



- Compliance with International Codes
- Compliance to State/Regional Codes

# ICC-ES Evaluation Report

## ESR-3937

Issued June 2022

This report is subject to renewal June 2023.

**DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES**

**Section: 06 50 00—Structural Plastics**

**Section: 06 73 00—Composite Decking**

**REPORT HOLDER:**

**DASSO USA DBA OF EASOON USA, LLC**

**EVALUATION SUBJECT:**

**DASSOXTR CLASSIC ESPRESSO (ECOTIMBER XTERIOR IPE) AND DASSOXTR EPIC COGNAC (ECOTIMBER XTERIOR TEAK) DECK BOARDS**

**1.0 EVALUATION SCOPE**

**1.1 Compliance with the following codes:**

- 2021, 2018, 2015 and 2012 *International Building Code*® (IBC)
- 2021, 2018, 2015 and 2012 *International Residential Code*® (IRC)

For evaluation for compliance with codes adopted by the Los Angeles Department of Building and Safety (LADBS), see [ESR-3937 LABC and LARC Supplement](#).

**Properties evaluated:**

- Structural
- Durability
- Surface-burning characteristics

**2.0 USES**

The dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards described in this report are limited to use as deck boards for exterior balconies, porches and decks in buildings of Type V-B (IBC) construction or structures constructed in accordance with the IRC. The dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards can also be used as stair treads where indicated in Table 2.

**3.0 DESCRIPTION**

**3.1 General:**

The dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards are rectangular in cross section and are

manufactured composite products consisting of bamboo filament, phenolic resin and other additives. The deck boards are manufactured by a heat treatment and phenolic infusion process in accordance with the approved quality control manual. The deck boards have been shown to comply with the performance requirements of ASTM D7032. The deck boards are available in grooved profiles. The deck boards are nominal 1 inch (25.4 mm) or 2 inches (50.8 mm) thick by 5½ inches (140 mm) wide (actual dimensions of 0.79 inch or 1.57 inch thick by 5.39 inch wide or 20 mm or 40 mm thick by 137 mm wide), with slightly rounded corners. See Figure 1 for typical cross sections of the deck boards.

**3.2 Durability:**

When subjected to weathering, insect attack including Formosan termites and other decaying elements, dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards are equivalent in durability to preservative-treated or naturally durable lumber when used in locations described in Section 2.0 of this report. The deck boards have been evaluated for use at ambient air temperatures between -20°F (-29°C) and 125°F (52°C).

**3.3 Surface-burning Characteristics:**

When tested in accordance with ASTM E84, dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards have a flame-spread index of no greater than 200.

**4.0 DESIGN AND INSTALLATION**

**4.1 General:**

The dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards must be installed in accordance with the manufacturer’s published installation instructions, subject to the conditions of use in this report. A copy of the manufacturer’s published installation instructions must be available on the jobsite at all times during installation. When the manufacturer’s published installation instruction differ from this report, this report governs.

**4.2 Deck Boards:**

Design loads imposed on the dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards must be limited to the allowable capacities shown in Table 1. The boards must be installed perpendicular to the supporting wood members, which is limited to the span rating as prescribed in Table 1.

Boards must be spaced at edges and ends in accordance with the manufacturer's published installation instructions.

#### 4.3 Deck Boards Used as Stair Treads:

The dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards, when used as stair treads, are sufficient to resist the code-prescribed concentrated load of 300 lbf (1.33 kN) when installed in at least a two-span continuous condition with a maximum center-to-center spacing of supporting construction as indicated in Table 2.

#### 4.4 Fasteners:

The nominal 1 inch (25.4 mm) dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards must be fastened with the Panda Claw 2 hidden fastener system at each supporting wood member. The nominal 2 inches (50.8 mm) dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards must be fastened with two No. 10 by 3<sup>1</sup>/<sub>2</sub>-inch-long (88.9 mm) stainless steel screws at each supporting wood member. Stair treads must be fastened along the risers with the same screws as required for the deck boards. When using the screws, the screws must be positioned 2 inch (50.8 mm) from board ends and minimum 1/2 inch (12.7 mm) from board edge.

The allowable uplift pressure is 77 psf (3687 Pa) when using the Panda Claw 2 hidden fastener system with the nominal 1 inch (25.4 mm) deck boards and the allowable uplift pressure is 75 psf (3591 Pa) when using the stainless steel screws with the nominal 2 inches (50.8 mm) deck boards.

#### 5.0 CONDITIONS OF USE

The dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards is limited to exterior use as deck boards for balconies, porches, decks and stair treads of buildings of Type V-B (IBC) construction or structures constructed in accordance with the IRC.
- 5.2 Installation must comply with this report, the manufacturer's published instructions and the applicable code. When the manufacturer's published installation instructions conflict with this report, this report governs.
- 5.3 The use dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards as a component of a fire-resistance-rated assembly is outside the scope of this report.

- 5.4 The compatibility of the fasteners with the supporting construction, including chemically treated wood, is outside the scope of this report.
- 5.5 The dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards must be directly fastened to supporting construction. Where required by the code official, engineering calculations and construction documents consistent with this report must be submitted for approval. The calculations must verify that the supporting construction complies with the applicable building code requirements and is adequate to resist the loads imparted to it from the products discussed in this report. The documents must contain details of the attachment to the supporting structure consistent with the requirements of this report. The documents must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.6 The dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards are produced in Jiangxi, China, under a quality control program with inspections by ICC-ES.

#### 6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails) (AC174), dated January 2012 (editorially revised April 2021).

#### 7.0 IDENTIFICATION

- 7.1 Each board or package of boards described in this report must be identified by a label bearing the Dasso USA dba of Easoon USA, LLC name and address, the dassoXTR Classic Espresso (EcoTimber Xterior Ipe) or dassoXTR Epic Cognac (EcoTimber Xterior Teak), the span rating for use as a deck board, the allowable span when used as a stair tread and the evaluation report number (ESR-3937).
- 7.2 The report holder's contact information is the following:

**DASSO USA DBA OF EASOON USA, LLC**  
**6060 BOAT ROCK BOULEVARD SW SUITE 800**  
**ATLANTA, GEORGIA 30336**  
**(404) 691-6872**  
[www.dassousa.com](http://www.dassousa.com)  
[www.dassoXTR.com](http://www.dassoXTR.com)

**TABLE 1—DECK BOARD SPAN RATING**

PRODUCT NAME	MAXIMUM SPAN <sup>1</sup> (in.)	ALLOWABLE CAPACITY <sup>2</sup> (lb/ft <sup>2</sup> )
dassoXTR Classic Espresso (EcoTimber Xterior Ipe)	24	100
dassoXTR Epic Cognac (EcoTimber Xterior Teak)	24	100

For **SI**: 1 inch = 25.4 mm; 1 lb/ft<sup>2</sup> = 47.9 Pa.

<sup>1</sup>Maximum span is measured center-to-center of the supporting construction.

<sup>2</sup>Allowable capacity is adjusted for durability. No further increases are permitted.

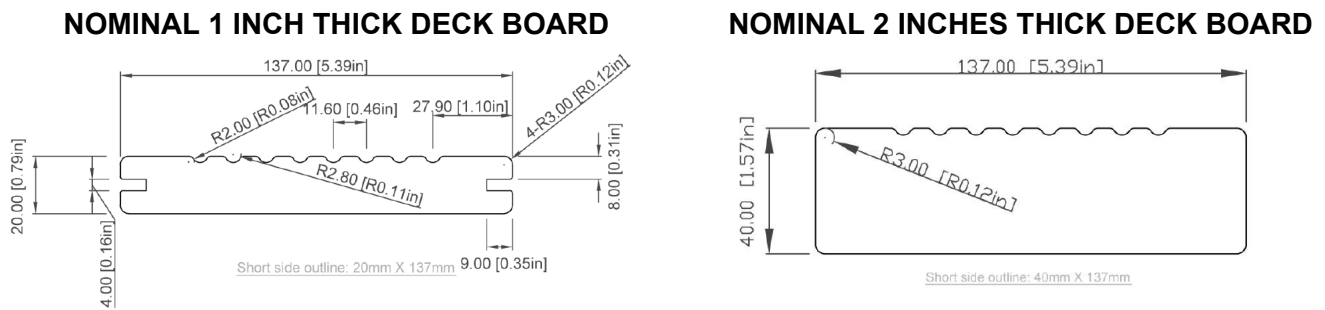
**TABLE 2—MAXIMUM STAIR TREAD SPAN<sup>2</sup>**

DECK BOARDS USED AS STAIR TREADS	MAXIMUM SPAN <sup>1,2</sup> (in.)
dassoXTR Classic Espresso (EcoTimber Xterior Ipe)	16
dassoXTR Epic Cognac (EcoTimber Xterior Teak)	16

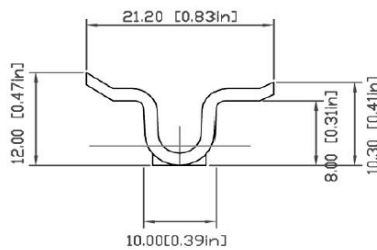
For **SI**: 1 inch = 25.4 mm; 1 lb/ft<sup>2</sup> = 47.9 Pa.

<sup>1</sup>Maximum span is measured center-to-center of the supporting construction.

<sup>2</sup>Based on a minimum continuous two-span installation.



**FIGURE 1— DASSOXTR CLASSIC ESPRESSO (ECOTIMBER XTERIOR IPE) AND DASSOXTR EPIC COGNAC (ECOTIMBER XTERIOR TEAK) DECK BOARDS**



**FIGURE 2—PANDA CLAW 2 HIDDEN CLIP**

**DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES**  
**Section: 06 50 00—Structural Plastics**  
**Section: 06 73 00—Composite Decking**

**REPORT HOLDER:****DASSO USA DBA OF EASOON USA, LLC****EVALUATION SUBJECT:****DASSOXTR CLASSIC ESPRESSO (ECOTIMBER XTERIOR IPE) AND DASSOXTR EPIC COGNAC (ECOTIMBER XTERIOR TEAK) DECK BOARDS****1.0 REPORT PURPOSE AND SCOPE****Purpose:**

The purpose of this evaluation report supplement is to indicate that the dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards, described in ICC-ES evaluation report [ESR-3937](#), have also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

**Applicable code editions:**

- 2020 *City of Los Angeles Building Code* (LABC)
- 2020 *City of Los Angeles Residential Code* (LARC)

**2.0 CONCLUSIONS**

The dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards, described in Sections 2.0 through 7.0 of the evaluation report [ESR-3937](#), comply with the LABC Chapter 14, and the LARC, and are subject to the conditions of use described in this supplement.

**3.0 CONDITIONS OF USE**

The dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-3937](#).
- The design, installation, conditions of use and identification of the dassoXTR Classic Espresso (EcoTimber Xterior Ipe) and dassoXTR Epic Cognac (EcoTimber Xterior Teak) deck boards are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report [ESR-3937](#).
- The design and installation are in accordance with the additional requirements of LABC Chapter 14.
- Under the LARC, an engineered design in accordance with LARC Section R301.1.3 must be submitted.

This supplement expires concurrently with the evaluation report, issued June 2022.