



FLORIDA AND INTERNATIONAL BUILDING CODE ENGINEERING EVALUATION REPORT

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Expiry Date | 2026-12-31
File No. | 0064-15-4-5985
For | Davinci Roofscapes, LLC
Address | 13890 W 101 St, Lenexa, KS 66215

Subject

DaVinci Slate, DaVinci Shake, Select Shake, Fancy Shake, Inspire Classic Slate, and Province Slate.

Evaluation Scope

This report is provided to assist registered design professionals and building officials in the United States for determining compliance to the performance objectives in the named building codes. The product(s) described herein have been evaluated to the:

2023 Florida Building Code (FBC); **2023 Florida Residential Code (FBC-R);**
2024 International Building Code (IBC); **2024 International Residential Code (IRC);**
2021 International Building Code (IBC); **2021 International Residential Code (IRC).**

CSI DIVISION: 07 00 00 THERMAL AND MOISTURE PROTECTION
SUBDIVISION: 07 32 26 Plastic Roof Tiles

FBC CATEGORY: Roofing
SUB-CATEGORY: Products Introduced as a Result of New Technology

CODE SECTIONS AND STANDARDS

2023 FBC Section	Description	Referenced Standard or Code Section ¹	Year
1504.3	Wind Resistance of Nonballasted Roofs	FBC Section 1609	-
1504.3.1	Wind Uplift Resistance (Non-HVHZ)	UL 580	2006
1504.6 ²	Durability, Physical Properties	ASTM G155	2013
1505	Fire Classification (Non-HVHZ)	ASTM E108	2017
1515.1.3	Performance Requirements (HVHZ)	TAS 301	1994
1516.1	Fire Classification (HVHZ)	ASTM E108	2017
1523.1.1	Testing (HVHZ)	TAS 110	2000
1523.6.5	Discontinuous Roofing Systems, Wind-driven Rain (HVHZ)	TAS 100	2023
1523.6.5.2.4.1 ²	Wind Uplift Resistance (HVHZ)	TAS 125	2003
2606.4	Burning Rate	ASTM D635	2014
2606.4	Self-Ignition Temperature	ASTM D1929	2016
2606.4	Smoke Density Rating	ASTM D2843	2016
2615.2	Weathering (HVHZ)	ASTM G155	2013
2615.2	Tensile Strength after Weathering (HVHZ)	ASTM D638	2003



2023 FBC-R Section	Description	Referenced Standard or Code Section ¹	Year
R902.1	Fire Classification	ASTM E108	2017
R904.3	Material Specifications and Physical Characteristics	-	-
R905.1	Roof Covering Application	FBC-R Table R301.2(2), R301.2(3)	-
R4402.1	Roof Assemblies and Rooftop Structures (HVHZ)	FBC Ch 15	-
R4412.1	Plastics (HVHZ)	FBC Ch 26	-

1. Only the applicable reference standards and code sections cited in the main body text are listed. (-) indicates that the main body text covers the full explanation of the objective.
2. Code section citing related roof covering performance requirements and referenced test standard.

COMPLIANCE STATEMENT

It is the opinion of Boca Engineering Co. that DaVinci Slate, DaVinci Shake, Fancy Shake, Inspire Classic Slate, Province Slate, and Select Shake Roof Shingles, when installed as described in this report, has demonstrated compliance with the listed sections of the 2023 Florida Building Code, 2023 Florida Residential Code, 2024 & 2021 International Building Code (IBC), and 2024 & 2021 International Residential Code (IRC). Design and performance information can be found in the *PRODUCT EVALUATION* section this report.

This report has been prepared and reviewed on behalf of Boca Engineering Co. by:

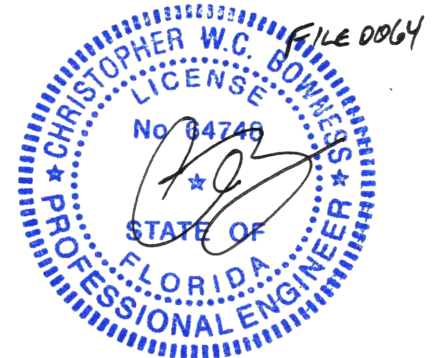
Christopher Bowness, P.Eng., P.E.

2025-03-06

Issue Date

2026-12-31

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EVALUATION REPORT TERMS

1. This report is a general evaluation of the building code section requirements as identified and applies only to the samples that were evaluated. It does not imply any endorsement or warranty, nor that the signatory Engineer is the Designer of Record of any construction project for which the information is used.
2. This Evaluation Report expires Dec. 31, 2026, open to renewal. Up to the renewal date, the report is valid until such time as the named product(s) changes, the Quality Assurance Agency changes, or provisions of the Code that relate to the product change.

CERTIFICATION OF INDEPENDENCE

1. Boca Engineering Co., its employees and shareholders, do not have, nor do they intend to or will acquire, a financial interest in any company manufacturing or distributing products that they evaluate.
2. Boca Engineering Co. is not owned, operated, or controlled by any company manufacturing or distributing products that they evaluate.



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PRODUCT EVALUATION

1.0 PRODUCT DESCRIPTION

Davinci roofing is manufactured by injection molding of a polymer blend in to individual slates and shakes, that serve as an exterior roof covering.

DAVINCI PRODUCT	DESCRIPTION
DaVinci Slate (DVSL)	Thickness of 1/8-inch at head to 1/2-inch at butt, 18-inch long by 6, 7, 9, 10 or 12-inch wide.
DaVinci Shake (DVSH)	Thickness of 1/4-inch at head to 1/2-inch to 5/8-inch at butt, 22-inch long by 4, 6, 7, 8, or 9-inch wide.
Select Shake (SSH)	Thickness of 1/4-inch at head to 5/8-inch at butt, 22-inch long by 8, or 10-inch wide.
Fancy Shake (FSH)	Thickness of 1/4-inch at head, 1/2-inch at butt, 18-inch long by 5, 7, or 12-inch wide. Fancy Shake is also available with a “Beaver Tail” leading edge; the “Beaver Tail” shakes are 5-inch wide.
Inspire Classic Slate (ICSL)	Thickness of 1/4-inch, 18-inch long by 12-inch wide.
Province Slate (PSL)	Thickness of 3/8-inch at head to 5/8-inch at butt, 11-½-inch long by 12-inch wide.

1.1 MATERIAL PROPERTIES

The material properties can be found in *APPENDIX A: MATERIAL PROPERTIES*.

2.0 INSTALLATION

The cladding systems as described in Section 1 shall be installed in accordance with the manufacturer’s installation instructions, the 2023 Florida Building Code, and are subject to the Limitations stated within this report.

3.0 CODE SECTIONS REVIEW

<u>2023 FBC Section</u>	<u>Description</u>
1504.3	Wind Resistance of Nonballasted Roofs DaVinci Roofing systems as covered in this report follow installation instructions in accordance with FBC Section 1507 and resist design wind load pressures in accordance with FBC Section 1609. See <i>APPENDICES C1 – C7</i> of this report.
1504.3.1	Wind Uplift Resistance (Non-HVHZ) DaVinci Slate, DaVinci Shake, Select Shake, Fancy Shake, Inspire Classic Slate, and Province Slate roofing assemblies have been tested in accordance with UL580 and TAS 125 to determine the allowable wind uplift pressure, applying a 2:1 margin of safety to tested results per FBC Section 1504.9. See wind pressure and wind speed tables in <i>APPENDICES C1 – C7</i> of this report.
1504.6	Physical Properties, Durability DaVinci Roofing products covered in this report demonstrate physical integrity over the course of 2000 hours of exposure to accelerated weathering tests conducted in accordance with ASTM G155.
1505	Fire Classification See <i>5.0 FIRE CLASSIFICATION</i> of this report.
1515.1.3	Performance Requirements (HVHZ)



2023 FBC
Section

Description

Testing labs as listed in 9.0 *REFERENCE TESTING AND EVALUATION DOCUMENTS* of this report are considered to comply with TAS 301 via accreditation by nationally recognized agencies.

1516.1

Fire Classification (HVHZ)

All roofing assemblies in HVHZ applications require classification to ASTM E108 Class A, B, or C, depending on building occupancy class. Information on DaVinci roofing classified assemblies is in Section 5.0 *FIRE CLASSIFICATION* of this report.

1523.1.1

Testing (HVHZ)

DaVinci Roofing systems covered in this report for HVHZ applications have been tested in compliance with TAS 110.

1523.6.5

Discontinuous Roofing Systems, Wind Driven Rain (HVHZ)

DaVinci Roofing systems covered in this report for HVHZ applications have been tested in compliance with TAS 100 for wind-driven water infiltration resistance.

1523.6.5.2.4.1

Wind Uplift Resistance (HVHZ)

DaVinci Roofing systems covered in this report for HVHZ applications have been tested in accordance with TAS 125 to determine the allowable wind uplift pressure, applying a 2:1 margin of safety to tested results per Section 1523.4. See wind pressure and wind speed tables in *APPENDICES C1 – C7* of this report.

2606.4

Burning Rate

DaVinci Roofing products covered in this report have been tested to ASTM D635 and qualify as a Class CC2.

2606.4

Self-Ignition Temperature

DaVinci Roofing products covered in this report have been tested to ASTM D1929 and have self-ignition temperatures greater than 650°F.

2606.4

Smoke Density

DaVinci Roofing products covered in this report have been tested to ASTM D2843 and have a smoke density rating less than 75.

2615.2

Weathering (HVHZ)

DaVinci Roofing products covered in this report have been tested to 4500 hours of accelerated xenon arc weathering exposure to ASTM G155.

2615.2

Tensile Strength after Weathering (HVHZ)

After 4500 hours of accelerated weathering exposure, DaVinci Roofing materials tested to ASTM D638 loss of tensile strength yield does not exceed 10%.



**2023 FBC
Section**

Description

**2023 FBC-R
Section**

Description

R902.1

Fire Classification

Same as this report commentary to FBC 1505.

R904.3

Material Specifications and Physical Characteristics

See *APPENDIX A: MATERIAL PROPERTIES*.

R905.1

Roof Covering Application

Allowable wind pressure values published in this report may be used with Tables R301.2(2) and R301.2(3) for roofs using an effective wind area of 10 square feet.

R4402.1

Roof Assemblies and Rooftop Structures (HVHZ)

DaVinci Roofing systems as covered in this report comply with HVHZ applications as prescribed in FBC Chapter 15.

R4412.1

Plastics (HVHZ)

DaVinci Roofing systems as covered in this report comply with HVHZ applications as prescribed in FBC Chapter 26.

4.0 LIMITATIONS

1. This Evaluation is for the base code requirements of the building system as addressed in this report. In some building applications, additional performance objectives may be required by the Code which must be addressed in the building design for those specific cases.
2. Design calculations, drawings, and special inspections are to be furnished for building projects by registered professionals as required by the respective jurisdictional authorities and Codes.
3. The installation details for each roof assembly evaluated for determining the maximum design wind uplift pressure are described in *APPENDICES C1 – C7* and are limited to those prescribed conditions.
4. Materials used as components in the roof assembly shall comply with the FBC, and where necessary possess the required product approval certification and labelling.
5. The minimum roof slope in all cases is 3:12.
6. DaVinci roofing slates and shakes are for installation and fastening into wood-based solid sheathing, in accordance with this report.
7. Building framing and roof sheathing must be designed and installed in accordance with the Code for capability of supporting the imposed loads, including but not limited to positive and negative wind loads.
8. The allowable negative wind pressures for roofing shown in *APPENDICES C1 – C7* must not exceed the design negative wind pressures determined in accordance with Chapter 16 of the FBC or Section R301.2.1.1 of the FBC-R.
9. The scope of evaluation does not include wind pressure due to tornado loads. For buildings prone to tornado loads, the Allowable Pressure (ASD) values listed in *APPENDICES C1 – C7* may be used by a licensed design professional to calculate ultimate wind speed, in accordance with ASCE7-22 Ch. 32 design methodology.



5.0 FIRE CLASSIFICATION

Summary of fire performance classifications found by testing to code referenced standards:

ASTM D635: Burning Rate: 0.6 in/min

ASTM D1929: Self-Ignition Temperature: 747 °F

ASTM D2843: Smoke Density: 8%

Where roof assembly fire classification of Class A, B, or C is required, Westlake DaVinci Roofscapes' listed assemblies by QAI Laboratories may be found at <https://qai.org/directory/davinci-roofscapes-llc/> and by Intertek at https://bpdirectory.intertek.com/pages/DLP_Search.aspx and shall be verified for each installation by the authority having jurisdiction.

6.0 QUALITY ASSURANCE ENTITY

The products evaluated in this report are surveyed at the approved manufacturing locations with third-party quality assurance inspections and product certification labelling by QAI Laboratories, Inc and Intertek.

7.0 MANUFACTURING PLANTS

The manufacturing plants of Davinci Roofing covered in this evaluation report are located in Lenexa, KS.

8.0 LABELING

Labeling shall be in accordance with the requirements of the FBC, IBC, and the Accredited Quality Assurance Agency.

9.0 REFERENCE TESTING AND EVALUATION DOCUMENTS

Entity	Entity Accreditation ¹	Standards	Report No.	Issue Date	Product Name
PRI	IAS TL 189	ASTM D635	MMLL-010-02-03	2018-05-18	Inspire Classic Slate
Intertek	IAS TL274	ASTM D635	104011548-004 RO	2019-10-16	All, except Inspire Classic
PRI	FBC TST5878	ASTM D638	DRM-156-02-01	2015-12-02	All, except Inspire Classic
PRI	IAS TL 189	ASTM D638	MML-010-02-02	2018-11-05	Inspire Classic Slate
PRI	IAS TL 189	ASTM D1929	MMLL-010-02-02	2018-03-20	Inspire Classic Slate
Intertek	IAS TL274	ASTM D1929	104011548-003 RO	2019-10-15	All, except Inspire Classic
PRI	FBC TST5878	ASTM D2843	DRM-054-02-01	2015-11-16	All, except Inspire Classic
PRI	IAS TL 189	ASTM D2843	MMLL-010-02-03	2018-05-18	Inspire Classic Slate
PRI	IAS TL 189	ASTM G155	MML-010-02-02	2018-11-05	Inspire Classic Slate
Intertek	IAS TL274	ASTM G155	104011548-001	2019-08-21	All, except Inspire Classic
PRI	IAS TL 189	UL 580, TAS 125	MMLL-011-02-01	2018-05-14	Inspire Classic Slate
Intertek	IAS TL-274	UL 580, TAS 125	104793286COQ-002	2022-06-02	Province Slate
Intertek	IAS TL-274	TAS 125	105797320COQ-002	2024-11-19	All
Intertek	IAS AA-647	Fire Classification	Spec ID: 73566	2025-03-06	Inspire Classic Slate
QAI	FBC CER3916	Fire Classification	B0150	2025-03-06	All, except Inspire Classic
Intertek	IAS AA-647	Quality Assurance	Spec ID: 73566	2025-03-06	Inspire Classic Slate
QAI	FBC QUA7628	Quality Assurance	B0150	2025-03-06	All, except Inspire Classic

1. Testing, certification, evaluation, and inspection agencies referenced have been verified to be accredited by Standards Council of Canada (www.scc.ca), A2LA (www.a2la.org) or International Accreditation Service (www.iasonline.org) for the applicable scope, in good standing on the date of the evaluation, in accordance with ISO 17025 and ISO 17020 international standards for testing and inspection bodies.



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APPENDIX A: MATERIAL PROPERTIES

Table A1: All DaVinci Roofing Material Properties

Property	Standard	Result	Requirement		Compliance
Fire/Flammability Material Properties					
Spontaneous Ignition Temperature (°F)	ASTM D1929	747 - 785 °F	≥	650	Pass
Linear Burn Rate (in/min)	ASTM D635	0.6 - 0.7 in/min	≤	2.5	Pass
Average Smoke Density (%)	ASTM D2843	8 - 16%	≤	75	Pass
Smoke Developed Index	ASTM E84	400	≤	450	Pass
General Material Properties					
Tensile Strength (psi)	ASTM D638	1115 - 1774 psi	Report Value		Pass
Tensile Strength After Heat Aging for 60 days at 176 °F Temperature (% of As Received)	ASTM D638	99 %	≥	80 ²	Pass
Flexural Strength after 5000-hrs of Accelerated Weathering (% of As Received)	ASTM G155 ASTM D790	96 %	≥	90 ²	Pass
Davinci Slate Nail Pull-Through (lb) with 3/8-inch nail head	ASTM D1037	120 lb	Report Value		Pass
Davinci Shake Nail Pull-Through (lb) with 3/8-inch nail head	ASTM D1037	159 lb	Report Value		Pass
Select Shake Nail Pull-Through (lb) with 3/8-inch nail head	ASTM D1037	159 lb	Report Value		Pass
Fancy Shake Nail Pull-Through (lb) with 3/8-inch nail head	ASTM D1037	159 lb	Report Value		Pass
Province Slate Nail Pull-Through (lb) with 3/8-inch nail head	ASTM D1037	201 lb	Report Value		Pass
Roof Assembly Tests, Regional Codes ¹					
Florida High Velocity Hurricane Zone (HVHZ) Maximum Uplift Resistance (psf)	TAS 125	Uplift design pressure value (ASD) dependent on assembly details and installation conditions			
Florida High Velocity Hurricane Zone (HVHZ) Wind and Wind Driven Rain Resistance (mph)	TAS 100	No shingle displacement or water infiltration on airflow velocity dependent on assembly details and installation conditions			
Roof Assembly Tests, Performance Values ¹					
Wind Uplift Resistance (psf)	UL 1897 UL 580	Allowable (ASD) values dependent on assembly details and installation conditions			
Wind Speed Resistance (mph)	ASCE 7-22	V _{ULT} at heights of 15 – 60 ft dependent on assembly details and installation conditions			
Fire Classification	ASTM E108	Class A, B, or C dependent on assembly details and installation conditions			
Impact Resistance	UL 2218	Class 4			

1. Roof assembly tests results are dependent on installation components and environmental conditions consistent with tested details. See Davinci's document library of Engineering and Certifications reports for further details.
2. Typical acceptable % retention of strength after aging values.



APPENDIX B: WIND PRESSURE AND WIND SPEED TABLES USER GUIDE

DaVinci Roofing wind uplift pressures and wind speed conversion tables have been developed to assist users in determining appropriate installation details for DaVinci products, roof construction components, building dimension plans, and site and environmental conditions.

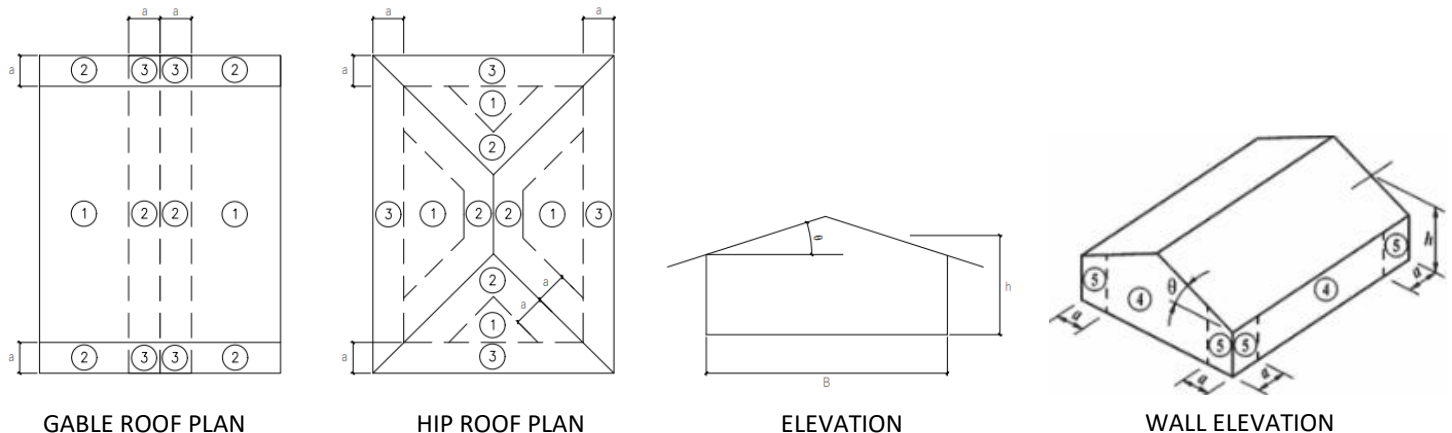
Wind speed conversion tables have been prepared following the design methodology of ASCE7-22, Ch. 30.3, for low-rise enclosed buildings with maximum height of 60 ft, with topographic and elevation factors set to unity. These settings are typical of many installations, and consistent with the prescriptive approach used in FBC-R Table R301.2(2) and IRC Table R301.2.1(1). All conditions and assembly details must be consistent with Tables in Appendices C1-C7 to be considered valid. If the actual site, building dimension or climatic conditions (including the given variables) differ from those prescribed, the allowable pressure values in Appendices C may be used to calculate adjusted wind speed limits. Refer to Figure B-1 for the determination of roof zones, in accordance with ASCE7-22.

The wind speed conversion tables introduce a Roof Overhang Reduction Factor for gable and hip roofs. The Roof Overhang Reduction Factor is a ratio of the maximum wind speed at roof overhang locations, divided by the calculated maximum wind speed at roof areas with no overhang, within the respective roof zones. The roof overhang wind speed is evaluated per design methodology defined in ASCE7-22, Ch. 30.7, which applies an uplift pressure due to an adjacent wall in addition to the external and internal roof wind pressure. The concluding Roof Overhang Reduction Factor within the tables in Appendices C1-C7 is taken as the value which produces the most critical maximum wind speed for overhang gable and hip roofs within the respective zones.

Although the 2021 IBC references ASCE7-16, the outcomes of the calculations between ASCE7-22 and ASCE7-16 are identical in nearly all applicable cases. Where not identical, it has been determined that the results are similar enough that the outcomes of the calculations performed to produce the wind speed conversion tables comply with the relevant sections of ASCE7-16.

For building heights over 60 ft, the Allowable Pressure (ASD) values listed in the wind uplift tables may be used by a licensed design professional to calculate ultimate wind speed and/or allowable height, for the given Davinci product installation detail and building project conditions.

At any building height, when the Allowable Pressure (ASD) has been pre-determined by the designer or building official, the user only needs to check that the installation detail is shown as capable of that pressure or greater.



a = 10% of least horizontal dimension or $0.4h$, whichever is smaller, but not less than either 4% of least horizontal dimension or 3 ft (0.9 m). If an overhang exists, the edge distance shall be measured from the outside edge of the overhang. The horizontal dimensions used to compute the edge distance shall not include any overhang distances.

h = Mean roof height, in ft (m), except that eave height shall be used for $\theta \leq 10^\circ$.

B = Horizontal dimension of building measured normal to wind direction, in ft (m).

θ = Angle of plane of roof from horizontal, in degrees.

Figure B-1: Wind Pressure Diagrams as Represented in ASCE7-22 for use in conjunction with tables in appendices C.



APPENDIX C1: GENERAL NOTES AND COMPONENT DETAILS

General Notes for APPENDIX C2 – APPENDIX C7

1. DaVinci System No. details as provided.
2. Plywood Sheathing: Min. 0.42 SG, Exposure 1, complying with NIST DOC PS 2. Wood sheathing may be substituted with a thicker profile or solid lumber of up to a nominal 1 inch.
3. OSB Sheathing: Exposure 1, complying with NIST DOC PS 2. Wood sheathing may be substituted with a thicker profile or solid lumber of up to a nominal 1 inch.
4. All fasteners are to be corrosion-resistant. Nails are 11ga 1.75-inch galvanized ring-shank roofing nail, and must comply with ASTM F1667. Screws are #10 x 2-inch wafer or washer head galvanized screws, and must comply with ASME B18.6.1.
5. Allowable pressure (psf) (ASD) represents tested assembly ultimate pressure divided by a safety factor of 2.
6. To convert to Factored Design Resistance Pressure (psf) (LRFD), multiply Allowable Pressure (psf) (ASD) by 1.67.
7. Wind exposure categories as defined in ASCE7-22, Section 26.7.
8. Per Figure B-1 of this report, Zone 2/3 is the corner and edge locations and Zone 1 is the field of the roof. Zone numbers have been simplified for table use.
9. Wind speed conversion corresponds to the maximum Zone 2/3 or Zone 1 pressure with an effective area of 10 ft². Table wind speeds are only valid under the design conditions stated. For other site conditions and/or building dimensions, designers can use the published Allowable Pressure (psf) (ASD) to determine wind speeds with FBC-R Table R301.2(2), IRC Table R301.2.1(1) or calculations to FBC/IBC Ch 16.
10. NA indicates that the installation condition is not acceptable within the design limits of the table.
11. Roof Overhang Reduction Factor is to be applied to the Maximum Wind Speed (V_{ult}) for roof areas above overhangs. The reduction accounts for the adjacent wall's positive external pressure in addition to the total roof uplift pressure, in accordance with ASCE7-22, Section 30.7.
12. Table limiting heights and wind velocity values are for low-rise buildings of maximum 60 ft height, developed in accordance with ASCE7-22. Design input values: GC_p = ASCE7-22 Figs 30.3-2(A-I), GC_{pi} = 0.18, K_{zt} = 1, K_d = 0.85, K_e = 1, I_w = 1.0.
13. Interpolation is not permitted. For heights in between those listed, use the next highest height column.

Table C1.1: General Assembly Component Details for Use with General Notes and Appendices C2 – C7^{a,b}

ROOFING SHINGLE:	ALL DAVINCI ROOFSCAPES
MAX SHINGLE EXPOSURE:	Specifies the exposure length of the shingle in inches as the maximum course-to-course spacing.
DECK SHEATHING:	Min. 15/32-inch plywood or wood plank, or 7/16 OSB, as specified.
SHINGLE FASTENER:	Specifies the number and type of fasteners per individual shingle.
ALLOWABLE PRESSURE:	Maximum ASD design pressure in pounds-per-square-foot (psf) for wind uplift.
EXPOSURE CATEGORY:	Terrain wind exposure category as defined in ASCE7-22, section 26.7.
SLOPE RANGE:	Slope is shown in Vertical:Horizontal (e.g. 3:12 = 3-inch rise to 12-inch run).
WIND VELOCITY V_{ult}:	Maximum wind velocity (mph) for the respective installation condition.
DECK ATTACHMENT:	In accordance with applicable Code, designed to support the maximum design pressure.
UNDERLAYMENT:	IBC and FBC Non-HVHZ Applications Minimum underlayment shall be in accordance with FBC/IBC 1507.1.1 or any Approved underlayment having current Product Approval. Per manufacturer's instructions, for roof slopes less than 4:12, an approved self-adhering underlayment is to be used in all applications. FBC HVHZ Applications For slopes of 3:12 – 4:12, one layer of ASTM D1970 compliant self-adhering underlayment applied over the entire deck surface. For slopes greater than 4:12, one layer of ASTM D226 Type 2 underlayment, overlapped 4-inch horizontally and 6-inch at end laps, fastened with 1½-inch ring-shank nails with 1½-inch tin caps at 12-inch o/c in field and 6-inch o/c at overlaps.
VALLEYS:	A full-width sheet of Approved ASTM D1970 self-adhering underlayment centered in the valley, followed by minimum 16-inch wide 28-gauge valley metal secured with roofing nails spaced at 4-inch o.c., 1-inch from the edge of the metal. An 18-inch strip of ASTM D1970 self-adhered membrane is placed over the edge of the valley metal.
STARTER:	Each DaVinci Slate Starter to be installed extending approximately 1-inch over eaves and ¾-inch over rakes and with a 3/8-inch gap between starter shingles. (Note: If using Style D or Style F drip edge, the starter shingle can be allowed to overhang less if it is appropriate for the gutter system.) Each starter shingle to be nailed approximately 6-inch up from the butt edge and ¾-inch from each side with 11-gage nails as specified. In high wind areas (greater than 110 mph in accordance with Figures in IBC 1609), an additional nail to be placed in an area below the 8-inch line so that it will not be exposed through the shingles on the first course.
SLATES AND SHAKES NAIL FASTENING	Galvanized, stainless steel, aluminum or copper roofing nails, minimum 11-gage [0.12 inch] ring-shank with a minimum 3/8-inch-diameter (9.5 mm) head, of a length to penetrate through the roofing materials and a minimum of 3/4 inch (19.1 mm) into the roof sheathing, or galvanized 2-inch #10 screws with a minimum 3/8-inch-diameter (9.5 mm) wafer or washer head. Where the roof sheathing is less than 3/4 inch (19.1 mm) thick, the nails shall penetrate through the sheathing. Nail and screw fasteners shall comply with ASTM F1667 and ASME B18.6.1, respectively.

a. Additional assembly-specific component details are provided in *APPENDICES C2 – C7*. Assembly-specific details govern if conflicting with those in Table C1.1.

b. HVHZ assemblies may also be used in Non-HVHZ regions following the same details.



APPENDIX C2: DAVINCI SLATE (DVSL) WIND PRESSURE & WIND SPEED TABLES

Table C2.1: Davinci Slate Assembly Configurations

System No. ¹	Min Sheathing ^{2,3}	Max Shingle Exposure	Shingle Fasteners ⁴	Allowable Pressure ^{5,6} (psf)(ASD)
DVSL-1	7/16" OSB	6"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	93
DVSL-2	7/16" OSB	6"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	154
DVSL-3	7/16" OSB	8"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	65
DVSL-4	7/16" OSB	8"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	127
DVSL-5	7/16" OSB	6-8"	2 screws per shingle, #10 2-inch galvanized wafer head screws	127
DVSL-6	7/16" OSB	6-8"	4 screws per shingle, #10 2-inch galvanized wafer head screws	178
DVSL-7	1/2" Plywood	6"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	124
DVSL-8	1/2" Plywood	6"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	206
DVSL-9	1/2" Plywood	8"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	87
DVSL-10	1/2" Plywood	8"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	170
DVSL-11	1/2" Plywood	6-8"	2 screws per shingle, #10 2-inch galvanized wafer head screws	170
DVSL-12	1/2" Plywood	6-8"	4 screws per shingle, #10 2-inch galvanized wafer head screws	237
DVSL-13	5/8" Plywood	6"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	191
DVSL-14	5/8" Plywood	6"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	249
DVSL-15	5/8" Plywood	8"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	104
DVSL-16	5/8" Plywood	8"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	226
DVSL-17	5/8" Plywood	6-8"	2 screws per shingle, #10 2-inch galvanized wafer head screws	170
DVSL-18	5/8" Plywood	6-8"	4 screws per shingle, #10 2-inch galvanized wafer head screws	237

See General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.

Allowable pressure (ASD) design values for max 8" exposure can be used for shingle exposures less than 8".

In accordance with the 2023 Florida Building Code(FBC), minimum 19/32-inch (5/8") plywood or wood planks must be installed for new roof deck construction in HVHZ regions.

Unless noted otherwise, the published allowable pressure (ASD) values apply to HVHZ and Non-HVHZ applications, and include a safety factor of 2.

<WIND SPEED TABLES BEGIN NEXT PAGE>



APPENDIX C3: DAVINCI SHAKE (DVSH) WIND PRESSURE & WIND SPEED TABLES

Table C3.1: Davinci Shake Assembly Configurations

System No. ¹	Min Sheathing ^{2,3}	Max Shingle Exposure	Shingle Fasteners ⁴	Allowable Pressure ^{5,6} (psf)(ASD)
DVSH-1	7/16" OSB	9"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	72
DVSH-2	7/16" OSB	9"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	171
DVSH-3	7/16" OSB	10"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	71
DVSH-4	7/16" OSB	10"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	144
DVSH-5	7/16" OSB	9-10"	2 screws per shingle, #10 2-inch wafer head screws	137
DVSH-6	7/16" OSB	9-10"	4 screws per shingle, #10 2-inch wafer head screws	184
DVSH-7	1/2" Plywood	9"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	96
DVSH-8	1/2" Plywood	9"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	228
DVSH-9	1/2" Plywood	10"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	95
DVSH-10	1/2" Plywood	10"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	192
DVSH-11	1/2" Plywood	9-10"	2 screws per shingle, #10 2-inch wafer head screws	183
DVSH-12	1/2" Plywood	9-10"	4 screws per shingle, #10 2-inch wafer head screws	246
DVSH-13	5/8" Plywood	9"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	157
DVSH-14	5/8" Plywood	9"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	264
DVSH-15	5/8" Plywood	10"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	134
DVSH-16	5/8" Plywood	10"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	228
DVSH-17	5/8" Plywood	9-10"	2 screws per shingle, #10 2-inch wafer head screws	183
DVSH-18	5/8" Plywood	9-10"	4 screws per shingle, #10 2-inch wafer head screws	246

See *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.

Allowable Pressure (ASD) design values for max 10" exposure can be used for shingle exposures less than 10".

In accordance with the 2023 Florida Building Code(FBC), minimum 19/32-inch (5/8") plywood or wood planks must be installed for new roof deck construction in HVHZ regions.

Unless noted otherwise, the published allowable pressure (ASD) values apply to HVHZ and Non-HVHZ applications, and include a safety factor of 2.

<WIND SPEED TABLES BEGIN NEXT PAGE>



APPENDIX C4: SELECT SHAKE (SSH) WIND PRESSURE & WIND SPEED TABLES

Table C4.1: Select Shake Assembly Configurations

System No. ¹	Min Sheathing ^{2,3}	Max Shingle Exposure	Shingle Fasteners ⁴	Allowable Pressure ^{5,6} (psf)(ASD)
SSH-1	7/16" OSB	9"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	89
SSH-2	7/16" OSB	9"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	146
SSH-3	7/16" OSB	10"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	73
SSH-4	7/16" OSB	10"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	131
SSH-5	7/16" OSB	9-10"	2 screws per shingle, #10 2-inch wafer head screws	166
SSH-6	1/2" Plywood	9"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	118
SSH-7	1/2" Plywood	9"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	195
SSH-8	1/2" Plywood	10"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	97
SSH-9	1/2" Plywood	10"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	174
SSH-10	1/2" Plywood	9-10"	2 screws per shingle, #10 2-inch wafer head screws	222
SSH-11	5/8" Plywood	9"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	140
SSH-12	5/8" Plywood	9"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	266
SSH-13	5/8" Plywood	10"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	141
SSH-14	5/8" Plywood	10"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	245
SSH-15	5/8" Plywood	9-10"	2 screws per shingle, #10 2-inch wafer head screws	222

See *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.

Allowable Pressure (ASD) design values for max 10" exposure can be used for shingle exposures less than 10".

In accordance with the 2023 Florida Building Code(FBC), minimum 19/32-inch (5/8") plywood or wood planks must be installed for new roof deck construction in HVHZ regions.

Unless noted otherwise, the published allowable pressure (ASD) values apply to HVHZ and Non-HVHZ applications, and include a safety factor of 2.

<WIND SPEED TABLES BEGIN NEXT PAGE>



Table C4.2: Select Shake Maximum Wind Speeds of Gable Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC [7/16" OSB]

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸							ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}							Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60	
GABLE ROOFS (SLOPE 3:12 – 4.4:12)																			
SSH-1	9"	2 nails	89	B	178	171	165	161	156	151	147	210	210	210	210	206	199	194	
				C	146	142	139	136	132	129	126	192	186	182	179	173	169	166	
				D	132	129	127	125	122	119	117	174	170	167	164	160	157	154	
SSH-2	9"	4 nails	146	B	210	210	210	206	200	194	189	210	210	210	210	210	210		
				C	187	181	177	174	169	165	162	210	210	210	210	210	210	210	
				D	169	166	163	160	156	153	150	210	210	210	210	205	201	198	
SSH-3	10"	2 nails	73	B	161	154	150	145	141	137	133	210	203	197	191	186	180	176	
				C	132	128	125	123	119	116	114	174	169	165	162	157	153	151	
				D	120	117	115	113	110	108	106	158	154	151	149	145	142	140	
SSH-4	10"	4 nails	131	B	210	207	201	195	189	183	179	210	210	210	210	210	210		
				C	177	172	168	165	160	156	153	210	210	210	210	210	205	202	
				D	161	157	154	151	148	145	142	210	206	203	199	194	190	187	
SSH-5	9-10"	2 screws	166	B	210	210	210	210	210	206	201	210	210	210	210	210	210		
				C	199	193	189	185	180	176	173	210	210	210	210	210	210	210	
				D	181	176	173	170	166	163	160	210	210	210	210	210	210	210	
GABLE ROOFS (SLOPE 4.5:12 – 6.1:12)																			
SSH-1	9"	2 nails	89	B	194	186	180	175	170	165	161	210	210	210	210	210	210		
				C	159	154	151	148	144	140	138	210	210	208	203	198	193	189	
				D	144	141	138	136	133	130	128	198	194	190	187	182	179	176	
SSH-2	9"	4 nails	146	B	210	210	210	210	210	210	206	210	210	210	210	210	210		
				C	203	198	193	189	184	180	176	210	210	210	210	210	210	210	
				D	185	180	177	174	170	166	164	210	210	210	210	210	210	210	
SSH-3	10"	2 nails	73	B	176	168	163	158	154	149	146	210	210	210	210	205	200		
				C	144	140	137	134	130	127	125	198	192	188	184	179	175	172	
				D	131	128	125	123	120	118	116	180	176	172	169	165	162	159	
SSH-4	10"	4 nails	131	B	210	210	210	210	206	200	195	210	210	210	210	210	210		
				C	193	187	183	179	174	170	167	210	210	210	210	210	210	210	
				D	175	171	168	165	161	158	155	210	210	210	210	210	210	210	
SSH-5	9-10"	2 screws	166	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	206	202	196	192	188	210	210	210	210	210	210	210	
				D	197	192	189	186	181	177	175	210	210	210	210	210	210	210	
GABLE ROOFS (SLOPE 6.2:12 – 12:12)																			
SSH-1	9"	2 nails	89	B	210	203	196	191	185	179	175	210	210	210	210	209	204		
				C	173	168	164	161	156	153	150	201	196	191	187	182	178	175	
				D	157	153	151	148	144	142	139	183	179	175	172	168	165	162	
SSH-2	9"	4 nails	146	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	206	200	196	192	210	210	210	210	210	210	210	
				D	201	197	193	190	185	181	178	210	210	210	210	210	210	208	
SSH-3	10"	2 nails	73	B	191	183	178	173	168	163	159	210	210	207	201	195	189	184	
				C	157	152	149	146	142	138	136	182	177	173	170	165	161	158	
				D	142	139	136	134	131	128	126	166	162	159	156	152	149	147	
SSH-4	10"	4 nails	131	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	204	200	195	190	185	182	210	210	210	210	210	210	210	
				D	191	186	183	180	175	172	169	210	210	210	209	204	200	197	
SSH-5	9-10"	2 screws	166	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	209	205	210	210	210	210	210	210	
				D	210	210	206	202	197	193	190	210	210	210	210	210	210	210	
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.85							0.79							

See Table C4.1 on page 27 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.



**Table C4.3: Select Shake Maximum Wind Speeds of Hip Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC
| 7/16" OSB |**

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
HIP ROOFS (SLOPE 3:12 – 4.4:12)																				
SSH-1	9"	2 nails	89	B	207	199	193	187	182	176	172	210	210	210	210	209	204			
				C	170	165	162	158	154	150	147	201	196	191	187	182	178	175		
				D	154	151	148	145	142	139	137	183	179	175	172	168	165	162		
SSH-2	9"	4 nails	146	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	207	203	197	192	189	210	210	210	210	210	210	210		
				D	198	193	190	186	182	178	175	210	210	210	210	210	210	208		
SSH-3	10"	2 nails	73	B	188	180	175	170	165	160	156	210	210	207	201	195	189	184		
				C	154	149	146	143	139	136	133	182	177	173	170	165	161	158		
				D	140	136	134	132	128	126	124	166	162	159	156	152	149	147		
SSH-4	10"	4 nails	131	B	210	210	210	210	210	210	209	210	210	210	210	210	210			
				C	206	200	196	192	186	182	179	210	210	210	210	210	210	210		
				D	187	183	180	176	172	169	166	210	210	210	209	204	200	197		
SSH-5	9-10"	2 screws	166	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	205	201	210	210	210	210	210	210	210		
				D	210	206	202	199	194	190	187	210	210	210	210	210	210	210		
HIP ROOFS (SLOPE 4.5:12 – 6.1:12)																				
SSH-1	9"	2 nails	89	B	210	210	210	210	206	199	194	210	210	210	210	210	210			
				C	192	186	182	179	173	169	166	210	210	210	210	204	199	195		
				D	174	170	167	164	160	157	154	205	200	196	193	188	184	181		
SSH-2	9"	4 nails	146	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	205	201	198	210	210	210	210	210	210	210		
SSH-3	10"	2 nails	73	B	210	203	197	191	186	180	176	210	210	210	210	210	206			
				C	174	169	165	162	157	153	151	204	198	194	190	184	180	177		
				D	158	154	151	149	145	142	140	185	181	178	175	170	167	164		
SSH-4	10"	4 nails	131	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	205	202	210	210	210	210	210	210	210		
				D	210	206	203	199	194	190	187	210	210	210	210	210	210	210		
SSH-5	9-10"	2 screws	166	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
HIP ROOFS (SLOPE 6.2:12 – 12:12)																				
SSH-1	9"	2 nails	89	B	210	206	200	194	189	183	178	210	210	210	210	210	210			
				C	176	171	168	164	159	156	153	210	210	208	203	198	193	189		
				D	160	156	154	151	147	144	142	198	194	190	187	182	179	176		
SSH-2	9"	4 nails	146	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	204	199	196	210	210	210	210	210	210	210		
				D	205	200	197	193	188	185	182	210	210	210	210	210	210	210		
SSH-3	10"	2 nails	73	B	195	187	181	176	171	166	162	210	210	210	210	205	200			
				C	160	155	152	149	144	141	138	198	192	188	184	179	175	172		
				D	145	142	139	137	133	131	129	180	176	172	169	165	162	159		
SSH-4	10"	4 nails	131	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	208	203	199	193	189	186	210	210	210	210	210	210	210		
				D	194	190	186	183	179	175	172	210	210	210	210	210	210	210		
SSH-5	9-10"	2 screws	166	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	209	210	210	210	210	210	210			
				D	210	210	210	206	201	197	194	210	210	210	210	210	210	210		
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.83								N/A							

See Table C4.1 on page 27 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.



**Table C4.4: Select Shake Maximum Wind Speeds of Gable Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC
[1/2" PLYWOOD]**

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸							ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}							Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60	
GABLE ROOFS (SLOPE 3:12 – 4.4:12)																			
SSH-6	9"	2 nails	118	B	205	196	190	185	180	174	170	210	210	210	210	210	210	210	
				C	168	163	159	156	152	148	145	210	210	210	206	200	195	192	
				D	152	149	146	144	140	137	135	201	196	192	189	184	181	178	
SSH-7	9"	4 nails	195	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	205	201	195	190	187	210	210	210	210	210	210	210	
				D	196	191	188	185	180	176	174	210	210	210	210	210	210	210	
SSH-8	10"	2 nails	97	B	186	178	173	168	163	158	154	210	210	210	210	210	208	203	
				C	152	148	145	142	137	134	132	200	195	190	186	181	177	174	
				D	138	135	132	130	127	124	122	182	178	174	171	167	164	161	
SSH-9	10"	4 nails	174	B	210	210	210	210	210	210	206	210	210	210	210	210	210		
				C	204	198	194	190	184	180	177	210	210	210	210	210	210	210	
				D	185	181	177	174	170	167	164	210	210	210	210	210	210	210	
SSH-10	9-10"	2 screws	222	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	208	203	200	210	210	210	210	210	210	210	
				D	209	204	200	197	192	188	185	210	210	210	210	210	210	210	
GABLE ROOFS (SLOPE 4.5:12 – 6.1:12)																			
SSH-6	9"	2 nails	118	B	210	210	208	201	196	190	185	210	210	210	210	210	210	210	
				C	183	178	174	170	165	161	159	210	210	210	210	210	210	210	
				D	166	162	159	157	153	150	147	210	210	210	210	210	206	203	
SSH-7	9"	4 nails	195	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	208	204	210	210	210	210	210	210	
				D	210	209	205	201	196	192	189	210	210	210	210	210	210	210	
SSH-8	10"	2 nails	97	B	202	194	188	183	178	172	168	210	210	210	210	210	210		
				C	166	161	158	154	150	146	144	210	210	210	210	206	201	198	
				D	151	147	144	142	138	136	134	207	202	199	195	190	187	184	
SSH-9	10"	4 nails	174	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	207	201	196	193	210	210	210	210	210	210	210	
				D	202	197	193	190	185	182	179	210	210	210	210	210	210	210	
SSH-10	9-10"	2 screws	222	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	209	205	202	210	210	210	210	210	210	210	
GABLE ROOFS (SLOPE 6.2:12 – 12:12)																			
SSH-6	9"	2 nails	118	B	210	210	210	210	210	207	202	210	210	210	210	210	210		
				C	199	194	189	186	180	176	173	210	210	210	210	210	205	201	
				D	181	177	174	171	166	163	160	210	206	202	198	193	190	187	
SSH-7	9"	4 nails	195	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	209	206	210	210	210	210	210	210	210	
SSH-8	10"	2 nails	97	B	210	210	205	199	194	187	183	210	210	210	210	210	210		
				C	181	176	172	168	163	159	157	210	204	200	196	190	186	182	
				D	164	160	157	155	151	148	145	191	186	183	180	175	172	169	
SSH-9	10"	4 nails	174	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	207	202	198	195	210	210	210	210	210	210	210	
SSH-10	9-10"	2 screws	222	B	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.85							0.79							

See Table C4.1 on page 27 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.



**Table C4.5: Select Shake Maximum Wind Speeds of Hip Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC
| 1/2" PLYWOOD |**

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
HIP ROOFS (SLOPE 3:12 – 4.4:12)																				
SSH-6	9"	2 nails	118	B	210	210	210	210	210	203	198	210	210	210	210	210	210	210		
				C	196	190	186	182	177	173	170	210	210	210	210	210	205	201		
				D	178	174	170	167	163	160	158	210	206	202	198	193	190	187		
SSH-7	9"	4 nails	195	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	206	203	210	210	210	210	210	210		
SSH-8	10"	2 nails	97	B	210	208	201	195	190	184	179	210	210	210	210	210	210			
				C	177	172	169	165	160	157	154	210	204	200	196	190	186	182		
				D	161	157	154	152	148	145	143	191	186	183	180	175	172	169		
SSH-9	10"	4 nails	174	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	206	210	210	210	210	210	210		
				D	210	210	207	203	198	194	191	210	210	210	210	210	210	210		
SSH-10	9-10"	2 screws	222	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
HIP ROOFS (SLOPE 4.5:12 – 6.1:12)																				
SSH-6	9"	2 nails	118	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	206	200	195	192	210	210	210	210	210	210	210		
				D	201	196	192	189	184	181	178	210	210	210	210	210	210	209		
SSH-7	9"	4 nails	195	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
SSH-8	10"	2 nails	97	B	210	210	210	210	210	208	203	210	210	210	210	210				
				C	200	195	190	186	181	177	174	210	210	210	210	210	208	204		
				D	182	178	174	171	167	164	161	210	209	205	201	196	192	189		
SSH-9	10"	4 nails	174	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
SSH-10	9-10"	2 screws	222	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
HIP ROOFS (SLOPE 6.2:12 – 12:12)																				
SSH-6	9"	2 nails	118	B	210	210	210	210	210	210	205	210	210	210	210	210	210			
				C	203	197	193	189	184	179	176	210	210	210	210	210	210	210		
				D	184	180	177	174	169	166	164	210	210	210	210	210	206	203		
SSH-7	9"	4 nails	195	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
SSH-8	10"	2 nails	97	B	210	210	209	203	197	191	186	210	210	210	210	210				
				C	184	179	175	171	166	163	160	210	210	210	210	206	201	198		
				D	167	163	160	158	154	151	148	207	202	199	195	190	187	184		
SSH-9	10"	4 nails	174	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	206	202	199	210	210	210	210	210	210			
SSH-10	9-10"	2 screws	222	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.83								N/A							

See Table C4.1 on page 27 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.



Table C4.6: Select Shake Maximum Wind Speeds of Gable Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC [5/8" PLYWOOD]

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60		15	20	25	30	40	50	60	
GABLE ROOFS (SLOPE 3:12 – 4.4:12)																				
SSH-11	9"	2 nails	140	B	210	210	207	201	196	189	185		210	210	210	210	210	210	210	210
				C	183	178	174	170	165	161	158		210	210	210	210	210	210	210	209
				D	166	162	159	156	152	149	147		210	210	210	206	201	197	194	
SSH-12	9"	4 nails	266	B	210	210	210	210	210	210	210		210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210		210	210	210	210	210	210	210	210
				D	210	210	210	210	210	210	206	203		210	210	210	210	210	210	210
SSH-13	10"	2 nails	141	B	210	210	208	202	196	190	186		210	210	210	210	210	210	210	
				C	183	178	174	171	166	162	159		210	210	210	210	210	210	210	209
				D	167	163	160	157	153	150	148		210	210	210	207	202	198	194	
SSH-14	10"	4 nails	245	B	210	210	210	210	210	210	210		210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
				D	210	210	210	207	202	198	195		210	210	210	210	210	210	210	210
SSH-15	9-10"	2 screws	222	B	210	210	210	210	210	210	210		210	210	210	210	210	210	210	
				C	210	210	210	210	208	203	200		210	210	210	210	210	210	210	210
				D	209	204	200	197	192	188	185		210	210	210	210	210	210	210	210
GABLE ROOFS (SLOPE 4.5:12 – 6.1:12)																				
SSH-11	9"	2 nails	140	B	210	210	210	210	210	207	202		210	210	210	210	210	210	210	210
				C	199	194	189	185	180	176	173		210	210	210	210	210	210	210	210
				D	181	177	174	170	166	163	160		210	210	210	210	210	210	210	210
SSH-12	9"	4 nails	266	B	210	210	210	210	210	210	210		210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
				D	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
SSH-13	10"	2 nails	141	B	210	210	210	210	210	207	202		210	210	210	210	210	210	210	
				C	200	194	190	186	181	177	173		210	210	210	210	210	210	210	210
				D	182	177	174	171	167	164	161		210	210	210	210	210	210	210	210
SSH-14	10"	4 nails	245	B	210	210	210	210	210	210	210		210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
				D	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
SSH-15	9-10"	2 screws	222	B	210	210	210	210	210	210	210		210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
				D	210	210	210	210	209	205	202		210	210	210	210	210	210	210	210
GABLE ROOFS (SLOPE 6.2:12 – 12:12)																				
SSH-11	9"	2 nails	140	B	210	210	210	210	210	210	210		210	210	210	210	210	210	210	210
				C	210	210	206	202	196	192	188		210	210	210	210	210	210	210	210
				D	197	192	189	186	181	177	175		210	210	210	210	210	207	203	
SSH-12	9"	4 nails	266	B	210	210	210	210	210	210	210		210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
				D	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
SSH-13	10"	2 nails	141	B	210	210	210	210	210	210	210		210	210	210	210	210	210	210	
				C	210	210	207	203	197	192	189		210	210	210	210	210	210	210	210
				D	198	193	190	186	182	178	175		210	210	210	210	210	207	204	
SSH-14	10"	4 nails	245	B	210	210	210	210	210	210	210		210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
				D	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
SSH-15	9-10"	2 screws	222	B	210	210	210	210	210	210	210		210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
				D	210	210	210	210	210	210	210	210		210	210	210	210	210	210	210
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.85								0.79							

See Table C4.1 on page 27 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.



**Table C4 7: Select Shake Maximum Wind Speeds of Hip Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC
[5/8" PLYWOOD]**

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸							ZONE 1 (FIELD) ⁸									
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							Maximum Wind Speed V _{ult} (mph) ^{9,10,11}									
					Building Height (ft) ^{12,13}							Building Height (ft) ^{12,13}									
					15	20	25	30	40	50	60	15	20	25	30	40	50	60			
HIP ROOFS (SLOPE 3:12 – 4.4:12)																					
SSH-11	9"	2 nails	140	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	207	203	198	193	188	185	210	210	210	210	210	210	210	210	210	210
				D	194	189	186	182	178	174	172	210	210	210	210	210	210	207	203		
SSH-12	9"	4 nails	266	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
SSH-13	10"	2 nails	141	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	208	203	199	193	189	185	210	210	210	210	210	210	210	210	210	
				D	194	190	186	183	178	175	172	210	210	210	210	210	210	207	204		
SSH-14	10"	4 nails	245	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
SSH-15	9-10"	2 screws	222	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
HIP ROOFS (SLOPE 4.5:12 – 6.1:12)																					
SSH-11	9"	2 nails	140	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	209	210	210	210	210	210	210	210	210	
				D	210	210	210	206	201	197	194	210	210	210	210	210	210	210	210	210	
SSH-12	9"	4 nails	266	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
SSH-13	10"	2 nails	141	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	209	210	210	210	210	210	210	210	210	
				D	210	210	210	207	202	198	194	210	210	210	210	210	210	210	210	210	
SSH-14	10"	4 nails	245	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
SSH-15	9-10"	2 screws	222	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
HIP ROOFS (SLOPE 6.2:12 – 12:12)																					
SSH-11	9"	2 nails	140	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	210	210	206	200	195	192	210	210	210	210	210	210	210	210	210	
				D	201	196	193	189	185	181	178	210	210	210	210	210	210	210	210	210	
SSH-12	9"	4 nails	266	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
SSH-13	10"	2 nails	141	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	207	201	196	192	210	210	210	210	210	210	210	210	210	
				D	202	197	193	190	185	182	179	210	210	210	210	210	210	210	210	210	
SSH-14	10"	4 nails	245	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
SSH-15	9-10"	2 screws	222	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.83							N/A									

See Table C4.1 on page 27 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.



APPENDIX C5: FANCY SHAKE (FSH) WIND PRESSURE & WIND SPEED TABLES

Table C5.1: Fancy Shake Assembly Configurations

System No. ¹	Min Sheathing ^{2,3}	Max Shingle Exposure	Shingle Fasteners ⁴	Allowable Pressure ^{5,6} (psf)(ASD)
FSH-1	7/16" OSB	6" FANCY	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	105
FSH-2	7/16" OSB	5" BEAVER	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	182
FSH-3	1/2" Plywood	6" FANCY	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	140
FSH-4	1/2" Plywood	5" BEAVER	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	243

See *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.

Allowable Pressure (ASD) design values for max 6" exposure can be used for shingle exposures less than 6".

In accordance with the 2023 Florida Building Code(FBC), minimum 19/32-inch (5/8") plywood or wood planks must be installed for new roof deck construction in HVHZ regions.

Unless noted otherwise, the published allowable pressure (ASD) values apply to HVHZ and Non-HVHZ applications, and include a safety factor of 2.

<WIND SPEED TABLES BEGIN NEXT PAGE>



Table C5.2: Fancy Shake Maximum Wind Speeds of Gable Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC [7/16" OSB]

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
GABLE ROOFS (SLOPE 3:12 – 4.4:12)																				
DVSL-1	6"	2 nails	105	B	193	185	180	174	170	164	160	210	210	210	210	210	210	210		
				C	158	154	150	147	143	140	137	208	202	198	194	188	184	181		
				D	144	140	138	135	132	129	127	189	185	181	178	174	170	168		
DVSL-2	5-6"	2 nails	182	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	208	202	198	194	188	184	181	210	210	210	210	210	210	210		
				D	189	185	181	178	174	170	168	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 4.5:12 – 6.1:12)																				
DVSL-1	6"	2 nails	105	B	210	202	196	190	185	179	175	210	210	210	210	210	210			
				C	172	168	164	161	156	152	150	210	210	210	210	210	210	206		
				D	157	153	150	148	144	141	139	210	210	207	203	198	194	191		
DVSL-2	5-6"	2 nails	182	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	205	201	197	210	210	210	210	210	210			
				D	206	201	198	194	190	186	183	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 6.2:12 – 12:12)																				
DVSL-1	6"	2 nails	105	B	210	210	210	207	201	195	190	210	210	210	210	210	210			
				C	188	183	179	175	170	166	163	210	210	208	204	198	193	190		
				D	171	167	164	161	157	154	151	199	194	190	187	182	179	176		
DVSL-2	5-6"	2 nails	182	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	206	202	199	210	210	210	210	210	210	210		
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.85								0.79							

Table C5.3: Fancy Shake Maximum Wind Speeds of Hip Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC [7/16" OSB]

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
HIP ROOFS (SLOPE 3:12 – 4.4:12)																				
DVSL-1	6"	2 nails	105	B	210	210	209	203	198	191	187	210	210	210	210	210	210	210		
				C	184	179	175	172	167	163	160	210	210	208	204	198	193	190		
				D	168	164	161	158	154	151	149	199	194	190	187	182	179	176		
DVSL-2	5-6"	2 nails	182	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	208	203	199	196	210	210	210	210	210	210	210		
HIP ROOFS (SLOPE 4.5:12 – 6.1:12)																				
DVSL-1	6"	2 nails	105	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	208	202	198	194	188	184	181	210	210	210	210	210	210	210		
				D	189	185	181	178	174	170	168	210	210	210	209	204	200	197		
DVSL-2	5-6"	2 nails	182	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
HIP ROOFS (SLOPE 6.2:12 – 12:12)																				
DVSL-1	6"	2 nails	105	B	210	210	210	210	205	199	194	210	210	210	210	210	210			
				C	192	186	182	178	173	169	166	210	210	210	210	210	210	206		
				D	174	170	167	164	160	157	154	210	210	207	203	198	194	191		
DVSL-2	5-6"	2 nails	182	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	206	203	210	210	210	210	210	210			
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.83							N/A								

See Table C5.1 on page 34 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.



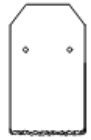
**Table C5.4: Fancy Shake Maximum Wind Speeds of Gable Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC
[1/2" PLYWOOD]**

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
GABLE ROOFS (SLOPE 3:12 – 4.4:12)																				
DVSL-3	6"	2 nails	140	B	210	210	207	201	196	189	185	210	210	210	210	210	210	210	210	210
				C	183	178	174	170	165	161	158	210	210	210	210	210	210	210	209	
				D	166	162	159	156	152	149	147	210	210	210	206	201	197	194		
DVSL-4	5-6"	2 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	209	210	210	210	210	210	210	210		
				D	210	210	210	206	201	197	194	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 4.5:12 – 6.1:12)																				
DVSL-3	6"	2 nails	140	B	210	210	210	210	210	207	202	210	210	210	210	210	210	210	210	
				C	199	194	189	185	180	176	173	210	210	210	210	210	210	210	210	
				D	181	177	174	170	166	163	160	210	210	210	210	210	210	210	210	
DVSL-4	5-6"	2 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 6.2:12 – 12:12)																				
DVSL-3	6"	2 nails	140	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	210	206	202	196	192	188	210	210	210	210	210	210	210	210	
				D	197	192	189	186	181	177	175	210	210	210	210	210	207	203		
DVSL-4	5-6"	2 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.85								0.79							

**Table C5.5: Fancy Shake Maximum Wind Speeds of Hip Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC
[1/2" PLYWOOD]**

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸								
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}								
					15	20	25	30	40	50	60	15	20	25	30	40	50	60			
HIP ROOFS (SLOPE 3:12 – 4.4:12)																					
DVSL-3	6"	2 nails	140	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	207	203	198	193	188	185	210	210	210	210	210	210	210	210	210	210
				D	194	189	186	182	178	174	172	210	210	210	210	210	210	207	203		
DVSL-4	5-6"	2 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
HIP ROOFS (SLOPE 4.5:12 – 6.1:12)																					
DVSL-3	6"	2 nails	140	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	209	210	210	210	210	210	210	210	210	
				D	210	210	210	206	201	197	194	210	210	210	210	210	210	210	210	210	
DVSL-4	5-6"	2 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
HIP ROOFS (SLOPE 6.2:12 – 12:12)																					
DVSL-3	6"	2 nails	140	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	210	210	206	200	195	192	210	210	210	210	210	210	210	210	210	
				D	201	196	193	189	185	181	178	210	210	210	210	210	210	210	210	210	
DVSL-4	5-6"	2 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.83								N/A								

See Table C5.1 on page 34 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.



APPENDIX C6: INSPIRE CLASSIC SLATE (ICSL) WIND PRESSURE & WIND SPEED TABLES

Table C6.1: Inspire Classic Slate Assembly Configurations

System No. ¹	Min Sheathing ^{2,3}	Max Shingle Exposure	Shingle Fasteners ⁴	Allowable Pressure ^{5,6} (psf)(ASD)
ICSL-1	7/16" OSB	6"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	83
ICSL-2	7/16" OSB	6"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	180
ICSL-3	7/16" OSB	7.5"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	82
ICSL-4	7/16" OSB	7.5"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	170
ICSL-5	1/2" Plywood	6"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	110
ICSL-6	1/2" Plywood	6"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	240
ICSL-7	1/2" Plywood	7.5"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	110
ICSL-8	1/2" Plywood	7.5"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	227
ICSL-9	5/8" Plywood	6"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	170
ICSL-10	5/8" Plywood	6"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	243
ICSL-11	5/8" Plywood	7.5"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	227

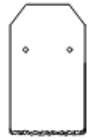
See *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.

Allowable Pressure (ASD) design values for max 7.5" exposure can be used for shingle exposures less than 7.5".

In accordance with the 2023 Florida Building Code(FBC), minimum 19/32-inch (5/8") plywood or wood planks must be installed for new roof deck construction in HVHZ regions.

Unless noted otherwise, the published allowable pressure (ASD) values apply to HVHZ and Non-HVHZ applications, and include a safety factor of 2.

<WIND SPEED TABLES BEGIN NEXT PAGE>



**Table C6.2: Inspire Classic Slate Maximum Wind Speeds of Gable Roof Cladding-2023 FBC (HVHZ & Non-HVHZ); 2024&2021 IBC
| 7/16" OSB |**

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
GABLE ROOFS (SLOPE 3:12 – 4.4:12)																				
ICSL-1	6"	2 nails	83	B	172	165	160	155	151	146	142	210	210	210	204	199	192	187		
				C	141	137	134	131	127	124	122	185	180	176	173	167	164	161		
				D	128	125	123	120	117	115	113	168	164	161	159	155	152	149		
ICSL-2	6"	4 nails	180	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	207	201	197	193	187	183	180	210	210	210	210	210	210	210		
				D	188	184	180	177	173	169	167	210	210	210	210	210	210	210		
ICSL-3	7.5"	2 nails	83	B	171	164	159	154	150	145	141	210	210	209	203	197	191	186		
				C	140	136	133	130	126	123	121	184	179	175	171	166	163	160		
				D	127	124	122	120	117	114	113	167	163	160	158	154	151	148		
ICSL-4	7.5"	4 nails	170	B	210	210	210	210	210	209	204	210	210	210	210	210	210			
				C	201	196	191	187	182	178	175	210	210	210	210	210	210	210		
				D	183	179	175	172	168	165	162	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 4.5:12 – 6.1:12)																				
ICSL-1	6"	2 nails	83	B	187	180	174	169	164	159	155	210	210	210	210	210	210	210		
				C	153	149	146	143	139	135	133	210	205	201	197	191	186	183		
				D	139	136	134	131	128	125	124	192	187	184	181	176	173	170		
ICSL-2	6"	4 nails	180	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	204	199	196	210	210	210	210	210	210	210		
				D	205	200	197	193	189	185	182	210	210	210	210	210	210	210		
ICSL-3	7.5"	2 nails	83	B	186	178	173	168	163	158	154	210	210	210	210	210	210			
				C	152	148	145	142	138	135	132	210	204	199	195	190	185	182		
				D	138	135	133	130	127	125	123	191	186	183	180	175	172	169		
ICSL-4	7.5"	4 nails	170	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	209	204	198	194	190	210	210	210	210	210	210	210		
				D	199	195	191	188	183	180	177	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 6.2:12 – 12:12)																				
ICSL-1	6"	2 nails	83	B	204	196	190	184	179	173	169	210	210	210	210	208	202	197		
				C	167	162	159	156	151	148	145	194	189	185	181	176	172	169		
				D	152	148	146	143	139	137	135	177	172	169	166	162	159	157		
ICSL-2	6"	4 nails	180	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				D	210	210	210	210	205	201	198	210	210	210	210	210	210	210		
ICSL-3	7.5"	2 nails	83	B	203	194	188	183	178	172	168	210	210	210	210	207	200	195		
				C	166	161	158	155	150	147	144	193	188	184	180	175	171	168		
				D	151	147	145	142	139	136	134	175	171	168	165	161	158	156		
ICSL-4	7.5"	4 nails	170	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	207	210	210	210	210	210	210	210		
				D	210	210	208	205	200	196	193	210	210	210	210	210	210	210		
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.85								0.79							

See Table C6.1 on page 37 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.

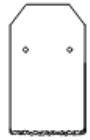
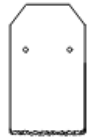


Table C6.3: Inspire Classic Slate Maximum Wind Speeds of Hip Roof Cladding - 2023 FBC (HVHZ & Non-HVHZ); 2024&2021 IBC [7/16" OSB]

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
HIP ROOFS (SLOPE 3:12 – 4.4:12)																				
ICSL-1	6"	2 nails	83	B	200	192	186	181	176	170	166	210	210	210	210	208	202	197		
				C	164	159	156	153	148	145	142	194	189	185	181	176	172	169		
				D	149	146	143	140	137	134	132	177	172	169	166	162	159	157		
ICSL-2	6"	4 nails	180	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	209	210	210	210	210	210	210	210		
				D	210	210	210	207	202	198	195	210	210	210	210	210	210	210		
ICSL-3	7.5"	2 nails	83	B	199	191	185	180	175	169	165	210	210	210	210	207	200	195		
				C	163	158	155	152	147	144	141	193	188	184	180	175	171	168		
				D	148	145	142	140	136	133	131	175	171	168	165	161	158	156		
ICSL-4	7.5"	4 nails	170	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	207	204	210	210	210	210	210	210	210		
				D	210	208	204	201	196	192	189	210	210	210	210	210	210	210		
HIP ROOFS (SLOPE 4.5:12 – 6.1:12)																				
ICSL-1	6"	2 nails	83	B	210	210	210	204	199	192	187	210	210	210	210	210	210	210		
				C	185	180	176	173	167	164	161	210	210	207	203	197	192	189		
				D	168	164	161	159	155	152	149	198	193	190	186	182	178	175		
ICSL-2	6"	4 nails	180	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
ICSL-3	7.5"	2 nails	83	B	210	210	209	203	197	191	186	210	210	210	210	210	210			
				C	184	179	175	171	166	163	160	210	210	206	201	196	191	188		
				D	167	163	160	158	154	151	148	196	192	188	185	181	177	174		
ICSL-4	7.5"	4 nails	170	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
HIP ROOFS (SLOPE 6.2:12 – 12:12)																				
ICSL-1	6"	2 nails	83	B	208	199	193	188	182	177	172	210	210	210	210	210	210			
				C	170	165	162	159	154	150	148	210	205	201	197	191	186	183		
				D	155	151	148	146	142	139	137	192	187	184	181	176	173	170		
ICSL-2	6"	4 nails	180	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	209	205	202	210	210	210	210	210	210			
ICSL-3	7.5"	2 nails	83	B	207	198	192	186	181	176	171	210	210	210	210	210	210			
				C	169	164	161	158	153	149	147	210	204	199	195	190	185	182		
				D	154	150	147	145	141	138	136	191	186	183	180	175	172	169		
ICSL-4	7.5"	4 nails	170	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	209	203	199	196	210	210	210	210	210	210			
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.83								N/A							

See Table C6.1 on page 37 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.



**Table C6.4: Inspire Classic Slate Maximum Wind Speeds of Gable Roof Cladding-2023 FBC (HVHZ & Non-HVHZ); 2024&2021 IBC
[1/2" PLYWOOD]**

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
GABLE ROOFS (SLOPE 3:12 – 4.4:12)																				
ICSL-5	6"	2 nails	110	B	198	190	184	178	174	168	164	210	210	210	210	210	210			
				C	162	157	154	151	146	143	140	210	207	203	199	193	188	185		
				D	147	144	141	139	135	132	130	194	189	186	183	178	174	172		
ICSL-6	6"	4 nails	240	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	207	210	210	210	210	210	210			
				D	210	210	208	205	200	196	193	210	210	210	210	210	210			
ICSL-7	7.5"	2 nails	110	B	198	190	184	178	174	168	164	210	210	210	210	210	210			
				C	162	157	154	151	146	143	140	210	207	203	199	193	188	185		
				D	147	144	141	139	135	132	130	194	189	186	183	178	174	172		
ICSL-8	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	205	202	210	210	210	210	210	210			
				D	210	206	203	199	194	190	187	210	210	210	210	210	210			
GABLE ROOFS (SLOPE 4.5:12 – 6.1:12)																				
ICSL-5	6"	2 nails	110	B	210	207	200	195	189	183	179	210	210	210	210	210	210			
				C	177	172	168	164	160	156	153	210	210	210	210	210	210			
				D	160	157	154	151	147	144	142	210	210	210	208	203	199	196		
ICSL-6	6"	4 nails	240	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210				
				D	210	210	210	210	210	210	210	210	210	210	210	210				
ICSL-7	7.5"	2 nails	110	B	210	207	200	195	189	183	179	210	210	210	210	210	210			
				C	177	172	168	164	160	156	153	210	210	210	210	210	210			
				D	160	157	154	151	147	144	142	210	210	210	208	203	199	196		
ICSL-8	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210				
				D	210	210	210	210	210	207	204	210	210	210	210	210				
GABLE ROOFS (SLOPE 6.2:12 – 12:12)																				
ICSL-5	6"	2 nails	110	B	210	210	210	210	206	199	195	210	210	210	210	210	210			
				C	192	187	183	179	174	170	167	210	210	210	208	202	198	194		
				D	175	171	168	165	161	157	155	203	198	195	192	187	183	180		
ICSL-6	6"	4 nails	240	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210				
				D	210	210	210	210	210	210	210	210	210	210	210	210				
ICSL-7	7.5"	2 nails	110	B	210	210	210	210	206	199	195	210	210	210	210	210	210			
				C	192	187	183	179	174	170	167	210	210	210	208	202	198	194		
				D	175	171	168	165	161	157	155	203	198	195	192	187	183	180		
ICSL-8	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210				
				D	210	210	210	210	210	210	210	210	210	210	210	210				
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.85								0.79							

See Table C6.1 on page 37 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.

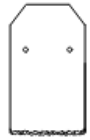


Table C6.5: Inspire Classic Slate Maximum Wind Speeds of Hip Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC [1/2" PLYWOOD]

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
HIP ROOFS (SLOPE 3:12 – 4.4:12)																				
ICSL-5	6"	2 nails	110	B	210	210	210	208	202	196	191	210	210	210	210	210	210	210	210	210
				C	189	184	180	176	171	167	164	210	210	210	208	202	198	194	194	
				D	172	168	164	162	158	154	152	203	198	195	192	187	183	180	180	
ICSL-6	6"	4 nails	240	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
ICSL-7	7.5"	2 nails	110	B	210	210	210	208	202	196	191	210	210	210	210	210	210	210	210	
				C	189	184	180	176	171	167	164	210	210	210	208	202	198	194	194	
				D	172	168	164	162	158	154	152	203	198	195	192	187	183	180	180	
ICSL-8	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
HIP ROOFS (SLOPE 4.5:12 – 6.1:12)																				
ICSL-5	6"	2 nails	110	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	207	203	199	193	188	185	210	210	210	210	210	210	210	210	
				D	194	189	186	183	178	174	172	210	210	210	210	209	205	202	202	
ICSL-6	6"	4 nails	240	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
ICSL-7	7.5"	2 nails	110	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	207	203	199	193	188	185	210	210	210	210	210	210	210	210	
				D	194	189	186	183	178	174	172	210	210	210	210	209	205	202	202	
ICSL-8	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
HIP ROOFS (SLOPE 6.2:12 – 12:12)																				
ICSL-5	6"	2 nails	110	B	210	210	210	210	210	203	198	210	210	210	210	210	210	210	210	
				C	196	190	186	183	177	173	170	210	210	210	210	210	210	210	210	
				D	178	174	171	168	164	160	158	210	210	210	208	203	199	196	196	
ICSL-6	6"	4 nails	240	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
ICSL-7	7.5"	2 nails	110	B	210	210	210	210	210	203	198	210	210	210	210	210	210	210		
				C	196	190	186	183	177	173	170	210	210	210	210	210	210	210	210	
				D	178	174	171	168	164	160	158	210	210	210	208	203	199	196	196	
ICSL-8	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.83								N/A							

See Table C6.1 on page 37 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.

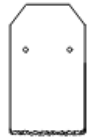


Table C6.6: Inspire Classic Slate Maximum Wind Speeds of Gable Roof Cladding-2023 FBC (HVHZ & Non-HVHZ); 2024&2021 IBC [5/8" PLYWOOD]

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
GABLE ROOFS (SLOPE 3:12 – 4.4:12)																				
ICSL-9	6"	2 nails	170	B	210	210	210	210	210	209	204	210	210	210	210	210	210	210		
				C	201	196	191	187	182	178	175	210	210	210	210	210	210	210	210	
				D	183	179	175	172	168	165	162	210	210	210	210	210	210	210	210	
ICSL-10	6"	4 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	209	210	210	210	210	210	210	210		
				D	210	210	210	206	201	197	194	210	210	210	210	210	210	210		
ICSL-11	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	205	202	210	210	210	210	210	210	210		
				D	210	206	203	199	194	190	187	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 4.5:12 – 6.1:12)																				
ICSL-9	6"	2 nails	170	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	209	204	198	194	190	210	210	210	210	210	210	210		
				D	199	195	191	188	183	180	177	210	210	210	210	210	210	210		
ICSL-10	6"	4 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
ICSL-11	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	207	204	210	210	210	210	210	210			
GABLE ROOFS (SLOPE 6.2:12 – 12:12)																				
ICSL-9	6"	2 nails	170	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	207	210	210	210	210	210	210	210		
				D	210	210	208	205	200	196	193	210	210	210	210	210	210	210		
ICSL-10	6"	4 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
ICSL-11	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.85								0.79							

See Table C6.1 on page 37 for assembly details, and *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.

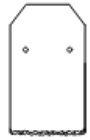
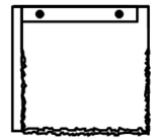


Table C6.7: Inspire Classic Slate Maximum Wind Speeds of Hip Roof Cladding–2023 FBC (HVHZ & Non-HVHZ); 2024&2021 IBC [5/8" PLYWOOD]

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸								
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}								
					15	20	25	30	40	50	60	15	20	25	30	40	50	60			
HIP ROOFS (SLOPE 3:12 – 4.4:12)																					
ICSL-9	6"	2 nails	170	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	207	204	210	210	210	210	210	210	210	210	210
				D	210	208	204	201	196	192	189	210	210	210	210	210	210	210	210	210	210
ICSL-10	6"	4 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
ICSL-11	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
HIP ROOFS (SLOPE 4.5:12 – 6.1:12)																					
ICSL-9	6"	2 nails	170	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
ICSL-10	6"	4 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
ICSL-11	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
HIP ROOFS (SLOPE 6.2:12 – 12:12)																					
ICSL-9	6"	2 nails	170	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	209	203	199	196	210	210	210	210	210	210	210	210	210	
ICSL-10	6"	4 nails	243	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
ICSL-11	7.5"	4 nails	227	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
				D	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.83								N/A								

See Table C6.1 on page 37 for assembly details, and *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.



APPENDIX C7: PROVINCE SLATE (PSL) WIND PRESSURE & WIND SPEED TABLES

Table C7.1: Province Slate Assembly Configurations

System No. ¹	Min Sheathing ^{2,3}	Max Shingle Exposure	Shingle Fasteners ⁴	Allowable Pressure ^{5,6} (psf)(ASD)
PSL-1	7/16" OSB	8"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	62 [NON-HVHZ ONLY]
PSL-2	7/16" OSB	8"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	89
PSL-3	7/16" OSB	8"	2 screws per shingle, #10 2-inch wafer head screws	140
PSL-4	1/2" Plywood	8"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	83 [NON-HVHZ ONLY]
PSL-5	1/2" Plywood	8"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	119
PSL-6	1/2" Plywood	8"	2 screws per shingle, #10 2-inch wafer head screws	187
PSL-7	5/8" Plywood	8"	2 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	92
PSL-8	5/8" Plywood	8"	4 nails per shingle, 11ga 1.75-inch galvanized ring-shank roofing nails	211
PSL-9	5/8" Plywood	8"	2 screws per shingle, #10 2-inch wafer head screws	187

See *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.

In accordance with the 2023 Florida Building Code(FBC), minimum 19/32-inch (5/8") plywood or wood planks must be installed for new roof deck construction in HVHZ regions.

Unless noted otherwise, the published allowable pressure (ASD) values apply to HVHZ and Non-HVHZ applications, and include a safety factor of 2.

<WIND SPEED TABLES BEGIN NEXT PAGE>

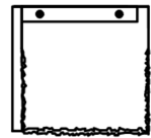


Table C7.2: Province Slate Maximum Wind Speeds of Gable Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC [7/16" OSB]

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
GABLE ROOFS (SLOPE 3:12 – 4.4:12)																				
PSL-1	8"	2 nails	62 [NON-HVHZ]	B	148	142	138	134	130	126	123	195	187	182	176	172	166	162		
				C	122	118	116	113	110	107	105	160	156	152	149	145	141	139		
				D	110	108	106	NA	NA	NA	NA	145	142	139	137	134	131	129		
PSL-2	8"	4 nails	89	B	178	171	165	161	156	151	147	210	210	210	210	206	199	194		
				C	146	142	139	136	132	129	126	192	186	182	179	173	169	166		
				D	132	129	127	125	122	119	117	174	170	167	164	160	157	154		
PSL-3	8"	2 screws	140	B	210	210	207	201	196	189	185	210	210	210	210	210	210	210		
				C	183	178	174	170	165	161	158	210	210	210	210	210	210	209		
				D	166	162	159	156	152	149	147	210	210	210	206	201	197	194		
GABLE ROOFS (SLOPE 4.5:12 – 6.1:12)																				
PSL-1	8"	2 nails	62 [NON-HVHZ]	B	162	155	150	146	142	137	134	210	210	207	201	195	189	185		
				C	133	129	126	123	120	117	115	182	177	173	170	165	161	158		
				D	120	118	115	113	111	108	107	166	162	159	156	152	149	147		
PSL-2	8"	4 nails	89	B	194	186	180	175	170	165	161	210	210	210	210	210	210	210		
				C	159	154	151	148	144	140	138	210	210	208	203	198	193	189		
				D	144	141	138	136	133	130	128	198	194	190	187	182	179	176		
PSL-3	8"	2 screws	140	B	210	210	210	210	210	207	202	210	210	210	210	210	210	210		
				C	199	194	189	185	180	176	173	210	210	210	210	210	210	210		
				D	181	177	174	170	166	163	160	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 6.2:12 – 12:12)																				
PSL-1	8"	2 nails	62 [NON-HVHZ]	B	176	169	164	159	155	150	146	205	197	191	185	180	174	170		
				C	144	140	137	134	131	127	125	168	163	160	156	152	148	146		
				D	131	128	126	124	121	118	116	153	149	146	144	140	137	135		
PSL-2	8"	4 nails	89	B	210	203	196	191	185	179	175	210	210	210	210	210	209	204		
				C	173	168	164	161	156	153	150	201	196	191	187	182	178	175		
				D	157	153	151	148	144	142	139	183	179	175	172	168	165	162		
PSL-3	8"	2 screws	140	B	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
				C	210	210	206	202	196	192	188	210	210	210	210	210	210	210		
				D	197	192	189	186	181	177	175	210	210	210	210	210	207	203		
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.85								0.79							

See Table C7.1 on page 44 for assembly details, and *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.

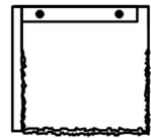
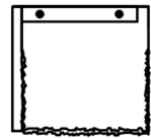


Table C7.3: Province Slate Maximum Wind Speeds of Hip Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC [7/16" OSB]

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
HIP ROOFS (SLOPE 3:12 – 4.4:12)																				
PSL-1	8"	2 nails	62 [NON-HVHZ]	B	173	166	161	156	152	147	143	205	197	191	185	180	174	170		
				C	142	138	135	132	128	125	123	168	163	160	156	152	148	146		
				D	129	126	123	121	118	116	114	153	149	146	144	140	137	135		
PSL-2	8"	4 nails	89	B	207	199	193	187	182	176	172	210	210	210	210	210	209	204		
				C	170	165	162	158	154	150	147	201	196	191	187	182	178	175		
				D	154	151	148	145	142	139	137	183	179	175	172	168	165	162		
PSL-3	8"	2 screws	140	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	207	203	198	193	188	185	210	210	210	210	210	210	210		
				D	194	189	186	182	178	174	172	210	210	210	210	210	207	203		
HIP ROOFS (SLOPE 4.5:12 – 6.1:12)																				
PSL-1	8"	2 nails	62 [NON-HVHZ]	B	195	187	182	176	172	166	162	210	210	210	207	202	195	190		
				C	160	156	152	149	145	141	139	188	183	179	175	170	166	163		
				D	145	142	139	137	134	131	129	171	167	164	161	157	154	151		
PSL-2	8"	4 nails	89	B	210	210	210	210	206	199	194	210	210	210	210	210	210			
				C	192	186	182	179	173	169	166	210	210	210	210	204	199	195		
				D	174	170	167	164	160	157	154	205	200	196	193	188	184	181		
PSL-3	8"	2 screws	140	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	206	201	197	194	210	210	210	210	210	210	210		
HIP ROOFS (SLOPE 6.2:12 – 12:12)																				
PSL-1	8"	2 nails	62 [NON-HVHZ]	B	180	172	167	162	158	153	149	210	210	207	201	195	189	185		
				C	147	143	140	137	133	130	128	182	177	173	170	165	161	158		
				D	134	131	128	126	123	120	119	166	162	159	156	152	149	147		
PSL-2	8"	4 nails	89	B	210	206	200	194	189	183	178	210	210	210	210	210	210			
				C	176	171	168	164	159	156	153	210	210	208	203	198	193	189		
				D	160	156	154	151	147	144	142	198	194	190	187	182	179	176		
PSL-3	8"	2 screws	140	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	206	200	195	192	210	210	210	210	210	210	210		
				D	201	196	193	189	185	181	178	210	210	210	210	210	210	210		
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.83								N/A							

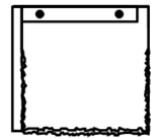
See Table C7.1 on page 44 for assembly details, and General Notes for APPENDIX C2 – APPENDIX C7 on page 12 for referenced superscript table notes.



**Table C7.4: Province Slate Maximum Wind Speeds of Gable Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC
[1/2" PLYWOOD]**

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
GABLE ROOFS (SLOPE 3:12 – 4.4:12)																				
PSL-4	8"	2 nails	83 [NON-HVHZ]	B	172	165	160	155	151	146	142	210	210	210	204	199	192	187		
				C	141	137	134	131	127	124	122	185	180	176	173	167	164	161		
				D	128	125	123	120	117	115	113	168	164	161	159	155	152	149		
PSL-5	8"	4 nails	119	B	206	197	191	186	181	175	170	210	210	210	210	210	210			
				C	168	164	160	157	152	149	146	210	210	210	207	201	196	192		
				D	153	149	147	144	141	138	136	201	197	193	190	185	181	179		
PSL-6	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	205	201	197	191	186	183	210	210	210	210	210	210	210		
				D	192	187	184	181	176	173	170	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 4.5:12 – 6.1:12)																				
PSL-4	8"	2 nails	83 [NON-HVHZ]	B	187	180	174	169	164	159	155	210	210	210	210	210	210			
				C	153	149	146	143	139	135	133	210	205	201	197	191	186	183		
				D	139	136	134	131	128	125	124	192	187	184	181	176	173	170		
PSL-5	8"	4 nails	119	B	210	210	208	202	197	190	186	210	210	210	210	210	210			
				C	184	178	175	171	166	162	159	210	210	210	210	210	210	210		
				D	167	163	160	157	153	150	148	210	210	210	210	210	207	204		
PSL-6	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	208	203	200	210	210	210	210	210			
				D	209	204	201	197	192	188	185	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 6.2:12 – 12:12)																				
PSL-4	8"	2 nails	83 [NON-HVHZ]	B	204	196	190	184	179	173	169	210	210	210	210	208	202	197		
				C	167	162	159	156	151	148	145	194	189	185	181	176	172	169		
				D	152	148	146	143	139	137	135	177	172	169	166	162	159	157		
PSL-5	8"	4 nails	119	B	210	210	210	210	210	207	202	210	210	210	210	210	210			
				C	200	194	190	186	181	177	173	210	210	210	210	210	206	202		
				D	182	177	174	171	167	164	161	210	206	203	199	194	190	187		
PSL-6	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	209	205	202	210	210	210	210	210	210	210		
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.85								0.79							

See Table C7.1 on page 44 for assembly details, and *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.



**Table C7.5: Province Slate Maximum Wind Speeds of Hip Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC
[1/2" PLYWOOD]**

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
HIP ROOFS (SLOPE 3:12 – 4.4:12)																				
PSL-4	8"	2 nails	83 [NON-HVHZ]	B	200	192	186	181	176	170	166	210	210	210	210	208	202	197		
				C	164	159	156	153	148	145	142	194	189	185	181	176	172	169		
				D	149	146	143	140	137	134	132	177	172	169	166	162	159	157		
PSL-5	8"	4 nails	119	B	210	210	210	210	210	204	199	210	210	210	210	210	210			
				C	196	191	187	183	178	173	170	210	210	210	210	210	206	202		
				D	178	174	171	168	164	161	158	210	206	203	199	194	190	187		
PSL-6	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	206	201	198	210	210	210	210	210	210	210		
HIP ROOFS (SLOPE 4.5:12 – 6.1:12)																				
PSL-4	8"	2 nails	83 [NON-HVHZ]	B	210	210	210	204	199	192	187	210	210	210	210	210	210			
				C	185	180	176	173	167	164	161	210	210	207	203	197	192	189		
				D	168	164	161	159	155	152	149	198	193	190	186	182	178	175		
PSL-5	8"	4 nails	119	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	207	201	196	192	210	210	210	210	210	210			
				D	201	197	193	190	185	181	179	210	210	210	210	210	210	210		
PSL-6	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
HIP ROOFS (SLOPE 6.2:12 – 12:12)																				
PSL-4	8"	2 nails	83 [NON-HVHZ]	B	208	199	193	188	182	177	172	210	210	210	210	210	210			
				C	170	165	162	159	154	150	148	210	205	201	197	191	186	183		
				D	155	151	148	146	142	139	137	192	187	184	181	176	173	170		
PSL-5	8"	4 nails	119	B	210	210	210	210	210	210	206	210	210	210	210	210	210			
				C	204	198	194	190	184	180	177	210	210	210	210	210	210	210		
				D	185	181	178	175	170	167	164	210	210	210	210	210	207	204		
PSL-6	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	209	206	210	210	210	210	210	210	210		
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.83								N/A							

See Table C7.1 on page 44 for assembly details, and *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.

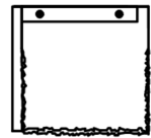
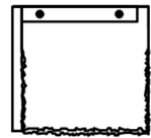


Table C7.6: Province Slate Maximum Wind Speeds of Gable Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC [5/8" PLYWOOD]

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
GABLE ROOFS (SLOPE 3:12 – 4.4:12)																				
PSL-7	8"	2 nails	92	B	181	173	168	163	159	154	150	210	210	210	210	209	202	197		
				C	148	144	141	138	134	131	128	195	190	185	182	176	172	169		
				D	135	131	129	127	124	121	119	177	173	170	167	163	160	157		
PSL-8	8"	4 nails	211	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	209	203	198	195	210	210	210	210	210	210	210		
				D	204	199	195	192	187	183	181	210	210	210	210	210	210	210		
PSL-9	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	205	201	197	191	186	183	210	210	210	210	210	210	210		
				D	192	187	184	181	176	173	170	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 4.5:12 – 6.1:12)																				
PSL-7	8"	2 nails	92	B	197	189	183	178	173	167	163	210	210	210	210	210	210			
				C	161	157	154	150	146	143	140	210	210	210	207	201	196	193		
				D	147	143	141	138	135	132	130	202	197	194	190	185	182	179		
PSL-8	8"	4 nails	211	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	209	204	200	197	210	210	210	210	210	210	210		
PSL-9	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	208	203	200	210	210	210	210	210	210	210		
				D	209	204	201	197	192	188	185	210	210	210	210	210	210	210		
GABLE ROOFS (SLOPE 6.2:12 – 12:12)																				
PSL-7	8"	2 nails	92	B	210	206	200	194	188	182	178	210	210	210	210	210	207			
				C	176	171	167	164	159	155	153	205	199	195	191	185	181	177		
				D	160	156	153	151	147	144	142	186	182	178	175	171	167	165		
PSL-8	8"	4 nails	211	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
PSL-9	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210				
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	209	205	202	210	210	210	210	210	210			
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.85								0.79							

See Table C7.1 on page 44 for assembly details, and *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.



**Table C7.7: Province Slate Maximum Wind Speeds of Hip Roof Cladding – 2023 FBC (HVHZ & Non-HVHZ); 2024 & 2021 IBC
[5/8" PLYWOOD]**

System No. ¹	Max Shingle Exposure	Shingle Fastener ⁴	Allowable Pressure (psf) (ASD) ^{5,6}	Exposure Category ⁷	ZONE 2/3 (CORNER/EDGE) ⁸								ZONE 1 (FIELD) ⁸							
					Maximum Wind Speed V _{ult} (mph) ^{9,10,11}								Maximum Wind Speed V _{ult} (mph) ^{9,10,11}							
					Building Height (ft) ^{12,13}								Building Height (ft) ^{12,13}							
					15	20	25	30	40	50	60	15	20	25	30	40	50	60		
HIP ROOFS (SLOPE 3:12 – 4.4:12)																				
PSL-7	8"	2 nails	92	B	210	202	196	190	185	179	175	210	210	210	210	210	210	207		
				C	173	168	164	161	156	152	150	205	199	195	191	185	181	177		
				D	157	153	150	148	144	141	139	186	182	178	175	171	167	165		
PSL-8	8"	4 nails	211	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
PSL-9	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	206	201	198	210	210	210	210	210	210	210		
HIP ROOFS (SLOPE 4.5:12 – 6.1:12)																				
PSL-7	8"	2 nails	92	B	210	210	210	210	209	202	197	210	210	210	210	210	210	210		
				C	195	190	185	182	176	172	169	210	210	210	210	207	202	199		
				D	177	173	170	167	163	160	157	208	203	200	196	191	187	185		
PSL-8	8"	4 nails	211	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
PSL-9	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
HIP ROOFS (SLOPE 6.2:12 – 12:12)																				
PSL-7	8"	2 nails	92	B	210	210	203	198	192	186	181	210	210	210	210	210	210	210		
				C	179	174	170	167	162	158	155	210	210	210	207	201	196	193		
				D	163	159	156	153	150	147	144	202	197	194	190	185	182	179		
PSL-8	8"	4 nails	211	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	210	210	210	210	210	210	210	210			
PSL-9	8"	2 screws	187	B	210	210	210	210	210	210	210	210	210	210	210	210	210			
				C	210	210	210	210	210	210	210	210	210	210	210	210	210			
				D	210	210	210	210	210	209	206	210	210	210	210	210	210			
ROOF OVERHANG REDUCTION FACTOR ¹¹					0.83								N/A							

See Table C7.1 on page 44 for assembly details, and *General Notes for APPENDIX C2 – APPENDIX C7* on page 12 for referenced superscript table notes.



APPENDIX D: FLORIDA TO INTERNATIONAL CODE CROSS-REFERENCES

Table D1: 2023 FBC to 2024/2021 IBC Cross-referenced Sections

<u>2023 FBC Section</u>	<u>2024 /2021 IBC Section¹</u>	<u>Description</u>	<u>Referenced Standard or Code Section²</u>	<u>Year</u>	<u>IBC Comparison to FBC</u>
1504.3	1504.4	Wind Resistance of Nonballasted Roofs	IBC Section 1609	-	Article content same as FBC
1504.3.1	1504.4.1	Wind Uplift Resistance	UL 580	2006	Article content same as FBC
1504.6	N/A	N/A	N/A	N/A	Content not included in IBC
1505	1505	Fire Classification	ASTM E108	2017	Article content same as FBC
1515.1.3	N/A	N/A	N/A	N/A	Content not included in IBC
1516.1	N/A	N/A	N/A	N/A	Content not included in IBC
1523.1.1	N/A	N/A	N/A	N/A	Content not included in IBC
1523.6.5	N/A	N/A	N/A	N/A	Content not included in IBC
1523.6.5.2.4.1	N/A	N/A	N/A	N/A	Content not included in IBC
2606.4	2606.4	Burning Rate	ASTM D635	2014	Article content same as FBC
2606.4	2606.4	Self-Ignition Temperature	ASTM D1929	2016	Article content same as FBC
2606.4	2606.4	Smoke Density Rating	ASTM D2843	2016	Article content same as FBC
2615.2	N/A	N/A	N/A	N/A	Content not included in IBC
2615.2	N/A	N/A	N/A	N/A	Content not included in IBC

Table D2: 2023 FBC-R to 2024/2021 IRC Cross-referenced Sections

<u>2023 FBC-R Section</u>	<u>2024 /2021 IRC Section¹</u>	<u>Description</u>	<u>Referenced Standard or Code Section²</u>	<u>Year</u>	<u>IBC Comparison to FBC</u>
R902.1	R902.1	Fire Classification	ASTM E108	2017	Article content same as FBC
R904.3	R904.3	Material Specifications and Physical Characteristics	-	-	Article content same as FBC
R905.1	R905.1	Roof Covering Application	IRC Table R301.2.1(1), R301.2.1(2)	-	Article content same as FBC
R4402.1	N/A	N/A	N/A	N/A	Content not included in IBC
R4412.1	N/A	N/A	N/A	N/A	Content not included in IBC

1. IBC/IRC equivalent sections are listed in comparison to the corresponding state code. (N/A) indicates that the IBC/IRC has no equivalent section and has not been addressed in the IBC/IRC.
2. Only the applicable reference standards and code sections cited in the main body text and this appendix are listed. (-) indicates that the main body text or this appendix covers the full explanation of the objective.

2024 IBC 104.2.3 Alternative materials, design and methods of construction and equipment

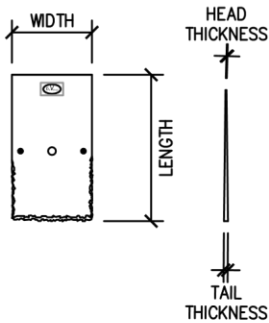
The roof covering material has been tested to FBC standard TAS 110 for aspects of quality, strength, effectiveness and durability to meet the performance objectives of the IBC.



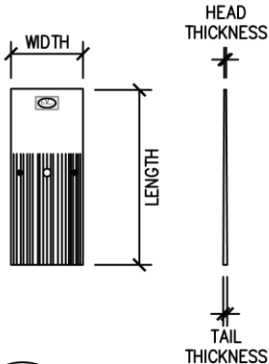
APPENDIX E: GENERAL INSTALLATION DRAWINGS

DAVINCI ROOFING SLATE AND SHAKE DIMENSIONS				
PRODUCT	LENGTHS (IN.)	WIDTH (IN.)	THICKNESS (IN.)	
			HEAD	TAIL
DAVINCI SLATE	18	6, 7, 9, 10, 12	1/8	1/2
DAVINCI SHAKE	22	4, 6, 7, 8, 9	1/4	5/8
SELECT SHAKE	22	8, 10	1/4	5/8
FANCY SHAKE	18	5, 7, 12	1/4	1/2
INSPIRE CLASSIC SLATE	18	12	1/4	1/4
PROVINCE SLATE	11½	12	¾	¾

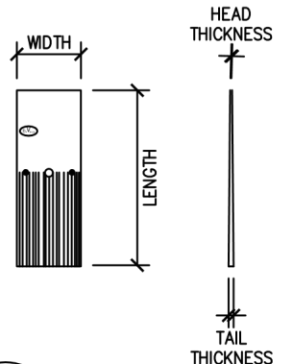
NOTE: "BEAVER TAIL" FANCY SHAKES ARE ONLY AVAILABLE IN 5" WIDTHS.



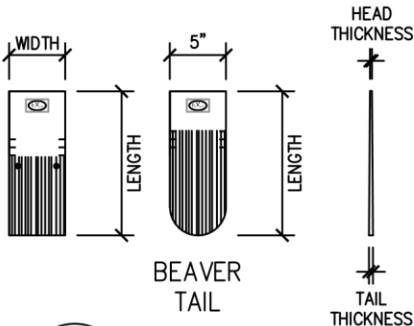
DVSL 1 DAVINCI SLATE
NOT-TO-SCALE



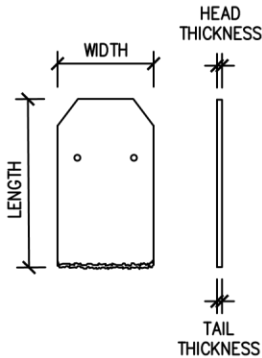
DVSH 1 DAVINCI SHAKE
NOT-TO-SCALE



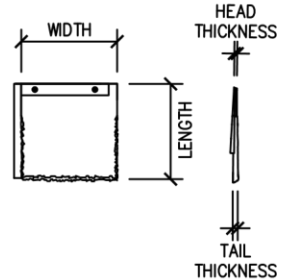
SSH 1 SELECT SHAKE
NOT-TO-SCALE



FSH 1 FANCY SHAKE
NOT-TO-SCALE



ICSL 1 INSPIRE CLASSIC SLATE
NOT-TO-SCALE



PSL 1 PROVINCE SLATE
NOT-TO-SCALE

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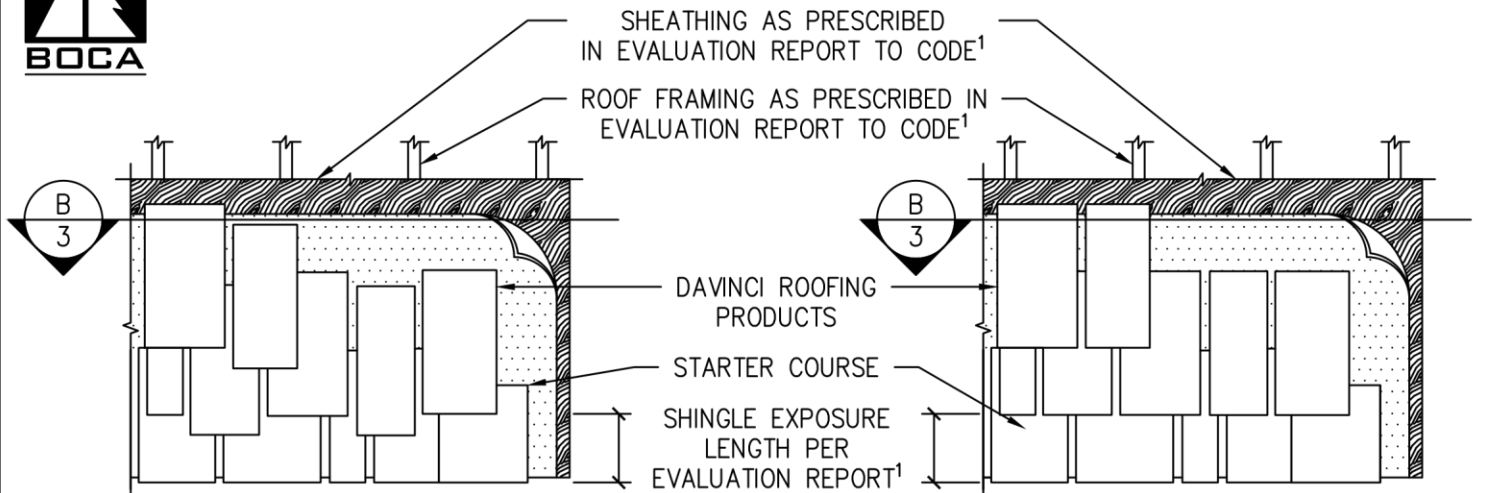


CLIENT
WESTLAKE DAVINCI
ROOFSCAPES, LLC

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PROJECT DAVINCI SHAKE AND SLATE ROOFING		TITLE DAVINCI ROOFING SLATE AND SHAKE PROFILES			

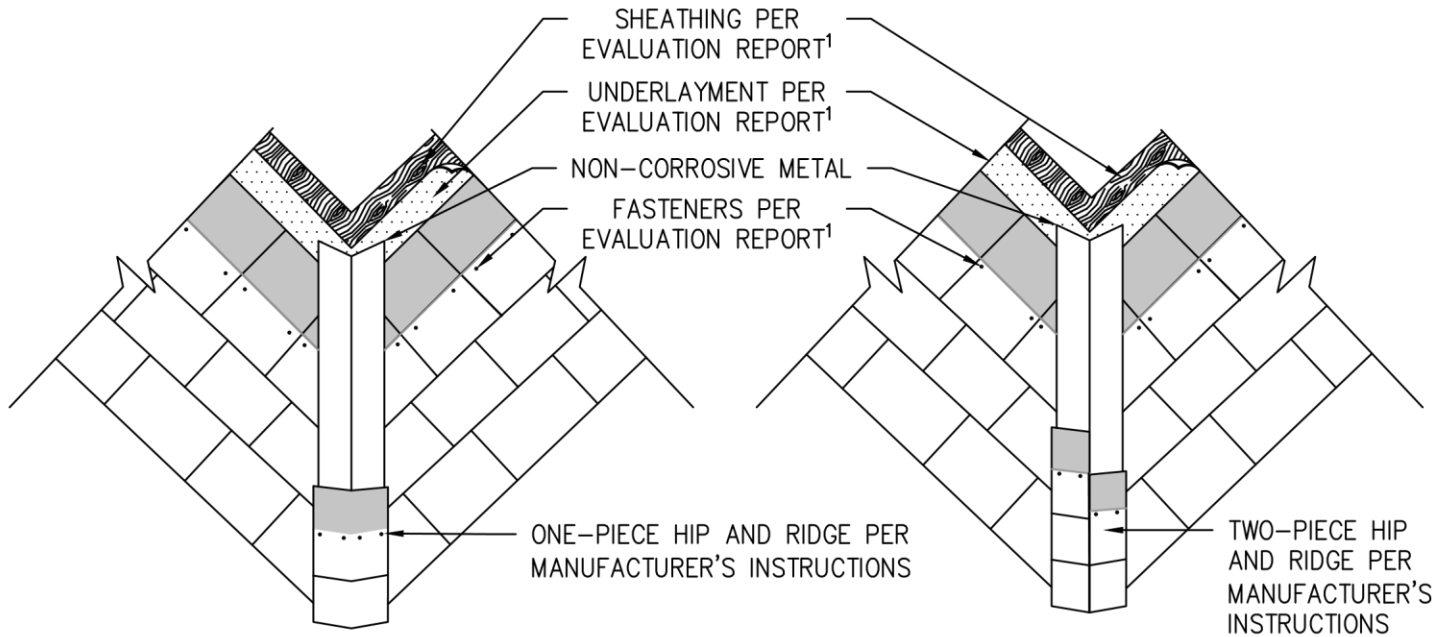
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A
2 TYPICAL STAGGERED ROOFING INSTALLATION
PLAN VIEW | NOT-TO-SCALE

B
2 TYPICAL STRAIGHT ROOFING INSTALLATION
PLAN VIEW | NOT-TO-SCALE



C
2 TYPICAL HIP/RIDGE ONE-PIECE DETAIL
PLAN VIEW | NOT-TO-SCALE

D
2 TYPICAL HIP/RIDGE TWO-PIECE DETAIL
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			TITLE TYPICAL STAGGERED, STRAIGHT, HIP, AND RIDGE ROOFING PLAN		DRN. TH	CHK. CB

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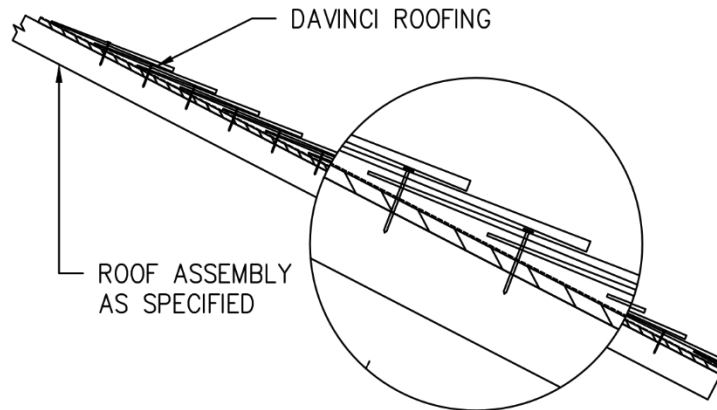
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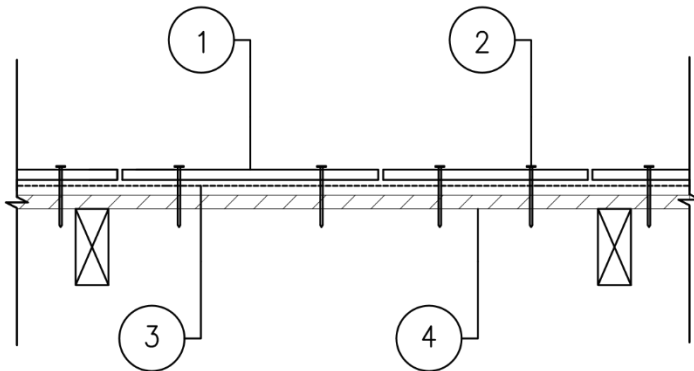
2025-03-06

TOP OF DOCUMENT

LIST OF TABLES



A
3 DAVINCI ROOFING TYPICAL INSTALLATION
SECTION VIEW | NOT-TO-SCALE



ROOF FRAMING & WOOD-BASE SHEATHING ASSEMBLY EXTERIOR TO INTERIOR	
1	DAVINCI ROOFING
2	ROOFING FASTENERS PER EVALUATION REPORT DETAILS ¹
3	ROOFING UNDERLAYMENT PER EVALUATION REPORT, TO CODE ¹
4	SHEATHING PER EVALUATION REPORT, TO CODE ¹

1. DRAWING FOR ENGINEERING EVALUATION REPORT: 0064-15-4-5985

B
3 DAVINCI ROOFING ON WOOD SHEATHING
SECTION VIEW | NOT-TO-SCALE

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	PROJECT DAVINCI SHAKE AND SLATE ROOFING		TITLE TYPICAL ROOFING SECTIONS			

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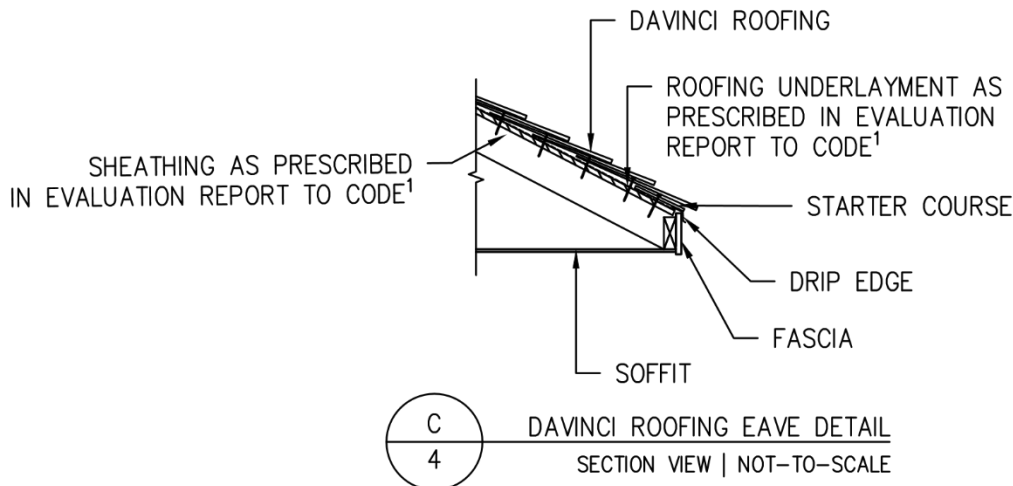
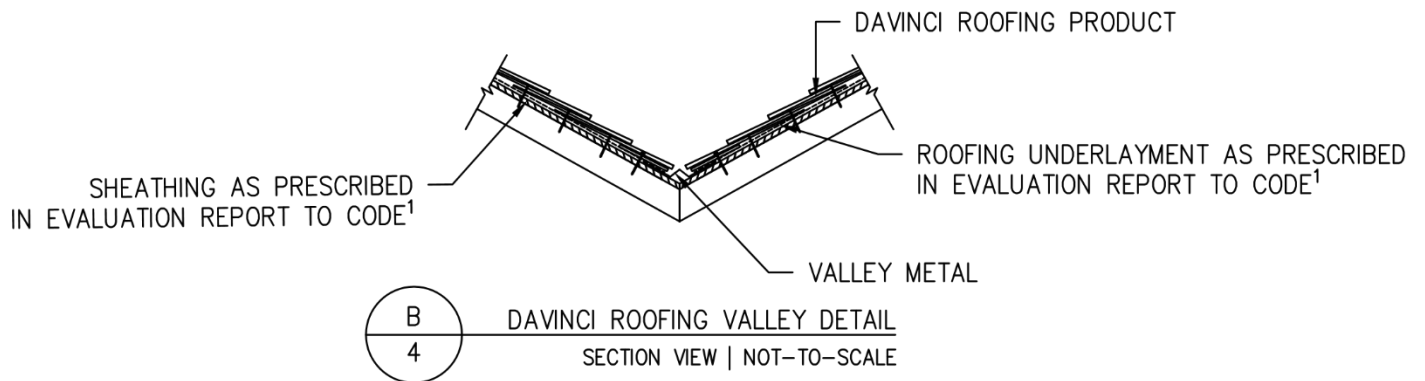
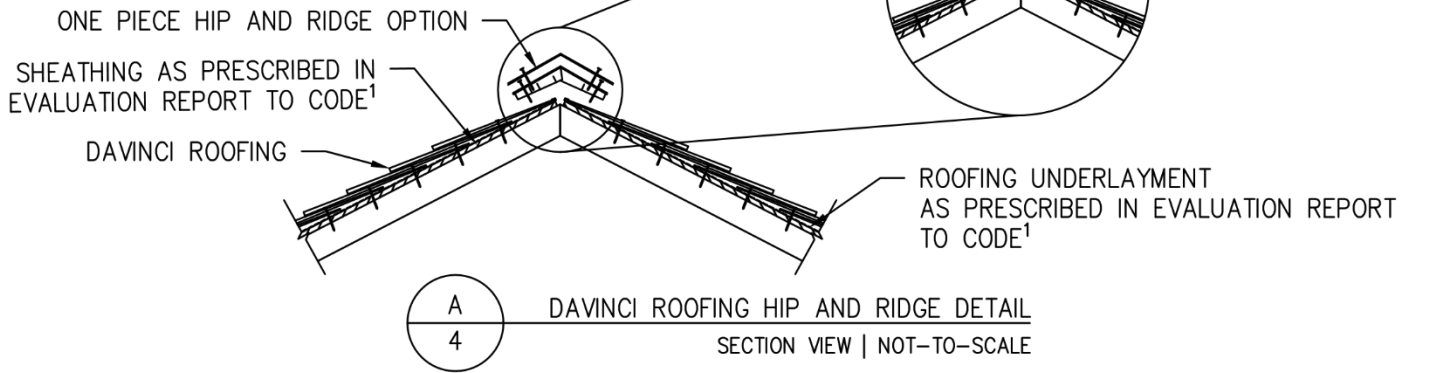
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CLIENT	PROJECT	WESTLAKE DAVINCI ROOFSCAPES, LLC		DAVINCI SHAKE AND SLATE ROOFING		TITLE	
						TYPICAL HIP, RIDGE, VALLEY AND EAVE INSTALLATION DETAILS	

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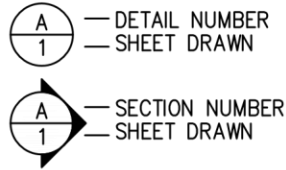
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LIST OF TABLES



DESIGN LOADS	
LIVE	SEE EVALUATION REPORT ¹
SNOW	
WIND	
SEISMIC	
TEMPERATURE	

LEGEND AND SYMBOLS



MATERIAL STANDARDS

SHEATHING

- WOOD-BASED STRUCTURAL SHEATHING:
 - PLYWOOD – US DOC PS1-19 OR PS2-18 U.N.O.
 - OSB – US DOC PS2-18 U.N.O.

FASTENERS

- NAILS TO CONFORM TO ASTM F1667.
- SCREWS TO CONFORM TO ASME B18.6.1
- ALL FASTENERS WITH CORROSION-RESISTANT GALVANIZED COATING.

HIP & RIDGE

INSPIRE CLASSIC SLATE:

ONE PIECE: INSPIRE CLASSIC SLATE ONE-PIECE HIP AND RIDGE TILES ARE INSTALLED AT A 6 TO 7.5-INCH (152 TO 191-mm) EXPOSURE. EACH TILE WILL BE FASTENED WITH (2) NAILS LOCATED IN THE DESIGNATED NAIL TARGET AREAS. HIP AND RIDGE TILES MUST BE SECURED WITH THE SAME TYPE AND NUMBER OF FASTENERS AS THE FIELD TILES.

ALL OTHER DAVINCI ROOFING:

ONE PIECE: TILE SHOULD BE INSTALLED AT 12" EXPOSURE. TILE SHOULD BE NAILED ONCE ON EACH SIDE ABOUT $\frac{3}{4}$ " FROM OUTSIDE EDGE WITH APPROVED FASTENER LONG ENOUGH TO PENETRATE THROUGH ROOF DECK AND EXCEED IT BY $\frac{3}{16}$ ". HIP AND RIDGE SHOULD BE NAILED APPROXIMATELY $12\frac{1}{2}$ " FROM BUFF OF TILE AND $\frac{1}{2}$ " TO $\frac{3}{4}$ " FROM OUTSIDE EDGE.

TWO PIECE: BOTTOM PIECE OF HIP AND RIDGE SHOULD BE CUT SO TIP DOES NOT EXTEND PAST THE BUTT OF SECOND COURSE. ROOFING THAT MAKES UP A HIP AND RIDGE UNIT SHOULD BE 6" SHAKES OR 7" SLATES AND INSTALLED WITH A TEN-INCH EXPOSURE. USING A CHALK LINE TO ASSURE STRAIGHTNESS, HIP AND RIDGE SHOULD BE INSTALLED ONE PIECE AT A TIME SO THAT THE BUTTS OF TWO SHINGLES ARE ADJACENT AND THE INSIDE EDGES TOUCH.

VALLEYS

A FULL SHEET OF ASTM D1970 SELF-ADHERING UNDERLAYMENT SHOULD BE CENTERED IN VALLEY WITH MINIMUM 16" WIDE, 28 GAUGE VALLEY METAL NAILED AT 4" O.C. AND 1" FROM EDGE OF METAL. AN 18" STRIP OF ASTM D1970 SELF-ADHERING UNDERLAYMENT SHOULD BE PLACED OVER THE OF THE VALLEY METAL.

ABBREVIATIONS

CONT	CONTINUOUS	O.C.	ON CENTER
EA	EACH	P.T.	PRESSURE TREATED
E/W	EACH WAY	S.G.	SPECIFIC GRAVITY
EXT.	EXTERIOR	SPEC.	SPECIFICATION
INT.	INTERIOR	NO.	TYPICAL
MAX	MAXIMUM	U.N.O.	UNLESS NOTED OTHERWISE
MIN	MINIMUM	W/	WITH
NO.	NUMBER		

TESTING AND CODE COMPLIANCE

- THE SIDING PRODUCT ASSEMBLY SHOWN IS DESIGNED TO COMPLY WITH THE 2024 AND 2021 INTERNATIONAL BUILDING CODE (IBC)
- THE STRUCTURAL FRAMING AND SHEATHING SHALL BE DESIGNED AND ANCHORED TO PROVIDE LATERAL BRACING TO NOT EXCEED DEFLECTION LIMITS, AND PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. FRAMING DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- THESE DRAWINGS APPLY TO THE TESTING ASSEMBLY ONLY AND DO NOT IMPLY THAT THE SIGNATORY ENGINEER IS THE DESIGNER OF RECORD FOR ANY FUTURE CONSTRUCTION ON WHICH THEY ARE USED.
- SOME NON-STRUCTURAL COMPONENTS NOW SHOWN AND DO NOT IMPACT STRENGTH FOR ATTACHMENT. TO BE INSTALLED PER CODE AND MAY INCLUDE: FLASHING, INTERIOR INSULATION, INTERIOR FINISH

INSTALLATION

- THE INSTALLATION DETAILS DESCRIBED ARE OF THE LABORATORY TESTED ASSEMBLY AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, THE JOB ENGINEER OR ARCHITECT PREPARED SITE-SPECIFIC DOCUMENTS SHALL BE USED.

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WESTLAKE DAVINCI ROOFSCAPES, LLC	DAVINCI SHAKE AND SLATE ROOFING	DAVINCI ROOFING GENERAL NOTES			

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