

## **ICC-ES Evaluation Report**

## File No. 12-04-08

Issued MONTH 1, 20XX

This report is subject to renewal MONTH 1, 20XX.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 06 00 00-WOOD, PLASTICS AND

COMPOSITES

Section: 06 50 00—Structural Plastics Section: 06 53 00—Plastic Decking

### **REPORT HOLDER:**

VISION ECOPRODUCTS LTD.
600 ZENWAY BOULEVARD
WOODBRIDGE, ONTARIO L4H 3M9
CANADA
(905) 265-0022
www.trunorthdeck.com

#### **EVALUATION SUBJECT:**

TRUNORTHDECK<sup>™</sup> ENVIROBOARD HOLLOW PROFILE AND ACCUSPAN AND NORTHERNLITE SOLID PROFILE COMPOSITE DECK BOARDS

#### 1.0 EVALUATION SCOPE

#### Compliance with the following codes:

- 2012 and 2009 International Building Code® (IBC)
- 2012 and 2009 International Residential Code® (IRC)

#### Properties evaluated:

- Structural
- Durability
- Surface-burning characteristics

#### **2.0 USES**

The TRUNORTHDECK<sup>TM</sup> Enviroboard and Accuspan Composite Deck Boards are for exterior use as deck boards for balconies, porches and decks of residential buildings of Type V-B construction under the IBC and dwellings constructed in accordance with the IRC. The Northernlite Composite Deck Boards are also used as stair treads.

#### 3.0 DESCRIPTION

#### 3.1 General:

The TRUNORTHDECK<sup>TM</sup> Enviroboard<sup>TM</sup>, Accuspan<sup>TM</sup> and Northernlite<sup>TM</sup> Composite Deck Boards are made from a composite material of recycled high density polyethylene and rice hulls. The deck boards are manufactured using a continuous extrusion process. TRUNORTHDECK<sup>TM</sup> Enviroboard is 1 inch (24.8mm) thick and 5.125 inch (130.2mm) wide with grooved edges. TRUNORTHDECK<sup>TM</sup> Accuspan is 0.940 inch (23.9mm) thick and 5.125 inch

(130.2mm) wide with grooved edges. TRUNORTHDECK<sup>TM</sup> Northernlite is 0.9375 inch (23.8mm) thick and 5.125 inch (130.2mm) wide with square edges. The deck boards have a textured surface finish that simulates wood grain and are manufactured in seven colors; cedar, maple, chestnut, mahogany and chestnut grey. See Figure 1 for the cross sectional profiles.

#### 3.2 Durability:

When subjected to weathering, insect attack (including Formosan termites), and other decaying elements, the deck board material is equivalent in durability to preservative-treated or naturally durable lumber. Accordingly, the material is permitted to be used as an alternative to preservative-treated or naturally durable lumber on exterior decks, porches or balconies, as applicable. The deck boards have been evaluated for use at ambient air temperatures between -20°F (-29°C) and 125°F (52°C).

#### 3.3 Surface-burning Characteristics:

When tested in accordance with ASTM E84, the TRUNORTHDECK<sup>TM</sup> Enviroboard, Accuspan and Northernlite Composite Deck Boards have a flame-spread index no greater than 200.

#### 4.0 DESIGN AND INSTALLATION

#### 4.1 General:

The deck boards must be installed in accordance with the manufacturer's published installation instructions, subject to the conditions of use in this report. A copy of the manufacturer's published installation instructions must be available on the jobsite at all times during installation.

#### 4.2 Deck Boards:

The deck boards are limited to the maximum allowable uniform load indicated in Table 1. The deck boards installed on supporting construction must have a maximum span as prescribed in Table 1. The ends of the boards must be supported by double joists where butt joints occur. The deck boards must be spaced at edges and ends in accordance with the manufacturer's published installation instructions.

## 4.3 Fasteners

The TRUNORTHDECK<sup>™</sup> Enviroboard and Accuspan profiles are installed using the Slide & Go<sup>®</sup> Fastening Clip concealed fastening system installed in the grooves of the deck board edges. The TRUNORTHDECK<sup>™</sup> Northernlite deck board must be fastened with #8 2-1/2-inch (64 mm) approved deck screws at each supporting wood member.

ICC

AND AND ACCORDANCE

ODE COUNCIL

PROGUET CHITHYLARION

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any covered by the report.

The allowable fastener head pull-through capacity for the Slide & Go® is 58 lb. (257 N) and the allowable withdrawal is 250 lbf (1114 N) for each screw.

#### 4.4 Deck Boards Used as Stair Treads:

TRUNORTHDECK<sup>TM</sup> Northernlite Composite Deck Boards, when used as stair treads, are sufficient to resist the codeprescribed concentrated load of 300 lbf (1.33 kN) when installed at a maximum span as indicated in Table 2.

#### 5.0 CONDITIONS OF USE

TRUNORTHDECK<sup>TM</sup> Enviroboard, Accuspan and NorthernLite Composite Deck Boards described in this report complies with, or are a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- **5.1** TRUNORTHDECK<sup>TM</sup> Enviroboard, Accuspan and NorthernLite Composite Deck Boards are limited to exterior use as deck boards for balconies, porches and decks of residential buildings of Type V-B (IBC) construction and structures constructed in accordance with the IRC.
- 5.2 Installation must comply with this report, the manufacturer's published instructions, and the applicable code. When the manufacturer's published installation instructions differ from this report, the more restrictive governs.
- **5.3** The use of TRUNORTHDECK<sup>TM</sup> Enviroboard and Accuspan deck boards as stair treads is outside of the scope of this report.
- **5.4** TRUNORTHDECK<sup>TM</sup> Enviroboard, Accuspan and Northernlite Composite Deck Boards as a component of a fire-resistance-rated assembly is outside the scope of this report.

- 5.5 The compatibility of fasteners with the supporting construction, including chemically treated wood, is outside the scope of this report.
- 5.6 The deck boards must be directly fastened to supporting construction. Where required by the code official, engineering calculations and construction documents consistent with this report must be submitted for approval. The calculations must verify that the supporting construction complies with the applicable building code requirements and is adequate to resist the loads imparted upon it from the products and systems discussed in this report. The documents must contain details of the attachment to the supporting structure consistent with the requirements of this report. The documents must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.7 The Vision EcoProducts Ltd. deck boards are produced in 600 Zenway Blvd, Woodbridge, Ontario, L4H 3M9, under a quality control program with inspections by Intertek Testing Services NA, Inc. (AA-XXX) (647).

#### **6.0 EVIDENCE SUBMITTED**

Data in accordance with applicable portions of the ICC-ES Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (AC174), dated January 2012.

#### 7.0 IDENTIFICATION

The deck boards described in this report are identified by a label on the packaging bearing the Vision EcoProducts Ltd. name and address, the product name, the date of manufacturing, the span rating for use as a deck board, the name of the inspection agency Intertek Testing Services NA, Inc. and the evaluation report number (ESR-XXXX).

### TABLE 1—DECK BOARD SPAN RATING

DECK BOARD (inch-by-inch)	MAXIMUM SPAN (in.) <sup>1</sup>	ALLOWABLE CAPACITY <sup>2</sup> (lbf/ft <sup>2</sup> )
TRUNORTHDECK <sup>TM</sup> Enviroboard: 0.975-by-5.125 Hollow with grooved edges	16	100
TRUNORTHDECK <sup>TM</sup> Accuspan: 0.940-by-5.125 Solid with grooved edges	16	100
TRUNORTHDECK <sup>TM</sup> Northernlite: 0.9375-by-5.125 Solid with square edges	16	100

For **SI:** 1 inch = 25.4 mm; 1 lb/ft<sup>2</sup> = 47.9 Pa.

#### TABLE 2-MAXIMUM STAIR TREAD SPAN2

DECK BOARD	MAXIMUM SPAN (in.) <sup>1</sup>
(inch-by-inch)	
TRUNORTHDECK <sup>TM</sup> NorthernLite:	12
0.9375-by-5.125 Solid with square edges	12

For **SI:** 1 inch = 25.4 mm; 1 lb/ft<sup>2</sup> = 47.9 Pa.

<sup>&</sup>lt;sup>1</sup>Maximum span is measured center-to-center of the supporting construction.

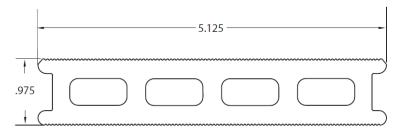
<sup>&</sup>lt;sup>2</sup>Maximum allowable capacity is adjusted for durability. No further increases are permitted.

<sup>&</sup>lt;sup>1</sup>Maximum span is measured center-to-center of the supporting construction.

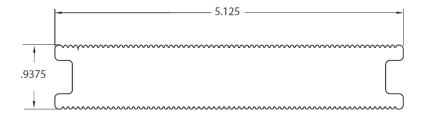
<sup>&</sup>lt;sup>2</sup>Based on a minimum two-span installation.

# Vision Ecoproducts Deck Board Profiles

## Enviroboard



# Accuspan



## Northern Lite

