



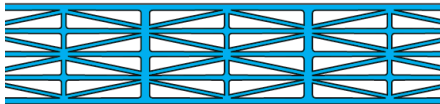
Makrolon® multi UV 5M40-20 sheet

Multiwall sheet

Makrolon® multi UV 5M/40-20 polycarbonate sheet is a 40 mm thick multiwall product with a 5-wall M-structure for enhanced stiffness. Its outstanding thermal insulation, impact resistance, lightweight, load bearing properties, and ease of installation provide a tough and versatile glazing, roofing, and cladding material. Makrolon multi UV sheet is available in clear and standard glazing tints. A ten (10) year Limited Product Warranty against breakage and weathering is available. The terms of the warranty are available upon request.

Applications

Industrial buildings, sports arenas, greenhouses, bus shelters, car ports, sunrooms, covered walkways, swimming pool covers, partition walls, facades, roofing, and skylights



Typical Properties*			
Property	Test Method	Units	Values
PHYSICAL			
Luminous Transmittance (D65)	DIN 5036		
Clear		%	47
White		%	35
Bronze		%	10
Thickness		mm	40
Weight Factor		lbs/ft ²	0.86
Sound Transmission	EN ISO 140 / 717	dB	19
Hail Impact	lab test**		Pass
THERMAL			
Coefficient of Thermal Expansion	ASTM D 696	in/in/°F	3.75 x 10 ⁻⁵
Temperature Resistance, no load		°F	250
U-Value / R-Value	EN ISO 6946	BTU/hr-ft ² -°F	0.18 / 5.6
Direct Solar Transmission	EN410 / EN13363-2		
Clear			0.44
White			0.32
Bronze			0.13
Total Solar Energy	EN410 / EN13363-2		
Clear		%	47
White		%	38
Bronze		%	28
Solar Heat Gain Coefficient	calculated***		
Clear			0.47
White			0.38
Bronze			0.28
Shading Coefficient	calculated****		
Clear			0.54
White			0.44
Bronze			0.32
Thermal Conductivity	ISO 6946	BTU-in/hr-ft ² -°F	.035
FLAMMABILITY			
Rate of Burn	ASTM D 635		CC1**** CC2*****
Flame Spread and Smoke	ASTM E 84		Class A**** Class B*****
Ignition Temperature	ASTM D 1929		
Self		°F	1043
Flash		°F	910

*Typical properties are not intended for specification purposes

**Hail impact test: 10 shots of a 0.79" diameter (0.16 oz) polyamide ball at 69 ft/s (0.74 ft lbs impact energy) - failure defined as more than 5 penetrations

***Solar Heat Gain Coefficient = Total Solar Energy/100

****Rating for white color product

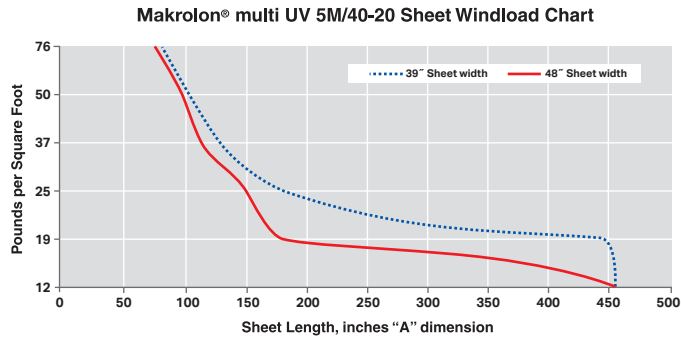
*****Shading Coefficient = Solar Heat Gain Coefficient x 1.15

*****Rating for clear color product



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Windload (uniformly applied loading) guidelines for specific multi UV sheet widths and their corresponding lengths as a function of load bearing in pounds per square foot are shown in the graph. Recommendations are based on a clamped framing method that supports all four sheet edges by an extrusion having sufficient rabbet depth for edge engagement and room for thermal expansion. Instructions on glazing multi UV sheet are outlined in the product installation guide.



Load	12 psf	19 psf	25 psf	37 psf	50 psf	76 psf	Sheet Width
5M/40-20	456	456	177	130	102	79	39"
Sheet Length, Inches	456	177	150	118	98	71	48"



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