MORE FROM WOOD.

EGGER

EGGER OSB 4 TOP

HIGH-PERFORMANCE AND SUSTAINABILITY – FOR ELEVATED WOOD CONSTRUCTION REQUIREMENTS

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HIGH-PERFORMANCE SUSTAINABILITY

100% FORMALDEHYDE-FREE BONDING WITH BUILDING AUTHORITY APPROVAL Z-9.1-566 OF THE DIBT

PRODUCT DESCRIPTION

PRODUCTION

EGGER OSB 4 TOP is a synthetic-resin-bonded flat-pressed board with a three-layer structure consisting of especially aligned strands (micro-veneers) according to building authority approval Z-9.1-566 of the Deutsches Institut für Bautechnik (DIBt).
The special strand geometry (strand length up to 160 mm) has a high degree of strand orientation and combined with the raw materials used assure above-average technical characteristics.

RAW MATERIALS

- Debarked softwood from domestic forestry
- Paraffin wax emulsion
- PU resin
- Water

EGGER OSB 4 TOP AREAS OF APPLICATION

- Timber frame and engineered wood construction
- Prefabricated house construction, passive house construction
- Refurbishment, renovation and modernisation
- Store construction and exhibition stands (decorative applications)
- Hall and commercial construction

Approval Z-9.1-566 regulates the following:

- Rated values for board thicknesses up to 40 mm
- Rated values for fasteners, screws, nails and clamps
- Constructive gluing of the unsanded boards on surfaces and edges

THE CERTIFICATES

- General building authority approval Z-9.1-566 from the Deutsches Institut für Bautechnik (DIBt)
- EGGER OSB 4 TOP CE certification by WKI Braunschweig
- Environmental product declaration (EPD) life cycle assessment sheet according to ISO 14040, Institut für Bauen und Umwelt e.V.
- F30/F60 test certificate for load-bearing, space-enclosing wall construction
- PEFC certified
- FSC Controlled wood (CW) certificate
- Test certificate for ball-impact-resistant wall construction
- Food-safe test report
- ISO 9001 certification
- Test reports on emission characteristics (formaldehyde / MDI)

EGGER OSB 4 TOP – The features speak for themselves

- for use in load-bearing, reinforcing construction with board thicknesses of up to 40 mm
- for high load dissipating construction in humid conditions (NK2)
- for the use in timber structure applications with large spans and high fire protection requirements
- for decorative applications with a nearly blueness-free and closed surface

STRUCTURAL-PHYSICAL CALCULATION VALUES

EGGER OSB 4 TOP according to Z-9.1-566

Characteristic	Test standard	Unit	EGGER OSB 4 TOP
Raw density	EN 323	kg/m³	600 – 640
μ-value*	EN ISO 12572	–	200 / 200 dry cup / wet cup
Thermal conductivity λ_R	EN 13986	W/(mK)	0.13
Specific thermal capacity c	EN 12524	J/(kgK)	1,700
Reaction to fire	EN 13986	–	D-s2, d0
24h thickness swelling	EN 317	%	d ≤ 10 mm: ≤ 12 / d > 10 mm: ≤ 10
Linear expansion per 1 % of moisture content	EN 318	%/%	0.03
Formaldehyde emission	EN 717-1	ppm	< 0.03

* Calculation values for water vapour diffusion factor μ correspond to the general building authority approval Z-9.1-566.

CHARACTERISTIC STRENGTH VALUES AND STIFFNESS

EGGER OSB 4 TOP according to Z-9.1-566, determined based on EN 1058 and EN 789

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	25	15	12	10	19	16	9.0	1.6
> 10 < 18	25	15	12	10	19	16	9.0	1.6
18 – 25	25	15	12	10	19	16	9.0	1.6
> 25 – 30	25	15	12	10	17	15	8.0	1.6
> 30 – 40	20	15	10	10	15	14	6.0	1.6

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	7,000	3,000	4,300	3,200	4,300	3,200	1,500	160
> 10 < 18	7,000	3,000	4,300	3,200	4,300	3,200	1,500	160
18 – 25	7,000	3,000	4,300	3,200	4,300	3,200	1,500	160
> 25 – 30	7,000	3,000	4,300	3,200	4,300	3,200	1,300	140
> 30 – 40	6,000	3,000	4,000	3,200	4,000	3,200	1,200	140

[1] 0°-major axis [2] 90°-minor axis

Additional information on ratings for EGGER OSB 4 TOP is found under www.egger.com/buildingproducts

EGGER OSB 4 TOP DELIVERY PROGRAMME (Z-9.1-566)

Product / length × width (mm)	Board thickness d (mm)											
	6	8	9	10	11	12	15	18	22	25	30	40
Straight edge unsanded												
5,000 × 2,500							●	●	●	●*		
5,000 × 1,250							●*	●*	●*	●*		
2,960 × 2,500							●*					
3,000 × 1,250						●	●					
2,800 × 1,250						●	●	●				
2,650 × 1,250						●	●					
2,500 × 1,250						●	●	●	●	●	●**	●**
T&G 4 sides unsanded												
2,500 × 675							●	●	●	●	●	
2,500 × 1,250							●	●	●	●		
T&G 4 sides sanded												
2,500 × 675							●		●			
T&G 2 sides unsanded												
6,250 × 675									●*			
3,000 × 905											●*	

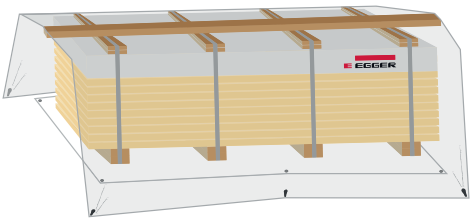
Changes to the delivery programme reserved.

* order of full truck load 24 to

** order on customer request, minimum order quantity ≥ 250 m³

PACKAGING

EGGER 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.



The assembly hall of the Swiss company Pilatus Flugzeugwerke AG in Stans has 8,800 m² of usable space and was made almost entirely of wood. EGGER OSB 4 TOP and EGGER DHF was selected for sheathing of the framework behind the wood and metal façade, the outstanding static and physical construction properties were crucial.

TECHNICAL HOTLINE

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

www.egger.com/buildingproducts

EGGER Building Products GmbH
Weiberndorf 20
6380 St. Johann in Tirol
Austria
T +43 50 600-0
F +43 50 600-10111
info-ebp@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

qualityaustria
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ISO 9001:2008 No.00184/0
ISO 14001:2004 No.01371/0
ISO 14001:2004 No.01128/2
ISO 14001:2004 No.01128/3
ISO 14001:2004 No.01128/4

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