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ACRYLIC (PMMA XT) SHEETS



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APPLICATION AREAS

Architecture and Construction Sector

- Aquarium/Structural panels
- Coating, Lighting
- Door Eaves, Awnings
- Door and Window Profiles
- Swimming Pool Windows
- Diving Pools
- Aquarium Museums
- Transparent Barriers
- Roof and Skylights
- Hard Surfaces, Sound Barrier
- Roof and Roof Windows
- Hand surfaces, Sound barrier

Advertising Sector

- Corporate identity applications
- Displays, Poster Boards
- Museum Artifact Protection Panels
- Exhibition and Exhibition Areas
- Plaques, Signs

Automotive & Transportation

- Accessories and Coatings
- Internal and External Indicators
- Caravan Windows
- Ship, Yacht, Boat Windows
- Light Covers and Storage
- Vehicle Windshield

Indoor Applications

- Furniture and Accessories
- Souvenirs
- Museum Artifact Protection Panels
- Styling & Painting Panels
- Bench and Bench Surfaces

Mirror Acrylic

- Automotive & Ship Decoration
- Furniture and Toys
- On Signs and Panels



ADVANTAGES OF ACRYLIC (PMMA-XT) SHEETS

- High transparency, light transmittance up to 92%
- Low haze <1%
- Half the weight of glass
- Glossy and hard surface
- Excellent colour stability
- Resistance to different weather conditions
- Lifetime UV resistance
- 10-year limited warranty
- Easy to thermoformable
- Polishable and reshaped
- Easy to bond
- Cold twist feature
- It is not carcinogenic and dangerous.
- It emits non-toxic smoke during a fire and can be easily extinguished with water.
- Environmentally friendly
- 100% Recyclable
- REACH and RoHS declarations



GENERAL FEATURES

	Conditions	Test Method	Unit	Value
Density		ISO 1183	g/cm ³	1,19
Water Absorption (24h)	23 °C /50% RH (24)	ISO 62	%	0,3
Mold Shrinkage Rate		ASTM D-955	%	0,2-0,6
MECHANICAL PROPERTIES				
Tensile Strength at Rupture	23 °C	ISO 527-2	MPa	83
Elongation at Rupture	23 °C	ISO 527-2	%	7
Tensile Modulus	23 °C	ISO 527-2	MPa	3200
Elasticity Strength at Breakage	23 °C	ISO 178	MPa	120
Flexural Modules	23 °C	ISO 178	MPa	3300
Charpy Impact Strength (Notched)	23 °C	ISO 179-1eA	kJ/m ²	2
Izod Impact Strength		ISO 178	kJ/m ²	2,1
Rockwell Hardness (M Scale)		ISO 2039-2	M-scale	92
THERMAL PROPERTIES				
Vicat Temperature	50 N	ISO 306	°C	105
Deflection Temperature (Under Load)	1,8 MPa	ISO 75	°C	100
Linear Expansion Factor		ISO 11359-2	mm/m °C	0,07
ELECTRICAL FEATURES				
Dielectric Strength		DIN53481	kV/mm	20
Dielectric Constant	1 kHz	DIN53481		3,1

Sound Reduction Values (EN ISO 10140-4 & EN ISO 717-1)

Product	Thickness (mm)	Sound Reduction Values (dB)
PMMA XT	8	27
PMMA XT	10	30
PMMA XT	12	33
PMMA XT	15	36
PMMA XT	20	40

PMMA Sheet Sizes

Maximum Width	Standard Length
2050mm	3050mm

Pmma XT Sheets Production Tolerances

Length	± 2 mm
Width	± 1 mm
Diogonal	≤ 3 mm



Light Transmittance (ASTM D 1003) Thickness and Thickness Tolerance

Thickness (mm)	Standard Colors				Thickness Tolerance (mm)
	Transparent	White	Transparent (Diffuser)	White (Diffuser)	
2	92	30	70	20	± 0,2
3	92	30	65	20	± 0,3
4	92	30	65	20	± 0,2
5	92	25	60	16	± 0,25
6	92	25	60	16	± 0,3
7		20	55		± 0,35
8	92	20	55		± 0,4
9		15	50		± 0,45
10	92	15	50		± 0,5
12	92				± 0,60
15	92				± 0,75
20	92				± 1,00

PMMA XT Sheet Quantities Per Pallet

Thickness	Size	Size
	(2050 x 3050)	(1350 x 2050)
2 mm	75 PCS	175 PCS
2,8 mm	55 PCS	120 PCS
3 mm	50 PCS	120 PCS
3,8 mm	40 PCS	90 PCS
4 mm	40 PCS	90 PCS
4,8 mm	32 PCS	75 PCS
5 mm	30 PCS	70 PCS
5,8 mm	27 PCS	60 PCS
6 mm	26 PCS	55 PCS
8 mm	20 PCS	45 PCS
10 mm	15 PCS	35 PCS
12 mm	13 PCS	30 PCS
15 mm	10 PCS	23 PCS
20 mm	8 PCS	17 PCS

LIGHT TRANSMISSION (%)

6mm Solid Polycarbonate	%86
6mm PET-G	%87
6mm Flat Glass	%88
6mm PMMA Sheet	%92

IMPACT RESISTANCE (Nm)

6mm Tempered Glass	4,5 Nm
6mm Acrylic	9,5 Nm
6mm Solid Polycarbonate	271 Nm Over

PMMA XT Sheet

SETUP			PMMA XT		GLASS	
Sheet Thickness (mm)	Air Gap Pocket (mm)	Composite Strength (mm)	K Value (W/m²K)	Weight (kg/m²)	K Value (W/m²K)	Weight (kg/m²)

SINGLE GLAZING

2	-	2	5,54	2,38	5,83	4,96
3	-	3	5,39	3,57	5,80	7,44
4	-	4	5,24	4,76	5,77	9,92
5	-	5	5,10	5,95	5,74	12,40
6	-	6	4,96	7,14	5,71	14,88
8	-	8	4,72	9,52	5,66	19,84
10	-	10	4,49	11,90	5,60	24,80

DOUBLE GLAZING

2	5	9	3,34	4,76	3,55	9,92
2	10	14	2,94		3,10	
2	15	19	2,77		2,91	
3	5	11	3,23	7,14	3,53	18,88
3	10	16	2,85		3,09	
3	15	21	2,69		2,90	
4	5	13	3,12	9,52	3,50	19,84
4	10	18	2,77		3,07	
4	15	23	2,62		2,88	
5	5	15	3,02	11,90	3,48	24,80
5	10	20	2,69		3,05	
5	15	25	2,55		2,87	

TRIPLE GLAZING

2	2x5	16	2,39	7,14	2,55	14,88
2	2x10	26	2,00		2,11	
2	2x15	36	1,84		1,94	
3	2x5	19	2,30	10,71	2,53	22,32
3	2x10	29	1,94		2,10	
3	2x15	39	1,79		1,93	
4	2x5	22	2,22	14,28	2,52	29,76
4	2x10	32	1,88		2,09	
4	2x15	42	1,74		1,92	
5	2x5	25	2,15	17,85	2,50	37,20
5	2x10	35	1,83		2,08	
5	2x15	45	1,70		1,91	

Transparent, White, Bronze, Diffuser, Blue and Grey; Production can be made in all desired colors.





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