DECLARATION OF PERFORMANCE

Reference number: **UKOSB2DoPv1**

West Fraser Europe nv

Eikelaarstraat 33

3600 Genk

Belgium

Unique Identification code of the product type*	Intended Use	Systems of AVCP	UK Approved Body	Designated standard
SterlingOSB zero, OSB2 OSB/2 (EN300) 6mm to 40mm*	Internal use as structural components in dry conditions	2+	0836	EN13986:2004 +A1:2015
*The unique identification code of the product type is a combination of the technical class and the individual product's nominal thickness				

Declared performance *(covering a range of producttypes OSB/2, 6mm to 40mm*)*

Essential characteristics	**Performance**									
	Thickness range (mm)									
	6 to 10		**>10 to <18**		**18 to 25**		**>25 to 32**		**>32 to 40**	
	0	**90**	**0**	**90**	**0**	**90**	**0**	**90**	**0**	**90**
[1] **Characteristic Strength (N/mm²):**										
- Bending f_m	18.0	9.0	16.4	8.2	14.8	7.4	NPD	NPD	NPD	NPD
- Compression f_c	15.9	12.9	15.4	12.7	14.8	12.4	NPD	NPD	NPD	NPD
- Tension f_t	9.9	7.2	9.4	7.0	9.0	6.8	NPD	NPD	NPD	NPD
- Panel Shear f_v	6.8		6.8		6.8		NPD		NPD	
- Planar shear f_r	1.0		1.0		1.0		NPD		PD	
[1] **Mean Stiffness (MOE) (N/mm²):**										
- Tension E_t	3800	3000	3800	3000	3800	3000	NPD	NPD	NPD	NPD
- Compression E_c	3800	3000	3800	3000	3800	3000	NPD	NPD	NPD	NPD
- Bending E_m	4930	1980	4930	1980	4930	1980	NPD	NPD	NPD	NPD
- Panel Shear G_v	1080		1080		1080		NPD		NPD	
- Planar Shear G_r	50		50		50		NPD		NPD	
Punching Shear, Characteristic strength under point load $F_{max,k}$ (kN) *(for floors and roofs)*	NPD		NPD		NPD		NPD		NPD	
Punching Shear, Mean stiffness under point load, R (N/mm²) *(for floors and roofs)*	NPD		NPD		NPD		NPD		NPD	
Characteristic serviceability strength under point load $F_{Ser,k}$ (kN) *(for floors and roofs)*	NPD		NPD		NPD		NPD		NPD	
Soft Body Impact resistance *(Floor/roofs/Walls)*	NPD		NPD		NPD		NPD		NPD	
Racking resistance Characteristic Strength $F_{Rd,max,k}$ (N) *(for walls)*	NPD		NPD		NPD		NPD		NPD	
Racking resistance Mean Stiffness R_{mean} (N/mm) *(for walls)*	NPD		NPD		NPD		NPD		NPD	
[5] **Embedment strength f_h (N/mm²)**	Calculation according to EN 1995-1-1 (8.22)									

Water vapour permeability μ	NPD	NPD	NPD	NPD	NPD
Release of formaldehyde	E1	E1	E1	E1	E1
Release (content) of pentachlorophenol (PCP)	≤5ppm	≤5ppm	≤5ppm	≤5ppm	≤5ppm
Airborne sound insulation (surface mass) R (dB)	NPD	NPD	NPD	NPD	NPD
[3] Sound absorption, Frequency range 250Hz to 500Hz (α)	0.1	0.1	0.1	0.1	0.1
[3] Sound absorption, Frequency range 1000Hz to 2000Hz (α)	0.25	0.25	0.25	0.25	0.25
Thermal conductivity λ (W/m.K)	0.13	0.13	0.13	0.13	0.13
Air Permeability (Δ*p*=50Pa) according to EN 12114, V_0 ($m^3/h\ m^2$)	NPD	NPD	NPD	NPD	NPD
Durability					
Internal bond (N/mm^2)	0.34	0.32	0.30	0.29	0.26
Swelling in thickness (%)	20	20	20	20	20
[4] Mechanical, (Creep k_{def}) service class 1	2.25	2.25	2.25	NPD	NPD
Mechanical (Duration of load k_{mod})	**Action Mode**				
	Permanent	Long Term	Medium Term	Short Term	Instantaneous
[4] Service Class 1	0.3	0.45	0.65	0.85	1.1
Biological	Use class 1				

Thickness range (mm)	**6 to 10**	**>10 to <18**	**18 to 25**	**>25 to 32**
Avg. Density (kg/m^3)	>= 600			

[2] Reaction to fire

(see notes to table for field of application details and associated documentation references)

	Minimum thickness	Class (excluding floorings)[g]	Class (Flooring)[h]
Without an air gap behind the panel [abef]	9	D-s2,d0	D_{fl},s1
With a closed or open air gap ≤ 22mm behind the panel [cef]	9	D-s2,d2	-
Closed air gap behind the panel [def]	15	D-s2,d0	D_{fl},s1
With an open air gap behind the panel [def]	18	D-s2,d0	D_{fl},s1
Any end use [ef]	3	E	E_{fl}

a -Mounted without an air gap directly against class A1 or A2-s1, d0 products with minimum density 10kg/m3 or at least class D-s2, d2 products with minimum density 400 kg/m3.
b -A substrate of cellulose insulation material of at least class E may be included if mounted directly against the wood-based panel, but not for floorings.
c -Mounted with an air gap behind. The reverse face of the cavity shall be at least class A2-s1, d0 products with minimum density 10 kg/m3.
d -Mounted with an air gap behind. The reverse face of the cavity shall be at least class D-s2, d2 products with minimum density 400 kg/m3.
e -Veneered, phenol- and melamine-faced panels are included for class excl. floorings.
f -A vapour barrier with a thickness up to 0,4 mm and a mass up to 200 g/m^2 can be mounted in between the wood-based panel and a substrate if there are no air gaps in between.
g -Class Provided for in Table 1 of the Annex to decision 2000/147/EC.
h -Class Provided for in Table 2 of the Annex to decision 2000/147/EC .

NOTES TO TABLE

1-Taken from EN 12369-1:2001

2-Reaction to fire classes from Table 1 of Commission Decision 2003/43/EC of January 2003 (OJEU L13 of 18.1.2003) corrected by Corrigendum (OJEU L33 of 8.2.2003) and amended by Commission decision 2007/348/EC of May 2007 (OJEU L131 of 23-05-2007); also reproduced in Table three of EN 13986:2004+A1:2015 for wood-based panels installed according to CEN/TR 12872

3-Taken from Table 10 of EN 13986:2004+A1:2015

4-Taken from Eurocode 5 EN 1995-1-1 2004+A2:2014

5-Embedment strenght can be calculated according to EN 1995-1-1 2004+A2:2014, by taking the OSB panel thickness (t) and the diameter of the used fastener (d) in account:

$$f_{h,k} = 65\, d^{-0,7}\, t^{0,1}$$

The performance of the product identified is in conformity with the declared performance.

This declaration of performance is issued in accordance with Regulation (EU) No 305/2011 as it has effect in the United Kingdom in respect of Great Britain, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Sterkmans Peter

Quality Supervisor

Peter.Sterkmans Digitaal ondertekend door Peter.Sterkmans
Datum: 2023.06.29 15:11:27 +02'00'

Genk, Belgium

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