



EVALUATION SUBJECT

Artisan® Siding with Lock Joint System

James Hardie Product Trade Names covered in this evaluation:

Artisan® Siding with Lock Joint System includes the following profiles: Artisan® Bevel Channel Siding, Artisan® Cove Siding, Artisan® Square Channel Siding, Artisan® Shiplap Siding, Artisan® V-Groove Siding

EVALUATION SCOPE:

ASCE 7-22 (referenced in 2023 FBC)
2023 Florida Building Code (8th Edition)

EVALUATION PURPOSE:

This analysis is to determine the maximum design 3-second gust wind speed to be resisted by an assembly of Artisan® Siding with Lock Joint System fastened to wood and metal framing with various fasteners.

REFERENCE REPORTS:

1. Intertek Report 101547645COQ-005A, ASTM C1186 Material property test on Artisan planks.
2. Intertek Report 101798003COQ-003, ASTM E330 test on 8.25" Artisan V-Rustic Siding
3. Intertek Report 102026457COQ-001A REV, ASTM E330 test on 8.25" Artisan V-Rustic Siding
4. Intertek Report 10206457COQ-003, ASTM E330 test on 8.25" Artisan V-Rustic Siding
5. Intertek Report 102477932COQ-001A REV, ASTM E330 test on 10.25" Artisan Beveled Shiplap Siding
6. Intertek Report G7085.01-303-44-R1, ASTM E330 test on 10.25" Artisan Beveled channel Siding

TEST RESULTS:

Table 1A. Test Results and Analysis of Transverse Loading					
Reference Test Report Number	Intertek 101798003COQ-003			Intertek 102026457COQ-003	
Product	Artisan V-Rustic ⁵				
Siding Thickness (in.)	0.625	0.625	0.625	0.625	0.625
Siding Width (in.)	8.25	8.25	8.25	8.25	8.25
Frame Type	2X4 wood SPF		2X4 wood SPF @ 24" o.c., w/ 7/16" OSB	2X4 wood DFL	
Frame Spacing (in.)	16	24	24	16	24
Fastener Type	6d siding nail, 0.092" x 0.222" x 2.0"		4d ring shank siding nail, 0.090" x 0.215" x 1.5"	10d siding nail, 0.092" x 0.222" x 3.0"	
Fastening Method	Blind nail to stud		Blind nail at 6" o.c. to OSB sheathing	Face nail to stud	
Ultimate Load (psf)	99.9	60.5	189.4	268	176
Design Load (psf)	33.3	20.2	63.1	89.3	58.7
Effective Tributary Area (sqft)	0.778	1.167	0.292	0.778	1.167
Fastener Load , as tested (lb/fastener)	25.9	23.5	18.4	69.5	68.4
Adjusted NDS fastener withdrawal capacity ³ (lb/fastener) , W'	39.2	39.2	28.4	85.3	85.3
Net Fastener Penetration (in.) , P	1.688	1.688	0.438	2.375	2.375
Wood Specific Gravity, G	0.42	0.42	0.50	0.50	0.50
Nail Shank Diameter (in.) , D	0.092	0.092	0.090	0.092	0.092
Withdrawal design value per NDS 2018 (lb/in. penetration) ³ , W	14.5	14.5	40.5	22.4	22.4
Adjusted Allowable Design Load ⁶ , psf	No Adjustment	No Adjustment	No Adjustment	No Adjustment	No Adjustment

1. Allowable Design Load is the Ultimate Load divided by a Factor of safety of 3.
2. Artisan Siding with Lock Joint System complies with ASTM C1186 for Grade II, Type A Non-asbestos Fiber-Cement Flat Sheets.
3. Calculated fastener withdrawal load is compared with the tested fastener load and the more conservative one will be used.
For all cases in the table, the adjusted withdrawal design value, W', is calculated as
 $W' = CD \cdot W \cdot P$
Where,
CD = load duration factor per NDS-2015 and NDS-2018 Table 2.3.2 for wind/earthquake load = 1.6
W = calculated withdrawal design value
P = fastener embedment depth, in.

NDS Equ. 12.2-3 for smooth shank nails: $W = 1380 \times G^{2.5} \times D$
NDS Equ. 12.2-5 for deformed shank nails: $W = 1800 \times G^2 \times D$
Where,
G = wood specific gravity published in NDS
D = nail shank diameter, in.

4. The published specific gravity of 0.50 was used for OSB per Table 12.3.3B of NDS-2018

5. The profile name, Artisan V-Rustic, has been changed to Artisan V-Groove.

6. Adjustment to allowable design load is made when the fastener load (as tested) is higher than the adjusted NDS fastener withdrawal capacity (W') where the adjusted allowable design load = W/Effective Tributary Area

Table 1B. Test Results and Analysis of Transverse Loading								
Report Number	Intertek 102026457COQ-001A REV				Analysis based on test results ⁴			
Product	Artisan V-Rustic ⁵							
Siding Thickness (in.)	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
Siding Width (in.)	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25
Frame Type	2X4 wood DFL	1X4 wood SPF @ 16" o.c.	20 ga. (33 mil, fy = 33 ksi) steel studs		2X4 wood DFL	1X4 SPF furring @ 24" o.c.	20 ga. (33 mil, fy = 33 ksi) steel studs	
Frame Spacing (in.)	16	16	16	16	24	24	24	24
Fastener Type	11 ga. roofing nail, 0.120" x 0.375" x 1.75"	No. 8 x 0.375" x 1.25" ribbed wafer head screw	ET&F 0.100" knurled shank diameter x 0.313" HD x 1.5" long	ET&F 0.100" knurled shank diameter x 0.250" HD x 1.5" long	11 ga. roofing nail, 0.120" x 0.375" x 1.75"	No. 8 x 0.375" x 1.25" ribbed wafer head screw	ET&F 0.100" knurled shank diameter x 0.313" HD x 1.5" long	ET&F 0.100" knurled shank diameter x 0.250" HD x 1.5" long
Fastening Method	Blind nail to stud	Blind screw to furring	Blind nail to stud	Face nail to stud	Blind nail to stud	Blind screw to furring	Blind nail to stud	Face nail to stud
Ultimate Load (psf)	128.7	162.1	128	220.2	N/A	N/A	N/A	N/A
Design Load (psf)	42.9	54.0	42.7	73.4	28.6	36.0	28.4	48.9
Effective Tributary Area (sqft)	0.778	0.778	0.778	0.778	1.167	1.167	1.167	1.167
Fastener Load , as tested (lb/fastener)	33.4	42.0	33.2	57.1	33.4	42.0	33.2	57.1
Adjusted NDS fastener withdrawal capacity ³ (lb/fastener) , W'	67.3	98.9	N/A		N/A		N/A	
Net Fastener Penetration (in.) , P	1.438	0.750						
Wood Specific Gravity, G	0.50	0.42						
Fastener Shank Diameter (in.) , D	0.120	0.164						
Withdrawal design value per NDS 2018 (lb/in. penetration) ³ , W	29.3	82.4						
Adjusted Allowable Design Load ⁶ , psf	No Adjustment	No Adjustment						

1. Allowable Design Load is the Ultimate Load divided by a Factor of safety of 3.

2. Artisan Siding with Lock Joint System complies with ASTM C1186 for Grade II, Type A Non-asbestos Fiber-Cement Flat Sheets.

3. See footnote 3 of Table 1B above. NDS-2018 Equ. 12.2-2 for wood screws: W = 2850 x G² x D

4. The allowable design loads for frame spacing of 24" were calculated using the tested fastener loads of 16" frame spacing configurations.

5. The profile name, Artisan V-Rustic, has been changed to Artisan V-Groove.

6. See above Table 1A footnote 6

Table 1C. Test Results and Analysis of Transverse Loading						
Report Number	Intertek 102026457COQ-001A REV			Analysis based on test results ⁴		
Product	Artisan Beveled Shiplap ⁵					
Thickness (in.)	0.625	0.625	0.625	0.625	0.625	0.625
Width (in.)	10.25	10.25	10.25	10.25	10.25	10.25
Frame Type	2X4 wood DFL	2X4 wood DFL	20 ga. (33 mil, fy = 33 ksi) steel	2X4 wood DFL	2X4 wood DFL	20 ga. (33 mil, fy = 33 ksi) steel
Frame Spacing (in.)	16	16	16	24	24	24
Fastener Type	8d ring shank siding nail, 0.092" x 0.222" x 2.5"	8d ring shank box nail, 0.113" x 0.260" x 2.375"	ET&F 0.100" knurled shank diameter x 0.250" HD x 1.5" long	8d ring shank siding nail, 0.092" x 0.222" x 2.5"	8d ring shank box nail, 0.113" x 0.260" x 2.375"	ET&F 0.100" knurled shank diameter x 0.250" HD x 1.5" long
Fastening Method	Face nail to stud	Face nail to stud	Face nail to stud	Face nail to stud	Face nail to stud	Face nail to stud
Ultimate Load (psf)	269.5	332.1	176.2	128.7	162.1	128
Design Load (psf)	89.8	110.7	58.7	59.9	73.8	39.2
Effective Tributary Area (sqft)	1.000	1.000	1.000	1.500	1.500	1.500
Fastener Load , as tested (lb/fastener)	89.8	110.7	58.7	89.8	110.7	58.7
Adjusted NDS fastener withdrawal capacity ³ (lb/fastener) , W'	124.2	142.4	N/A	N/A	N/A	
Net Fastener Penetration (in.) , P	1.875	1.750				
Wood Specific Gravity, G	0.50	0.50				
Nail Shank Diameter (in.) , D	0.092	0.113				
Withdrawal design value per NDS 2018 (lb/in. penetration) ³ , W	41.4	50.9				
Adjusted Allowable Design Load ⁶ , psf	No Adjustment	No Adjustment				

1. Allowable Design Load is the Ultimate Load divided by a Factor of safety of 3.

2. Artisan Siding with Lock Joint System complies with ASTM C1186 for Grade II, Type A Non-asbestos Fiber-Cement Flat Sheets.

3. See footnote 3 of Table 1A.

4. The allowable design loads for frame spacing of 24" were calculated using the tested fastener loads of 16" frame spacing configurations.

5. Tests were performed on Artisan Bevel Channel (original name Beveled Shiplap) sidings. The results are applicable to other four profiles: V-Groove, Cove, Shiplap, Square Channel, since they have very similar design and Bevel Channel has the least amount of material.

6. See above Table 1A footnote 6

Table 1D. Test Results and Analysis of Transverse Loading											
Report Number	Intertek G7085.01-303-44-R1						Analysis based on test results ⁴				
Product	Artisan Beveled Channel ⁵										
Siding Thickness (in.)	0.6250	0.6250	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
Siding Width (in.)	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25
Frame Type	2X4 wood SPF		1X4 SPF furring @ 16" o.c.	20 ga. (33 mil, fy =33 ksi) steel studs		2X4 wood SPF @ 24" o.c., w/ 7/16" OSB sheathing ⁷	2X4 wood SPF		1X4 SPF furring @ 24" o.c.	20 ga. (33 mil, fy =33 ksi) steel studs	
Frame Spacing (in.)	16	16	16	16	16	24	24	24	24	24	24
Fastener Type	6d ring siding nail, 0.092" x 0.222" x 2.0"	11 ga. roofing nail, 0.120" x 0.375" x 1.75"	No. 8 x 0.375" x 1.25" ribbed wafer head screw	ET&F 0.100" knurled shank diameter x 0.313" HD x 1.5" long	No. 8 x 0.375" x 1.25" ribbed wafer head screw	4d ring shank siding nail, 0.090" x 0.215" x 1.5"	6d ring siding nail, 0.092" x 0.222" x 2.0"	11 ga. roofing nail, 0.120" x 0.375" x 1.75"	No. 8 x 0.375" x 1.25" ribbed wafer head screw	ET&F 0.100" knurled shank diameter x 0.313" HD x 1.5" long	No. 8 x 0.375" x 1.25" ribbed wafer head screw
Fastening Method	Blind nail to stud	Blind nail to stud	Blind screw to furring	Blind nail to stud	Blind screw to stud	Blind nail at 6" o.c. to OSB sheathing	Blind nail to stud	Blind nail to stud	Blind screw to furring	Blind nail to stud	Blind screw to stud
Ultimate Load (psf)	89.3	122.8	155.2	101.8	128.2	140	N/A	N/A	N/A	N/A	N/A
Design Load (psf)	29.8	40.9	51.7	33.9	42.7	46.7	19.8	29.0	34.5	22.6	28.5
Effective Tributary Area (sqft)	1.000	1.000	1.000	1.000	1.000	0.375	1.500	1.500	1.500	1.500	1.500
Fastener Load , as tested (lb/fastener)	29.8	40.9	51.7	33.9	42.7	17.5	29.8	43.5	51.7	33.9	42.7
Adjusted NDS fastener withdrawal capacity ³ (lb/fastener) , W'	78.9	43.5	98.9	N/A	N/A	28.4	N/A	N/A	N/A	N/A	N/A
Net Fastener Penetration (in.), P	1.688	1.438	0.750			0.438					
Wood Specific Gravity, G	0.42	0.42	0.42			0.50					
Nail Shank Diameter (in.), D	0.092	0.120	0.164			0.090					
Withdrawal design value per NDS 2018 (lb/in. penetration) ³ , W	29.2	18.9	82.4			40.5					
Adjusted Allowable Design Load ⁶ , psf	No Adjustment	No Adjustment	No Adjustment			No Adjustment					

1. Allowable Design Load is the Ultimate Load divided by a Factor of safety of 3.

2. Artisan Siding with Lock Joint System complies with ASTM C1186 for Grade II, Type A Non-asbestos Fiber-Cement Flat Sheets.

3. See Note 3 of Table 1A. NDS-2018 Equ. 12.2-2 for wood screws: W = 2850 x G² x D

4. The allowable design loads for frame spacing of 24" were calculated using the tested fastener loads of 16" frame spacing configurations.

5. Tests were performed on Artisan Bevel Channel sidings. The results are applicable to other four profiles: V-Groove, Cove, Shiplap, Square Channel, since they have very similar design and Bevel Channel has the least amount of material.

6. See above Table 1B footnote 6

7. The published specific gravity of 0.50 was used for OSB per Table 12.3.3B of NDS-2018

DESIGN WIND LOAD PROCEDURES:

Fiber-cement siding transverse load capacity (wind load capacity) is determined from transverse load testing in accordance with ASTM E330 or E72 as noted in Section 4.0 of the ICC ES AC90, Acceptance Criteria for Fiber Cement Siding Used as Exterior Wall Siding (approved October 2018). The allowable/design capacity from the testing is based on a factor of safety of 3 applied to the ultimate test load per AC90. The wind load values are determined from the ASCE 7 equations.

Since the allowable design load is based on factor of safety of 3, allowable design loads on fiber-cement siding correlate directly to required design pressures for Allowable Stress Design, and therefore should be used with combination loading equations for Allowable Stress Design (ASD).

By using the combination loading equations for Allowable Stress Design (ASD), the tested allowable design loads for fiber-cement siding are aligned with the wind speed requirements in ASCE 7-22 (Figures 26.5-1A to -1D), or the figures in the 2023 FBC as applicable.

Equation 1, $q_z = 0.00256 * K_z * K_{zt} * K_e * V^2$ {ref. ASCE 7-22 Eq. 26.10-1}

q_z , velocity pressure at height z
 K_z , velocity pressure exposure coefficient evaluated at height z
 K_{zt} , topographic factor
 K_e , ground elevation factor, permitted to take $K_e = 1.0$ for all elevations
 V , basic wind speed (3-second gust MPH) as determined from:
 ASCE 7-22 Figures 26.5-1A, B, C, or D
 2023 FBC Figures 1609.3(1) -1609.3(4)

Equation 2, $V = V_{ult}$

V_{ult} , ultimate design wind speeds (3-second gust MPH) determined from 2023 FBC Figures 1690.3(1) - 1609.3(4)

Equation 3, $p = q_h K_d (GC_{pf} - GC_{pi}) h \leq 60 \text{ ft}$ {ref. ASCE 7-22 Eq. 30.3-1}

q_h , velocity pressure evaluated at mean roof height h {ref. ASCE 7-22 Section 26.10}

GC_{pf} , product of external pressure coefficient and gust-effect factor {ref. ASCE 7-22 Figure 30.3-1 for walls}

GC_{pi} , product of internal pressure coefficient and gust-effect factor {ref. ASCE 7-22 Table 26.13-1}

K_d , wind directionality factor {ref. ASCE 7-22 Section 26.6}

p , design pressure (PSF) for siding (allowable design load for siding)

To determine design pressure, substitute q_h into Equation 3,

Equation 4, $p = 0.00256 \cdot K_z \cdot K_{zt} \cdot K_d \cdot K_e \cdot V^2 \cdot (GC_p - GC_{pi})$

Allowable Stress Design, ASCE 7-22 Section 2.4.1, load combination 7,

Equation 5, $0.6D + 0.6W$

{ref. ASCE 7-22 Section 2.4.1, load combination 7}

D , dead load

W , wind load (load due to wind pressure)

To determine the Allowable Stress Design Pressure, apply the load factor for W (wind) from Equation 5 to p (design pressure) determined from equation 4

Equation 6, $p_{asd} = 0.6 \cdot [p]$

Equation 7, $p_{asd} = 0.6 \cdot [0.00256 \cdot K_z \cdot K_{zt} \cdot K_d \cdot K_e \cdot V^2 \cdot (GC_p - GC_{pi})]$

Equation 7 is used to populate Table 4, 5, and 6.

To determine the allowable ultimate basic wind speed for Hardie Siding in Table 7, solve Equation 7 for V_{ult} .

Equation 8, $V_{ult} = (p_{asd} / 0.6 \cdot 0.00256 \cdot K_z \cdot K_{zt} \cdot K_d \cdot K_e \cdot (GC_p - GC_{pi}))^{0.5}$

Applicable to methods specified in Exceptions 1 through 3 of [2023 FBC] Section 1609.1.1., to determine the allowable nominal design wind speed (V_{asd}) in Table 7, apply the conversion formula below,

Equation 9, $V_{asd} = V_{ult} \cdot (0.6)^{0.5}$

{ref. 2023 FBC Eq. 16-17}

V_{asd} , Nominal design wind speed (3-second gust, mph)

V_{ult} , Ultimate design wind speed (3-second gust, mph) determined from Figure 1609.3(1), 1609.3(2), 1609.3(3) or 1609.3(4)

Table 3, Coefficients and Constants used in Determining V and p,										
Height (ft)	K_z					Wall Zone 5				
	Exp B (ASCE 7-22)	Exp B	Exp C	Exp D		K_{zt}	K_d	K_e	GC_p	GC_{pi}
0-15	0.57	0.70	0.85	1.03	h≤60	1	0.85	1	-1.4	0.18
20	0.62	0.70	0.90	1.08		1	0.85	1	-1.4	0.18
25	0.66	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
30	0.70	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
35	0.72	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
40	0.74	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
45	0.765	0.765	1.065	1.245		1	0.85	1	-1.4	0.18
50	0.79	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
55	0.81	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
60	0.83	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	0.95	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18

The coefficients and constants listed in Table 2 above were consistent for ASCE 7-22 except for K_z at Exposure B under 30 ft, where ASCE 7-22 allows to use lower exposure coefficient that previous codes used a more conservative values (resulted in higher design pressure). For the simplicity of the tables, the tables in the following sheet was populated using the more conservative ASCE 7-10 coefficients.

Table 4, Allowable Stress Design - Component and Cladding (C&C) Pressures (PSF) to be Resisted at Various Wind Speeds - Wind Exposure Category B,														
Wind Speed (3-second gust)	100	105	110	115	120	130	140	150	160	170	180	190	200	210
Height (ft)	B	B	B	B	B	B	B	B	B	B	B	B	B	B
0-15	-14.4	-15.9	-17.5	-19.1	-20.8	-24.4	-28.3	-32.5	-37.0	-41.7	-46.8	-52.1	-57.8	-63.7
20	-14.4	-15.9	-17.5	-19.1	-20.8	-24.4	-28.3	-32.5	-37.0	-41.7	-46.8	-52.1	-57.8	-63.7
25	-14.4	-15.9	-17.5	-19.1	-20.8	-24.4	-28.3	-32.5	-37.0	-41.7	-46.8	-52.1	-57.8	-63.7
30	-14.4	-15.9	-17.5	-19.1	-20.8	-24.4	-28.3	-32.5	-37.0	-41.7	-46.8	-52.1	-57.8	-63.7
35	-14.9	-16.4	-18.0	-19.6	-21.4	-25.1	-29.1	-33.4	-38.0	-42.9	-48.1	-53.6	-59.4	-65.5
40	-15.3	-16.8	-18.5	-20.2	-22.0	-25.8	-29.9	-34.3	-39.1	-44.1	-49.5	-55.1	-61.1	-67.3
45	-15.8	-17.4	-19.1	-20.9	-22.7	-26.7	-30.9	-35.5	-40.4	-45.6	-51.1	-57.0	-63.1	-69.6
50	-16.3	-18.0	-19.7	-21.6	-23.5	-27.5	-31.9	-36.7	-41.7	-47.1	-52.8	-58.8	-65.2	-71.9
55	-16.7	-18.4	-20.2	-22.1	-24.1	-28.2	-32.7	-37.6	-42.8	-48.3	-54.1	-60.3	-66.8	-73.7
60	-17.1	-18.9	-20.7	-22.6	-24.7	-28.9	-33.6	-38.5	-43.8	-49.5	-55.5	-61.8	-68.5	-75.5
100	-24.6	-27.1	-29.7	-32.5	-35.4	-41.5	-48.1	-55.3	-62.9	-71.0	-79.6	-88.7	-98.2	-108.3

Table 5, Allowable Stress Design - Component and Cladding (C&C) Pressures (PSF) to be Resisted at Various Wind Speeds - Wind Exposure Category C,														
Wind Speed (3-second gust)	100	105	110	115	120	130	140	150	160	170	180	190	200	210
Height (ft)	C	C	C	C	C	C	C	C	C	C	C	C	C	C
0-15	-17.5	-19.3	-21.2	-23.2	-25.2	-29.6	-34.4	-39.5	-44.9	-50.7	-56.8	-63.3	-70.1	-77.3
20	-18.6	-20.5	-22.5	-24.6	-26.7	-31.4	-36.4	-41.8	-47.5	-53.7	-60.2	-67.0	-74.3	-81.9
25	-19.4	-21.4	-23.5	-25.6	-27.9	-32.8	-38.0	-43.6	-49.6	-56.0	-62.8	-70.0	-77.6	-85.5
30	-20.2	-22.3	-24.5	-26.7	-29.1	-34.2	-39.6	-45.5	-51.8	-58.4	-65.5	-73.0	-80.9	-89.2
35	-20.8	-23.0	-25.2	-27.6	-30.0	-35.2	-40.8	-46.9	-53.3	-60.2	-67.5	-75.2	-83.3	-91.9
40	-21.5	-23.7	-26.0	-28.4	-30.9	-36.3	-42.0	-48.3	-54.9	-62.0	-69.5	-77.4	-85.8	-94.6
45	-22.0	-24.2	-26.6	-29.1	-31.6	-37.1	-43.1	-49.4	-56.2	-63.5	-71.2	-79.3	-87.9	-96.9
50	-22.5	-24.8	-27.2	-29.7	-32.4	-38.0	-44.1	-50.6	-57.6	-65.0	-72.9	-81.2	-89.9	-99.2
55	-22.9	-25.2	-27.7	-30.3	-33.0	-38.7	-44.9	-51.5	-58.6	-66.2	-74.2	-82.7	-91.6	-101.0
60	-23.3	-25.7	-28.2	-30.8	-33.6	-39.4	-45.7	-52.4	-59.7	-67.4	-75.5	-84.1	-93.2	-102.8
100	-32.6	-35.9	-39.4	-43.1	-46.9	-55.0	-63.8	-73.3	-83.4	-94.1	-105.5	-117.6	-130.3	-143.6

Table 6, Allowable Stress Design - Component and Cladding (C&C) Pressures (PSF) to be Resisted at Various Wind Speeds - Wind Exposure Category D,														
Wind Speed (3-second gust)	100	105	110	115	120	130	140	150	160	170	180	190	200	210
Height (ft)	D	D	D	D	D	D	D	D	D	D	D	D	D	D
0-15	-21.2	-23.4	-25.7	-28.1	-30.6	-35.9	-41.6	-47.8	-54.4	-61.4	-68.8	-76.7	-85.0	-93.7
20	-22.3	-24.6	-27.0	-29.5	-32.1	-37.7	-43.7	-50.1	-57.0	-64.4	-72.2	-80.4	-89.1	-98.2
25	-23.1	-25.5	-28.0	-30.6	-33.3	-39.0	-45.3	-52.0	-59.1	-66.8	-74.9	-83.4	-92.4	-101.9
30	-23.9	-26.4	-29.0	-31.6	-34.5	-40.4	-46.9	-53.8	-61.3	-69.2	-77.5	-86.4	-95.7	-105.5
35	-24.5	-27.1	-29.7	-32.5	-35.3	-41.5	-48.1	-55.2	-62.8	-70.9	-79.5	-88.6	-98.2	-108.3
40	-25.2	-27.7	-30.5	-33.3	-36.2	-42.5	-49.3	-56.6	-64.4	-72.7	-81.5	-90.9	-100.7	-111.0
45	-25.7	-28.3	-31.1	-34.0	-37.0	-43.4	-50.3	-57.8	-65.7	-74.2	-83.2	-92.7	-102.7	-113.3
50	-26.2	-28.9	-31.7	-34.6	-37.7	-44.3	-51.3	-58.9	-67.1	-75.7	-84.9	-94.6	-104.8	-115.5
55	-26.6	-29.3	-32.2	-35.2	-38.3	-45.0	-52.2	-59.9	-68.1	-76.9	-86.2	-96.1	-106.4	-117.4
60	-27.0	-29.8	-32.7	-35.7	-38.9	-45.7	-53.0	-60.8	-69.2	-78.1	-87.6	-97.6	-108.1	-119.2
100	-37.0	-40.8	-44.7	-48.9	-53.2	-62.5	-72.5	-83.2	-94.6	-106.8	-119.8	-133.4	-147.9	-163.0

Tables 4, 5 and 6 are based off of ASCE 7-22, and consistent with the 2023 FBC

Wind Speed Calculation Example:

The following is an example of the wind speed calculation for Table 7:

$$P_{asd} = -41.0 \text{ psf}; K_z = 0.7 \text{ (Exp B)}; K_{zt} = 1; K_d = 0.85; K_e = 1; G C_p = -1.4; G C_{pi} = 0.18$$

Use Equation 6:

$$V = V_{ult} = \sqrt{\frac{P_{asd}}{0.6 \times 0.00256 \times K_z \times K_{zt} \times K_d \times K_e \times (G C_p - G C_{pi})}} = \sqrt{\frac{-33.0}{0.6 \times 0.00256 \times 0.7 \times 1 \times 0.85 \times 1 \times (-1.4 - 0.18)}} = 152 \text{ mph}$$

Use Equation 7:

$$V_{asd} = V \times \sqrt{0.6} = 152 \times \sqrt{0.6} = 118 \text{ mph}$$



TABLE 7 - MAXIMUM WIND SPEEDS (MPH) FOR ARTISAN LOCK JOINT SYSTEM¹

								2023 FBC (Ultimate Design Wind Speed, V_{ult}^4)			2023 FBC (Nominal Design Wind, Speed, $V_{asd}^{3,6}$)												
								Applicable to methods specified in Section 1609.1.1. of 2023 FBC			Applicable to methods specified in Exceptions 1 through 3 of Section 1609.1.1 of 2023												
														Wind Exposure Category			Wind Exposure Category			Allowable Design Load from Testing (PSF)	K _e		
								Product	Product Thickness (inches)	Width (inches)	Fastener Type ²	Fastener Spacing	Frame Type	Stud Spacing (inches)	Building Height ¹ (feet)	B	C	D	B		C	D	Exp B
Artisan® V-Groove Siding	5/8	8.25	6d siding nail, 0.092" x 0.222" x 2.0"	Blind nail to stud	2X4 Wood SPF	16	0-15	152	138	125	118	107	97	-33.3	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	152	134	122	118	104	95	-33.3	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	152	131	120	118	102	93	-33.3	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	152	128	118	118	99	91	-33.3	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	150	126	116	116	98	90	-33.3	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	148	125	115	114	97	89	-33.3	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	145	123	114	113	95	88	-33.3	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	143	122	113	111	94	87	-33.3	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	141	121	112	109	93	87	-33.3	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	139	120	111	108	93	86	-33.3	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	116	-	-	90	-	-	-33.3	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® V-Groove Siding	5/8	8.25	6d siding nail, 0.092" x 0.222" x 2.0"	Blind nail to stud	2X4 Wood SPF	24	0-15	118	-	-	92	-	-	-20.2	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	118	-	-	92	-	-	-20.2	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	118	-	-	92	-	-	-20.2	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	118	-	-	92	-	-	-20.2	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	117	-	-	90	-	-	-20.2	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	115	-	-	89	-	-	-20.2	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	113	-	-	88	-	-	-20.2	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	111	-	-	86	-	-	-20.2	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	-	-	-	-	-	-	-20.2	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	-	-	-	-	-	-	-20.2	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	-	-	-	-	-	-	-20.2	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® V-Groove Siding	5/8	8.25	4d ring shank siding nail, 0.090" x 0.215" x 1.5"	Blind nail at 6" o.c. to WSP sheathing	2X4 wood SPF @ 24" o.c., w/ 7/16" OSB sheathing	24	0-15	209	190	172	162	147	134	-63.1	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	209	184	168	162	143	130	-63.1	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	209	180	165	162	140	128	-63.1	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	209	177	162	162	137	126	-63.1	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	206	174	160	160	135	124	-63.1	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	203	172	158	158	133	123	-63.1	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	200	170	157	155	131	121	-63.1	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	197	168	155	152	130	120	-63.1	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	194	166	154	151	129	119	-63.1	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	192	165	153	149	127	118	-63.1	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	160	139	131	124	108	101	-63.1	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® V-Groove Siding	5/8	8.25	10d siding nail, 0.092" x 0.222" x 3.0"	Face nail to stud	2X4 Wood DFL	16	0-15	249	226	205	193	175	159	-89.3	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	249	219	200	193	170	155	-89.3	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	249	215	197	193	166	152	-89.3	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	249	210	193	193	163	150	-89.3	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	245	207	191	190	160	148	-89.3	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	242	204	188	187	158	146	-89.3	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	238	202	187	184	156	144	-89.3	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	234	199	185	181	154	143	-89.3	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	231	198	183	179	153	142	-89.3	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	228	196	182	177	152	141	-89.3	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	191	166	155	148	128	120	-89.3	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® V-Groove Siding	5/8	8.25	10d siding nail, 0.092" x 0.222" x 3.0"	Face nail to stud	2X4 Wood DFL	24	0-15	202	183	166	156	142	129	-58.7	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	202	178	162	156	138	126	-58.7	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	202	174	159	156	135	123	-58.7	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	202	170	157	156	132	121	-58.7	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	199	168	155	154	130	120	-58.7	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	196	165	153	152	128	118	-58.7	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	193	163	151	149	127	117	-58.7	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	190	162	150	147	125	116	-58.7	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	187	160	148	145	124	115	-58.7	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	185	159	147	143	123	114	-58.7	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	155	134	126	120	104	98	-58.7	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							

TABLE 7 - MAXIMUM WIND SPEEDS (MPH) FOR ARTISAN LOCK JOINT SYSTEM¹

TABLE 7 - MAXIMUM WIND SPEEDS (MPH) FOR ARTISAN LOCK JOINT SYSTEM ¹																							
								2023 FBC (Ultimate Design Wind Speed, V _{ult} ⁴)			2023 FBC (Nominal Design Wind, Speed, V _{asd} ^{3,6})												
								Applicable to methods specified in Section 1609.1.1. of 2023 FBC			Applicable to methods specified in Exceptions 1 through 3 of Section 1609.1.1 of 2023												
								Wind Exposure Category			Wind Exposure Category			Coefficients used for calculations ⁵									
Product	Product Thickness (inches)	Width (inches)	Fastener Type ²	Fastener Spacing	Frame Type	Stud Spacing (inches)	Building Height ² (feet)	B	C	D	B	C	D	Allowable Design Load from Testing (PSF)	K _e			K _{zt}	K _d	K _e	GC _p	GC _s	
															Exp B	Exp C	Exp D						
Artisan® V-Groove Siding	5/8	8.25	11 ga. roofing nail, 0.120" x 0.375" x 1.75"	Blind nail to stud	2X4 Wood DFL	16	0-15	172	156	142	134	121	110	-42.9	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	172	152	139	134	118	107	-42.9	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	172	149	136	134	115	106	-42.9	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	172	146	134	134	113	104	-42.9	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	170	143	132	132	111	102	-42.9	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	168	141	131	130	110	101	-42.9	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	165	140	129	128	108	100	-42.9	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	162	138	128	126	107	99	-42.9	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	160	137	127	124	106	98	-42.9	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	158	136	126	123	105	98	-42.9	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
							100	132	115	-	102	89	-	-42.9	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18
Artisan® V-Groove Siding	5/8	8.25	11 ga. roofing nail, 0.120" x 0.375" x 1.75"	Blind nail to stud	2X4 Wood DFL	24	0-15	141	128	116	109	99	90	-28.6	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	141	124	113	109	96	88	-28.6	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	141	121	111	109	94	86	-28.6	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	141	119	-	109	92	-	-28.6	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	139	117	-	107	91	-	-28.6	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	137	115	-	106	89	-	-28.6	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	135	114	-	104	88	-	-28.6	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	132	113	-	103	87	-	-28.6	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	131	112	-	101	87	-	-28.6	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	129	111	-	100	86	-	-28.6	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
							100	-	-	-	-	-	-	-28.6	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18
Artisan® V-Groove Siding	5/8	8.25	No. 8 x 0.375" x 1.25" ribbed wafer head screw	Blind screw to furring	1X4 wood SPF furring	16	0-15	193	176	159	150	136	124	-54.0	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	193	171	156	150	132	121	-54.0	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	193	167	153	150	129	118	-54.0	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	193	163	150	150	127	116	-54.0	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	191	161	148	148	125	115	-54.0	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	188	159	147	146	123	113	-54.0	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	185	157	145	143	121	112	-54.0	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	182	155	144	141	120	111	-54.0	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	180	154	142	139	119	110	-54.0	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	178	152	141	138	118	110	-54.0	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
							100	148	129	121	115	100	94	-54.0	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18
Artisan® V-Groove Siding	5/8	8.25	No. 8 x 0.375" x 1.25" ribbed wafer head screw	Blind screw to furring	1X4 wood SPF furring	24	0-15	158	143	130	122	111	101	-36.0	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	158	139	127	122	108	98	-36.0	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	158	136	125	122	106	97	-36.0	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	158	133	123	122	103	95	-36.0	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	156	131	121	121	102	94	-36.0	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	154	130	120	119	100	93	-36.0	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	151	128	118	117	99	92	-36.0	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	149	127	117	115	98	91	-36.0	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	147	125	116	114	97	90	-36.0	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	145	124	115	112	96	89	-36.0	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
							100	121	-	-	94	-	-	-36.0	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18
Artisan® V-Groove Siding	5/8	8.25	ET&F 0.100" knurled shank diameter x 0.313" HD x 1.5" long	Blind nail to stud	20ga. Metal (33mil, fy = 33 ksi)	16	0-15	172	156	142	133	121	110	-42.7	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	172	152	138	133	117	107	-42.7	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	172	148	136	133	115	105	-42.7	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	172	145	134	133	113	103	-42.7	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	169	143	132	131	111	102	-42.7	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	167	141	130	130	109	101	-42.7	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	164	139	129	127	108	100	-42.7	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	162	138	128	125	107	99	-42.7	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	160	137	127	124	106	98	-42.7	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	158	135	126	122	105	97	-42.7	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
							100	132	114	-	102	89	-	-42.7	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18

TABLE 7 - MAXIMUM WIND SPEEDS (MPH) FOR ARTISAN LOCK JOINT SYSTEM¹

TABLE 7 - MAXIMUM WIND SPEEDS (MPH) FOR ARTISAN LOCK JOINT SYSTEM ¹																							
								2023 FBC (Ultimate Design Wind Speed, V _{ult} ⁴)			2023 FBC (Nominal Design Wind, Speed, V _{asd} ^{3,6})												
								Applicable to methods specified in Section 1609.1.1. of 2023 FBC			Applicable to methods specified in Exceptions 1 through 3 of Section 1609.1.1 of 2023												
								Wind Exposure Category			Wind Exposure Category			Allowable Design Load from Testing (PSF)	Coefficients used for calculations ⁵								
Product	Product Thickness (inches)	Width (inches)	Fastener Type ²	Fastener Spacing	Frame Type	Stud Spacing (inches)	Building Height ² (feet)	B	C	D	B	C	D		K _e								
														Exp B	Exp C	Exp D							
Artisan® V-Groove Siding	5/8	8.25	ET&F 0.100" knurled shank diameter x 0.313" HD x 1.5" long	Blind nail to stud	20ga. Metal (33mil, fy = 33 ksi)	24	0-15	140	127	116	109	99	90	-28.4	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	140	124	113	109	96	88	-28.4	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	140	121	111	109	94	86	-28.4	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	140	119	-	109	92	-	-28.4	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	138	117	-	107	91	-	-28.4	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	137	115	-	106	89	-	-28.4	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	134	114	-	104	88	-	-28.4	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	132	112	-	102	87	-	-28.4	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	130	111	-	101	86	-	-28.4	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	129	110	-	100	86	-	-28.4	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	-	-	-	-	-	-	-28.4	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® V-Groove Siding	5/8	8.25	ET&F 0.100" knurled shank diameter x 0.250" HD x 1.5" long	Face nail to stud	20ga. Metal (33mil, fy = 33 ksi)	16	0-15	225	205	186	175	158	144	-73.4	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	225	199	182	175	154	141	-73.4	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	225	195	178	175	151	138	-73.4	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	225	191	175	175	148	136	-73.4	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	222	188	173	172	145	134	-73.4	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	219	185	171	170	143	132	-73.4	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	216	183	169	167	142	131	-73.4	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	212	181	167	164	140	130	-73.4	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	210	179	166	162	139	129	-73.4	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	207	177	165	160	137	128	-73.4	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	173	150	141	134	116	109	-73.4	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® V-Groove Siding	5/8	8.25	ET&F 0.100" knurled shank diameter x 0.250" HD x 1.5" long	Face nail to stud	20ga. Metal (33mil, fy = 33 ksi)	24	0-15	184	167	152	143	129	118	-48.9	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	184	162	148	143	126	115	-48.9	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	184	159	146	143	123	113	-48.9	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	184	156	143	143	121	111	-48.9	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	182	153	141	141	119	109	-48.9	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	179	151	139	139	117	108	-48.9	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	176	149	138	136	116	107	-48.9	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	173	148	137	134	114	106	-48.9	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	171	146	136	133	113	105	-48.9	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	169	145	135	131	112	104	-48.9	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	141	123	115	109	95	89	-48.9	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® Siding with Lock Joint System	5/8	10.25	8d ring shank siding nail, 0.092" x 0.222" x 2.5"	Face nail to stud	2X4 Wood DFL	16	0-15	249	226	206	193	175	159	-89.8	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	249	220	201	193	170	156	-89.8	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	249	215	197	193	167	153	-89.8	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	249	211	194	193	163	150	-89.8	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	246	208	191	190	161	148	-89.8	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	243	205	189	188	159	146	-89.8	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	239	202	187	185	157	145	-89.8	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	235	200	185	182	155	143	-89.8	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	232	198	184	180	153	142	-89.8	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	229	196	182	177	152	141	-89.8	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	191	166	156	148	129	121	-89.8	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® Siding with Lock Joint System	5/8	10.25	8d ring shank siding nail, 0.092" x 0.222" x 2.5"	Face nail to stud	2X4 Wood DFL	24	0-15	204	185	168	158	143	130	-59.9	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	204	180	164	158	139	127	-59.9	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	204	176	161	158	136	125	-59.9	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	204	172	158	158	133	123	-59.9	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	201	170	156	156	131	121	-59.9	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	198	167	154	153	129	119	-59.9	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	195	165	153	151	128	118	-59.9	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	192	163	151	148	126	117	-59.9	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	189	162	150	147	125	116	-59.9	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	187	160	149	145	124	115	-59.9	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	156	136	127	121	105	99	-59.9	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							

								2023 FBC (Ultimate Design Wind Speed, V _{ult} ⁴)			2023 FBC (Nominal Design Wind, Speed, V _{asd} ^{3,6})												
								Applicable to methods specified in Section 1609.1.1. of 2023 FBC			Applicable to methods specified in Exceptions 1 through 3 of Section 1609.1.1 of 2023												
								Wind Exposure Category			Wind Exposure Category			Allowable Design Load from Testing (PSF)	Coefficients used for calculations ⁵								
Product	Product Thickness (inches)	Width (inches)	Fastener Type ²	Fastener Spacing	Frame Type	Stud Spacing (inches)	Building Height ² (feet)	B	C	D	B	C	D			K _c			K _{st}	K _d	K _e	GC _u	GC _w
														Exp B		Exp C	Exp D						
Artisan® Siding with Lock Joint System	5/8	10.25	8d ring shank box nail, 0.113" x 0.260" x 2.375" x	Face nail to stud	2X4 Wood DFL	16	0-15	277	251	228	214	195	177	-110.7	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	277	244	223	214	189	173	-110.7	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	277	239	219	214	185	170	-110.7	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	277	234	215	214	181	167	-110.7	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	273	231	212	211	179	164	-110.7	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	269	227	210	209	176	162	-110.7	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	265	224	208	205	174	161	-110.7	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	261	222	206	202	172	159	-110.7	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	257	220	204	199	170	158	-110.7	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	254	218	202	197	169	157	-110.7	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	212	184	173	164	143	134	-110.7	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® Siding with Lock Joint System	5/8	10.25	8d ring shank box nail, 0.113" x 0.260" x 2.375" x	Face nail to stud	2X4 Wood DFL	24	0-15	226	205	186	175	159	144	-73.8	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	226	199	182	175	154	141	-73.8	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	226	195	179	175	151	138	-73.8	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	226	191	176	175	148	136	-73.8	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	223	188	173	173	146	134	-73.8	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	220	185	171	170	144	133	-73.8	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	216	183	170	168	142	131	-73.8	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	213	181	168	165	140	130	-73.8	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	210	180	167	163	139	129	-73.8	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	208	178	165	161	138	128	-73.8	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	173	151	141	134	117	109	-73.8	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® Siding with Lock Joint System	5/8	10.25	ET&F 0.100" knurled shank diameter x 0.250" HD x 1.5" long	Face nail to stud	20ga. Metal (33mil, fy = 33 ksi)	16	0-15	202	183	166	156	142	129	-58.7	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	202	178	162	156	138	126	-58.7	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	202	174	159	156	135	124	-58.7	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	202	170	157	156	132	121	-58.7	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	199	168	155	154	130	120	-58.7	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	196	165	153	152	128	118	-58.7	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	193	164	151	149	127	117	-58.7	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	190	162	150	147	125	116	-58.7	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	187	160	149	145	124	115	-58.7	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	185	159	147	143	123	114	-58.7	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	155	134	126	120	104	98	-58.7	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® Siding with Lock Joint System	5/8	10.25	ET&F 0.100" knurled shank diameter x 0.250" HD x 1.5" long	Face nail to stud	20ga. Metal (33mil, fy = 33 ksi)	24	0-15	165	149	136	128	116	105	-39.2	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	165	145	133	128	112	103	-39.2	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	165	142	130	128	110	101	-39.2	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	165	139	128	128	108	99	-39.2	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	162	137	126	126	106	98	-39.2	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	160	135	125	124	105	97	-39.2	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	158	134	123	122	103	96	-39.2	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	155	132	122	120	102	95	-39.2	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	153	131	121	119	101	94	-39.2	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	151	130	120	117	100	93	-39.2	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	126	-	-	98	-	-	-39.2	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® Siding with Lock Joint System	5/8	10.25	ET&F 0.100" knurled shank diameter x 0.313" HD x 1.5" long	Blind nail to stud	20ga. Metal (33mil, fy = 33 ksi)	16	0-15	153	139	126	119	108	98	-33.9	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	153	135	123	119	105	96	-33.9	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	153	132	121	119	102	94	-33.9	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	153	130	119	119	100	92	-33.9	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	151	128	118	117	99	91	-33.9	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	149	126	116	115	97	90	-33.9	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	147	124	115	114	96	89	-33.9	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	144	123	114	112	95	88	-33.9	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	143	122	113	110	94	87	-33.9	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	141	121	112	109	93	87	-33.9	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	118	-	-	91	-	-	-33.9	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							

TABLE 7 - MAXIMUM WIND SPEEDS (MPH) FOR ARTISAN LOCK JOINT SYSTEM¹

								2023 FBC (Ultimate Design Wind Speed, V _{ult} ⁴)			2023 FBC (Nominal Design Wind, Speed, V _{asd} ^{3,6})												
								Applicable to methods specified in Section 1609.1.1. of 2023 FBC			Applicable to methods specified in Exceptions 1 through 3 of Section 1609.1.1 of 2023												
								Wind Exposure Category			Wind Exposure Category			Allowable Design Load from Testing (PSF)	K _e								
Product	Product Thickness (inches)	Width (inches)	Fastener Type ²	Fastener Spacing	Frame Type	Stud Spacing (inches)	Building Height ² (feet)	B	C	D	B	C	D		Exp B	Exp C	Exp D	K _{zt}	K _d	K _e	GC _s	GC _{pi}	
Artisan® Siding with Lock Joint System	5/8	10.25	ET&F 0.100" knurled shank diameter x 0.313" HD x 1.5" long	Blind nail to stud	20ga. Metal (33mil, fy = 33 ksi)	24	0-15	125	114	-	97	88	-	-22.6	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	125	110	-	97	86	-	-22.6	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	125	-	-	97	-	-	-22.6	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	125	-	-	97	-	-	-22.6	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	123	-	-	96	-	-	-22.6	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	122	-	-	94	-	-	-22.6	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	120	-	-	93	-	-	-22.6	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	118	-	-	91	-	-	-22.6	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	116	-	-	90	-	-	-22.6	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	115	-	-	89	-	-	-22.6	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
							100	-	-	-	-	-	-	-22.6	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18
Artisan® Siding with Lock Joint System	5/8	10.25	No. 8 x 0.375" x 1.25" ribbed wafer head screw	Blind screw to stud	20ga. Metal (33mil, fy = 33 ksi)	16	0-15	172	156	142	133	121	110	-42.7	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	172	152	138	133	118	107	-42.7	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	172	148	136	133	115	105	-42.7	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	172	145	134	133	113	104	-42.7	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	170	143	132	131	111	102	-42.7	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	167	141	130	130	109	101	-42.7	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	165	139	129	127	108	100	-42.7	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	162	138	128	125	107	99	-42.7	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	160	137	127	124	106	98	-42.7	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	158	135	126	122	105	97	-42.7	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
							100	132	115	-	102	89	-	-42.7	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18
Artisan® Siding with Lock Joint System	5/8	10.25	No. 8 x 0.375" x 1.25" ribbed wafer head screw	Blind screw to stud	20ga. Metal (33mil, fy = 33 ksi)	24	0-15	140	127	116	109	99	90	-28.5	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	140	124	113	109	96	88	-28.5	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	140	121	111	109	94	86	-28.5	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	140	119	-	109	92	-	-28.5	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	138	117	-	107	91	-	-28.5	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	137	115	-	106	89	-	-28.5	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	134	114	-	104	88	-	-28.5	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	132	113	-	102	87	-	-28.5	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	131	112	-	101	86	-	-28.5	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	129	111	-	100	86	-	-28.5	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
							100	-	-	-	-	-	-	-28.5	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18
Artisan® Siding with Lock Joint System	5/8	10.25	6d siding nail, 0.092" x 0.222" x 2.0"	Blind nail to stud	2X4 Wood SPF	16	0-15	144	130	118	111	101	92	-29.8	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	144	127	116	111	98	90	-29.8	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	144	124	114	111	96	88	-29.8	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	144	121	112	111	94	86	-29.8	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	142	120	110	110	93	85	-29.8	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	140	118	-	108	91	-	-29.8	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	137	116	-	106	90	-	-29.8	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	135	115	-	105	89	-	-29.8	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	133	114	-	103	88	-	-29.8	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	132	113	-	102	88	-	-29.8	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
							100	110	-	-	85	-	-	-29.8	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18
Artisan® Siding with Lock Joint System	5/8	10.25	6d siding nail, 0.092" x 0.222" x 2.0"	Blind nail to stud	2X4 Wood SPF	24	0-15	117	-	-	91	-	-	-19.8	0.70	0.85	1.03	hs60	1	0.85	1	-1.4	0.18
							20	117	-	-	91	-	-	-19.8	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	117	-	-	91	-	-	-19.8	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	117	-	-	91	-	-	-19.8	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	116	-	-	90	-	-	-19.8	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	114	-	-	88	-	-	-19.8	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	112	-	-	87	-	-	-19.8	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	110	-	-	85	-	-	-19.8	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	-	-	-	-	-	-	-19.8	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	-	-	-	-	-	-	-19.8	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
							100	-	-	-	-	-	-	-19.8	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18

TABLE 7 - MAXIMUM WIND SPEEDS (MPH) FOR ARTISAN LOCK JOINT SYSTEM¹

TABLE 7 - MAXIMUM WIND SPEEDS (MPH) FOR ARTISAN LOCK JOINT SYSTEM ¹																							
								2023 FBC (Ultimate Design Wind Speed, V _{ult} ⁴)			2023 FBC (Nominal Design Wind, Speed, V _{asd} ^{3,6})												
								Applicable to methods specified in Section 1609.1.1. of 2023 FBC			Applicable to methods specified in Exceptions 1 through 3 of Section 1609.1.1 of 2023												
								Wind Exposure Category			Wind Exposure Category			Allowable Design Load from Testing (PSF)	K _e			K _{zt}	K _d	K _e	GC _p	GC _{pi}	
Product	Product Thickness (inches)	Width (inches)	Fastener Type ²	Fastener Spacing	Frame Type	Stud Spacing (inches)	Building Height ² (feet)	B	C	D	B	C	D		Exp B	Exp C	Exp D						h≤60
Artisan® Siding with Lock Joint System	5/8	10.25	11 ga. roofing nail, 0.120" x 0.375" x 1.75"	Blind nail to stud	2X4 Wood SPF	16	0-15	168	153	139	130	118	108	-40.9	0.70	0.85	1.03	h≤60	1	0.85	1	-1.4	0.18
							20	168	148	136	130	115	105	-40.9	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	168	145	133	130	113	103	-40.9	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	168	142	131	130	110	101	-40.9	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	166	140	129	129	109	100	-40.9	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	164	138	128	127	107	99	-40.9	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	161	136	126	125	106	98	-40.9	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	158	135	125	123	105	97	-40.9	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	157	134	124	121	104	96	-40.9	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	155	133	123	120	103	95	-40.9	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	129	112	-	100	87	-	-40.9	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® Siding with Lock Joint System	5/8	10.25	11 ga. roofing nail, 0.120" x 0.375" x 1.75"	Blind nail to stud	2X4 Wood SPF	24	0-15	142	129	117	110	100	91	-29.0	0.70	0.85	1.03	h≤60	1	0.85	1	-1.4	0.18
							20	142	125	114	110	97	88	-29.0	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	142	122	112	110	95	87	-29.0	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	142	120	110	110	93	85	-29.0	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	140	118	-	108	91	-	-29.0	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	138	116	-	107	90	-	-29.0	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	136	115	-	105	89	-	-29.0	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	133	114	-	103	88	-	-29.0	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	132	113	-	102	87	-	-29.0	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	130	112	-	101	86	-	-29.0	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	-	-	-	-	-	-	-29.0	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® Siding with Lock Joint System	5/8	10.25	No. 8 x 0.375" x 1.25" ribbed wafer head screw	Blind screw to furring	1X4 wood SPF furring	16	0-15	189	172	156	147	133	121	-51.7	0.70	0.85	1.03	h≤60	1	0.85	1	-1.4	0.18
							20	189	167	152	147	129	118	-51.7	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	189	163	150	147	127	116	-51.7	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	189	160	147	147	124	114	-51.7	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	187	158	145	145	122	112	-51.7	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	184	155	143	143	120	111	-51.7	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	181	153	142	140	119	110	-51.7	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	178	152	141	138	117	109	-51.7	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	176	150	139	136	116	108	-51.7	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	174	149	138	135	115	107	-51.7	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	145	126	118	112	98	92	-51.7	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							
Artisan® Siding with Lock Joint System	5/8	10.25	No. 8 x 0.375" x 1.25" ribbed wafer head screw	Blind screw to furring	1X4 wood SPF furring	24	0-15	155	140	127	120	109	99	-34.5	0.70	0.85	1.03	h≤60	1	0.85	1	-1.4	0.18
							20	155	136	124	120	106	96	-34.5	0.70	0.9	1.08		1	0.85	1	-1.4	0.18
							25	155	133	122	120	103	95	-34.5	0.70	0.94	1.12		1	0.85	1	-1.4	0.18
							30	155	131	120	120	101	93	-34.5	0.70	0.98	1.16		1	0.85	1	-1.4	0.18
							35	152	129	119	118	100	92	-34.5	0.72	1.01	1.19		1	0.85	1	-1.4	0.18
							40	150	127	117	116	98	91	-34.5	0.74	1.04	1.22		1	0.85	1	-1.4	0.18
							45	148	125	116	115	97	90	-34.5	0.77	1.065	1.245		1	0.85	1	-1.4	0.18
							50	145	124	115	113	96	89	-34.5	0.79	1.09	1.27		1	0.85	1	-1.4	0.18
							55	144	123	114	111	95	88	-34.5	0.81	1.11	1.29		1	0.85	1	-1.4	0.18
							60	142	122	113	110	94	88	-34.5	0.83	1.13	1.31		1	0.85	1	-1.4	0.18
100	119	-	-	92	-	-	-34.5	0.95	1.26	1.43	h>60	1	0.85	1	-1.8	0.18							

1. Installation must be in accordance with siding manufacturer's instructions.
2. Building height = mean roof height (in feet) of a building, except that eave height shall be used for roof angle θ less than or equal to 10° (2-12 roof slope).
3. V_{asd} = nominal design wind speed
4. V_{ult} = ultimate design wind speed
5. Wind speed design coefficient assumptions per Section 30.4 of ASCE 7-22: $K_{zt}=1$, $K_d=0.85$, $K_e = 1$; $GC_p=-1.4$ (hs60), $GC_p=-1.8$ (h>60), $GC_{pi}=0.18$.
6. 2023 FBC Section 1609.3.1 Eq. 16-17, $V_{asd} = V_{ult}(0.6)^{0.5}$

LIMITATIONS OF USE:

The fastening configurations listed in this report are not applicable to High Velocity Hurricane Zones (HVHZ).

