

# **BLUEBOARD**



# **DATA SHEET**

Aluminum-honeycomb-panel with aluminum cover sheets

# DESCRIPTION

**Blueboard** is an aluminium lightweight panel consisting of an aluminium honeycomb structure as core material and covered on both sides with aluminium sheets.

**Blueboard** is being developed especially for the requirements of interior design in cruise liners. The setup with large cell sizes and slim and light cover sheets makes the Blueboard fitting especially for decorative uses in all areas. For static ambitious uses the product Luxboard A is highly recommended. Technical data is shown in the tables on next page.

Refering to the prefered use Blueboard is certified as non-combustible by IMO according to the MED for shipbuilding . See certicates listed on next page.

### The Composite:

The cover sheets and the core material are bonded by a thermoplastic adhesive film that provides a stability of the composite up to 110°C.

### Availability:

available panel thicknesses: minimum panel thickness: 6 mm maximum panel thickness 20 mm

### **Panel Widths:**

Production widths: 1500 mm

### **Panel Lengths:**

Continously manufactured length up to 15.000 mm (Maximum transportation limit) Individual cuttings are available out of the production widths.

### **Recyclability:**

Blueboard is allmost completly recyclable due to its consistency of more than 95% of aluminium.

# MATERIALIEN

### Core material:

Aluminium honeycomb structure manufactured from alloy 3003 ,the nomina cell size is 1/2" (12,7 mm). The density of the core material is  $42 \text{ kg/m}^3$ .

#### **Cover Sheets:**

The alloy 3005 H44 is the standard material for Blueboard cover sheets. Standard thicknesses of the cover sheets are 0,8 mm for the white prelacquered front side and 0,5 mm for the primered back side.

The white prelacquered front side is optimized for digital direct print. The colour is similar to RAL 9010. Other printing techniques are possible.

#### **Tolerances:**

Lengths:	+ 1,0 / - 0 mm per m
Widths:	+ 1,0 / - 0 mm
Thickness:	+ 0,1 / - 0 mm
Flatness:	+ 0,1 / - 0,1 mm
Bending:	< 1 mm per 1m

#### Safety:

It is recommended that protective equipment such as safety glasses and breathing protection is worn during any cutting operations to avoid inhalation and eye contact with dust. Gloves should be worn to avoid cuts. Hands should be washed before eating, drinking or smoking and after finishing work.

#### **Environmetal sustainability:**

The materials are manufactured 100% chrome free.





# **BLUEBOARD**

## **CERTIFICATES / STANDARDS**

Shipbuilding:	MED, IMO	In conformity with the EU-MED directive, to allow use in vessels constructed, built, registered or operated in Europe C-class certified, Module B and Module D. <b>non combustible</b> according to IMO FTP Code, Annex 2 Certificates No: MEDB00002JV, MEDD000013Y
	MED, USCG	Honeycomb core: Module B certificate no.: MEDB0003U9 USCG Approval No: 164.109/EC0098/MEDB0003U9 non combustible according to IMO FTP Code, Annex 1, part 1

### **Table Types and Weights:**

Туре		Thickness* [mm]						Area Weight
		Cover sheet				Honey-		
	total	front	Surface	Back	Surface	comb Core	[mm-inch]	[kg/m²]
B060805	6	0,8	white prelacquered	0,5	primered	4,7	12,7 - 1/2"	3,9
B100805	10	0,8	white prelacquered	0,5	primered	8,7	12,7 - 1/2"	4,1
B150805	15	0,8	white prelacquered	0,5	primered	13,7	12,7 - 1/2"	4,3
B200805	20	0,8	white prelacquered	0,5	primered	18,7	12,7 - 1/2"	4,5

\*) Individual Thickness and Widths on demand

### **Technological Data:**

Туре	Thickness	E-Modulus Cover Sheets	Tensile Strength Rm	Elastic Limit Rp 0,2	Traverse strength at deformation *	max. bending at traverse strength *	theor. Bending stiffness *	Section Modulus *	Area Moment of Inertia *	Compression Strength ***
	total	[N/mm²]	MPa**	MPa**	[N]	[mm]	[kNcm²/m]	cm³/m	cm⁴/m	MPa***
B060805	6	70.000	240	200						
B100805	10	70.000	240	200	653,9	5,62	18.829,5	5,38	2,69	1,44
B150805	15	70.000	240	200	1.270,7	3,09	44.352,5	8,54	6,34	1,47
B200805	20	70.000	240	200	2.082,2	4,73	80.644,8	15,36	11,52	1,50

\*) 4-Point Bending Test acc. to DIN 53293

\*\*) DIN EN 485-2 for alloy 3005 H14

\*\*\*) DIN 53291; 1 MPa = 1 N/mm<sup>2</sup>

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