DEPARTMENT OF MATERIALS
AND ENVIRONMENTAL
TECHNOLOGY

Laboratory of Wood Technology

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Customer:	Standwood OÜ
Customer address:	Sõeru tee 11, Alliku küla, Saue vald, 76403
Customer contact:	Kaarel Tali
Test subjects:	Interior cladding board, finger jointed and laminated with veneer
Test method:	EN 314-1
Testing objective:	Testing the durability of glue joints in finger jointed interior cladding boards
Test specimen(s) description and marking used in current report:	

Appendices:

Appendix 1	**EN 314-1 Test results for glue joints in interior cladding board**

Given report shall not be reproduced without written approval of the laboratory.	**Approved by:** Jaan Kers, PhD Head of Laboratory of Wood Technology

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APPENDIX 1.

Specimen(s) description

Finger jointed interior cladding board with veneer lamination.
Wood species: alder.
Bond strength specimen cut out from boards: 12 mm x 25 mm x 170 mm, 14 pcs .
Shear area: 25 x 25 mm.

Test description

Test severity classification:
EN 314-2 Plywood – Bonding Quality – Part 2: Requirements; class 3: – non-covered exterior

Specimen pre-treatment sequence:

1. Immersion for 24h in water at (20 ± 3) °C.
2. Immersion for (72 ± 1) h in boiling water, followed by cooling in water at (20 3) °C for at least 1h.

Tensile test for bond strength determination after pre-treatment between the top veneer layer and finger jointed structure underneath.

Test parameters

Tester(s)	Margus Kangur, technician
Test Machine	ZwickRoell Z050
Test type	EN 314-1
Test date	27.10.2022

Test results

The specimen bonding requirements passed the test according to EN 314-1, obtaining plywood use class no 3: non-covered exterior conditions. No delamination occured during pre-treatment – finger joints visually sound.
Average bond strength 2,5 ± 0,5 N/mm^2.

Table 1. Test results 314-1

Specimen ID	Maximum load, N	Bond strength, N/mm²
Specimen 1	1604	2,6
Specimen 2	1461	2,3
Specimen 3	1406	2,2
Specimen 4	1110	1,8
Specimen 5	1361	2,2
Specimen 6	1913	3,1
Specimen 7	1984	3,2
Specimen 8	1528	2,4
Specimen 9	1142	1,8
Specimen 10	1863	3,0
Specimen 11	2118	3,4
Specimen 12	1318	2,1
Specimen 13	1165	1,9
Specimen 14	1522	2,4
Average	**1535**	**2,5**
Standard deviation	**324**	**0,5**

Figure 1. Specimen after testing