

Laboratory of Wood Technology

DEPARTMENT OF AND ENVIRONME TECHNOLOGY Laboratory of Wood		TALLINN UNIVERSITY OF TECH
Report No:	11-40/EK/1423-2	ONH
Date of issue:	28.10.2022	LOGY
Pages:	3	GΥ
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) desc	cription and marking used in current report:	_

Appendices:

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

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

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 $2.5 \pm 0.5 \text{ N/mm}^2$.

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