Code Compliance Research Report
CCRR-0266

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Renewal Date: 08-31-2027

DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION
Section: 07 46 00 – Siding
Section: 07 46 33 – Plastic Siding

REPORT HOLDER:
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REPORT SUBJECT:
AZEK Cellular PVC Cladding

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2024, 2021, 2018 *International Building Code®* (IBC)
- 2024, 2021, 2018 *International Residential Code®* (IRC)
- 2026, 2023 *Florida Building Code®* (FBC) (see Section 9.0) (Excluding High Velocity Hurricane Zones)

NOTE: This report references the most recent Code editions cited. Section numbers in earlier editions may differ.

1.2 *AZEK Cellular PVC Cladding* has been evaluated for the following properties (see Table 1):

- Physical Properties
- Surface Burning
- Wind Load Resistance
- Fire Resistance
- Ignition Resistance

1.3 *AZEK Cellular PVC Cladding* was evaluated for the following uses (see Table 1):

- Use as an exterior wall cladding on buildings of Type V-B construction (IBC, FBC) and all construction types permitted under the IRC and FBC-Residential.
- Use as an exterior wall cladding on buildings of Types I-IV construction .
- Use as an exterior wall cladding on fire-resistance rated walls (IBC and FBC 703.2).

2.0 STATEMENT OF COMPLIANCE

AZEK Cellular PVC Cladding complies 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.

2.1 2024 IBC and IRC Evaluation Reports

The Intertek CCRR is an *Evaluation Report* for approval of an alternate material, design, or method of construction in accordance with Section 104.2.3.6.1 of the 2024 IBC and Section R104.2.2.6.1 of the 2024 IRC.

3.0 DESCRIPTION

3.1 *AZEK Cellular PVC Cladding* have a rectangular profile 1" thick in various widths and are composed of a solid co-extruded cellular polyvinyl chloride (PVC) with a polymer cap and finished with a simulated wood-grain pattern. Harvest and LANDMARK collections are semi-capped (capped on three sides), and the Vintage collection is fully capped in cross section.

3.2 The 5.5" wide *AZEK Cellular PVC Cladding* are provided in the following collections:

3.2.1 *AZEK Harvest® Collection®* products are produced in three colors: Brownstone, Kona®, and Slate Gray.

3.2.2 *AZEK LANDMARK Collection®* products are produced in three colors: American Walnut, Castle Gate, and French White Oak.

3.2.3 *AZEK Vintage Collection®* products are produced in six colors: Coastline, Cypress, Dark Hickory, English Walnut, Mahogany, and Weathered Teak.

3.3 The 3.5" and 7.25" wide *AZEK Cellular PVC Cladding* are provided in the following collections:

3.3.1 *AZEK Vintage Collection*® products are produced in six colors: Coastline, Cypress, Dark Hickory, English Walnut, Mahogany, and Weathered Teak.

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

3.4 The Tongue and Groove *AZEK Cellular PVC Cladding* boards measure nominal 1" thick with a 3.2" exposure width (3.415" overall width) and 5.5" exposure width (5.715" overall width). The 3.2" widths are produced in nine colors: Brownstone, Coastline, Dark Hickory, Mahogany, Morado®, Silver Oak®, Oyster®, Slate Gray, and Weathered Teak. The 5.5" width is produced in four colors: Coastline, Dark Hickory, Mahogany, and Weathered Teak.

4.0 PERFORMANCE CHARACTERISTICS

4.1 Windload Resistance – Maximum allowable design pressures are shown in Table 2 for the *AZEK Cellular PVC Cladding* when installed in accordance with this report.

4.2 *AZEK Cellular PVC Cladding* has a flame spread index not exceeding 200 when tested in accordance with ASTM E 84.

4.3 *AZEK Cellular PVC Cladding* may be installed on the exterior of fire-resistance rated walls with fire-resistance ratings that have been established in accordance with IBC Section 703.2.

4.4 Ignition resistance / IBC Section 1405.1.1.1 - *AZEK Cellular PVC Cladding* did not exhibit sustained flaming when tested in accordance with NFPA 268.

5.0 INSTALLATION

5.1 General:

AZEK Cellular PVC Cladding must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

5.1.1 Application: *AZEK Cellular PVC Cladding* shall be installed with fastening as described in Table 2.

5.1.2 *K Cellular PVC Cladding* shall be attached to treated Southern Yellow Pine (G=0.55, or greater), minimum 2 x 4 nominal wood furring strips secured to the wall framing over an approved structural wood sheathing complying with Section 2303.1.5 of the IBC and FBC.

5.1.3 Sheathing must be covered by an approved water-resistive barrier complying with Section 1403.2 of the IBC and FBC, and Section R703.1.1 of the IRC and FBC-R, and provide a means for draining water that enters the assembly to the exterior.

5.1.4 Protection against condensation shall be provided in accordance with Section 1404.3 of the IBC and FBC.

5.1.5 Flashing shall be installed in accordance with Section 1404.4 of the IBC and FBC, and Section R703.4 of the IRC and FBC-R.

5.1.6 For exterior use on buildings of Types I-IV construction, *AZEK Cellular PVC Cladding* shall be installed as follows:

- AZEK Cellular PVC Cladding installed onto the wood furring strips using mechanical fasteners.
- 2x4 pressure treated wood furring strips fastened over noncombustible walls, creating a 1-1/2'' cavity space between the substrate and cladding.

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 Wind design pressures determined from nominal design wind speeds (V_{asd}) in accordance with Section 1609.3.1 of the IBC and FBC-B shall not exceed the maximum allowable design pressure given in Table 2 for *AZEK Cellular PVC Cladding.*

6.3 *AZEK Cellular PVC Cladding* products are limited to the following construction types:

6.3.1 Exterior use on buildings of Type V construction (A and B) and all construction types permitted under the IRC and FBC-R.

6.3.2 Exterior use on buildings of Types I-IV construction when installed in accordance with Section 5.1.5 with the following limitations:

- The area of the cladding shall not exceed 10 percent of the wall area where the fire separation distance is 5 feet or less.
- Building heights of 40 feet or less above grade
- Cladding located along the top of exterior walls shall be completely backed up by the exterior wall and shall not extend over or above the top of the exterior wall.
- Fire-blocking complying with IBC Section 718.2.6 shall be installed when the wall cladding is installed on the exterior wall without any gaps between the cladding boards.

6.3.3 *AZEK Cellular PVC Cladding* may be installed on the exterior of fire-resistance rated walls.

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 When fasteners are installed in pressure-treated wood (preservative or fire-retardant), the appropriate adjustment factors based on the pressure-treated wood manufacturer's recommendations or appropriate code provisions shall be applied to reduce the capacity of the fastener.

6.6 Fasteners shall have corrosion protection for exterior use and the substrate in which it is installed.

6.7 Only those types of fasteners and fastening methods described in this report have been evaluated for the installation of the AZEK Cellular PVC Cladding. Other methods of attachment are outside the scope of this report.

6.8 The wood furring strips and wood furring strip attachment to the building structure is outside the scope of this report.

6.9 *AZEK Cellular PVC Cladding* 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 Reports of testing demonstrating equivalent impact and windload resistance requirements for plastic siding in accordance with ASTM D7254-21, Standard Specification for polypropylene (PP) siding, and ASTM D3679-21, Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding for: Extent of Burn, Heat Shrinkage, Impact Resistance, Surface Distortion, Coefficient of Linear Expansion, and Windload Resistance.

7.2 Reports of testing in accordance with ASTM D635-18, Test Method for Rate of Burning and/or Extent and Time of Burning of Self-supporting Plastics in a Horizontal Position.

7.3 Reports of evaluation and engineering analysis for allowable fastener capacities in accordance with NDS-2024, National Design Specification (NDS) for Wood Construction.

7.4 Reports of testing demonstrating compliance with ASTM E84-2024 [2021a], Test Method for Surface Burning Characteristics of Building Materials.

7.5 Data in accordance with the ICC-ES AC227, Acceptance Criteria for Rigid Cellular PVC Nonload-Bearing Exterior Trim, revised November 2019 for: Artificial Weathering, Flame Spread, Freeze-Thaw, Water Absorption, Windload Resistance, Density, and Deflection Temperature.

7.6 Reports of ignition resistance testing in accordance with NFPA 268-2022, Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source.

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

7.8 Intertek Listing Report "CPG International LLC – AZEK Cellular PVC Cladding" on the Intertek Directory of Building Products.

8.0 IDENTIFICATION

AZEK Cellular PVC Cladding is identified with the following information:

- Manufacturer's name (CPG International LLC d/b/a The AZEK® Company LLC.)
- Manufacture's address and telephone number
- The product name (*AZEK Cellular PVC Cladding*)
- The following statements: "See CCRR-0266 at https://www.intertek.com/building/ccrr for uses and performance levels."
- Packaging shall also be identified with the Intertek identification mark, the Intertek Control Number, and Code Compliance Research Report number (CCRR-0266) as shown:



9.0 FLORIDA BUILDING CODE

9.1 Scope of Evaluation:

AZEK Cellular PVC Cladding was evaluated for compliance with the *Florida Building Code – Building* and *Florida Building Code – Residential.*

9.2 Conclusion:

AZEK Cellular PVC Cladding, 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 Cellular PVC Cladding* 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 553-847 – *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.

TABLE 1 – PROPERTIES EVALUATED

PROPERTY	APPLICABLE CODE SECTIONS			
	IBC	IRC	FBC – Building	FBC – Residential
Physical Properties	1403.8 1403.11	R703.11 R703.14	1404.9 1404.12	R703.11 R703.14
Surface Burning	1403.11	R703.14	1404.12	R703.14
Wind Load Resistance	1404.15	R703.1.2	1405.14	R703.14
Fire Resistance	703.2	n/a	703.2	n/a
Ignition Resistance	1405.1.1.1	n/a	1406.2.1.1	n/a

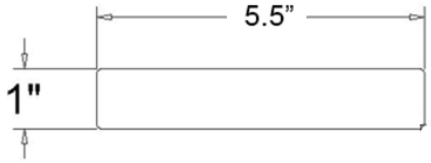
[1]Section numbers pertain to the most recent edition cited in Section 1.1 of this Report

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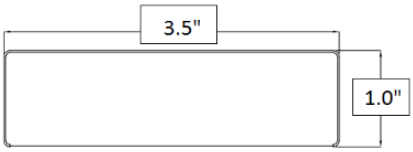
TABLE 2 – *AZEK CELLULAR PVC CLADDING* ALLOWABLE DESIGN PRESSURES

Product	Furring strips		Fastener Description	Allowable Design Pressure[2]
	Material[1]	Spacing		
3.5" Solid Board	1.5" thick Southern Pine (Specific Gravity, 0.55)	16" o.c.	Two #10 x 2-1/2" long *TOPLoc™* stainless steel screw into each furring strip	631 psf
			Two #10 x 2-3/4" long *OMG FastenMaster® Cortex* concealed fasteners each furring strip	631 psf
			Two #10 x 2" long *OMG FastenMaster® Cortex* face-fastened into each furring strip	382 psf
5.5" Solid Board	1.5" thick Southern Pine (Specific Gravity, 0.55)	16" o.c.	Two #10 x 2" long *OMG FastenMaster® Cortex* trim board carbon steel fastener into each furring strip, and three *Cortex* fasteners at the end of each plank	223 psf
			Two #8 x 2.5" long stainless steel trim-head screw (9 TPI, 0.130" shank dia., 0.258" head dia.) into each furring strip	351 psf
7.25" Solid Board	1.5" thick Southern Pine (Specific Gravity, 0.55)	16" o.c.	Two #10 x 2-1/2" long *TOPLoc™* stainless steel screw into each furring strip	454 psf
			Two #10 x 2-3/4" long *OMG FastenMaster® Cortex* concealed fasteners each furring strip	372 psf
			Two #10 x 2" long *OMG FastenMaster® Cortex* face-fastened into each furring strip	216 psf
3.2 inch AZEK Tongue & Groove Board	1.5" thick Southern Pine (Specific Gravity, 0.55)	16" o.c.	(1) #8 x 2-1/2" stainless steel trim-head screw @ 45° through root of tongue into each furring strip	294 psf
			Two #10 x 2" long *OMG FastenMaster® Cortex* face-fastened into each furring strip	382 psf
5.5 inch AZEK Tongue & Groove Board	1.5" thick Southern Pine (Specific Gravity, 0.55)	16" o.c.	(1) #10 x 2-1/2" stainless steel trim-head screw @ 45° through root of tongue into each furring strip	144 psf
			(1) #10 x 2-1/2" TOPLoc™ stainless steel screw into each furring strip	177 psf
			(1) OMG FastenMaster Cortex concealed fasteners each furring strip (#10 x 2-1/2" screws)	158 psf
			Two #10 x 2" long *OMG FastenMaster® Cortex* face-fastened into each furring strip	294 psf

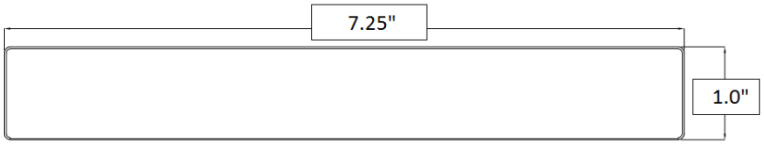
[1] Installation on furring strips with a lesser thickness or lesser specific gravity may result in a lower allowable design pressure.
[2] Allowable wind loads are applicable to wind design pressure derived from nominal wind speed (V_{asd}) per Section 1609.3.1 of the IBC and FBC-B.



1 x-5 ½ Solid Board

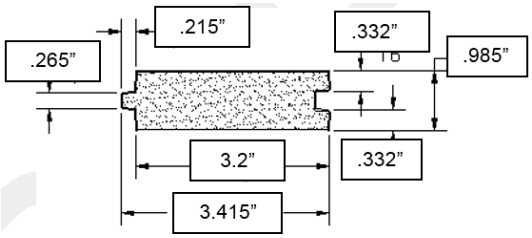


1 x 3-1/2 Solid Board

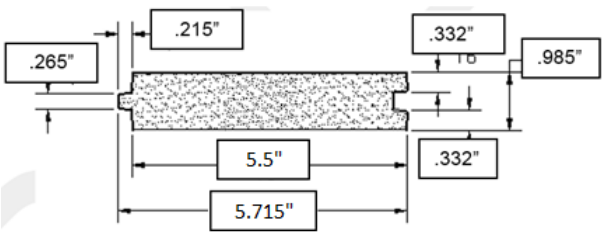


1 x 7-1/4 Solid Board

FIGURE 1 – *AZEK HARVEST® COLLECTION®, LANDMARK COLLECTION®*, AND *VINTAGE COLLECTION®*



3.2 inch Tongue & Groove



5.5 inch Tongue & Groove

FIGURE 2 – *AZEK TONGUE AND GROOVE BOARDS*



#8 x 2.5" stainless steel trim head screw



#10 *OMG FastenMaster™ Cortex*



TOPLoc™ Face Fastener

FIGURE 3 – FASTENERS