MORE FROM WOOD.

EGGER

PROFESSIONAL

EGGER EUROSTRAND® OSB/2 AND OSB 3 E0

› The **environmentally friendly board** for wood construction and interior design

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EUROSTRAND® OSB 3 E0 has outstanding technical characteristics and good dimensional stability.

EUROSTRAND® OSB 3 E0

THE ENVIRONMENTALLY FRIENDLY BOARD FOR WOOD CONSTRUCTION AND INTERIOR DESIGN

PRODUCT DESCRIPTION

PRODUCTION

EUROSTRAND® OSB is a flat hardboard with a three-layer structure of oriented distributed strands (micro-veneers) according to DIN EN 300. The special strand geometry (length up to 160 mm) has a high degree of strand orientation in the grain direction of the outer layer which assures outstanding technical characteristics and very good inherent stability. EUROSTRAND® OSB boards for use in humid conditions are made with 100% formaldehyde-free adhesives.

RAW MATERIALS USED

- Debarked softwood from domestic forestry
- Paraffin wax emulsion
- PU resin
- Water
- MUF resin, only in the outer layer of EUROSTRAND® OSB/2 EN 300

OSB BOARD TYPES

EGGER EUROSTRAND® OSB boards are available from inventory in three technical classes according to EN 13986.

- EGGER EUROSTRAND® OSB/2 EN 300, CE
- EGGER EUROSTRAND® OSB 3 E0, CE
- EGGER EUROSTRAND® OSB 4 TOP, CE, Z-9.1-566

Additional information on EUROSTRAND® OSB 4 TOP can be found in our separate OSB product brochure.

The materials are available:

- in board thicknesses from 6 to 25 mm
- with 2-sided and 4-sided asymmetrical tongue and groove
- with sanded and unsanded surface

Usage class

According to ENV 1995-1-1 (EC5), EUROSTRAND® OSB 3 E0 can be used for applications in usage class 1 (dry conditions) and 2 (humid conditions), EUROSTRAND® OSB/2 EN 300 in usage class 1.

EUROSTRAND® OSB AREAS OF APPLICATION

IN WOOD AND RESIDENTIAL CONSTRUCTION AS

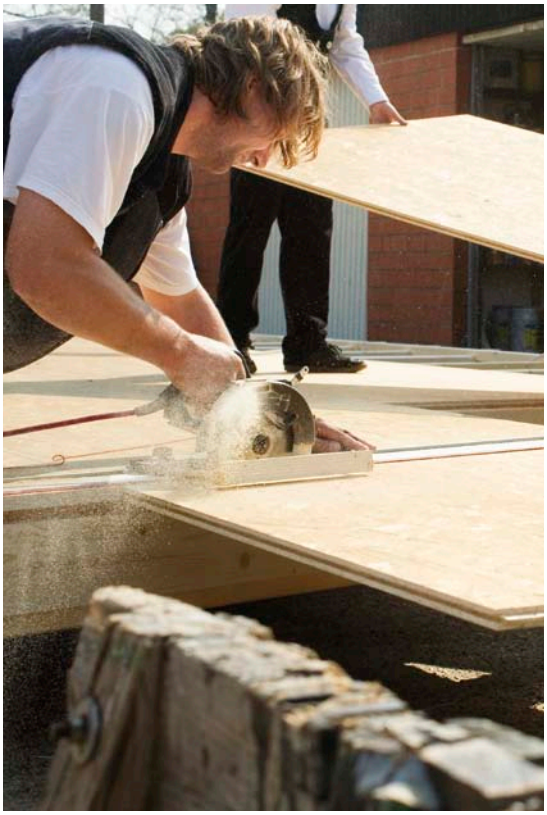
- load-bearing, reinforcing sheathing for wood frame construction
- airtight vapour barrier in roofs and walls
- floor to ceiling sheathing for thermal-bridge-reducing components in passive houses
- OSB 3 E0 load-bearing sheathing for metal siding and roof waterproofing

INTERIOR DESIGN AND DECORATIVE APPLICATIONS

- for floor renovations
- as ball-impact-resistant wall and sports facility sheathing
- for trade fair and store construction and interior design (decorative applications)
- for sturdy sub structures in the furniture industry

IN INDUSTRIAL APPLICATIONS AS

- For load-bearing and shaping components used in the car industry
- load-bearing flooring in stage and warehouse construction
- robust construction site fencing
- durable, long-lasting packaging material



OSB 3 E0 IN CONCRETE CONSTRUCTION AS

- Sheathing for repeated use
- Structured facework
- Ceiling edge formwork and foundation formwork
- Low-cost alternative to lost formwork and as a fitted board

EUROSTRAND® OSB – The features speak for themselves

- straightforward and fast processing without special tools
- high static loading capacity for the greatest possible application versatility
- dry, clean processing for shorter construction times

STRUCTURAL-PHYSICAL CALCULATION VALUES

EUROSTRAND® OSB/2 and OSB 3 E0 according to EN 300:2006

Characteristic	Standard	Unit	EUROSTRAND® OSB	
			OSB/2	OSB 3 E0
Raw density	EN 323	kg/m³	≥ 580	≥ 600
μ-value	EN ISO 12572	–	200	200
Thermal conductivity λ_R	EN 13986	W/(mK)	0.13	0.13
Specific thermal capacity c	DIN 4108-4	J/(kgK)	1,700	1,700
Reaction to fire	EN 13986	–	E, D-s1, d0	(≥ 9 mm) D-s2, d0
24h thickness swelling	EN 317	%	≥ 20	≥ 15
Linear expansion per 1 % change of moisture content	EN 318	%/%	0.04	0.03
Formaldehyde emission	EN 717-1	ppm	0.1	‹ 0.03

We will gladly provide you with material values for additional moisture dynamics calculations.

CHARACTERISTIC STRENGTH VALUES AND STIFFNESS

EUROSTRAND® OSB/2 and OSB 3 E0 according to EN 300:2006
The typical static rating calculation values are based on EN 12369-1.

Thickness (mm)	Strength values (N/mm²)							
	Bending		Tension		Compression		Panel shear	Planar shear
t_{nom}	f_m		f_t		f_c		f_v	f_r
	0° [1]	90° [2]	0°	90°	0°	90°	–	–
8 – 10	18.0	9.0	9.9	7.2	15.9	12.9	6.8	1.0
› 10 ‹ 18	16.4	8.2	9.4	7.0	15.4	12.7	6.8	1.0
18 – 25	14.8	7.4	9.0	6.8	14.8	12.4	6.8	1.0

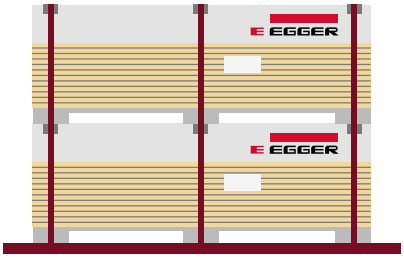
Thickness (mm)	Stiffness values (N/mm²)							
	Bending		Tension		Compression		Panel shear	Planar shear
t_{nom}	E_m		E_t		E_c		G_v	G_r
	0°	90°	0°	90°	0°	90°	–	–
8 – 10	4,930	1,980	3,800	3,000	3,800	3,000	1,080	50
› 10 ‹ 18	4,930	1,980	3,800	3,000	3,800	3,000	1,080	50
18 – 25	4,930	1,980	3,800	3,000	3,800	3,000	1,080	50

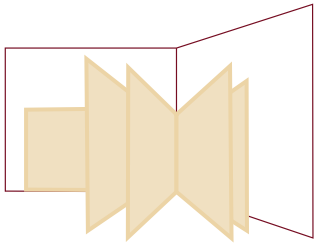
1) 0°-major axis
2) 90°-minor axis

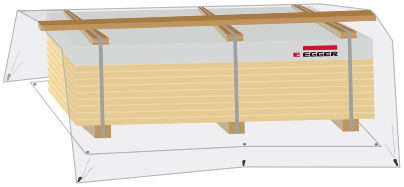
For load-bearing, reinforcing construction with elevated static requirements and / or construction where board thicknesses in the range › 25 mm are used. Only EUROSTRAND® OSB 4 TOP boards with building authority approval (Z-9.1-566) are suitable for this application.

THE CERTIFICATES

- OSB/2, OSB 3 E0 and OSB 4 TOP CE certification by WKI Braunschweig
- F30/F60 test certificate for load-bearing, space-enclosing wall construction
- Environmental product declaration (EPD) including ecological balance sheet according to ISO 14040, Institut für Bauen und Umwelt e.V.
- FSC Controlled wood (CW) certificate
- Test certificate for ball-impact-resistant wall construction
- Food-safe test report
- ISO 9001 certification







WHAT TO WATCH FOR

STORAGE AND TRANSPORTATION

- Store in a dry place, lying flat on several squared timbers of uniform height - the maximum spacing between the squared timbers is 80 cm.
- The steel bands around the packages must be removed promptly upon reaching the fabricator.
- The boards should be installed under moisture conditions equivalent to their use. We expressly recommend a 48-hour acclimatisation period.
- The absorption of additional moisture, e.g. due to weather, is not recommended and must be prevented.

PACKAGING

EUROSTRAND® OSB boards are covered in cardboard as a package and secured with steel bands. Sanded tongue and groove boards are also packaged in stretch film or with protective edges.

UTILISATION AND DISPOSAL

Untreated wood-based materials may be used for material or thermal applications. Wood-based materials are assigned to the waste codes (EWC codes) 030105, 150103 and 170201.

DELIVERY PROGRAMME

EUROSTRAND® OSB 3 E0

Product / length × width (mm)	Board thickness d (mm)													
	6	8	9	10	11	12	15	18	20	22	25	30	35	40
Straight edge unsanded														
5,000 × 2,500						●*	●*	●*		●*				
5,000 × 1,250							●*			●*				
2,800 × 1,250						●	●*							
2,070 × 2,770						●*								
2,500 × 1,250	●	●	●	●	●**	●	●	●	●**	●	●			
T&G 4 sides unsanded														
2,500 × 1,250							●			●				
2,500 × 675						●	●	●		●	●			
1,830 × 675						●**	●	●		●				
T&G 4 sides sanded														
2,500 × 675						●	●	●		●	●			
1,830 × 675						●**	●	●		●				
T&G 2 sides unsanded														
2,440 × 1,205						●	●	●						

* per truck load minimum 24 to

** delivery on request, minimum order quantity = 250 m³

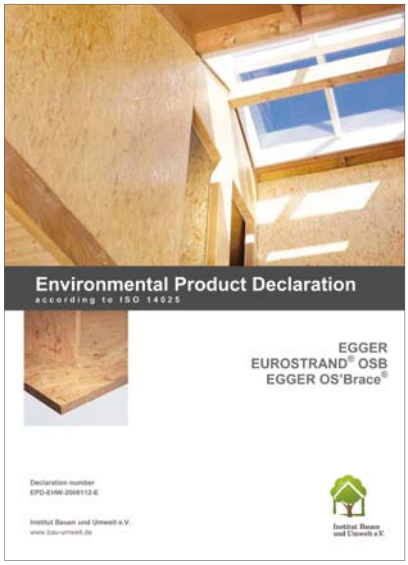
EUROSTRAND® OSB/2 EN 300

Product / length × width (mm)	Board thickness d (mm)													
	6	8	9	10	11	12	15	18	20	22	25	30	35	40
Straight edge unsanded														
2,440 × 1,220			●		●		●	●						
2,070 × 2,770								●						

Changes to the delivery programme reserved.

ENVIRONMENTAL PRODUCT DECLARATION

EUROSTRAND® OSB/2 AND OSB 3 E0



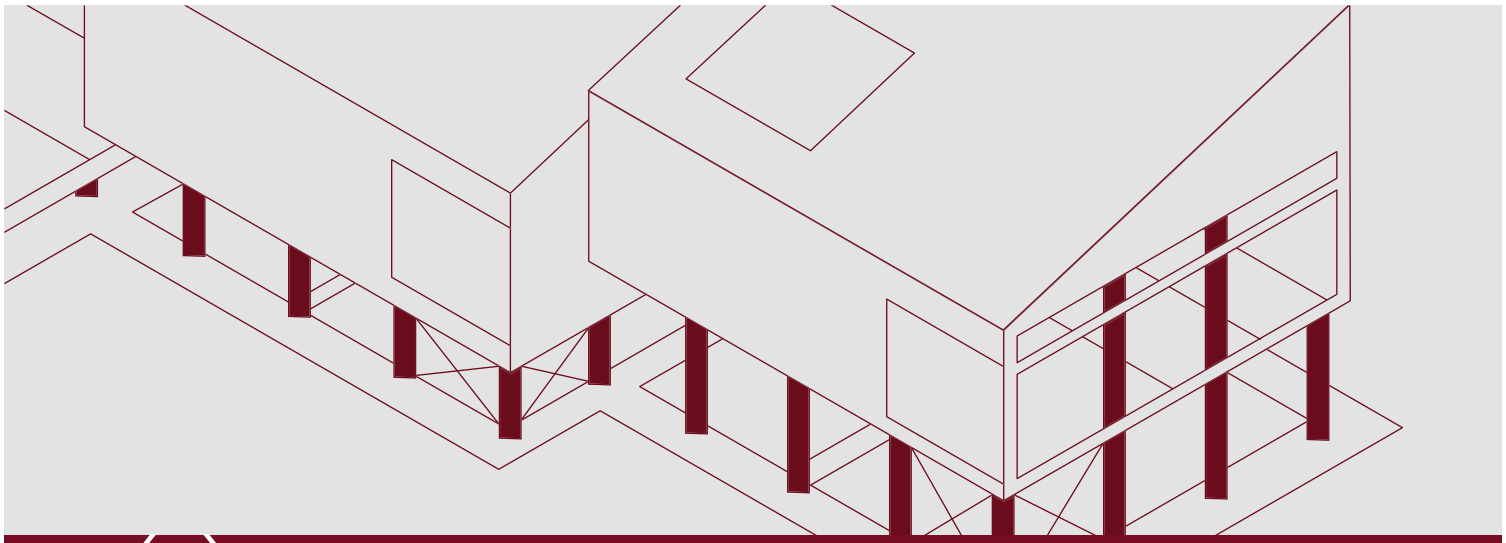
We had the sustainability and environmental compatibility of our products confirmed through independent tests and have disclosed this information in our environmental product declarations (EPDs).

These are used in certifying the sustainability of buildings. EPDs are available for all key EGGER product groups.

1 m³ (35 ⅓ cubic feet) of OSB from EGGER binds approximately 864 kg CO_2 (calculation based on GWP 100 production)

This corresponds to the average CO_2 emissions for a mid-size car over a distance of 6,647 km (calculation based on the planned European standard of 130 g – 4 ½ oz – CO_2 /km).

For more information, please consult the EGGER Environment & Sustainability brochure or visit www.egger.com



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