DECLARATION OF PERFORMANCE

Reference number: **NGOSB3DoPv6**

West Fraser Europe nv

Eikelaarstraat 33

3600 Genk

Belgium

Unique Identification code of the product type*	Intended Use	Systems of AVCP	Notified Body	Harmonised standard
SterlingOSB zero, OSB3 OSB/3 (EN300) 6mm to 32mm*	Internal use as structural components in humid conditions	2+	1161	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/3, 6mm to 32mm*)*

Essential characteristics	Performance													
Thickness range (mm)	**6 to 10**		**>10 to <18**		**18 to 25**		**>25 to 32**		**15 T&G 600/400/300mm**		**18 T&G 600mm**		**22 T&G 600mm**	
	0	**90**	**0**	**90**	**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	16.4	8.2	14.8	7.4	14.8	7.4
- Compression f_c	15.9	12.9	15.4	12.7	14.8	12.4	NPD	NPD	15.4	12.7	14.8	12.4	14.8	12.4
- Tension f_t	9.9	7.2	9.4	7.0	9.0	6.8	NPD	NPD	9.4	7.0	9.0	6.8	9.0	6.8
- Panel Shear f_v	6.8		6.8		6.8		NPD		6.8		6.8		6.8	
- Planar shear f_r	1.0		1.0		1.0		NPD		1.0		1.0		1.0	
[1] **Mean Stiffness (MOE) (N/mm²):**														
- Tension E_t	3800	3000	3800	3000	3800	3000	NPD	NPD	3800	3000	3800	3000	3800	3000
- Compression E_c	3800	3000	3800	3000	3800	3000	NPD	NPD	3800	3000	3800	3000	3800	3000
- Bending E_m	4930	1980	4930	1980	4930	1980	NPD	NPD	4930	1980	4930	1980	4930	1980
- Panel Shear G_v	1080		1080		1080		NPD		1080		1080		1080	
- Planar Shear G_r	50		50		50		NPD		50		50		50	
Punching Shear, Characteristic strength under point load $F_{max,k}$ (kN) *(for floors and roofs)*	NPD		NPD		NPD		NPD		1.68/1.85/1.78		2.25		3.04	
Punching Shear, Mean stiffness under point load, R (N/mm²) *(for floors and roofs)*	NPD		NPD		NPD		NPD		190/333/514		269		445	
Characteristic serviceability strength under point load $F_{Ser,k}$ (kN) *(for floors and roofs)*	NPD		NPD		NPD		NPD		1.67/1.71/1.78		2.20		2.81	
Soft Body Impact resistance *(Floor/roofs/Walls)*	NPD		NPD		NPD		NPD		Impact Class 1 Pass Floor		Impact Class 1 Pass Floor		Impact Class 1 Pass Floor	
Racking resistance Characteristic Strength $F_{Rd,max,k}$ (N) *(for walls)*	NPD		NPD		NPD		NPD		NPD		NPD		NPD	

Racking resistance Mean Stiffness R_{mean} (N/mm) *(for walls)*	NPD	NPD	NPD	NPD	NPD	NPD	NPD
[5] Embedment strength f_h (N/mm²)	Calculation according to EN 1995-1-1 (8.22)						
Release of formaldehyde	E1	E1	E1	E1	E1	E1	E1
Release (content) of pentachlorophenol (PCP)	≤5ppm	≤5ppm	≤5ppm	≤5ppm	≤5ppm	≤5ppm	≤5ppm
Airborne sound insulation (surface mass) R (dB)	NPD	NPD	NPD	NPD	NPD	NPD	NPD
[3] Sound absorption, Frequency range 250Hz to 500Hz (α)	0.1	0.1	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	0.25	0.25
Thermal conductivity λ (W/m.K)	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Air Permeability (Δ*p*=50Pa) according to EN 12114, V_0 (m³/h m²)	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Durability							
Internal bond (N/mm²)	0.34	0.32	0.30	0.29	0.32	0.32	0.30
Swelling in thickness (%)	15	15	15	15	15	15	15
Moisture resistance Internal bond after boil test (N/mm²)	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Internal bond after cyclic test (N/mm²)	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Bending strength after cyclic test – major axis (N/mm²)	9	8	7	6	8	8	7
[4] Mechanical (Creep k_{def}) service class 1	1.5	1.5	1.5	1.5	1.5	1.5	1.5
[4] Mechanical (Creep k_{def}) service class 2	2.25	2.25	2.25	2.25	2.25	2.25	2.25

Mechanical (Duration of load k_{mod})	**Action Mode**				
	Permanent	Long Term	Medium Term	Short Term	Instantaneous
[4] Service Class 1	0.4	0.5	0.7	0.9	1.1
[4] Service Class 2	0.3	0.4	0.55	0.7	0.9
Biological	Use classes 1 & 2				

Thickness range (mm)	**6 to 10**	**>10 to <18**	**18 to 25**	**>25 bis 32**
Avg. Dens. (kg/m³)	>= 600			

	Watervapourtransmission according to EN 12572:2001
Thickness (mm)	**15**
μ Dry	125
μ Wet	82

		Minimum thickness	Class (excluding floorings)[g]	Class (Flooring)[h]
[2] Reaction to fire **(see notes to table for field of application details and associated documentation references)**	**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/m² 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, 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 14:47:08 +02'00'

Genk, Belgium

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