MUWI PLASTICS LIMITED

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MUWI POLYCARBONATE SHEETS - IT5 Profile ACT950/850 MADE IN KENYA

DATA SHEETS BUILD AFRICA

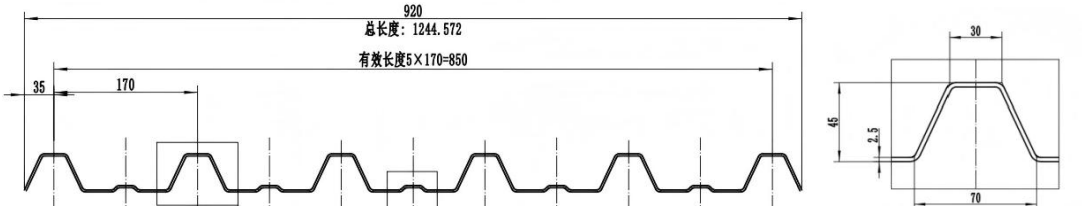
Description:

Muwi Polycarbonate Transparent corrugated tile is a high-performance roofing daylighting material made of imported virgin polycarbonate resin with anti-UV co-extrusion coating. This five-through sheet features standard 850mm effective width, perfect wave matching with conventional color steel roof panels, enabling seamless installation and excellent roof waterproof performance.

The product provides high light transmission up to 86%, delivering bright and natural indoor lighting while effectively saving electric energy. Compared with glass and FRP daylighting tiles, PC corrugated tile features ultra-high impact resistance, anti-hail, windproof and crack-proof performance. It remains stable under extreme weather from -40℃ to 120℃, and effectively prevents yellowing and aging under long-term outdoor exposure.

Lightweight, flexible and easy to cut and install, our PC daylighting tile greatly reduces construction cost and roof load. With flame retardant, weather-resistant, self-cleaning and low-maintenance characteristics, it is widely used for factory roofing daylighting, warehouse canopies, agricultural greenhouses, stadiums and industrial buildings, serving as a durable and cost-effective daylighting roofing solution.

Muwi ACT850 Profile drawing



Note: With practical feedback during production may adjust the edge make production width have difference with drawing , effective cover width always same .

Basic information:

Theoretical unfold width	1244.572mm
Production width	920mm
Effective cover width	850mm
Length	3m/3.6m/4m/6m
Weight	1.49kg-3.0kg /meter
Thickness	1.0mm/1.5mm/2mm ±0.1mm
Max service temperature	120℃
Wave height	42-44mm
Life span	＞10 years

Mechanical Properties

Tested at room temperature,based on GB&common international standards .

Item	Test standard	1.0mm	1.5mm	2.0mm
Density	G/T 1033.1	1.2g/cm^3	1.2g/cm^3	1.2g/cm^3
Tensile Strength	GB/T 1040.2	≥58MPa	≥60MPa	≥62MPa
Tensile Modulus	GB/T 1040.2	2200-2400MPa	2300-2500MPa	235-2550MPa
Elongation at break	GB/T1040.2	≥58%	≥60%	≥62%
Bending Strength	GB/T 9341	≥82MPa	≥85MPa	≥88MPa
Bending Modulus	GB/T9341	2100-2300MPa	2200-2400MPa	2250-2450MPa
Notched izod impact strength	GB/T1843	≥75kJ/㎡	≥80kJ/㎡	≥85kJ/㎡
Unnotched impact strength	GB/T1843	No fracture	No fracture	No fracture
Heat deflection temperature(HDT)	GB/T1634.2	≥128℃	≥130℃	≥132℃
Linear coefficient of thermal expansion	-	6.5×10^{-5} /℃	6.5×10^{-5} /℃	6.5×10^{-5} /℃
Hardness (rockwell)	GB/T 3398.2	R118-122	R118-122	R118-122

Note:

- **Need expansion gap during installation.**
- **use self-tapping screw with wings and waterproof caps ,hole diameter should be 2-3mm larger than screw diameter.**
- **Fix only on wave peaks .**
- **Annual light transmittance loss 0.5-1% ,Total loss within 10 years ≤6%-10%**

