

ICC-ES Evaluation Report

ESR-5016


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<p>DIVISION: 06 00 00— WOOD, PLASTICS & COMPOSITES</p> <p>Section: 06 50 00— Structural Plastics</p> <p>Section: 06 53 00— Plastic Decking</p>	<p>REPORT HOLDER: FIBER COMPOSITES, LLC</p> <p>ADDITIONAL LISTEE: THE WOLF ORGANIZATION, LLC</p>	<p>EVALUATION SUBJECT: PERSPECTIVE™ DECK BOARDS</p>	
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1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2024, 2021, 2018, 2015, 2012 and 2009 [International Building Code® \(IBC\)](#)
- 2024, 2021, 2018, 2015, 2012 and 2009 [International Residential Code® \(IRC\)](#)

Properties evaluated:

- Structural
- Durability
- Surface-burning characteristics

1.2 Evaluation to the following green code(s) and/or standards:

- 2022 and 2019 [California Green Building Standards Code \(CALGreen\)](#), Title 24, Part 11
- 2020, 2015, 2012 and 2008 ICC 700 [National Green Building Standard™](#) (ICC 700-2020, ICC 700-2015, ICC 700-2012 and ICC 700-2008)

Attributes verified:

See Section 3.5

2.0 USES

Deck boards are limited to exterior use applications on structures regulated by the IRC or Type VB construction in accordance with the IBC. Deck boards may be used on balconies and similar projects on buildings of Type III, IV & V construction where fire sprinkler protection is extended into those areas in accordance with 2024, 2021 and 2018 IBC 705.2.3.1, Exception 3 (2015, 2012 and 2009 IBC 1406.3, Exception 3).

3.0 DESCRIPTION

3.1 General: Perspective™ decking materials are plastic composites™, subject to the requirements of 2024, 2021, 2018 and 2015 IBC Section 2612 and 2024, 2021 and 2018 IRC Sections R507.2.2 (2015 and 2012 IRC Section R507.3) and R317.4.

3.2 Material: Perspective™ Deck Boards are a polyethylene (PE) and wood fiber composite with a high-density polyethylene capstock. The grooved deck boards have a ½-inch (12.7 mm) deep x 13/32-inch (10.3 mm)

high groove along the entire length of the deckboard, utilized for a hidden fastener installation system. Perspective™ Deck Boards are manufactured in the styles and shapes as described in [Table 1](#) of this report. Perspective™ Deck Boards are produced with a wood grain pattern. Refer to [Figures 1, 2](#) and [3](#) for approved section profiles and colors.

3.3 Surface-burning Characteristics: The Perspective™ Deck Boards meet or exceed the flame spread index of 200 or less when tested in accordance with ASTM E84.

3.4 Durability: When subjected to weathering and decay, Perspective™ Deck Boards have shown equivalency to pressure treated lumber; therefore, it can be used as an alternative to pressure treated lumber and is approved for direct ground contact. The decking has been evaluated for structural capacity when exposed to temperatures from -20°F to +125°F (-29°C to 52°C).

3.5 Green Attributes: The attributes of the composite deck boards have been verified as conforming to the provisions of (i) 2022 and 2019 CALGreen Section A5.406.1.2 for reduced maintenance; and (ii) ICC 700-2020 Section 602.1.6 and 11.602.1.6 for termite-resistant materials and Section 601.7 and 11.601.7 for site-applied finishing materials (iii) ICC 700-2015 and ICC 700-2012 Sections 602.1.6 and 11.602.1.6 for termite-resistant materials and Sections 601.7, 11.601.7, and 12.1(A).601.7 for site-applied finishing materials; (iv) ICC 700-2008 Section 602.8 for termite-resistant materials and Section 601.7 for site-applied finished materials. Note that decisions on compliance for those areas rest with the user of this report. The user is advised of the project-specific provisions that may be contingent upon meeting specific conditions, and the verification of those conditions is outside the scope of this report. These codes or standards often provide supplemental information as guidance. See Section 3.4 for limitations on termite-resistance use.

4.0 DESIGN AND INSTALLATION

4.1 Design:

Perspective™ Deck Boards comply with ASTM D7032. Allowable Load and Maximum Allowable Span of the Perspective™ Deck Boards complies with ASTM D7032. See [Tables 2](#) and [3](#) of span and wind uplift ratings. Wind uplift values based upon the lesser of deck board flexural strength, fastener pull-through, and fastener withdrawal from SYP lumber. Fastener withdrawal from alternative lumber species must be approved by the Code Official prior to installation.

4.2 Installation:

Installation of the Perspective™ Deck Boards must comply with this report and the manufacturer's published installation instructions. The manufacturer's published installation instructions must be available at the jobsite at all times during installation. When the manufacturer's published installation instructions differ from this report, this report governs.

1. Perspective™ Deck Boards must be stored on a flat surface, supported every 24 inches (610 mm) and kept in the shade or in the original packaging.
2. Allow a minimum of 1.5 inches (38 mm) between the bottom of the joists and the ground or existing surface to allow proper airflow and drainage.
3. Specialized surface fasteners are required when Perspective™ Deck Boards are installed over steel joists. Phantom® Hidden Fasteners must not be used. Metal fasteners that install at a 90-degree angle are required for this application.
4. Spacing requirements as directed in the Wolf Perspective™ Decking Installation Instructions must be met in order to maintain product warranty.
5. Approved deck board fastening methods are shown in [Table 2](#) and [Table 3](#) of this report. Alternative fastening methods are outside the scope of this report and is subject to approval by the code official.
6. Fastener heads must be installed flush with the board surface or countersunk if using one of the recommended fasteners with color matched plugs.
7. Surface fasteners must be installed at a 90-degree angle to the decking surface.
8. All construction, wood or steel framing, beams, joist, stringers and associated connections needed to support Perspective™ Deck Boards are outside the scope of this report. All construction must follow applicable codes and the manufacturer's installation instructions and are subject to approval by the code official.

9. The use of hidden fasteners is not recommended for installations above 6500 ft (1981 m).
10. Perspective™ Deck Boards used as stair treads must be installed in a minimum of a two-span condition in accordance with [Table 3](#).

5.0 CONDITIONS OF USE:

The Perspective™ Deck Boards described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 Perspective™ Deck Boards must be installed in accordance with the Wolf Perspective™ Decking Installation Instructions. In the case of conflict, this report governs.
- 5.2 Deck boards are limited for exterior use applications on structures regulated by the IRC or Type VB construction in accordance with the IBC. Deck boards may be used on balconies and similar projects on buildings of Type III, IV & V construction where fire sprinkler protection is extended into those areas in accordance with 2024, 2021 and 2018 IBC 705.2.3.1, Exception 3 (2015, 2012 and 2009 IBC 1406.3, Exception 3).
- 5.3 Compatibility of the supporting construction materials with all fasteners and other hardware components is subject to approval by the code official.
- 5.4 Only those types of fasteners and fastening methods described in this report have been evaluated for the installation of the Perspective™ Deck Boards; other methods of attachment are outside the scope of this report.
- 5.5 Evaluation of slip resistance for the Perspective™ Deck Boards is outside the scope of this report.
- 5.6 Perspective™ Deck Boards is produced under quality control programs with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the [Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems \(Guards and Handrails\) \(AC174\)](#), dated January 2012 (editorially revised April 2024).

7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-5016) along with the name, registered trademark, or registered logo of the report holder and/or listee must be included in the product label.
- 7.2 In addition, each deck board and/or package of decking must be identified with the brand name (Perspective™ Deck Boards), the product name (see [Table 1](#)), the span rating for use as a deck board or stair tread as applicable, a statement regarding compliance with ASTM D7032 and a manufacturing plant identifier.
- 7.3 The report holder's contact information is the following:

FIBER COMPOSITES, LLC
181 RANDOM DRIVE
NEW LONDON, NORTH CAROLINA 28127
800-573-8841
info@fiberondecking.com
www.fiberondecking.com

- 7.4 The additional listee's contact information is the following:

THE WOLF ORGANZIATION, LLC
20 WEST MARKET STREET
YORK, PENNSYLVANIA 17401

TABLE 1—PERSPECTIVE™ DECK BOARDS DESCRIPTION SUMMARY

Deck Board ¹	Grooved Availability (Yes or No)	Approved Colors ³	Material/Process ²
Perspective Deck Boards	Yes	Acacia	Coextruded with a PE/wood core and HDPE capstock on three sides (No capstock on bottom)
		Cedar Ridge	
		Potomac Gray	
		Redwood	
		Dune	

¹ Deck board cross-sections are provided in [Figures 2 & 3](#).

² High Density Polyethylene (HDPE). Polyethylene (PE).

³ Approved colors are shown in [Figure 1](#).

TABLE 2—PERSPECTIVE™ DECK BOARDS SPAN & WIND UPLIFT RATINGS

Deck Board ¹	Fastener System ²	Span (inch)	Stair Tread Span ³ (inch)	Load Rating (psf)	Allowable Wind Uplift ⁴ (psf)
Perspective Solid Deck Board	Two (2) #9 x 2½ -in Kameleon™ Face Fasteners at each end and joist support.	16	12	100	619

1 inch = 25.4 mm 1 psf = 47.9 Pa

¹ Deck board cross-sections are provided in [Figures 2 & 3](#).

² Approved fasteners are provided in [Figure 5](#)

³ A minimum two-span condition is required when deck boards are utilized for a stair tread application.

⁴ Wind uplift values based upon the lesser of deck board flexural strength, fastener pull-through, and fastener withdrawal from SYP lumber. Fastener withdrawal from alternative lumber species must be approved by the Code Official prior to installation.

TABLE 3—PERSPECTIVE™ GROOVED DECK BOARDS & WIND UPLIFT RATINGS

Deck Board ¹	Fastener System ²	Span (inch)	Stair Tread Span ³ (inch)	Load Rating (psf)	Wind Uplift (psf)
Perspective Grooved Deck Board	Fiberon Phantom GT Hidden	16	--	100	136
	Fiberon Universal Clip Hidden Fastener System	16	--	100	84

1 inch = 25.4 mm 1 psf = 47.9 Pa

¹ Grooved deck board cross-sections are provided in [Figures 2 & 3](#).

² Grooved deck boards are not permitted (NP) in stair tread applications.

³ Fiberon Phantom GT Hidden Fastener System are detailed in [Figure 4](#). A #8 x 1⅝-inch (41.3 mm) long stainless-steel screw (10 TPI, 1.60-inch (40.6 mm) overall length, 0.162-inch (4 mm) major diameter, 0.108-inch (2.7 mm) minor diameter, 0.120-inch (3 mm) shank diameter, 0.232-inch (5.9 mm) head diameter, square drive trim head, type A point) must be used for all Hidden Fastener System installations.

⁴ Fiberon Universal Clip Hidden Fastener Systems are detailed in [Figure 4](#). A #8 x 1⅝-inch (41.3 mm) long coated steel screw (10 TPI, 1.62-inch (41.1 mm) overall length, 0.161-inch (4 mm) major diameter, 0.108-inch (2.7 mm) minor diameter, 0.120-inch (3 mm) shank diameter, 0.232-inch (5.9 mm) head diameter, star drive trim head, type 17 point) must be used for all Hidden Fastener System installations.

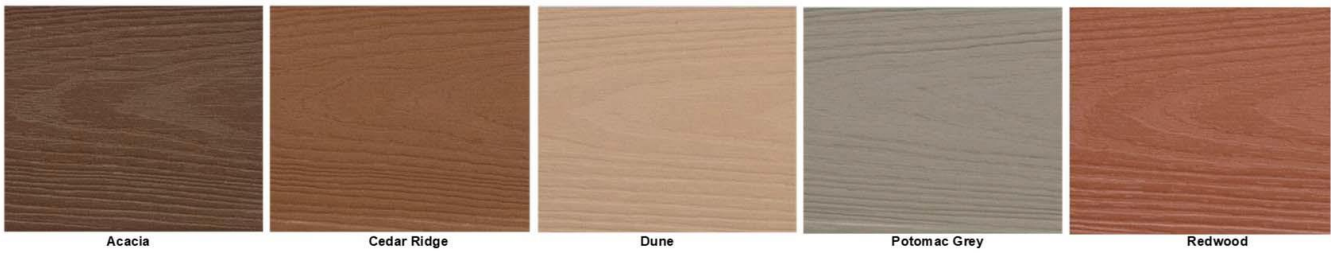


FIGURE 1—APPROVED COLORS

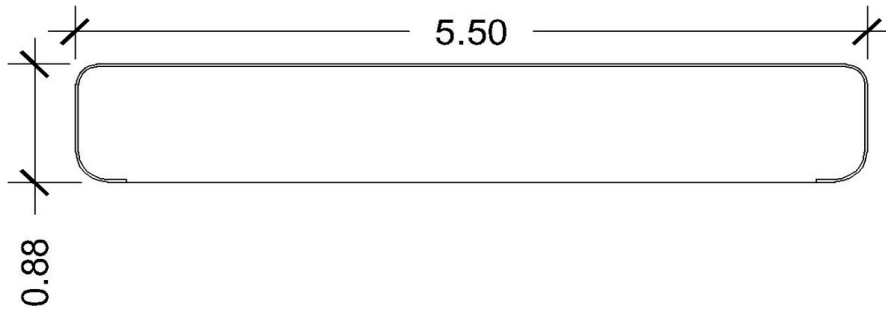


FIGURE 2—PERSPECTIVE™ SOLID DECK BOARD – CROSS SECTION (all dimensions are in inches; 1 inch = 25.4 mm)

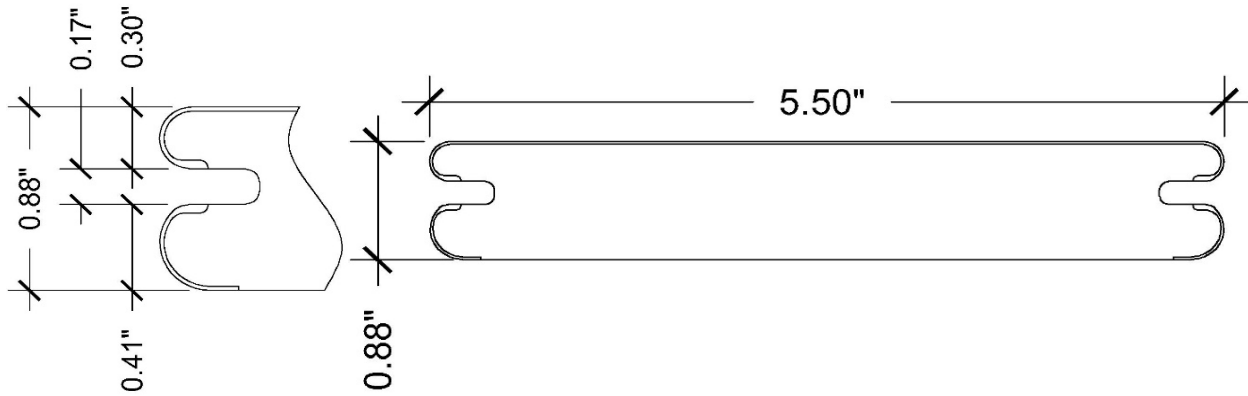


FIGURE 3—PERSPECTIVE™ GROOVED DECK BOARD – CROSS SECTION (all dimensions are in inches; 1 inch = 25.4 mm)

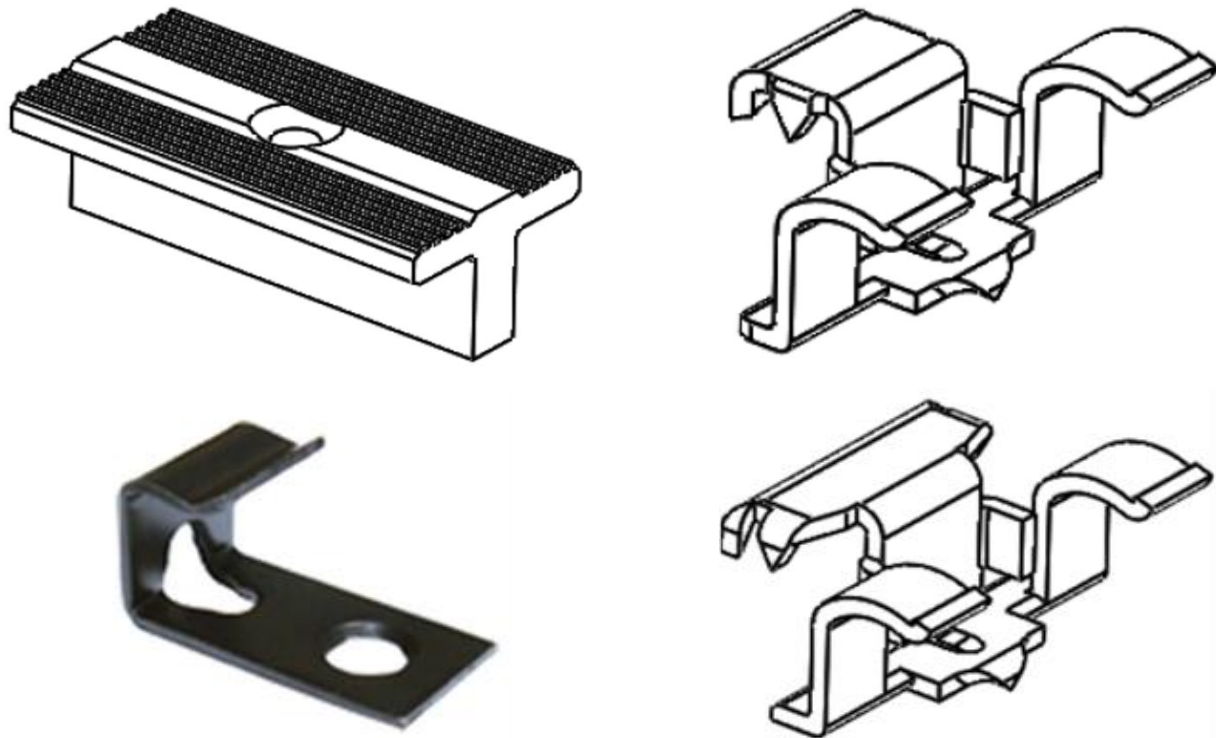


FIGURE 4—PERSPECTIVE™ GROOVED DECK BOARD – PHANTOM GT HIDDEN FASTENER SYSTEM, END CLIP AND PHANTOM UNIVERSAL CLIP (all dimensions are in inches; 1 inch = 25.4 mm)



2-1/2" Kameleon Composite Deck Screw



#8 x 1-5/8" Coated Steel Screw, Type 17 Point, Start Drive



#8 x 1-5/8" SS Steel Screw, Type A Point,

FIGURE 5—APPROVED FASTENERS (all dimensions are in inches; 1 inch = 25.4 mm)