



Attachments for Projects 60 – 85ft.

All national, state, and local building code requirements must be followed and where they are more stringent than the James Hardie installation requirements, state and local requirements will take precedence.

Document Scope

This document applies to HardiePlank® Lap Siding, CemPlank® lap siding, Prevail® lap siding, HardiePanel® Vertical Siding, CemPanel® Siding, Prevail® Panel and HardieShingle® Panel Siding. The attachment details listed in this document are limited to buildings not exceeding 85 feet in mean roof height.

Siding General Description

James Hardie Siding Products are noncombustible fiber-cement siding, manufactured by James Hardie Building Products Inc.

Siding Product Dimensions

Lap Siding – Thickness – 5/16 inch Length – 12 feet Width – Available in 5 ¼, 6 ¼, 7 ¼, 7 ½, 8 ¼, or 9 ¼ inches
Panel Siding – Thickness – 5/16 inch Length – 8, 9 & 10 feet Width – 4 feet
Shingle Panel Siding – Thickness – 1/4 inch Length – 48 inches Width – 15 ¼ inches

Siding Product Composition

James Hardie siding products are a *Grade II, Type A*, fiber-cement flat sheet as defined by ASTM C 1186. The siding is manufactured by the Hatschek process and cured by high pressure steam autoclaving.

Siding Code Compliance

James Hardie Siding Products comply with:

- The 2009, 2012, and 2015 International Building Code® (IBC) Section 1404.10, 2018, and 2021 International Building Code® (IBC) Section 1403.10 and 2009, 2012, 2015, 2018 and 2021 International Residential Code® (IRC) Table R703.3(1) and Section R703.10 as ASTM C 1186 Grade II, Type A Fiber Cement.

Wind Design:

- Design Tables 2, 3 and 4 as shown in this report provide the allowable capacity in mph for transverse load conditions for HardiePlank lap siding, HardiePanel Vertical Siding and HardieShingle Panel Siding respectively attached to wood framing, metal framing and 7/16 inch Wood Structural Panel (tested to ASTM E 330).

Fire Characteristics:

- James Hardie Siding Products are classified as noncombustible when tested in accordance with ASTM E136.
- James Hardie Siding Products may be used in ASTM E119 fire resistance rated assemblies as listed by Warnock Hersey 60 minute design JH/FCS 60-01, JH/FCS 60-02, JH/FCS 60-03, and JH/FCS 60-04.
- James Hardie Siding Products are Class A material according to 2006, 2009, 2012, and 2015 IBC Section 803.1.1 and 2018, 2021 IBC Section 803.1.2. Surface burning characteristics in accordance with ASTM E 8 4: Flame Spread Index = 0 and Smoke Developed Index ≤ 5.
- The building official reserves the right to approve alternate materials, design and methods of construction based on research reports and/or tests based on 2006, 2009, 2012, 2015, 2018, and 2021 IBC Section 104.11, 2006, 2009, 2012, 2015, 2018, and 2021 IRC Section R104.11.
- Test reports can be furnished to the building official upon request, contact your local James Hardie sales representative.
- For more information, contact James Hardie at 1-888 J-HARDIE (1-888 542-7343) or info@JamesHardie.com.

Siding Installation Requirements

- James Hardie Siding Products shall be installed on exterior walls braced in accordance with the applicable building code.
- A water-resistive barrier complying with Section 1403.2 of the IBC or Section R703.2 of the IRC is required to be installed.
- Install siding in accordance with this report and the James Hardie's published installation requirements. For a copy contact your local James Hardie sales representative or visit www.JamesHardiePros.com.

Table 1, James Hardie Siding Products ASTM C 1186 Physical Properties and Supplementary Requirements

Warnock Hersey
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MARK



Intertek
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Client # 8518,
17832



	ASTM Test Method	General Property	Unit or Characteristic	Requirement	Result
Physical Attributes	ASTM C1185	Dimensional Tolerances	Length	± 0.5% or ±1/4 in	Pass
			Width	± 0.5% or ±1/4 in	
			Thickness	± 0.04 in	
			Squareness	<1/32 in/ft of length	
			Edge Straightness	<1/32 in/ft of length	
ASTM C1185	Density, lb/ft ³		As reported	<75	
ASTM C1185	Water Tightness	Physical Observations	No drop formation		Pass
Durability	ASTM C1185	Flexural Strength	Wet conditioned, psi	>1015 psi	Pass
			Equilibrium conditioned, psi	>1450 psi	
	ASTM C1185	Warm Water Resistance, Observations	Physical Observations	No visible cracks or structural alteration	Pass
			Heat/Rain Resistance	Physical Observations	No visible cracks or structural alteration
Fire Characteristics	ASTM C1185	Freeze/Thaw Resistance	Physical Observations	No visible cracks or structural alteration	Pass
			Mass Loss, %	≤ 3.0%	
			Freeze/Thaw, % strength retention	≥ 80%	
	ASTM G23	UV Accelerated Weathering Test	Physical Observations	No cracking, checking, or crazing	Pass
ASTM E84	Surface Burning Characteristics	Flame Spread Index (FSI)	0	As reported	
		Smoke Developed Index (SDI)	≤ 5		
		Fuel Contributed	0		
		NFPA Class	A		
		Uniform Building Code Class	1		
ASTM E136	Noncombustibility	International Building Code® class	A		
		Noncombustible	Pass		



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Table 2, Wind Design Table for HardiePlank lap siding

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE ^{3,10}	FASTENING METHOD ²	FRAME TYPE ^{1,7}	STUD SPACING (IN.)	PRESSURE (psf)	
	THICK.	WIDTH					ASD	LFRD (Ultimate)
HardiePlank®	5/16	5 1/4	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	16	-63.9	-106.5
HardiePlank®	5/16	6 1/4	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	16	-51.1	-85.2
HardiePlank®	5/16	7 1/4	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	16	-42.6	-71.0
HardiePlank®	5/16	7 1/2	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	16	-40.9	-68.2
HardiePlank®	5/16	8	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	16	-37.9	-63.1
HardiePlank®	5/16	8 1/4	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	16	-36.5	-60.9
HardiePlank®	5/16	9 1/4	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	16	-32.0	-53.3
HardiePlank®	5/16	9 1/2	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	16	-31.0	-51.6
HardiePlank®	5/16	5 1/4	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	24	-42.6	-71.0
HardiePlank®	5/16	6 1/4	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	24	-34.1	-56.8
HardiePlank®	5/16	7 1/4	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	24	-28.4	-47.3
HardiePlank®	5/16	7 1/2	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	24	-27.3	-45.4
HardiePlank®	5/16	8	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	24	-25.2	-42.1
HardiePlank®	5/16	8 1/4	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	24	-24.3	-40.6
HardiePlank®	5/16	9 1/4	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	24	-21.3	-35.5
HardiePlank®	5/16	9 1/2	No. 11 gauge, 1.25" long roofing nail	Blind Nailed	2X4 wood	24	-20.7	-34.4
HardiePlank®	5/16	5 1/4	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	16	-98.0	-163.3
HardiePlank®	5/16	6 1/4	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	16	-78.4	-130.6
HardiePlank®	5/16	7 1/4	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	16	-65.3	-108.9
HardiePlank®	5/16	7 1/2	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	16	-62.7	-104.5
HardiePlank®	5/16	8	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	16	-58.1	-96.8
HardiePlank®	5/16	8 1/4	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	16	-56.0	-93.3
HardiePlank®	5/16	9 1/4	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	16	-49.0	-81.7
HardiePlank®	5/16	9 1/2	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	16	-47.5	-79.2



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Table 2, Wind Design Table for HardiePlank lap siding

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE ^{3,10}	FASTENING METHOD ²	FRAME TYPE ^{1,7}	STUD SPACING (IN.)	PRESSURE (psf)	
	THICK.	WIDTH					ASD	LFRD (Ultimate)
HardiePlank®	5/16	5 1/4	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	24	-65.3	-108.9
HardiePlank®	5/16	6 1/4	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	24	-52.3	-87.1
HardiePlank®	5/16	7 1/4	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	24	-43.5	-72.6
HardiePlank®	5/16	7 1/2	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	24	-41.8	-69.7
HardiePlank®	5/16	8	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	24	-38.7	-64.5
HardiePlank®	5/16	8 1/4	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	24	-37.3	-62.2
HardiePlank®	5/16	9 1/4	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	24	-32.7	-54.4
HardiePlank®	5/16	9 1/2	No. 11 gauge, 1.75" long roofing nail	Blind Nailed	2X4 wood	24	-31.7	-52.8
HardiePlank®	5/16	5 1/4	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	16	-47.9	-79.8
HardiePlank®	5/16	6 1/4	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	16	-38.3	-63.8
HardiePlank®	5/16	7 1/4	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	16	-31.9	-53.2
HardiePlank®	5/16	7 1/2	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	16	-30.7	-51.2
HardiePlank®	5/16	8	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	16	-28.4	-47.3
HardiePlank®	5/16	8 1/4	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	16	-27.4	-45.7
HardiePlank®	5/16	9 1/4	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	16	-24.0	-40.0
HardiePlank®	5/16	9 1/2	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	16	-23.2	-38.7
HardiePlank®	5/16	5 1/4	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	24	-31.9	-53.2
HardiePlank®	5/16	6 1/4	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	24	-25.6	-42.7
HardiePlank®	5/16	7 1/4	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	24	-21.3	-35.5
HardiePlank®	5/16	7 1/2	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	24	-20.4	-34.0
HardiePlank®	5/16	8	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	24	-18.9	-31.5
HardiePlank®	5/16	8 1/4	8d siding nail, 0.93 in x 0.222 in HD x 2.5 in long	Blind Nailed	2 x 4 wood	24	-18.3	-30.5
HardiePlank®	5/16	≤8 1/4	8d siding nail, 0.92 in x 0.222 in HD x 2.5 in long	Face Nailed	2 x 4 wood	16	-55.3	-92.2
HardiePlank®	5/16	9 1/4	8d siding nail, 0.92 in x 0.222 in HD x 2.5 in long	Face Nailed	2 x 4 wood	16	-48.4	-80.7



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Table 2, Wind Design Table for HardiePlank lap siding

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE ^{3,10}	FASTENING METHOD ²	FRAME TYPE ^{1,7}	STUD SPACING (IN.)	PRESSURE (psf)	
	THICK.	WIDTH					ASD	LFRD (Ultimate)
HardiePlank®	5/16	9 1/2	8d siding nail, 0.92 in x 0.222 in HD x 2.5 in long	Face Nailed	2 x 4 wood	16	-46.9	-78.2
HardiePlank®	5/16	12	8d siding nail, 0.92 in x 0.222 in HD x 2.5 in long	Face Nailed	2 x 4 wood	16	-36.0	-60.0
HardiePlank®	5/16	≤8 1/4	8d ring shank box nail, 0.113" shank X 0.260" HD X 2.375" L	Face Nailed	2 x 4 wood ⁶	16	-98.7	-164.5
HardiePlank®	5/16	≤8 1/4	8d ring shank box nail, 0.113" shank X 0.260" HD X 2.375" L	Face Nailed	2 x 4 wood ⁶	24	-65.8	-109.7
HardiePlank®	5/16	≤8 1/4	0.092" shank X 0.222" HD X 2.5" long galv. nail	Face Nailed	2 x 4 wood ⁶	16	-84.3	-140.5
HardiePlank®	5/16	5 1/4	6d common	Face Nailed	2X4 wood	16	-88.2	-147.0
HardiePlank®	5/16	6 1/4	6d common	Face Nailed	2X4 wood	16	-70.6	-117.7
HardiePlank®	5/16	7 1/4	6d common	Face Nailed	2X4 wood	16	-58.8	-98.0
HardiePlank®	5/16	7 1/2	6d common	Face Nailed	2X4 wood	16	-56.5	-94.1
HardiePlank®	5/16	8	6d common	Face Nailed	2X4 wood	16	-52.3	-87.2
HardiePlank®	5/16	8 1/4	6d common	Face Nailed	2X4 wood	16	-50.4	-84.0
HardiePlank®	5/16	9 1/4	6d common	Face Nailed	2X4 wood	16	-44.1	-73.5
HardiePlank®	5/16	9 1/2	6d common	Face Nailed	2X4 wood	16	-42.8	-71.3
HardiePlank®	5/16	5 1/4	6d common	Face Nailed	2X4 wood	24	-58.8	-98.0
HardiePlank®	5/16	6 1/4	6d common	Face Nailed	2X4 wood	24	-47.1	-78.4
HardiePlank®	5/16	7 1/4	6d common	Face Nailed	2X4 wood	24	-39.2	-65.4
HardiePlank®	5/16	7 1/2	6d common	Face Nailed	2X4 wood	24	-37.7	-62.8
HardiePlank®	5/16	8	6d common	Face Nailed	2X4 wood	24	-34.9	-58.1
HardiePlank®	5/16	8 1/4	6d common	Face Nailed	2X4 wood	24	-33.6	-56.0
HardiePlank®	5/16	9 1/4	6d common	Face Nailed	2X4 wood	24	-29.4	-49.0
HardiePlank®	5/16	9 1/2	6d common	Face Nailed	2X4 wood	24	-28.5	-47.5
HardiePlank®	5/16	5 1/4	8d common	Face Nailed	2X4 wood	16	-136.8	-228.0
HardiePlank®	5/16	6 1/4	8d common	Face Nailed	2X4 wood	16	-109.5	-182.4
HardiePlank®	5/16	7 1/4	8d common	Face Nailed	2X4 wood	16	-91.2	-152.0



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Table 2, Wind Design Table for HardiePlank lap siding

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE ^{3,10}	FASTENING METHOD ²	FRAME TYPE ^{1,7}	STUD SPACING (IN.)	PRESSURE (psf)	
	THICK.	WIDTH					ASD	LFRD (Ultimate)
HardiePlank®	5/16	7 1/2	8d common	Face Nailed	2X4 wood	16	-87.6	-145.9
HardiePlank®	5/16	8	8d common	Face Nailed	2X4 wood	16	-81.1	-135.1
HardiePlank®	5/16	8 1/4	8d common	Face Nailed	2X4 wood	16	-78.2	-130.3
HardiePlank®	5/16	9 1/4	8d common	Face Nailed	2X4 wood	16	-68.4	-114.0
HardiePlank®	5/16	9 1/2	8d common	Face Nailed	2X4 wood	16	-66.3	-110.6
HardiePlank®	5/16	5 1/4	8d common	Face Nailed	2X4 wood	24	-91.2	-152.0
HardiePlank®	5/16	6 1/4	8d common	Face Nailed	2X4 wood	24	-73.0	-121.6
HardiePlank®	5/16	7 1/4	8d common	Face Nailed	2X4 wood	24	-60.8	-101.4
HardiePlank®	5/16	7 1/2	8d common	Face Nailed	2X4 wood	24	-58.4	-97.3
HardiePlank®	5/16	8	8d common	Face Nailed	2X4 wood	24	-54.1	-90.1
HardiePlank®	5/16	8 1/4	8d common	Face Nailed	2X4 wood	24	-52.1	-86.9
HardiePlank®	5/16	9 1/4	8d common	Face Nailed	2X4 wood	24	-45.6	-76.0
HardiePlank®	5/16	9 1/2	8d common	Face Nailed	2X4 wood	24	-44.2	-73.7
HardiePlank®	5/16	5 1/4	No. 8 X 1- 5/8" long X 0.375" HD ribbed wafer head screw ⁵	Blind Screwed at 12 in on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	-103.5	-172.5
HardiePlank®	5/16	6 1/4	No. 8 X 1- 5/8" long X 0.375" HD ribbed wafer head screw ⁵	Blind Screwed at 12 in on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	-80.6	-134.3
HardiePlank®	5/16	7 1/4	No. 8 X 1- 5/8" long X 0.375" HD ribbed wafer head screw ⁵	Blind Screwed at 12 in on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	-65.3	-108.8
HardiePlank®	5/16	8 1/4	No. 8 X 1- 5/8" long X 0.375" HD ribbed wafer head screw ⁵	Blind Screwed at 12 in on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	-54.4	-90.7
HardiePlank®	5/16	9 1/4	No. 8 X 1- 5/8" long X 0.375" HD ribbed wafer head screw ⁵	Blind Screwed at 12 in on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	-46.3	-77.2
HardiePlank®	5/16	≤8 1/4	No. 8 X 1- 5/8" long X 0.375" HD ribbed wafer head screw ⁵	Blind Screwed at 8 in on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	-50.7	-84.5
HardiePlank®	5/16	≤8 1/4	No. 8 X 1- 5/8" long X 0.375" HD ribbed wafer head screw ⁵	Blind Screwed at 6 in on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	-66.0	-110.0
HardiePlank®	5/16	5 1/4	ET&F pin 0.100" x 1.5" x 0.25" HD	Blind Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-37.3	-62.2
HardiePlank®	5/16	6 1/4	ET&F pin 0.100" x 1.5" x 0.25" HD	Blind Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-29.9	-49.8
HardiePlank®	5/16	7 1/4 or 7 1/2	ET&F pin 0.100" x 1.5" x 0.25" HD	Blind Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-23.9	-39.8
HardiePlank®	5/16	8	ET&F pin 0.100" x 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-22.1	-36.8



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	THICK.	WIDTH					ASD	LFRD (Ultimate)
HardiePlank®	5/16	8 1/4	ET&F pin 0.100" x 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-21.3	-35.5
HardiePlank®	5/16	5 1/4	ET&F pin 0.100" x 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-29.7	-49.5
HardiePlank®	5/16	6 1/4	ET&F pin 0.100" x 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-23.3	-38.8
HardiePlank®	5/16	7 1/4 or 7 1/2	ET&F pin 0.100" x 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-18.7	-31.2
HardiePlank®	5/16	6 1/4	No 8 x 1-5/8 in long x 0.375 in HD ribbed waferhead screw	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-93.1	-155.2
HardiePlank®	5/16	7 1/4 or 7 1/2	No 8 x 1-5/8 in long x 0.375 in HD ribbed waferhead screw	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-74.5	-124.2
HardiePlank®	5/16	8	No 8 x 1-5/8 in long x 0.375 in HD ribbed waferhead screw	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-68.9	-114.8
HardiePlank®	5/16	8 1/4	No 8 x 1-5/8 in long x 0.375 in HD ribbed waferhead screw	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-66.5	-110.8
HardiePlank®	5/16	9 1/4 or 9 1/2	No 8 x 1-5/8 in long x 0.375 in HD ribbed waferhead screw	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-56.4	-94.0
HardiePlank®	5/16	5 1/4	No 8 x 1-5/8 in long x 0.375 in HD ribbed waferhead screw	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-77.6	-129.3
HardiePlank®	5/16	6 1/4	No 8 x 1-5/8 in long x 0.375 in HD ribbed waferhead screw	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-62.0	-103.3
HardiePlank®	5/16	7 1/4 or 7 1/2	No 8 x 1-5/8 in long x 0.375 in HD ribbed waferhead screw	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-49.6	-82.7
HardiePlank®	5/16	8	No 8 x 1-5/8 in long x 0.375 in HD ribbed waferhead screw	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-46.0	-76.7
HardiePlank®	5/16	8 1/4	No 8 x 1-5/8 in long x 0.375 in HD ribbed waferhead screw	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-44.3	-73.8
HardiePlank®	5/16	9 1/4 or 9 1/2	No 8 x 1-5/8 in long x 0.375 in HD ribbed waferhead screw	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-37.6	-62.7
HardiePlank®	5/16	5 1/4	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-132.1	-220.2
HardiePlank®	5/16	6 1/4	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-105.7	-176.2
HardiePlank®	5/16	7 1/4 or 7 1/2	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-84.5	-140.8
HardiePlank®	5/16	8	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-78.3	-130.5
HardiePlank®	5/16	8 1/4	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-75.5	-125.8
HardiePlank®	5/16	9 1/4 or 9 1/2	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-64.0	-106.7
HardiePlank®	5/16	12	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	-50.3	-83.8
HardiePlank®	5/16	5 1/4	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-72.1	-120.2
HardiePlank®	5/16	6 1/4	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-57.7	-96.2



Attachments for Projects 60 – 85ft.

All national, state, and local building code requirements must be followed and where they are more stringent than the James Hardie installation requirements, state and local requirements will take precedence.

Table 2, Wind Design Table for HardiePlank lap siding

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE ^{3,10}	FASTENING METHOD ²	FRAME TYPE ^{1,7}	STUD SPACING (IN.)	PRESSURE (psf)	
	THICK.	WIDTH					ASD	LFRD (Ultimate)
HardiePlank®	5/16	7 1/4 or 7 1/2	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-46.1	-76.8
HardiePlank®	5/16	8	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-42.7	-71.2
HardiePlank®	5/16	8 1/4	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-41.2	-68.7
HardiePlank®	5/16	9 1/4 or 9 1/2	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-35.0	-58.3
HardiePlank®	5/16	12	ET&F pin 0.100" x 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	-27.0	-45.0

¹Values are for species of wood having a specific gravity of 0.42 or greater, unless otherwise noted.

²Face = Fastened through the overlapping plank. Blind = Fastened through the top edge of single plank.

³ET&F pin fasteners have knurled shanks.

⁴Fastener length shall be sufficient to penetrate back side of the minimum 7/16" WSP sheathing by at least 1/4" for nails or 3 full threads for screws.

⁵Values are for species of wood having a specific gravity of 0.50 or greater.

⁶Values are for species of wood having a specific gravity of 0.40 or greater.

⁷Metal studs must be minimum Fy = 33 ksi.

⁸2015 and 2012 IBC Section 1609.3.1, Eqn. 16-33, Vasd=Vult v0.6

⁹2021 IBC Section 1609.3.1, Eqn. 16-17 and 2018 IBC Section 1609.3.1, Eqn. 16-33, Vasd = v0.6

¹⁰Smooth-shank nails are outside of the scope of this report



Attachments for Projects 60 – 85ft.

All national, state, and local building code requirements must be followed and where they are more stringent than the James Hardie installation requirements, state and local requirements will take precedence.

Table 3, Wind Design Table for HardiePanel vertical siding

PRODUCT	PRODUCT THICKNESS	FASTENER TYPE ⁵	FASTENER SPACING (IN)	FRAME TYPE	STUD SPACING (IN)	PRESSURE (psf)	
						ASD	LFRD (Ultimate)
HardiePanel	5/16	0.091-in. shank x .225-in HD x 1½-in. long ring shank nail	4 edge,8 field	2 x 4 wood ²	16	-30.0	-50.0
HardiePanel	5/16	6d common, 2 in. long	4	2 x 4 wood ²	16	-78.7	-131.2
HardiePanel	5/16	6d common, 2 in. long	4	2 x 4 wood ²	24	-47.7	-79.5
HardiePanel	5/16	6d common, 2 in. long	6	2 x 4 wood ²	16	-49.7	-82.8
HardiePanel	5/16	6d common, 2 in. long	6	2 x 4 wood ²	24	-31.3	-52.2
HardiePanel	5/16	No. 8 X 1-5/8 in. long X 0.375 in. HD ribbed waferhead screw	6" OC vertically / 12" OC horizontally	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	-53.8	-89.7
HardiePanel	5/16	Min. No. 8 x 1-in. long x 0.323-in. HD ribbed buglehead screw	6	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud	16	-56.6	-94.3
HardiePanel	5/16	Min. No. 8 x 1-in. long x 0.323-in. HD ribbed buglehead screw	6	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud	24	-30.6	-51.0
HardiePanel	5/16	ET & F 0.10-in. knurled shank x 1½-in. long x 0.25-in. HD pin fastener (AKN100-0150NA)	4 edge,8 field	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud	16	-56.7	-94.5
HardiePanel	5/16	ET & F 0.10-in. knurled shank x 1½-in. long x 0.25-in. HD pin fastener (AKN100-0150NA)	4 edge, 8 field	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud	24	-33.7	-56.2
HardiePanel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	6" O.C.	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud or 2 X 4 wood studs ²	16	-53.6	-89.3
HardiePanel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	8" O.C.	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud or 2 X 4 wood studs ²	16	-43.8	-73.0



Attachments for Projects 60 – 85ft.

All national, state, and local building code requirements must be followed and where they are more stringent than the James Hardie installation requirements, state and local requirements will take precedence.

Table 3, Wind Design Table for HardiePanel vertical siding

PRODUCT	PRODUCT THICKNESS	FASTENER TYPE ⁵	FASTENER SPACING (IN)	FRAME TYPE	STUD SPACING (IN)	PRESSURE (psf)	
						ASD	LFRD (Ultimate)
HardiePanel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	10" O.C.	Min. No. 20 ga. (33 mil) X 3 ⁵ / ₈ in. x 1 ³ / ₈ in. metal C-stud or 2 X 4 wood studs ²	16	-38.8	-64.7
HardiePanel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	12" O.C.	Min. No. 20 ga. (33 mil) X 3 ⁵ / ₈ in. x 1 ³ / ₈ in. metal C-stud or 2 X 4 wood studs ²	16	-35.4	-59.0
HardiePanel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	8" O.C.	Min. No. 20 ga. (33 mil) X 3 ⁵ / ₈ in. x 1 ³ / ₈ in. metal C-stud or 2 X 4 wood studs ²	24	-27.6	-46.0
HardiePanel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	6" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring ^{6,7,8,9}	16	-53.6	-89.3
HardiePanel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	8" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring ^{6,7,8,9}	16	-43.8	-73.0
HardiePanel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	10" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring ^{6,7,8,9}	16	-38.8	-64.7
HardiePanel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	12" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring ^{6,7,8,9}	16	-35.4	-59.0
HardiePanel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	8" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring ^{6,7,8,9}	24	-27.6	-46.0
HardiePanel	5/16	0.090" shank X 0.215" HD x 1.5" long ring shank nail	6" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring ^{6,7,8}	16	-49.2	-82.0

¹ Installation must be in accordance with Section 4.2 of this report.

² Values are for species of wood having a specific gravity of 0.42 or greater.

³ 2012 IBC Section 1609.3.1, Eqn. 16-33,

⁴ 2018 IBC Section 1609.3.1, Eqn. 16-33,

⁵ Smooth-shank stainless steel nails are outside of the scope of this report.

⁶ Furring attachment to structural members (framing) or alternative furring width shall be designed by the project engineer.

⁷ Wood furring shall be preservative treated per AWPA.

⁸ Wood furring shall be specific gravity of 0.42 or greater per AFPA/NDS, or wood structural panel, conforming to DOC PS-1 or DOC PS-2 or APA PRP-108.

⁹ The design and attachment of steel furring shall be the responsibility of the project engineer.



Attachments for Projects 60 – 85ft.

All national, state, and local building code requirements must be followed and where they are more stringent than the James Hardie installation requirements, state and local requirements will take precedence.

Table 4, Wind Design Table for HardieShingle Panel siding

PRODUCT	THICK. (IN.)	FASTENER TYPE ^{4,5}	FASTENER SPACING (IN.)	FRAME TYPE ^{1,2}	STUD SPACING (IN.)	PRESSURE (psf)	
						ASD	LFRD (Ultimate)
HardieShingle™ (New HardieShingle®) Panel	1/4	0.090" shank x 0.215" HD x 1-1/2" long ring shank nail ⁴	8	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached to framing per code	-60.0	-100.0
HardieShingle™ (New HardieShingle®) Panel	1/4	0.090" shank x 0.215" HD x 1-1/2" long ring shank nail ⁴	6	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached to framing per code	-71.0	-118.3
HardieShingle™ (New HardieShingle®) Panel	1/4	0.083" shank x 0.187" HD x 11/2" long ring shank nail ³	at each stud ³	Nominal 2x4 ¹	16	-64.0	-106.7
HardieShingle™ (New HardieShingle®) Panel	1/4	0.083" shank x 0.187" HD x 11/2" long ring shank nail ³	at each stud ³	Nominal 2x4 ¹	16	-32.3	-53.8
HardieShingle™ (New HardieShingle®) Panel	1/4	ET&F pin 0.100" x 1.5" x 0.313" HD	at each stud	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud ²	16	-64.0	-106.7
HardieShingle™ (New HardieShingle®) Panel	1/4	ET&F pin 0.100" x 1.5" x 0.313" HD	at each stud	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud ²	16	-32.3	-53.8

¹Values are for species of wood having a specific gravity of 0.40 or greater.

²For application to metal framing members, fasteners must be ET & F Fastening Systems, Inc. ET&F Panelfast® nail, ET & F No. AGS-100-0150, head diameter = 0.313 in., shank diameter = 0.100 in., length = 1.5 in. Metal studs must be maximum Fy = 33 ksi.

³For application to ASTM C90 concrete masonry unit wall, fasteners must be either ET & F Fastening Systems, Inc. ET&F block nail (ET & F No. ASM-144-0125, head dia. = 0.30 in., shank dia. = 0.14 in., length = 1.25 in.), Max System block nail (CP-C 832 W7-ICC, head diameter. = 0.30 in., shank diameter. = 0.15 in., length = 1.3 in.), Aerosmith SurePin block nail (head diameter = 0.30 in., shank diameter = 0.144 in., length = 1.25 in.), or Jaaco Nail Pro (NP145S head diameter = 0.30 in., shank diameter = 0.145 in., length = 1.25 in.) applied at the equivalent fastener or stud spacing.

⁴For application to wood framing or wood-based sheathing, the minimum fastener penetration must be 1 inch into framing or the sheathing thickness as applicable.

⁵Smooth-shank stainless steel nails are outside of the scope of this report.