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## 1.0 Subject

*Floorizon®* Plank  
- Wood-Plastic Composite Deck Boards

## 2.0 Research Scope

### 2.1 Building Codes:

2006 International Building Code (IBC)  
2006 International Residential Code (IRC)

### 2.2 Properties:

Structural Performance  
Durability  
Surface Burning  
Decay Resistance  
Termite Resistance

## 3.0 Description

3.1 General – *Floorizon®* Planks are intended for use as a walking surface on exterior decks, balconies, porches, and walkways.

3.2 Materials and Processes - *Floorizon®* Planks are extrusions of a composite material comprised primarily of high density polyethylene (HDPE) and hard wood fiber / flour.

3.3 *Floorizon®* Planks have a ribbed-plank cross-sectional profile - 1.50 in high, 6.79 in wide with opposing tongue and groove longitudinal sides and 0.38 inch wall thickness.

3.4 Walking Surface - *Floorizon®* Planks have an embossed simulated wood-grain pattern that has been mechanically abraded called *VertiGrain™* or a smooth extruded surface that has been mechanically abraded called *Brushed*; both intended for a walking surface. *Floorizon®* Planks produced in Tropical Walnut, Tropical Rosewood and Tropical Teak have an embossed simulated wood-grain pattern with no mechanical abrading.

3.5 Colors - *Floorizon®* Planks can be produced in the following colors: Tropical Walnut, Tropical Rosewood, Tropical Teak, Grey, Cedar and Redwood.

## 4.0 Performance Characteristics

4.1 *Floorizon®* Planks are rated for a uniform live load of 100 lb/ft.<sup>2</sup> when installed on support framing spaced at 24".

4.2 *Floorizon®* Planks have a wind uplift resistance rating equal to 98 lb/ft.<sup>2</sup> when installed on support framing spaced 24".

4.3 Materials used have a flame spread index of 75 when tested in accordance with ASTM E 84. The referenced criteria of AC174, requires a flame spread index not exceeding 200.

4.4 Materials used are deemed equivalent to preservative treated or naturally durable wood for resistance to weathering effects, attack from termites and fungus decay.

4.5 Structural performance has been demonstrated for a temperature range from -20°F (-29°C) to 125°F (52°C).

## 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 Tongue and groove fastening of the *Floorizon®* Planks shall be with #8 x 2-1/2 inch deck screws. A #8 x 2-1/2 inch deck screw shall be installed at each tongue and groove joint at each joist. See Figure 2.

## 6.0 Supporting Evidence

6.1 Manufacturer's drawings and installation instructions.

6.2 Reports of testing demonstrating compliance with ICC-ES Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails), AC174 effective April 1, 2008.

6.3 Quality control manual in accordance with ICC-ES Acceptance Criteria for Quality Documentation, AC10, approved July 2008.



## 7.0 Conditions of Use

The *Floorizon*<sup>®</sup> Plank 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 *Floorizon*<sup>®</sup> Planks are limited to use in Type V-B (5B) construction.

7.2 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.

7.2.1. 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.

7.3 Compatibility of the supporting construction materials with all fasteners, metal post mount components and other hardware components is subject to approval by the code official.

7.4 *Floorizon*<sup>®</sup> Planks shall not be used as stair treads.

7.5 All products are manufactured in Wilmington, Ohio by TimberTech<sup>®</sup> Limited, in accordance with the manufacturer's approved quality control system with inspections by Architectural Testing, Inc (AA-676).

## 8.0 Identification

*Floorizon*<sup>®</sup> Planks 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 the manufacturer and the manufacturers address.

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

8.3 The ATI Code Compliance Research Report Number (CCRR-0127)

## 9.0 Code Compliance Research Report Use

9.1 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.

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

9.3 Reference to the Architectural Testing internet web site address at [www.archtest.com](http://www.archtest.com) is recommended to ascertain the current version and status of this report.

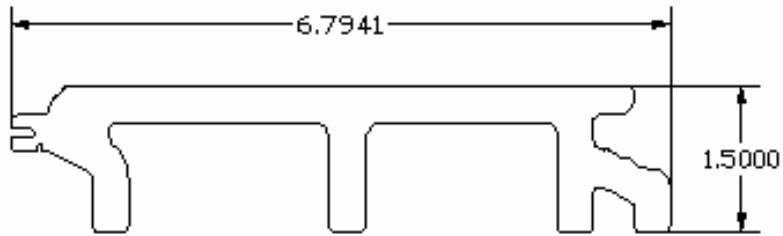


Figure 1 - *Floorizon*™ Plank Profile

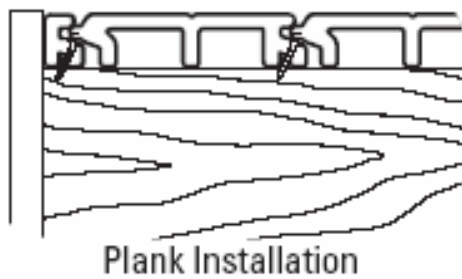


Figure 2 - *Floorizon*™ Plank Installation