



Technical data

Properties	Test method	Unit	Thickness (mm) 4, 5, 6	Thickness (mm) 8, 10, 13	Thickness (mm) 19, 24, 30
Mechanical properties					
(Apparent) Density*	DIN 53479/ISO 1183	g/cm ³	0.65–0.80	0.55–0.60	0.50–0.60
Tensile stress at yield (tensile strength)	DIN 53455/ISO 527	MPa	≥ 20	≥ 13	–
Elongation at tear	DIN 53455/ISO 527	%	≥ 30	≥ 15	–
Flexural strength	DIN 53452/ISO 178	MPa	≥ 30	≥ 20	≥ 20
Compressive strength (range of elasticity per Hooke)	DIN 53421 (based on)	MPa	> 8	> 3	> 3
Compressive stress at 30%	DIN 53421 (based on)	MPa	> 14	> 7	> 7
Modulus of elasticity	DIN 53452/ISO 527-2/1A/50	MPa	~ 1100	~ 800	~ 800
Impact strength +20 °C	DIN 53453/ISO 179 (based on)	kJ/m ²	AV 15*	AV 20*	AV 25*
0 °C	DIN 53453/ISO 179 (based on)	kJ/m ²	AV 13*	AV 15*	AV 20*
–20 °C	DIN 53453/ISO 179 (based on)	kJ/m ²	AV 10*	AV 10*	AV 15*
Ball indentation hardness (132 N/30 s)	DIN 53456/ISO 2039-1	MPa	≥ 15	≥ 12	≥ 25
Shore hardness D	DIN 53505		~ 55	~ 75	~ 77

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

Thermal properties									
Vicat softening temperature	DIN 53460/ISO 306 (process A50)	°C	≥ 75	≥ 75	77				
Deflection temperature	DIN 53461/ISO 75 (process Ae)	°C	~ 56	~ 63	–				
Coefficient of linear thermal expansion α (from –30 °C to +50 °C)	DIN 53752	mm/mK	≤ 0.08	≤ 0.08	≤ 0.08				
Thermal conductivity (from 0 °C to +60 °C) λ	DIN 52616	W/mK	0.10	0.05–0.07					
U-value* (heat transfer coefficient)	DIN EN 674 (based on)	W/m²K		8 mm	10 mm	13 mm	19 mm	24 mm	30 mm
				3,1	2,6	2,4	2,0	1,7	1,4

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

Electrical properties					
Surface resistance	DIN VDE 0303 T3/ DIN IEC 93	Ω	10 ¹⁴	10 ¹⁴	10 ¹⁴
Volume resistivity	DIN VDE 0303 T3/ DIN IEC 93	Ω · m	10 ¹⁵	10 ¹⁵	10 ¹⁵
Dielectric strength (sample thickness 4 mm)	DIN VDE 0303 T21			kV/mm	≥ 12
Comparative figure of tracking	DIN IEC 112		CTI 600	CTI 600	CTI 600

Other properties							
Weighted sound reduction index R _{w,p}	DIN 52210/84	dB	—	10 mm	19 mm	24 mm	30 mm
				28	31	33	34
Water absorption after 7 days	DIN 53495	%	< 0.2	appr. 0.2		appr. 0.2	
Fire behaviour	DIN 4102 (D)		B 1 (colour 654, thicknesses 4, 5, 6, 10 mm)				
	NFP 92-501 (F)		M 1 (colour 654, thicknesses 4, 5, 6, 10 mm)				
	UL 94 (USA)		VO	VO (10 mm)			
	Brandkennziffer (fire charac.) (CH)		5-3	5-3		5-3	
	CSE-RF2/75 A (I)		Class 1 (colour 654, thicknesses 4, 5, 6, 10 mm)				
	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 the sheet thickness.

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

Tolerances:

Thickness (s): ± (0.1 + 0.05 x s)

Width: 0 + 2.5 mm

Rectilinearity: max. 1.5 mm/m

Example at 10 mm = ± 0.6 mm

Length: 0 + 10 mm

Angle at saw notch: 0.5°

Levelness: max. 1.5 mm/m