

Code Compliance Research Report CCRR-1019

Re-Issue Date: 02-01-2015 Revised Date: 03-05-2015 Renewal Date: 01-01-2016

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DIVISION 06 00 00 - Wood, Plastics and Composites Section: 06 53 00 - Plastic Decking

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Report Subject:
TRUNORTHDECK^{TM,} Composite Deck Boards:
Enviroboard
Accuspan
Northernlite

1.0 SCOPE OF EVALUATION

This Research Report addresses compliance with the following Codes:

- 2012 International Building Code® (IBC)
- 2012 International Residential Code® (IRC)

The products described in this report have been evaluated for the following properties:

- Structural Performance
- Durability
- Surface Burning
- Decay Resistance
- Termite Resistance

2.0 USES

TRUNORTHDECKTM Composite Deck Boards are intended for use as a walking surface on exterior decks, balconies, porches, and walkways, including stairs.

3.0 DESCRIPTION

TRUNORTHDECK $^{\text{TM}}$ Composite Deck Boards are provided in hollow and solid cross-sections, with flat and grooved edges. See Tables 1a and 1b and Figures 1 and 2.

Slide & Go® Fastening Clips are injection molded thermoplastic clips provided to permit hidden attachment of grooved edge deck boards to supports. See Tables 1a and 1b and Figures 3 and 4.

4.0 PERFORMANCE CHARACTERISTICS AND INSTALLATION

4.1 Performance Characteristics:

- **4.1.1** Uniform Live Load ratings are given in Table 3 for the corresponding deck boards and fasteners indicated.
- **4.1.2** Deck boards used as stair treads are rated for the Code-prescribed concentrated load equal to 300 lb. when installed with a maximum span indicated in Table 3. Deck boards used as stair treads must be installed in a minimum two-span condition.
- **4.1.3** Wind Uplift Resistance ratings are given in Table 3 for the corresponding deck boards and fasteners indicated.
- **4.1.4** TRUNORTHDECKTM Composite Deck Boards have a flame spread index as indicated in Table 2 when tested in accordance with ASTM E 84. The referenced criterion, AC174, requires a flame spread index not exceeding 200.
- **4.1.5** Materials used are deemed equivalent to preservative treated or naturally durable wood for resistance to weathering effects, attack from Eastern subterranean termites and fungus decay.
- **4.1.6** Structural performance has been demonstrated for a temperature range from -20°F (-29°C) to 125°F (52°C).

4.2 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.

4.2.1 Flat edge boards must be face-fastened and require two fasteners at every joist 3/4 in. from the side and at least 3/4 in. from the end of the board.









- **4.2.2** Grooved edge hollow cross-section deck boards (Enviroboard) must be secured with Slide & Go® Fastening Clips (specified in Table 3) at each joist. Grooved edge solid cross-section deck boards (Accuspan) can be secured with Slide & Go® Fastening Clips (specified in Table 3) at each joist or may alternatively be face-fastened and require two fasteners at every joist 3/4 in. from the side and at least 3/4 in. from the end of the board.
- **4.2.3** Flat edge solid cross-section boards (Northerlite) must be face-fastened and require two fasteners at every joist 3/4 in. from the side and at least 3/4 in. from the end of the board.
- **4.2.4** Table 3 indicates type of fasteners that are to be used for each installation.

5.0 CONDITIONS OF USE

The TRUNORTHDECKTM Composite Deck Boards identified in this report are deemed to comply with the intent of the provisions of the referenced Building Codes subject to the following conditions.

- **5.1** Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict between the manufacturer's instructions and this report, this report governs.
- **5.2** The deck boards are limited to use in Type V-B construction.
- **5.3** Deck boards placed at an angle other than 90 degrees to the supporting joist will require support framing at a reduced spacing such that the span of the deck board does not exceed the span identified in Table 3.
- **5.4** The wind uplift resistance rating recognized in this report is based on attachment to No. 2 Structural Grade Spruce-Pine-Fir (SPF). Installation on wood framing with a lesser grading may result in a lower wind uplift rating.
- **5.5** Compatibility of the metal fasteners, metal post mount components, and other hardware with the supporting structure, including chemically-treated wood, is outside the scope of this report and is subject to approval by the Code official.

- **5.6** 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.
- **5.7** The composite deck boards are manufactured in Woodbridge, Ontario, Canada, in accordance with the manufacturer's approved quality control system under a quality control program with inspections by Intertek Testing Services NA, Inc. (AA-647).

6.0 SUPPORTING EVIDENCE

- **6.1** Manufacturer's drawings and installation instructions.
- **6.2** Reports of testing demonstrating compliance with ICC-ES AC174, Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails), and approved January 2012.
- **6.3** Reports of testing and engineering analysis demonstrating compliance with the performance requirements of ASTM D7032-08, Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite Deck Boards and Guardrail Systems (Guards or Handrails).
- **6.4** Quality control manual in accordance with ICC-ES AC10, Acceptance Criteria for Quality Documentation, effective January 2014.
- **6.5** Intertek Listing Report "TRUNORTHDECK Composite Deck Boards" available at https://whdirectory.intertek.com.

7.0 IDENTIFICATION

The TRUNORTHDECKTM Composite Deck Boards shall be identified with labeling on the individual deck boards that includes the name and/or trademark of the manufacturer; the Research Report number (CCRR-1019) and the Intertek Mark.

8.0 COMPLIANCE WITH STATE SPECIFIC CODES – FL. CA

Not applicable.









9.0 CODE COMPLIANCE RESEARCH REPORT USE

- **9.1** Approval of building products and/or materials can only be granted by a building official have legal authority in the specific jurisdiction where approval is sought.
- **9.2** Code Compliance Research Reports shall not be use in any manner that implies an endorsement of the product by Intertek.
- **9.3** Reference to the Intertek internet website address at https://whdirectory.intertek.com is recommended to ascertain the current version of status of this report.

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Table 1a – TRUNORTHDECK[™] Product Description

Decking Plank	Description	Surface Descriptions	Color(s)		
Enviroboard	0.975" x 5.125" Hollow with Grooved Edges	Textured with Embossed Wood Pattern			
Accuspan	0.940" x 5.125" Solid with Grooved Edges	Textured with Embossed Wood Pattern	Cedar, Maple, Chestnut, Mahogany and Heritage Grey		
Northernlite	0.9375" x 5.125" Solid with Square Edges	Textured with Embossed Wood Pattern	smage crey		
Accuspan CAP	0.940" x 5.125" Solid with Grooved Edges	Textured with Embossed Wood Pattern	Sable (Mocha), Caramel, Stone Grey, Bordeaux		
Northernlite CAP	0.9375" x 5.125" Solid with Square Edges	Textured with Embossed Wood Pattern			

Table 1b – TRUNORTHDECK[™] Product Description

Product	WPC Core ¹	PVC Core	WPC Cap	Polymer Cap	PVC Cap	Full Cap	Semi Cap	Co-Extruded	Mono- Extruded
Enviroboard	Х								Х
Accuspan	Х								Х
Northernlite	Х								Х
Accuspan CAP	Х			Х		Х		Х	
Northernlite CAP	Х			Х		Х		Х	

WPC is Wood Plastic Composite comprised of high density polyethylene (HDPE) and rice huls.

Table 2 - Wind Uplift Resistance

Decking Plank	Span/Load Rating ¹	Stair Tread Span ²	Fastener ³	Wind Uplift Resistance ³
Enviroboard ⁴	16/100	Not Allowed	Slide & Go [®] Hidden Fastening Clip	115
Accuspan/Accuspan CAP ⁴	16/100	Not Allowed	Slide & Go [®] Hidden Fastening Clip	115
Northernlite/Northernlite CAP	16/100	12"	#8 x 2.5" Deck Screw	441

Span/Load rating is the maximum span in inches and the maximum allowable live load in pounds per square feet (psf).

Grooved Deck Boards are not used as stair treads.



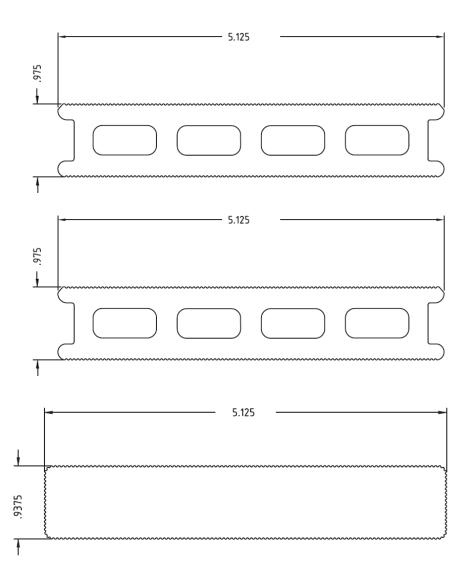


Stair tread span in inches is based on a continuous deck board over two or more equal spans (3 supports).

Wind uplift resistance in pounds per square feet (psf) is based on two fasteners at each support (wood joist) except Grooved Edge Boards which use one hidden fastener located at each joist. Values have been adjusted for wind load duration and end use. No further adjustments shall be made.



Figure 1 – TRUNORTHDECK[™] Composite Deck Boards – Mono-Extruded









5.125 ±0.040

258

Q

4.610

5.125 ±0.040

Q

Figure 2 – TRUNORTHDECK[™] Composite Deck Boards – Co-Extruded



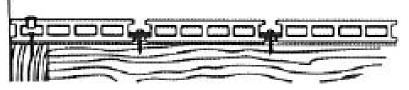


Figure 4 – Slide & Go® Hidden Fastener





