

Product Evaluation

RC232| 0617

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: RC-232 **Effective Date:** June 1, 2017

Re-evaluation Date: June 2021

Product Name: Symphony Synthetic Slate Shingles

Manufacturer: CertainTeed Corporation

20 Moores Road Malvern, PA, 19355 610-893-6096

General Description:

CertainTeed's Symphony synthetic slate is a composite roofing product simulating the appearance, texture, and contours of traditional natural slate. Symphony slates are available in $18" \times 12"$, $18" \times 9"$ and $18" \times 6"$ sizes and in three color blends. Slate thickness varies from 0.40" at the butt edge to 0.14" at the top edge. Also available are preformed hip and ridge shingles folded to either steep or shallow roof slope profiles. The hip and ridge slates are $18" \times 12"$ nominal dimensions.

Limitations:

Design Wind Pressures: The design wind pressure uplift resistance is specified in Table 1.

Table 1.Attachment of Symphony Slate Shingles to Minimum 15/32" Plywood Deck

System	Allowable Design Pressure Rating
1	-82.5 psf
2	-78.5 psf
3	-163.5 psf

Roof Slope: Symphony slate shingles must not be installed on roof slopes less than 3:12.

Roof Framing: Roof framing (rafters or trusses) must not exceed 24" on center.

Roof Deck: Minimum 15/32" thick plywood sheathing.

Roof Deck Attachment: The roof deck must be secured to the roof framing to resist the required wind uplift design pressures.

Installation Over an Existing Roof Covering: Not permitted.

Installation:

Underlayment: A minimum of one layer of No. 30 (Type II) asphalt felt must be used. The underlayment used must comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The felt must be installed with minimum 6" side laps and minimum 2" end laps. The underlayment must be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners must be applied along the overlaps not farther apart than 36" on center. For the valleys, along the rake and eave edges, under half-piece hip and ridge caps, around chimneys and skylights, use CertainTeed WinterGuard Waterproofing underlayment or equivalent waterproofing underlayment.

For roof slopes from 3:12 to 5:12, install CertainTeed WinterGuard Waterproofing underlayment or equivalent waterproofing underlayment over the entire deck. Ensure that adequate ventilation meeting code requirements is provided.

Slate: The Symphony slates have spacer tabs, exposure marks, alignment marks and nail pockets. The slate can be applied with a straight or staggered bottom edge application and with a half-piece offset (6"), 5" or 4" offset with a textured headlap show-through. It is recommended that the side-edge to side-edge offset not be less than 3". For roof slopes from 3:12 through 5:12, the Symphony Slates must be applied at a 6" exposure. On slopes over 5:12, the slates can be applied with a greater exposure, but not in excess of 8". It is not recommended to apply Symphony slates at temperatures below 15 degrees Fahrenheit.

Anchorage:

System 1: Each slate is secured to the plywood deck with 1-3/4" long, galvanized steel ring shank roofing nails. The nails must be minimum 11-gauge and are placed at the nail pocket locations on each shingle. Overlapping course will yield four nails per shingle. Fasteners must be long enough to penetrate a minimum of 1/4" below the plywood deck.

System 2: Each slate is secured to the plywood deck with 1-1/2" long, galvanized steel ring shank roofing nails. The nails must be minimum 11-gauge and are placed at the nail pocket locations on each shingle. Overlapping course will yield four nails per shingle. Fasteners must be long enough to penetrate a minimum of 1/4" below the plywood deck.

System 3: Each slate is secured to the plywood deck with two, 1-1/2" long, galvanized steel ring shank roofing nails, at the nail pocket locations on each shingle. The nails must be a minimum 11-gauge. At each nail guide, the pair of nails is spaced 1-1/4" apart. Overlapping course will yield eight nails per shingle. Fasteners must be long enough to penetrate a minimum of 1/4" below the plywood deck.

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