

**DECLARATION OF PERFORMANCE**  
**SMARTPLY MAX**  
Reference Number: **UKCADOP01 REV0**

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

Product Type	Intended Use	AVCP*	UK Assessment Body
OSB/3	Internal use as structural components in humid conditions	2+	0836
*Assessment and verification of constancy of performance system according to Annex V of regulation (EU) No 305/2011			

**Declared Performance**

Essential Characteristics	Performance										Designated Standard
	>6 to 10		>10 to 18		>18 to 25		>25 to 32		>32 to 40		
Thickness Range (mm)	0	90	0	90	0	90	0	90	0	90	BS EN 13986:2004 +A1:2015
Angle to Major Axis (°)											
Characteristic Strength (N/mm <sup>2</sup> )							NPD	NPD	NPD	NPD	
- Bending $f_m$	18.0	9.0	16.4	8.2	14.8	7.4					
- Compression $f_c$	15.9	12.9	15.4	12.7	14.8	12.4	NPD	NPD	NPD	NPD	
- Tension $f_t$	9.9	7.2	9.4	7.0	9.0	6.8	NPD	NPD	NPD	NPD	
- Panel Shear $f_v$	6.8		6.8		6.8		NPD		NPD		
- Planar shear $f_r$	1.0		1.0		1.0		NPD		NPD		
Mean Stiffness (MOE) (N/mm <sup>2</sup> )							NPD	NPD	NPD	NPD	
- Tension $E_t$	3800	3000	3800	3000	3800	3000					
- Compression $E_c$	3800	3000	3800	3000	3800	3000	NPD	NPD	NPD	NPD	
- Bending $E_m$	4930	1980	4930	1980	4930	1980	NPD	NPD	NPD	NPD	
- Panel Shear $G_v$	1080		1080		1080		NPD		NPD		
- Planar Shear $G_r$	50		50		50		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		NPD		
- Wet Cup	150		150		150						
- Dry Cup	240		240		240						
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 $\lambda$	0.11		0.11		0.11		0.11		0.11		

Essential Characteristics	Performance						Designated Standard
<b>Durability</b>							BS 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>	0.34	0.32	0.30	0.29	0.26		
<b>Swelling in Thickness (%)</b>	15	15	15	15	15		
<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>	9	8	7	6	6		
<b>Mechanical (creep <math>k_{def}</math>) Service Class 1</b>	1.50	1.50	1.50	1.50	1.50		
<b>Mechanical (creep <math>k_{def}</math>) 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 <math>k_{mod}</math>) Service Class 1</b>	0.40	0.50	0.7	0.90	1.10		
<b>Mechanical (duration of load <math>k_{mod}</math>) 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 <math>F_{max,k}</math> (N) (for floors and roofs)</b>	400mm	3019	4815	5494	6709	7610	
	600mm	2766	3807	4712	6575	7272	
<b>Point Load Mean Stiffness (N/mm) (for floors and roofs)</b>	400mm	395	563	797	1161	1305	
	600mm	188	322	426	669	754	
<b><sup>3</sup>Characteristic Point Load Serviceability <math>F_{ser,k}</math> (N) (for floors and roofs)</b>	400mm	2113	3370	3846	4696	5327	
	600mm	1936	2665	3298	4603	5091	
<b>Soft Body Impact Resistance Floor/roofs</b>	400mm	Class I	Class I	Class I	Class I	Class I	
	600mm	Class II	Class I	Class I	Class I	Class I	
<b>Soft Body Impact Resistance Walls</b>	<b>Spacing</b>			<b>&gt; 9mm</b>			
	400mm			Class III			
	600mm			Class III			
<sup>1</sup> minimum thickness 9mm for range >6 – 10mm & performance D-s1,d0 for 18mm within range >10 to 18mm							
<sup>2</sup> NPD for square edge products							
<sup>3</sup> characteristic means lower 5 <sup>th</sup> percentile calculated according to EN 1058							

This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011 as it has effect in the United Kingdom, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:



Guillaume Coste, Structural Engineer. Waterford, Ireland. 15<sup>th</sup> of July 2021.