

PLAZIT High Quality Acrylic sheets - Noise reduction products					
Technical specification: <i>Sheets complies with International standard UNE-EN-ISO 7823-1 and 7823-2 and acoustic EN 1793-1 and 1793-2</i>			PLAZCRYL Extruded Acrylic	PLAZCAST Cast Acrylic	PLAZCAST SMR (Steel Metal Reinforced)
Properties	Unit	Method	Value	Value	Value
Density	g/cm ³	ISO 1183	1.19	1.2	1.2
Water absorption	%	ISO 62 (1)	0.3	0.3	0.3
Flammability	class	UL-94	HB	HB	HB
Optical					
Light transmission (clear sheet)	%	DIN 5036-3	>91	>91	>91
Haze (clear sheet)	%	EN 2155-9	<1	<1	<1
Refractive index (clear sheet)		ISO 489	1.49	1.49	1.49
Mechanical					
Tensile Strength	MPa	ISO 527-2	72	74	74
Elongation at break	%	ISO 527-2	4	5	5
Tensile Modulus	MPa	ISO 527-2	3220	3280	3280
Flexural Strength	MPa	ISO 178	103	114	114
Flexural Modulus	MPa	ISO 179	3334	3350	3350
Rockwell hardness	M - scale		95	100	100
Impact resistant – Izod notched	kJ/m ²	ISO 180/1A	1.5	1.5	1.5
Impact resistant – Charpy unnotched	kJ/m ²	ISO 179/1fu	15	15	15
Acoustic standard EN-1793-1 and EN-1793-2					
Noise reduction 15 mm thickness	dB	UNI EN 1793 and UNI EN ISO 140-3:2006 and UNI EN ISO 717-1:2007	DLR = 32 dB Category B3		
Noise reduction 15 mm thickness	dB		RW = 33 dB		
Noise reduction 20 mm thickness	dB		DLR = 32 dB Category B3		
Noise reduction 20 mm thickness	dB		RW = 34 dB		
Stability under wind load - 15 mm thickness		EN 1794-1:2004 with reference to standard UNI EN 14388:2005	Tested at 210 Kg/m ² (2060 Pa), complies with standard		
Stability under wind load - 20 mm thickness			Tested at 250 Kg/m ² (2452 Pa), complies with standard		
Resistance to Stone Impact - 15 mm thickness		UNI EN 1794-1:2004	Comply test at impact energy of 29.4 N-m		
Resistance to Stone Impact - 20 mm thickness			Comply test at impact energy of 29.4 N-m		
Resistance to brush fire 15 mm thickness		UNI EN 1794-2:2004	class 3		
Resistance to brush fire 20 mm thickness			class 3		
Sliver retainer properties - Risk of falling debris		UNE-EN 1794-2 annex B	Class 5/B		

Thermal					
Vicat softening point	C ⁰	ISO 306	103	115	115
Residual Shrinkage (Internal Stress)	%		n.a	<2	<2
Temp. of deflection under load 1.8 Mpa	C ⁰	ISO 75-1	95	105	105
Coefficient of linear thermal expansion	K ⁻¹	EN 2155-12	7 x 10 ⁻⁵	7 x 10 ⁻⁵	7 x 10 ⁻⁵
Recommended Continues Service Temperature	C ⁰		75	82	82
PLAZCAST SMR-RW	Acrylic reinforced sheet with 2mm diameter stainless steel rods and stainless steel wires, at a distance of 32mm center to center ±0.5 mm				
PLAZCRYL AG - non glare sheets	Glare reflection	BS 2782	20° angle <10 Gloss Unit 60° angle <30 Gloss Unit 80° angle <20 Gloss Unit		
<i>PLAZCAST SMR is the best solution complying with the European regulation for installation of acoustic elements along bridges, (patent apply)</i>					
<i>Metallic elements in the acrylic matrix show a high contrast helping birds not to collide with them Contrast is warranty for life, because the lines are stainless steel metal made</i>					

