



Product Evaluation

EC93 | 1117

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-93

Effective Date: November 1, 2017

Re-evaluation Date: January 2021

Product Name: Composite PVC Siding

Manufacturer: The TAPCO Group
200 Shotwell Drive
Franklin, Ohio 45005
(248) 668-7945

General Description:

The 5" and 7.5" GRAYNE Composite Siding are new products. The composite siding is a shingle product. Grayne engineered composite cedar offers the variation and grain patterns of real or cedar shakes and shingles-from every angle. Grayne shingles are moisture proof and maintenance free.

Horizontal Siding:

Product Name	Profile	Width	Length	Panel Thickness
5" GRAYNE	Shingle	6.3"	60.75"	0.050"
7.5" GRAYNE	Shingle	8.8"	60.75"	0.050"

Limitations:

- Wall Framing: Wall studs must be minimum 2" x 4" SPF dimension lumber spaced a maximum of 16" on center. Wall bracing must be installed as required.
- Lateral Resistance: The wall system does not have any lateral capacity and must not be used as wall bracing or as shear walls.

Design Pressure: Tables 1 and 2 specify the allowable design pressures for the composite siding product based on the fastener type and fastener spacing.

Table 1
Design Pressures (psf)

Product Name	Profiles	Design Pressure
5" GRAYNE	Shingle	-60.0 psf

Table 2
Design Pressures (psf)

Product Name	Profiles	Fastener Spacing	Fastener Type	Fastener Penetration	Design Pressure
7.5" GRAYNE	Shingle	16" on center	Nails	Through Sheathing into Studs	-33.4 psf
7.5" GRAYNE	Shingle	10" on center	Nails	Through Sheathing	-26.2 psf
7.5" GRAYNE	Shingle	16" on center	Screws	Through Sheathing into Studs	-45.8 psf
7.5" GRAYNE	Shingle	10" on center	Screws	Through Sheathing	-67.5 psf

Installation: 5" GRAYNE

- **Fasteners:** Minimum 1-1/2" long roofing nails (minimum 0.125" smooth shank diameter) with a minimum 3/8" diameter head. The fasteners must penetrate into the wall studs. Space the fasteners a maximum of 8" on center.
- **Wall Sheathing:** Minimum, nominal 1/2" plywood is to be installed using 2" drywall screws
- **Wall studs:** The maximum wall stud spacing must not exceed 16" on center. Use a minimum of #2 Spruce-Pine-Fir dimension lumber for wall studs.
- **Siding:** The siding is installed using minimum 1-1/2" long roofing nails (minimum 0.125" smooth shank diameter) with a minimum 3/8" diameter head, spaced 8" on center, through the sheathing into the wall studs.

Installation: 7.5" GRAYNE (into wall framing) - Nails

- **Fasteners:** Minimum 1-1/2" long roofing nails (minimum 0.125" smooth shank diameter) with a minimum 7/16" diameter head. The fasteners must penetrate through the sheathing into the wall studs. Space the fasteners a maximum of 16" on center.
- **Wall Sheathing:** Minimum, 15/32" OSB.
- **Wall studs:** The maximum wall stud spacing must not exceed 16" on center. Use a minimum of #2 Spruce-Pine-Fir dimension lumber for wall studs.
- **Siding:** The siding is installed using minimum 1-1/2" long roofing nails (minimum 0.125" smooth shank diameter) with a minimum 7/16" diameter head, spaced 16" on center, through the sheathing into the wall studs.

Installation: 7.5" GRAYNE (into sheathing) - Nails

- **Fasteners:** Minimum 1-1/2" long roofing nails (minimum 0.125" smooth shank diameter) with a minimum 7/16" diameter head. The fasteners must penetrate into the wall sheathing. Space the fasteners a maximum of 10" on center.
- **Wall Sheathing:** As a minimum, 15/32" OSB is to be installed.
- **Wall studs:** The maximum wall stud spacing must not exceed 16" on center. Use a minimum of #2 Spruce-Pine-Fir dimension lumber for wall studs.
- **Siding:** The siding is installed using minimum 1-1/2" long roofing nails (minimum 0.125" smooth shank diameter) with a minimum 7/16" diameter head, spaced 10" on center through the sheathing.

Installation: 7.5" GRAYNE (into wall framing) - Screws

- **Fasteners:** Minimum 1-1/2" long roofing nails (minimum 0.125" smooth shank diameter) with a minimum 7/16" diameter head. The fasteners must penetrate through the sheathing into the wall studs. Space the fasteners a maximum of 16" on center.
- **Wall Sheathing:** Minimum, 15/32" OSB.
- **Wall studs:** The maximum wall stud spacing must not exceed 16" on center. Use a minimum of #2 Spruce-Pine-Fir dimension lumber for wall studs.
- **Siding:** The siding is installed using minimum 1-1/2" long roofing nails (minimum 0.125" smooth shank diameter) with a minimum 7/16" diameter head, spaced 16" on center, through the sheathing into the wall studs.

Installation: 7.5" GRAYNE (into sheathing) – Screws

- **Fasteners:** Minimum 1-1/2" long roofing nails (minimum 0.125" smooth shank diameter) with a minimum 7/16" diameter head. The fasteners must penetrate into the wall sheathing. Space the fasteners a maximum of 10" on center.
- **Wall Sheathing:** Minimum, 15/32" OSB.
- **Wall studs:** The maximum wall stud spacing must not exceed 16" on center. Use a minimum of #2 Spruce-Pine-Fir dimension lumber for wall studs.
- **Siding:** The siding is installed using minimum 1-1/2" long roofing nails (minimum 0.125" smooth shank diameter) with a minimum 7/16" diameter head, spaced 10" on center through the sheathing.

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.