CE

West Fraser Europe Ltd
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IV2 7JQ

DoP ref: **WFOSB3DoPv11**
EN 13986:2004+A1:2015
0502
03
E1
OSB3
6mm to 32mm
Structural use in humid conditions

Essential characteristics	Performance													
Thickness range	6 to 10		>10 to <18		18 to 25		>25 to 32		15 T&G 400mm centres		18 T&G 600mm centres		22 T&G 600mm centres	
	0	90	0	90	0	90	0	90	0 - 90		0- 90		0-90	
[1]Characteristic Strength (N/mm²) - Bending	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 values,(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	
- Compression E_c	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		2.64		4.12		4.96	
Punching Shear Mean stiffness under point load, R (N/mm) (for floors and roofs)	NPD		NPD		NPD		NPD		305		489		770	
Racking resistance(for walls) Characteristic Strength $F_{Rd,max,k}$ (N)	NPD		NPD		NPD		NPD		NPD		NPD		NPD	

Racking resistance (for walls) Mean Stiffness R_{mean} (N/mm)	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Soft Body Impact resistance Floors/Roofs Walls	NPD	NPD	NPD	NPD	Impact Class 1 Pass Roof	Impact Class 1 Pass Floor	Impact Class 1 Pass Floor
Embedment strength f_h (N/mm2)	NPD	NPD	NPD	NPD	NPD	NPD	NPD

[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/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

Water vapour permeability (EN:12572:2001)

Thickness (mm)	15
Dry (µ)	207
Wet (µ)	97

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 V_0 (m3/h)	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
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

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