

Composite element or finished component with high-gloss surface

A high-gloss, co-extruded ABS / PMMA laminate is applied to a coated wood-based panel. Resistance to scuffing, chemicals and UV has been improved for this material. To prevent scratching, the material is covered with a protective film. In addition to supplying panels for processing yourself, we can also provide finished elements with edgings in matching or contrasting colour.



Standard dimensions:

Panel manufacturer	Dimensions	
independent	2800 X 1250 (1300) mm	
Thickness:	19 mm	Coated on one side, painted rear side
Film thickness:	0.70 mm / 1.00 mm + protective film (depending on colour)	

Properties:

Mechanical properties	Test standard	Unit	Class / value
Chemical resistance	DIN EN 68861 T1	Level	1 B
Resistance to micro-scratches	IHD-W-466	Method A	Class 1 Shine loss <20%
Resistance to scuffing Resistance to wire wool	Production standard QPA-25-LT	Loading capacity:1Kg Number of strokes: 20 Steel wool type: 00	Class 1 No visible changes or scratches
Dry heat	DIN EN 68861 T7	Level °C	7 D 75°C
Humid heat	DIN EN 68861 T8	Level °C	8 B 70°C
Light fastness	EN ISO 4892-2 Total colour variation after 200h xenon test		DE* <1.7
Gloss unit	DIN 67530 Measured from and angle of 60°	GLE	>85

Test	Description	Result
Aging	30 days 50 °C	passed
Distortion (in-house)	10 cycle -2,5 °C - 24 h. RT - 24 h.	passed
Uprising heat	50 °C - 1 h. 60 °C - 1 h. 70 °C - 4 h. 80 °C - 1 h.	passed
Resistance to alternating climate	AMK Modul 4	passed
Asientest (in-house)	810 h -10°C – +35°C 0% - 95% humidity	passed

Tolerances	Panel			Finished part		
Support panel	< 15 mm	15 - 20 mm	> 20 mm	< 15 mm	15 - 20 mm	> 20 mm
Thickness	± 0.5 mm			± 0.5 mm		
Length and width	± 5.0 mm			± 0.5 mm		
Distortion lengthwise / crosswise	Concave: 1.5 mm/m convex : 1.5 mm/m Higher distortion values may be incurred with backing panels <16 mm thick.					
Edge error	≤ 10 mm			Not permissible		

The distortion values refer to a normal climate of 18 - 25 °C and 45 - 65% relative humidity. Higher values may be obtained in other climates or in changing climate conditions!

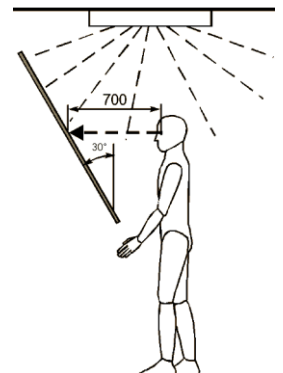
Thickness tolerance = rated dimension + 0.2 mm (film + adhesive) ± tolerance

Surface properties	Panel	Finished part
Scratching	The stated properties are assessed on the basis of DIN EN 14322, DIN EN 438-1 and AMK-MB-004 Normal fine micro-scratches visible in sunlight and halogen light are attributable to the high-gloss effect and do not constitute a surface defect.	
Contrasting areas		
Spots, dents, chip residue under the film		
Pressure points		
Blistering		
<p>Viewing distance and light source in accordance with DIN EN 14323 as amended.</p> <p>Criteria not specified in further detail are subject to the relevant standards and guidelines as amended for the materials concerned.</p>		
Colour shade	Minor variations may occur in the usual tolerances as a result of material irregularities in the lining paper and substrate used. Permissible variation:	

	White and light colours Medium colours Dark colours	Delta E ≤ 0.5 Delta E ≤ 0.8 Delta E ≤ 1.5
Greater variations may be expected with mother-of-pearl and metallic finishes		
Depending on light incidence and viewing angle, differences in the shape and size of the metallic pigments used produce different colour impressions and an shimmering effect changing between light and dark. This is the particular fascination of metal finishes and does not constitute any cause for complaint.		
Before assessing colour a photochemical process makes it necessary to expose the sample to daylight conditions for at least 48 hours. Samples should always be conditioned in the same way. (type of light, duration etc.) The samples being assessed must not be exposed to direct sunlight.		
Acrylux is only suitable for lamination on flat surfaces. Postforming or bending may result in irreversible micro-cracks.		
<i>Note: Owing to a slight change in colour, Acrylux cannot be used in conjunction with the Acrylux materials supplied to date.</i>		

Distance of observation and light source as per AMK-MB-004 in the current version!

- position: installed situation
- light: fluorescent tube with 6.500°K (diffuse light or D65 light)
- angle of view: 30° to vertical
- distance: 700 mm
- Viewing time: Max. 20 seconds



The current versions of the relevant standards of guidelines for the particular materials will apply where alternative criteria are not further specified!

Recommendation for cleaning:

Stains, especially of the type produced by highly pigmented substances and liquids, and spots of grease etc. must be washed off straight away with plenty of water and, if necessary, standard non-abrasive household cleaner. Remove any soap residue with lukewarm water and wipe dry with a soft cloth. Stains must not be allowed to dry! It may not be possible to remove substances once they have dried on or been allowed to penetrate over a prolonged period of time.

Treating Acrylux with solvent-based cleaning agents may cause surface tension, resulting over time in fine, hardly noticeable cracking. For this reason, these fronts should only be cleaned with soapy water and a soft cloth.

Do not use any scouring agents, furniture polish, wax, nitrocellulose or synthetic resin dilutions, acetone or similar cleaning agents. Never use steel wool or abrasive sponges!

Composite elements are generally delivered with layers of foam in between to protect surfaces. They are shipped on non-returnable pallets. The stack of composite elements is wrapped in stretch film to protect it from dirt and moisture.

If different packaging is preferred, this must be agreed separately.

Excess / short delivery

For production reasons, the quantity of each item delivered may vary by 10% above or below the quantity ordered.

General information:

The composite materials are used in interior design and furniture construction. The panels may only be used in dry environments.

Correct order handling includes careful incoming inspections. These comply with Niemann-Möbelteile's general terms and conditions of business. The composite panels must be transported and stored with care. They are best stored on a level, horizontal and dry surface. Panels must be stored indoors to prevent warpage and edge swelling. Panels should not be stored at temperatures below 15 °C for any prolonged period either. This could cause irreparable damage to the composite (warping). Relative humidity should be between 45 and 65%.

This information is based on current knowledge and does not provide any assurance of product qualities. It is merely intended for guidance and provides no assurance of specific product qualities or suitability for a particular use. The user must always make sure that the products we manufacture are suitable for the purpose they are to be used for. This applies when sampling a product for the first time as well as in the event of changes in ongoing production. As we have no influence on our suppliers' materials and processing conditions, this information cannot give rise to any liability on our part. The recipient of our product is responsible for observing the laws and regulations in force. Subject to technical change without notice.

Our general terms of sale and delivery apply.