



Pei Evaluation Service® is an accredited ISO Standard 17065 Product Certifier, accredited by the IAS. This **Product Evaluation Report** represents a product that Pei ES has evaluated. This product has a Product Evaluation Service Agreement & Follow-up Inspection Service Agreement. This **Product Evaluation Report** in no way implies warranty for this product or relieves **Fiber Composites, LLC** of their liabilities for this product. This **PER** is an official document if it is within one year of the Initial or Re-Approval date.

Initial Approval
April, 2020

Re-Approved

See all Pei ES Listings at: www.p-e-i.com

Report Owner

Fiber Composites, LLC

181 Random Drive
New London, NC 28127

Approved Manufacturing Locations

Fiber Composites, LLC

181 Random Drive
New London, NC 28127

Approved Private Labeler

The Wolf Organization, LLC

20 West Market Street
York, PA 17401

Product

Perspective™ Deck Boards

Evaluation Report Information

Fiber Composites Contact Information:

1-800-573-8841 or info@fiberondecking.com

General Details

This report covers **Perspective™ Deck Boards**. The plant location listed above has an approved Q.C. Manual to manufacture the product. **Fiber Composites, LLC** has a Product Evaluation Service Agreement with **Pei Evaluation Service® (Pei ES)** / Follow-up Inspection Service Agreement with **Progressive Engineering Inc. (Pei)**. The plant location listed above shall be audited quarterly by **Pei**.

Perspective™ Deck Boards have been tested and evaluated for strength, weathering, termite, decay and surface burning characteristics to meet design loads and requirements of the codes as noted under the Code Compliance section of this PER. A temperature range of -20°F to +125°F was used for this evaluation.

Product Description

Perspective™ Deck Boards are manufactured in the styles and shapes as described in Table 1 of this **PER**. **Perspective™ Deck Boards** are produced with a wood grain pattern. Refer to Figures 1 and 2 for approved section profiles and colors. **Perspective™ Deck Boards** are a polyethylene (PE) and wood fiber composite with a high density polyethylene capstock. The grooved deck boards have a 1/2" deep x 13/32" high groove along the entire length of the deckboard, utilized for a hidden fastener installation system. The **Perspective™ Deck Boards** meet or exceed the flame spread index of 200 or less as stated in test method ASTM E84. 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.

General Product Use

- Perspective™ Deck Boards** shall be installed in accordance with the Wolf Perspective™ Decking Installation Instructions.
- Perspective™ Deck Boards** shall be stored on a flat surface, supported every 24" and kept in the shade or in the original packaging.
- Allow a minimum of 1.5" between the bottom of the joists and the ground or existing surface to allow proper airflow and drainage.
- Specialized surface fasteners are required when **Perspective™ Deck Boards** are installed over steel joists. Phantom® Hidden Fasteners shall not be used. Metal fasteners that install at a 90-degree angle are required for this application.
- Spacing requirements as directed in the Wolf Perspective™ Decking Installation Instructions must be met in order to maintain product warranty.
- Approved deck board fastening methods are shown in Table 2 and Table 3 of this **PER**. Alternative fastening methods are outside the scope of this **PER** and shall be subject to approval by the building official.
- Fastener heads shall be installed flush with the board surface or countersunk if using one of the recommended fasteners with color matched plugs.
- Surface fasteners shall be installed at a 90-degree angle to the decking surface.

General Product Use continued

9. All construction, wood or steel framing, beams, joist, stringers and associated connections needed to support **Perspective™ Deck Boards** are outside the scope of this **PER**. All construction shall follow applicable codes and the manufacturer's installation instructions and are subject to approval by the building official.

10. Deck boards are intended for exterior use applications on structures regulated by the 2009, 2012, 2015 & 2018 IRC or Type VB construction in accordance with the 2009, 2012, 2015 & 2018 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 2009, 2012, 2015 IBC 1406.3, Exception 3 or 2018 IBC 705.2.3.1, Exception 3.

11. The use of hidden fasteners is not recommended for installations above 6500 ft.

Code Compliance

International Residential Code®	International Building Code®
2009 - Section 317.4	2009 - Section 104.11
2012 - Section 507.3	2012 - Section 104.11
2015 - Section 507.3	2015 - Section 2612
2018 - Section 507.2.2	2018 - Section 2612

Standard Compliance

ASTM D790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.

ASTM D1761 - Standard Test Methods for Mechanical Fasteners in Wood.

ASTM D2565 - Standard Practice for Xenon-Arc Exposure of Plastics Intended for Outdoor Applications.

ASTM D6109 - Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastic Lumber and Related Products.

ASTM D7031 - Standard Guide for Evaluating Mechanical and Physical Properties of Wood-Plastic Composite Products.

ASTM D7032 - Standard Specification for Establishing Performance Ratings for Wood, Plastic Composite Deck Boards and Guardrail Systems (Guards or Rails)

ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.

ASTM F1679 - Standard Test Method for Using a Variable Incidence Tribometer (VIT)

Code Considerations

2016 California Green Building Standard Code "CALGreen" Title 24, Part 11

CALGreen Section A5.406.1.1 Reduced Maintenance. Fiberon Decking requires no finishing at installation and no finishing required for product maintenance.

2015 ICC 700 National Green Building Standard

Section 602.1.6 Termite-resistance materials. Fiberon Decking has been tested to AWPA Standard E1-13

Section 601.7 Prefinished Materials. Fiberon Decking requires no finishing at installation and no finishing required for product maintenance.

Decisions on compliance of Fiberon/Wolf Decking to 2016 CALGreen and 2015 ICC 700 National Green Building standard are the responsibility of the building designer/professional. Fiberon /Wolf Decking is just one product in the completed structure and there may be other or specific requirements that need to be considered.

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	

Notes:

1. Deck board cross-sections are provided in Figures 6 and 7.
2. High Density Polyethylene (HDPE). Polyethylene (PE).
3. Approved colors are shown in Figure 4.

Table 2 - Perspective™ Deck Boards Span & Wind Uplift Ratings

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

Notes:

- Deck board cross-sections are provided in Figures 6 & 7.
- Approved fasteners are provided in Figures 5
- A minimum two-span condition is required when deck boards are utilized for a stair tread application.
- 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 shall be approved by the Building Official prior to installation.

Table 3 - Perspective™ Grooved Deck Boards Span & Wind Uplift Ratings

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

Notes:

- Grooved deck board cross-sections are provided in Figures 6 & 7
- Grooved deck boards are not permitted (NP) in stair tread applications.
- Fiberon Phantom GT Hidden Fastener System are detailed in Figure 8. A #8 x 1-5/8" long stainless steel screw (10 TPI, 1.60" overall length, 0.162" major diameter, 0.108" minor diameter, 0.120" shank diameter, 0.232" head diameter, square drive trim head, type A point) shall be used for all Hidden Fastener System installations.
- Fiberon Universal Clip Hidden Fastener Systems are detailed in Figure 8. A #8 x 1-5/8" long coated steel screw (10 TPI, 1.62" overall length, 0.161" major diameter, 0.108" minor diameter, 0.120" shank diameter, 0.232" head diameter, star drive trim head, type 17 point) shall be used for all Hidden Fastener System installations.

Figure 4 - Approved Colors

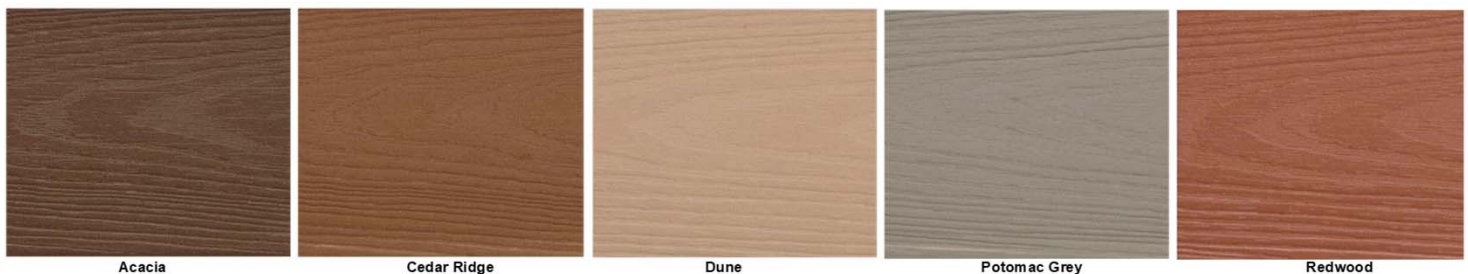


Figure 6 - Perspective™ Solid Deck Board - Cross Section

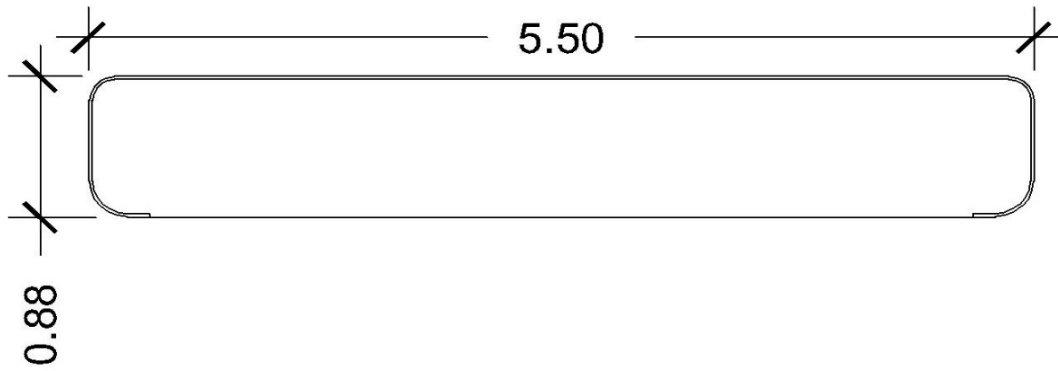


Figure 7 - Perspective™ Grooved Deck Board - Cross Section

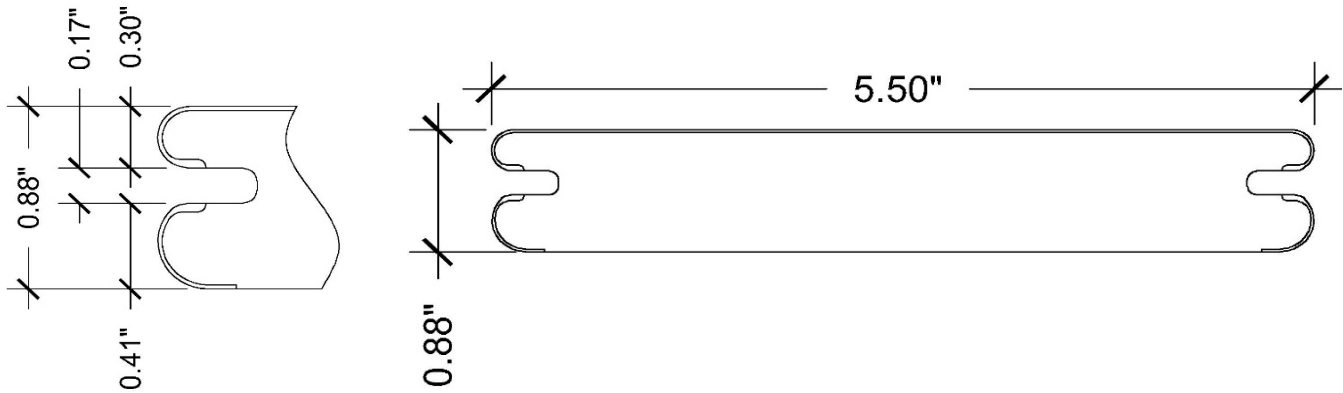


Figure 8 - Perspective™ Grooved Deck Board - Phantom GT Hidden Fastener System, End Clip and Phantom Universal Clip

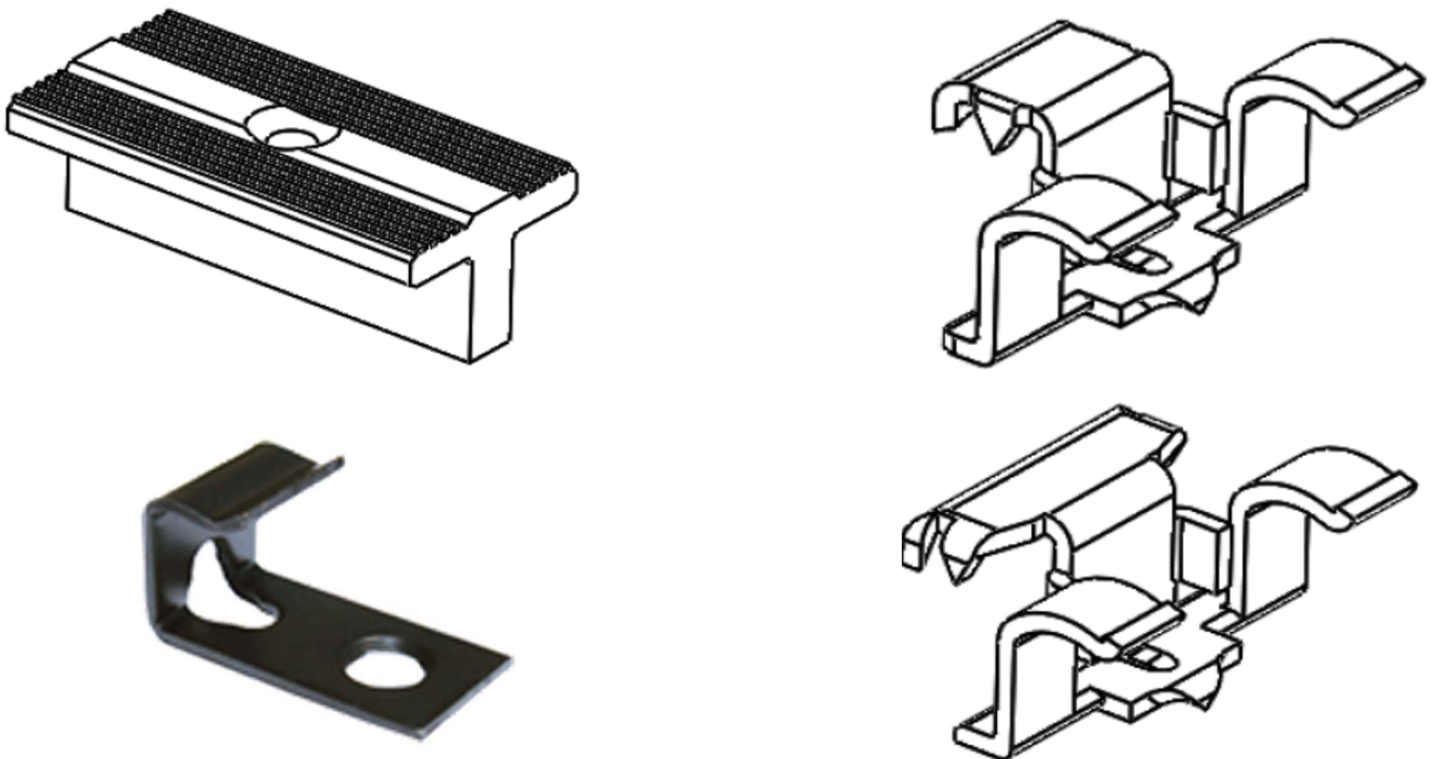


Figure 5 - Approved Fasteners

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,

Product Labeling

Each deck board shipment, that is covered by this **Product Evaluation Report**, must have a label attached with at least the following information:

1. [The Wolf Organization Name and Address](#)
2. Product Name
3. Plant Identifier & Date Code
4. This **PER** Number and *Pei Evaluation Service*[®] Logo
5. Allowable Load and Maximum Allowable Span (Indicate Compliance with ASTM D7032)

Acceptable Evaluation Marks**Product Documentation**

A Product Evaluation Service Agreement between *Pei Evaluation Service*[®] and [Fiber Composites, LLC](#)

A Follow-up Inspection Service Agreement between [Progressive Engineering Inc.](#) and [Fiber Composites, LLC](#)

[Fiber Composites, LLC](#) Quality Control Manual - Dated: March 15, 2019

A Test Report No. J3130.01-119-19 R0 - ICC-ES AC174 Compliance Evaluation on Perspective Deck Boards - Dated: December 09, 2019.

A Test Report No. 01.23233.18.051d -Fire Performance Evaluation in Accordance with ASTM E84-18, Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: July 31, 2018.

An Affidavit Opinion Letter - Dated February 21, 2020

A Test Report No. WDL-2019-16A - Formosan Subterranean Termite Resistance Study of Two Fiberon Decking Boards and Untreated Southern Pine Control - Dated October 2, 2019.

A Test Report No. WDL-2019-16B - Decay Resistance Study of Two Fiberon Decking Boards and Untreated Southern Pine Control - Dated February 19, 2019.