

## Code Compliance Research Report CCRR-0184

Issue Date: 11-15-2012 Revision Date: 06-11-2025 Renewal Date: 01-31-2026

## 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:

- 2024, 2021, 2018 International Building Code<sup>®</sup> (IBC)
- 2024, 2021, 2018 International Residential Code® (IRC)

NOTE: This report references 2024 Code sections with [2021, 2018] Code sections shown in brackets where they differ.

**1.2** *Norandex Vinyl Siding* has been evaluated for the following properties:

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

**1.3** *Norandex Vinyl Siding* has been evaluated for the following uses:

 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.

## 2.1 2024 IBC and IRC Evaluation Reports

The Intertek CCRR is an *Evaluation Report* for approval of an alternate material, design, or method of construction in accordance with Section 104.2.3.6.1 of the 2024 IBC and Section R104.2.2.6.1 of the 2024 IRC.

#### **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 1404.15 [1404.14].

**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-resistive 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.



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#### 7.0 SUPPORTING EVIDENCE

7.1 Manufacturer's drawings and installation instructions.

**7.2** Reports of testing demonstrating compliance with ASTM D 3679-21 [17, 13] 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 <u>https://bpdirectory.intertek.com</u> is recommended to ascertain the current version and status of this report.

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Single



Half-Rolled Over



Single Roll Over



Double-Rolled Over

FIGURE 1 – NAIL HEM TYPES







Nominal Thickness	Nail Hem Type	Identified As	Profile Name	Exposure (inches)	Length (inches)	Allowable Design Pressure (psf) <sup>(2)</sup>	Colors
		Norandex Summit Manor	Double 4.5 DutchLap	9	145	40	Almond
0.040 in.	Single		Double 4 Horizontal	8	150	43	Beige Cactus
			Double 4.5 Horizontal	9	145	43	Champagne Cobblestone Cream Deep Water Evergreen Fern
	Half-rolled over	Norandex Woodsman Select	Double 4 Horizontal	8	150	68	
0.042 in.			Double 4 DutchLap	8	150	98	
			Double 5 DutchLap	10	144	70	
	Single	Norandex Woodsman Select	sman Select Double 5 Horizontal 10 144	144	77	Firebrick	
		Norandex Cedar Knolls	Double 4 Horizontal	8	150	74	Geneva Blue Granite Ivy Khaki Linen Maverick Brown Mocha Myrtle Olive Russet Sand
0.044 in.	Half-rolled over		Double 5 Horizontal	10	144	77	
0.044 In.			Double 5 DutchLap	10	144	70	
	Single	Norandex Cambridge	Full-Beaded 6-1/2	6.5	144	58	
		Norandex Great Barrier Norandex Great Barrier XL	Double 4 Horizontal	8	150	148	
0.046 in.	Double- rolled over		Double 5 DutchLap	10	148	107	

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



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Nominal

Thickness

0.048 in.

0.50 in.

Nail Hem

Type

Single

Single

Norandex Board & Batten

(Continued)								
Identified As	Profile Name	Exposure (inches)	Length (inches)	Allowable Design Pressure (psf) <sup>(2)</sup>	Colors			
Norandex Sterling	Single 8 Horizontal	8	150	61	Sand Stone Seaport			
Premium D5 Vertical Vinyl Siding	Double 5 Vertical	10	144	55	Sierra Silver			
					Smoke Steel Blue			

7

120

111

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

<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.

(2) 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.

Single 7 Vertical





Tan Tumbleweed

Wedgewood Wheat White Yellow