

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION EC-1

November 1, 2004  
Revised September 1, 2006

*The following products have been evaluated for compliance with the wind loads specified in the **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 manufactured by

**Crane Performance Siding**  
**1441 Universal Rd.**  
**P.O. Box 1058**  
**Columbus, Ohio 43216**  
**(800) 366-8472**

will be 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

NOTE: Crane Performance Siding vinyl siding is sold by several distributors, such as **Amazing Siding Corporation**. The code in "( )" next to each product shall be located on the end cap of each box and is followed by a 2 digit color code.

This product evaluation applies to the following Crane Performance Siding products:

### Horizontal Siding:

#### Staple Application Only:

Double 4" Dutchlap (D4WRL)	Triple 3 1/3" (T3RWL)
Double 5" Dutchlap (DL5BP)	Triple 4" Soffit (T4B)
Double 4" Post Formed Lock (BP4RL)	
Double 5" Post Formed Lock (AD5RL)	

#### Nail Application Only:

Double 4" Clapboard (4WG)	Double 5" Dutchlap (DL5BP)
Double 5" Clapboard (5WG)	Triple 3 1/3" (T3RWL)
Double 4" Dutchlap Woodgrain (DL4W)	Double 4" Natural Smooth (D4L)
Double 5" Dutchlap Woodgrain (DL5W)	Double 4 1/2" Dutchlap Natural Smooth (D45L)
8" Beaded (S8B)	Quad 4" Insulated Panel (Q4IP)

**Horizontal Siding (Continued):**

**Nail Application Only (Continued):**

Double 4" (BP4RL)	Quad 4 ½" Dutchlap Insulated Panel (Q45IP)
Double 4" Dutchlap (D4WRL)	True-milled Quad 4" Insulated Panel (TMQIP)
Double 4 ½" Dutchlap (D45RL)	True-milled Quad 4 ½" Insulated Panel (TMQ45IP)
Double 5" (BP5RL)	True-milled Triple 6" Insulated Panel (TMT6IP)
	True-milled Double 7" Insulated Panel (TMD7IP)

**Vertical/Soffit Siding:**

Triple 4" (T4SA), (T4FA), (T4CA)  
Triple 3 ⅓" (T3SRS)  
6" Beaded (6BS01)  
Double 5" (D5SA), (D5FA)

**Vertical Siding:**

CraneBoard Double 10 Board and Batten Vertical Siding (D10BBIP)

**INSTALLATION INSTRUCTIONS**

**General Installation Requirements:**

All fasteners shall be corrosion resistant as specified in the IRC and the IBC. Fasteners shall be driven in the center of the nailing slot, leaving a minimum ⅓<sub>2</sub> 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) is used on the exterior 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 the corner posts shall be spaced a maximum of 12 inches on center.

Design pressures are based on the framing members being sheathed, either on the interior or exterior surface, with structural or non-structural sheathing.

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.

**Wind Resistant Assemblies:**

**Assemblies No. 1 thru 5**

**Horizontal Siding - Fasteners Penetrating Into Studs**

**Assembly No. 1: Double 4 Post Formed Lock**

Design pressure: -73 psf  
Nominal nail hem thickness: 0.046"  
Nominal panel thickness: 0.039"

### Assemblies No. 1 thru 5 (Continued)

#### **Assembly No. 2: Double 5 Post Formed Lock**

Design pressure: -60 psf  
Nominal nail hem thickness: 0.044"  
Nominal panel thickness: 0.041"

#### **Assembly No. 3: Triple 3 $\frac{1}{3}$**

Design pressure: -73 psf  
Nominal nail hem thickness: 0.050"  
Nominal nail hem thickness: 0.038"

#### **Assembly No. 4: Double 5 Dutchlap**

Design pressure: -60 psf  
Nominal nail hem thickness: 0.042"  
Nominal panel thickness: 0.040"

#### **Assembly No. 5: Double 4 Dutchlap**

Design Pressure: -91 psf  
Nominal nail hem thickness: 0.045"  
Nominal panel thickness: 0.039"

**Fasteners:** 1  $\frac{1}{2}$ " long x  $\frac{7}{16}$ " wide x 16 gauge galvanized staples

**Installation:** Wall studs shall be minimum Stud or No. 3 grade 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. Panel ends should be staggered from adjacent courses.

### Assembly No. 6

#### **Soffit - Fasteners Penetrating Into Studs**

##### **Assembly No. 6: Triple 4 Soffit**

Design pressure: -67 psf  
Nominal nail hem thickness: 0.069"  
Nominal panel thickness: 0.037"

**Fasteners:** 1  $\frac{1}{2}$ " long x  $\frac{7}{16}$ " wide x 16 gauge galvanized staples

**Installation:** Framing members shall be minimum Stud or No. 3 grade SPF lumber. The studs shall be spaced a maximum of 16 inches on center. The soffit shall be fastened to the framing members with fasteners spaced a maximum of 16 inches on center.

### Assembly No. 7

#### **Horizontal Siding - Fasteners Penetrating Into Studs**

**Design pressure:** -62 psf  
**Nominal nail hem thickness:** 0.041 inches

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

**The following products are applicable:** Double 4 Clapboard, Double 4 Dutchlap Woodgrain, Double 5 Clapboard, Double 5 Dutchlap Woodgrain, 8" Beaded, Double 4, Double 4 Dutchlap, Double 4  $\frac{1}{2}$  Dutchlap, Double 5, Double 5 Dutchlap, Triple 3  $\frac{1}{3}$ , Double 4 Natural Smooth, Double 4  $\frac{1}{2}$  Dutchlap Natural Smooth.

### Assemblies No. 7 (Continued)

**Installation:** Wall studs shall be minimum Stud or No. 3 grade 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. Panel ends should be staggered from adjacent courses.

### Assembly No. 8

#### Horizontal Siding - Fasteners Penetrating Into Sheathing

**Design pressure:** -52 psf

**Nominal nail hem thickness:** 0.041 inches

**Fasteners:** 1 ½" long galvanized roofing nails ( $\frac{3}{8}$ " diameter head,  $\frac{1}{8}$ " shank diameter)

**The following products are applicable:** Double 4 Clapboard, Double 4 Dutchlap Woodgrain, Double 5 Clapboard, Double 5 Dutchlap Woodgrain, 8" Beaded, Double 4, Double 4 Dutchlap, Double 4 ½ Dutchlap, Double 5, Double 5 Dutchlap, Triple 3 ⅓, Double 4 Natural Smooth, Double 4 ½ Dutchlap Natural Smooth.

**Installation:** Wall studs shall be minimum Stud or No. 3 grade SPF lumber. The studs shall be spaced a maximum of 24 inches on center. The framing members shall be sheathed with minimum  $\frac{3}{8}$  inch thick structural sheathing. The vinyl siding shall be fastened to the sheathing with fasteners spaced a maximum of 12 inches on center. Panel ends should be staggered from adjacent courses.

### Assembly No. 9

#### Vertical Siding/Soffit - Fasteners Penetrating Into Sheathing

**Design pressure:** -57 psf

**Nominal nail hem thickness:** 0.033 inches

**Fasteners:** 1 ½" long galvanized roofing nails ( $\frac{3}{8}$ " diameter head,  $\frac{1}{8}$ " shank diameter)

**The following products are applicable:** Triple 4; Triple 3 ⅓; 6 inch Beaded; Double 5"

**Installation:** Framing shall be minimum Stud or No. 3 grade SPF lumber. Framing shall be spaced a maximum of 16 inches on center.

The vertical siding shall be installed over minimum  $\frac{3}{8}$  inch thick wood structural sheathing. The vinyl siding shall be fastened to the sheathing with fasteners spaced a maximum of 6 inches on center. Panel ends should be staggered from adjacent courses.

Soffit may be installed over either minimum  $\frac{3}{8}$  inch thick wood structural sheathing or nominal one-inch thick spaced boards. If spaced boards are used, then the boards shall be a minimum of 2 inches wide. The boards shall be fastened to each framing member they cross with two 8d nails. The boards shall be spaced a maximum of 6 inches on center. The vinyl siding shall be fastened to the sheathing or boards at 6 inches on center.

### Assembly No. 10

#### Horizontal Siding (CraneBoard) - Fasteners Penetrating Into Sheathing

**Design pressure:** -76 psf

**Nominal nail hem thickness:** 0.039 inches

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

**The following products are applicable:** Quad 4 Insulated Panel, Quad 4.5 Insulated Panel, True-milled Quad 4 Insulated Panel, True-milled Quad 4.5 Insulated Panel, True-milled Triple 6 Insulated Panel, True-milled Double 7 Insulated Panel.

NOTE: CraneBoard is a product where each panel contains 2 courses of vinyl siding interlocked, with expanded polystyrene (EPS) backing pre-installed as a complete system.

**Installation:** Wall studs shall be minimum Stud or No. 3 grade SPF lumber. The studs shall be spaced a maximum of 16 inches on center. The framing members shall be sheathed with minimum  $\frac{3}{8}$  inch thick wood structural sheathing. The vinyl siding shall be fastened to the sheathing with fasteners spaced a maximum of 6 inches on center. Panel ends should be staggered from adjacent courses.

### Assembly No. 11

#### Vertical Siding - Fasteners Penetrating Into Sheathing

**Design pressure:** -40.9 psf

**Nominal nail hem thickness:** 0.055 inches

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

**The following products are applicable:** CraneBoard Double 10 Board and Batten Vertical Siding

**Installation:** Framing shall be minimum Stud or No. 3 grade SPF lumber. Framing shall be spaced a maximum of 16 inches on center.

The vertical siding shall be installed over minimum  $\frac{7}{16}$  inch thick wood structural sheathing. The vinyl siding shall be fastened to the sheathing with fasteners spaced a maximum of 8 inches on center.

### Assembly No. 12

#### Vertical Siding - Fasteners Penetrating Into Sheathing

**Design pressure:** -29.8 psf

**Nominal nail hem thickness:** 0.055 inches

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

**The following products are applicable:** CraneBoard Double 10 Board and Batten Vertical Siding

**Installation:** Framing shall be minimum Stud or No. 3 grade SPF lumber. Framing shall be spaced a maximum of 16 inches on center.

The vertical siding shall be installed over minimum  $\frac{7}{16}$  inch thick wood structural sheathing. The vinyl siding shall be fastened to the sheathing with fasteners spaced a maximum of 12 inches on center.

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