

# Technical data

**CODE:**

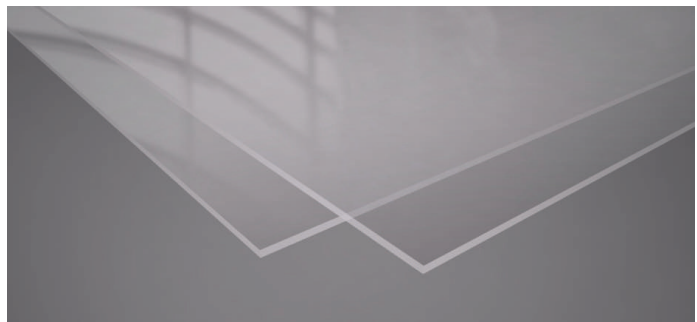
307\*\*

**PRODUCT:**

PLEXIGLASS CRYSTAL

**NOTE:**

TECHNICAL DATA

**IMAGE:****LAST UPDATE:**

7/2021

# PLEXIGLASS CRYSTAL

## High quality extruded acrylic sheets

Bright clarity, excellent transparency and easy to thermoform, The PLEXIGLASS CRYSTAL extruded sheets provide long-life UV resistant products for visual communication, architectural and interior design purposes. Also great for shopping center shelves, point-of-sale units for cosmetics, fashion and medical products, back-lit signage and other display purposes. The PLEXIGLASS CRYSTAL Super (high impact PMMA) sheet is appropriate for vehicle number-plates, lighting and other applications where good mechanical properties are required.

### Applications

Glazing  
Curtain walls  
Noise reduction barriers  
Lighting / Illumination  
Sky light / Domes  
Art design  
POS display stands  
Interior decoration  
Furniture  
Signage  
Automotive

### Features and Benefits

Highly transparent, 92% light transmission  
Low haze <1%  
Hard surface  
Excellent colour stability  
10 year limited warranty  
Proved weather resistance  
Easily thermoformed and machined  
Easily glue bonded  
Cold curving capability  
Less half the weight of glass  
Recycle 100% after use  
No carcinogenic or hazardous substances  
REACH certification  
Food approved  
Friendly to the environment  
Non toxics fumes emitted in fire  
Fires can be easily extinguished with water  
Easily polished and reshape

### Dimensions

Thickness (mm): 0,7 to 30  
Widths (mm): 1000, 1250, 2050  
Length (mm): 500-6000

All sheets are also available cut to size, according to customer requirements.

### Colours

Transparent, White Opaque, Opal and Diffusers, Black Opaque, shades of Green, Brown, Grey, Blue & Red

### Grades

CRYSTAL Super - Hi Impact grades  
CRYSTAL UV Block - blocks U.V. from 380nm  
CRYSTAL IR Solar - blocks IR radiation  
CRYSTAL Acoustic - noise reducing  
CRYSTAL TOP - (Thin Optical Sheets)  
ACRYLED - for LED illumination

### Embossing patterns



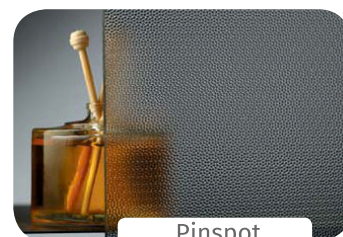
Aqua



Non Reflective



Cracked Ice



Pinspot

GENERAL PROPERTIES	METHOD	UNITS	CRYSTAL XT		CRYSTAL SUPER	
			R7000	R7700	R7500	R7600
Density	ISO 1183	g/cm <sup>3</sup>	1,19	1,19	1,18	1,16
Water absorption	ISO 62 (1)	%	0,3	0,3	0,3	0,3
Flammability	UL-94 class	class	HB	HB	HB	HB
Optical						
Light transmission (clear sheet)	ASTM D1003	%	92	92	92	91
Haze (clear sheet)	ASTM D1002	%	<1	<1	<1	<1
Refractive index (clear sheet)	ISO 489		1,49	1,49	1,49	1,49
Mechanical						
Tensile Strength	ISO 572-2	MPa	72	57	50	40
Elongation at break	ISO 572-2	%	4	22	30	40
Tensile Modulus	ISO 572-2	MPa	3300	2450	2100	1700
Flexural Strength	ISO 178	MPa	106	88	79	62
Flexural Modulus	ISO 178	MPa	3350	2470	2100	1800
Rockwell hardness		M-scale	95	77	68	44
Impact resistance - Izod notched	ISO 180	kJ/m <sup>2</sup>	1,5	4	5	6,3
Thermal						
Temp. of deflection under load 1,8 Mpa	ISO 75-1	°C	95	92	90	83
Coefficient of linear thermal expansion (CLTE)	ISO 11359	mm/(m x 1/°C)	0,065	0,07	0,1	0,11
Vicat softening temperature (50 N)	ISO 306	°C	103	99	97	90
Recommended Continuous Service Temperature		°C	70	65	63	62
Recommended Maximum Temperature / Short time		°C	91	86	81	74