

MORE FROM WOOD.



PROFESSIONAL



EGGER EUROSTRAND® OSB/2 AND OSB 3 E0

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

www.egger.com



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

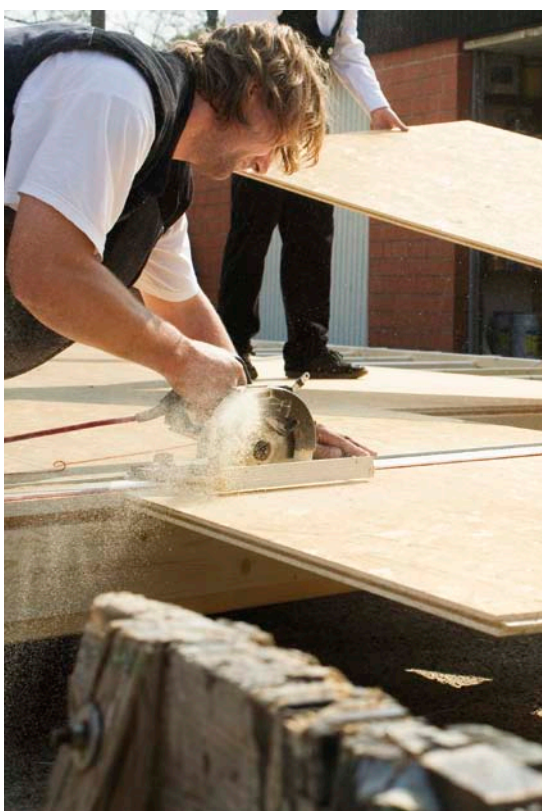
- load-bearing, reinforcing sheathing for wood frame construction
- airtight vapour barrier in roofs and walls
- floor to ceiling sheathing for thermal-bridge-reducing components in passive houses
- OSB 3 E0 load-bearing sheathing for metal siding and roof waterproofing

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/m ³	≥ 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/mm ²)							
	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/mm ²)							
	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

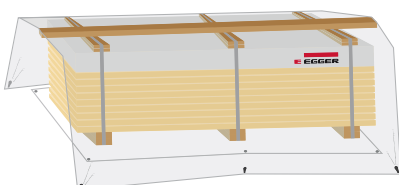
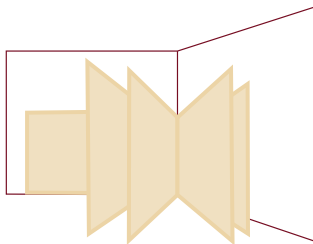
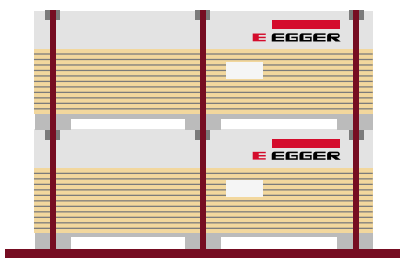
- 1) 0°-major axis
2) 90°-minor axis

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

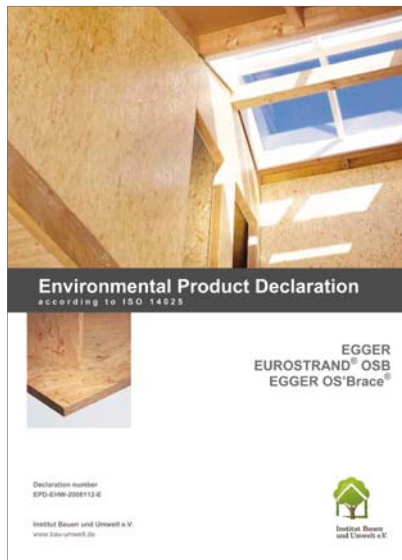
Product / length × width (mm)	Board thickness d (mm)													
	6	8	9	10	11	12	15	18	20	22	25	30	35	40
Straight edge unsanded														
2,440 × 1,220			•		•		•	•						
2,070 × 2,770								•						

Changes to the delivery programme reserved.



ENVIRONMENTAL PRODUCT DECLARATION

EUROSTRAND® OSB/2 AND OSB 3 E0



1 m³ (35 1/3 cubic feet) of OSB from EGGER binds approximately **864 kg CO₂** (calculation based on GWP 100 production)

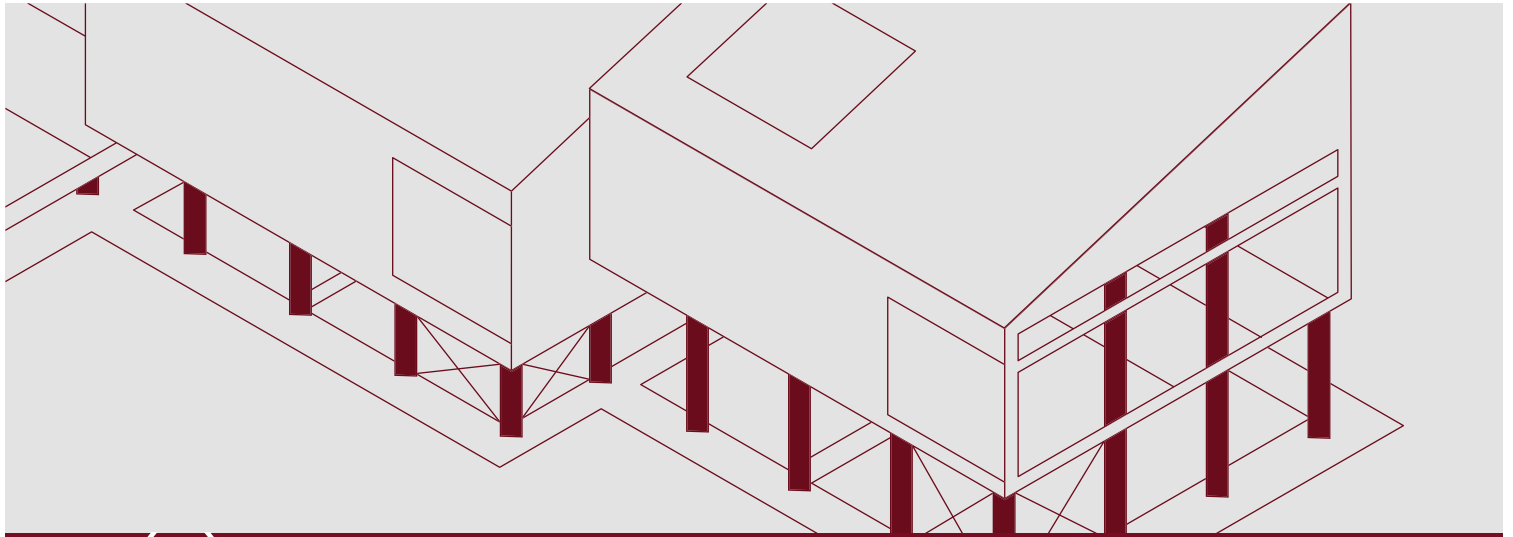


••••• We had the **sustainability and environmental compatibility** of our products confirmed through independent tests and have disclosed this information in our **environmental product declarations (EPDs)**.

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

••••• This corresponds to the average CO₂ emissions for a mid-size car over a distance of **6,647 km** (calculation based on the planned European standard of 130 g – 4 1/2 oz – CO₂ /km).

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



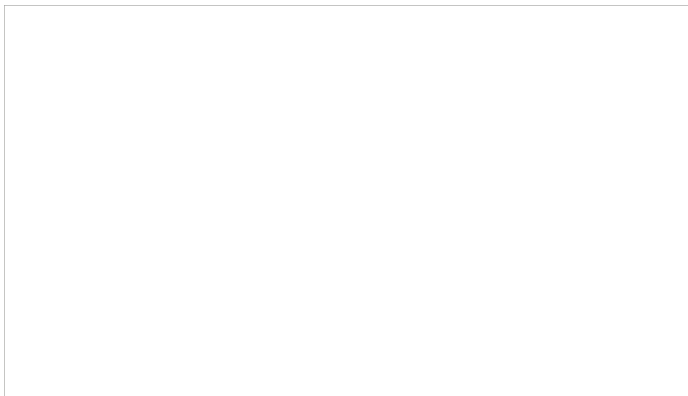
www.egger.com

TECHNICAL HOTLINE

T +49 3841 301-21260
F +49 3841 301-20222
construction@egger.com

EGGER Holzwerkstoffe Wismar
GmbH & Co. KG
Am Haffeld 1
23970 Wismar
Germany
T +49 3841 301-0
F +49 3841 301-20222
info-wis@egger.com

FRITZ EGGER GmbH & Co. OG
Holzwerkstoffe
Weiberndorf 20
6380 St. Johann in Tirol
Austria
T +43 50 600-0
F +43 50 600-10111
info-sjo@egger.com



Institut Bauen
und Umwelt e.V.



ISO 9001:2000 NR.00184/0