COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS: FLORIDA BUILDING CODE RESIDENTIAL 2014 EFFECTIVE 1 JULY 2015 AND THE NATIONAL ELECTRICAL CODE 2011 EFFECTIVE 1 JULY 2015

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE WITH THE CURRENT 2014 FLORIDA BUILDING CODES RESIDENTIAL, EFFECTIVE 1 JULY 2015. NATIONAL ELECTRICAL CODE 2011 EFFECTIVE 1 JULY 2015. 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
Revised 12/2016

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Marked as Applicable
		Select From the Dropbox
1	Two (2) complete sets of plans containing the following:	- Yes
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void	- Yes
3	Condition space (Sq. Ft.) 2494 Total (Sq. Ft.) under roof 3547	YES / NO / N/A

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

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 Marked as Applicable
8	**Plans or specifications must show compliance with FBCR Chapter 3**	(YES) / NO / N/A
		Select From the Dropbox
9	Basic wind speed (3-second gust), miles per hour	- Yes
10	(Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	- Yes
11	Wind importance factor and nature of occupancy	- Yes
12	The applicable internal pressure coefficient, Components and Cladding	- Yes
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.	- Yes

Elevations Drawing including:

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

Floor Plan including:

20	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies	- yes
21	Raised floor surfaces located more than 30 inches above the floor or grade	- n/a
22	All exterior and interior shear walls indicated	- yes
23	Shear wall opening shown (Windows, Doors and Garage doors)	- yes
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.	- yes
25	Safety glazing of glass where needed	- n/a
26	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 and chapter 24 of FBCR)	gas -
27	Show stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails	- n/a
28	Identify accessibility of bathroom (see FBCR SECTION 320)	- n/a

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 Marked as Applicable YES / NO / N/A Select From the Dropbox

FBCR 403: Foundation Plans

29	Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing.	- yes
30	All posts and/or column footing including size and reinforcing	- yes
31	Any special support required by soil analysis such as piling.	- n/a
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	- n/a

FBCR 506: CONCRETE SLAB ON GRADE

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

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**	- yes

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	- yes
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	- yes

40	Show conventional floor joist type, size, span, spacing and attachment to load bearing walls, stem walls and/or priers	- Yes
41	Girder type, size and spacing to load bearing walls, stem wall and/or priers	- Yes
42	Attachment of joist to girder	- Yes
43	Wind load requirements where applicable	- Yes
44	Show required under-floor crawl space	- n/a
45	Show required amount of ventilation opening for under-floor spaces	- n/a
46	Show required covering of ventilation opening	- n/a
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 & intermediate of the areas structural panel sheathing	- Yes
49	Show Draftstopping, Fire caulking and Fire blocking	- Yes
50	Show fireproofing requirements for garages attached to living spaces, per FBCR section 302.6	- Yes
51	Provide live and dead load rating of floor framing systems (psf).	- Yes

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

YES / NO / N/A

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Marked as Applicable Select From the Dropbox
52	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	- Yes
53	Fastener schedule for structural members per table IRC 602.3 are to be shown	- Yes
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	- Yes
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	- Yes
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)	- Yes
57	Indicate where pressure treated wood will be placed	- Yes
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	- Yes
59	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail	- Yes

FBCR :ROOF SYSTEMS:

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

FBCR 802:Conventional Roof Framing Layout

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

FBCR 803 ROOF SHEATHING

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

ROOF ASSEMBLIES FRC Chapter 9

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

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.*

YES / NO / N/A

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Marked as Applicable Select From the Dropbox
73	Show the insulation R value for the following areas of the structure	- YES
74	Attic space	- YES
75	Exterior wall cavity	- YES
76	Crawl space	- N/A
	HVAC information	
77	Submit two copies of a Manual J sizing equipment or equivalent computation study	- YES
78	Exhaust fans shown in bathrooms **Mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous required**	- YES
79	Show clothes dryer route and total run of exhaust duct	- YES
	Plumbing Fixture layout shown	
80	All fixtures waste water lines shall be shown on the foundation plan	- YES
81	Show the location of water heater	- YES
	Private Potable Water	
82	Pump motor horse power	- N/A
83	Reservoir pressure tank gallon capacity	- N/A
84	Rating of cycle stop valve if used	- N/A
	Electrical layout shown including	
85	Show Switches, receptacles outlets, lighting fixtures and Ceiling fans	- YES
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**	- YES
87	Show the location of smoke detectors & Carbon monoxide detectors	- YES
88	Show service panel, sub-panel, location(s) and total ampere ratings	- YES
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	- YES
90	Appliances and HVAC equipment and disconnects	- YES
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.	- YES

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 is to be completed, by following the Checklist all supporting documents must be submitted. There is a **$15.00** application fee. The completed application with attached documents and application fee can be mailed.	YES NO		
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 required. www.columbiacountyfla.com	NO YES		
94	**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.	NO		
***	**BELOW ITEMS ONLY NEEDED AFTER ZONING APPROVAL HAS GIVEN.**	****	***	***
95	**Environmental Health Permit or Sewer Tap Approval** A copy of a approved Columbia County Environmental Health (386) 758-1058 applied for	NO YES		
96	**City of Lake City** A City Water and/or Sewer letter. Call 386-752-2031	NO		
97	**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	NO		
98	**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.			
99	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is **$50.00**			
100	**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.	NO		
101	**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.	YES NO		

TOILET FACILITIES SHALL BE PROVIDED FOR ALL CONSTRUCTION SITES. NO

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.

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 application 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.

Notification:
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.

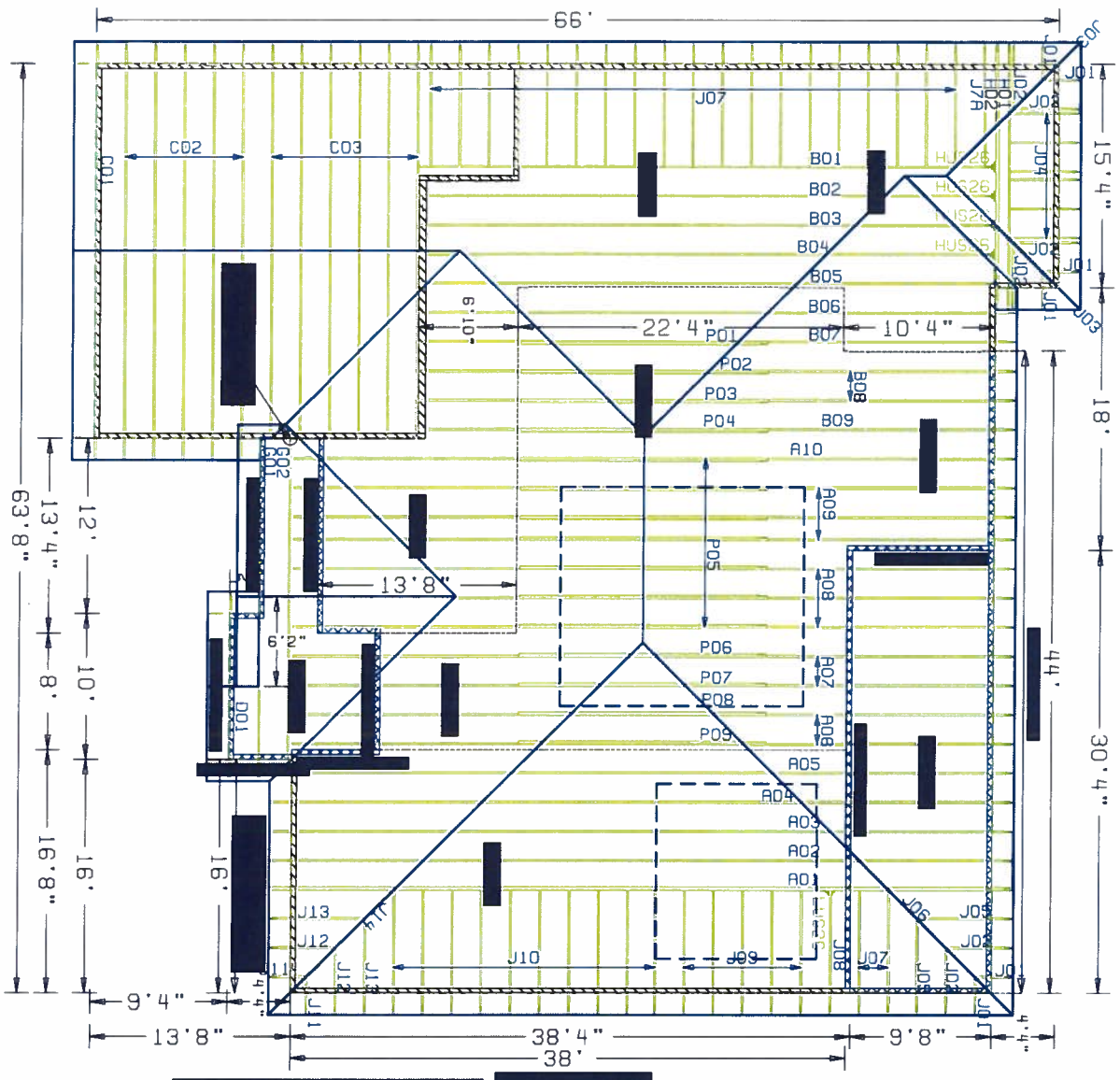
As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and approval numbers on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. Statewide approved products are listed online @ www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
1. EXTERIOR DOORS			
A. SWINGING	Masonite	Single hung	FL5965-R9
B. SLIDING			
C. SECTIONAL/ROLL UP	CHI Overhead	Garage Door	FL12065-R4
D. OTHER	Masonite	Single door w/sidelites	FL17798-R2
2. WINDOWS			
A. SINGLE/DOUBLE HUNG	MI Windows	Single hung	FL17499-R5
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING	Hardie	plank siding	FL10477-R7
B. SOFFITS			
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES	Timberline		FL3443-R29
B. NON-STRUCTURAL METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCTURAL COMPONENTS			
A. WOOD CONNECTORS	Simpson		
B. WOOD ANCHORS			FL620-R18
C. TRUSS PLATES	Si		
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
6. NEW EXTERIOR ENVELOPE PRODUCTS			

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) performance characteristics which the product was tested and certified to comply with, 3) copy of the applicable manufacturers installation requirements.
Further, I understand these products may have to be removed if approval cannot be demonstrated during inspection.

Contractor OR Agent Signature 10-30-A Date

NOTES: _____

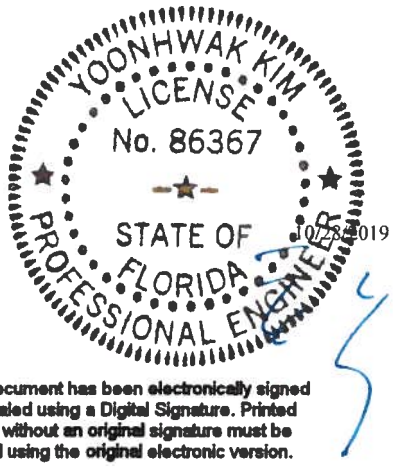


[redacted]

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

PAGE NO: 1 OF 1	JOB NO: 19-3660	Job Name: Powell Residence Customer: SPARKS CONST. Designer: Lynn Bell ADDRESS: SALESMAN: SB : <Not Found>

JOB #: 19-3660



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ALPINE
AN ITW COMPANY

FL REG# 278, Yoonhwak Kim, FL PE #86367

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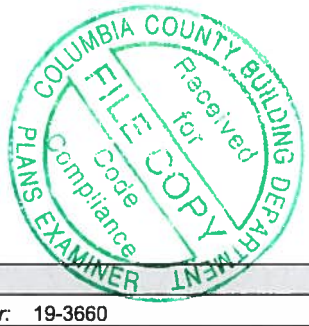
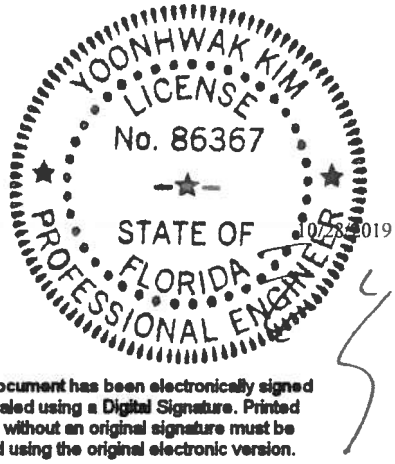


Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	*Job Number:* 19-3660
Job Description: /Powell Residence /SPARKS CONST.	
Address: FL	

Job Engineering Criteria:	
Design Code: FBC 2017 RES	*IntelliVIEW Version:* 18.02.01B *JRef #:* 1WPQ2150004
Wind Standard: ASCE 7-10 *Wind Speed (mph):* 130 *Building Type:* Closed	*Roof Load (psf):* 20.00-10.00- 0.00-10.00 *Floor Load (psf):* None

This package contains general notes pages, 52 truss drawing(s) and 4 detail(s).

Item	Seal #	Truss	Item	Seal #	Truss
1	301.19.1524.20022	A01	2	301.19.1524.20242	A02
3	301.19.1524.21442	A03	4	301.19.1524.20678	A04
5	301.19.1524.20444	A05	6	301.19.1524.19820	A06
7	301.19.1524.21630	A07	8	301.19.1524.20243	A08
9	301.19.1524.19961	A09	10	301.19.1524.20133	A10
11	301.19.1524.20912	B01	12	301.19.1524.20070	B02
13	301.19.1524.19960	B03	14	301.19.1524.20459	B04
15	301.19.1524.19665	B05	16	301.19.1524.19710	B06
17	301.19.1524.20055	B07	18	301.19.1524.20522	B08
19	301.19.1524.21224	B09	20	301.19.1524.21021	C01
21	301.19.1524.20880	C02	22	301.19.1524.21083	C03
23	301.19.1524.19757	D01	24	301.19.1524.21676	G01
25	301.19.1524.21771	G02	26	301.19.1524.21629	H01
27	301.19.1524.20802	H02	28	301.19.1524.19866	J01
29	301.19.1524.20303	J02	30	301.19.1524.21239	J03
31	301.19.1524.20350	J04	32	301.19.1524.20289	J05
33	301.19.1524.20398	J06	34	301.19.1524.20196	J07
35	301.19.1524.20366	J7A	36	301.19.1524.20646	J08
37	301.19.1524.20788	J09	38	301.19.1524.21348	J10
39	301.19.1524.19555	J11	40	301.19.1524.19617	J12
41	301.19.1524.19962	J13	42	301.19.1524.20272	P01
43	301.19.1524.20226	P02	44	301.19.1524.20101	P03
45	301.19.1524.20896	P04	46	301.19.1524.21052	P05
47	301.19.1524.20132	P06	48	301.19.1524.21303	P07
49	301.19.1524.20615	P08	50	301.19.1524.20194	P09
51	301.19.1532.27460	J14	52	301.19.1532.32953	A01



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Site Information:	Page 2:
Customer: W. B. Howland Company, Inc.	*Job Number:* 19-3660
Job Description: /Powell Residence /SPARKS CONST.	
Address: FL	

Item	Seal #	Truss
53	A14015ENC101014	
55	GBLLETIN0118	

Item	Seal #	Truss
54	BRCLBSUB0119	
56	PB160101014	

General Notes

Truss Design Engineer Scope of Work, Design Assumptions and Design Responsibilities:
The design responsibilities assumed in the preparation of these design drawings are those specified in ANSI/TPI 1, Chapter 2; and the National Design Standard for Metal Plate Connected Wood Truss Construction, by the Truss Plate Institute. The truss component designs conform to the applicable provisions of ANSI/TPI 1 and NDS, the National Design Specification for Wood Construction by AF&PA. The truss component designs are based on the specified loading and dimension information furnished by others to the Truss Design Engineer. The Truss Design Engineer has no duty to independently verify the accuracy or completeness of the information provided by others and may rely on that information without liability. The responsibility for verification of that information remains with others neither employed nor controlled by the Truss Design Engineer. The Truss Design Engineer's seal and signature on the attached drawings, or cover page listing these drawings, indicates acceptance of professional engineering responsibility solely for the truss component designs and not for the technical information furnished by others which technical information and consequences thereof remain their sole responsibility.

The suitability and use of these drawings for any particular structure is the responsibility of the Building Designer in accordance with ANSI/TPI 1 Chapter 2. The Building Designer is responsible for determining that the dimensions and loads for each truss component match those required by the plans and by the actual use of the individual component, and for ascertaining that the loads shown on the drawings meet or exceed applicable building code requirements and any additional factors required in the particular application. Truss components using metal connector plates with integral teeth shall not be placed in environments that will cause the moisture content of the wood in which plates are embedded to exceed 19% and/or cause corrosion of connector plates and other metal fasteners.

The Truss Design Engineer shall not be responsible for items beyond the specific scope of the agreed contracted work set forth herein, including but not limited to: verifying the dimensions of the truss component, calculation of any of the truss component design loads, inspection of the truss components before or after installation, the design of temporary or permanent bracing and their attachment required in the roof and/or floor systems, the design of diaphragms or shear walls, the design of load transfer connections to and from diaphragms and shear walls, the design of load transfer to the foundation, the design of connections for truss components to their bearing supports, the design of the bearing supports, installation of the truss components, observation of the truss component installation process, review of truss assembly procedures, sequencing of the truss component installation, construction means and methods, site and/or worker safety in the installation of the truss components and/or its connections.

This document may be a high quality facsimile of the original engineering document which is a digitally signed electronic file with third party authentication. A wet or embossed seal copy of this engineering document is available upon request.

Temporary Lateral Restraint and Bracing:
Temporary lateral restraint and diagonal bracing shall be installed according to the provisions of BCSI chapters B1, B2, B7 and/or B10 (Building Component Safety Information, by TPI and SBCA), or as specified by the Building Designer or other Registered Design Professional. The required locations for lateral restraint and/or bracing depicted on these drawings are only for the permanent lateral support of the truss members to reduce buckling lengths, and do not apply to and may not be relied upon for the temporary stability of the truss components during their installation.

Permanent Lateral Restraint and Bracing:
The required locations for lateral restraint or bracing depicted on these drawings are for the permanent lateral support of the truss members to reduce buckling lengths. Permanent lateral support shall be installed according to the provisions of BCSI chapters B3, B7 and/or B10, or as specified by the Building Designer or other Registered Design Professional. These drawings do not depict or specify installation/erection bracing, wind bracing, portal bracing or similar building stability bracing which are parts of the overall building design to be specified, designed and detailed by the Building Designer.

Connector Plate Information:
Alpine connector plates are made of ASTM A653 or ASTM A1063 galvanized steel with the following designations, gauges and grades: W=Wave, 20ga, grade 40; H=High Strength, 20ga, grade 60; S=Super Strength, 18ga, grade 60. Information on model code compliance is contained in the ICC Evaluation Service report ESR-1118, available on-line at www.icc-es.org.

General Notes (continued)

Key to Terms:
Information provided on drawings reflects a summary of the pertinent information required for the truss design. Detailed information on load cases, reactions, member lengths, forces and members requiring permanent lateral support may be found in calculation sheets available upon written request.

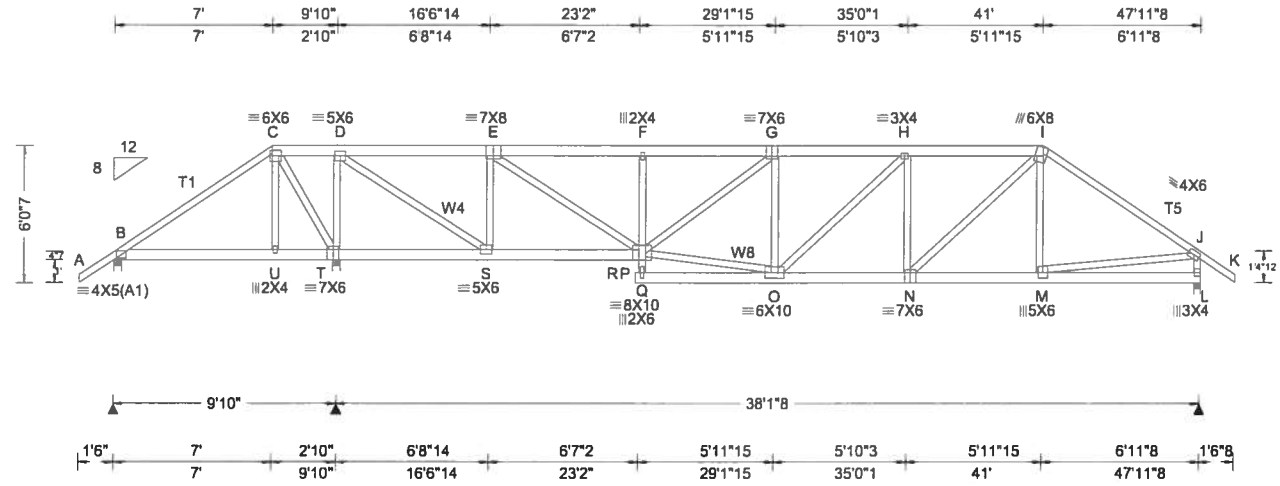
BCDL = Bottom Chord standard design Dead Load in pounds per square foot.
BCLL = Bottom Chord standard design Live Load in pounds per square foot.
Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.
HORZ(LL) = maximum Horizontal panel point deflection due to Live Load, in inches.
HORZ(TL) = maximum Horizontal panel point long term deflection in inches, due to Total Load, including creep adjustment.
HPL = additional Horizontal Load added to a truss Piece in pounds per linear foot or pounds.
L/# = user specified divisor for limiting span/deflection ratio for evaluation of actual L/defl value.
L/defl = ratio of Length between bearings, in inches, divided by the immediate vertical Deflection, in inches, at the referenced panel point. Reported as 999 if greater than or equal to 999.
Loc = Location, starting location of left end of bearing or panel point (joint) location of deflection.
Max BC CSI = Maximum bending and axial Combined Stress Index for Bottom Chords for of all load cases.
Max TC CSI = Maximum bending and axial Combined Stress Index for Top Chords for of all load cases.
Max Web CSI= Maximum bending and axial Combined Stress Index for Webs for of all load cases.
NCBCLL = Non-Concurrent Bottom Chord design Live Load in pounds per square foot.
PL = additional Load applied at a user specified angle on a truss Piece in pounds per linear foot or pounds.
PLB = additional vertical load added to a Bottom chord Piece of a truss in pounds per linear foot or pounds
PLT = additional vertical load added to a Top chord Piece of a truss in pounds per linear foot or pounds.
PP = Panel Point.
R = maximum downward design Reaction, in pounds, from all specified gravity load cases, at the indicated location (Loc).
-R = maximum upward design Reaction, in pounds, from all specified gravity load cases, at the identified location (Loc).
Rh = maximum horizontal design Reaction in either direction, in pounds, from all specified gravity load cases, at the indicated location (Loc).
RL = maximum horizontal design Reaction in either direction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).
Rw = maximum downward design Reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the identified location (Loc).
TCDL = Top Chord standard design Dead Load in pounds per square foot.
TCLL = Top Chord standard design Live Load in pounds per square foot.
U = maximum Upward design reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).
VERT(CL) = maximum Vertical panel point deflection in inches due to Live Load and Creep Component of Dead Load in inches.
VERT(LL) = maximum Vertical panel point deflection in inches due to Live Load.
VERT(TL) = maximum Vertical panel point long term deflection in inches due to Total load, including creep adjustment.
W = Width of non-hanger bearing, in inches.

Refer to ASCE-7 for Wind and Seismic abbreviations.
Uppercase Acronyms not explained above are as defined in TPI 1.

References:
1. AF&PA: American Forest & Paper Association, 1111 19th Street, NW, Suite 800, Washington, DC 20036; www.afandpa.org.
2. ICC: International Code Council; www.iccsafe.org.
3. Alpine, a division of ITW Building Components Group Inc.: 13723 Riverport Drive, Suite 200, Maryland Heights, MO 63043; www.alpineitw.com.
4. TPI: Truss Plate Institute, 218 North Lee Street, Suite 312, Alexandria, VA 22314; www.tpinst.org.
5. SBCA: Wood Truss Council of America, 6300 Enterprise Lane, Madison, WI 53719; www.sbcindustry.co

SEQN: 564904 / HIPS FROM: CDM Page 1 of 2	Ply: 2 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** A01	Cust: R 215 JRef: 1WPQ2150004 T14 / DrwNo: 301.19.1524.20022 / YK 10/28/2019

2 Complete Trusses Required



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 4.80 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Varies by Ld Case
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.147	G	999	240
VERT(CL): 0.301	G	999	180
HORZ(LL): 0.030	J	-	-
HORZ(TL): 0.063	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.518
Max BC CSI: 0.206
Max Web CSI: 0.771

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	-	/-	/-	/-	/-	/-
T	5334	/-	/-	/-	/712	/-
L	3630	/-	/-	/-	/102	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 2.2
T Brg Width = 4.0 Min Req = 1.5
L Brg Width = 3.5 Min Req = 1.5
Bearings B, T, & L are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	387	-108	F - G	0	-3373
C - D	666	-179	G - H	0	-3177
D - E	0	-1744	H - I	0	-2953
E - F	0	-3385	I - J	33	-2502

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
T - S	166	-564	O - N	2983	0
S - P	1823	0	N - M	2041	-9

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - T	207	-768	G - O	27	-526
T - D	187	-1786	H - N	9	-596
D - S	2537	-160	N - I	1261	0
S - E	89	-1240	M - J	2023	-1
E - P	1933	-26	J - L	65	-1784
P - O	3153	0			

Lumber

Top chord 2x6 SP 2400f-2.0E
:T1, T5 2x4 SP #2:
Bot chord 2x6 SP 2400f-2.0E
Webs 2x4 SP #3
:W4, W8 2x4 SP #2:

Nailnote

Nail Schedule:0.128"x3", min. nails
Top Chord: 1 Row @12.00" o.c.
Bot Chord: 1 Row @12.00" o.c.
Webs : 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails in each row to avoid splitting.

Wind

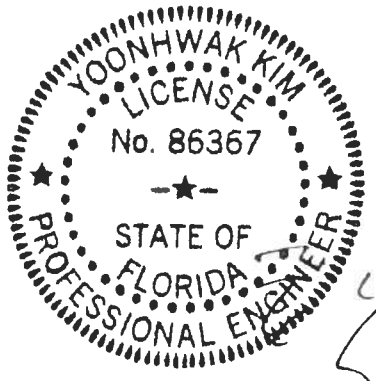
Wind loads and reactions based on MWFRS.

Additional Notes

Refer to General Notes for additional information

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 5-0-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing,any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses**A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.**

For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com, TPI: www.tpinst.org, SBCA: www.sbcindustry.com, ICC www.iccsafe.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

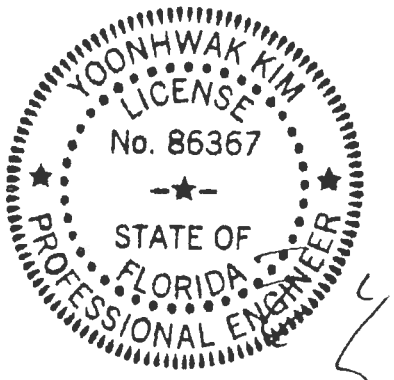
SEQN: 564904 / HIPS	Ply: 2	**Job Number:** 19-3660	Cust: R 215 JRef 1WPQ2150004 T14 /
FROM: CDM	Qty: 1	/Powell Residence /SPARKS CONST.	DrwNo: 301.19.1524.20022
Page 2 of 2		**Truss Label:** A01	/ YK 10/28/2019

Special Loads

——(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From	60 plf at	-1.50 to	60 plf at	7.00	
TC: From	30 plf at	7.00 to	30 plf at	41.00	
TC: From	60 plf at	41.00 to	60 plf at	49.50	
BC: From	5 plf at	-1.50 to	5 plf at	0.00	
BC: From	20 plf at	0.00 to	20 plf at	7.03	
BC: From	10 plf at	7.03 to	10 plf at	40.97	
BC: From	20 plf at	40.97 to	20 plf at	47.96	
BC: From	5 plf at	47.96 to	5 plf at	49.50	

TC: 257 lb Conc. Load at 7.03
TC: 181 lb Conc. Load at 9.06
TC: 198 lb Conc. Load at 11.06,23.06,24.94,26.94 28.94,30.94,32.94,34.94,36.94,38.94
TC: 38 lb Conc. Load at 13.06,15.06,17.06,19.06 21.06
TC: 291 lb Conc. Load at 40.97
BC: 466 lb Conc. Load at 7.03
BC: 129 lb Conc. Load at 9.06
BC: 139 lb Conc. Load at 11.06
BC: 128 lb Conc. Load at 13.06,15.06,17.06,19.06 21.06
BC: 159 lb Conc. Load at 23.06,24.94,26.94,28.94 30.94,32.94,34.94,36.94,38.94
BC: 526 lb Conc. Load at 40.97



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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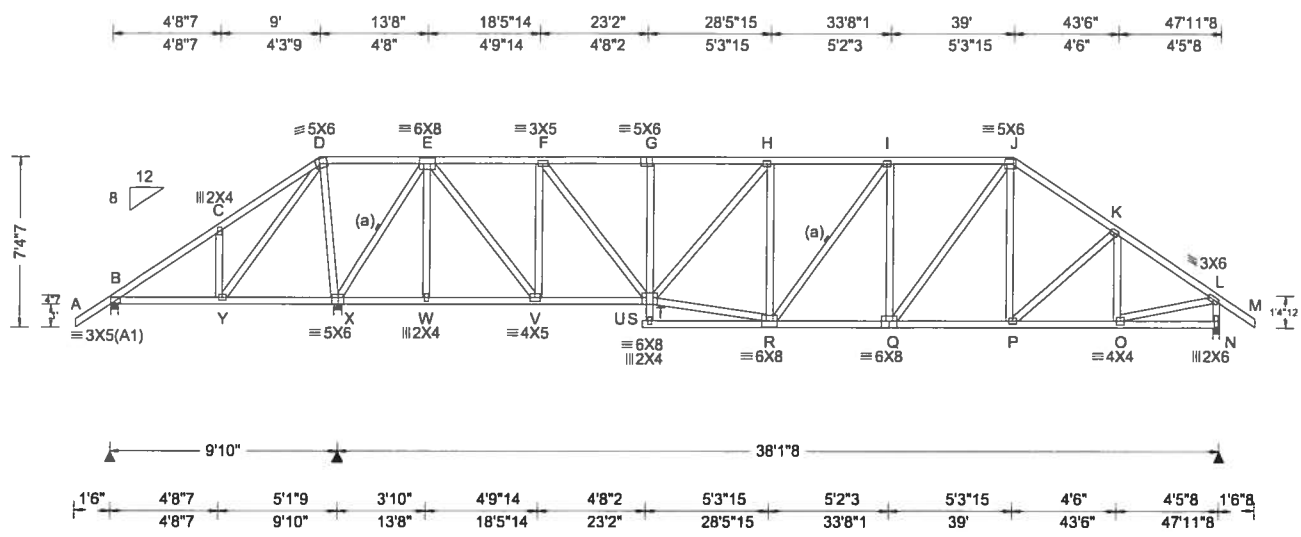
For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org, SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

ALPINE
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564906 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** A02	Cust: R 215 JRef: 1WPQ2150004 T15 / DrwNo: 301.19.1524.20242 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 4.80 ft
Loc. from endwall: not in 6.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.098	H	999	240
VERT(CL): 0.195	H	999	180
HORZ(LL): 0.020	N	-	-
HORZ(TL): 0.041	N	-	-

Creep Factor: 2.0
Max TC CSI: 0.611
Max BC CSI: 0.521
Max Web CSI: 0.805

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	123	/-444	/-	/85	/168	/237
X	2795	/-	/-	/1538	/515	/-
N	1453	/-	/-	/912	/270	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
X Brg Width = 4.0 Min Req = 3.3
N Brg Width = 3.5 Min Req = 1.7
Bearings B, X, & N are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	997	-234	G - H	504	-1526
C - D	987	-127	H - I	542	-1591
D - E	1141	-194	I - J	543	-1582
E - F	324	-827	J - K	506	-1603
F - G	505	-1530	K - L	446	-1626

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - Y	277	-798	R - Q	1595	-300
Y - X	393	-989	Q - P	1272	-219
V - S	882	-96	P - O	1303	-278

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
Y - D	517	-212	F - S	1057	-268
D - X	301	-1107	S - R	1599	-298
X - E	518	-1896	Q - J	525	-151
E - V	1513	-380	O - L	1315	-279
V - F	321	-1111	L - N	442	-1413

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

Bracing
(a) Continuous lateral restraint equally spaced on member.

Plating Notes
All plates are 3X4 except as noted.

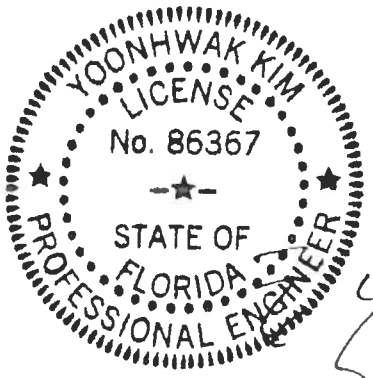
Wind
Wind loads based on MWFRS with additional C&C member design.

Additional Notes
Refer to General Notes for additional information

Negative reaction(s) of -444# MAX. from a non-wind load case requires uplift connection. See Maximum Reactions.

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 6-4-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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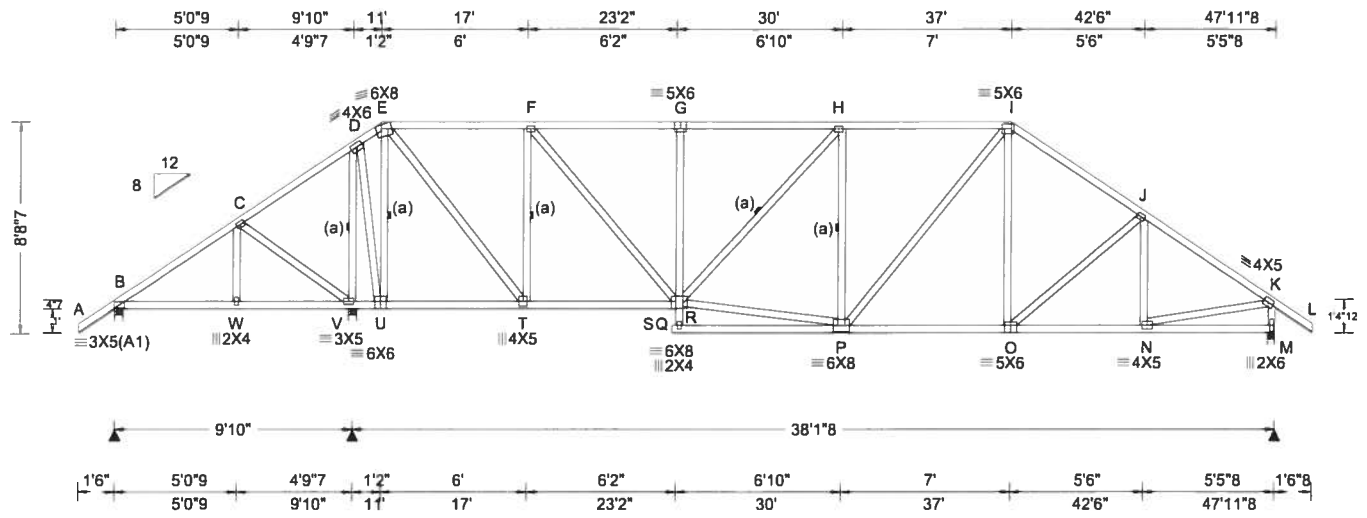
For more information see this job's general notes page and these web sites. ALPINE: www.alpineitw.com, TPI: www.tpinst.org, SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564910 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** A03	Cust: R 215 JRef 1WPQ2150004 T10 / DrwNo: 301.19.1524.21442 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 4.80 ft
Loc. from endwall: not in 6.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.108	G	999	240
VERT(CL): 0.215	G	999	180
HORZ(LL): 0.029	M	-	-
HORZ(TL): 0.058	M	-	-

Creep Factor: 2.0
Max TC CSI: 0.530
Max BC CSI: 0.704
Max Web CSI: 0.719

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	335	/-4	/-	/167	/40	/277
V	2238	/-	/-	/1295	/413	/-
M	1573	/-	/-	/993	/288	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
V Brg Width = 4.0 Min Req = 2.3
M Brg Width = 3.5 Min Req = 1.9
Bearings B, V, & M are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
C - D	518	-59	H - I	567	-1640
E - F	375	-982	I - J	542	-1735
F - G	548	-1657	J - K	488	-1849
G - H	548	-1653			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
T - Q	1027	-117	O - N	1474	-305
P - O	1369	-221			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
V - D	473	-1884	Q - P	1627	-286
D - U	1496	-338	H - P	165	-439
E - U	367	-1490	P - I	422	-119
E - T	1637	-428	N - K	1465	-300
T - F	359	-1150	K - M	462	-1525
F - Q	985	-250			

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

Bracing
(a) Continuous lateral restraint equally spaced on member.

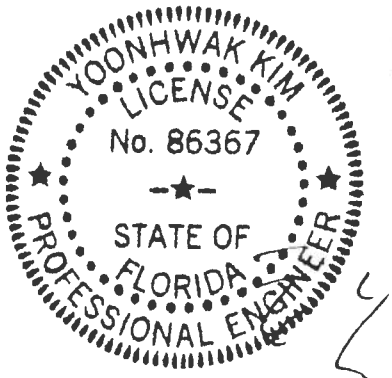
Plating Notes
All plates are 3X4 except as noted.

Wind
Wind loads based on MWFRS with additional C&C member design.

Additional Notes
Refer to General Notes for additional information

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 7-8-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
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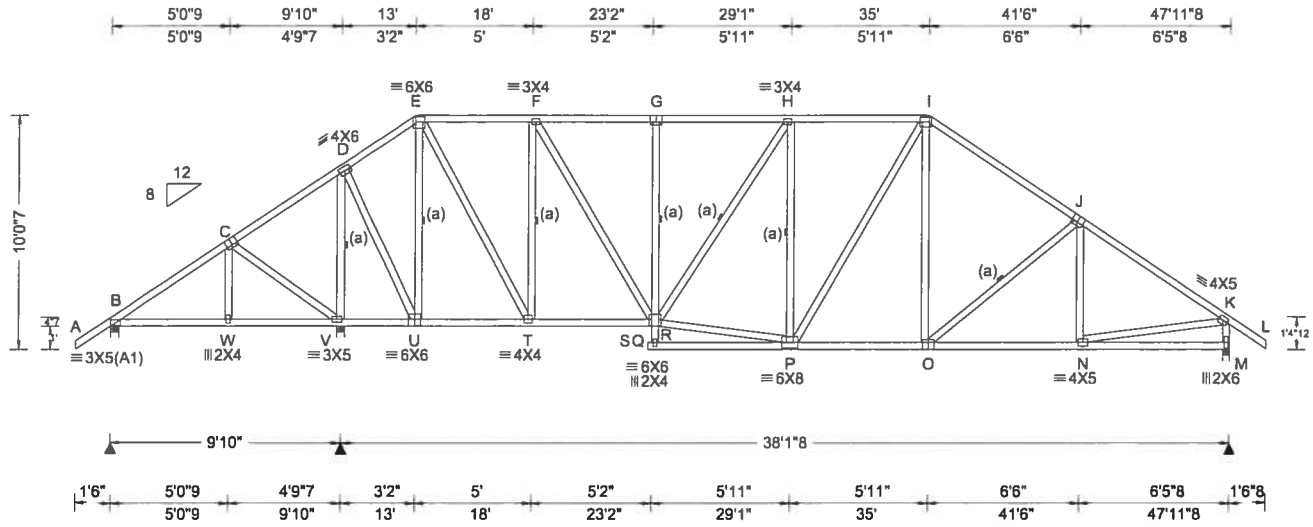
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing,any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses**A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.**

For more information see this job's general notes page and these web sites. ALPINE: www.alpineitw.com, TPI: www.tpinst.org, SBCA: www.sbcindustry.com; ICC www.iccsafe.org

ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564912 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** A04	Cust: R 215 JRef: 1WPQ2150004 T16 / DrwNo: 301.19.1524.20678 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 4.80 ft
Loc. from endwall: not in 13.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.092	G	999	240
VERT(CL): 0.181	G	999	180
HORZ(LL): 0.028	M	-	-
HORZ(TL): 0.055	M	-	-

Creep Factor: 2.0
Max TC CSI: 0.530
Max BC CSI: 0.654
Max Web CSI: 0.649

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs)

Loc	R+	/ R-	/ Rh	Gravity / Rw	Gravity / U	Gravity / RL	Non-Gravity / Rw	Non-Gravity / U	Non-Gravity / RL
B	364	/-	/-	/181	/51	/317			
V	2171	/-	/-	/1291	/394	/-			
M	1585	/-	/-	/1016	/288	/-			

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
V Brg Width = 4.0 Min Req = 2.2
M Brg Width = 3.5 Min Req = 1.9
Bearings B, V, & M are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
C - D	434	-77	G - H	513	-1436
D - E	260	-469	H - I	532	-1430
E - F	399	-977	I - J	537	-1681
F - G	514	-1438	J - K	494	-1909

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
T - Q	1013	-94	O - N	1511	-297
P - O	1303	-183			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
V - D	466	-1861	F - Q	834	-204
D - U	1333	-282	Q - P	1433	-213
E - U	270	-1145	N - K	1481	-285
E - T	1299	-343	K - M	460	-1531
T - F	321	-1041			

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

Bracing
(a) Continuous lateral restraint equally spaced on member.

Plating Notes
All plates are 5X6 except as noted.

Wind
Wind loads based on MWFRS with additional C&C member design.

Additional Notes
Refer to General Notes for additional information
WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.
The overall height of this truss excluding overhang is 9-0-7.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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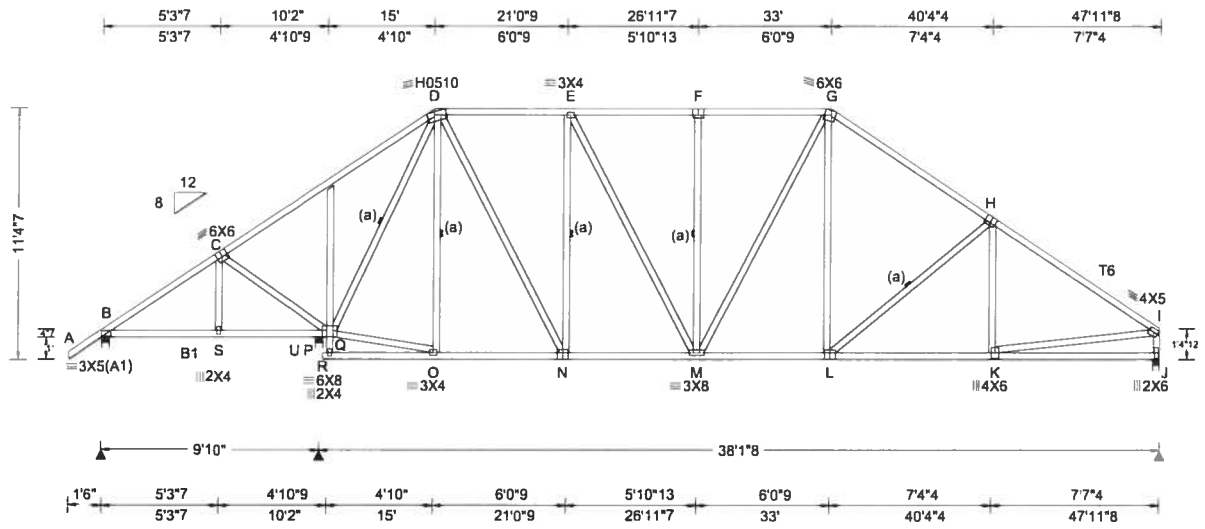
For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC. www.iccsafe.org

ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564914 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** A05	Cust: R 215 JRef 1WPQ2150004 T29 / DrwNo: 301.19.1524.20444 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.80 ft
Loc. from endwall: not in 13.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.098	F	999	240
VERT(CL): 0.188	F	999	180
HORZ(LL): 0.043	I	-	-
HORZ(TL): 0.085	I	-	-

Creep Factor: 2.0
Max TC CSI: 0.903
Max BC CSI: 0.832
Max Web CSI: 0.701

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	707	/-	/-	/428	/4	/337
U	1651	/-	/-	/996	/98	/-
J	1576	/-	/-	/976	/72	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
U Brg Width = 4.0 Min Req = 1.5
J Brg Width = 3.5 Min Req = 1.9
Bearings B, U, & J are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	157	- 756	F - G	536	- 1416
C - D	208	- 557	G - H	559	- 1751
D - E	481	- 1220	H - I	521	- 2077
E - F	535	- 1415			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - S	592	- 199	N - M	1237	- 165
S - P	892	- 412	M - L	1346	- 194
O - N	806	- 67	L - K	1641	- 335

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
P - D	306	- 1116	G - L	449	- 101
P - O	739	- 62	L - H	188	- 387
D - N	898	- 224	K - I	1576	- 312
N - E	217	- 671	I - J	394	- 1512
E - M	388	- 107			

Lumber
Top chord 2x4 SP #2
:T6 2x4 SP M-31:
Bot chord 2x4 SP #2
:B1 2x4 SP M-31:
Webs 2x4 SP #3

Bracing
(a) Continuous lateral restraint equally spaced on member.

Plating Notes
All plates are 5X6 except as noted.

Wind
Wind loads based on MWFRS with additional C&C member design.

Additional Notes
Refer to General Notes for additional information

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 10-4-7.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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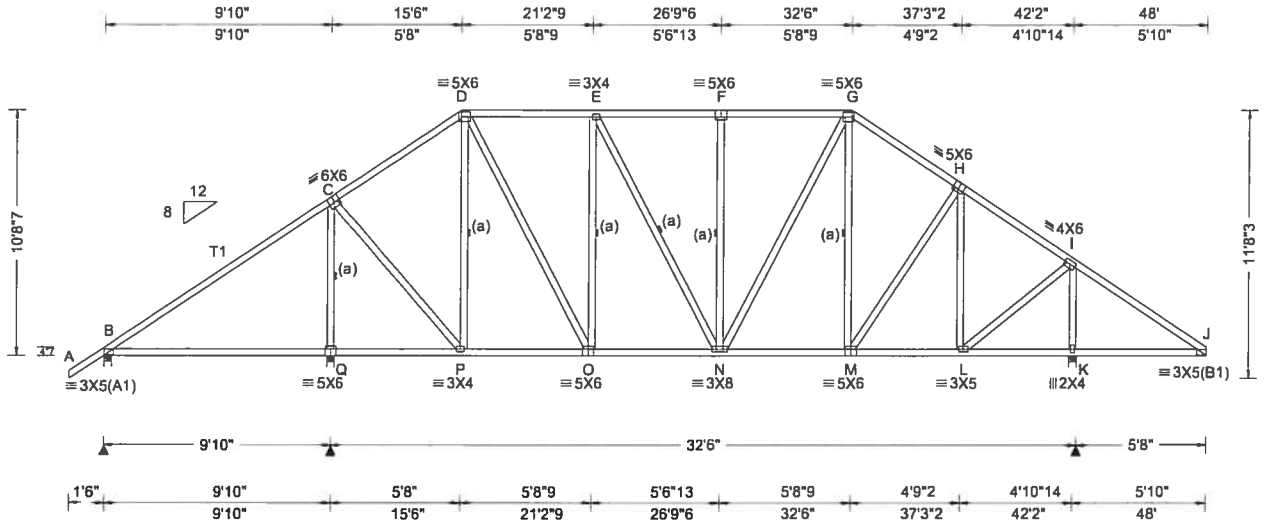
For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com, TPI: www.tpinst.org, SBCA: www.sbcindustry.com, ICC: www.iccsafe.org

ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564818 / HIPS FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** A06	Cust: R 215 JRef: 1WPQ2150004 T18 / DrwNo: 301.19.1524.19820 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 16.20 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.80 ft
Loc. from endwall: not in 13.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.047	F	999	240
VERT(CL): 0.093	F	999	180
HORZ(LL): 0.020	Q	-	-
HORZ(TL): 0.042	Q	-	-

Creep Factor: 2.0
Max TC CSI: 0.795
Max BC CSI: 0.804
Max Web CSI: 0.679

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	685	/-	/-	/391	/31	/408
Q	1417	/-	/-	/968	/-	/-
K	1854	/-	/-	/1300	/-	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
Q Brg Width = 4.0 Min Req = 1.7
K Brg Width = 4.0 Min Req = 1.8
Bearings B, Q, & K are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	191	-571	F - G	271	-1066
C - D	250	-989	G - H	228	-1116
D - E	267	-1015	H - I	185	-932
E - F	271	-1066	I - J	449	-242

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - Q	420	-214	O - N	1026	-35
Q - P	427	-214	N - M	863	0
P - O	717	-123	M - L	725	-5

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
Q - C	73	-1200	N - G	440	-14
C - P	710	0	H - L	81	-661
D - P	0	-460	L - I	1137	-76
D - O	629	0	I - K	319	-1707
O - E	18	-434			

Lumber

Top chord 2x4 SP #2
:T1 2x4 SP M-31:
Bot chord 2x4 SP #2
Webs 2x4 SP #3

Bracing

(a) Continuous lateral restraint equally spaced on member.

Wind

Wind loads based on MWFRS with additional C&C member design.

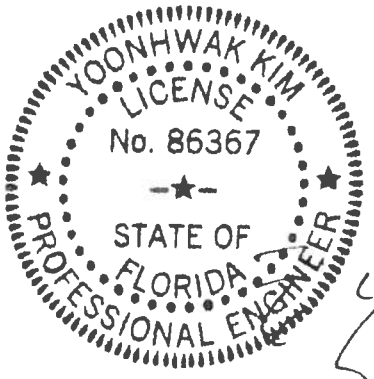
Right cantilever is exposed to wind

Additional Notes

Refer to General Notes for additional information

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 10-8-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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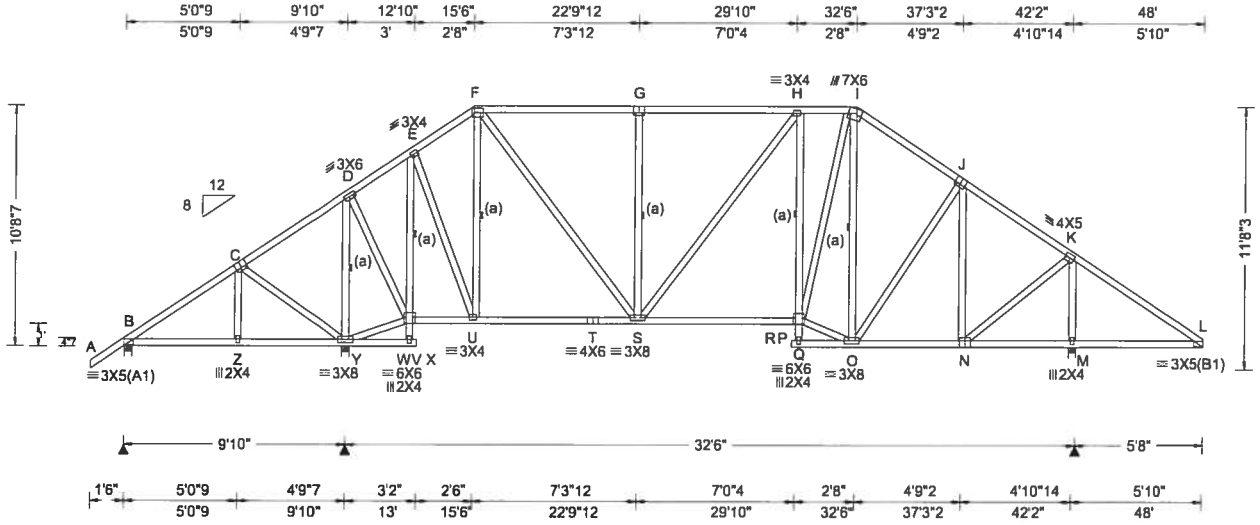
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564821 / HIPS	Ply: 1	**Job Number:** 19-3660	Cust: R 215 JRef: 1WPQ2150004 T20 /
FROM: CDM	Qty: 2	/Powell Residence /SPARKS CONST.	DrwNo: 301.19.1524.21630
		Truss Label: A07	/ YK 10/28/2019



Loading Criteria (psf)
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TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 17.54 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.80 ft
Loc. from endwall: not in 13.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.056	G	999	240
VERT(CL): 0.111	G	999	180
HORZ(LL): 0.025	N	-	-
HORZ(TL): 0.053	N	-	-

Creep Factor: 2.0
Max TC CSI: 0.577
Max BC CSI: 0.699
Max Web CSI: 0.631

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	408	/-	/-	/209	/48	/478
Y	1823	/-	/-	/1245	/32	/-
M	1769	/-	/-	/1257	/-	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
Y Brg Width = 4.0 Min Req = 1.8
M Brg Width = 4.0 Min Req = 1.7
Bearings B, Y, & M are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
C - D	385	-200	H - I	239	-980
D - E	147	-429	I - J	225	-1015
E - F	189	-676	J - K	185	-857
F - G	250	-999	K - L	450	-247
G - H	252	-999			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
W - U	421	-196	S - P	988	0
U - T	562	-165	O - N	663	-8
T - S	562	-165			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
Y - D	136	-1448	P - O	846	0
D - W	990	-12	P - I	816	0
W - E	47	-914	O - I	0	-477
E - U	709	0	J - N	77	-614
F - U	1	-569	N - K	1070	-70
F - S	746	-14	K - M	316	-1622
G - S	21	-465			

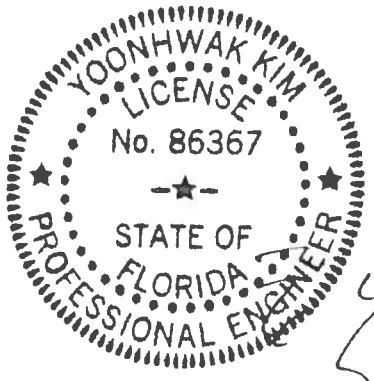
Lumber
Top chord 2x4 SP #2
Bot chord 2x4 SP #2
Webs 2x4 SP #3

Bracing
(a) Continuous lateral restraint equally spaced on member.

Plating Notes
All plates are 5X6 except as noted.

Wind
Wind loads based on MWFRS with additional C&C member design.
Right cantilever is exposed to wind

Additional Notes
Refer to General Notes for additional information
WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.
The overall height of this truss excluding overhang is 10-8-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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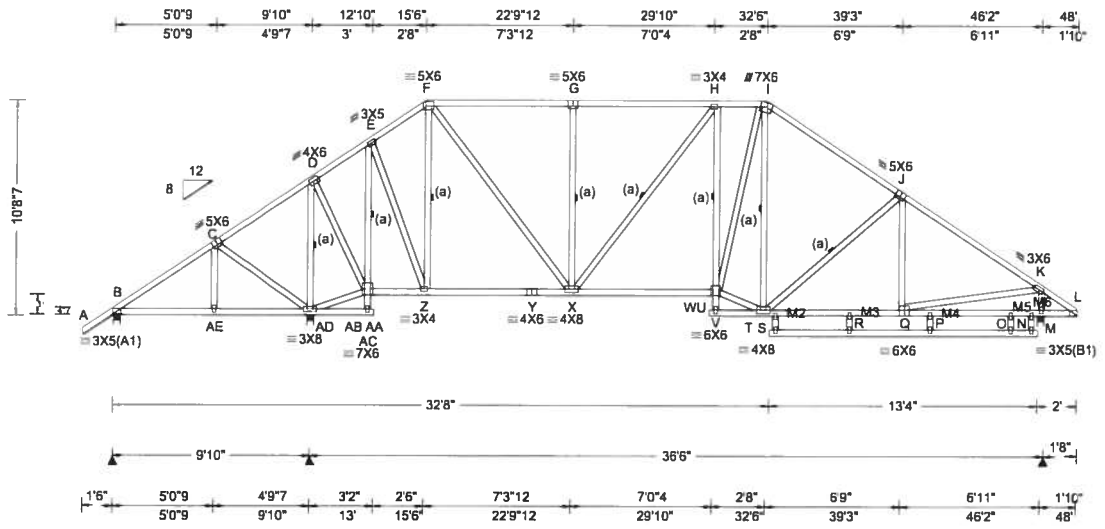
For more information see this job's general notes page and these web sites. ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564826 / SPEC FROM: CDM	Ply: 1 Qty: 3	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** A08	Cust: R 215 JRef: 1WPQ2150004 T47 / DrwNo: 301.19.1524.20243 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 17.87 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.80 ft
Loc. from endwall: not in 13.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.078	W	999	240
VERT(CL): 0.150	R	999	180
HORZ(LL): 0.034	M	-	-
HORZ(TL): 0.069	M	-	-

Creep Factor: 2.0
Max TC CSI: 0.580
Max BC CSI: 0.764
Max Web CSI: 0.478

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	374	/-	/-	/175	/52	/495
AD	2087	/-	/-	/1363	/25	/-
M	1557	/-	/-	/1028	/-	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
AD Brg Width = 4.0 Min Req = 2.1
M Brg Width = 4.0 Min Req = 1.5
Bearings B, AD, & M are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
C - D	452	- 191	G - H	332	- 1209
D - E	169	- 422	H - I	317	- 1336
E - F	232	- 748	I - J	297	- 1488
F - G	332	- 1209	J - K	282	- 1736

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
AB- Z	423	- 196	T - S	1356	- 110
Z - Y	607	- 149	S - R	1334	- 110
Y - X	607	- 149	R - Q	1334	- 110
X - U	1340	0			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
AD- D	192	- 1668	G - X	45	- 467
D -AB	1176	- 46	U - T	1254	0
AB- E	96	- 1119	U - I	765	0
E - Z	883	- 28	Q - K	1210	- 46
F - Z	39	- 732	K - M	290	- 1436
F - X	991	- 90			

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP #2
Webs 2x4 SP #3
:M2, M3, M4, M5, M6 2x4 SP #2:
Filler 2x4 SP #2

Bracing

(a) Continuous lateral restraint equally spaced on member.

Plating Notes

All plates are 2X4 except as noted.

Purlins

Laterally brace BC at 24" oc in lieu of rigid ceiling.
Laterally brace BC above filler at 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

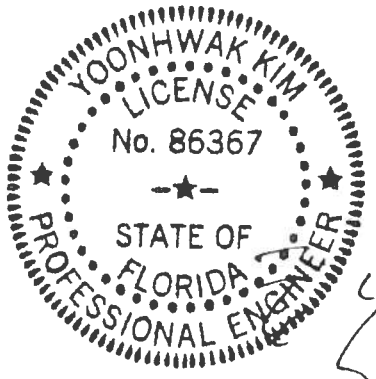
Right cantilever is exposed to wind

Additional Notes

Refer to General Notes for additional information

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 10-8-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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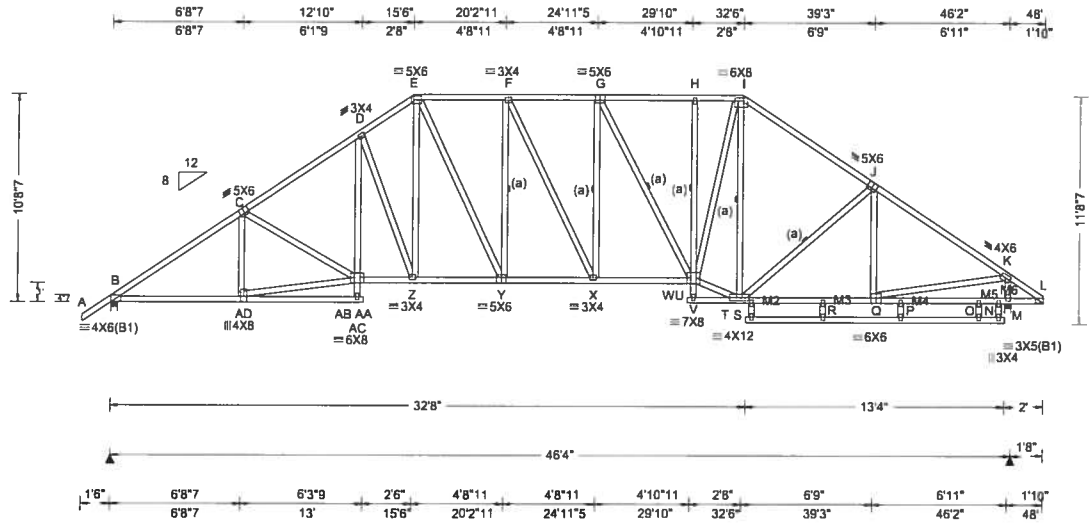
For more information see this job's general notes page and these web sites. ALPINE: www.alpineitw.com, TPI: www.tpinst.org, SBCA: www.sbcindustry.com, ICC: www.iccsafe.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564829 / SPEC FROM: CDM	Ply: 1 Qty: 3	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** A09	Cust: R 215 JRef: 1WPQ2150004 T51 / DrwNo: 301.19.1524.19961 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 17.87 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.80 ft
Loc. from endwall: not in 13.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.178	F	999	240
VERT(CL): 0.355	F	999	180
HORZ(LL): 0.094	M	-	-
HORZ(TL): 0.188	M	-	-

Creep Factor: 2.0
Max TC CSI: 0.545
Max BC CSI: 0.799
Max Web CSI: 0.994

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1950	/-	/-	/1193	/17	/495
M	1989	/-	/-	/1213	/-	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 2.3
M Brg Width = 4.0 Min Req = 2.0
Bearings B & M are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	441	-2894	G - H	474	-2085
C - D	439	-2842	H - I	430	-2082
D - E	452	-2472	I - J	400	-2179
E - F	456	-2213	J - K	372	-2350
F - G	477	-2244			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B -AD	2314	-322	X - U	2246	-86
AB- Z	2281	-212	T - S	1870	-186
Z - Y	2007	-129	S - R	1845	-185
Y - X	2223	-122	R - Q	1845	-185

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
AD-AB	2291	-320	U - T	1866	-65
AB- D	646	-126	U - I	1438	-31
D - Z	240	-792	T - I	36	-556
E - Z	716	-203	Q - K	1685	-118
E - Y	470	-93	K - M	342	-1858
G - U	149	-382			

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP #2
Webs 2x4 SP #3
:M2, M3, M4, M5, M6 2x4 SP #2:
Filler 2x4 SP #2

Bracing

(a) Continuous lateral restraint equally spaced on member.

Plating Notes

All plates are 2X4 except as noted.

Purlins

Laterally brace BC at 24" oc in lieu of rigid ceiling.
Laterally brace BC above filler at 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

Right cantilever is exposed to wind

Additional Notes

Refer to General Notes for additional information

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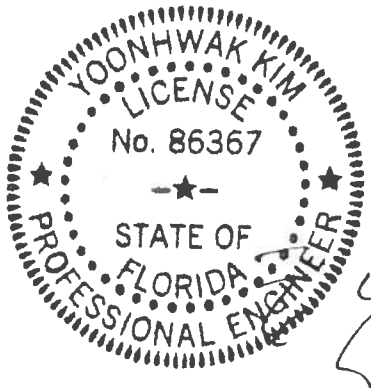
The overall height of this truss excluding overhang is 10-8-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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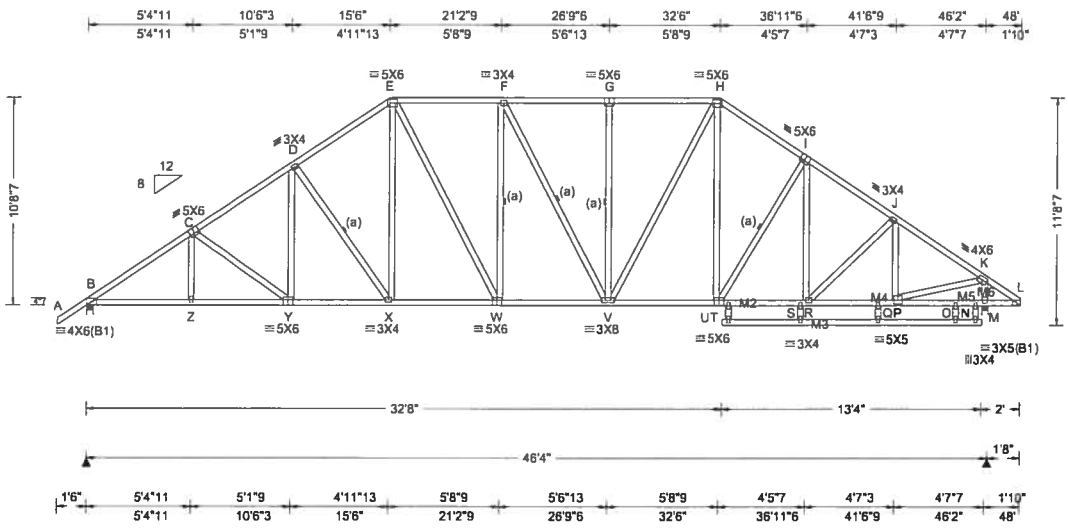
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564832 / SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** A10	Cust: R 215 JRef: 1WPQ2150004 T30 / DrwNo: 301.19.1524.20133 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 17.87 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.80 ft
Loc. from endwall: not in 13.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.148	F	999	240
VERT(CL): 0.295	F	999	180
HORZ(LL): 0.068	M	-	-
HORZ(TL): 0.136	M	-	-

Creep Factor: 2.0
Max TC CSI: 0.503
Max BC CSI: 0.877
Max Web CSI: 0.646

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1950	/-	/-	/1193	/17	/495
M	1989	/-	/-	/1213	/-	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 2.3
M Brg Width = 4.0 Min Req = 2.0
Bearings B & M are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	443	-2912	G - H	452	-1996
C - D	442	-2616	H - I	415	-2126
D - E	433	-2273	I - J	401	-2278
E - F	461	-2026	J - K	348	-2169
F - G	488	-1995			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - Z	2339	-338	U - T	1829	-138
Z - Y	2338	-338	T - S	1808	-136
Y - X	2102	-232	S - R	1808	-136
X - W	1820	-119	R - Q	1740	-194
W - V	2033	-105	Q - P	1740	-194
V - U	1709	-57			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
D - X	199	-495	J - P	64	-420
E - X	518	-147	P - K	1695	-171
E - W	435	-113	K - M	331	-1876
V - H	596	-90			

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP #2
Webs 2x4 SP #3
:M2, M3, M4, M5, M6 2x4 SP #2:
Filler 2x4 SP #2

Bracing

(a) Continuous lateral restraint equally spaced on member.

Plating Notes

All plates are 2X4 except as noted.

Purlins

Laterally brace BC at 24" oc in lieu of rigid ceiling.
Laterally brace BC above filler at 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

Right cantilever is exposed to wind

Additional Notes

Refer to General Notes for additional information

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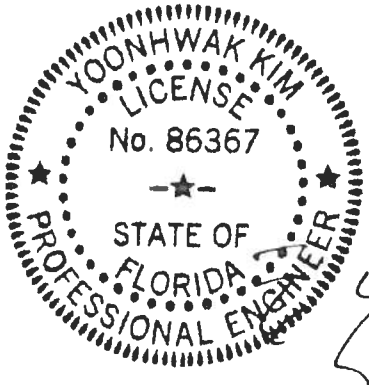
The overall height of this truss excluding overhang is 10-8-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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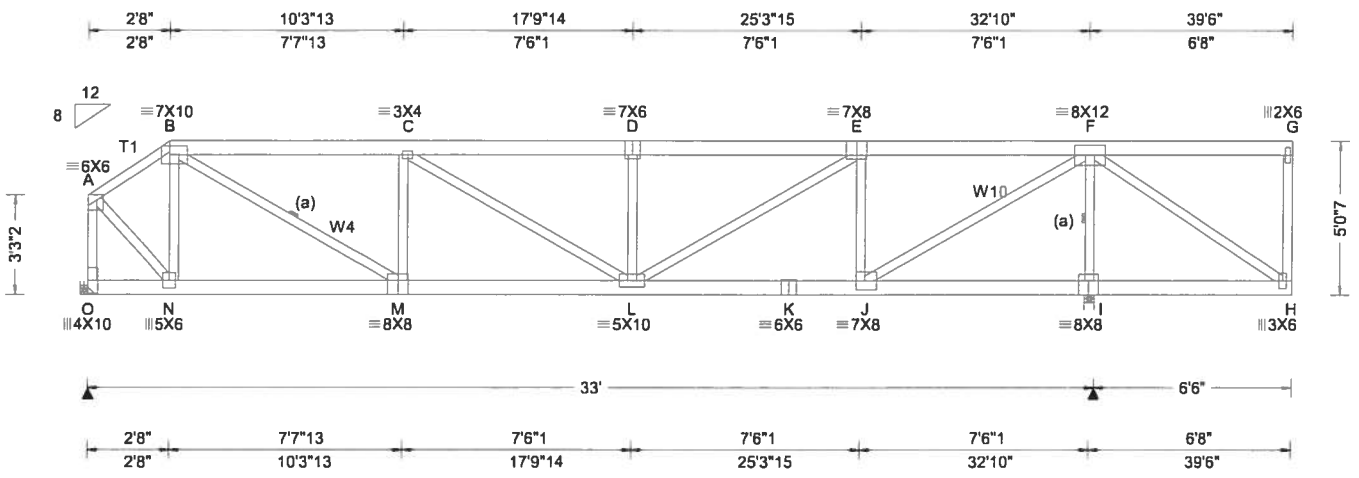
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564732 / HIPM FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** B01	Cust: R 215 JRef 1WPQ2150004 T21 / DrwNo: 301.19.1524.20912 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.95 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Varies by Ld Case
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.195	D	999	240
VERT(CL): 0.391	D	999	180
HORZ(LL): 0.043	B	-	-
HORZ(TL): 0.087	B	-	-

Creep Factor: 2.0
Max TC CSI: 0.439
Max BC CSI: 0.403
Max Web CSI: 0.967

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
O	3071	/-	/-	/-	/795	/-
I	4676	/-	/-	/-	/1225	/-

Wind reactions based on MWFRS
O Brg Width = - Min Req = -
I Brg Width = 4.0 Min Req = 3.9
Bearing I is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	535	-2104	D - E	1385	-5361
B - C	1243	-4788	E - F	872	-3434
C - D	1385	-5361			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
N - M	1736	-442	K - J	3562	-917
M - L	4870	-1276	J - I	186	-734
L - K	3562	-917	I - H	186	-734

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - O	773	-3045	L - E	2149	-551
A - N	2539	-647	D - L	392	-851
B - N	481	-1354	E - J	703	-2018
B - M	3579	-939	J - F	4799	-1247
M - C	533	-1315	F - I	1245	-4040
C - L	578	-127	F - H	890	-226

Lumber
Top chord 2x6 SP 2400f-2.0E
:T1 2x4 SP #2:
Bot chord 2x6 SP 2400f-2.0E
Webs 2x4 SP #3
:W4 2x4 SP #2:
:W10 2x4 SP M-31:

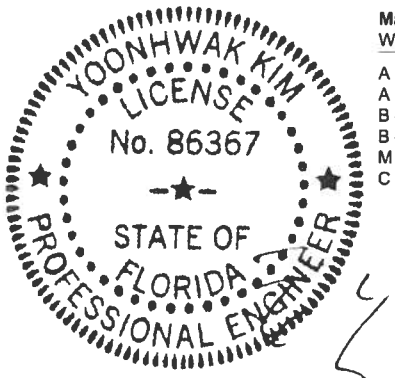
Bracing
(a) Continuous lateral restraint equally spaced on member.

Special Loads
-----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)
TC: From 30 plf at 0.00 to 30 plf at 39.50
BC: From 10 plf at 0.00 to 10 plf at 39.50
TC: 104 lb Conc. Load at 0.73
TC: 181 lb Conc. Load at 2.73, 4.73, 6.73, 8.73 10.73,12.73,14.73,16.73,18.73,20.73,22.73,24.73 26.73,28.73,30.73,32.73,34.73,36.73,38.73
BC: 157 lb Conc. Load at 0.73
BC: 129 lb Conc. Load at 2.73, 4.73, 6.73, 8.73 10.73,12.73,14.73,16.73,18.73,20.73,22.73,24.73 26.73,28.73,30.73,32.73,34.73,36.73,38.73

Hangers / Ties
(J) Hanger Support Required, by others

Wind
Wind loads and reactions based on MWFRS.
End verticals not exposed to wind pressure.
Right cantilever is exposed to wind

Additional Notes
Refer to General Notes for additional information
The overall height of this truss excluding overhang is 5-0-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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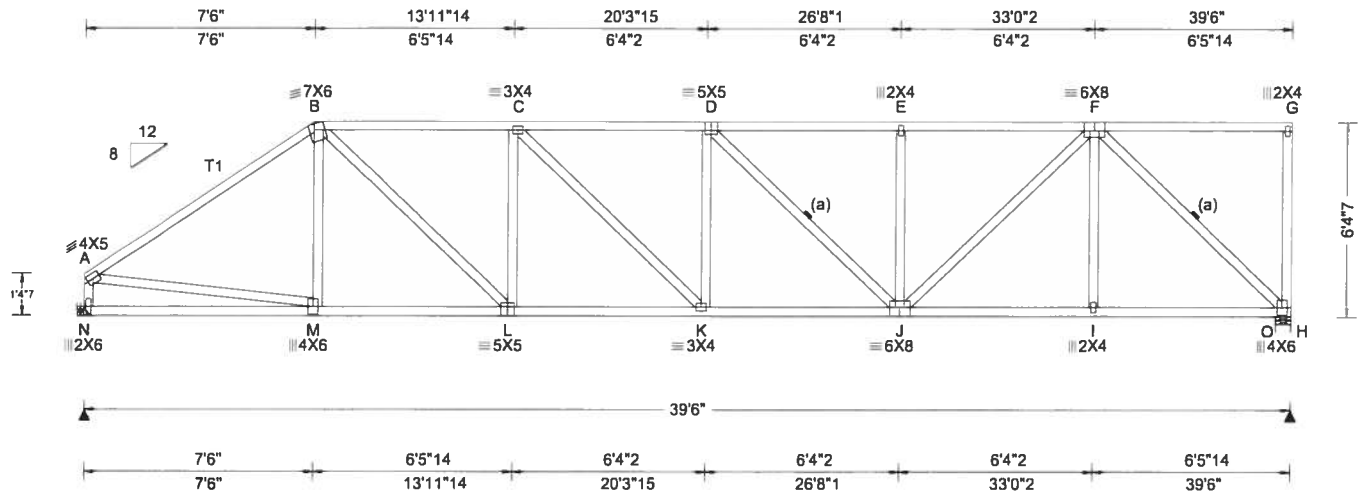
ALPINE
ANITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564735 / HIPM FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** B02		Cust: R 215 JRef: 1WPQ2150004 T52 / DrwNo: 301.19.1524.20070 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.95 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.155	D	999	240
VERT(CL): 0.311	D	999	180
HORZ(LL): 0.051	H	-	-
HORZ(TL): 0.101	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.616
Max BC CSI: 0.777
Max Web CSI: 0.820

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
N	1580	/-	/-	/913	/275	/142
O	1580	/-	/-	/826	/316	/-

Wind reactions based on MWFRS
N Brg Width = - Min Req = -
O Brg Width = 6.0 Min Req = 1.9
Bearing O is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	544	-2086	D - E	626	-2289
B - C	686	-2368	E - F	626	-2289
C - D	723	-2598			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
M - L	1643	-519	J - I	1463	-401
L - K	2395	-695	I - H	1463	-401
K - J	2601	-726			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - N	409	-1514	D - J	140	-437
A - M	1575	-322	J - F	1144	-320
B - L	1002	-231	F - H	549	-2005
L - C	178	-576			

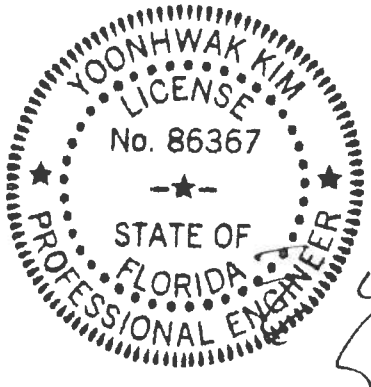
Lumber
Top chord 2x4 SP #2
:T1 2x4 SP M-31:
Bot chord 2x4 SP #2
Webs 2x4 SP #3

Bracing
(a) Continuous lateral restraint equally spaced on member.

Hangers / Ties
(J) Hanger Support Required, by others

Wind
Wind loads based on MWFRS with additional C&C member design.
Right end vertical not exposed to wind pressure.

Additional Notes
Refer to General Notes for additional information
The overall height of this truss excluding overhang is 6-4-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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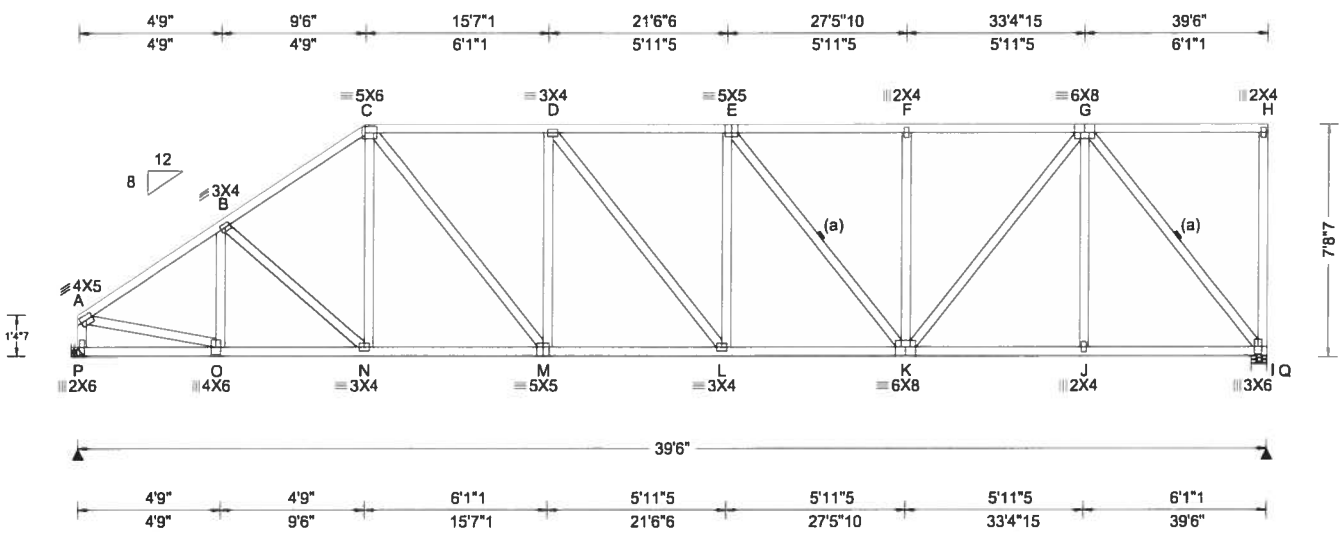
ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564738 / HIPM FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** B03	Cust: R 215 JRef: 1WPQ2150004 T59 / DrwNo: 301.19.1524.19960 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.95 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.116	L	999	240
VERT(CL): 0.232	L	999	180
HORZ(LL): 0.046	I	-	-
HORZ(TL): 0.092	I	-	-

Creep Factor: 2.0
Max TC CSI: 0.543
Max BC CSI: 0.633
Max Web CSI: 0.840

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
P	1580	/-	/-	/936	/266	/180
Q	1580	/-	/-	/835	/321	/-

Wind reactions based on MWFRS
P Brg Width = - Min Req = -
Q Brg Width = 6.0 Min Req = 1.9
Bearing Q is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	490	-1976	D - E	600	-2113
B - C	557	-1961	E - F	504	-1811
C - D	601	-2031	F - G	504	-1811

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
O - N	1599	-555	L - K	2111	-600
N - M	1565	-495	K - J	1137	-317
M - L	2049	-607	J - I	1137	-317

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - P	386	-1537	E - K	157	-488
A - O	1593	-341	K - G	1078	-308
C - M	744	-169	G - I	500	-1791
M - D	152	-461			

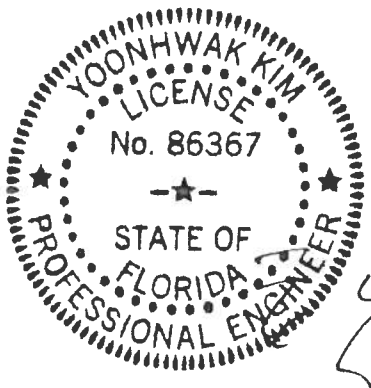
Lumber
Top chord 2x4 SP #2
Bot chord 2x4 SP #2
Webs 2x4 SP #3

Bracing
(a) Continuous lateral restraint equally spaced on member.

Hangers / Ties
(J) Hanger Support Required, by others

Wind
Wind loads based on MWFRS with additional C&C member design.
Right end vertical not exposed to wind pressure.

Additional Notes
Refer to General Notes for additional information
The overall height of this truss excluding overhang is 7-8-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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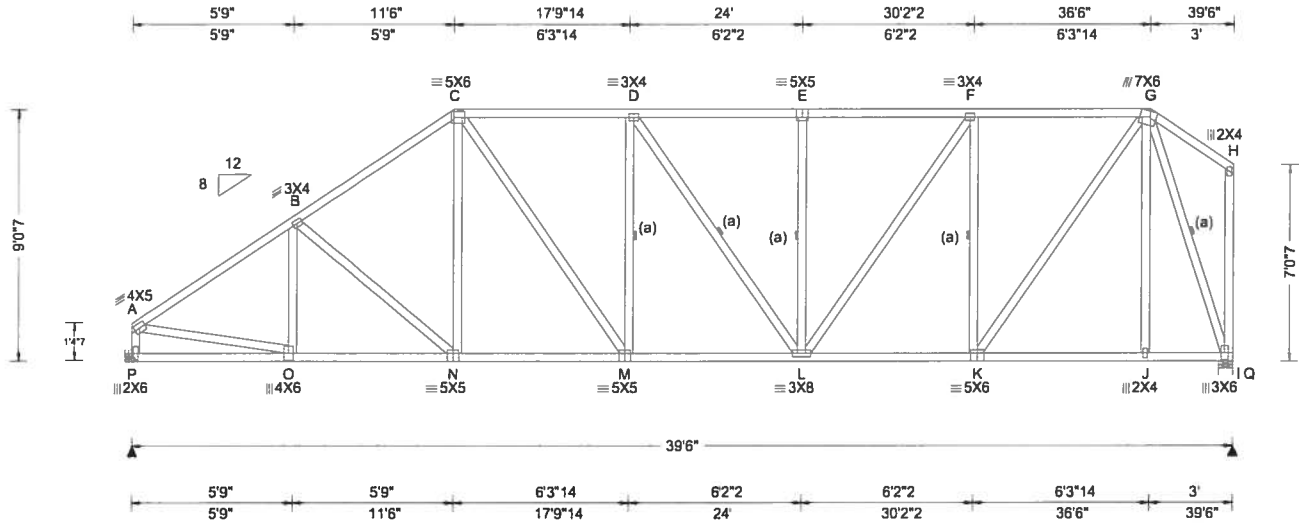
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564741 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** B04	Cust: R 215 JRef: 1WPQ2150004 T55 / DrwNo: 301.19.1524.20459 / YK 10/28/2019



Loading Criteria (psf)
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TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.95 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.101	D	999	240
VERT(CL): 0.202	D	999	180
HORZ(LL): 0.036	I	-	-
HORZ(TL): 0.072	I	-	-

Creep Factor: 2.0
Max TC CSI: 0.534
Max BC CSI: 0.612
Max Web CSI: 0.831

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
P	1580	/-	/-	/948	/266	/166
Q	1580	/-	/-	/817	/309	/-

Wind reactions based on MWFRS
P Brg Width = - Min Req = -
Q Brg Width = 6.0 Min Req = 1.9
Bearing Q is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	501	-2040	D - E	542	-1725
B - C	555	-1902	E - F	542	-1725
C - D	567	-1790	F - G	428	-1302

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
O - N	1636	-521	L - K	1335	-366
N - M	1499	-431	K - J	508	-134
M - L	1799	-498	J - I	506	-134

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - P	384	-1530	F - K	332	-994
A - O	1607	-334	K - G	1375	-383
C - M	502	-117	G - I	413	-1556
L - F	687	-191			

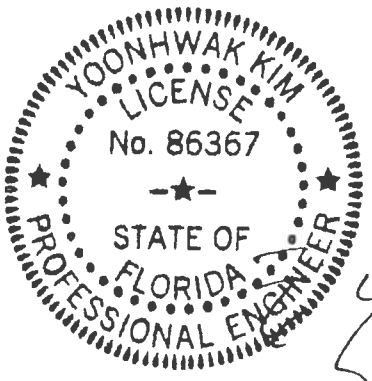
Lumber
Top chord 2x4 SP #2
Bot chord 2x4 SP #2
Webs 2x4 SP #3

Bracing
(a) Continuous lateral restraint equally spaced on member.

Hangers / Ties
(J) Hanger Support Required, by others

Wind
Wind loads based on MWFRS with additional C&C member design.
Right end vertical not exposed to wind pressure.

Additional Notes
Refer to General Notes for additional information
The overall height of this truss excluding overhang is 9-0-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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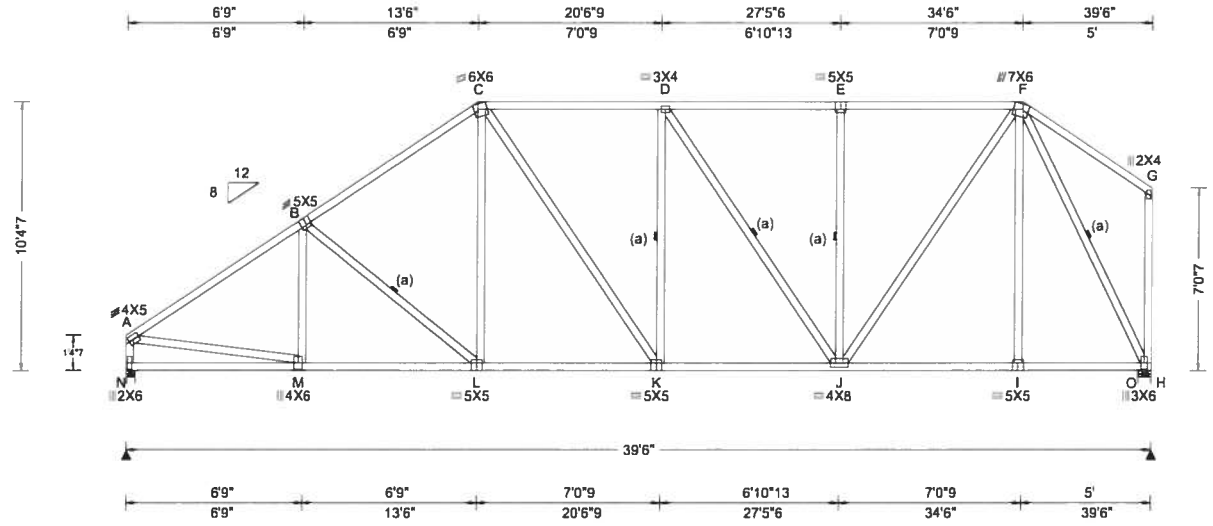
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564747 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** B05	Cust: R 215 JRef: 1WPQ2150004 T2 / DrwNo: 301.19.1524.19665 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.95 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.085	D	999	240
VERT(CL): 0.170	D	999	180
HORZ(LL): 0.034	H	-	-
HORZ(TL): 0.067	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.770
Max BC CSI: 0.698
Max Web CSI: 0.989

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
N	1580	/-	/-	/957	/97	/205
O	1580	/-	/-	/822	/140	/-

Wind reactions based on MWFRS
N Brg Width = 4.0 Min Req = 1.9
O Brg Width = 6.0 Min Req = 1.9
Bearings N & O are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	499	- 2075	D - E	473	- 1349
B - C	542	- 1828	E - F	473	- 1349
C - D	532	- 1572			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
M - L	1650	- 503	J - I	694	- 172
L - K	1423	- 385	I - H	692	- 172
K - J	1574	- 416			

Maximum Web Forces Per Ply (lbs)

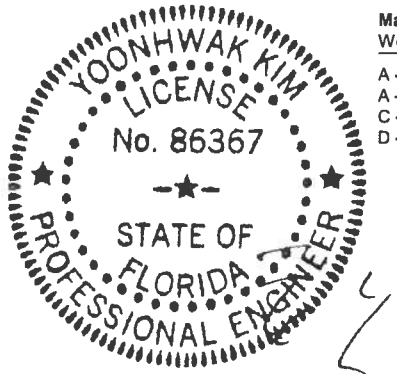
Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - N	378	- 1522	E - J	195	- 457
A - M	1595	- 313	J - F	1142	- 320
C - L	411	- 79	F - H	386	- 1554
D - J	122	- 405			

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

Bracing
(a) Continuous lateral restraint equally spaced on member.

Wind
Wind loads based on MWFRS with additional C&C member design.
Right end vertical not exposed to wind pressure.

Additional Notes
Refer to General Notes for additional information
The overall height of this truss excluding overhang is 10-4-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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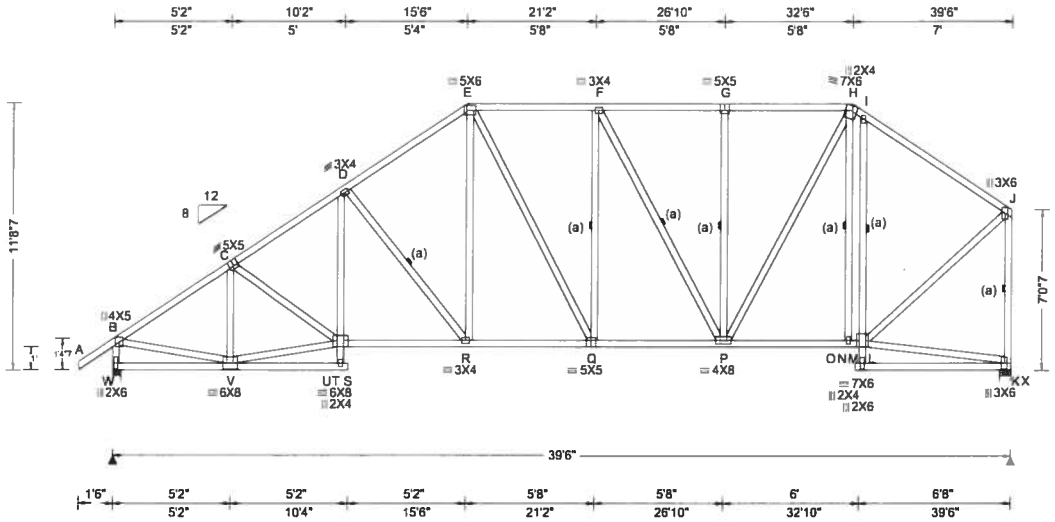
For more information see this job's general notes page and these web sites. ALPINE: www.alpineitw.com, TPI. www.tpinst.org, SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564750 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** B06	Cust: R 215 JRef: 1WPQ2150004 T26 / DrwNo: 301.19.1524.19710 / YK 10/28/2019



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.04 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.95 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.093	R	999	240
VERT(CL): 0.185	R	999	180
HORZ(LL): 0.047	K	-	-
HORZ(TL): 0.093	K	-	-

Creep Factor: 2.0
Max TC CSI: 0.677
Max BC CSI: 0.588
Max Web CSI: 0.616

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
W	1679	/-	/-	/1048	/97	/263
X	1578	/-	/-	/828	/102	/-

Wind reactions based on MWFRS
W Brg Width = 4.0 Min Req = 2.0
X Brg Width = 6.0 Min Req = 1.9
Bearings W & X are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	464	-2005	F - G	484	-1323
C - D	608	-2244	G - H	484	-1324
D - E	570	-1829	H - I	482	-1236
E - F	534	-1505	I - J	362	-1159

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
T - R	1803	-513	P - O	889	-215
R - Q	1446	-367	O - L	906	-207
Q - P	1504	-377			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - W	443	-1633	E - R	532	-149
B - V	1601	-285	F - P	119	-387
V - C	192	-578	P - H	908	-230
V - T	1617	-493	L - I	218	-522
T - D	392	-100	L - J	1176	-285
D - R	234	-568	J - K	436	-1513

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member.

Wind

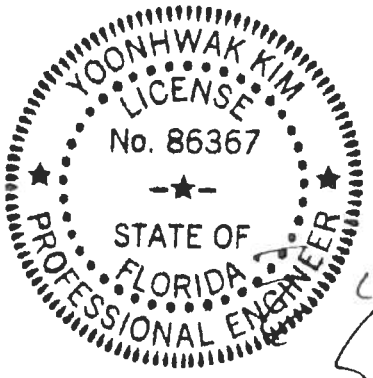
Wind loads based on MWFRS with additional C&C member design.

Right end vertical not exposed to wind pressure.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 11-8-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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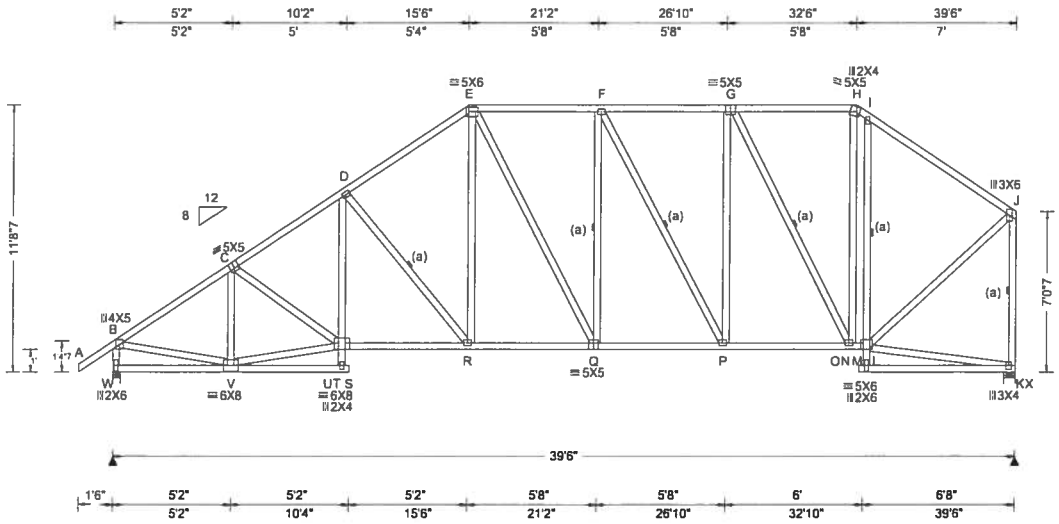
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564757 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** B07		Cust: R 215 JRef: 1WPQ2150004 T28 / DrwNo: 301.19.1524.20055 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.70 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.95 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.101	R	999	240
VERT(CL): 0.200	R	999	180
HORZ(LL): 0.051	K	-	-
HORZ(TL): 0.101	K	-	-

Creep Factor: 2.0
Max TC CSI: 0.774
Max BC CSI: 0.592
Max Web CSI: 0.643

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
W	1679	/-	/-	/1079	/-	/297
X	1578	/-	/-	/878	/-	/-

Wind reactions based on MWFRS
W Brg Width = 4.0 Min Req = 2.0
X Brg Width = 6.0 Min Req = 1.9
Bearings W & X are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	190	-2005	F - G	171	-1330
C - D	253	-2244	G - H	200	-900
D - E	219	-1829	H - I	190	-1304
E - F	203	-1504	I - J	114	-1139

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
T - R	1803	-215	P - O	1316	0
R - Q	1446	-75	O - L	870	-18
Q - P	1504	-6			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - W	244	-1633	F - P	76	-380
B - V	1601	-60	P - G	503	-56
V - C	94	-578	G - O	9	-929
V - T	1617	-268	O - H	841	-60
T - D	391	-91	L - I	132	-680
D - R	223	-568	L - J	1177	-12
E - R	533	-147	J - K	124	-1515

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

Bracing
(a) Continuous lateral restraint equally spaced on member.

Plating Notes
All plates are 3X4 except as noted.

Wind
Wind loads based on MWFRS with additional C&C member design.
Right end vertical not exposed to wind pressure.

Additional Notes
Refer to General Notes for additional information
The overall height of this truss excluding overhang is 11-8-7.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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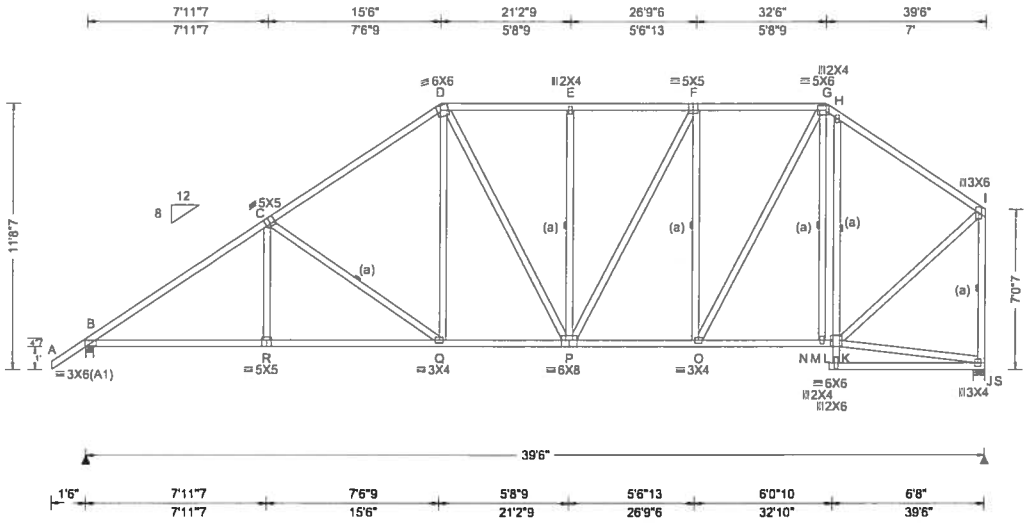
ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564838 / HIPS FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** B08		Cust: R 215 JRef: 1WPQ2150004 T32 / DrwNo: 301.19.1524.20522 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 16.37 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.95 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.098	Q	999	240
VERT(CL): 0.194	Q	999	180
HORZ(LL): 0.046	J	-	-
HORZ(TL): 0.092	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.727
Max BC CSI: 0.805
Max Web CSI: 0.446

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1685	/-	/-	/1081	/-	/331
S	1572	/-	/-	/871	/-	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 2.0
S Brg Width = 6.0 Min Req = 1.9
Bearings B & S are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	197	-2404	F - G	169	-1307
C - D	175	-1863	G - H	180	-1225
D - E	172	-1493	H - I	98	-1154
E - F	172	-1493			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - R	1897	-284	P - O	1326	0
R - Q	1895	-284	O - N	885	0
Q - P	1440	-107	N - K	904	0

Maximum Web Forces Per Ply (lbs)

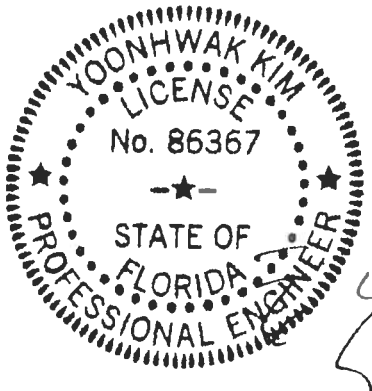
Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - Q	229	-562	K - H	145	-513
D - Q	518	-109	K - I	1171	0
F - O	28	-667	I - J	103	-1506
O - G	894	-21			

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

Bracing
(a) Continuous lateral restraint equally spaced on member.

Wind
Wind loads based on MWFRS with additional C&C member design.
Right end vertical not exposed to wind pressure.

Additional Notes
Refer to General Notes for additional information
The overall height of this truss excluding overhang is 10-8-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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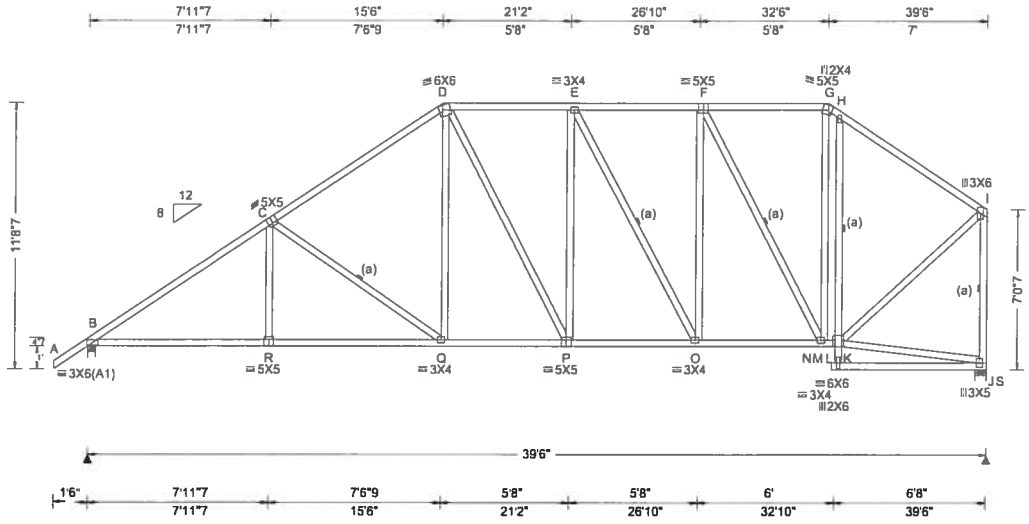
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564835 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** B09		Cust: R 215 JRef: 1WPQ2150004 T27 / DrwNo: 301.19.1524.21224 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 17.70 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.95 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.099	Q	999	240
VERT(CL): 0.196	Q	999	180
HORZ(LL): 0.048	J	-	-
HORZ(TL): 0.096	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.727
Max BC CSI: 0.807
Max Web CSI: 0.627

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1685	/-	/-	/1054	/3	/399
S	1572	/-	/-	/838	/-	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 2.0
S Brg Width = 6.0 Min Req = 1.9
Bearings B & S are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	357	-2404	F - G	325	-906
C - D	336	-1863	G - H	271	-1225
D - E	374	-1492	H - I	191	-1154
E - F	371	-1320			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - R	1897	-390	P - O	1492	-165
R - Q	1895	-390	O - N	1307	-106
Q - P	1439	-211	N - K	904	-71

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - Q	228	-562	N - G	676	-97
D - Q	515	-110	K - H	148	-511
E - O	164	-396	K - I	1170	-109
O - F	536	-138	I - J	216	-1507
F - N	49	-895			

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

Bracing
(a) Continuous lateral restraint equally spaced on member.

Wind
Wind loads based on MWFRS with additional C&C member design.
Right end vertical not exposed to wind pressure.

Additional Notes
Refer to General Notes for additional information
The overall height of this truss excluding overhang is 10-8-7.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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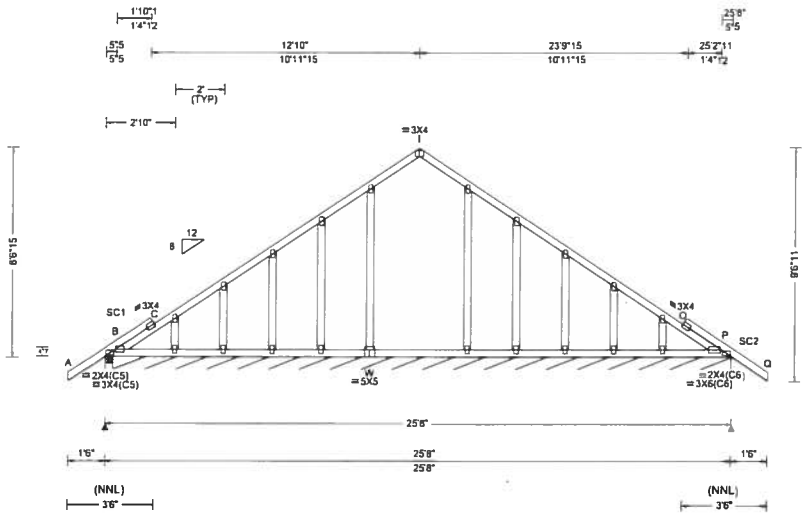
ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564860 / GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** C01	Cust: R 215 JRef: 1WPQ2150004 T11 / DrwNo: 301.19.1524.21021 / YK 10/28/2019



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲Maximum Reactions (lbs), or *=PLF
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA **Code / Misc Criteria** Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.006 I 999 240 VERT(CL): 0.008 I 999 180 HORZ(LL): 0.007 K - - HORZ(TL): 0.009 K - - Creep Factor: 2.0 Max TC CSI: 0.193 Max BC CSI: 0.115 Max Web CSI: 0.134 VIEW Ver: 18.02.01B.0321.08	Gravity / Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 306 /- /- /174 /15 /288 P* 77 /- /- /40 /16 /- Wind reactions based on MWFRS B Brg Width = 4.0 Min Req = 1.5 P Brg Width = 304 Min Req = - Bearings B & B are a rigid surface. Members not listed have forces less than 375#

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP #2
Webs 2x4 SP #3
:Stack Chord SC1 2x4 SP #2:
:Stack Chord SC2 2x4 SP #2:

Plating Notes

All plates are 2X4 except as noted.

Purlins

In lieu of structural panels use purlins to brace TC @ 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

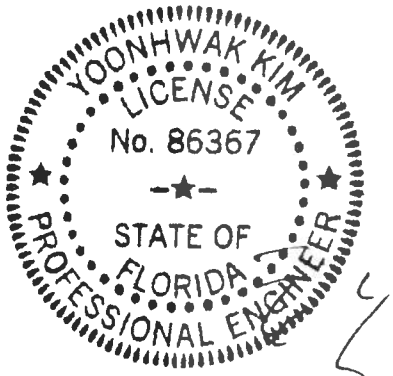
Additional Notes

Refer to General Notes for additional information

See DWGS A14015ENC101014 & GBLLETIN0118 for gable wind bracing and other requirements.

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

The overall height of this truss excluding overhang is 8-6-15.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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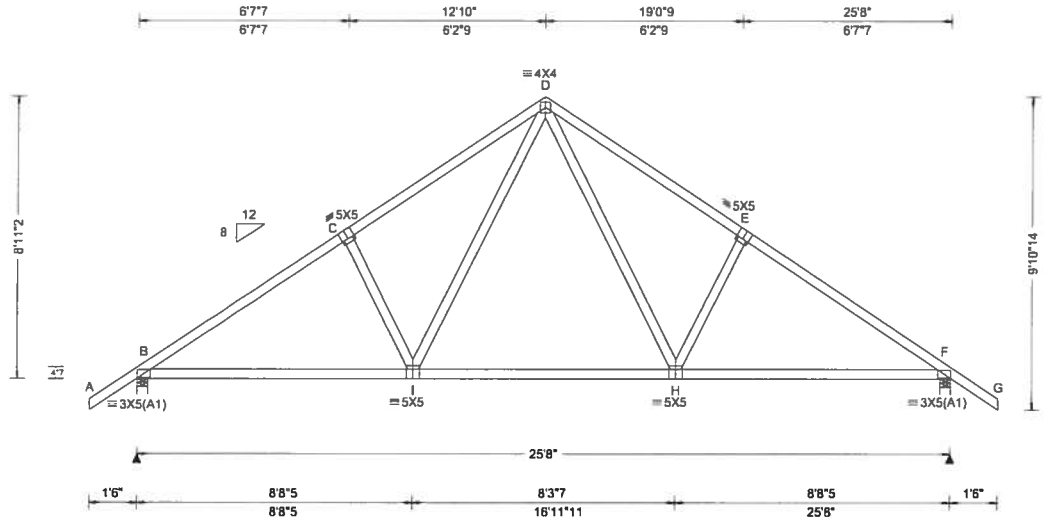
For more information see this job's general notes page and these web sites. ALPINE: www.alpineitw.com, TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564863 / COMN FROM: CDM	Ply: 1 Qty: 5	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** C02	Cust: R 215 JRef: 1WPQ2150004 T1 DrwNo: 301.19.1524.20880 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.058	H	999	240
VERT(CL): 0.106	H	999	180
HORZ(LL): 0.025	H	-	-
HORZ(TL): 0.045	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.383
Max BC CSI: 0.815
Max Web CSI: 0.358

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1212	/-	/-	/667	/194	/291
F	1213	/-	/-	/667	/194	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
F Brg Width = 4.0 Min Req = 1.5
Bearings B & F are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	413	-1616	D - E	485	-1453
C - D	486	-1452	E - F	413	-1617

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - I	1260	-201	H - F	1261	-208
I - H	852	-39			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
I - D	620	-203	D - H	622	-203

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

Loading
Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance.

Wind
Wind loads based on MWFRS with additional C&C member design.

Additional Notes
Refer to General Notes for additional information
The overall height of this truss excluding overhang is 8-11-2.

YOONHWAK KIM
LICENSE
No. 86367
STATE OF FLORIDA
PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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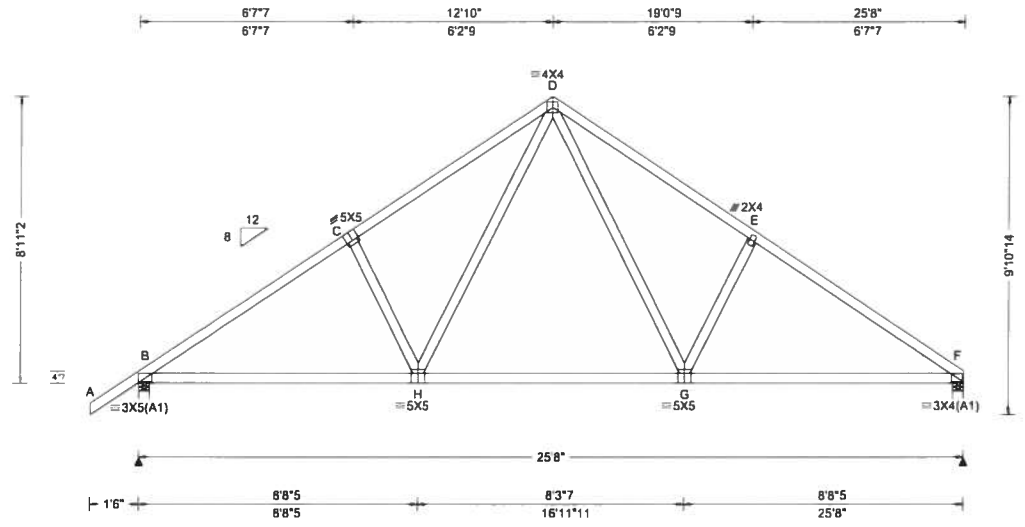
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564866 / COMN FROM: CDM	Ply: 1 Qty: 6	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** C03	Cust: R 215 JRef: 1WPQ2150004 T13 / DrwNo: 301.19.1524.21083 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.057	H	999	240
VERT(CL): 0.105	H	999	180
HORZ(LL): 0.025	G	-	-
HORZ(TL): 0.046	G	-	-

Creep Factor: 2.0
Max TC CSI: 0.420
Max BC CSI: 0.841
Max Web CSI: 0.277

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1215	/-	/-	/667	/195	/271
F	1112	/-	/-	/582	/167	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
F Brg Width = 4.0 Min Req = 1.5
Bearings B & F are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	306	-1622	D - E	391	-1471
C - D	372	-1458	E - F	324	-1634

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - H	1265	-173	G - F	1280	-178
H - G	857	-31			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
H - D	619	-148	D - G	641	-157

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

Loading
Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance.

Wind
Wind loads based on MWFRS with additional C&C member design.

Additional Notes
Refer to General Notes for additional information
The overall height of this truss excluding overhang is 8-11-2.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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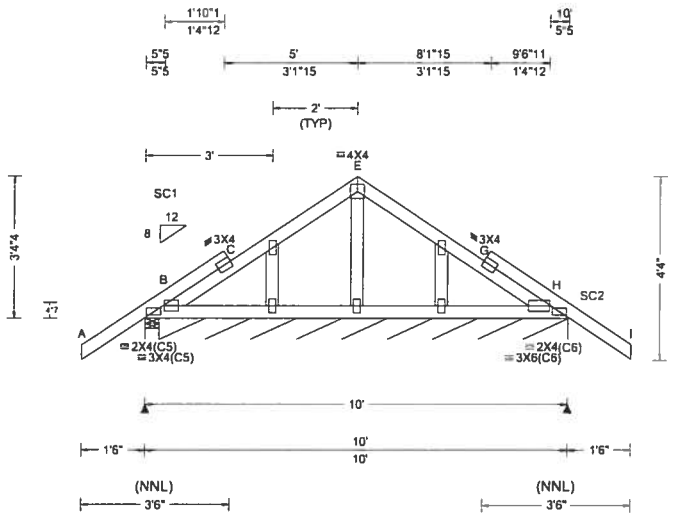
ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564868 / GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** D01	Cust: R 215 JRef: 1WPQ2150004 T7 / DrwNo: 301.19.1524.19757 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.001	J	999	240
VERT(CL): 0.003	J	999	180
HORZ(LL): 0.001	G	-	-
HORZ(TL): 0.001	G	-	-

Creep Factor: 2.0
Max TC CSI: 0.193
Max BC CSI: 0.071
Max Web CSI: 0.030

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	246	/-	/-	/174	/45	/142
H*	77	/-	/-	/45	/13	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
H Brg Width = 115 Min Req = -
Bearings B & B are a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP #2
Webs 2x4 SP #3
:Stack Chord SC1 2x4 SP #2:
:Stack Chord SC2 2x4 SP #2:

Plating Notes

All plates are 2X4 except as noted.

Purlins

In lieu of structural panels use purlins to brace TC @ 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

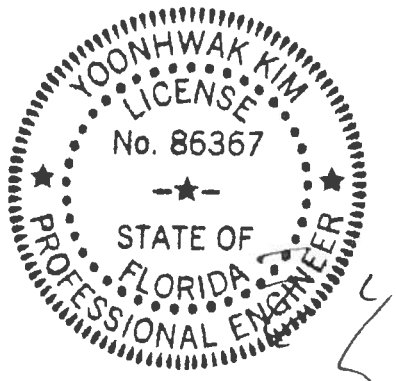
Additional Notes

Refer to General Notes for additional information

See DWGS A14015ENC101014 & GBLLETIN0118 for gable wind bracing and other requirements.

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

The overall height of this truss excluding overhang is 3-4-4.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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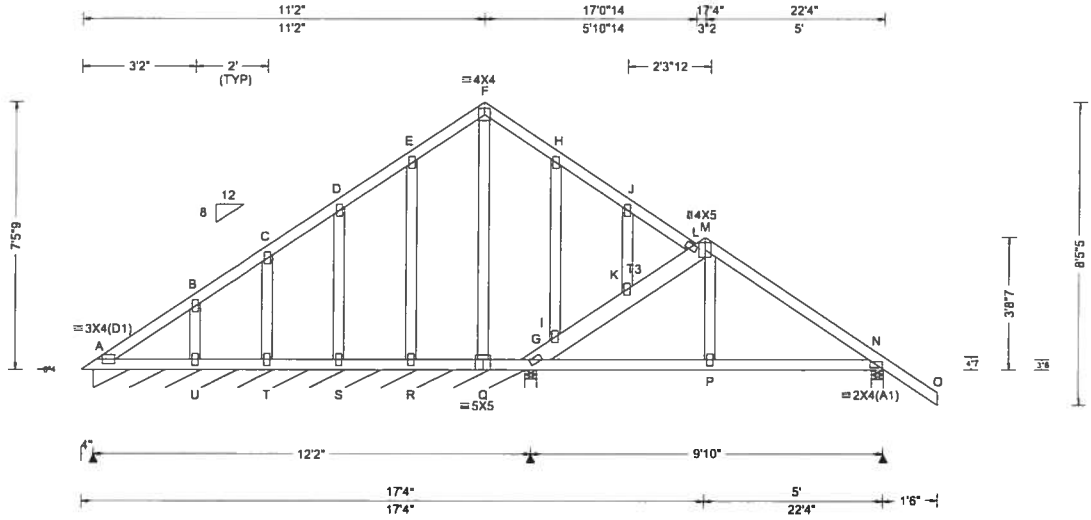
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564871 / COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** G01	Cust: R 215 JRef: 1WPQ2150004 T12 / DrwNo: 301.19.1524.21676 / YK 10/28/2019



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA **Code / Misc Criteria** Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.007 J 999 240 VERT(CL): 0.017 J 999 180 HORZ(LL): 0.005 K - - HORZ(TL): 0.011 K - - Creep Factor: 2.0 Max TC CSI: 0.193 Max BC CSI: 0.256 Max Web CSI: 0.186 VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A*	82	/-	/-	/54	/8	/20
G	449	/-	/-	/341	/126	/-
N	456	/-	/-	/313	/81	/-

Wind reactions based on MWFRS
A Brg Width = 144 Min Req = -
G Brg Width = 4.0 Min Req = 1.5
N Brg Width = 4.0 Min Req = 1.5
Bearings A, G, & N are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
G - I	243	-470

Lumber

Top chord 2x4 SP #2
:T3 2x6 SP 2400f-2.0E:
Bot chord 2x4 SP #2
Webs 2x4 SP #3

Plating Notes

All plates are 2X4 except as noted.

Wind

Wind loads based on MWFRS with additional C&C member design.

Left cantilever is exposed to wind

Blocking

Full Height Blocking reinforcement required to prevent buckling of members over the bearings: bearing 2 located at 12.3'

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 7-5-9.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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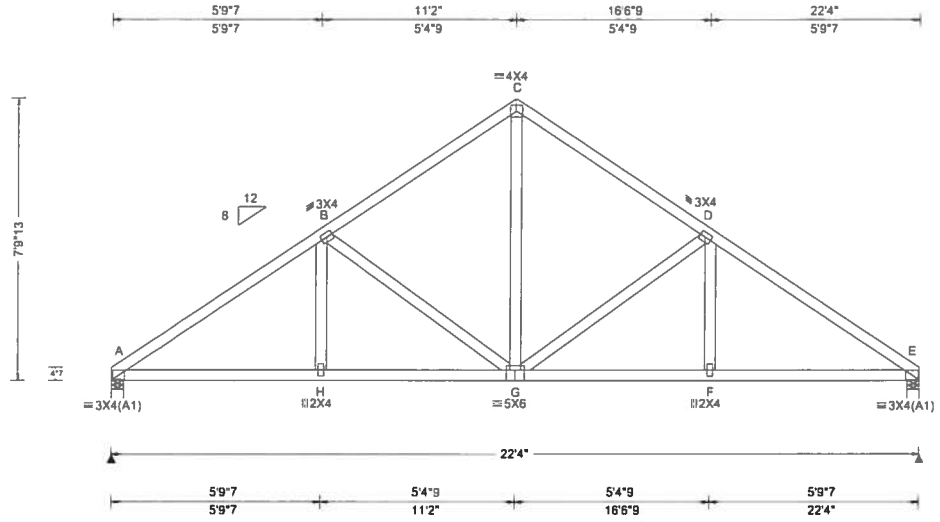
ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564882 / COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** G02	Cust: R 215 JRef: 1WPQ2150004 T22 / DrwNo: 301.19.1524.21771 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.034	G	999	240
VERT(CL): 0.069	G	999	180
HORZ(LL): 0.017	F	-	-
HORZ(TL): 0.034	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.315
Max BC CSI: 0.415
Max Web CSI: 0.340

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	893	/-	/-	/506	/146	/206
E	893	/-	/-	/506	/146	/-

Wind reactions based on MWFRS
A Brg Width = 4.0 Min Req = 1.5
E Brg Width = 4.0 Min Req = 1.5
Bearings A & E are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	368	-1283	C - D	338	-897
B - C	338	-897	D - E	368	-1283

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - H	996	-221	G - F	994	-221
H - G	994	-221	F - E	996	-221

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - G	211	-404	G - D	211	-404
C - G	589	-231			

Lumber

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

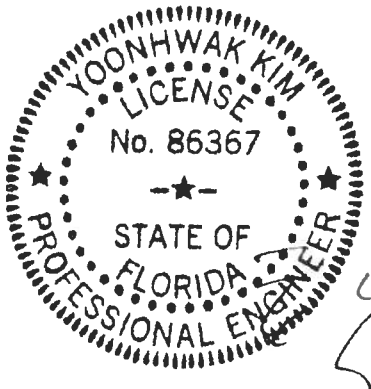
Wind

Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 7-9-13.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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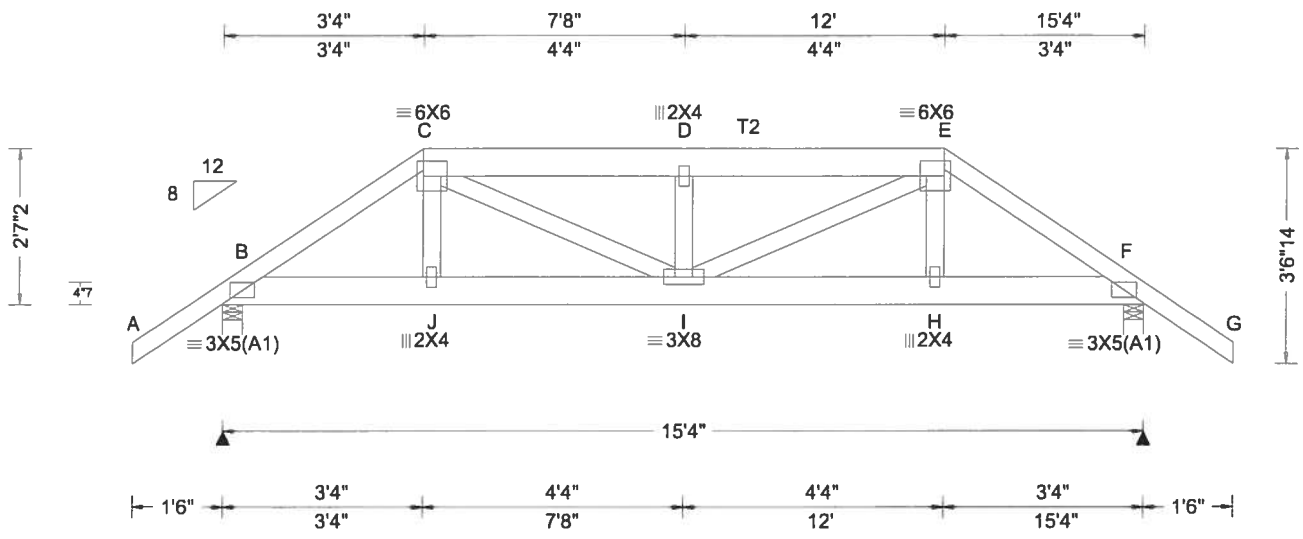
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564722 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** H01		Cust: R 215 JRef: 1WPQ2150004 T4 / DrwNo: 301.19.1524.21629 / YK 10/28/2019	



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Varies by Ld Case
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.032	D	999	240
VERT(CL): 0.062	D	999	180
HORZ(LL): 0.007	H	-	-
HORZ(TL): 0.013	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.240
Max BC CSI: 0.114
Max Web CSI: 0.240

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1112	/-	/-	/-	/324	/-
F	1112	/-	/-	/-	/324	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
F Brg Width = 4.0 Min Req = 1.5
Bearings B & F are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	455	-1545	D - E	517	-1829
C - D	517	-1829	E - F	455	-1545

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - J	1250	-363	I - H	1264	-361
J - I	1264	-361	H - F	1250	-363

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - I	630	-173	I - E	630	-173

Lumber

Top chord 2x4 SP #2
:T2 2x6 SP 2400f-2.0E:
Bot chord 2x6 SP 2400f-2.0E
Webs 2x4 SP #3

Special Loads

——(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From	60 plf at	-1.50 to	60 plf at	3.33	
TC: From	30 plf at	3.33 to	30 plf at	12.00	
TC: From	60 plf at	12.00 to	60 plf at	16.83	
BC: From	5 plf at	-1.50 to	5 plf at	0.00	
BC: From	20 plf at	0.00 to	20 plf at	3.36	
BC: From	10 plf at	3.36 to	10 plf at	11.97	
BC: From	20 plf at	11.97 to	20 plf at	15.33	
BC: From	5 plf at	15.33 to	5 plf at	16.83	

TC: 170 lb Conc. Load at 3.36,11.97
TC: 71 lb Conc. Load at 5.40, 7.40, 7.94, 9.94
BC: 147 lb Conc. Load at 3.36,11.97
BC: 57 lb Conc. Load at 5.40, 7.40, 7.94, 9.94

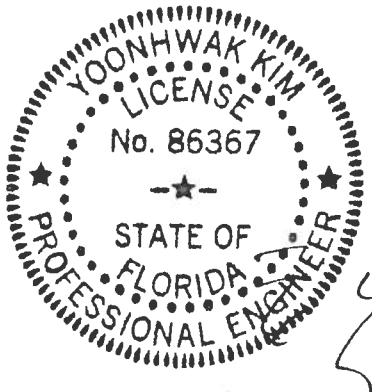
Wind

Wind loads and reactions based on MWFRS.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 2-7-2.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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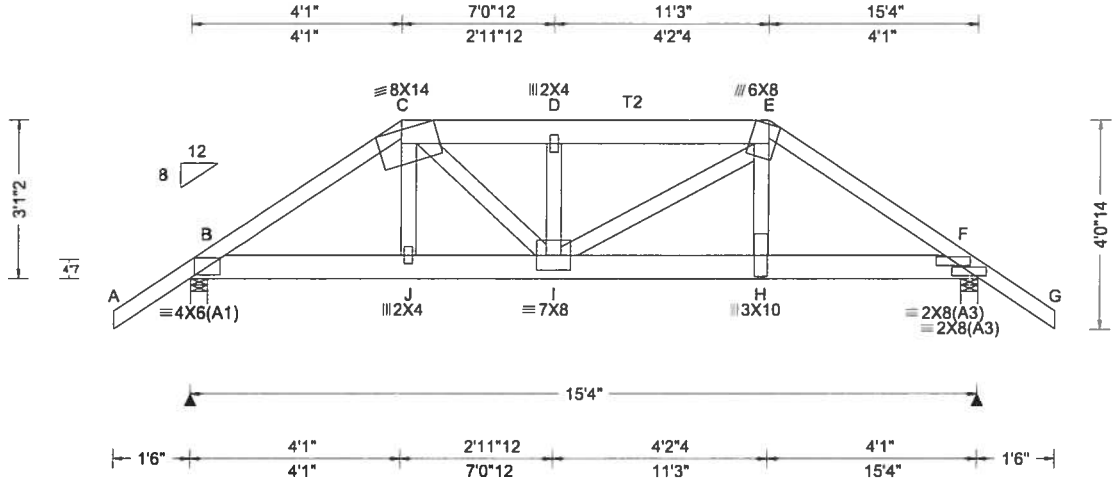
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564744 / HIPS FROM: CDM	Ply: 2 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** H02	Cust: R 215 JRef: 1WPQ2150004 T25 / DrwNo: 301.19.1524.20802 / YK 10/28/2019

2 Complete Trusses Required



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 0.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: No
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.064	D	999	240
VERT(CL): 0.126	D	999	180
HORZ(LL): 0.016	H	-	-
HORZ(TL): 0.032	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.393
Max BC CSI: 0.491
Max Web CSI: 0.915

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	3649	/-	/-	/-	/819	/-
F	5523	/-	/-	/-	/1126	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
F Brg Width = 4.0 Min Req = 2.3
Bearings B & F are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	662	-2979	D - E	935	-4245
C - D	935	-4245	E - F	852	-4151

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - J	2459	-541	I - H	3537	-716
J - I	2454	-539	H - F	3444	-701

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - I	2401	-530	H - E	1688	-271
I - E	839	-259			

Lumber

Top chord 2x4 SP #2
:T2 2x6 SP 2400f-2.0E:
Bot chord 2x6 SP 2400f-2.0E
Webs 2x4 SP #3

Nailnote

Nail Schedule:0.128"x3", min. nails
Top Chord: 1 Row @12.00" o.c.
Bot Chord: 2 Rows @ 6.00" o.c. (Each Row)
Webs : 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails in each row to avoid splitting.

Special Loads

-----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From	60 plf at	-1.50 to	60 plf at	16.83
BC: From	5 plf at	-1.50 to	5 plf at	0.00
BC: From	20 plf at	0.00 to	20 plf at	7.06
BC: From	10 plf at	7.06 to	10 plf at	13.06
BC: From	20 plf at	13.06 to	20 plf at	15.33
BC: From	5 plf at	15.33 to	5 plf at	16.83

BC: 3071 lb Conc. Load at 7.06
BC: 1580 lb Conc. Load at 9.06,11.06,13.06

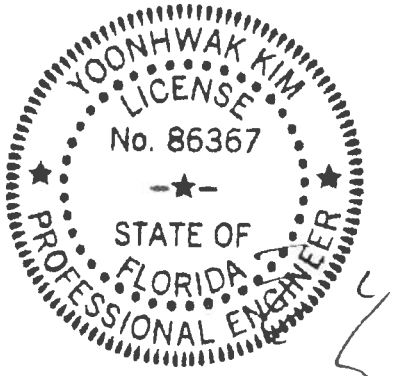
Wind

Wind loads and reactions based on MWFRS.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 3-1-2.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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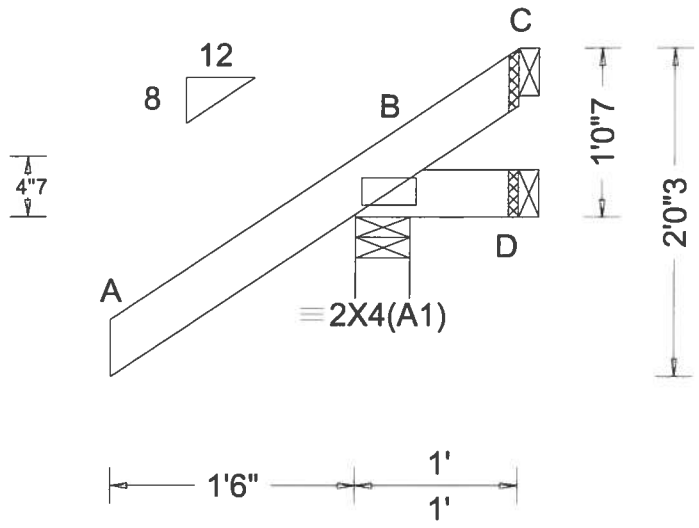
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564714 / JACK FROM: CDM	Ply: 1 Qty: 6	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J01	Cust: R 215 JRef: 1WPQ2150004 T6 / DrwNo: 301.19.1524.19866 / YK 10/28/2019



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA **Code / Misc Criteria** Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): -0.000 D - - HORZ(TL): 0.001 D - - Creep Factor: 2.0 Max TC CSI: 0.176 Max BC CSI: 0.026 Max Web CSI: 0.000 VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	246	/-	/-	/210	/67	/47
D	6	/-15	/-	/18	/19	/-
C	-	/-54	/-	/35	/63	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP #2

Wind

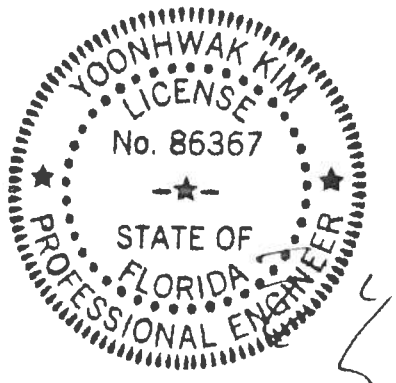
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 1-0-7.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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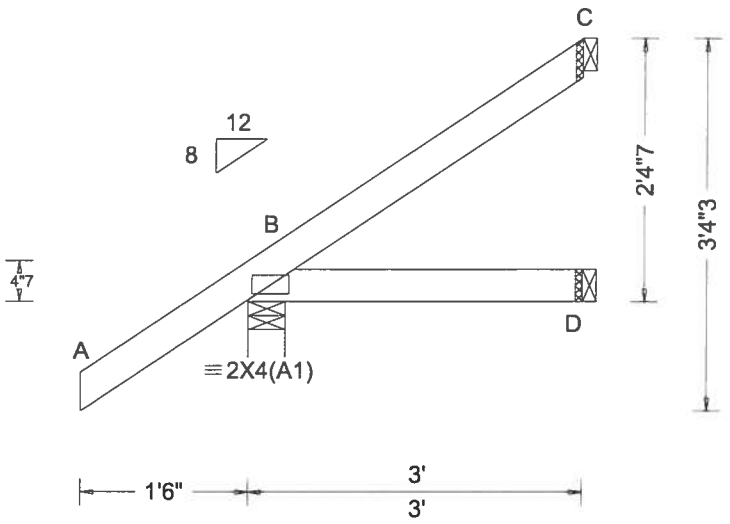
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564716 / JACK FROM: CDM	Ply: 1 Qty: 6	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J02	Cust: R 215 JRef: 1WPQ2150004 T5 / DrwNo: 301.19.1524.20303 / YK 10/28/2019



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA **Code / Misc Criteria** Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.001 D - - HORZ(TL): 0.001 D - - Creep Factor: 2.0 Max TC CSI: 0.191 Max BC CSI: 0.075 Max Web CSI: 0.000 VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	254	/-	/-	/192	/35	/85
D	50	/-	/-	/40	/2	/-
C	60	/-	/-	/27	/31	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP #2

Wind

Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 2-4-7.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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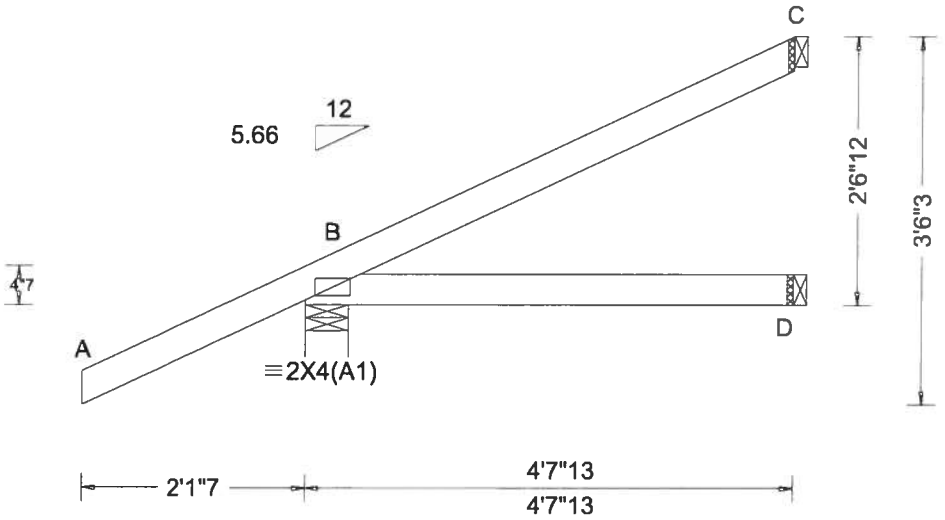
ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564720 / HIP_ FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J03	Cust: R 215 JRef: 1WPQ2150004 T9 / DrwNo: 301.19.1524.21239 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Varies by Ld Case
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria
PP Deflection in loc L/defl L/#
VERT(LL): NA
VERT(CL): NA
HORZ(LL): -0.005 D - -
HORZ(TL): 0.005 D - -
Creep Factor: 2.0
Max TC CSI: 0.166
Max BC CSI: 0.195
Max Web CSI: 0.000

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

		Gravity		Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	210	/-	/-	/-	/145	/-
D	90	/-	/-	/-	/16	/-
C	99	/-	/-	/-	/75	/-

Wind reactions based on MWFRS
B Brg Width = 4.9 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP #2

Special Loads

——(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From	0 plf at	-2.12 to	60 plf at	0.00
TC: From	2 plf at	0.00 to	2 plf at	4.65
BC: From	0 plf at	-2.12 to	4 plf at	0.00
BC: From	2 plf at	0.00 to	2 plf at	4.65

TC: -41 lb Conc. Load at 1.41
TC: 120 lb Conc. Load at 4.24
BC: 13 lb Conc. Load at 1.41
BC: 100 lb Conc. Load at 4.24

Wind

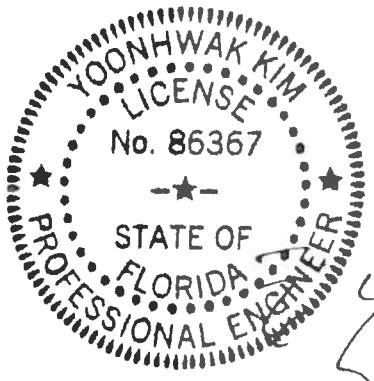
Wind loads and reactions based on MWFRS.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 2-6-12.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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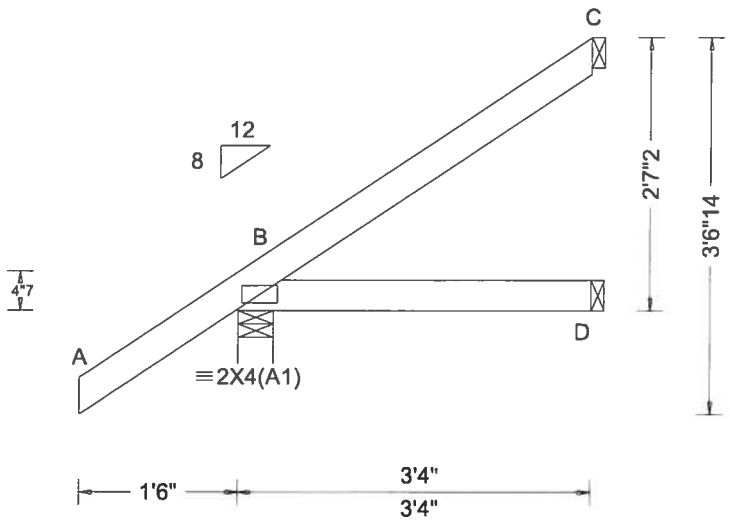
For more information see this job's general notes page and these web sites ALPINE: www.alpineitw.com, TPI: www.tpinst.org, SBCA: www.sbcindustry.com; ICC. www.iccsafe.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564718 / EJAC FROM: CDM	Ply: 1 Qty: 6	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J04	Cust: R 215 JRef: 1WPQ2150004 T8 / DrwNo: 301.19.1524.20350 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria
PP Deflection in loc L/defl L/#
VERT(LL): NA
VERT(CL): NA
HORZ(LL): 0.001 D - -
HORZ(TL): 0.002 D - -
Creep Factor: 2.0
Max TC CSI: 0.191
Max BC CSI: 0.099
Max Web CSI: 0.000

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	264	/-	/-	/197	/34	/91
D	57	/-	/-	/44	/0	/-
C	71	/-	/-	/34	/36	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP #2

Wind

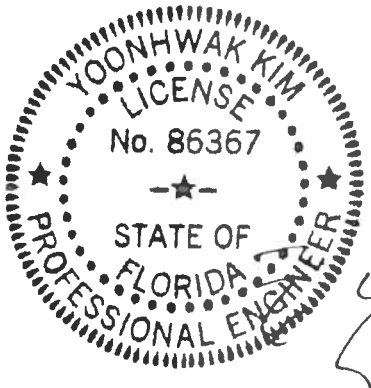
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 2-7-2.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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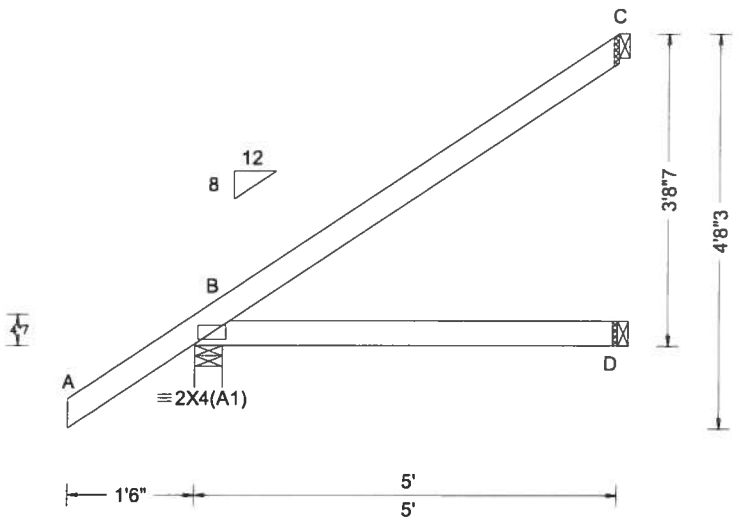
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564765 / JACK FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J05	Cust: R 215 JRef: 1WPQ2150004 T38 / DrwNo: 301.19.1524.20289 / YK 10/28/2019



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA **Code / Misc Criteria** Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.004 D - - HORZ(TL): 0.007 D - - Creep Factor: 2.0 Max TC CSI: 0.308 Max BC CSI: 0.251 Max Web CSI: 0.000 VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	321	/-	/-	/231	/31	/123
D	90	/-	/-	/64	/-	/-
C	123	/-	/-	/67	/59	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP #2

Wind

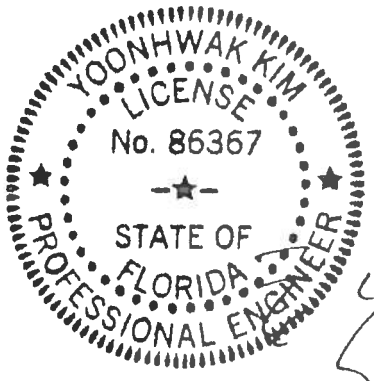
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 3-8-7.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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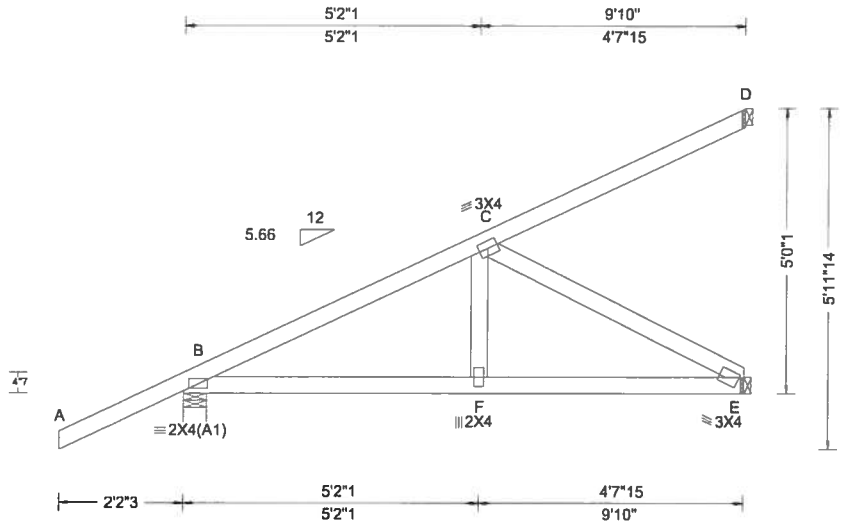
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564769 / HIP_ FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J06	Cust: R 215 JRef: 1WPQ2150004 T35 / DrwNo: 301.19.1524.20398 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Varies by Ld Case
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.011	F	999	240
VERT(CL): 0.022	F	999	180
HORZ(LL): 0.004	E	-	-
HORZ(TL): 0.008	E	-	-

Creep Factor: 2.0
Max TC CSI: 0.560
Max BC CSI: 0.548
Max Web CSI: 0.310

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

		Gravity			Non-Gravity	
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	355	/-	/-	/-	/221	/-
E	337	/-	/-	/-	/89	/-
D	76	/-	/-	/-	/23	/-

Wind reactions based on MWFRS
B Brg Width = 4.9 Min Req = 1.5
E Brg Width = 1.5 Min Req = -
D Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - C	225	-528

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - F	485	-167	F - E	478	-166

Maximum Web Forces Per Ply (lbs)

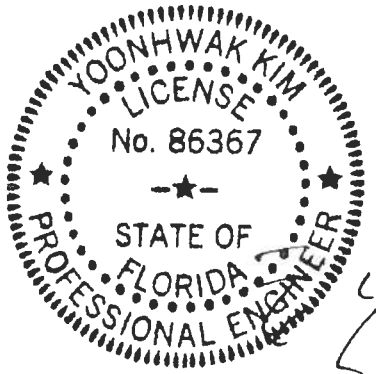
Webs	Tens.	Comp.
C - E	192	-551

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

Special Loads
-----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)
TC: From 0 plf at -2.18 to 60 plf at 0.00
TC: From 2 plf at 0.00 to 2 plf at 9.83
BC: From 0 plf at -2.18 to 4 plf at 0.00
BC: From 2 plf at 0.00 to 2 plf at 9.83
TC: -41 lb Conc. Load at 1.41
TC: 120 lb Conc. Load at 4.24
TC: 247 lb Conc. Load at 7.07
BC: 13 lb Conc. Load at 1.41
BC: 100 lb Conc. Load at 4.24
BC: 180 lb Conc. Load at 7.07

Wind
Wind loads and reactions based on MWFRS.

Additional Notes
Refer to General Notes for additional information
The overall height of this truss excluding overhang is 5-0-1.
Provide (3) 16d common 0.162"x3.5", toe-nails at TC.
Provide (3) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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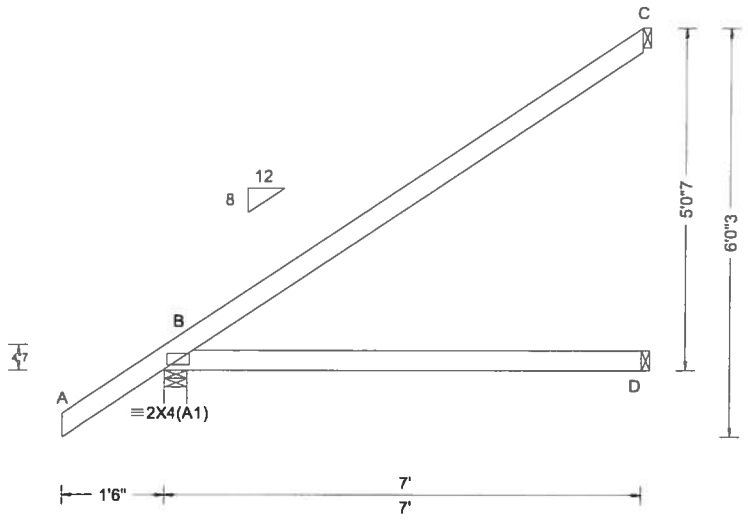
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564726 / EJAC FROM: CDM	Ply: 1 Qty: 21	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J07	Cust: R 215 JRef: 1WPQ2150004 T43 / DrwNo: 301.19.1524.20196 / YK 10/28/2019



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA **Code / Misc Criteria** Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.013 D - - HORZ(TL): 0.026 D - - Creep Factor: 2.0 Max TC CSI: 0.703 Max BC CSI: 0.517 Max Web CSI: 0.000 VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	396	/-	/-	/277	/29	/161
D	129	/-	/-	/90	/1	/-
C	181	/-	/-	/101	/86	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord 2x4 SP #2
Bot chord 2x4 SP #2

Wind

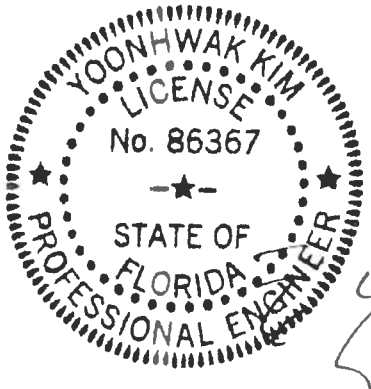
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 5-0-7.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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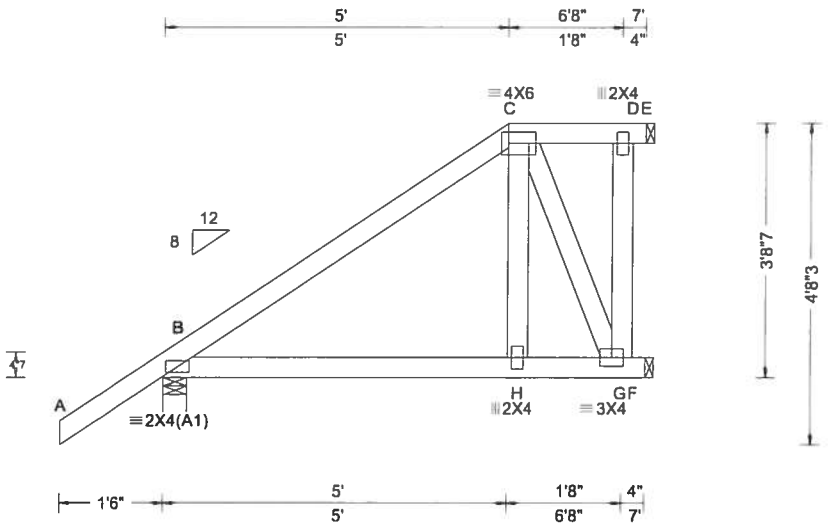
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564724 / EJAC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J7A	Cust: R 215 JRef: 1WPQ2150004 T34 / DrwNo: 301.19.1524.20366 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.002	H	999	240
VERT(CL): 0.005	H	999	180
HORZ(LL): 0.002	H	-	-
HORZ(TL): 0.004	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.210
Max BC CSI: 0.205
Max Web CSI: 0.090

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	396	/-	/-	/280	/52	/123
F	157	/-	/-	/98	/38	/-
E	104	/-	/-	/62	/30	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
F Brg Width = 1.5 Min Req = -
E Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Wind

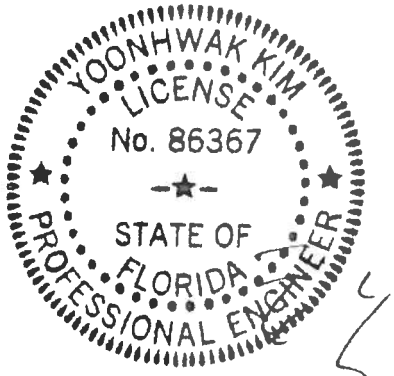
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 3-8-7.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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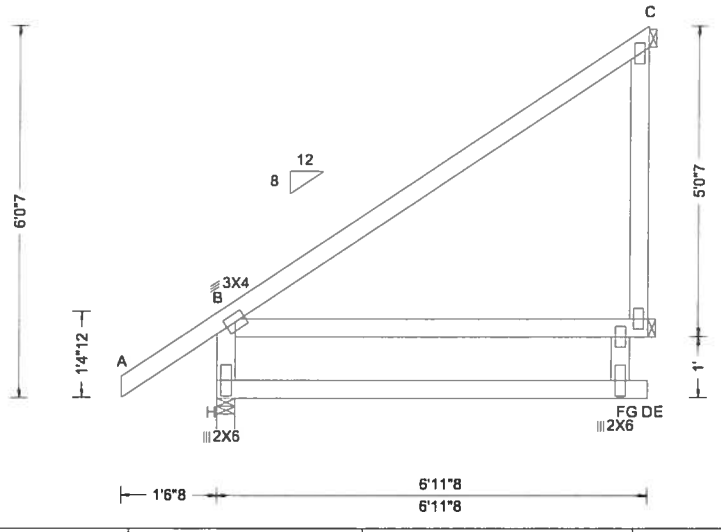
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564890 / MONO FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J08	Cust: R 215 JRef: 1WPQ2150004 T3 / DrwNo: 301.19.1524.20646 / YK 10/28/2019



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA **Code / Misc Criteria** Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): -0.010 D 999 240 VERT(CL): -0.029 D 999 180 HORZ(LL): -0.001 F - - HORZ(TL): 0.002 F - - Creep Factor: 2.0 Max TC CSI: 0.846 Max BC CSI: 0.522 Max Web CSI: 0.092 VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
H	389	/-	/-	/325	/138	/-
D	139	/-	/-	/93	/-	/-
C	198	/-	/-	/83	/-	/161

Wind reactions based on MWFRS
H Brg Width = 3.5 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing H is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4 except as noted.

Wind

Wind loads based on MWFRS with additional C&C member design.

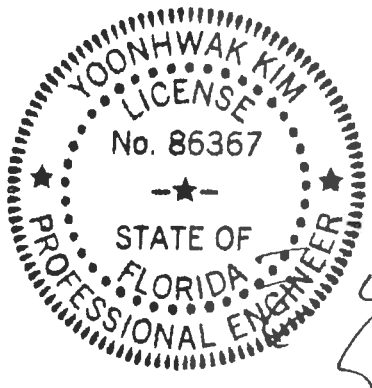
Right end vertical not exposed to wind pressure.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 6-0-7.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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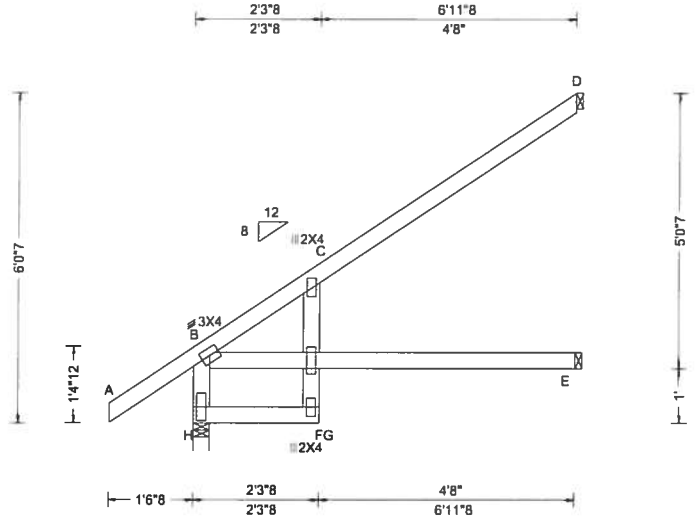
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564892 / EJAC FROM: CDM	Ply: 1 Qty: 5	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J09	Cust: R 215 JRef: 1WPQ2150004 T45 / DrwNo: 301.19.1524.20788 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.109	C	764	240
VERT(CL): 0.211	C	396	180
HORZ(LL): 0.074	C	-	-
HORZ(TL): 0.143	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.543
Max BC CSI: 0.705
Max Web CSI: 0.435

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
H	514	/-	/-	/392	/136	/-
E	128	/-	/185	/98	/15	/147
D	38	/-31	/185	/34	/20	/174

Wind reactions based on MWFRS
H Brg Width = 3.5 Min Req = 1.5
E Brg Width = 1.5 Min Req = -
D Brg Width = 1.5 Min Req = -
Bearing H is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - C	170	-390

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.
B - H	264	-469

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

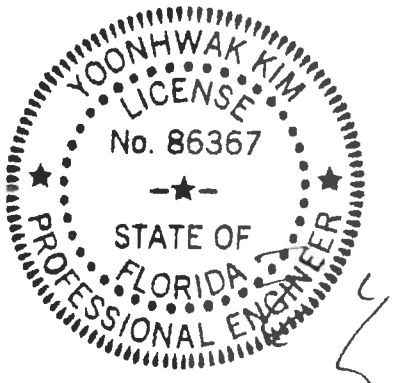
Plating Notes
All plates are 2X6 except as noted.

Wind
Wind loads based on MWFRS with additional C&C member design.

Additional Notes
Refer to General Notes for additional information

The overall height of this truss excluding overhang is 6-0-7.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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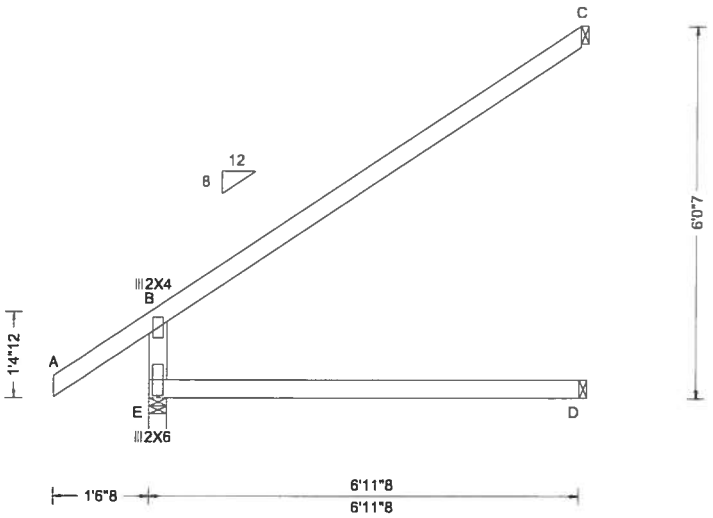
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564894 / EJAC FROM: CDM	Ply: 1 Qty: 10	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J10	Cust: R 215 JRef: 1WPQ2150004 T44 / DrwNo: 301.19.1524.21348 / YK 10/28/2019



Loading Criteria (psf)		**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**			
TCLL:	20.00	Wind Std: ASCE 7-10	Pg: NA Ct: NA CAT: NA	PP Deflection in	loc	L/defl	L/#
TCDL:	10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.000	B	999	240
BCLL:	0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.001	B	999	180
BCDL:	10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.001	B	-	-
Des Ld:	40.00	EXP: C Kzt: NA		HORZ(TL): 0.002	B	-	-
NCBCLL:	10.00	Mean Height: 15.00 ft	**Code / Misc Criteria**	Creep Factor: 2.0			
Soffit:	2.00	TCDL: 5.0 psf	Bldg Code: FBC 2017 RES	Max TC CSI: 0.846			
Load Duration: 1.25		BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.600			
Spacing: 24.0 "		MWFRS Parallel Dist: h/2 to h	Rep Fac: Yes	Max Web CSI: 0.092			
		C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)				
		Loc. from endwall: not in 4.50 ft	Plate Type(s):	VIEW Ver: 18.02.01B.0321.08			
		GCpi: 0.18	WAVE				
		Wind Duration: 1.60					

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
E	412	/-	/-	/325	/138	/-
D	159	/-	/-	/93	/-	/-
C	198	/-	/-	/83	/-	/161

Wind reactions based on MWFRS
E Brg Width = 3.5 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing E is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Loading

Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance.

Wind

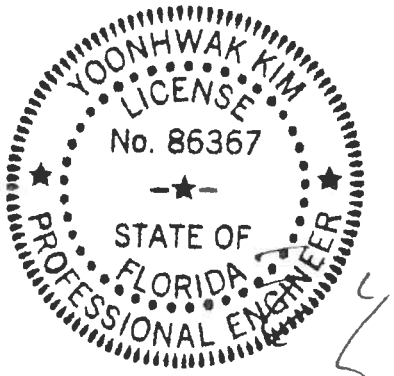
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 6-0-7.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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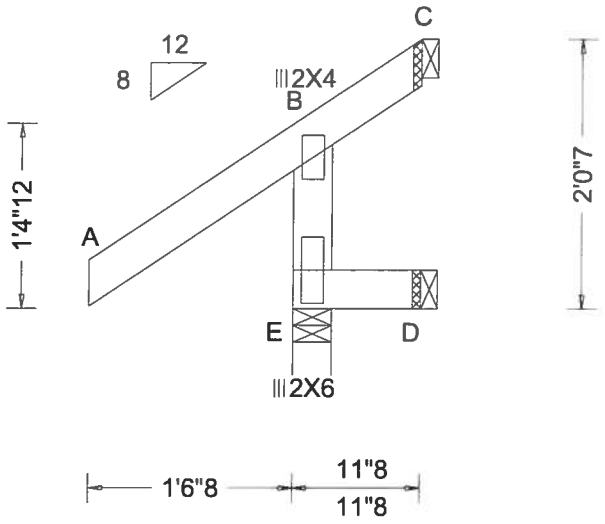
ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564896 / JACK FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J11	Cust: R 215 JRef: 1WPQ2150004 T42 / DrwNo: 301.19.1524.19555 / YK 10/28/2019



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA **Code / Misc Criteria** Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.000 B 999 240 VERT(CL): 0.000 B 999 180 HORZ(LL): 0.000 B - - HORZ(TL): 0.000 B - - Creep Factor: 2.0 Max TC CSI: 0.186 Max BC CSI: 0.009 Max Web CSI: 0.083 VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
E	218	/-	/-	/217	/88	/-
D	19	/-	/-	/13	/-	/-
C	-	/-52	/-	/64	/93	/47

Wind reactions based on MWFRS
E Brg Width = 3.5 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing E is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Wind

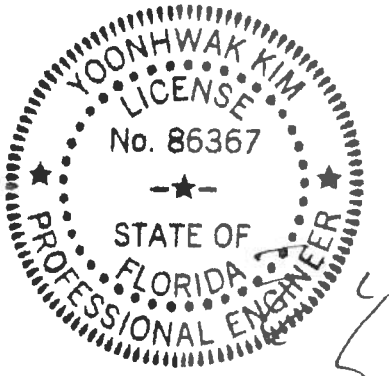
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 2-0-7.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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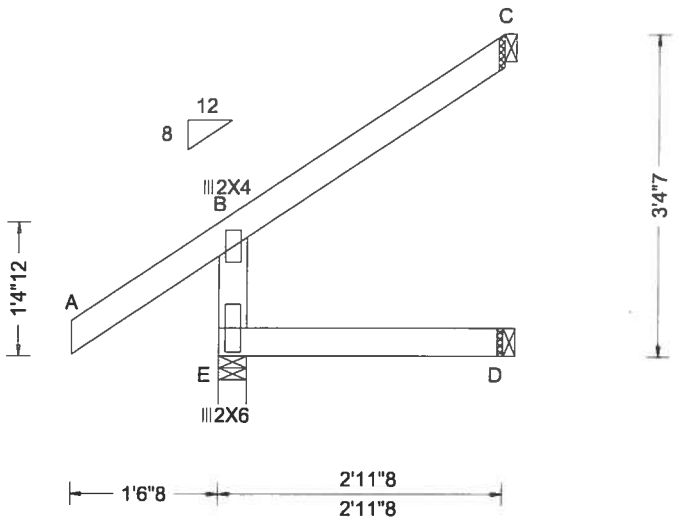
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564898 / JACK FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J12	Cust: R 215 JRef: 1WPQ2150004 T41 / DrwNo: 301.19.1524.19617 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.000	B	999	240
VERT(CL): 0.000	B	999	180
HORZ(LL): -0.000	B	-	-
HORZ(TL): 0.001	B	-	-

Creep Factor: 2.0
Max TC CSI: 0.203
Max BC CSI: 0.107
Max Web CSI: 0.076

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
E	244	/-	/-	/221	/92	/-
D	59	/-	/-	/40	/-	/-
C	63	/-	/-	/55	/22	/85

Wind reactions based on MWFRS
E Brg Width = 3.5 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing E is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Wind

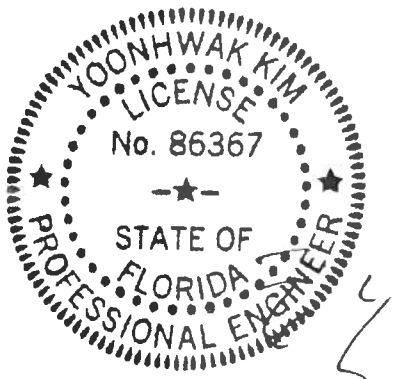
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 3-4-7.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



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10/28/2019

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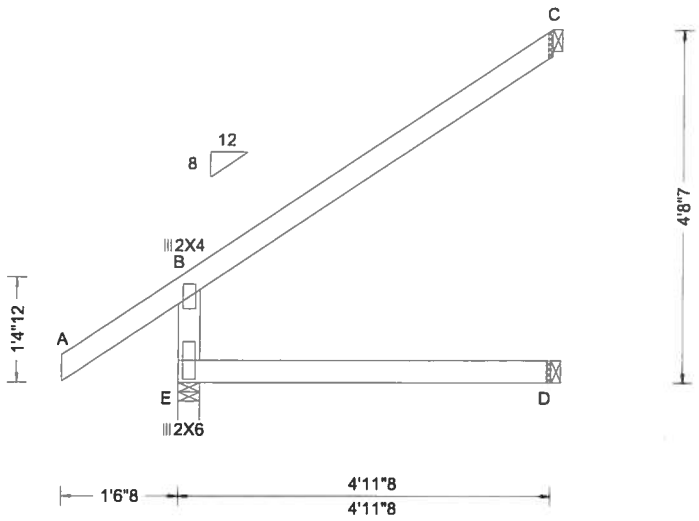
Suite 305
Orlando FL, 32821

SEQN: 564900 / JACK FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J13	Cust: R 215 JRef: 1WPQ2150004 T40 / DrwNo: 301.19.1524.19962 / YK 10/28/2019



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.000	B	999	240
VERT(CL): 0.000	B	999	180
HORZ(LL): -0.001	B	-	-
HORZ(TL): 0.001	B	-	-

Creep Factor: 2.0
Max TC CSI: 0.363
Max BC CSI: 0.305
Max Web CSI: 0.085

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
E	314	/-	/-	/270	/114	/-
D	99	/-	/-	/66	/-	/-
C	133	/-	/-	/68	/-	/123

Wind reactions based on MWFRS
E Brg Width = 3.5 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing E is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Wind

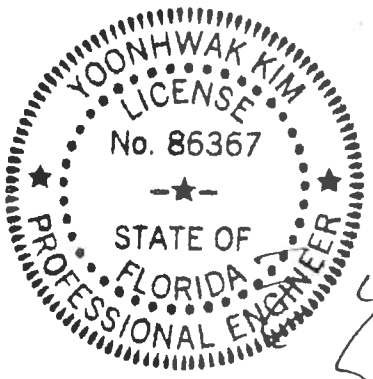
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

The overall height of this truss excluding overhang is 4-8-7.

Provide (2) 16d common 0.162"x3.5", toe-nails at TC.
Provide (2) 16d common 0.162"x3.5", toe-nails at BC.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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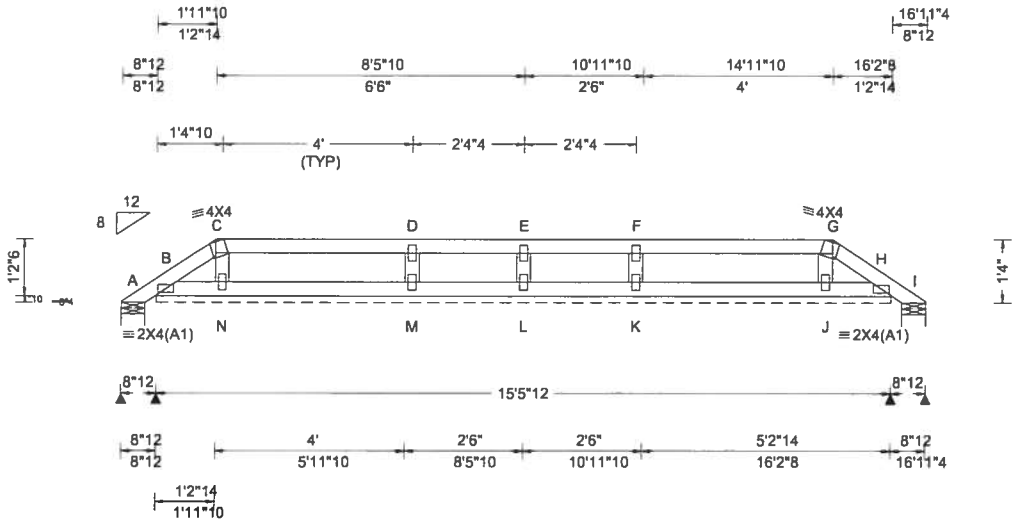
For more information see this job's general notes page and these web sites. ALPINE: www.alpineitw.com, TPI: www.tpinst.org, SBCA: www.sbcindustry.com, ICC: www.iccsafe.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564851 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** P01	Cust: R 215 JRef: 1WPQ2150004 T54 / DrwNo: 301.19.1524.20272 / YK 10/28/2019



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.70 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.000	F	999	240
VERT(CL): 0.000	D	999	180
HORZ(LL): 0.000	J	-	-
HORZ(TL): 0.000	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.198
Max BC CSI: 0.090
Max Web CSI: 0.046

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	21	/-	/-	/26	/11	/34
B*	82	/-	/-	/37	/4	/-
I	21	/-	/-	/14	/-	/-

Wind reactions based on MWFRS
A Brg Width = 5.9 Min Req = 1.5
B Brg Width = 185 Min Req = -
I Brg Width = 5.9 Min Req = 1.5
Bearings A, B, & I are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4 except as noted.

Wind

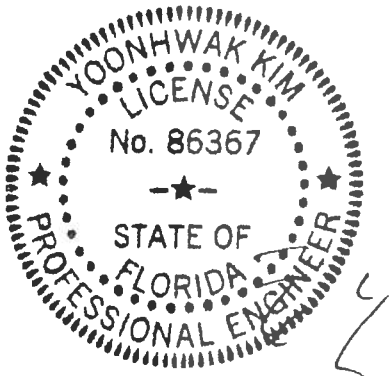
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

Refer to DWG PB160101014 for piggyback details.

The overall height of this truss excluding overhang is 1-4-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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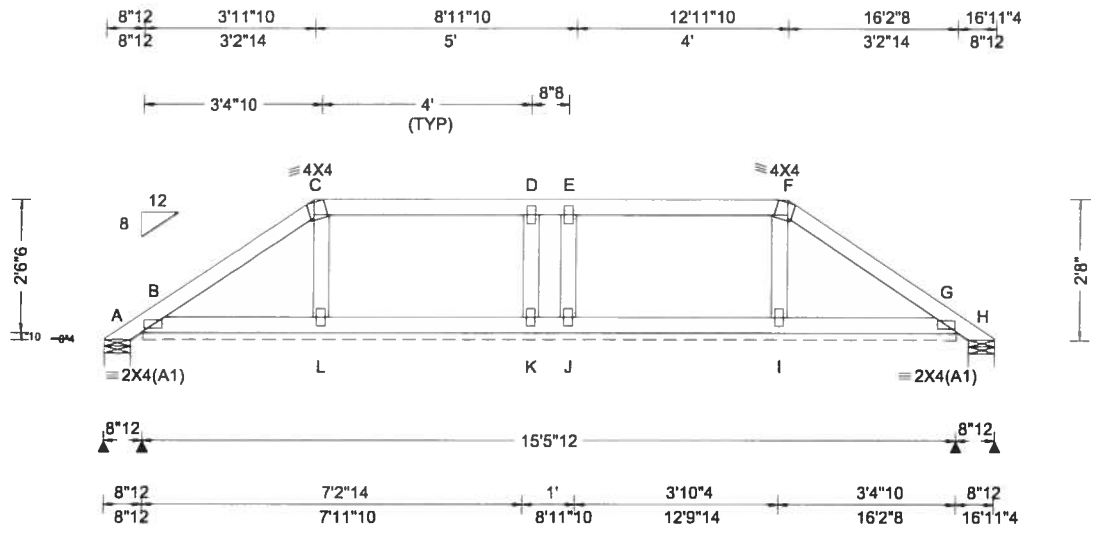
For more information see this job's general notes page and these web sites. ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564853 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** P02	Cust: R 215 JRef: 1WPQ2150004 T39 / DrwNo: 301.19.1524.20226 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 16.37 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.001	L	999	240
VERT(CL): 0.002	L	999	180
HORZ(LL): -0.001	I	-	-
HORZ(TL): 0.001	L	-	-

Creep Factor: 2.0
Max TC CSI: 0.198
Max BC CSI: 0.133
Max Web CSI: 0.034

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	-	/-42	/-	/56	/69	/74
B*	91	/-	/-	/41	/2	/-
H	-	/-42	/-	/14	/27	/-

Wind reactions based on MWFRS
A Brg Width = 5.9 Min Req = 1.5
B Brg Width = 185 Min Req = -
H Brg Width = 5.9 Min Req = 1.5
Bearings A, B, & H are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4 except as noted.

Wind

Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

Refer to DWG PB160101014 for piggyback details.

The overall height of this truss excluding overhang is 2-8-0.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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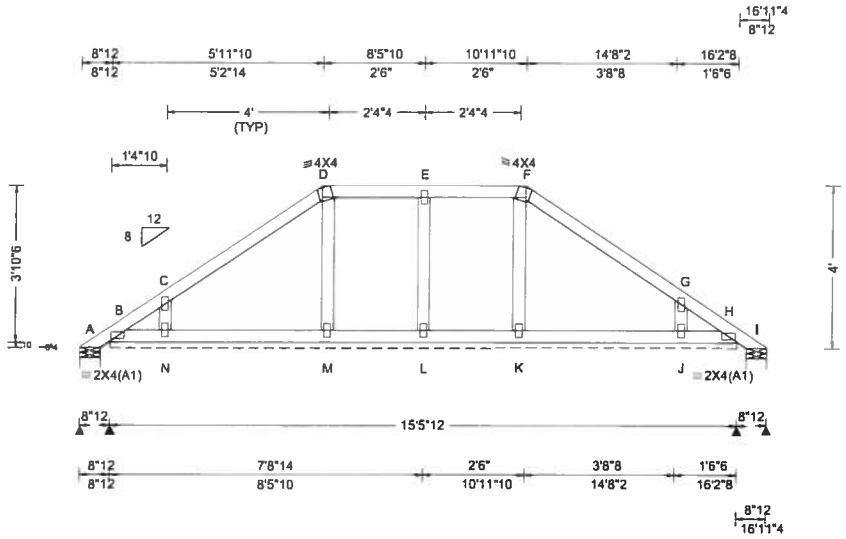
ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564855 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** P03	Cust: R 215 JRef: 1WPQ2150004 T31 / DrwNo: 301.19.1524.20101 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 17.04 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.000	E	999	240
VERT(CL): 0.001	E	999	180
HORZ(LL): 0.001	G	-	-
HORZ(TL): 0.001	G	-	-

Creep Factor: 2.0
Max TC CSI: 0.181
Max BC CSI: 0.097
Max Web CSI: 0.053

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	33	/-	/-	/71	/52	/113
B*	81	/-	/-	/40	/-	/-
I	33	/-	/-	/19	/1	/-

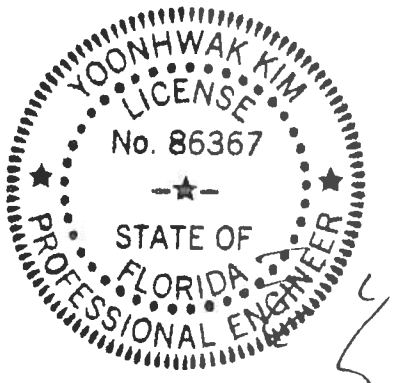
Wind reactions based on MWFRS
A Brg Width = 5.9 Min Req = 1.5
B Brg Width = 185 Min Req = -
I Brg Width = 5.9 Min Req = 1.5
Bearings A, B, & I are a rigid surface.
Members not listed have forces less than 375#

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

Plating Notes
All plates are 2X4 except as noted.

Wind
Wind loads based on MWFRS with additional C&C member design.

Additional Notes
Refer to General Notes for additional information
Refer to DWG PB160101014 for piggyback details.
The overall height of this truss excluding overhang is 4-0-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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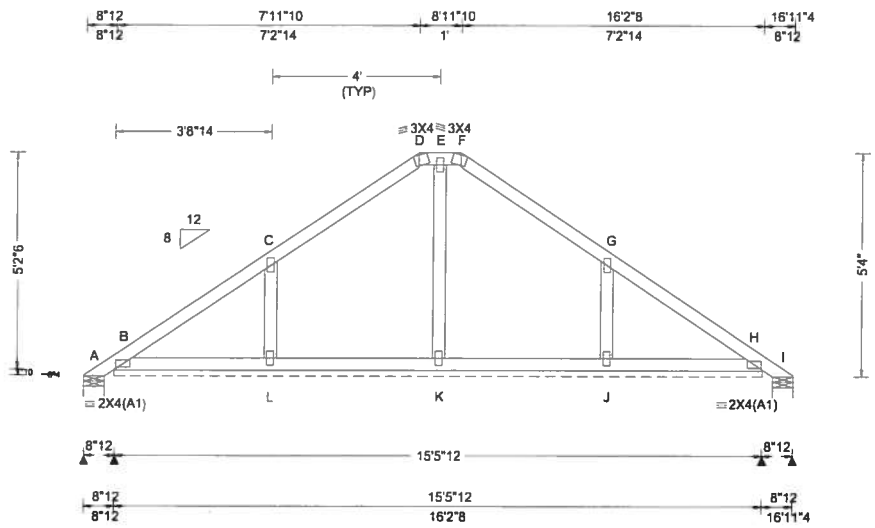
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564857 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** P04	Cust: R 215 JRef: 1WPQ2150004 T53 / DrwNo: 301.19.1524.20896 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 17.70 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.003	D	999	240
VERT(CL): 0.007	D	999	180
HORZ(LL): 0.003	F	-	-
HORZ(TL): 0.004	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.144
Max BC CSI: 0.110
Max Web CSI: 0.068

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	-	/-29	/-	/95	/105	/152
B*	89	/-	/-	/44	/-	/-
I	-	/-29	/-	/12	/23	/-

Wind reactions based on MWFRS
A Brg Width = 5.9 Min Req = 1.5
B Brg Width = 185 Min Req = -
I Brg Width = 5.9 Min Req = 1.5
Bearings A, B, & I are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4 except as noted.

Wind

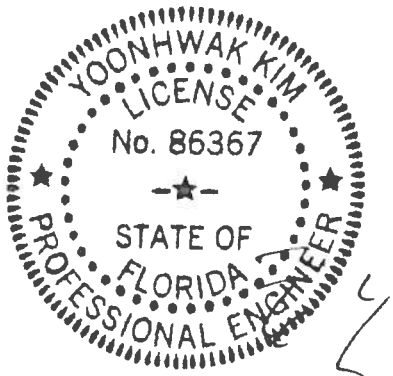
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

Refer to DWG PB160101014 for piggyback details.

The overall height of this truss excluding overhang is 5-4-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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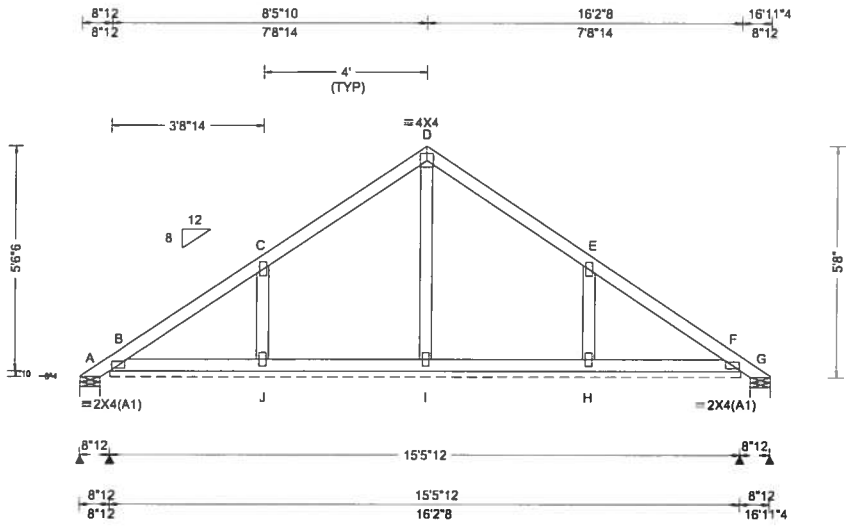
For more information see this job's general notes page and these web sites ALPINE: www.alpineitw.com, TPI: www.tpinst.org, SBCA: www.sbcindustry.com, ICC: www.iccsafe.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564848 / SPEC FROM: CDM	Ply: 1 Qty: 7	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** P05	Cust: R 215 JRef: 1WPQ2150004 T33 / DrwNo: 301.19.1524.21052 / YK 10/28/2019



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**	**▲Maximum Reactions (lbs), or *=PLF**
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 17.87 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.00 ft Loc. from endwall: not in 13.00 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA **Code / Misc Criteria** Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.001 J 999 240 VERT(CL): 0.002 J 999 180 HORZ(LL): 0.001 E - - HORZ(TL): 0.002 E - - Creep Factor: 2.0 Max TC CSI: 0.197 Max BC CSI: 0.107 Max Web CSI: 0.077 VIEW Ver: 18.02.01B.0321.08	Gravity / Non-Gravity Loc R+ / R- / Rh / Rw / U / RL A - /-23 /- /105 /115 /168 B* 88 /- /- /45 /- /- G - /-23 /- /12 /22 /- Wind reactions based on MWFRS A Brg Width = 5.9 Min Req = 1.5 B Brg Width = 185 Min Req = - G Brg Width = 5.9 Min Req = 1.5 Bearings A, B, & G are a rigid surface. Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4 except as noted.

Wind

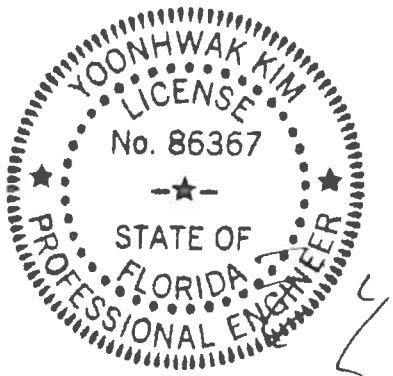
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

Refer to DWG PB160101014 for piggyback details.

The overall height of this truss excluding overhang is 5-8-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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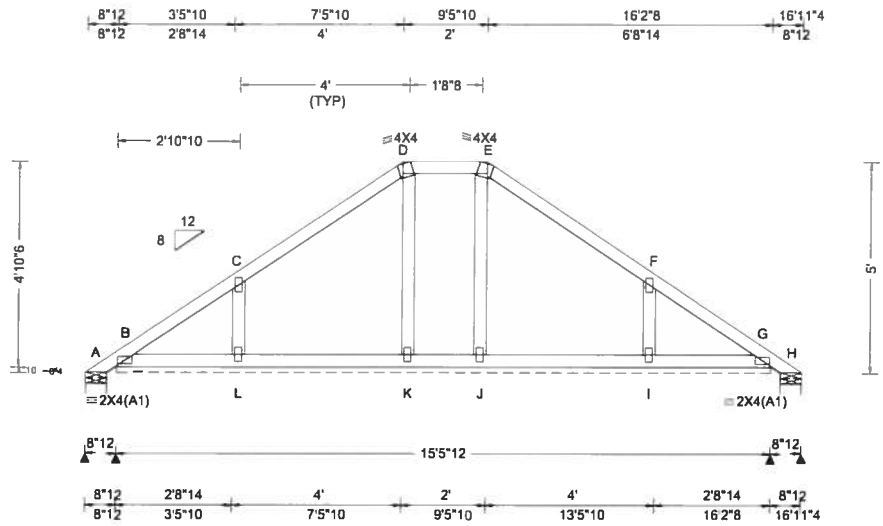
For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com, TPI: www.tpinst.org, SBCA: www.sbcindustry.com, ICC: www.iccsafe.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564846 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** P06	Cust: R 215 JRef: 1WPQ2150004 T50 / DrwNo: 301.19.1524.20132 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 17.54 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 13.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.000	D	999	240
VERT(CL): 0.001	D	999	180
HORZ(LL): 0.001	F	-	-
HORZ(TL): 0.002	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.182
Max BC CSI: 0.119
Max Web CSI: 0.060

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	13	/-	/-	/90	/81	/147
B*	83	/-	/-	/42	/-	/-
H	13	/-	/-	/8	/-	/-
L		/-133				
I		/-133				

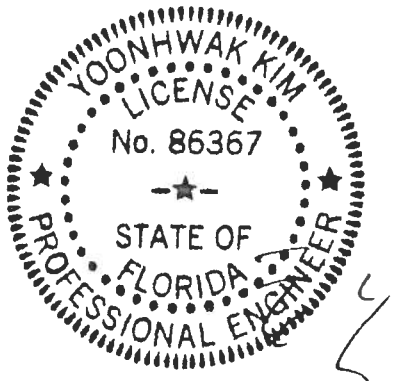
Wind reactions based on MWFRS
A Brg Width = 5.9 Min Req = 1.5
B Brg Width = 185 Min Req = -
H Brg Width = 5.9 Min Req = 1.5
Bearings A, B, & H are a rigid surface.
Members not listed have forces less than 375#

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

Plating Notes
All plates are 2X4 except as noted.

Wind
Wind loads based on MWFRS with additional C&C member design.

Additional Notes
Refer to General Notes for additional information
Refer to DWG PB160101014 for piggyback details.
The overall height of this truss excluding overhang is 5-0-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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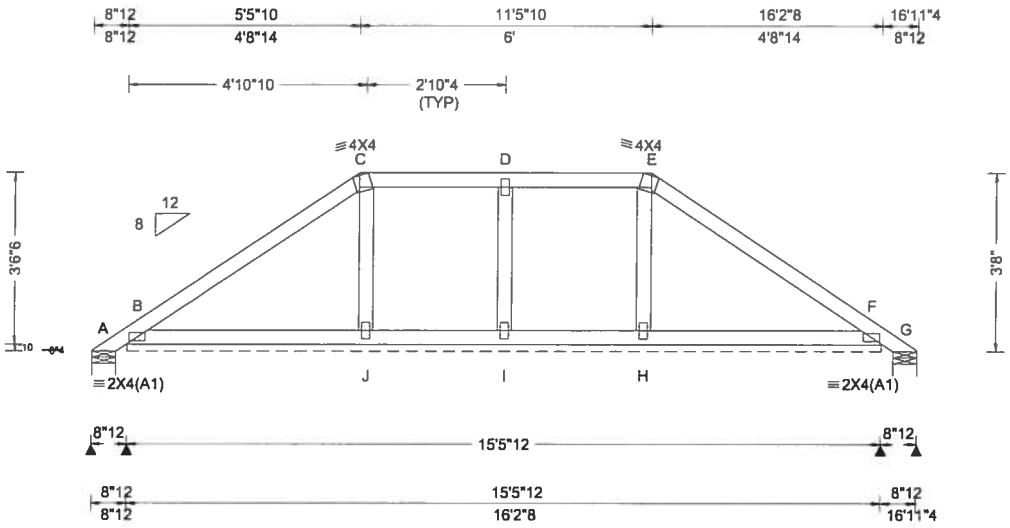
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564844 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** P07		Cust: R 215 JRef: 1WPQ2150004 T19 / DrwNo: 301.19.1524.21303 / YK 10/28/2019



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00	Wind Std: ASCE 7-10	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.002 J 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.004 J 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.001 H - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.003 H - -
NCBCLL: 10.00	Mean Height: 16.87 ft	**Code / Misc Criteria**	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	Bldg Code: FBC 2017 RES	Max TC CSI: 0.242
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.168
Spacing: 24.0 "	MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI: 0.057
	C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: not in 13.00 ft	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 18.02.01B.0321.08
	Wind Duration: 1.60		

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	-	/-152	/-	/93	/164	/106
B*	105	/-	/-	/47	/-	/-
G	-	/-152	/-	/34	/104	/-

Wind reactions based on MWFRS
A Brg Width = 5.9 Min Req = 1.5
B Brg Width = 185 Min Req = -
G Brg Width = 5.9 Min Req = 1.5
Bearings A, B, & G are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4 except as noted.

Wind

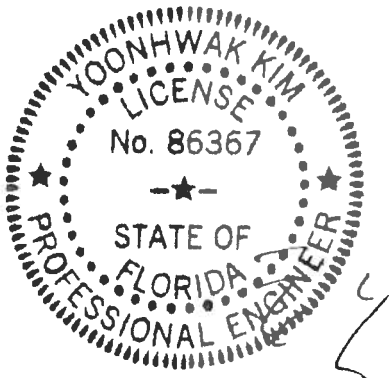
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

Refer to DWG PB160101014 for piggyback details.

The overall height of this truss excluding overhang is 3-8-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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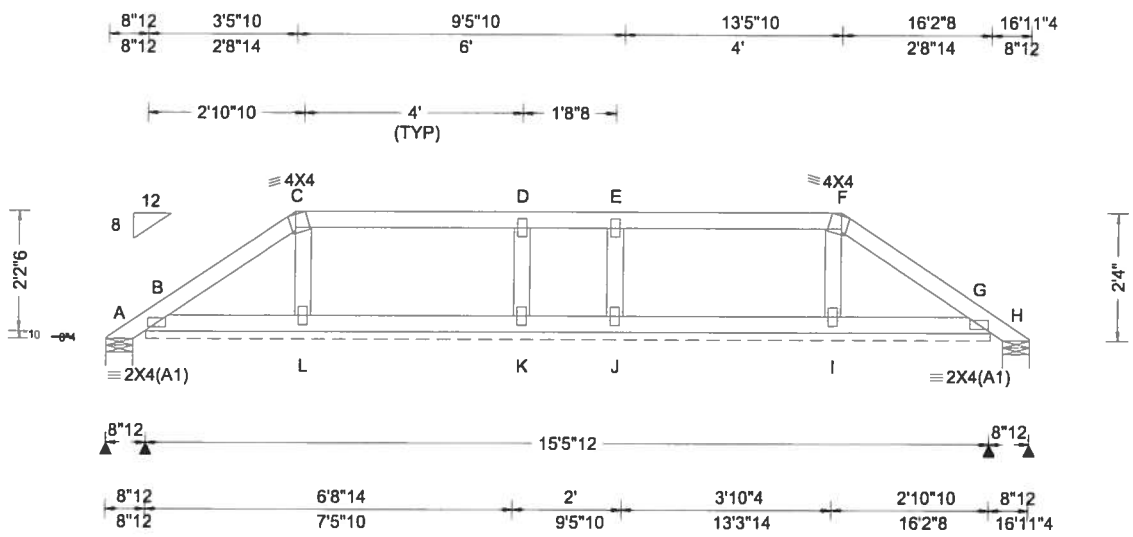
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564842 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** P08		Cust: R 215 JRef: 1WPQ2150004 T23 / DrwNo: 301.19.1524.20615 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 16.20 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 13.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.000	L	999	240
VERT(CL): 0.001	L	999	180
HORZ(LL): -0.000	I	-	-
HORZ(TL): 0.001	L	-	-

Creep Factor: 2.0
Max TC CSI: 0.209
Max BC CSI: 0.121
Max Web CSI: 0.038

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	-	/-17	/-	/47	/49	/66
B*	87	/-	/-	/40	/-	/-
H	-	/-17	/-	/10	/12	/-

Wind reactions based on MWFRS
A Brg Width = 5.9 Min Req = 1.5
B Brg Width = 185 Min Req = -
H Brg Width = 5.9 Min Req = 1.5
Bearings A, B, & H are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4 except as noted.

Wind

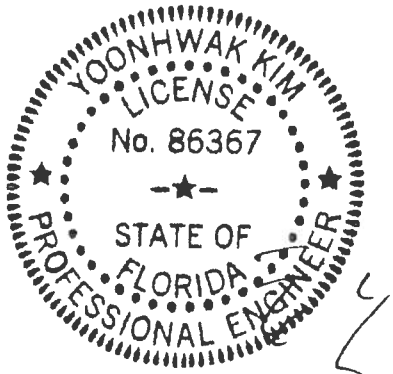
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

Refer to DWG PB160101014 for piggyback details.

The overall height of this truss excluding overhang is 2-4-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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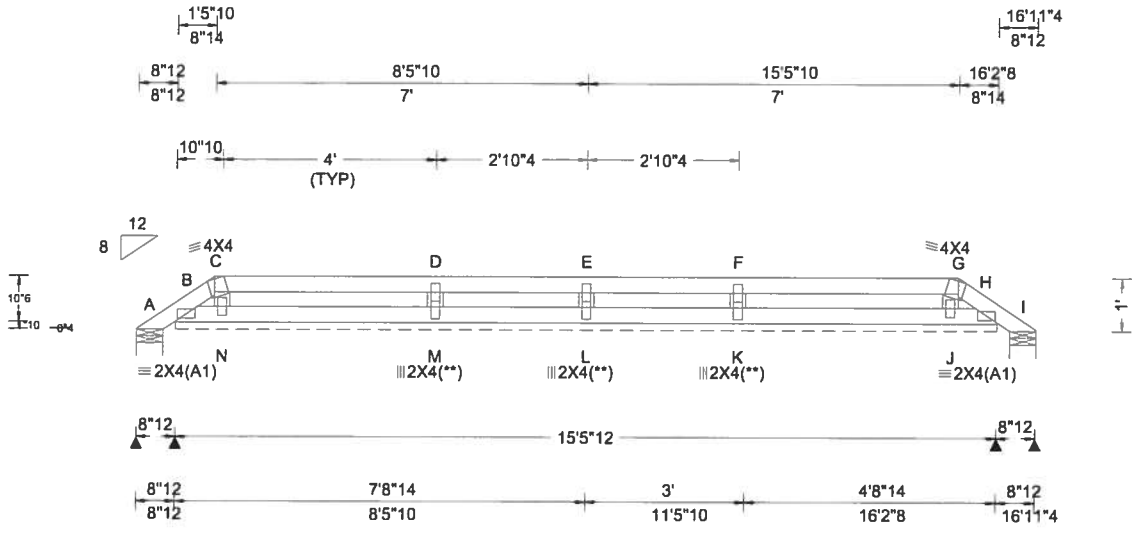
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564840 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** P09	Cust: R 215 JRef: 1WPQ2150004 T17 / DrwNo: 301.19.1524.20194 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.54 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 13.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.000	D	999	240
VERT(CL): 0.000	D	999	180
HORZ(LL): 0.000	J	-	-
HORZ(TL): 0.000	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.222
Max BC CSI: 0.088
Max Web CSI: 0.047

VIEW Ver: 18.02.01B.0321.08

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	24	/-	/-	/19	/4	/25
B*	82	/-	/-	/36	/-	/-
I	24	/-	/-	/16	/1	/-

Wind reactions based on MWFRS
A Brg Width = 5.9 Min Req = 1.5
B Brg Width = 185 Min Req = -
I Brg Width = 5.9 Min Req = 1.5
Bearings A, B, & I are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4 except as noted.

(**) 3 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

Wind

Wind loads based on MWFRS with additional C&C member design.

Additional Notes

Refer to General Notes for additional information

Refer to DWG PB160101014 for piggyback details.

The overall height of this truss excluding overhang is 1-0-0.

YOONHWAK KIM
LICENSE
No. 86367
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
10/28/2019

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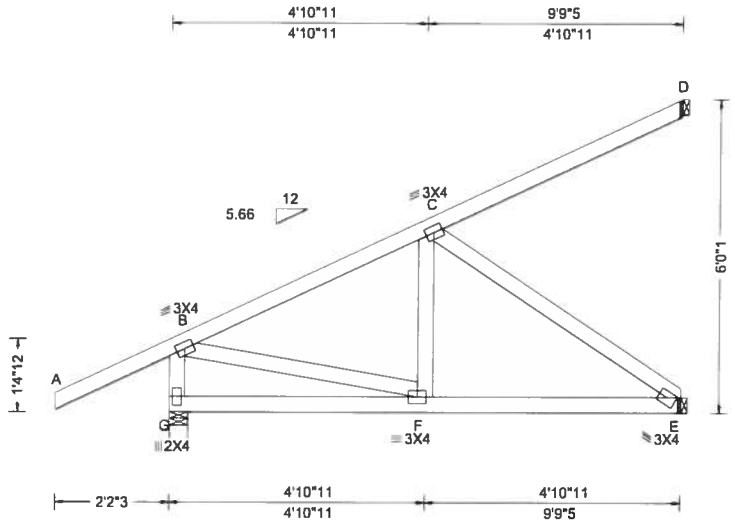
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 564924 HIP_ FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** J14	Cust: R 215 JRef: 1WPQ2150004 T24 DrwNo: 301.19.1532.27460 / YK 10/28/2019



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: NA
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Code / Misc Criteria
Bldg Code: FBC 2017 RES
TPI Std: 2014
Rep Fac: Varies by Ld Case
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.007	F	999	240
VERT(CL): 0.013	F	999	180
HORZ(LL): -0.002	D	-	-
HORZ(TL): 0.004	D	-	-

Creep Factor: 2.0
Max TC CSI: 0.692
Max BC CSI: 0.615
Max Web CSI: 0.357

VIEW Ver: 18.02.01B.0321.08

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
G	366	/-	/-	/-	/159	/-
E	375	/-	/-	/-	/12	/-
D	94	/-	/-	/18	/-	/-

Wind reactions based on MWFRS
G Brg Width = 4.2 Min Req = 1.5
E Brg Width = 1.5 Min Req = -
D Brg Width = 1.5 Min Req = -
Bearing G is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - C	84	-459

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
F - E	410	-28

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - F	382	0	C - E	35	-509

Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Special Loads
-----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From	0 plf at	-2.18 to	60 plf at	0.00
TC: From	2 plf at	0.00 to	2 plf at	9.78
BC: From	0 plf at	-2.18 to	4 plf at	0.00
BC: From	2 plf at	0.00 to	2 plf at	9.78

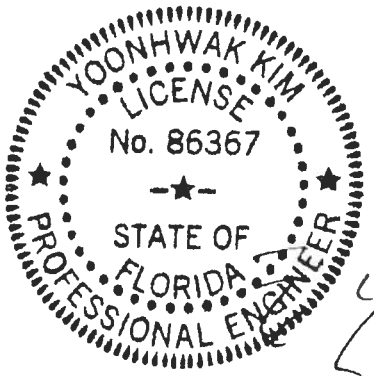
TC: -36 lb Conc. Load at 1.41
TC: 131 lb Conc. Load at 4.24
TC: 271 lb Conc. Load at 7.07
BC: 40 lb Conc. Load at 1.41
BC: 120 lb Conc. Load at 4.24
BC: 200 lb Conc. Load at 7.07

Wind
Wind loads and reactions based on MWFRS.

Additional Notes
Refer to General Notes for additional information

The overall height of this truss excluding overhang is 6-0-1.

Provide (3) 16d common 0.162"x3.5", toe-nails at TC.
Provide (3) 16d common 0.162"x3.5", toe-nails at BC.



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10/28/2019

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AN ITW COMPANY
6750 Forum Drive
Suite 305
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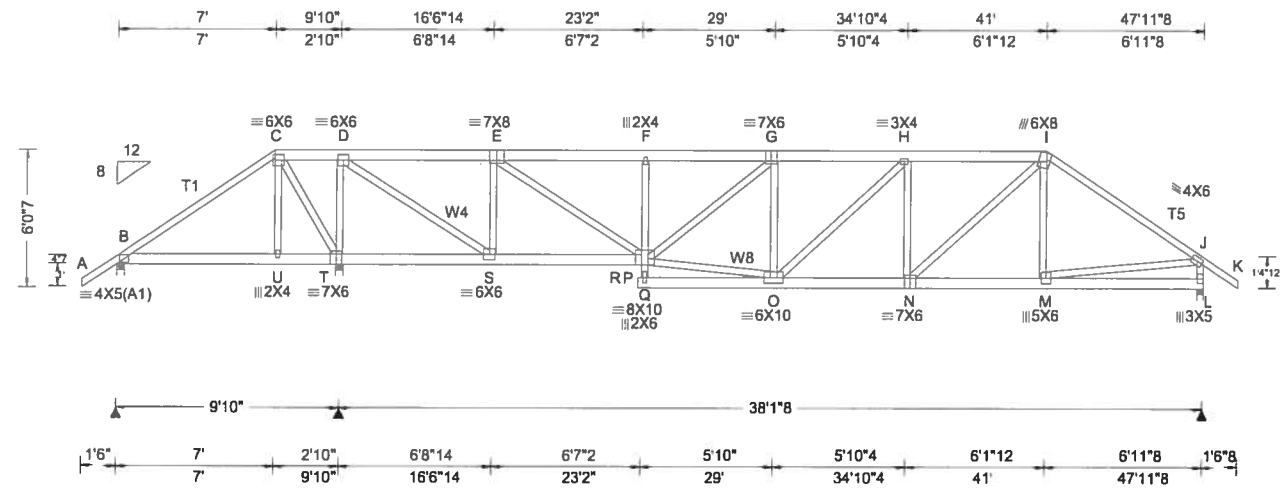
SEQN: 564928 COMN FROM: CDM Page 1 of 2	Ply: 2 Qty: 1	**Job Number:** 19-3660 /Powell Residence /SPARKS CONST. **Truss Label:** A01	Cust: R 215 JRef: 1WPQ2150004 T36 DrwNo: 301.19.1532.32953 / YK 10/28/2019	

2 Complete Trusses Required



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00	Wind Std: ASCE 7-10	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.153 G 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.313 G 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.031 J - -
Des Ld: 40.00	EXP: C Kzt: NA	**Code / Misc Criteria**	HORZ(TL): 0.065 J - -
NCBCLL: 0.00	Mean Height: 15.00 ft	Bldg Code: FBC 2017 RES	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	TPI Std: 2014	Max TC CSI: 0.531
Load Duration: 1.25	BCDL: 5.0 psf	Rep Fac: No	Max BC CSI: 0.211
Spacing: 24.0 "	MWFRS Parallel Dist: 0 to h/2	FT/RT:20(0)/10(0)	Max Web CSI: 0.790
	C&C Dist a: 4.80 ft	Plate Type(s):	
	Loc. from endwall: NA	WAVE	VIEW Ver: 18.02.01B.0321.08
	GCpi: 0.18		
	Wind Duration: 1.60		

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	-	/-	/-	/-	/-	/-
T	5750	/-	/-	/-	/743	/-
L	3712	/-	/-	/-	/79	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
T Brg Width = 4.0 Min Req = 2.4
L Brg Width = 3.5 Min Req = 1.5
Bearings B, T, & L are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	388	- 108	F - G	0	- 3544
C - D	673	- 173	G - H	0	- 3287
D - E	0	- 1905	H - I	0	- 3056
E - F	0	- 3556	I - J	15	- 2563

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
T - S	162	- 567	O - N	3087	0
S - P	1990	0	N - M	2093	0

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - T	193	- 778	G - O	10	- 569
T - D	152	- 1885	H - N	1	- 615
D - S	2723	- 93	N - I	1316	0
S - E	38	- 1333	M - J	2074	0
E - P	1941	- 17	J - L	54	- 1825
P - O	3264	0			

Lumber

Top chord: 2x6 SP 2400f-2.0E; T1,T5 2x4 SP #2;
Bot chord: 2x6 SP 2400f-2.0E;
Webs: 2x4 SP #3; W4,W8 2x4 SP #2;

Nailnote

Nail Schedule:0.128"x3", min. nails
Top Chord: 1 Row @12.00" o.c.
Bot Chord: 1 Row @12.00" o.c.
Webs : 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails in each row to avoid splitting.

Wind

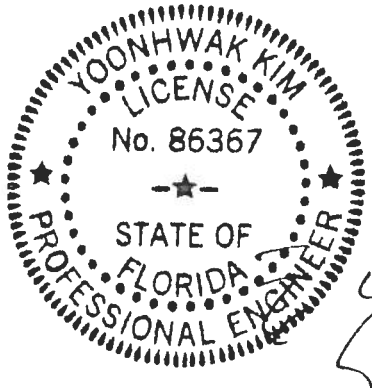
Wind loads and reactions based on MWFRS.

Additional Notes

Refer to General Notes for additional information

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 5-0-7.



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Orlando FL, 32821

Special Loads

-----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From	60 plf at	-1.50 to	60 plf at	13.06	
TC: From	30 plf at	13.06 to	30 plf at	41.00	
TC: From	60 plf at	41.00 to	60 plf at	49.50	
BC: From	5 plf at	-1.50 to	5 plf at	0.00	
BC: From	20 plf at	0.00 to	20 plf at	13.06	
BC: From	10 plf at	13.06 to	10 plf at	40.97	
BC: From	20 plf at	40.97 to	20 plf at	47.96	
BC: From	5 plf at	47.96 to	5 plf at	49.50	

TC: 257 lb Conc. Load at 7.03

TC: 181 lb Conc. Load at 9.06

TC: 91 lb Conc. Load at 13.06,15.06,17.06,19.06 21.06

TC: 200 lb Conc. Load at 23.06,24.94,26.94,28.94 30.94,32.94,34.94,36.94,38.94

TC: 294 lb Conc. Load at 40.97

BC: 466 lb Conc. Load at 7.03

BC: 129 lb Conc. Load at 9.06,13.06,15.06,17.06 19.06,21.06

BC: 275 lb Conc. Load at 11.06

BC: 160 lb Conc. Load at 23.06,24.94,26.94,28.94 30.94,32.94,34.94,36.94,38.94

BC: 536 lb Conc. Load at 40.97

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10/28/2019

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Gable Stud Reinforcement Detail

ASCE 7-10: 140 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 1.00

Or: 120 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure C, Kzt = 1.00
Or: 120 mph Wind Speed, 15' Mean Height, Enclosed, Exposure D, Kzt = 1.00
Or: 100 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure D, 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	4' 3"	7' 3"	7' 7"	8' 7"	8' 11"	10' 3"	10' 8"	13' 6"	14' 0"	14' 0"	14' 0"
		#3	4' 1"	6' 7"	7' 1"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
		Stud	4' 1"	6' 7"	7' 0"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
		Standard	4' 1"	5' 8"	6' 0"	7' 7"	8' 1"	10' 1"	10' 6"	11' 10"	12' 8"	14' 0"	14' 0"
	SP DFL	#1	4' 6"	7' 4"	7' 8"	8' 8"	9' 0"	10' 4"	10' 9"	13' 8"	14' 0"	14' 0"	14' 0"
		#2	4' 3"	7' 3"	7' 7"	8' 7"	8' 11"	10' 3"	10' 8"	13' 6"	14' 0"	14' 0"	14' 0"
		#3	4' 2"	6' 0"	6' 4"	7' 11"	8' 6"	10' 2"	10' 7"	12' 5"	13' 4"	14' 0"	14' 0"
		Stud	4' 2"	6' 0"	6' 4"	7' 11"	8' 6"	10' 2"	10' 7"	12' 5"	13' 4"	14' 0"	14' 0"
		Standard	4' 0"	5' 3"	5' 7"	7' 0"	7' 6"	9' 6"	10' 2"	11' 0"	11' 10"	14' 0"	14' 0"
16" o.c.	SPF HF	#1 / #2	4' 11"	8' 4"	8' 8"	9' 10"	10' 3"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 8"	8' 1"	8' 8"	9' 8"	10' 1"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	4' 8"	8' 1"	8' 6"	9' 8"	10' 1"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	4' 8"	6' 11"	7' 5"	9' 3"	9' 11"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
	SP DFL	#1	5' 1"	8' 5"	8' 9"	9' 11"	10' 4"	11' 10"	12' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	4' 11"	8' 4"	8' 8"	9' 10"	10' 3"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 9"	7' 4"	7' 9"	9' 9"	10' 2"	11' 8"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	4' 9"	7' 4"	7' 9"	9' 9"	10' 2"	11' 8"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	4' 8"	6' 5"	6' 10"	8' 7"	9' 2"	11' 7"	12' 1"	13' 6"	14' 0"	14' 0"	14' 0"
12" o.c.	SPF HF	#1 / #2	5' 5"	9' 2"	9' 6"	10' 10"	11' 3"	11' 8"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	5' 1"	9' 0"	9' 4"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	5' 1"	9' 0"	9' 4"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	5' 1"	8' 0"	8' 6"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
	SP DFL	#1	5' 8"	9' 3"	9' 8"	10' 11"	11' 4"	13' 0"	13' 6"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	5' 5"	9' 2"	9' 6"	10' 10"	11' 3"	12' 11"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	5' 1"	7' 5"	7' 11"	9' 11"	10' 7"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"

Bracing Group Species and Grades:

Group A:

Spruce-Pine-Fir	
#1 / #2	Standard
#3	Stud

Hem-Fir	
#2	Stud
#3	Standard

Douglas Fir-Larch
#3
Stud
Standard

Southern Pine***
#3
Stud
Standard

Group B:

Hem-Fir
#1 & Btr
#1

Douglas Fir-Larch
#1
#2

Southern Pine***
#1
#2

1x4 Braces shall be SRB (Stress-Rated Board).

***For 1x4 So. Pine use only Industrial 55 or Industrial 45 Stress-Rated Boards. Group B values may be used with these grades.

Gable Truss Detail Notes:

Wind Load deflection criterion is L/240.

Provide uplift connections for 55 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 "L" braces with 10d (0.128"x3.0" min) nails.

* 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.

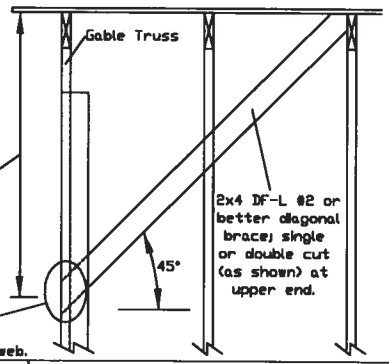
"L" bracing must be a minimum of 80% of web member length.

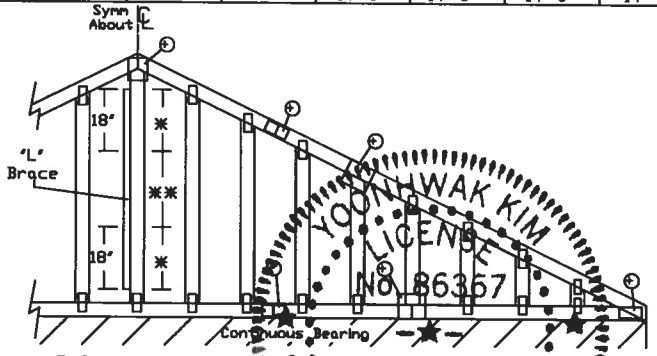
Gable Vertical Plate Sizes	
Vertical Length	No Splice
Less than 4' 0"	1X4 or 2X3
Greater than 4' 0"	3X4

+ Refer to common truss design for peak, splice, and heel plates.

Refer to the Building Designer for conditions not addressed by this detail.

Diagonal brace option: vertical length may be doubled when diagonal brace is used. Connect diagonal brace for 450# at each end. Max web total length is 14'.





Refer to chart above for max gable vertical length.

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MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF	ASCE7-10-GAB14015
DATE	10/01/14
DRWG	A14015ENC101014

CLR Reinforcing Member Substitution

This detail is to be used when a Continuous Lateral Restraint (CLR) is specified on a truss design but an alternative web reinforcement method is desired.

Notes:

This detail is only applicable for changing the specified CLR shown on single ply sealed designs to T-reinforcement or L-reinforecement or scab reinforcement.

Alternative reinforcement specified in chart below may be conservative. For minimum alternative reinforcement, re-run design with appropriate reinforcement type.

Use scabs instead of L- or T- reinforcement on webs with intersecting truss joints, such as K-web joints, that may interfere with proper application along the narrow face of the web.

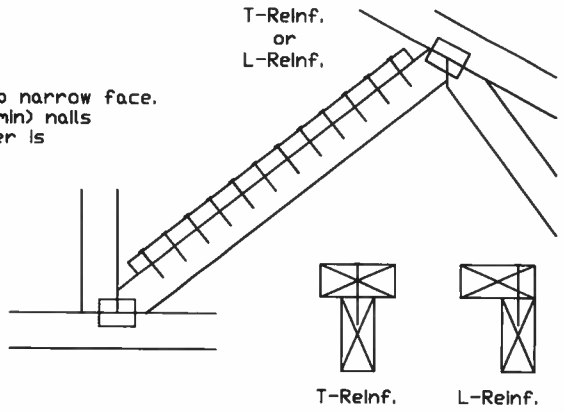
Web Member Size	Specified CLR Restraint	Alternative Reinforecement T- or L- Reinf.	Alternative Reinforecement Scab Reinf.
2x3 or 2x4	1 row	2x4	1-2x4
2x3 or 2x4	2 rows	2x6	2-2x4
2x6	1 row	2x4	1-2x6
2x6	2 rows	2x6	2-2x4 (X)
2x8	1 row	2x6	1-2x8
2x8	2 rows	2x6	2-2x6 (X)

T-reinforcement, L-reinforcement, or scab reinforcement to be same species and grade or better than web member unless specified otherwise on Engineer's sealed design.

(X) Center scab on wide face of web. Apply (1) scab to each face of web.

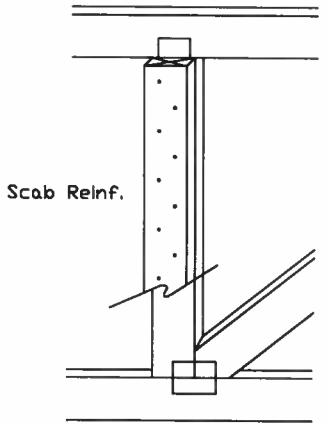
T-Reinforcement or L-Reinforcement:

Apply to either side of web narrow face. Attach with 10d (0.128"x3.0",min) nails at 6" o.c. Reinforcing member is a minimum 80% of web member length.



Scab Reinforcement:

Apply scab(s) to wide face of web. No more than (1) scab per face. Attach with 10d (0.128"x3.0",min) nails at 6" o.c. Reinforcing member is a minimum 80% of web member length.



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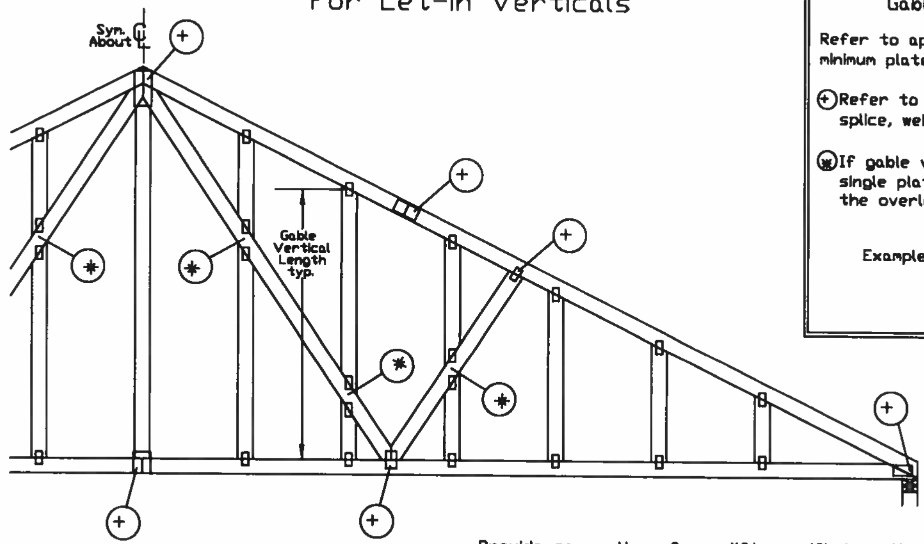
ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.org; ICC: www.iccsafe.org

TC LL	PSF	REF CLR Subst.
TC DL	PSF	DATE 01/02/19
BC DL	PSF	DRWG BRCLBSUB0119
BC LL	PSF	
TOT. LD.	PSF	
DUR. FAC.		
SPACING		

10/28/2019
FL REG# 278, Yoonhwak Kim, FL PE #86367

Gable Detail

For Let-In Verticals



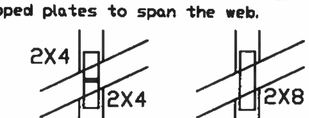
Gable Truss Plate Sizes

Refer to appropriate Alpine gable detail for minimum plate sizes for vertical studs.

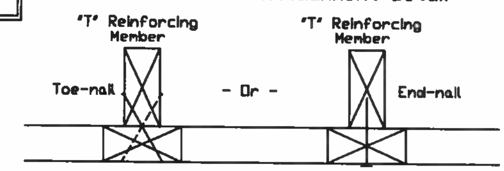
(+) Refer to Engineered truss design for peak, splice, web, and heel plates.

(*) 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 Alpine gable detail).

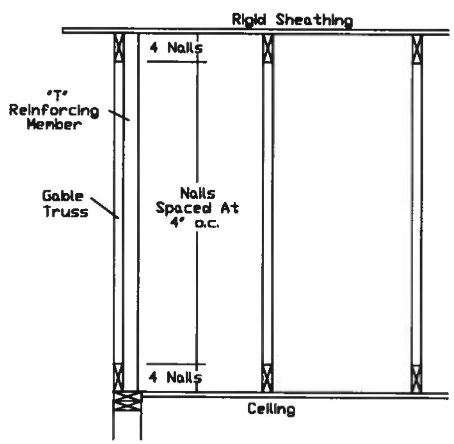
Maximum allowable "T" reinforced gable vertical length is 14' from top to bottom chord.

"T" reinforcing member material must match size, specie, and grade of the "L" reinforcing member.

Web Length Increase w/ "T" Brace

"T" Reinf. Mbr. Size	"T" Increase
2x4	30 %
2x6	20 %

Example:
ASCE 7-10 Wind Speed = 120 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) = 30% = 1.30
(1) 2x4 "L" Brace Length = 8' 7"
Maximum "T" Reinforced Gable Vertical Length
1.30 x 8' 7" = 11' 2"



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 the top and bottom chords.

Toenailed Nails:
10d Common (0.148"x3",min) Toenails at 4" o.c. plus
(4) toenails in the top and bottom chords.

This detail to be used with the appropriate Alpine gable detail for ASCE wind load.

ASCE 7-05 Gable Detail Drawings
A13015051014, A12015051014, A11015051014, A10015051014, A14015051014,
A13030051014, A12030051014, A11030051014, A10030051014, A14030051014

ASCE 7-10 & ASCE 7-16 Gable Detail Drawings
A11515ENC100118, A12015ENC100118, A14015ENC100118, A16015ENC100118,
A18015ENC100118, A20015ENC100118, A20015END100118, A20015PED100118,
A11530ENC100118, A12030ENC100118, A14030ENC100118, A16030ENC100118,
A18030ENC100118, A20030ENC100118, A20030END100118, A20030PED100118,
S11515ENC100118, S12015ENC100118, S14015ENC100118, S16015ENC100118,
S18015ENC100118, S20015ENC100118, S20015END100118, S20015PED100118,
S11530ENC100118, S12030ENC100118, S14030ENC100118, S16030ENC100118,
S18030ENC100118, S20030ENC100118, S20030END100118, S20030PED100118

See appropriate Alpine gable detail for maximum unreinforced gable vertical length.

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ALPINE AN ITW COMPANY
13723 Riverport Drive
Suite 200
Maryland Heights, MO 63043

YOONHWAK KIM No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

10/28/2019
FL REG# 278, Yoonhwak Kim, FL PE #86367

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

REF	LET-IN VERT
DATE	01/02/2018
DRWG	GBLLETIN0118

Piggyback Detail - ASCE 7-10: 160 mph, 30' Mean Height, Enclosed, Exposure C, Kzt=1.00

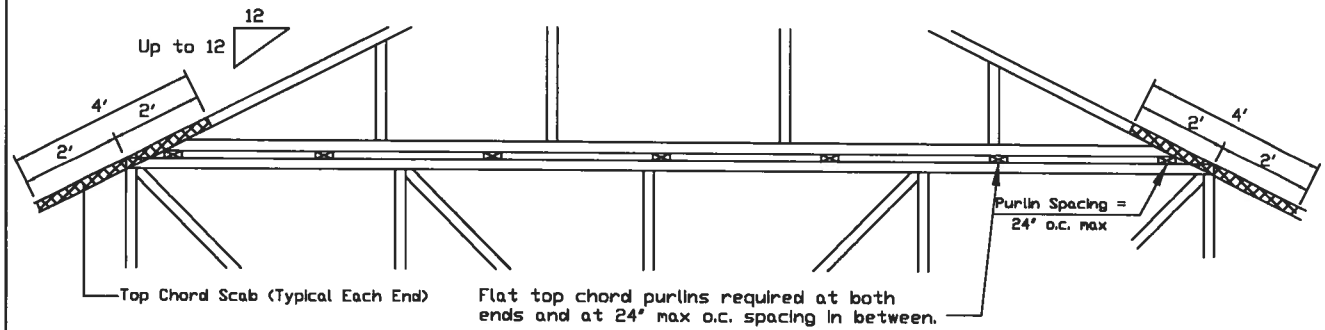
160 mph Wind, 30.00 ft Mean Hgt, ASCE 7-10, Enclosed Bldg. located anywhere in roof, Exp C, Wind DL= 5.0 psf (min), Kzt=1.0.
Or 140 mph wind, 30.00 ft Mean Hgt, ASCE 7-10, Enclosed Bldg. located anywhere in roof, Exp D, wind DL= 5.0 psf (min), Kzt=1.0.

Note: Top chords of trusses supporting piggyback cap trusses must be adequately braced by sheathing or purlins. The building Engineer of Record shall provide diagonal bracing or any other suitable anchorage to permanently restrain purlins, and lateral bracing for out of plane loads over gable ends.

Maximum truss spacing is 24" o.c. detail is not applicable if cap supports additional loads such as cupola, steeple, chimney or drag strut loads.

** Refer to Engineer's sealed truss design drawing for piggyback and base truss specifications.

Detail A : Purlin Spacing = 24" o.c. or less



Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") and secure top chord with 2x4 #3 grade scab (1 side only at each end) attached with 2 rows of 10d box nails (0.128"x3") at 4' o.c.

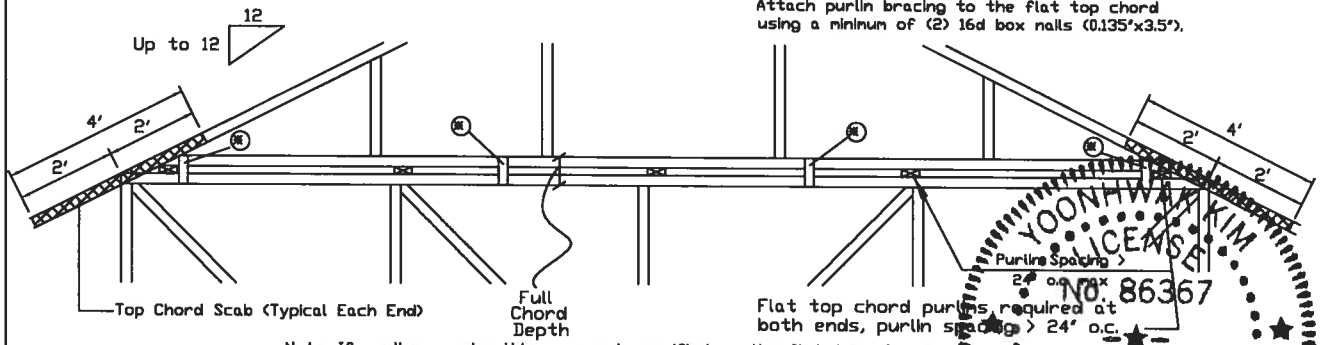
Attach purlin bracing to the flat top chord using (2) 16d box nails (0.135"x3.5").

The top chord #3 grade 2x4 scab may be replaced with either of the following: (1) 3X8 Trulox plate attached with (8) 0.120"x1.375" nails, (4) into cap TC & (4) into base truss TC or (1) 28PB wave piggyback plate plated to the piggyback truss TC and attached to the base truss TC with (4) 0.120"x1.375" nails. Note: Nailing thru holes of wave plate is acceptable.

Detail B : Purlin Spacing > 24" o.c.

Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") and secure top chord with 2x4 #3 grade scab (1 side only at each end) attached with 2 rows of 10d box nails (0.128"x3") at 4' o.c.

Attach purlin bracing to the flat top chord using a minimum of (2) 16d box nails (0.135"x3.5").



Note: If purlins or sheathing are not specified on the flat top of the base truss, purlins must be installed at 24" o.c. max. and use Detail A.

* In addition, provide connection with one of the following methods:

Trulox
Use 3X8 Trulox plates for 2x4 chord member, and 3X10 Trulox plates for 2x6 and larger chord members. Attach to each face @ 8" o.c. with (4) 0.120"x1.375" nails into cap bottom chord and (4) in base truss top chord. Trulox plates may be staggered 4" o.c. front to back faces.

APA Rated Gusset
8"x8"x7/16" (min) APA rated sheathing gussets (each face). Attach @ 8" o.c. with (8) 6d common (0.113"x2") nails per gusset, (4) in cap bottom chord and (4) in base truss top chord. Gussets may be staggered 4" o.c. front to back faces.

2x4 Vertical Scabs
2x4 SPF #2, full chord depth scabs (each face). Attach @ 8" o.c. with (6) 10d box nails (0.128"x3") per scab, (3) in cap bottom chord and (3) in base truss top chord. Scabs may be staggered 4" o.c. front to back faces.

28PB Wave Piggyback Plate
One 28PB wave piggyback plate to each face @ 8" o.c. Attach teeth to piggyback at time of fabrication. Attach to supporting truss with (4) 0.120"x1.375" nails per face per ply. Piggyback plates may be staggered 4" o.c. front to back faces.

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REF	PIGGYBACK
DATE	10/01/14
DRWG	PB160101014
SPACING	24.0"

10/28/2019
FL REG# 278, Yoonhwak Kim, FL PE #86367

Residential System Sizing Calculation

Summary

Project Title:
Powell Residence

, FL

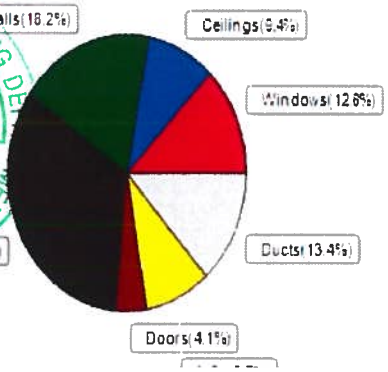
10/21/2019

Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(152 ft.) Temp Range(M) Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(51gr.)					
Winter design temperature(TMY3 99%)	30	F	Summer design temperature(TMY3 99%)	94	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	40	F	Summer temperature difference	19	F
Total heating load calculation	**33953**	**Btuh**	**Total cooling load calculation**	**26237**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	141.4	48000	Sensible (SHR = 0.85)	183.0	40800
Heat Pump + Auxiliary(0.0kW)	141.4	48000	Latent	182.6	7200
			Total (Electric Heat Pump)	182.9	48000

WINTER CALCULATIONS

Winter Heating Load (for 2494 sqft)

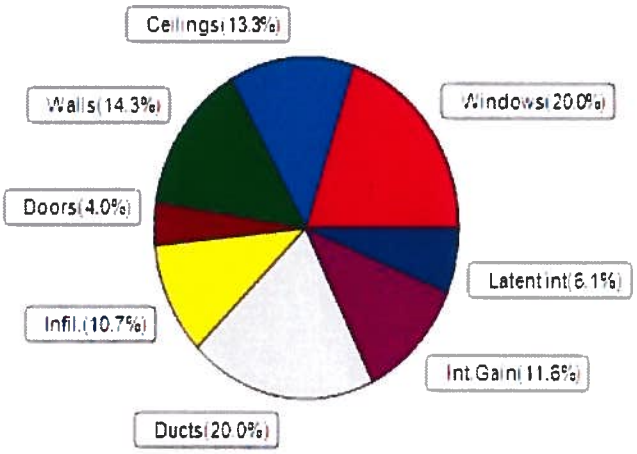
Load component			Load	
Window total	329	sqft	4343	Btuh
Wall total	1796	sqft	6192	Btuh
Door total	88	sqft	1408	Btuh
Ceiling total	2494	sqft	3177	Btuh
Floor total	2494	sqft	11328	Btuh
Infiltration	67	cfm	2956	Btuh
Duct loss			4549	Btuh
Subtotal			**33953**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**33953**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 2494 sqft)

Load component			Load	
Window total	329	sqft	5236	Btuh
Wall total	1796	sqft	3760	Btuh
Door total	88	sqft	1056	Btuh
Ceiling total	2494	sqft	3495	Btuh
Floor total			0	Btuh
Infiltration	51	cfm	1053	Btuh
Internal gain			3040	Btuh
Duct gain			4654	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			**22294**	**Btuh**
Latent gain(ducts)			595	Btuh
Latent gain(infiltration)			1747	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1600	Btuh
Total latent gain			**3943**	**Btuh**
TOTAL HEAT GAIN			**26237**	**Btuh**



8th Edition

EnergyGauge® System Sizing
PREPARED BY: _____
DATE: 10-21-19

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Project Title:
Powell Residence

, FL

10/21/2019

Reference City: Gainesville, FL Temperature Difference: 19.0F(TMY3 99%) Humidity difference: 51gr.

Component Loads for Whole House

Window	Type* Panes	SHGC	U	InSh	IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	2 NFRC	0.22, 0.33	No	No	N	1.5ft	1.3ft	30.0	0.0	30.0	11	11	327	Btuh
2	2 NFRC	0.22, 0.33	No	No	N	5.5ft	1.3ft	54.0	0.0	54.0	11	11	588	Btuh
3	2 NFRC	0.22, 0.33	No	No	E	13.5f	1.3ft	36.0	36.0	0.0	11	27	392	Btuh
4	2 NFRC	0.22, 0.33	No	No	N	15.5f	1.3ft	36.0	0.0	36.0	11	11	392	Btuh
5	2 NFRC	0.22, 0.33	No	No	E	1.5ft	1.3ft	30.0	0.0	30.0	11	27	824	Btuh
6	2 NFRC	0.22, 0.33	No	No	E	1.5ft	1.3ft	20.0	0.0	20.0	11	27	550	Btuh
7	2 NFRC	0.22, 0.33	No	No	S	9.5ft	1.3ft	18.0	18.0	0.0	11	13	196	Btuh
8	2 NFRC	0.22, 0.33	No	No	W	15.5f	1.3ft	6.0	6.0	0.0	11	27	65	Btuh
9	2 NFRC	0.22, 0.33	No	No	S	17.2f	1.3ft	13.3	13.3	0.0	11	13	145	Btuh
10	2 NFRC	0.22, 0.33	No	No	S	17.2f	1.3ft	6.7	6.7	0.0	11	13	73	Btuh
11	2 NFRC	0.22, 0.33	No	No	S	10.2f	1.3ft	36.0	36.0	0.0	11	13	392	Btuh
12	2 NFRC	0.22, 0.33	No	No	W	1.5ft	1.3ft	20.0	0.0	20.0	11	27	550	Btuh
13	2 NFRC	0.22, 0.33	No	No	W	1.5ft	1.3ft	8.0	0.0	8.0	11	27	220	Btuh
14	2 NFRC	0.22, 0.33	No	No	W	1.5ft	1.3ft	15.0	0.0	15.0	11	27	412	Btuh
	Excursion												108	Btuh
	Window Total								329 (sqft)				5236	Btuh

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	0.09	13.0/0.6	108.0	2.2	237 Btuh
2	Frame - Wood - Ext	0.09	13.0/0.6	39.0	2.2	86 Btuh
3	Frame - Wood - Ext	0.09	13.0/0.6	126.0	2.2	277 Btuh
4	Frame - Wood - Ext	0.09	13.0/0.6	60.7	2.2	133 Btuh
5	Frame - Wood - Ext	0.09	13.0/0.6	92.0	2.2	202 Btuh
6	Frame - Wood - Ext	0.09	13.0/0.6	111.0	2.2	244 Btuh
7	Frame - Wood - Ext	0.09	13.0/0.6	295.0	2.2	649 Btuh
8	Frame - Wood - Ext	0.09	13.0/0.6	132.0	2.2	290 Btuh
9	Frame - Wood - Ext	0.09	13.0/0.6	45.0	2.2	99 Btuh
10	Frame - Wood - Ext	0.09	13.0/0.6	40.0	2.2	88 Btuh
11	Frame - Wood - Ext	0.09	13.0/0.6	36.0	2.2	79 Btuh
12	Frame - Wood - Ext	0.09	13.0/0.6	84.0	2.2	185 Btuh
13	Frame - Wood - Adj	0.09	13.0/0.6	334.0	1.6	547 Btuh
14	Frame - Wood - Ext	0.09	13.0/0.6	179.0	2.2	394 Btuh
15	Frame - Wood - Ext	0.09	13.0/0.6	114.0	2.2	251 Btuh
	Wall Total			1796 (sqft)		3760 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	48.0	12.0	576 Btuh
2	Insulated - Exterior	20.0	12.0	240 Btuh
3	Insulated - Garage	20.0	12.0	240 Btuh
	Door Total	88 (sqft)		1056 Btuh

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/Light/Shingle	0.032	30.0/0.0	2494.0	1.40	3495 Btuh
	Ceiling Total			2494 (sqft)		3495 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	2494 (ft-perimeter)	0.0	0 Btuh
	Floor Total		2494.0 (sqft)		0 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Powell Residence

Climate:FL_GAINESVILLE_REGIONAL_A

, FL

10/21/2019

			Envelope Subtotal:			13547 Btuh
Infiltration	Type Natural	Average ACH 0.14	Volume(cuft) 22446	Wall Ratio 1	CFM= 50.6	Load 1053 Btuh
Internal gain		Occupants 8	Btuh/occupant X 230	+	Appliance 1200	Load 3040 Btuh
			Sensible Envelope Load:			17640 Btuh
Duct load			(DGMs vary for Mixed ducts)			4654 Btuh
			Sensible Load All Zones			**22294 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Powell Residence

Climate:FL_GAINESVILLE_REGIONAL_A

, FL

10/21/2019

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	**17640 Btuh**
	Sensible Duct Load	4654 Btuh
	Total Sensible Zone Loads	**22294 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
Whole House	**Total sensible gain**	**22294 Btuh**
Totals for Cooling	Latent infiltration gain (for 51 gr. humidity difference)	1747 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	595 Btuh
	Latent occupant gain (8.0 people @ 200 Btuh per person)	1600 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**3943 Btuh**
	TOTAL GAIN	**26237 Btuh**

EQUIPMENT

1. Central Unit	#	36000 Btuh
2. Central Unit	#	12000 Btuh

*Key: Window types (Panes - Number and type of panes of glass)
(SHGC - Shading coefficient of glass as SHGC numerical value)
(U - Window U-Factor)
(InSh - Interior shading device: none(No), Blinds(B), Draperies(D) or Roller Shades(R))
- For Blinds: Assume medium color, half closed
For Draperies: Assume medium weave, half closed
For Roller shades: Assume translucent, half closed
(IS - Insect screen: none(N), Full(F) or Half(½))
(Ornt - compass orientation)

Version 8

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Project Title:
Powell Residence
, FL Building Type: User

10/21/2019

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 40.0 F (TMY3 99%)

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft) X	HTM=	Load
1	2, NFRC 0.22	Vinyl	0.33	N	30.0	13.2	396 Btuh
2	2, NFRC 0.22	Vinyl	0.33	N	54.0	13.2	713 Btuh
3	2, NFRC 0.22	Vinyl	0.33	E	36.0	13.2	475 Btuh
4	2, NFRC 0.22	Vinyl	0.33	N	36.0	13.2	475 Btuh
5	2, NFRC 0.22	Vinyl	0.33	E	30.0	13.2	396 Btuh
6	2, NFRC 0.22	Vinyl	0.33	E	20.0	13.2	264 Btuh
7	2, NFRC 0.22	Vinyl	0.33	S	18.0	13.2	238 Btuh
8	2, NFRC 0.22	Vinyl	0.33	W	6.0	13.2	79 Btuh
9	2, NFRC 0.22	Vinyl	0.33	S	13.3	13.2	176 Btuh
10	2, NFRC 0.22	Vinyl	0.33	S	6.7	13.2	88 Btuh
11	2, NFRC 0.22	Vinyl	0.33	S	36.0	13.2	475 Btuh
12	2, NFRC 0.22	Vinyl	0.33	W	20.0	13.2	264 Btuh
13	2, NFRC 0.22	Vinyl	0.33	W	8.0	13.2	106 Btuh
14	2, NFRC 0.22	Vinyl	0.33	W	15.0	13.2	198 Btuh
	Window Total				329.0(sqft)		4343 Btuh

Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Frame - Wood	- Ext	(0.086)	13.0/0.6	108	3.45	372 Btuh
2	Frame - Wood	- Ext	(0.086)	13.0/0.6	39	3.45	134 Btuh
3	Frame - Wood	- Ext	(0.086)	13.0/0.6	126	3.45	435 Btuh
4	Frame - Wood	- Ext	(0.086)	13.0/0.6	61	3.45	209 Btuh
5	Frame - Wood	- Ext	(0.086)	13.0/0.6	92	3.45	317 Btuh
6	Frame - Wood	- Ext	(0.086)	13.0/0.6	111	3.45	383 Btuh
7	Frame - Wood	- Ext	(0.086)	13.0/0.6	295	3.45	1017 Btuh
8	Frame - Wood	- Ext	(0.086)	13.0/0.6	132	3.45	455 Btuh
9	Frame - Wood	- Ext	(0.086)	13.0/0.6	45	3.45	155 Btuh
10	Frame - Wood	- Ext	(0.086)	13.0/0.6	40	3.45	138 Btuh
11	Frame - Wood	- Ext	(0.086)	13.0/0.6	36	3.45	124 Btuh
12	Frame - Wood	- Ext	(0.086)	13.0/0.6	84	3.45	290 Btuh
13	Frame - Wood	- Adj	(0.086)	13.0/0.6	334	3.45	1152 Btuh
14	Frame - Wood	- Ext	(0.086)	13.0/0.6	179	3.45	617 Btuh
15	Frame - Wood	- Ext	(0.086)	13.0/0.6	114	3.45	393 Btuh
	Wall Total				1796(sqft)		6192 Btuh

Doors	Type	Storm	Ueff.	Area X	HTM=	Load
1	Insulated - Exterior,	n	(0.400)	48	16.0	768 Btuh
2	Insulated - Exterior,	n	(0.400)	20	16.0	320 Btuh
3	Insulated - Garage,	n	(0.400)	20	16.0	320 Btuh
	Door Total			88(sqft)		1408Btuh

Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
1	Vented Attic/L/Shing	(0.032)	30.0/0.0	2494	1.3	3177 Btuh
	Ceiling Total			2494(sqft)		3177Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Project Title:
Powell Residence
Building Type: User

, FL

10/21/2019

Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade	(1.180)	0.0	240.0 ft(perim.)	47.2	11328 Btuh
	Floor Total			2494 sqft		11328 Btuh
				Envelope Subtotal:		26448 Btuh
Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=	
	Natural	0.18	22446	1.00	67.5	2956 Btuh
Duct load				(DLM of Mixed ducts)		4549 Btuh
All Zones				**Sensible Subtotal All Zones**		**33953 Btuh**

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss	33953 Btuh
	Ventilation Sensible Heat Loss	0 Btuh
	Total Heat Loss	33953 Btuh

EQUIPMENT

1. Electric Heat Pump	#	36000 Btuh
2. Electric Heat Pump	#	12000 Btuh

Key: Window types - NFRC (Requires U-Factor and Shading coefficient(SHGC) of glass as numerical values)
or - Glass as 'Clear' or 'Tint' (Uses U-Factor and SHGC defaults)
U - (Window U-Factor)
HTM - (ManualJ Heat Transfer Multiplier)

Version 8

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 93

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1. New (From Plans)	
2. Single-family or multiple-family	2. Single-family	
3. No. of units (if multiple-family)	3. 1	
4. Number of bedrooms	4. 4	
5. Is this a worst case? (yes/no)	5. No	
6. Conditioned floor area (sq. ft.)	6. 2494	
7. Windows, type and area		
a) U-factor:(weighted average)	7a. 0.330	
b) Solar Heat Gain Coefficient (SHGC)	7b. 0.220	
c) Area	7c. 329.0	
8. Skylights		
a) U-factor:(weighted average)	8a. NA	
b) Solar Heat Gain Coefficient (SHGC)	8b. NA	
9. Floor type, insulation level:		
a) Slab-on-grade (R-value)	9a. 0.0	
b) Wood, raised (R-value)	9b.	
c) Concrete, raised (R-value)	9c.	
10. Wall type and insulation:		
A. Exterior:		
1. Wood frame (Insulation R-value)	10A1. 13.0	
2. Masonry (Insulation R-value)	10A2.	
B. Adjacent:		
1. Wood frame (Insulation R-value)	10B1. 13.0	
2. Masonry (Insulation R-value)	10B2.	
11. Ceiling type and insulation level		
a) Under attic	11a. 30.0	
b) Single assembly	11b.	
c) Knee walls/skylight walls	11c.	
d) Radiant barrier installed	11d. No	
12. Ducts, location & insulation level		
a) Supply ducts		R 6.0
b) Return ducts		R 6.0
c) AHU location		varies
13. Cooling system:		Capacity 48.0
a) Split system		SEER 14.0
b) Single package		SEER
c) Ground/water source		SEER/COP
d) Room unit/PTAC		EER
e) Other		21.0
14. Heating system:		Capacity 48.0
a) Split system heat pump		HSPF 8.5
b) Single package heat pump		HSPF
c) Electric resistance		COP
d) Gas furnace, natural gas		AFUE
e) Gas furnace, LPG		AFUE
f) Other		8.50
15. Water heating system		
a) Electric resistance		EF 0.92
b) Gas fired, natural gas		EF
c) Gas fired, LPG		EF
d) Solar system with tank		EF
e) Dedicated heat pump with tank		EF
f) Heat recovery unit		HeatRec%
g) Other		
16. HVAC credits claimed (Performance Method)		
a) Ceiling fans		Yes
b) Cross ventilation		No
c) Whole house fan		No
d) Multizone cooling credit		
e) Multizone heating credit		
f) Programmable thermostat		Yes

*Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

I certify that this home has complied with the Florida Building Code, Energy Conservation, through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL display card will be completed based on installed code compliant features.

Builder Signature:_____ Date:_____

Address of New Home: _____ City/FL Zip: __, FL

FORM R405-2017

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Powell Residence	Builder Name:	Sparks Construction
Street:		Permit Office:	Columbia County
City, State, Zip:	, FL ,	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Gainesville	County:	Columbia (Florida Climate Zone 2)

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Single-family
3. Number of units, if multiple family	1
4. Number of Bedrooms	4
5. Is this a worst case?	No
6. Conditioned floor area above grade (ft²)	2494
Conditioned floor area below grade (ft²)	0

7. Windows(329.0 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.33	329.00 ft²
SHGC:	SHGC=0.22	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
d. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		7.595 ft.
Area Weighted Average SHGC:		0.220

8. Floor Types (2494.0 sqft.)	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	2494.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types (2212.7 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1858.70 ft²
b. Frame - Wood, Adjacent	R=13.0	354.00 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types (2494.0 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=30.0	2494.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	R	ft²
a. Sup: Attic, Ret: Attic, AH: Garage	6	496.8
b. Sup: Bedroom 2, Ret: Bedroom 2, AH: Bedroom	6	1

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	36.0	SEER:14.00
b. Central Unit	12.0	SEER:21.00

13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	36.0	HSPF:8.50
b. Electric Heat Pump	12.0	HSPF:8.50

14. Hot water systems	
a. Electric	Cap: 40 gallons
	EF: 0.920
b. Conservation features	
None	
15. Credits	CF, Pstat

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

Glass/Floor Area: 0.132

Total Proposed Modified Loads: 61.22

Total Baseline Loads: 66.18

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: _____

DATE: 10-21-19

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT: _____

DATE: _____

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

GREAT SEAL OF THE STATE OF FLORIDA * IN GOD WE TRUST

BUILDING OFFICIAL: _____

DATE: _____

- Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.

- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).

- Compliance with a proposed duct leakage Qn requires a Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.030 Qn for whole house.

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Powell Residence	Bedrooms:	4	Address Type:	Street Address
Building Type:	User	Conditioned Area:	2494	Lot #	
Owner Name:		Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Sparks Construction	Rotate Angle:	0	Street:	
Permit Office:	Columbia County	Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	, FL ,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Gainesville	FL_GAINESVILLE_REGI	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	2274	20466
2	Block2	220	1980

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	2274	20466	Yes	6	3	1	Yes	Yes	Yes
2	Bedroom 2	220	1980	No	2	1	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	240 ft	0	2494 ft²	----	0.33	0.33	0.34

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Hip	Composition shingles	2998 ft²	0 ft²	Medium	N	0.85	No	0.9	No	0	33.7

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	2494 ft²	N	N

INPUT SUMMARY CHECKLIST REPORT

CEILING

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	30	Blown	2494 ft²	0.11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor	Below Grade%
____	1	N	Exterior	Frame - Wood	Bedroom 2	13	15	4	9		138.0 ft²	0.625	0.23	0.75	0
____	2	E	Exterior	Frame - Wood	Bedroom 2	13	4	4	9		39.0 ft²	0.625	0.23	0.75	0
____	3	N	Exterior	Frame - Wood	Main	13	18		10		180.0 ft²	0.625	0.23	0.75	0
____	4	E	Exterior	Frame - Wood	Main	13	9	8	10		96.7 ft²	0.625	0.23	0.75	0
____	5	N	Exterior	Frame - Wood	Main	13	14		10		140.0 ft²	0.625	0.23	0.75	0
____	6	N	Exterior	Frame - Wood	Main	13	16	4	9		147.0 ft²	0.625	0.23	0.75	0
____	7	E	Exterior	Frame - Wood	Main	13	38	4	9		345.0 ft²	0.625	0.23	0.75	0
____	8	S	Exterior	Frame - Wood	Main	13	16	8	9		150.0 ft²	0.625	0.23	0.75	0
____	9	W	Exterior	Frame - Wood	Main	13	5	8	9		51.0 ft²	0.625	0.23	0.75	0
____	10	S	Exterior	Frame - Wood	Main	13	8		10		80.0 ft²	0.625	0.23	0.75	0
____	11	E	Exterior	Frame - Wood	Main	13	4		9		36.0 ft²	0.625	0.23	0.75	0
____	12	S	Exterior	Frame - Wood	Main	13	13	4	9		120.0 ft²	0.625	0.23	0.75	0
____	13	SW	Garage	Frame - Wood	Main	13	39	4	9		354.0 ft²	0.625	0.23	0.75	0
____	14	W	Exterior	Frame - Wood	Main	13	23		9		207.0 ft²	0.625	0.23	0.75	0
____	15	W	Exterior	Frame - Wood	Bedroom 2	13	14	4	9		129.0 ft²	0.625	0.23	0.75	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
_____	1	N	Insulated	Main	None	.4	6		8		48 ft²
_____	2	S	Insulated	Main	None	.4	3		6	8	20 ft²
_____	3	SW	Insulated	Main	None	.4	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	N	1	Vinyl	Low-E Double	Yes	0.33	0.22	N	30.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	2	N	3	Vinyl	Low-E Double	Yes	0.33	0.22	N	54.0 ft²	5 ft 6 in	1 ft 4 in	None	None
_____	3	E	4	Vinyl	Low-E Double	Yes	0.33	0.22	N	36.0 ft²	13 ft 6 in	1 ft 4 in	None	None
_____	4	N	6	Vinyl	Low-E Double	Yes	0.33	0.22	N	36.0 ft²	15 ft 6 in	1 ft 4 in	None	None
_____	5	E	7	Vinyl	Low-E Double	Yes	0.33	0.22	N	30.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	6	E	7	Vinyl	Low-E Double	Yes	0.33	0.22	N	20.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	7	S	8	Vinyl	Low-E Double	Yes	0.33	0.22	N	18.0 ft²	9 ft 6 in	1 ft 4 in	None	None
_____	8	W	9	Vinyl	Low-E Double	Yes	0.33	0.22	N	6.0 ft²	15 ft 6 in	1 ft 4 in	None	None
_____	9	S	10	Vinyl	Low-E Double	Yes	0.33	0.22	N	13.3 ft²	17 ft 2 in	1 ft 4 in	None	None
_____	10	S	10	Vinyl	Low-E Double	Yes	0.33	0.22	N	6.7 ft²	17 ft 2 in	1 ft 4 in	None	None
_____	11	S	12	Vinyl	Low-E Double	Yes	0.33	0.22	N	36.0 ft²	10 ft 2 in	1 ft 4 in	None	None
_____	12	W	14	Vinyl	Low-E Double	Yes	0.33	0.22	N	20.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	13	W	14	Vinyl	Low-E Double	Yes	0.33	0.22	N	8.0 ft²	1 ft 6 in	1 ft 4 in	None	None

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

WINDOWS

Orientation shown is the entered, Proposed orientation.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	14	W	15	Vinyl	Low-E Double	Yes	0.33	0.22	N	15.0 ft²	1 ft 6 in	1 ft 4 in	None	None

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
_____	1	560.3978778 ft²	560.3978778 ft²	70 ft	9 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000286	1870.5	102.69	193.12	.1128	5

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump/	Split	HSPF:8.5	36 kBtu/hr	1	sys#1
_____	2	Electric Heat Pump/	Through the Wall(Single)	HSPF:8.5	12 kBtu/hr	2	sys#2

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit/	Split	SEER: 14	36 kBtu/hr	1080 cfm	0.85	1	sys#1
_____	2	Central Unit/	Through the Wall(Single)	SEER: 21	12 kBtu/hr	360 cfm	0.85	2	sys#2

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	None	Garage	0.92	40 gal	70 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
_____	None	None			ft²		

DUCTS

√	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	HVAC # Cool
_____	1	Attic	6	496.8 ft	Attic	124.2 ft	Prop. Leak Free	Garage	-- cfm	68.2 cfm	0.03	0.50	1	1
_____	2	Bedroom 2	6	1 ft²	Bedroom 2	1 ft²	Prop. Leak Free	Bedroom 2	-- cfm	6.6 cfm	0.03	0.50	2	2

INPUT SUMMARY CHECKLIST REPORT

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]
Heating	[X]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]
Venting	[ ]	[ ]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[ ]

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	80	80	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	80	80	78	78	78	78	78	78	78	78
Heating (WD)	AM	65	65	65	65	65	65	65	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	65	65	65	65	65	65	65	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Main
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Bedroom 2