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# **Product Evaluation**

EC64 | 1020

**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-64 **Effective Date:** October 1, 2020

**Re-evaluation Date:** October 2024

**Product Name:** GAF WeatherSide™ Fiber-Cement Siding

Manufacturer: GAF

1 Campus Drive Parsippany, NJ 07054 (800) 766-3411

technicalquestions@gaf.com

### **General Description:**

The fiber-cement shingle siding products evaluated in this report are comprised of cellulose fiber, cement, and silica. The proprietary mixture is formed into sheets and cut to the specific product dimensions. A textured, striated or wood grain pattern is then applied to the product before being sent into an autoclaving process. All products are pre-primed at the factory.

**WeatherSide™ Emphasis™ Shingles** are 9/32" thick, 14-5/8" x 25-5/32" fiber-cement siding shingles with a wood-grain surface and thatched edge; meets ASTM C1186, Type A, Grade 1.

WeatherSide™ Profile Shingles are 11/64" thick, 9 x 32" or 12 x 24" fiber-cement siding shingles with a striated surface and straight edge; meets ASTM C1186, Type A, Grade 1.

**WeatherSide™ Purity™ Shingles** are 11/64" thick, 12 x 24" fiber-cement siding shingles with a textured surface and Straight, Thatched or Wavy edge; meets ASTM C1186, Type A, Grade 1.

All **WeatherSide™ Fiber-Cement Siding** products are applied with white, 12-gauge x 1-3/4" long, 0.195" head diameter, hot-dip galvanized, ring-shank siding nails available from GAF for use in anchoring the product.

#### Installation:

General Installation Requirements: All fasteners must be corrosion resistant.

If non-structural sheathing is installed between the siding and the wall studs, then the length of the fastener must be increased so that the fasteners penetrate the structural sheathing a minimum of 1-1/4". The substrate to which the siding is applied must be adequately supported, capable of having full holding power for the nails, and the surface must be clean, smooth, and dry.

Use non-perforated No. 15 asphalt saturated felt underlayment meeting ASTM D4869 performance requirements or equal. Do not use coal-tar saturated felts which may stain the siding. Do not install reflective insulation, wool blanket insulation or any type of vapor barrier as an underlayment between the siding and the sheathing. If house wrap is used, it must have a minimum perm rating of 15.

Downspouts and gutters must be functioning prior to installation to prevent serious staining that may occur from any excess water draining over the new siding. Use durable materials for flashing around heads, jambs, and sills of openings. Non-corroding, non-staining metal must be used at the head of openings. Use non-shrinking caulking compound, either white or matching colors, to weather seal all joints where siding abuts wooden trim, masonry, or other projections.

GAF siding nails, backer strips and outside corners are recommended for accurate and complete installations.

GAF WeatherSide™ Fiber-Cement Siding is already primed. Prior to painting, ensure that the surface is dry and free of grease and mildew. Brush all surfaces thoroughly with a stiff fiber brush. Do NOT paint surfaces during or immediately following fog, rain, frost, or temperatures under 50° F (10° C). NOTE: Before painting surfaces directly exposed to high heat from the sun or under windy conditions, consult the paint manufacturer's instructions.

#### **Wind Resistant Assemblies:**

## Assembly No. 1

Profile 9, Profile 12 and Purity Shingles (Exposed Nailing Method)

**The following products are applicable:** Profile 9, Profile 12 and Purity fiber-cement shingles.

**Fastener:** 12-gauge x 1-3/4" long, 0.195" head diameter, hot-dip galvanized, ring-shank siding nails.

Design pressure: -44.2 psf

**Installation:** Wall studs must be minimum 2x4 SPF dimension lumber spaced a maximum of 16" on center. Wall bracing must be installed as required. The walls must be fully sheathed with minimum 19/32" wood structural panels. A building paper must be applied to the walls before installing the shingles. The shingles must be fastened to the wood structural panel sheathing using five (5), 12-gauge x 1-3/4" long, hot-dip galvanized, ring-shank nails. Refer to Figures 1-5 for nail hole locations. Flashing, trim, and corners should be installed according to the manufacturer's specifications.

## Assembly No. 2

## **Emphasis Shingles (Exposed Nailing Method)**

The following products are applicable: Emphasis fiber-cement shingles.

**Fastener:** 12-gauge x 1-3/4" long, 0.195" head diameter, hot-dip galvanized, ring-shank siding nails.

Design pressure: -36.1 psf

**Installation:** Wall studs must be minimum 2x4 SPF dimension lumber spaced a maximum of 16" on center. Wall bracing must be installed as required. The walls must be fully sheathed with minimum 19/32" wood structural panels. A building paper must be applied to the walls before installing the shingles. The shingles must be fastened to the wood structural panel sheathing using five 12-gauge x 1-3/4" long, hot-dip galvanized, ring-shank nails. Refer to Figure 6 for nail hole locations. Flashing, trim, and corners should be installed according to the manufacturer's specifications.

**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.

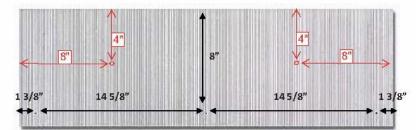


Figure 1: Profile 9, 5-nails/shingle

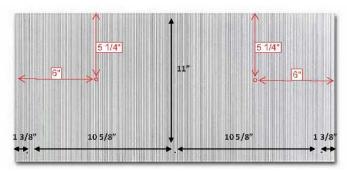


Figure 2: Profile 12, 5-nails/shingle

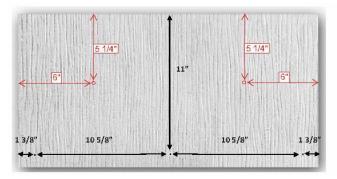


Figure 3: Purity™ Straight, 5-nails/shingle

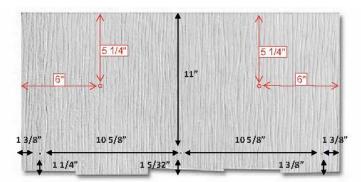


Figure 4: Purity™ Thatched, 5-nails/shingle

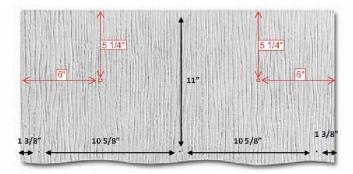


Figure 5: Purity™ Wavy, 5-nails/shingle

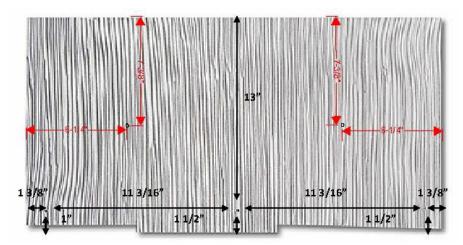


Figure 6: Emphasis™, 5-nails/shingle

**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.