when exposed to elevated temperatures over a long period of time, it will not crack or splinter, assuring you a high degree of safety.

Resistance of Polycarbonate to Chemical Agents

Polycarbonate panels are resistant to some chemicals and products and non-resistant to others.

Resistance can be effected by the chemicals concentration, duration of exposure, degree of pressure and temperature at time of contact. Check with your local AmeriLux distributor for complete recommendations.

Load Resistance

This diagram is valid only when the following conditions are followed:

- Correct calculation of expansion in order to provide for the necessary allowance in the framing. The thermal expansion coefficient is 0.0000375 in/in ^{O}F.
- Where possible install the sheets with the ribs running vertically and following bending recommendation.
- Washers and sealing materials must be compatible with polycarbonate.

RECOMMENDED LOADING
Guidelines for selecting sheet thickness and purling spacing (sheet supported on the four sides)

MAX PURLING SPACING (inches) DEFLECTION 1"

LOAD PER GAUGE (lb./ft.^{2})	4' WIDTH			
	15	30	45	60
8 mm. 5/16"	38"	28"	18"	-
10 mm. 3/8"	45"	34"	28"	12"
16 RDC 5/8"	72"	40"	33"	27"
16 mm. 5/8"	75"	43"	36"	30"
LOAD PER GAUGE (lb./ft.^{2})	**6' WIDTH**			
	15	**30**	**45**	**60**
8 mm. 5/16"	36"	26"	12"	-
10 mm. 3/8"	44"	33"	27"	24"
16 RDC 5/8"	57"	37	33	27
16 mm. 5/8"	60"	40"	36"	30"

MAX PURLING SPACING (inches) DEFLECTION 2"

LOAD PER GAUGE (lb./ft.^{2})	4' WIDTH			
	15	30	45	60
8 mm. 5/16"	59"	41"	32"	20"
10 mm 3/8"	70"	52"	43"	33"
16 RDC 5/8"	94"	73"	67"	53"
16 mm. 5/8"	98"	77"	70"	57"
LOAD PER GAUGE (lb./ft.^{2})	**6' WIDTH**			
	15	**30**	**45**	**60**
8 mm. 5/16"	48"	35"	25"	.
10 mm 3/8"	62"	45"	35"	31"
16 RDC 5/8"	86"	55"	50"	42"
16 mm 5/8"	90"	59"	54"	46"

Cleaning

AmeriLux should be protected from abrasion by the installer. 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.

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