

LULI FOSB PRODUCT DATA SHEET

Fine Surface Oriented Strand Board (F-OSB/1)

Product Model: 18FOSB- HE_{NF} Grade

Revision Date: 12 February 2025

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Fine Surface Oriented Strand Board (F-OSB/1) – HE_{NF} Grade

Product Model: 18FOSB- HE_{NF} (Fine Surface OSB)

Brand: 鲁丽 (Luli)

Manufacturer: Jiangxi Luli Wood Industry Co., Ltd. (subsidiary of Luli Group)

Address: Shouguang Luli Wood Industrial Park, Weifang, Shandong, China

Tel: 4008-315-123

Group Website: www.luliwood.net

Note: This datasheet is based on the independent test report No. 2025W0167 for the exact 18 mm batch.

2. PRODUCT DESCRIPTION

Luli Fine Surface Oriented Strand Board (F-OSB/1 HE_{NF}) is a high-performance, zero-formaldehyde-addition engineered wood panel. It uses premium imported pine strands bonded with isocyanate (MDI) adhesive and features a fine, smooth surface ideal for direct melamine facing or decorative applications.

Manufactured under strict GB/T 41715-2022 standards with advanced German 4.0 continuous pressing technology, it delivers superior strength, dimensional stability, and environmental safety. Perfect for modern furniture, cabinetry interior fit-outs, and structural uses where low emissions and high durability are required.

3. KEY FEATURES

- **Zero Formaldehyde Addition :** Isocyanate glue only.
- **HE_{NF} Grade:** Ultra-low formaldehyde emission.
- **Excellent Mechanical Performance:** Far exceeds minimum requirements.
- **High Surface Quality:** Fine strands for smooth melamine/decorative facing.
- **Moisture & Screw-Holding Resistant:** Ideal for humid environments.

- **Eco-Friendly & Sustainable:** FSC-COC, China Green Product, CARB/EPA compliant (group certifications)

4. APPLICATIONS & FORMATS

Applications:

- Interior wall panels, partitions, and decorative surfaces.
- Structural and non-structural components in humid environments.
- High-end fit-outs, shopfitting, and modular furniture.

Thickness options (group):

9 / 12 / 15 / 18 / 22 / 25 mm

Formats:

1220 × 2440 mm and 1220 × 2745 mm

Surface:

Fine surface (ready for melamine, UV, or direct use)

5. TECHNICAL SPECIFICATIONS

Nominal Size: 1220 mm × 2440 mm × 18 mm

Density: Standard OSB density (exact value not reported; within grade tolerances)

Adhesive: Isocyanate (MDI) – Zero formaldehyde added

Grade: HE_{NF} (Super E0 Grade)

6. TEST RESULTS & STANDARDS

Test Report No: 2025W0167 (Test Date: 6 Jan – 11 Feb 2025).

Test Laboratory: National Center of Inspection and Testing for Wood-based Panels and Wood-Bamboo Products, Chinese Academy of Forestry (CNAS L1333, CMA accredited).

Standards: GB/T 41715-2022, HJ 571-2010 (TVOC), T/CNFPIA 1003-2022.



Key Result Summary (Requirement vs. Result):

Property	Unit	Standard Requirement	Test Result	Result
Moisture Content	%	2~12	4.0	Pass
Density Deviation (within board)	%	± 10	+3.2 /-1.6	Pass
Modulus of Rupture (MOR) - Major	MPa	≥ 13	19.7	Pass
Modulus of Rupture (MOR) - Minor	MPa	≥ 10	19.3	Pass
Modulus of Elasticity (MOE) - Major	MPa	≥ 2200	3450	Pass
Modulus of Elasticity (MOE) - Minor	MPa	≥ 1200	2970	Pass
Internal Bond (IB)	MPa	≥ 0.30	0.35	Pass
24 h Thickness Swelling	%	≤ 20	7.0	Pass
Surface Bonding Strength	MPa	≥ 0.8	1.16	Pass
Screw-Holding - Face	N	≥ 900	1440	Pass
Screw-Holding - Edge	N	≥ 600	1140	Pass
TVOC Emission (72 h)	mg/(m ² ·h)	≤ 0.50	0.02	Pass
Formaldehyde Emission	mg/m ³	HE _{NF} ≤ 0.025	0.011	Pass

7. CERTIFICATIONS & COMPLIANCE

- HE_{NF} low-formaldehyde grade.
- Isocyanate (zero added formaldehyde).
- **Group certifications:** China Green Product, China Environmental Label, FSC-COC, CARB/EPA, EU CE, Japan JAS F☆☆☆☆☆☆, etc.
- **Manufacturer Status:** National Forestry Key Leading Enterprise, Shandong Green/Intelligent Factory.

8. IMPORTANT NOTES

- This datasheet is based on the independent test report No. 2025W0167 for the exact 18 mm batch.
- Results apply only to the tested sample; production consistency is guaranteed by Luli's ISO-certified quality system.
- For custom colours, finishes, or large orders, contact Luli directly.
- Report copies are invalid without official seals and signatures.

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