

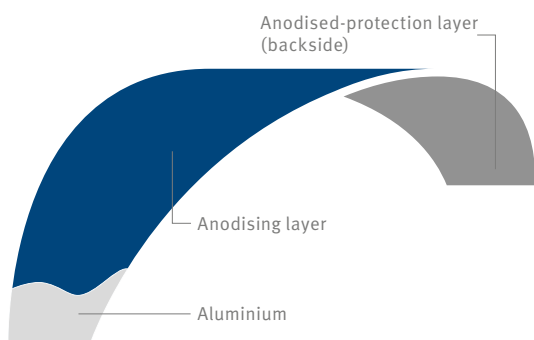
BEMO-ELOX

MAIN FEATURES

The BEMO-ELOX products are getting an "anodic oxidation" which gives the products a highly decorative, very durable and scratch-resistant surface. The Aluminium itself reacts. No additional layer is applied. The products are therefore 100% recyclable.

The layer thickness if visible side is between 3µm and 15µm, depending on the requirements and colour.

The anodised protective layer on the back side is usually approx. 1/3 of the layer on the front side.



** Remove protective film immediately after installation and do not expose the protective film to UV radiation for a long time, even when in storage.*

As no additional top coat is applied, BEMO-ELOX surfaces have a "living" metallic appearance.

Differences in the visual effect of the materials from different batches, surface shapes and due to the chemical composition of the aluminium alloys cannot be avoided systemically and make up the "charm" of the ELOX products. The surfaces are available in the versions: High-gloss, matt, natural and brushed. In addition to the special surface effect, they are characterised by very high scratch resistance and long-lasting colour and corrosion resistance.

APPLICATIONS

- Recommended for all roof applications with the need of low sun reflection (=BEMO natural pre-weathered) or if very durable corrosion protection is required for high decorative requirements.
- Recommended for all highly decorative facade applications where a "natural" metallic effect and high scratch and corrosion resistance are desired.
- The surface is very hard (level 8-9 on the Mohs hardness scale). If subsequently bent, the thin anodised layer of the surface cracks without impairing the corrosion protection, but is visibly noticeable.
- Please note that aluminium alloys for decorative use may not be covered by building authority approvals for the systems!

Processing Possibilities



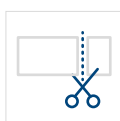
Drilling



Punching



Profiling

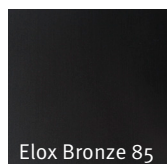
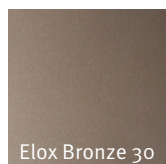
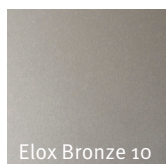
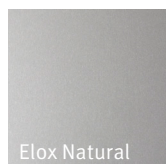


Cutting



Folding $T > 1,0$ with cracking

Colour samples



BEMO-ELOX

- Also available in other colours.
- Up to 3,0 mm anodised as coil anodising.
- Stock colours: no
- Minimum quantity 350 m² at 1,0 mm Aluminium resp. 500 m² for BEMO-BOND composite panels.
- Product groups: BEMO Standing seam, UNIKO*, PRIMO, Aluminium-Composite, trapezoidal- and corrugated profiles

** for BEMO-UNIKO is possibly a subsequent piece anodising recommended*

Surfaces

- Mirror
- Gloss
- Matt
- Natural
- Brushed

PERFORMANCE AND DURABILITY OF BEMO-ELOX ANODISED SURFACES		PRE-WEATHERED ALU NATURAL	COLOURED SURFACES + MIRROR
Thicknes of anodising layer	ISO 2360	3µm - 5µm 5µm - 8µm 8µm - 12µm depending on requirement	> 5µm > 10µm > 15µm depending on requirement
Gloss	EN ISO 7668	Pre-weathered (GE 8 + / - 5)	MIRROR (GE 85+ / - 5), GLANZ (GE 60 +/- 5), MATT (GE 20 + / -5) depending on the ALU-Substrate
Light stabiliy	Suntest CPS . ISO 1134110 years "exposure"		Natural, Bronze, Copper : unrestricted Gold: restricted
Weather resistance		excellent	
Surface hardness		High scratch and abrasion resistance	
Filiform-Corrosion		No peeling	
Crack resistance when bending		Surface cracks during bending and edging	
Sealing quality of the anodic layer		5µm - 15 years // 10µm - 20 years // 15µm - 25 years	
Salt spray mist	ISO 9227	1000 hours	
Tropical test	ISO 6270-2 (40°C - 100 % Humidity)	1000 hours	
Mechanical Properties	Mirror	EN-AW 1085 or similar (DIN EN 485-2) – DiBt-approval only for BEMO-BOND	
	Gloss	EN-AW 1050EX or similar (DIN EN 485-2) – DiBt-approval only for BEMO-BOND	
	Matt, Natural, Brushed	EN-AW 3005 or 5005 H24 or H26 or similar (DIN EN 485-2)	

COMPARISON OF BEMO COATING VARIANTS

COMPARISON OF PAINT TYPES						
	Bending resistance*	Humidity resistance*	Chemical resistance*	Corrosion resistance*	Gloss retention*	Surface hardness*
BEMO-ELOX	2	5	5	5	5	5
BEMO-FLON PROTECT	3	4	4	3	4	3
PVDF	5	5	5	4	5	4
BEMO-FLON FEVE	4	5	5	4	5	3

COLOUR FASTNESS TO ENVIRONMENTAL IMPACTS						
	Rural environment*	Urban environment*	Industrial environment*	Distance of the coast*		Sun-intensive zones*
				> 5 km	1.5 – 5 km	
BEMO-ELOX	5	5	5	5	5	5
BEMO-FLON PROTECT	4	4	3	3	3	1
PVDF	5	5	5	5	5	5
BEMO-FLON FEVE	5	5	5	5	5	5

*(Classification according to BEMO)

Rating scale: 5 = very good, 1 = poor

BEMO maintains the right to update and modify the contents of this datasheet at any time. The specified values are average values of the various paint manufacturers of the coating system and may vary slightly depending on the colour and base material. Each customer is advised to ensure that the product is suitable for his production.