SMARTPLY®
DEFINING THE STANDARD OF OSB

DECLARATION OF PERFORMANCE
SMARTPLY PROPASSIV
Reference Number **UKCADOP05 REV0**

SMARTPLY,
Belview, Slieverue,
Waterford,
Ireland.

Product Type	Intended Use	AVCP*	UK
OSB/3 PROPASSIV	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
Thickness Range (mm)	**>6 to 10**		**>10 to 18 (12.5mm)**		**>18 to 25**		**>25 to 32**		**>32 to 40**		BS EN 13986:2004 +A1:2015
Angle to Major Axis	**0**	**90**	**0**	**90**	**0**	**90**	**0**	**90**	**0**	**90**	
Characteristic Strength (N/mm²) - **Bending f_m**	NPD	NPD	16.4	8.2	NPD	NPD	NPD	NPD	NPD	NPD	
- **Compression f_c**	NPD	NPD	15.4	12.7	NPD	NPD	NPD	NPD	NPD	NPD	
- **Tension f_t**	NPD	NPD	9.4	7.0	NPD	NPD	NPD	NPD	NPD	NPD	
- **Panel Shear f_v**	NPD		6.8		NPD		NPD		NPD		
- **Planar shear f_r**	NPD		1.0		NPD		NPD		NPD		
Mean Stiffness (MOE) (N/mm²) - **Tension E_t**	NPD	NPD	3800	3000	NPD	NPD	NPD	NPD	NPD	NPD	
- **Compression E_c**	NPD	NPD	3800	3000	NPD	NPD	NPD	NPD	NPD	NPD	
- **Bending E_m**	NPD	NPD	4930	1980	NPD	NPD	NPD	NPD	NPD	NPD	
- **Panel Shear G_v**	NPD		1080		NPD		NPD		NPD		
- **Planar Shear G_r**	NPD		50		NPD		NPD		NPD		
Reaction to Fire (Excluding Floorings)	NPD		D-s1,d0		NPD		NPD		NPD		
Reaction to Fire (Floorings)	NPD		NPD		NPD		NPD		NPD		
Water Vapour Permeability μ - **Wet cup** - **Dry cup**	NPD		420 750		NPD		NPD		NPD		
Release of Formaldehyde	NPD		E1		NPD		NPD		NPD		
Release (content) of Pentachlorophenol (PCP)	NPD		NPD		NPD		NPD		NPD		
Airborne Sound Insulation (surface mass) (R)	NPD		NPD		NPD		NPD		NPD		
Sound Absorption α (250 – 500 Hz)	NPD		0.10		NPD		NPD		NPD		
Sound Absorption α (1000 – 2000 Hz)	NPD		0.25		NPD		NPD		NPD		
Thermal Conductivity λ	NPD		0.11		NPD		NPD		NPD		

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Essential Characteristics	Performance						Harmonised technical specification
Durability							BS EN 13986:2004 +A1:2015
Thickness Range (mm)	**6 to 10**	**>10 to <18 (12.5mm)**	**18 to 25**	**>25 to 32**	**>32 to 40**		
Internal Bond (N/mm²)	NPD	0.32	NPD	NPD	NPD		
Swelling in Thickness (%)	NPD	15	NPD	NPD	NPD		
Moisture Resistance - Internal Bond after Boil Test (N/mm²)	NPD	NPD	NPD	NPD	NPD		
Moisture Resistance - Internal Bond after Cyclic Test (N/mm²)	NPD	NPD	NPD	NPD	NPD		
Bending Strength after Cyclic Test – Major Axis (N/mm²)	NPD	8	NPD	NPD	NPD		
Mechanical (creep k_{def}) **Service Class 1**	NPD	1.50	NPD	NPD	NPD		
Mechanical (creep k_{def}) **Service Class 2**	NPD	2.25	NPD	NPD	NPD		
Thickness Range (mm)	**>6 to 40**						
Load-Duration Class	**Permanent Action**	**Long Term Action**	**Medium Term Action**	**Short Term Action**	**Instantaneous Action**		
Mechanical (duration of load k_{mod}) **Service Class 1**	0.40	0.50	0.7	0.90	1.10		
Mechanical (duration of load k_{mod}) **Service Class 2**	0.30	0.40	0.55	0.70	0.90		
Biological	Use classes 1 & 2						
T&G Products	**Spacing**	**12.5mm T&G**	**15mm T&G**	**18mm T&G**	**22mm T&G**	**24mm T&G**	
Characteristic Point Load $F_{max,k}$ (N) *(for floors and roofs)*	400mm	N/A	N/A	N/A	N/A	N/A	
	600mm	N/A	N/A	N/A	N/A	N/A	
Point Load Mean Stiffness (N/mm) *(for floors and roofs)*	400mm	N/A	N/A	N/A	N/A	N/A	
	600mm	N/A	N/A	N/A	N/A	N/A	
Characteristic Point Load Serviceability $F_{ser,k}$ (N) *(for floors and roofs)*	400mm	N/A	N/A	N/A	N/A	N/A	
	600mm	N/A	N/A	N/A	N/A	N/A	
Soft Body Impact Resistance Floor/Roofs	400mm	N/A	N/A	N/A	N/A	N/A	
	600mm	N/A	N/A	N/A	N/A	N/A	
Soft Body Impact Resistance Walls	**Spacing**			**> 9mm**			
	400mm			Class III			
	600mm			Class III			
Air Permeability	<0.005 $m^3/(h.m^2)$ to EN 12114						
Racking Strength - $F_{Rd,max,k}$ (N) - R_{mean} (N/mm)	EN 594:2011 8800 650						

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, 15th July 2021.