

PRODUCT IDENTIFICATION		
Hammerglass is a durable and abrasion resistant polycarbonate, further developed through nano-technology providing a unique surface coating of silicone oxide.		
CHEMICAL RESISTANCE		
The Hammerglass sheets are coated with a silicon oxide treatment for excellent chemical resistance and vandal protection. The surface will withstand attacks from acetone, petrol, White Spirit, paint- and graffiti-removals.		
LIGHT TRANSMISSION		
Hammerglass is extruded in clean room environments which gives the sheets an outstanding clarity. The triple quality control guarantees High end quality. The coating enhances the light transmission.		
PHYSICAL PROPERTIES	VALUE	STANDARD
Density (half the weight of glass)	1,20 g/cm ³	ISO 1183
Light transmission (Light source D65, thickness 1 mm)	88 %	DIN 5036, T.3
UV protection	99,96 %	SIKA
Refractive index	1,586	ISO 489
Moisture absorption (24 h, 23 °C, 50 % RH)	0,15 %	
Recommended range of temperature usage	-40 °C < x < 90 °C	
MECHANICAL PROPERTIES	VALUE	STANDARD
Tensile strength at yield	63 N/mm ²	ISO 527
Tensile strength at break	70 N/mm ²	ISO 527
Elongation at yield	6 %	ISO 527
Elongation at break	> 110 %	ISO 527
Elastic modules	2300 N/mm ²	ISO 527
Böjmoduler	2300 N/mm ²	ISO 178
Charpy unnotched impact break (+23 °C)	No break	ISO 179/2D
Izod notched impact break (-40 °C)	11,5 kJ/m ²	ISO 179/2D
Rockwell hardness	95	ISO 20392
THERMAL PROPERTIES	VALUE	STANDARD
Linear coefficient of thermal expansion (23–80 °C)	70 x 10 ⁻⁶ K ⁻¹	
Heat deflection temperature A (1,80 N/mm ²)	132 °C	ISO 75
Heat deflection temperature B (0,45 N/mm ²)	142 °C	ISO 75
ACOUSTIC PROPERTIES	VALUE	
Noise reduction Hammerglass 4 mm	27 dB R _w	
Noise reduction Hammerglass 6 mm	29 dB R _w	
Noise reduction Hammerglass 8 mm	31 dB R _w	
Noise reduction Hammerglass 10 mm	32 dB R _w	
Noise reduction Hammerglass 12 mm	34 dB R _w	
Noise reduction Hammerglass 15 mm	35 dB R _w	
Noise reduction Hammerglass 17 mm	36 dB R _w	
FLAMMABILITY		
Warrington Fire Institute, test according to BS 476, part 7, Class 1Y: "The flaming material fell down to the floor of the laboratory where it self extinguished after 30 seconds".		
Conclusion: Hammerglass will eventually melt, but does not contribute to spread of flames.		
DELIVERY PROGRAM		
Thickness	4 mm, 6 mm, 8 mm, 10 mm, 12 mm, 15 mm, 17 mm, 20 mm	
Standard sheets	2000 x 3000 mm. Available up to 2000 x 6000 mm.	
Standard colour	Clear. Available in most colours, both opaque and opal.	
Special feature	Hammerglass IR: Absorbs up to 50% of solar IR radiation. Available as standard in 6 mm/8 mm green.	
All sheets are available as coated. Printed sheets are coated after printing.		