

TEBOPIN FLAM

1. **Identification code:** Plywood 100% Maritime Pine - EN 636-3 S
 2. **Type number:** 100% Maritime Pine for exterior conditions
 3. **Intended use:** Structural exterior
 4. **Manufacturer:**
SIB THEBAULT SAS - 20 rue de Saunière - 79190 Sauzé-Vaussais - France
THEBAULT PLYLAND SAS - 6, piste 36A JP Darrigade - 40210 Solférino - France
 5. **Authorized representative:** not applicable
 6. **System of assessment and verification of constancy of performance:** 1
 7. **Certificate of conformity of the factory production control issued by:** FCBA (0380)
 8. **European technical assessment:** not applicable
 9. **Declared performances:** harmonized technical specification EN 13986:2004+A1:2015
- Essential characteristics and performances**

Thickness (mm)		10	12	15	18	21	25	30	35	40
Number of plies		5	5	5	7	7	9	11	13	15
RESISTANCE (N / mm ²)										
Tension f _t	//	12,5	15,2	15,7	17,7	15,1	13,2	11,2	13,4	13,3
	└┘	15,2	10,3	12	10	12,6	13,9	12,4	14,3	14,4
Compression f _c	//	21,4	26	26,9	30,4	26	22,6	19,2	22,9	22,8
	└┘	26,1	17,7	20,6	17,1	21,5	23,8	21,2	24,6	24,7
Bending f _m	//	20,3	23,2	24,4	23	20,4	14,9	15,5	15,9	16,9
	└┘	17,8	10,2	13,7	12,1	15,1	15,5	12,7	15,2	15,1
Planar shear f _r	//	2,1	2,1	0,5	0,5	0,5	0,5	2,1	0,5	0,5
	└┘	2,1	0,5	0,5	2,1	0,5	0,5	0,5	0,5	0,5
Panel shear f _v	//	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9
	└┘	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9
MODULUS OF ELASTICITY (N / mm ²)										
Tension E _t	//	6827	5619	7052	7968	6802	5936	5908	5963	6002
	└┘	5623	4627	5398	4482	5648	6250	6542	6487	6448
Compression E _c	//	6827	5619	7052	7968	6802	5936	5908	5963	6002
	└┘	5623	4627	5398	4482	5648	6514	6542	6487	6448
Bending E _m	//	8723	7596	9152	9220	8188	6444	7500	7093	6824
	└┘	3727	2078	3298	3230	4262	4815	4950	5357	5626
Planar shear G _r	//	95	95	95	95	95	95	95	95	95
	└┘	95	95	95	95	95	95	95	95	95
Panel shear G _v	//	548	548	548	548	548	548	548	548	548
	└┘	548	548	548	548	548	548	548	548	548

FIRE REACTION CLASSIFICATION

IAW EN13501-1	<p>B-s1, d0 (european classification report No FCBA 22/RC-41, dated 06/12/2022)</p> <p>The classification is valid for the following end use applications:</p> <ul style="list-style-type: none"> • Mounting with mechanical fixation (nails, screws, etc.) on D-s2,d0 wood structure or better • For ≥ 7 to < 15 mm-thick panels: on a class A2-s1,d0 substrate or better with minimal density of 525 kg/m³ and minimal thickness of 12 mm standard plaster board type) • For ≥ 15 to < 40 mm-thick panels: without air gap or with closed or open air gap of any thickness between the product and the substrate; on a class A2-s1,d0 substrate or better with minimal density of 525 kg/m³ and minimal thickness of 12 mm (standard plaster board type) • For ≥ 40 à ≤ 43 mm-thick panels: without air gap or with closed or open air gap of any thickness between the product and the substrate; on a class D-s2,d0 substrate or better with minimal density of 338 kg/m³ and minimal thickness of 8 mm (standard plywood type), with or without protective rain or vapour screen rated E or better • For ≥ 12 to ≤ 43 mm-thick panels: with air gap, filled with 40 mm-thick biobased insulation material rated Euroclass E or better with a density of 55 kg/m³ (+/- 10 %); on a class D-s2,d0 substrate or better with minimal density of 338 kg/m³ and minimal thickness of 8 mm (standard plywood type), with or without protective rain screen rated E or better • With or without vertical or horizontal joints
	<p>Flooring application correspondence : Dfl-s1</p>

THERMAL CONDUCTIVITY (W/m.K)

λ = 0,13

MEAN STIFFNESS IN BENDING UNDER CONCENTRATED LOAD R_{mean} (N / MM)										
e (mm)	Span l (mm)									
	300	400	500	600	700	800	900	1000	1100	1200
12	258	167	119	90	71	58	49	41	36	31
15	807	521	371	281	223	182	152	129	112	98
18	1426	921	656	497	393	321	269	229	198	173
21	1650	1066	759	575	455	372	311	265	229	201
22	1026	662	472	358	283	231	193	165	142	125
24	2316	1496	1065	808	639	522	436	371	321	282
30	3913	2527	1800	1364	1079	881	737	628	543	476
35	5488	3544	2525	1914	1514	1236	1033	880	762	667
40	7542	4870	3469	2630	2080	1698	1420	1210	1047	917

ULTIMATE CHARACTERISTIC STRENGTH UNDER CONCENTRATED LOAD - $F_{max,k}$ (kN)										
e (mm)	Span l (mm)									
	300	400	500	600	700	800	900	1000	1100	1200
12	4,58	3,76	2,94	2,11						
15	5,98	5,22	4,46	3,70	2,94	2,17	1,41			
18	7,38	6,68	5,98	5,28	4,58	3,88	3,18	2,48	1,78	
21	8,78	8,14	7,50	6,86	6,22	5,59	4,95	4,31	3,67	3,03
22	9,25	8,63	8,01	7,39	6,77	6,15	5,54	4,92	4,30	3,68
24	10,18	9,60	9,02	8,45	7,87	7,29	6,71	6,14	5,56	4,98
30	12,98	12,52	12,07	11,61	11,16	10,70	10,25	9,79	9,34	8,89
35	15,31	14,96	14,60	14,25	13,90	13,55	13,19	12,84	12,49	12,14
40	17,64	17,39	17,14	16,89	16,64	16,39	16,14	15,89	15,64	15,39

SERVICEABILITY CHARACTERISTIC STRENGTH UNDER CONCENTRATED LOAD - $F_{ser,k}$ (kN)										
e (mm)	Span l (mm)									
	300	400	500	600	700	800	900	1000	1100	1200
12	3,21	2,63	2,06	1,48	0,90					
15	4,19	3,65	3,12	2,59	2,05	1,52	0,99			
18	5,17	4,68	4,19	3,70	3,21	2,72	2,23	1,74	1,25	
21	6,15	5,70	5,25	4,80	4,36	3,91	3,46	3,02	2,57	2,12
22	6,47	6,04	5,61	5,17	4,74	4,31	3,88	3,44	3,01	2,58
24	7,12	6,72	6,32	5,91	5,51	5,10	4,70	4,30	3,89	3,49
30	9,08	8,77	8,45	8,13	7,81	7,49	7,17	6,86	6,54	6,22
35	10,72	10,47	10,22	9,98	9,73	9,48	9,24	8,99	8,74	8,50
40	12,35	12,17	12,00	11,82	11,65	11,47	11,30	11,12	10,95	10,77

RACKING RESISTANCE (WALL SHEATHING ON STUDS)	NPD To obtain the values by mean of calculation, use EN 1195-1-1 with a density of 540 (kg/m ³)
IMPACT RESISTANCE	NPD In accordance with the requirements of EN 12871 in impact resistance

WATER VAPOUR PERMEABILITY	μ Wet cup	μ Dry cup
	44	187

RELEASE OF FORMALDEHYDE	$\leq 0,062$ mg/m ³ , 1/2 E1 IAW EN 717-1
-------------------------	--

CONTENT OF PENTACHLOROPHENOL	PCP < 5 ppm
------------------------------	-------------

AIRBORNE SOUND ABSORPTION	NPD The sound transmission loss R of a single wood-based panel, measured in dB, is related the mean surface mass mA en kg/m ² according to the following equation (which is only valid for the frequency range of 1 kHz to 3 kHz and at a surface mass > 5 kg/m ²): R = 13 x lg (mA) + 14
---------------------------	---

SOUND ABSORPTION (COEFFICIENT)	Frequency range 250 Hz to 500 Hz	Frequency range 1000 Hz to 2000 Hz
	0,10	0,30
EMBEDMENT STRENGTH	NPD To obtain the values by mean of calculation, use EN 1195-1-1 with a density of 540 kg/m ³	
AIR PERMEABILITY (FLOW)	0,0 m ³ /(h.m ²)	
BONDING	Class 3 (EN 636-3) according to EN 314-2	

MODIFICATION FACTOR k_{mod}	Service class	Duration of load				
		Permanent	Long	Medium	Short	Instantaneous
	1 and 2	0,60	0,70	0,80	0,90	1,10
	3	0,50	0,55	0,65	0,70	0,90
DEFORMATION FACTOR k_{def}	Service class					
	1	2	3			
	0,80	1,00	2,50			
BIOLOGICAL DURABILITY - USE CLASS	3					

10. **Performance of the product:**
 The performance of the product identified in points 1 and 2 is in conformity with the declared performance of point 7.
 This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed on behalf of the manufacturer by :

Antoine THEBAULT, President
 Issued in Magné - 18/03/24