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-135  Effective Date: December 1, 2015
Re-evaluation Date: December 2019

Product Name: Majestic Slate and Seneca Shake Thermoplastic Olefin and Rubber Based Roofing Products Installed over a Wood Structural Panel Roof Deck

Manufacturer: EcoStar, LLC
42 Edgewood Drive
Holland, NY 14080
(800) 211-7170

General Description:
EcoStar Majestic Slate Products:
The EcoStar Majestic Slate roof tiles/shingles are manufactured from recycled thermoplastic and-rubber-based materials. The tiles/shingles are available in Traditional, Beaver Tail, Chisel Point, and Beveled styles. The finished product measures 10” wide or 12” wide x 18”. The Majestic products are 1/4” thick and weigh approximately 3 lb/ft² when installed.

EcoStar Seneca Shake Products:
The EcoStar Seneca Shake roof tiles/shingles are manufactured from recycled thermoplastic and-rubber based materials. The tiles are available in three mixed sizes: 6”, 9” and 12” wide by 19” long. Seneca is 3/8” thick, and Seneca Plus (also referred to as Thick Butt) is 3/4” thick. The weight of the Seneca is approximately 3 lb/ft² when installed, and the weight of the Seneca Plus is approximately 6 lb/ft² when installed.

Limitations:
Roof Slope: Products must not be installed on roof slopes less than 3:12.

Maximum Exposure: For roof slopes less than 6:12, Majestic products must be installed with a maximum exposure of 6”, and Seneca products must be installed with a maximum exposure of 7”. For installation
on roof slopes equal to or greater than 6:12, Majestic products may be installed with 6", 6 1/2" or 7" exposure, and Seneca products may be installed with 7", 7-1/2" or 8" exposure.

**Temperature**: The products should be at least 45°F prior to installation.

**Installation**

**Assembly No. 1**
- **Design Pressure Rating**: 52.5 psf
- **Roof Deck**: A minimum of 15/32" thick plywood.
- **Underlayment**: Prior to installation of the roof covering, Glacier Guard must be installed in all valleys, eaves, rake edges, hips, ridges and projections. For the remaining roof deck, a minimum of one layer of ASTM D 226, Type II, 30 lb. asphalt felt, or equivalent synthetic underlayment, with minimum 2" sidelaps must be installed in accordance with the manufacturer’s normal installation instructions.
- **Fasteners**: Two, 1-1/2" long, stainless steel ring shank nails with a minimum shank diameter of 0.143" and a head diameter of 0.375" per tile/shingle. Place nails at locations specified on the tile/shingle. If desired, a bead of sealant may be applied to the backside of each tile/shingle to help secure the tabs.
- **Roof Covering**: Majestic Slate and Seneca Shake products.

**Assembly No. 2**
- **Design Pressure Rating**: 60 psf
- **Roof Deck**: A minimum of 7/16" thick OSB.
- **Underlayment**: Prior to installation of the roof covering, Glacier Guard must be installed in all valleys, eaves, rake edges, hips, ridges and projections. For the remaining roof deck, a minimum of one layer of ASTM D 226, Type II, 30 lb. asphalt felt, or equivalent synthetic underlayment, with minimum 2" sidelaps must be installed in accordance with the manufacturer’s normal installation instructions.
- **Fasteners**: Two, 1-1/2" long, stainless steel ring shank nails with a minimum shank diameter of 0.143" and a head diameter of 0.375" per tile/shingle. Place nails at locations specified on the tile/shingle. If desired, a bead of sealant may be applied to the backside of each tile/shingle to help secure the tabs.
- **Roof Covering**: Majestic Slate and Seneca Shake products.

**Assembly No. 3**
- **Design Pressure Rating**: 90 psf
- **Roof Deck**: A minimum of 7/16" thick OSB.
- **Underlayment**: Prior to installation of the roof covering, Glacier Guard must be installed in all valleys, eaves, rake edges, hips, ridges and projections. For the remaining roof deck, a minimum of one layer of ASTM D 226, Type II, 30 lb. asphalt felt, or equivalent synthetic underlayment, with minimum 2" sidelaps must be installed in accordance with the manufacturer’s normal installation instructions.
- **Fasteners**: Three, 1-1/2" long, stainless steel ring shank nails with a minimum shank diameter of 0.143" and a head diameter of 0.375" per tile/shingle. Place two nails at locations specified on the tile/shingle. The third nail is offset approximately 1" from the center of the tile to ensure coverage by the overlapping tile/shingle. If desired, a bead of sealant may be applied to the backside of each tile/shingle to help secure the tabs.
- **Roof Covering**: Majestic Slate and Seneca Shake products.

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