

## TEBOPIN III TEBOPIN CONTREVENTEMENT TEBOWALL

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:** 2+
  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)		7	9	9,5	10	12	15	18	21	24	25	27	30	35	40	45
Number of plies		3	3	5	5	5	5	7	7	9	9	9	10	13	15	15
<b>RESISTANCE (N / mm<sup>2</sup>)</b>																
Tension $f_t$	//	15,9	18,5	16,6	14	16,6	16,6	18,4	15,8	11,8	13,9	15,4	11,4	11,5	11,5	14,8
	└┘	11,8	9,2	11,1	13,7	9,3	11,1	9,3	11,9	11,7	13,8	12,3	12,1	12	12,1	12,9
Compression $f_c$	//	27,3	31,7	28,5	23,9	28,5	28,5	31,5	27,1	20,3	23,8	26,4	19,6	19,8	19,7	25,3
	└┘	20,2	15,8	19	23,6	16	19	16	20,4	20,1	22,7	21,1	20,8	20,6	20,7	22,2
Bending $f_m$	//	31	32,4	26,6	23,8	26,4	26,4	24,8	23,9	17,7	17,2	20,3	16,3	14,1	15	20,2
	└┘	6,1	3,7	7	14,6	8,2	11,6	10,6	9,7	11,9	14	13,6	12,2	12,5	12,4	13,4
Planar shear $f_r$	//	2,1	0,5	2,1	2,1	0,5	0,5	0,5	2,1	0,5	2,1	0,5	2,1	0,5	0,5	2,1
	└┘	0,5	0,5	2,1	2,1	0,5	0,5	2,1	2,1	0,5	2,1	0,5	2,1	0,5	0,5	2,1
Panel shear $f_v$	//	5,9	5,9	7,9	5,9	5,9	5,9	5,9	7,9	5,9	7,9	5,9	7,9	5,9	5,9	7,9
	└┘	5,9	5,9	7,9	5,9	5,9	5,9	5,9	7,9	5,9	7,9	5,9	7,9	5,9	5,9	7,9
<b>MODULUS OF ELASTICITY (N / mm<sup>2</sup>)</b>																
Tension $E_t$	//	7163	8300	7470	7470	6275	7470	8256	7114	6250	6250	6917	6039	6071	6093	6640
	└┘	5287	4150	4980	4980	4183	4980	4194	5336	5961	5961	5533	6411	6379	6357	5810
Compression $E_c$	//	7163	8300	7470	7470	6275	7470	8256	7114	6250	6250	6917	6039	6071	6093	6640
	└┘	5287	4150	4980	4980	4183	4980	4194	5336	5961	6200	5533	6411	6379	6357	5810
Bending $E_m$	//	11497	11989	9860	9860	8864	9860	9802	8857	8298	7241	8283	7790	7354	7059	7466
	└┘	953	461	2590	2590	1535	2590	2648	3593	4152	4152	4167	4660	5096	5391	4984
Planar shear $G_r$	//	95	95	95	95	95	95	95	166	95	95	95	95	95	95	95
	└┘	95	95	95	95	95	95	95	127	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	548	548	548	548	548	548	548	548	548	548	548	548

REACTION TO FIRE*	End use condition	Minimum thickness	Class excluding floorings	Class floorings	
	Without an air gap behind the panel	9 mm	D-s2,d0	Dfl-s1	
	With a closed or an open air gap not more than 22 mm behind the wood based panel	9 mm	D-s2,d2	-	
	With a closed air gap behind the wood based panel	15 mm	D-s2,d1	Dfl-s1	
	With an open air gap behind the wood based panel	18 mm	D-s2,d0	Dfl-s1	
Any		3 mm	E	Efl	
THERMAL CONDUCTIVITY (W/m.K)		$\lambda = 0,13$			

\* In reference to table 8 of EN 13986 - 2004+A1:2015

MEAN STIFFNESS IN BENDING UNDER CONCENTRATED LOAD  $R_{mean}$  (N / MM) - IAW EN 12871

T (mm)	Span l (mm)								
	400	500	600	700Z	800	900	1000	1100	1200
12	378	310	242	173	104	60	55	54	45
15	543	455	372	268	162	98	74	78	69
18	814	691	561	429	288	210	184	171	129
21	1124	993	831	600	406	328	286	231	179
22	1178	1040	871	629	425	344	300	242	187
24	1285	1135	950	686	464	375	327	264	204
27	1756	1464	1132	829	621	505	420	348	270
30	1951	1627	1258	921	690	561	467	387	300

ULTIMATE CHARACTERISTIC STRENGTH UNDER CONCENTRATED LOAD -  $F_{max,k}$  (kN) - IAW EN 12871

T (mm)	Span l (mm)								
	400	500	600	700	800	900	1000	1100	1200
12	2.29	2.18	2.07	1.96	1.84	1.79	1.74	1.69	1.64
15	3.13	3.02	2.88	2.66	2.45	2.39	2.34	2.28	2.21
18	4.35	4.13	3.91	3.69	3.32	3.26	3.19	3.13	3.01
21	5.36	5.15	4.94	4.46	3.97	3.90	3.84	3.69	3.52
22	5.61	5.39	5.17	4.67	4.16	4.09	4.02	3.87	3.69
24	6.12	5.88	5.64	5.09	4.54	4.46	4.39	4.22	4.03
27	7.58	7.07	6.56	6.05	5.54	5.36	5.18	5.00	4.82
30	8.42	7.86	7.29	6.72	6.16	5.96	5.76	5.56	5.36

SERVICEABILITY CHARACTERISTIC STRENGTH UNDER CONCENTRATED LOAD -  $F_{ser,k}$  (kN) - IAW EN 12871

T (mm)	Span l (mm)								
	400	500	600	700	800	900	1000	1100	1200
12	1.61	1.58	1.55	1.53	1.5	1.45	1.40	1.35	1.31
15	2.15	2.12	2.09	2.03	1.97	1.93	1.88	1.85	1.82
18	3.01	2.95	2.89	2.83	2.66	2.63	2.61	2.58	2.52
21	3.80	3.74	3.68	3.42	3.15	3.12	3.09	3.03	2.94
22	3.98	3.92	3.86	3.58	3.30	3.27	3.24	3.17	3.08
24	4.34	4.28	4.21	3.91	3.60	3.57	3.53	3.46	3.36
27	5.5	5.22	4.93	4.64	4.36	4.27	4.19	4.10	4.01
30	6.11	5.80	5.48	5.16	4.84	4.74	4.66	4.56	4.46

RACKING RESISTANCE  
(WALL SHEATHING ON STUDS)

IAW EN 12871 :  
To obtain the values by mean of calculation, use EN 1195-1-1 with a density of 540 (kg/m<sup>3</sup>)

IMPACT RESISTANCE

In conformity with the requirements of EN 12871 in impact resistance

WATER VAPOUR PERMEABILITY

$\mu$  Wet cup

$\mu$  Dry cup

44

187

RELEASE OF FORMALDEHYDE

$\leq 0,062$  mg/m<sup>3</sup>, 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<sup>2</sup> 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<sup>2</sup>):  $R = 13 \times \lg (mA) + 14$

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 <sup>3</sup>	
AIR PERMEABILITY (FLOW)	0,0 m <sup>3</sup> /(h.m <sup>2</sup> )	
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