

Issue Date: 07-28-2005
Revision Date: 05-22-2023
Renewal Date: 05-31-2024

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 LANDMARK 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)

NOTE: This report references 2021 Code sections with [2018, 2015] Code sections shown in brackets where they differ. FBC Code sections match IBC 2018 code sections.

1.2 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.

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 is a semi-capped (capped on three sides), and the Vintage and Landmark collections are 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 Six colors: Coastline, Dark Hickory, Mahogany, Weathered Teak, 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 three colors: Brownstone, Kona®, and Slate Gray.

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

3.3.3. AZEK Landmark deck boards are produced in three colors: French White Oak, Castle Gate, American Walnut



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3.4 The 3.5" and 7.25" wide AZEK Decking measure 1" thick are provided as follows:

3.4.1 AZEK Vintage Collection® is available in 3.5" and 7.25" widths in six colors: Coastline, Cypress, Dark Hickory, English Walnut, Mahogany and Weathered Teak.

3.4.2 AZEK Harvest® Collection® is available in 7.25" widths 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, HARVEST, LANDMARK, Vintage, and Porch 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 MAX decking is rated for a uniform live load of 100 lbs/ft² when installed on support framing spaced at 24" on center. This live load rating also applies to MAX deck boards installed diagonal to the support framing (45° max.) with 16" on center maximum joist spacing.

4.3 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.

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

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

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

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

5.0 INSTALLATION

Installation shall be in accordance with the manufacturer's installation instructions and this report. Where differences occur between this report and the manufacturer's installation instructions, this report shall govern.

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

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

5.3 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.

6.0 CONDITIONS OF USE

The AZEK Decking applications identified in this report are deemed to comply with the intent of the provisions of the referenced building codes subject to the following conditions.

6.1 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.

6.2 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.

6.3 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.



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6.4 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.

6.5 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 [14, 10a].

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

8.0 IDENTIFICATION

AZEK Decking produced in accordance with this report shall be identified with labeling on the individual deck boards that includes the following information:

8.1 Name and/or trademark of manufacturer.

8.2 The following statement: "ASTM D7032. See Intertek CCRR-0101 at <https://bpdirectory.intertek.com> for uses and performance levels."

8.3 Packaging of deck boards shall also be identified with the Intertek identification mark and Code Compliance Research Report number (CCRR-0101) as shown:



9.0 OTHER CODES

9.1 Scope of Evaluation:

AZEK Decking was evaluated for compliance with the *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 *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 *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*.



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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.

This Code Compliance Research Report ("Report") is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Report. Only the Client is authorized to permit copying or distribution of this Report and then only in its entirety, and the Client shall not use the Report in a misleading manner. Client further agrees and understands that reliance upon the Report is limited to the representations made therein. The Report is not an endorsement or recommendation for use of the subject and/or product described herein. This Report is not the Intertek Listing Report covering the subject product and utilized for Intertek Certification and this Report does not represent authorization for the use of any Intertek certification marks. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.



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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 screw @ 45° through root of tongue into each joist	16" o.c.	294 psf
	(1) 16 GA x 2" Simpson Strong-Tie L Series Stainless Steel Flooring Cleat at 45° through root of tongue into each joist	16" o.c.	102 psf
	(1) TimberTech® Cortex concealed fastener (2-1/2 in. long, 12 TPI with a 0.5 in. length reverse pitch, 0.189 in. major dia., 0.130 in. minor dia.) at each joist, installed at a 45-degree angle through the tongue. The boards on the perimeter are face fastened on the outer edge at each joist.	16" o.c.	261 psf
	(2) TimberTech® Cortex concealed fasteners (2-1/2 in. long, 12 TPI with a 0.5 in. length reverse pitch, 0.189 in. major dia., 0.130 in. minor dia) at each joist, face fastened	16" o.c.	386 psf
	(1) #7 x 2-1/4" trim head screws (2-1/4 in. long, 9 TPI, 0.162 in. major dia., 0.113 in. minor dia., 0.235 in. head dia) at each joist, installed at a 45-degree angle through the tongue. The boards on the perimeter are face fastened on the outer edge at each joist.	16" o.c.	369 psf
5.5 inch AZEK Porch Board	(1) #10 x 2-1/2" stainless steel trim-head screw @ 45° through root of tongue into each joist	16" o.c.	144 psf
	(1) #10 x 2-1/2" TOPLoc™ stainless steel screw into each joist	16" o.c.	177 psf
	(1) TimberTech® Cortex concealed fasteners each joist (#10 x 2-1/2" screws)	16" o.c.	158 psf
	(1) TimberTech® Cortex concealed fasteners (2-1/2 in. long, 12 TPI with a 0.5 in. length reverse pitch, 0.189 in. major dia., 0.130 in. minor dia) each joist, installed at a 45-degree angle through the tongue. The boards on the perimeter are face fastened on the outer edge at each joist.	16" o.c.	116 psf
	(2) TimberTech® Cortex concealed fasteners (2-1/2 in. long, 12 TPI with a 0.5 in. length reverse pitch, 0.189 in. major dia., 0.130 in. minor dia.) each joist, face fastened	16" o.c.	347 psf
	(1) #7 x 2-1/4" trim head screws (2-1/4 in. long, 9 TPI, 0.162 in. major dia., 0.113 in. minor dia., 0.235 in. head dia) at each joist, installed at a 45-degree angle through the tongue. The boards on the perimeter are face fastened on the outer edge at each joist.	16" o.c.	330 psf





Product	Fastening Description	Span	Wind Uplift Resistance
3.5 inch AZEK Harvest® Collection® 3.5 inch AZEK LANDMARK Collection® 3.5 inch AZEK Vintage Collection®	(2) #10 x 2-1/2" TOPLoc™ stainless steel screw into each joist	16" o.c.	631 psf
	(2) TimberTech® Cortex concealed fasteners each joist (#10 x 2-3/4" screws)	16" o.c.	631 psf
	(2) SIDELoc™ hidden fasteners per joist (#8 x 1-7/8" screws)	16" o.c.	316 psf
	(2) SIDELoc™ hidden fasteners (1-7/8 in. long, 9 TPI with a 0.39 in. length reverse pitch, 0.118 in. shank dia., 0.197 in. head dia.) per joist, toe-nailed in each side of deck board.	16" o.c.	238 psf
	(2) SIDELoc™ hidden fasteners (2-3/8 in. long, 9 TPI with a 0.39 in. length reverse pitch, 0.120 in. shank dia., 0.199 in. head dia.) per joist, toe-nailed in each side of deck board.	16" o.c.	208 psf
	(2) TimberTech® Cortex concealed fasteners (2-1/2 in. long, 12 TPI with a 0.5 in. length reverse pitch, 0.189 in. major dia., 0.130 in. minor dia) at each joist	16" o.c.	438 psf
5.5 inch AZEK Harvest® Collection® 5.5 inch AZEK LANDMARK Collection® 5.5 inch AZEK Vintage Collection®	(2) #10 x 2-1/2" TOPLoc™ stainless steel screw into each joist	16" o.c.	593 psf
	(2) TimberTech® Cortex concealed fasteners each joist (#10 x 2-3/4" screws)	16" o.c.	486 psf
	CONCEALoc™ 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 Headcote™ screw	16" o.c.	135 psf
	FUSIONLoc™ Hidden Deck fastener with 2" pneumatic screws. Starter board (edge) face-fastened with (1) #8 x 2-1/2" stainless steel trim-head Headcote™ screw	16" o.c.	186 psf
	(2) SIDELoc™ hidden fasteners (1-7/8 in. long, 9 TPI with a 0.39 in. length reverse pitch, 0.118 in. shank dia., 0.197 in. head dia.) per joist, toe-nailed in each side of deck board	16" o.c.	238 psf
	(2) SIDELoc™ hidden fasteners (2-3/8 in. long, 9 TPI with a 0.39 in. length reverse pitch, 0.120 in. shank dia., 0.199 in. head dia.) per joist, toe-nailed in each side of deck board.	16" o.c.	208 psf
	(2) TimberTech® Cortex concealed fasteners (2-1/2 in. long, 12 TPI with a 0.5 in. length reverse pitch, 0.189 in. major dia., 0.130 in. minor dia) at each joist	16" o.c.	438 psf



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Product	Fastening Description	Span	Wind Uplift Resistance
7.25 inch AZEK Harvest® Collection® 7.25 inch AZEK Vintage Collection®	(2) #10 x 2-1/2" TOPLoc™ stainless steel screw into each joist	16" o.c.	454 psf
	(2) TimberTech® 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
	(2) TimberTech® Cortex concealed fasteners (2-1/2 in. long, 12 TPI with a 0.5 in. length reverse pitch, 0.189 in. major dia., 0.130 in. minor dia) at each joist	16" o.c.	438 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) TimberTech® 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) TimberTech® 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" TimberTech® 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





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 LANDMARK 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.

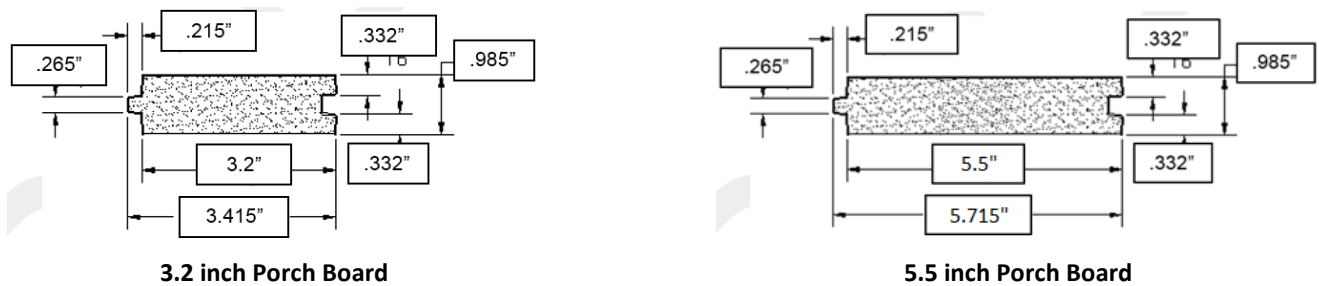


Figure 1 – AZEK Porch Board



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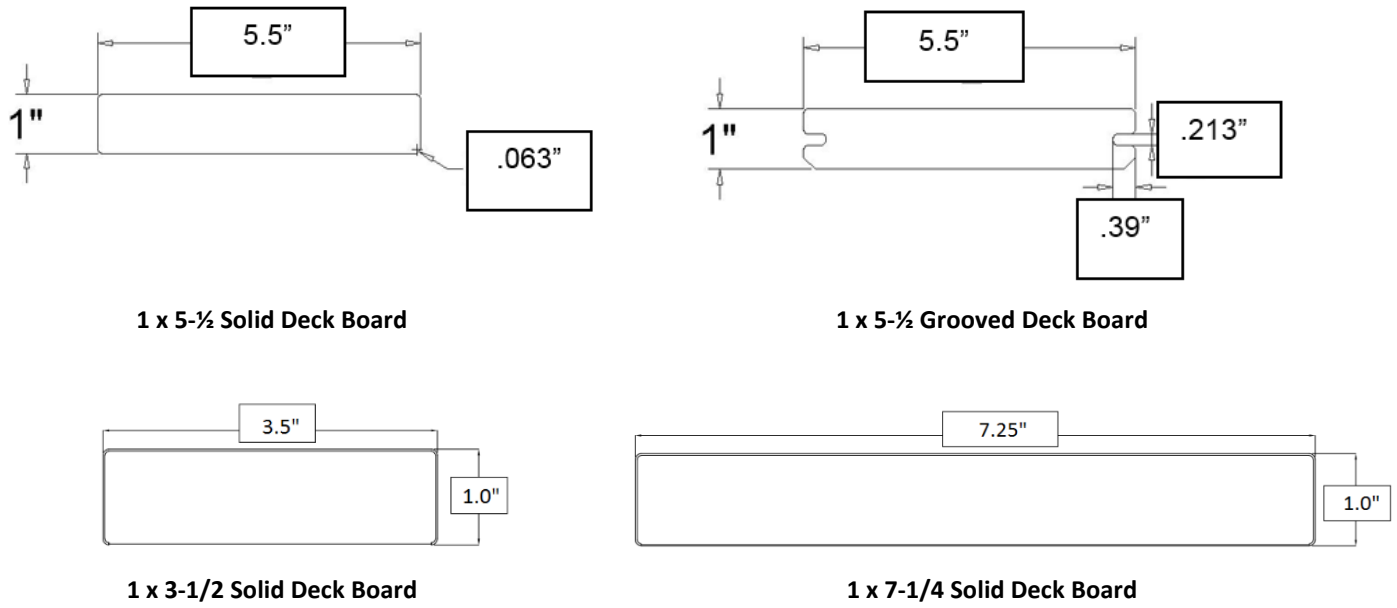


Figure 2 – AZEK Landmark, Harvest, and Vintage Decking

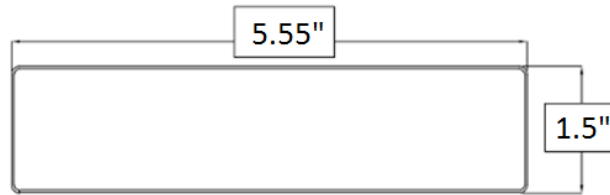
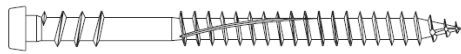


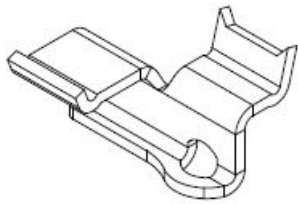
Figure 3 – AZEK MAX Decking



TimberTech® Cortex



TOPLoc™ Face Fastener



CONCEALoc™ Hidden Fastener



FusionLoc™ Hidden Fastener

Figure 4 – Fasteners

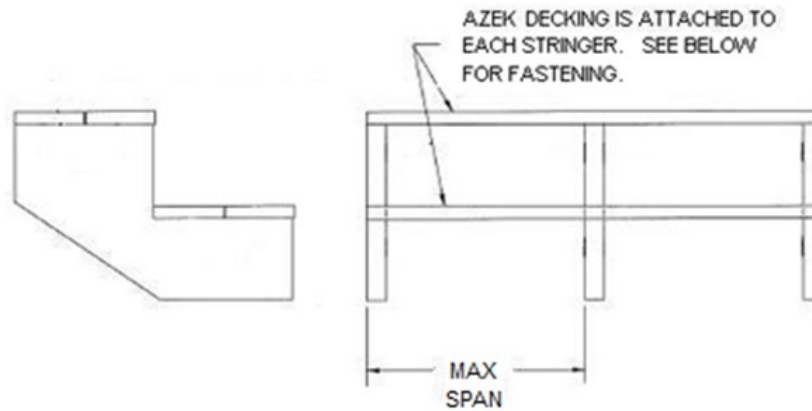


Figure 5 – Stair Tread Installation with no additional support (Minimum tread length is 36")



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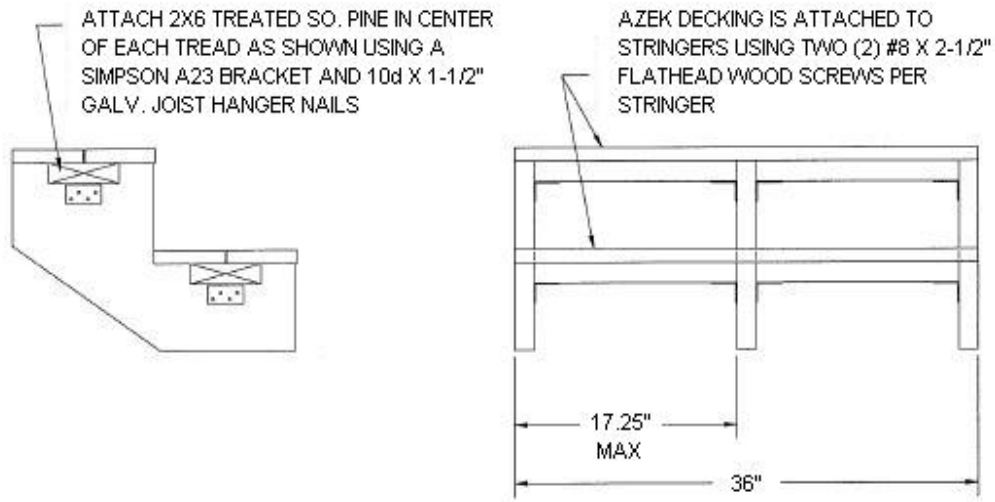


Figure 6 – Alternate 1 X 5-½ Stair Tread Installation for 17.25" Span (2X6 additional support)

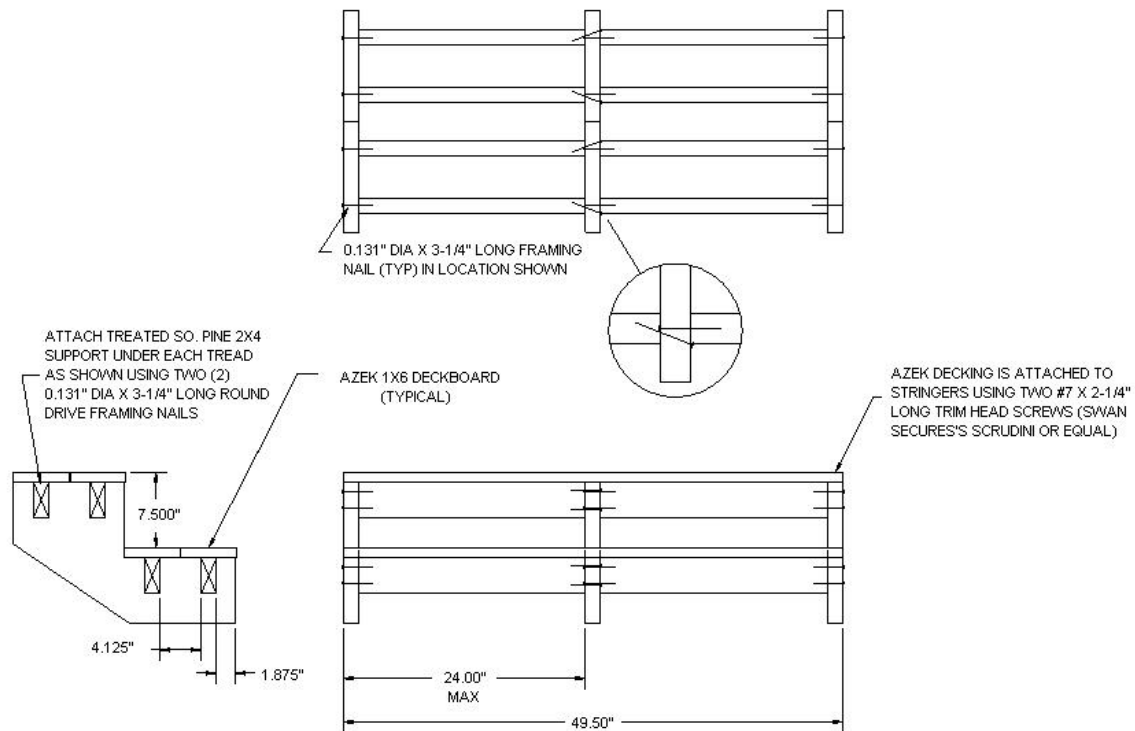


Figure 7 – Alternate 1 X 5-½ Stair Tread Installation for 24" Span (2X4 additional supports)