

## DECLARATION OF PERFORMANCE

Reference number **DOP06REV0**

**SMARTPLY,  
Belview,  
Slieverue,  
Waterford,  
Ireland.**

Product Type	Intended Use	AVCP*	Notified Body Reference
OSB/4	Heavy duty load-bearing boards for use in humid conditions	2+	0050
*Assessment and verification of constancy of performance system according to Annex V of regulation (EU) No 305/2011			

### Declared Performance

Essential Characteristics	Performance										Harmonised technical specification
Thickness Range (mm)	>6 to 10		>10 to 18		>18 to 25		>25 to 32		>32 to 40		EN 13986:2004 +A1:2015
Angle to Major Axis	0	90	0	90	0	90	0	90	0	90	
Characteristic Strength (N/mm <sup>2</sup> )	24.5	13.0	23.0	12.2	21.0	11.4	NPD	NPD	NPD	NPD	
- Bending $f_m$	24.5	13.0	23.0	12.2	21.0	11.4	NPD	NPD	NPD	NPD	
- Compression $f_c$	18.1	14.3	17.6	14.0	17.0	13.7	NPD	NPD	NPD	NPD	
- Tension $f_t$	11.9	8.5	11.4	8.2	10.9	8.0	NPD	NPD	NPD	NPD	
- Panel Shear $f_v$	6.9		6.9		6.9		NPD		NPD		
- Planar Shear $f_r$	1.1		1.1		1.1		NPD		NPD		
Mean Stiffness (MOE) (N/mm <sup>2</sup> )	4300	3200	4300	3200	4300	3200	NPD	NPD	NPD	NPD	
- Tension $E_t$	4300	3200	4300	3200	4300	3200	NPD	NPD	NPD	NPD	
- Compression $E_c$	4300	3200	4300	3200	4300	3200	NPD	NPD	NPD	NPD	
- Bending $E_m$	6780	2680	6780	2680	6780	2680	NPD	NPD	NPD	NPD	
- Panel Shear $G_v$	1090		1090		1090		NPD		NPD		
- Planar Shear $G_r$	60		60		60		NPD		NPD		
<sup>1</sup> Reaction to Fire (excluding floorings)	<sup>1</sup> D-s2,d0		<sup>1</sup> D-s2,d0		D-s1,d0		D-s1,d0		D-s1,d0		
Reaction to Fire (floorings)	NPD		D <sub>FL</sub> -s1		D <sub>FL</sub> -s1		D <sub>FL</sub> -s1		D <sub>FL</sub> -s1		
Water Vapour Permeability $\mu$	NPD		180		NPD		NPD		NPD		
- Wet Cup	NPD		430		NPD		NPD		NPD		
- Dry Cup	NPD		430		NPD		NPD		NPD		
Release of Formaldehyde	E1		E1		E1		E1		E1		
Release (content) of Pentachlorophenol (PCP)	NPD		NPD		NPD		NPD		NPD		
Airborne Sound Insulation (surface mass) (R)	NPD		NPD		NPD		NPD		NPD		
Sound Absorption $\alpha$ (250 – 500 Hz)	0.10		0.10		0.10		0.10		0.10		
Sound Absorption $\alpha$ (1000 – 2000 Hz)	0.25		0.25		0.25		0.25		0.25		
Thermal Conductivity $\lambda$	0.13		0.13		0.13		0.13		0.13		

Essential Characteristics	Performance						Harmonise Technical specification
<b>Durability</b>							EN 13986:2004 +A1:2015
<b>Thickness Range (mm)</b>	<b>6 to 10</b>	<b>&gt;10 to &lt;18</b>	<b>18 to 25</b>	<b>&gt;25 to 32</b>	<b>&gt;32 to 40</b>		
<b>Internal Bond (N/mm<sup>2</sup>)</b>	0.50	0.45	0.40	0.35	0.30		
<b>Swelling in Thickness (%)</b>	12	12	12	12	12		
<b>Moisture Resistance - Internal Bond after Boil Test (N/mm<sup>2</sup>)</b>	NPD	NPD	NPD	NPD	NPD		
<b>Moisture Resistance - Internal Bond after Cyclic Test (N/mm<sup>2</sup>)</b>	NPD	NPD	NPD	NPD	NPD		
<b>Bending Strength after Cyclic Test – Major Axis (N/mm<sup>2</sup>)</b>	15	14	13	6	6		
<b>Mechanical (creep k<sub>def</sub>) Service Class 1</b>	1.50	1.50	1.50	1.50	1.50		
<b>Mechanical (creep k<sub>def</sub>) Service Class 2</b>	2.25	2.25	2.25	2.25	2.25		
<b>Thickness Range (mm)</b>	<b>&gt;6 to 40</b>						
<b>Load-Duration Class</b>	<b>Permanent Action</b>	<b>Long Term Action</b>	<b>Medium Term Action</b>	<b>Short Term Action</b>	<b>Instantaneous Action</b>		
<b>Mechanical (duration of load k<sub>mod</sub>) Service Class 1</b>	0.40	0.50	0.70	0.90	1.10		
<b>Mechanical (duration of load k<sub>mod</sub>) Service Class 2</b>	0.30	0.40	0.55	0.70	0.90		
<b>Biological</b>	Use Classes 1 & 2						
<b><sup>2</sup>T&amp;G Products</b>	<b>Spacing</b>	<b>12.5mm T&amp;G</b>	<b>15mm T&amp;G</b>	<b>18mm T&amp;G</b>	<b>22mm T&amp;G</b>	<b>24mm T&amp;G</b>	
<b><sup>3</sup>Characteristic Point load F<sub>max,k</sub> (N) (for floors and roofs)</b>	400mm	NPD	NPD	NPD	NPD	NPD	
	600mm	NPD	NPD	NPD	NPD	NPD	
<b>Point Load Mean Stiffness (N/mm) (for floors and roofs)</b>	400mm	NPD	NPD	NPD	NPD	NPD	
	600mm	NPD	NPD	NPD	NPD	NPD	
<b><sup>3</sup>Characteristic Point Load Serviceability F<sub>ser,k</sub> (N) (for floors and roofs)</b>	400mm	NPD	NPD	NPD	NPD	NPD	
	600mm	NPD	NPD	NPD	NPD	NPD	
<b>Soft Body Impact Resistance Floor/roofs</b>	400mm	NPD	NPD	NPD	NPD	NPD	
	600mm	NPD	NPD	NPD	NPD	NPD	
<b>Soft Body Impact Resistance Walls</b>	<b>Spacing</b>			<b>&gt; 9mm</b>			
	NPD			NPD			
	NPD			NPD			
<sup>1</sup> minimum thickness 9mm for thickness range >6 – 10mm & performance D-s1,d0 for 18mm within thickness range >10 to 18 <sup>2</sup> NPD for square edge products <sup>3</sup> characteristic means lower 5 <sup>th</sup> percentile calculated according to EN 1058							

The performance of the product identified is in conformity with the declared performance. This declaration of performance is issued under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:



09/08/2016

Frank Fogarty, Quality Assurance Specialist.

Waterford, Ireland. 9<sup>th</sup> August 2016.