



Test Report

Applicant **SHANDONG FUSHI WOOD CO.,LTD.**

Test Category **Entrusted Test**

Sample Type **Structural Laminated Veneer Lumber**

Test Standard **AS/NZS 4357.0**

TEST REPORT DUPLICATION

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Precautions

1. This test report is invalid without authorized approved signature, signature of verifier and approver.
2. This test report is invalid if being supplemented, deleted or altered.
3. Unless otherwise stated, the observations and test results in this report are relevant only to the sample(s) tested.
4. Objections to the test report must be submitted to Hongjun within 15 days of report received date. This report does not imply that the material, product, or service is or have ever been under Hongjun or ICTT certification program.
5. The test applicant is responsible for authenticity of sample information which not subject to verification of Hongjun.
6. The applicable decision rules of this test are: IEC Guide 115:2007 Procedure 2 - Accuracy method, do not subject to measurement uncertainty.

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1. Sample Description¹

Samples for type test in this report were sampled and shipped to test laboratory by applicant on Jan 4th, 2022, packed well and kept in good conditions. Samples were identified as Structural laminated veneer lumber by applicant. The cross-sectional dimension of laminated veneer lumber is 95mm×35mm, 95mm×45mm and 300mm×45mm, respectively. Laminated veneer lumber are made of larch and radiata pine. The dimension specification and quantity of samples obtained are shown in the Table below:

Sampling Plan			
Test Item	Specimen Specification (Length×Width×Thickness, mm)		Sample Size
Manufacture			
Bonding Property	150×65×65		5
	150×65×65		5
Structural Properties			
Bending Strength and Modulus Of Elasticity	On edge	1800×95×35	5
		1800×95×45	5
		6000×300×45	5
Bending Strength and Modulus Of Elasticity	On flat	700×90×35	5
		900×90×45	5
		3000×300×45	5
Compression Strength Parallel to Grain	Axial	3000×95×35	5
		3000×95×45	5
		3000×300×45	5
Tension Strength Parallel to Grain	Axial	3000×95×35	5
		3000×95×45	5
		3000×300×45	5

Notes:

1. Sample information is provided by the applicant.

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2. Adhesive Information²

The adhesive used is phenolic formaldehyde resin. Adhesive information is listed in the table below:

Adhesive Name	Type	Manufacturer
Phenolic formaldehyde resin adhesive	WG62	Jinyu Weiguan (Cangzhou) Chemical Co., LTD

Notes:

2. Adhesive information is provided by the applicant.

3. Referenced Standards

- ◆ AS/NZS 2098.1:2006 Methods of test for veneer and plywood-Method 1: Moisture content of veneer and plywood
- ◆ AS/NZS 2098.2:2012 Methods of test for veneer and plywood-Method 2: Bond quality of plywood (chisel test)
- ◆ AS/NZS 2754.1:2016 Adhesives for timber and timber products-Part 1: Adhesives for manufacture of plywood and laminated veneer lumber (LVL)
- ◆ AS/NZS 4063.1:2010 Characterization of structural timber-Part 1: Test methods
- ◆ AS/NZS 4357.0:2005 Structural laminated veneer lumber-Part 0: Specifications

Unless specified, all test standards in this report are the version cited by AS/NZS 4357.0.

4. Test Description/ Environment

During the test, the relative humidity and temperature of test environment are $(65 \pm 5)\%$ and $(20 \pm 5)^\circ\text{C}$, respectively.

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5. Test Results

Test Item				Units	Results	Standard Requirement
Bonding Between Plies	90×35	Steam Condition	Average	-	7.3	Bond quality in any single glueline of not less than 2 and an average of not less than 5
			Minimum	-	6.0	
	300×45	Steam Condition	Average	-	6.0	
			Minimum	-	7.8	
STRUCTURE PROPERTIES						
Dimension Specification (mm)	Test Item			Place Direction	Average Value (MPa)	
90×35	Bending Strength			On edge	67.1	
	Bending Modulus				14603	
	Bending Strength			On flat	72.8	
	Bending Modulus				13333	
	Compression Strength Parallel to Grain			Axial	52.4	
	Tension Strength Parallel to Grain				58.4	
90×45	Bending Strength			On edge	76.7	
	Bending Modulus				16515	
	Bending Strength			On flat	67.4	
	Bending Modulus				12654	
	Compression Strength Parallel to Grain			Axial	57.1	
	Tension Strength Parallel to Grain				54.2	
300×45	Bending Strength			On edge	67.4	
	Bending Modulus				13502	
	Bending Strength			On flat	69.4	
	Bending Modulus				12527	
	Compression Strength Parallel to Grain			Axial	51.8	
	Tension Strength Parallel to Grain				56.9	

Notes:

3. The results were adjusted to 12% moisture content in accordance with ISO 13061:2014

Reporter: *Xiang Xin*

Verifier: *Ji Lu*





Approver: *[Signature]*

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Appendix I – Typical Sample Photos

	
Bending Properties Test Specimen	Bonding Test Specimen

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