

DECLARATION OF PERFORMANCE
SMARTPLY ULTIMA
Reference number **UKCADOP06 REV0**

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

Product Type	Intended Use	AVCP*	UK Assessment Body
OSB/4	Heavy duty load-bearing boards for use 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 (°)	0	90	0	90	0	90	0	90	0	90	
Characteristic Strength (N/mm ²)											
- Bending f_m	24.5	13.0	23.0	12.2	21.0	11.4	NPD	NPD	NPD	NPD	
- Compression f_c	18.1	14.3	17.6	14.0	17.0	13.7	NPD	NPD	NPD	NPD	
- Tension f_t	11.9	8.5	11.4	8.2	10.9	8.0	NPD	NPD	NPD	NPD	
- Panel Shear f_v	6.9		6.9		6.9		NPD		NPD		
- Planar Shear f_r	1.1		1.1		1.1		NPD		NPD		
Mean Stiffness (MOE) (N/mm ²)											
- Tension E_t	4300	3200	4300	3200	4300	3200	NPD	NPD	NPD	NPD	
- Compression E_c	4300	3200	4300	3200	4300	3200	NPD	NPD	NPD	NPD	
- Bending E_m	6780	2680	6780	2680	6780	2680	NPD	NPD	NPD	NPD	
- Panel Shear G_v	1090		1090		1090		NPD		NPD		
- Planar Shear G_r	60		60		60		NPD		NPD		
¹ Reaction to Fire (excluding floorings)	¹ D-s2,d0		¹ D-s2,d0		D-s1,d0		D-s1,d0		D-s1,d0		
Reaction to Fire (floorings)	NPD		D _{FL} -s1		D _{FL} -s1		D _{FL} -s1		D _{FL} -s1		
Water Vapour Permeability μ											
- Wet Cup	NPD		180		NPD		NPD		NPD		
- Dry Cup	NPD		430		NPD		NPD		NPD		
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 α (250 – 500 Hz)	0.10		0.10		0.10		0.10		0.10		
Sound Absorption α (1000 – 2000 Hz)	0.25		0.25		0.25		0.25		0.25		
Thermal Conductivity λ	0.13		0.13		0.13		0.13		0.13		

Essential Characteristics	Performance						Designated Standard
Durability							BS EN 13986:2004 +A1:2015
Thickness Range (mm)	6 to 10	>10 to <18	18 to 25	>25 to 32	>32 to 40		
Internal Bond (N/mm²)	0.50	0.45	0.40	0.35	0.30		
Swelling in Thickness (%)	12	12	12	12	12		
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)	15	14	13	6	6		
Mechanical (creep k_{def}) Service Class 1	1.50	1.50	1.50	1.50	1.50		
Mechanical (creep k_{def}) Service Class 2	2.25	2.25	2.25	2.25	2.25		
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	0.70	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	NPD	NPD	NPD	NPD	NPD	
	600mm	NPD	NPD	NPD	NPD	NPD	
Point Load Mean Stiffness (N/mm) (for floors and roofs)	400mm	NPD	NPD	NPD	NPD	NPD	
	600mm	NPD	NPD	NPD	NPD	NPD	
³Characteristic Point Load Serviceability $F_{ser,k}$ (N) (for floors and roofs)	400mm	NPD	NPD	NPD	NPD	NPD	
	600mm	NPD	NPD	NPD	NPD	NPD	
Soft Body Impact Resistance Floor/roofs	400mm	NPD	NPD	NPD	NPD	NPD	
	600mm	NPD	NPD	NPD	NPD	NPD	
Soft Body Impact Resistance Walls	Spacing			> 9mm			
	NPD			NPD			
	NPD			NPD			
¹ minimum thickness 9mm for range >6 – 10mm & performance D-s1,d0 for 18mm within range >10 to 18 ² NPD for square edge products ³ characteristic means lower 5 th 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, 15th July 2021.