TDI | Texas Department of Insurance

Product Evaluation

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

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.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: EC-66

Effective Date: January 1, 2023
Re-evaluation Date: August 2023

Product Name: Vinyl Siding

Manufacturer: Westlake Royal Building Products
1441 Universal Road
Columbus, OH 43207
(614) 754-3488

Westlake Royal Building Products
91 Royal Group Crescent
Woodbridge, Ontario L4H 1X9
Canada

General Description:
This evaluation report applies to the vinyl siding products listed in Tables 1, 2, and 3.

Table 1. Royal Brand Vinyl Siding

Product Family	Product Code	Product Style	Orientation	Exposure (in.)	Thickness (in.)
Woodland	RWD45	Double 4.5" Traditional	Horizontal	9	0.046
	RWD45D	Double 4.5" Designer	Horizontal	9	0.046
	RWBB	Board and Batten	Vertical	7	0.046
Estate	ESTD4	Double 4" Traditional	Horizontal	8	0.044
	ESTD45D	Double 4.5" Designer	Horizontal	9	0.044
	ESTD5D	Double 5" Designer	Horizontal	10	0.044
	RCCOL6	Single 6" Beaded	Horizontal	6.5	0.044
Residential	RED4	Double 4" Traditional	Horizontal	8	0.042
	RED45	Double 4.5" Traditional	Horizontal	9	0.042
	RED45D	Double 4.5" Designer	Horizontal	9	0.042
	RET3D	Triple 3" Traditional	Horizontal	9	0.042
Crest	RCD4	Double 4" Traditional	Horizontal	8	0.040
	RCD4D	Double 4" Designer	Horizontal	8	0.040
	RCD45D	Double 4.5" Designer	Horizontal	9	0.040
	RCD5	Double 5" Traditional	Horizontal	10	0.040
	RCD5D2	Double 5" Designer	Horizontal	10	0.040
	RCD4V10	Vertical Double 4"	Vertical	8	0.040
	RC8	Single 8" Traditional	Horizontal	8	0.040
Soffit as Siding	RSD5VSBF	Vertical Double 5"	Vertical	10	0.042
Genesis (Crest)	GEND45	Double 4.5" Traditional	Horizontal	9	0.040
	GEND45D	Double 4.5" Designer	Horizontal	9	0.040
	GENT3	Triple 3" Traditional	Horizontal	9	0.040
Haven	HAVD6	Double 6" Traditional	Horizontal	12	1.125
	HAVD45D	Double 4.5" Designer	Horizontal	9	1.125
	HAVBB10	Double 10" Board & Batten	Vertical	20	1.125
	TMD7IP	Double 7" Traditional Wire	Horizontal	14	1.125

Table 2. Exterior Portfolio Brand Vinyl Siding

Product Family	Product Code	Product Style	Orientation	Exposure (in.)	Thickness (in.)
Premium Point 360	D4PPTM	Double 4" Traditional	Horizontal	8	0.046
	D45PPTM	Double 4.5" Dutchlap	Horizontal	9	0.046
	S55PPBB	Board & Batten	Vertical	7	0.046
Market Square	D4STD	Double 4" Traditional	Horizontal	8	0.044
	D45DLSTD	Double 4.5" Dutchlap	Horizontal	9	0.044
	D5STD	Double 5" Traditional	Horizontal	10	0.044
Carolina Sands	S65B	Single 6" Beaded	Horizontal	6.5	0.044
Parkview	D4CEDAR	Double 4" Traditional	Horizontal	8	0.042
	D4DCG	Double 4.5" Dutchlap	Horizontal	9	0.042
	D5CEDAR	Double 5" Traditional	Horizontal	10	0.042
	D5DCG	Double 5" Dutchlap	Horizontal	10	0.042
Elm Grove	D4EG	Double 4"	Horizontal	8	0.040
	D4DLEG	Double 4.5" Dutchlap	Horizontal	8	0.040
	D5DLEG	Double 5" Dutchlap	Horizontal	10	0.040
American Dream Edge	D4	Double 4" Traditional	Horizontal	8	0.040
	D4DL	Double 4" Dutchlap	Horizontal	8	0.040
	D5DL	Double 5" Dutchlap	Horizontal	10	0.040
	D4DLRO	Double 4" Dutchlap	Horizontal	8	0.038
	D5DLRO	Double 5" Dutchlap	Horizontal	10	0.038
Soffit as Siding	T4SS	Vertical Triple 4"	Vertical	12	0.040
	PPSS	Vertical Triple 3-1/3"	Vertical	10	0.044
	D5SA	Double 5"	Vertical	10	0.038

Table 2. Exterior Portfolio Brand Vinyl Siding (Continued)

Product Family	Product Code	Product Style	Orientation	Exposure (in.)	Thickness (in.)
CraneBoard	TMT6IP	Triple 6" Traditional Molded	Horizontal	18	1.125
	TMT616I	Triple 6" Traditional Molded	Horizontal	18	1.125
	TMD7IP	Double 7" Traditional Molded	Horizontal	14	1.125
	D10BBIP	Double 10" Board & Batten	Vertical	20	1.125
	TMQ4IP	Quad 4" Traditional	Horizontal	16	1.125
	TMQ45IP	Quad 4.5" Dutchlap	Horizontal	18	1.125

Table 3. Soffit

Product Family	Product Code	Product Style	Orientation	Exposure (in.)	Thickness (in.)
Royal Building Products	RSD5VSBF	Vertical Double 5"	Vertical	10	0.042
Exterior Portfolio	T4SS	Vertical Triple 4"	Vertical	12	0.040
	PPSS	Vertical Triple 3-1/3"	Vertical	10	0.044
	D5SA	Double 5"	Vertical	10	0.038

Limitations:

Design Pressure: The allowable design pressures for the vinyl siding products are specified in Tables 4, 5, and 6.

Table 4. Royal Brand Vinyl Siding

Product Family	Product Code	Product Style	Orientation	Installation Method	Design Pressure (PSF)
Woodland	RWD45	Double 4.5" Traditional	Horizontal	Standard 1	-102
	RWD45D	Double 4.5" Designer	Horizontal	Standard 1	-111
	RWBB	Board and Batten	Vertical	Standard 2	-83
Estate	ESTD4	Double 4" Traditional	Horizontal	Standard 1	-77
	ESTD45D	Double 4.5" Designer	Horizontal	Standard 1	-77
	ESTD5D	Double 5" Designer	Horizontal	Standard 1	-56
	RCCOL6	Single 6" Beaded	Horizontal	Standard 1	-69
Residential	RED4	Double 4" Traditional	Horizontal	Standard 1	-65
	RED45	Double 4.5" Traditional	Horizontal	Standard 1	-89
	RED45D	Double 4.5" Designer	Horizontal	Standard 1	-89
	RET3D	Triple 3" Traditional	Horizontal	Standard 1	-89
Crest	RCD4	Double 4" Traditional	Horizontal	Standard 1	-81
	RCD4D	Double 4" Designer	Horizontal	Standard 1	-81
	RCD45D	Double 4.5" Designer	Horizontal	Standard 1	-74
	RCD5	Double 5" Traditional	Horizontal	Standard 1	-65
	RCD5D2	Double 5" Designer	Horizontal	Standard 1	-65
	RCD4V10	Vertical Double 4"	Vertical	Standard 1	-56
	RC8	Single 8" Traditional	Horizontal	Standard 1	-65
Soffit as Siding	RSD5VSBF	Vertical Double 5"	Vertical	Standard 1	-40
Genesis (Crest)	GEND45	Double 4.5" Traditional	Horizontal	Standard 1	-74
	GEND45D	Double 4.5" Designer	Horizontal	Standard 1	-74
	GENT3	Triple 3" Traditional	Horizontal	Standard 1	-74
Haven	HAVD6	Double 6" Traditional	Horizontal	Standard 4	-67
	HAVD45D	Double 4.5" Designer	Horizontal	Standard 1	-79
	HAVBB10	Double 10" Board & Batten	Vertical	Standard 2	-35
	TMD7IP	Double 7" Traditional Wire	Horizontal	Standard 5	-56
				Staple 2	-56

Table 5. Exterior Portfolio Brand Vinyl Siding

Product Family	Product Code	Product Style	Orientation	Installation Method	Design Pressure
Premium Point 360	D4PPTM	Double 4" Traditional	Horizontal	Standard 1	-126
				Washer 1	-246
	D45PPTM	Double 4.5" Dutchlap	Horizontal	Standard 1	-124
				Washer 1	-159
	S55PPBB	Board & Batten	Vertical	Standard 1	-83
Market Square	D4STD	Double 4" Traditional	Horizontal	Standard 1	-74
				Washer 1	-117
	D45DLSTD	Double 4.5" Dutchlap	Horizontal	Standard 1	-68
				Washer 1	-154
	D5STD	Double 5" Traditional	Horizontal	Standard 1	-62
				Washer 1	-117
Carolina Sands	S65B	Single 6" Beaded	Horizontal	Standard 1	-96
				Washer 1	-123
Parkview	D4CEDAR	Double 4" Traditional	Horizontal	Standard 1	-68
				Washer 1	-77
	D4DCG	Double 4.5" Dutchlap	Horizontal	Standard 1	-68
				Washer 1	-77
	D5CEDAR	Double 5" Traditional	Horizontal	Standard 1	-68
				Washer 1	-77
	D5DCG	Double 5" Dutchlap	Horizontal	Standard 1	-68
				Washer 1	-77
Elm Grove	D4EG	Double 4"	Horizontal	Standard 1	-93
				Staple 1	-111
	D4DLEG	Double 4.5" Dutchlap	Horizontal	Standard 1	-93
				Staple 1	-111
	D5DLEG	Double 5" Dutchlap	Horizontal	Standard 1	-93
				Staple 1	-111
American Dream Edge	D4	Double 4" Traditional	Horizontal	Standard 1	-83
	D4DL	Double 4" Dutchlap	Horizontal	Standard 1	-83
				Washer 1	-124
	D5DL	Double 5" Dutchlap	Horizontal	Standard 1	-68
				Washer 1	-71
	D4DLRO	Double 4" Dutchlap	Horizontal	Standard 1	-93
				Staple 1	-111
	D5DLRO	Double 5" Dutchlap	Horizontal	Standard 1	-93
				Staple 1	-111
Soffit as Siding	T4SS	Vertical Triple 4"	Vertical	Standard 3	-40
	PPSS	Vertical Triple 3-1/3"	Vertical	Standard 1	-49
	D5SA	Double 5"	Vertical	Standard 2	-56

Table 5. Exterior Portfolio Brand Vinyl Siding (Continued)

Product Family	Product Code	Product Style	Orientation	Installation Method	Design Pressure
CraneBoard	TMT6IP	Triple 6" Traditional Molded	Horizontal	Standard 1	-53
	TMT616I	Triple 6" Traditional Molded	Horizontal	Standard 1	-44
	TMD7IP	Double 7" Traditional Molded	Horizontal	Standard 5	-68
				Staple 2	-68
	D10BBIP	Double 10" Board & Batten	Vertical	Standard 2	-35
	TMQ4IP	Quad 4" Traditional	Horizontal	Standard 5	-56
				Washer 2	-66
	TMQ45IP	Quad 4.5" Dutchlap	Horizontal	Standard 5	-56
				Washer 2	-66

Table 6. Soffit

Product Family	Product Code	Product Style	Orientation	Installation Method	Design Pressure
Royal Building Products	RSD5VSBF	Vertical Double 5"	Vertical	Standard 1	-40
Exterior Portfolio	T4SS	Vertical Triple 4"	Vertical	Standard 3	-40
	PPSS	Vertical Triple 3-1/3"	Vertical	Standard 1	-49
	D5SA	Double 5"	Vertical	Standard 2	-56

Installation:

General Installation Requirements: Install the vinyl siding in accordance with this product evaluation report and the manufacturer's installation instructions.

Installation Method: Secure the vinyl siding to the wall substrate in accordance with one of the following attachment methods as specified in Tables 4, 5, and 6:

Standard 1:
Wall studs are minimum Spruce-Pine-Fir dimension lumber spaced a maximum of 16" on center. Walls are sheathed with minimum 7/16" wood structural panels (plywood or OSB). Fasteners are minimum 11-gauge, smooth shank roofing nails with 3/8." diameter head and minimum 1-1/2" length. The fasteners must be long enough to extend a minimum of 1-1/4" into the combination of wall sheathing and wall framing. Fasteners spacing is a maximum of 16" on center.

Standard 2:
Wall studs are minimum Southern Yellow Pine dimension lumber spaced a maximum of 16" on center. Walls are sheathed with minimum 7/16" OSB. Fasteners are minimum 11-gauge, smooth shank roofing nails with 3/8" diameter head and minimum 1-1/2" length. The fasteners must be

long enough to penetrate completely through the sheathing. Fasteners spacing a maximum of 12" on center into the sheathing. Fasteners not required to penetrate into the wall framing members.

Standard 3:
Wall studs are minimum Southern Yellow Pine dimension lumber spaced a maximum of 16" on center. Walls are sheathed with minimum 7/16" OSB. Fasteners are minimum 11-gauge, smooth shank roofing nails with 3/8" diameter head and minimum 1-1/2" length. The fasteners must be long enough to penetrate completely through the sheathing. Fasteners spacing a maximum of 16" on center into the sheathing. Fasteners not required to penetrate into the wall framing members.

Standard 4:
Wall studs are minimum Spruce-Pine-Fir dimension lumber spaced a maximum of 16" on center. Walls are sheathed with minimum 15/32" plywood. Fasteners are minimum 11-gauge, smooth shank roofing nails with 3/8" diameter head and minimum 2-1/2" length. Fasteners spacing a maximum of 8" on center into the sheathing with every other fastener penetrating into the wall framing. The fasteners must be long enough to penetrate completely through the sheathing and a minimum of 1-1/4" into the wall framing

Standard 5:
Wall studs are minimum Spruce-Pine-Fir dimension lumber spaced a maximum of 16" on center. Walls are sheathed with minimum 15/32" plywood. Fasteners are minimum 11-gauge, smooth shank roofing nails with 3/8" diameter head and minimum 2-1/2" length. Fasteners spacing a maximum of 16" on center. The fasteners must be long enough to penetrate a minimum of 1-1/4" into the wall framing.

Washer 1:
Wall studs are minimum Spruce-Pine-Fir dimension lumber spaced a maximum of 16" on center. Walls are sheathed with minimum 7/16" OSB. Fasteners are minimum 11-gauge, ring shank roofing nails with 3/8" diameter head and minimum 1-1/2" length. Fender washers are 1/8" x 3/4". The fasteners must be long enough to penetrate a minimum of 1-1/4" into the wall framing. Fasteners spacing (and wall framing spacing) a maximum of 16" on center.

Washer 2:
Wall studs are minimum Spruce-Pine-Fir dimension lumber spaced a maximum of 16" on center. Walls are sheathed with minimum 15/32" plywood. Fasteners are minimum 11-gauge, ring shank roofing nails with 3/8" diameter head and minimum 2" length. Fender washers are 1/8" x 3/4". The fasteners must be long enough to penetrate a minimum of 1-1/4" into the wall framing. Fasteners spacing (and wall framing spacing) a maximum of 16" on center.

Staple 1:
Wall studs are minimum Spruce-Pine-Fir dimension lumber spaced a maximum of 16" on center. Walls are sheathed with minimum 7/16" wood structural panels (plywood or OSB). Fasteners are

minimum 16-gauge, 7/16" crown staples, with a minimum 1-1/2" length. The fasteners must be long enough to extend a minimum of 1-1/4" into the combination of wall sheathing and wall framing. Fasteners spacing (and wall framing spacing) a maximum of 16" on center.

Staple 2:
Wall studs are minimum Spruce-Pine-Fir dimension lumber spaced a maximum of 16" on center. Walls are sheathed with minimum 7/16" wood structural panels (plywood or OSB). Fasteners are minimum 16-gauge, 7/16" crown staples, with a minimum 2" length. The fasteners must be long enough to extend a minimum of 1-1/4" into the combination of wall sheathing and wall framing. Fasteners spacing (and wall framing spacing) a maximum of 16" on center.

Starter Strips, Corner Posts and J-Channels: Apply the starter strips with fasteners spaced a maximum of 8" on center. Corner posts must have a maximum fastener spacing of 10" on center. Attach J-channels to the wall framing with fasteners spaced a maximum of 10" on center.

Note: Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.