

## DECLARATION OF PERFORMANCE

### SMARTPLY MAX FR B

Reference Number: **DOP09REV0**

**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	1	1812
*Assessment and verification of constancy of performance system according to Annex V of regulation (EU) No 305/2011			

**1812-CPR-1737**

#### Declared performance

Essential Characteristics	Performance						Harmonised technical specification
<b>Thickness</b>	<b>11mm</b>		<b>15mm</b>		<b>18 mm</b>		EN 13986:2004 +A1:2015
<b>Angle to Major Axis</b>	<b>0°</b>	<b>90°</b>	<b>0°</b>	<b>90°</b>	<b>0°</b>	<b>90°</b>	
<b>Characteristic Strength (N/mm<sup>2</sup>)</b>							
- <b>Bending <math>f_m</math></b>	16.4	8.2	16.4	8.2	14.8	7.4	
- <b>Compression <math>f_c</math></b>	15.4	12.7	15.4	12.7	14.8	12.4	
- <b>Tension <math>f_t</math></b>	9.4	7.0	9.4	7.0	9.0	6.8	
- <b>Panel Shear <math>f_v</math></b>	6.8		6.8		6.8		
- <b>Planar shear <math>f_r</math></b>	1.0		1.0		1.0		
<b>Mean Stiffness (N/mm<sup>2</sup>)</b>							
- <b>Bending <math>E_m</math></b>	4930	1980	4930	1980	4930	1980	
- <b>Compression <math>E_c</math></b>	3800	3000	3800	3000	3800	3000	
- <b>Tension <math>E_t</math></b>	3800	3000	3800	3000	3800	3000	
- <b>Panel Shear <math>G_v</math></b>	1080		1080		1080		
- <b>Planar Shear <math>G_r</math></b>	50		50		50		
<b><sup>1</sup>Reaction to Fire Excluding floorings</b>	B-s2, d0		B-s2, d0		B-s2, d0		
<b><sup>1</sup>Reaction to Fire Floorings</b>	B <sub>fl</sub> -s1		B <sub>fl</sub> -s1		B <sub>fl</sub> -s1		
<b>Water Vapour Permeability <math>\mu</math></b>	NPD		NPD		NPD		
<b>Release of Formaldehyde</b>	E1		E1		E1		
<b>Release (content) of Pentachlorophenol (PCP)</b>	NPD		NPD		NPD		
<b>Airborne Sound Insulation (surface mass) (R)</b>	NPD		NPD		NPD		
<b>Sound Absorption <math>\alpha</math> (250 – 500 Hz)</b>	0.1		0.1		0.1		
<b>Sound Absorption <math>\alpha</math> (1000 – 2000 Hz)</b>	0.25		0.25		0.25		
<b>Thermal Conductivity <math>\lambda</math></b>	0.13		0.13		0.13		

Essential Characteristics	Performance					Harmonised Technical Specification	
<b>Durability</b>						EN 13986:2004 +A1:2015	
<b>Thickness</b>	<b>11mm</b>	<b>15mm</b>			<b>18mm</b>		
<b>Internal Bond (N/mm<sup>2</sup>)</b>	0.32	0.32			0.30		
<b>Swelling in Thickness (%)</b>	15	15			15		
<b>Moisture Resistance - Internal Bond after Boil Test (N/mm<sup>2</sup>)</b>	NPD	NPD			NPD		
<b>Moisture Resistance - Internal Bond after Cyclic Test (N/mm<sup>2</sup>)</b>	NPD	NPD			NPD		
<b>Moisture Resistance - Bending Strength after Cyclic Test – Major Axis (N/mm<sup>2</sup>)</b>	8.0	8.0			7.0		
<b>Mechanical (creep <math>k_{def}</math>) Service Class 1</b>	1.50						
<b>Mechanical (creep <math>k_{def}</math>) Service Class 2</b>	2.25						
<b>Thickness Range (mm)</b>	>6 to 40						
<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	0.70	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>T&amp;G Products (for floors and roofs)</b>	Spacing (mm)	15mm		18mm			
<b>Characteristic Point Load <math>F_{max, k}</math> (N)</b>	400	3330		6268			
	600	2658		6120			
<b>Point Load Mean Stiffness <math>R_{mean}</math> (N/mm)</b>	400	432		716			
	600	299		515			
<b>Characteristic Point Load Serviceability <math>F_{ser, k}</math> (N)</b>	400	2331		4388			
	600	1861		4284			
<b>Soft Body Impact Resistance Floor/Roofs Walls</b>	NPD	NPD		NPD			
<sup>1</sup> See Certificate of Constancy of Performance for details on field of application.							

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:



07/08/2020

Frank Fogarty, Quality Assurance Specialist.

Waterford, Ireland. 07/08/2020