

ICC-ES Evaluation Report



ESR-4306

Reissued December 2021

This report is subject to renewal November 2022.

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DIVISION: 06 00 00—WOOD, PLASTICS AND

COMPOSITES

Section: 06 16 00—Sheathing

REPORT HOLDER:

LINYI DONGFANG JUXIN WOOD COMPANY, LTD.

EVALUATION SUBJECT:

DONGFANG JUXIN DECORATIVE PANELS

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018 and 2015 International Building Code® (IBC)
- 2021, 2018 and 2015 International Residential Code[®] (IRC)

Property evaluated:

■ Structural

2.0 USES

The Dongfang Juxin Decorative Panels described in this evaluation report are Exposure 1, Decorative grade plywood panel products designed and manufactured for construction and industrial uses.

3.0 DESCRIPTION

The Dongfang Juxin Decorative Panels are manufactured to comply with the performance requirements specified in the U.S. DOC Voluntary Product Standard PS-1 as outlined in the approved quality assurance manual.

The Dongfang Juxin Decorative Panels are manufactured with Grade D wood veneers from a single wood species, having a specific gravity of 0.42 with phenolic type adhesives as specified in the approved quality assurance manual. The Dongfang Juxin Decorative Panels are produced in sheets having a nominally width of 48 inches to 48.5 inches (1220 mm to 1232 mm) and length ranging from 72.5 inches to 96.5 inches (1842 mm to 2451 mm), and are available in Performance Categories of 1/4, 11/32, and 3/4.

4.0 DESIGN AND INSTALLATION

4.1 Design:

The Dongfang Juxin Decorative Panels can be used in designs, using the panel capacities provided in this evaluation report, in accordance with the design provisions provided in the Chapter 23 of the IBC for wood structural

panels. Tables 1 and 2 provide Dongfang Juxin Decorative Panel section properties and capacities. Nailed connections (withdrawal and lateral) must be in accordance with the *National Design Specification* (NDS) for Wood Construction referenced by the IBC and IRC.

4.2 Installation

Dongfang Juxin Decorative Panels must be installed in accordance with applicable code and manufacturer's published installation requirements.

5.0 CONDITIONS OF USE

Dongfang Juxin Decorative Panels described in this report comply with, or are suitable alternatives to what is specified, in those codes listed in Section 1.0, subject to the following conditions:

- 5.1 Installation, fabrication, identification, and connections must be in accordance with the applicable building code, this evaluation report and the manufacturer's published installation instructions.
- 5.2 When used in a construction project, design calculations and details, demonstrating the panels comply with this evaluation report, must be submitted to the code official and prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- **5.3** Panels having preservative chemical and fire retardant treatments are outside the scope of this evaluation report.
- 5.4 The panels are manufactured in Linyi City, Shangdong Province, China, under an approved quality control program with inspections conducted by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the U.S. Department of Commerce Voluntary Product Standard PS 1-2019 (-2009 for the 2018 and 2015 IBC and IRC).

7.0 IDENTIFICATION

7.1 The Dongfang Juxin Decorative Panels are identified with a grade stamp that includes the product logo, bond classification (Exposure 1), product standard (PS-1), Performance Categories, Recommended Thickness Label, grade, span rating, the name and address of the manufacturer (Linyi Dongfang Juxin Wood Co., Ltd.), and the evaluation report number (ESR-4306).



7.2 The report holder's contact information is the following:

LINYI DONGFANG JUXIN WOOD COMPANY, LTD. DAYITANG VILLAGE YITANG TOWN, LANSHAN DISTRICT LINYI, SHANDONG PROVINCE 276000 CHINA 86-023-63535678 906230967@qq.com

TABLE 1-DONGFANG JUXIN DECORATIVE PANEL SECTION PROPERTIES¹

SPAN RATING (in.)	NOMINAL THICKNESS		PANEL	AREA	MOMENT OF	SECTION	STATICAL	SHEAR
	Performance Category (in.)	Average (in.)	WEIGHT (psf.)	A (in.²/ft)	INERTIA I (in.⁴/ft)	MODULUS S (in. ³ /ft)	MOMENT Q (in. ³ /ft)	CONSTANT lbf/Q (in.²/ft)
Roof-16	1/4	0.25	0.7	3.0	0.016	0.125	0.094	2.0
Roof-16	11/32	0.344	1.0	4.1	0.041	0.236	0.177	2.75
Roof-20 ²	3/4	0.75	2.3	9.0	0.422	1.125	0.844	6.0

For **SI**: 1 inch = 25.4 mm, 1 in²/ft = 2.12×10^{-3} m²/m, 1 in³/ft = 5.38×10^{-5} m³/m, and 1 in⁴/ft = 1.37×10^{-6} m⁴/m, 1 psf = 47.88 Pa.

TABLE 2-DONGFANG JUXIN DECORATIVE PANEL CAPACITIES¹

SPAN RATING (in.)	PERFORMANCE CATEGORY (in.)	STRENGTH AXIS ²	BENDING STIFFNESS EI (lbf-in.2/ft)	BENDING STRENGTH F _b S (lbf-in./ft)	PLANAR SHEAR Fs (lbf/ft)	SHEAR THROUGH THICKNESS F _v t _v (lbf/ft)
Roof-16	1/4	Parallel	8,800	155	255	83
Roof-16	11/32	Parallel	21,000	250	350	89
Roof-20 ³	3/4	Parallel	215,000	1,100	860	175

For **SI**: 1 inch = 25.4 mm.

¹Section properties represent 1-foot of panel width.

²The "20" span designation is intended for spans of 19.2 inches.

¹Tabulated panel capacities represent the panel capacity per 1-foot of panel width.

²Strength axis corresponds to the panel length.

³The "20" span designation is intended for spans of 19.2 inches.