

Macrolux

8mm Twin Wall Polycarbonate Sheets



Macrolux[®] 8mm twin wall is ideal for sloped glazing, curved and cold formed barrel vaults, signs, displays, home improvement projects such as hobby greenhouses, carports, partitions, patio covers and more!











• Excellent Insulation: 8mm twin wall:

- U Value = .59 R Value = 1.69
- Stocked in Clear, Bronze and Opal
- Lightweight, durable and virtually unbreakable
- Custom cut to specified size

Macrolux[®] 8mm twin wall is perfect for applications requiring material which offers high light transmission,

thermal insulation, light in weight yet strong, high shock resistance, flame resistant, great economy, vandal resistance and design flexibility. Consider using Macrolux[®] panels in your project.

FEATURES

Macrolux[®] is co-extruded with a U.V. stabilizer which provides high stability against the effects of U.V. radiation, and provides excellent weatherability. Lightweight, virtually unbreakable and durable, Macrolux[®] panels can be readily cold formed to many bending radii, and are backed by a 10 year non-prorated warranty.

ENERGY SAVING

The multi-layered construction of this new, energy saving polycarbonate sheet creates increased thermal insulation. When compared with the traditional glazing, the 8mm twin wall Macrolux[®] sheet offers up to 60% increases in the U value and R factor producing real dollar savings in energy costs.

IMPACT RESISTANCE

Macrolux[®] is so strong it withstands the impact of 16 lbs. dropped 25 feet on an 8mm panel with no breakage. It will maintain its mechanical properties over a wide temperature range from -40° F to 250°F.



tel: 800/888-5364 203/679-0500 fax: 203/679-0600 web: www.co-excorp.com e-mail: coexcorp.@aol.com

5 Alexander Drive, Wallingford, CT 06492

Macrolux

8mm Twin Wall Polycarbonate Sheets

8MM TWIN WALL TECHNICAL DATA

| SHEET THICKNESS | 8mm |
|-----------------------------------------------------------------------------------------------|-------------|
| INCH | 5/16 |
| WALL TYPE | Twin |
| WEIGHT (lbs./ft. ²) | 35 |
| LIGHT TRANSMISSION ASTM-D1003 (%) | |
| CLEAR | 81% |
| BRONZE | 50% |
| OPAL | 46% |
| MINIMUM BENDING RADIUS | 3' 11" |
| U FACTOR (BTU/hr ft. ² F) | 59 |
| R-VALUE | 1.69 |
| Tolerances: Thickness \pm 5% , Length \pm $\frac{1}{4}$ ", Width \pm $\frac{1}{8}$ ", V | Veight ± 5% |
| | |

RECOMMENDED LOADING

Guidelines for Selecting Sheet Thickness and Purlin Spacing (Sheet Supported on the Four Sides)

MAXIMUM PURLIN SPACING (inches) DEFLECTION - 1"

| LOAD PER | 4' WIDTH | | | |
|-------------------------------|----------|-----|-----|----|
| GAUGE (lb./ft. ²) | 15 | 30 | 45 | 60 |
| 8 mm 5/16" | 38" | 28" | 18" | |

MAXIMUM PURLIN SPACING (inches) DEFLECTION – 3"

| LOAD PER | 4' WIDTH | | | |
|-------------------------------|----------|-----|-----|-----|
| GAUGE (lb./ft. ²) | 15 | 30 | 45 | 60 |
| 8 mm 5/16" | 80" | 54" | 46" | 40" |
| | | | | |

H PROFILE – Transition between 2 sheets





Measurements shown in millimeters.

BENDING RADII

MACROLUX[®] 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 = 3' 11"

CLEANING AND HANDLING

 $MACROLUX^{\otimes}$ should be protected from abrasion by the installer. After installation, panels shall 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 naptha or isopropyl alcohol followed by a final wash with mild soap or detergent and final rinse.

 $MACROLUX^{\otimes}$ shall be stored in warehouse areas not exposed to direct heat or light, with sloped stacking recommended. All panels shall be shipped with protective polyethylene film.

INSTALLATION

Stiff fixing by means of adhesive or putty is to be avoided. If using sealants, contact CO-EX 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 MACROLUX[®] extruded polycarbonate profiles and be installed with their protective U.V. stabilized surface towards the exterior. MACROLUX[®] should not be used with PVC profiles, however, a variety of aluminum



48" Width

systems may be used. Consult with CO-EX for approved systems.

For proper application of MACROLUX[®] in roofing conditions, a slope of at least 5° or ²/₁₂ pitch is required.

FASTENING

For proper point fastening, 1" neoprene bonded washers should be used with screws.

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



Foil Vent Tape

1″ W x 150′ L

1.5" W x 150' L Used on the bottom of sheet to keep debris from getting in the flutes, but allows condensation to come out. The wider tape used on the thicker sheets.

Solid Foil Tape 1.5" W x 150' L

Used to cap off the top of the sheet so debris cannot get in the flutes.

DISTRIBUTED BY:

TAP PLASTICS Inc.

For the location nearest you please go to www.tapplastics.com or call 1-800-894-0827



WRONG



Purlin

Supports

(below sheets)

Variable

Length

