

Project number: FB-A166N-24975-2022

Topic number: M-3036/2007

**TYPE TEST CERTIFICATE (TVB)**

of

**Betonyp - Cement-bonded particleboard  
construction product**

**ÉMI Non-profit limited liability company for quality control and innovation in building  
Engineering Services Directorate's  
ÉMI Testing Laboratory in Building Industry  
hereby certifies with this document for**

**Falco Forgácslapgyártó Zrt.  
9700 Szombathely, Zanati út 26.**

**as the holder of the TVB that  
it has performed the initial type testing of the construction product manufactured at the  
establishment**

**Falco Forgácslapgyártó Zrt.  
9700 Szombathely, Zanati út 26.**

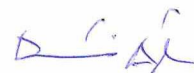
**and falling within the scope of  
regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011.**

**Based on results detailed in the Initial Type Test Report issued under M-3036/2007 number and with  
29 October 2007 date, and the Test Reports listed in this Certificate (section 2) the construction  
product conforms the requirements Cement-bonded particleboard of non-structural use, applicable  
in dry, wet and outer environment of the EN 13986:2004+A1:2015 technical specification applying  
for the product.**

**This TVB remains valid  
- with no change in product characteristics -  
until 31. 08. 2023.**

**Date of next surveillance: August 2023**

Szentendre, 27 July, 2022



Ákos Darányi

head of ÉMI Testing Laboratory in Building Industry

The Type Test Certificate consists of 3 numbered pages that are only valid for one unit!  
The ÉMI Non-profit Llc. is an organization certified according to MSZ EN ISO 9001 standards.  
The text of the present document is a translation which is based on the original Hungarian language document with the  
same project number, and in case of legal dispute the Hungarian version is authoritative.

1. Properties (characteristics) of the product in support of the declaration of performance:

| Product characteristics and their units   | Requirement              | Test/Assessment method                   |
|---|--------------------------|--|
| Density [kg/m <sup>3</sup> ]  | ≥ 1000                   | MSZ EN 323:1995                          |
| Bending strength (durability against aging) [N/mm <sup>2</sup> ]  | ≥ 9,0                    | MSZ EN 310:1999                          |
| Bending stiffness (modulus of elasticity) [N/mm <sup>2</sup> ]  | ≥ 4500<br>(Class 1)      | MSZ EN 310:1999                          |
| Durability as:  |                          |  |
| <ul style="list-style-type: none"> <li>Internal bond (tensile strength perpendicular to the plane of the board) [N/mm<sup>2</sup>]</li> </ul>   | ≥ 0,5                    | MSZ EN 319:1998                          |
| <ul style="list-style-type: none"> <li>Swelling in thickness 24 h [%]</li> </ul>  | ≤ 1,5                    | MSZ EN 317:1998                          |
| <ul style="list-style-type: none"> <li>Moisture resistance (values measured after cyclic load)               <ul style="list-style-type: none"> <li>Swelling in thickness [%]</li> <li>tensile strength perpendicular to the plane of the board [N/mm<sup>2</sup>]</li> </ul> </li> </ul> | ≤ 1,5<br>≥ 0,3           | MSZ EN 321:2002<br>MSZ EN 321:2002       |
| <ul style="list-style-type: none"> <li>Biological durability [class]</li> </ul>   | 3                        | MSZ EN 335:2013<br>MSZ EN ISO 846:2019   |
| Release of formaldehyde [mg/m <sup>3</sup> ]  | ≤ 0,124 (E1)             | MSZ EN 717-1:2005                        |
| Reaction to fire [class]  | B-s1, d0                 | MSZ EN 13986:2004+A1:2015<br>2000/147/EC |
| Reaction to fire when intended use as floorings [class]   | B <sub>FL</sub> -s1      |  |
| Water vapour permeability (μ)<br>(Density: 1200 kg/m <sup>3</sup> )<br>wet<br>dry   | -<br>30<br>50            | MSZ EN 13986:2004+A1:2015                |
| Airborne sound insulation (R)<br>(Density: 1400 kg/m <sup>3</sup> )<br>8 mm thick<br>40 mm thick  | [dB]<br><br>27,6<br>36,7 | MSZ EN 13986:2004+A1:2015                |
| Sound absorption (α)<br>250-500 Hz között<br>1000-2000 Hz között  | -<br>0,1<br>0,3          | MSZ EN 13986:2004+A1:2015                |
| Thermal conductivity (λ)<br>(Density: 1200 kg/m <sup>3</sup> )  | [W/mK]<br>0,23           | MSZ EN 13986:2004+A1:2015                |
| Release (content) of Pentachlorophenol [ppm]  | ≤ 5                      | CEN/TR 14823: 2003                       |

Results of the initial type test may be used for the drawing up a declaration of performance for the system 3 in Annex V of the regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 as long as product characteristics, requirements and manufacturing technology of the product manufactured at the establishment of the manufacturer remain unchanged.

The holder of the TVB must report changes to ÉMI Testing Laboratory in Building Industry of ÉMI Nonprofit LLC's Engineering Services Directorate within 30 days which way he can initiate renewal of the TVB.

Surveillance testing of essential characteristics of the product which support the declaration of performance are performed by ÉMI Nonprofit Kft. yearly based on separate mandates.


Mandate related to surveillance testing has to be sent to ÉMI Nonprofit Kft. at least one month prior to the date of surveillance on the cover of the TVB. In case of missing surveillance tests the TVB will lose its validity.


## 2. Surveillance tests

| Date          | Project number      | Tested characteristics   | Changes |
|---------------|---------------------|--|---------|
| 05 Oct 2016   | FB-A164N-09947-2016 | Density, Internal bond, Bending strength and stiffness, Swelling in thickness, Moisture resistance | -       |
| 17 Nov 2017   | FB-A166N-13282-2017 | Density, Internal bond, Bending strength and stiffness, Swelling in thickness, Moisture resistance | -       |
| 17 May 2019   | FB-A166N-17607-2019 | Bending strength and stiffness, Swelling in thickness, Internal bond, Density                      | -       |
| 14 June 2019  | M1-A166N-18117-2019 |  |         |
| 16 July 2020  | FB-A166N-20565-2020 | Internal bond, Bending strength and stiffness, Swelling in thickness                               | -       |
| 02 July 2021  | FB-A166N-22607-2021 | Density, Internal bond, Moisture resistance  | -       |
| 28. July 2022 | FB-A166N-24975-2022 | Swelling in thickness  | -       |
|               | M1-A166N-25198-2022 | Bending strength and stiffness   | -       |

The certificate was compiled by:

Checked by:

  
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