

DECLARATION OF PERFORMANCE
SMARTPLY AIRTIGHT
Reference Number **DOP05REV3**

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 (12.5mm)		>18 to 25		>25 to 32		>32 to 40		
Thickness Range (mm)											EN 13986:2004 +A1:2015
Angle to Major Axis	0	90	0	90	0	90	0	90	0	90	
Characteristic Strength (N/mm ²)	NPD	NPD	16.4	8.2	NPD	NPD	NPD	NPD	NPD	NPD	
- Bending f_m	NPD	NPD	15.4	12.7	NPD	NPD	NPD	NPD	NPD	NPD	
- Compression f_c	NPD	NPD	9.4	7.0	NPD	NPD	NPD	NPD	NPD	NPD	
- Tension f_t	NPD	NPD	6.8	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
- Panel Shear f_v	NPD	NPD	1.0	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
- Planar shear f_r	NPD	NPD	3800	3000	NPD	NPD	NPD	NPD	NPD	NPD	
Mean Stiffness (MOE) (N/mm ²)	NPD	NPD	3800	3000	NPD	NPD	NPD	NPD	NPD	NPD	
- Tension E_t	NPD	NPD	3800	3000	NPD	NPD	NPD	NPD	NPD	NPD	
- Compression E_c	NPD	NPD	4930	1980	NPD	NPD	NPD	NPD	NPD	NPD	
- Bending E_m	NPD	NPD	1080	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
- Panel Shear G_v	NPD	NPD	50	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
- Planar Shear G_r	NPD	NPD	D-s2,d0	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
¹ Reaction to Fire (Excluding Floorings)	NPD	NPD	D _{FL} -s1	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Reaction to Fire (Floorings)	NPD	NPD	E1	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Water Vapour Permeability μ	NPD	NPD	420	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
- Wet cup	NPD	NPD	750	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
- Dry cup	NPD	NPD	E1	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Release of Formaldehyde	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Release (content) of Pentachlorophenol (PCP)	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Airborne Sound Insulation (surface mass) (R)	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Sound Absorption α (250 – 500 Hz)	NPD	NPD	0.10	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Sound Absorption α (1000 – 2000 Hz)	NPD	NPD	0.25	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Thermal Conductivity λ	NPD	NPD	0.11	NPD	NPD	NPD	NPD	NPD	NPD	NPD	

Essential Characteristics	Performance						Harmonised technical specification
Durability							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						
²T&G Products	Spacing	12.5mm T&G	15mm T&G	18mm T&G	22mm T&G	24mm T&G	
³Characteristic 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	
³Characteristic 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	EN 594:2011						
- F _{Rd,max,k} (N)	8800						
- R _{mean} (N/mm)	650						
¹ Minimum thickness 9mm for thickness range >6 – 10mm & performance D-s1,d0 for 18mm within thickness range >10 to 18							
² NPD for square edge products							
³ Characteristic means lower 5th 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. 10th January 2024