Town of Chapel Hill, NC

7/18/2023

HDC-23-12

Historic District Certificate of Appropriateness

Status: Active

Submitted On: 6/7/2023

Primary Location

207 W CAMERON AVE
CHAPEL HILL, NC 27516

Owner

SIG EP HOUSING OF NORTH CAROLINA DELTA LLC
310 S ARTHUR ASHE BLVD
RICHMOND, VA 23220

Applicant

Chris Cook
919-606-9209
ccook@bakerroofing.com
1401 Moring St.
Raleigh, NC 27603

Certificate of Appropriateness Form

Historic District

Cameron-McCauley

Application Type Check all that apply

Minor Work is exterior work that does not involve any substantial alterations, and do not involve additions or removals that could impair the integrity of the property and/or the district as a whole. See Chapel Hill Historic Districts Design Principles & Standards ("Principles & Standards") (p. 9-11) for a list of minor works. Please contact Town Staff to confirm if you believe the project is classified as "minor work."

Historic District Commission Review includes all exterior changes to structures and features other than minor works

Minor Work as defined by Design Standards

☑

Historic District Commission Review

☑

Request for Review After Previous Denial

☐

After-the-Fact COA Application

☑

Written Description

Describe clearly and in detail the physical changes you are proposing to make. Identify the materials to be used (siding, windows, trim, roofing, pavements, decking, fencing, light fixtures, etc.), specify their dimensions, and provide names of manufacturers, model numbers, and specifications where applicable. Consider including additional materials to illustrate your project, such as: - Photos and specifications for proposed exterior materials such as siding, trim, roof, foundation materials, windows, etc. - Renderings of the proposed work - Spec sheets

Roof: Old architectural asphalt shingles are being replaced with a similar color new shingle (CertainTeed Landmark Pro - Moire Black). New dripedge and roof flashings will be used to bring work up to current standards. Leaks are evident at the roof to wall transitions around the dormers and rear walls with siding.

Gutters: Old copper gutters will be replaced with similar color and profile aluminum gutters. One downspout will be moved or added to move water flow away from stairs in the rear. Old gutters had massive leaks, playing a significant role in the haste of scheduling, as well as the scope of work. The leaking gutters were causing damage to a large portion of the trim under the roof line.

Siding/Trim: All off the existing siding and around and below the roof line will be changed. The old materials are mostly wood based materials, and will be swapped with new non-rot materials (James Hardie fiber cement and PVC). James Hardie materials are widely used around the country to help preserve historic buildings, while maintaining their existing look. The profiles of all the trim will be maintained as close as possible. Old flashings will be replaced, as well as the addition of new flashings to enhance the durability of the structure. All windows will be rewrapped with similar colored aluminum, to ensure any water penetration is stopped.

Applicable HDC Design Standards

Page / Standard #	Topic
Section 3.6.2(e)	2. Building Materials

Brief Description of the Applicable Aspects of Your Proposal

For siding portion: existing wood and masonite trim and siding will be converted to a combination of PVC and James Hardie fiber cement board. These new materials are non rot, preserving the life of the existing structure

Page / Standard #	Topic
87/3.3. Exterior Walls, Trim, & Ornamentation	2. Building Materials

Brief Description of the Applicable Aspects of Your Proposal

3.3.5. If deterioration necessitates the replacement of an entire wall surface, replacement surfaces should match the original in material, design, dimension, pattern, detail, texture, and color. Consider a compatible substitute material only if replacement in kind is not technically feasible; if repeated deterioration is reasonably expected; or the material is in a location that is not visible from the street.

Page / Standard #	Topic
81-82/ 3.1 Roofs, Gutters, & Chimneys	–

Brief Description of the Applicable Aspects of Your Proposal

3.1.1. Retain and preserve roof shapes, materials, and decorative and functional features that are important in defining the overall historic character of buildings within the historic districts. These include, but are not limited to, roof height, form, shape, pitch, and overhang; roof materials and functional features including shingles, flashing, vents, and gutters; and decorative features including dormers, chimneys, turrets, spires, cupolas, and balustrades.

3.1.5. If deterioration necessitates the replacement of an entire roof surface, replacement surfaces should match the original in material, design, dimension, pattern, detail, texture, and color. Consider a compatible substitute material (including composite shingle, synthetic slate, and wide-pan matte-finish metal roofing) only if the replacement material is compatible with the design, size, and scale of the building.
a. Do not replace historic standing-seam, pressed metal, or asphalt-shingled roofs with multi-rib metal roofing.
b. Do not install built-up or rubber roofing in locations that are visible from the street.

3.1.8. Introduce new gutters and downspouts, as needed, with care so that no architectural features are damaged or lost. Select gutters and downspouts that are painted or coated with a factory finish (unless they are copper) to match the building's trim. Replace half-round gutters and cylindrical downspouts in kind.

3.1.9. Do not remove or conceal character-defining roof features such as chimneys or chimney pots, dormers, built-in gutters, and vents, especially on a primary or other highly visible elevation.

Property Owner Information

Property Owner Name

SIG EP Housing of NC Delta LLC

Property Owner Signature

Ben Hutto
Jul 18, 2023

Sig Ep Housing Project

207 W Cameron Ave.

Chapel Hill, NC

Summary of Siding/Trim work:

Our motivation with this project is to maintain the historic and iconic look the building has kept, since construction in 1983. Unfortunately, older trim and siding materials were made from materials that are vulnerable to rot and degradation from exposure to the elements. Modern materials provide the luxury of matching profiles, with the added benefits of weather resistant composition, with much less long-term maintenance. All of the trim and boards used to construct the cornice maintain the same profiles. The lap siding also maintains the appearance of the outdated wood siding, with the added benefits of rot resistant fiber cement board.

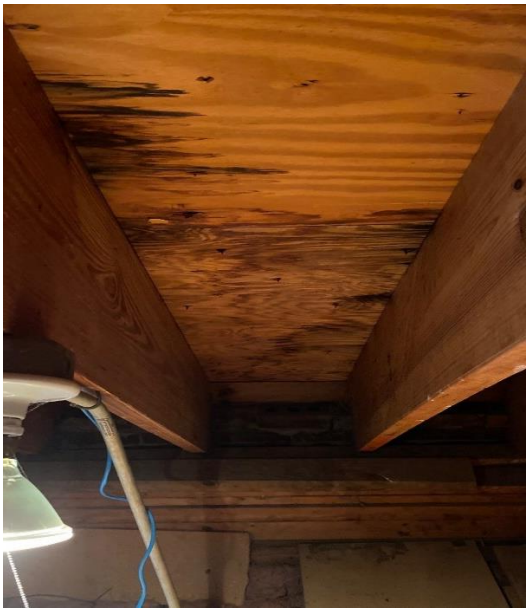
Photos of existing structure:

Overall rear view:

New materials will keep look of old materials.

Water damaged roof decking from leaks:

Rotten decking will be changed with like material

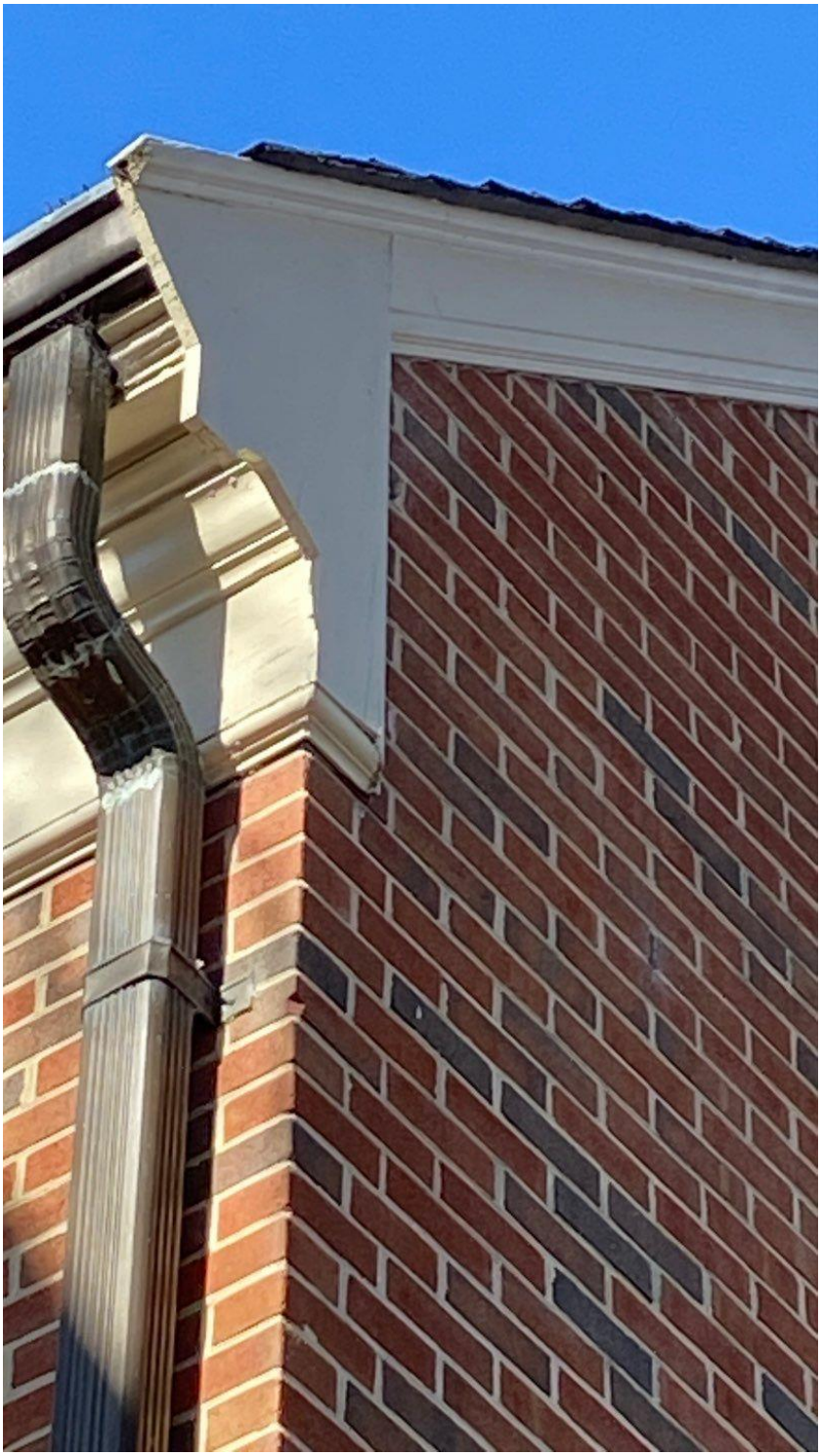


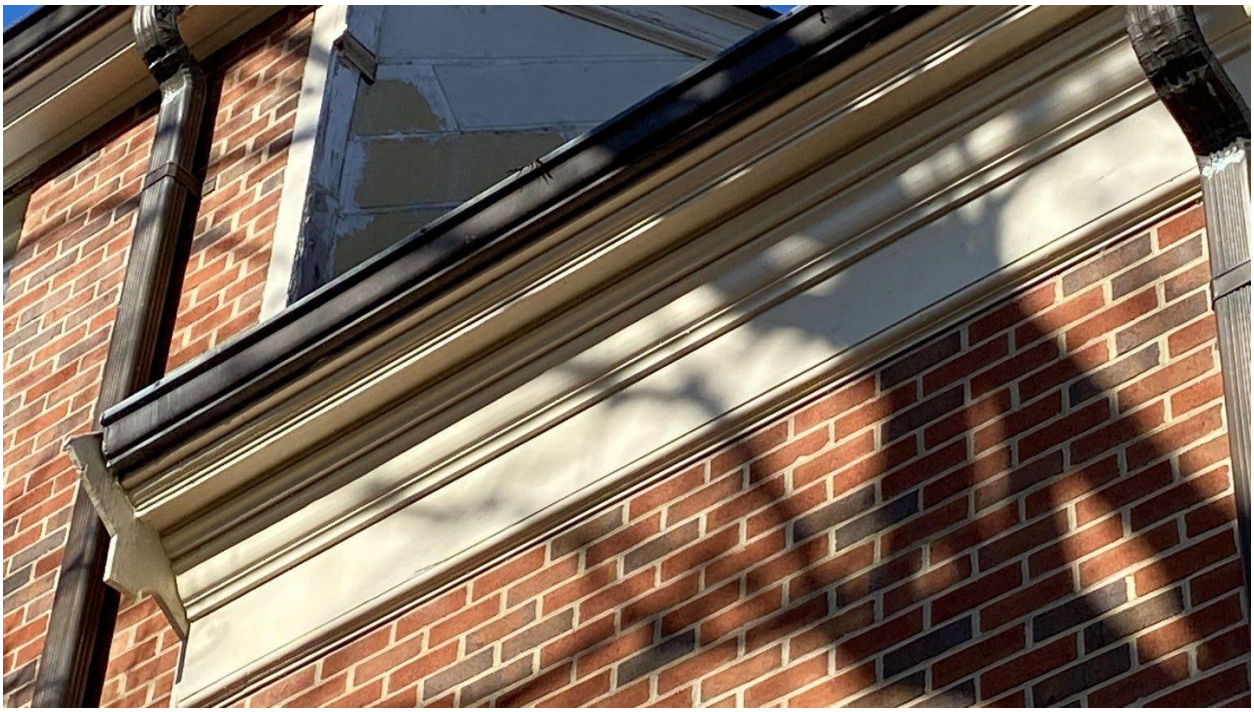
Rear view:

Ceiling panel under front entry. Panel will be replaced with James Hardie fiber cement panel. Vents will be replaced with similar metal vents.

Existing window wrap:

Wiindow trim will be wrapped with new aluminum, reparing any damaged/leaking metal.





James Hardie 4/4

James Hardie 4/4

PVC Bedmould

James Hardie 4/4

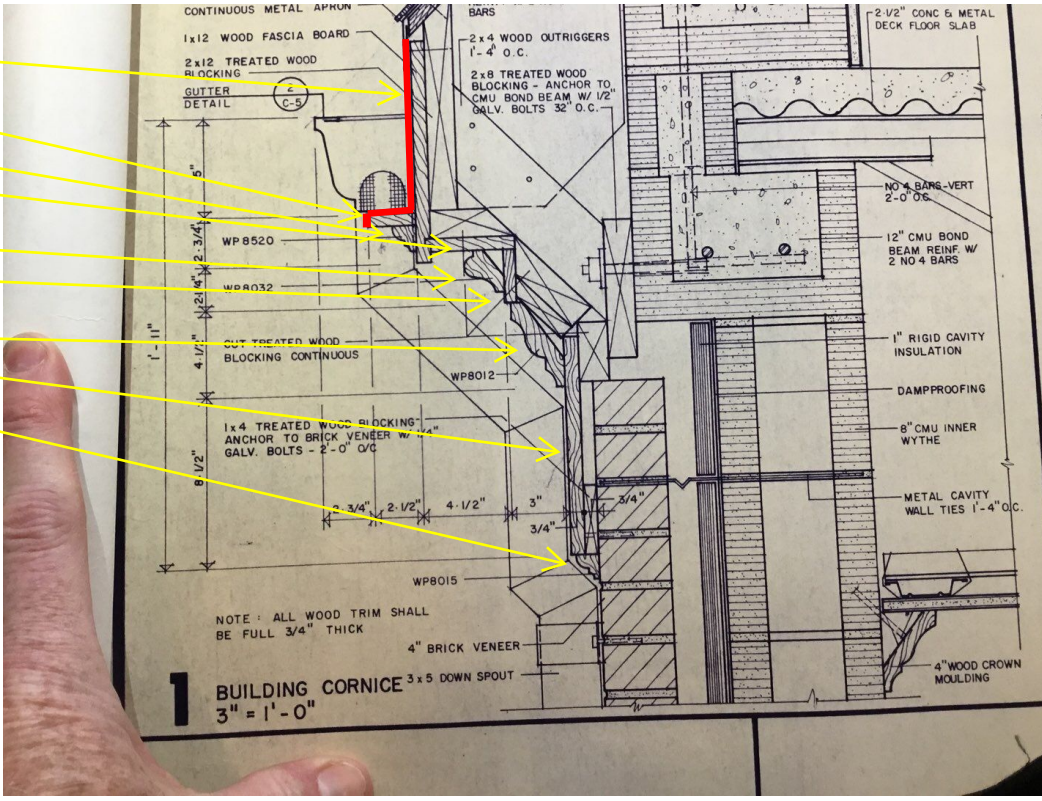
PVC Crown Mould 3-5/8"

James Hardie 4/4

PVC Crown Mould 5-1/4"

James Hardie 4/4

PVC Bed Mould



All James Hardie 4/4 material is cut to size to match existing.
Red line is aluminum bend to protect gutter shelf from water.

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ESR-2290

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Reissued 03/2016

This report is subject to renewal 03/2018.

DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES

SECTION: 06 16 00—SHEATHING

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

SECTION: 07 46 46—FIBER-CEMENT SIDING

REPORT HOLDER:

JAMES HARDIE BUILDING PRODUCTS, INC.

10901 ELM AVENUE
FONTANA, CALIFORNIA 92337

EVALUATION SUBJECT:

HARDIESHINGLE™ (NEW HARDIESHINGLE®) PANELS, HARDIEPLANK™ LAP SIDING, ARTISAN® LAP SIDING, AND HARDIESHINGLE™ (NEW HARDIESHINGLE®) INDIVIDUAL SHINGLES

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Reissued March 2016
Revised November 2016
This report is subject to renewal March 2018.

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DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES
Section: 06 16 00—Sheathing

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
Section: 07 46 46—Fiber-Cement Siding

REPORT HOLDER:

JAMES HARDIE BUILDING PRODUCTS, INC.
10901 ELM AVENUE
FONTANA, CALIFORNIA 92337
(800) 942-7343
www.jameshardie.com
info@jameshardie.com

EVALUATION SUBJECT:

HARDIESHINGLE™ (NEW HARDIESHINGLE®) PANELS, HARDIEPLANK™ LAP SIDING, ARTISAN® LAP SIDING, AND HARDIESHINGLE™ (NEW HARDIESHINGLE®) INDIVIDUAL SHINGLES

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2015, 2012, 2009 and 2006 *International Building Code®* (IBC)
- 2015, 2012, 2009 and 2006 *International Residential Code®* (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

- Weather protection
- Structural
- Types I, II, III, and IV (noncombustible) construction
- Fire-resistance-rated construction
- Thermal resistance

1.2 Evaluation to the following green standards:

2015, 2012 and 2008 ICC 700 *National Green Building Standard™* (ICC 700-2012 and ICC 700-2008)

Attributes verified:

See Section 3.1

2.0 USES

James Hardie fiber-cement panels, plank lap siding, and cladding shingles are used as exterior wall covering. The products comply with IBC Sections 1404.10 and IRC Section R703.10. The products may be used on exterior walls required to be of Type I, II, III or IV construction (IBC).

3.0 DESCRIPTION

3.1 General:

The exterior sidings are single-faced, cellulose fiber–reinforced cement (fiber-cement) products. Exterior sidings are identified as HardieShingle™ (New HardieShingle®)panels, HardiePlank™ (Cemplank®, Prevail™, and RFC®) lap siding, Artisan® Lap Siding, and HardieShingle™ (New HardieShingle®) individual shingles.

The products comply with ASTM C1186, as Grade II, Type A; have a flame-spread index of 0 and a smoke-developed index of 5 when tested in accordance with ASTM E84; and are classified as noncombustible when tested in accordance with ASTM E136. Thermal conductance (K) and resistance (R) values for the products are as shown in Table 2 of this report, based on testing in accordance with ASTM C177.

The attributes of the fiber-cement sidings have been verified as conforming to the provisions of (i) ICC 700-2012 Sections 602.1.6 and 11.602.1.6 for termite-resistant materials; and (ii) ICC 700-2008 Section 602.8 for termite-resistant materials. Note that decisions on compliance for those areas rest with the user of this report. The user is advised of the project-specific provisions that may be contingent upon meeting specific conditions, and the verification of those conditions is outside the scope of this report. These codes or standards often provide supplemental information as guidance.

3.2 Siding:

HardieShingle™ (New HardieShingle®) panels, HardiePlank™ (Cemplank®, Prevail™, and RFC®) lap siding, Artisan® Lap Siding, and HardieShingle™ (New HardieShingle®) individual shingles are supplied either unprimed or primed for subsequent application of a compatible primer and/or exterior-grade top coat. Nominal product dimensions are noted in Table 1.

The products are available in a variety of finish textures. HardieShingle™ panels are offered in three configurations: half-round, staggered-edge, and square-edge. New HardieShingle® individual shingles are offered in two configurations: staggered-edge and square-edge.

3.3 Fasteners:

Fastener type, size, spacing and installation method must be as shown in the tables of this report. Fasteners must be made from corrosion-resistant steel.

4.0 DESIGN AND INSTALLATION

4.1 Design:

Walls: The maximum basic wind speeds for positive or negative transverse load resistance of HardieShingle™ (New HardieShingle®) panels, HardiePlank™ (Cemplank®, Prevail™, and RFC®) lap siding, Artisan® Lap Siding, and HardieShingle™ (New HardieShingle®) individual shingles are presented in Tables 3 through 13.

4.2 Installation:

4.2.1 General: Installation must comply with this report, and a copy of this report must be available at all times on the jobsite during installation. All products may be cut to shape on-site by the score-and-snap method using a score-and-snap knife, a hand guillotine or a handsaw utilizing a carbide blade. A clear distance of 6 inches (152 mm) must be maintained between the siding and the earth. Unless otherwise noted in this report, the products must be installed in accordance with 2015 and 2012 IBC Section 1405.16; 2015 and 2012 IRC Section R703.10; 2009 IBC Sections 1405.16; ; 2009 IRC Section R703.10; 2006 IBC Sections 1405.15 and 1405.16; or 2006 IRC Section R703.10, as applicable.

4.2.2 HardieShingle™ (New HardieShingle®) Panels: When installation is on wood or metal framing members, with or without wood structural panel sheathing, a water-resistive barrier must be applied over the wood or metal framing members or wood structural panel sheathing in accordance with the applicable code. The panels must be fastened in accordance with the provisions of Table 4 of this report.

A $^1/_8$-inch (3.2 mm) gap must be left at locations where the siding butts against door and window trim and at internal or external corners; such gaps must be flashed in accordance with the applicable code, then caulked. Vertical joints must occur over framing members and must be sealed with caulking or covered with battens. Horizontal joints must be flashed with metal Z-flashing and occur over solid blocking or wood structural panel sheathing.

4.2.3 HardiePlank™ (Cemplank®, Prevail™, and RFC®) Lap Siding: When installation is on wood or metal framing members, with or without wood structural panel sheathing, the lap siding must be fastened either through the overlapping planks (face nailed) or through the top edge of single planks (blind nailed) in accordance with the provisions of Table 4 of this report. A water-resistive barrier must be applied over wood or metal framing members or wood structural panel sheathing in accordance with the applicable code. Lap siding installed over walls constructed of concrete masonry units complying with ASTM C90 must be applied in accordance with Tables 5 through 10. The lap siding requires the use of a starter strip to set the first course on the proper angle and to create a drip edge.

Vertical joints must occur over studs, except where the "off-stud splice device" is installed or where the planks are installed to wood structural panel sheathing complying with the applicable code, and must be staggered on subsequent courses. Where the "off-stud splice device" is installed, the splice device's bottom lip must be placed over the adjacent solid course of planks. The plank must then be fastened to the framing with corrosion-resistant fasteners. The abutting plank must be positioned and fastened into place ensuring that the lower edges of the two planks align. The metal device must be located centrally over the vertical joint.

Vertical joints between planks must be lightly butted or gapped and must be protected by one of the following methods: (a) sealed with caulking in accordance with the caulk manufacturer's published gapping requirements and caulking application instructions; or (b) covered with an H-section joint cover; or (c) located over a strip of non-perforated flashing complying with ASTM D226, Type I felt, or other approved flashing. Trim and corners must be installed and the siding must be finished in accordance with the manufacturer's application instructions. A $^1/_8$-inch (3.2 mm) gap must be left at locations where the siding butts against door and window trim and at internal or external corners; such gaps must be flashed in accordance with the applicable code, then caulked. Horizontal joints must be flashed with Z-flashing and occur over solid blocking or wood structural panel sheathing.

4.2.4 Artisan® Lap Siding: When installation is on wood or metal framing members, with or without wood structural panel sheathing, the lap siding must be fastened through the top edge of single planks (blind nailed) in accordance with the provisions of Table 4 of this report. A water-resistive barrier must be applied over wood or metal framing or wood structural panel sheathing in accordance with the applicable code. Lap siding installed over walls constructed of concrete masonry units complying with ASTM C90 must be applied in accordance with Tables 5 through 10. The lap siding requires the use of a starter strip to set the first course on the proper angle and to create a drip edge.

Vertical joints must be made off-stud by means of the tongue and groove joint. Tongue and groove joints may be located centrally between studs but no closer than 4 inches (102 mm) from the edge of a stud. Nails must not be placed within 2 inches (51 mm) of the tongue and groove at the end of the planks. Vertical joints must be staggered on subsequent courses. The plank must then be fastened to the framing with corrosion-resistant fasteners.

Vertical joints between planks must be lightly butted and must be located over a strip of non-perforated flashing complying with ASTM D226, Type I felt, or other approved flashing. Trim and corners must be installed and the siding must be finished in accordance with the manufacturer's application instructions. A $^1/_8$-inch (3.2 mm) gap must be left at the locations where the siding butts against door and window trim and at internal or external corners; such gaps must be flashed in accordance with the applicable code, then caulked. Horizontal joints must be flashed with Z-flashing and must occur over solid blocking or wood structural panel sheathing.

4.2.5 HardieShingle™ (New HardieShingle®) Individual Shingles: When installed on wood structural panel sheathing, the cladding shingles are fastened in accordance with the provisions of either Table 11, 12, or 13 of this report. A water-resistive barrier in accordance with the applicable code must be applied over the wood-based sheathing substrate to which the shingles are attached.

The individual shingles require the use of a starter strip to set the first course on the proper angle and to create a drip edge. The nominally $1^1/_4$-inch-wide-by-$^1/_4$-inch-thick starter strip and a minimum $8^1/_4$-inch-wide (210 mm) HardiePlank™ (Cemplank®, Prevail™, and RFC®) lap siding starter course are installed over the water-resistive barrier with the bottom of the starter strip and starter course even with the bottom of the bottom plate. Shingles are spaced a maximum of $^1/_4$ inch (6.4 mm) apart, leaving a minimum side lap of $1^1/_2$ inches (38 mm) between the joints of successive courses. Fasteners must be spaced a minimum of $^3/_4$ inch (19 mm) and a maximum of 1 inch

(25.4 mm) from shingle edges and must be positioned to be covered a nominal $1^1/_4$ inches by the succeeding shingle course; for 12-inch-wide (305 mm) shingles, the third nail (see Table 14) must be installed mid-span of the shingle. Nails must secure shingles but must not be over-driven. Trim and corners must be installed and the shingles must be finished in accordance with the manufacturer's application instructions. A $^1/_8$-inch (3.2 mm) gap must be left at locations where the shingle butts against door and window trim and at internal or external corners; such gaps must be flashed in accordance with the applicable code, then caulked. Horizontal joints must be flashed with Z-flashing.

4.3 Fire-resistance-rated Wall Assembly (HardiePlank™ Lap Siding):

The asymmetrical, load-bearing, one-hour fire-resistance-rated wall assembly must consist of nominally 2-by-4 wood studs spaced a maximum of 24 inches (610 mm) on center, with two top plates and a single bottom plate. One layer of $^5/_8$-inch-thick (15.9), Type X, gypsum wallboard complying with ASTM C36 or ASTM C1396, 48 inches (1219 mm) wide, must be applied vertically to the interior face of the studs and secured with minimum $1^3/_4$-inch-long (44 mm) cup-head gypsum wallboard nails, spaced 7 inches (178 mm) on center at board edges and intermediate framing members. All board joints must be backed by framing. The $^5/_8$-inch-thick (15.9 mm), Type X, gypsum wallboard joints and nail heads must be finished in accordance with ASTM C840 or GA216. The exterior face of the wall must be covered with one layer of $^1/_2$-inch-thick (12.7 mm), Type X, water-resistant core treated gypsum sheathing complying with ASTM C36 or ASTM C1396 and one layer of maximum 12-inch-wide (305 mm) HardiePlank™ (Cemplank®, Prevail™, and RFC®) lap siding lapped a minimum of $1^1/_4$ inches (32 mm). The $^1/_2$-inch-thick (12.7 mm), Type X, water-resistant core-treated gypsum sheathing must be applied vertically to the exterior side of the framing members with vertical edges staggered 24 inches (610 mm) from the joints on the opposite side. All board joints must be backed by framing. The $^1/_2$-inch-thick (12.7 mm), Type X, water-resistant core-treated gypsum sheathing must be fastened to the framing members with $1^3/_4$-inch-long (44 mm) roofing nails spaced 7 inches (178 mm) on center in the field and 4 inches (102 mm) on center along the perimeter of each board. The outer layer of $^5/_{16}$-inch-thick (7.5 mm), minimum 12-inch-wide (305 mm) HardiePlank™ (Cemplank®, Prevail™, and RFC®) lap siding must be applied over the $^1/_2$-inch-thick (12.7 mm), Type X, water-resistant core-treated gypsum sheathing by attaching $1^1/_2$-inch-wide (38 mm) HardiePlank™ (Cemplank®, Prevail™, and RFC®) starter strips through the gypsum sheathing into the bottom plate and 12-inch-wide (305 mm) HardiePlank™ (Cemplank®, Prevail™, and RFC®) lap siding applied horizontally with a minimum nominally $1^1/_4$-inch head lap, and fastening with a single 6d corrosion-resistant common nail driven through the lapped planks into each stud.

The axial load must be the lesser of the following, provided structural consideration for axial, flexural and bearing perpendicular-to-grain stresses is in accordance with ANSI/AWC NDS-2015 for the 2015 IBC and IRC; ANSI/AF&PA NDS-2010 for the 2012 IBC or IRC (-2005 for the 2009 and 2006 IBC or IRC):

1. Maximum 100 percent of full allowable axial compressive design load permitted for the wood species.
2. Maximum allowable wood axial stress of 0.78 F'_c, which must not exceed 0.78 F'_c at a slenderness ratio l_e/d of 33.

5.0 CONDITIONS OF USE

The HardieShingle™ (New HardieShingle®) panels, HardiePlank™ (Cemplank®, Prevail™, and RFC®) lap siding, Artisan® Lap Siding, and HardieShingle™ (New HardieShingle®) individual shingles described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 James Hardie® Building Products, Inc, products listed in this report must be installed in accordance with this report and the manufacturer's published installation instructions. In the event of a conflict between this report and the manufacturer's instructions, this report governs.

5.2 HardieShingle™ (New HardieShingle®) panels, HardiePlank™ (Cemplank®, Prevail™, and RFC®) lap siding, Artisan® Lap Siding, and HardieShingle™ (New HardieShingle®) individual shingles must be installed on exterior walls braced in accordance the applicable code.

5.3 Design wind speeds applied to James Hardie® sidings described in this report must be determined in accordance with the applicable code and must be less than those shown in the wind speed tables in this report.

5.4 The sidings must be installed over a code-complying water-resistive barrier and as noted in this report.

5.5 For use in fire-resistance-rated construction, installation must be in accordance with Section 4.3.

5.6 Flashing must be installed at all penetrations and terminations in accordance with the applicable code.

5.7 Under the 2015 or 2012 IBC, Section 1403.5, installation on exterior walls of buildings of Type I, II, III, and IV construction is limited to buildings that are not greater than 40 feet in height above grade plane and that feature a combustible water-resistive barrier.

5.8 The products are manufactured at the following locations, with quality control inspections by ICC-ES:

- Cleburne, Texas
- Peru, Illinois
- Plant City, Florida
- Pulaski, Virginia
- Sparks, Nevada
- Tacoma, Washington
- Waxahachie, Texas
- Fontana, California

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Fiber Cement Siding Used as Exterior Wall Siding (AC90), dated June 2012 (editorially revised September 2015).

7.0 IDENTIFICATION

Pallets of the JamesHardie® Building Products, Inc., HardieShingle™ (New HardieShingle®) panels, HardiePlank™ (Cemplank®, Prevail™, and RFC®) lap siding, Artisan® Lap Siding, and HardieShingle™ (New HardieShingle®) individual shingles must carry a label bearing the manufacturer's name and telephone number, the product name, the name of the inspection agency, ICC-ES, and the evaluation report number (ESR-2290).

TABLE 1—STANDARD NOMINAL PANEL, PLANK AND SHINGLE DIMENSIONS

PRODUCT	WIDTH (INCHES)	LENGTH	THICKNESSES (INCHES)
HardiePlank® lap siding	4, 5 1/4, 6, 6 1/4, 7 1/4, 7 1/2, 8, 8 1/4, 9 1/4, 9 1/2 & 12	12, 14 feet	5/16
Artisan® lap siding,	5 1/4, 7 1/4, 8 1/4	12, 14 feet	5/8
Cemplank® lap siding	5 1/4, 6, 6 1/4, 7 1/4, 7 1/2, 8, 8 1/4, 9 1/2 & 12	12, 14 feet	5/16
Prevail™ lap siding	5 1/4, 6, 6 1/4, 7 1/4, 7 1/2, 8, 8 1/4, 9 1/2 & 12	12, 14 feet	5/16
RFC® lap siding	6 1/4, 7 1/2, 8 1/4, 9 1/2 & 12	12, 14 feet	5/16
New HardieShingle® 5-inch exposure (square & staggered edge)	48	14 inches	1/4
New HardieShingle® 7-inch exposure (square & staggered edge)	48	15 1/4, 15 7/8 inches	1/4
HardieShingle™ panel (square & staggered edge)	48	16 inches	1/4
HardieShingle™ panel (half round)	48	16, 19 inches	1/4
New HardieShingle® individual shingles 5-inch exposure	3 1/2, 4 1/2, 5 1/2, 7, 8 3/4	14 inches	1/4
New HardieShingle® individual shingles 7-inch exposure	4 3/16, 5 1/2, 6 3/4, 7 1/4, 10,	15 1/4 inches	1/4
HardieShingle™ individual shingles	6, 8, & 12	18 inches	1/4

For **SI:** 1 inch = 25.4 mm, 1 ft = 305 mm.

TABLE 2—"K" and "R" VALUES FOR FIBER-CEMENT PRODUCTS

PRODUCT THICKNESS[3] (INCH)	THERMAL CONDUCTANCE[1] K_{EFF} = (BTU/HR-FT^2-°F)/INCH	THERMAL RESISTANCE[1] R = 1/K_{EFF}	ACTUAL THERMAL CONDUCTANCE[2] (K_{EFF})	ACTUAL THERMAL RESISTANCE[2] (R)
1/4	1.95	0.51	7.80	0.13
5/16	2.07	0.48	6.62	0.15

For **SI:** 1 inch = 25.4 mm, 1 Btu/h-ft^2-°F = 5.678 W/m^2-K.

[1]Based on 1 inch of panel thickness.
[2]Actual value for panel thickness shown.

TABLE 3—MAXIMUM BASIC WIND SPEED (3-second gust) (mph)

PRODUCT	THICK (IN.)	FASTENER TYPE	FASTENER SPACING (IN.)	FRAME TYPE[1]	STUD SPACING (IN.)	BLDG. HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[4,6,9]) EXPOSURE CATEGORY			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[7,8]) EXPOSURE CATEGORY		
							B	C	D	B	C	D
HardieShingle™ (New HardieShingle®) Panel (straight or half round installation)	1/4	0.083" shank 0.187" HD x 1 1/2" long ring shank nail[5]	13.75	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached to framing per code	0-15	126	85	-	163	110	-
						20	121	85	-	156	110	-
						40	105	85	-	136	110	-
						60	95	-	-	123	-	-
HardieShingle™ (New HardieShingle®) Panel (staggered installation)	1/4	0.083" shank 0.187" HD x 1 1/2" long ring shank nail[5]	13.75	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached to framing per code	0-15	105	85	-	136	110	-
						20	105	-	-	136	-	-
						40	95	-	-	123	-	-
						60	85	-	-	110	-	-
HardieShingle™ (New HardieShingle®) Panel	1/4	0.090" shank 0.215" HD x 1 1/2" long ring shank nail[5]	8	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached to framing per code	0-15	158	143	130	204	185	168
						20	158	139	127	204	179	164
						40	152	130	120	196	168	155
						60	143	124	115	185	160	148
HardieShingle™ (New HardieShingle®) Panel	1/4	0.090" shank 0.215" HD x 1 1/2" long ring shank nail[5]	6	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached to framing per code	0-15	172	156	142	222	201	183
						20	172	151	138	222	195	178
						40	165	141	130	213	182	168
						60	156	135	126	201	174	163
HardieShingle™ (New HardieShingle®) Panel	1/4	0.083" shank 0.187" HD x 1 1/2" long ring shank nail[2]	at each stud[3]	Nominal 2x4[1] or Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	168	137	116	217	177	150
						20	168	137	116	217	177	150
						40	168	126	105	217	163	136
						60	158	116	105	204	150	136
HardieShingle™ (New HardieShingle®) Panel	1/4	0.083" shank 0.187" HD x 1 1/2" long ring shank nail[2]	at each stud[3]	Nominal 2x4[1] or Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	147	105	85	190	136	110
						20	137	100	85	177	129	110
						40	126	95	-	163	123	-
						60	116	89	-	150	115	-

For **SI:** 1 foot = 305 mm, 1 inch = 25.4 mm, 1 mph – 0.44 m/s.

[1]Values are for species of wood having a specific gravity of 0.40 or greater.
[2]For 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.
[3]For 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.
[4]Wind speed design assumptions per Section 6.5, Method 2, of ASCE 7-05: I = 1.0, K_{zt} = 1, K_d = 0.85, GC_{pi} = 0.18., GC_p=-1.4.
[5]For application to wood framing or wood-based sheathing, the minimum fastener penetration must be 1 inch into framing or the sheathing thickness as applicable.
[6]V_{asd} = nominal design wind speed.
[7]V_{ult} = ultimate design wind speed.
[8]Wind speed design assumptions per Section 30.4, of ASCE 7-10: Kzt = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[9]2015 and 2012 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd}=V_{ult}\sqrt{0.6}$

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3]

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12]) EXPOSURE CATEGORY			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11]) EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	4	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	16	0-15	168	168	147	217	217	190
							20	168	168	147	217	217	190
							40	168	158	137	217	204	177
							60	168	147	126	217	190	163
HardiePlank®	5/16	6	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	16	0-15	168	168	147	217	217	190
							20	168	168	147	217	217	190
							40	168	158	137	217	204	177
							60	168	147	126	217	190	163
HardiePlank®	5/16	6 1/4	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	16	0-15	168	168	147	217	217	190
							20	168	168	137	217	217	177
							40	168	158	137	217	204	177
							60	168	147	126	217	190	163
HardiePlank®	5/16	7 1/4 or 7 1/2	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	16	0-15	168	158	126	217	204	163
							20	168	147	126	217	190	163
							40	168	137	121	217	177	156
							60	168	126	116	217	163	150
HardiePlank®	5/16	8	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	16	0-15	168	147	126	217	190	163
							20	168	147	126	217	190	163
							40	168	137	116	217	177	150
							60	168	126	105	217	163	136
HardiePlank®	5/16	8 1/4	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	16	0-15	168	147	126	217	190	163
							20	168	147	116	217	190	150
							40	168	131	116	217	169	150
							60	158	126	105	204	163	136
HardiePlank®	5/16	9 1/4 or 9 1/2	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	16	0-15	168	137	116	217	177	150
							20	168	137	116	217	177	150
							40	158	126	105	204	163	136
							60	147	116	105	190	150	136
HardiePlank®	5/16	12	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	16	0-15	145	131	119	187	169	154
							20	145	127	116	187	164	150
							40	139	119	110	179	154	142
							60	131	114	106	169	147	137
HardiePlank®	5/16	4	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	24	0-15	160	137	116	207	177	150
							20	160	137	116	207	177	150
							40	154	121	105	199	156	136
							60	145	116	100	187	150	129
HardiePlank®	5/16	6	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	24	0-15	160	137	116	207	177	150
							20	160	137	116	207	177	150
							40	154	121	105	199	156	136
							60	145	116	100	187	150	129

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12]) EXPOSURE CATEGORY			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11]) EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	6 1/4	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	24	0-15	160	137	116	207	177	150
							20	160	126	110	207	163	142
							40	147	121	105	190	156	136
							60	137	116	95	177	150	123
HardiePlank®	5/16	7 1/4 or 7 1/2	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	24	0-15	160	116	100	207	150	129
							20	158	116	95	204	150	123
							40	137	105	89	177	136	115
							60	126	95	89	163	123	115
HardiePlank®	5/16	8	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	24	0-15	160	116	95	207	150	123
							20	158	116	95	204	150	123
							40	137	105	89	177	136	115
							60	126	95	85	163	123	110
HardiePlank®	5/16	8 1/4	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	24	0-15	158	116	95	204	150	123
							20	158	105	95	204	136	123
							40	137	100	85	177	129	110
							60	126	95	85	163	123	110
HardiePlank®	5/16	9 1/4 or 9 1/2	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	24	0-15	147	105	85	190	136	110
							20	147	105	85	190	136	110
							40	126	95	85	163	123	110
							60	126	95	-	163	123	-
HardiePlank®	5/16	12	ET&F pin 0.100" ´ 1.5" x 0.25" HD	Face Nailed	Min. No. 20 ga. x 3.62" ´ 1.375" Metal C-stud	24	0-15	106	96	87	137	124	112
							20	106	93	85	137	120	110
							40	102	87	-	132	112	-
							60	96	-	-	124	-	-
HardiePlank®	5/16	4	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	16	0-15	158	126	105	204	163	136
							20	158	121	100	204	156	129
							40	147	110	95	190	142	123
							60	137	105	95	177	136	123
HardiePlank®	5/16	6	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	16	0-15	158	126	105	204	163	136
							20	158	121	100	204	156	129
							40	147	110	95	190	142	123
							60	137	105	95	177	136	123
HardiePlank®	5/16	6 1/4	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	16	0-15	168	116	100	217	150	129
							20	158	116	95	204	150	123
							40	137	105	89	177	136	115
							60	126	100	85	163	129	110
HardiePlank®	5/16	7 1/4 or 7 1/2	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	16	0-15	147	105	85	190	136	110
							20	137	100	85	177	129	110
							40	121	89	-	156	115	-
							60	110	85	-	142	110	-

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12]) EXPOSURE CATEGORY			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11]) EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	8	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	16	0-15	137	95	85	177	123	110
							20	126	95	-	163	123	-
							40	116	85	-	150	110	-
							60	105	85	-	136	110	-
HardiePlank®	5/16	8 1/4	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	16	0-15	137	95	-	177	123	-
							20	126	95	-	163	123	-
							40	116	85	-	150	110	-
							60	105	-	-	136	-	-
HardiePlank®	5/16	4	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	24	0-15	158	110	95	204	142	123
							20	147	105	85	190	136	110
							40	126	95	85	163	123	110
							60	121	95	-	156	123	-
HardiePlank®	5/16	6	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	24	0-15	158	110	95	204	142	123
							20	147	105	85	190	136	110
							40	126	95	85	163	123	110
							60	121	95	-	156	123	-
HardiePlank®	5/16	6 1/4	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	24	0-15	147	105	85	190	136	110
							20	137	100	85	177	129	110
							40	126	95	-	163	123	-
							60	105	89	-	136	115	-
HardiePlank®	5/16	7 1/4 or 7 1/2	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	24	0-15	137	95	85	177	123	110
							20	126	95	-	163	123	-
							40	116	85	-	150	110	-
							60	105	85	-	136	110	-
HardiePlank®	5/16	8	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	24	0-15	126	85	-	163	110	-
							20	116	85	-	150	110	-
							40	100	-	-	129	-	-
							60	95	-	-	123	-	-
HardiePlank®	5/16	8 1/4	ET&F pin 0.100" ´ 1.5" x 0.313" HD	Blind Nailed	Min. No. 20 ga. x 3.62" ´ 1.375"	24	0-15	116	-	-	150	-	-
							20	105	-	-	136	-	-
							40	95	-	-	123	-	-
							60	85	-	-	110	-	-
HardiePlank®	5/16	5.25	6d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	170	170	158	219	219	204
							20	170	169	154	219	218	199
							40	170	157	145	219	203	187
							60	170	151	140	219	194	180
HardiePlank®	5/16	6.25	6d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	170	155	141	219	200	182
							20	170	151	138	219	195	178
							40	164	140	130	218	181	167
							60	155	135	125	207	174	161

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12]) EXPOSURE CATEGORY			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11]) EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	7.25	6d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	156	142	129	202	183	166
							20	156	138	126	202	178	162
							40	150	128	118	193	165	153
							60	142	123	114	183	159	147
HardiePlank®	5/16	7.5	6d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	153	139	126	197	179	163
							20	153	135	123	197	174	159
							40	147	125	116	190	162	150
							60	139	120	112	179	155	144
HardiePlank®	5/16	8	6d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	147	134	121	190	172	157
							20	147	130	118	190	168	153
							40	141	121	111	182	156	144
							60	134	116	108	172	150	139
HardiePlank®	5/16	8.25	6d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	145	131	119	187	169	154
							20	145	127	116	187	165	150
							40	139	119	110	179	153	141
							60	131	114	106	169	147	136
HardiePlank®	5/16	9.25	6d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	135	123	111	175	158	144
							20	135	119	109	175	154	141
							40	130	111	102	168	143	132
							60	123	106	99	158	137	128
HardiePlank®	5/16	9.5	6d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	133	121	110	172	156	142
							20	133	117	107	172	152	138
							40	128	109	101	165	141	130
							60	121	105	97	156	135	126
HardiePlank®	5/16	5.25	6d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	156	142	129	201	183	166
							20	156	138	126	201	178	162
							40	150	128	118	193	165	153
							60	142	123	114	183	159	147
HardiePlank®	5/16	6.25	6d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	140	127	115	180	164	149
							20	140	123	112	180	159	145
							40	134	115	106	173	148	137
							60	127	110	102	164	142	132
HardiePlank®	5/16	7.25	6d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	127	116	105	165	149	136
							20	127	112	103	165	145	132
							40	122	105	97	158	135	125
							60	116	100	93	149	130	120
HardiePlank®	5/16	7.5	6d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	125	113	103	161	146	133
							20	125	110	100	161	142	130
							40	120	102	95	155	132	122
							60	113	98	91	146	127	118

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd} [3,9,12])			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult} [10,11])		
								EXPOSURE CATEGORY			EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	8	6d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	120	109	99	155	141	128
							20	120	106	97	155	137	125
							40	115	99	91	149	127	117
							60	109	95	88	141	122	113
HardiePlank®	5/16	8.25	6d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	118	107	97	152	138	126
							20	118	104	95	152	134	123
							40	113	97	89	146	125	115
							60	107	93	86	138	120	111
HardiePlank®	5/16	9.25	6d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	110	100	91	142	129	117
							20	110	97	89	142	126	115
							40	106	91	-	137	117	-
							60	100	87	-	129	112	-
HardiePlank®	5/16	9.5	6d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	109	99	90	140	127	116
							20	109	96	87	140	124	113
							40	104	89	-	135	115	-
							60	99	85	-	127	110	-
HardiePlank®	5/16	5.25	8d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	170	170	170	219	219	219
							20	170	170	170	219	219	219
							40	170	170	170	219	219	219
							60	170	170	170	219	219	219
HardiePlank®	5/16	6.25	8d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	170	170	170	219	219	219
							20	170	170	170	219	219	219
							40	170	170	161	219	219	208
							60	170	168	156	219	217	201
HardiePlank®	5/16	7.25	8d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	170	170	160	219	219	207
							20	170	170	157	219	219	203
							40	170	160	147	219	207	190
							60	170	153	142	219	198	183
HardiePlank®	5/16	7.5	8d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	170	170	157	219	219	203
							20	170	168	154	219	217	199
							40	170	157	145	219	203	187
							60	170	150	139	219	194	179
HardiePlank®	5/16	8	8d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	170	167	151	219	216	195
							20	170	162	148	219	209	191
							40	170	151	139	219	195	179
							60	167	144	134	216	186	173
HardiePlank®	5/16	8.25	8d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	170	164	149	219	212	192
							20	170	159	145	219	205	187
							40	170	148	137	219	191	177
							60	164	142	132	212	183	170

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12]) EXPOSURE CATEGORY			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11]) EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	9.25	8d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	169	153	139	218	198	179
							20	169	149	136	218	192	176
							40	162	138	128	209	178	165
							60	153	133	123	198	172	159
HardiePlank®	5/16	9.5	8d common	Face Nailed Through plank overlap	2X4 wood	16	0-15	166	151	137	214	195	177
							20	166	146	134	214	188	173
							40	159	136	126	205	176	163
							60	151	131	121	195	169	156
HardiePlank®	5/16	5.25	8d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	160	145	132	207	187	170
							20	160	141	129	207	182	167
							40	154	131	121	199	169	156
							60	145	126	117	187	163	151
HardiePlank®	5/16	6.25	8d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	160	145	132	207	187	170
							20	160	141	129	207	182	167
							40	154	131	121	199	169	156
							60	145	126	117	187	163	151
HardiePlank®	5/16	7.25	8d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	159	144	131	205	186	169
							20	159	140	128	205	181	165
							40	153	130	120	198	168	155
							60	144	125	116	186	161	150
HardiePlank®	5/16	7.5	8d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	156	141	128	201	182	165
							20	156	137	125	201	177	161
							40	150	128	118	194	165	152
							60	141	123	114	182	159	147
HardiePlank®	5/16	8	8d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	150	136	123	194	176	159
							20	150	132	121	194	170	156
							40	144	123	113	186	159	146
							60	136	118	109	176	152	141
HardiePlank®	5/16	8.25	8d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	147	134	121	190	173	156
							20	147	130	118	190	168	152
							40	141	121	111	182	156	143
							60	134	116	108	173	150	139
HardiePlank®	5/16	9.25	8d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	138	125	113	178	161	146
							20	138	121	111	178	156	143
							40	132	113	104	170	146	134
							60	125	108	101	161	139	130
HardiePlank®	5/16	9.5	8d common	Face Nailed Through plank overlap	2X4 wood	24	0-15	136	123	112	176	159	145
							20	136	120	109	176	155	141
							40	130	111	103	168	143	133
							60	123	107	99	159	138	128

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12])			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11])		
								EXPOSURE CATEGORY			EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	4	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" ' 1.375" Metal C-stud	16	0-15	168	168	137	217	217	177
							20	168	158	137	217	204	177
							40	168	147	131	217	190	169
							60	168	137	126	217	177	163
HardiePlank®	5/16	6	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" ' 1.375"	16	0-15	168	168	137	217	217	177
							20	168	158	137	217	204	177
							40	168	147	131	217	190	169
							60	168	137	126	217	177	163
HardiePlank®	5/16	6 1/4	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" ' 1.375"	16	0-15	168	168	137	217	217	177
							20	168	158	137	217	204	177
							40	168	147	126	217	190	163
							60	168	137	121	217	177	156
HardiePlank®	5/16	7 1/4 or 7 1/2	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" ' 1.375"	16	0-15	168	147	126	217	190	163
							20	168	147	121	217	190	156
							40	168	131	116	217	169	150
							60	168	126	105	217	163	136
HardiePlank®	5/16	8	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" ' 1.375"	16	0-15	168	147	126	217	190	163
							20	168	147	121	217	190	156
							40	168	131	116	217	169	150
							60	158	126	105	204	163	136
HardiePlank®	5/16	8 1/4	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" ' 1.375"	16	0-15	168	147	126	217	190	163
							20	168	137	121	217	177	156
							40	168	131	116	217	169	150
							60	158	121	105	204	156	136
HardiePlank®	5/16	9 1/4 or 9 1/2	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" ' 1.375"	16	0-15	168	137	116	217	177	150
							20	168	131	110	217	169	142
							40	158	121	105	204	156	136
							60	147	116	100	190	150	129
HardiePlank®	5/16	12	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" ' 1.375"	16	0-15	168	126	105	217	163	136
							20	168	121	95	217	156	123
							40	137	110	95	177	142	123
							60	137	105	89	177	136	115
HardiePlank®	5/16	4	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" ' 1.375"	24	0-15	160	137	116	207	177	150
							20	160	137	116	207	177	150
							40	155	126	110	200	163	142
							60	145	116	105	187	150	136
HardiePlank®	5/16	6	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" ' 1.375"	24	0-15	160	137	116	207	177	150
							20	160	137	116	207	177	150
							40	154	126	110	199	163	142
							60	145	116	105	187	150	136

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12]) EXPOSURE CATEGORY			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11]) EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	6 1/4	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" x 1.375"	24	0-15	160	145	116	207	187	150
							20	160	141	110	207	182	142
							40	154	131	105	199	169	136
							60	145	126	100	187	163	129
HardiePlank®	5/16	7 1/4 or 7 1/2	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" x 1.375"	24	0-15	160	126	105	207	163	136
							20	160	121	105	207	156	136
							40	147	110	95	190	142	123
							60	137	105	95	177	136	123
HardiePlank®	5/16	8	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" x 1.375"	24	0-15	160	126	105	207	163	136
							20	160	121	100	207	156	129
							40	147	110	95	190	142	123
							60	137	105	89	177	136	115
HardiePlank®	5/16	8 1/4	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" x 1.375"	24	0-15	160	121	105	207	156	136
							20	160	121	100	207	156	129
							40	137	105	95	177	136	123
							60	131	100	89	169	129	115
HardiePlank®	5/16	9 1/4 or 9 1/2	No. 8-18, 1-5/8" long x 0.323" HD ribbed bugle head screw	Face Screwed	Min. No. 20 ga. x 3.62" x 1.375"	24	0-15	158	116	95	204	150	123
							20	158	110	95	204	142	123
							40	137	100	89	177	129	115
							60	126	95	85	163	123	110
HardiePlank®	5/16	5.25	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	163	148	134	210	191	173
							20	163	143	131	210	185	169
							40	156	133	123	202	172	159
							60	148	128	119	191	165	154
HardiePlank®	5/16	6.25	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	146	132	120	188	171	155
							20	146	128	117	188	166	151
							40	140	119	110	180	154	142
							60	132	115	106	171	148	137
HardiePlank®	5/16	7.25	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	133	121	110	172	156	142
							20	133	117	107	172	151	138
							40	128	109	101	165	141	130
							60	121	105	97	156	135	126
HardiePlank®	5/16	7.5	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	130	118	107	168	152	138
							20	130	115	105	168	148	135
							40	125	107	99	161	138	127
							60	118	102	95	152	132	123
HardiePlank®	5/16	8	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	125	114	103	162	147	133
							20	125	110	101	162	143	130
							40	120	103	95	155	133	122
							60	114	99	91	147	127	118

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12])			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11])		
								EXPOSURE CATEGORY			EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	8.25	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	123	112	101	159	144	131
							20	123	108	99	159	140	128
							40	118	101	93	152	130	120
							60	112	97	90	144	125	116
HardiePlank®	5/16	9.25	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	115	104	95	148	135	122
							20	115	101	93	148	131	119
							40	110	94	87	142	122	112
							60	104	90	-	135	117	-
HardiePlank®	5/16	9.5	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	113	103	93	146	133	121
							20	113	100	91	146	129	118
							40	109	93	86	140	120	111
							60	103	89	-	133	115	107
HardiePlank®	5/16	5.25	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	133	121	110	172	156	141
							20	133	117	107	172	151	138
							40	128	109	101	165	141	130
							60	121	105	97	156	135	125
HardiePlank®	5/16	6.25	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	119	108	98	153	139	126
							20	119	105	96	153	135	124
							40	114	98	90	147	126	116
							60	108	94	87	139	121	112
HardiePlank®	5/16	7.25	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	108	98	89	140	127	115
							20	108	96	87	140	123	113
							40	104	89	-	134	115	-
							60	98	85	-	127	110	-
HardiePlank®	5/16	7.5	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	106	96	88	137	125	113
							20	106	94	86	137	121	110
							40	102	87	-	132	113	-
							60	96	-	-	125	108	-
HardiePlank®	5/16	8	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	102	93	-	132	120	-
							20	102	90	-	132	116	-
							40	98	-	-	127	-	-
							60	93	-	-	120	-	-
HardiePlank®	5/16	8.25	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	100	91	-	129	117	-
							20	100	88	-	129	114	-
							40	96	-	-	124	-	-
							60	91	-	-	117	-	-
HardiePlank®	5/16	9.25	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	94	85	-	121	110	-
							20	94	-	-	121	107	-
							40	90	-	-	116	-	-
							60	85	-	-	110	-	-

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12]) EXPOSURE CATEGORY			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11]) EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	9.5	No. 11 gauge, 1.25" long roofing nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	93	-	-	119	-	-
							20	93	-	-	119	-	-
							40	89	-	-	115	-	-
							60	-	-	-	-	-	-
HardiePlank®	5/16	5.25	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	170	170	166	219	219	214
							20	170	170	162	219	219	209
							40	170	165	153	219	213	197
							60	170	158	147	219	205	190
HardiePlank®	5/16	6.25	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	170	164	149	219	211	192
							20	170	159	145	219	205	187
							40	170	148	137	219	191	176
							60	164	142	132	211	183	170
HardiePlank®	5/16	7.25	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	164	149	136	212	193	175
							20	164	145	132	212	187	171
							40	158	135	125	204	174	161
							60	149	129	120	193	167	155
HardiePlank®	5/16	7.5	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	161	146	133	208	189	172
							20	161	142	130	208	183	167
							40	155	132	122	200	171	158
							60	146	127	118	189	164	152
HardiePlank®	5/16	8	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	155	141	128	200	182	165
							20	155	137	125	200	176	161
							40	149	127	117	192	164	152
							60	141	122	113	182	157	146
HardiePlank®	5/16	8.25	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	152	138	126	197	178	162
							20	152	134	123	197	173	158
							40	146	125	115	189	161	149
							60	138	120	111	178	155	144
HardiePlank®	5/16	9.25	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	142	129	117	184	167	152
							20	142	126	115	184	162	148
							40	137	117	108	176	151	139
							60	129	112	104	167	145	134
HardiePlank®	5/16	9.5	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	16	0-15	140	127	116	181	164	149
							20	140	124	113	181	160	146
							40	135	115	106	174	148	137
							60	127	110	102	164	142	132
HardiePlank®	5/16	5.25	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	164	149	136	212	193	175
							20	164	145	132	212	187	171
							40	158	135	125	204	147	161
							60	149	129	120	193	167	155

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12]) EXPOSURE CATEGORY			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11]) EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	6.25	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	147	134	121	190	172	157
							20	147	130	118	190	168	153
							40	141	121	111	182	156	144
							60	134	116	108	172	150	139
HardiePlank®	5/16	7.25	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	134	122	111	173	157	143
							20	134	118	108	173	153	140
							40	129	110	102	166	142	131
							60	122	106	98	157	136	127
HardiePlank®	5/16	7.5	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	132	119	109	170	154	140
							20	132	116	106	170	150	137
							40	126	108	100	163	139	129
							60	119	104	96	154	134	124
HardiePlank®	5/16	8	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	127	115	104	163	148	135
							20	127	112	102	163	144	132
							40	122	104	96	157	134	124
							60	115	100	93	148	129	120
HardiePlank®	5/16	8.25	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	124	113	102	161	146	132
							20	124	110	100	161	142	129
							40	119	102	94	154	132	122
							60	113	98	91	146	126	117
HardiePlank®	5/16	9.25	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	116	106	96	150	136	124
							20	116	103	94	150	133	121
							40	112	95	88	144	123	114
							60	106	92	85	136	118	110
HardiePlank®	5/16	9.5	No. 11 guage, 1.75 inch long roofing Nail	Blind Nailed Through top edge of plank	2 x 4	24	0-15	114	104	94	148	134	122
							20	114	101	92	148	130	119
							40	110	94	87	142	121	112
							60	104	90	-	134	116	-
HardiePlank®	5/16	4	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	168	168	137	217	217	177
							20	168	158	137	217	204	177
							40	168	147	126	217	190	163
							60	168	137	121	217	177	156
HardiePlank®	5/16	6	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	168	168	137	217	217	177
							20	168	158	137	217	204	177
							40	168	147	126	217	190	163
							60	168	137	121	217	177	156
HardiePlank®	5/16	6 1/4	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	168	158	142	217	204	183
							20	168	158	131	217	204	169
							40	168	147	126	217	190	163
							60	158	137	121	204	177	156

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12])			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11])		
								EXPOSURE CATEGORY			EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	7 1/4 or 7 1/2	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	168	152	126	217	196	163
							20	168	147	116	217	190	150
							40	168	137	116	217	177	150
							60	158	126	110	204	163	142
HardiePlank®	5/16	8	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	168	147	116	217	190	150
							20	168	137	116	217	177	150
							40	158	126	105	204	163	136
							60	147	121	105	190	156	136
HardiePlank®	5/16	8 1/4	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	168	142	121	217	183	156
							20	168	137	116	217	177	150
							40	158	126	110	204	163	142
							60	147	116	105	190	150	136
HardiePlank®	5/16	9 1/4 or 9 1/2	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	16	0-15	168	137	116	217	177	150
							20	168	126	105	217	163	136
							40	158	116	105	204	150	136
							60	137	110	100	177	142	129
HardiePlank®	5/16	4	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	160	137	116	207	177	150
							20	160	131	110	207	169	142
							40	152	121	105	196	156	136
							60	145	116	100	187	150	129
HardiePlank®	5/16	6	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	160	137	116	207	177	150
							20	160	131	110	207	169	142
							40	152	121	105	196	156	136
							60	145	116	100	187	150	129
HardiePlank®	5/16	6 1/4	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	160	137	116	207	177	150
							20	160	131	105	207	169	136
							40	154	121	105	199	156	136
							60	145	116	100	187	150	129
HardiePlank®	5/16	7 1/4 or 7 1/2	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	160	126	105	207	163	136
							20	160	116	100	207	150	129
							40	147	105	89	190	136	115
							60	137	89	89	177	115	115
HardiePlank®	5/16	8	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	160	121	100	207	156	129
							20	158	116	100	204	150	129
							40	142	105	89	183	136	115
							60	131	100	89	169	129	115
HardiePlank®	5/16	8 1/4	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	160	121	100	207	156	129
							20	158	116	100	204	150	129
							40	142	105	89	183	136	115
							60	126	100	89	163	129	115

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12])			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11])		
								EXPOSURE CATEGORY			EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	9 1/4 or 9 1/2	No. 8 x 1 1/4 in. long x 0.375 in. HD ribbed waferhead screws	Blind Screwed	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	158	116	95	204	150	123
							20	147	105	89	190	136	115
							40	131	95	85	169	123	110
							60	121	89	85	156	115	110
HardiePlank®	5/16	5.25	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	16	0-15	141	128	116	182	165	150
							20	141	124	114	182	160	147
							40	135	116	107	174	150	138
							60	128	111	103	165	143	133
HardiePlank®	5/16	6.25	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	16	0-15	126	114	104	163	147	134
							20	126	111	102	163	143	132
							40	121	103	96	156	133	124
							60	114	99	92	147	128	119
HardiePlank®	5/16	7.25	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	16	0-15	115	104	95	148	134	123
							20	115	102	93	148	132	120
							40	110	94	87	142	121	112
							60	104	91	-	134	117	-
HardiePlank®	5/16	7.5	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	16	0-15	113	102	93	146	132	120
							20	113	99	91	146	128	117
							40	108	93	85	139	120	110
							60	102	89	-	132	115	-
HardiePlank®	5/16	8	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	16	0-15	109	99	90	141	128	116
							20	109	96	87	141	124	112
							40	104	89	-	134	115	-
							60	99	85	-	128	110	-
HardiePlank®	5/16	8.25	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	16	0-15	107	97	88	138	125	114
							20	107	94	86	138	121	111
							40	102	88	-	132	114	-
							60	97	-	-	125	-	-
HardiePlank®	5/16	9.25	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	16	0-15	100	90	-	129	116	-
							20	100	88	-	129	114	-
							40	96	-	-	124	-	-
							60	90	-	-	116	-	-
HardiePlank®	5/16	9.5	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	16	0-15	98	89	-	127	115	-
							20	98	87	-	127	112	-
							40	94	-	-	121	-	-
							60	89	-	-	115	-	-

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12])			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11])		
								EXPOSURE CATEGORY			EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	5.25	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	24	0-15	115	104	95	148	134	123
							20	115	102	93	148	132	120
							40	110	94	87	142	121	112
							60	104	91	-	134	117	-
HardiePlank®	5/16	6.25	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	24	0-15	103	93	-	133	120	-
							20	103	91	-	133	117	-
							40	99	-	-	128	-	-
							60	93	-	-	120	-	-
HardiePlank®	5/16	7.25	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	24	0-15	94	85	-	121	110	-
							20	94	-	-	121	-	-
							40	90	-	-	116	-	-
							60	85	-	-	110	-	-
HardiePlank®	5/16	7.5	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	24	0-15	92	-	-	119	-	-
							20	92	-	-	119	-	-
							40	88	-	-	114	-	-
							60	-	-	-	-	-	-
HardiePlank®	5/16	8	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	24	0-15	89	-	-	115	-	-
							20	89	-	-	115	-	-
							40	85	-	-	110	-	-
							60	-	-	-	-	-	-
HardiePlank®	5/16	8.25	6d-2 inch long X 0.093 inch shank X 0.222 inch head diameter siding nail	Blind Nailed Through top edge of plank	2 x 4 wood	24	0-15	87	-	-	112	-	-
							20	87	-	-	112	-	-
							40	-	-	-	-	-	-
							60	-	-	-	-	-	-
HardiePlank®	5/16	≤8.25	0.092" shank X 0.222" HD X 2.5" long galv. nail	face nailed through plank overlap	2 x 4 wood	16	0-15	153	138	126	198	178	163
							20	153	135	123	198	174	159
							40	146	125	116	188	161	150
							60	138	120	112	178	155	145
HardiePlank®	5/16	9.25	0.092" shank X 0.222" HD X 2.5" long galv. nail	face nailed through plank overlap	2 x 4 wood	16	0-15	143	130	118	185	168	152
							20	143	126	115	185	163	148
							40	137	117	108	177	151	139
							60	130	113	105	168	146	136

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12])			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11])		
								EXPOSURE CATEGORY			EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	9.5	0.092" shank X 0.222" HD X 2.5" long galv. nail	face nailed through plank overlap	2 x 4 wood	16	0-15	141	128	116	182	165	150
							20	141	124	113	182	160	146
							40	135	116	107	174	150	138
							60	128	111	103	165	143	133
HardiePlank®	5/16	12	0.092" shank X 0.222" HD X 2.5" long galv. nail	face nailed through plank overlap	2 x 4 wood	16	0-15	123	112	101	159	144	131
							20	123	108	99	159	140	128
							40	118	101	934	152	130	120
							60	112	97	90	144	125	116
HardiePlank®	5/16	≤8.25	8d ring shank box nail, 0.113" shank X 0.260" HD X 2.375" L	face nailed through plank overlap	2 x 4 wood[6]	16	0-15	203	184	167	262	238	216
							20	203	179	163	262	231	210
							40	194	166	153	250	214	198
							60	184	159	148	238	205	191
HardiePlank®	5/16	≤8.25	8d ring shank box nail, 0.113" shank X 0.260" HD X 2.375" L	face nailed through plank overlap	2 x 4 wood[6]	24	0-15	166	151	137	214	195	177
							20	166	146	134	214	188	173
							40	159	136	126	205	176	163
							60	151	131	121	195	169	156
HardiePlank®	5/16	≤8.25	0.092" shank X 0.222" HD X 2" long galv. nail	face nailed through plank overlap	2 x 4 wood[6]	16	0-15	151	137	125	195	177	161
							20	151	133	122	195	172	158
							40	145	124	115	187	160	148
							60	137	119	111	177	154	143
HardiePlank®	5/16	≤8.25	0.092" shank X 0.222" HD X 2.5" long galv. nail	face nailed through plank overlap	2 x 4 wood[6]	16	0-15	187	170	154	241	219	199
							20	187	165	151	241	213	195
							40	180	154	142	232	199	183
							60	170	147	137	219	190	177
HardiePlank®	5/16	5.25	No. 8 X 1-5/8" long X 0.375" HD ribbed wafer head screw[5]	blind screw through top edge of plank at 12 in. on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	0-15	207	188	171	267	243	221
							20	207	183	167	267	236	216
							40	199	170	157	257	219	203
							60	188	163	152	243	210	196
HardiePlank®	5/16	6.25	No. 8 X 1-5/8" long X 0.375" HD ribbed wafer head screw[5]	blind screw through top edge of plank at 12 in. on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	0-15	183	166	151	236	214	195
							20	183	161	147	236	208	190
							40	176	150	139	227	194	179
							60	166	144	134	214	186	173
HardiePlank®	5/16	7.25	No. 8 X 1-5/8" long X 0.375" HD ribbed wafer head screw[5]	blind screw through top edge of plank at 12 in. on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	0-15	165	150	136	213	194	176
							20	165	145	133	213	187	172
							40	158	135	125	204	174	161
							60	150	130	120	194	168	155
HardiePlank®	5/16	8.25	No. 8 X 1-5/8" long X 0.375" HD ribbed wafer head screw[5]	blind screw through top edge of plank at 12 in. on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	0-15	150	136	124	194	176	160
							20	150	133	121	194	172	156
							40	144	123	114	186	159	147
							60	136	118	110	176	152	142

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[3,9,12])			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult}[10,11])		
								EXPOSURE CATEGORY			EXPOSURE CATEGORY		
	THICK.	WIDTH						B	C	D	B	C	D
HardiePlank®	5/16	9.25	No. 8 X 1-5/8" long X 0.375" HD ribbed wafer head screw[5]	blind screw through top edge of plank at 12 in. on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	0-15	139	126	114	179	163	147
							20	139	122	112	179	158	145
							40	133	114	105	172	147	136
							60	126	109	101	163	141	130
HardiePlank®	5/16	≤8.25	0.090" shank X 0.215" HD X 1.5" long ring shank nail[5]	blind nail through top edge of plank at 8 in. on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	0-15	145	132	120	187	170	155
							20	145	128	117	187	165	151
							40	139	119	110	179	154	142
							60	132	114	106	170	147	137
HardiePlank®	5/16	≤8.25	0.090" shank X 0.215" HD X 1.5" long ring shank nail[5]	blind nail through top edge of plank at 6 in. on center	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	0-15	166	150	137	214	194	177
							20	166	146	133	214	188	172
							40	159	136	125	205	176	161
							60	150	130	121	194	168	156
HardiePlank®	5/16	< 9 1/2	0.091" shank, 0.221" HD, 1.5" long ring shank nail[5]	Face Nailed through the overlap at 12" o.c.	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	0-15	100	91	-	129	117	-
							20	100	88	-	129	114	-
							40	96	-	-	124	-	-
							60	91	-	-	117	-	-
Artisan® Lap	5/8	5.25	0.092" shank X 0.225" HD X 2.25" long galv. Nail	blind nail through top edge of plank	2X4 Wood[7]	16	0-15	184	167	152	238	216	196
							20	184	162	148	238	209	191
							40	177	151	140	229	195	181
							60	167	145	135	216	187	174
Artisan® Lap	5/8	7.25	0.092" shank X 0.225" HD X 2.25" long galv. Nail	blind nail through top edge of plank	2X4 Wood[7]	16	0-15	135	122	111	174	158	143
							20	135	119	108	174	154	139
							40	129	111	102	167	143	132
							60	122	106	98	158	137	127
Artisan® Lap	5/8	8.25	0.092" shank X 0.225" HD X 2.25" long galv. Nail	blind nail through top edge of plank	2X4 Wood[7]	16	0-15	117	106	96	151	137	124
							20	117	103	94	151	133	121
							40	112	96	88	145	124	114
							60	106	92	85	137	119	110
Artisan® Lap	5/8	5.25	0.092" shank X 0.225" HD X 2.25" long galv. nail	blind nail through top edge of plank	2X4 Wood[7]	24	0-15	132	119	109	170	154	141
							20	132	116	106	170	150	137
							40	126	108	100	163	139	129
							60	119	104	96	154	134	124
Artisan® Lap	5/8	7.25	0.092" shank X 0.225" HD X 2.25" long galv. nail	blind nail through top edge of plank	2X4 Wood[7]	24	0-15	99	90	-	128	116	-
							20	99	87	-	128	112	-
							40	95	-	-	123	-	-
							60	90	-	-	116	-	-
Artisan® Lap	5/8	8.25	0.092" shank X 0.225" HD X 2.25" long galv. nail	blind nail through top edge of plank	2X4 Wood[7]	24	0-15	88	-	-	114	-	-
							20	88	-	-	114	-	-
							40	-	-	-	-	-	-
							60	-	-	-	-	-	-

TABLE 4—MAXIMUM BASIC WIND SPEED (mph)[3] (Continued)

PRODUCT	PRODUCT DIMENSION (IN.)		FASTENER TYPE[4]	FASTENING METHOD[2]	FRAME TYPE[1,8]	STUD SPACING (IN.)	BUILDING HEIGHT (FT.)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd} [3,9,12])			2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult} [10,11])		
	THICK.	WIDTH						EXPOSURE CATEGORY			EXPOSURE CATEGORY		
								B	C	D	B	C	D
Artisan® Lap	5/8	5.25	No. 8 X 1-5/8" long X 0.323" HD ribbed bugle head screw	blind screw through top edge of plank	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	181	164	149	234	212	192
							20	181	159	146	234	205	188
							40	174	148	137	225	191	177
							60	164	142	132	212	183	170
Artisan® Lap	5/8	7.25	No. 8 X 1-5/8" long X 0.323" HD ribbed bugle head screw	blind screw through top edge of plank	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	157	142	129	203	183	167
							20	157	138	126	203	178	163
							40	150	128	119	194	165	154
							60	142	123	114	183	159	147
Artisan® Lap	5/8	8.25	No. 8 X 1-5/8" long X 0.323" HD ribbed bugle head screw	blind screw through top edge of plank	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	149	135	123	192	174	159
							20	149	131	120	192	169	155
							40	143	122	113	185	158	146
							60	135	117	109	174	151	141
Artisan® Lap	5/8	5.25	No. 8 X 1-5/8" long X 0.323" HD ribbed bugle head screw	blind screw through top edge of plank	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	180	163	148	232	210	191
							20	180	158	145	232	204	187
							40	172	147	136	222	190	176
							60	163	141	131	210	182	169
Artisan® Lap	5/8	7.25	No. 8 X 1-5/8" long X 0.323" HD ribbed bugle head screw	blind screw through top edge of plank	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	144	130	118	186	168	152
							20	144	127	116	186	164	150
							40	138	118	109	178	152	141
							60	130	113	105	168	146	136
Artisan® Lap	5/8	8.25	No. 8 X 1-5/8" long X 0.323" HD ribbed bugle head screw	blind screw through top edge of plank	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	132	119	108	170	154	139
							20	132	116	106	170	150	137
							40	126	108	100	163	139	129
							60	119	104	96	154	134	124

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 mph = 0.44 m/s.

[1]Values are for species of wood having a specific gravity of 0.42 or greater, unless otherwise noted.
[2]Face = Fastened through the overlapping plank. Blind = Fastened through the top edge of single plank.
[3]Wind speed design assumptions per Section 30.4, Method 2, of ASCE 7-10: I = 1.0, Kzt = 1, Kd = 0.85, GC_{pi} = 0.18, GC_p = -1.4.
[4]ET&F pin fasteners have knurled shanks
[5]Fastener length shall be sufficient to penetrate back side of the minimum 7/16" WSP sheathing by at least ¼" for nails or 3 full threads for screws.
[6]Values are for species of wood having a specific gravity of 0.50 or greater
[7]Values are for species of wood having a specific gravity of 0.40 or greater
[8]Metal studs must be minimum Fy = 33 ksi.
[9]V_{asd} = nominal design wind speed.
[10]V_{ult} = ultimate design wind speed.
[11]Wind speed design assumptions per Section 30.4, of ASCE 7-10: Kzt = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[12]2015 and 2012 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd}=V_{ult}\sqrt{0.6}$

TABLE 5—(V_{asd} 100 MPH; V_{ult} 129 MPH)[3]
ALLOWABLE FASTENER SPACING (IN.)
JAMES HARDIE LAP SIDING FASTENED TO ASTM C90 CONCRETE MASONRY UNIT WALL[1,2,,4,5]

Building Height (feet)	≤6 1/2-inch wide			7 1/4- & 7 1/2-inch wide			8- & 8 1/4-inch wide			9 1/4- & 9 1/2-inch wide		
	Exposure			Exposure			Exposure			Exposure		
	B	C	D	B	C	D	B	C	D	B	C	D
0-15	24	24	24	24	24	24	24	24	21	24	23	19
20	24	24	24	24	24	23	24	24	20	24	21	18
30	24	24	24	24	24	21	24	22	19	24	20	17
40	24	24	23	24	24	20	24	21	18	24	19	16
50	24	24	22	24	22	19	24	20	17	24	18	15
60	24	24	22	24	22	19	24	19	17	23	17	15

For **SI:** 1 inch = 25.4 mm, 1 foot = 305 mm, 1 mph = 0.44 m/s.

[1]HardiePlank® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-125, head diameter. = 0.30 in., shank diameter. = 0.144 in., length = 1.25-in. long), Max System block Nail (CP-C 832 W7-ICC, head diameter. = 0.30 in., shank diameter. = 0.145 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.).
[2]Artisan® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-150, head diameter. = 0.30 in., shank diameter. = 0.145 in., length = 1.5-in. long), Max System block Nail (CP-C 838 W7-ICC, head diameter. = 0.30 in., shank diameter. = 0.145 in., length = 1.5 in.), Aerosmith SurePin block Nail (head diameter = 0.30 in., shank diameter = 0.144 in., length = 1.5 in.), or Jaaco Nail Pro (NP145S head diameter = 0.30 in., shank diameter = 0.145 in., length = 1.5 in.).[3] Maximum nominal design wind speed (V_{asd}) shall be 100 mph. Maximum ultimate design wind speed (V_{ult}) shall be 129 mph.
[4]Interpolation of spacing to address building height and other plank widths is permitted.
[5]The lap conceals the fasteners of the previous course (Blind Nailed).

TABLE 6—(V_{asd} 110 MPH; V_{ult} 142 MPH)[3]
ALLOWABLE FASTENER SPACING (IN.)
JAMES HARDIE LAP SIDING FASTENED TO ASTM C90 CONCRETE MASONRY UNIT WALL[1,2,4,5]

Building Height (feet)	≤6 1/2-inch wide			7 1/4- & 7 1/2-inch wide			8- & 8 1/4-inch wide			9 1/4- & 9 1/2-inch wide		
	Exposure			Exposure			Exposure			Exposure		
	B	C	D	B	C	D	B	C	D	B	C	D
0-15	24	24	22	24	24	19	24	21	17	23	19	15
20	24	24	21	24	22	18	24	20	16	23	18	15
30	24	24	20	24	20	17	24	18	15	23	16	14
40	24	22	19	24	19	16	24	17	15	21	15	13
50	24	21	18	24	18	16	22	16	14	20	14	12
60	24	20	18	23	18	15	21	16	14	19	14	12

For **SI:** 1 inch = 25.4 mm, 1 foot = 305 mm, 1 mph = 0.44 m/s.

[1]HardiePlank® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-125, head diameter. = 0.30 in., shank diameter. = 0.144 in., length = 1.25-in. long), Max System block Nail (CP-C 832 W7-ICC, head diameter. = 0.30 in., shank diameter. = 0.145 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.).
[2]Artisan® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-150, head diameter. = 0.30 in., shank diameter. = 0.145 in., length = 1.5-in. long), Max System block Nail (CP-C 838 W7-ICC, head diameter. = 0.30 in., shank diameter. = 0.145 in., length = 1.5 in.), Aerosmith SurePin block Nail (head diameter = 0.30 in., shank diameter = 0.144 in., length = 1.5 in.), or Jaaco Nail Pro (NP145S head diameter = 0.30 in., shank diameter = 0.145 in., length = 1.5 in.).
[3]Maximum nominal design wind speed (V_{asd}) shall be 110 mph Maximum ultimate design wind speed (V_{ult}) shall be 142 mph.
[4]Interpolation to address building height and other plank widths is permitted.
[5]The lap conceals the fasteners of the previous course (Blind Nailed).

TABLE 7—(V_{asd} 120 MPH; V_{ult} 155 MPH)[3]
ALLOWABLE FASTENER SPACING (IN.)
JAMES HARDIE LAP SIDING FASTENED TO ASTM C90 CONCRETE MASONRY UNIT WALL[1,3,4]

Building Height (feet)	≤6 1/2-inch wide			7 1/4- & 7 1/2-inch wide			8- & 8 1/4-inch wide			9 1/4- & 9 1/2-inch wide		
	Exposure			Exposure			Exposure			Exposure		
	B	C	D	B	C	D	B	C	D	B	C	D
0-15	24	23	19	24	20	17	21	18	15	19	16	13
20	24	22	18	24	19	16	21	17	14	19	15	12
30	24	20	17	24	17	15	21	15	13	19	14	12
40	24	19	16	22	16	14	20	14	12	18	13	11
50	24	18	16	21	16	13	18	14	12	17	12	11
60	23	17	15	20	15	13	18	13	11	16	12	10

For **SI:** 1 inch = 25.4 mm, 1 foot = 305 mm, 1 mph = 0.44 m/s.

[1]HardiePlank® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-125, head diameter. = 0.30 in., shank diameter. = 0.144 in., length = 1.25-in. long), 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.).
[2]Artisan® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-150, head diameter. = 0.30 in., shank diameter. = 0.145 in., length = 1.5-in. long), Max System block Nail (CP-C 838 W7-ICC, head diameter. = 0.30 in., shank diameter. = 0.145 in., length = 1.5 in.), Aerosmith SurePin block Nail (head diameter = 0.30 in., shank diameter = 0.144 in., length = 1.5 in.), or Jaaco Nail Pro (NP145S head diameter = 0.30 in., shank diameter = 0.145 in., length = 1.5 in.). [3]Maximum nominal design wind speed (V_{asd}) shall be 120 mph. Maximum ultimate design wind speed (V_{ult}) shall be 155 mph.
[4]Interpolation to address building height and other plank widths is permitted.
[5]The lap conceals the fasteners of the previous course (Blind Nailed).

TABLE 8—(V_{asd} 130 MPH; V_{ult} 168 MPH)[3]
ALLOWABLE FASTENER SPACING (IN.)
JAMES HARDIE LAP SIDING FASTENED TO ASTM C90 CONCRETE MASONRY UNIT WALL[1,2,4,5]

Building Height (feet)	≤6 1/2-inch wide			7 1/4- & 7 1/2-inch wide			8- & 8 1/4-inch wide			9 1/4- & 9 1/2-inch wide		
	Exposure			Exposure			Exposure			Exposure		
	B	C	D	B	C	D	B	C	D	B	C	D
0-15	24	20	16	21	17	14	18	15	12	16	14	11
20	24	19	15	21	16	13	18	14	12	16	13	11
30	24	17	14	21	15	12	18	13	11	16	12	10
40	22	16	14	19	14	12	17	12	11	15	11	9
50	21	15	13	18	13	11	16	12	10	14	11	9
60	20	15	13	17	13	11	15	11	10	13	10	9

For **SI:** 1 inch = 25.4 mm, 1 foot = 305 mm, 1 mph = 0.44 m/s.

[1]HardiePlank® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-125, head dia. = 0.30 in., shank dia. = 0.144 in., length = 1.25-in. long), Max System block Nail (CP-C 832 W7-ICC, head diameter. = 0.30 in., shank diameter. = 0.145 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.).
[2]Artisan® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-150, head diameter. = 0.30 in., shank diameter. = 0.145 in., length = 1.5-in. long), Max System block Nail (CP-C 838 W7-ICC, head diameter. = 0.30 in., shank diameter. = 0.145 in., length = 1.5 in.), Aerosmith SurePin block Nail (head diameter = 0.30 in., shank diameter = 0.144 in., length = 1.5 in.), or Jaaco Nail Pro (NP145S head diameter = 0.30 in., shank diameter = 0.145 in., length = 1.5 in.).
[3]Maximum nominal design wind speed shall be 130 mph. Maximum ultimate design wind speed (V_{ult}) shall be 168 mph.
[4]Interpolation to address building height and other plank widths is permitted.
[5]The lap conceals the fasteners of the previous course (Blind Nailed).

TABLE 9—(V_{asd} 140 MPH; V_{ult} 181 MPH)[3]
ALLOWABLE FASTENER SPACING (IN.)
JAMES HARDIE LAP SIDING FASTENED TO ASTM C90 CONCRETE MASONRY UNIT WALL[1,2,4,5]

Building Height (feet)	≤6 1/2-inch wide			7 1/4- & 7 1/2-inch wide			8- & 8 1/4-inch wide			9 1/4- & 9 1/2-inch wide		
	Exposure			Exposure			Exposure			Exposure		
	B	C	D	B	C	D	B	C	D	B	C	D
0-15	21	17	14	18	15	12	16	13	11	14	12	10
20	21	16	13	18	14	12	16	12	10	14	11	9
30	21	15	12	18	13	11	16	11	10	14	10	9
40	19	14	12	16	12	10	15	11	9	13	9	8
50	18	13	11	15	11	10	14	10	9	12	9	8
60	17	13	11	15	11	10	13	10	9	12	9	8

For **SI:** 1 inch = 25.4 mm, 1 foot = 305 mm, 1 mph = 0.44 m/s.

[1]HardiePlank® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-125, head diameter. = 0.30 in., shank diameter. = 0.144 in., length = 1.25-in. long), 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.).
[2]Artisan® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-150, head diameter. = 0.30 in., shank diameter. = 0.145 in., length = 1.5-in. long), Max System block Nail (CP-C 838 W7-ICC, head diameter. = 0.30 in., shank diameter. = 0.145 in., length = 1.5 in.), Aerosmith SurePin block Nail (head diameter = 0.30 in., shank diameter = 0.144 in., length = 1.5 in.), or Jaaco Nail Pro (NP145S head diameter = 0.30 in., shank diameter = 0.145 in., length = 1.5 in.).[3]Maximum nominal design wind speed shall be 140 mph. Maximum ultimate design wind speed (V_{ult}) shall be 181 mph.
[4]Interpolation to address building height and other plank widths is permitted.
[5]The lap conceals the fasteners of the previous course (Blind Nailed).

TABLE 10—(V_{asd} 150 MPH; V_{ult} 194 MPH)[3]
ALLOWABLE FASTENER SPACING (IN.)
JAMES HARDIE LAP SIDING FASTENED TO ASTM C90 CONCRETE MASONRY UNIT WALL[1,2,4,5]

Building Height (feet)	≤6 1/2-inch wide			7 1/4- & 7 1/2-inch wide			8- & 8 1/4-inch wide			9 1/4- & 9 1/2-inch wide		
	Exposure			Exposure			Exposure			Exposure		
	B	C	D	B	C	D	B	C	D	B	C	D
0-15	18	15	12	16	13	11	14	11	9	12	10	8
20	18	14	12	16	12	10	14	11	9	12	10	8
30	18	13	11	16	11	9	14	10	8	12	9	7
40	16	12	10	14	10	9	13	9	8	11	8	7
50	15	12	10	13	10	9	12	9	8	11	8	7
60	15	11	10	13	10	8	11	8	7	10	8	7

For **SI:** 1 inch = 25.4 mm, 1 foot = 305 mm, 1 mph = 0.44 m/s.

[1]HardiePlank® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-125, head diameter. = 0.30 in., shank diameter. = 0.144 in., length = 1.25-in. long), Max System block Nail (CP-C 832 W7-ICC, head dia. = 0.30 in., shank dia. = 0.145 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.).
[2]Artisan® Lap Siding fasteners must be ET&F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-150, head diameter. = 0.30 in., shank diameter. = 0.144 in., length = 1.5-in. long), Max System block Nail (CP-C 838 W7-ICC, head diameter. = 0.30 in., shank diameter. = 0.145 in., length = 1.5 in.), Aerosmith SurePin block Nail (head diameter = 0.30 in., shank diameter = 0.144 in., length = 1.5 in.), or Jaaco NailPro (NP145S head diameter = 0.30 in., shank diameter = 0.145 in., length = 1.5 in.).
[3]Maximum nominal design wind speed shall be 150 mph. Maximum ultimate design wind speed (V_{ult}) shall be 194 mph.
[4]Interpolation to address building height and other plank widths is permitted.
[5]The lap conceals the fasteners of the previous course (Blind Nailed).

TABLE 11—ALLOWABLE BASIC WIND SPEEDS (mph) FOR HARDIESHINGLE™ (NEW HARDIESHINGLE™) INDIVIDUAL SHINGLE EXTERIOR WALL FINISH

Sheathing Type	Siding Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd} [1,2,5])		2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult} [3,4])	
				Exposure Category		Exposure Category	
				B	C	B	C
Minimum $^{15}/_{32}$ inch thick plywood complying with DOC PS 1-95	Min. 0.121 in. shank x 0.371 in. HD x $1^{1}/_{4}$ in. long corrosion resistant roofing Nail	8 inch exposure 2 roofing nails 9 inches from butt edge	0-15	126	110	163	142
			20	126	105	163	136
			40	126	95	163	123
			60	126	89	163	115
		7 inch exposure 2 roofing nails 8 inches from butt edge	0-15	126	126	163	163
			20	126	121	163	156
			40	126	110	163	142
			60	126	105	163	136
		6 inch exposure 2 roofing nails 7 inches from butt edge	0-15	126	126	163	163
			20	126	126	163	163
			40	126	121	163	156
			60	126	116	163	150
		5 inch exposure 2 roofing nails 6 inches from butt edge	0-15	126	126	163	163
			20	126	126	163	163
			40	126	121	163	156
			60	126	116	163	150

For SI: 1 foot = 305 mm, 1 inch = 25.4 mm, 1 mph = 0.44 m/s.

[1]Wind speed design assumptions per Section 6.5, Method 2, of ASCE 7-05: I = 1.0, Kzt = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[2]V_{asd} = nominal design wind speed.
[3]V_{ult} = ultimate design wind speed.
[4]Wind speed design assumptions per Section 30.4, of ASCE 7-10: Kzt = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[5]2015 and 2012 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd} = V_{ult}\sqrt{0.6}$

TABLE 12—ALLOWABLE BASIC WIND SPEEDS (MPH) FOR HARDIESHINGLE™ (NEW HARDIESHINGLE™) INDIVIDUAL SHINGLE EXTERIOR WALL FINISH

Sheathing Type	Siding Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd} [1,2,5])		2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult} [3,4])	
				Exposure Category		Exposure Category	
				B	C	B	C
Minimum $^{7}/_{16}$ inch thick OSB sheathing complying with DOC-PS 2-95	Min. 0.091 in. shank x 0.221 in. HD x $1^{1}/_{2}$ in. long corrosion resistant siding Nail	8 inch exposure 2 siding nails 9 inches from butt edge	0-15	126	89	163	115
			20	126	89	163	115
			40	105	85	136	110
			60	100		129	
		7 inch exposure 2 siding nails 8 inches from butt edge	0-15	126	105	163	136
			20	126	100	163	129
			40	121	95	156	123
			60	116	89	150	115
		6 inch exposure 2 siding nails 7 inches from butt edge	0-15	126	116	163	150
			20	126	110	163	142
			40	126	105	163	136
			60	126	95	163	123
		5 inch exposure 2 siding nails 6 inches from butt edge	0-15	126	116	163	150
			20	126	110	163	142
			40	126	105	163	136
			60	126	95	163	123

For SI: 1 foot = 305 mm, 1 inch = 25.4 mm, 1 mph = 0.44 m/s.

[1]Wind speed design assumptions per Section 6.5, Method 2, of ASCE 7-05: I = 1.0, Kzt = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[2]V_{asd} = nominal design wind speed.
[3]V_{ult} = ultimate design wind speed.
[4]Wind speed design assumptions per Section 30.4, of ASCE 7-10: Kzt = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[5]2015 and 2012 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd} = V_{ult}\sqrt{0.6}$

TABLE 13—ALLOWABLE BASIC WIND SPEEDS (MPH) FOR HARDIESHINGLE™ (NEW HARDIESHINGLE™) INDIVIDUAL SHINGLE EXTERIOR WALL FINISH

Sheathing Type	Siding Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd} [1,2,5])		2015 IBC/IRC and 2012 IBC (Ultimate Design Wind Speed, V_{ult} [3,4])	
				Exposure Category		Exposure Category	
				B	C	B	C
Minimum $^{7}/_{16}$ inch thick OSB sheathing complying with DOC-PS 2-95	Min. 0.091 in. shank x 0.221 in. HD x $1^{1}/_{2}$ in. long corrosion resistant siding Nail	8 inch exposure, 3 nails for shingles greater than 8 in. wide, 2 nails for shingles 8 in. wide and narrower, 9 inches from drip edge	0-15	116	116	150	150
			20	110	110	142	142
			40	100	100	129	129
			60	95	95	123	123
		7 inch exposure 3 nails for shingles greater than 8 in. wide, 2 nails for shingles 8 in. wide and narrower, 8 inches from drip edge	0-15	126	126	163	163
			20	121	121	156	156
			40	110	110	142	142
			60	105	105	136	136
		6 inch exposure 3 nails for shingles greater than 8 in. wide, 2 nails for shingles 8 in. wide and narrower, 7 inches from drip edge	0-15	126	126	163	163
			20	126	126	163	163
			40	126	126	163	163
			60	121	121	156	156
		5 inch exposure 3 nails for shingles greater than 8 in. wide, 2 nails for shingles 8 in. wide and narrower, 6 inches from drip edge	0-15	126	126	163	163
			20	126	126	163	163
			40	126	126	163	163
			60	121	121	156	156

For SI: 1 foot = 305 mm, 1 inch = 25.4 mm, 1 mph = 0.44 m/s.

[1]Wind speed design assumptions per Section 6.5, Method 2, of ASCE 7-05: I = 1.0, Kzt = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[2]V_{asd} = nominal design wind speed.
[3]V_{ult} = ultimate design wind speed.
[4]Wind speed design assumptions per Section 30.4, of ASCE 7-10: Kzt = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[5]2015 and 2012 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd} = V_{ult}\sqrt{0.6}$

ICC-ES Evaluation Report

ESR-2290 CBC and CRC Supplement

Reissued March 2016
Revised November 2016
This report is subject to renewal March 2018.

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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
Section: 07 46 46—Fiber-Cement Siding

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EVALUATION SUBJECT:

HARDIESHINGLE™ (NEW HARDIESHINGLE®) PANELS, HARDIEPLANK™ LAP SIDING, ARTISAN® LAP SIDING, AND HARDIESHINGLE™ (NEW HARDIESHINGLE®) INDIVIDUAL SHINGLES

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that HARDIESHINGLE™ (NEW HARDIESHINGLE®) PANELS, HARDIEPLANK™ LAP SIDING, ARTISAN® LAP SIDING, AND HARDIESHINGLE™ (NEW HARDIESHINGLE®) INDIVIDUAL SHINGLES, recognized in ICC-ES master evaluation report ESR-2290, have also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2016 *California Building Code®* (CBC)
- 2016 *California Residential Code®* (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The HARDIESHINGLE™ (NEW HARDIESHINGLE®) PANELS, HARDIEPLANK™ LAP SIDING, ARTISAN® LAP SIDING, and HARDIESHINGLE™ (NEW HARDIESHINGLE®) INDIVIDUAL SHINGLES described in Sections 2.0 through 7.0 of the master evaluation report ESR-2290, comply with CBC Chapter 14, provided the design and installation are in accordance with the 2015 *International Building Code®* (IBC) provisions noted in the master report and the additional requirements of CBC Chapters 14, 17, and 17A, as applicable.

The use of the products in construction of noncombustible or ignition-resistant exterior walls of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Area requires installation in accordance with the 2015 *International Building Code®* (IBC) provisions of the master report and the additional requirements of CBC Sections 701A.3, 704A.3 and 707A.3, as applicable.

2.2 CRC:

The HARDIESHINGLE™ (NEW HARDIESHINGLE®) PANELS, HARDIEPLANK™ LAP SIDING, ARTISAN® LAP SIDING, and HARDIESHINGLE™ (NEW HARDIESHINGLE®) INDIVIDUAL SHINGLES, described in Sections 2.0 through 7.0 of the

master evaluation report ESR-2290, comply with CRC Chapter 7, provided the design and installation are in accordance with the 2015 *International Residential Code*® (IRC) provisions noted in the master report.

The use of the products in construction of noncombustible or ignition-resistant exterior walls of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Area requires installation in accordance with the 2015 *International Residential Code*® (IRC) provisions of the master report and the additional requirements of CRC Sections R337.1.3.1 and R337.7, as applicable.

The products recognized in this supplement have not been evaluated for compliance with the *International Wildland–Urban Interface Code*®.

This supplement expires concurrently with the master report reissued March 2016, and revised November 2016.

The building appears on the 1932 Sanborn map and is listed in the 1935 directory as the Kappa Sigma House. In 1944 however, the fraternity is listed on Old Fraternity Road and the building, then called King Hall, is occupied by the U. S. Navy V-12 Unit. However, with the close of the war, by 1946, the fraternity once again occupied the building.

207 W. Cameron Avenue – Sigma Phi Epsilon Fraternity House – c. 1983
Non-Contributing Building
Located at the southwest corner of West Cameron Avenue and Pittsboro Street, this two-and-a-half-story, clipped-side-gabled, Colonial Revival-style building is seven bays wide with a brick veneer, projecting brick watertable, and wide molded wood cornice. Vinyl windows throughout have flat-arch brick headers and brick sills. The entrance, centered on the façade, is a six-panel door with three-light-over-one-panel sidelights. The center three bays of the façade, including the entrance, are sheltered by a shallow, two-story, flat-roofed portico supported by Doric columns. There are six gabled dormers on the façade, each with a single vinyl window and fiber cement siding. A five-bay-wide, shed-roofed wall dormer on the rear (southeast) elevation has a brick veneer with fiber cement siding on the sides. The northeast and southwest elevations each feature a single entrance at the first-floor level, a single window each at the second-floor level and in the gable, and a barrel-roofed dormer with louvered vent. The building is accessed by a brick walkway and brick steps with metal railings. A low stone wall extends along the sidewalk and there is parking at the east side of the building.
A building in this location appears on the 1932 Sanborn map and the Sigma Phi Epsilon Fraternity is listed at this address as early as the 1950 directory. However, tax records date the current building, which has a slightly different footprint, to 1983.

209 W. Cameron Avenue
VACANT LOT

416 W. Cameron Avenue – Apartments – c. 1957
Contributing Building
The eight-unit apartment building is arranged as a U shape with the main side-gabled form facing West Cameron Avenue and rear gabled wings with a central courtyard at the rear (northwest). The building has a brick veneer, flush eaves and louvered vents in the gables, overhangs on the other elevations, and two interior brick chimneys. Vinyl windows throughout have brick sills and there are replacement four-light-over-four-panel doors on the southeast, southwest, and northeast elevations. The center bay of the seven-bay façade projects slightly under a shed roof with a paired window centered on the bay. On each side of this bay is an entrance flanked by paired windows and accessed by an uncovered stoop. The side elevations each feature a pair of windows in the gable of the main building and an entrance flanked by paired windows for each of the three units in the rear wings, resulting in a ten-bay-wide side elevation. Within the U shape, secondary entrances to each apartment are three-light-over-three-panel doors and are accessed by concrete steps with metal railings. County tax records date the building to 1957 and it appears as eight apartments in the 1957 city directory.

Orange County North Carolina

34805
207 W CAMERON AVE

JANUARY 1ST OWNER MAILING ADDRESS
SIG EP HOUSING OF NORTH CAROLINA
DELTA LLC
310 S ARTHUR ASHE BLVD
RICHMOND VA 23220-

Total Assessed Value
$1,350,200

KEY INFORMATION

Tax Year	**2023**		
Parcel ID	**9788364013**	Township	**7 - CHAPEL HILL**
Land Size	**0.32**	Land Units	**AC**
Rate Code	**22**		
District Codes	**CH CHSchoolDst., G0 County, G2 Chapel Hill**		
Property LUC	**Residential- Improved**		
Neighborhood	**L006 - 7W CAMERON**		
Legal Description	**S/W INT CAMERON AVE & PITTSBORO ST**		
Exempt Type	**-**		

APPRAISAL DETAILS

Total Land	**$167,300**
Ag Credit	**-**
Land	**$167,300**
Building	**$1,182,900**
Yard Items	**$0**
Market Total	**$1,350,200**
Total Assessed	**$1,350,200**

RESIDENTIAL

BUILDING (1)

Type	**Single Fam**	Total Value	**$1,182,900**	Finished Sq Ft	**9,583 sf**
Style	**-**	Quality	**Grade A+30**	Condition	**Average**
Year Built	**1983**	Exterior Walls	**Masonry**	Full Bath	**3**
Roof Cover	**Shingle**	Half Bath	**0**	HVAC	**Combo H&A**
Bedrooms	**40**			Garage Type	**-**
Fireplace Count	**0**				

MISC IMPROVEMENTS

IMPROVEMENT TYPE	UNITS/SQ FT	EST YEAR BUILT	APPRAISED VALUE
No items to display			

SALES

SALE DATE	SALE PRICE	DEED BOOK	DEED PAGE	INSTRUMENT TYPE	GRANTOR
11/04/2019	$0	6633	730		-
02/01/1973	$19,000	240	1005		-

YARD ITEMS

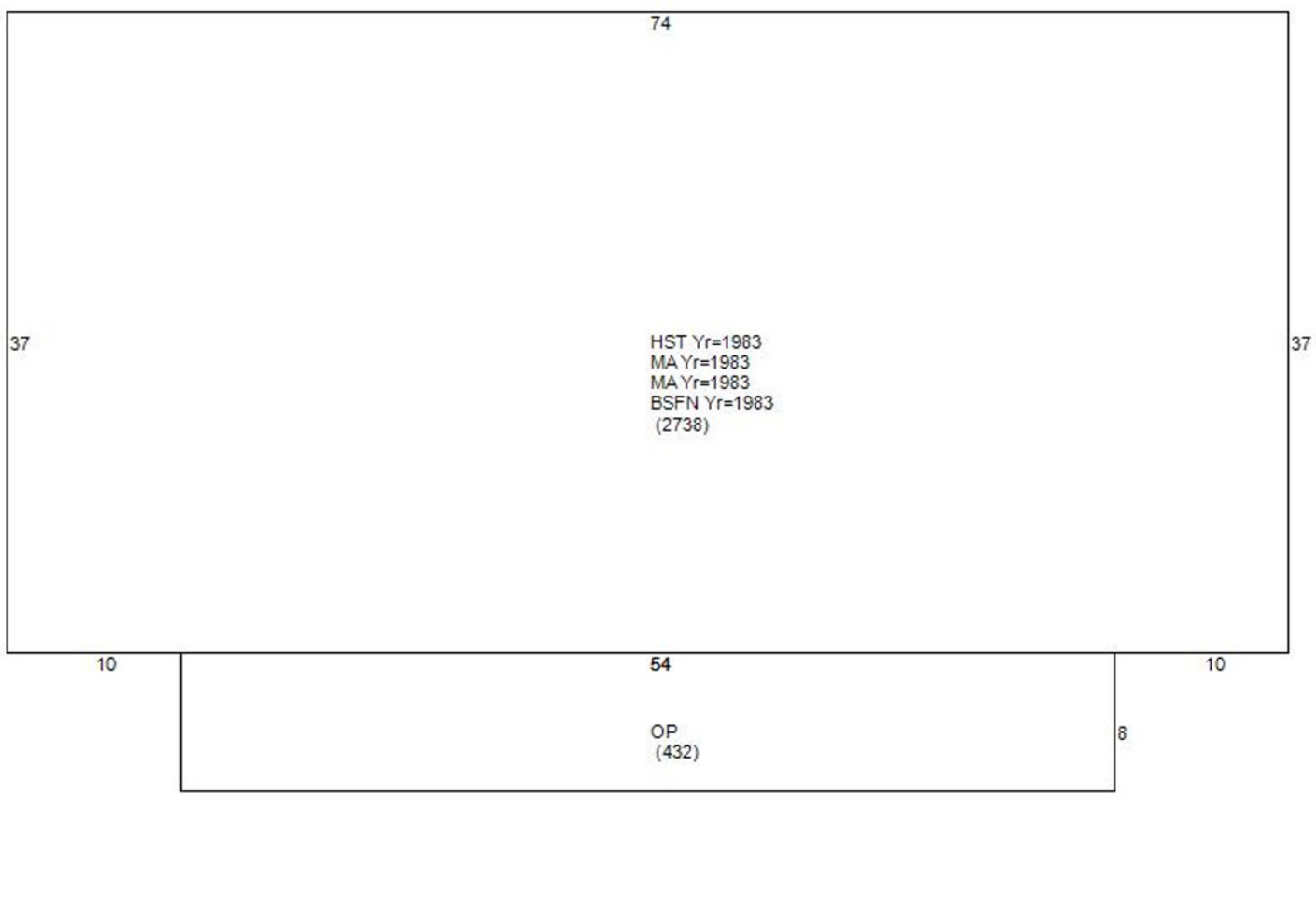
DESCRIPTION	TOTAL UNITS	YEAR BUILT	LENGTH	WIDTH	HEIGHT
No items to display					

LAND

UNIT / SOIL TYPE	DESCRIPTION	USE CODE	ACRES / LOTS	VALUE
SF	Square Ft	SITE	13939	$167,300

VALUE HISTORY

YEAR	TOTAL MARKET VALUE
2023	$1,350,200
2022	$1,350,200
2021	$1,350,200
2020	$1,255,800
2019	$1,255,800
2018	$1,255,800
2017	$1,255,800
2016	$1,198,112
2015	$1,198,112
2014	$1,198,112
2013	$1,198,112



Disclaimer

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