

OSTERMANN ABS EDGINGS WITH SOLID ALUMINIUM FINISH

OSTERMANN ABS Edging With Solid Aluminium Finish

OSTERMANN ABS edgings with solid aluminium finish are a thermoplastic edging product with protective and decorative properties for finishing the narrow edges of wood-based panels.

OSTERMANN ABS edgings with solid aluminium finish consist of two components: Component a) is an ABS substrate which is completely coloured through and coated with a universal bonding agent (primer) on the reverse side which, in conjunction with any suitable hotmelt adhesive, ensures a firm bond between the edging and the substrate. Component b) is an approximately 0.08 mm thick layer of real aluminium which is bonded firmly to the ABS substrate.

Use / Areas of Application

The raw material mix of OSTERMANN ABS edgings with solid aluminium finish is eco-friendly and facilitates both straight processing and an application on all rounded furniture geometries, no matter if they form an inner or an outer radius.

Note: The OSTERMANN ABS edgings with solid aluminium finish are primarily to be understood as design edgings. Due to the 2 -component structure, certain other areas of application are not recommended.

Large temperature fluctuations (shop windows, motor home) and shear stress should be avoided; application in an unsuitable area of use may cause the applied real aluminium coating to peel off.

Product Characteristics

ABS (acrylonitrile-butadiene-styrene) is a mechanically and thermally resistant high quality chlorine-free thermoplastic which is ecologically sound. ABS is resistant to acids, alkalis, salts, alcohol, and oils, but only to a limited extent to organic solvents and petrol. The highly impact-resistant material guarantees long tool lives for milling and other cutting tools.

Material

The solid aluminium finish, about 0.08 mm thick, is supported by an ABS layer.

The aluminium layer is available in a wide variety of metallic finishes and is bonded to the ABS substrate.

Colours: silver, stainless steel, gold, bronze, champagne, copper

Production

OSTERMANN ABS edgings with solid aluminium finish in 0.5 mm, 1 mm and 2 mm are made by calendering.

Surface Finish

The surface of OSTERMANN ABS edgings with real aluminium finish is not scratch- and impact- resistant. Please note the limited temperature resistance (due to bonding) between substrate & solid aluminium finish.

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Bonding Properties

The reverse side of OSTERMANN ABS edgings with solid aluminium finish 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. In any case, please observe the specifications of the respective adhesive supplier.

EVA - Ethylen Vinyl Acetate

PA - Polyamide

APAO - Amorphous Poly Alpha Olefins (based on polyolefin)

PUR - Polyurethane

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 ABS edgings with solid aluminium finish, 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 6 | DIN EN ISO 4892-2:2003 |
| Wear resistance | cycles | 100 | ISO 7784-2 |
| Tensile strength at break | MPa | 42 | EN ISO 527-3:2003 |
| Flammability | - | НВ | UL 94 |
| Water absorption | ISO 62 | negligible | - |
| Softening temperature | °C | 90 | ISO 306 |
| Temperature resistance aluminium finish | [0°] | 50 - 60 | - |
| Shrinkage (1h at 80°C) | % | <0.6 | DIN 53377 |
| Static charging | - | very low | - |



Processing Characteristics

| Finishing | Suitability |
|------------------------------------|---|
| Cutting | good |
| Milling direction 1) | climb milling / conventional milling |
| Pre-milling | good |
| Radius milling | good |
| Profiling | good |
| Scraper processing | conditionally suitable |
| Buffing | good |
| Bonding | any standard hotmelt adhesive for edgebanding can be used |
| Machining on BAZ processing centre | good |
| Application recommendations | the use of resistant (diamond) millers is recommended |

Tolerances

Edging Width

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

Edging Thickness

| Thickness [mm] | Tolerance [mm] |
|----------------|----------------|
| 0.50 to 0.90 | + 0.05 / -0.05 |
| 0.90 bo 1.20 | + 0.05 / -0.10 |
| 1.20 to 2.00 | + 0.05 / -0.15 |

Pre-tensioning

| Thickness [mm] | Tolerance for width [mm] | |
|----------------|--------------------------|-------------|
| | to 60 | from 60 |
| 0.50 to 0.90 | 0.00 - 0.35 | 0.00 - 0.45 |
| 0.90 bo 1.20 | 0.00 - 0.35 | 0.00 - 0.45 |
| 1.20 to 2.00 | 0.00 - 0.35 | 0.00 - 0.45 |

Plane Parallelism

| Thickness [mm] | Maximum deviation [mm] |
|----------------|------------------------|
| 0.50 bo 0.90 | 0.10 |
| 0.90 to 1.20 | 0.15 |
| 0.90 to 2.00 | 0.15 |
| 2.1 to 3.0 | 0.15 |

Longitudinal Distortion

| Thickness [mm] | Maximum distortion on 1 m length |
|----------------|----------------------------------|
| 0 to 3.0 | 3.3 mm |

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Storage

OSTERMANN ABS edgings with solid aluminium finish are resistant against rotting and can therefore be stored for an almost unlimited period of time at room temperature (18 to 25°C) in areas that are protected against the influence of weather. However, tests should be carried out prior to processing of any edging material that is more than 12 months old.

Cleaning

OSTERMANN ABS edgings with solid aluminium finish are easy to clean using commercially available cleaning agents suitable for plastic surfaces. To be safe, the suitability of the cleaner should be tested before use.

Disposal

OSTERMANN ABS edgings with solid aluminium finish must be disposed of in accordance with the regulations of the respective country.

Note

THINGS TO CONSIDER regarding OSTERMANN ABS edgings with solid aluminium finish

Check Intended Use / Area of Application

- Unsuitable locations are those with strong temperature fluctuations or high impact touch or contact.
- Unsuitable application areas are e.g. motor homes or shop windows.
- The processing of edgings with solid aluminium finish on kitchen worktops or tabletops for public use is unsuitable.

Observe the Temperature Resistance

- ABS edgings with solid aluminium finish are temperature-resistant up to 50 °C.
- Locations with a temperature higher than 50 °C are unsuitable.
- Non-compliance may result in the real aluminium finish peeling off.

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- are to be understood as a design element.
- can be used as a safety edging only to a limited extent.
- The real aluminium finish is not resistant to scratches or pressure.

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