



Product Evaluation

EC55 | 0818

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-55 **Effective Date:** August 1, 2018
Re-evaluation Date: May 2022

Product Name: Artisan® Lap Siding and Artisan® Siding with Lock Joint System, Fiber-Reinforced Cement Exterior Siding

Manufacturer: James Hardie Building Products, Inc.
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General Description: The following James Hardie Building Products are included in this evaluation report:

Artisan® lap siding is nominal 5/8" thick. The siding comes in a 12' length. The siding is available in widths up to 8-1/4". The vertical edges of the siding are tongue and groove joints. The siding is available in a variety of finishes.

Artisan® Siding with Lock Joint System is a family of products including Artisan® Cove Siding, Artisan® Bevel Channel Siding, Artisan® Square Channel Siding, Artisan® Shiplap Siding, and Artisan® V-Groove Siding. The sidings have interlocking horizontal edges and tongue and groove vertical edges. The sidings have a nominal thickness of 5/8" and come in a 12' length and widths up to 10-1/4". The sidings are available in a variety of finishes.

Limitations and Installation:

Artisan® Lap Siding, Artisan® Siding with Lock Joint System: Vertical splices must be made between framing members 4" off the stud. Nails must not be placed within 2" of the tongue and groove at the end of the planks. In addition, successive splices in the same plank must be at least 48" apart and splices within the same stud cavity must be at least 24" apart.

Artisan® Lap Siding, Artisan® Siding with Lock Joint System: This product must not be used as wall bracing.

Wind Resistant Assemblies:

Assemblies No. 1, No. 2, and No. 3.

Artisan® Lap Siding (Concealed Nailing Method)

Assembly No. 1

Design pressure: -33 psf

Fastener: 0.092" shank, 2-1/4" long, 0.225" head

Wall framing: 2 x 4 SPF lumber spaced a maximum of 16" on center

The following products are applicable: Artisan® Lap siding 8-1/4" in width or less.

Assembly No. 2

Design pressure: -82 psf

Fastener: 0.092" shank, 2-1/4" long, 0.225" head

Wall framing: 2 x 4 SPF lumber spaced a maximum of 16" on center

The following products are applicable: Artisan® Lap siding 5-1/4" in width or less.

Assembly No. 3

Design pressure: -42 psf

Fastener: 0.092" shank, 2-1/4" long, 0.225" head

Wall framing: 2 x 4 SPF lumber spaced a maximum of 24" on center

The following products are applicable: Artisan® lap siding 5-1/4" in width or less.

Installation: Wall bracing must be installed as required. Building paper must be applied to the wall studs before installing the siding. The fasteners must be driven through the top of the plank and into the framing member. The fastener should be located 1" from the top edge of the plank and covered by the next succeeding course of planks. The first Artisan® plank should be installed horizontally over a 1-1/4" wide weather resistant lath starter strip. The remaining courses are then installed with minimum 1-1/4" wide overlaps. Flashing, trim, and corners should be installed according to the manufacturer's specifications.

Assemblies No. 4 thru No. 9.

Artisan® Lap Siding (Exposed/Concealed Combination Nailing Method, refer to Figure 1)

Assembly No. 4

Design pressure: -45 psf

Concealed Fastener: 0.092" shank diameter, 2-1/2" long, and 0.225" diameter head.

Exposed Fastener: No. 16-gauge (0.0625"), 2-1/2" long, finish nail.

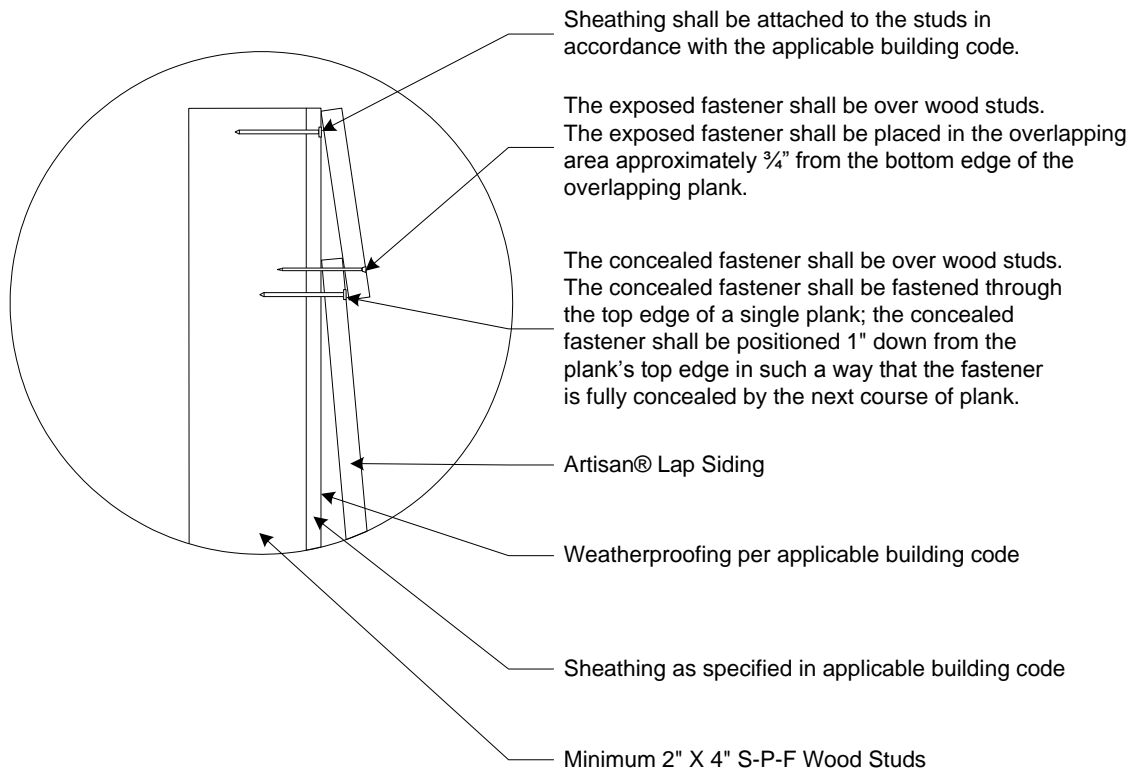
Wall framing: 2 x 4 SPF lumber spaced a maximum of 16" on center

The following products are applicable: Artisan® Lap siding 8-1/4" in width or less.

Assembly No. 5**Design pressure:** -63 psf**Concealed Fastener:** 0.092" shank diameter, 2-1/2" long, and 0.225" diameter head.**Exposed Fastener:** No. 16-gauge (0.0625"), 2-1/2" long, finish nail.**Wall framing:** 2 x 4 SPF lumber spaced a maximum of 16" on center**The following products are applicable:** Artisan® Lap siding 7-1/4" in width or less.**Assembly No. 6****Design pressure:** -100 psf**Concealed Fastener:** 0.092" shank diameter, 2-1/2" long, and 0.225" diameter head.**Exposed Fastener:** No. 16-gauge (0.0625" diameter), 2-1/2" long, finish nail.**Wall framing:** 2 x 4 SPF lumber spaced a maximum of 16" on center**The following products are applicable:** Artisan® Lap siding 5-1/4" in width or less.**Assembly No. 7****Design pressure:** -80 psf**Concealed Fastener:** 8d box nail, 0.113" shank diameter, 2-3/8" long ring shank.**Exposed Fastener:** No. 16-gauge (0.0625" diameter), 2-1/2" long, finish nail.**Wall framing:** 2 x 4 SPF lumber spaced a maximum of 16" on center**The following products are applicable:** Artisan® Lap siding 8-1/4" in width or less.**Assembly No. 8 (wall studs 16" on center)****Design pressure:** -87 psf**Concealed Fastener:** 8d box nail, 0.113" shank diameter, 2-3/8" long ring shank.**Exposed Fastener:** No. 16-gauge (0.0625" diameter), 2-1/2" long, finish nail.**Wall framing:** 2 x 4 SPF lumber spaced a maximum of 16" on center**The following products are applicable:** Artisan® Lap siding 7-1/4" in width or less.**Assembly No. 9 (wall studs 16" on center)****Design pressure:** -100 psf**Concealed Fastener:** 8d box nail, 0.113" shank diameter, 2-3/8" long ring shank.**Exposed Fastener:** No. 16-gauge (0.0625" diameter), 2-1/2" long, finish nail.**Wall framing:** 2 x 4 SPF lumber spaced a maximum of 16" on center**The following products are applicable:** Artisan® Lap siding 5-1/4" in width or less.

Installation: Wall studs must be minimum 2x4 SPF dimension lumber. Wall bracing must be installed as required. Building paper must be applied to the wall studs before installing the siding. The concealed fastener must be driven through the top of the plank using the concealed nailing method into the framing member. The concealed fastener should be 1" from the top edge of the plank and covered by the next succeeding course of planks. The exposed fastener must be driven through the overlap using the exposed nailing method. The exposed fastener must be located 3/4" from the bottom of the plank. The first Artisan® plank should be installed horizontally over a 1-1/4" wide weather resistant lath starter strip. The remaining courses are then installed with minimum 1-1/4" wide overlaps. Flashing, trim, and corners should be installed according to the manufacturer's specifications.

Figure 1, Exposed/Concealed Combination Nailing Method



Assemblies No. 10 thru No. 14

Artisan® V-Groove Siding (Concealed Fastening Method)

Assembly No. 10

Design pressure: -33 psf

Wall framing: 2 x 4 SPF lumber spaced a maximum of 16 inches on center

Fastener: 0.092" shank diameter, 2" long, and 0.222" diameter head.

Fastening Method: concealed fastener at each stud.

The following products are applicable: Artisan® V-Groove siding 8-1/4" in width or less.

Assembly No. 11

Design pressure: -63 psf

Wall framing: 2 x 4 SPF lumber spaced a maximum of 24" on center

Sheathing: 7/16" wood structural panel attached to stud per code

Fastener: 0.090" shank diameter, 1-1/2" long, and 0.215" diameter head

Fastening Method: concealed fastener at 6 inch on center to wood structural panel

The following products are applicable: Artisan® V-Groove siding 8-1/4" in width or less.

Assembly No. 12**Design pressure:** -43 psf**Wall framing:** 2 x 4 DF-L lumber spaced a maximum of 16" on center**Fastener:** No. 11-gauge, 0.120" shank diameter, 1-3/4" long, and 0.375" diameter head**Fastening Method:** concealed fastener at each stud**The following products are applicable:** Artisan® V-Groove siding 8-1/4" in width or less.**Assembly No. 13****Design pressure:** -54 psf**Wall framing:** 3/4" thick by 3-1/2" wide SPF wood furring spaced at a maximum of 16" on center attached to wood stud per code**Fastener:** No. 8 by 1-1/4" long and 0.375" diameter head ribbed wafer head screw**Fastening Method:** concealed fastener at each furring**The following products are applicable:** Artisan® V-Groove siding 8-1/4" in width or less.**Assembly No. 14****Design pressure:** -43 psf**Wall framing:** minimum 20-gauge steel stud spaced a maximum 16" on center**Fastener:** ET&F shot pin with 0.100" shank, 1-1/2" long, and 0.313" head diameter**Fastening Method:** concealed fastener at each stud**The following products are applicable:** Artisan® V-Groove siding 8-1/4" in width or less.

Installation: Wall bracing must be installed as required. A building paper must be applied to the wall studs before installing the siding. The fasteners must be driven through the top of the plank and into the framing member. The fastener should be located 1" from the top edge of the plank and covered by the next succeeding course of plank. Flashing, trim, and corners should be installed according to the manufacturer's specifications.

Assemblies No. 15 thru No. 17**Artisan® V-Groove Siding (Exposed Fastening Method)****Assembly No. 15****Design pressure:** -73 psf**Wall framing:** minimum 20-gauge steel stud spaced a maximum 16" on center**Fastener:** ET&F shot pin with 0.100" shank, 1-1/2" long, and 0.250" head diameter**Fastening Method:** exposed fastener at each stud.**The following products are applicable:** Artisan® V-Groove siding 8-1/4" in width or less.**Assembly No. 16****Design pressure:** -89 psf**Wall framing:** 2 x 4 DF-L lumber spaced a maximum of 16" on center**Fastener:** 0.092" shank diameter, 3" long, and 0.222" diameter head nail**Fastening Method:** exposed fastener at each stud.**The following products are applicable:** Artisan® V-Groove siding 8-1/4" in width or less.

Assembly No. 17**Design pressure:** -59 psf**Wall framing:** 2 x 4 DF-L lumber spaced a maximum of 24" on center**Fastener:** 0.092" shank diameter, 3" long, and 0.222" diameter head nail**Fastening Method:** exposed fastener at each stud.**The following products are applicable:** Artisan® V-Groove siding 8-1/4" in width or less.

Installation: Wall bracing must be installed as required. A building paper must be applied to the wall studs before installing the siding. Each fastener must be located 2" from the bottom edge of the plank and driven through the plank into the stud. Flashing, trim, and corners should be installed according to the manufacturer's specifications.

Assemblies No. 18 thru No. 23**Artisan® Siding with Lock Joint System (Concealed Fastening Method)****Assembly No. 18****Design pressure:** -47 psf**Wall framing:** 2 x 4 SPF lumber spaced a maximum of 24" on center**Sheathing:** 7/16" wood structural panel attached to stud per code**Fastener:** 4d ring shank siding nail with 0.090" shank diameter, 1.5" long, and 0.215" diameter head**Fastening Method:** concealed fastener at 6" on center to wood structural panel**The following products are applicable:** Artisan® Siding with Lock Joint System 10-1/4" in width or less.**Assembly No. 19****Design pressure:** -30 psf**Wall framing:** 2 x 4 SPF lumber spaced a maximum of 16" on center**Fastener:** 6d siding nail 0.092" shank diameter, 2.0" long, and 0.222" diameter head**Fastening Method:** concealed fastener at each stud**The following products are applicable:** Artisan® Siding with Lock Joint System 10-1/4" in width or less.**Assembly No. 20****Design pressure:** -41 psf**Wall framing:** 2 x 4 SPF lumber spaced a maximum of 16" on center**Fastener:** 11 ga. roofing nail with 0.120" shank diameter, 1.75" long, and 0.375" diameter head**Fastening Method:** concealed fastener at each stud**The following products are applicable:** Artisan® Siding with Lock Joint System 10-1/4" in width or less.**Assembly No. 21****Design pressure:** -43 psf**Wall framing:** minimum 20-gauge steel (33 mil) stud spaced a maximum 16" on center**Fastener:** No. 8 by 1-1/4" long and 0.375" diameter head ribbed wafer head screw**Fastening Method:** concealed fastener at each stud**The following products are applicable:** Artisan® Siding with Lock Joint System 10-1/4" in width or less.

Assembly No. 22**Design pressure:** -34 psf**Wall framing:** minimum 20-gauge steel (33 mil) stud spaced a maximum 16" on center**Fastener:** ET&F shot pin with 0.100" shank, 1-1/2" long, and 0.313" head diameter**Fastening Method:** concealed fastener at each stud**The following products are applicable:** Artisan® Siding with Lock Joint System 10-1/4" in width or less.**Assembly No. 23****Design pressure:** -52 psf**Wall framing:** 3/4" thick by 3-1/2" wide SPF wood furring spaced at a maximum of 16" on center attached to wood stud per code**Fastener:** No. 8 by 1-1/4" long and 0.375" diameter head wood screw**Fastening Method:** concealed fastener at each stud**The following products are applicable:** Artisan® Siding with Lock Joint System 10-1/4" in width or less.

Installation: Wall bracing must be installed as required. A building paper must be applied to the wall studs before installing the siding. The fasteners must be driven through the top of the plank and into the framing member or wood structural sheathing. The fastener should be located 1" from the top edge of the plank and covered by the next succeeding course of plank. Flashing, trim, and corners should be installed according to the manufacturer's specifications.

Assemblies No. 24 thru No. 26**Artisan® Siding with Lock Joint System (Exposed Fastening Method)****Assembly No. 24****Design pressure:** -59 psf**Wall framing:** minimum 20-gauge steel (33 mil) stud spaced a maximum 16" on center**Fastener:** ET&F shot pin with 0.100" shank, 1-1/2" long, and 0.250" head diameter**Fastening Method:** exposed fastener at each stud**The following products are applicable:** Artisan® Siding with Lock Joint System 10-1/4" in width or less.**Assembly No. 25****Design pressure:** -90 psf**Wall framing:** 2 x 4 DF-L lumber spaced a maximum of 16" on center**Fastener:** 8d ring shank siding nail with 0.092" shank diameter, 2.5" long, and 0.222" diameter head**Fastening Method:** exposed fastener at each stud**The following products are applicable:** Artisan® Siding with Lock Joint System 10-1/4" in width or less.**Assembly No. 26****Design pressure:** -111 psf**Wall framing:** 2 x 4 DF-L lumber spaced a maximum of 16" on center**Fastener:** 8d ring shank box nail with 0.113" shank diameter, 2.375" long, and 0.266" diameter head**Fastening Method:** exposed fastener at each stud**The following products are applicable:** Artisan® Siding with Lock Joint System 10-1/4" in width or less.

Installation: Wall bracing must be installed as required. A building paper must be applied to the wall studs before installing the siding. The fasteners must be driven through the top of the plank and into the framing member. Each fastener must be located 2" from the bottom edge of the plank and driven through the plank into the stud. 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 the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.