

# **PC Premium**

**PC Premium** is an extruded polycarbonate sheet with coating for barrier protection application products for indoor use.

**PC Premium** is glass like in appearance. The high impact strength of polycarbonate is combined with a coating with improved chemical and abrasion resistance.

**PC Premium** can be cold formed and allows the end user to use the sheets in moderately curved applications.

Good fire performance complying requirements to EN 13501-1 (european building std). In case of fire, the sheet will melt and allow venting where heat and smoke will be let out and therefore reduce the growth of fire by flame spread.

#### **PC Premium benefits:**

- Improved abrasion and impact resistant
- Chemical resistance
- Flexible hard coating
- More than 10 times the impact strength of high impact PMMA

#### **Application areas:**

Moderately curved applications, sneeze guards, desk barriers, restaurant shielding, checkout lines.

Various barrier and screen projects to separate and protect people to avoid infections.

### **Delivery Program:**

Standard size: 2000 x 3000 mm

Thickness range: 2 – 6 mm

2 sides coated

Special sizes and thicknesses on request

## **PC Premium technical specifications**

Property	Value	Unit	Standard
Physical properties			
Density	1,2	g/cm³	ISO 1183
Refractive index (20 °C)	1,586		ISO 489
Moisture absorption 24 hours, 23 °C, 50% RH	0,15	%	ISO 62
Mechanical properties			
Tensile strength at yield (at break)	60 (70)	N/mm <sup>2</sup>	ISO 527
Elongation at yield (at break)	6 (110)	%	ISO 527
Elastic modulus	>2300	N/mm <sup>2</sup>	ISO 527
Flexural modulus	>2300	N/mm <sup>2</sup>	ISO 178
Charpy unnotched impact strength -40 °C	NB	kJ/m²	ISO 179/1eU
Charpy notched impact strength -30 °C	11	kJ/m²	ISO 179/1eA
Izod notched impact strength +23 °C	65	kJ/m²	ISO 180/1A
Izod notched impact strength -30 °C	10	kJ/m²	ISO 180/1A
Thermal properties			
Linear coefficient of thermal expansion (20-70 °C)	65x10 <sup>-6</sup>	K <sup>-1</sup>	ISO 11359-2
Thermal conductivity	0,20	W/m.K	DIN 8302
Coating properties			
Adhesion	GT-0		ISO 1044
Taber Abrasion, CS 10F, 500g, 100 / 500 cycles	<4	% Haze	ASTM D 1044

Sheet Thickness	Bending Radius	Unit	Forming
2 mm	300	mm	Cold forming
3 mm	450	mm	Cold forming
4 mm	600	mm	Cold forming
5 mm	750	mm	Cold forming
6 mm	900	mm	Cold forming

