

# OSTERMANN ACRYLIC EDGINGS

## OSTERMANN Acrylic Edgings

OSTERMANN acrylic edgings are made of highly transparent PMMA. The special, three-dimensional effect of the edging is achieved by the decorations applied to the back. Because the decor is on the reverse side of the edging, it remains complete even in the milled radius and the visual remains the same from all sides; no frame effect occurs. Other terms for acrylic edgings are: 3D acrylic or PMMA edgings / edgebands.

## Use / Areas of Application

The range of applications for OSTERMANN acrylic edgings is almost infinite: they are suitable for bathroom, kitchen and office furniture construction, trade fair stands and shop fitting as well as private and commercial interior design. The processing-friendly raw material mix of OSTERMANN acrylic edgings facilitates an application on both straight edgings and round workpieces or moulded parts, no matter if they form an inner or an outer radius.

## Product Characteristics

### Material

Acrylic (PMMA = polymethyl methacrylate) is a very high-quality and long-term proven thermoplastic material. In OSTERMANN's acrylic edgings, it sets new technical and aesthetic standards for furniture edgebands. In addition, transparency in acrylic is better than in glass.

### Bonding properties

The reverse side of OSTERMANN acrylic edgings is coated with a universal bonding agent which, in conjunction with conventional hotmelt adhesives, ensures that a firm bond is established between edging and substrate. The bonding agent coating has been optimised for use with EVA, PA, APAO and PUR hotmelt adhesives. Adhesives that are highly heat-resistant should be used where the product is likely to be exposed to critically high temperatures, e.g. in the kitchen or when exporting furniture in shipping containers. Polyurethane hotmelt adhesives are particularly suitable for use in damp conditions. Always follow the instructions of the respective adhesive supplier, particularly with respect to the application temperature and the amount of glue required.

EVA	-	Ethylen Vinyl Acetate
PA	-	Polyamide
APAO	-	Amorphous Poly Alpha Olefins (based on polyolefin)
PUR	-	Polyurethane

### Note:

OSTERMANN acrylic edgings can be provided with an appropriate functional layer for zero bondline processing. We recommend laser method processing.

## Surface

The surfaces of OSTERMANN acrylic edgings are always sealed with a scratch-resistant UV lacquer, giving the surface of the edging a high scratch and mechanical wear resistance.

The surface of the edging can be polished to almost any desired gloss level. Due to its placement on the back, the decor can not be rubbed off or damaged, even under heavy use. Mechanical damage to the acrylic surface, such as scratches or pressure marks, can be repolished without difficulty.

The OSTERMANN acrylic edging is hygienic and resistant to impacts and all common household cleaners.

## Quality Features / Technical Data

Any material- or process-related irregularities must not be apparent at a distance of 0.5 m. Due to the precise pre-tensioning and plane parallelism of OSTERMANN acrylic edgings, a tight, almost invisible joint is achieved. The pre-tensioning also ensures optimum bonding: excess glue is taken up at the midpoint of the back of the edging and the glue enters deeply into the chipboard.

Properties / mechanical / electrical	Unit	Value	Standard
Lightfastness (for interior use)	-	> Level 4 - 5	DIN EN ISO 4892-3 DIN EN 15187
Indentation hardness	N/mm <sup>2</sup>	> 70	DIN EN ISO 2039-1
Shore D hardness	-	83 ± 3	DIN EN ISO 868
Coefficient of linear thermal expansion		90 - 110	DIN ISO 7991
Fire behaviour		flammable	
Thermostability Vicat B 50	[°C]	90 ± 3	DIN EN ISO 306
Chemical resistance	-	good*	DIN 68861-8
Shrinkage (1h at 80 °C)	%	<1.5	factory standards
Static charging	-	low	-

\* Limited resistance to solvents and alcoholic substances.

## Processing Characteristics

Finishing	Suitability
Cutting	good
Milling direction	Climb milling / conventional milling*
Pre-milling	good
Radius milling	good
Profiling	good
Scraper processing	good
Buffing	very good
Bonding	Any standard hotmelt adhesive for edgebanding can be used
Polishability	very good
Tendency for stress whitening	low
Machining on BAZ processing centre	very good
Radius bonding	good

\*Conventional milling is recommended for all thermoplastic edging material

## Tolerances

### Edging width

Width [mm]	Tolerance [mm]
12 to 100	+ 0.50/ - 0.50

### Edging thickness

Thickness [mm]	Tolerance [mm]
0 to 1.0	+ 0.10 / - 0.15
1.1 to 2.0	+ 0.15 / - 0.20
2.1 to 3.0	+ 0.20 / - 0.25

### Pre-tensioning

Thickness [mm]	Tolerance for width [mm]	
	until 30	from 30
0 to 1.0	0.00 - 0.50	0.00 - 0.70
1.1 to 3.0	0.00 - 0.30	0.00 - 0.40

### Plane parallelism

Thickness [mm]	Maximum deviation [mm]
0 to 2.0	0.10
2.1 to 3.0	0.15

### Longitudinal distortion

Thickness [mm]	Maximum distortion on 1 m length
0 to 3.0	3 mm

### **Storage**

OSTERMANN acrylic edgings are resistant to rotting and can therefore be stored almost indefinitely at room temperature (20 to 25°C) in a weather-protected environment. The edgings must be protected from sunlight (UV radiation) and dust. However, tests should be carried out prior to processing any edging material that is more than 12 months old.

### **Cleaning**

For cleaning OSTERMANN acrylic edgings, we recommend the use of simple soapsuds or special cleaners that are explicitly suitable for cleaning acrylic materials. Solvent-containing or alcoholic substances must never be used!

### **Disposal**

OSTERMANN acrylic edgings must be disposed of in accordance with the regulations of the respective country.

### **Radius Processing**

The processing of edgings, especially with larger or tighter radii, can be significantly improved by the pretreatment with or addition of heat.