



Norbord Europe Ltd  
Morayhill  
Dalcross  
Inverness  
Scotland  
IV2 7JQ

DoP ref: **NOSB3DoPv6**

EN 13986:2004+A1:2015

0502

03

E1

OSB3

6mm to 32mm

Structural use in humid conditions

Essential characteristics	Performance													
	6 to 10		>10 to <18		18 to 25		>25 to 32		15 T&G 600mm		18 T&G 600mm		22 T&G 600mm	
Thickness range	0	90	0	90	0	90	0	90	0 - 90		0 - 90		0-90	
<b>Characteristic Strength (N/mm<sup>2</sup>)</b>														
- 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	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	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	6.8		6.8		6.8		NPD		6.8		6.8		6.8	
- Planar shear	1.0		1.0		1.0		NPD		1.0		1.0		1.0	
<b>Mean Stiffness values,(MOE) (N/mm<sup>2</sup>)</b>														
- Tension	3800	3000	3800	3000	3800	3000	NPD	NPD	3800	3000	3800	3000	3800	3000
-Compression	3800	3000	3800	3000	3800	3000	NPD	NPD	3800	3000	3800	3000	3800	3000
- Bending	4930	1980	4930	1980	4930	1980	NPD	NPD	4930	1980	4930	1980	4930	1980
- Panel Shear	1080		1080		1080		NPD		1080		1080		1080	
-Planar Shear	50		50		50		NPD		50		50		50	
<b>Characteristic strength under point load F<sub>max,k</sub> (kN) (for floors and roofs)</b>	NPD		NPD		NPD		NPD		2.8		4.50		5.20	
<b>Mean stiffness under point load, R (N/mm<sup>2</sup>) (for floors and roofs)</b>	NPD		NPD		NPD		NPD		1400		450		600	
<b>Characteristic serviceability strength under point load F<sub>Ser,k</sub> (kN)</b>	NPD		NPD		NPD		NPD		1.96		3.2		3.3	

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<i>(for floors and roofs)</i>							
<b>Racking resistance</b> <i>(for walls)</i>	NPD	NPD	NPD	NPD	NPD	NPD	NPD
<b>Soft Body Impact resistance</b> <b>Floors/Roofs Walls</b>	Pass Wall	NPD	NPD	NPD	Pass Roof	Pass Floor	Pass Floor
<b>Reaction to fire</b>	D-s3,d0	D-s2,d0	D-s2,d0	D-s2,d0	D-s2,d0	DfL-S1	DfL-S1
<b>Water vapour permeability <math>\mu</math></b>	NPD	NPD	NPD	NPD	NPD	NPD	NPD
<b>Release of formaldehyde</b>	<b>E1</b>	<b>E1</b>	<b>E1</b>	<b>E1</b>	<b>E1</b>	<b>E1</b>	<b>E1</b>
<b>Release (content) of pentachlorophenol (PCP)</b>	<b><math>\leq 5\text{ppm}</math></b>	<b><math>\leq 5\text{ppm}</math></b>	<b><math>\leq 5\text{ppm}</math></b>	<b><math>\leq 5\text{ppm}</math></b>	<b><math>\leq 5\text{ppm}</math></b>	<b><math>\leq 5\text{ppm}</math></b>	<b><math>\leq 5\text{ppm}</math></b>
<b>Airborne sound insulation (surface mass) (R)</b>	NPD	NPD	NPD	NPD	NPD	NPD	NPD
<b>Sound absorption</b> Frequency range 250Hz to 500Hz ( $\alpha$ )	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<b>Sound absorption</b> Frequency range 1000Hz to 2000Hz ( $\alpha$ )	0.25	0.25	0.25	0.25	0.25	0.25	0.25
<b>Thermal conductivity <math>\lambda</math></b>	0.13	0.13	0.13	0.13	0.13	0.13	0.13
<b>Durability</b>							
<b>Internal bond (<math>\text{N}/\text{mm}^2</math>)</b>	0.34	0.32	0.30	0.29	0.32	0.32	0.30
<b>Swelling in thickness (%)</b>	15	15	15	15	15	15	15
<b>Moisture resistance</b> Internal bond after boil test (%)	NPD	NPD	NPD	NPD	NPD	NPD	NPD
<b>Internal bond after cyclic test (<math>\text{N}/\text{mm}^2</math>)</b>	NPD	NPD	NPD	NPD	NPD	NPD	NPD
<b>Bending strength after cyclic test – major axis (<math>\text{N}/\text{mm}^2</math>)</b>	9	8	7	6	8	8	7
<b>Mechanical</b> (creep $k_{\text{def}}$ ) <b>Service class 1</b>	1.5	1.5	1.5	1.5	1.5	1.5	1.5
<b>Mechanical</b> (creep $k_{\text{def}}$ ) <b>Service class 2</b>	2.25	2.25	2.25	2.25	2.25	2.25	2.25
<b>Mechanical</b> (duration of load $k_{\text{mod}}$ )	<b>Action Mode</b>						
	<b>Permanent</b>	<b>Long Term</b>	<b>Medium Term</b>	<b>Short Term</b>	<b>Instantaneous</b>		
<b>Service class 1</b>	<b>0.4</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>	<b>1.1</b>		
<b>Service class 2</b>	<b>0.3</b>	<b>0.4</b>	<b>0.55</b>	<b>0.7</b>	<b>0.9</b>		
<b>Biological</b>	<b>Use classes 1 &amp; 2</b>						