

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

**REPORT HOLDER:**

**Norandex**  
**1 ABC Parkway**  
**Beloit, Wisconsin 53511**

**REPORT SUBJECT:**

***Norandex Vinyl Siding***

### 1.0 SCOPE OF EVALUATION

**1.1** This Research Report addresses compliance with the following Codes:

- 2021, 2018 and 2015 *International Building Code*® (IBC)
- 2021, 2018 and 2015 *International Residential Code*® (IRC)

NOTE: This report references 2021 Code sections with [2018, 2015] Code sections shown in brackets where they differ.

**1.2** *Norandex Vinyl Siding* has been evaluated for the following properties (see Table 1):

- Durability
- Exterior Veneer
- Wind Load Resistance (Negative Transverse)

**1.3** *Norandex Vinyl Siding* has been evaluated for the following uses (see Table 1):

- *Norandex Vinyl Siding* is rigid polyvinyl chloride (PVC) solid cross sections intended for use as exterior siding attached to an approved structural sheathing.

### 2.0 STATEMENT OF COMPLIANCE

*Norandex Vinyl Siding* 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.

### 3.0 DESCRIPTION

**3.1** *Norandex Vinyl Siding* is manufactured in various thicknesses and profiles. A list of products can be found in Table 1.

**3.2** Materials and Processes – *Norandex Vinyl Siding* products are extruded polyvinyl chloride (PVC) or acrylic material and conform to the requirements of ASTM D 3679. Corner trim, starter strips, J-channels and other accessories are manufactured with the same materials.

**3.3** All products, except for the Board & Batten 7” and Premium D5 Vertical are intended to be installed horizontally. The Board & Batten 7” and the Premium DS Vertical products are installed vertically.

### 4.0 PERFORMANCE CHARACTERISTICS

**4.1** *Norandex Vinyl Siding* products are not evaluated for resisting positive wind pressure and must be installed over sheathing materials designed and approved for the required positive design wind pressure.

**4.2** *Norandex Vinyl Siding* installed in accordance with the code specified installation is recognized for use within the corresponding limitations prescribed by the code for wind speed, exposure category and other conditions, See Section 5.1 for applications within the code prescribed conditions.

**4.3** Maximum allowable wind pressures are given in Table 1 for siding installed in accordance with Section 5.2

### 5.0 INSTALLATION

#### 5.1 General:

*Norandex Vinyl Siding* 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.



## 5.2 Prescriptive Requirements

**5.2.1** For IBC applications: Areas where the nominal design wind speed does not exceed 100 mph and the building height is no greater than 40 ft. in Exposure C, installation shall comply with the prescriptive requirements in IBC Section 1404.14 [1405.14].

**5.2.2** For IRC applications: Areas where the ultimate wind speed and maximum mean roof height is in accordance with Table R703.1.2 [R703.3.1], installation shall comply with the prescriptive requirements in IRC Section R703.3.

## 5.3 In Excess of Prescriptive Requirements

**5.3.1** Vinyl siding shall be installed over structural wood sheathing complying with DOC PS 1, DOC PS 2 or ANSI/APA PRP 210, per IBC 2303.1.5.

**5.4** Sheathing must be covered by an approved water-resistant barrier in accordance with IBC Section 1404.2 and provide a means for draining water that enters the assembly to the exterior.

**5.5** Flashing shall be installed in accordance with IBC 1404.4 [1405.4] and IRC R703. 4.

**5.6** Protection against condensation shall be provided in accordance with IBC 1404.3 [1405.3].

**5.7** Fasteners shall be corrosion-resistant roofing nails with a minimum head diameter of 3/8 inch and a minimum shank diameter of 1/8 inch. Length of nails shall be a minimum 1-1/2 inches long.

**5.7.1** For siding installed horizontally, nails shall be spaced at a maximum of 16 inches along the nail hem with every nail penetrating a stud at least 0.75 inches.

**5.7.2** For siding installed vertically, nails shall be spaced at a maximum of 12 inches along the nail hem.

**5.8** Corner trim, starter strips, J-channels and other accessories must be installed in accordance with the VSI's Vinyl Siding Installation Manual and the applicable code.

## 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** *Norandex Vinyl Siding* is limited to exterior use in Type V-B (IBC) construction and construction permitted by the IRC. Siding products within this report are permitted on exterior walls as described in IBC 1404.14 [1405.14]. *Norandex Vinyl Siding* is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

**6.3** Wind design pressures determined from nominal design wind speeds ( $V_{ASD}$ ) in accordance with IBC Chapter 16 and IRC Section R301.2.1.1 and shall not exceed the allowable wind loads specified in Table 1. The allowable wind loads in Table 1 require installation over structural wood sheathing (See Section 5.2).

**6.4** Exterior walls must be braced or sheathed to resist racking loads with approved materials in accordance with the applicable code.

**6.5** All products are manufactured by Norandex, a division of American Builders & Contractors Supply Co., Inc. in accordance with the manufacturer's approved quality control system with inspections by Intertek.

## 7.0 SUPPORTING EVIDENCE

**7.1** Manufacturer's drawings and installation instructions.

**7.2** Reports of testing demonstrating compliance with ASTM D 3679-17 [13, 11] Rigid Poly (Vinyl Chloride) (PVC) Siding.

**7.3** Reports of testing demonstrating compliance with the performance requirements of ICC-ES AC37, Acceptance Criteria for Vinyl Siding, revised October 2017.

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





**8.0 IDENTIFICATION**

Norandex Vinyl Siding is identified with the manufacturer’s name (Norandex), address and telephone number, the product name (Norandex Vinyl Siding), the statement “Conforms to ASTM Specification D3679”, the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0184).



**9.0 OTHER CODES**

This section is not applicable.

**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.

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Single



Single Roll Over



Half-Rolled Over



Double-Rolled Over

FIGURE 1 – NAIL HEM TYPES

TABLE 1 - VINYL SIDING THICKNESSES, LENGTHS, DESCRIPTIONS AND DESIGN PRESSURES <sup>(1)</sup>

Nominal Thickness	Nail Hem Type	Identified As	Profile Name	Exposure (inches)	Length (inches)	Allowable Design Pressure (psf) <sup>(2)</sup>	Colors
0.040 in.	Single	<i>Norandex Summit Manor</i>	Double 4.5 DutchLap	9	145	40	Almond Beige Cactus Champagne Cobblestone Cream Deep Water Evergreen Fern Firebrick Geneva Blue Granite Graphite Ivy Khaki Linen Maverick Brown Mocha Myrtle Olive Russet Sand
			Double 4 Horizontal	8	150	43	
			Double 4.5 Horizontal	9	145	43	
		<i>Norandex Shenandoah</i>	Triple 3 Horizontal	9	145	61	
0.042 in.	Half-rolled over	<i>Norandex Woodsman Select</i>	Double 4 Horizontal	8	150	68	
			Double 4 DutchLap	8	150	98	
			Double 5 DutchLap	10	144	70	
	Single	<i>Norandex Woodsman Select</i>	Double 5 Horizontal	10	144	77	
		<i>Norandex Shenandoah</i>	Semi-Beaded 6-½	6.5	148	95	
0.044 in.	Half-rolled over	<i>Norandex Cedar Knolls</i>	Double 4 Horizontal	8	150	74	
			Double 5 Horizontal	10	144	77	
			Double 5 DutchLap	10	144	70	
	Single	<i>Norandex Cambridge</i>	Full-Beaded 6-½	6.5	144	58	
	0.046 in.	Double-rolled over	<i>Norandex Great Barrier</i> <i>Norandex Great Barrier XL</i>	Double 4 Horizontal	8	150	
Double 5 DutchLap				10	148	107	



**TABLE 1 - VINYL SIDING THICKNESSES, LENGTHS, DESCRIPTIONS AND DESIGN PRESSURES <sup>(1)</sup>**  
(Continued)

Nominal Thickness	Nail Hem Type	Identified As	Profile Name	Exposure (inches)	Length (inches)	Allowable Design Pressure (psf) <sup>(2)</sup>	Colors
0.048 in.	Single	<i>Norandex Sterling</i>	Single 8 Horizontal	8	150	61	Sand Stone Seaport Sierra Silver Smoke Steel Blue Tan Tumbleweed Wedgewood Wheat White Yellow
		<i>Premium D5 Vertical Vinyl Siding</i>	Double 5 Vertical	10	144	55	
0.050 in.	Single-roll over	<i>Norandex Sagebrush</i>	Double 5 DutchLap	10	144	70	
	Single	<i>Norandex Board &amp; Batten</i>	Single 7 Vertical	7	120	111	

<sup>(1)</sup> The Board & Batten 7" siding profile is installed vertically, in which nails shall be spaced at a maximum of 12 inches on center along the nail hem. All other siding profiles are installed horizontally, in which nails shall be spaced at a minimum of 16 inches on center along the nail hem with every nail penetrating a stud.

<sup>(2)</sup> Design Pressures are determined in accordance with Annex A1 of ASTM D 3679, using a pressure equalization factor (PEF) of 0.36 and safety factor of 1.5.

