

**DECLARATION OF PERFORMANCE**

**SMARTPLY MAX DB**

Reference Number: **CEDOP12REV0**

**SMARTPLY Europe DAC,**

**Belview, Slieverue,**

**Waterford,**

**Ireland.**

Product Type	Intended Use	AVCP*	Notified Body Reference
OSB/3	Internal use as structural components 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
	>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	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> )											
- Bending $f_m$	NPD	NPD	16.4	8.2	14.8	7.4	NPD	NPD	NPD	NPD	
- Compression $f_c$	NPD	NPD	15.4	12.7	14.8	12.4	NPD	NPD	NPD	NPD	
- Tension $f_t$	NPD	NPD	9.4	7.0	9.0	6.8	NPD	NPD	NPD	NPD	
- Panel Shear $f_v$	NPD		6.8		6.8		NPD		NPD		
- Planar shear $f_r$	NPD		1.0		1.0		NPD		NPD		
Mean Stiffness (MOE) (N/mm <sup>2</sup> )											
- Tension $E_t$	NPD	NPD	3800	3000	3800	3000	NPD	NPD	NPD	NPD	
- Compression $E_c$	NPD	NPD	3800	3000	3800	3000	NPD	NPD	NPD	NPD	
- Bending $E_m$	NPD	NPD	4930	1980	4930	1980	NPD	NPD	NPD	NPD	
- Panel Shear $G_v$	NPD		1080		1080		NPD		NPD		
- Planar Shear $G_r$	NPD		50		50		NPD		NPD		
Reaction to Fire (excluding floorings)	NPD		NPD		NPD		NPD		NPD		
Reaction to Fire (floorings)	NPD		D <sub>FL</sub> -s1		NPD		NPD		NPD		
Water Vapour Permeability $\mu$	NPD		NPD		NPD		NPD		NPD		
Release of Formaldehyde	E1		E1		E1		E1		E1		
Release (content) of Pentachlorophenol (PCP)	NPD		NPD		NPD		NPD		NPD		
<sup>1</sup> Airborne Sound Insulation $R_w$ (Acc. To EN ISO 717-1)	NPD		40 dB		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 $\lambda$ (W/m.K)	0.11		0.11		0.11		0.11		0.11		
Air permeability (m <sup>3</sup> /m <sup>2</sup> .h) at 50 Pa	NPD		NPD		NPD		NPD		NPD		

Essential Characteristics	Performance						Harmonised 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>	NPD	0.32	0.30	NPD	NPD		
<b>Swelling in Thickness (%)</b>	NPD	15	15	NPD	NPD		
<b>Bending Strength after Cyclic Test – Major Axis (N/mm<sup>2</sup>)</b>	NPD	8	7	NPD	NPD		
<b>Deformation Factor <math>k_{def}</math> Service Class 1</b>	NPD	1.50	1.50	NPD	NPD		
<b>Deformation factor <math>k_{def}</math> Service Class 2</b>	NPD	2.25	2.25	NPD	NPD		
<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>Modification factor <math>k_{mod}</math> Service Class 1</b>	0.40	0.50	0.7	0.90	1.10		
<b>Modification factor <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	NPD	NPD	5494	NPD	NPD	
	600mm	NPD	NPD	4712	NPD	NPD	
<b>Point Load Mean Stiffness (N/mm) (for floors and roofs)</b>	400mm	NPD	NPD	797	NPD	NPD	
	600mm	NPD	NPD	426	NPD	NPD	
<b><sup>2</sup>Characteristic Point Load Serviceability <math>F_{ser,k}</math> (N) (for floors and roofs)</b>	400mm	NPD	NPD	3846	NPD	NPD	
	600mm	NPD	NPD	3298	NPD	NPD	
<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> Airborne sound insulation $R_w = 40dB$ for floor systems including MAX DB 18mm, min. 220mm OSB-web i-joists, metal web joists or solid timber joists at 600mm centres, 100mm mineral wool insulation(8-36kg/m <sup>3</sup> ) and 15mm plasterboard ( $\geq 10.1$ kg/m <sup>2</sup> ). <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:



Guillaume Coste. Technical Services Manager. Waterford, Ireland 16/07/24.