

WARRANTY CORRUGATED POLYCARBONATE SHEET MR9 AND MR12

THE 10 YEARS WARRANTY AS SPECIFIED BELOW FOR COVERLITE MR9" AND MR12" CORRUGATED POLYCARBONATE SHEETS PURCHASED AS OF THE DATE OF DELIVERY/SHIPMENT:

- **Yellowing of sheets' surface:** in accordance with standard test ASTM D1925, the yellowing index should remain at or below 3 within three years, and remain at or below 10 within ten years.
- **Penetrability of Ultraviolet Ray:** should be less than 2,4% in a wave length of 300 nm.
- **Light Transmittance:** based on standard test ASTM D1003, sheets should have 90% of the original percentage of light transmittance at the end of the ten (10) year warranty period.
- **Severe weather:** sheets shall not break as a result of hailstones measuring up to 25 mm in diameter, and attaining up to 20 meter/seconds in velocity.

Should the polycarbonate sheets not reach the warranty scope specified above (providing that storing, installation, handling and cleaning of the sheets was complied per guidelines), you must present this warranty and invoice as well as samples of the defective products for replacement of new sheets.

Notes in relation to the warranty mentioned above:

1. Does not apply to scratches, abrasion and/or any damage caused by contact with incompatible materials or breakage due to natural disasters.
2. Does not apply to applications in an environment that may damage the principle raw materials of the sheets (polycarbonate resins) as well as contacts within compatible adhesives, such as cements.
3. Does not apply to losses or expenditure resulting from improper installation and/or cleaning.
4. Applies to CoverLite® Corrugated Polycarbonate Sheets as the only new sheets for replacement. Costs associated with removal and/or installation is not included in the warranty as well as packaging, shipping, taxes, or any other direct or indirect losses.
5. Breakage caused by objects other than hail is excluded from this warranty. Impact failures or breakage caused by other means, intentional or unintentional, is not covered.

Property	Test Method	Average Index
Specific Gravity	ASTM D792	1.20 +/- 5%
Tensile Strength	CNS11335	551 kgf/cm ²
Elongation	CNS11335	50%
Compressive Strength	ASTM D695	830 kgf/cm ²
Modulus of Elasticity	ASTM D638	345 000 psi +/- 10%
Flexural Strength	ASTM D790	950 kgf/cm ²
Yellowing Index (only UV grade apply)	After exposure to sun light for 3 years	Below 3.0
Light Transmittance	Wave length 500 nm (UV/VIS)	85%
UV-Ray Penetrability (only UV grade apply)	Wave length 300 nm (UV/VIS)	2.4%
Impact Strength	CNS11335 (1 kg iron ball falls from 120 cm height)	Unbreakable
Inflammability	UL 94V2 (contact with flame for 10 seconds and move away)	Self-extinguishing
Deflexion Temperature	ASTM D648, 18.6 kgf/cm ²	135°C (the highest temperature is about 120°C in continuous use)
Brittle Temperature	ASTM D764	The lowest temperature is about -30°C in continuous use
Linear Thermal Expansion Coefficient	-	Pertain to smaller coefficient of synthetic resin

Incompatible Materials with the CoverLite® MR 9" and MR12" Corrugated Polycarbonate Sheet

Acetaldehyde, acetate acid, acetone, acrylonitrile, ammonia, hydrogen fluoride, hydrogen sulphide, benzene, benzoate acid, benzoate alcohol, calcium nitrate boromoxynil, phenol, carbon disulfide, carbon tetrachloride, 5% potassium hydroxide solutions, 5% sodium hydroxide solutions or caustic soda, chlorobenzilate, chloroform, m-cresol, cyclohexanone, cyclohexene, dimethyl formamide, dioxane, ethylamine, ethyl ether, 2-ethylene, chlorohydrin, gasoline, methyl methacrylate, nitrobenzene, benzoate ethylalcohol, phenol, phosphorus trichloride, prionic acid, styrene, 1,1,2,2-tetrachloro ethane, tetrahydrofuran, toluene, 10% trichloroacetic acid, xylene, ammonia hydroxide, ketone, methyl ethyl ketone, dichloromethane, poly vinyl chloride, potassium hydroxide, sodium hydroxide and nitric acid, etc.

Note: This is only a partial list and should be used only as a general guideline. If the material is not listed above, check the compatibility of polycarbonate with the manufacturer before use.