



Norbord Europe Ltd  
Morayhill  
Dalcross  
Inverness  
Scotland  
IV2 7JQ

DoP ref: **NOSB3DoPv1**

EN 13986:2004

0502

03

E1

OSB3

6mm to 32mm

Structural use in humid conditions

Essential characteristics	Performance														Harmonised technical specification
	>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	
Characteristic Strength (N/mm <sup>2</sup> )															
- 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		
Mean Stiffness values (MOE) (N/mm <sup>2</sup> )															
- 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		
*Characteristic Point load F <sub>max,k</sub> (kN) (for floors and roofs)	NPD		NPD		NPD		NPD		2.8		4.63		4.63		
Point load mean stiffness (N/mm <sup>2</sup> ) (for floors and roofs)	NPD		NPD		NPD		NPD		1.4		0.483		0.483		
*Characteristic Point load serviceability F <sub>ser,k</sub> (kN) (for floors and roofs)	NPD		NPD		NPD		NPD		1.96		3		3		
Racking resistance (for walls)	NPD		NPD		NPD		NPD		NPD		NPD		NPD		
Soft Body Impact resistance Floor/roofs Walls	Pass Wall		NPD		NPD		NPD		Pass Roof		Pass Floor		Pass Floor		

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<b>Reaction to fire</b>	D-s2,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>	E1	E1	E1	E1	E1	E1	E1
<b>Release (content) of pentachlorophenol (PCP)</b>	$\leq 5\text{ppm}$	$\leq 5\text{ppm}$	$\leq 5\text{ppm}$	$\leq 5\text{ppm}$	$\leq 5\text{ppm}$	$\leq 5\text{ppm}$	$\leq 5\text{ppm}$
<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> (duration of load $k_{\text{def}}$ ) <b>service class 1</b>	1.5	1.5	1.5	1.5	1.5	1.5	1.5
<b>Mechanical</b> (duration of load $k_{\text{def}}$ ) <b>service class 2</b>	2.25	2.25	2.25	2.25	2.25	2.25	2.25
<b>Mechanical</b> (creep $k_{\text{mod}}$ ) <b>Service class 1</b>	0.7	0.7	0.7	0.7	0.7	0.7	0.7
<b>Mechanical</b> (creep $k_{\text{mod}}$ ) <b>Service class 2</b>	0.55	0.55	0.55	0.55	0.55	0.55	0.55
<b>Biological</b>	<b>Use classes 1 &amp; 2</b>						
<b>*'characteristic' means lower 5<sup>th</sup> percentile calculated according to EN 1058</b>							