

TEST REPORT ref. No. 785200494-02

Client: Institut pro testování a certifikaci, a.s.
Certifikace stavebních výrobků, Ing. Lenka Lazareva

Address: třída Tomáše Bati 299, Louky, 763 02 Zlín

Issued for: DENCOP LIGHTING spol. s r.o. IČ: 25566130
Tečovská 1122, Zlín – Malenovice, 763 02 Czech Republic

Subject of the test: ALP Bond A2

Sample received on: September 5, 2025

Tested: From November 6, 2025 to December 11, 2025

Report elaborated by: Ing. Radim Mikač

Place and date of issue: Zlín, December 22, 2025

Annex: -




Ing. Jiří Růžička
Head of Construction Testing Laboratory Zlín


Ing. Petra Hrdinová
Head of Testing Laboratory

Note: The results given in this Test Report apply only to the sample tested as received!
Without a written consent by Institut pro testování a certifikaci, a.s. Zlín, the Test Report may not be reproduced unless as a whole!

Subject of the test:**Table No. I – Description and identification of the test Subject**

| ITC's identification number | Identification of the test Subject/sample by client | Description |
|-----------------------------|---|---|
| 785200494/1 | ALP Bond A2 – composite cladding panel | Test specimens with a diameter of 50 mm, test specimens with dimensions (400 x 100) mm and (600 x 600) mm |

Sampling method used:

The test sample was collected and supplied to the laboratory by the client. The laboratory is not responsible for this way of sampling. The results refer to the sample as received.

Work requested:

Tensile strength perpendicular to the face, bending performance in four-point test arrangement, hard body impact resistance, bending performance in four-point test arrangement after hygrothermal behaviour and bending performance in four-point test arrangement after of freeze – thaw cycles

Testing method used:

1. Determination of the tensile strength perpendicular to the face according to EAD 210046-00-1201, annex A
2. Determination of bending performance in four-point test arrangement according to EAD 210046-00-1201, clause 2.2.4.1
3. Determination of hard body impact resistance according to EAD 210046-00-1201, clause 2.2.9 with reference to ČSN EN ISO 7892
4. Determination of durability - hygrothermal behaviour according to EAD 210046-00-1201, clause 2.2.12.1 with reference to TR 38, clause 5.1
5. Determination of durability – effect of freeze – thaw cycles according to EAD 210046-00-1201, clause 2.2.12.4 with reference to TR 38, clause 5.4

Test conditions:

1. 5 test specimens with diameter (50 ± 0.3) mm, metal plate, test speed 5 mm/min, tested on November 6, 2025
2. 6 test specimens with dimensions (400 x 100) mm, four-point arrangement, distance between supports 300 mm, test speed 5 mm/min, tested at (23 ± 2) °C and (50 ± 5) % relative humidity, tested on December 10, 2025
3. Test specimens with dimension (600 x 600) mm, test temperatures 23 °C and (-20) °C, conditioning at test temperature 24 hours, tested on December 11, 2025
4. 6 test specimens with dimensions (400 x 100) mm, four-point arrangement, 1 cycle: exposure 90 °C and 90 % relative humidity along 1 hour, decrease of temperature to (-40) °C along 2.5 hours, exposure to temperature (-40) °C along 1 hour and increase of temperature and humidity up to 90 °C and 90 % relative humidity along 1.5 hours; total 6hours/1 cycle, total cycle: 8; distance between supports 300 mm, test speed 5 mm/min, tested at (23 ± 2) °C and (50 ± 5) % relative humidity, tested on December 10, 2025
5. 6 test specimens with dimensions (400 x 100) mm, four-point arrangement, 1 cycle: full immersion in water bath for 8 hours at (20 ± 2) °C, decrease to (-20 ± 2) °C for 2 hours and exposure to (-20 ± 2) °C for 14 hours; total 24 hours/1 cycle, total cycles:50; distance between supports 300 mm, test speed 5 mm/min, tested at (23 ± 2) °C and (50 ± 5) % relative humidity, tested on December 10, 2025

The laboratory is not responsible for information received from customer, which could have influence on the validity of the results. Further information required by the standard/standards and not given in this Test Report are available at a request at the Laboratory.

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**Testing laboratory:**

The test was performed in the workplace no.2: Třída Tomáše Bati 5264, areal Svit, Building No. 113, 760 01 Zlín

Test results:

The test results are given in the following table:

Table No. II – ALP Bond A2 – composite cladding panel, Sample No. 785200494/1

| Characteristics measured | Unit | Separate values | Test results | Uncertainty 1) |
|--|------|--|--------------|----------------|
| Tensile strength perpendicular to the face ²⁾ | MPa | 3.31; 3.64; 3.28; 3.44; 3.49 | 3.43 | 0.18 |
| Bending strength $R_{bend,IN1}$ | MPa | 59.3; 63.7; 60.9; 61.6; 57.2; 62.5 | 60.9 | 2.3 |
| Bending modulus of elasticity E_{bend} | GPa | 44.6; 46.3; 47.2; 47.4; 45.1; 46.3 | 46.1 | 1.3 |
| Hard body impact resistance at 23 °C | - | Impact energy 1 Nm – test specimens without damage. At the point of impact, an indentation with a diameter of 9 mm Impact energy 3 Nm – test specimens without damage. At the point of impact, an indentation with a diameter of 13 mm Impact energy 5 Nm – test specimens without damage. At the point of impact, an indentation with a diameter of 16 mm Impact energy 10 Nm – test specimens without damage. At the point of impact, an indentation with a diameter of 18 mm | - | - |

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Continuation of Table No. II – ALP Bond A2 – composite cladding panel, Sample No. 785200494/1

| Characteristics measured | Unit | Separate values | Test results | Uncertainty 1) |
|---|------|---|--------------|-------------------|
| Hard body impact resistance at (-20) °C | - | Impact energy 1 Nm – test specimens without damage. At the point of impact, an indentation with a diameter of 11 mm Impact energy 3 Nm – test specimens without damage. At the point of impact, an indentation with a diameter of 14 mm Impact energy 5 Nm – test specimens without damage. At the point of impact, an indentation with a diameter of 20 mm Impact energy 10 Nm – test specimens without damage. At the point of impact, an indentation with a diameter of 26 mm | - | - |
| Bending strength R_h after hygrothermal behaviour | MPa | 57.3; 62.5; 59.7; 63.5; 62.9; 57.4 | 60.6 | 2.6 |
| Bending modulus of elasticity E_h after hygrothermal behaviour | GPa | 46.6; 46.0; 47.1; 46.4; 46.1; 46.3 | 46.4 | 1.0 |
| Description of damage to test specimens after hygrothermal behaviour | - | The test specimens showed no damage after hygrothermal behaviour | - | - |
| Relative change in bending strength after hygrothermal behaviour ΔR_h | % | 99.5 | - | - |
| Bending strength R_{fft} after freeze – thaw cycles | MPa | 62.8; 61.9; 59.7; 64.8; 54.4; 58.8 | 60.4 | 3.3 |
| Bending modulus of elasticity E_{fft} after freeze – thaw cycles | GPa | 45.2; 46.6; 46.8; 46.5; 46.1; 46.7 | 46.3 | 1.1 |
| Description of damage to test specimens after freeze – thaw cycles | - | The test specimens showed no damage after freeze – thaw cycles | - | - |
| Relative change in bending strength after freeze – thaw cycles ΔR_{fft} | % | 99.2 | - | - |

1) expanded uncertainty for coverage factor $k = 2$, which for a normal distribution corresponds to a coverage probability of approximately 95%

2) In all measurements, a failure occurred between the plate and the ALP Bond A2

..... End of the test report.....

