

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION EC-43

Effective February 1, 2006

*The following product has been evaluated for compliance with the wind loads specified in **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation 3 years after the effective date.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Vinyl siding products manufactured by:

**Owens Corning
Vinyl Operations
402 Penny Road
Claremont, North Carolina 28610
Telephone: 800-438-7465**

and distributed under the following brand names:

**Owens Corning
84 Lumber
Homeside
Norandex**

**Norandex/Reynolds
Reynolds
Vytec**

**Oakview
Walnut
Town Hall**

are accepted for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

This product evaluation applies to the following products:

Horizontal Siding:

84 Lumber

Builder's Pride Double 4"
Builder's Pride Double 5" Dutchlap
Builder's Pride Board and Batten

Builder's Pride Double 5"
Builder's Pride Double 4" Dutchlap

Homeside

Narrow Plank
Proform Double 4"
Proform Double 4" Dutchlap
Proform Double 5"
Proform Double 5" Dutchlap
Semi Beaded 6 1/2"

Classic Double 4"
Classic Double 4 1/2"
Classic Double 4 1/2" Dutchlap
Reminiscence Double 4.5"
Board and Batten
Supreme Plus Double 4.5" Dutchlap

PRODUCT DESCRIPTION (continued)

Supreme Plus Double 4"

Reminiscence Double 4.5" Dutchlap

Norandex

Sagebrush Double 4"

Summit Manor Double 4½"

Sagebrush Double 5" Dutchlap

Summit Manor Double 4½" Dutchlap

Woodsman Select Double 4"

Summit Manor Double 4"

Woodsman Select Double 4" Dutchlap

Great Barrier Double 4"

Woodsman Select Double 5"

Great Barrier Double 5" Dutchlap

Woodsman Select Double 5" Dutchlap

Norandex/Reynolds

Premium Single 8"

Cedar Reflections Double 4.5" Dutchlap

Cambridge Single 6½" Beaded

Cedar Reflections Double 4.5"

Board and Batten

Shenandoah Single 6½" Beaded

Shenandoah Triple 3"

Sterling Double 4"

Sterling Double 5"

Sterling Double 5" Dutchlap

Polar Wall Plus Double 4"

Polar Wall Plus Double 5" Dutchlap

Polar Wall Plus Double 6"

Ridgewood Double 4"

Ridgewood Double 5" Dutchlap

Ridgewood Double 6"

Generations Double 4"

Generations Double 5 Dutchlap

Generations Double 6"

Oakview

Oakview Estate Double 4" Dutchlap

Oakview Manor Double 4"

Oakview Manor Double 4.5"

Oakview Manor Double 4.5" Dutchlap

Oakview Estate Double 4"

Oakview Estate Double 5"

Oakview Premium Double 4"

Oakview Estate Double 5" Dutchlap

Oakview Premium Double 5" Dutchlap

Walnut

Walnut Manor Double 4"

Walnut Manor Double 4.5"

Walnut Manor Double 4.5" Dutchlap

Walnut Estate Double 4"

Walnut Estate Double 4" Dutchlap

Walnut Estate Double 5"

Walnut Estate Double 5" Dutchlap

Town Hall

Town Hall Woodgrain Double 4"

Town Hall Woodgrain Double 5"

Town Hall Woodgrain Double 4" Dutchlap

Town Hall Woodgrain Double 5" Dutchlap

Owens Corning

Essentials Premium Double 5" Dutchlap

Essentials Double 4½"

Essentials Premium Double 5"

Essentials Plus Double 4"

Essentials Premium Double 4"

Essentials Narrow Plank T-3

Essentials Semi Beaded 6 ½"

Essentials Double 4½" Dutchlap

Timber Double 4"

Essentials Plus Double 5"

Timber Double 4" Dutchlap

Essentials Plus Double 5" Dutchlap

Timber Double 5" Dutchlap

Timber Double 5"

Reynolds

Easy Street Double 4"

Renovations Basic Double 4"

Easy Street Double 4½"

Renovations Select Double 4"

PRODUCT DESCRIPTION (continued)

Easy Street Double 4½" Dutchlap
Cross Roads Double 4"
Cross Roads Double 5" Dutchlap
Grand Junction Double 4"
Grand Junction Double 5" Dutchlap
Chesapeake Select Double 5"
Chesapeake Select Double 5" Dutchlap

Renovations Basic Double 5" Dutch Lap
Renovations Select Double 5" Dutch Lap
Renovations Single 6.5" Beaded
Renovations Triple 3"
Chesapeake Select Double 4"
Chesapeake Select Double 4" Dutchlap

Vytec

Bevel 8"
Double 4"
Triple 3"
Nantucket Double 4"
Nantucket Double 4" Dutchlap
6.5" Full Beaded
Prosider Double 4.5" Dutchlap
Accord Standard Double 4"
Accord Premium Double 4.5"
Accord Premium Triple 3"
Accord Premium Plus Double 4.5" Dutchlap
Accord Bevel 8"

Eminence Double 4½" Dutchlap
Eminence Double 4½" Bevel
Prestige Double 4.5"
Prestige Double 4.5" Dutchlap
Prestige Double 5" Dutchlap
Board and Batten
Prosider Double 4.5"
Prosider Double 4"
Accord Premium Double 4.5" Dutchlap
Accord Premium Plus Double 4.5"
Accord Premium Plus Double 5" Dutchlap
Accord Standard Double 4" Dutchlap

Vertical/Soffit Siding:

84 Lumber

Double 5" Vertical/Soffit

Homeside

Double 5" Vertical/Soffit

Owens Corning

T4 Soffit
Double 5" Vertical/Soffit

Vytec

Universal 8" Vertical/Soffit

Norandex/Reynolds

Double 5" Premium Plus Vertical/Soffit
Premium Triple 4 Vertical/Soffit
Cedar Reflections Double 5" Vertical/Soffit

INSTALLATION INSTRUCTIONS

General Installation Requirements:

All fasteners shall be corrosion resistant. Fasteners shall be driven in the center of the nailing slot, leaving a minimum $\frac{1}{32}$ inch space between the nail head and the vinyl siding.

As a minimum, either the interior or exterior surface of the wall shall be sheathed with either structural or non-structural materials. If non-structural materials (such as foam or fiberboard) are used on the exterior

INSTALLATION INSTRUCTIONS (continued)

side of the wall, then the length of the fasteners used to secure the vinyl siding to the framing shall be increased by the thickness of the non-structural material.

Apply the starter strip with fasteners spaced a maximum of 8 inches on center. The fasteners for the J-channels and corner posts shall be spaced 6 to 12 inch centers.

Panel ends should be staggered from adjacent courses.

Soffits: Soffit material may be installed without a listing in this product evaluation report. If the soffit is perforated (the soffit must be perforated along its entire length) or if the overhang is 24 inches in width or less, then the soffit material may be installed in accordance with the manufacturer's installation instructions. All other soffit installations shall be in accordance with a listing in this product evaluation report.

Wall studs: Wall framing (framing members for soffits applications) shall be capable of resisting the design loads specified in each assembly.

Wind Resistant Assemblies:

Assembly No. 1

Horizontal Siding - Fasteners Penetrating into Studs

Design pressure: -44 psf

Nominal panel and hem thickness: 0.040 inches

Fasteners: 1 1/2" long nails (3/8" diameter head, 1/8" shank diameter)

The following products are applicable:

Owens Corning: Essentials Premium Double 4"; Essentials Narrow Plank T-3; Essentials Semi-Beaded 6.5; Essentials (Double 4.5, Double 4.5 Dutchlap); and Essentials Plus (Double 4, Double 5, Double 5 Dutchlap).

Norandex: Sagebrush Double 4; Summit Manor (Double 4, Double 4.5, Double 4.5 Dutchlap); Woodsman Select (Double 4, Double 4 Dutchlap); and Great Barrier Double 4.

Norandex/Reynolds: Sterling Double 4; Premium (Single 8); Polar Wall Plus (Double 4 and Double 5 Dutchlap) Ridgewood (Double 4 and Double 5 Dutchlap); Generations (Double 4 and Double 5 Dutchlap); and Shenandoah (Triple 3, Single 6.5 Beaded).

Oakview: Oakview Manor (Double 4, Double 4.5, Double 4.5 Dutchlap); Oakview Premium Double 4; and Oakview Estate (Double 4, Double 4 Dutchlap).

Walnut: Walnut Manor (Double 4, Double 4.5, Double 4.5 Dutchlap); and Walnut Estate (Double 4, Double 4 Dutchlap).

Town Hall: Town Hall Woodgrain (Double 4, Double 4 Dutchlap).

INSTALLATION INSTRUCTIONS (continued)

Reynolds: Premium Deluxe 8"; Cross Roads Double 4; Easy Street (Double 4, Double 4.5, Double 4.5 Dutchlap); Heritage (Triple 3, Single 6.5 Beaded); Chesapeake Select (Double 4, Double 4 Dutchlap); Grand Junction Double 4; Renovations Select (Double 4", Double 5" Dutch Lap); Renovations Basic (Double 4", Double 5 Dutch Lap); and Renovations (Triple 3", Single 6.5 Beaded).

Vytec: Triple 3", Proside (Double 4, Double 4.5 Dutchlap, Double 4.5); and Accord Premium (Double 4.5, Double 4.5 Dutchlap, Triple 3).

Installation: Wall studs shall be minimum SPF lumber. The studs shall be spaced a maximum of 16 inches on center. The vinyl siding shall be fastened to the wall framing with fasteners spaced a maximum of 16 inches on center.

Assembly No. 2

Horizontal Siding - Fasteners Penetrating into Studs

Design pressure: -46 psf

Nominal panel and hem thickness: 0.044 inches

Fasteners: 1 1/2" long nails (3/8" diameter head, 1/8" shank diameter)

The following products are applicable:

Owens Corning: Essentials Premium (Double 5", Double 5" Dutchlap).

Norandex: Sagebrush Double 5 Dutchlap.

Reynolds: Cross Roads Double 5 Dutchlap.

Norandex/Reynolds: Sterling (Double 5, Double 5 Dutchlap).

Installation: Wall studs shall be minimum Douglas Fir-Larch lumber. The studs shall be spaced a maximum of 16 inches on center. The vinyl siding shall be fastened to the wall framing with fasteners spaced a maximum of 16 inches on center.

Assembly No. 3

Horizontal Siding - Fasteners Penetrating into Studs

Design pressure: -61 psf

Nominal panel and hem thickness: 0.048 inches

Fasteners: 1 1/2" long nails (3/8" diameter head, 1/8" shank diameter)

The following products are applicable:

Norandex/Reynolds: Cambridge Single 6.5 Beaded.

Vytec: 6.5 Full Beaded.

Installation: Wall studs shall be minimum SPF lumber. The studs shall be spaced a maximum of 16 inches on center. The vinyl siding shall be fastened to the wall framing with fasteners spaced a maximum of 16 inches on center.

INSTALLATION INSTRUCTIONS (continued)

Assembly No. 4

Horizontal Siding - Fasteners Penetrating into Studs

Design pressure: -71 psf

Nominal panel and hem thickness: 0.038 inches

Fasteners: 1 ½" long roofing nails (⅜" diameter head, 0.120" shank diameter)

The following products are applicable:

Vytec: Bevel 8"; Double 4; Triple 2⅔; Nantucket (Double 4, Double 4 Dutchlap); Accord (Standard Double 4, Standard Double 4 Dutchlap, Bevel 8).

Installation: Wall studs shall be minimum Douglas-Fir Larch lumber. The studs shall be spaced a maximum of 16 inches on center. The vinyl siding shall be fastened to the wall studs with fasteners spaced a maximum of 16 inches on center.

Assembly No. 5

Horizontal Siding - Fasteners Penetrating into Studs

Design pressure: -93 psf

Nominal panel and hem thickness: 0.048 inches

Fasteners: 1 ½" long roofing nails (⅜" diameter head, 0.120" shank diameter)

The following products are applicable:

Vytec: Eminence (Double 4.5 Dutchlap, Double 4.5 Bevel).

Installation: Wall studs shall be minimum SPF lumber. The studs shall be spaced a maximum of 16 inches on center. The vinyl siding shall be fastened to the wall studs with fasteners spaced a maximum of 16 inches on center.

Assembly No. 6

Horizontal Siding - Fasteners Penetrating into Studs

Design pressure: -51 psf

Nominal panel and hem thickness: 0.044 inches

Fasteners: 1 ½" long roofing nails (⅜" diameter head, 0.120" shank diameter)

The following products are applicable:

Vytec: Prestige (Double 4.5, Double 4.5 Dutchlap, Double 5 Dutchlap); and Accord Premium Plus (Double 4.5, Double 4.5 Dutchlap, Double 5 Dutchlap).

Installation: Wall studs shall be minimum SPF lumber. The studs shall be spaced a maximum of 16 inches on center. The vinyl siding shall be fastened to the wall studs with fasteners spaced a maximum of 16 inches on center.

Assembly No. 7

Horizontal Siding - Fasteners Penetrating into Studs

Design pressure: -62 psf

Nominal panel and hem thickness: 0.044 inches

Fasteners: 1 ½" long roofing nails (⅜" diameter head, 0.120" shank diameter)

The following products are applicable:

Norandex/Reynolds: Cedar Reflections (Double 4.5, Double 4.5 Dutchlap).

Installation: Wall studs shall be minimum SPF lumber. The studs shall be spaced a maximum of 16 inches on center. The vinyl siding shall be fastened to the wall studs with fasteners spaced a maximum of 16 inches on center.

Assembly No. 8

Horizontal Siding - Fasteners Penetrating into Studs

Design pressure: -80 psf

Nominal panel and hem thickness: 0.045 inches

Fasteners: 1 ½" long roofing nails (⅜" diameter head, 0.120" shank diameter)

The following products are applicable:

Norandex/Reynolds: Polar Wall Plus Double 6, Ridgewood Double 6 and Generations Double 6.

Installation: Wall studs shall be minimum SPF lumber. The studs shall be spaced a maximum of 16 inches on center. The vinyl siding shall be fastened to the wall studs with fasteners spaced a maximum of 16 inches on center.

Assembly No. 9

Horizontal Siding – Fasteners Penetrating into Sheathing

Design Pressure: -47 psf

Nominal panel and hem Thickness: 0.040" nominal

Fasteners: 1 ½" long roofing nails (⅜" diameter head, ⅛" shank diameter)

The following products are applicable:

Norandex: Woodsman Select (Double 4, Double 4 Dutchlap, Double 5, Double 5 Dutchlap); Summit Manor (Double 4, Double 4.5, Double 4.5 Dutchlap); Sagebrush Double 5 Dutchlap; and Great Barrier (Double 4, Double 5 Dutchlap).

Owens Corning: Essentials Premium (Double 4", Double 5", Double 5" Dutchlap); Essentials Narrow Plank T-3; Essentials Semi Beaded 6.5"; and Essentials Plus (Double 4", Double 5", Double 5" Dutchlap).

Vytec: Triple 3"; Proside (Double 4, Double 4.5, Double 4.5 Dutchlap); and Accord Premium (Double 4.5, Double 4.5 Dutchlap, Triple 3).

INSTALLATION INSTRUCTIONS (continued)

Reynolds: Easy Street (Double 4, Double 4.5, Double 4.5 Dutchlap); Cross Roads Double 5 Dutchlap; Grand Junction (Double 4, Double 5 Dutchlap); Renovations Select (Double 4", Double 5" Dutch Lap), Renovations Basic (Double 4", Double 5 Dutch Lap), and Renovations (Triple 3", Single 6.5 Beaded).

Norandex/Reynolds: Premium (Single 8); Shenandoah (Triple 3, Single 6.5 Beaded); Cambridge Single 6.5 Beaded; Chesapeake Select (Double 4, Double 4 Dutchlap, Double 5, Double 5

Dutchlap); Polar Wall Plus (Double 4, Double 5 Dutchlap); Ridgewood (Double 4 and Double 5 Dutchlap); Generations (Double 4 and Double 5 Dutchlap); and Sterling (Double 4, Double 4 Dutchlap, Double 5, Double 5 Dutchlap).

Walnut: Walnut Manor (Double 4.5, Double 4.5 Dutchlap); and Walnut Estate (Double 4, Double 4 Dutchlap, Double 5, Double 5 Dutchlap).

Oakview: Oakview Manor (Double 4.5, Double 4.5 Dutchlap); Oakview Estate (Double 4, Double 4 Dutchlap, Double 5, Double 5 Dutchlap); and Oakview Premium (Double 4, Double 5 Dutchlap).

Town Hall: Town Hall Woodgrain (Double 4, Double 4 Dutchlap, Double 5, Double 5 Dutchlap).

Installation: Wall studs shall be minimum SPF. The wall studs shall be spaced a maximum of 24" on center. The siding shall be installed over minimum $\frac{3}{8}$ " wood structural panels or board siding (minimum Douglas Fir-Larch siding). The vinyl siding shall be fastened to the wood structural panels or board siding with fasteners spaced a maximum of 8 inches on center.

Assembly No. 10

Horizontal Siding - Fasteners Penetrating into Sheathing

Design pressure: -65 psf

Nominal panel and hem thickness: 0.042 inches

Fasteners: 1 $\frac{1}{2}$ " long roofing nails ($\frac{3}{8}$ " diameter head, $\frac{1}{8}$ " shank diameter)

The following products are applicable:

Homeside: Proform (Double 4, Double 4 Dutchlap, Double 5 and Double 5 Dutchlap); Classic (Double 4, Double 4 $\frac{1}{2}$, Double 4 $\frac{1}{2}$ Dutchlap), Supreme Plus (Double 4, Double 4.5 Dutchlap); Reminiscence (Double 4.5, Double 4.5 Dutchlap).

84 Lumber: Builder's Pride (Double 4, Double 4 Dutchlap, Double 5, Double 5 Dutchlap).

Owens Corning: Timber (Double 4, Double 4 Dutchlap, Double 5, Double 5 Dutchlap).

Installation: Wall studs shall be minimum SPF lumber. The wall studs shall be spaced a maximum of 16 inches on center. The vinyl siding shall be installed over minimum $\frac{3}{8}$ inch thick wood structural panels or board siding (minimum Douglas Fir-Larch siding). The vinyl siding shall be fastened to the wood structural panels or board siding with fasteners spaced a maximum of 6 inches on center.

INSTALLATION INSTRUCTIONS (continued)

Assembly No. 11

Horizontal Siding - Fasteners Penetrating into Sheathing

Design pressure: -67 psf

Nominal panel and hem thickness: 0.050 inches

Fasteners: 1 $\frac{1}{2}$ " long roofing nails ($\frac{3}{8}$ " diameter head, $\frac{1}{8}$ " shank diameter)

The following profiles are applicable:

Norandex: Sagebrush Double 4".

Reynolds: Cross Roads Double 4".

Installation: Wall studs shall be minimum SPF lumber. The studs shall be spaced a maximum of 16 inches on center. The siding shall be installed over minimum $\frac{3}{8}$ inch thick wood structural panels or board siding (minimum Douglas Fir-Larch siding). The vinyl siding shall be fastened to the wood structural panels or board siding with fasteners spaced a maximum of 12 inches on center.

Assembly No. 12

Vertical Siding and Soffit - Fasteners Penetrating into Sheathing

Design pressure: -55 psf

Nominal panel and hem thickness: 0.040 inches

Fasteners: 1 $\frac{1}{2}$ " long roofing nails ($\frac{3}{8}$ " diameter head, $\frac{1}{8}$ " shank diameter)

The following products are applicable:

Homeside: Double 5" Vertical/Soffit.

84 Lumber: Double 5" Vertical/Soffit.

Owens Corning: T4 Soffit; and Double 5" Vertical/Soffit.

Vytec: Universal 8 Vertical/Soffit.

Installation: Framing members shall be minimum SPF lumber. The framing members shall be spaced a maximum of 24" on center. The vinyl siding shall be installed over minimum $\frac{3}{8}$ " wood structural panels or board siding (minimum Douglas Fir-Larch siding). The vinyl siding shall be fastened to the wood structural panels or board siding with fasteners spaced a maximum of 5 inches on center.

Assembly No. 13

Vertical Siding and Soffit - Fasteners Penetrating into Sheathing

Design pressure: -71 psf

Nominal panel and hem thickness: 0.044 inches

Fasteners: 1 $\frac{1}{2}$ " long roofing nails ($\frac{3}{8}$ " diameter head, $\frac{1}{8}$ " shank diameter)

INSTALLATION INSTRUCTIONS (continued)

Assembly No. 13

The following products are applicable:

Norandex/Reynolds: Premium (Triple 4, Double 5).

Installation: Framing members shall be minimum SPF lumber. The framing members shall be spaced a maximum of 24" on center. The vinyl siding shall be installed over minimum $\frac{3}{8}$ " wood

structural panels or board siding (minimum Douglas Fir-Larch siding). The vinyl siding shall be fastened to the wood structural panels or board siding with fasteners spaced a maximum of 6 inches on center.

Assembly No. 14

Vertical Siding and Soffit - Fasteners Penetrating into Sheathing

Design pressure: -39.5 psf

Nominal panel and hem thickness: 0.044 inches

Fasteners: 1 1/2" long roofing nails (3/8" diameter head, 1/8" shank diameter), corrosion resistant roofing nails

The following products are applicable:

Homeside: Board and Batten.

84 Lumber: Board and Batten.

Vytec: Board and Batten.

Norandex/Reynolds: Board and Batten.

Installation: Framing members shall be minimum SPF lumber. The framing members shall be spaced a maximum of 16" on center. The vinyl siding shall be installed over minimum 7/16" OSB. The vinyl siding shall be nailed in the nailing slots at 16" o.c. to the OSB sheathing. There shall be a 1/16" to 1/32" gap between the nail and the vinyl. Siding shall be installed vertically such that it runs parallel to the 8 ft. dimension.

Assembly No. 15

Vertical Siding and Soffit - Fasteners Penetrating into Sheathing

Design pressure: -33 psf

Nominal panel and hem thickness: 0.048 inches

Fasteners: 1 1/2" long roofing nails (3/8" diameter head, 1/8" shank diameter)

The following products are applicable:

Norandex/Reynolds: Cedar Reflections Double 5

INSTALLATION INSTRUCTIONS (continued)

Installation: Framing members shall be minimum SPF lumber. The framing members shall be spaced a maximum of 16" on center. The vinyl siding shall be installed over minimum 1/2" wood structural panels or board siding (minimum Douglas Fir-Larch siding).

The vinyl siding shall be fastened to the wood structural panels or board siding with fasteners spaced a maximum of 16 inches on center.

Note: The manufacturer's installation instructions shall be on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC) and the International Building Code (IBC).