COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST REQUIRMENTS

MINIMUM PLAN REQUIREMENTS FOR THE FLORIDA BUILDING CODE RESIDENTIAL 2007 ONE (1) AND TWO (2) FAMILY DWELLINGS

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE with the Current 2007 FLORIDA BUILDING CODES RESIDENTIAL. 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 FIGURE R301.2(4) of the FLORIDA BUILDING CODES RESIDENTIAL (Florida Wind speed map) **SHALL BE USED.**

WIND SPEED LINE SHALL BE DEFINED AS FOLLOWS: THE CENTERLINE OF INTERSTATE 75.

ALL BUILDINGS CONSTRUCTED EAST OF SAID LINE SHALL BE -------- 100 MPH
ALL BUILDINGS CONSTRUCTED WEST OF SAID LINE SHALL BE --------110 MPH
NO AREA IN COLUMBIA COUNTY IS IN A WIND BORNE DEBRIS REGION

	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:			✓		
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void			✓		
3	Condition space (Sq. Ft.)		Total (Sq. Ft.) under roof	IIIIIIII	IIIIIIII	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	✓		
5	Dimensions of all building set backs	✓		
6	Location of all other structures (include square footage of structures) on parcel, existing or proposed well and septic tank and all utility easements.	✓		
7	Provide a full legal description of property.	✓		

Wind-load Engineering Summary, calculations and any details 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 YES	IIIII NO	IIIIII 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 m^2), 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	Emergency escape and rescue opening shown in each bedroom (net clear opening shown)	✓		
25	Safety glazing of glass where needed	✓		
26	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 of FBCR)			✓
27	Stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails (see FBCR SECTION 311)	✓		
28	Identify accessibility of bathroom (see FBCR SECTION 322)	✓		

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 plan (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)	✓		

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 320: 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	✓		
	Show the sub-floor structural panel sheathing type, thickness and fastener schedule on the edges &	✓		

48	intermediate 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 309			✓
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 FBCR 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 FBCR 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 802.10 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 Table 602,3(2) & 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	✓		

FBCR 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, showing dimensions condition area equal to the total condition living space area*

	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

* using window unit

77	Submit two copies of a Manual J sizing equipment or equivalent computation study			✓
78	Exhaust fans locations in bathrooms			✓
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	Switches, outlets, receptacles, lighting and all required GFCI outlets identified	✓		
86	Ceiling fans	✓		
87	Smoke detectors & Carbon dioxide detectors	✓		
88	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	✓		

90	Appliances and HVAC equipment and disconnects			✓
91	Arc Fault Circuits (AFCI) in bedrooms	✓		

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 Building Permit Application form is to be completed and submitted for all residential projects	✓		
93	**Parcel Number** The parcel number (Tax ID number) from the Property Appraiser (386) 758-1084 is required. A copy of property deed is also requested	✓		
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	✓		
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 base flood elevation (100 year flood) has been established	✓		
100	A development permit will also be required. 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. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver (**$50.00**). All culvert waivers are sent to the Columbia County Public Works Department for approval or denial.			✓
102	**911 Address:** If the project is located in an area where a 911 address has not been issued, then application for a 911address must be applied for and **received** through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125	✓		

Section R101.2.1 of the Florida Building Code Residential:

The provisions of Chapter 1, Florida Building Code, Building 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 applicati 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 o 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 nu 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 submitted application is approved for permitting the applican will be notified by phone as to the date and time a building permit will b prepared and issued by the Columbia County Building & Zoning Department

PRODUCT APPROVAL SPECIFICATION SHEET

Location:_____ **Project Name:**_____

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit on or after April 1, 2004. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at www.floridabuilding.org <http://www.floridabuilding.org>

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
A. EXTERIOR DOORS	MASONITE	STEEL PREHUNG SINGLE DOOR	4904 1
1. Swinging	MASONITE	STEEL PREHUNG DOUBLE DOOR	5465 1
2. Sliding	MI WNDW/DOOR	ALUMINUM PATIO DOOR	5483 R1
3. Sectional	WAYNE-DALTON	SERIES 8000	22-R1
6. Other			
B. WINDOWS			
1. Single hung	BETTERBILT	ALUMINUM SINGLE HUNG	7085
2. Horizontal Slider			
3. Casement			
4. Double Hung			
5 Fixed			
6. Awning			
7. Pass -through			
8. Projected			
9. Mullion	BETTERBILT	ALUMINUM 60" X 3-5/8" X 1-1/4"	7096
10. Wind Breaker			
11 Dual Action			
12 Other			
C. PANEL WALL			
1. Siding	JAMES HARDIE	LAP CEMENT SIDING	889-R2
2. Soffits	ALCOA	ALUMINUM	5543
3. EIFS			
4. Storefronts			
5. Curtain walls			
6. Wall louver			
7 Glass block			
8. Membrane			
9. Greenhouse			
10. Other			
D. ROOFING PRODUCTS			
1. Asphalt Shingles	TAMKO	25YR ELITE FIBERGLAS	1956.2
2. Underlayments	WOODLAND IND	FELT	1814
3 Roofing Fasteners			
4. Non-structural Metal Rf	WHEELING	CENTURYDRAIN	5190.3
5. Built-Up Roofing			
6. Modified Bitumen			
7. Single Ply Roofing Sys			
8. Roofing Tiles			
9. Roofing Insulation			
10 Waterproofing			
11. Wood shingles /shakes			
12. Roofing Slate			
Category/Subcategory (cont.)	**Manufacturer**	**Product Description**	**Approval Number(s)**
13. Liquid Applied Roof Sys			
14. Cements-Adhesives - Coatings			
15. Roof Tile Adhesive			
16. Spray Applied Polyurethane Roof			
17. Other			
E. SHUTTERS			
1. Accordion			
2. Bahama			
3. Storm Panels			
4. Colonial			
5. Roll-up			

PRODUCT APPROVAL SPECIFICATION SHEET

Location:_____ **Project Name:**_____

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit on or after April 1, 2004. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at www.floridabuilding.org <http://www.floridabuilding.org>

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
A. EXTERIOR DOORS	MASONITE	STEEL PREHUNG SINGLE DOOR	4904.1
1. Swinging	MASONITE	STEEL PREHUNG DOUBLE DOOR	5465.1
2. Sliding	MI WNDW/DOOR	ALUMINUM PATIO DOOR	5483.R1
3. Sectional	WAYNE-DALTON	SERIES 8000	22-R1
6. Other			
B. WINDOWS			
1. Single hung	BETTERBILT	ALUMINUM SINGLE HUNG	7085
2 Horizontal Slider			
3. Casement			
4. Double Hung			
5 Fixed			
6. Awning			
7. Pass -through			
8. Projected			
9 Mullion	BETTERBILT	ALUMINUM 60" X 3-5/8" X 1-1/4"	7096
10. Wind Breaker			
11 Dual Action			
12 Other			
C. PANEL WALL			
1. Siding	JAMES HARDIE	LAP CEMENT SIDING	889-R2
2. Soffits	ALCOA	ALUMINUM	5543
3. EIFS			
4. Storefronts			
5. Curtain walls			
6. Wall louver			
7 Glass block			
8. Membrane			
9 Greenhouse			
10. Other			
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2. Underlayments	WOODLAND IND	FELT	1814
3 Roofing Fasteners			
4. Non-structural Metal Rf	WHEELING	CENTURYDRAIN	5190.3
5. Built-Up Roofing			
6. Modified Bitumen			
7. Single Ply Roofing Sys			
8. Roofing Tiles			
9. Roofing Insulation			
10. Waterproofing			
11. Wood shingles /shakes			
12. Roofing Slate			
Category/Subcategory (cont.)	**Manufacturer**	**Product Description**	**Approval Number(s)**
13. Liquid Applied Roof Sys			
14. Cements-Adhesives - Coatings			
15. Roof Tile Adhesive			
16. Spray Applied Polyurethane Roof			
17. Other			
E. SHUTTERS			
1. Accordion			
2 Bahama			
3. Storm Panels			
4. Colonial			
5. Roll-up			

6. Equipment			
7. Others			
F. SKYLIGHTS			
1. Skylight			
2. Other			
G. STRUCTURAL COMPONENTS			
1. Wood connector/anchor	SIMPSON S-TIE	STRAPS & CONNECTORS	474,538,1901,1725
2. Truss plates			
3. Engineered lumber			
4. Railing			
5. Coolers-freezers			
6. Concrete Admixtures			
7. Material			
8. Insulation Forms			
9. Plastics			
10. Deck-Roof			
11. Wall			
12. Sheds			
13. Other			
H. NEW EXTERIOR ENVELOPE PRODUCTS			
1			
2			

The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these products, the following information must be available to the inspector on the jobsite; 1) copy of the product approval, 2) the performance characteristics which the product was tested and certified to comply with, 3) copy of the applicable manufacturers installation requirements.

I understand these products may have to be removed if approval cannot be demonstrated during inspection.

Contractor or Contractor's Authorized Agent Signature

John Utley

Print Name

9/14/09

Date

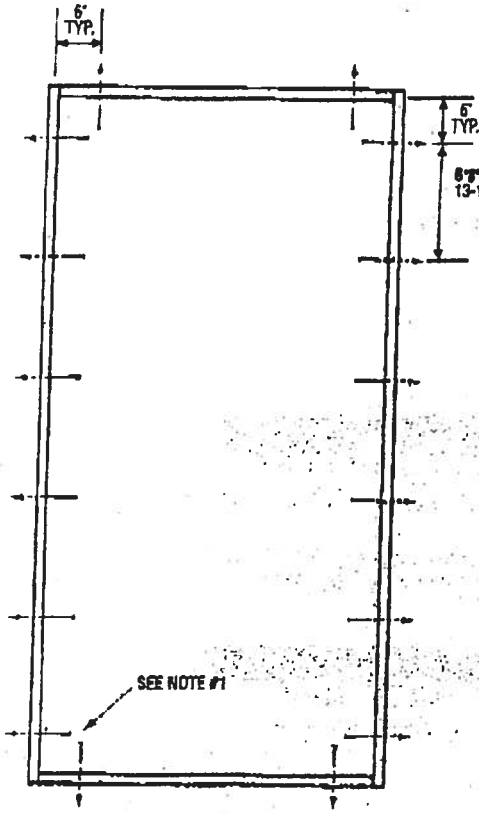
Location

Permit # **(FOR STAFF USE ONLY)**

X
Unit

MID-WL-MA0001-02

SINGLE DOOR



Minimum Fastener Count

- 5 per vertical framing member
- 2 per horizontal framing member

Hinge and strike plates require two 2-1/2" long screws per location.

Rough Opening (RO)

- Width of door unit plus 1/2"
- Height of door unit plus 1/4"

Test Data Review Certificate #3025447A, #3025447B, #3025447C and CCRF/Test Report Validation Matrix #3025447A-001, 002, 003, 004; #3025447B-001, 002, 003, 004; #3025447C-001, 002, 003, 004 provides additional information - available from the ITS/WH website (www.intertek.com), the Masonite website (www.masonite.com) or the Masonite Technical Center.

Latching Hardware:

- [1] Compliance requires that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed @ 5-1/2" centerline.
- [2] Compliance requires that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed @ 10-1/2" centerline OR that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed @ 5-1/2" centerline with 8" GRADE 1 (ANSI/BHMA A156.16) surface bolts installed on latch side of active door panel – (1) at top and (1) at bottom.
- [3] Compliance requires that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed @ 10-1/2" centerline with 8" GRADE 1 (ANSI/BHMA A156.16) surface bolts installed on latch side of active door panel – (1) at top and (1) at bottom.
- [4] Compliance requires that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed @ 5-1/2" centerline with 8" GRADE 1 (ANSI/BHMA A156.16) surface bolts installed on latch side of active door panel – (1) at top and (1) at bottom.

Hardware requirements not footnoted on CCRF requirements shall comply with Item 1 as shown above.

Notes:

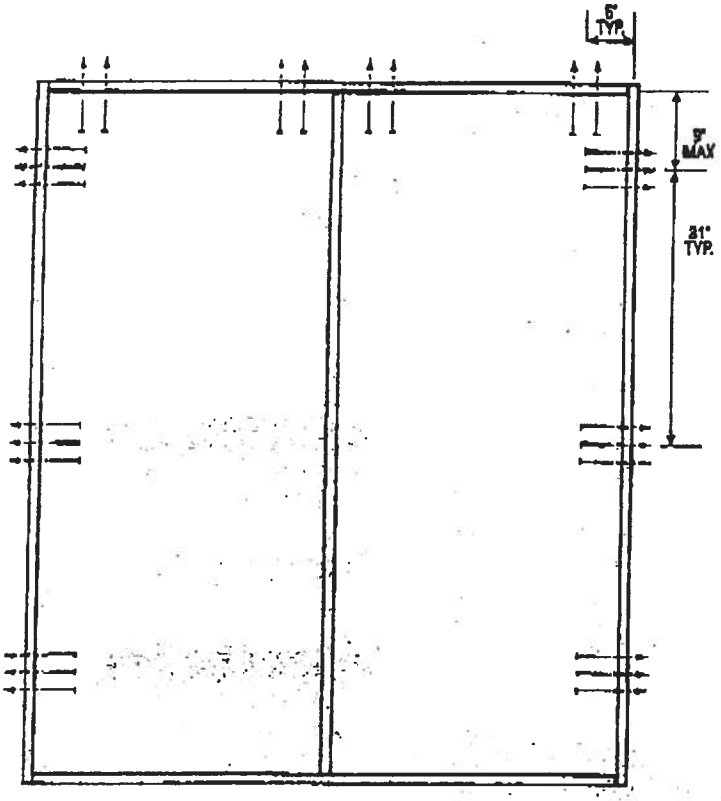
1. Anchor calculations have been carried out with the lowest (least) fastener rating from the different fasteners being considered for use. Jamb and head fasteners analyzed for this unit include #8 and #10 wood screws or 3/16" Tapcons. A physical shim must be placed in shim space at each anchor location. Threshold fasteners analyzed for this unit include #8 and #10 wood screws, 3/16" Tapcons, or Liquid Nails Builders Choice 490 (or equal structural adhesive).
2. The wood screw single shear design values come from Table 11.3A of ANSI/AF & PA NDS for southern pine lumber with a side member thickness of 1-1/4" and achievement of minimum embedment. The 3/16" Tapcon single shear design values come from the ITW and ELCO Dade County approvals respectively, each with minimum 1-1/4" embedment.
3. Wood bucks by others, must be anchored properly to transfer loads to the structure.

Masonite®

XX
Unit

MID-WL-MA0002 02

DOUBLE DOOR



Minimum Fastener Count

- 5 per vertical framing member for 7'0" heights and smaller
- 8 per vertical framing member for heights greater than 7'0"
- 8 per horizontal framing member

Hinge and strike plates require two 2-1/2" long screws per location.

Rough Opening (RO)

- Width of door unit plus 1/2"
- Height of door unit plus 1/4"

Warnock Hersey — Test Data Review Certificate #30284474; #30284478, #30284470 and CDP/Test Report Validation Memo #30284474-001, 002, 003, 004; #30284478-001, 002, 003, 004; #30284472-001, 002, 003, 004 providing additional information - available from the ITS/WH website (www.Intertek.com), the Masonite website (www.masonite.com) or the Masonite Technical Center.

Latching Hardware:

- [1] Compliance requires that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed @ 5-1/2" centerline.
- [2] Compliance requires that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed @ 10-1/2" centerline DB that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed @ 5-1/2" centerline with 8" GRADE 1 (ANSI/BHMA A156.16) surface bolts installed on latch side of active door panel – (1) at top and (1) at bottom.
- [3] Compliance requires that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed @ 10-1/2" centerline with 8" GRADE 1 (ANSI/BHMA A156.16) surface bolts installed on latch side of active door panel – (1) at top and (1) at bottom.
- [4] Compliance requires that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed @ 5-1/2" centerline with 6" GRADE 1 (ANSI/BHMA A156.16) surface bolts installed on latch side of active door panel – (1) at top and (1) at bottom.

Hardware requirements not footnoted on CDP documents shall comply with item 1 as shown above.

Notes:

1. Anchor calculations have been carried out with the fastener rating from the different fasteners being considered for use. Jamb and head fasteners analyzed for this unit include #8 wood screws and 10d common nails. A physical shim must be placed in shim space at each anchor location. Threshold fasteners analyzed for this unit include Liquid Nails Builders Choice 490 (or equal structural adhesive).
2. The wood screw and common nail single shear design values come from ANSI/AF & PA NDS for southern pine lumber with a side member thickness of 1-1/4" and achievement of minimum embedment of 1-1/4".
3. Wood bucks by others, must be anchored properly to transfer loads to the structure.

Masonite

MI HOME PRODUCTS
- PRIME ALUMINUM WINDOWS -
INSTALLATION INSTRUCTIONS FOR "NAIL FIN" PRODUCTS

MI Home Products appreciates your recent purchase of a maintenance free prime window, which will not rust, rot, mildew, or warp. This is a quality product that left our factory in good condition – proper handling and installation are just as important as good design and workmanship. Please follow these recommendations to allow this product to complete its function.

1. Handle units one at a time in the closed and locked position and take care not to scratch frame or glass or to bend the nailing fin.

2. Set unit plumb and square into opening and make sure that there is 3/16" ± 1/16" clearance around the frame. Fasten unit into opening in the closed and locked position, making sure that fasteners are screwed in straight in order to avoid twisting or bowing of the frame. Make sure that sill is straight and level. Check operation of unit before any and all fasteners are set.

3. Use # 8 sheet metal or wood screws with a minimum of 1" penetration into the framing (stud). Place first screws (two at each corner) 3" from end of fin. For positive and negative DPs (design pressures) up to 35, do not exceed 24" spacing of additional screws. For DPs from 35.1 to 50, do not exceed 18". Install load bearing shim adjacent to each anchor. Use shim where space exceeds 1/16".

4. Flash over head and caulk outside perimeter in accordance with code requirements and good installation practices.

5. Fill voids between frame and construction with loose batten type insulation or non-expanding aerosol foam specifically formulated for windows and doors to eliminate drafts. The use of expanding aerosol type insulating foam, which can bow the frame, waives all stated warranties.

6. Remove plaster, mortar, paint and any other debris that may have collected on the unit and make sure that sash/vent tracks and interlocks are also clear. Do not use abrasives, solvents, ammonia, vinegar, alkaline, or acid solutions for clean-up, especially with insulated glass units as their use could cause chemical breakdown of the glass seal. Take care not to scratch glass; scratches severely weaken glass and it could eventually break from thermal expansion and contraction. Clean units with water and mild detergent as you would you automobile.

- CAUTION -

MI Home Products or its representatives are unable to control and cannot assume responsibility for the selection and placement of their products in a building or structure in a manner required by laws, statutes, and/or building codes. The purchaser is solely responsible for knowledge of and adherence to the same. MI Home Products window products are not provided with safety glazing unless specifically ordered with such. Many laws and codes require safety glazing near doors, bathtubs, and shower enclosures. Also be aware of emergency egress code requirements.

Corporate Headquarters:
650 West Market St.
Gratz, PA 17030-0370
(717) 365-3300

ITW Building Components Group, Inc.

1950 Marley Drive Haines City, FL 33844
Florida Engineering Certificate of Authorization Number: 0 278
Florida Certificate of Product Approval # FL1999
 Document ID:ITP48228Z0212100020

Truss Fabricator:	Anderson Truss Company
Job Identification:	9-028--Fill in later -- , **
Truss Count:	4
Model Code:	Florida Building Code
Truss Criteria:	FBC2007Res/TPI-2002(STD)
Engineering Software:	Alpine Software,Version 8.07.
Structural Engineer of Record:	The identity of the structural EOR did not exist as of
Address:	the seal date per section 61G15-31.003(5a) of the FAC
Minimum Design Loads:	Roof - 40.0 PSF @ 1.25 Duration
	Floor - N/A
	Wind - 110 MPH ASCE 7-05 -Closed

Notes:

1. Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1
2. The drawing date shown on this index sheet must match the date shown on the individual truss component drawing.
3. As shown on attached drawings; the drawing number is preceded by: HCUSR8228

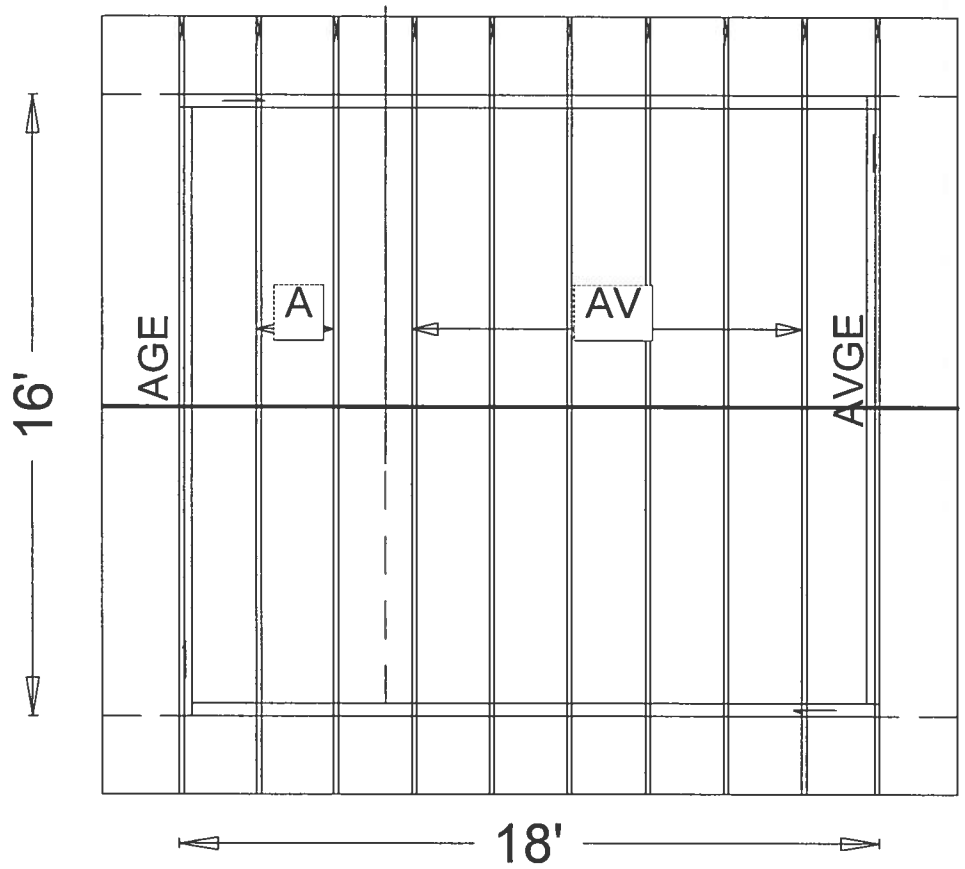
Details: A1101505-GBLLETIN-

#	Ref	Description	Drawing#	Date
1	39373	--A	09043009	02/12/09
2	39374	--AV	09043010	02/12/09
3	39375	--AVGE	09043011	02/12/09
4	39376	--AGE	09043012	02/12/09

Seal Date: 02/12/2009

-Truss Design Engineer-
Doug Fleming
Florida License Number: 66648
1950 Marley Drive
Haines City, FL 33844

#9-028
JEFF SWANSON/ UTLEY



Roof Plane Sheathing Area = 492 sq. ft
Gable Sheathing Area = 60 sq. ft
Total Sheathing Area = 552 sq. ft
Fascia Material = 89 linear ft
Ridge Cap Material = 22 linear ft

JOB DESCRIPTION:: Fill in later
/:

JOB NO:
9-028

PAGE NO:
1 OF 1

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

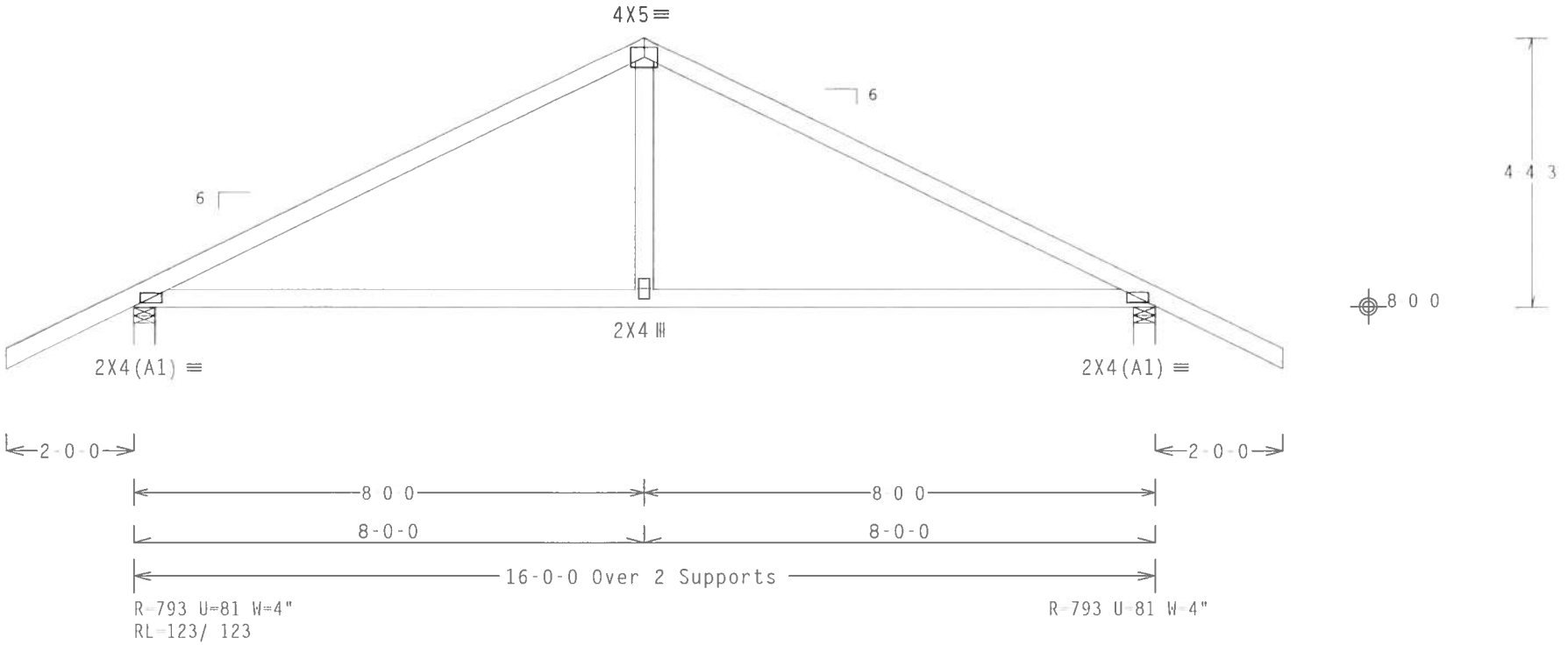
Roof overhang supports 2.00 psf soffit load.

Bottom chord checked for 10.00 psf non concurrent live load.

110 mph wind, 15.00 ft mean hgt, ASCE 7-05, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL 5.0 psf, wind BC DL 5.0 psf. Iw=1.00 GCpi(+/-) 0.18

Wind reactions based on MWFRS pressures.

Deflection meets L/240 live and L/180 total load.



Design Crit: FBC2007Res/TPI-2002(STD)

PLT TYP. Wave FT/RT=20%(0%)/0(0) 8.07.00.1218 QTY:2 FL/-/4/-/-/R/- Scale =.375"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL COA #0 278

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

IMPORTANT FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI1; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC, BY AF&PA) AND TPI. ITW BCG CONNECTOR PLATES ARE MADE OF 20/20/16GA (W,H/SS/E) ASTM A653 GRADE 40/60 (W, E/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A Z ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI1 2002 SEC 3. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC 2.

DOUGLAS FLEMING LICENSE No. 66648 STATE OF FLORIDA PROFESSIONAL ENGINEER
2 '09

TC LL	20.0 PSF	REF	R8228-39373
TC DL	10.0 PSF	DATE	02/12/09
BC DL	10.0 PSF	DRW	HCUSR8228 09043009
BC LL	0.0 PSF	HC-ENG	DF/DF *
TOT.LD.	40.0 PSF	SEQN-	53037
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TP48228Z02

(9 028 Fill in later , ** AV)

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

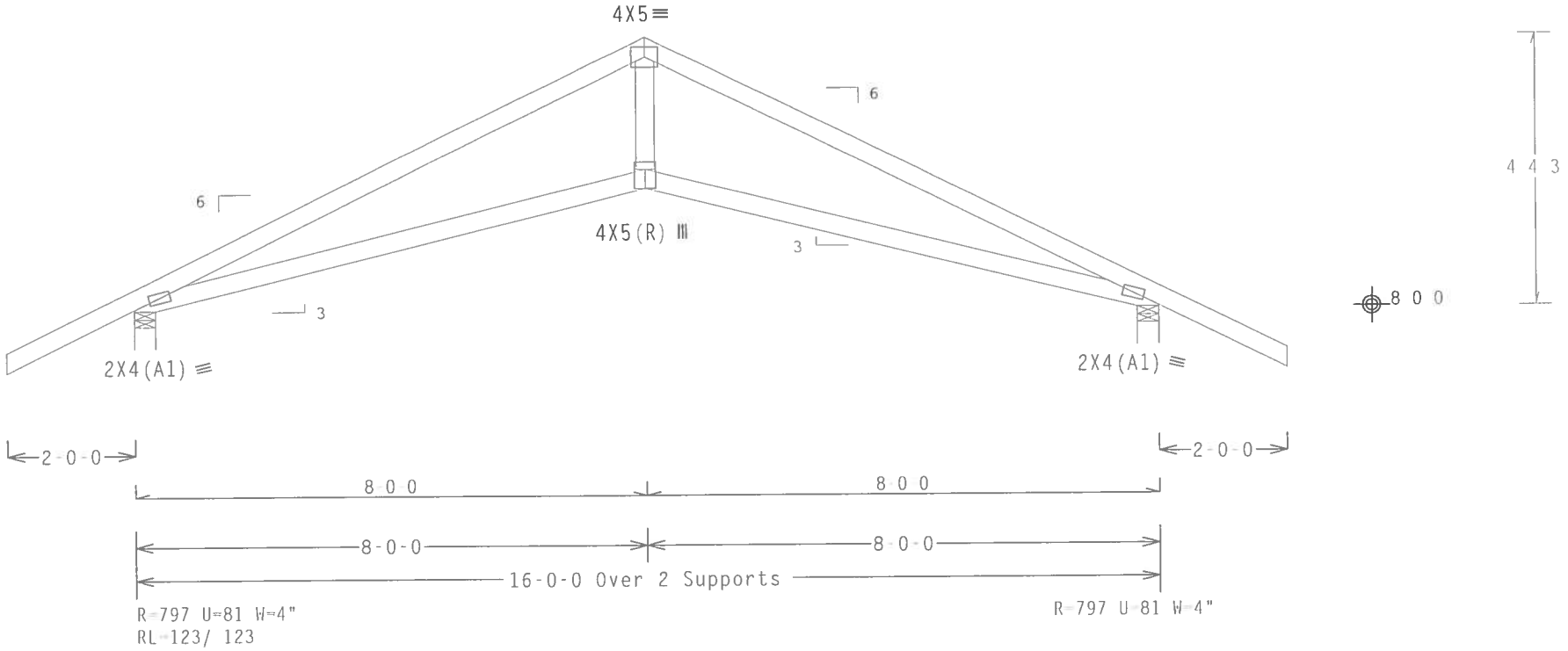
Roof overhang supports 2.00 psf soffit load.

Bottom chord checked for 10.00 psf non concurrent live load.

110 mph wind, 15.00 ft mean hgt, ASCE 7-05, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



Design Crit: FBC2007Res/TPI-2002(STD)

PLT TYP. Wave FT/RT=20%(0%)/0(0) 8.07.00.1218.13 QTY:6 FL/-/4/-/-/R/- Scale =.375"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL COA #0 278

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DOUGLAS FLEMING LICENSE No. 66648 STATE OF FLORIDA PROFESSIONAL ENGINEER '09

TC LL	20.0 PSF
TC DL	10.0 PSF
BC DL	10.0 PSF
BC LL	0.0 PSF
TOT.LD.	40.0 PSF
DUR.FAC.	1.25
SPACING	24.0"

REF	R8228- 39374
DATE	02/12/09
DRW	HCUSR8228 09043010
HC-ENG	DF/DF *
SEQN-	53042
FROM	AH
JREF-	1TP48228Z02

(9 028 Fill in later , ** AVGE)

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

Roof overhang supports 2.00 psf soffit load.

Gable end supports 8" max rake overhang.

Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" o.c. intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie plates 24" o.c. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notchable area using 3x6.

MEMBER TO BE LATERALLY BRACED FOR OUT OF PLANE WIND LOADS TO TRUSS. BRACING SYSTEM TO BE DESIGNED AND FURNISHED BY OTHERS.

110 mph wind, 15.00 ft mean hgt, ASCE 7-05, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

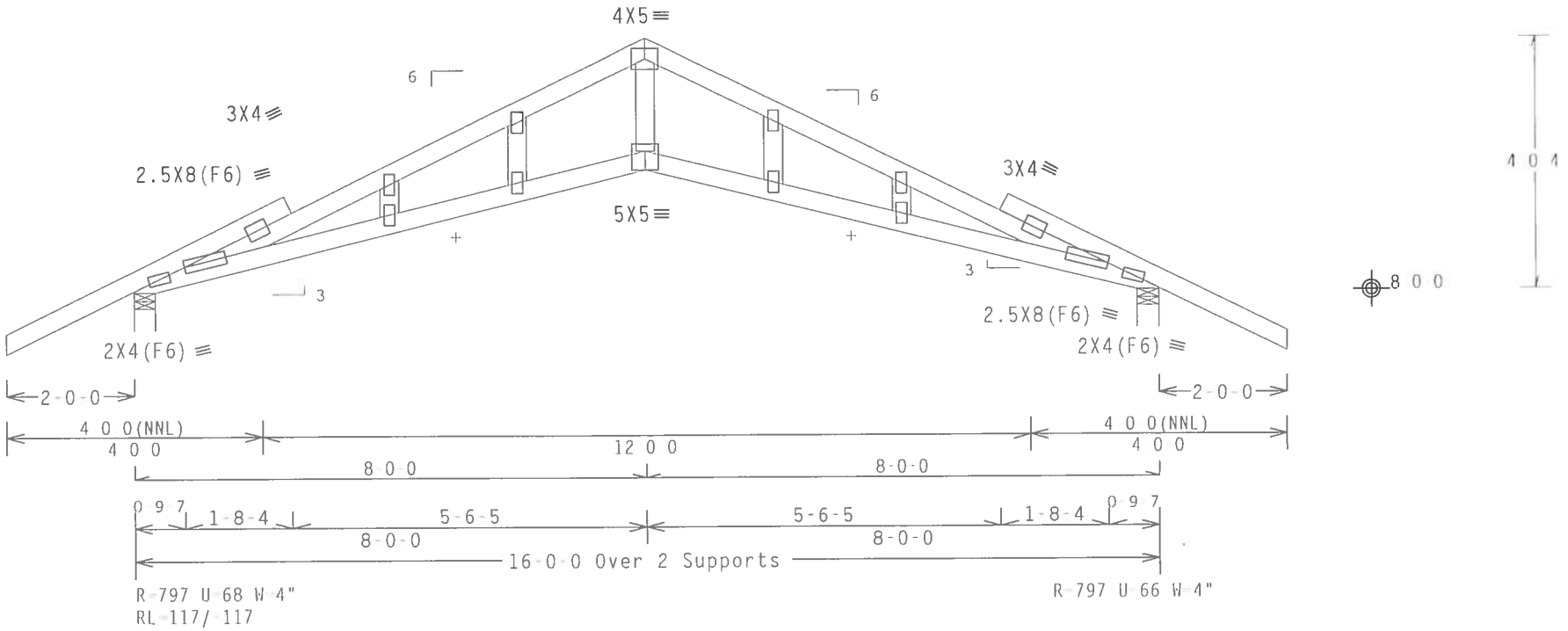
Wind reactions based on MWFRS pressures.

See DWGS A11015050109 & GBLLETIN0109 for more requirements.

Bottom chord checked for 10.00 psf non concurrent live load.

Deflection meets L/240 live and L/180 total load.

THE BUILDING DESIGNER IS RESPONSIBLE FOR THE DESIGN OF THE ROOF, FLOOR AND CEILING DIAPHRAGMS, GABLE END SHEAR WALLS, AND SUPPORTING SHEAR WALLS. DIAPHRAGMS AND SHEAR WALLS MUST PROVIDE CONTINUOUS LATERAL RESTRAINT TO THE GABLE END. ALL CONNECTIONS ARE TO BE PROVIDED BY THE BUILDING DESIGNER.



Note: All Plates Are 2X4 Except As Shown.

Design Crit: FBC2007Res/TPI-2002(STD)

PLT TYP. Wave FT/RT=20%(0%)/0(0) 8.07.00.1218.12 QTY:1 FL/-/4/-/-/R/- Scale =.375"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL COA #0 278

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DOUGLAS FLEMING LICENSE No. 65648 STATE OF FLORIDA PROFESSIONAL ENGINEER '09

TC LL	20.0 PSF	REF	R8228-39375
TC DL	10.0 PSF	DATE	02/12/09
BC DL	10.0 PSF	DRW	HCUSR8228 09043011
BC LL	0.0 PSF	HC-ENG	DF/DF
TOT.LD.	40.0 PSF	SEQN-	53098
DUR.FAC.	1.25	FROM	AH
SPACING	24.0"	JREF-	1TP48228Z02

(9 028 Fill in later , ** AGE)

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

Roof overhang supports 2.00 psf soffit load.

Gable end supports 8" max rake overhang.

Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" o.c. intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie plates 24" o.c. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notchable area using 3x6.

THE BUILDING DESIGNER IS RESPONSIBLE FOR THE DESIGN OF THE ROOF, FLOOR AND CEILING DIAPHRAGMS, GABLE END SHEAR WALLS, AND SUPPORTING SHEAR WALLS. DIAPHRAGMS AND SHEAR WALLS MUST PROVIDE CONTINUOUS LATERAL RESTRAINT TO THE GABLE END. ALL CONNECTIONS ARE TO BE PROVIDED BY THE BUILDING DESIGNER.

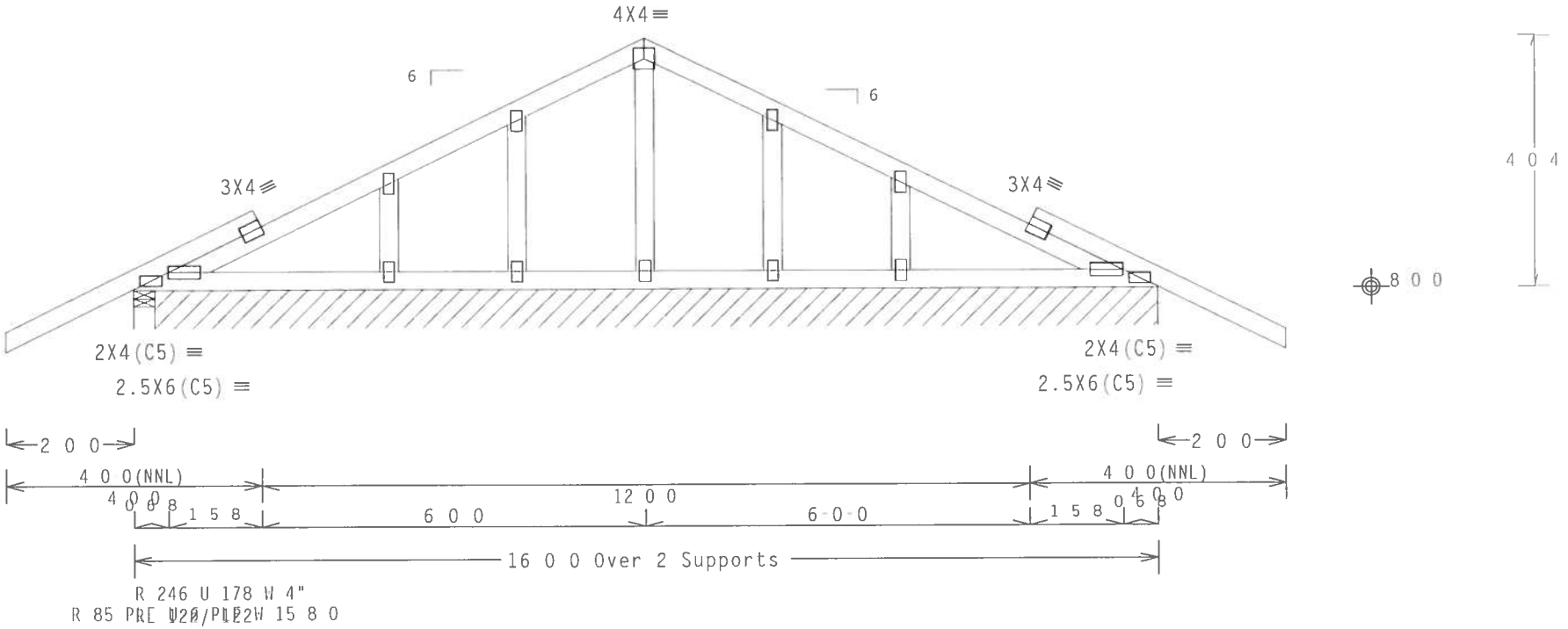
110 mph wind, 15.00 ft mean hgt, ASCE 7-05, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

See DWGS A11015050109 & GBLLETIN0109 for more requirements.

Bottom chord checked for 10.00 psf non concurrent live load.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



Note: All Plates Are 2X4 Except As Shown.

Design Crit: FBC2007Res/TPI-2002(STD)

PLT TYP. Wave FT/RT=20%(0%)/0(0) 8.07.00.1218.13 QTY:1 FL/ /4/ / /R/ Scale =.375"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL COA #0 278

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DOUGLAS FLEMING LICENSE No. 66648 STATE OF FLORIDA PROFESSIONAL ENGINEER

2 '09

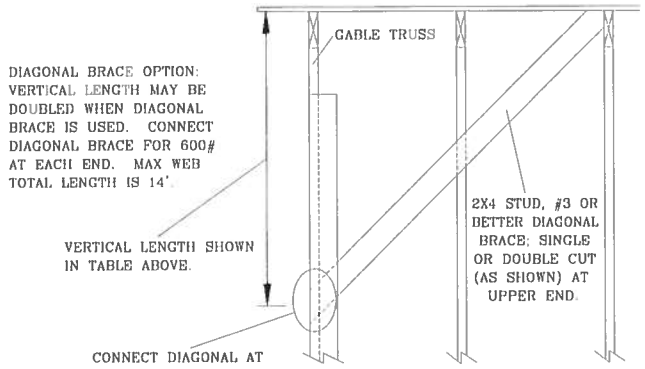
TC LL	20.0 PSF	REF	R8228- 39376
TC DL	10.0 PSF	DATE	02/12/09
BC DL	10.0 PSF	DRW	HCUSR8228 09043012
BC LL	0.0 PSF	HC-ENG	DF/DF
TOT.LD.	40.0 PSF	SEQN-	53034
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TP48228Z02

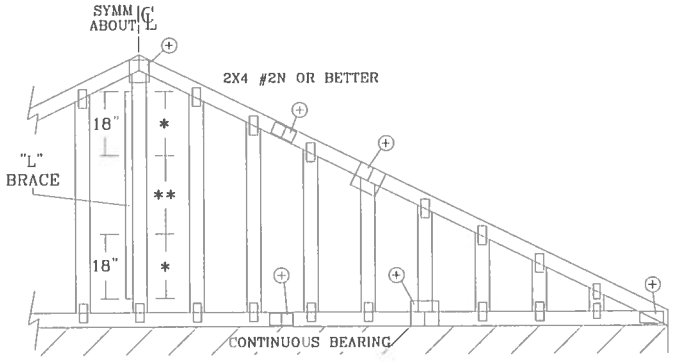
GABLE STUD REINFORCEMENT DETAIL

ASCE 7-05: 110 MPH WIND SPEED, 15' MEAN HEIGHT, ENCLOSED, I = 1.00, EXPOSURE C, Kzt = 1.00

MAX GABLE VERTICAL LENGTH

2X4 GABLE VERTICAL SPACING	SPECIES	BRACE GRADE	NO BRACES	(1) 1X4 "L" BRACE *		(1) 2X4 "L" BRACE *		(2) 2X4 "L" BRACE **		(1) 2X6 "L" BRACE *		(2) 2X6 "L" BRACE **	
				GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B
24" O.C.	SPF HF	#1 / #2	3' 10"	6' 8"	6' 10"	7' 11"	8' 1"	9' 5"	9' 8"	12' 5"	12' 9"	14' 0"	14' 0"
		#3	3' 9"	6' 0"	6' 0"	7' 11"	7' 11"	9' 5"	9' 5"	12' 4"	12' 4"	14' 0"	14' 0"
		STUD	3' 9"	6' 0"	6' 0"	7' 11"	7' 11"	9' 5"	9' 5"	12' 3"	12' 3"	14' 0"	14' 0"
		STANDARD	3' 9"	5' 2"	5' 2"	6' 9"	6' 9"	9' 1"	9' 1"	10' 7"	10' 7"	14' 0"	14' 0"
	SP DFL	#1	4' 3"	6' 8"	7' 2"	7' 11"	8' 6"	9' 5"	10' 2"	12' 5"	13' 5"	14' 0"	14' 0"
		#2	4' 2"	6' 8"	7' 2"	7' 11"	8' 6"	9' 5"	10' 2"	12' 5"	13' 5"	14' 0"	14' 0"
		#3	4' 0"	6' 2"	6' 2"	7' 11"	8' 1"	9' 5"	9' 11"	12' 5"	12' 8"	14' 0"	14' 0"
		STUD	4' 0"	6' 1"	6' 1"	7' 11"	8' 0"	9' 5"	9' 11"	12' 5"	12' 6"	14' 0"	14' 0"
		STANDARD	3' 10"	5' 3"	5' 3"	6' 11"	6' 11"	9' 4"	9' 4"	10' 10"	10' 10"	14' 0"	14' 0"
16" O.C.	SPF HF	#1 / #2	4' 5"	7' 8"	7' 10"	9' 1"	9' 4"	10' 10"	11' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 4"	7' 4"	7' 4"	9' 1"	9' 1"	10' 10"	10' 10"	14' 0"	14' 0"	14' 0"	14' 0"
		STUD	4' 4"	7' 4"	7' 4"	9' 1"	9' 1"	10' 10"	10' 10"	14' 0"	14' 0"	14' 0"	14' 0"
		STANDARD	4' 4"	6' 4"	6' 4"	8' 4"	8' 4"	10' 10"	10' 10"	12' 11"	12' 11"	14' 0"	14' 0"
	SP DFL	#1	4' 10"	7' 8"	8' 3"	9' 1"	9' 9"	10' 10"	11' 8"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	4' 9"	7' 8"	8' 3"	9' 1"	9' 9"	10' 10"	11' 8"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 6"	7' 7"	7' 7"	9' 1"	9' 6"	10' 10"	11' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		STUD	4' 6"	7' 6"	7' 6"	9' 1"	9' 6"	10' 10"	11' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		STANDARD	4' 5"	6' 5"	6' 5"	8' 6"	8' 6"	10' 10"	11' 1"	13' 3"	13' 3"	14' 0"	14' 0"
12" O.C.	SPF HF	#1 / #2	4' 11"	8' 5"	8' 8"	10' 0"	10' 3"	11' 11"	12' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 9"	8' 5"	8' 5"	10' 0"	10' 0"	11' 11"	11' 11"	14' 0"	14' 0"	14' 0"	14' 0"
		STUD	4' 9"	8' 5"	8' 5"	10' 0"	10' 0"	11' 11"	11' 11"	14' 0"	14' 0"	14' 0"	14' 0"
		STANDARD	4' 9"	7' 3"	7' 3"	9' 7"	9' 7"	11' 11"	11' 11"	14' 0"	14' 0"	14' 0"	14' 0"
	SP DFL	#1	5' 4"	8' 5"	9' 1"	10' 0"	10' 9"	11' 11"	12' 10"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	5' 3"	8' 5"	9' 1"	10' 0"	10' 9"	11' 11"	12' 10"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	5' 0"	8' 5"	8' 5"	10' 0"	10' 6"	11' 11"	12' 6"	14' 0"	14' 0"	14' 0"	14' 0"
		STUD	5' 0"	8' 5"	8' 7"	10' 0"	10' 6"	11' 11"	12' 6"	14' 0"	14' 0"	14' 0"	14' 0"
		STANDARD	4' 11"	7' 5"	7' 5"	9' 10"	9' 10"	11' 11"	12' 3"	14' 0"	14' 0"	14' 0"	14' 0"





REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

BRACING GROUP SPECIES AND GRADES:

GROUP A:

SPRUCE-PINE-FIR		HEM-FIR	
#1 / #2	STANDARD	#2	STUD
#3	STUD	#3	STANDARD

DOUGLAS FIR-LARCH	SOUTHERN PINE
#3	#3
STUD	STUD
STANDARD	STANDARD

GROUP B:

HEM-FIR
#1 & BTR
#1

SOUTHERN PINE	DOUGLAS FIR-LARCH
#1	#1
#2	#2

GABLE TRUSS DETAIL NOTES:

LIVE LOAD DEFLECTION CRITERIA IS L/240

PROVIDE UPLIFT CONNECTIONS FOR 80 PLF OVER CONTINUOUS BEARING (5 PSF TC DEAD LOAD)

GABLE END SUPPORTS LOAD FROM 4' 0" OUTLOOKERS WITH 2' 0" OVERHANG, OR 12" PLYWOOD OVERHANG.

ATTACH EACH "L" BRACE WITH 10d NAILS (0.128"x3" min)

* FOR (1) "L" BRACE: SPACE NAILS AT 2" O.C. IN 18" END ZONES AND 4" O.C. BETWEEN ZONES

** FOR (2) "L" BRACES: SPACE NAILS AT 3" O.C. IN 18" END ZONES AND 6" O.C. BETWEEN ZONES

"L" BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH.

GABLE VERTICAL PLATE SIZES

VERTICAL LENGTH	NO. SPLICE
LESS THAN 4' 0"	1X4 OR 2X3
GREATER THAN 4' 0", BUT LESS THAN 11' 6"	2.5X4
GREATER THAN 11' 6"	3X4

+ REFER TO COMMON TRUSS DESIGN FOR PEAK, SPLICE, AND HEEL PLATES

ITW Building Components Group Inc.

Earth City, MO 63045

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IMPORTANT FURNISH COPY OF THIS DESIGN TO INSTALLATION CONTRACTOR.
ITW Building Components Group Inc (ITWBCG) shall not be responsible for any deviation from this design, any failure to build the truss in conformance with TPI, or fabricating, handling, shipping, installing & bracing of trusses. ITWBCG connector plates are made of 20/18/16GA (W,H/S/K) ASTM A653 grade 37/40/60 (K/W/H,S) galv. steel. Apply plates to each face of truss, positioned as shown above and on Joint Details. A seal on this drawing or cover page indicates acceptance and professional engineering responsibility solely for the truss component design shown. The suitability and use of this component for any building is the responsibility of the Building Designer per ANST/TPI 1 Sec. 2.
ITW-BCG: www.itwbcg.com; TPI: www.tpinst.com; WTCA: www.sbcindustry.com; ICC: www.iccsafe.org

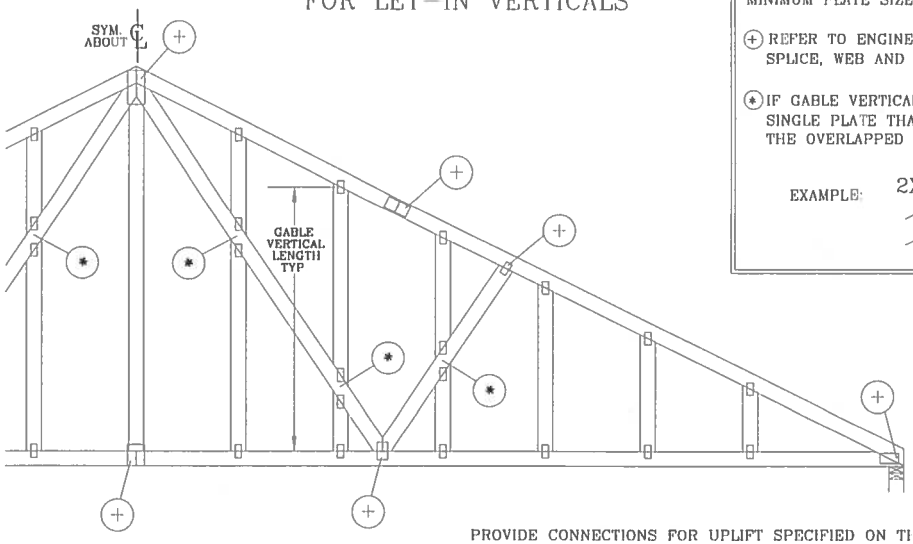
DOUGLAS FLEMING LICENSE Feb 12 No. 66648 STATE OF FLORIDA PROFESSIONAL ENGINEER

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF	ASCE7-05-GAB11015
DATE	1/1/09
DRWG	A11015050109

GABLE DETAIL
FOR LET-IN VERTICALS



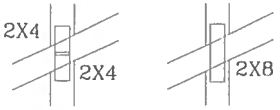
GABLE TRUSS PLATE SIZES

REFER TO APPROPRIATE ITW GABLE DETAIL FOR MINIMUM PLATE SIZES FOR VERTICAL STUDS.

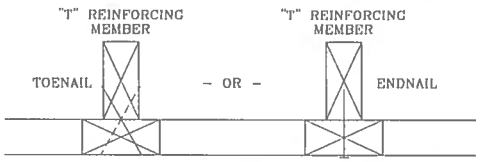
(+) REFER TO ENGINEERED TRUSS DESIGN FOR PEAK, SPLICE, WEB AND HEEL PLATES.

(*) IF GABLE VERTICAL PLATES OVERLAP, USE A SINGLE PLATE THAT COVERS THE TOTAL AREA OF THE OVERLAPPED PLATES TO SPAN THE WEB.

EXAMPLE:



"T" REINFORCEMENT ATTACHMENT DETAIL



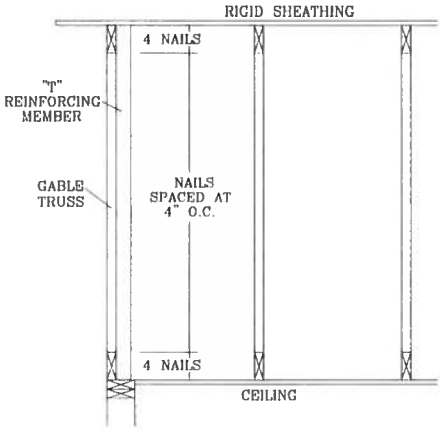
TO CONVERT FROM "L" TO "T" REINFORCING MEMBERS, MULTIPLY "T" INCREASE BY LENGTH (BASED ON APPROPRIATE ITW GABLE DETAIL).

MAXIMUM ALLOWABLE "T" REINFORCED GABLE VERTICAL LENGTH IS 14' FROM TOP TO BOTTOM CHORD.

WEB LENGTH INCREASE W/ "T" BRACE

WIND SPEED AND MRH	"T" REINF. MBR. SIZE	"T" INCREASE
140 MPH	2x4	10 %
15 FT	2x6	50 %
140 MPH	2x4	10 %
30 FT	2x6	50 %
130 MPH	2x4	10 %
15 FT	2x6	50 %
130 MPH	2x4	10 %
30 FT	2x6	50 %
120 MPH	2x4	10 %
15 FT	2x6	50 %
120 MPH	2x4	10 %
30 FT	2x6	40 %
110 MPH	2x4	10 %
15 FT	2x6	40 %
110 MPH	2x4	10 %
30 FT	2x6	50 %
100 MPH	2x4	20 %
15 FT	2x6	30 %
100 MPH	2x4	10 %
30 FT	2x6	40 %
90 MPH	2x4	20 %
15 FT	2x6	20 %
90 MPH	2x4	20 %
30 FT	2x6	30 %

EXAMPLE:
ASCE WIND SPEED = 100 MPH
MEAN ROOF HEIGHT = 30 FT, Kzt = 1.00
GABLE VERTICAL = 24" O.C. SP #3
"T" REINFORCING MEMBER SIZE = 2X4
"T" BRACE INCREASE (FROM ABOVE) = 10% = 1.10
(1) 2X4 "L" BRACE LENGTH = 6' 7"
MAXIMUM "T" REINFORCED GABLE VERTICAL LENGTH
1.10 x 6' 7" = 7' 3"



PROVIDE CONNECTIONS FOR UPLIFT SPECIFIED ON THE ENGINEERED TRUSS DESIGN.

ATTACH EACH "T" REINFORCING MEMBER WITH
END DRIVEN NAILS:
10d COMMON (0.148"X 3.",MIN) NAILS AT 4" O.C. PLUS
(4) NAILS IN TOP AND BOTTOM CHORD.

TOENAILED NAILS:
10d COMMON (0.148"x3",MIN) TOENAILS AT 4" O.C. PLUS
(4) TOENAILS IN TOP AND BOTTOM CHORD.

THIS DETAIL TO BE USED WITH THE APPROPRIATE ITW GABLE DETAIL FOR ASCE WIND LOAD.
ASCE 7-98 GABLE DETAIL DRAWINGS
A13015980109, A12015980109, A11015980109, A10015980109,
A13030980109, A12030980109, A11030980109, A10030980109
ASCE 7-02 GABLE DETAIL DRAWINGS
A13015020109, A12015020109, A11015020109, A10015020109, A14015020109,
A13030020109, A12030020109, A11030020109, A10030020109, A14030020109
ASCE 7-05 GABLE DETAIL DRAWINGS
A13015050109, A12015050109, A11015050109, A10015050109, A14015050109,
A13030050109, A12030050109, A11030050109, A10030050109, A14030050109

SEE APPROPRIATE ITW GABLE DETAIL FOR MAXIMUM UNREINFORCED GABLE VERTICAL LENGTH.

Building Components Group Inc.

Earth City, MO 63045

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ITW-BCG: www.itwbcg.com; TPI: www.tpinst.com; WTCA: www.sbcindustry.com; ICC: www.iccsafe.org

Feb 12 '09

DOUGLAS FLEMING LICENSE No. 66648 STATE OF FLORIDA PROFESSIONAL ENGINEER

MAX TOT. LD. 60 PSF
DUR. FAC. ANY
MAX SPACING 24.0"

REF	LET-IN VERT
DATE	1/1/09
DRWG	GBLLETIN0109