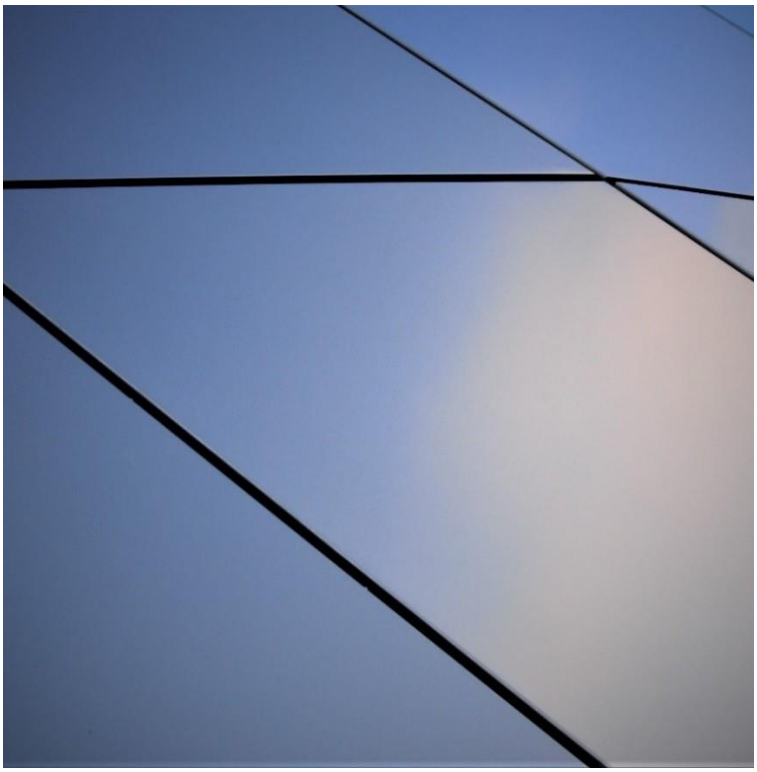
TECHNICAL DATA SHEET



BEMO-BOND® presents a versatile, lightweight, and robust metal composite panel suitable for both interior and exterior wall cladding applications, offering a modern aesthetic to any project. Its exceptional strength-to-weight ratio, flexibility, and ease of fabrication make it ideal for diverse design possibilities in commercial construction, including retrofit applications and curtainwall systems. Proven product properties and benefits of BEMO-BOND® include:

- Flexibility
- Durability
- Affordability
- Remarkably flat
- Light weight
- Wide range of colors & finishes

With BEMO-BOND®, you access composite paneling characterized by remarkable flexibility and durability. Engineered for interior and exterior use, BEMO-BOND® demonstrates resilience in challenging conditions, offering unparalleled design options, including curved and angled configurations. Its superior strength-to-weight ratio and flatness make it the top choice for metal cladding, unlocking endless creative potential for architects, engineers, designers, and contractors alike.

PRODUCT DESCRIPTION

MATERIAL COMPOSITION
- Two outer layers of aluminum .020" (.5mm) nominal thickness enclosing a core made of a fire-retardant compound
- 4mm total thickness of composite

SHEET WIDTHS
- 50" (1270mm) wide
- 62" (1574mm) wide
-Custom widths available upon request
39.4" (1,000mm) – 78.4" (2,000mm)

SHEET LENGTHS
- 196" (4979mm)
- Custom lengths up to 222" (5.663m) available

MINIMUM BENDING RADIUS
-Minimum transverse: 50mm
-Minimum parallel: 80mm

MANUFACTURING/ SUPPLY LOCATIONS
- Mesa, Arizona USA

TECHNICAL SUMMARY

TEMPERATURE RESISTANCE
-Withstands environmental temperature changes from -55°F (12C) to +180°F (83C)

TECHNICAL PROPERTIES

-Nominal thickness:	4mm
-Nominal weight:	1.29 lbs./ft^2

SUSTAINABILITY DESIGN
-LEED 3
-LEED v4/4.1
-LCA Industry Standard
-EPD Industry Standard

ACCEPTED EVALUATION REPORTS
-ICC-ES: ESL-1569
-UL E514194

WALL ASSEMBLY FIRE TESTING
-NFPA 285
-EN 13501-1:2018

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Engineering Properties for

BEMO-BOND® Material

Category	Property	Test Method	Result (STD)
European Fire and Smoke	Fire Performance	EN 13501-1:2018	Classification: B-s1,d0
UK Fire and Smoke	Fire Performance	BS476-6,-7	1.13
Fire Safety-Building- Interior Fitting	Fire Performance	NFP 2-501:1995	M1
Fire Characteristics of Exterior Wall	Fire Performance	NFP285-2012	Pass
Flame Spread	Fire Performance	ASTM E 84	<25
Smoke Developed	Fire Performance	ASTM E 84	<450
180 Degree Peel Strength	Bond Integrity	ASTM D 903	1537.4 Psi
Core Shear Ultimate Stress	Physical	ASTM C393-06	1479.4 Psi
Facing Bending Stress	Physical	ASTM C393-06	25.08 Psi
Shear Strength by Punch	Physical	ASTM D 732-09	4.4 Ksi
Penetrating Resistance	Physical	ASTM D 732-09	2104.7 lbs
Tensile Strength	Mechanical	ASTM E 8-09	6.4 Ksi
Tensile Strength & Yield	Mechanical	ASTM E 8-09	6.4 Ksi
Elongation at Break	Mechanical	ASTM E 8-09	250%
Flexural Strength	Mechanical	ASTM D 790	16.2 Ksi
Flexural Modulus	Mechanical	ASTM D 790	2339.5 Ksi
Linear Thermal Expansion Coefficient	Thermal	ASTM E 831-06	132.4 min/in F
Deflection Temperature	Thermal	ASTM D 648	235.4°F
Thermal Resistance (R Value)	Thermal	ASTM C 518-04	.06305
Coefficient of Thermal Conductivity (U Value)	Thermal	ASTM C 518-04	4.32
Assessment of Antimicrobial activity	Organic	ASTM E 2180-18	98%

Tests conducted in 4mm with .20”/.20” panels, except for the ASTM E84 test, which was conducted on 6mm.

BEMO-BOND® Material Layers

Masking, Paint System, Primer and Pretreatment, Aluminum, Adhesive, B1-FR Core, Adhesive, Aluminum, Back Side Coating