

Material properties

	PVC	ABS	PP	PMMA (3D)
Working properties				
Light-fastness for indoor applications tested in accordance with DIN 53 384c/53 388 (wool colour scale)	7–8	6–7	7–8	7–8
Indentation hardness tested in accordance with DIN 53 456 (N/mm ²)	110–130	100–120	80–90	> 70
Shore hardness D – tested in accordance with DIN 53 505/ISO 868	81 (± 3)	74 (± 4)	70 (± 3)	83 (± 3)
Linear thermal expansion coefficient tested in accordance with DIN 52 328 (1/K × 10 ⁻⁶)	80	100	140	90-110
Thermal dimensional stability Vicat B50 tested in accordance with DIN 53 460/ISO 306 (in °C)	80 (± 2)	94 (± 2)	90 (± 5)	90 (± 3)
Shrinkage tested in accordance with Doellken factory standard (in %)	< 0,3	< 0,3	< 0,2	< 1,5
Resistance to chemicals tested in accordance with DIN 68 861	very good/ LGA tested	good/ LGA tested	very good/ LGA tested	good ¹ / LGA tested
Surface quality	silk matt to high gloss	silk matt to high gloss	matt to gloss	matt to gloss; can be buffed to high gloss
Static charge	low	very low	medium	low
Processing properties²				
Capping	good	good	good	good
Milling direction ³	Same/opposite router direction	Same/opposite router direction	opposite router direction	Same/opposite router direction
Trimming	good	good	good	good
Contour milling	good	good	good	good
Copy milling	good	good	good	good
Scraping	good	good	satisfactory	good
Buffing	good	good	satisfactory	good
Gluing radii	good	good	good	good
Gluing with hot melt adhesive	All standard edge gluing adhesives can be used (EVA, APAO, PA, PUR ⁶)			
Polishing properties ²	good ²	good ²	average ²	very good ²
Susceptibility to stress whitening	very low	low	low	low
Varnishing properties	good (acrylic/PUR lacquer)	good (acrylic/PUR lacquer)	poor ⁴	–
BAZ machining properties	very good	good	good	good with 3D BAZ quality ⁵
Disposal properties	Returns system for milling and cutting waste	Edgeband leftovers can be incinerated with the shavings in suitable plants	Edgeband leftovers can be incinerated with the shavings in suitable plants	Edgeband leftovers can be incinerated with the shavings in suitable plants
Physiological properties	Not harmful to general health			

¹ Limited resistance to alcohol, solvents and thinners

² Machine finishing may be required

³ Milling in opposite direction is recommended for all thermoplastic materials

⁴ Special lacquer and primer necessary

⁵ The hot-melt adhesive must be applied directly to the board. If HOMAG or IMA machines are used, a special glue application roller is required.

⁶ Does not apply to all 3D edgeboards of type DC XXX F + DC 7XX R, which are not suitable for adhesion using PUR adhesives.