



Procell, LLC
11746 Foley Beach Express
Foley, Alabama 36535

1.0 Subject

Procell Decking

2.0 Research Scope

2.1. Building Codes:

2003 International Building Code (IBC)

2003 International Residential Code (IRC)

2.2. Properties:

Structural Performance

Durability

Surface Burning

2.3. Criteria: The following criteria are used to evaluate code compliance.

ICC-ES Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails), AC174 approved April 2002, editorially revised July 1, 2004.

Exception: Evaluation is not limited to residential use groups (Group R).

3.0 Description

3.1. General - *Procell Decking* is a deck board intended for use as a walking surface on exterior decks, balconies, porches, and walkways, including stairs.

3.2. Materials and Processes - *Procell Decking* is extruded thermoplastic composite utilizing Poly Vinyl Chloride (PVC) and Agrifibre filler.

3.3. Finished deck boards have a solid rectangular profile, 5.5" wide and 1" thick. Edges are rounded with a 1/8" radius. See Figure 1. The walking surface is finished with an embossed simulated wood grain.

3.4. *Procell Decking* is manufactured in four different colors: Ivory, Brownstone, Slate Gray, and Clay.

4.0 Performance Characteristics

4.1. *Procell Decking* is rated for a uniform live load of 100 lbs/ft.² when installed on support framing spaced 16".

4.2. *Procell Decking* used as stair treads are rated for the code-prescribed concentrated load equal to 300 lbs when installed on a maximum 18" support span in accordance with Figure 2.

4.3. *Procell Decking* has a wind uplift resistance rating equal to 160 lbs/ft.² when installed on support framing spaced 16".

4.4. *Procell Decking* has a flame spread index of 40 when tested according to ASTM E 84. The referenced criteria, AC174, requires a flame spread index not exceeding 200.

4.5. *Procell Decking* is deemed equivalent to preservative treated or naturally durable wood for resistance to weathering effects and attack from termites.

Note: Decay resistance due to attack from fungi is not included within the scope of this research report. See "Conditions of Use" for additional information.

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. Deck boards shall be installed with two screws at each support. Minimum screw size shall be # 7 x 2-1/4". Screws shall be stainless-steel.

5.2. *Procell Decking* used as stair treads require additional support blocking between the supports (See Figure 2).

6.0 Supporting Evidence

6.1. Manufacturer's drawings and installation instructions.

6.2. Reports of testing in accordance with ICC-ES Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails), AC174 approved April 2002, editorially revised July 1, 2004.

6.3. Quality control manual in accordance with ICC-ES Acceptance Criteria for Quality Control Manuals, AC10, approved October 2004, editorially amended April 2005.



7.0 Conditions of Use

The *Procell 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.

7.1. *Procell Decking* is limited to use in Type V-B (5B) construction.

7.2. *Procell Decking* may be used in applications where untreated wood is permitted. In applications that require preservative-treated or naturally durable wood and where the material may be subject to fungi attack, decay resistance of *Procell Decking* has not been established. In these applications, deck boards may require additional protective treatment.

The manufacturer of Procell Decking has decay testing in progress that has not been completed at the time of this code compliance research. Upon completion of decay testing and evaluation, this report shall be revised and reissued.

7.3. 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.

7.3.1. 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.

7.4. All products are manufactured in accordance with the manufacturer's approved quality control system with inspections by Architectural Testing, Inc. (AA-676).

8.0 Identification

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

8.1. The mark of the independent inspection agency, Architectural Testing, Inc. (AA-676)

8.2. The ATI Code Compliance Research Report Number (CCRR-0101)

9.0 Code Compliance Research Report Use

9.1. Approval of "alternative products" can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought. Code Compliance Research Reports published by ATI provide information to the Code Official to assist in his/her determination of whether the "alternative product" satisfies the building code requirements for his/her jurisdiction. No guarantee is either expressed or implied regarding the building official's approval of the product based on an ATI Code Compliance Research Report.

9.2. Code Compliance Research Reports constitute a qualified independent opinion. No guarantee or a warranty is either expressed or implied about the alternative product's merchantability, suitability for use, defects or failures in service.

9.3. Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product or manufacturer by ATI.

9.4. Reference to the Architectural Testing internet web site address at www.archtest.com is recommended to ascertain the current version and status of this report.

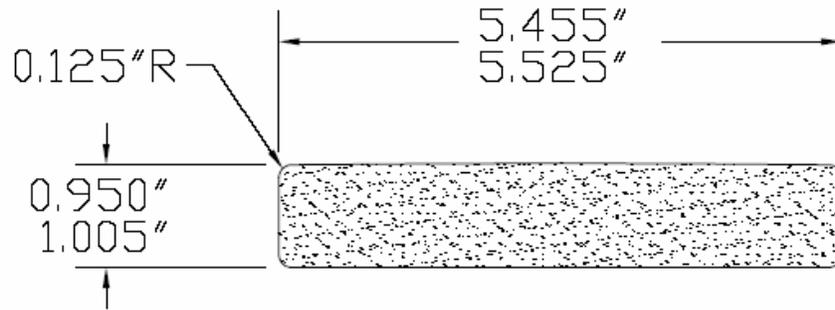


Figure 1 - Procell Deck Board Cross-Section

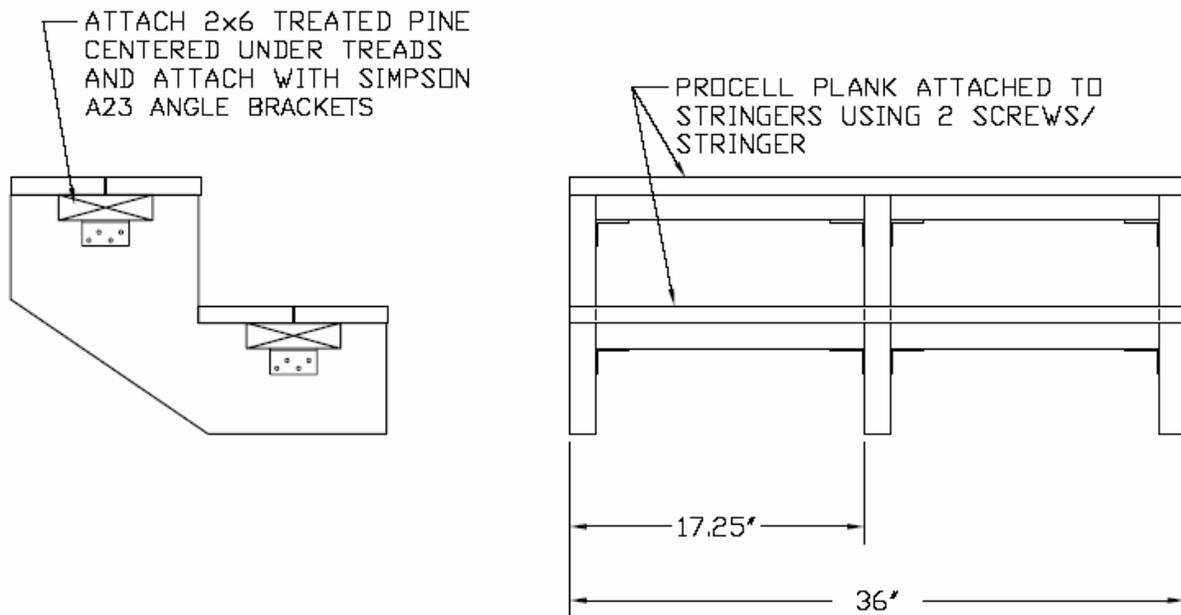


Figure 2: Stair Tread Installation