40

COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS: FLORIDA BUILDING CODE RESIDENTIAL 2010 EFFECTIVE 15 MARCH 2012 AND THE NATIONAL ELECTRICAL 2008 EFFECTIVE 1 OCTOBER 2009

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE WITH THE CURRENT 2010 FLORIDA BUILDING CODES RESIDENTIAL, EFFECTIVE 15 MARCH 2012. NATIONAL ELECTRICAL CODE 2008 EFFECTIVE 1 OCTOBER 2009. ALL PLANS OR DRAWINGS SHALL PROVIDE CALCULATIONS AND DETAILS THAT HAVE THE SEAL AND SIGNATURE OF A CERTIFIED ARCHITECT OR ENGINEER REGISTERED IN THE STATE OF FLORIDA, OR ALTERNATE METHODOLOGIES, APPROVED BY THE STATE OF FLORIDA BUILDING COMMISSION FOR ONE-AND-TWO FAMILY DWELLINGS.

FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEEDS ARE PER FLORIDA BUILDING CODE FIGURE 1609-A THROUGH 1609-C ULTIMATE DESIGN WIND SPEEDS FOR RISK CATEGORY AND BUILDINGS AND OTHER STRUCTURES

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL			Items to Include- Each Box shall be Circled as Applicable		
				Yes	No	N/A
1	Two (2) complete sets of plans containing the following:			X		
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void			X		
3	Condition space (Sq. Ft.) 728		Total (Sq. Ft.) under roof 884	IIIIIII	IIIIIII	IIIII

Designers name and signature shall be on all documents and a licensed architect or engineer, signature and official embossed seal shall be affixed to the plans and documents as per the FLORIDA BUILDING CODES RESIDENTIAL R101.2.1

Site Plan information including:

4	Dimensions of lot or parcel of land	X		
5	Dimensions of all building set backs	X		
6	Location of all other structures (include square footage of structures) on parcel, existing or proposed well and septic tank and all utility easements.	X		
7	Provide a full legal description of property.	X		

Wind-load Engineering Summary, calculations and any details are required.

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
8	**Plans or specifications must show compliance with FBCR Chapter 3**	IIIIII	IIIII	IIIIII
		YES	NO	N/A
9	Basic wind speed (3-second gust), miles per hour	✓		
10	(Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	✓		
11	Wind importance factor and nature of occupancy	✓		
12	The applicable internal pressure coefficient, Components and Cladding	✓		
13	The design wind pressure in terms of psf (kN/m²), to be used for the design of exterior component, cladding materials not specifally designed by the registered design professional.	✓		

Elevations Drawing including:

14	All side views of the structure	✓		
15	Roof pitch	✓		
16	Overhang dimensions and detail with attic ventilation	✓		
17	Location, size and height above roof of chimneys	✓		
18	Location and size of skylights with Florida Product Approval			✓
18	Number of stories	✓		
20A	Building height from the established grade to the roofs highest peak	✓		

Floor Plan including:

20	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies	✓		
21	Raised floor surfaces located more than 30 inches above the floor or grade	✓		
22	All exterior and interior shear walls indicated	✓		
23	Shear wall opening shown (Windows, Doors and Garage doors)	✓		
24	Show compliance with Section FBCR 310 Emergency escape and rescue opening shown in each bedroom (net clear opening shown) and Show compliance with Section FBC 1405.13.2 where the opening of an operable window is located more than 72 inches above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches above the finished floor of the room in which the window is located. Glazing between the floor and 24 inches shall be fixed or have openings through which a 4-inch-diameter sphere cannot pass.	✓		
25	Safety glazing of glass where needed	✓		
26	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 and chapter 24 of FBCR)	✓		
27	Show stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails	✓		
28	Identify accessibility of bathroom (see FBCR SECTION 320)			

All materials placed within opening or onto/into exterior walls, soffits or roofs shall have Florida product approval number and mfg. installation information submitted with the plans (see Florida product approval form)

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable

FBCR 403: Foundation Plans

		YES	NO	N/A
29	Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing.	✓		
30	All posts and/or column footing including size and reinforcing	✓		
31	Any special support required by soil analysis such as piling.			✓
32	Assumed load-bearing valve of soil _____ Pound Per Square Foot	✓		
33	Location of horizontal and vertical steel, for foundation or walls (include # size and type) **For** structures with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an grounding electrode system. Per the National Electrical Code article 250.52.3	✓		

FBCR 506: CONCRETE SLAB ON GRADE

34	Show Vapor retarder (6mil. Polyethylene with joints lapped 6 inches and sealed)			✓
35	Show control joints, synthetic fiber reinforcement or welded fire fabric reinforcement and Supports			

FBCR 318: PROTECTION AGAINST TERMITES

36	Indicate on the foundation plan if soil treatment is used for subterranean termite prevention or Submit other approved termite protection methods. **Protection shall be provided by registered termiticides**	✓		

FBCR 606: Masonry Walls and Stem walls (load bearing & shear Walls)

37	Show all materials making up walls, wall height, and Block size, mortar type	✓		
38	Show all Lintel sizes, type, spans and tie-beam sizes and spacing of reinforcement			

Metal frame shear wall and roof systems shall be designed, signed and sealed by Florida Prof. Engineer or Architect

Floor Framing System: First and/or second story

39	Floor truss package shall including layout and details, signed and sealed by Florida Registered Professional Engineer	✓		
40	Show conventional floor joist type, size, span, spacing and attachment to load bearing walls, stem walls and/or priers	✓		
41	Girder type, size and spacing to load bearing walls, stem wall and/or priers	✓		
42	Attachment of joist to girder	✓		
43	Wind load requirements where applicable	✓		
44	Show required under-floor crawl space	✓		
45	Show required amount of ventilation opening for under-floor spaces	✓		
46	Show required covering of ventilation opening	✓		
47	Show the required access opening to access to under-floor spaces	✓		
48	Show the sub-floor structural panel sheathing type, thickness and fastener schedule on the edges & interi of the areas structural panel sheathing	✓		

49	Show Draftstopping, Fire caulking and Fire blocking	✓		
50	Show fireproofing requirements for garages attached to living spaces, per FBCR section 302.6	✓		
51	Provide live and dead load rating of floor framing systems (psf).			

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable YES	NO	N/A
52	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	✓		
53	Fastener schedule for structural members per table IRC 602.3 are to be shown	✓		
54	Show Wood structural panel's sheathing attachment to studs, joist, trusses, rafters and structural members, showing fastener schedule attachment on the edges & intermediate of the areas structural panel sheathing	✓		
55	Show all required connectors with a max uplift rating and required number of connectors and oc spacing for continuous connection of structural walls to foundation and roof trusses or rafter systems	✓		
56	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per IRC Table 502.5 (1)	✓		
57	Indicate where pressure treated wood will be placed	✓		
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	✓		
59	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail			

FBCR :ROOF SYSTEMS:

60	Truss design drawing shall meet section FBCR 802.1.6.1 Wood trusses	✓		
61	Include a layout and truss details, signed and sealed by Florida Professional Engineer	✓		
62	Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters	✓		
63	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details	✓		
64	Provide dead load rating of trusses			

FBCR 802:Conventional Roof Framing Layout

65	Rafter and ridge beams sizes, span, species and spacing			
66	Connectors to wall assemblies' include assemblies' resistance to uplift rating			✓
67	Valley framing and support details			
68	Provide dead load rating of rafter system			

FBCR 803 ROOF SHEATHING

69	Include all materials which will make up the roof decking, identification of structural panel sheathing, grade, thickness	✓		
70	Show fastener Size and schedule for structural panel sheathing on the edges & intermediate areas			

ROOF ASSEMBLIES FRC Chapter 9

71	Include all materials which will make up the roof assembles covering	✓		
72	Submit Florida Product Approval numbers for each component of the roof assembles covering			

FBCR Chapter 11 Energy Efficiency Code for residential building

Residential construction shall comply with this code by using the following compliance methods in the FBCR chapter11 Residential buildings compliance methods. **Two of the required forms are to be submitted**, *N1100.1.1.1 As an alternative to the computerized Compliance Method A, the Alternate Residential Point System Method hand calculation, Alternate Form 600A, may be used. All requirements specific to this calculation are located in Sub appendix C to Appendix G. Buildings complying by this alternative shall meet all mandatory requirements of this chapter. Computerized versions of the Alternate Residential Point System Method shall not be acceptable for code compliance.*

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
		YES	NO	N/A
73	Show the insulation R value for the following areas of the structure	✓		
74	Attic space	✓		
75	Exterior wall cavity	✓		
76	Crawl space			

HVAC information

77	Submit two copies of a Manual J sizing equipment or equivalent computation study	✓		
78	Exhaust fans shown in bathrooms **Mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous required**	✓		
79	Show clothes dryer route and total run of exhaust duct	✓		

Plumbing Fixture layout shown

80	All fixtures waste water lines shall be shown on the foundation plan	✓		
81	Show the location of water heater			

Private Potable Water

82	Pump motor horse power	✓		
83	Reservoir pressure tank gallon capacity			
84	Rating of cycle stop valve if used			

Electrical layout shown including

85	Show Switches, receptacles outlets, lighting fixtures and Ceiling fans	✓		
86	Show all 120-volt, single phase, 15- and 20-ampere branch circuits outlets required to be protected by **Ground-Fault Circuit Interrupter (GFCI) Article 210.8 A**			
87	Show the location of smoke detectors & Carbon monoxide detectors			
88	Show service panel, sub-panel, location(s) and total ampere ratings			
89	On the electrical plans identify the electrical service overcurrent protection device for the main electrical service. This device shall be installed on the exterior of structures to serve as a disconnecting means for the utility company electrical service. Conductors used from the exterior disconnecting means to a panel or sub panel shall have four-wire conductors, of which one conductor shall be used as an equipment ground. Indicate if the utility company service entrance cable will be of the overhead or underground type. **For structures** with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an Grounding electrode system. Per the National Electrical Code article 250.52.3			

90	Appliances and HVAC equipment and disconnects			
91	Show all 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas shall be protected by a listed **Combination arc-fault circuit interrupter,** Protection device.			

Disclosure Statement for Owner Builders *If you as the applicant will be acting as an owner/builder under section 489.103(7) of the Florida Statutes, submit the required owner builder disclosure statement form.*

Notice Of Commencement

A notice of commencement form **recorded** in the Columbia County Clerk Office is required to be filed with the building department Before Any Inspections can be preformed.

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable

THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS

		YES	NO	N/A
92	**Building Permit Application** A current On-Line Building Permit Application www.ccpermit.com is to be completed, by following the Checklist all supporting documents must be submitted. There is a **$15.00** application fee.	✓		
93	**Parcel Number** The parcel number (Tax ID number) from the Property Appraisers Office (386) 758-1083 is required. A copy of property deed is also requested. www.columbiacountyfla.com	✓		
94	**Environmental Health Permit or Sewer Tap Approval** A copy of a approved Columbia County Environmental Health (386) 758-1058	✓		
95	**City of Lake City** A permit showing an approved waste water sewer tap 386-752-2031			✓
96	**Toilet facilities shall be provided for all construction sites**	✓		
97	**Town of Fort White** (386) 497-2321 If the parcel in the application for building permit is within the Corporate city limits of Fort White, an approval land use development letter issued by the Town of Fort is required to be submitted with the application for a building permit.			✓
98	**Flood Information:** All projects within the Floodway of the Suwannee or Santa Fe Rivers shall require permitting through the Suwannee River Water Management District, before submitting a application to this office. Any project located within a flood zone where the base flood elevation (100 year flood) has been established shall meet the requirements of Section 8.5.2 of the Columbia County Land Development Regulations. Any project located within a flood zone where the base flood elevation has not been established (Zone A) shall meet the requirements of Section 8.5.3 of the Columbia County Land Development Regulations			
99	**CERTIFIED FINISHED FLOOR ELEVATIONS** will be required on any project where the approved FIRM Flood Maps show the property is in a AE, Floodway, and AH flood zones. Additionally One Foot Rise letters are required for AE and AH zones. In the Floodway Flood zones a Zero Rise letter is required.			
100	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is **$50.00**			
101	**Driveway Connection:** If the property does not have an existing access to a public road, then an application for a culvert permit (**$25.00**) must be made. County Public Works Dept. determines the size and length of every culvert before instillation and completes a final inspection before permanent power is granted. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver (**$50.00**) Separate Check when issued. If the project is to be located on an F.D.O.T. maintained road, then an F.D.O.T. access permit is required.			
102	**911 Address:** An application for a 911address must be applied for and **received** through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125 Ext. 3			

Section R101.2.1 of the Florida Building Code Residential:

The provisions of Chapter 1, Florida Building Code shall govern the administration and enforcement of the Florida Building Code, Residential.

Section 105 of the Florida Building Code defines the:

Time limitation of application.
An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

Single-family residential dwelling.
Section 105.3.4 A building permit for a single-family residential dwelling must be issued within 30 working days of application therefor unless unusual circumstances require a longer time for processing the applicatio or unless the permit application fails to satisfy the Florida Building Code or the enforcing agency's laws or ordinances.

Permit intent.
Section 105.4.1: A permit issued shall be constructed to be a license to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes, nor shall issuance of a permit prevent the building official from thereafter requiring a correction of errors in plans, construction or violations of this code. Every permit issued shall become invalid unless the work authorized by such permit is commenced within six months after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of six months after the time the work is commenced.

If work has commenced.
Section 105.4.1.1: If work has commenced and the permit is revoked, becomes null and void, or expires because of lack of progress or abandonment, a new permit covering the proposed construction shall be obtained before proceeding with the work.

New Permit.
Section 105.4.1.2: If a new permit is not obtained within 180 days from the date the initial permit became null and void, the building official is authorized to require that any work which has been commenced or completed be removed from the building site. Alternately, a new permit may be issued on application, providing the work in place and required to complete the structure meets all applicable regulations in effect at the time the initial permit became null and void and any regulations which may have become effective between the date of expiration and the date if issuance of the new permit.

Work Shall Be:
Section 105.4.1.3: Work shall be considered to be in active progress when the permit has received an approved inspection within 180 days. This provision shall not be applicable in case of civil commotion or strike or when the building work is halted due directly to judicial injunction, order or similar process.

The Fee:
Section 105.4.1.4: The fee for renewal reissuance and extension of a permit shall be set forth by the administrative authority.

When the application is approved for permitting the applicant will be notified by phone as to the status by the Columbia County Building & Zoning Department.

Force Engineering & Testing Inc.
19530 Ramblewood Drive
Humble,TX 77338

Product Evaluation Report

TRI COUNTY METALS

29 Ga. Ultra-Rib Roof Panel over 15/32" Plywood

Florida Product Approval # 4595.2 R2

Florida Building Code 2010
Per Rule 9N-3
Method: 1 –D

Category: Roofing
Subcategory: Metal Roofing
Compliance Method: 9N-3.005(1)(d)
NON HVHZ

Product Manufacturer:
Tri County Metals
301 SE 16th Street
Trenton, Florida 32693

Engineer Evaluator:
Terrence E. Wolfe, P.E. # 44923
Florida Evaluation ANE ID: 1920

Validator:
Locke Bowden, P.E., FL #49704
9450 Alysbury Place
Montgomery, AL 36117

Contents:
Evaluation Report Pages 1 – 4

COLUMBIA COUNTY BUILDING DEPARTMENT
Received for FILE COPY
Code Compliance
PLANS EXAMINER

TERRENCE E. WOLFE LICENSE No. 44923 STATE OF FLORIDA PROFESSIONAL ENGINEER

State of Florida C.O.A. #26778

February 20, 2012

Force Engineering & Testing Inc.
19530 Ramblewood Drive
Humble, TX 77338

Compliance Statement: The product as described in this report has demonstrated compliance with the Florida Building Code 2010, Sections 1504.3.2, 1504.7.

Product Description: Ultra-Rib Roof Panel, Min. 29 Ga. Steel, 36" Wide, through fastened roof panel over 15/32" Plywood decking. Non-Structural Application.

Panel Material/Standards: Material: Minimum 29 Ga. Steel conforming to Florida Building Code 2010 Section 1507.4.3.
Yield Strength: Min. 80.0 ksi
Corrosion Resistance: Panel Material shall comply with Florida Building Code 2010, Section 1507.4.3.

Panel Dimension(s):

Thickness:	0.0145" min.
Width:	36"
Rib Height:	¾" major rib at 9" O.C.
Panel Rollformer:	MRS Metal Rollforming Systems

Panel Fastener: #10-16 x 1-1/2" HWH Woodgrip with sealing washing or approved equal
¼" minimum penetration through plywood
Corrosion Resistance: Per Florida Building Code 2010, Section 1506.6, 1507.4.4

Substrate Description: Min. 15/32" thick, APA Rated plywood over supports at maximum 24" O.C. Design of plywood and plywood supports are outside the scope of this evaluation. Must be designed in accordance w/ Florida Building Code 2010.

Design Uplift Pressures:

Table "A"

Maximum Total Uplift Design Pressure:	84.3 psf	146.0 psf
Fastener Pattern:	9"-9"-9"-9"	6.5"-2.5"-6.5"-2.5"-6.5"-2.5"-6.5"
Fastener Spacing:	24" O.C.	12" O.C.

*Design Pressure includes a Safety Factor = 2.0.

FL# 4595.2 R2

February 20, 2012

Force Engineering & Testing Inc.
19530 Ramblewood Drive
Humble, TX 77338

Code Compliance:

The product described herein has demonstrated compliance with The Florida Building Code 2010, Section 1504.3.2, 1504.7.

Evaluation Report Scope:

The product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code 2010, as relates to Rule 9N-3.

Performance Standards:

The product described herein has demonstrated compliance with:

- UL 580-06 - Test for Uplift Resistance of Roof Assemblies
- UL 1897-04 - Uplift Test for Roof Covering Systems
- FM 4471, Section 4.4 - Foot Traffic Resistance Test.

Reference Data:

1. UL 580-94 / 1897-98 Uplift Test
   Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
   Report No. 136-0393T-07G, H
2. FM 4471-10, Section 4.4 Foot Traffic Resistance Test
   Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
   Report No. 136-0027T-12C
3. Certificate of Independence
   By Terrence E. Wolfe, P.E. (No. 44923) @ Force Engineering & Testing, Inc.
   (FBC Organization # ANE ID: 1920)

Test Standard Equivalency:

1. The UL 580-94 test standard is equivalent to the UL 580-06 test standard.
2. The UL 1897-98 test standard is equivalent to the UL 1897-04 test standard.

Quality Assurance Entity:

The manufacturer has established compliance of roof panel products in accordance with the Florida Building Code and Rule 9N-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity.

Minimum Slope Range:

Minimum Slope shall comply with Florida Building Code 2010, including Section 1507.4.2 and in accordance with Manufacturers recommendations. For slopes less than 3:12, lap sealant must be used in the panel side laps.

Installation:

Install per manufacturer's recommended details.

Underlayment:

Per Manufacturer's installation guidelines per Florida Building Code 2010 Section 1507.4.5.

FL# 4595.2 R2

February 20, 2012

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19530 Ramblewood Drive
Humble, TX 77338

Roof Panel Fire Classification: Fire classification is not part of this acceptance.

Shear Diaphragm: Shear diaphragm values are outside the scope of this report.

Design Procedure: Based on the dimensions of the structure, appropriate wind loads are determined using Chapter 16 of the Florida Building Code 2010 for roof cladding wind loads. These component wind loads for roof cladding are compared to the allowable pressure listed above. The design professional shall select the appropriate erection details to reference in his drawings for proper fastener attachment to his structure and analyze the panel fasteners for pullout and pullover. Support framing must be in compliance with Florida Building Code 2010 Chapter 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.

FL# 4595.2 R2

February 20, 2012

FLORIDA DEPARTMENT OF
Business & Professional Regulation

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Product Approval
USER: Public User

Product Approval Menu > Product or Application Search > **Application List**

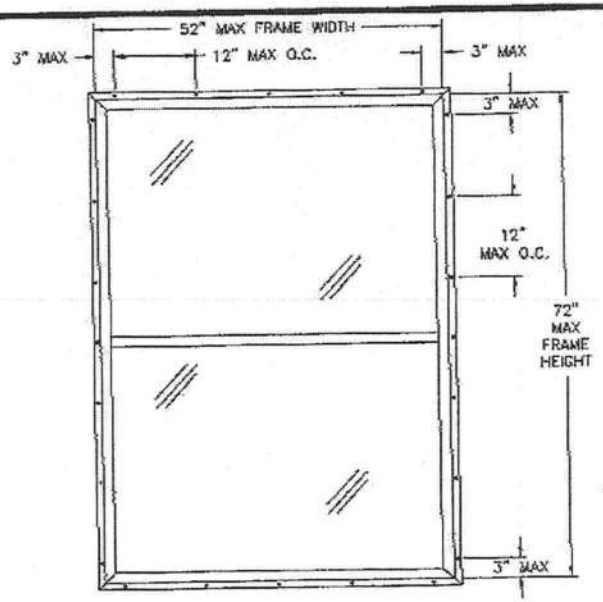
Refine Search

Search Criteria			
Code Version	2010	FL#	15447.1
Application Type	ALL	Product Manufacturer	ALL
Category	ALL	Subcategory	ALL
Application Status	ALL	Compliance Method	ALL
Quality Assurance Entity	ALL	Quality Assurance Entity Contract Expired	ALL
Product Model, Number or Name	ALL	Product Description	ALL
Approved for use in HVHZ	ALL	Approved for use outside HVHZ	ALL
Impact Resistant	ALL	Design Pressure	ALL
Other	ALL		

Search Results - Applications

FL#	Type	Manufacturer	Validated By	Status
FL15447-R2 History	Revision	MI Windows and Doors **FL#:** FL15447.1 **Model:** 185 SH **Description:** 36x84 Fin Frame Insulated Laminated, Non-Impact. **Category:** Windows **Subcategory:** Single Hung	Steven M. Urich, PE (717) 932-8500	Approved *

*Approved by DBPR. Approvals by DBPR shall be reviewed and ratified by the POC and/or the Commission if necessary.



185/3185 SINGLE HUNG FIN FRAME
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±55.0PSF	NONE

NUMBER OF ANCHOR LOCATIONS REQUIRED FOR NAIL FIN INSTALLATION

Window Height (in)	Window Width (in) 18.00 Head	18.00 Jamb	24.00 Head	24.00 Jamb	30.00 Head	30.00 Jamb	36.00 Head	36.00 Jamb	42.00 Head	42.00 Jamb	48.00 Head	48.00 Jamb	52.00 Head	52.00 Jamb
24.00	2	3	3	3	3	3	4	3	4	3	5	3	5	3
30.00	2	3	3	3	3	3	4	3	4	3	5	3	5	3
36.00	2	4	3	4	3	4	4	4	4	4	5	4	5	4
42.00	2	4	3	4	3	4	4	4	4	4	5	4	5	4
48.00	2	5	3	5	3	5	4	5	4	5	5	5	5	5
54.00	2	5	3	5	3	5	4	5	4	5	6	5	5	5
60.00	2	6	3	6	3	6	4	6	4	6	5	6	5	6
66.00	2	6	3	6	3	6	4	6	4	6	5	6	5	6
72.00	2	7	3	7	3	7	4	7	4	7	5	7	5	7

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

NOTES:
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
2. WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
3. 1X BUCK OVER MASONRY/CONCRETE IS OPTIONAL. WHERE 1X BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
4. ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
5. FRAME MATERIAL: ALUMINUM 6063-T5.
6. UNITS MUST BE GLAZED PER ASTM E1300-04, SEE SHEET 2 FOR GLASS OPTIONS.
7. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
8. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".
9. FOR NAIL FIN INSTALLATION INTO WOOD FRAMING OR 2X BUCK USE #8 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
10. FOR FRAME INSTALLATION INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
11. FOR FRAME INSTALLATION INTO MASONRY/CONCRETE USE 3/16" TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 5/8" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
12. ALL FASTENERS TO BE CORROSION RESISTANT.
13. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW:
    A. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42
    B. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 3,192 PSI.
    C. MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE I (OR GREATER).

SIGNED: 04/18/2012

TABLE OF CONTENTS

SHEET NO.	DESCRIPTION
1 – 2	ELEVATION AND GENERAL NOTES
3 – 5	INSTALLATION DETAILS

MI WINDOWS AND DOORS
650 WEST MARKET STREET
GRANTZ, PA 17030-0370

SERIES 185/3185 SINGLE HUNG ALUMINUM WINDOW
52 X 72 NON-IMPACT
ELEVATION AND NOTES

DRAWN	DWG NO.	REV
V.L.	08-01511	–
SCALE NTS	DATE 04/17/12	SHEET 1 OF 5

LUIS R. LOMAS
LICENSE
No. 62514
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

FLORIDA DEPARTMENT OF
Business & Professional Regulation

Florida Department of Business & Professional Regulation

OFFICE OF THE SECRETARY

Product Approval
USER: Public User

FL #	FL15213-R1
Application Type	Revision
Code Version	2010
Application Status	Approved
Comments	
Archived	☐
Product Manufacturer Address/Phone/Email	Plastpro Inc. / Nanya Plastics Corp. 5200 W CENTURY BLVD. LOS ANGELES, CA 90045 (440) 969-9773 Ext 16 rickw@rwbldgconsultants.com
Authorized Signature	Vivian Wright rickw@rwbldgconsultants.com
Technical Representative Address/Phone/Email	Scott Johnson 5200 W Century Blvd. Los Angeles, CA 90045 (440) 969-9773 Ext 18 scottjohnson@plastproinc.com
Quality Assurance Representative Address/Phone/Email	Ron O'Connell 5200 W Century Blvd. Los Angeles, CA 90045 (440) 969-9773 Ext 16 ronoconnell@plastpro.com
Category	Exterior Doors
Subcategory	Swinging Exterior Door Assemblies
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer ☑ Evaluation Report - Hardcopy Received
Florida Engineer or Architect Name who developed the Evaluation Report	Lyndon F. Schmidt, P.E.
Florida License	PE-43409
Quality Assurance Entity	National Accreditation and Management Institute
Quality Assurance Contract Expiration Date	12/31/2014
Validated By	Ryan J. King, P.E. ☑ Validation Checklist - Hardcopy Received
Certificate of Independence	FL15213_R1_COI_Certificate Of Independence.pdf

Referenced Standard and Year (of Standard)	Standard	Year
	101/I.S.2	1997
	101/I.S.2/NAFS	2002
	AAMA/WDMA/CSA101/I.S.2/A440	2005
	ASTM E1886	2002

ASTM E1996	2002
ASTM E330	2002
TAS 201, 202, 203	1994

Equivalence of Product Standards
Certified By

Sections from the Code

Product Approval Method	Method 1 Option D
Date Submitted	05/03/2012
Date Validated	05/03/2012
Date Pending FBC Approval	05/08/2012
Date Approved	06/11/2012

Summary of Products

Go to Page  Page 1 / 2

FL #	Model, Number or Name	Description
15213.1	a. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series Fiberglass Door	6'8 "Impact" Opaque Fiberglass Single Door - Inswing/Outswing (X - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** See INST 15213.1 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.1.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.1.pdf Created by Independent Third Party: Yes
15213.2	b. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series Fiberglass Door	6'8 "Impact" Opaque Fiberglass Single Door with Sidelite utilizing "Snap Frame" Glazing - Inswing/Outswing (OX or XO - Configurations)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** See INST 15213.2 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.2.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.2.pdf Created by Independent Third Party: Yes
15213.3	c. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series Fiberglass Door	6'8 "Impact" Opaque Fiberglass Single Door with Sidelites utilizing "Snap Frame" Glazing - Inswing/Outswing (OXO - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** See INST 15213.3 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.3.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.3.pdf Created by Independent Third Party: Yes
15213.4	d. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series Fiberglass Door	6'8 "Impact" Opaque Fiberglass Single Door with Sidelite utilizing "Lip Lite" Glazing - Inswing/Outswing (OX or XO - Configurations)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** See INST 15213.4 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.4.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.4.pdf Created by Independent Third Party: Yes
15213.5	e. Smooth/Wood Grain/White	6'8 "Impact" Opaque Fiberglass Single Door with

	Wood Grain/Rustic/Mahogany Series Fiberglass Door	Sidelites utilizing "Lip Lite" Glazing - Inswing/Outswing (OXO - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** See INST 15213.5 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.5.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.5.pdf Created by Independent Third Party: Yes
15213.6	f. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series Fiberglass Door	6'8 "Impact" Opaque Fiberglass Double Door - Inswing/Outswing (XX - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** See INST 15213.6 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.6.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.6.pdf Created by Independent Third Party: Yes
15213.7	g. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series Fiberglass Door	6'8 "Impact" Opaque Fiberglass Double Door with Sidelites utilizing "Snap Frame" Glazing - Inswing/Outswing (OXXO - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** See INST 15213.7 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.7.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.7.pdf Created by Independent Third Party: Yes
15213.8	h. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series Fiberglass Door	6'8 "Impact" Opaque Fiberglass Double Door with Sidelites utilizing "Lip Lite" Glazing - Inswing/Outswing (OXXO - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** See INST 15213.8 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.8.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.8.pdf Created by Independent Third Party: Yes
15213.9	i. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series Fiberglass Door	6'8 "Non-Impact" Glazed Fiberglass Single Door utilizing "Snap Frame" Glazing - Inswing/Outswing (X - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** N/A **Other:** See INST 15213.9 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.9.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.9.pdf Created by Independent Third Party: Yes
15213.10	j. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series Fiberglass Door	6'8 "Non-Impact" Glazed Fiberglass Single Door with Sidelite utilizing "Snap Frame" Glazing - Inswing/Outswing (OX or XO - Configurations)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** N/A **Other:** See INST 15213.10 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.10.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.10.pdf Created by Independent Third Party: Yes
15213.11	k. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series Fiberglass Door	6'8 "Non-Impact" Glazed Fiberglass Single Door with Sidelites utilizing "Snap Frame" Glazing - Inswing/Outswing (OXO - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No		**Installation Instructions** FL15213_R1_II_INST 15213.11.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes

Design Pressure: N/A **Other:** See INST 15213.11 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Evaluation Reports** FL15213_R1_AE_EVAL_15213.11.pdf Created by Independent Third Party: Yes
15213.12	l. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series N Fiberglass Door	6'8 "Non-Impact" Glazed Fiberglass Double Door utilizing "Snap Frame" Glazing - Inswing/Outswing (XX - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** N/A **Other:** See INST 15213.12 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.12.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.12.pdf Created by Independent Third Party: Yes
15213.13	m. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series N Fiberglass Door	6'8 "Non-Impact" Glazed Fiberglass Double Door with Sidelites utilizing "Snap Frame" Glazing - Inswing/Outswing (OXXO - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** N/A **Other:** See INST 15213.13 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.13.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.13.pdf Created by Independent Third Party: Yes
15213.14	n. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series N Fiberglass Door	6'8 "Non-Impact" Glazed Fiberglass Single Door utilizing "Lip Lite" Glazing - Inswing/Outswing (X - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** N/A **Other:** See INST 15213.14 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.14.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.14.pdf Created by Independent Third Party: Yes
15213.15	o. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series N Fiberglass Door	6'8 "Non-Impact" Glazed Fiberglass Single Door with Sidelite utilizing "Lip Lite" Glazing - Inswing/Outswing (OX or XO - Configurations)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** N/A **Other:** See INST 15213.15 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.15.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.15.pdf Created by Independent Third Party: Yes
15213.16	p. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series N Fiberglass Door	6'8 "Non-Impact" Glazed Fiberglass Single Door with Sidelites utilizing "Lip Lite" Glazing - Inswing/Outswing (OXO - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** N/A **Other:** See INST 15213.16 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.16.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.16.pdf Created by Independent Third Party: Yes
15213.17	q. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series N Fiberglass Door	6'8 "Non-Impact" Glazed Fiberglass Double Door utilizing "Lip Lite" Glazing - Inswing/Outswing (XX - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** N/A **Other:** See INST 15213.17 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.17.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.17.pdf Created by Independent Third Party: Yes
15213.18	r. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany	6'8 "Non-Impact" Glazed Fiberglass Double Door with Sidelites utilizing "Lip Lite" Glazing - Inswing/Outswing

	Series N Fiberglass Door	(OXXO - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** No **Design Pressure:** N/A **Other:** INST 15213.18 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.18.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.18.pdf Created by Independent Third Party: Yes
15213.19	s. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series N Fiberglass Door	8'0 "Impact" Opaque Fiberglass Single Door - Inswing/Outswing (X - Configuration)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** INST 15213.19 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.19.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.19.pdf Created by Independent Third Party: Yes
15213.20	t. Smooth/Wood Grain/White Wood Grain/Rustic/Mahogany Series N Fiberglass Door	8'0 "Impact" Opaque Fiberglass Single Door with Sidelite utilizing "Snap Frame" Glazing - Inswing/Outswing (OX or XO - Configurations)
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** N/A **Other:** INST 15213.20 for Design Pressure Ratings, any additional use limitations, installation instructions and product particulars.		**Installation Instructions** FL15213_R1_II_INST 15213.20.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes **Evaluation Reports** FL15213_R1_AE_EVAL 15213.20.pdf Created by Independent Third Party: Yes
Go to Page		Page 1 / 2

Back Next