

Declaration of Performance

No. 001 DoP 2017-01-01

1. Product Type	Light Transmitting flat solid polycarbonate (PC) sheets
2. Product Type Reference Number	R80XXXXXX - XXX (no co-extrusion UV protection layer) R80XXXXXX W XXX (co-extrusion UV protection layer from both sides)
3. Intended Use	For internal and external use in roofs, walls and ceilings
4. Manufacturer	Plazit 2001, Kibbutz Gazit, D.N Yizrael 1934000, Israel. Tel +972-4-662-8888, plazit@plazit-polygal.com
5. Notified Body Information	1168 (fire), 0407 (sound), 0402 (durability)
6. AVCP system	System 3
7. Declared Performance – Harmonized Technical Specification EN 16240:2013	
Type	Monogal / Plazcarb
Material Description	Polycarbonate (PC) flat solid extruded sheets.
Thickness (mm)	2-15
External Fire Performance	F _{ROOF} – NPD
Reaction to Fire	2-5 mm: B, s1, d0 6 mm: B, s2, d0
Resistance to Fire	NPD
Water Vapor Permeability	3.8×10^{-5} mg/m.h.Pa
Water/Air Permeability	Pass
Linear Thermal Expansion (-20 °C to 70 °C)	$\alpha = 65 \times 10^{-6}$ K ⁻¹
Release of Dangerous Substances	NPD
Dimensional Tolerances	Pass
Shatter Properties (safe breakability) as:	
- Small Hard Body Impact Resistance	Pass (2 mm)
- Large Body Impact Resistance	NPD
Mechanical Resistance (deformation behavior)	$E_{t,mean} \geq 2200$ MPa $E_{t,charac} \geq 2000$ MPa $\sigma_{M,mean} \geq 60$ MPa $\sigma_{M,charac} \geq 55$ MPa
Direct Airborne Sound Insulation	R _w = 32 dB (12 mm); R _w = 33 dB (15 mm)
Thermal Transmittance	U = 5.4 W/(m ² .K) (3 mm) U = 5.0 W/(m ² .K) (6 mm) U = 4.3 W/(m ² .K) (12 mm)
Light and Solar Transmittance (clear sheet)	$\tau_v = 87.3$ % (R8000, 3 mm); 86.5% (R8000W, 3 mm) $\tau_e = 80.0$ % (R8000, 3 mm); 79.5% (R8000W, 3 mm) g = 82.3 % (R8000, 3 mm); 82.0% (R8000W, 3 mm)
Resistance to fixings	Method of fixing (see manufacturer's datasheet)
Durability, as variation (after ageing–18 GJ/m ²):	
- of Yellowness Index	1.89 (ΔA)
- of Light Transmittance	0.53 (ΔA)
- of Flexural Modulus	Cu 0
- of Tensile Strength	Ku 0

The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 7. This declaration of performance is issued under the sole responsibility of the manufacturers identified in point 4.