

# TEBO SILVER FLOOR

FT TEBO SILVER FLOOR - REF 26-VI-GB - Cancels and supersedes any previous versions



TEBO SILVER FLOOR II/III is a tongue-and-groove flooring plywood panel designed for use in traditional construction and timber frame buildings. It is ideally suited for structural flooring applications.

TEBO SILVER FLOOR II/III is available in a variety of standard sizes and thicknesses.



## DESCRIPTION

**Base board:** Silver Fir throughout Plywood (*Abies alba*)

**Faces** (IAW EN 635-3): II / III

| Face side II                             | Reverse side III  |
|------------------------------------------|-------------------|
|                                          |                   |
| With sound or synthetically filled knots | With open defects |

**Finishing:** sanded 2 sides

**Edge machining:** with tongue & groove

**Average density** (IAW EN 323): 510 kg/m<sup>3</sup> (+/- 10%)

**Bonding** (IAW EN 314-2): class 3 / IAW DIN 68705-3 : BFU 100

**Service** (IAW EN 636): class 2 (humid conditions) · Flooring and roofing IAW EN 12871

**Formaldehyde release classification** (IAW EN 717-1): E0,5 (≤ 0,062 mg/m<sup>3</sup>)

**Content of Pentachlorophenol** (IAW EN 13986): PCP ≈ 0 ppm

## SIZES, NUMBER OF PLIES & PACKAGING

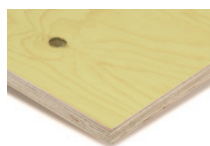
| Thicknesses (mm) | Number of plies | Sizes (mm)               | Packing |        |
|------------------|-----------------|--------------------------|---------|--------|
|                  |                 |                          | 1235 mm | 610 mm |
| 12               | (5)             | 2485 x 610 / 1235 (T&G4) | 50      | 100    |
| 15               | (5)             |                          | 40      | 80     |
| 18               | (7)             |                          | 34      | 68     |
| 21               | (7)             |                          | 30      | 60     |
| 24               | (9)             | 2500 x 610 / 1235 (T&G2) | 24      | 48     |
| 27               | (9)             |                          | 25      | 50     |
| 30               | (11)            |                          | 20      | 40     |

Other sizes & thicknesses: on request

## OPTIONS

• **Preservative treatments, fungicide & Insecticide, antitermite:** on request

• **Cutting & TG processing:** on request



• **WeatherScreen treatment:** on request

Hydrophobic coating significantly reducing the risk of micro-organisms (mould and blue stain) growth, yellow in colour to allow easy identification in the warehouse and at the worksite.

## STORAGE

Flat, on intermediate bearers, in an enclosed dry and ventilated building, clear of the ground. As far as storage on site is concerned, provision should be made to cover the panels with an opaque waterproof sheeting with the underside of the stacks clear of the ground.

## FURTHER PROCESSING & INSTALLATION

Compliance with standard practice, with regulations and with health and safety rules should be maintained at all times.

Cutting and machining in the workshop possible except laser technology.

## PRODUCTION SITES

Production on Thébault's sites in France



Groupe THEBAULT  
47, rue des Fontenelles - 79 460 MAGNE - France  
Tél : +33 (0)5 49 35 70 20  
info@groupe-thebault.com

[www.groupe-thebault.com](http://www.groupe-thebault.com)



# TEBOSILVER FLOOR II/III

## TECHNICAL PROPERTIES



### Characteristic values (MPa) IAW EN 789 - 1058 for structural calculations IAW Eurocodes

|                                 |                                                                                                                                                                                                                                                    | 12    | 15    | 18    | 21    | 24    | 27   | 30   |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|------|------|
| Modulus of elasticity ( $E_m$ ) | //                                                                                                                                                                                                                                                 | 10614 | 11879 | 11851 | 10275 | 10004 | 9983 | 8411 |
|                                 | └┐                                                                                                                                                                                                                                                 | 1810  | 3121  | 3149  | 4325  | 4996  | 5017 | 5756 |
| Bending strength ( $f_m$ )      | //                                                                                                                                                                                                                                                 | 31.8  | 35.6  | 35.6  | 32.0  | 30.0  | 29.9 | 25.2 |
|                                 | └┐                                                                                                                                                                                                                                                 | 5.4   | 9.4   | 9.4   | 13.0  | 15.0  | 15.0 | 17.3 |
| Others characteristic values    | Available on DOP : Strength in: Tension ( $f_t$ ), Compression ( $f_c$ ), Panel shear ( $f_v$ ) and Planar shear ( $f_p$ )<br>Modulus of elasticity in: Tension ( $E_t$ ), Compression ( $E_c$ ), Panel shear ( $G_v$ ) and planar shear ( $G_p$ ) |       |       |       |       |       |      |      |

### Uses

|                                                                                    |                                                                                                                        |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Use in structural applications<br>(IAW EN 13986, IAW EN 12871, EN 636-2, EN 636-1) | Suitable for use as structural element in humid conditions (service class 2) and interior conditions (service class 1) |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|

### Sizing - Span tables

Maximum permissible span between supports IAW EN 1991-1-1 (5/03/2003).

The table below has been calculated in accordance with the French national annex NF P06 -11-2 to EN 1991-1-1. It is given for indication purposes only. It is therefore the designer's responsibility to calculate the sizing of the structural project in accordance with the national Annex to EN 1991-1-1 applicable in the European country where the plywood is going to be used.

|                 |                | Flooring : use categories applied                                                           |                                                         |                                                                                                      |                                                                                                  |
|-----------------|----------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|                 | Thickness (mm) | A                                                                                           | B                                                       | C1                                                                                                   | C2                                                                                               |
|                 |                | Areas for domestic and residential activities (e.g. dwellings, flats & bedrooms in hotel..) | Office areas (e.g. offices, classrooms, hospital wards) | Areas with tables (e.g. schools, cafes, restaurants, dining halls, reading rooms, reception halls..) | Areas with fixed seats (e.g. places of worship, theatres, cinemas, conference & meeting rooms..) |
| Service class 1 | 18             | 700                                                                                         |                                                         |                                                                                                      |                                                                                                  |
|                 | 21             | 775                                                                                         |                                                         | 625                                                                                                  |                                                                                                  |
|                 | 24             | 825                                                                                         | 625                                                     | 675                                                                                                  |                                                                                                  |
|                 | 25             | 850                                                                                         | 650                                                     | 675                                                                                                  | 550                                                                                              |
|                 | 27             | 1000                                                                                        | 675                                                     | 725                                                                                                  | 625                                                                                              |
|                 | 30             | 1050                                                                                        | 725                                                     | 750                                                                                                  | 675                                                                                              |
| Service class 2 | 18             | 675                                                                                         |                                                         |                                                                                                      |                                                                                                  |
|                 | 21             | 775                                                                                         |                                                         | 600                                                                                                  |                                                                                                  |
|                 | 24             | 825                                                                                         | 625                                                     | 650                                                                                                  |                                                                                                  |
|                 | 25             | 825                                                                                         | 650                                                     | 650                                                                                                  |                                                                                                  |
|                 | 27             | 975                                                                                         | 675                                                     | 700                                                                                                  | 600                                                                                              |
|                 | 30             | 1025                                                                                        | 725                                                     | 725                                                                                                  | 650                                                                                              |

|                      | Thicknesses (mm) | Roofing : use categories applied                                |  |
|----------------------|------------------|-----------------------------------------------------------------|--|
|                      |                  | H<br>Roofs : not accesible except normal maintenance and repair |  |
| Classe of services 2 | 12               | 675                                                             |  |
|                      | 15               | 825                                                             |  |
|                      | 18               | 1200                                                            |  |
|                      | 21               | 1200                                                            |  |

### Bending radius (mm)

| Thickness | 12   | 15   | 18   |
|-----------|------|------|------|
| //        | 3000 | 3750 | 4750 |
| └┐        | 2400 | 3000 | 3800 |

### Nail and screw holding (t = 15 mm)

|       |                      |        |
|-------|----------------------|--------|
| Nail  | Face and edge: 300 N |        |
| Screw | Face                 | Edge   |
|       | 1450 N               | 1150 N |

# TEBOSILVER FLOOR II/III

## Sound absorption coefficient

| IAW EN 13986<br>Table N°10 | Frequency range  |                    |
|----------------------------|------------------|--------------------|
|                            | 250 Hz to 500 Hz | 1000 Hz to 2000 Hz |
|                            | 0,10             | 0,30               |

## Thermal conductivity

|              |                  |
|--------------|------------------|
| IAW EN 13986 | $\lambda = 0,13$ |
|--------------|------------------|

## Characteristic density

|            |                       |
|------------|-----------------------|
| IAW EN 789 | 490 kg/m <sup>3</sup> |
|------------|-----------------------|

## Vapour permeability

| IAW EN 13986<br>Table 9 | Wet cup  | Dry cup   |
|-------------------------|----------|-----------|
|                         | 44 $\mu$ | 187 $\mu$ |

## Reaction to fire

| End use condition<br>In reference to table 8<br>of EN 13986 - 2004+A1:2015            | Minimum<br>thickness | Class<br>excluding<br>floorings | Class<br>floorings  |
|---------------------------------------------------------------------------------------|----------------------|---------------------------------|---------------------|
| Without an air gap behind the panel                                                   | 9 mm                 | D-s2,d0                         | D <sub>fl</sub> -s1 |
| With a closed or an open air gap<br>not more than 22 mm behind<br>the woodbased panel | 9 mm                 | D-s2,d2                         | -                   |
| With a closed air gap behind<br>the wood-based panel                                  | 15 mm                | D-s2,d1                         | D <sub>fl</sub> -s1 |
| With an open air gap behind<br>the wood-based panel                                   | 18 mm                | D-s2,d0                         | D <sub>fl</sub> -s1 |
| Any                                                                                   | 3 mm                 | E                               | E <sub>fl</sub>     |

## Airborne sound absorption

|                                |                                                                                                                                                                                                                                                                                                                         |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IAW EN 13986<br>Paragraph 5.10 | The sound transmission loss R of a single wood-based panel, measured in dB, is related the mean surface mass $m_A$ 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> ): $R = 13 \times \lg(m_A) + 14$ |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## TECHNICAL SUITABILITY & CERTIFICATION

|            |  |                                           |                                                                                                                                                                                    |
|------------|--|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CE Marking |  | CE Structure attestation of conformity 2+ | DOP - CPR - EN 13986 : 2004 + A1 : 2015 - EN 636-3 S E1<br>* DOP : Declaration of Performance available<br>on <a href="http://www.groupe-thebault.com">www.groupe-thebault.com</a> |
|------------|--|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| Use   | Ressource bois  |                   |                | Volatile substances                                                                                                                                                                                                                     |                         |         |
|-------|-----------------|-------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------|
| Humid | RDUE Conformity | PEFC (on request) | Bois de France | Information on the emission level of volatile substances within the indoor air, showing a risk of toxicity in case of inhalation, based on a scale going from A+ (very low emissions) to C (high emissions). Scenarios flooring/ceiling | EPA TSCA Titre VI (USA) | M1 (FI) |
|       |                 |                   |                |                                                                                                                                                                                                                                         |                         |         |