

Mechanical properties

Properties	Test Method	Unit	Thickness - 6mm	Thickness - 8, 10mm
(Apparent) Density*	DIN 53479/ISO 1183	g/cm ³	0.65-0.80	0.55-0.60
Tensile stress at yield (tensile strength)	DIN 53455/ISO 527	MPa	≥ 20	≥ 13
Elongation at tear	DIN 53455/ISO 527	%	≥ 30	
Flexural strength	DIN 53452/ISO 178	MPa	≥ 30	≥ 20
Compressive strength (range of elasticity per Hooke)	DIN 53421 (based on)	MPa	> 8	> 3
Compressive stress at 30%	DIN 53421 (based on)	MPa	> 14	> 7
Modulus of elasticity	DIN 53452/ISO 527-2/1A/50	MPa	- 1100	- 800
Impact strength	+20°C	DIN 53453/ ISO 179 (based on)	kJ/m ²	AV 15*
	0°C	DIN 53453/ ISO 179 (based on)	kJ/m ²	AV 13*
	-20°C	DIN 53453/ ISO 179 (based on)	kJ/m ²	AV 10*
Ball indentation hardness (132 N/30 s)	DIN 53456/ ISO 2039-1	MPa	≥ 15	≥ 12
Shore hardness D	DIN 53505		- 55	- 75

AV* = average value. Values stated cannot be measured in accordance with the relevant standards.

Thermal properties

Properties	Test Method	Unit	Thickness - 6mm	Thickness - 8, 10mm
Vicat softening temperatures	DIN 53460/ISO 306 (process A50)	°C	≥ 75	≥ 75
Deflection temperature	DIN 53461/ISO 75 (process A50)	°C	- 56	- 63
Coefficient of linear thermal expansion α (from -30°C to +50°C)	DIN 53752	mm/mK	≤ 0.08	≤ 0.08
Thermal conductivity (from 0°C to 60°C)	DIN 52616	W/mK		
	DIN EN 674 (based on)	W/m ² K		

Values not stated cannot be measured in accordance with the relevant standards.

Electrical Properties

Properties	Test Method	Unit	Thickness - 6mm	Thickness - 8, 10mm
Surface resistance	DIN VDE 0303 T3/ DIN IEC 93	Ω	10 ¹⁴	10 ¹⁴
Volume resistivity	DIN VDE 0303 T3/ DIN IEC 93	Ω · m	10 ¹⁵	10 ¹⁵
Dielectric strength (sample thickness 4mm)		DIN VDE 0303	T21	Kv/mm
Comparative figure of tracking	DIN IEC 112		CTI 600	CTI 600

Other properties

Properties	Test Method	Unit	Thickness - 6mm	Thickness - 8, 10mm
Weighted sound reduction index RW1P	DIN 52210/84	dB	-	
Water absorption after 7 days	DIN 53495	%	< 0.2	appr. 0.2
Fire behaviour	DIN 4102 (D)		B 1 (colour 654, thicknesses 4, 5, 6, 10mm)	
	NFP 92-501 (F)		M 1 (colour 654, thicknesses 4, 5, 6, 10mm)	
	UL 94 (USA)	VO	VO (10mm)	
	Brandkennziffer (fire charac.) (CH)		5.3	5.3
	CSE-RF2/75 A (I)	Class 1 (colour 654, thicknesses 4, 5, 6, 10mm)		
	CSE-RF3/77 (I)			
Physiological evaluation		generally recognised as safe		
Components used to prevent falls	TRAV**	-	-	Category C requirements met

*These are standard values that apply to an average density. **Technical Rules for the Use of Safety Glazing.

Minor variations are possible depending on sheet thickness.

Permissible colour deviation in accordance with DIN 6174, White ≤ 1.1 CIELAB units.

Tolerances:

Thickness (s): ± (0.1 + 0.05 x s) Example at 10mm = ± 0.6mm

Width: 0 + 2.5mm Length: 0 + 10mm

Rectilinearity: max. 1.5mm/m Angle at saw notch: 0.5° Levelness: max. 1.5mm/m

