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DIVISION: 06 00 00 – WOOD, PLASTICS, AND COMPOSITES
Section: 06 50 00 – Structural Plastics
Section: 06 53 00 – Plastic Decking

REPORT HOLDER:

The AZEK® Company LLC
894 Prairie Avenue
Wilmington, OH 45177
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REPORT SUBJECT:

AZEK ARBOR Collection®
AZEK Harvest® Collection®
AZEK Porch Boards
AZEK Vintage Collection®
AZEK MAX

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2021, 2018, 2015 *International Building Code*® (IBC)
- 2021, 2018, 2015 *International Residential Code*® (IRC)
- 2020 *Florida Building Code* (FBC), excluding High-Velocity-Hurricane Zones (HVHZ) (See Section 9.0)

1.2 NOTE: This report references the most recent Code sections cited. Section numbers in earlier editions may differ. AZEK Decking (Deck and Porch Boards) have been evaluated for the following properties:

- Structural Performance
- Durability
- Surface Burning

1.3 AZEK Decking (Deck and Porch Boards) are intended for use as a walking surface on exterior decks, balconies, porches, and walkways, including stairs in One- and Two-Family Dwellings regulated by the IRC and other construction types regulated by the IBC in accordance with IBC Section 705.2.3 *Combustible projections* [1406.3], where fire-resistance rated floor construction is not required for the deck or balcony.

2.0 STATEMENT OF COMPLIANCE

AZEK Decking (Deck and Porch Boards) comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.0.

3.0 DESCRIPTION

3.1 Materials and Processes - AZEK Decking are composed of a solid co-extruded cellular polyvinyl chloride (PVC) with a polymer cap. Harvest and Arbor collections are semi-capped (capped on three sides), and the Vintage collection is fully capped in cross section.

3.2 AZEK Porch Boards measure 1" thick with a 3.2" exposure width (3.415" overall width) and 5.5" exposure width (5.715" overall width) and are produced in five colors: Brownstone, Coastline, Dark Hickory, Mahogany, Morado®, Silver Oak®, Oyster®, and Slate Gray.

3.3 The 5.5" wide AZEK Decking measure 1" thick and are provided in the following collections:

3.3.1. AZEK Harvest® Collection® deck boards are produced in five colors: Autumn Chestnut™, Brownstone, Island Oak™, Kona®, and Slate Gray.



3.3.2. AZEK ARBOR Collection® deck boards are produced in six colors: Acacia®, Brazilian Walnut, Hazelwood, Morado®, Mountain Redwood™, and Silver Oak®.

3.3.3. AZEK Vintage Collection® deck boards are produced in six colors: Coastline, Cypress, Dark Hickory, English Walnut, Mahogany, and Weathered Teak.

3.4 The 3.5" and 7.25" wide AZEK Decking measure 1" thick and are provided in the following collections:

3.4.1. AZEK Vintage Collection® products are produced in three colors: Cypress, Dark Hickory, and Mahogany.

3.4.2. AZEK Harvest® Collection® products are produced in two colors: Brownstone and Slate Gray.

3.5 The AZEK MAX decking measures 1.5" thick by 5.5" wide and are provided in the following colors: Coastline and Slate Gray.

3.6 The walking surface is embossed with a simulated wood grain.

4.0 PERFORMANCE CHARACTERISTICS

4.1 AZEK Decking are rated for a uniform live load of 100 lbs/ft² when installed on support framing spaced at 16" on center. This live load rating also applies to deck boards and porch boards installed diagonal to the support framing (45° max.) with 12" on center maximum joist spacing.

4.2 AZEK Deck and porch boards used as stair treads shall be installed on a minimum of a two-span condition and are rated for the code-prescribed concentrated load equal to 300 lbs when installed in accordance with Table 2.

4.3 AZEK Decking has wind uplift resistance ratings as indicated in Table 1 when installed on support framing spaced at 16 inches on center.

4.4 AZEK Decking is deemed equivalent to preservative treated or naturally durable wood for resistance to weathering effects, attack from termites and fungus decay.

4.5 AZEK Decking structural performance has been demonstrated for a temperature range of -20° F to 125° F.

4.6 AZEK Decking has a flame spread index not exceeding 200 when tested in accordance with ASTM E 84.

5.0 INSTALLATION

5.1 Installation must be in accordance with the manufacturer's installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instruction must be available on the jobsite during installation.

5.2 AZEK Decking shall be installed with fastening as indicated in Table 1.

5.3 AZEK porch boards used as stair treads shall be installed as shown in Figure 5.

5.4 AZEK deck boards used as stair treads shall be installed as shown in Figures 5, 6, and 7. See Table 2 for maximum stair tread spans.

5.5 AZEK Deck and porch may be installed diagonal to support framing up to maximum of 45° with 12" o.c. maximum joist spacing.

6.0 CONDITIONS OF USE

6.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2 The wind uplift resistance rating recognized in this report is based on attachment to treated Southern Pine framing (specific gravity, G=0.55). Installation on wood framing with a lesser specific gravity may result in a lower wind uplift rating.

6.3 AZEK Decking shall be fastened directly to supporting construction. Conventional wood supporting structure is not within the scope of this report and is subject to the evaluation and approval by the building official. Design and construction of supporting structure must satisfy the design load requirements of Chapter 16 of the IBC.





6.4 Where required by the building official, engineering calculations and details shall be provided. The calculations shall verify that the anchorage complies with the building code for the type of framing and condition of the supporting construction.

6.5 The compatibility of all fasteners with supporting structure, including chemically treated wood, is not within the scope of this report and subject to approval by the code official.

6.6 AZEK Decking recognized in this report are manufactured in accordance with the manufacturer's approved quality control system with inspections by Intertek.



7.0 SUPPORTING EVIDENCE

7.1 Manufacturer's drawings and installation instructions.

7.2 Reports of testing demonstrating compliance with ICC-ES AC174, Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails), revised December 2014 and ASTM D 7032-17.

7.3 Documentation of an Intertek approved quality control system for the manufacturing of products recognized in this report.

7.4 Intertek Listing Report "[AZEK Deck Boards and AZEK Porch Boards](#)", on the Intertek Directory of Building Products.

8.0 IDENTIFICATION

8.1 The AZEK Deck Boards and AZEK Porch Boards are identified with the manufacturer's name (The AZEK Company LLC), the product, the following statement: "ASTM D7032. See Intertek CCRR-0101 at <https://bpdirectory.intertek.com> for uses and performance levels", the Intertek Mark as shown below, the Intertek Control Number. and the Code Compliance Research Report number (CCRR-0101).

9.0 FLORIDA BUILDING CODE

9.1 Scope of Evaluation:

AZEK Decking was evaluated for compliance with the 2020 Florida Building Code – Building and Florida Building Code – Residential.

9.2 Conclusion:

AZEK Decking, described in Sections 2.0 through 7.0 of this Research Report, comply with the 2020 Florida Building Code – Building and Florida Building Code – Residential, subject to the following conditions:

- Use of AZEK Decking for compliance with the High-Velocity Hurricane Zone provisions of the 2020 Florida Building Code – Building and the Florida Building Code – Residential has not been evaluated and is outside the scope of this Research Report.
- Intertek is an approved evaluation entity and quality assurance entity pursuant to Florida Statute 553.842 – Product Evaluation and Approval.





10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3 Reference to the <https://bpdirectory.intertek.com> is recommended to ascertain the current version and status of this report.

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Table 1 – Fastening Schedule and Wind Rating

Product	Fastening Description	Span	Wind Uplift Resistance
3.2 inch AZEK Porch Board	(1) #8 x 2-1/2" stainless steel trim-head <i>Headcote™</i> screw @ 45° through root of tongue into each joist	16" o.c.	294 psf
	(1) 16 GA x 2" <i>Simpson Strong-Tie L Series</i> Stainless Steel Flooring Cleat at 45° through root of tongue into each joist	16" o.c.	102 psf
5.5 inch AZEK Porch Board	(1) #10 x 2-1/2" stainless steel trim-head <i>Headcote™</i> screw @ 45° through root of tongue into each joist	16" o.c.	144 psf
	(1) #10 x 2-1/2" <i>TOPLoc™</i> stainless steel screw into each joist	16" o.c.	177 psf
	(1) <i>OMG FastenMaster® Cortex</i> concealed fasteners each joist (#10 x 2-1/2" screws)	16" o.c.	158 psf
3.5 inch AZEK <i>Harvest® Collection®</i> 3.5 inch AZEK <i>ARBOR Collection®</i> 3.5 inch AZEK <i>Vintage Collection®</i>	(2) #10 x 2-1/2" <i>TOPLoc™</i> stainless steel screw into each joist	16" o.c.	631 psf
	(2) <i>OMG FastenMaster® Cortex</i> concealed fasteners each joist (#10 x 2-3/4" screws)	16" o.c.	631 psf
	(2) <i>SIDELOC™</i> hidden fasteners per joist (#8 x 1-7/8" screws)	16" o.c.	316 psf
5.5 inch AZEK <i>Harvest® Collection®</i> 5.5 inch AZEK <i>ARBOR Collection®</i> 5.5 inch AZEK <i>Vintage Collection®</i>	(2) #8 x 2-1/2" stainless steel trim-head <i>Headcote™</i> screw into each joist	16" o.c.	351 psf
	(2) #10 x 2-1/2" <i>TOPLoc™</i> stainless steel screw into each joist	16" o.c.	593 psf
	(2) <i>OMG FastenMaster® Cortex</i> concealed fasteners each joist (#8 x 2-3/4" screws)	16" o.c.	486 psf
	<i>CONCEALoc™</i> Hidden Deck fastener with 1-1/2" pneumatic screws. Starter board (edge) face-fastened with (1) #8 x 2-1/2" stainless steel trim-head <i>Headcote™</i> screw	16" o.c.	135 psf
	<i>HIDfast</i> hidden fastener (13 GA x 2-1/2") with (1) #8 x 2-1/2" stainless steel trim-head <i>Headcote™</i> screw at each joist for the starter (edge) board.	16" o.c.	119 psf
	<i>FUSIONLoc™</i> Hidden Deck fastener with 2" pneumatic screws. Starter board (edge) face-fastened with (1) #8 x 2-1/2" stainless steel trim-head <i>Headcote™</i> screw	16" o.c.	186 psf
	<i>EdgeFast</i> hidden fastener (14 GA x 2-1/4" long) installed through the groove of the board and into each joist at 45°	16" o.c.	146 psf



Product	Fastening Description	Span	Wind Uplift Resistance
7.25 inch AZEK Harvest® Collection®	(2) #10 x 2-1/2" TOPLoc™ stainless steel screw into each joist	16" o.c.	454 psf
7.25 inch AZEK Vintage Collection®	(2) OMG FastenMaster® Cortex concealed fasteners each joist (#10 x 2-3/4" screws)	16" o.c.	372 psf
	(2) SIDELOC™ hidden fasteners per joist (#8 x 1-7/8" screws)	16" o.c.	163 psf
AZEK MAX	(2) SIDELOC™ hidden fasteners per joist (#8 x 2-3/8 inch, 9 TPI, 0.42 inch long reverse pitch, 0.162 inch major dia., 0.120 inch shank dia., 0.199 inch head dia., type 17 point screws)	24" o.c.	162 psf
	(2) OMG FastenMaster® Cortex® concealed fasteners each joist (#10x2-1/2", 12 TPI, 0.55 inch long reverse pitch, 0.191 inch major dia., 0.150 inch shank dia., 0.262 inch head dia., type 17 point screws)	24" o.c.	273 psf
	(2) OMG FastenMaster® Cortex® concealed fasteners each joist (#10 x 2-3/4", 12 TPI, 0.50 inch long reverse pitch, 0.191 inch major dia., 0.150 inch shank dia., 0.262 inch head dia., type A point screws)	24" o.c.	341 psf
	(2) #10 x 2-1/2" TOPLoc™ stainless steel screw into each joist (12 TPI, 0.182 inch major dia., 0.132 inch shank dia., 0.265 inch head dia., type 17 point screws)	24" o.c.	260 psf
	(2) #10 x 3" OMG FastenMaster® TrapEase®3 stainless steel screws into each joist (12 TPI, 0.50 inch long reverse pitch, 0.195 inch major dia., 0.156 inch shank dia., 0.257 inch head dia., type 17 point screws)	24" o.c.	417 psf
	(2) #10 x 2-1/2" OMG FastenMaster® TrapEase®3 stainless steel screws into each joist (12 TPI, 0.45 inch long reverse pitch, 0.195 inch major dia., 0.156 inch shank dia., 0.257 inch head dia., type 17 point screws)	24" o.c.	278 psf





Table 2 – Stair Tread Span Ratings

Product	Maximum Stair Tread Span	Installation
3.2" AZEK Porch Board 5.5" AZEK Porch Board	11"	See Figure 5 for installation details.
5.5" AZEK Harvest® Collection® 5.5" AZEK ARBOR Collection® 5.5" AZEK Vintage Collection®	10"	See Figure 5 for installation details.
	17.25"	2X6 additional supports. See Figure 6 for installation details.
	24"	2X4 additional supports. See Figure 7 for installation details.
7.25" AZEK Harvest® Collection® 7.25" AZEK Vintage Collection®	12"	See Figure 5 for installation details.
AZEK MAX	14"	See Figure 5 for installation details.

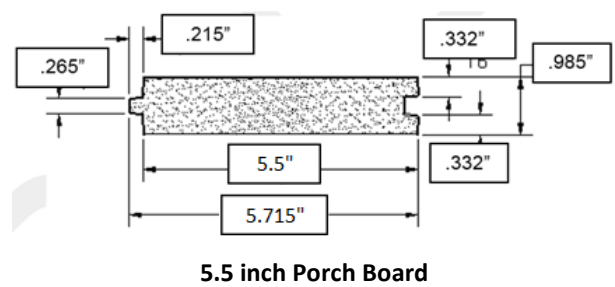
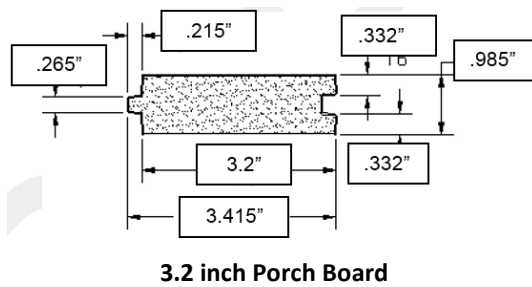


Figure 1 – AZEK Porch Board



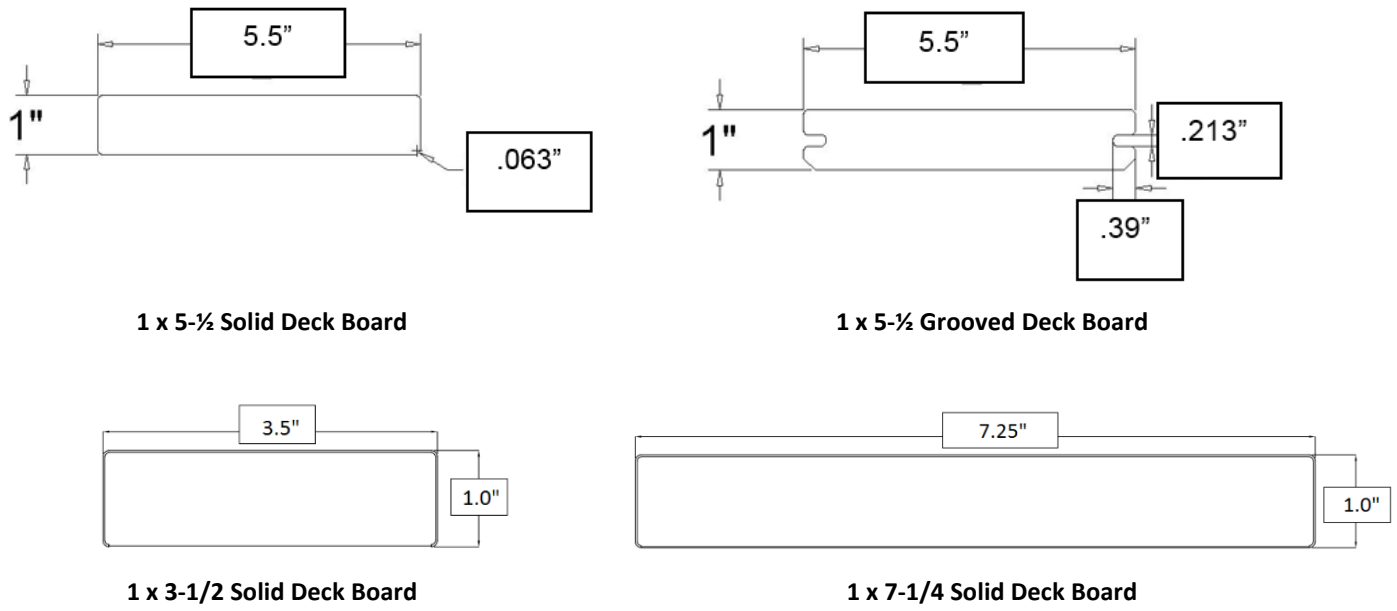


Figure 2 – AZEK Arbor, Harvest, and Vintage Decking

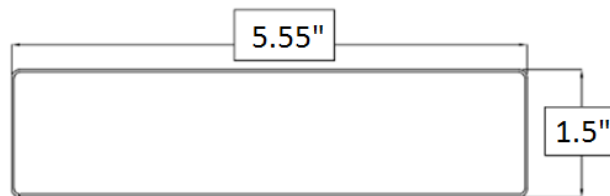
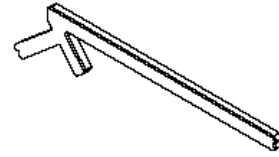


Figure 3 – AZEK MAX Decking



FastenMaster® Cortex



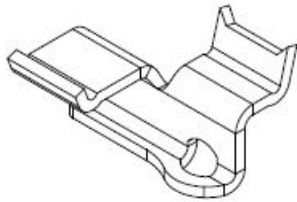
HidFast Fastener



TOPLoc™ Face Fastener



EdgeFast Fastener



CONCEALoc™ Hidden Fastener



FusionLoc™ Hidden Fastener

Figure 4 – Fasteners

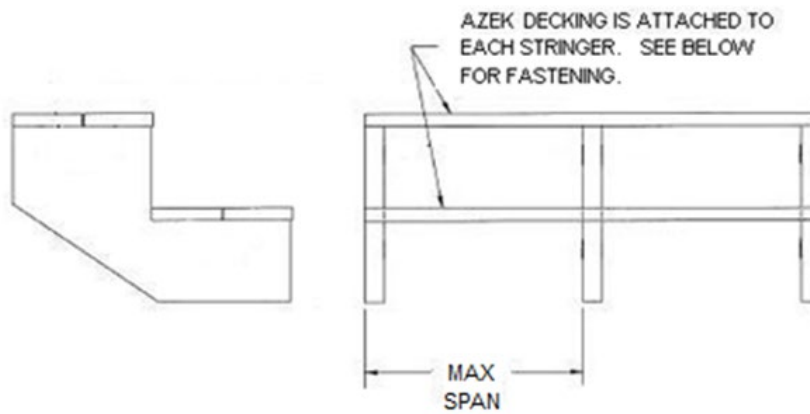




Figure 5 – Stair Tread Installation with no additional support
(Minimum tread length is 36")

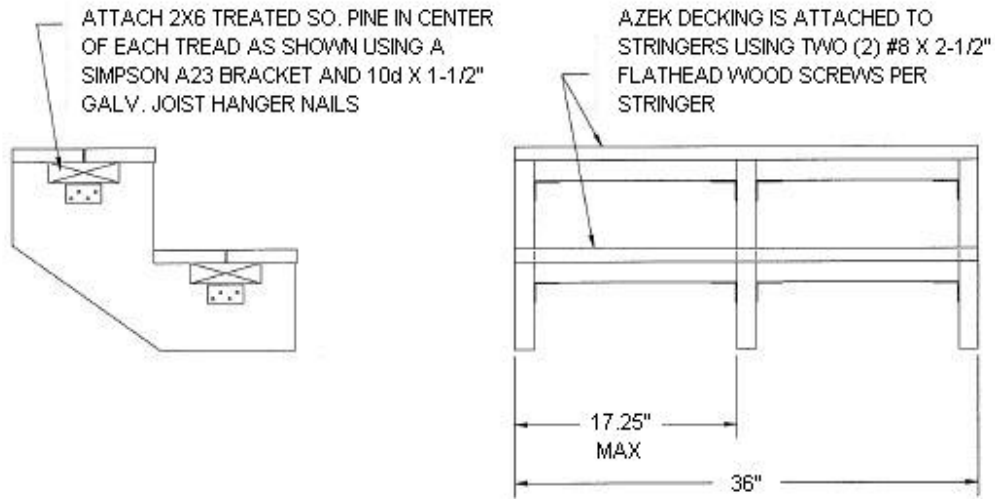


Figure 6 – Alternate 1 X 5-½ Stair Tread Installation for 17.25” Span
(2X6 additional support)

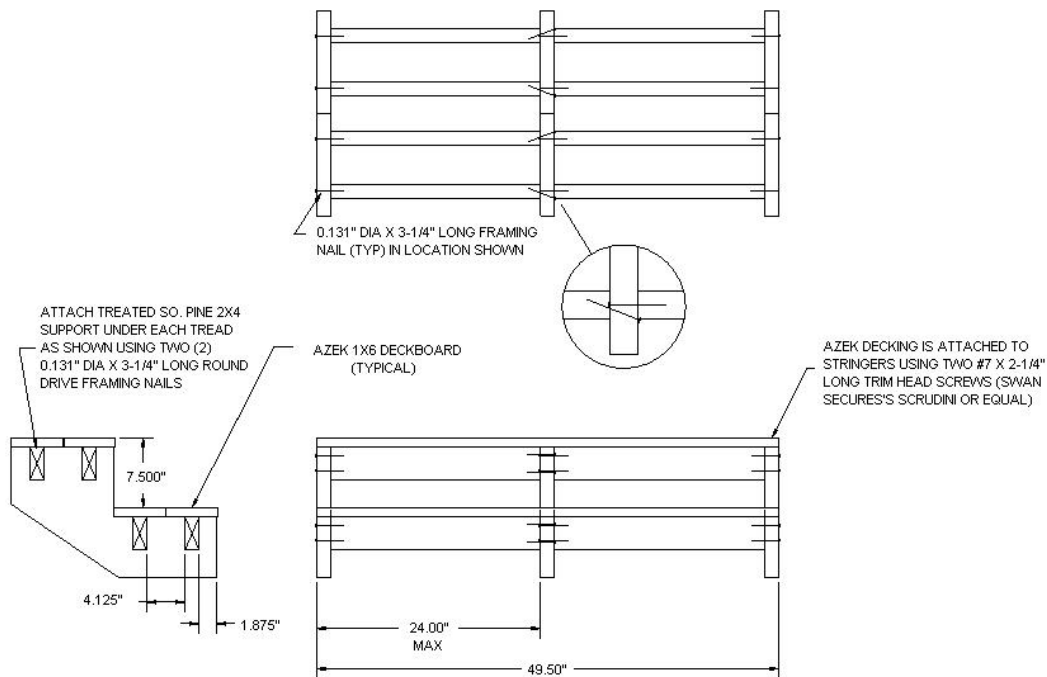


Figure 7 – Alternate 1 X 5-½ Stair Tread Installation for 24” Span
(2X4 additional supports)