Columbia County New Building Permit Application

For Office Use Only Application # 44482 Date Received ________ By MG Permit # 39456/39457

Zoning Official LW Date 2-12-20 Flood Zone X Land Use RLD Zoning PRD

FEMA Map # ______ Elevation ______ MFE 118.2' River ______ Plans Examiner T.C. Date 3-2-20

Comments

□ NOC ☑ CITY □ EH ☑ Deed or PA ☑ Site Plan □ State Road Info ~~□ Well letter~~ ☑ 911 Sheet □ Parent Parcel # ______

□ Dev Permit # ______ □ In Floodway □ Letter of Auth. from Contractor ☑ F W Comp. letter

□ Owner Builder Disclosure Statement □ Land Owner Affidavit □ Ellisville Water ☑ App Fee Paid ☑ Sub VF Form

Septic Permit No. XCITY OR City Water ☑ Fax ______

Applicant (Who will sign/pickup the permit) LORA DAVID Phone 365-5671

Address P.O. BOX 1208 LAKE CITY, FL 32024

Owners Name THE PRESERVE AT LAUREL LAKE, INC. Phone 386-755-3117

911 Address 407 SILVER PALM DR. LAKE CITY, FL 32024

Contractors Name AARON SIMQUE HOMES, INC. Phone 386-867-5395

Address 601 SW ROSEMARY DR. LAKE CITY, FL 32024

Contractor Email AARON@AARONSIMQUE.COM-loridavid@yahoo.com ***Include to get updates on this job.

Fee Simple Owner Name & Address -------------

Bonding Co. Name & Address ------------ MARK DISOSWAY, 163 SW Midtown Pl #103 Lake City FL 32025

Architect/Engineer Name & Address RIDGEPOINT DESIGN-496 SW RING CT LAKE CITY FL 32025

Mortgage Lenders Name & Address Renasant Bank 3295 Inner Perimeter Rd Valdosta, Ga 31602

Circle the correct power company ☑ FL Power & Light □ Clay Elec. □ Suwannee Valley Elec. □ Duke Energy

Property ID Number 03-4S-16-02731-082/083 Estimated Construction Cost 280K

Subdivision Name PRESERVE AT LAUREL LAKE Lot 82/83 Block ______ Unit 1 Phase ______

Driving Directions from a Major Road HWY 90 W, TURN LEFT ONTO 252B THEN RIGHT ONTO ROSEMARY DRIVE. AT DEAD END TURN RIGHT ONTO SILVER PALM DR. LOT IS THE 10TH ON RIGHT

Construction of SFR ______ Commercial OR X Residential

Proposed Use/Occupancy SFR Number of Existing Dwellings on Property 0

Is the Building Fire Sprinkled? ______ If Yes, blueprints included ______ Or Explain ______

Circle Proposed □ Culvert Permit or ☑ Culvert Waiver or □ D.O.T. Permit or □ Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 25.5 Side 50.7 Side 49 Rear 49

Number of Stories 2 Heated Floor Area 3367 Total Floor Area 4619 Acreage .50

Zoning Applications applied for (Site & Development Plan, Special Exception, etc.) ______

Ut-Emailed Lora & Michelle 3/2 ... $1900.42

Columbia County Building Permit Application

CODE: Florida Building Code 2014 and the 2011 National Electrical Code.

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

TIME LIMITATIONS 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 pursued in good faith or a permit has been issued.

TIME LIMITATIONS OF PERMITS: Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time work is commenced. A valid permit receives an approved inspection every 180 days. Work shall be considered not suspended, abandoned or invalid when the permit has received an approved inspection within 180 days of the previous approved inspection.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment: According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO CONTRACTOR AND AGENT: ***YOU ARE HEREBY NOTIFIED*** as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

OWNERS CERTIFICATION: I CERTIFY THAT ALL THE FOREGOING INFORMATION IS ACCURATE AND THAT ALL WORK WILL BE DONE IN COMPLIANCE WITH ALL APPLICABLE LAWS REGULATING CONSTRUCTION AND ZONING.

NOTICE TO OWNER: There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. You must verify if your property is encumbered by any restrictions or face possible litigation and or fines.

Aaron Simque
Print Owners Name

Owners Signature

****Property owners must sign here before any permit will be issued.**

****If this is an Owner Builder Permit Application then, ONLY the owner can sign the building permit when it is issued.**

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit including all application and permit time limitations.

Contractor's Signature

Contractor's License Number RR 28281187 9
Columbia County Competency Card Number 000713

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 7 **day of** February **20**20.

Personally known N **or Produced Identification**

Cristin Ashe
State of Florida Notary Signature (For the Contractor)

SEAL:

CRISTIN ASHE
MY COMMISSION # GG 361461
EXPIRES: October 18, 2023
Bonded Thru Notary Public Underwriters

DANIEL & GORE, LLC
Professional Surveying and Mapping
P.O. BOX 1601
LAKE CITY, FL 32056
PH.: (386) 208-4176
Fax: (904) 339-9229
429 SW COMMERCE BLVD
SUITE 130-N
LAKE CITY, FL 32025
Email: sdaniel@dgsurveying.com
LICENSE NO. LB 7583

NOTES:

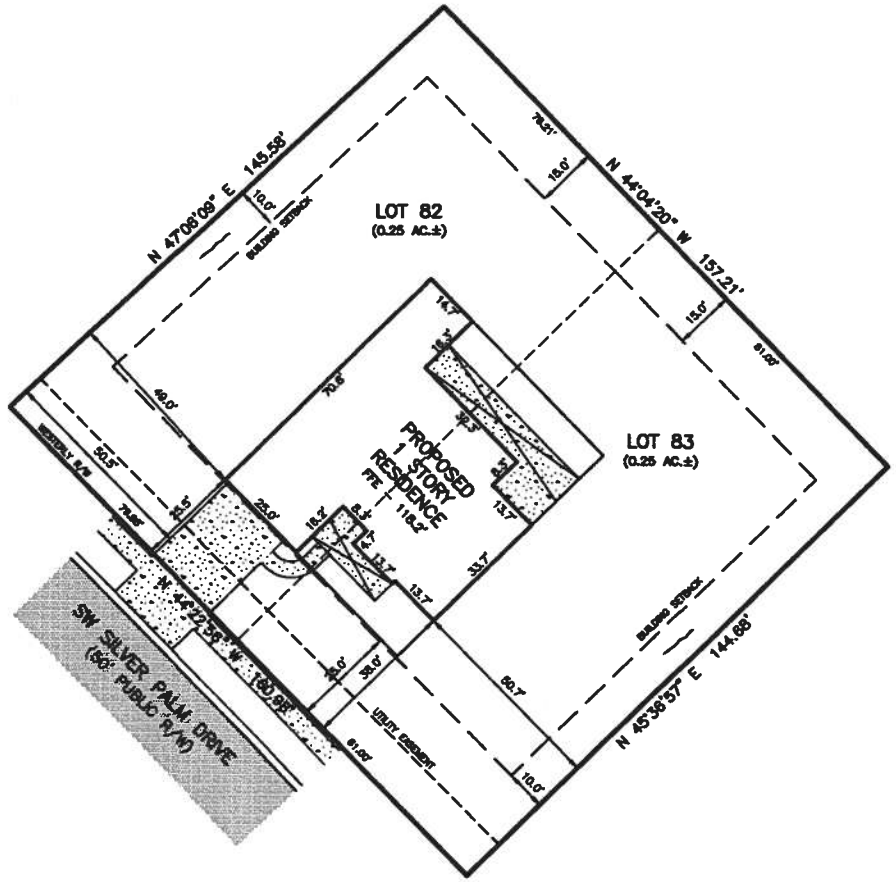
1. BEARINGS ARE BASED ON THE NORTH RIGHT OF WAY LINE OF SW MAPLE PLACE, BEING N 44°22'56" W, ASSUMED.
2. THE PURPOSE OF THIS SURVEY IS TO SHOW PROPOSED IMPROVEMENTS IN RELATION TO LOT LINES.
3. NO ATTEMPT WAS MADE BY THIS SURVEY TO DETERMINE IF THE SUBJECT PROPERTY LIES WITHIN A FLOOD PRONE AREA.
4. RESIDENCE TO BE ON A COMMUNITY WATER AND SEWER SYSTEM.

SPECIFIC PURPOSE SURVEY

SITE PLAN OF
LOTS 82 AND 83, PRESERVE AT
LAUREL LAKE, UNIT 1
SECTION 3, TWP 3-S, RNG 16-E
COLUMBIA COUNTY, FLORIDA

DESCRIPTION

LOTS 82 AND 83, PRESERVE AT LAUREL LAKE, UNIT 1, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 9, PAGE 19-25 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.



LEGEND

- ○ DENOTES 5/8" IRON ROD & CAP SET (LB7583)
- ● DENOTES IRON PIPE OR REBAR FOUND (5/8")
- □ DENOTES 4"x4" CONCRETE MONUMENT SET (LB7583)
- ■ DENOTES 4"x4" CONCRETE MONUMENT FOUND
- ◎ DENOTES NAIL & DISC FOUND
- NO ID - NO IDENTIFICATION
- FND - FOUND
- CM - CONCRETE MONUMENT
- ± - MORE OR LESS
- ORB - OFFICIAL RECORDS BOOK
- PG - PAGE (S)
- (P) - PLAT
- (D) - DEED
- (C) - CALCULATED
- (M) - MEASURED
- AC. - ACRE(S)
- POB - POINT OF BEGINNING
- POC - POINT OF COMMENCEMENT
- EOP - EDGE OF PAVEMENT
- EOG - EDGE OF GRADE
- N - NORTH
- E - EAST
- S - SOUTH
- W - WEST
- ⦻ - TELEPHONE PEDESTAL
- PC - POINT OF CURVATURE
- PI - POINT OF INTERSECTION
- PT - POINT OF TANGENCY
- IP - IRON PIPE
- IPC - IRON PIPE and CAP
- IR - IRON ROD
- IRC - IRON ROD and CAP
- R - RADIUS
- T - TANGENT
- L - ARC LENGTH
- Δ - CENTRAL ANGLE
- CH - CHORD BEARING & DISTANCE
- R/W - RIGHT OF WAY
- TWP - TOWNSHIP
- RNG - RANGE
- X——X DENOTES FENCE
- E—E DENOTES OVERHEAD ELECTRIC
- -O- POWER POLE
- CONCRETE

SCALE: 1" = 30'

0 30 60 90

SURVEY FOR: AARON SIMQUE HOMES

01/30/2020
DATE OF CERTIFICATE

//
DATE OF FIELD SURVEY

BRIAN SCOTT DANIEL, PSM
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. 6449

SURVEY VALID ONLY ON THE DATE OF FIELD SURVEY SHOWN HEREON. NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF THE FLORIDA LICENSED SURVEYOR AND MAPPER.

JOB NUMBER:	200031
APPROVED:	BSD
DRAWN BY:	BC
FIELD BOOK:	: EFB
SHEET NO.	1 OF 1

Legend

Columbia County, FLA - Building & Zoning Property Map

Printed: Wed Feb 12 2020 14:45:05 GMT-0500 (Eastern Standard Time)

Parcel Information

Parcel No: 03-4S-16-02731-082

Owner: CORNERSTONE HOMES OF

Subdivision: PRESERVE AT LAUREL LAKE UNIT 1

Lot: 82

Acres: 0.26124534

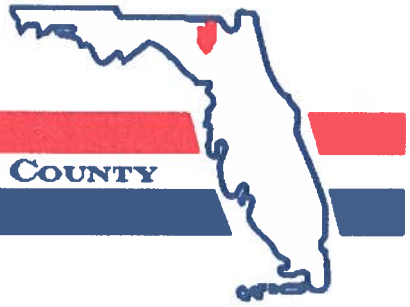
Deed Acres:

District: District 3 Bucky Nash

Future Land Uses: Residential - Low

Flood Zones:

Official Zoning Atlas: PRD



BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY

Address Assignment and Maintenance Document

To maintain the county wide Addressing Policy you must make application for a 9-1-1 Address at the time you apply for a building permit. The established standards for addressing and posting numbers to all principal buildings, dwellings, businesses and industries are contained in Columbia County Ordinance 2001-9. The addressing system is to enable Emergency Services Agencies to locate you in an emergency, and to assist the United States Postal Service and the public in the timely and efficient provision of services to residents and businesses of Columbia County

Date/Time Issued:	**2/6/2020 9:15:43 PM**
Address:	**407 SW SILVER PALM Dr**
City:	**LAKE CITY**
State:	**FL**
Zip Code	**32024**
Parcel ID	**02731-082**

REMARKS: Address Verification.

NOTICE: THIS ADDRESS WAS ISSUED BASED ON LOCATION AND ACCESS INFORMATION RECEIVED FROM THE REQUESTER. SHOULD, AT A LATER DATE, THE LOCATION AND/OR ACCESS INFORMATION BE FOUND TO BE IN ERROR OR CHANGED, THIS ADDRESS IS SUBJECT TO CHANGE.

Address Issued By: **Signed:/ Matt Crews**

Columbia County GIS/911 Addressing Coordinator

COLUMBIA COUNTY
911 ADDRESSING / GIS DEPARTMENT

263 NW Lake City Ave., Lake City, FL 32055 Telephone: (386) 758-1125
Email: gis@columbiacountyfla.com

Inst. Number: 202012000776 Book: 1402 Page: 2754 Page 1 of 1 Date: 1/9/2020 Time: 4:48 PM
P.DeWitt Cason Clerk of Courts, Columbia County, Florida Doc Mort: 0.00 Int Tax: 0.00 Doc Deed: 0.00

Prepared by and return to:
Cornerstone Homes of Lake City
PO Box 1208
Lake City, FL 32056

Folio Number: 03-4S-16-02731-082, 03-4S-16-02731-083

THIS WARRANTY DEED made this 8 day of January, 2020 by Cornerstone Homes of Lake City, Inc., a Florida Corporation, whose post office address is PO Box 1208, Lake City, FL 32056, hereinafter called the Grantor, to The Preserve at Laurel Lake, Inc., a Florida Corporation, whose post office address is PO Box 1208, Lake City, FL 32056 hereinafter called the Grantee.

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations).

WITNESSETH: That the grantor, for and in consideration of the sum of TEN AND 00/100'S ($10.00) Dollars, and other variable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situated in Columbia County, Florida, viz:

LOT 82 and LOT 83, PRESERVE AT LAUREL LAKE UNIT 1, as per the plat thereof recorded in Plat Book 9, Page 19, of the Public Records of Columbia County, Florida

SUBJECT TO restrictions, reservations, easements and limitations of record, if any, provided that this shall not serve to reimpose same, zoning ordinances, and taxes for the current year and subsequent years.

TOGETHER with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; and hereby warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except as mentioned above.

IN WITNESS WHEREOF, the said grantor has signed and sealed the day and year first above written.

Signed, sealed and delivered in the presence of:

Cristin Ashe
Witness
Print Name Cristin Ashe

Stacy Cady
Witness
Print Name Stacy Cady

Cornerstone Homes of Lake City, Inc.
Scott Stewart, President

STATE OF: FLORIDA
COUNTY OF: COLUMBIA

The foregoing instrument was acknowledged before me this 8 day of Janauary, 2020 by Scott Stewart, as President of Cornerstone Homes of Lake City, Inc, A Florida Corporation, who is/are personally known to me or has/have produced _____ as identification and who did not take an oath.

Notary Public

Michelle Monahan
Printed Notary Name

(SEAL)

Notary Public State of Florida
Michelle Monahan
My Commission GG 358800
Expires 11/20/2023

Detail by Entity Name

Florida Profit Corporation

THE PRESERVE AT LAUREL LAKE, INC.

Filing Information

Document Number	P14000092433
FEI/EIN Number	47-2334288
Date Filed	11/13/2014
State	FL
Status	ACTIVE

Principal Address

426 SW COMMERCE DRIVE, SUITE 130
LAKE CITY, FL 32025

Mailing Address

426 SW COMMERCE DRIVE, SUITE 130
LAKE CITY, FL 32025

Registered Agent Name & Address

STEWART, SCOTT D
426 SW COMMERCE DRIVE, SUITE 130
LAKE CITY, FL 32025

Officer/Director Detail

Name & Address

Title President

Stewart, Scott
P O Box 1208
Lake City, FL 32056

Title VP

Simque, Aaron
333 SW Rosemary Drive
Lake City, FL 32024

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.) ____ Total (Sq. Ft.) under roof	**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	YES
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	YES
26	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 and chapter 24 of FBCR)	YES
27	Show stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails	YES
28	Identify accessibility of bathroom (see FBCR SECTION 320)	YES

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

FBCR 403: Foundation Plans

YES / NO / N/A

Select From the Dropbox

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.	YES
32	Assumed load-bearing valve of soil _____ Pound Per Square Foot	YES
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	YES

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	YES

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	YES
45	Show required amount of ventilation opening for under-floor spaces	YES
46	Show required covering of ventilation opening	YES
47	Show the required access opening to access to under-floor spaces	YES
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	
74	Attic space	YES
75	Exterior wall cavity	YES
76	Crawl space	YES
		YES

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	YES
83	Reservoir pressure tank gallon capacity	YES
84	Rating of cycle stop valve if used	YES

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.	N/A

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		
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	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	YES		
96	**City of Lake City** A City Water and/or Sewer letter. Call 386-752-2031	YES		
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.	YES		
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		

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.

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	PGT IND.	EXTERIOR DOORS	FL253-R12
B. SLIDING			
C. SECTIONAL/ROLL UP	OVERHEAD DOORS	GARAGE DOOR	FL742-R6
D. OTHER			
2. WINDOWS			
A. SINGLE/DOUBLE HUNG	PGT IND.	SH WINDOWS	FL239-R19
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING	JAMES HARDI	HARDIBOARD SIDING	FLB192-R2
B. SOFFITS			
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES	TAMKO	ASPHALT SHINGLES	FL1956-R8
B. NON-STRUCTURAL METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCTURAL COMPONENTS			
A. WOOD CONNECTORS			
B. WOOD ANCHORS			
C. TRUSS PLATES			
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 Date NOTES: _____

CITY OF LAKE CITY
Florida's Gateway Est. 1859

App # 44482

February 11, 2020

Cornerstone Homes of Lake City, Inc.
426 SW Commerce Dr.
Suite 130
Lake City, FL 32025

RE: Service Availability Letter

To Whom It May Concern,

Thank you for your inquiry regarding the availability of city utilities. The City of Lake City has potable water and sanitary sewer available to tap into at 391 SW Silver Palm Dr., Parcel 03-4S-16-02731-083.

This availability response does not represent the City of Lake City's commitment for or reservation of capacity. In accordance with the City of Lake City's policies and procedures, commitment to serve is made only upon the City of Lake City's approval of your application for service and receipt of your payment for all applicable fees.

If you have any questions, please feel free to contact me at (386) 719-5786 during our normal business hours of 8:00 am to 4:30 pm, Monday through Friday. I will be happy to assist you.

Sincerely,

Shasta Pelham
Utility Service Coordinator

Brian Scott
Director of Distribution and Collections

SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # 44482 JOB NAME _____

THIS FORM MUST BE SUBMITTED BEFORE A PERMIT WILL BE ISSUED

Columbia County issues combination permits. One permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the general contractors permit.

***NOTE:** It shall be the responsibility of the general contractor to make sure that all of the subcontractors are licensed with the Columbia County Building Department.*
Use website to confirm licenses: http://www.columbiacountyfla.com/PermitSearch/ContractorSearch.aspx

***NOTE:** If this should change prior to completion of the project, it is your responsibility to have a corrected form submitted to our office, before that work has begun.*

Violations will result ' top work orders and/or fines.

			Need
ELECTRICAL ☑ CC# 811	Print Name RYAN BEVILLE	Signature	Lic / Liab / ~~W/C~~ / Ex / DE
	Company Name: RBI ELECTRICAL Contracting		
	License #: EC13004236	Phone #: 386 339 0360	
MECHANICAL/ A/C ☐ CC# [redacted]	Print Name [redacted]	Signature [redacted]	Lic / Liab / W/C / Ex / DE
	Company Name: [redacted]		
	License #: [redacted]	[redacted]	
PLUMBING/ GAS ☑ CC# 1023	Print Name MARK GANSKOP	Signature	Lic / Liab / W/C / Ex / DE
	Company Name: Express Plumbing		
	License #: CFC1428040	Phone #: 386-867-0269	
ROOFING ☑ CC# 1129	Print Name DANA Johnson	Signature	Lic / Liab / W/C / Ex / DE
	Company Name: MAC Johnson Roofing		
	License #: CCC1325497	Phone #:	
SHEET METAL ☐ CC#	Print Name	Signature	Lic / Liab / W/C / Ex / DE
	Company Name:		
	License #:	Phone #:	
FIRE SYSTEM/ SPRINKLER ☐ CC#	Print Name	Signature	Lic / Liab / W/C / Ex / DE
	Company Name:		
	License#:	Phone #:	
SOLAR ☐ CC#	Print Name	Signature	Lic / Liab / W/C / Ex / DE
	Company Name:		
	License #:	Phone #:	
STATE SPECIALTY ☐ CC#	Print Name	Signature	Lic / Liab / W/C / Ex / DE
	Company Name:		
	License #:	Phone #:	

Ref: F.S. 440.103; ORD. 2016-30

SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # 44482 JOB NAME

THIS FORM MUST BE SUBMITTED BEFORE A PERMIT WILL BE ISSUED

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NOTE: *It shall be the responsibility of the general contractor to make sure that all of the subcontractors are licensed with the Columbia County Building Department.*
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NOTE: If this should change prior to completion of the project, it is your responsibility to have a corrected form submitted to our office, before that work has begun.

Violations will result in stop work orders and/or fines.

		Need
ELECTRICAL ☐ CC#_____	Print Name_____ Signature_____ Company Name:_____ License #:_____ Phone #:_____	Lic Liab W/C EX DE
MECHANICAL/ A/C X ☒ CC# 1762	Print Name Steve Brisbois Signature Company Name: Arctic A/C Services Heating & Air License #: CAC 1815182 Phone #: 386-688-4707	Lic Liab W/C EX DE
PLUMBING/ GAS ☐ CC#_____	Print Name_____ Signature_____ Company Name:_____ License #:_____ Phone #:_____	Lic Liab W/C EX DE
ROOFING ☐ CC#_____	Print Name_____ Signature_____ Company Name:_____ License #:_____ Phone #:_____	Lic Liab W/C EX DE
SHEET METAL ☐ CC#_____	Print Name_____ Signature_____ Company Name:_____ License #:_____ Phone #:_____	Lic Liab W/C EX DE
FIRE SYSTEM/ SPRINKLER ☐ CC#_____	Print Name_____ Signature_____ Company Name:_____ License#:_____ Phone #:_____	Lic Liab W/C EX DE
SOLAR ☐ CC#_____	Print Name_____ Signature_____ Company Name:_____ License #:_____ Phone #:_____	Lic Liab W/C EX DE
STATE SPECIALTY ☐ CC#_____	Print Name_____ Signature_____ Company Name:_____ License #:_____ Phone #:_____	Lic Liab W/C EX DE

2090

Ref: F.S. 440.103; ORD. 2016-30

ACORD

CERTIFICATE OF LIABILITY INSURANCE

84

DATE (MM/DD/YYYY) 03/12/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

SCANNED

PRODUCER	CONTACT NAME: Joseph McNeill III	
Nature Coast Insurance, Inc P.O. Box 1520 Chiefland FL 32644	PHONE (A/C, No, Ext): (352) 493-2565	FAX (A/C, No): (352) 493-0402
	E-MAIL ADDRESS: joe@naturecoastinsurance.com	

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A :	Southern Owners Insurance	10190
INSURER B :	Owners Insurance Company	32700
INSURER C :	Florida Citrus, Business & Industries Fund	15764
INSURER D :		
INSURER E :		
INSURER F :		

INSURED
RBI Electricial Contracting LLC
22103 Nw County Road 235A
Alachua FL 32615-4237

COVERAGES **CERTIFICATE NUMBER:** CL203223086 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [X] POLICY [ ] PRO-JECT [ ] LOC [ ] OTHER:			78084835	07/21/2019	07/21/2020	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] OWNED AUTOS ONLY [ ] HIRED AUTOS ONLY [X] 19 [X] SCHEDULED AUTOS [ ] NON-OWNED AUTOS ONLY			4808483500	07/16/2019	07/16/2020	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
	[ ] UMBRELLA LIAB [ ] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $						EACH OCCURRENCE AGGREGATE	$ $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [Y] If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		10657519-2019	03/05/2020	03/05/2021	[X] PER STATUTE [X] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 500,000 $ 500,000 $ 500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Columbia County Building Department
135 NE Hernando Ave
Lake City FL 32055

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

FORM R405-2017

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Stewart Residence	Builder Name:	Aaron Simque Homes
Street:		Permit Office:	Columbia County
City, State, Zip:	Lake City , FL , 32024	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)	3367
Conditioned floor area below grade (ft²)	0

7. Windows(393.3 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.33	393.33 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:		6.087 ft.
Area Weighted Average SHGC:		0.220

8. Floor Types (3367.0 sqft.)	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	3367.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types (2103.0 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1770.00 ft²
b. Frame - Wood, Adjacent	R=13.0	333.00 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types (3367.0 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=30.0	3367.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	R	ft²
a. Sup: Attic, Ret: Attic, AH: Main	6	673.4

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	48.0	SEER:16.00

13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	48.0	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 1st FILE COPY Code Compliance PLANS EXAMINER

Glass/Floor Area: 0.117

Total Proposed Modified Loads: 66.88

Total Baseline Loads: 76.88

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: _____

DATE: 1-30-20

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

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000286	2525.3	138.63	260.72	.1128	5

HEATING SYSTEM

√	#	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump/	None	Singl	HSPF:8.5	48 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit/	None	Singl	SEER: 16	48 kBtu/hr	1440 cfm	0.8	1	sys#1

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	Cool
_____	1	Attic	6	673.4 ft	Attic	168.35	Prop. Leak Free	Main	--- cfm	101.0 cfm	0.03	0.50	1	1

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]	[ ]

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

Thermostat Schedule: HERS 2006 Reference		Hours											
Schedule Type		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	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Main

Residential System Sizing Calculation

Summary

Project Title:
Stewart Residence

Lake City, FL 32024

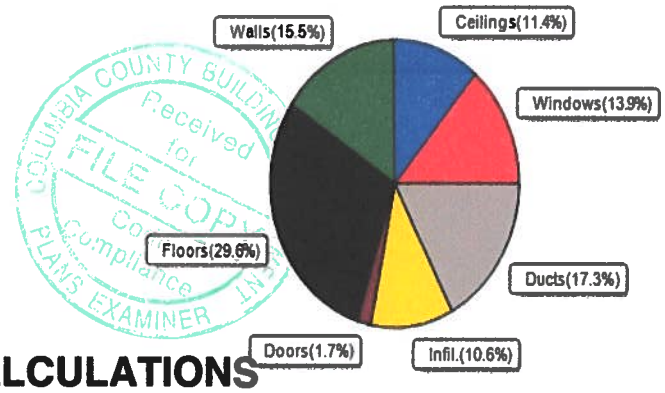
1/30/2020

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	**37472**	**Btuh**	**Total cooling load calculation**	**29144**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	128.1	48000	Sensible (SHR = 0.80)	154.9	38400
Heat Pump + Auxiliary(0.0kW)	128.1	48000	Latent	220.3	9600
			Total (Electric Heat Pump)	164.7	48000

WINTER CALCULATIONS

Winter Heating Load (for 3367 sqft)

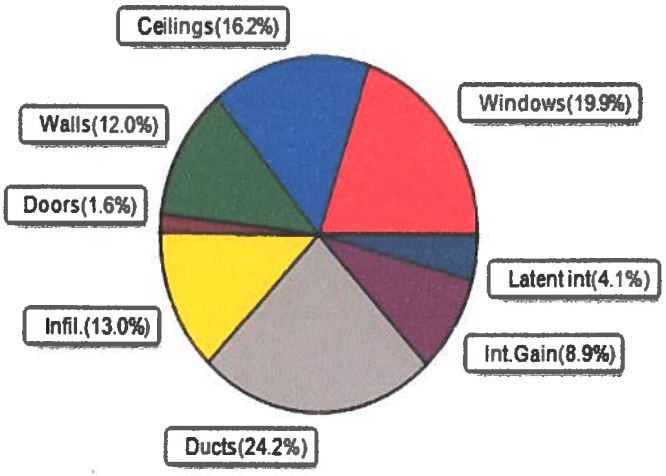
Load component			Load	
Window total	393	sqft	5192	Btuh
Wall total	1670	sqft	5790	Btuh
Door total	40	sqft	640	Btuh
Ceiling total	3367	sqft	4289	Btuh
Floor total	3367	sqft	11092	Btuh
Infiltration	91	cfm	3990	Btuh
Duct loss			6479	Btuh
Subtotal			**37472**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**37472**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 3367 sqft)

Load component			Load	
Window total	393	sqft	5812	Btuh
Wall total	1670	sqft	3510	Btuh
Door total	40	sqft	480	Btuh
Ceiling total	3367	sqft	4718	Btuh
Floor total			0	Btuh
Infiltration	68	cfm	1422	Btuh
Internal gain			2580	Btuh
Duct gain			6264	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			**24786**	**Btuh**
Latent gain(ducts)			799	Btuh
Latent gain(infiltration)			2359	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1200	Btuh
Total latent gain			**4358**	**Btuh**
TOTAL HEAT GAIN			**29144**	**Btuh**



8th Edition

EnergyGauge® System Sizing
PREPARED BY: _____
DATE: 1-30-20

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Project Title:
Stewart Residence

Lake City, FL 32024

1/30/2020

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	17.8f	1.3ft	18.0	0.0	18.0	11	11	196	Btuh
2	2 NFRC	0.22, 0.33	No	No	N	9.5ft	1.3ft	144.0	0.0	144.0	11	11	1569	Btuh
3	2 NFRC	0.22, 0.33	No	No	N	1.5ft	1.3ft	54.0	0.0	54.0	11	11	588	Btuh
4	2 NFRC	0.22, 0.33	No	No	E	1.5ft	1.3ft	36.0	0.0	36.0	11	27	989	Btuh
5	2 NFRC	0.22, 0.33	No	No	E	1.5ft	1.3ft	16.0	0.0	16.0	11	27	440	Btuh
6	2 NFRC	0.22, 0.33	No	No	E	1.5ft	1.3ft	4.0	0.0	4.0	11	27	110	Btuh
7	2 NFRC	0.22, 0.33	No	No	S	12.2f	1.3ft	13.3	13.3	0.0	11	13	145	Btuh
8	2 NFRC	0.22, 0.33	No	No	S	7.5ft	1.3ft	36.0	36.0	0.0	11	13	392	Btuh
9	2 NFRC	0.22, 0.33	No	No	S	1.5ft	1.3ft	36.0	36.0	0.0	11	13	392	Btuh
10	2 NFRC	0.22, 0.33	No	No	E	1.5ft	1.3ft	36.0	0.0	36.0	11	27	989	Btuh
	Window Total								393 (sqft)					5812 Btuh

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	0.09	13.0/0.6	105.0	2.2	231 Btuh
2	Frame - Wood - Ext	0.09	13.0/0.6	75.0	2.2	165 Btuh
3	Frame - Wood - Ext	0.09	13.0/0.6	120.0	2.2	264 Btuh
4	Frame - Wood - Ext	0.09	13.0/0.6	147.0	2.2	323 Btuh
5	Frame - Wood - Ext	0.09	13.0/0.6	78.0	2.2	171 Btuh
6	Frame - Wood - Ext	0.09	13.0/0.6	298.0	2.2	655 Btuh
7	Frame - Wood - Ext	0.09	13.0/0.6	41.7	2.2	92 Btuh
8	Frame - Wood - Ext	0.09	13.0/0.6	42.0	2.2	92 Btuh
9	Frame - Wood - Ext	0.09	13.0/0.6	87.0	2.2	191 Btuh
10	Frame - Wood - Ext	0.09	13.0/0.6	9.0	2.2	20 Btuh
11	Frame - Wood - Ext	0.09	13.0/0.6	87.0	2.2	191 Btuh
12	Frame - Wood - Ext	0.09	13.0/0.6	267.0	2.2	587 Btuh
13	Frame - Wood - Adj	0.09	13.0/0.0	313.0	1.7	528 Btuh
	Wall Total			1670 (sqft)		3510 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	20.0	12.0	240 Btuh
2	Insulated - Garage	20.0	12.0	240 Btuh
	Door Total	40 (sqft)		480 Btuh

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/Light/Shingle	0.032	30.0/0.0	3367.0	1.40	4718 Btuh
	Ceiling Total			3367 (sqft)		4718 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	3367 (ft-perimeter)	0.0	0 Btuh
	Floor Total		3367.0 (sqft)		0 Btuh

	Envelope Subtotal:	14520 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Climate:FL_GAINESVILLE_REGIONAL_A
Stewart Residence

Lake City, FL 32024

1/30/2020

Infiltration	Type	Average ACH	Volume(cuft)		Wall Ratio		CFM=	Load
	Natural	0.14	30303		1		68.3	1422 Btuh
Internal gain		Occupants	Btuh/occupant				Appliance	Load
		6	X	230	+		1200	2580 Btuh
						Sensible Envelope Load:		18522 Btuh
Duct load	Extremely sealed, Supply(R6.0-Attic), Return(R6.0-Attic)					(DGM of 0.338)		6264 Btuh
						Sensible Load All Zones		**24786 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Stewart Residence
Climate:FL_GAINESVILLE_REGIONAL_A

Lake City, FL 32024

1/30/2020

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**18522 Btuh**
	Sensible Duct Load	6264 Btuh
	Total Sensible Zone Loads	**24786 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	**24786 Btuh**
	Latent infiltration gain (for 51 gr. humidity difference)	2359 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	799 Btuh
	Latent occupant gain (6.0 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**4358 Btuh**
	TOTAL GAIN	**29144 Btuh**

EQUIPMENT

1. Central Unit	#	48000 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:
Stewart Residence
Building Type: User

Lake City, FL 32024

1/30/2020

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	18.0	13.2	238 Btuh
2	2, NFRC 0.22	Vinyl	0.33	N	144.0	13.2	1901 Btuh
3	2, NFRC 0.22	Vinyl	0.33	N	54.0	13.2	713 Btuh
4	2, NFRC 0.22	Vinyl	0.33	E	36.0	13.2	475 Btuh
5	2, NFRC 0.22	Vinyl	0.33	E	16.0	13.2	211 Btuh
6	2, NFRC 0.22	Vinyl	0.33	E	4.0	13.2	53 Btuh
7	2, NFRC 0.22	Vinyl	0.33	S	13.3	13.2	176 Btuh
8	2, NFRC 0.22	Vinyl	0.33	S	36.0	13.2	475 Btuh
9	2, NFRC 0.22	Vinyl	0.33	S	36.0	13.2	475 Btuh
10	2, NFRC 0.22	Vinyl	0.33	E	36.0	13.2	475 Btuh
	Window Total				393.3(sqft)		5192 Btuh

Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Frame - Wood	- Ext	(0.086)	13.0/0.6	105	3.45	362 Btuh
2	Frame - Wood	- Ext	(0.086)	13.0/0.6	75	3.45	259 Btuh
3	Frame - Wood	- Ext	(0.086)	13.0/0.6	120	3.45	414 Btuh
4	Frame - Wood	- Ext	(0.086)	13.0/0.6	147	3.45	507 Btuh
5	Frame - Wood	- Ext	(0.086)	13.0/0.6	78	3.45	269 Btuh
6	Frame - Wood	- Ext	(0.086)	13.0/0.6	298	3.45	1028 Btuh
7	Frame - Wood	- Ext	(0.086)	13.0/0.6	42	3.45	144 Btuh
8	Frame - Wood	- Ext	(0.086)	13.0/0.6	42	3.45	145 Btuh
9	Frame - Wood	- Ext	(0.086)	13.0/0.6	87	3.45	300 Btuh
10	Frame - Wood	- Ext	(0.086)	13.0/0.6	9	3.45	31 Btuh
11	Frame - Wood	- Ext	(0.086)	13.0/0.6	87	3.45	300 Btuh
12	Frame - Wood	- Ext	(0.086)	13.0/0.6	267	3.45	921 Btuh
13	Frame - Wood	- Adj	(0.089)	13.0/0.0	313	3.55	1111 Btuh
	Wall Total				1670(sqft)		5790 Btuh

Doors	Type	Storm	Ueff.	Area X	HTM=	Load
1	Insulated - Exterior,	n	(0.400)	20	16.0	320 Btuh
2	Insulated - Garage,	n	(0.400)	20	16.0	320 Btuh
	Door Total			40(sqft)		640Btuh

Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
1	Vented Attic/L/Shing	(0.032)	30.0/0.0	3367	1.3	4289 Btuh
	Ceiling Total			3367(sqft)		4289Btuh

Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade	(1.180)	0.0	235.0 ft(perim.)	47.2	11092 Btuh
	Floor Total			3367 sqft		11092 Btuh

	Envelope Subtotal:	27003 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Project Title:
Stewart Residence
Building Type: User

Lake City, FL 32024

1/30/2020

Infiltration	Type Natural	Wholehouse	ACH 0.18	Volume(cuft) 30303	Wall Ratio 1.00	CFM= 91.1	3990 Btuh
Duct load	Extremely sealed, R6.0, Supply(Att), Return(Att)				(DLM of 0.209)		6479 Btuh
All Zones				**Sensible Subtotal All Zones**			**37472 Btuh**

WHOLE HOUSE TOTALS

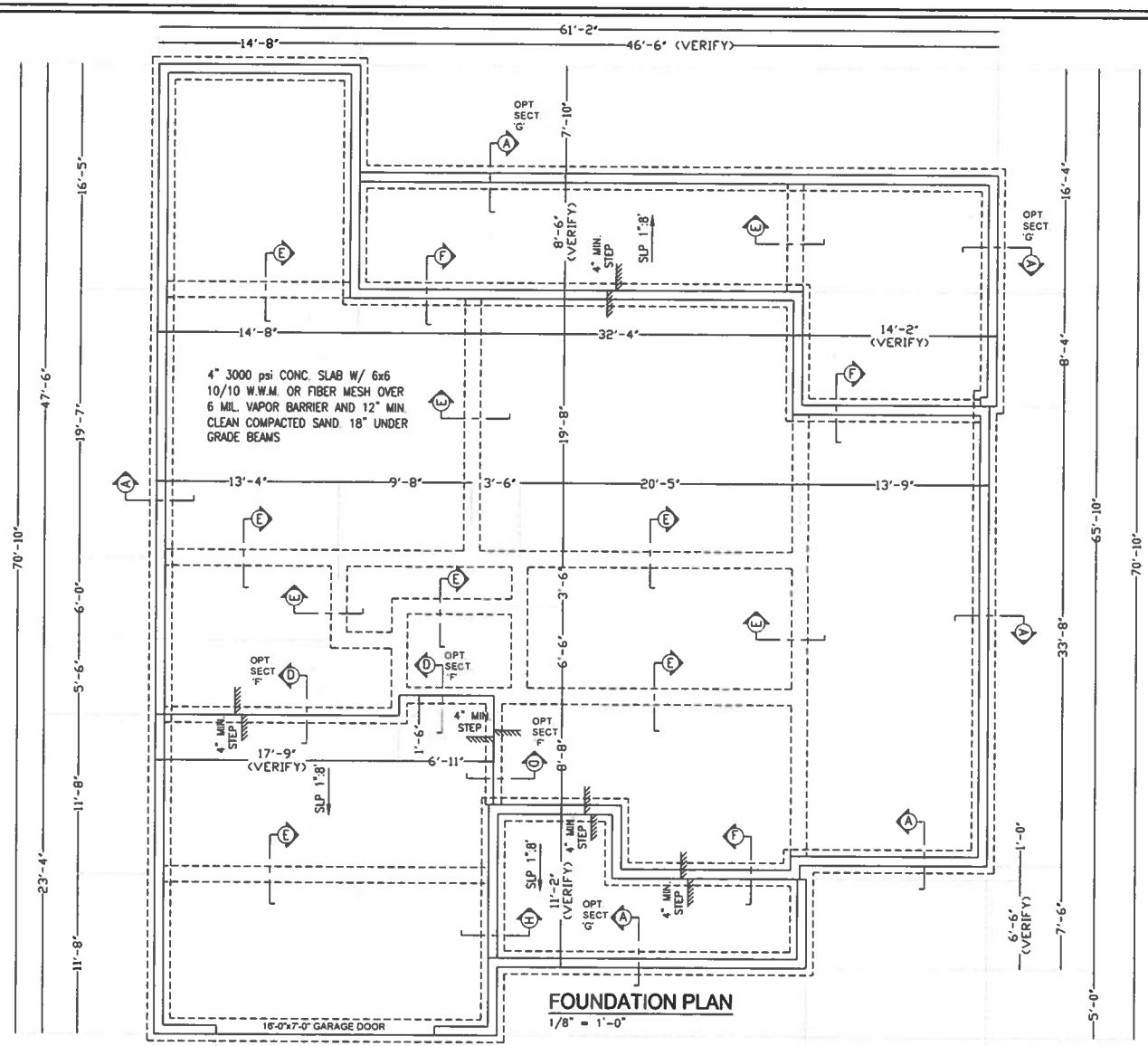
Totals for Heating	Subtotal Sensible Heat Loss Ventilation Sensible Heat Loss Total Heat Loss	37472 Btuh 0 Btuh 37472 Btuh

EQUIPMENT

1. Electric Heat Pump	#	48000 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



FOUNDATION PLAN

1/8" = 1'-0"

NOTE:

INTERIOR LOAD CONDITIONS SHALL BE VERIFIED WITH TRUSS MANUFACTURER. ADDITIONAL INTERIOR GRADE BEAMS AS PER SECTION "E" SHALL BE REQUIRED UNDER ANY LOAD BEARING WALLS OR COLUMNS. GRADE BEAMS SHALL TIE INTO AND BE POURED CONTINUOUS WITH ADJACENT GRADE BEAMS AND/OR OUTER EDGE OF SLAB.

NOTE:

CONTRACTOR TO VERIFY ALL DIMENSIONS FOR FOUNDATION PLAN PRIOR TO CONSTRUCTION

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

R. MICHAEL LATIMER P.E. No 41970 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Robert M Latimer
Date: 2020.02.27 11:22:24 -05'00'

R. MICHAEL LATIMER, P.E.
LICENSE #41970
DEC ENGINEERING INC.

Feb 27, 2020 - 11:06am

THE BRISTOL MODEL

DEC Engineering, Inc.
Civil Engineering
2236 Capital Circle NE Ste 202 Tallahassee, Florida 32308
Phone: (850) 385-0288
Email: info@decengrs.com State Certification #4244

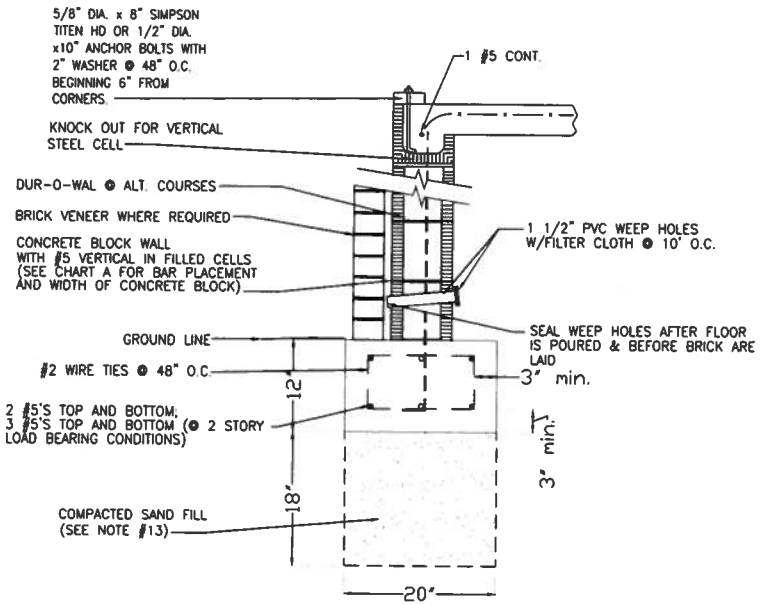
PROJECT: 407 SW Silver Palm, Lake City, Fl.
TITLE: Foundation Plan
SCALE: 1/8"=1'-0" CLIENT: Aaron Simque Homes

	Description:	Date:	Revised by:

File Name:	
Designed:	D.A.W.
Drawn:	D.A.W.
Checked:	R.M.L.
Date:	1/27/20

Sheet 1 of 4

NO. 19D-0110



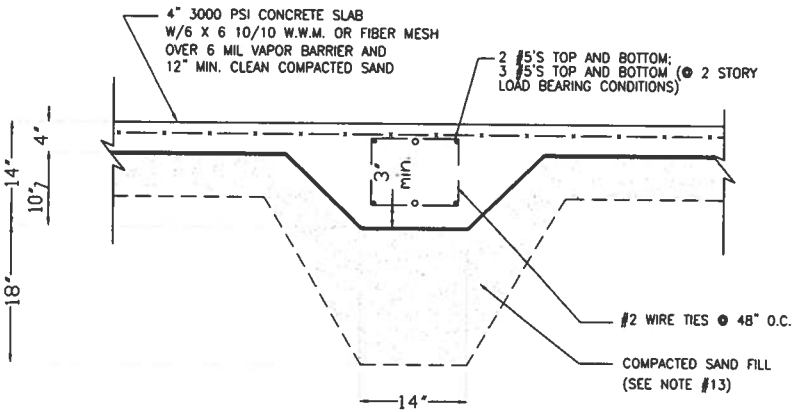
A. SECTION

All steel connectors, anchors and fasteners to be in direct contact with pressure-treated woods are to be as a minimum:

Standard galvanized coating, 0.90 oz of zink per square foot of surface area (per ASTM A653)

Hot-dip galvanized after fabrication at 2.0 oz per square foot of surface area (per ASTM A123)

Stainless steel (Type 316L) or equal.



E. TYPICAL INTERIOR GRADE BEAM

NOTE: WHERE USED WITH BLOCK STEM, INTERIOR GRADE BEAM SHALL BE TIED TO PERIMETER WALL/FOOTER BY TURNING 2 OF THE SHOWN #5 BARS DOWN THROUGH FILLED CELLS AND INTO PERIMETER FOOTER

Digitally signed by Robert M Latimer
Date: 2020.02.27 11:22:55 -05'00'

R. MICHAEL LATIMER, P.E.
LICENSE #41970
DEC ENGINEERING INC

Feb 27, 2020 - 9:52am

DEC Engineering, Inc.
Civil Engineering
2236 Capital Circle NE Ste 202 Tallahassee, Florida 32308
Phone: (850) 385-5268
Email: info@decengrs.com State Certification #4244

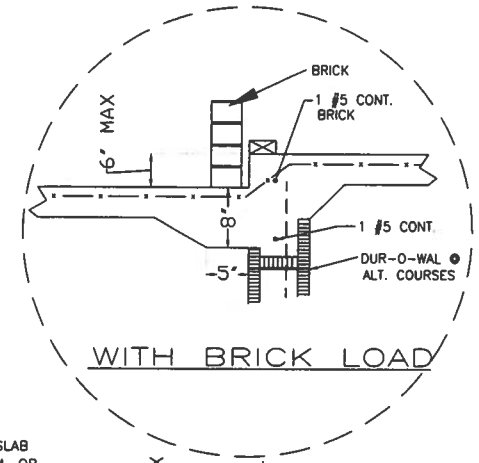
PROJECT: 407 SW Silver Palm, Lake City, Fl.
TITLE: Foundation Details
CLIENT: Aaron Simque Homes
SCALE: 3/4"=1'-0"

	Revised by:	Date:	Description:

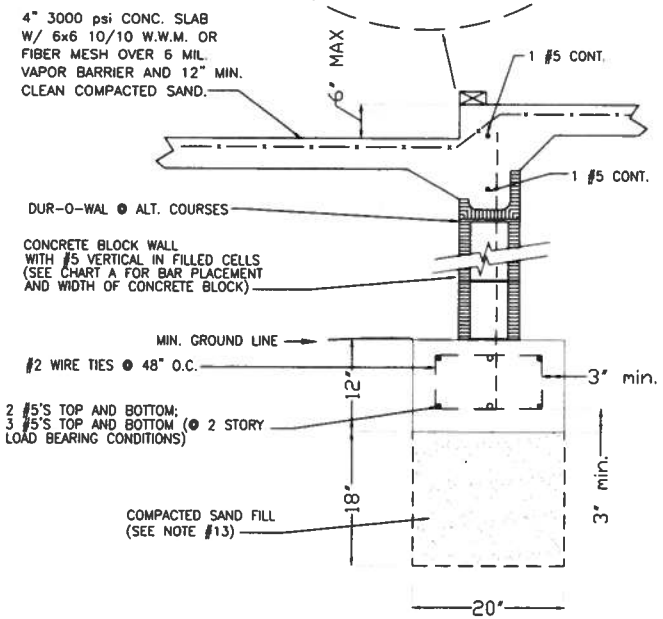
File Name:	
Designed:	D.A.W.
Drawn:	D.A.W.
Checked:	R.M.L.
Date:	1/27/20

Sheet 2 of 4

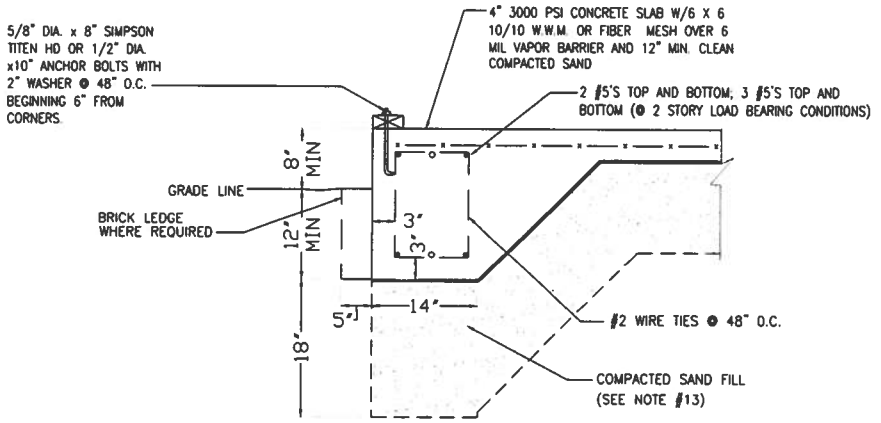
NO. 19D-0110



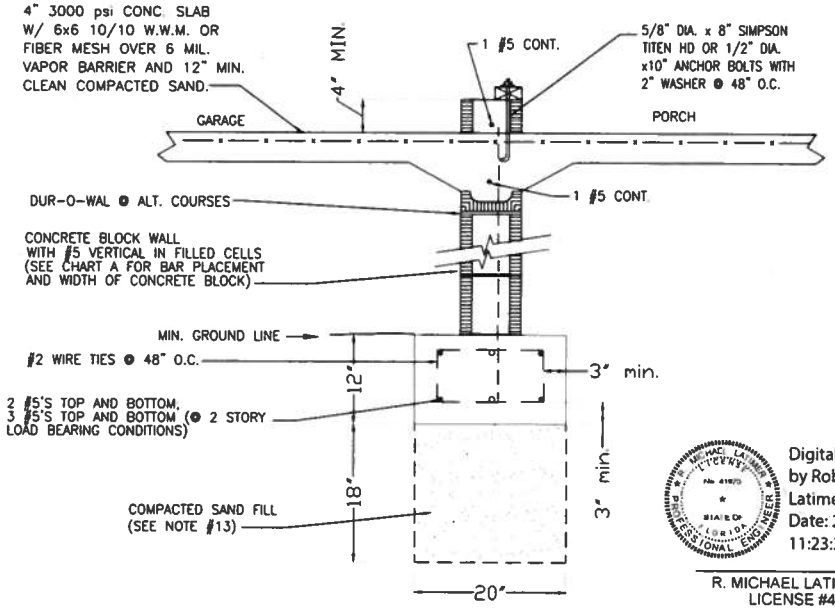
WITH BRICK LOAD



F. STEP DOWN DETAIL



G. TYPICAL EXTERIOR GRADE BEAM



H. STEP DOWN DETAIL

Digitally signed by Robert M Latimer
Date: 2020.02.27 11:23:22 -05'00'

R. MICHAEL LATIMER, P.E.
LICENSE #41970
DEC ENGINEERING INC.

Feb 27, 2020 - 11:09am

DEC Engineering, Inc.
Civil Engineering
2236 Capital Circle NE Ste 202 Tallahassee, Florida 32308
Phone: (850) 385-5288
Email: info@decengre.com State Certification #4244

PROJECT: 407 SW Silver Palm, Lake City, Fl.
TITLE: Foundation Details
SCALE: 3/4"=1'-0" CLIENT: Aaron Simque Homes

File Name:	
Designed:	D.A.W.
Drawn:	D.A.W.
Checked:	R.M.L.
Date:	2/27/20

Revised by:	Date:	Description:

Sheet 3 of 4

No. 19D-0110

CHART A
VERTICAL BAR PLACEMENT FOR
BLOCK WALL WITH CONCRETE FLOOR SLAB OR JOIST DESIGN

FOR FLOOR JOIST DESIGN USE BOND BEAM WITH 1 #5 REINFORCED BAR CONTINUOUS FOR SLAB FLOOR, POUR INTO BLOCK WITH WELDED WIRE MESH. (SEE CHART BELOW.)

**IN ALL CASES VERTICAL BARS SHALL BE PLACED AT EITHER SIDE OF OPENINGS IN WALL AND AT EACH CORNER. VERTICAL BARS SHALL BE BENT 24" INTO SLAB EACH REINFORCED CELL SHALL BE FILLED WITH CONCRETE **

*** FLOOR SYSTEM TO BE PLACED BEFORE BACKFILLING

H--HEIGHT OF WALL	WIDTH OF BLOCK	VERTICAL BAR SPACING
H < 32	8"	NO. 5 @ 72" O.C.
32 < H < 56	8"	NO. 5 @ 48" O.C.
56 < H < 72	8"	NO. 5 @ 32" O.C.
72 < H < 88	12"	NO. 5 @ 32" O.C. W/ BOND BEAM W/ 1 #5 @ MID-HEIGHT
	8" *	NO. 5 @ 32" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1- #5 SHALL BE PROVIDED @ MID-HEIGHT)
88 < H < 96	12"	NO. 5 @ 24" O.C. W/ BOND BEAM W/ 1 #5 @ MID-HEIGHT
	8" *	NO. 5 @ 24" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1 #5 SHALL BE PROVIDED @ MID-HEIGHT)
96 < H < 120	12"	NO. 5 @ 16" O.C. (ALL CELLS FILLED W/3000 PSI CONC.) W/ BOND BEAM W/ 1 #5 @ 48" O.C. OR LESS ***
	8" *	NO. 5 @ 24" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1 #5 SHALL BE PROVIDED @ MID-HEIGHT)
120 < H < 132	12"	NO. 6 @ 8" O.C. (ALL CELLS FILLED W/3000 PSI CONC.) W/ BOND BEAM W/ 1 #6 @ MID-HEIGHT
	8" *	NO. 5 @ 24" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1 #5 SHALL BE PROVIDED @ MID-HEIGHT)

CHART B
PHYSICAL PROPERTIES OF MASONRY CEMENTS

MASONRY CEMENT TYPE	N	* S	* M
TIME OF SETTING			
INITIAL SET, MINIMUM, HR.	2	1 1/2	1 1/2
FINAL SET, MAXIMUM, HR.	24	24	24
COMPRESSIVE STRENGTH (AVERAGE OF 3 CUBES), MIN.			
7 DAYS, PSI (MPa)	500 (3.4)	1300 (9.0)	1800 (12.4)
28 DAYS, PSI (MPa)	900 (6.2)	2100 (14.5)	2900 (20.0)

* FOR THE PURPOSE OF THESE PLANS USE GRADE 'S' OR 'M'

GENERAL NOTES FOR SPECIAL FOUNDATION

1. ALL CONSTRUCTION SHALL CONFORM TO THE 2017 (6th ADDITION) FLORIDA BUILDING CODE.
2. IN THE EVENT OF A CONFLICT BETWEEN PLANS AND THE CODES, THE CODES SHALL GOVERN.
3. LOT SHALL BE LANDSCAPED TO PREVENT THE DETENTION OF SURFACE WATER.
4. CONCRETE: 3000 PSI STEEL: GRADE 60
5. ALL FILL SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST.

   DEFINITION:
   a. COMPACTION TEST WILL NOT BE REQUIRED WHEN THE FILL IS LESS THAN 12 INCHES IN DEPTH. THE INSPECTOR'S SHALL USE BEST JUDGEMENT.
   b. WHEN THE FILL IS 12 INCHES TO 18 INCHES IN DEPTH, COMPACTION TEST WILL BE REQUIRED ONLY IF THE INSPECTOR'S JUDGEMENT IS THAT THE COMPACTION IS QUESTIONABLE.
   c. WHEN THE FILL IS 18 INCHES IN DEPTH OR MORE COMPACTION TEST WILL BE REQUIRED.
6. ALL SPLICES IN FOOTING STEEL SHALL BE LAPPED 40 BAR DIAMETERS IN CONCRETE BLOCK AND 30 BAR DIAMETERS IN MONOLITHIC SLAB.
7. STEEL IN INTERIOR GRADE BEAMS SHALL BE SPLICED TO STEEL IN EXTERIOR GRADE BEAMS TO ASSURE CONTINUITY OF FOOTING THROUGHOUT STRUCTURE.
8. EXTERIOR GRADE BEAMS SHALL RUN CONTINUOUS AROUND THE PERIMETER OF THE STRUCTURE TO ASSURE CONTINUITY.
9. ALL CONCRETE SLABS SHALL HAVE CONTROL JOINTS TO CONTROL CRACKING SPACED MAXIMUM 15 FEET IN EACH DIRECTION.
10. SOIL SHALL BE CHEMICALLY TREATED FOR TERMITES PER F.B.C. (SEE NOTE 23 FOR ALTERNATE)
11. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE SITE PRIOR TO BEGINNING CONSTRUCTION.
12. ALL REINFORCING STEEL SHALL BE LOCATED MIN. 3" FROM CONCRETE SURFACE.
13. A CLEAN COMPACTED SAND FILL AT LEAST 18 INCHES THICK SHALL BE PLACED UNDER ALL EXTERIOR AND INTERIOR GRADE BEAMS.
    NOTE:
    THIS MAY BE OMITTED IN AREAS THAT HAVE AT LEAST 30 INCHES OF CLEAN PACTED NATURAL SOIL THAT HAS A MINIMUM BEARING CAPACITY OF 2000 PSF AND IS FREE OF MULCH, ORGANIC MATERIAL AND PLASTIC CLAYS AND CONSIST OF AT LEAST 50% SAND (EST.)
14. ANY ORGANIC MATERIAL UNDER FOUNDATION SHALL BE REMOVED PRIOR TO CONSTRUCTION, UNLESS OTHERWISE SPECIFIED.
15. FOR STEM WALLS 56" OR HIGHER, FORMWORK SHALL BE BRACED BEFORE BACKFILLING.
16. CONCRETE BLOCK SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 1500 PSI.
17. ADDITIONAL #5 W/ FILLED CELLS @ LOAD BEARING POINTS ON WALL.
18. INCREASE OVERALL STEMWALL FOOTER WIDTH BY 4" WHEN BLOCK SIZE IS INCREASED FROM 8" BLOCK TO 12" BLOCK.
19. FOUNDATION DESIGN UNLESS NOTED IN SOILS REPORT IS A MIN. BEARING CAPACITY OF 2000 PSF.
20. USE 3#5's @ FOOTER FOR ANY SECOND STORY LOADING PER DETAIL.
21. IF WIND LOAD REQUIREMENTS FOR ANCHOR BOLTS EXCEED 7" THEY WILL GOVERN.
22. FOOTER @ A 12" MIN. INTO UNDISTURBED SOIL.
23. APPLICATION OF WOOD-TREATMENT TERMITCIDE SHALL BE AS REQUIRED BY LABEL DIRECTIONS FOR USE, AND MUST BE COMPLETED PRIOR TO FINAL BUILDING APPROVAL. CHANGES IN FRAMING OR ADDITIONS TO FRAMING IN AREAS OF THE STRUCTURE REQUIRING TREATMENT THAT OCCUR AFTER WOOD TREATMENT MUST BE TREATED PRIOR TO FINAL BUILDING APROVAL.

SOIL REPORT BY EARTHWORKS GEOTECHNICAL, INC.
FILE NUMBER TAL19E-0207, FEB. 26, 2020 REVIEWED
PRIOR TO FOUNDATION DESIGN.

Digitally signed by Robert M Latimer
Date: 2020.02.27 11:23:48 -05'00'

R. MICHAEL LATIMER, P.E
LICENSE #41970
DEC ENGINEERING INC.

Feb 27, 2020 - 9:53am

DEC Engineering, Inc.
Civil Engineering
2236 Capital Circle NE Ste 202 Tallahassee, Florida 32308
Phone: (850) 385-5288
Email: info@decengrs.com State Certification #4244

PROJECT: 407 SW Silver Palm, Lake City, Fl.
TITLE: Foundation Notes
SCALE: 3/4"=1'-0" CLIENT: Aaron Simque Homes
File Name:
Designed: D.A.W.
Drawn: D.A.W.
Checked: R.M.L.
Date: 2/27/20
Revised by: Date: Descriptions:

Sheet 4 of 4
NO. 19D-0110

GEOTECHNICAL ENGINEERING REPORT

Earthworks Geotechnical, Inc.

Civil · Environmental · Geotechnical
Subsurface Exploration & Testing

Lot 82 & 83
407 SW Silverpalm Dr, Lake City, FL
Project No. TAL19E-0207
February 26, 2020

Prepared For:
Aaron Simque
426 SW Commerce Dr, Ste 130
Lake City FL 32025

Prepared By:
Earthworks Geotechnical Inc.
2236 Capital Circle NE Ste. 202
Tallahassee, FL 32308

Florida License No. CA6354 · Phone: (850) 385-5288 · Email: info@decengrs.com

February 26, 2020

Aaron Simque
426 SW Commerce Dr, Ste 130
Lake City FL 32025

Reference: 407 SW Silverpalm Dr, Lake City, FL 32024, Lot 82 & 83

Dear Mr. Simque,

Earthworks Geotechnical, Inc. (**Earthworks**) has prepared the attached geotechnical report subsequent to the geotechnical site investigation performed February 23, 2020 at the referenced property.

Should you have any questions regarding this project or report, please do not hesitate to contact our office at (850) 385-5288. Earthworks would be pleased to continue providing geotechnical services throughout the implementation of the project. We look forward to working with you and your organization on this and future projects.

Sincerely

John Eaglin

Sales & Marketing Team Leader
Staff Engineer

Certified to this date:
February 26, 2020
Respectfully,

R. Michael Latimer, P.E.
Lic# 41970

R. MICHAEL LATIMER
LICENSE
NO. 41970
STATE OF FLORIDA
PROFESSIONAL ENGINEER

2/26/20

Disclaimer: This geotechnical site investigation and subsequent report has been prepared based upon my best training, knowledge, and experience and is warranted only as my best opinion.

REPORT CONTENTS

EXECUTIVE SUMMARY

This executive summary is provided as a brief overview of pertinent findings, and our conclusions and recommendations based on the subsurface exploration and analysis of the proposed project. This summary inherently omits information and should not be utilized in design or construction without reading all of the recommendations presented in the text and Appendix of this report. This report should be read in its entirety prior to being implemented into design and construction.

- This subsurface exploration consisted of installing a total of four (4) soil borings to a depth of ten (10) feet in order to evaluate soil and groundwater conditions at the proposed construction site. Dynamic Cone Penetration testing was preformed in order to access the local bearing capacity of the subsurface soils.
- Groundwater was encountered during field activities at eight an a half (8.5) feet below the existing ground surface. However, Earthworks does not anticipate groundwater to adversely impact the planned near surface construction.
- Based on on-site analysis, the saturated vertical and horizontal infiltration rate is anticipated to be on the order of 0.12 inches per hour and 0.18 inches per hour respectively. The infiltration rates provided in this report does not include a safety factor (SF), a minimum safety factor of two (2) is recommended.
- Based on field DCP N-values, the soils located at/near test area boring B1 appear to have a soil bearing capacity of more than 2,000 lbs./ft^2.
- Highly plastic soils (e.g. Pipe clay) were encountered during this subsurface exploration.

1 PROJECT INFORMATION

1.1 Project Authorization

On February 20, 2020, Aaron Simque authorized Earthworks to proceed with conducting a geotechnical site investigation at 407 SW Silverpalm Dr, Lake City, FL 32024.

1.2 Project Description

Earthworks understands that the owner is exploring options for a proposed residence at the referenced property. Accordingly, Earthworks was hired by Aaron Simque on February 20, 2020 to conduct a geotechnical exploration and analysis of the subsurface conditions at the proposed project site.

1.3 Project Scope

Earthworks scope of services was presented in our proposals dated February 19, 2020. Services consists of field and laboratory programs to evaluate physical and engineering properties of the subsurface soils, engineering analysis to prepare recommendations, and preparation of this report. Based on Earthworks proposal, subsurface exploration and analysis should consists of four (4) soil borings, one (1) Dynamic Cone Penetration Test (**DCP**), and one (1) Double Ring Infiltration (**DR**) test. Brief descriptions of our field and laboratory programs are provided below in Section: 2 of this report.

All engineering recommendations provided in this report are based upon the collection and subsequent analysis of field data obtained during the project period of performance. Accordingly, any deviation in site conditions or existing project scope would require additional engineering analysis to qualify said findings and recommendations.

2 FIELD AND LABORATORY PROGRAM

2.1 Subsurface Exploration Program

Borings are installed in general accordance with ASTM D 1452. Test borings for this subsurface investigation were advanced using a hand-operated auger. Representative soil samples were collected continuously from the ground surface to a specified depth below existing ground surface.

2.2 Dynamic Cone Penetration Testing

DCP testing was preformed with a HUMBOLDT H-4202A Dynamic Cone Penetrometer in general accordance with ASTM STP 399. The HUMBOLDT H-4202A has an one and a half (1.5) inch diameter 45 degree cone which is driven in 1-3/4 inch increments by blows from a 15-pound steel mass falling freely for twenty (20) inches. The number of blows required to drive the sampler 1-3/4 inches is the Cone Penetration Resistance (**DCP N-value**).

2.3 Groundwater Levels

Groundwater levels at the test boring locations were estimated from visual inspection of the soil sample, the moisture condition of the soil, and by the observed water levels within the boreholes at the time of drilling. All boreholes were properly backfilled.

2.4 Double Ring Infiltration Test

DR testing was performed in general accordance with ASTM D 3385. The double ring testing apparatus utilized had a 12.3 inch inner diameter ring and an 24.3 inch outer diameter ring. The two open cylinders, one inside the other, were driven approximately one half (0.5) to one (1) foot below existing grade. The volume of liquid added to the inner and outer rings was recorded at specific time intervals. The volume infiltrated during timed intervals was converted to an incremental infiltration velocity.

It should be noted that this test only measures the local soil infiltration and is not an indication of the hydraulic conductivity (coefficient of permeability) of the soil.

2.5 Geotechnical Laboratory Testing

Soil samples collected during each boring were properly packaged and transported to the Earthworks testing laboratory in Tallahassee Florida for subsequent evaluation and analysis. Soil samples were visually examined, evaluated in the laboratory, and classified by a geotechnical engineer in general accordance with the United Soil Classification System (**USCS**) per ASTM D 2487. Laboratory testing included the standard test methods for liquid limit, plastic limit and plasticity index of soils per ASTM D 4318 and mechanical grain-size analysis per ASTM D 1140.

3 SITE AND SUBSURFACE CONDITIONS

3.1 Site Location and Description

The site is located on 407 SW Silverpalm Dr, Lake City, FL 32024. The site is bounded to the south by Southwest Silverpalm Drive, a small body of water to the east, and residential properties to the north, and west. The general location of the site is illustrated on the Site Location Map, provided as **Figure A1** in **Appendix A** of this report.

The subject site consists of a rectangular shaped parcel.An aerial view of the subject site is provided in **Appendix A** as **Figure A2**. The ground surface cover has recently been removed.

Detailed topographic information was not available at the time of this report. Based on visual observations, the site topography within the area of the proposed development appears to slope gently downward toward the south at a gradient of approximately one-half percent (1/2 %).

3.2 Review of Available Data

The United States Department of Agriculture (**USDA**)Natural Resources Conservation Service (**NRCS**) Soil Survey of Columbia was reviewed to obtain near-surface soils information. The NRCS Soil Survey map is provided at the end of **Appendix A.** A summary of soil characteristics located in the vicinity of the proposed project is provided in **Appendix B** as **Table B1.** In general, the NRCS soil survey map depicts fine sand, fine sandy loam, and sandy loam in the vicinity of the proposed site. The soils have a moderately high to high capacity to transmit water with a saturated hydraulic conductivity reported as 0.20 to 6.00 inches per hour. Seasonal high groundwater levels ranged from three an a half (3.5) to six (6.0) feet below ground surface. The corrosion potential was reported as low for uncoated steel and high for concrete.

It should be noted that information contained in the NRCS Soil Survey is very general and may be outdated. It may not therefore be reflective of actual soil and groundwater conditions. The soils and groundwater data collected as part of this study should be considered a more accurate representation of soil within the vicinity of the proposed project.

3.3 Subsurface Exploration

The subsurface materials examined from borings B1, B2, B3, and B4 generally demonstrated characteristics of silty sand (SM) from ground surface to two (2) feet below ground surface, fat clay (SM) from two (2) feet to six (6) feet below ground surface, and silty sand (SM) to ten (10) feet below ground surface.

An aerial view of the locations of tests preformed is provided in **Appendix A** as **Fig-**

ure A2. Geographic Coordinate System (WGS 84) latitude and longitude coordinates of each boring is provided within **Appendix B** in **Table B3**. A summary of the test results and soil classifications is provided in **Appendix B** as **Table B2** and results of laboratory and field testing are provided in **Appendix C**.

3.4 Penetration Testing

DCP testing was performed during the auguring of boring B1. The DCP N-values recorded during on-site testing are provided within **Appendix B** in **Table B2**.

3.5 Groundwater Information

The boreholes were observed while drilling and after completion for the presence and level of groundwater. The recorded depth at which groundwater was encountered during field testing is provided in **Appendix B** within **Table B3**.

It should be recognized that fluctuations of the groundwater table will occur due to seasonal variations in the amount of rainfall, runoff and other factors not evident at the time the boring was performed. In addition, perched water can develop within higher permeability soils overlying less permeable soils. Therefore, groundwater levels during construction or at other times in the future may be higher or lower than the levels indicated on the boring logs.

3.6 Double Ring Infiltration Test

The DR test was performed approximately one an a half (1.5) foot below existing ground surface within the footprint of the proposed residence. Geographic Coordinate System (WGS 84) latitude and longitude coordinates of the DR test is provided in **Table B3**.

Earthworks field data logs and a graphical representation of the data are provided at the end of **Appendix C**. The recorded on-site saturated vertical infiltration rate was measured at 0.12 inches per hour and the saturated horizontal infiltration rate was approximated at 0.18 inches per hour.

4 RECOMMENDATIONS FOR DESIGN AND CONSTRUCTION

4.1 Groundwater

Groundwater was during field activities at eight an a half (8.5) feet below the existing ground surface. Earthworks does not anticipate groundwater to adversely impact the planned near surface construction.

4.2 Infiltration Rate

Based on on-site analysis, the saturated vertical and horizontal infiltration rate is anticipated to be on the order of **0.12 inches per hour and 0.18 inches per hour** respectively. The infiltration rate provided in this report does not include a safety factor (SF), **a minimum safety factor of two (2) is recommended.**

4.3 Bearing Capacity

Typically, foundation designs require soils with a bearing capacity of 2,000 lbs./ft^2 or greater. Based on the DCP N-values, the soils located at/near test area **boring B1** appear to **have a soil bearing capacity of more than** 2,000 lbs./ft^2.

4.4 Highly Plastic Soils

Highly plastic soils (e.g. Pipe clay) were encountered during this subsurface exploration. Pipe clay was encountered during the boring of B1, B2, and B3 at approximately two (2) feet below ground surface. Pipe clay was encountered at ground surface in the area of boring B4.

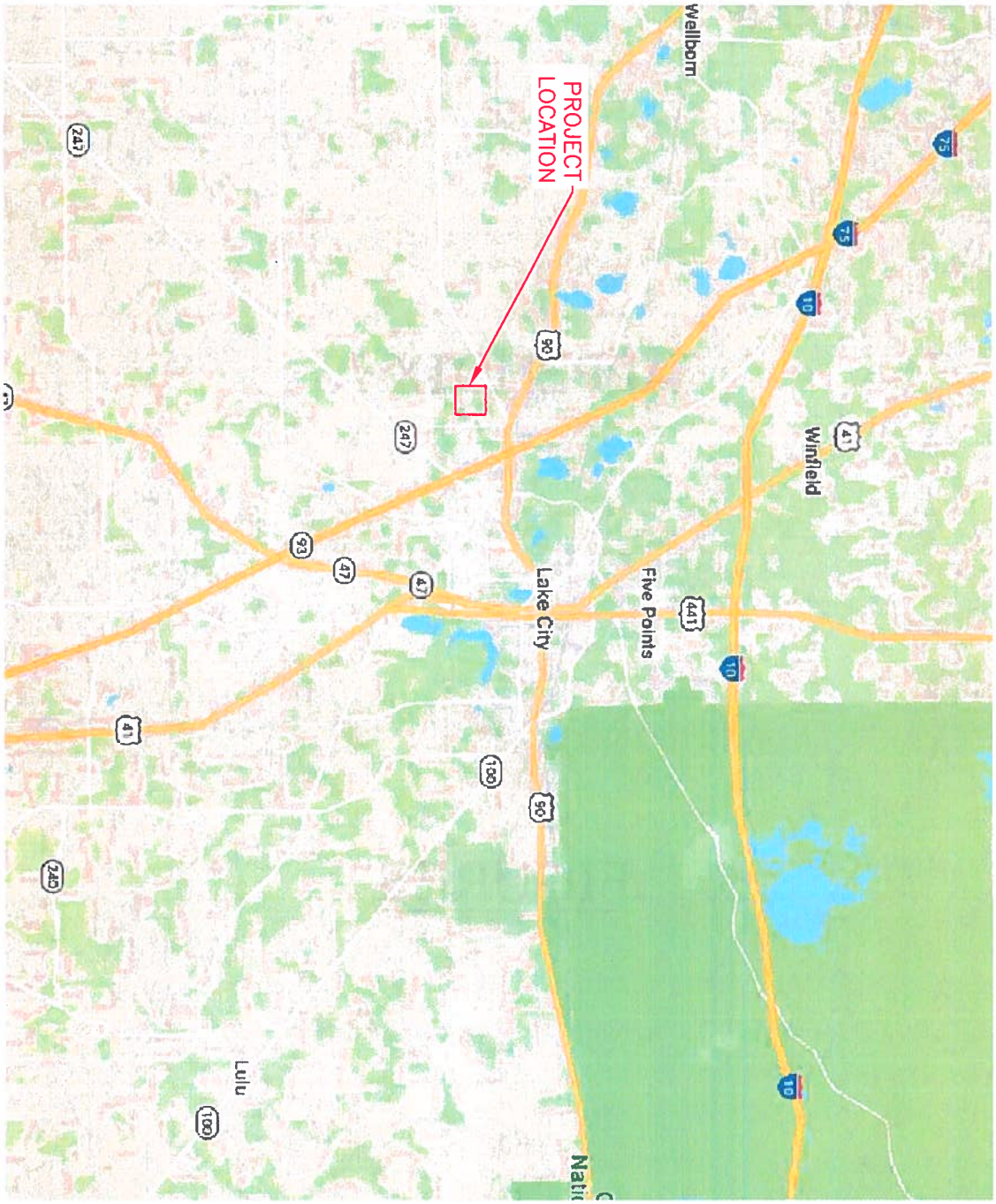
5 REPORT LIMITATIONS

Earthworks Geotechnical, Inc. warrants that the findings, recommendations, specifications or professional advice contained herein have been made in accordance with generally accepted engineering practices in the local area. No other warranties are implied or expressed with this service.

Appendices

APPENDIX A

FIGURES



PROJECT:	SITE LOCATION MAP
TITLE:	FIGURE A1
SCALE:	N.T.S.
Designed:	J.S.W.
Drawn:	J.S.W.
Checked:	R.M.L.
Date:	02/23/20

Revised:	Date:	Description:

No. 19E-207 Sheet 1 of 1

Earthworks Geotechnical, Inc.
2236 Capital Circle NE, Tallahassee, Fl. 32308
Phone: (850) 385-5288 Fax: (850) 386-7586
Email: info@decengrs.com State Certification #6354

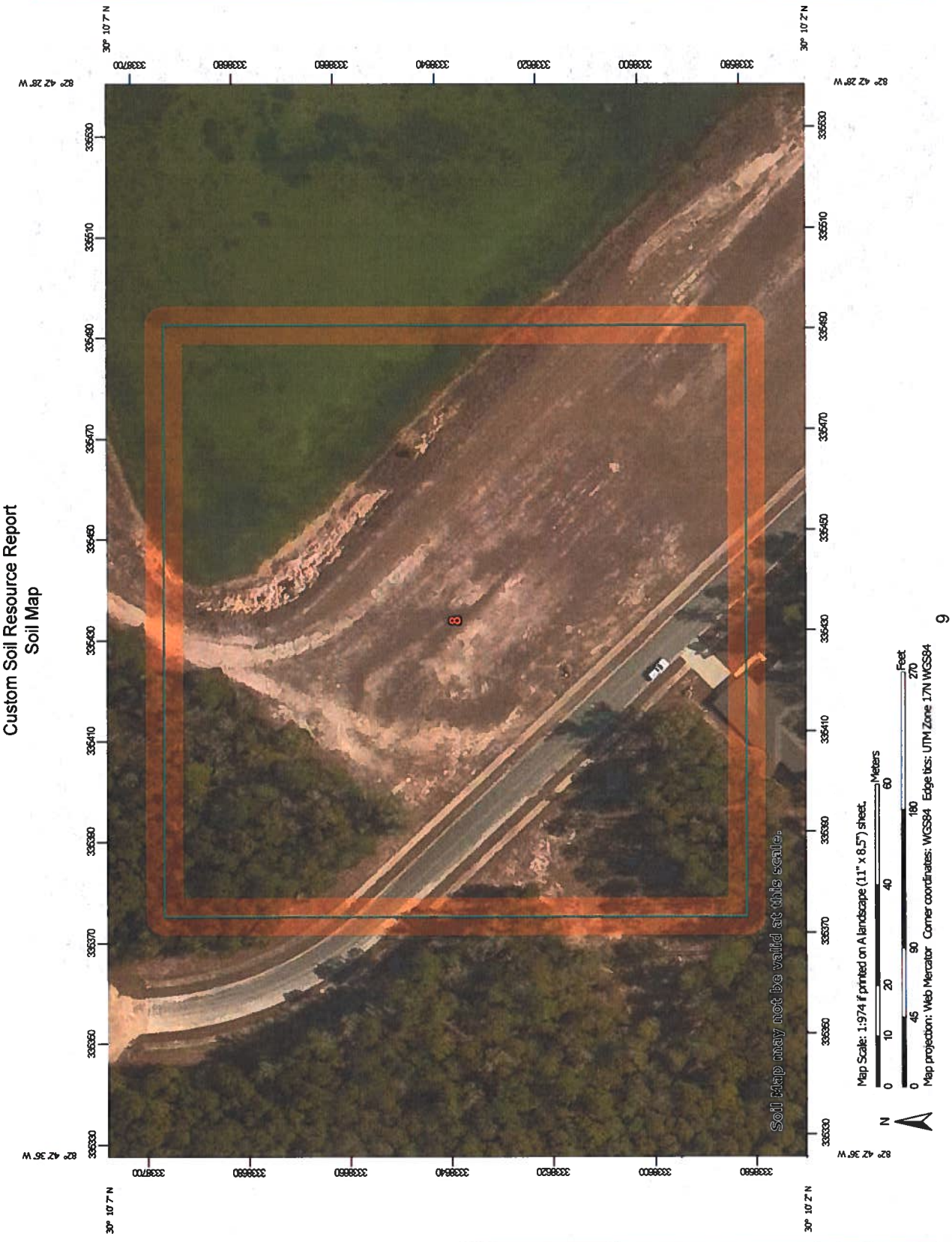
Earthworks Geotechnical, Inc.

PROJECT: AERIAL VIEW & TEST LOCATIONS					
TITLE: FIGURE A2		SCALE: 1:40			
Designed:	J.S.W.	Revised:	Date:	Description:	
Drawn:	J.S.W.				
Checked:	R.M.L.				
Date:	02/23/20				

No. 19E-207 | Sheet 1 of 1

Earthworks Geotechnical, Inc.
2236 Capital Circle NE, Tallahassee, Fl. 32308
Phone: (850) 385-5288 Fax: (850) 386-7586
Email: info@decengrs.com State Certification #6354

Custom Soil Resource Report
Soil Map



APPENDIX B

TABLES

TABLE-B1
USDA SOIL SURVEY DATA
COLUMBIA COUNTY, FLORIDA

MATERIAL REFERENCE NUMBER	MATERIAL NAME	DEPTH (INCHES)	MATERIAL DESCRIPTION	MATERIAL CLASSIFICATION		REACTION (PH)	CORROSION POTENTIAL		DEPTH TO SHGWT (FEET)
				UNIFIED	AASHTO		UNCOATED STEEL	CONCRETE	
8	Blanton fine sand, 0 to 5% slopes	0-7	Fine sand	SM, SP-SM	A-2-4, A-3	4.5-5.5	LOW	HIGH	3.5-6.0
		7-52	Fine sand	SM, SP-SM	A-2-4, A-3	4.5-5.5			
		52-80	Fine sandy loam, sandy clay loam, sandy loam	SC-SM, SC, CL	A-2-4, A-6	4.5-5.5			

TABLE-B2
SOIL CLASSIFICATION DATA

JOB NO.: TAL19E-0207 **PAGE:** 1 of 4

LOCATION: 426 SW Commerce Dr, Ste 130

BORING NO.: B-1

DEPTH (FEET)	Wc (%)	-4 (%)	-10 (%)	-40 (%)	-100 (%)	-200 (%)	LL	PI	N Value	USCS	DESCRIPTION
0.0 - 2.0									16	SM	GRAY SILTY SAND
2.0 - 4.0									20	CH	REDDISH BROWN/WHITE FAT CLAY
4.0 - 6.0									25+	CH	REDDISH BROWN/WHITE FAT CLAY
6.0 - 8.0									25+	SM	LIGHT GRAY SILTY SAND
8.0 - 10.0									14	SM	LIGHT GRAY SILTY SAND

TABLE-B2 (CONTINUED)
SOIL CLASSIFICATION DATA

JOB NO.: TAL19E-0207 **PAGE:** 2 of 4

LOCATION: 426 SW Commerce Dr, Ste 130

BORING NO.: B-2

DEPTH (FEET)	Wc (%)	-4 (%)	-10 (%)	-40 (%)	-100 (%)	-200 (%)	LL	PI	DCP N-value	USCS	DESCRIPTION
0.0 - 2.0										SM	GRAY SILTY SAND
2.0 - 4.0										CH	REDDISH BROWN/WHITE FAT CLAY
4.0 - 6.0										CH	REDDISH BROWN/WHITE FAT CLAY
6.0 - 8.0										CH	REDDISH BROWN/WHITE FAT CLAY
8.0 - 10.0										SM	LIGHT GRAY SILTY SAND

TABLE-B2 (CONTINUED)
SOIL CLASSIFICATION DATA

JOB NO.: TAL19E-0207 **PAGE:** 3 of 4

LOCATION: 426 SW Commerce Dr, Ste 130

BORING NO.: B-3

DEPTH (FEET)	Wc (%)	-4 (%)	-10 (%)	-40 (%)	-100 (%)	-200 (%)	LL	PI	DCP N-value	USCS	DESCRIPTION
0.0 - 2.0										SM	GRAY SILTY SAND
2.0 - 4.0										CH	REDDISH BROWN/WHITE FAT CLAY
4.0 - 6.0										CH	REDDISH BROWN/WHITE FAT CLAY
6.0 - 8.0										SM	LIGHT GRAY SILTY SAND
8.0 - 10.0										SM	LIGHT GRAY SILTY SAND

TABLE-B2 (CONTINUED)
SOIL CLASSIFICATION DATA

JOB NO.: TAL19E-0207 **TABLE 1 PAGE** 4 of 4

LOCATION: 426 SW Commerce Dr, Ste 130

BORING NO.: B-4

DEPTH (FEET)	Wc (%)	-4 (%)	-10 (%)	-40 (%)	-100 (%)	-200 (%)	LL	PI	DCP N-value	USCS	DESCRIPTION
0.0 - 2.0										CH	REDDISH BROWN/WHITE FAT CLAY
2.0 - 4.0										CH	REDDISH BROWN/WHITE FAT CLAY
4.0 - 6.0										CH	REDDISH BROWN/WHITE FAT CLAY
6.0 - 8.0										SM	LIGHT GRAY SILTY SAND
8.0 - 10.0										SM	DARK BROWN SILTY SAND

TABLE-B3
SOIL BORING LOCATION AND GROUNDWATER DATA
COLUMBIA COUNTY, FLORIDA

BORING NUMBER	DEPTH (FEET)	MEASURED GROUNDWATER DEPTH (FEET)	GEOGRAPHIC COORDINATE SYSTEM (WGS 84)			
			NORTH LATITUDE		WEST LONGITUDE	
			DEG(°)	MIN(')	DEG(°)	MIN(')
B-1	10.00	9.0	30	10.091	82	42.551
B-2	10.00	9.5	30	10.084	82	42.544
B-3	10.00	9.0	30	10.084	82	42.559
B-4	10.00	8.5	30	10.080	82	42.552
DR	1.50	--	30	10.086	82	42.550

NOTE: "--" Indicates groundwater not encountered

APPENDIX C

TEST RESULTS

DOUBLE RING INFILTROMETER ANALYSIS
ASTM D 3385

JOB NO.: TAL19E-0207
CLIENT: Aaron Simque
LOCATION: 426 SW Commerce Dr, Ste 130
TESTED BY: J.S.W.
CHECKED BY: R.M.L.
DATE: 2/23/2020

DIAMETER OF INNER RING:	31.3 [cm]	12.3 [in]
AREA OF INNER RING:	769.4 [cm^2]	118.8 [in^2]
DIAMETER OF OUTER RING:	61.6 [cm]	24.3 [in]
AREA OF OUTER RING:	2980.2 [cm^2]	463.8 [in^2]
AREA OF ANNULAR SURFACE:	2210.8 [cm^2]	344.9 [in^2]

Time Intervals (actual)	Min.	Elapsed Time Min.	Inner Ring Vol (ML)	Outer Ring Vol (ML)	Perc. Rate (Inner Ring) (cm/Hr)	Perc. Rate (Inner Ring) (In/Hr)	Perc. Rate (Outer Ring) (cm/Hr)	Perc. Rate (Outer Ring) (In/Hr)
10:00 - 10:10	10	10	162	0	1.27	0.50	0.00	0.00
10:10 - 10:20	10	20	162	0	1.27	0.50	0.00	0.00
10:20 - 10:30	10	30	130	0	1.01	0.40	0.00	0.00
10:30 - 10:40	10	40	84	0	0.66	0.26	0.00	0.00
10:40 - 10:50	10	50	84	0	0.66	0.26	0.00	0.00
10:50 - 11:00	10	60	39	0	0.30	0.12	0.00	0.00
11:10 - 11:20	10	70	39	0	0.30	0.12	0.00	0.00
11:20 - 11:30	10	80	39	0	0.30	0.12	0.00	0.00
11:30 - 11:40	10	90	39	0	0.30	0.12	0.00	0.00
11:40 - 11:50	10	100	0	0	0.00	0.00	0.00	0.00
11:50 - 11:20	30	130	0	0	0.00	0.00	0.00	0.00
11:20 - 11:50	30	160	0	0	0.00	0.00	0.00	0.00

APPROXIMATE SATURATED VERTICAL INFILTRATION RATE:	**0.12 in/hr**
APPROXIMATE SATURATED HORIZONTAL INFILTRATION RATE:	**0.18 in/hr**

NOTE: Earthworks recommends at least a 2.0 safety factor be included in the approximate saturated vertical infiltration rate

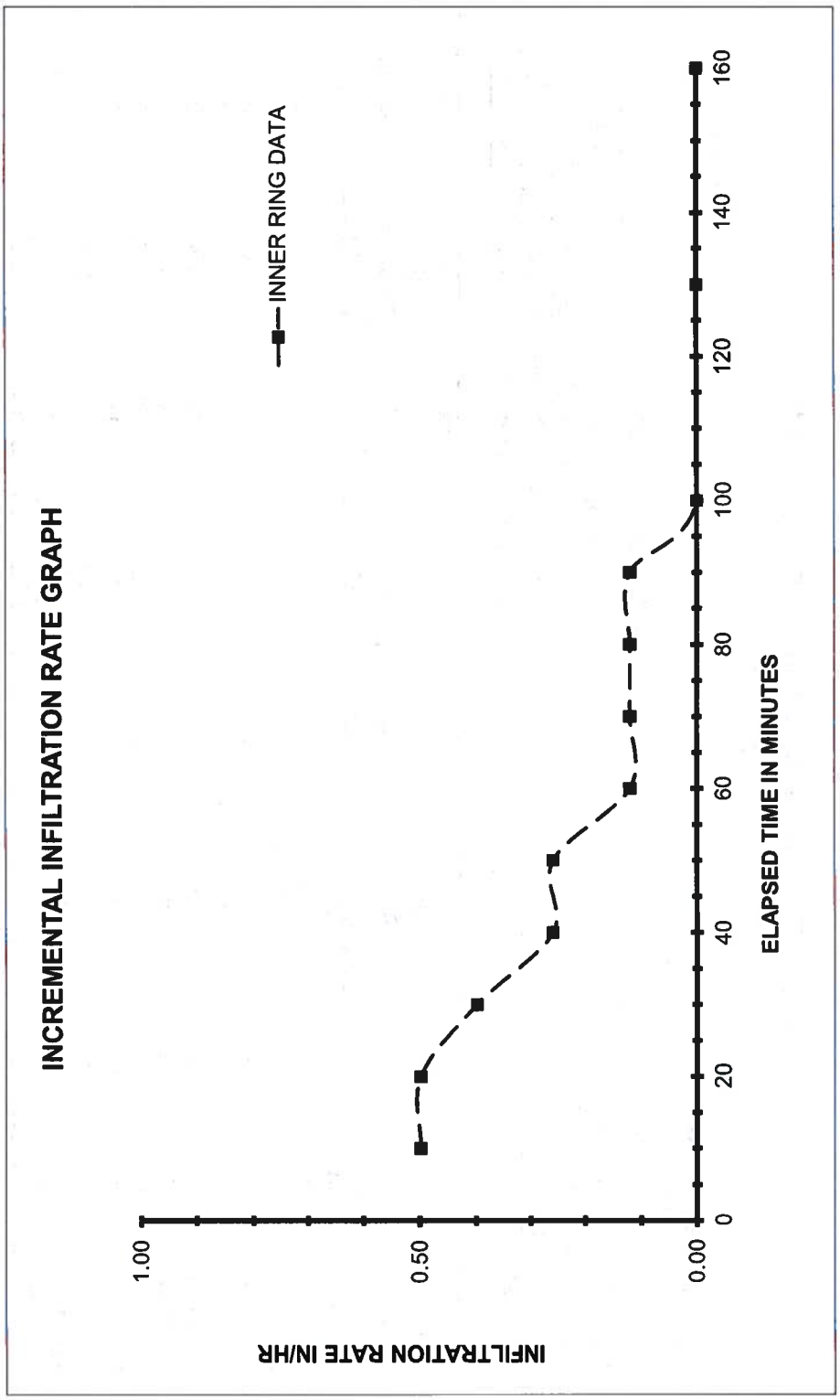
DOUBLE RING INFILTROMETER ANALYSIS
ASTM D 3385

Page: 2 of 2

JOB NO.: TAL19E-0207
LOCATION: 426 SW Commerce Dr, Ste 130

TESTED BY: J.S.W.
DATE: 2/23/2020

INCREMENTAL INFILTRATION RATE GRAPH



APPENDIX D

NRCS SOIL SURVEY REPORT DATA

Custom Soil Resource Report

Chemical Soil Properties—Columbia County, Florida

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	*meq/100g*	*meq/100g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
8—Blanton fine sand, 0 to 5 percent slopes								
Blanton	0-7	—	0.2-0.9	4.5-5.5	0	0	0.0-2.0	0-4
	7-52	—	0.0-1.6	4.5-5.5	0	0	0.0-2.0	0-4
	52-80	—	2.3-7.2	4.5-5.5	0	0	0.0-2.0	0-4

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash. The criteria for determining the hydrologic soil group for individual soil components is found in the National Engineering Handbook, Chapter 7 issued May 2007(http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba). Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Engineering Properties–Columbia County, Florida														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
8—Blanton fine sand, 0 to 5 percent slopes														
Blanton	85	A	0-7	Fine sand	SM, SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100 -100	89-94-100	79-91-100	10-20-25	0-0 -23	NP-0 -2
			7-52	Fine sand	SM, SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100 -100	89-95-100	76-91-100	10-21-25	0-0 -17	NP-0 -2
			52-80	Fine sandy loam, sandy clay loam, sandy loam	SC-SM, SC, CL	A-2-4, A-6	0- 0- 0	0- 0- 0	100-100 -100	95-96-100	80-94-100	27-37-60	22-29 -39	7-12-21

Custom Soil Resource Report

Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Physical Soil Properties–Columbia County, Florida

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
8—Blanton fine sand, 0 to 5 percent slopes														
Blanton	0-7	90-96-99	0-3-5	1-2-5	1.48-1.50-1.52	42.34-91.74-141.14	0.03-0.05-0.07	0.1-0.1-0.3	0.5-2.4-3.0	.15	.15	5	1	250
	7-52	90-95-99	0-4-5	1-1-5	1.56-1.58-1.59	42.34-91.74-141.14	0.03-0.05-0.07	0.0-0.1-0.4	0.0-0.3-0.5	.17	.17			
	52-80	50-76-85	0-6-35	12-19-34	1.60-1.62-1.64	1.41-28.23-42.34	0.10-0.13-0.15	0.6-0.9-1.6	0.0-0.3-0.5	.24	.24			

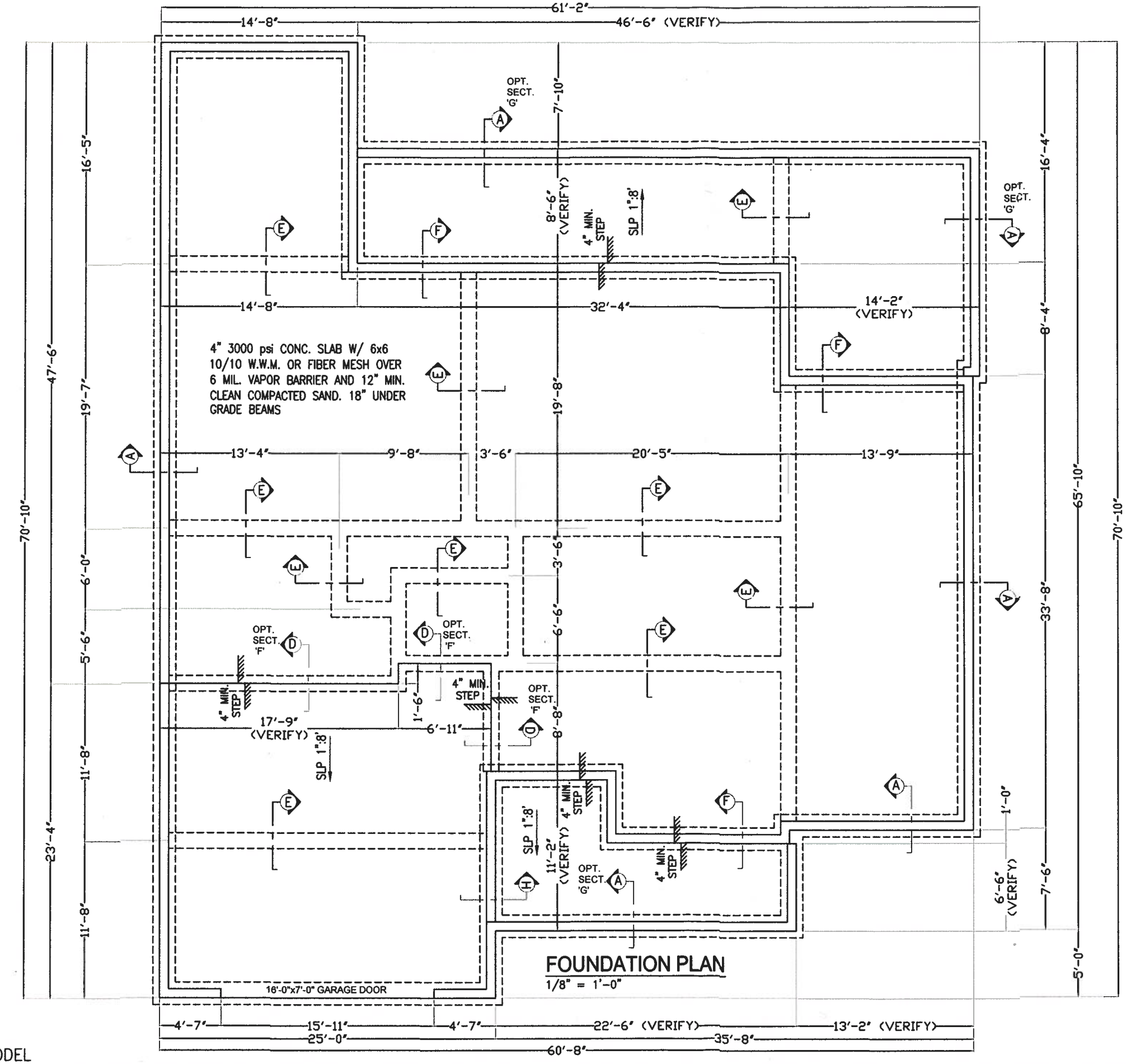
Custom Soil Resource Report

Soil Features–Columbia County, Florida

Map symbol and soil name	Restrictive Layer			Hardness	Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness		Initial	Total		Uncoated steel	Concrete
		Low-RV-High	*Range*		*Low-High*	*Low-High*			
		In	*In*		*In*	*In*			
8—Blanton fine sand, 0 to 5 percent slopes									
Blanton		—	—		0	0	None	Low	High

Custom Soil Resource Report

Map unit symbol and soil name	Hydrologic group	Surface runoff	Most likely months	Water table				Ponding			Flooding	
				Upper limit	Lower limit	Kind	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft		Ft				
8—Blanton fine sand, 0 to 5 percent slopes											
Blanton	A	Negligible	Jan-Feb	—	—	—	—	—	None	—	None
			Mar-Nov	3.5-6.0	6.0	Apparent	—	—	None	—	None
			Dec	—	—	—	—	—	None	—	None



FOUNDATION PLAN

1/8" = 1'-0"

THE BRISTOL MODEL

NOTE:

INTERIOR LOAD CONDITIONS SHALL BE VERIFIED WITH TRUSS MANUFACTURER. ADDITIONAL INTERIOR GRADE BEAMS AS PER SECTION "E" SHALL BE REQUIRED UNDER ANY LOAD BEARING WALLS OR COLUMNS. GRADE BEAMS SHALL TIE INTO AND BE POURED CONTINUOUS WITH ADAJACENT GRADE BEAMS AND/OR OUTER EDGE OF SLAB.

NOTE:

CONTRACTOR TO VERIFY ALL DIMENSIONS FOR FOUNDATION PLAN PRIOR TO CONSTRUCTION

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

R. MICHAEL LATIMER
LICENSE
NO. 41970
STATE OF FLORIDA
PROFESSIONAL ENGINEER
2/27/20

R. MICHAEL LATIMER, P.E.
LICENSE #41970
DEC ENGINEERING INC.

Feb 27, 2020 - 11:13am

DEC Engineering, Inc.
Civil Engineering
2236 Capital Circle NE Ste 202 Tallahassee, Florida 32308
Phone: (850) 385-6288
Email: info@decengrs.com State Certification #4844

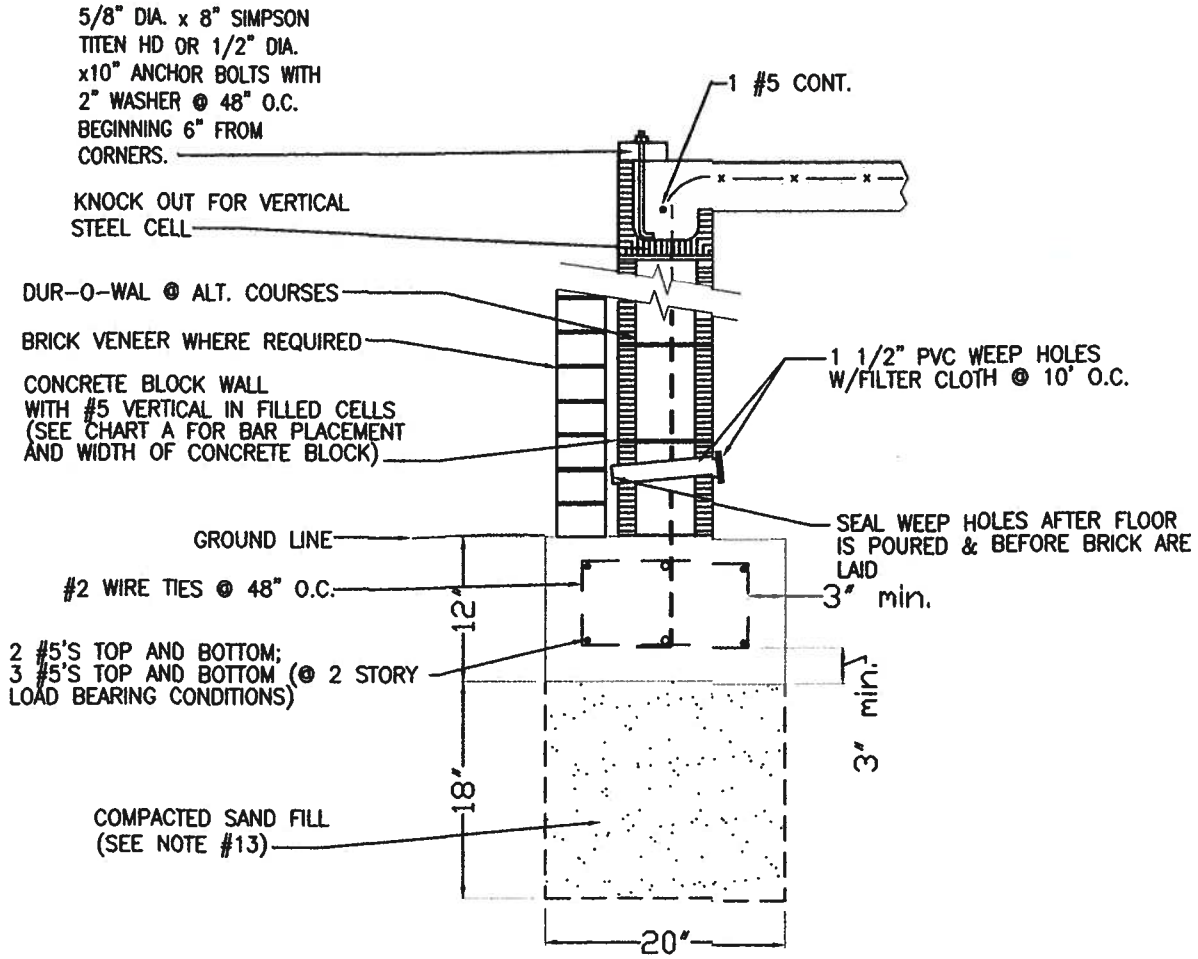
PROJECT: 407 SW Silver Palm, Lake City, Fl.
TITLE: Foundation Plan
SCALE: 1/8"=1'-0"
CLIENT: Aaron Simque Homes

File Name:	
Designed:	D.A.W.
Drawn:	D.A.W.
Checked:	R.M.L.
Date:	2/27/20

Revised by:	Date:	Description:

Sheet 1 of 4

No. 19D-0110



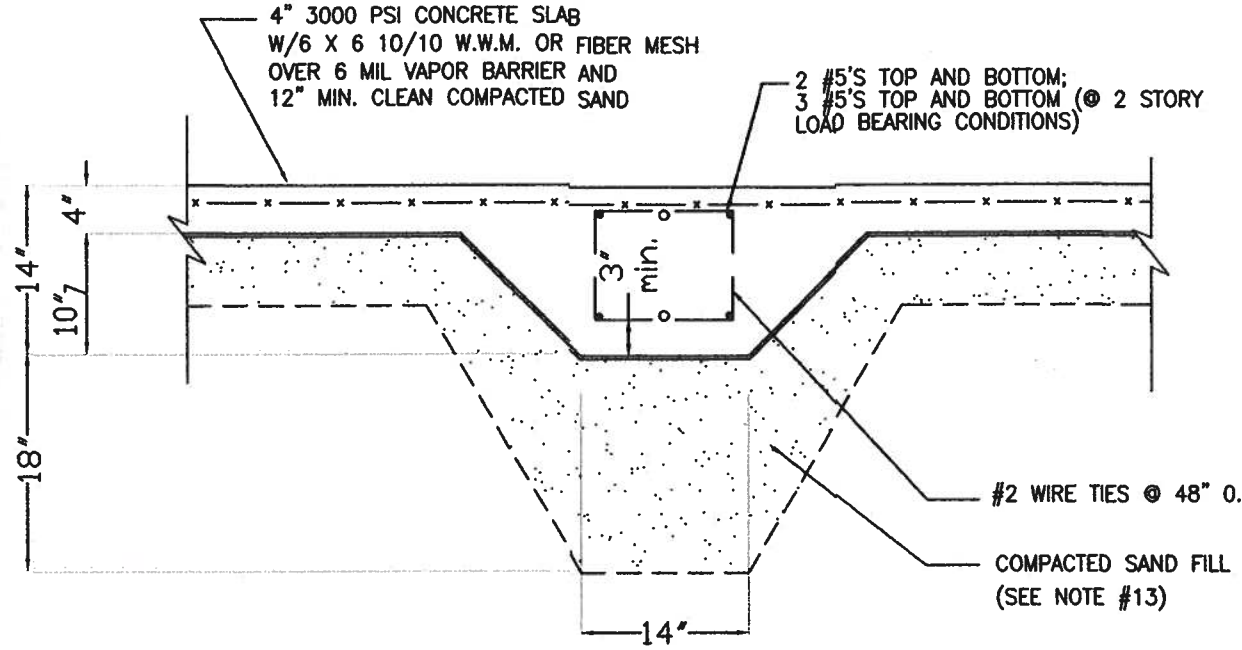
A. SECTION

All steel connectors, anchors and fasteners to be in direct contact with pressure-treated woods are to be as a minimum:

Standard galavanized coating, 0.90 oz of zink per square foot of surface area (per ASTM A653)

Hot-dip galvanized after fabrication at 2.0 oz per square foot of surface area (per ASTM A123)

Stainless steel (Type 316L) or equal.



E. TYPICAL INTERIOR GRADE BEAM

NOTE: WHERE USED WITH BLOCK STEM, INTERIOR GRADE BEAM SHALL BE TIED TO PERIMETER WALL/FOOTER BY TURNING 2 OF THE SHOWN #5 BARS DOWN THROUGH FILLED CELLS AND INTO PERIMETER FOOTER.

R. MICHAEL LATIMER LICENSE NO. 41970 STATE OF FLORIDA PROFESSIONAL ENGINEER

R. MICHAEL LATIMER, P.E.
LICENSE #41970
DEC ENGINEERING INC.

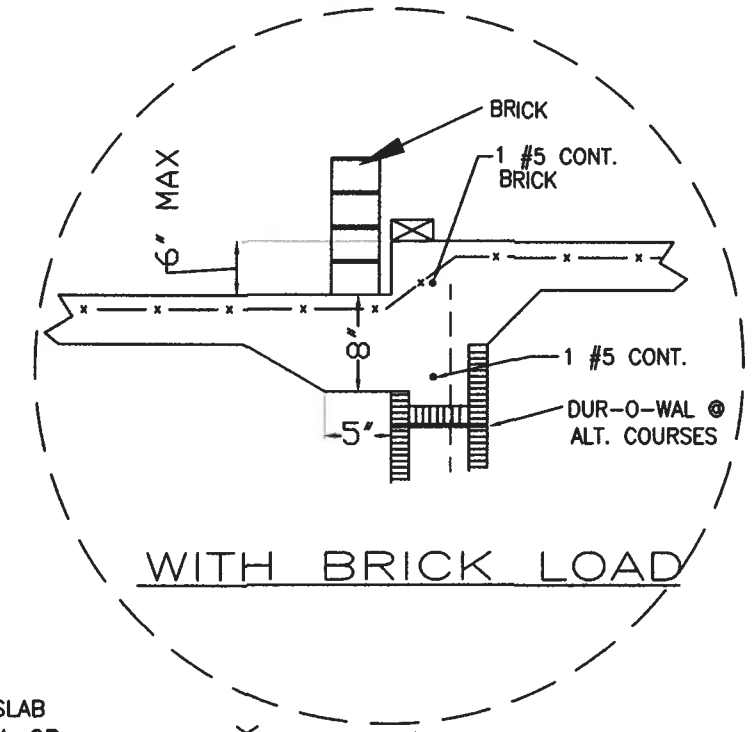
Feb 27, 2020 - 9:06am

DEC Engineering, Inc.
Civil Engineering
2236 Capital Circle NE Ste 202 Tallahassee, Florida 32308
Phone: (850) 385-5268
Email: info@decengrs.com State Certification #4244

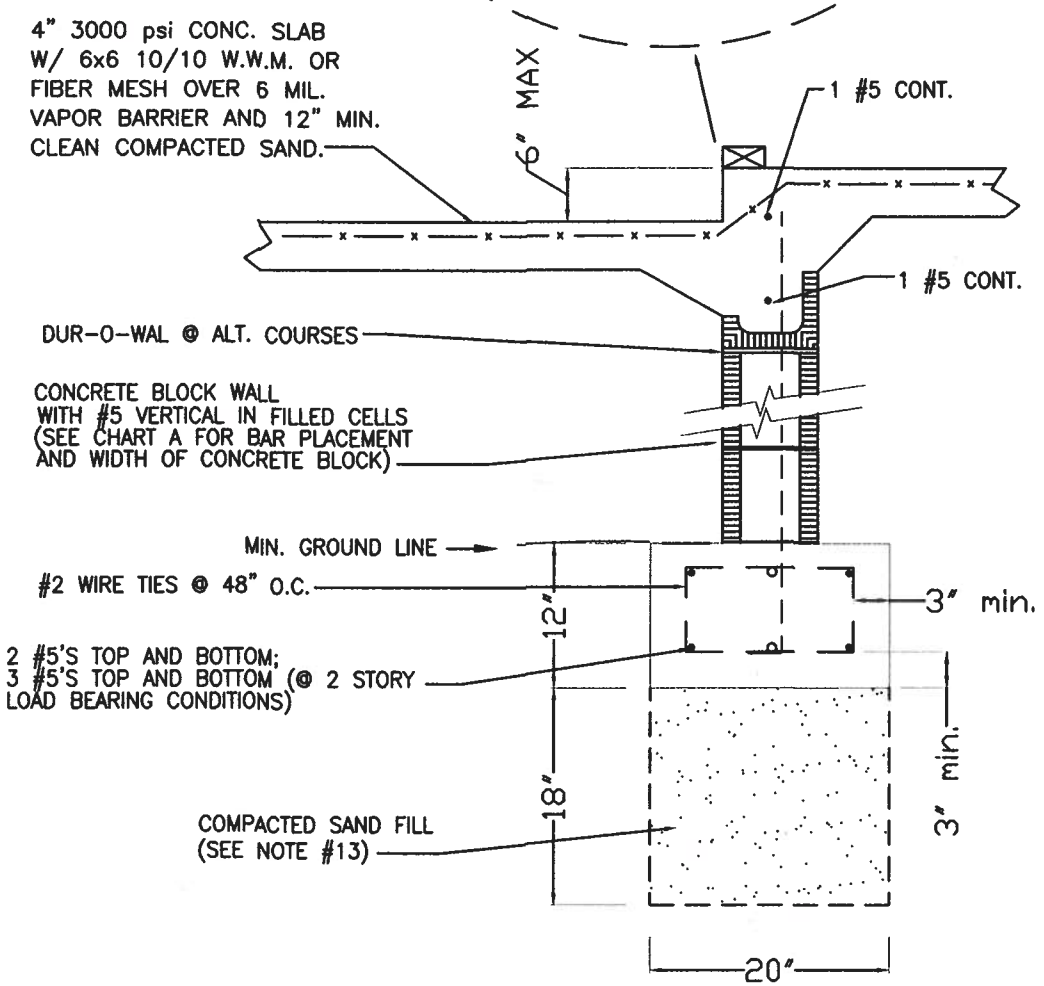
PROJECT: 407 SW Silver Palm, Lake City, Fl.
TITLE: Foundation Details
CLIENT: Aaron Simque Homes
SCALE: 3/4"=1'-0'
File Name:
Designed: D.A.W.
Drawn: D.A.W.
Checked: R.M.L.
Date: 2/27/20
Reviewed by: Date: Descriptions:

Sheet 2 of 4

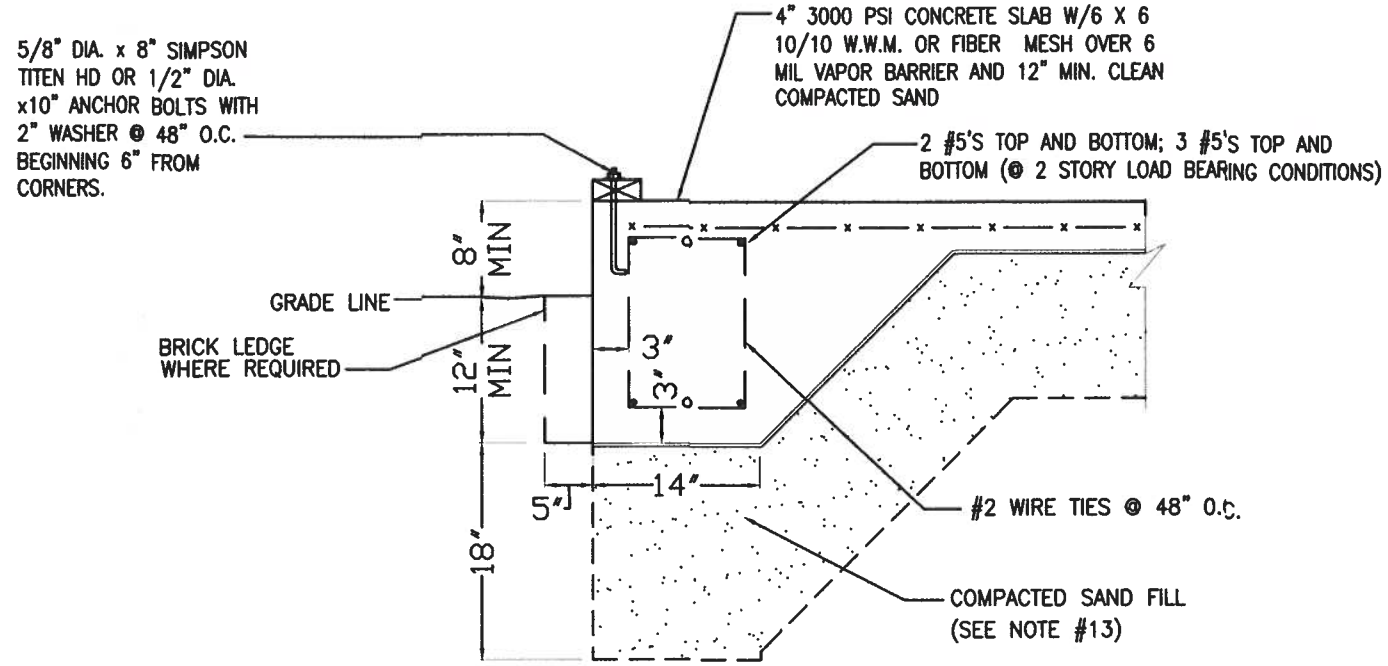
No. 19D-0110



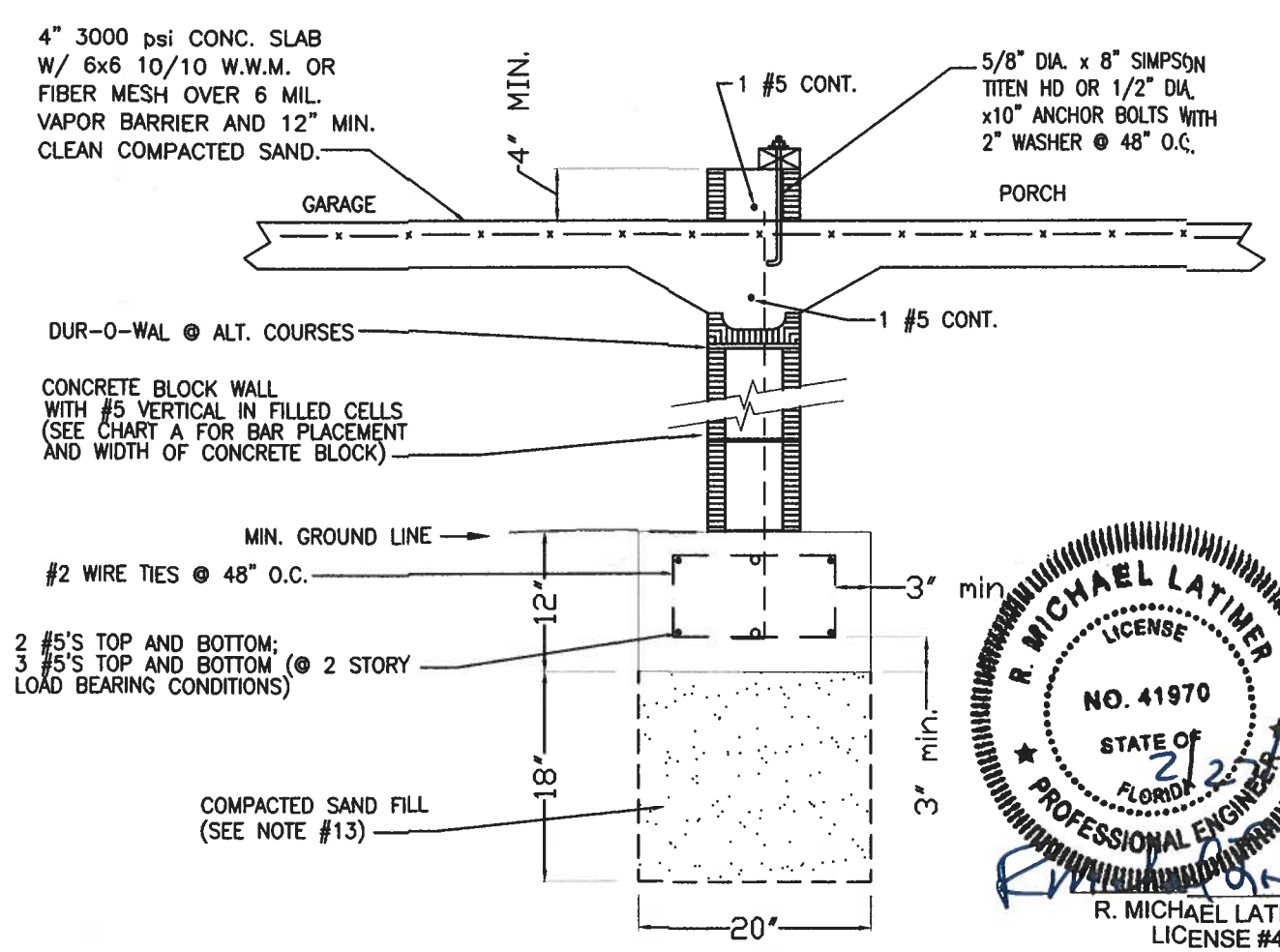
WITH BRICK LOAD



F. STEP DOWN DETAIL



G. TYPICAL EXTERIOR GRADE BEAM



H. STEP DOWN DETAIL

R. MICHAEL LATIMER, P.E.
LICENSE #41970
DEC ENGINEERING INC.

Feb 27, 2020 - 11:08am

DEC Engineering, Inc.
Civil Engineering
2236 Capital Circle NE Ste 202 Tallahassee, Florida 32308
Phone: (850) 385-6288
Email: info@decengre.com State Certification #4244

PROJECT: 407 SW Silver Palm, Lake City, Fl.
TITLE: Foundation Details
CLIENT: Aaron Simque Homes
SCALE: 3/4"=1'-0"

Revised by:	Date:	Description:

File Name:	
Designed:	D.A.W.
Drawn:	D.A.W.
Checked:	R.M.L.
Date:	2/27/20

Sheet 3 of 4

NO. 19D-0110

CHART A
VERTICAL BAR PLACEMENT FOR
BLOCK WALL WITH CONCRETE FLOOR SLAB OR JOIST DESIGN

FOR FLOOR JOIST DESIGN USE BOND BEAM WITH 1 #5 REINFORCED BAR CONTINUOUS FOR SLAB FLOOR, POUR INTO BLOCK WITH WELDED WIRE MESH. (SEE CHART BELOW.)

**IN ALL CASES VERTICAL BARS SHALL BE PLACED AT EITHER SIDE OF OPENINGS IN WALL AND AT EACH CORNER. VERTICAL BARS SHALL BE BENT 24" INTO SLAB EACH REINFORCED CELL SHALL BE FILLED WITH CONCRETE **

*** FLOOR SYSTEM TO BE PLACED BEFORE BACKFILLING

H--HEIGHT OF WALL	WIDTH OF BLOCK	VERTICAL BAR SPACING
H < 32	8"	NO. 5 @ 72" O.C.
32 < H < 56	8"	NO. 5 @ 48" O.C.
56 < H < 72	8"	NO. 5 @ 32" O.C.
72 < H < 88	12"	NO. 5 @ 32" O.C. W/ BOND BEAM W/ 1 #5 @ MID-HEIGHT
	8" *	NO. 5 @ 32" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1- #5 SHALL BE PROVIDED @ MID-HEIGHT)
88 < H < 96	12"	NO. 5 @ 24" O.C. W/ BOND BEAM W/ 1 #5 @ MID-HEIGHT
	8" *	NO. 5 @ 24" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1 #5 SHALL BE PROVIDED @ MID-HEIGHT)
96 < H < 120	12"	NO. 5 @ 16" O.C. (ALL CELLS FILLED W/3000 PSI CONC.) W/ BOND BEAM W/ 1 #5 @ 48" O.C. OR LESS ***
	8" *	NO. 5 @ 24" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1 #5 SHALL BE PROVIDED @ MID-HEIGHT)
120 < H < 132	12"	NO. 6 @ 8" O.C. (ALL CELLS FILLED W/3000 PSI CONC.) W/ BOND BEAM W/ 1 #6 @ MID-HEIGHT
	8" *	NO. 5 @ 24" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1 #5 SHALL BE PROVIDED @ MID-HEIGHT)

CHART B
PHYSICAL PROPERTIES OF MASONRY CEMENTS

MASONRY CEMENT TYPE	N	* S	* M
TIME OF SETTING			
INITIAL SET, MINIMUM, HR.	2	1 1/2	1 1/2
FINAL SET, MAXIMUM, HR.	24	24	24
COMPRESSIVE STRENGTH (AVERAGE OF 3 CUBES), MIN.			
7 DAYS, PSI (MPa)	500 (3.4)	1300 (9.0)	1800 (12.4)
28 DAYS, PSI (MPa)	900 (6.2)	2100 (14.5)	2900 (20.0)

* FOR THE PURPOSE OF THESE PLANS USE GRADE 'S' OR 'M'

GENERAL NOTES FOR SPECIAL FOUNDATION

1. ALL CONSTRUCTION SHALL CONFORM TO THE 2017 (6th ADDITION) FLORIDA BUILDING CODE.
2. IN THE EVENT OF A CONFLICT BETWEEN PLANS AND THE CODES, THE CODES SHALL GOVERN.
3. LOT SHALL BE LANDSCAPED TO PREVENT THE DETENTION OF SURFACE WATER.
4. CONCRETE: 3000 PSI STEEL: GRADE 60
5. ALL FILL SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST.

   DEFINITION:
   a. COMPACTION TEST WILL NOT BE REQUIRED WHEN THE FILL IS LESS THAN 12 INCHES IN DEPTH. THE INSPECTOR'S SHALL USE BEST JUDGEMENT.
   b. WHEN THE FILL IS 12 INCHES TO 18 INCHES IN DEPTH, COMPACTION TEST WILL BE REQUIRED ONLY IF THE INSPECTOR'S JUDGEMENT IS THAT THE COMPACTION IS QUESTIONABLE.
   c. WHEN THE FILL IS 18 INCHES IN DEPTH OR MORE COMPACTION TEST WILL BE REQUIRED.
6. ALL SPLICES IN FOOTING STEEL SHALL BE LAPPED 40 BAR DIAMETERS IN CONCRETE BLOCK AND 30 BAR DIAMETERS IN MONOLITHIC SLAB.
7. STEEL IN INTERIOR GRADE BEAMS SHALL BE SPLICED TO STEEL IN EXTERIOR GRADE BEAMS TO ASSURE CONTINUITY OF FOOTING THROUGHOUT STRUCTURE.
8. EXTERIOR GRADE BEAMS SHALL RUN CONTINUOUS AROUND THE PERIMETER OF THE STRUCTURE TO ASSURE CONTINUITY.
9. ALL CONCRETE SLABS SHALL HAVE CONTROL JOINTS TO CONTROL CRACKING SPACED MAXIMUM 15 FEET IN EACH DIRECTION.
10. SOIL SHALL BE CHEMICALLY TREATED FOR TERMITES PER F.B.C. (SEE NOTE 23 FOR ALTERNATE)
11. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE SITE PRIOR TO BEGINNING CONSTRUCTION.
12. ALL REINFORCING STEEL SHALL BE LOCATED MIN. 3" FROM CONCRETE SURFACE.
13. A CLEAN COMPACTED SAND FILL AT LEAST 18 INCHES THICK SHALL BE PLACED UNDER ALL EXTERIOR AND INTERIOR GRADE BEAMS.
    NOTE:
    THIS MAY BE OMITTED IN AREAS THAT HAVE AT LEAST 30 INCHES OF CLEAN PACTED NATURAL SOIL THAT HAS A MINIMUM BEARING CAPACITY OF 2000 PSF AND IS FREE OF MULCH, ORGANIC MATERIAL AND PLASTIC CLAYS AND CONSIST OF AT LEAST 50% SAND (EST.)
14. ANY ORGANIC MATERIAL UNDER FOUNDATION SHALL BE REMOVED PRIOR TO CONSTRUCTION, UNLESS OTHERWISE SPECIFIED.
15. FOR STEM WALLS 56" OR HIGHER, FORMWORK SHALL BE BRACED BEFORE BACKFILLING.
16. CONCRETE BLOCK SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 1500 PSI.
17. ADDITIONAL #5 W/ FILLED CELLS @ LOAD BEARING POINTS ON WALL
18. INCREASE OVERALL STEMWALL FOOTER WIDTH BY 4" WHEN BLOCK SIZE IS INCREASED FROM 8" BLOCK TO 12" BLOCK.
19. FOUNDATION DESIGN UNLESS NOTED IN SOILS REPORT IS A MIN. BEARING CAPACITY OF 2000 PSF.
20. USE 3#5's @ FOOTER FOR ANY SECOND STORY LOADING PER DETAIL.
21. IF WIND LOAD REQUIREMENTS FOR ANCHOR BOLTS EXCEED 7" THEY WILL GOVERN.
22. FOOTER @ A 12" MIN. INTO UNDISTURBED SOIL.
23. APPLICATION OF WOOD-TREATMENT TERMITCIDE SHALL BE AS REQUIRED BY LABEL DIRECTIONS FOR USE, AND MUST BE COMPLETED PRIOR TO FINAL BUILDING APPROVAL. CHANGES IN FRAMING OR ADDITIONS TO FRAMING IN AREAS OF THE STRUCTURE REQUIRING TREATMENT THAT OCCUR AFTER WOOD TREATMENT MUST BE TREATED PRIOR TO FINAL BUILDING APROVAL.

SOIL REPORT BY EARTHWORKS GEOTECHNICAL, INC.
FILE NUMBER TAL19E-0207, FEB. 26, 2020 REVIEWED PRIOR TO FOUNDATION DESIGN.

R. MICHAEL LATIMER LICENSE NO. 41970 STATE OF FLORIDA PROFESSIONAL ENGINEER 2/27/20

R. MICHAEL LATIMER, P.E.
LICENSE #41970
DEC ENGINEERING INC.

DEC Engineering, Inc.
Civil Engineering
2236 Capital Circle NE Ste 202 Tallahassee, Florida 32308
Phone: (850) 385-5266
Email: info@decengrs.com
State Certification #4244

PROJECT: 407 SW Silver Palm, Lake City, Fl. | CLIENT: Aaron Simque Homes
TITLE: Foundation Notes | SCALE: 3/4"=1'-0" | Revised by: | Date: | Description:
File Name: | Designed: D.A.W. | Drawn: D.A.W. | Checked: R.M.L. | Date: 2/27/20
Sheet 4 of 4
No. 19D-0110

Feb 27, 2020 - 9:06am

Lumber design values are in accordance with ANSI/TPI 1 section 6.3
These truss designs rely on lumber values established by others.

RE: 2217427 - SIMQUE - STEWART RES.

MiTek USA, Inc.
6904 Parke East Blvd.
Tampa, FL 33610-4115

Site Information:
Customer Info: Aaron Simque Project Name: Stewart Res. Model: Bristol Modified
Lot/Block: N/A Subdivision: N/A
Address: TBD, TBD
City: Columbia Cty State: FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.
Name: License #:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):
Design Code: FBC2017/TPI2014 Design Program: MiTek 20/20 8.2
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: 55.0 psf

This package includes 54 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T19159750	CJ01A	1/16/20	23	T19159772	T05	1/16/20
2	T19159751	CJ01T	1/16/20	24	T19159773	T05D	1/16/20
3	T19159752	CJ02A	1/16/20	25	T19159774	T06	1/16/20
4	T19159753	CJ02T	1/16/20	26	T19159775	T07	1/16/20
5	T19159754	CJ03A	1/16/20	27	T19159776	T07G	1/16/20
6	T19159755	CJ03T	1/16/20	28	T19159777	T09	1/16/20
7	T19159756	EJ01	1/16/20	29	T19159778	T10	1/16/20
8	T19159757	EJ02	1/16/20	30	T19159779	T11	1/16/20
9	T19159758	HJ01A	1/16/20	31	T19159780	T12	1/16/20
10	T19159759	HJ01T	1/16/20	32	T19159781	T12D	1/16/20
11	T19159760	PB01	1/16/20	33	T19159782	T14	1/16/20
12	T19159761	PB01G	1/16/20	34	T19159783	T15	1/16/20
13	T19159762	PB04	1/16/20	35	T19159784	T16	1/16/20
14	T19159763	PB04G	1/16/20	36	T19159785	T17	1/16/20
15	T19159764	T01	1/16/20	37	T19159786	T18	1/16/20
16	T19159765	T01G	1/16/20	38	T19159787	T18G	1/16/20
17	T19159766	T02	1/16/20	39	T19159788	T19	1/16/20
18	T19159767	T03	1/16/20	40	T19159789	T20	1/16/20
19	T19159768	T03G	1/16/20	41	T19159790	T21	1/16/20
20	T19159769	T04	1/16/20	42	T19159791	T22	1/16/20
21	T19159770	T04D	1/16/20	43	T19159792	T23	1/16/20
22	T19159771	T04G	1/16/20	44	T19159793	T24	1/16/20

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Jacksonville.

Truss Design Engineer's Name: Lee, Julius
My license renewal date for the state of Florida is February 28, 2021.

Julius Lee PE No.34869
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: January 16,2020

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

RE: 2217427 - SIMQUE - STEWART RES.

MiTek USA, Inc.
6904 Parke East Blvd.
Tampa, FL 33610-4115

Site Information:

Customer Info: Aaron Simque Project Name: Stewart Res. Model: Bristol Modified
Lot/Block: N/A Subdivision: N/A
Address: TBD, TBD
City: Columbia Cty State: FL

No.	Seal#	Truss Name	Date
45	T19159794	T25	1/16/20
46	T19159795	TG01	1/16/20
47	T19159796	TG02	1/16/20
48	T19159797	TG03	1/16/20
49	T19159798	TG04	1/16/20
50	T19159799	TG05	1/16/20
51	T19159800	TG05A	1/16/20
52	T19159801	TG06	1/16/20
53	T19159802	TG07	1/16/20
54	T19159803	TG08	1/16/20

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	
2217427	CJ01A	Jack-Open	2	1	Job Reference (optional)	T19159750

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:06 2020 Page 1
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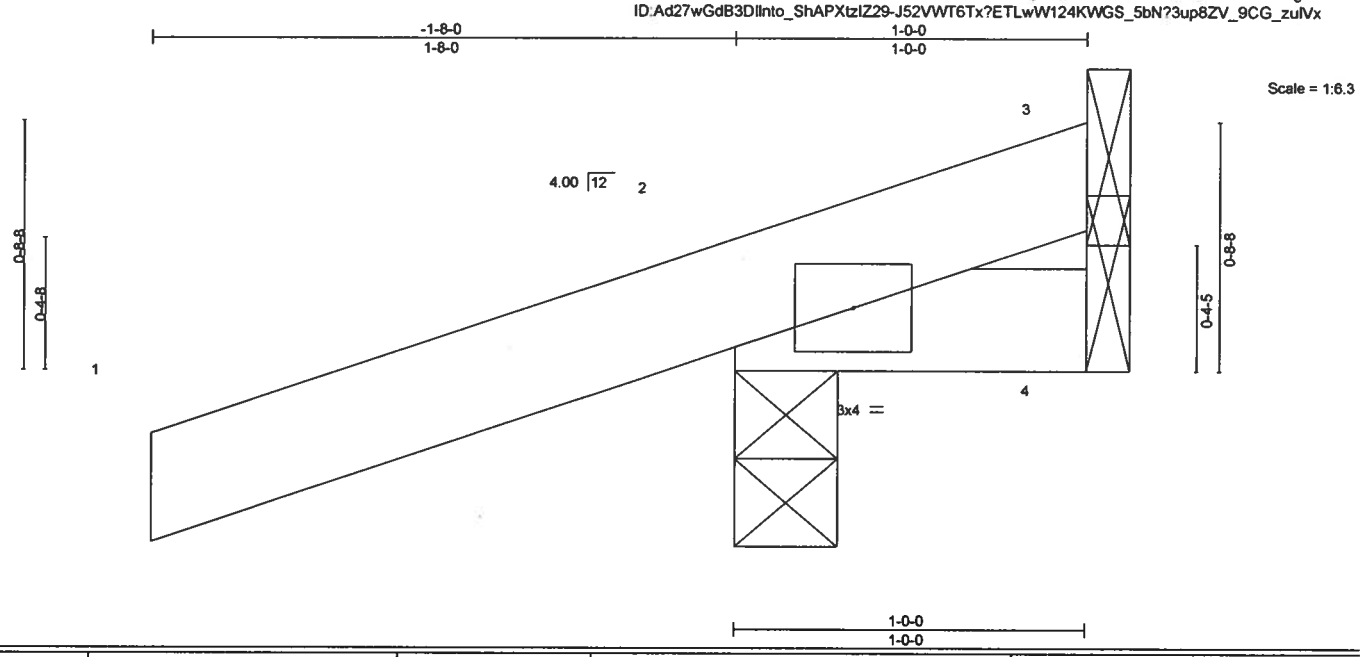

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 6 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=-12/Mechanical, 2=202/0-3-8, 4=-27/Mechanical
Max Horz 2=52(LC 8)
Max Uplift 3=-12(LC 1), 2=-205(LC 8), 4=-27(LC 1)
Max Grav 3=19(LC 8), 2=202(LC 1), 4=35(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=205.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Julius Lee PE No.34869
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

January 16,2020

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159751
2217427	CJ01T	JACK-OPEN TRUSS	4	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:07 2020 Page 1
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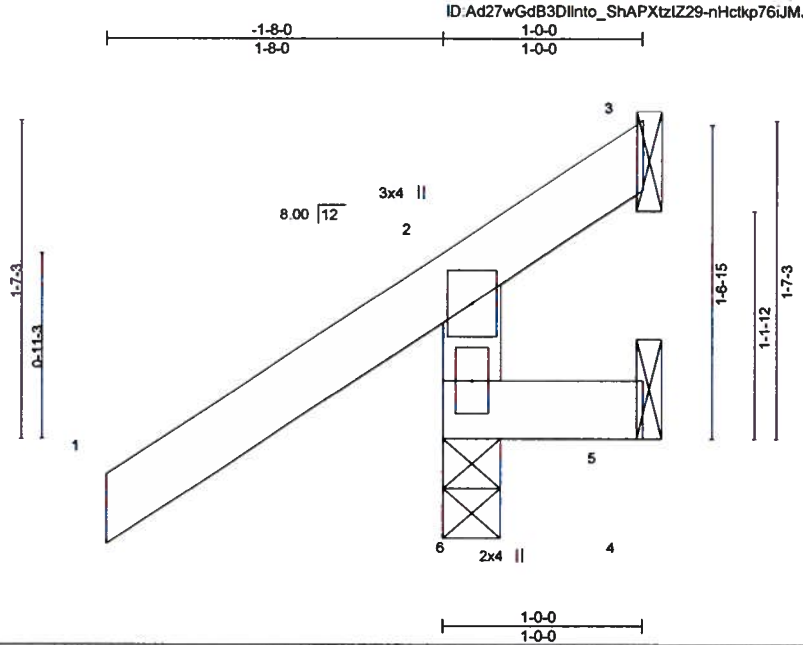


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.28	Vert(LL)	0.00	6	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MR							Weight: 7 lb	FT = 20%

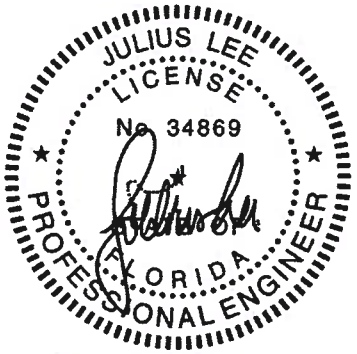
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=236/0-3-8, 3=-56/Mechanical, 5=-20/Mechanical
Max Horz 6=66(LC 12)
Max Uplift 6=-106(LC 12), 3=-56(LC 1), 5=-20(LC 1)
Max Grav 6=236(LC 1), 3=29(LC 16), 5=12(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5 except (jt=lb) 6=106.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Julius Lee PE No.34869
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
January 16,2020

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159752
2217427	CJ02A	Jack-Open	2	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:07 2020 Page 1
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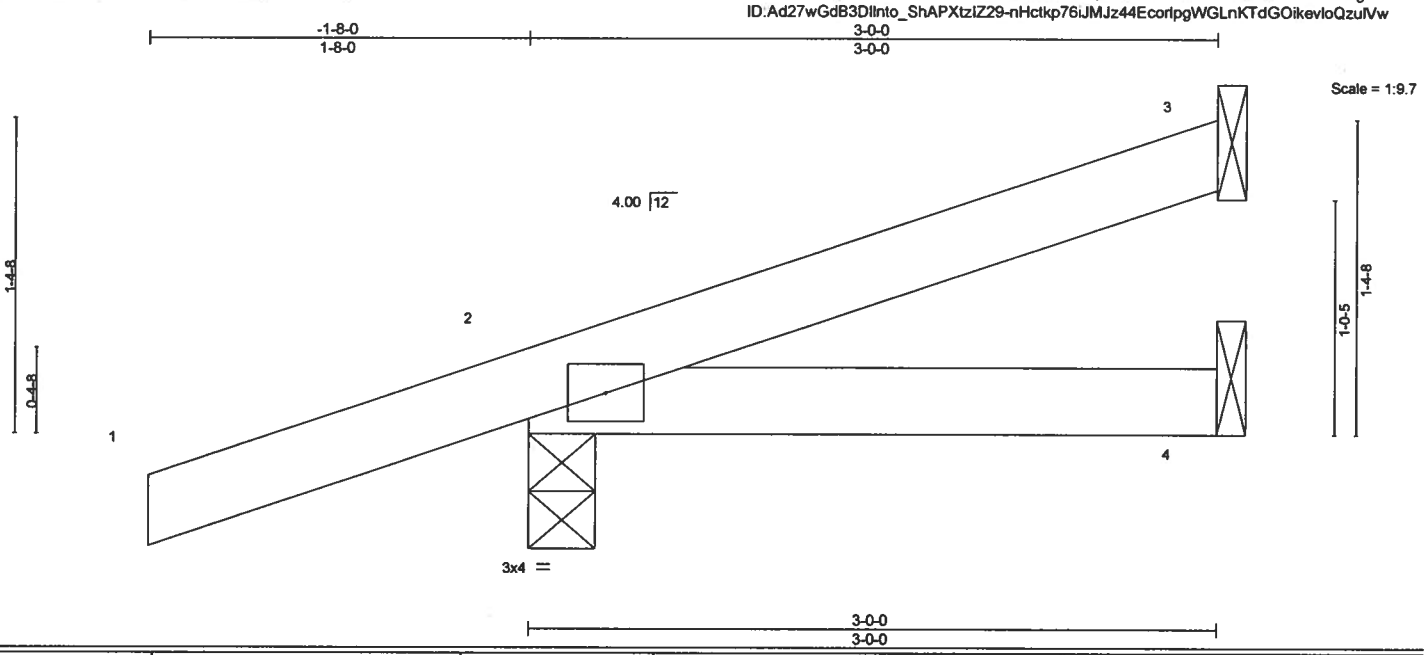

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 12 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=56/Mechanical, 2=224/0-3-8, 4=27/Mechanical
Max Horz 2=84(LC 8)
Max Uplift 3=-45(LC 8), 2=-198(LC 8), 4=-25(LC 9)
Max Grav 3=56(LC 1), 2=224(LC 1), 4=48(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=198.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Date:

January 16,2020

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159753
2217427	CJ02T	JACK-OPEN TRUSS	4	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:08 2020 Page 1
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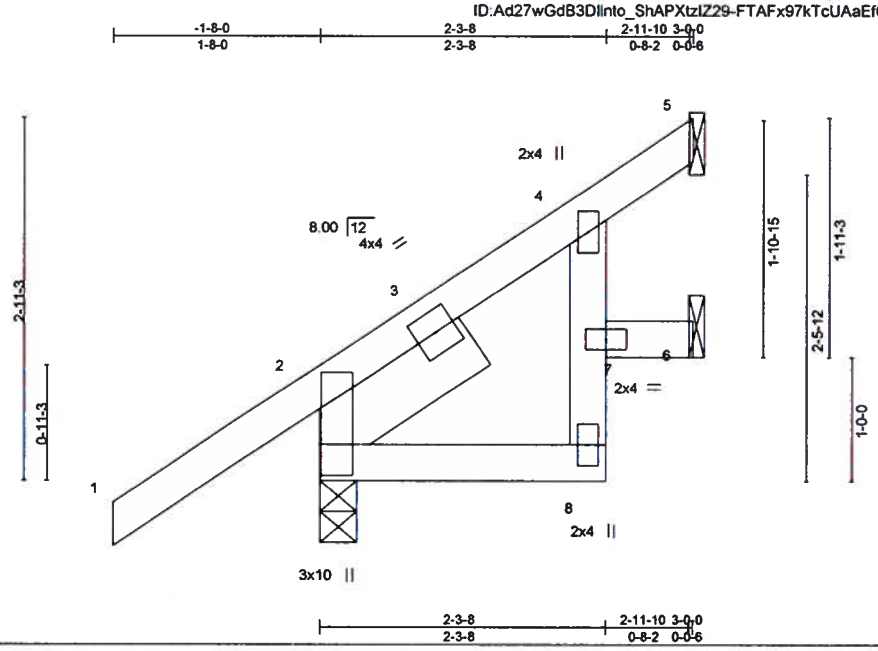

Plate Offsets (X,Y)— [2:0-3-0,0-0-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.23	Vert(LL)	0.00	11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.14	Vert(CT)	-0.00	8	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MR							Weight: 19 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-8: 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 5=41/Mechanical, 2=224/0-3-8, 6=42/Mechanical
Max Horz 2=142(LC 12)
Max Uplift 5=-40(LC 12), 2=-69(LC 12), 6=-47(LC 12)
Max Grav 5=48(LC 19), 2=224(LC 1), 6=55(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see *ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information* available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	
2217427	CJ03A	Jack-Open	2	1	Job Reference (optional)	T19159754

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:09 2020 Page 1
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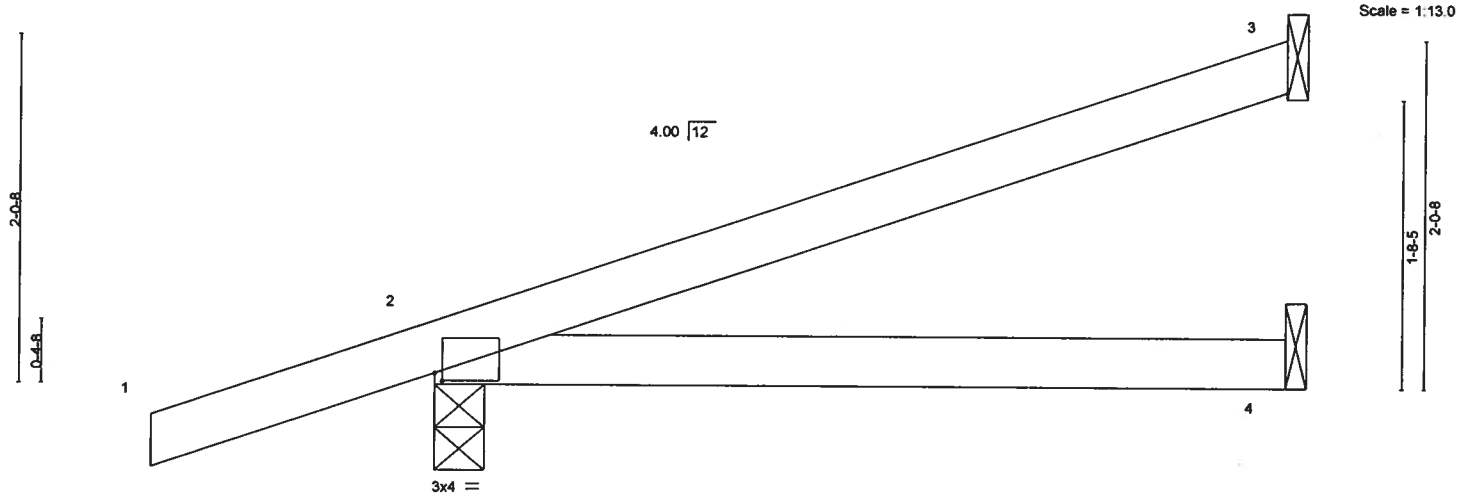

5-0-0 / 5-0-0

Plate Offsets (X,Y)-- [2:0-0-9,0-0-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.35	Vert(LL)	0.08	4-7	>740	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.34	Vert(CT)	0.07	4-7	>851	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 18 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=111/Mechanical, 2=288/0-3-8, 4=57/Mechanical
Max Horz 2=116(LC 8)
Max Uplift 3=-92(LC 8), 2=-239(LC 8), 4=-47(LC 8)
Max Grav 3=111(LC 1), 2=288(LC 1), 4=86(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=239.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159755
2217427	CJ03T	JACK-OPEN TRUSS	4	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:10 2020 Page 1
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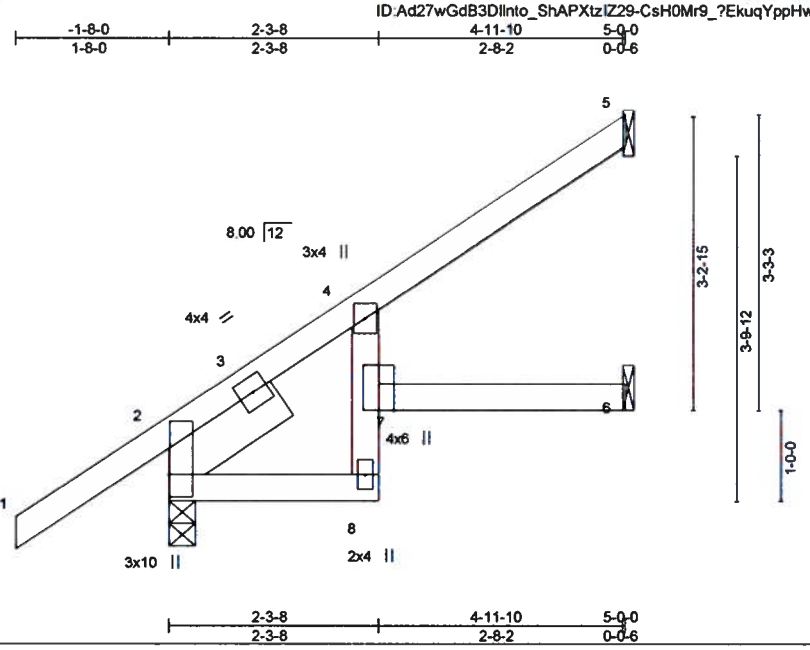

Plate Offsets (X,Y)-- [2:0-3-0,0-0-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.26	Vert(LL)	0.05	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.40	Vert(CT)	-0.06	6-7	>956	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MR							Weight: 26 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-8: 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 5=98/Mechanical, 2=288/0-3-8, 6=70/Mechanical
Max Horz 2=206(LC 12)
Max Uplift 5=-106(LC 12), 2=-76(LC 12), 6=-43(LC 12)
Max Grav 5=116(LC 19), 2=288(LC 1), 6=84(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 5=106.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	
2217427	EJ01	Jack-Partial	5	1	Job Reference (optional)	T19159756

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:11 2020 Page 1
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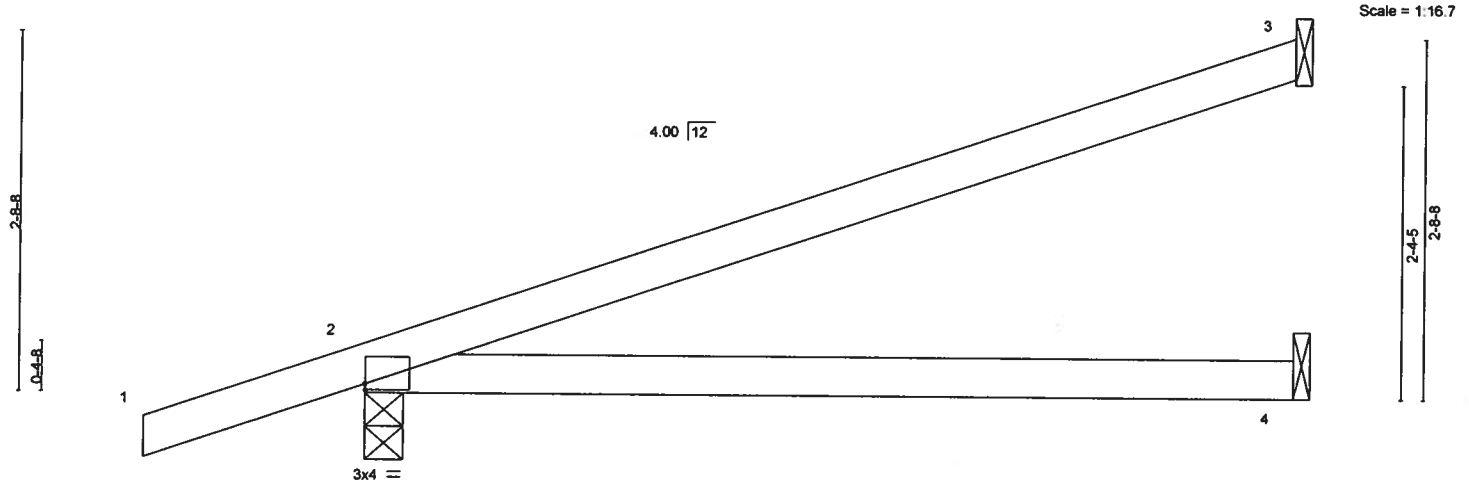

7-0-0 / 7-0-0

Plate Offsets (X,Y)-- [2:Edge,0-0-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.77	Vert(LL)	0.32	4-7	>257	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	0.28	4-7	>298	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 24 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=162/Mechanical, 2=357/0-3-8, 4=84/Mechanical
Max Horz 2=149(LC 8)
Max Uplift 3=-136(LC 8), 2=-286(LC 8), 4=-70(LC 8)
Max Grav 3=162(LC 1), 2=357(LC 1), 4=124(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 3=136, 2=286.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159757
2217427	EJ02	JACK-PARTIAL TRUSS	2	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:11 2020 Page 1
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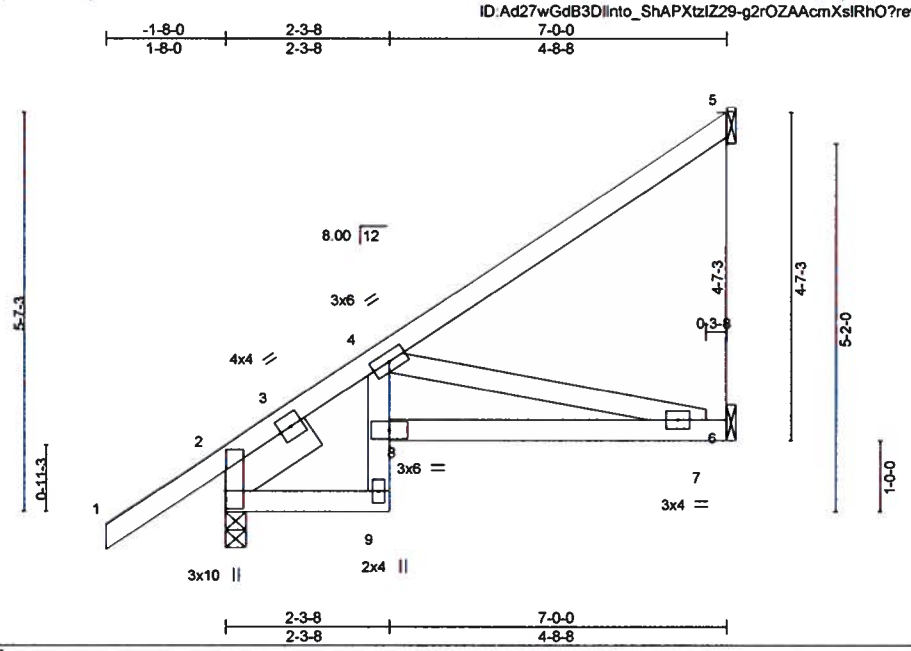

Plate Offsets (X,Y)-- [2:0-3-0,0-0-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	0.05	8	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.08	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 39 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-9: 2x4 SP No.3
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 5=116/Mechanical, 2=357/0-3-8, 6=130/Mechanical
Max Horz 2=271(LC 12)
Max Uplift 5=-129(LC 12), 2=-86(LC 12), 6=-78(LC 12)
Max Grav 5=135(LC 19), 2=357(LC 1), 6=150(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 2-9=-235/330, 7-8=-460/646
WEBS 4-7=-663/472

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 5=129.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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January 16,2020

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	
2217427	HJ01A	Diagonal Hip Girder	1	1	Job Reference (optional)	T19159758

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:12 2020 Page 1
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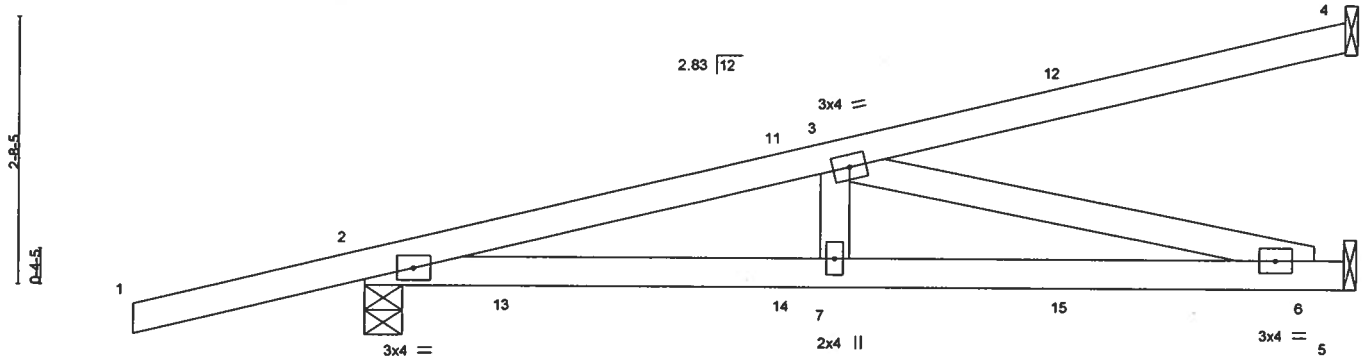

4-9-0 / 4-9-0 | 9-10-13 / 5-1-13

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.55	Vert(LL)	0.12	6-7	>945	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.63	Vert(CT)	-0.12	6-7	>970	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.50	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 42 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-7 oc bracing.

REACTIONS. (lb/size) 4=145/Mechanical, 2=495/0-4-9, 5=288/Mechanical
Max Horz 2=149(LC 22)
Max Uplift 4=-125(LC 4), 2=-417(LC 4), 5=-244(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-986/756
BOT CHORD 2-7=-817/940, 6-7=-817/940
WEBS 3-7=-124/257, 3-6=-968/841

NOTES- (9)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=125, 2=417, 5=244.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 26 lb down and 41 lb up at 4-3-11, 26 lb down and 41 lb up at 4-3-11, and 49 lb down and 95 lb up at 7-1-10, and 49 lb down and 95 lb up at 7-1-10 on top chord, and 49 lb down and 40 lb up at 1-5-12, 49 lb down and 40 lb up at 1-5-12, 18 lb down and 33 lb up at 4-3-11, 18 lb down and 33 lb up at 4-3-11, and 40 lb down and 65 lb up at 7-1-10, and 40 lb down and 65 lb up at 7-1-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 5-8=-20
Concentrated Loads (lb)
Vert: 12=-69(F=-34, B=-34) 13=58(F=29, B=29) 14=-5(F=-2, B=-2) 15=-57(F=-28, B=-28)

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159759
2217427	HJ01T	DIAGONAL HIP GIRDER	2	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:14 2020 Page 1
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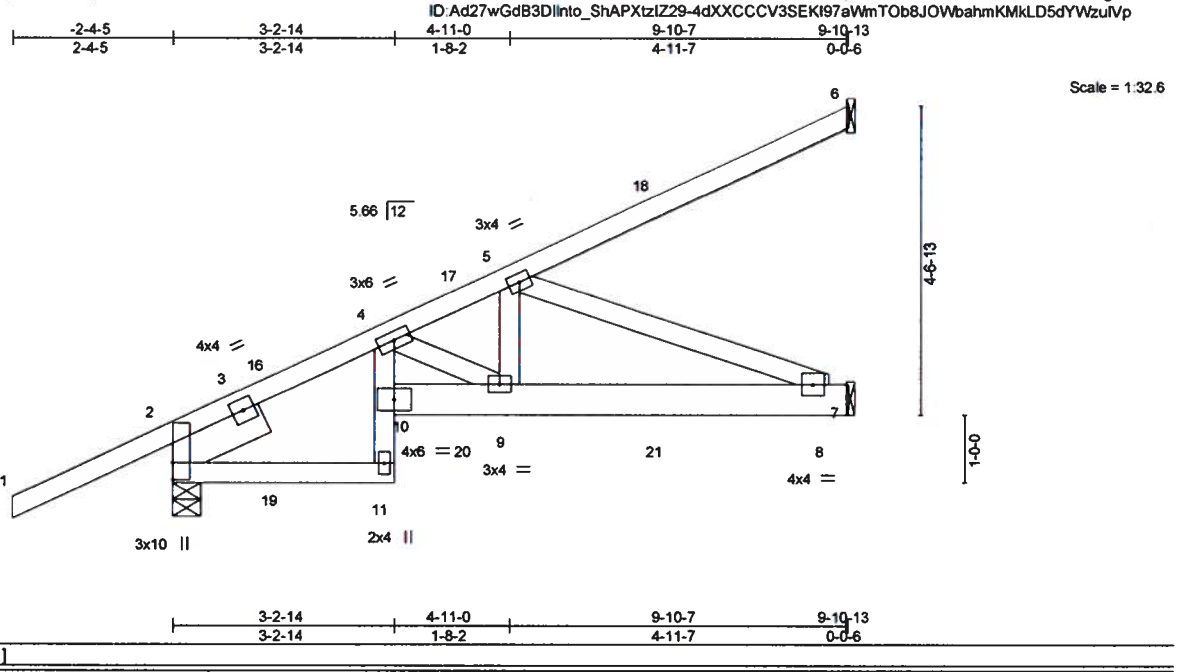

Plate Offsets (X,Y)– [2:0-3-0,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.45	Vert(LL)	0.07	10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.69	Vert(CT)	0.07	10	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.43	Horz(CT)	-0.05	7	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 59 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
7-10: 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 6=121/Mechanical, 2=500/0-4-15, 7=322/Mechanical
Max Horz 2=272(LC 8)
Max Uplift 6=-133(LC 8), 2=-386(LC 8), 7=-302(LC 8)
Max Grav 6=121(LC 1), 2=549(LC 32), 7=374(LC 32)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-644/349, 4-5=-907/633
BOT CHORD 2-11=-448/419, 9-10=-691/688, 8-9=-758/807
WEBS 5-9=-247/303, 5-8=-866/813

NOTES- (9)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=133, 2=386, 7=302.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 92 lb down and 133 lb up at 1-5-12, 92 lb down and 133 lb up at 1-5-12, 92 lb down and 37 lb up at 4-3-11, 92 lb down and 37 lb up at 4-3-11, and 138 lb down and 113 lb up at 7-1-10, and 138 lb down and 113 lb up at 7-1-10 on top chord, and 15 lb down and 50 lb up at 1-5-12, 15 lb down and 50 lb up at 1-5-12, 50 lb down and 57 lb up at 4-3-11, 50 lb down and 57 lb up at 4-3-11, and 64 lb down and 59 lb up at 7-1-10, and 64 lb down and 59 lb up at 7-1-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

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Continued on page 2

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-6=-54, 11-12=-20, 7-10=-20

Concentrated Loads (lb)

Vert: 16=68(F=34, B=34) 18=-43(F=-22, B=-22) 20=-30(F=-15, B=-15) 21=-82(F=-41, B=-41)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	
2217427	PB01	GABLE	16	1	Job Reference (optional)	T19159760

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:15 2020 Page 1
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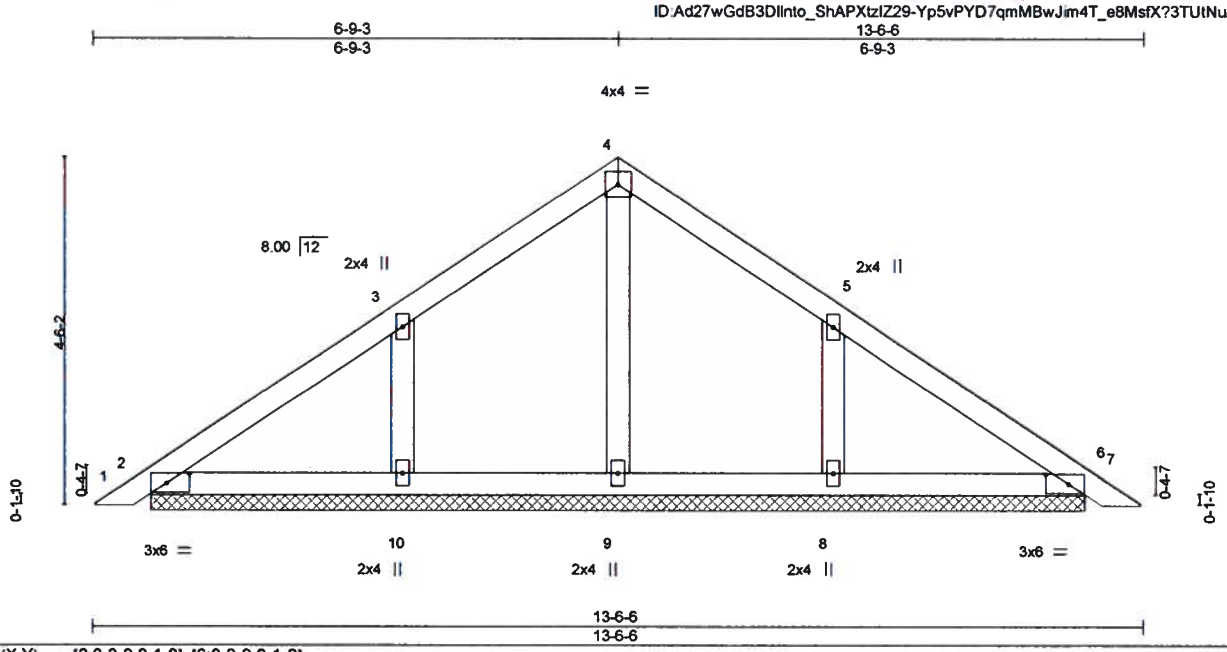

Plate Offsets (X,Y)— [2:0-3-9,0-1-8], [6:0-3-9,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.11	Vert(LL)	0.00	7	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 53 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-0-2.
(lb) - Max Horz 2=-135(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 8=-204(LC 13), 10=-205(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 8=300(LC 20), 10=300(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 8=204, 10=205.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159761
2217427	PB01G	GABLE	2	1	Job Reference (optional)	

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6-2-14 / 6-2-14 | 12-5-11 / 6-2-14

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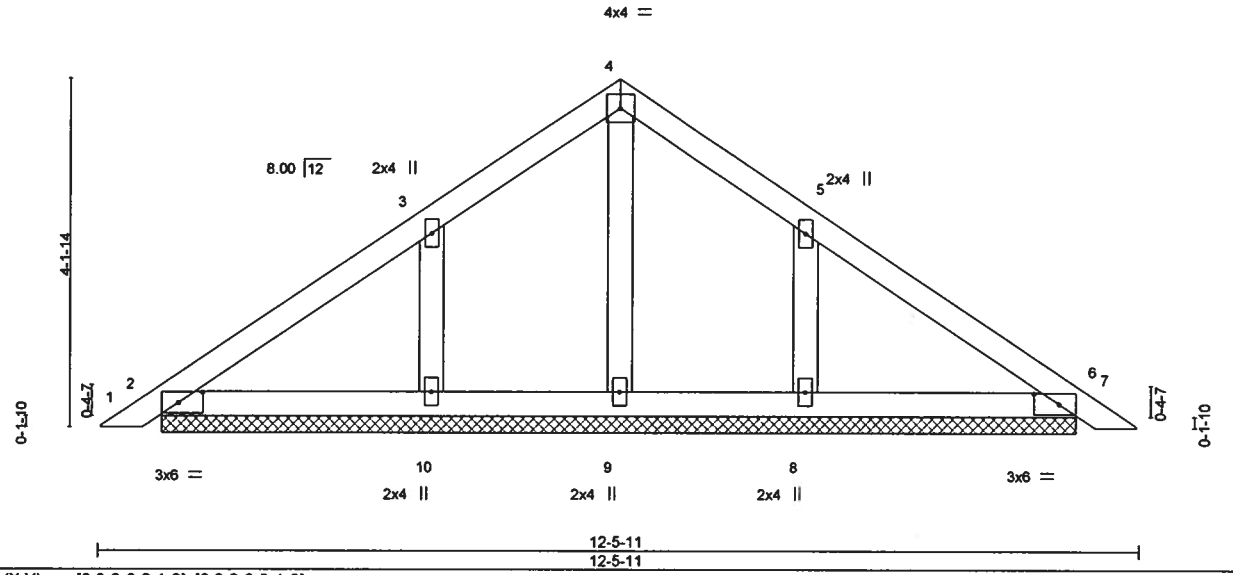

12-5-11 / 12-5-11

Plate Offsets (X,Y)-- [2:0-3-9,0-1-8], [6:0-3-9,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.10	Vert(LL)	0.00	7	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 49 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 10-11-7.
(lb) - Max Horz 2=-124(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 8=-192(LC 13), 10=-193(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 8=285(LC 20), 10=286(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 8=192, 10=193.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159762
2217427	PB04	GABLE	6	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:17 2020 Page 1
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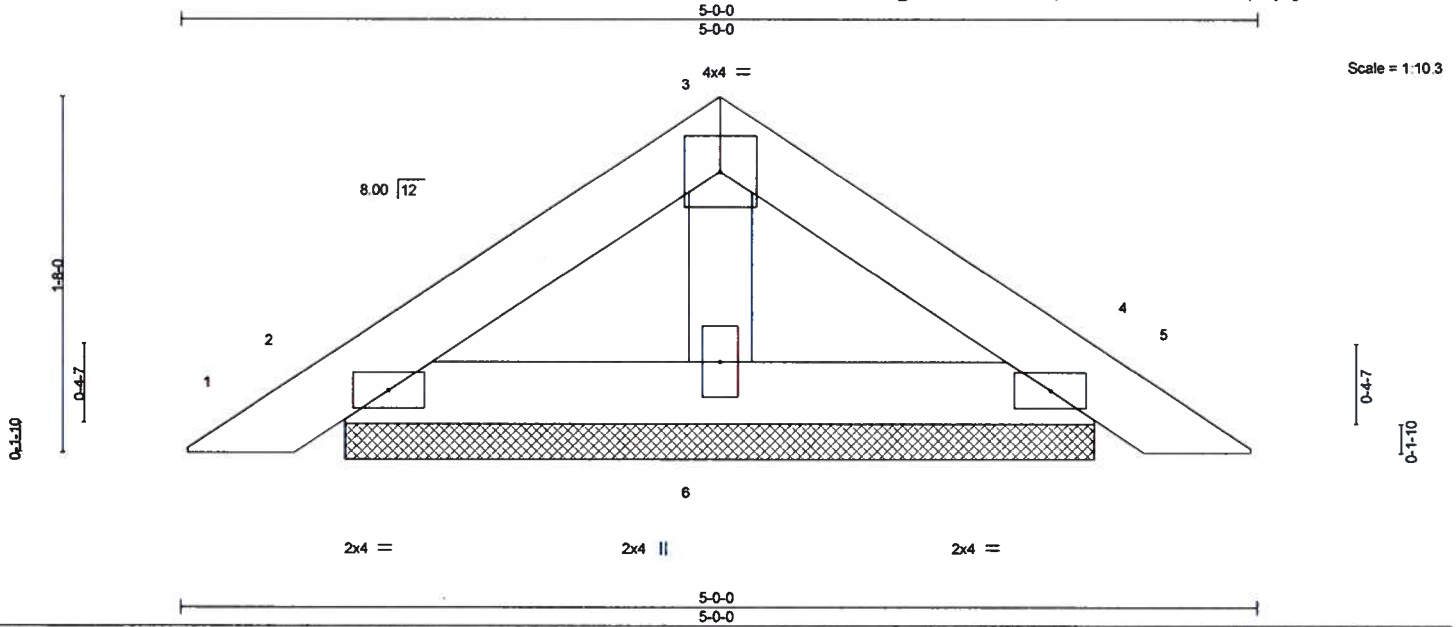

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.05	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	0.00	4	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-P							Weight: 15 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=98/3-5-12, 4=98/3-5-12, 6=114/3-5-12
Max Horz 2=-46(LC 10)
Max Uplift 2=-53(LC 12), 4=-60(LC 13), 6=-19(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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January 16,2020

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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159763
2217427	PB04G	PIGGYBACK TRUSS	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:18 2020 Page 1
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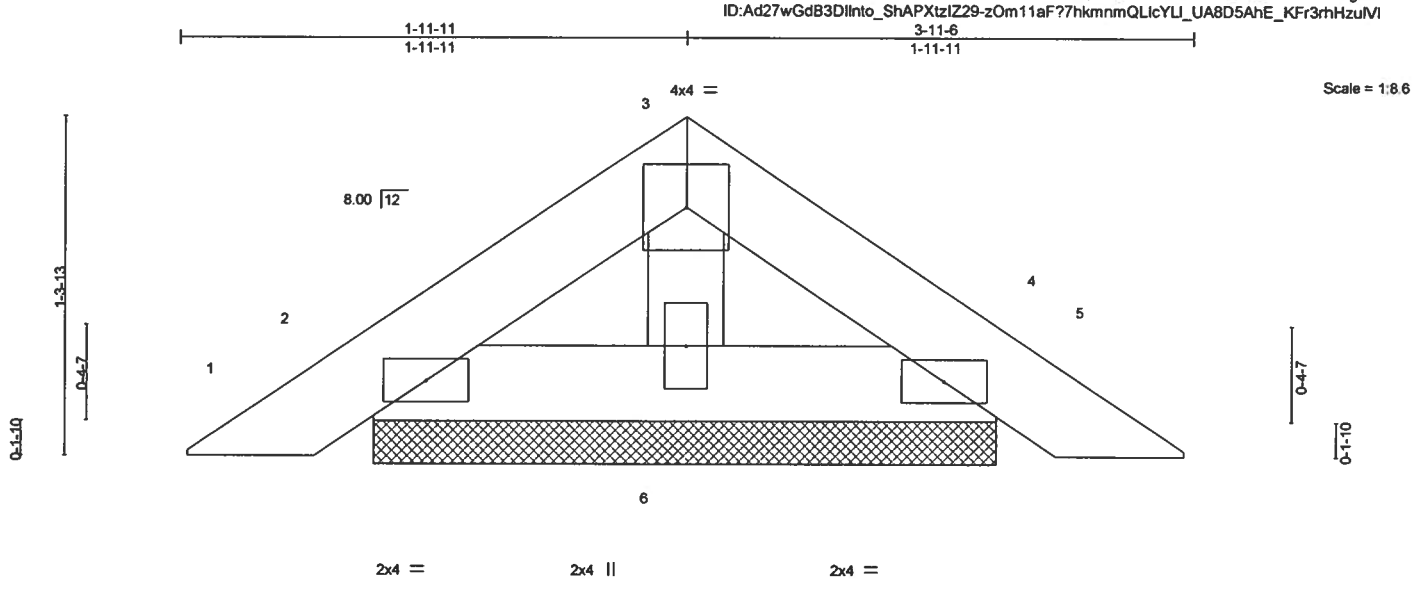

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.02	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.02	Vert(CT)	0.00	4	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-P							Weight: 11 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=78/2-5-2, 4=78/2-5-2, 6=76/2-5-2
Max Horz 2=-35(LC 10)
Max Uplift 2=-44(LC 12), 4=-49(LC 13), 6=-10(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	
2217427	T01	COMMON TRUSS	2	1	Job Reference (optional)	T19159764

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:19 2020 Page 1
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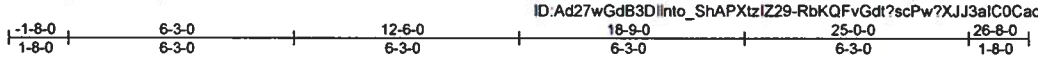

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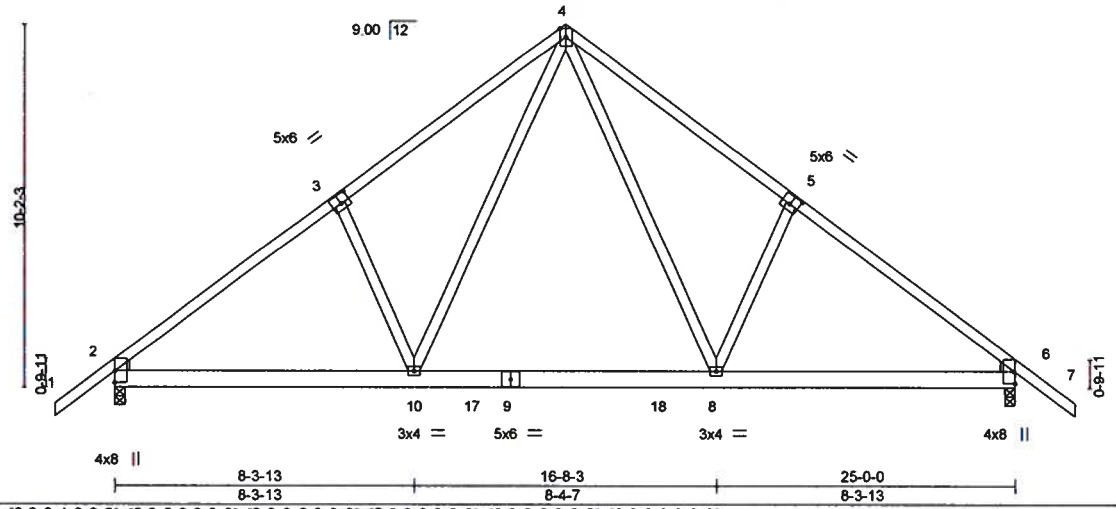

Plate Offsets (X,Y)-- [2:0-0-1,0-0-2], [2:0-0-3,0-3-6], [3:0-3-0,0-3-0], [5:0-3-0,0-3-0], [6:0-0-2,0-0-2], [6:0-0-3,0-3-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.62	Vert(LL)	-0.17	8-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.30	8-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.98	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 159 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1266/0-3-8, 6=1266/0-3-8
Max Horz 2=331(LC 11)
Max Uplift 2=-496(LC 12), 6=-496(LC 13)
Max Grav 2=1274(LC 19), 6=1274(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1623/702, 3-4=-1589/814, 4-5=-1589/814, 5-6=-1623/702
BOT CHORD 2-10=-527/1440, 8-10=-206/958, 6-8=-391/1264
WEBS 4-8=-454/900, 5-8=-382/365, 4-10=-454/900, 3-10=-382/365

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=496, 6=496.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-7=-54, 10-11=-20, 8-10=-80(F=-60), 8-14=-20

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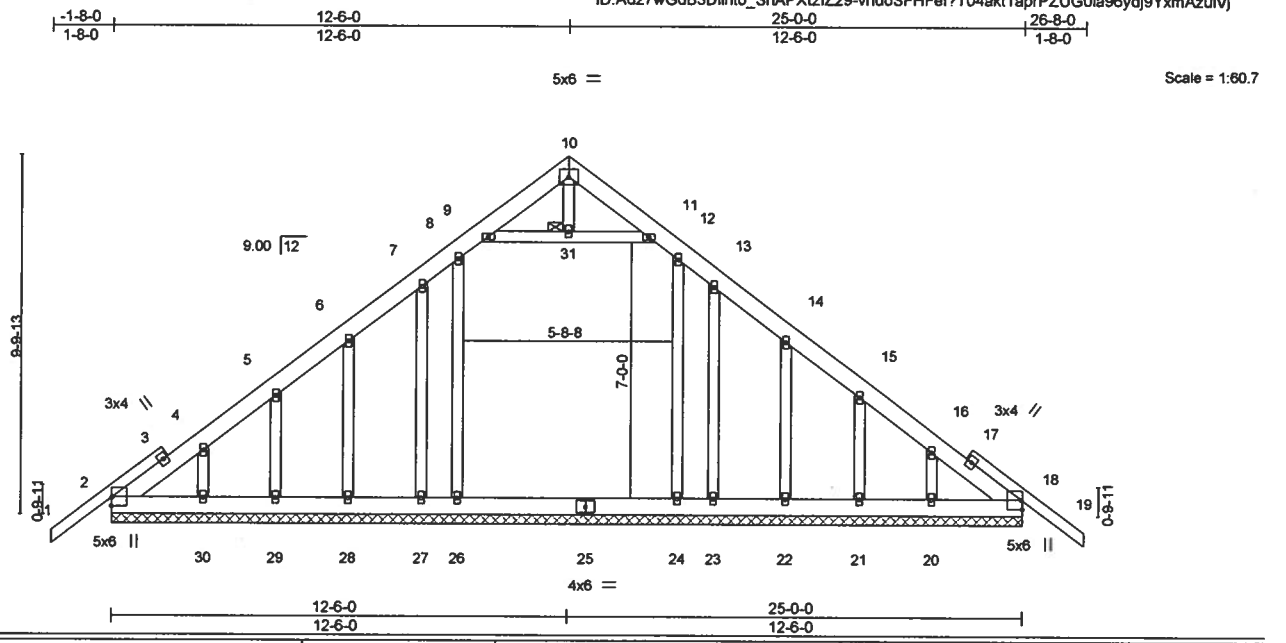
Date:

January 16,2020

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159765
2217427	T01G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:20 2020 Page 1
ID:Ad27wGdB3DIInto_ShAPXtzIZ29-vnuoSFHFeI?T04akt1aprPZUG0la96ydj9YxmAzulVj



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.18	Vert(LL) -0.01 19 n/r 120	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.15	Vert(CT) -0.01 19 n/r 120	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.01 18 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-S		Weight: 216 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-3,17-19: 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 31

REACTIONS. All bearings 25-0-0.
(lb) - Max Horz 2=-316(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 26 except 27=-160(LC 18), 28=-124(LC 12), 29=-128(LC 12), 30=-111(LC 12), 23=-160(LC 18), 22=-128(LC 13), 21=-127(LC 13), 20=-113(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 27, 28, 29, 30, 23, 22, 21, 20 except 2=257(LC 1), 18=257(LC 1), 26=506(LC 19), 24=457(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-266/201, 7-8=-223/257

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 26 except (jt=lb) 27=160, 28=124, 29=128, 30=111, 23=160, 22=128, 21=127, 20=113.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159766
2217427	T02	COMMON TRUSS	6	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:22 2020 Page 1
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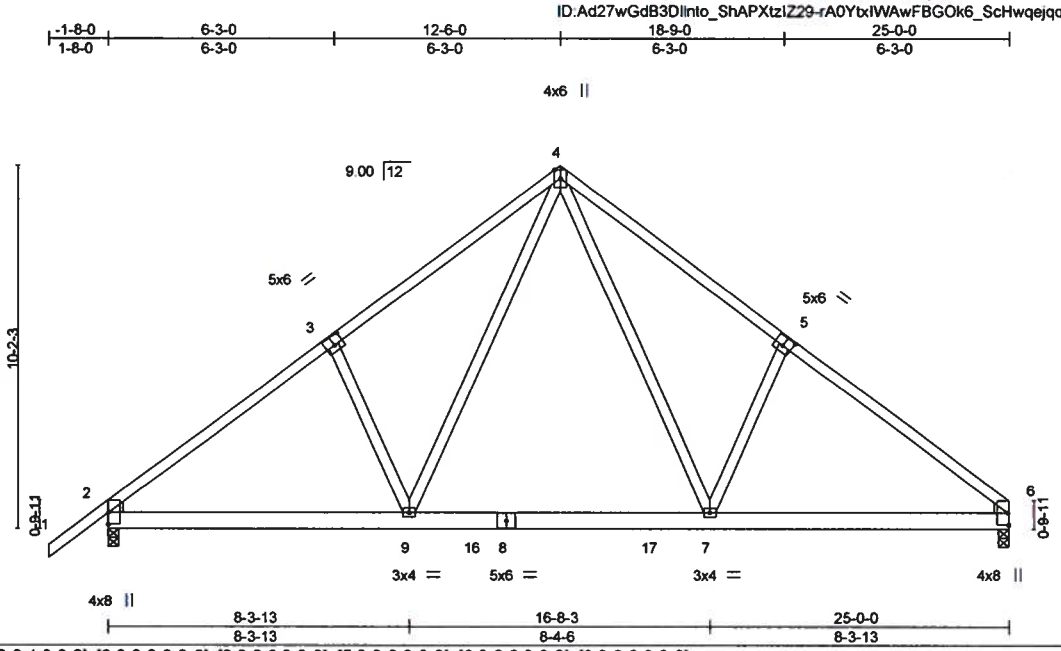

Plate Offsets (X,Y)— [2:0-0-1,0-0-2], [2:0-0-3,0-3-6], [3:0-3-0,0-3-0], [5:0-3-0,0-3-0], [6:0-0-2,0-0-2], [6:0-0-3,0-3-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.62	Vert(LL)	-0.17	7-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.29	7-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	1.00	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 156 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-9-6 oc bracing.

REACTIONS. (lb/size) 2=1269/0-3-8, 6=1173/0-3-8
Max Horz 2=318(LC 11)
Max Uplift 2=-496(LC 12), 6=-438(LC 13)
Max Grav 2=1272(LC 19), 6=1181(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1618/707, 3-4=-1593/819, 4-5=-1589/826, 5-6=-1629/713
BOT CHORD 2-9=-553/1417, 7-9=-233/937, 6-7=-450/1245
WEBS 4-7=-465/911, 5-7=-381/368, 4-9=-453/894, 3-9=-382/365

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=496, 6=438.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-6=-54, 9-10=-20, 7-9=-80(F=-60), 7-13=-20

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January 16,2020

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	
2217427	T03	PIGGYBACK BASE TRUSS	6	1	Job Reference (optional)	T19159767

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:23 2020 Page 1
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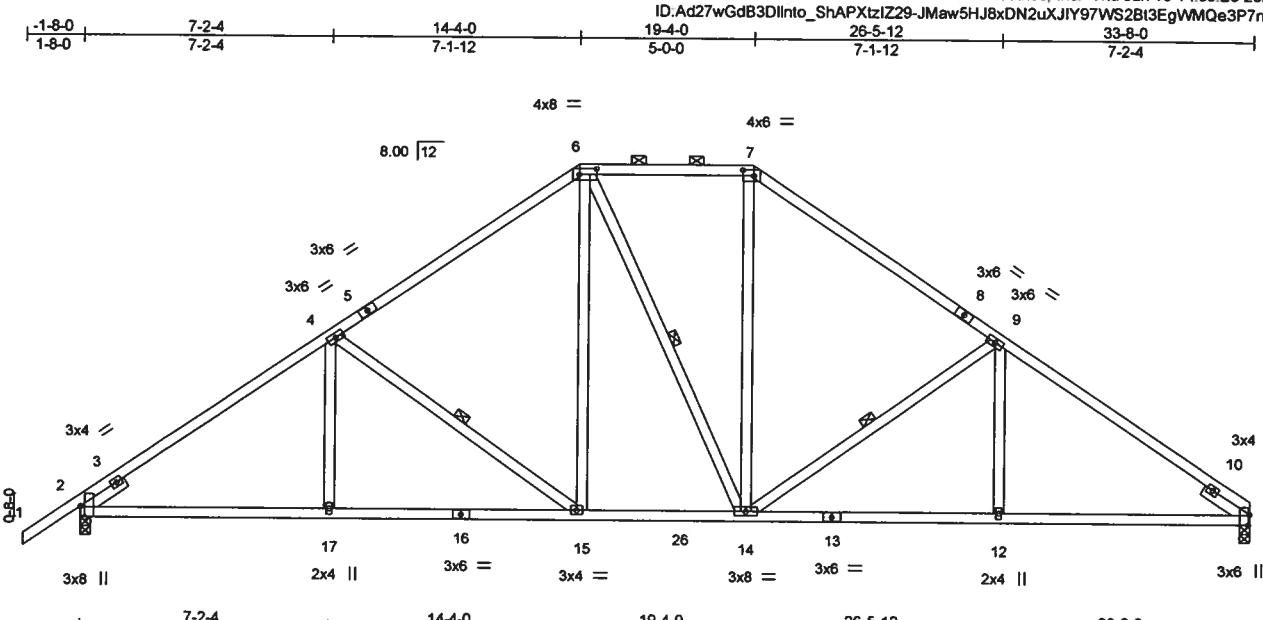

Plate Offsets (X,Y)– [2:0-3-13,Edge], [6:0-5-12,0-2-0], [7:0-3-12,0-2-0], [11:0-3-9,0-0-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.65	Vert(LL)	-0.10	15-17	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.58	Vert(CT)	-0.22	15-17	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.07	11	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 201 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-8 oc purlins, except 2-0-0 oc purlins (5-4-11 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 7-8-6 oc bracing.
WEBS 1 Row at midpt 4-15, 6-14, 9-14

REACTIONS. (lb/size) 2=1338/0-3-8, 11=1243/0-3-8
Max Horz 2=321(LC 9)
Max Uplift 2=-486(LC 12), 11=-429(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1786/793, 4-6=-1369/722, 6-7=-1131/687, 7-9=-1371/723, 9-11=-1797/801
BOT CHORD 2-17=-569/1457, 15-17=-569/1457, 14-15=-247/1047, 12-14=-544/1424, 11-12=-544/1424
WEBS 4-17=0/282, 4-15=-608/399, 6-15=-192/489, 7-14=-173/464, 9-14=-601/410, 9-12=0/283

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=486, 11=429.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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January 16,2020

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES	T19159768
2217427	T03G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:25 2020 Page 1
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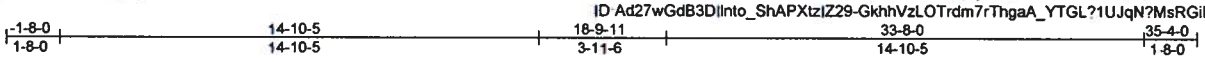

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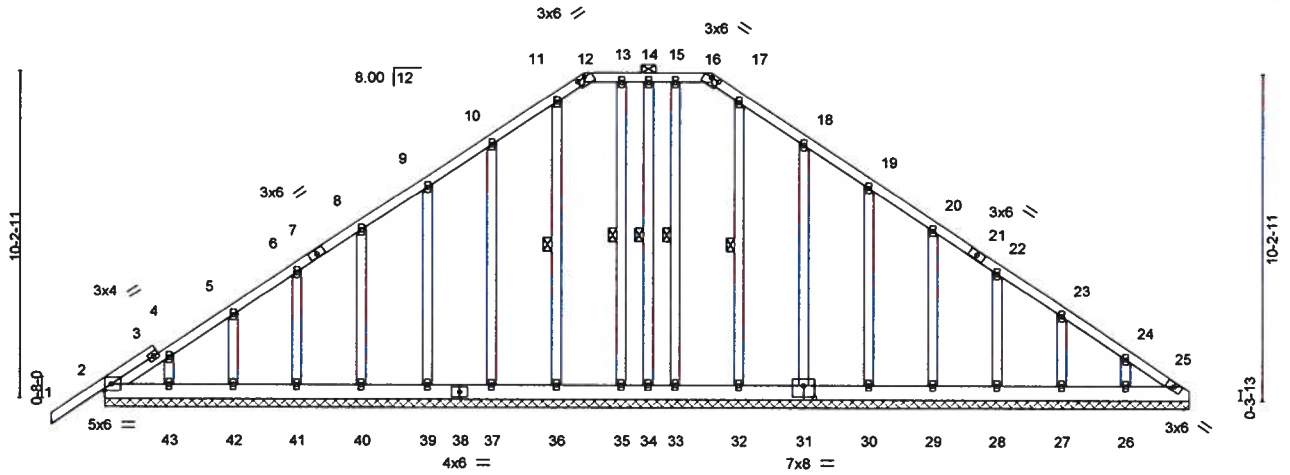

33-8-0
33-8-0

Plate Offsets (X,Y)-- [12:0-3-0,0-0-2], [16:0-3-0,0-0-2], [31:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	25	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 288 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 12-16.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 14-34, 17-32, 15-33, 11-36, 13-35

REACTIONS. All bearings 33-8-0.
(lb) - Max Horz 2=324(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 32, 33, 43, 36, 25, 35 except 26=-127(LC 13), 27=-110(LC 13), 28=-112(LC 13), 29=-112(LC 13), 30=-109(LC 13), 31=-132(LC 13), 42=-119(LC 12), 41=-110(LC 12), 40=-113(LC 12), 39=-109(LC 12), 37=-128(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 34, 26, 27, 28, 29, 30, 31, 32, 33, 43, 42, 41, 40, 39, 37, 36, 25, 35

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-338/228, 4-5=-280/210, 24-25=-305/212
BOT CHORD 2-43=-188/274, 42-43=-188/274, 41-42=-188/274, 40-41=-188/274, 39-40=-188/274, 37-39=-188/274, 36-37=-188/274, 35-36=-188/274, 34-35=-188/274, 33-34=-188/274, 32-33=-188/274, 31-32=-188/274, 30-31=-188/274, 29-30=-188/274, 28-29=-188/274, 27-28=-188/274, 26-27=-188/274, 25-26=-188/274

NOTES- (13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 34, 32, 33, 43, 36, 25, 35 except (jt=lb) 26=127, 27=110, 28=112, 29=112, 30=109, 31=132, 42=119, 41=110, 40=113, 39=109, 37=128.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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January 16,2020

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159769
2217427	T04	ATTIC TRUSS	3	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:28 2020 Page 1
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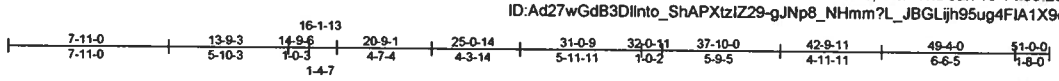

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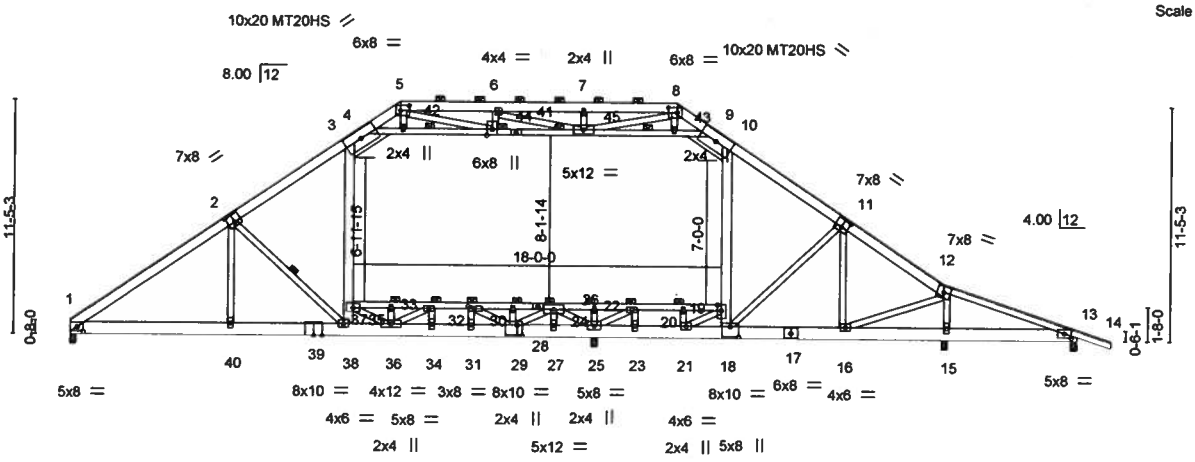

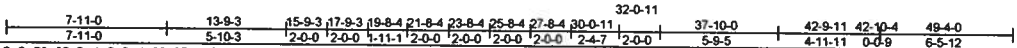

Plate Offsets (X,Y)-- [1:0-3-10,0-2-8], [2:0-4-0,0-4-8], [5:0-5-4,0-3-0], [8:0-5-4,0-3-0], [11:0-4-0,0-4-8], [13:0-4-0,0-2-10], [18:0-5-0,0-6-0], [19:Edge,0-2-4], [29:0-3-0,0-6-0], [32:0-3-8,0-1-8], [44:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.95	Vert(LL)	-0.39	37	>787	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.93	Vert(CT)	-0.63	38	>486	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.06	13	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Attic	-0.28	19-37	787	360	Weight: 485 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
12-14: 2x4 SP No.2, 3-4,9-10: 2x8 SP 2400F 2.0E
BOT CHORD 2x8 SP 2400F 2.0E *Except*
28-37,19-28: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
3-38,10-18: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (5-8-13 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
2-2-0 oc bracing: 24-26, 22-24
3-10-0 oc bracing: 35-37
3-11-0 oc bracing: 30-33
4-0-0 oc bracing: 33-35
6-0-0 oc bracing: 26-30
10-0-0 oc bracing: 20-22, 19-20
WEBS 1 Row at midpt 2-38, 4-44, 9-45
JOINTS 1 Brace at Jt(s): 24, 22, 35, 33, 44, 45, 30, 26, 20

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 1=-364(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-364(LC 12), 15=-641(LC 8), 13=-518(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 1=1985(LC 2), 15=1479(LC 25), 25=2727(LC 18), 13=1036(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3252/719, 2-3=-2694/647, 3-4=-1968/682, 4-5=-928/466, 5-6=-1591/896, 6-7=-1516/959, 7-8=-1516/959, 8-9=-760/518, 9-10=-2016/683, 10-11=-2477/641, 11-12=-2505/503, 12-13=-2697/745
BOT CHORD 1-40=-494/2841, 38-40=-493/2837, 36-38=-269/2518, 34-36=-171/3863, 31-34=-171/3863, 29-31=-171/3863, 27-29=-292/1121, 25-27=-292/1121, 23-25=-100/550, 21-23=-100/550, 18-21=-166/1721, 16-18=-227/2113, 15-16=-587/2577, 13-15=-597/2550, 35-37=-1988/128, 33-35=-1988/128, 32-33=-2049/0, 30-32=-794/264, 26-30=-722/281, 24-26=-284/2430, 22-24=-284/2430, 20-22=-215/1739, 19-20=-215/1739
WEBS 2-40=-94/469, 2-38=-948/478, 3-37=-43/1097, 18-19=-210/1372, 10-19=-107/798, 12-16=-600/766, 12-15=-1237/654, 4-42=-1566/349, 42-44=-1554/348, 44-45=-1348/255, 43-45=-2187/410, 9-43=-2205/410, 24-25=-438/4, 22-23=-107/259, 19-21=-1522/166, 35-36=-414/0, 36-37=-55/1874, 33-34=-400/112, 11-16=-326/246, 5-44=-626/964, 8-45=-601/1123, 6-45=-267/56, 25-26=-1733/0, 22-25=-1159/290, 33-36=-295/475, 26-27=-529/51, 29-30=-392/0, 26-29=-3/1938, 31-32=-64/375, 29-32=-1457/72, 20-21=-454/49

NOTES- (14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: January 16,2020

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MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159769
2217427	T04	ATTIC TRUSS	3	1	Job Reference (optional)

NOTES- (14)

3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 3x6 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 4-42, 42-44, 44-45, 43-45, 9-43; Wall dead load (5.0psf) on member(s).3-37, 10-19
9) Bottom chord live load (75.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 35-37, 33-35, 32-33, 30-32, 26-30, 24-26, 22-24, 20-22, 19-20
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 364 lb uplift at joint 1, 641 lb uplift at joint 15 and 518 lb uplift at joint 13.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.
14) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.
2217427	T04D	ATTIC TRUSS	1	4	T19159770
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:32 2020 Page 1
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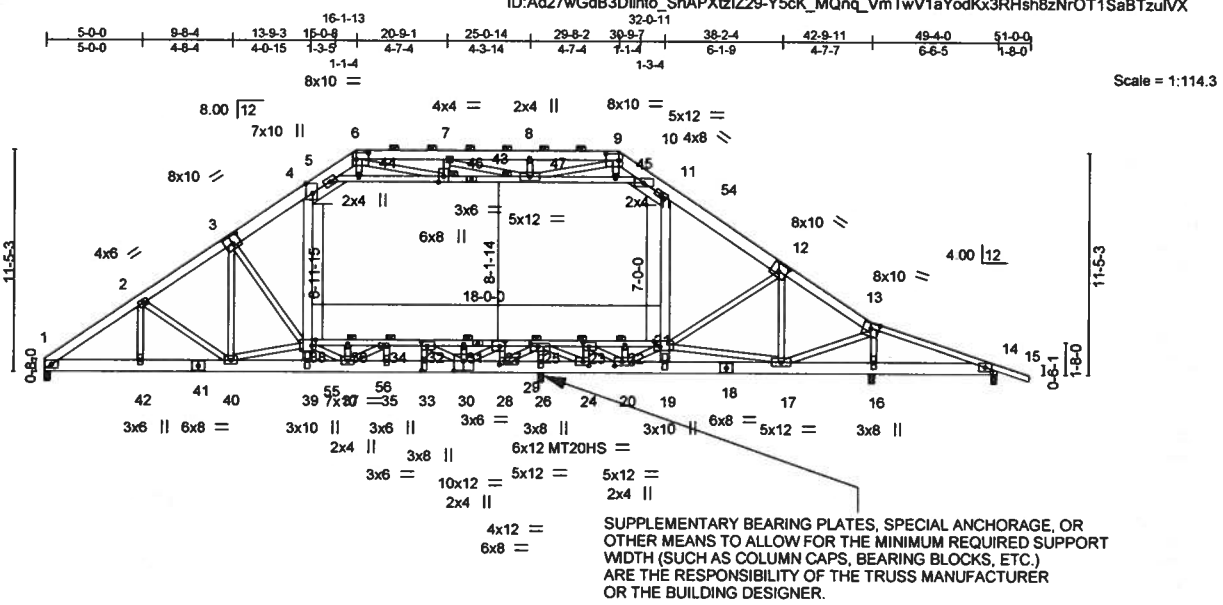

Plate Offsets (X,Y)-- [3:0-5-0,0-4-8], [4:0-5-15,Edge], [6:0-7-12,0-4-0], [9:0-7-12,0-4-0], [12:0-5-0,0-4-8], [13:0-5-0,0-3-4], [14:0-4-0,0-2-10], [20:0-4-8,0-2-8], [21:0-4-0,Edge], [23:0-3-8,0-2-8], [24:0-3-8,0-2-8], [25:0-4-8,0-1-12], [27:0-3-8,0-3-0], [28:0-3-8,0-2-0], [30:0-5-12,0-6-0], [32:0-3-8,0-2-8], [33:0-6-0,0-1-8], [38:0-2-8,Edge], [46:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.62	Vert(LL)	-0.28	37-39	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.36	37-39	>860	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.04	14	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Attic	0.15	21-38	1475	360	Weight: 2090 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
3-6,9-12: 2x8 SP 2400F 2.0E, 13-15: 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except*
29-38,21-29: 2x4 SP M 31
WEBS 2x4 SP No.3 *Except*
4-39,11-19: 2x6 SP No.2
13-17,25-26,23-24,20-22,36-37,34-35,32-33,30-31,27-28,10-43: 2x4

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 28-30,26-28,24-26,20-24.
JOINTS 1 Brace at Jt(s): 25, 23, 22, 36, 34, 31, 46, 47

REACTIONS. All bearings 0-3-8 except (jt=length) 16=0-4-6 (input: 0-3-8), 26=0-7-1 (input: 0-3-8).
(lb) - Max Horz 1=-364(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-2145(LC 5), 16=-4499(LC 4), 26=-6167(LC 4), 14=-365(LC 5)
Max Grav All reactions 250 lb or less at joint(s) except 1=8196(LC 16), 16=14750(LC 17), 26=23982(LC 17), 14=523(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-13728/3627, 2-3=-14076/3792, 3-4=-12287/3377, 4-5=-7959/2331, 5-6=-1686/659, 6-7=-1486/738, 7-8=-783/1251, 8-9=-783/1251, 9-10=-242/1127, 10-11=-8393/2455, 11-12=-12680/3587, 12-13=-14117/4027, 13-14=-1580/494
BOT CHORD 1-42=-3129/11557, 40-42=-3129/11557, 39-40=-4813/17852, 37-39=-4723/17566, 35-37=-4881/18964, 33-35=-4881/18964, 30-33=-4881/18964, 28-30=-6345/1960, 26-28=-19618/5125, 24-26=-19618/5125, 20-24=-7221/1834, 19-20=-3198/9383, 17-19=-3303/9975, 16-17=-600/2338, 14-16=-362/1496, 36-38=-12080/3106, 34-36=-12080/3106, 32-34=-9220/2255, 31-32=-836/2009, 27-31=-831/1985, 25-27=-4202/15791, 23-25=-4460/16965, 22-23=-1808/6712, 21-22=-1808/6712
WEBS 3-40=-589/2297, 3-38=-3813/1015, 38-39=-1146/3550, 4-38=-2050/7919, 19-21=-988/3480, 11-21=-518/1990, 12-21=-2593/937, 13-17=-3163/10577, 13-16=-13067/3904, 5-44=-8149/2170, 44-46=-8053/2147, 46-47=-9111/2000, 45-47=-12067/3220, 10-45=-12226/3260, 25-26=-16843/4272, 23-24=-7836/2128, 20-22=-1726/378, 20-21=-7088/2156, 36-37=-1567/327, 37-38=-1360/5336, 34-35=-2792/731, 32-33=-1302/4805, 30-31=-1447/311, 27-28=-9690/2430, 12-17=-1669/430, 6-44=-149/636, 9-45=-259/1050, 7-46=-65/355, 6-46=-1132/416, 9-47=-776/1619, 7-47=-1784/489, 25-28=-4024/15783, 27-30=-4177/16304, 34-37=-997/3348, 30-32=-12995/3369, 38-40=-6102/1650, 17-21=-585/2268, 2-42=-486/181, 2-40=-291/744, 20-23=-3499/12301, 24-25=-3973/14139

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MiTek
6904 Parke East Blvd.
Tampa, FL 36610

NOTES- (18)

1) 4-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc, 2x8 - 2 rows staggered at 0-6-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc, 2x4 - 2 rows staggered at 0-5-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 26-25 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-8-0 oc, Except member 11-19 2x6 - 2 rows staggered at 0-9-0 oc.
   Attach TC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
   Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 5x8 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Ceiling dead load (5.0 psf) on member(s). 4-5, 10-11, 5-44, 44-46, 46-47, 45-47, 10-45; Wall dead load (5.0psf) on member(s).4-38, 11-21
11) Bottom chord live load (75.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 36-38, 34-36, 32-34, 31-32, 27-31, 25-27, 23-25, 22-23, 21-22
12) WARNING: Required bearing size at joint(s) 16, 26 greater than input bearing size.
13) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2145 lb uplift at joint 1, 4499 lb uplift at joint 16, 6167 lb uplift at joint 26 and 365 lb uplift at joint 14.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2880 lb down and 872 lb up at 32-11-4 on top chord, and 4362 lb down and 1321 lb up at 13-10-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
17) Attic room checked for L/360 deflection.
18) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 1-4=-54, 4-5=-64, 5-6=-54, 6-9=-54, 9-10=-54, 10-11=-64, 13-15=-54, 48-55=-20, 16-55=-265(F=-245), 16-51=-20, 38-56=-40, 21-56=-285(F=-245), 5-10=-10
      Drag: 4-38=-10, 11-21=-10
   Concentrated Loads (lb)
      Vert: 39=-1702(F) 54=-1124
   Trapezoidal Loads (plf)
      Vert: 11=-201(F=-147)-to-13=-319(F=-265)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159771
2217427	T04G	GABLE	1	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:39 2020 Page 1
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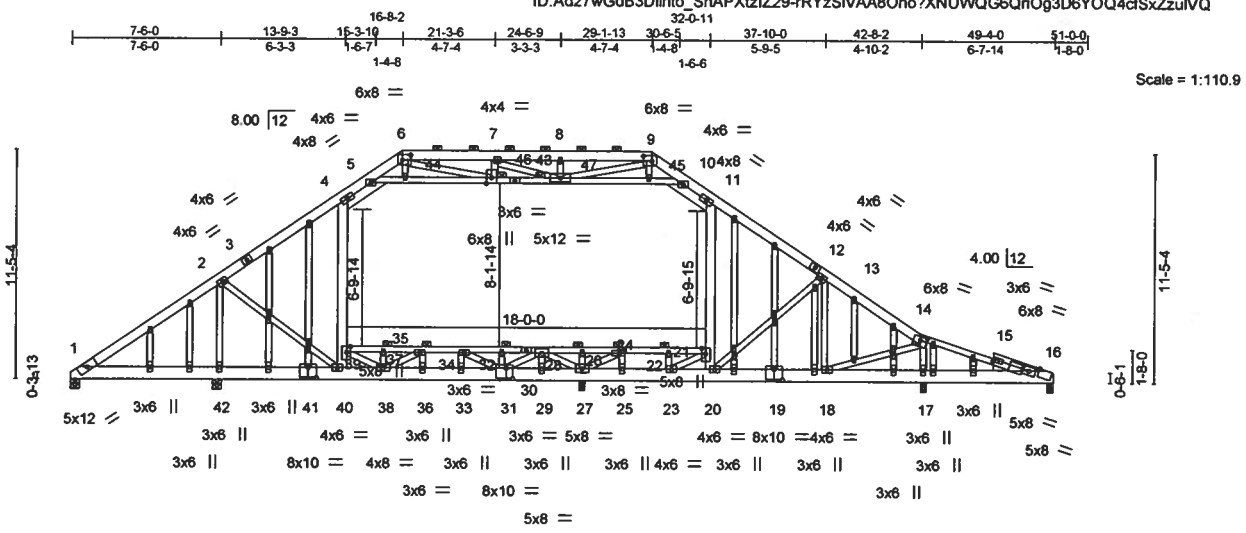

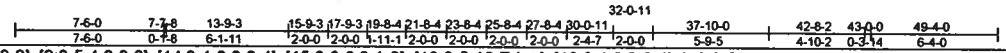

Plate Offsets (X,Y)-- [6:0-5-4,0-3-0], [9:0-5-4,0-3-0], [14:0-4-0,0-2-4], [15:0-2-0,0-1-8], [16:0-5-12,Edge], [16:0-4-0,0-2-4], [19:0-5-0,0-6-0], [21:Edge,0-2-4], [24:0-3-8,0-1-8], [31:0-3-12,0-6-0], [39:Edge,0-2-4], [41:0-5-0,0-6-0], [46:0-3-8,0-3-0], [54:0-1-10,0-1-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.31	Vert(LL)	-0.08	35	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.11	35	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.02	17	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Attic	-0.05	21-39	4353	360	Weight: 539 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except* 14-16,15-16: 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except* 30-39,21-30: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 4-40,11-20: 2x6 SP No.2
OTHERS 2x4 SP No.3
WEDGE
Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (5-10-15 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-42,40-42,17-18,16-17.
JOINTS 1 Brace at Jt(s): 26, 24, 22, 37, 35, 32, 46, 47

REACTIONS. All bearings 0-3-8 except (jt=length) 1=0-5-8, 42=0-5-8.
(lb) - Max Horz 1=-352(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) except 16=-220(LC 9), 1=-361(LC 8), 42=-447(LC 12), 17=-556(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 16 except 1=505(LC 1), 42=2346(LC 20), 17=1709(LC 25), 27=2670(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-734/743, 2-4=-1369/525, 4-5=-1161/612, 5-6=-814/463, 6-7=-1455/850, 7-8=-1432/833, 8-9=-1432/833, 9-10=-803/423, 10-11=-1161/610, 11-13=-1367/537, 13-14=-1229/395, 14-16=-366/442
BOT CHORD 1-42=-334/599, 40-42=-334/599, 38-40=-87/1037, 36-38=-132/2406, 33-36=-132/2406, 31-33=-132/2406, 29-31=-354/541, 27-29=-354/541, 25-27=-124/542, 23-25=-124/542, 20-23=-124/1095, 18-20=-156/994, 17-18=-321/368, 16-17=-408/403, 37-39=-1063/86, 35-37=-1063/86, 34-35=-1645/43, 32-34=-821/297, 28-32=-748/310, 26-28=-438/1975, 24-26=-438/1975, 22-24=-140/597, 21-22=-140/597
WEBS 2-42=-2065/530, 2-40=-128/1408, 39-40=-729/194, 4-39=-256/296, 20-21=-32/335, 11-21=-167/266, 14-18=-422/1285, 14-17=-1402/608, 5-44=-848/314, 44-46=-838/314, 46-47=-727/618, 45-47=-768/293, 10-45=-778/293, 26-27=-416/52, 24-25=-114/466, 22-23=-414/44, 21-23=-772/203, 37-38=-432/58, 38-39=-103/1264, 31-32=-392/52, 28-29=-436/94, 13-18=-415/251, 6-46=-504/899, 9-47=-508/870, 27-28=-1507/150, 24-27=-1623/349, 35-38=-681/106, 31-34=-939/178, 28-31=-227/1538

NOTES- (15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

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Julius Lee PE No.34869
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6904 Parke East Blvd. Tampa FL 33610
Date: January 16,2020

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159771
2217427	T04G	GABLE	1	1	Job Reference (optional)

NOTES- (15)

4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Ceiling dead load (5.0 psf) on member(s). 4-5, 10-11, 5-44, 44-46, 46-47, 45-47, 10-45; Wall dead load (5.0psf) on member(s).4-39, 11-21
10) Bottom chord live load (75.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 37-39, 35-37, 34-35, 32-34, 28-32, 26-28, 24-26, 22-24, 21-22
11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 220 lb uplift at joint 16, 361 lb uplift at joint 1, 447 lb uplift at joint 42 and 556 lb uplift at joint 17.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.
15) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159772
2217427	T05	ATTIC TRUSS	3	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:42 2020 Page 1
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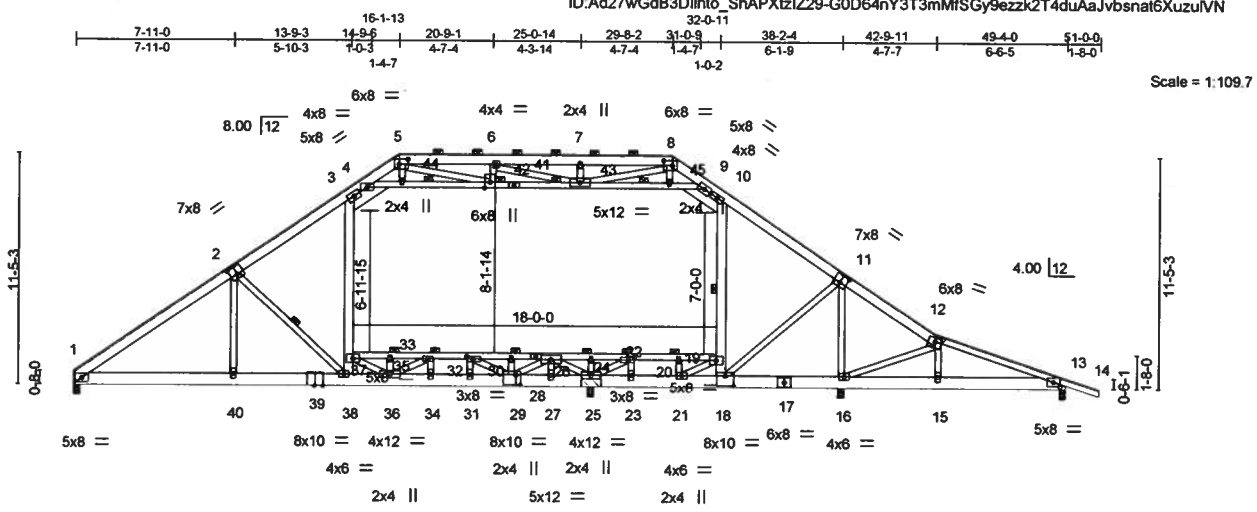

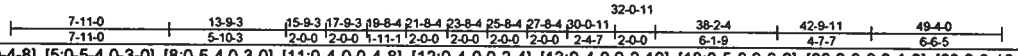

Plate Offsets (X,Y)-- [2:0-4-0,0-4-8], [5:0-5-4,0-3-0], [8:0-5-4,0-3-0], [11:0-4-0,0-4-8], [12:0-4-0,0-2-4], [13:0-4-0,0-2-10], [18:0-5-0,0-6-0], [22:0-3-8,0-1-8], [29:0-2-12,0-6-0], [32:0-3-8,0-1-8], [42:0-3-8,0-3-0]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.00	TC 0.89	Vert(LL) -0.33 38 >947 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.00	BC 0.54	Vert(CT) -0.57 38-40 >541 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.80	Horz(CT) 0.06 13 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS	Attic -0.20 19-37 1082 360	Weight: 487 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except* 12-14: 2x4 SP No.2, 3-4,9-10: 2x8 SP 2400F 2.0E
BOT CHORD 2x8 SP 2400F 2.0E *Except* 28-37,19-28: 2x4 SP M 31
WEBS 2x4 SP No.3 *Except* 3-38,10-18: 2x6 SP No.2 19-21,36-37,25-26,22-25,33-36,29-32,26-29: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (5-8-2 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 27-29,25-27,23-25,21-23.
WEBS 1 Row at midpt 2-38, 10-19, 4-42, 9-43
JOINTS 1 Brace at Jt(s): 24, 22, 35, 33, 30, 42, 43, 20

REACTIONS. All bearings 0-3-8 except (jt=length) 25=0-3-9 (input: 0-3-8 + bearing block).
(lb) - Max Horz 1=-364(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-350(LC 12), 16=-718(LC 8), 13=-569(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 1=1899(LC 20), 16=997(LC 25), 25=3020(LC 18), 13=1438(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3102/689, 2-3=-2533/585, 3-4=-1862/626, 4-5=-918/453, 5-6=-1606/897, 6-7=-1521/948, 7-8=-1521/948, 8-9=-738/485, 9-10=-1908/634, 10-11=-2334/540, 11-12=-2800/519, 12-13=-3533/904
BOT CHORD 1-40=-471/2709, 38-40=-471/2706, 36-38=-240/2384, 34-36=-19/3323, 31-34=-19/3323, 29-31=-19/3323, 27-29=-208/312, 25-27=-208/312, 18-21=-119/1668, 16-18=-299/2384, 15-16=-738/3346, 13-15=-748/3342, 35-37=-1857/75, 33-35=-1857/75, 32-33=-1711/0, 30-32=-376/538, 26-30=-369/554, 24-26=-261/3347, 22-24=-261/3347, 20-22=-267/2064, 19-20=-267/2064
WEBS 2-40=-88/459, 2-38=-916/469, 3-37=-27/1008, 18-19=-240/1551, 10-19=-96/751, 11-18=-579/245, 11-16=-549/562, 12-16=-1235/721, 12-15=-264/187, 4-44=-1498/268, 42-44=-1485/269, 42-43=-1247/394, 43-45=-2027/391, 9-45=-2044/391, 24-25=-445/6, 22-23=-27/418, 19-21=-2009/251, 35-36=-420/0, 33-34=-547/130, 31-32=-81/461, 29-30=-395/0, 26-27=-553/27, 36-37=0/1786, 5-42=-590/931, 8-43=-589/1108, 25-26=-1876/0, 22-25=-1620/174, 33-36=-334/689, 29-32=-1683/118, 26-29=-4/2141, 20-21=-404/56

NOTES- (14)
1) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 25 attached to front face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners. Bearing is assumed to be SP No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159772
2217427	T05	ATTIC TRUSS	3	1	Job Reference (optional)

NOTES- (14)

5) All plates are 3x6 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 4-44, 42-44, 42-43, 43-45, 9-45; Wall dead load (5.0psf) on member(s).3-37, 10-19
9) Bottom chord live load (75.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 35-37, 33-35, 32-33, 30-32, 26-30, 24-26, 22-24, 20-22, 19-20
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 350 lb uplift at joint 1, 718 lb uplift at joint 16 and 569 lb uplift at joint 13.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.
14) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	
2217427	T05D	ATTIC TRUSS	1	4	Job Reference (optional)	T19159773

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:46 2020 Page 1
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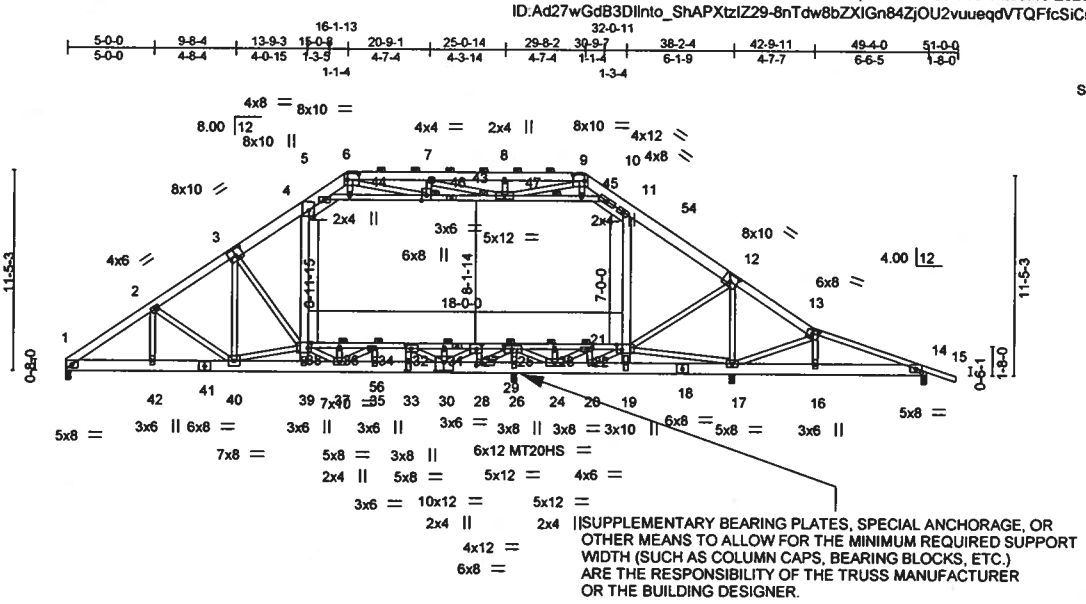

Plate Offsets (X,Y)– [3:0-5-0,0-4-8], [4:0-4-4,Edge], [6:0-7-12,0-4-0], [9:0-7-12,0-4-0], [12:0-5-0,0-4-8], [13:0-4-0,0-2-4], [14:0-4-0,0-2-10], [21:0-3-12,Edge], [22:0-3-8,0-1-8], [25:0-5-4,0-2-4], [27:0-3-8,0-3-0], [28:0-3-8,0-2-0], [30:0-5-12,0-6-0], [32:0-3-8,0-2-8], [33:0-6-0,0-1-8], [38:0-2-4,Edge], [46:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.63	Vert(LL)	-0.35	37-39	>890	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.45	37-39	>686	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.05	14	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Attic	-0.19	21-38	1145	360	Weight: 2090 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
3-6,9-12: 2x8 SP 2400F 2.0E, 13-15: 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except*
29-38,21-29: 2x4 SP M 31
WEBS 2x4 SP No.3 *Except*
4-39,11-19: 2x6 SP No.2
20-21,37-38,25-28,27-30,34-37,30-32,22-24: 2x4 SP M 31
24-25: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 10-47
JOINTS 1 Brace at Jt(s): 25, 23, 22, 36, 34, 31, 46, 47

REACTIONS. All bearings 0-3-8 except (jt=length) 17=0-4-4 (input: 0-3-8), 26=0-6-6 (input: 0-3-8).
(lb) - Max Horz 1=-364(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-2078(LC 5), 17=-4644(LC 4), 26=-5456(LC 5), 14=-1186(LC 5)
Max Grav All reactions 250 lb or less at joint(s) except 1=7991(LC 16), 17=14495(LC 17), 26=21697(LC 16), 14=3169(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-13361/3507, 2-3=-13744/3682, 3-4=-11265/3064, 4-5=-7069/2062, 5-6=-2160/805, 6-7=-1669/865, 7-8=-814/1176, 8-9=-814/1176, 9-10=-163/1346, 10-11=-7625/2222, 11-12=-11366/3189, 12-13=-5955/1615, 13-14=-8819/2687
BOT CHORD 1-42=-3028/11247, 40-42=-3028/11247, 39-40=-5584/20513, 37-39=-5558/20443, 35-37=-5700/21876, 33-35=-5700/21876, 30-33=-5700/21876, 28-30=-3613/1025, 26-28=-17289/4426, 24-26=-17289/4426, 20-24=-2629/838, 19-20=-268/346, 17-19=-478/1274, 16-17=-2424/8337, 14-16=-2442/8363, 36-38=-16022/4254, 34-36=-16022/4254, 32-34=-13128/3375, 31-32=-1875/364, 27-31=-1900/369, 25-27=-3201/12245, 23-25=-4610/17388, 22-23=-4610/17388, 21-22=-3163/11377
WEBS 3-40=-894/3333, 3-38=-4916/1337, 38-39=-1012/3118, 4-38=-1959/7641, 19-21=-1039/3707, 11-21=-229/1043, 12-21=-1229/4060, 13-17=-4110/1475, 13-16=-278/491, 5-44=-6298/1598, 44-46=-6225/1582, 46-47=-7668/1572, 45-47=-11400/3018, 10-45=-11552/3056, 25-26=-15057/3762, 23-24=-1570/334, 20-22=-630/2085, 20-21=-3183/815, 36-37=-1519/310, 37-38=-1410/5422, 34-35=-2816/747, 32-33=-1379/5039, 30-31=-1415/302, 27-28=-9680/2434, 12-17=-9034/2786, 6-44=-102/485, 9-45=-243/1002, 7-46=-15/461, 6-46=-1509/236, 9-47=-902/2015, 7-47=-2167/598, 25-28=-4157/16151, 24-25=-2534/9820, 27-30=-4169/16228, 34-37=-1030/3389, 30-32=-13505/3537, 38-40=-9146/2544, 17-21=-1204/4371, 2-42=-511/187, 2-40=-313/805, 22-24=-7205/1914

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NOTES- (17)

1) 4-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc, 2x8 - 2 rows staggered at 0-6-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc, 2x4 - 2 rows staggered at 0-5-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 26-25 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-8-0 oc, Except member 11-19 2x6 - 2 rows staggered at 0-9-0 oc.
   Attach TC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
   Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Ceiling dead load (5.0 psf) on member(s). 4-5, 10-11, 5-44, 44-46, 46-47, 45-47, 10-45; Wall dead load (5.0psf) on member(s).4-38, 11-21
10) Bottom chord live load (75.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 36-38, 34-36, 32-34, 31-32, 27-31, 25-27, 23-25, 22-23, 21-22
11) WARNING: Required bearing size at joint(s) 17, 26 greater than input bearing size.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2078 lb uplift at joint 1, 4644 lb uplift at joint 17, 5456 lb uplift at joint 26 and 1186 lb uplift at joint 14.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2880 lb down and 872 lb up at 32-11-4 on top chord, and 4362 lb down and 1321 lb up at 13-10-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
16) Attic room checked for L/360 deflection.
17) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 1-4=-54, 4-5=-64, 5-6=-54, 6-9=-54, 9-10=-54, 10-11=-64, 13-15=-54, 48-55=-20, 16-55=-265(F=-245), 16-51=-20, 38-56=-40, 21-56=-285(F=-245), 5-10=-10
      Drag: 4-38=-10, 11-21=-10
   Concentrated Loads (lb)
      Vert: 39=-1702(F) 54=-1124
   Trapezoidal Loads (plf)
      Vert: 11=-201(F=-147)-to-13=-319(F=-265)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.
2217427	T06	Attic Truss	1	3	T19159774
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:50 2020 Page 1
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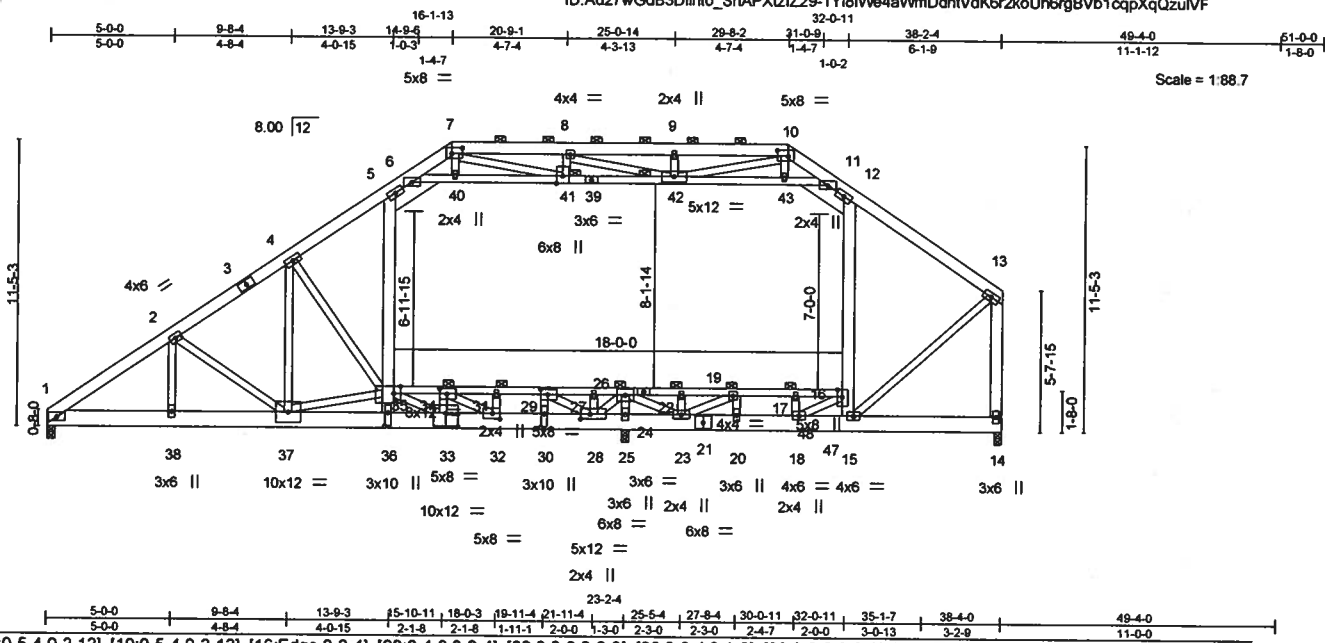

Plate Offsets (X,Y)– [7:0-5-4,0-2-12], [10:0-5-4,0-2-12], [16:Edge,0-2-4], [28:0-4-8,0-2-4], [29:0-3-8,0-2-8], [30:0-6-4,0-1-8], [32:0-3-8,0-2-8], [33:0-6-0,0-6-4], [34:0-3-8,0-2-8], [35:0-3-4,Edge], [36:0-6-4,0-1-8], [41:0-3-8,0-3-0]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.00	TC 0.69	Vert(LL) -0.25 36 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.00	BC 0.72	Vert(CT) -0.48 36 >582 180	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.86	Horz(CT) 0.03 25 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS	Attic -0.17 16-35 1324 360	Weight: 1311 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except* 5-6,11-12: 2x8 SP 2400F 2.0E
BOT CHORD 2x8 SP 2400F 2.0E *Except* 24-35,16-24: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 5-36,12-15,13-14: 2x6 SP No.2, 35-37: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-10.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 41, 42, 26, 34, 31, 17, 19, 22

REACTIONS. (lb/size) 1=2944/0-3-8, 25=5163/0-3-8, 14=843/0-3-8
Max Horz 1=370(LC 8)
Max Uplift 1=-715(LC 8), 25=-975(LC 8), 14=-431(LC 24)
Max Grav 1=2944(LC 1), 25=6459(LC 22), 14=1234(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4768/1109, 2-4=-4895/1150, 4-5=-1670/390, 5-6=-1073/318, 6-7=-1594/663, 7-8=-2070/1043, 8-9=-1610/963, 9-10=-1610/963, 10-11=-598/607, 11-12=-1225/344, 12-13=-1101/182
BOT CHORD 1-38=-1189/3893, 37-38=-1189/3893, 36-37=-4852/16840, 33-36=-4933/17069, 32-33=-3820/14744, 30-32=-1392/6464, 28-30=-1392/6464, 25-28=-6863/1676, 23-25=-6863/1676, 20-23=-3279/1303, 18-20=-3279/1303, 15-18=-394/686, 34-35=-13385/3641, 31-34=-5507/1330, 29-31=-5507/1330, 27-29=-876/3983, 26-27=-876/3983, 22-26=-1629/6317, 19-22=-1629/6317, 17-19=-1279/4040, 16-17=-1279/4040
WEBS 2-38=-277/165, 2-37=-332/481, 4-37=-1524/5045, 4-35=-4857/1630, 35-36=-878/2232, 5-35=-249/877, 15-16=-496/1385, 12-16=-650/304, 13-15=-114/1266, 6-40=-689/922, 40-41=-681/923, 41-42=-1001/1310, 42-43=-1118/388, 11-43=-1132/389, 8-41=-145/259, 9-42=-250/186, 7-41=-853/704, 8-42=-492/159, 10-42=-725/1568, 25-26=-4809/813, 33-34=-1474/4769, 31-32=-181/322, 29-30=-1232/5134, 19-20=-223/1106, 22-23=-261/0, 26-28=-1155/5418, 23-26=-83/1741, 16-18=-3782/1225, 33-35=-3978/1466, 32-34=-9796/2883, 28-29=-11063/2515, 19-23=-2902/401, 13-14=-1421/245, 35-37=-13477/3980

NOTES- (17)
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-7-0 oc, Except member 12-15 2x6 - 2 rows staggered at 0-9-0 oc, member 14-13 2x6 - 2 rows staggered at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.

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NOTES- (17)

4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 4x8 MT20 unless otherwise indicated.
7) The Fabrication Tolerance at joint 35 = 8%
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Ceiling dead load (5.0 psf) on member(s). 5-6, 11-12, 6-40, 40-41, 41-42, 42-43, 11-43; Wall dead load (5.0psf) on member(s).5-35, 12-16
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 34-35, 31-34, 29-31, 27-29, 26-27, 22-26, 19-22, 17-19, 16-17
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 715 lb uplift at joint 1, 975 lb uplift at joint 25 and 431 lb uplift at joint 14.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4485 lb down and 1351 lb up at 13-10-15, 578 lb down at 15-8-10, 578 lb down at 17-8-10, and 578 lb down at 19-8-10, and 578 lb down at 30-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
16) Attic room checked for L/360 deflection.
17) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 1-5=-54, 5-6=-64, 6-7=-54, 7-10=-54, 10-11=-54, 11-12=-64, 12-13=-54, 14-44=-20, 16-35=-40, 6-11=-10
   Drag: 5-35=-10, 12-16=-10
   Concentrated Loads (lb)
   Vert: 36=-4485(F) 33=-143(F) 32=-143(F) 30=-143(F) 47=-143(F)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159775
2217427	T07	ATTIC TRUSS	6	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:52 2020 Page 1
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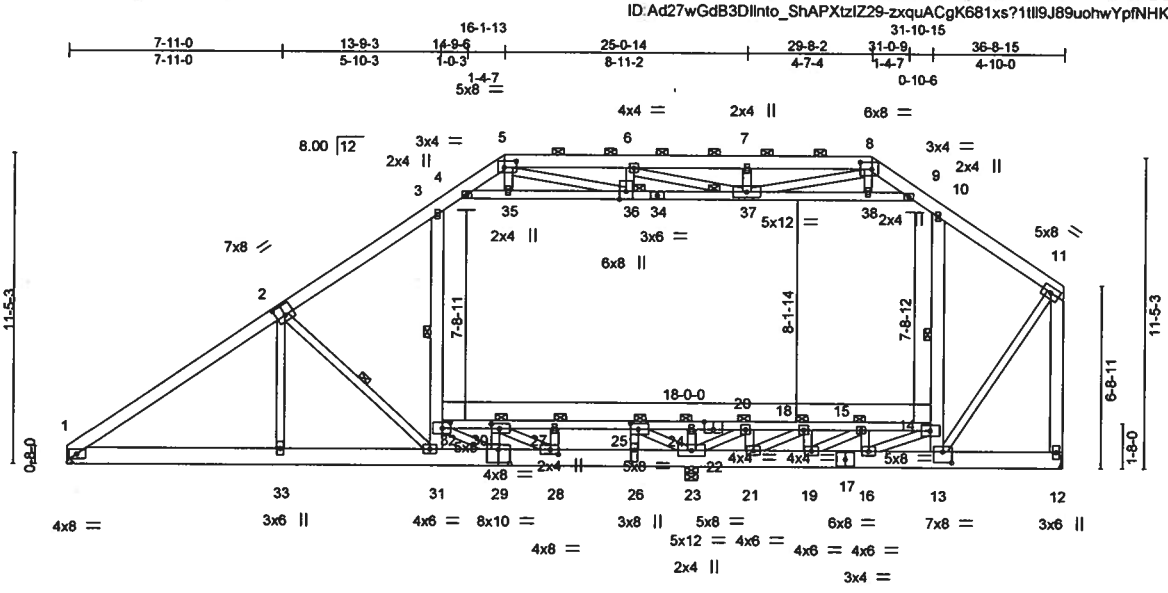

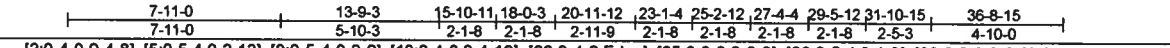

Plate Offsets (X,Y)-- [2:0-4-0,0-4-8], [5:0-5-4,0-2-12], [8:0-5-4,0-3-0], [13:0-4-0,0-4-12], [22:0-4-0,Edge], [25:0-3-8,0-2-8], [26:0-5-4,0-1-8], [28:0-3-8,0-2-0], [29:0-5-0,0-6-0], [30:0-3-8,0-2-0], [32:0-3-12,0-2-8], [36:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.78	Vert(LL)	0.39	31-33	>707	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.68	Vert(CT)	-0.70	31-33	>394	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.01	23	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Attic	-0.22	14-32	990	360	Weight: 400 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except* 22-32,14-22: 2x4 SP M 31
WEBS 2x4 SP No.3 *Except* 3-31,10-13,11-12: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-7 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 2-31, 3-32, 10-14
JOINTS 1 Brace at Jt(s): 36, 37, 24, 25, 20, 30, 15, 18, 27

REACTIONS. (lb/size) 1=1134/Mechanical, 12=961/Mechanical, 23=1690/0-5-8
Max Horz 1=399(LC 12)
Max Uplift 1=-205(LC 12), 12=-202(LC 8), 23=-74(LC 12)
Max Grav 1=1134(LC 1), 12=1086(LC 27), 23=2481(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1754/460, 2-3=-1023/274, 3-4=-820/392, 4-5=-1096/527, 5-6=-1765/973, 6-7=-1642/936, 7-8=-1642/936, 8-9=-782/492, 9-10=-874/409, 10-11=-724/190, 11-12=-1287/303
BOT CHORD 1-33=-525/1441, 31-33=-524/1436, 29-31=-316/1240, 28-29=-367/2131, 26-28=-554/407, 23-26=-554/407, 21-23=-2577/879, 19-21=-1636/816, 16-19=-1207/688, 13-16=-105/359, 30-32=-1442/235, 27-30=-458/1109, 25-27=-458/1109, 24-25=-863/3915, 20-24=-863/3915, 18-20=-912/3154, 15-18=-843/2191, 14-15=-715/1762
WEBS 2-33=-186/695, 2-31=-1066/556, 31-32=-615/231, 3-32=-260/297, 13-14=-241/300, 10-14=-604/353, 4-35=-440/446, 35-36=-437/450, 36-37=-891/1208, 37-38=-540/101, 9-38=-550/99, 11-13=-203/1118, 5-36=-601/886, 8-37=-634/1228, 29-32=-42/921, 23-25=-3273/481, 20-23=-910/0, 14-16=-1513/655, 29-30=-448/1253, 25-26=-258/1217, 18-19=-83/410, 18-21=-1157/85, 28-30=-3031/816, 15-19=-580/161

NOTES- (13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 4-35, 35-36, 36-37, 37-38, 9-38; Wall dead load (5.0psf) on member(s).3-32, 10-14
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 30-32, 27-30, 25-27, 24-25, 20-24, 18-20, 15-18, 14-15
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Refer to girder(s) for truss to truss connections.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159775
2217427	T07	ATTIC TRUSS	6	1	Job Reference (optional)

NOTES- (13)

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 205 lb uplift at joint 1, 202 lb uplift at joint 12 and 74 lb uplift at joint 23.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.
13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159776
2217427	T07G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:33:55 2020 Page 1
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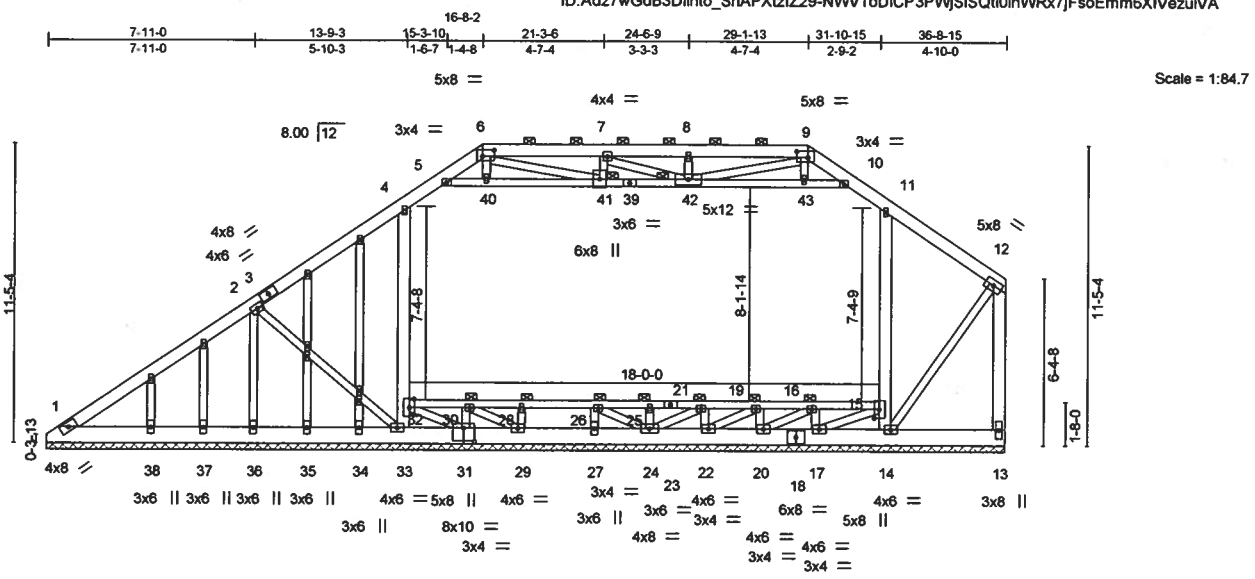

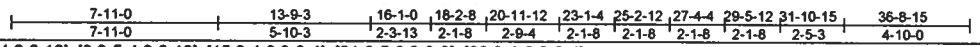

Plate Offsets (X,Y)-- [6:0-5-4,0-2-12], [9:0-5-4,0-2-12], [15:0-4-0,0-2-4], [31:0-5-0,0-6-0], [32:0-4-0,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 419 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except* 23-32,15-23: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 4-33,11-14,12-13: 2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-11 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 41, 42, 25, 21, 30, 26, 19, 28, 16

REACTIONS. All bearings 36-8-15.
(lb) - Max Horz 1=394(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 38, 37 except 36=-245(LC 12), 33=-291(LC 12), 14=-200(LC 13), 13=-408(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 24, 38, 37, 35, 34, 20 except 1=426(LC 1), 36=524(LC 1), 33=623(LC 20), 14=489(LC 11), 13=1008(LC 1), 22=263(LC 18), 31=290(LC 18), 27=306(LC 18), 29=307(LC 18), 17=312(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-568/241, 2-4=-627/316, 4-5=-702/403, 5-6=-950/479, 6-7=-1631/896, 7-8=-1633/893, 8-9=-1633/893, 9-10=-941/475, 10-11=-703/402, 11-12=-575/267, 12-13=-965/417
BOT CHORD 1-38=-252/384, 37-38=-252/384, 36-37=-252/384, 35-36=-252/384, 34-35=-252/384, 33-34=-252/384, 31-33=-223/441, 29-31=-187/369, 27-29=-182/359, 24-27=-182/359, 22-24=-187/363, 20-22=-185/356, 17-20=-194/367, 14-17=-213/427
WEBS 2-36=-470/299, 32-33=-509/189, 4-32=-528/276, 14-15=-539/203, 11-15=-545/288, 5-40=-198/369, 40-41=-195/374, 41-42=-623/1180, 42-43=-137/360, 10-43=-139/355, 12-14=-381/745, 6-41=-493/871, 9-42=-498/885

NOTES- (15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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NOTES- (15)

10) Ceiling dead load (5.0 psf) on member(s). 4-5, 10-11, 5-40, 40-41, 41-42, 42-43, 10-43; Wall dead load (5.0psf) on member(s).4-32, 11-15
11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 38, 37 except (jt=lb) 36=245, 33=291, 14=200, 13=408.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.
15) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.
2217427	T09	ATTIC TRUSS	1	3	T19159777
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:00 2020 Page 1
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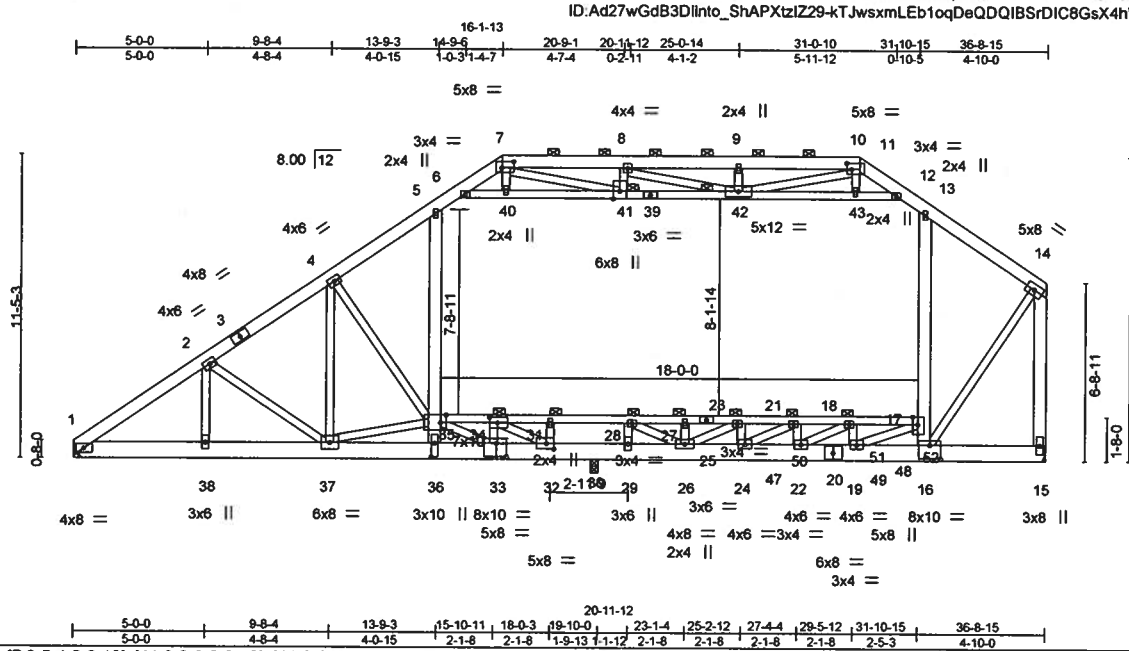

Plate Offsets (X,Y)– [7:0-5-4,0-2-12], [11:0-0-0,0-2-12], [11:0-2-4,0-2-12], [16:0-5-0,0-6-0], [17:Edge,0-2-4], [32:0-3-8,0-2-8], [33:0-4-8,0-6-0], [34:0-3-8,0-2-8], [35:0-2-8,Edge], [36:0-6-4,0-1-8], [41:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.30	Vert(LL)	-0.10	36-37	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.19	36-37	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.02	15	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Attic	0.08	17-35	2892	360	Weight: 1253 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except*
25-35,17-25: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
5-36,13-16,14-15: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-11.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 41, 42, 27, 23, 21, 28, 34, 31, 18

REACTIONS. (lb/size) 1=2761/Mechanical, 15=4622/Mechanical, 30=4817/0-3-8
Max Horz 1=399(LC 8)
Max Uplift 1=-732(LC 8), 15=-1304(LC 4), 30=-976(LC 8)
Max Grav 1=2761(LC 1), 15=4814(LC 23), 30=5878(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4467/1148, 2-4=-4437/1187, 4-5=-2809/867, 5-6=-2081/689, 6-7=-962/488, 7-8=-1641/995, 8-9=-1488/1058, 9-10=-1488/1058, 10-11=-555/560, 11-12=-771/556, 12-13=-2111/688, 13-14=-2709/739, 14-15=-4705/1245
BOT CHORD 1-38=-1254/3649, 37-38=-1254/3649, 36-37=-2926/9191, 33-36=-2890/8993, 32-33=-1704/5471, 30-32=-2410/609, 29-30=-2410/609, 26-29=-2410/609, 24-26=-602/1283, 22-24=0/2329, 19-22=-308/2727, 16-19=-579/2146, 34-35=-3081/1093, 31-34=-1091/4555, 28-31=-1091/4555, 27-28=-1378/3870, 23-27=-1378/3870, 21-23=-1202/2602, 18-21=-1024/1417, 17-18=-1059/428
WEBS 2-37=-348/414, 4-37=-843/2509, 4-35=-2492/1001, 35-36=-982/2787, 5-35=-517/1231, 16-17=-854/878, 13-17=-425/967, 6-40=-1625/611, 40-41=-1610/613, 41-42=-1869/1077, 42-43=-1816/633, 12-43=-1818/633, 14-16=-970/3773, 23-24=-147/765, 21-22=-219/610, 17-19=-423/1220, 28-29=-1319/0, 33-34=-1359/4360, 33-35=-4529/1524, 7-41=-618/910, 10-42=-579/1054, 26-28=0/1651, 23-26=-2020/219, 21-24=-1574/373, 31-32=-284/43, 32-34=-8933/2657, 35-37=-5838/1896, 18-19=-503/471, 18-22=-1152/534

NOTES- (16)
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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NOTES- (16)

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Ceiling dead load (5.0 psf) on member(s). 5-6, 12-13, 6-40, 40-41, 41-42, 42-43, 12-43; Wall dead load (5.0psf) on member(s).5-35, 13-17
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 34-35, 31-34, 28-31, 27-28, 23-27, 21-23, 18-21, 17-18
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=732, 15=1304, 30=976.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4133 lb down and 1272 lb up at 13-10-15, 578 lb down at 15-8-10, 578 lb down at 17-8-10, 173 lb down at 26-4-12, 173 lb down at 28-4-12, and 578 lb down at 30-4-12, and 3797 lb down and 1356 lb up at 32-1-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
15) Attic room checked for L/360 deflection.
16) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 1-5=-54, 5-6=-64, 6-7=-54, 7-11=-54, 11-12=-54, 12-13=-64, 13-14=-54, 15-44=-20, 17-35=-40, 6-12=-10
   Drag: 5-35=-10, 13-17=-10
   Concentrated Loads (lb)
   Vert: 36=-4133(B) 16=-3797(B) 33=-143(B) 32=-143(B) 47=-33(B) 48=-33(B) 49=-143(B)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159778
2217427	T10	MONOPITCH TRUSS	8	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:01 2020 Page 1
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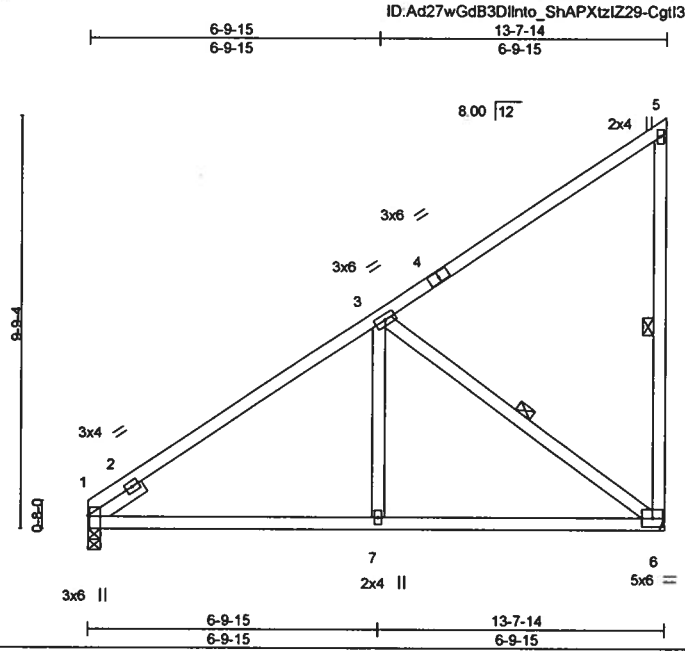

Plate Offsets (X,Y)— [1:0-3-13,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.54	Vert(LL)	0.09	7-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.10	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	-0.02	1	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 80 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-2-13 oc bracing.
WEBS 1 Row at midpt 5-6, 3-6

REACTIONS. (lb/size) 1=500/0-3-8, 6=500/Mechanical
Max Horz 1=438(LC 12)
Max Uplift 1=-74(LC 12), 6=-389(LC 12)
Max Grav 1=500(LC 1), 6=564(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-567/18
BOT CHORD 1-7=-340/530, 6-7=-340/530
WEBS 3-7=0/307, 3-6=-647/416

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 6=389.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159779
2217427	T11	MONOPITCH TRUSS	5	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:02 2020 Page 1
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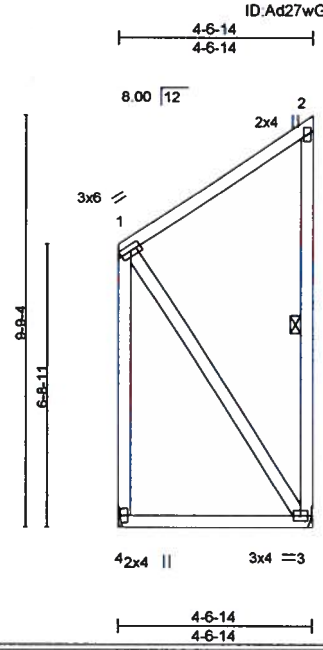

Scale = 1:52.4

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.33	Vert(LL) -0.02 3-4 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.22	Vert(CT) -0.04 3-4 >999 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.25	Horz(CT) -0.00 3 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MP		Weight: 49 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-3

REACTIONS. (lb/size) 4=158/Mechanical, 3=158/Mechanical
Max Horz 4=139(LC 12)
Max Uplift 3=-330(LC 12)
Max Grav 4=219(LC 21), 3=235(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 1-3=-218/279

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=330.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159780
2217427	T12	QUEENPOST	5	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:03 2020 Page 1
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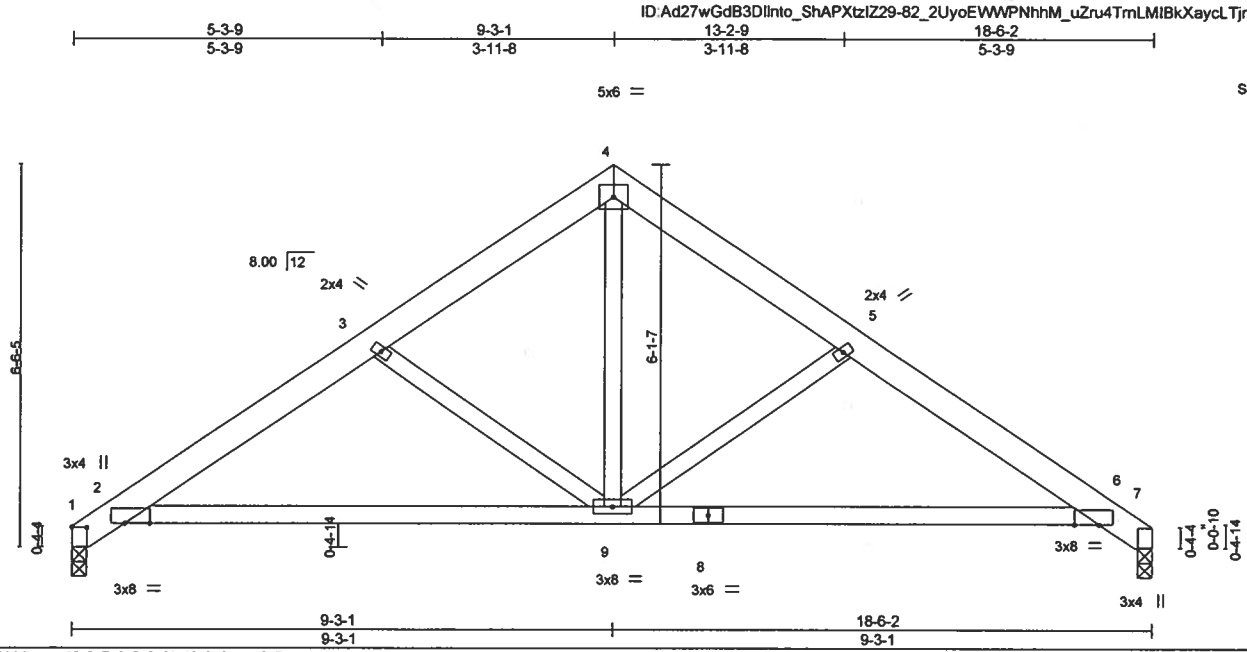

Plate Offsets (X,Y)-- [2:0-5-2,0-0-0], [2:0-0-14,0-7-13], [2:0-0-12,0-10-14], [6:0-5-2,0-0-0]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.44	Vert(LL) -0.09 9-12 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.69	Vert(CT) -0.19 9-12 >999 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.24	Horz(CT) 0.07 7 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS		Weight: 100 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-6-11 oc bracing.

REACTIONS. (lb/size) 1=689/0-3-0, 7=679/0-3-0
Max Horz 1=-190(LC 8)
Max Uplift 1=-240(LC 12), 7=-242(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-438/217, 2-3=-1019/467, 3-4=-782/385, 4-5=-782/385, 5-6=-1018/467, 6-7=-373/167
BOT CHORD 2-9=-370/925, 6-9=-316/874
WEBS 3-9=-436/305, 4-9=-286/693, 5-9=-433/294

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=240, 7=242.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159781
2217427	T12D	Roof Special	3	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:04 2020 Page 1
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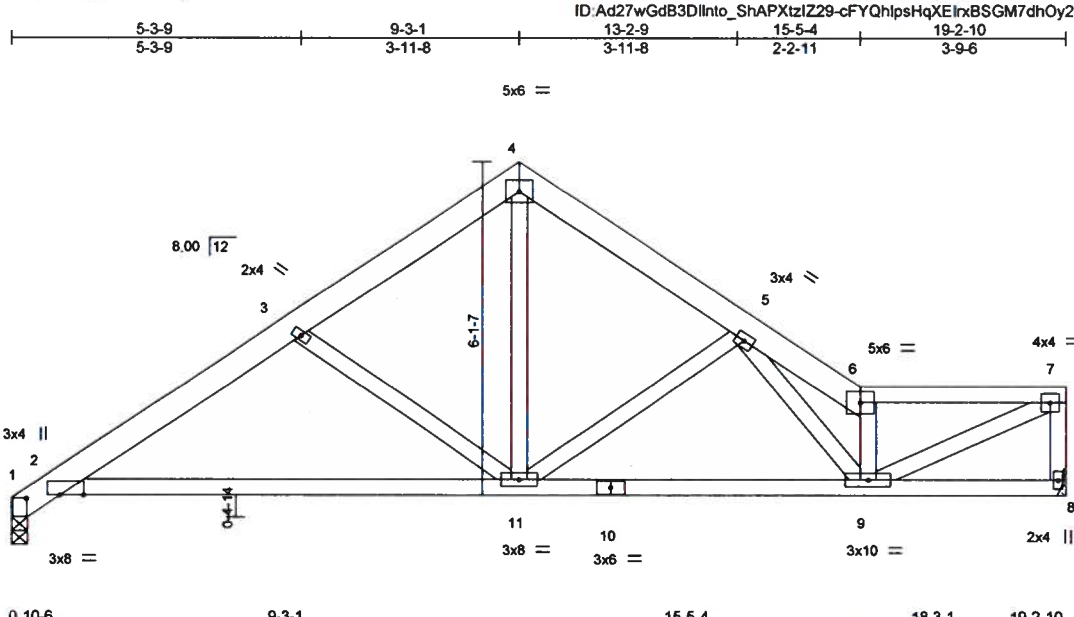

Plate Offsets (X,Y)-- [2:0-5-2,Edge], [2:0-0-12,0-7-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.44	Vert(LL)	-0.10	11-14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.75	Vert(CT)	-0.22	11-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	FBC2017/TPI2014	Matrix-MS							Weight: 114 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except* 6-7: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-11-14 oc bracing.

REACTIONS. (lb/size) 1=713/0-3-8, 8=701/Mechanical
Max Horz 1=185(LC 12)
Max Uplift 1=-243(LC 12), 8=-263(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-419/134, 2-3=-1060/486, 3-4=-814/404, 4-5=-797/396, 5-6=-1472/661, 6-7=-1171/507
BOT CHORD 2-11=-440/931, 9-11=-432/955
WEBS 3-11=-438/307, 4-11=-291/678, 5-11=-442/289, 7-8=-669/318, 6-9=-886/442, 7-9=-564/1304, 5-9=-190/490

NOTES- (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=243, 8=263.
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159782
2217427	T14	HIP TRUSS	1	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:05 2020 Page 1
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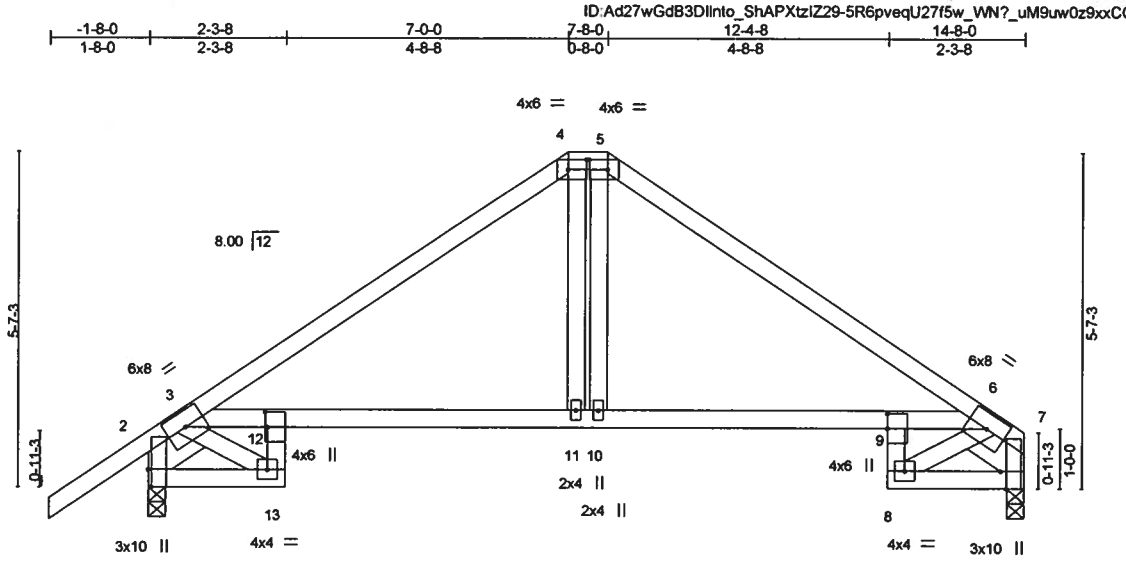

Plate Offsets (X,Y)– [2:0-3-8,Edge], [4:0-3-12,0-2-0], [5:0-3-12,0-2-0], [7:0-3-8,Edge], [9:0-3-0,0-0-0], [12:0-3-0,0-0-8]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.81	Vert(LL) 0.26 11-12 >666 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.86	Vert(CT) -0.29 9-10 >610 180	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.27	Horz(CT) 0.16 7 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS		Weight: 80 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
12-13,8-9: 2x4 SP No.3, 3-6: 2x4 SP M 31
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-0-0, Right 2x6 SP No.2 1-0-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-2-2 oc bracing. Except:
7-6-0 oc bracing: 9-10

REACTIONS. (lb/size) 7=1003/0-3-8, 2=1103/0-3-8
Max Horz 2=169(LC 24)
Max Uplift 7=-685(LC 9), 2=-745(LC 8)
Max Grav 7=1018(LC 34), 2=1112(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-19=-429/282, 3-4=-1671/1227, 4-5=-1379/1112, 5-6=-1703/1257, 6-7=-379/249
BOT CHORD 2-13=-574/753, 12-13=-344/469, 3-12=-805/1190, 11-12=-970/1408, 10-11=-982/1427, 9-10=-963/1401, 6-9=-861/1233, 8-9=-306/439, 7-8=-518/708
WEBS 4-11=-561/754, 5-10=-585/768, 3-13=-656/507, 6-8=-613/454

NOTES- (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=685, 2=745.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 114 lb down and 137 lb up at 7-0-0, and 114 lb down and 137 lb up at 7-8-0 on top chord, and 447 lb down and 428 lb up at 7-0-0, and 447 lb down and 428 lb up at 7-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-5=-54, 5-7=-54, 13-18=-20, 9-12=-20, 8-14=-20

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Continued on page 2

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 4=-62(B) 5=-62(B) 11=-403(B) 10=-403(B)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159783
2217427	T15	SPECIAL TRUSS	3	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:06 2020 Page 1
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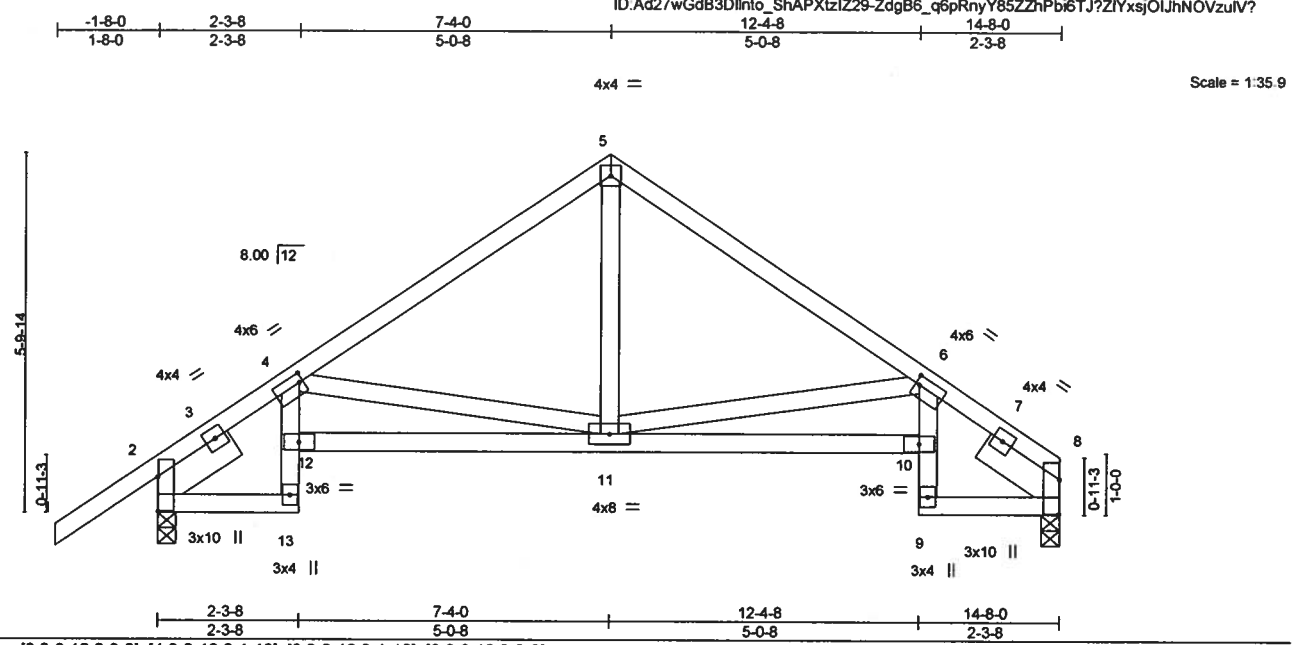

Plate Offsets (X,Y)– [2:0-6-12,0-0-2], [4:0-0-12,0-1-12], [6:0-0-12,0-1-12], [8:0-6-12,0-0-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.28	Vert(LL)	0.06	11-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.11	10-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.11	8	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 85 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0, Right 2x6 SP No.2 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-1-1 oc bracing.

REACTIONS. (lb/size) 8=538/0-3-8, 2=638/0-3-8
Max Horz 2=175(LC 9)
Max Uplift 8=-190(LC 13), 2=-250(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-675/303, 4-5=-642/293, 5-6=-642/294, 6-8=-666/320
BOT CHORD 2-13=-237/499, 11-12=-531/1079, 10-11=-456/991, 8-9=-201/462
WEBS 5-11=-122/395, 6-11=-624/398, 4-11=-638/428

NOTES- (7)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=190, 2=250.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159784
2217427	T16	COMMON TRUSS	1	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:07 2020 Page 1
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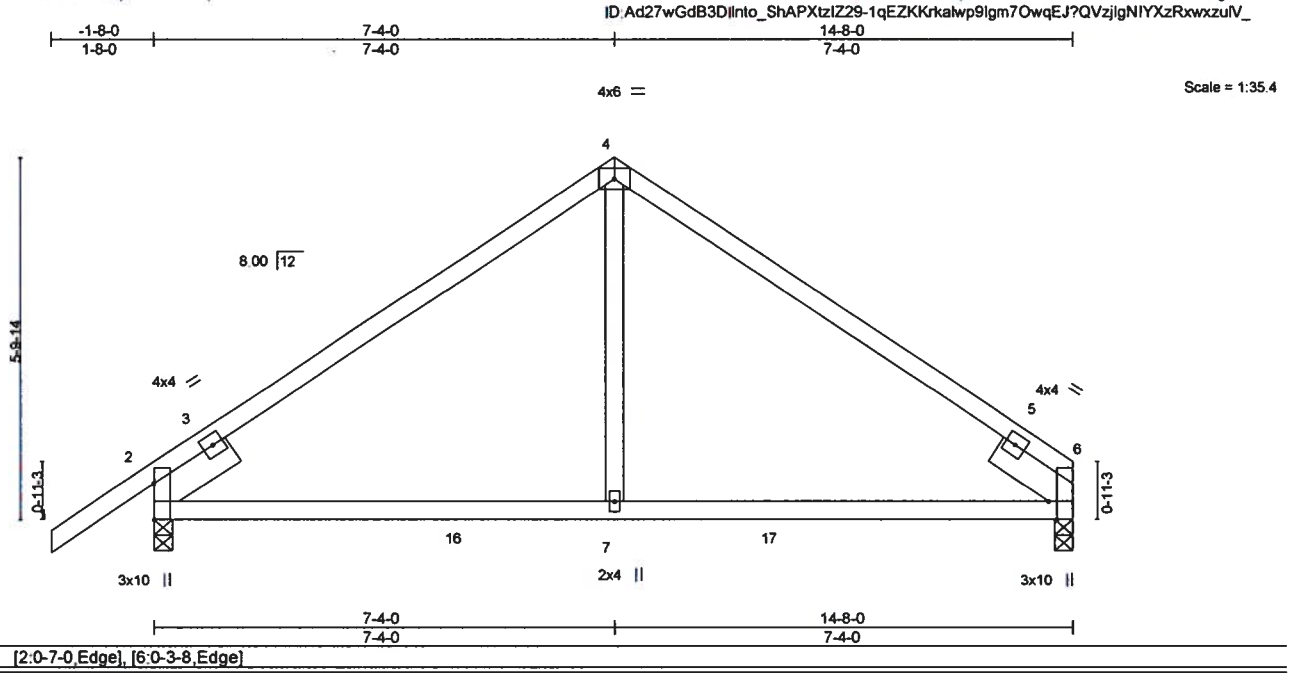

Plate Offsets (X,Y)-- [2:0-7-0,Edge], [6:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.55	Vert(LL)	0.12	7-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.46	Vert(CT)	-0.14	7-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 66 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0, Right 2x6 SP No.2 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=538/0-3-8, 2=638/0-3-8
Max Horz 2=175(LC 9)
Max Uplift 6=-190(LC 13), 2=-250(LC 12)
Max Grav 6=572(LC 20), 2=666(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-654/280, 4-6=-648/279
BOT CHORD 2-7=-112/503, 6-7=-112/503
WEBS 4-7=-32/327

NOTES- (7)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=190, 2=250.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.
2217427	T17	Common Girder	1	2	T19159785
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:11 2020 Page 1
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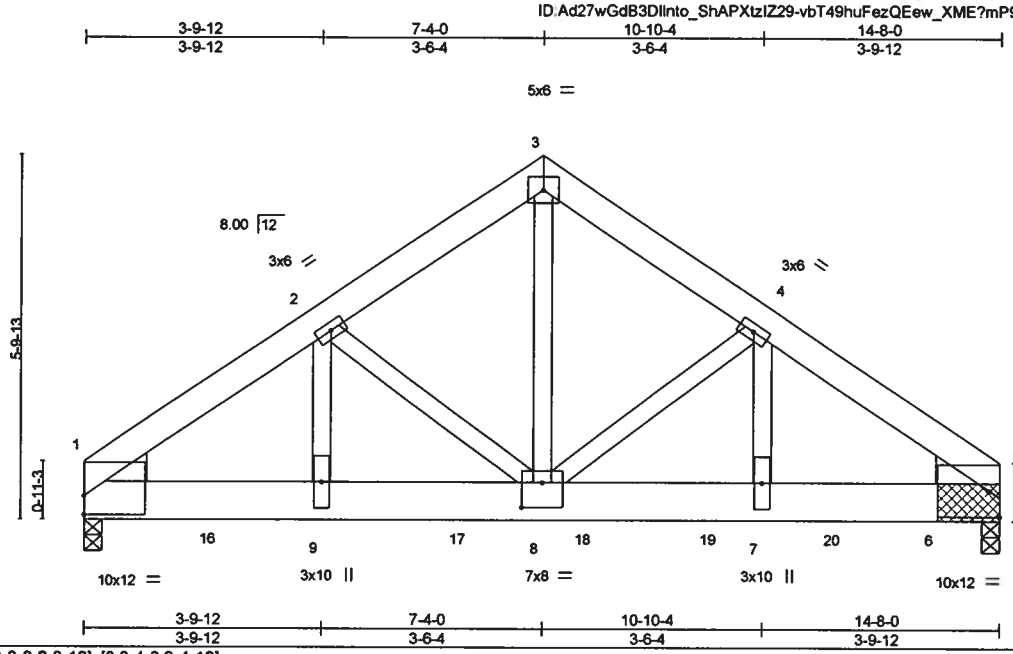

Plate Offsets (X,Y)– [1:0-0-0,0-3-10], [8:0-4-0,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	-0.04	7-8	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.07	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 247 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3
WEDGE
Left: 2x6 SP No.2, Right: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=4213/0-3-8, 5=6296/(0-3-8 + bearing block) (req. 0-3-11)
Max Horz 1=-152(LC 25)
Max Uplift 1=-903(LC 8), 5=-1487(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5519/1176, 2-3=-4259/971, 3-4=-4267/974, 4-5=-6102/1344
BOT CHORD 1-9=-998/4479, 8-9=-998/4479, 7-8=-1057/4999, 5-7=-1057/4999
WEBS 3-8=-932/4333, 4-8=-1896/568, 4-7=-459/2161, 2-8=-1222/374, 2-9=-261/1476

NOTES- (11)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-3-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 5 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SP No.2.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=903, 5=1487.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1114 lb down and 225 lb up at 2-0-12, 1114 lb down and 225 lb up at 4-0-12, 1114 lb down and 225 lb up at 6-0-12, 1114 lb down and 225 lb up at 8-0-12, 1114 lb down and 225 lb up at 10-0-12, and 1114 lb down and 225 lb up at 12-0-12, and 2741 lb down and 752 lb up at 13-7-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Continued on page 2

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-54, 3-5=-54, 10-13=-20
   Concentrated Loads (lb)
   Vert: 9=-1114(F) 6=-2741(F) 16=-1114(F) 17=-1114(F) 18=-1114(F) 19=-1114(F) 20=-1114(F)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159786
2217427	T18	COMMON	4	1	Job Reference (optional)

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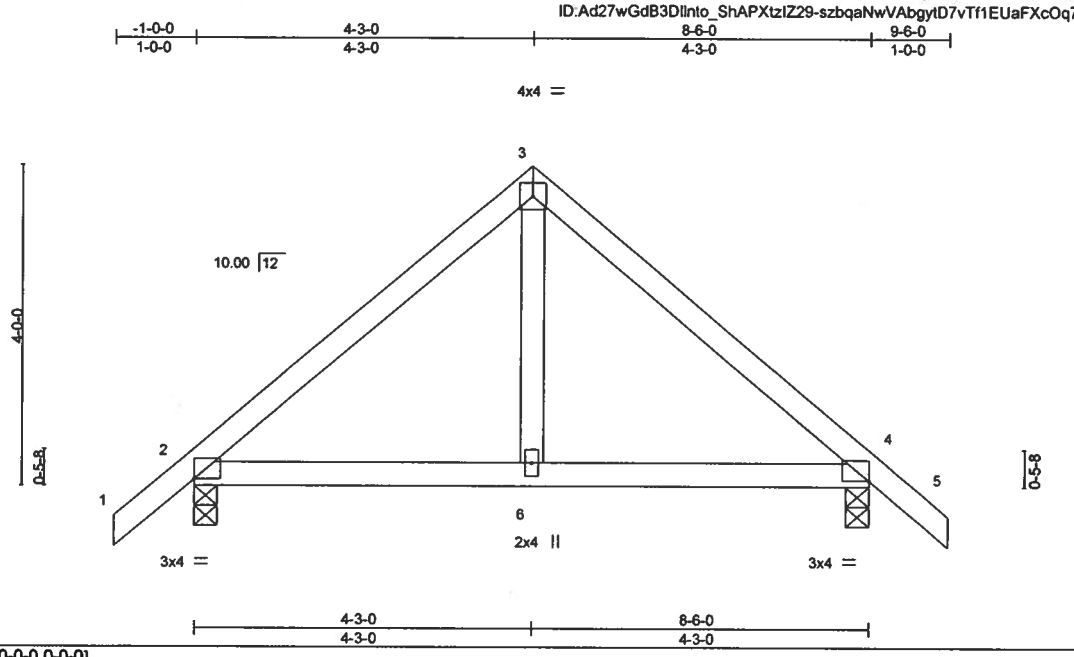

Plate Offsets (X,Y)-- [2:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	0.02	6-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.20	Vert(CT)	-0.02	6-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 39 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=369/0-3-8, 4=369/0-3-8
Max Horz 2=136(LC 11)
Max Uplift 2=-142(LC 12), 4=-142(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-333/160, 3-4=-333/160

NOTES- (7)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=142, 4=142.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159787
2217427	T18G	GABLE	1	1	Job Reference (optional)

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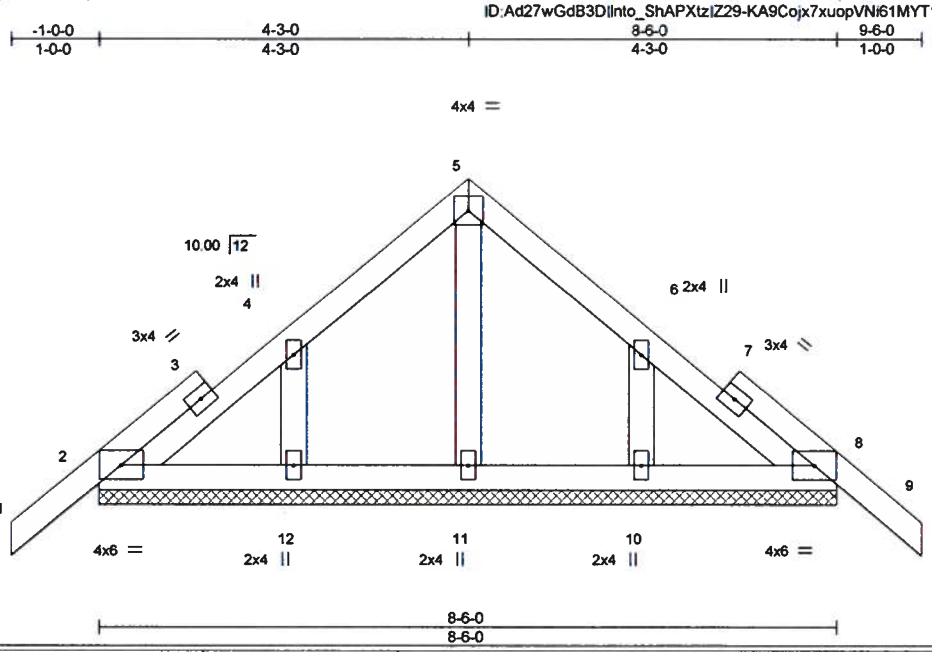

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.08	Vert(LL) -0.00 8 n/r 120	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.04	Vert(CT) -0.00 9 n/r 120	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00 8 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-S		Weight: 46 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 8-6-0.
(lb) - Max Horz 2=-124(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8 except 12=-137(LC 12), 10=-139(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 11, 12, 10

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (jt=lb) 12=137, 10=139.
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159788
2217427	T19	COMMON GIRDER	1	1	Job Reference (optional)	

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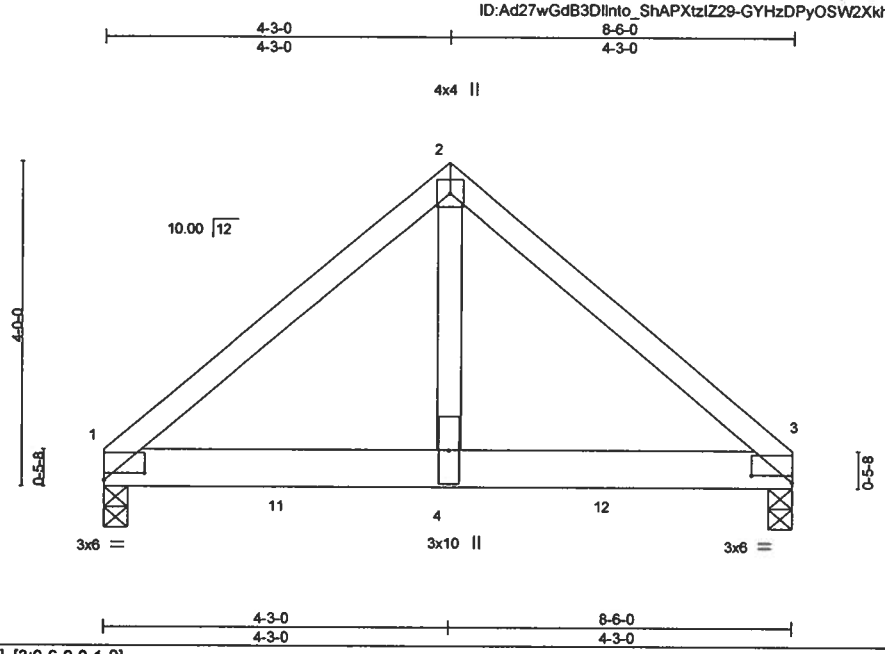

Plate Offsets (X,Y)— [1:0-6-0,0-1-0], [3:0-6-0,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.29	Vert(LL)	0.04	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 42 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=1339/0-3-8, 3=1333/0-3-8
Max Horz 1=110(LC 24)
Max Uplift 1=-512(LC 8), 3=-510(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1564/633, 2-3=-1564/633
BOT CHORD 1-4=-429/1171, 3-4=-429/1171
WEBS 2-4=-657/1706

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=512, 3=510.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 681 lb down and 283 lb up at 2-2-12, and 681 lb down and 283 lb up at 4-2-12, and 681 lb down and 283 lb up at 6-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-54, 5-8=-20
Concentrated Loads (lb)
Vert: 4=-681(F) 11=-681(F) 12=-681(F)

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159789
2217427	T20	Monopitch	3	1	Job Reference (optional)	

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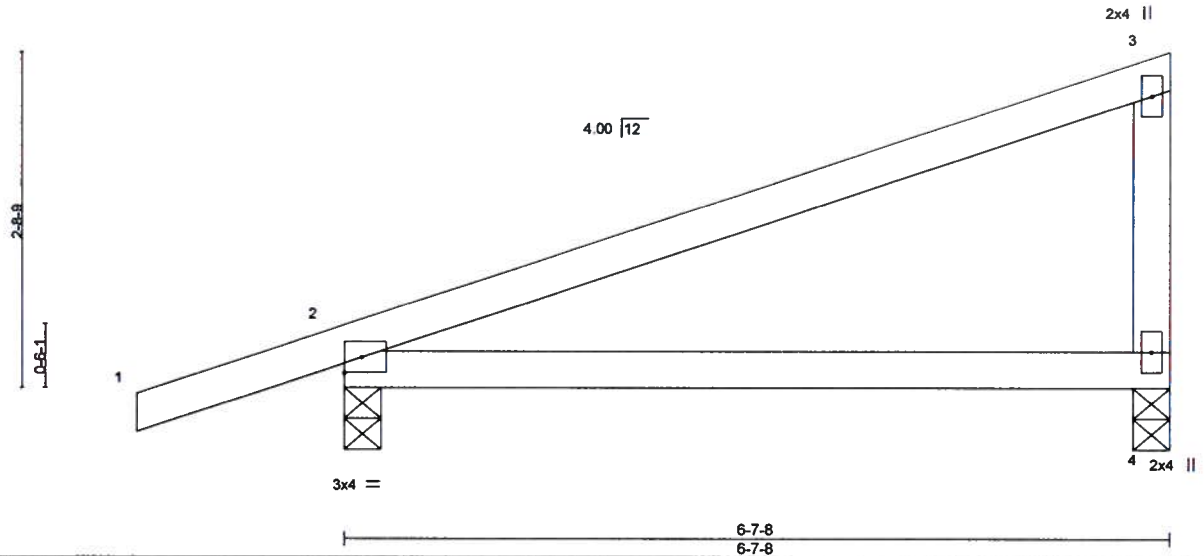

6-7-8 / 6-7-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.65	Vert(LL)	0.25	4-7	>312	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.64	Vert(CT)	0.22	4-7	>359	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.03	2	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 26 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 4=228/0-3-8, 2=341/0-3-8
Max Horz 2=141(LC 8)
Max Uplift 4=-194(LC 8), 2=-272(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (6)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=194, 2=272.
6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	
2217427	T21	Half Hip Girder	1	1	Job Reference (optional)	T19159790

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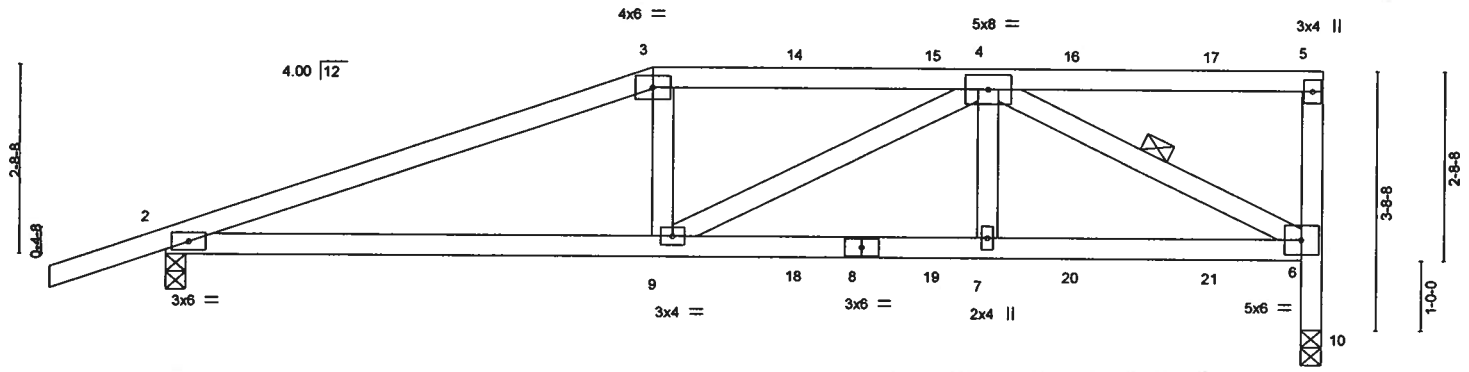
1-8-0	7-0-0	4-9-12	4-9-12

Scale: 3/8"=1'



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

7-0-0	11-9-12	16-7-8
7-0-0	4-9-12	4-9-12

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.89	Vert(LL)	0.20	9-13	>995	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.19	9-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.56	Horz(CT)	-0.09	10	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 78 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 3-11-1 oc bracing.
WEBS 1 Row at midpt 4-6

REACTIONS. (lb/size) 2=1173/0-3-8, 10=1325/0-3-8
Max Horz 2=150(LC 23)
Max Uplift 2=-985(LC 4), 10=-1123(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2610/2146, 3-4=-2439/2092, 6-10=-1325/1123
BOT CHORD 2-9=-2077/2422, 7-9=-1728/2030, 6-7=-1728/2030
WEBS 3-9=-259/426, 4-9=-410/461, 4-7=-214/396, 4-6=-2215/1886

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=985, 10=1123.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 224 lb down and 265 lb up at 7-0-0, 108 lb down and 139 lb up at 9-1-1, 108 lb down and 139 lb up at 11-1-1, and 108 lb down and 139 lb up at 13-1-1, and 108 lb down and 139 lb up at 15-1-1 on top chord, and 323 lb down and 373 lb up at 7-0-0, 84 lb down and 93 lb up at 9-1-1, 84 lb down and 93 lb up at 11-1-1, and 84 lb down and 93 lb up at 13-1-1, and 84 lb down and 93 lb up at 15-1-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-5=-54, 6-11=-20

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Date: January 16,2020

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LOAD CASE(S) Standard

Concentrated Loads (lb)

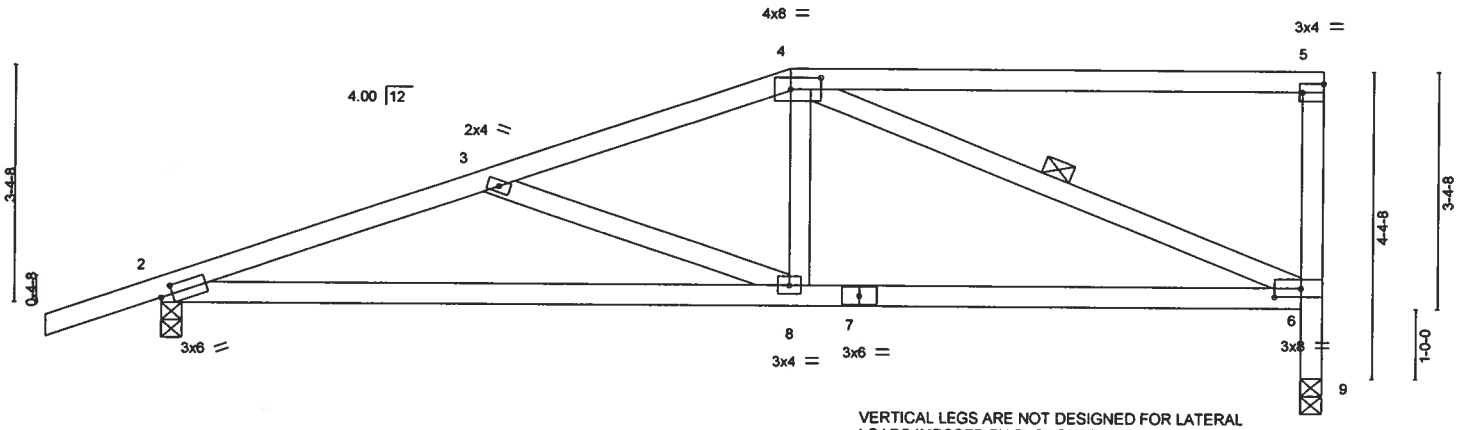
Vert: 3=-177(B) 9=-323(B) 14=-108(B) 15=-108(B) 16=-108(B) 17=-108(B) 18=-64(B) 19=-64(B) 20=-64(B) 21=-64(B)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.
2217427	T22	Half Hip	1	1	T19159791
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:20 2020 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-9KWT2m?uWkYzDIAGOdfG32ceC6wDBMSWU47shzulUn

-1-8-0 | 4-10-1 | 9-0-0 | 16-7-8
1-8-0 | 4-10-1 | 4-1-15 | 7-7-8

Scale = 1:31.6



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

9-0-0 | 16-7-8
9-0-0 | 7-7-8

Plate Offsets (X,Y)-- [2:0-2-0,0-1-8], [4:0-5-4,0-2-0], [5:Edge,0-1-8], [6:0-4-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.66	Vert(LL)	0.30	8-12	>651	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	0.26	8-12	>762	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	-0.05	9	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 81 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 3-7-10 oc bracing.
WEBS 1 Row at midpt 4-6

REACTIONS. (lb/size) 2=704/0-3-8, 9=605/0-3-8
Max Horz 2=182(LC 8)
Max Uplift 2=-558(LC 8), 9=-482(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1296/1653, 3-4=-946/1289, 6-9=-605/835
BOT CHORD 2-8=-1704/1211, 6-8=-1286/879
WEBS 3-8=-367/477, 4-8=-658/418, 4-6=-886/1313

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=558, 9=482.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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MiTek USA, Inc. FL Cert 6634
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Date:

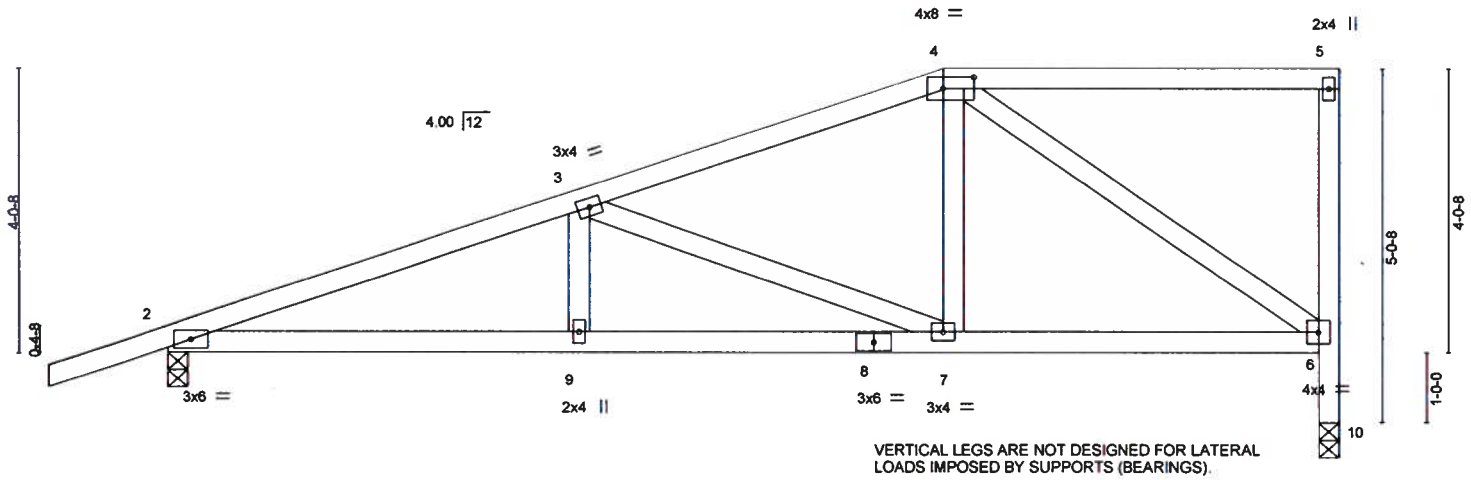
January 16,2020

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159792
2217427	T23	Half Hip	1	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:22 2020 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-5ieETS182LogTcJeV2hLLU7?d0rlh1ulzoZDxazulUI

-1-8-0 | 5-10-1 | 11-0-0 | 16-7-8
1-8-0 | 5-10-1 | 5-1-15 | 5-7-8

Scale = 1:31.5



5-10-1 | 11-0-0 | 16-7-8
5-10-1 | 5-1-15 | 5-7-8

Plate Offsets (X,Y)-- [4:0-5-4,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.50	Vert(LL)	0.12	9-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	0.10	9-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	-0.05	10	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 84 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-1-9 oc bracing.

REACTIONS. (lb/size) 2=704/0-3-8, 10=605/0-3-8
Max Horz 2=215(LC 8)
Max Uplift 2=-552(LC 8), 10=-489(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1301/1702, 3-4=-692/888, 6-10=-605/847
BOT CHORD 2-9=-1758/1197, 7-9=-1758/1197, 6-7=-904/624
WEBS 3-7=-626/940, 4-7=-653/392, 4-6=-727/1058, 3-9=-317/219

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=552, 10=489.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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January 16,2020

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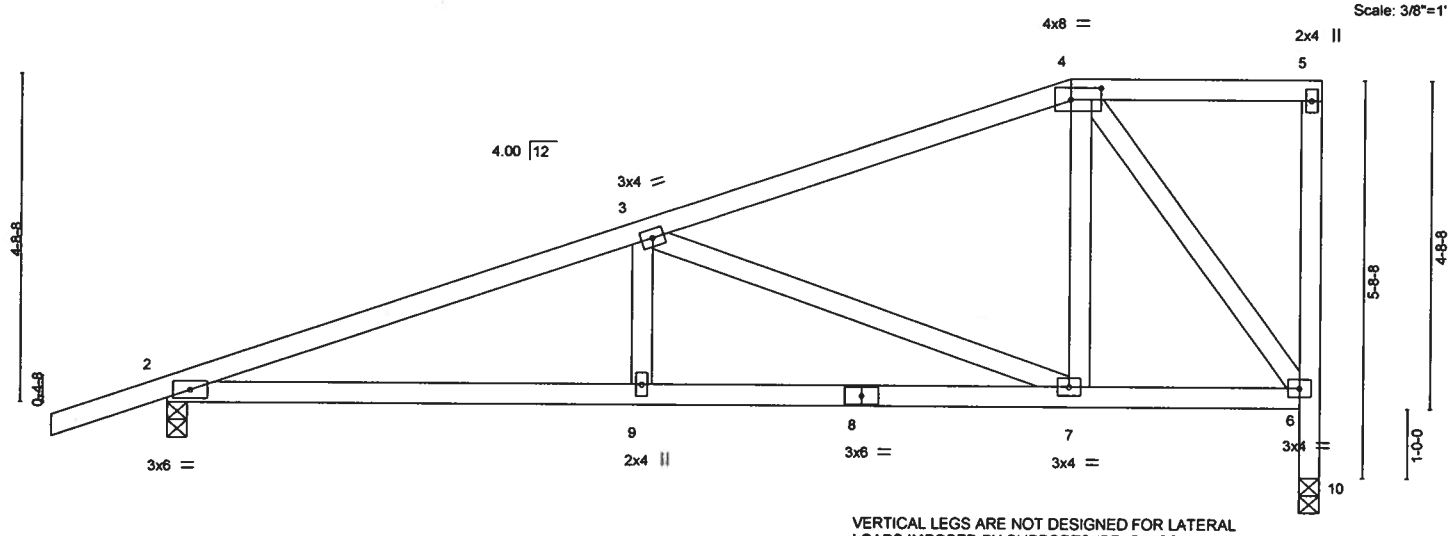
Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	
2217427	T24	Half Hip	1	1	Job Reference (optional)	T19159793

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:23 2020 Page 1
ID:Ad27wGdB3Dlinto_ShAPXtzIZ29-ZvCcho2npfxX4muq3lCauhg8nQA5QTOuCSJnT0zulUk

-1-8-0	6-10-1	13-0-0	16-7-8
1-8-0	6-10-1	6-1-15	3-7-8

Scale: 3/8"=1'



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

6-10-1	13-0-0	16-7-8
6-10-1	6-1-15	3-7-8

Plate Offsets (X,Y)— [4:0-5-4,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	0.17	9-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	0.14	9-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	-0.04	10	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 87 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-1-3 oc bracing.

REACTIONS. (lb/size) 2=704/0-3-8, 10=605/0-3-8
Max Horz 2=247(LC 8)
Max Uplift 2=-544(LC 8), 10=-497(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1247/1596, 3-4=-471/555, 6-10=-605/861
BOT CHORD 2-9=-1686/1141, 7-9=-1686/1141, 6-7=-591/403
WEBS 3-9=-405/279, 3-7=-801/1194, 4-7=-710/417, 4-6=-642/945

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=544, 10=497.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Date:

January 16,2020

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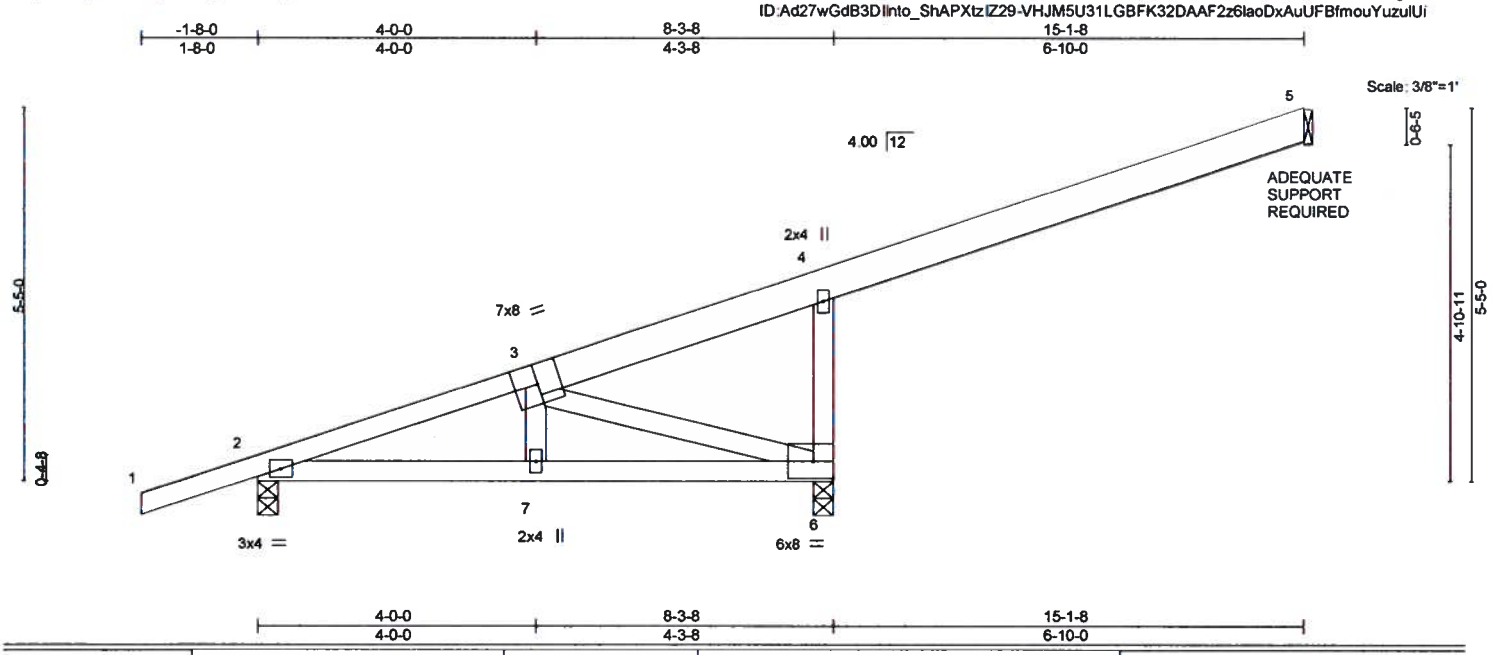
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159794
2217427	T25	MONOPITCH	16	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:25 2020 Page 1
ID:Ad27wGdB3DIinto_ShAPXtzIZ29-VHJM5U31LGBFK32DAAF2z6laoDxAuUFBfmouYuzulUi



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.24	Vert(LL) 0.03 6-7 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.19	Vert(CT) -0.02 6-7 >999 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.22	Horz(CT) -0.01 6 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS		Weight: 60 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except* 1-3: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-10-7 oc bracing.

REACTIONS. (lb/size) 5=149/Mechanical, 2=369/0-3-8, 6=549/0-3-8
Max Horz 2=276(LC 8)
Max Uplift 5=-127(LC 12), 2=-253(LC 8), 6=-461(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-408/448, 4-6=-388/463
BOT CHORD 2-7=-700/361, 6-7=-704/362
WEBS 3-6=-389/741, 3-7=-270/177

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=127, 2=253, 6=461.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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MiTek USA, Inc. FL Cert 6634
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Date:

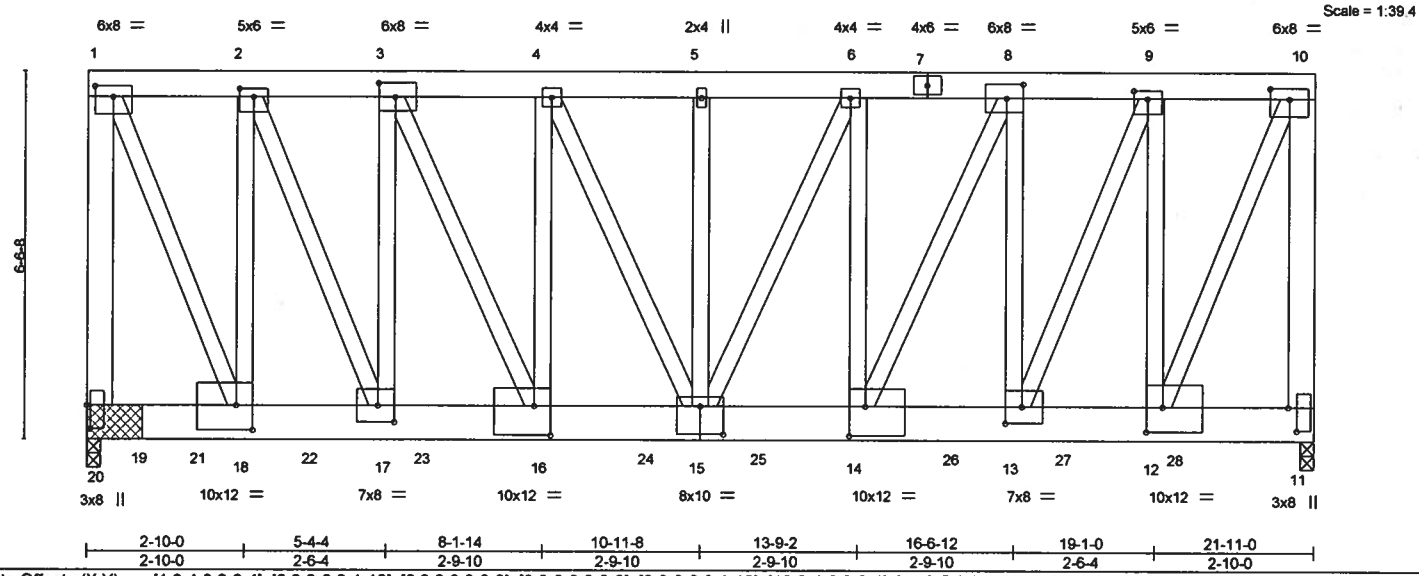
January 16,2020

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES	
2217427	TG01	FLAT TRUSS	1	2	Job Reference (optional)	T19159795

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:28 2020 Page 1
ID:Ad27wGdB3Dlnto_ShAPXtzIZ29-ws?VkV5veBZqBXnosJolblN0?Rwg5hhdMk0Y9DzulUf

2-10-0	5-4-4	8-1-14	10-11-8	13-9-2	16-6-12	19-1-0	21-11-0
2-10-0	2-6-4	2-9-10	2-9-10	2-9-10	2-9-10	2-6-4	2-10-0

Scale = 1:39.4



2-10-0	5-4-4	8-1-14	10-11-8	13-9-2	16-6-12	19-1-0	21-11-0
2-10-0	2-6-4	2-9-10	2-9-10	2-9-10	2-9-10	2-6-4	2-10-0

Plate Offsets (X,Y)– [1:0-4-0,0-2-4], [2:0-3-0,0-1-12], [3:0-3-8,0-3-0], [8:0-3-8,0-3-0], [9:0-3-0,0-1-12], [10:0-4-0,0-2-4], [11:0-5-0,0-1-12], [12:0-3-8,0-5-4], [13:0-3-8,0-3-8], [14:0-3-8,0-6-4], [15:0-5-0,0-6-0], [16:0-3-8,0-6-4], [17:0-3-8,0-3-8], [18:0-3-8,0-5-4], [20:0-5-0,0-0-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.57	Vert(LL)	-0.12	14-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.26	Vert(CT)	-0.24	14-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 557 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
1-20,10-11: 2x6 SP No.2
2-18,3-17,4-16,5-15,6-14,8-13,9-12: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 20=6740/(0-3-0 + bearing block) (req. 0-4-1), 11=6303/0-3-0 (req. 0-3-11)
Max Horz 20=274(LC 5)
Max Uplift 20=-1727(LC 4), 11=-1513(LC 5)
Max Grav 20=6881(LC 2), 11=6303(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-20=-6561/1656, 1-2=-2841/754, 2-3=-4889/1243, 3-4=-6518/1639, 4-5=-7355/1849, 5-6=-7355/1849, 6-8=-7207/1861, 8-9=-4893/1283, 9-10=-2600/715, 10-11=-5977/1559
BOT CHORD 18-20=-255/246, 17-18=-873/2841, 16-17=-1363/4889, 15-16=-1758/6518, 14-15=-1944/7207, 13-14=-1329/4893, 12-13=-732/2600
WEBS 1-18=-1730/6930, 2-18=-4832/1326, 2-17=-1343/5294, 3-17=-3633/1034, 3-16=-1022/3856, 4-16=-1904/635, 4-15=-578/1981, 6-15=-163/351, 6-14=-413/278, 8-14=-1455/5477, 8-13=-5019/1402, 9-13=-1544/5929, 9-12=-5541/1543, 10-12=-1636/6347

NOTES- (12)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 6-14 2x4 - 1 row at 0-4-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 20 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SP No.2.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) WARNING: Required bearing size at joint(s) 11 greater than input bearing size.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=1727, 11=1513.

Continued on page 2

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6904 Parke East Blvd. Tampa FL 33610
Date: January 16,2020

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6904 Parke East Blvd.
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NOTES- (12)

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1066 lb down and 222 lb up at 2-0-12, 1066 lb down and 222 lb up at 4-0-12, 1066 lb down and 222 lb up at 6-0-12, 1066 lb down and 222 lb up at 8-0-12, 1066 lb down and 222 lb up at 10-0-12, 1066 lb down and 222 lb up at 12-0-12, 4794 lb down and 1324 lb up at 13-7-11, 220 lb down at 15-6-2, 220 lb down at 17-6-2, 220 lb down at 19-6-2, and 224 lb down at 21-8-4, and 236 lb down at 23-6-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-10=-54, 11-20=-20
   Concentrated Loads (lb)
   Vert: 11=-305(B) 16=-1017(B) 14=-4635(B) 21=-1017(B) 22=-1017(B) 23=-1017(B) 24=-1017(B) 25=-1017(B) 26=-138(B) 27=-138(B) 28=-138(B)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159796
2217427	TG02	FLAT TRUSS	1	2	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:30 2020 Page 1
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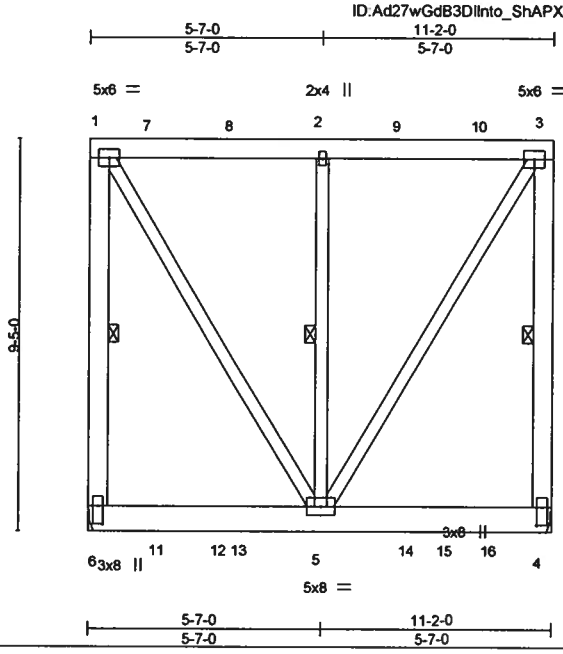


Scale = 1:53.3

Plate Offsets (X,Y)-- [4:0-5-4,0-1-8], [6:0-5-4,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.82	Vert(LL)	0.04	5-6	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	-0.05	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 282 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
1-6,3-4: 2x6 SP No.2

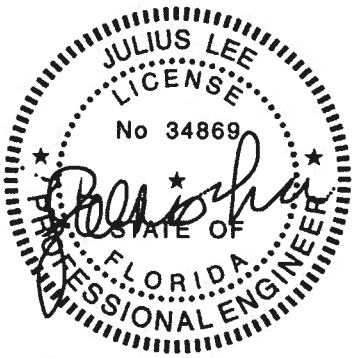
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-6, 3-4, 2-5

REACTIONS. (lb/size) 6=4504/Mechanical, 4=4153/Mechanical
Max Uplift 6=-2270(LC 4), 4=-2128(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-3918/1887, 1-2=-1641/836, 2-3=-1641/836, 3-4=-3535/1718
WEBS 1-5=-1559/3050, 2-5=-3825/1558, 3-5=-1565/3062

NOTES- (11)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=2270, 4=2128.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 635 lb down and 219 lb up at 1-5-14, 635 lb down and 219 lb up at 3-5-14, 635 lb down and 219 lb up at 5-5-14, and 635 lb down and 219 lb up at 7-5-14, and 635 lb down and 219 lb up at 9-5-14 on top chord, and 493 lb down and 409 lb up at 1-8-2, 493 lb down and 409 lb up at 3-8-2, 493 lb down and 409 lb up at 5-8-2, and 493 lb down and 409 lb up at 7-8-2, and 493 lb down and 409 lb up at 9-8-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-10=-304, 3-10=-54, 4-6=-20

Concentrated Loads (lb)

Vert: 5=-480(F) 2=-635 7=-635 8=-635 9=-635 10=-635 11=-480(F) 13=-480(F) 14=-480(F) 16=-480(F)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.
2217427	TG03	FLAT TRUSS	1	2	T19159797

Builders FirstSource, Jacksonville, FL - 32244, Job Reference (optional)

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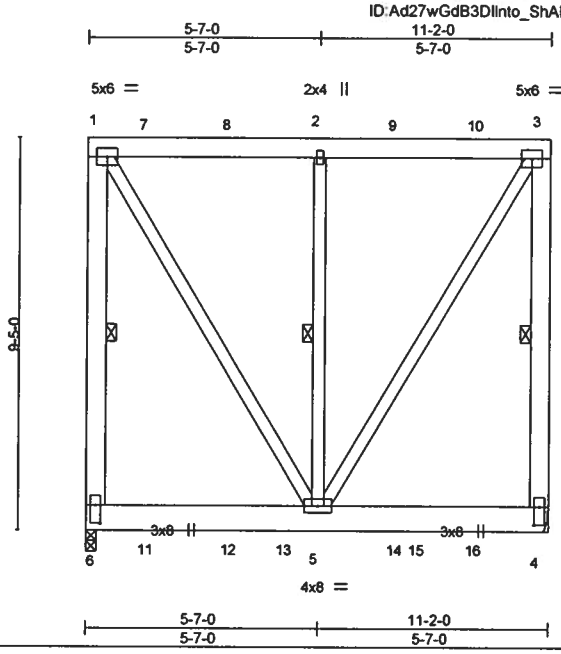

Scale = 1:53.3

Plate Offsets (X,Y)-- [4:0-5-4,0-1-8], [6:0-5-4,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.82	Vert(LL)	0.04	4-5	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	-0.05	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 282 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
1-6,3-4: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-6, 3-4, 2-5

REACTIONS. (lb/size) 6=3992/0-3-0, 4=3817/Mechanical
Max Uplift 6=-2322(LC 4), 4=-2219(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-3727/1977, 1-2=-1520/884, 2-3=-1520/884, 3-4=-3309/1794
WEBS 1-5=-1655/2830, 2-5=-3798/1563, 3-5=-1655/2831

NOTES- (11)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=2322, 4=2219.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 625 lb down and 222 lb up at 1-5-6, 625 lb down and 222 lb up at 3-5-6, 625 lb down and 222 lb up at 5-5-6, and 625 lb down and 222 lb up at 7-5-6, and 625 lb down and 222 lb up at 9-5-6 on top chord, and 198 lb down and 350 lb up at 1-5-6, 198 lb down and 350 lb up at 3-5-6, 198 lb down and 350 lb up at 5-5-6, and 198 lb down and 350 lb up at 7-5-6, and 198 lb down and 350 lb up at 9-5-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-10=-304(F=-250), 3-10=-54, 6-13=-20, 13-16=-220(B=-200), 4-16=-20

Concentrated Loads (lb)

Vert: 5=-138(B) 2=-625 7=-625 8=-625 9=-625 10=-625 11=-138(B) 12=-138(B) 14=-138(B) 16=-138(B)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.
2217427	TG04	FLOOR	4	1	T19159798
					Job Reference (optional)

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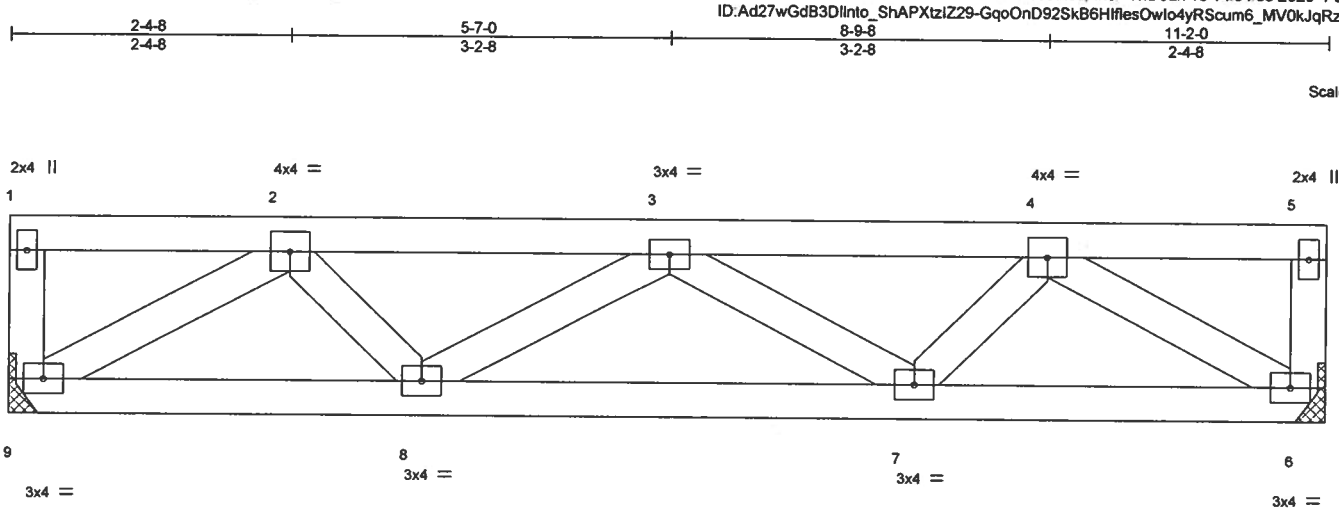


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.20	Vert(LL)	-0.03	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.39	Vert(CT)	-0.05	7-8	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.02	6	n/a	n/a		
BCDL	5.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 55 lb	FT = 20%

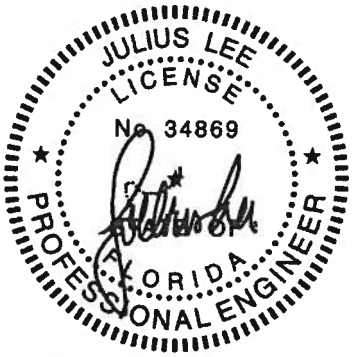
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 9=598/Mechanical, 6=598/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-968/0, 3-4=-968/0
BOT CHORD 8-9=0/803, 7-8=0/1222, 6-7=0/803
WEBS 2-9=-917/0, 2-8=0/261, 3-8=-305/0, 3-7=-305/0, 4-7=0/261, 4-6=-917/0

NOTES- (4)
1) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159799
2217427	TG05	FLOOR	3	1	Job Reference (optional)	

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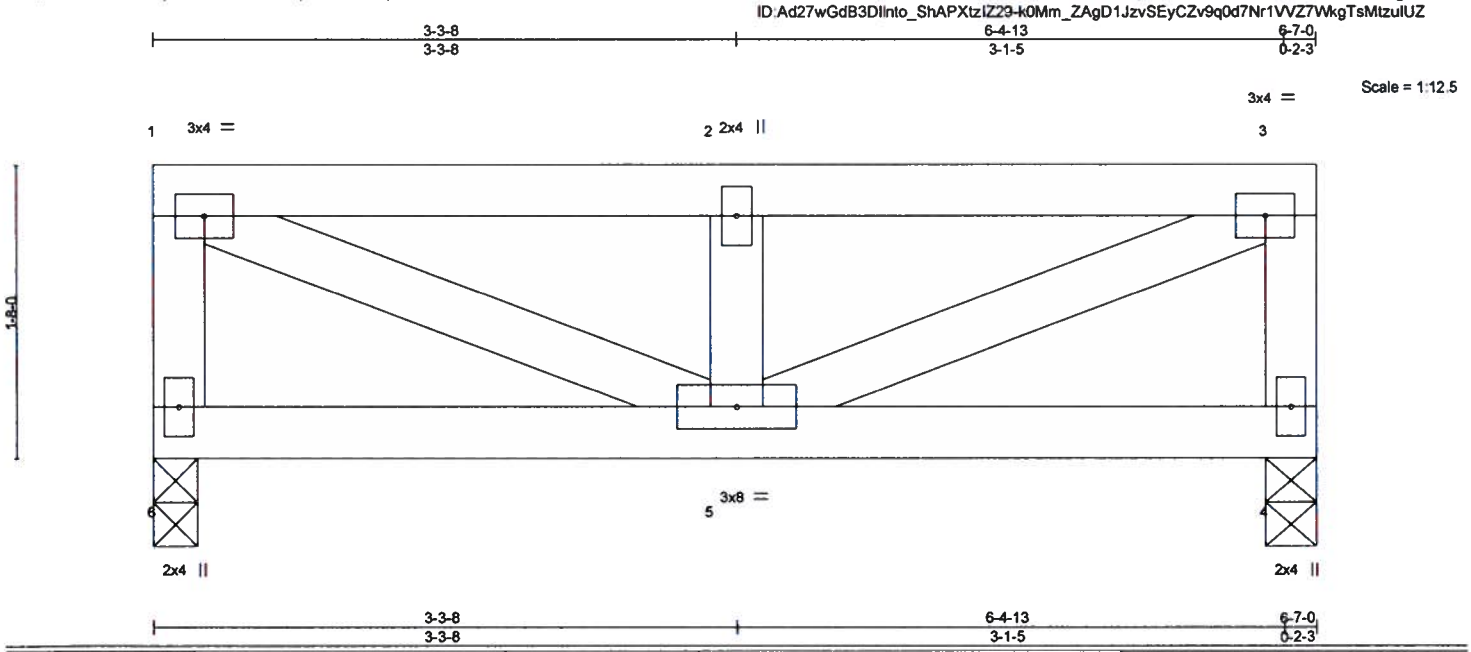

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.25	Vert(LL) -0.01 5 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.04	Vert(CT) -0.01 5 >999 240	
BCLL 0.0	Rep Stress Incr YES	WB 0.24	Horz(CT) 0.00 4 n/a n/a	
BCDL 5.0	Code FBC2017/TPI2014	Matrix-MP		Weight: 33 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=346/0-3-0, 4=346/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-328/0, 1-2=-468/0, 2-3=-468/0, 3-4=-328/0
WEBS 1-5=0/511, 2-5=-381/0, 3-5=0/511

NOTES- (3)
1) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES. T19159800
2217427	TG05A	FLOOR	1	1	Job Reference (optional)

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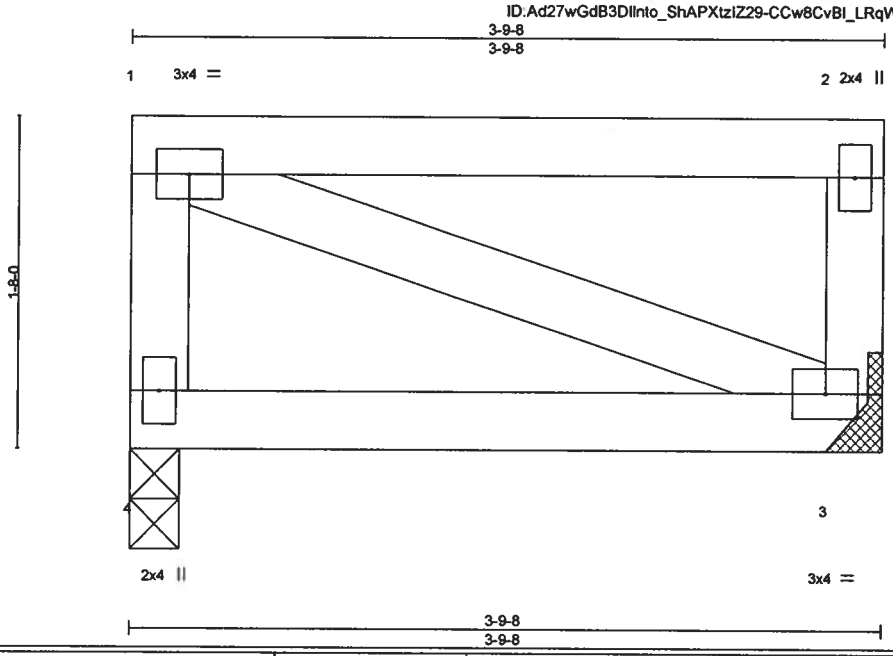

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.43	Vert(LL)	0.00	4	****	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.04	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 20 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 4=193/0-3-0, 3=193/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (4)
1) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.
2217427	TG06	FLAT GIRDER	1	2	T19159801
					Job Reference (optional)

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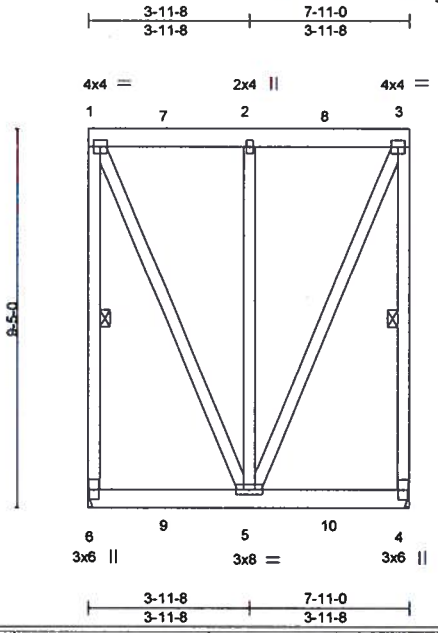

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.29	Vert(LL) 0.02 4-5 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.22	Vert(CT) -0.03 5 >999 180	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.54	Horz(CT) 0.00 4 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS		Weight: 205 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-6, 3-4

REACTIONS. (lb/size) 6=1997/Mechanical, 4=1985/Mechanical
Max Uplift 6=-1030(LC 4), 4=-1024(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-1737/868, 1-2=-590/307, 2-3=-590/307, 3-4=-1730/866
WEBS 1-5=-773/1484, 2-5=-1654/603, 3-5=-773/1484

NOTES- (11)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=1030, 4=1024.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 659 lb down and 222 lb up at 1-11-4, and 659 lb down and 222 lb up at 3-11-4, and 659 lb down and 222 lb up at 5-11-4 on top chord, and 493 lb down and 409 lb up at 1-11-4, and 493 lb down and 409 lb up at 3-11-4, and 493 lb down and 409 lb up at 5-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 4-6=-20
Concentrated Loads (lb)
Vert: 5=-480(F) 2=-659 7=-659 8=-659 9=-480(F) 10=-480(F)

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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ***ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information*** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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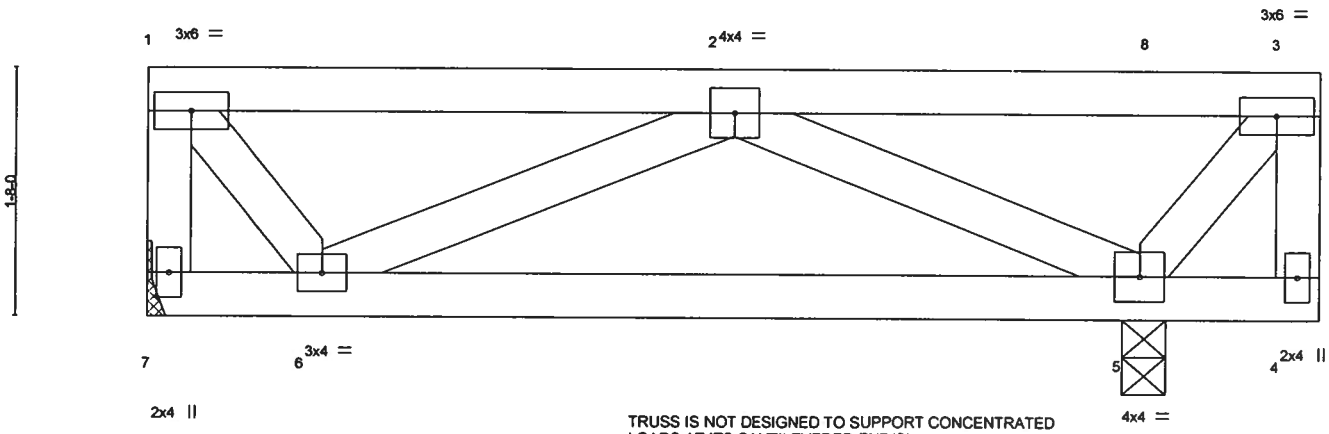
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159802
2217427	TG07	FLOOR	2	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:37 2020 Page 1
ID:Ad27wGdB3DIInto_ShAPXtzIZ29-9b2vdaCZWyhYmvzXtiSsSeFXh3?OivqyQeiWzCzulUW

3-11-8 / 3-11-8 | 7-11-0 / 3-11-8

Scale = 1:14.9



TRUSS IS NOT DESIGNED TO SUPPORT CONCENTRATED LOADS AT ITS CANTILEVERED END(S).

1-2-4 / 1-2-4 | 6-10-8 / 5-8-4 | 7-11-0 / 1-0-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	75.0	Plate Grip DOL	1.00	TC	0.63	Vert(LL)	-0.01	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.29	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	5	n/a	n/a		
BCDL	5.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 40 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 7=574/Mechanical, 5=799/0-3-8
Max Grav 7=587(LC 3), 5=799(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-7=-565/0, 1-2=-288/0
BOT CHORD 5-6=0/833
WEBS 2-6=-608/0, 2-5=-1061/0, 3-5=-333/0, 1-6=0/354

NOTES- (5)
1) Unbalanced floor live loads have been considered for this design.
2) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
3) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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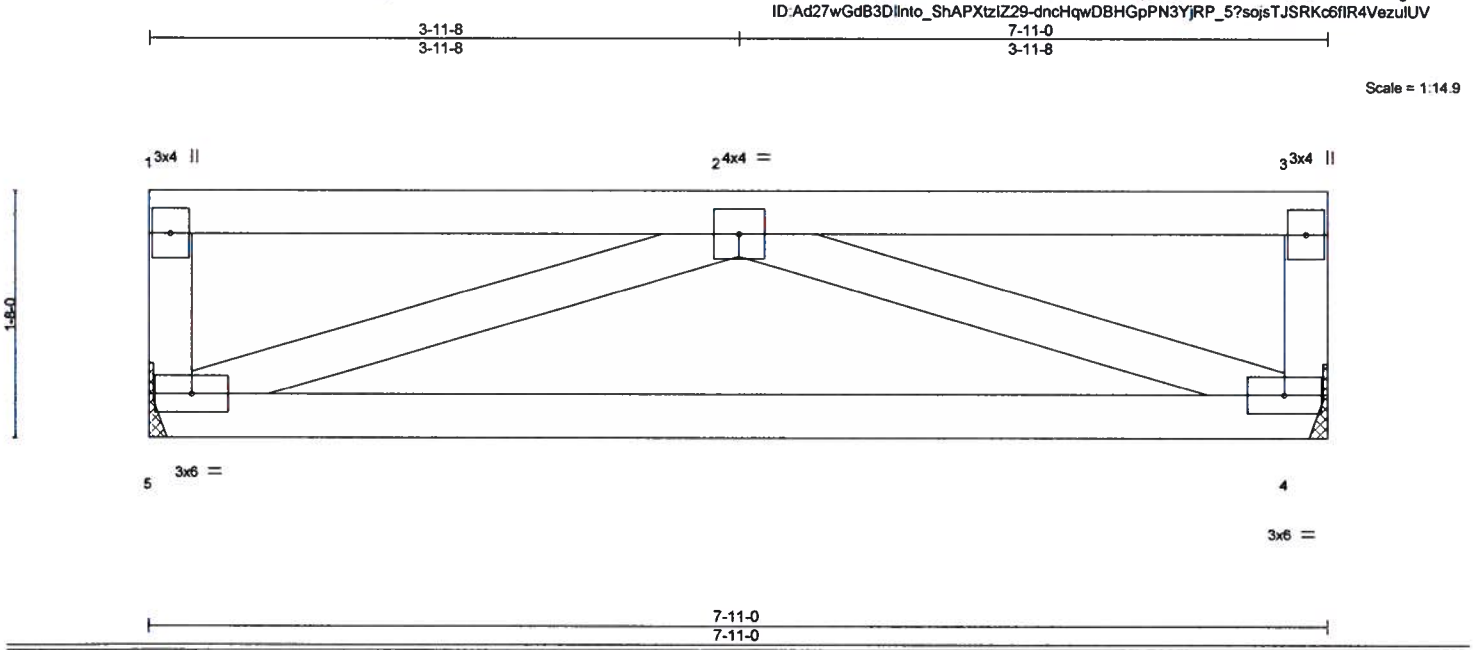
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

January 16,2020

Job	Truss	Truss Type	Qty	Ply	SIMQUE - STEWART RES.	T19159803
2217427	TG08	FLOOR	12	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2019 MiTek Industries, Inc. Thu Jan 16 14:34:38 2020 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-dncHqwDBHGpPN3YjRP_5?sojsTJSRKc6fIR4VezuIUV



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 75.0	Plate Grip DOL 1.00	TC 0.54	Vert(LL) -0.00 5 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.43	Vert(CT) -0.05 4-5 >999 240	
BCLL 0.0	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.01 4 n/a n/a	
BCDL 5.0	Code FBC2017/TPI2014	Matrix-MS		Weight: 38 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 5=686/Mechanical, 4=686/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-5=-288/0, 3-4=-288/0
BOT CHORD 4-5=0/1085
WEBS 2-5=-1062/0, 2-4=-1062/0

NOTES- (4)
1) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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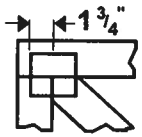
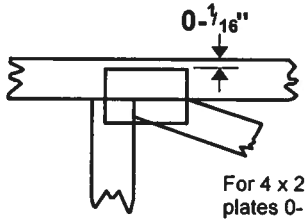
January 16,2020

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

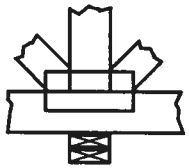
4 x 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION

Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

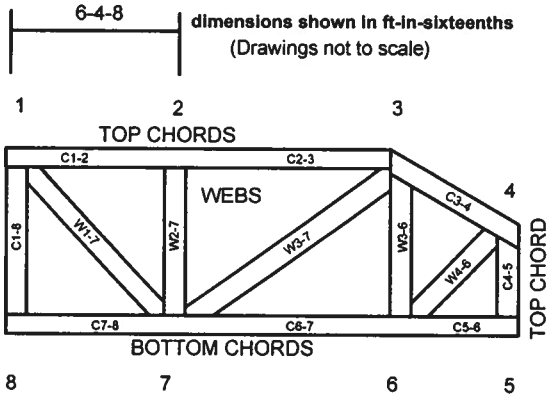


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek®

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

AUGUST 1, 2016	T-BRACE / I-BRACE DETAIL WITH 2X BRACE ONLY	MII-T-BRACE 2

MiTek USA, Inc.

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Note: T-Bracing / I-Bracing to be used when continuous lateral bracing is impractical. T-Brace / I-Brace must cover 90% of web length.

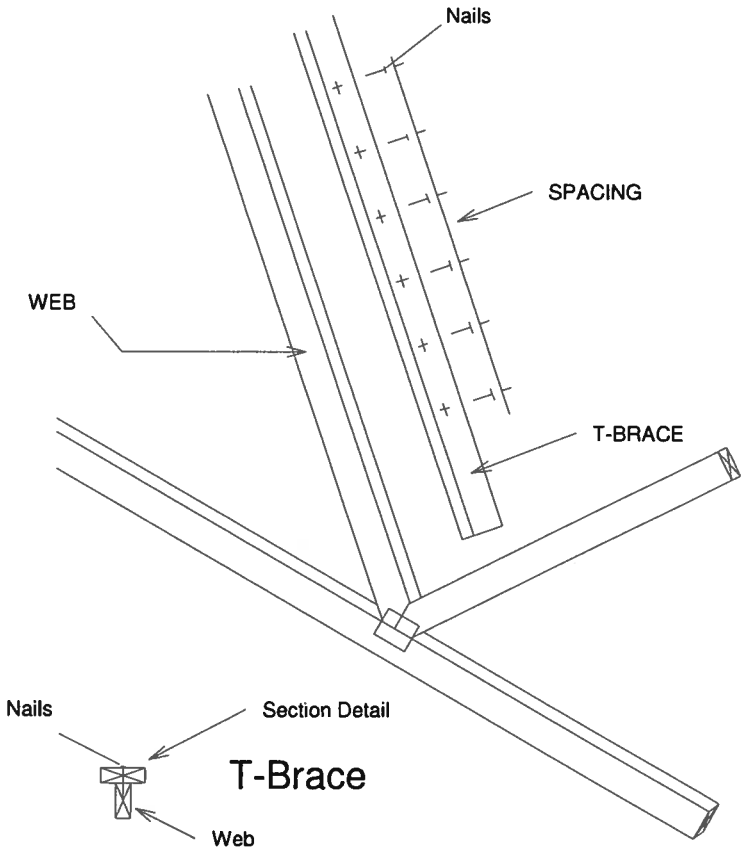
Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

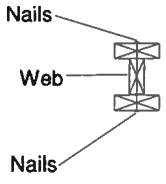
Nailing Pattern		
T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d (0.131" X 3")	6" o.c.
Note: Nail along entire length of T-Brace / I-Brace (On Two-Ply's Nail to Both Plies)		

	Brace Size for One-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

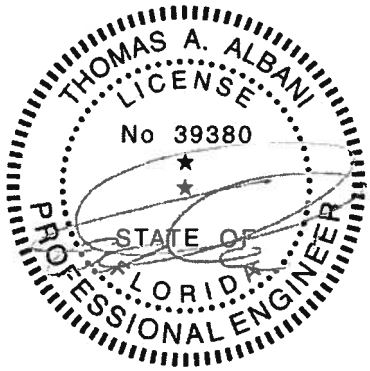
	Brace Size for Two-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

T-Brace / I-Brace must be same species and grade (or better) as web member.





I-Brace



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Date:
February 12, 2018

AUGUST 1, 2016	SCAB-BRACE DETAIL	MII-SCAB-BRACE

MiTek USA, Inc.

MiTek USA, Inc.
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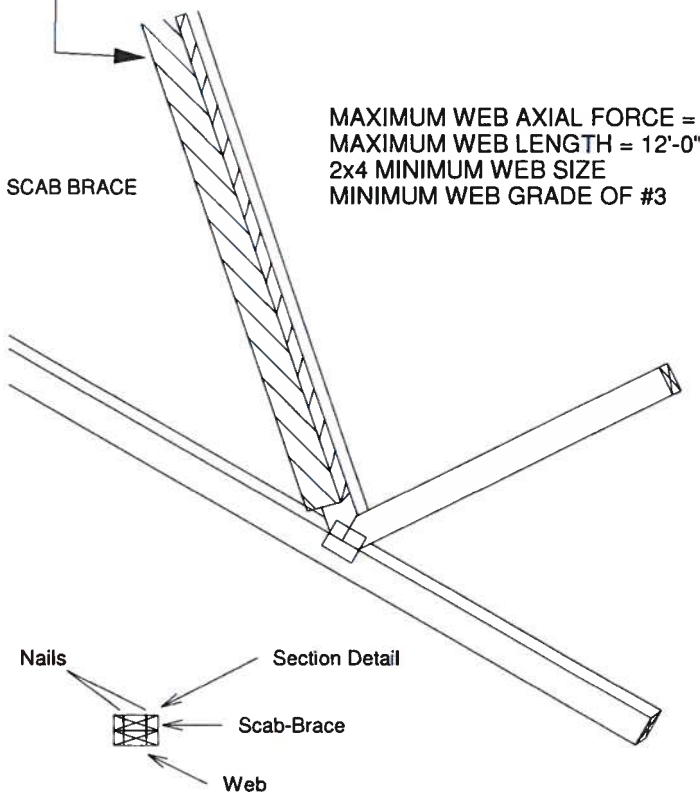
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.
Scab must cover full length of web +/- 6".

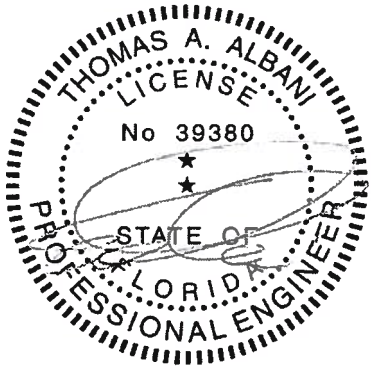
*** THIS DETAIL IS NOT APLICABLE WHEN BRACING IS *** REQUIRED AT 1/3 POINTS OR I-BRACE IS SPECIFIED.

APPLY 2x___ SCAB TO ONE FACE OF WEB WITH
2 ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
SCAB MUST BE THE SAME GRADE, SIZE AND
SPECIES (OR BETTER) AS THE WEB.



MAXIMUM WEB AXIAL FORCE = 2500 lbs
MAXIMUM WEB LENGTH = 12'-0"
2x4 MINIMUM WEB SIZE
MINIMUM WEB GRADE OF #3

Scab-Brace must be same species grade (or better) as web member.



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February 12, 2018

AUGUST 1, 2016	STANDARD REPAIR TO REMOVE END VERTICAL (RIBBON NOTCH VERTICAL)	MII-REP05

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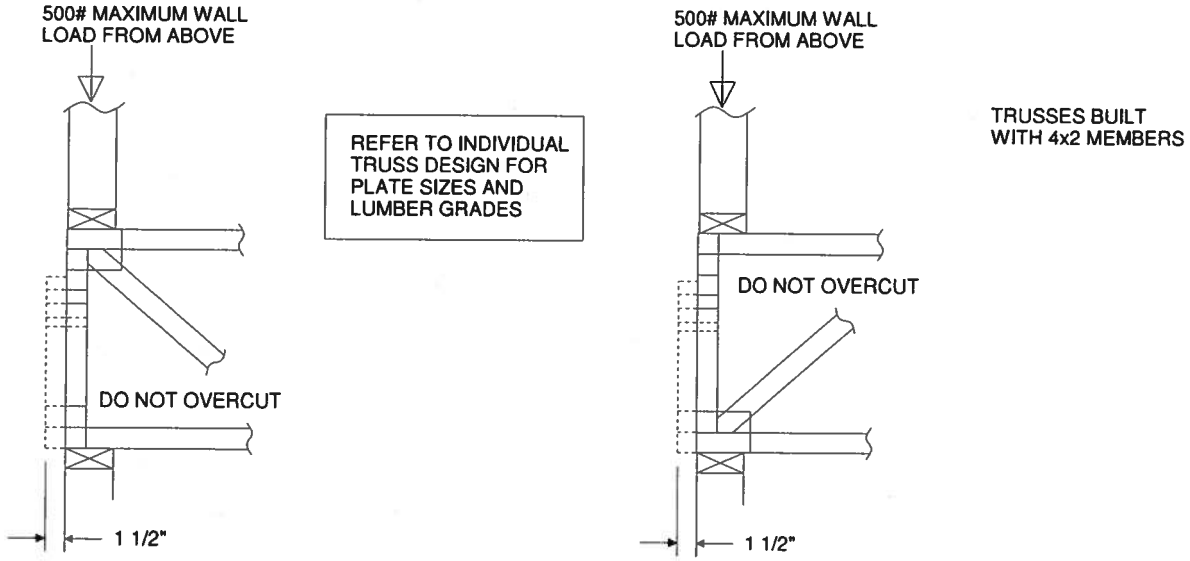
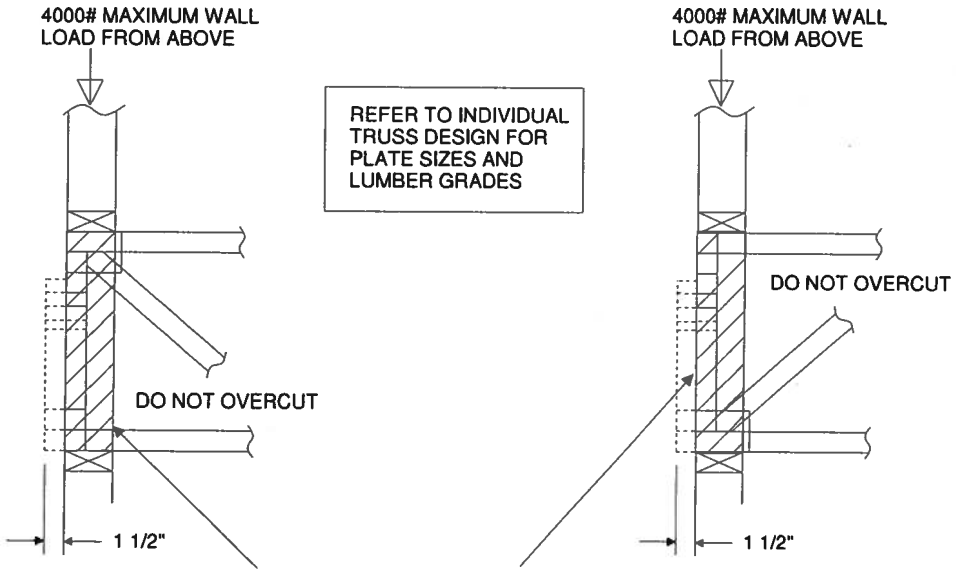
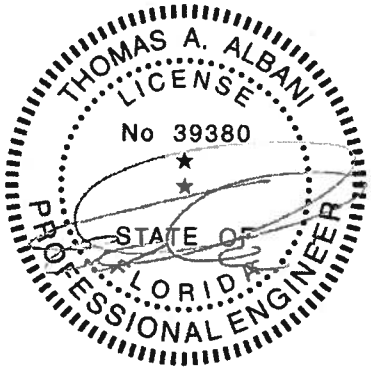
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.
3. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID SPLITTING OF THE WOOD.
4. LUMBER MUST BE CUT CLEANLY AND ACCURATELY AND THE REMAINING WOOD MUST BE UNDAMAGED.
5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 4X_ ORIENTATION ONLY.
6. CONNECTOR PLATES MUST BE FULLY IMBEDDED AND UNDISTURBED.





ATTACH 2x4 SQUASH BLOCK (CUT TO FIT TIGHTLY) TO BOTH SIDES OF THE TRUSS AS SHOWN WITH 10d (0.131" X 3") NAILS SPACED 3" O.C.



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AUGUST 1, 2016	Standard Gable End Detail	MII-GE130-D-SP

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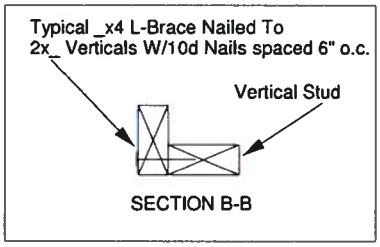
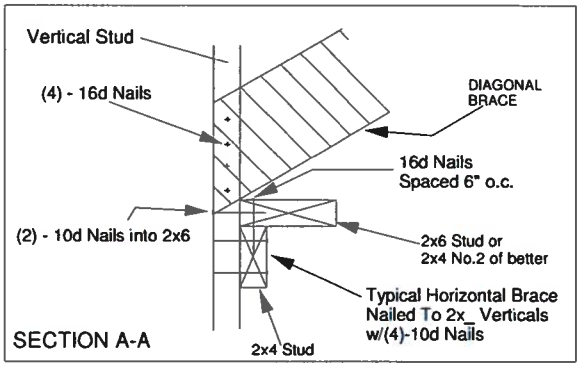
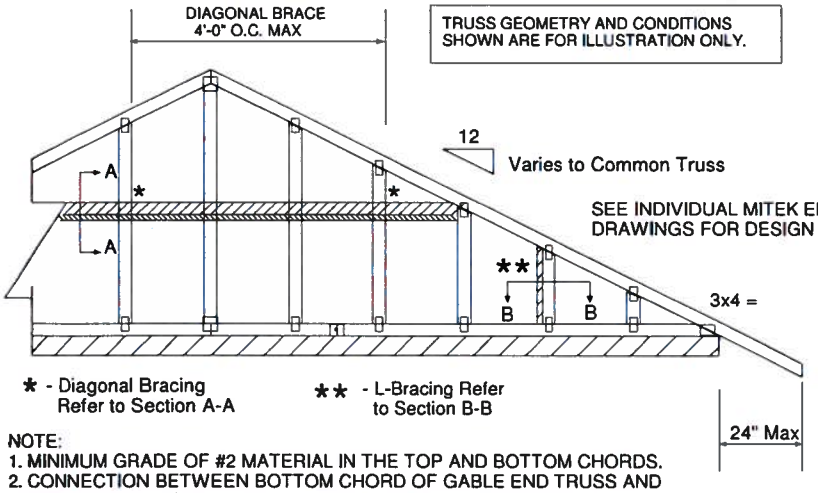






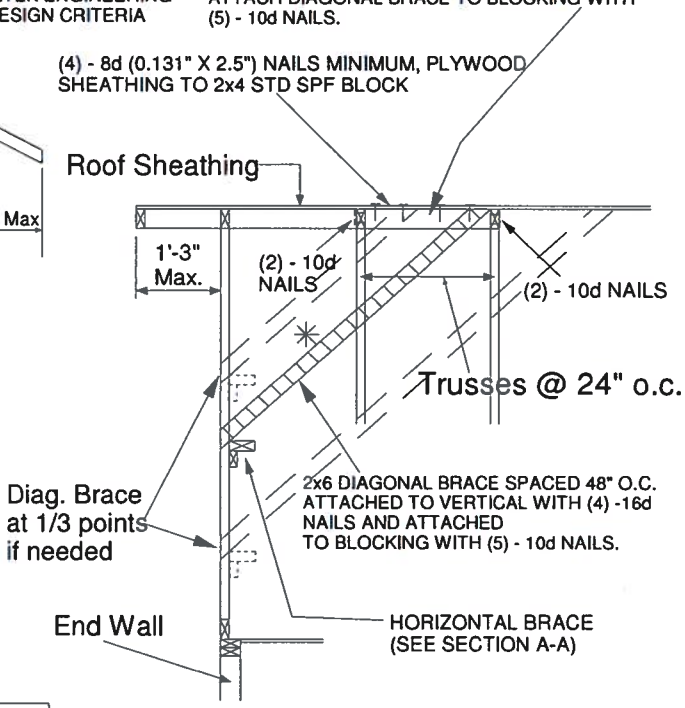
TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - Diagonal Bracing Refer to Section A-A

** - L-Bracing Refer to Section B-B

PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.



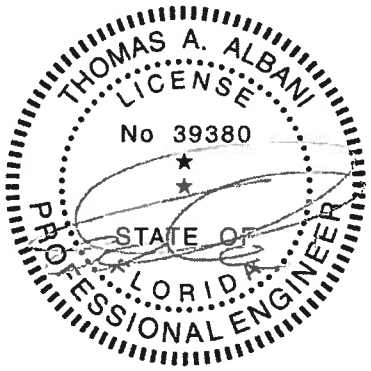
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length				
2x4 SP No. 3 / Stud	12" O.C.	3-9-13	4-1-1	5-9-6	7-1-3	11-5-7
2x4 SP No. 3 / Stud	16" O.C.	3-5-4	3-6-8	5-0-2	6-10-8	10-3-13
2x4 SP No. 3 / Stud	24" O.C.	2-9-11	2-10-11	4-1-1	5-7-6	8-5-1

✳ Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE D
ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH
ASCE 7-10 160 MPH
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.



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Date:
February 12, 2018

AUGUST 1, 2016	Standard Gable End Detail	MII-GE130-SP

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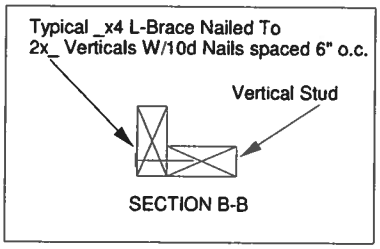
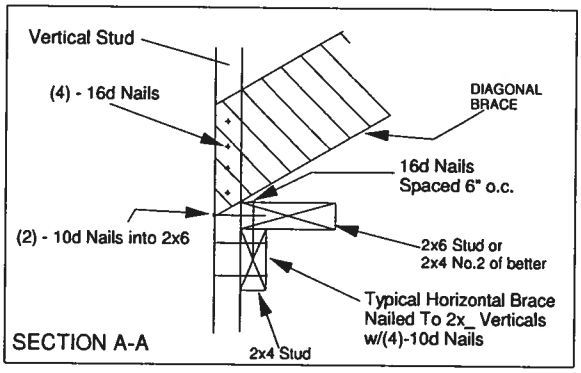
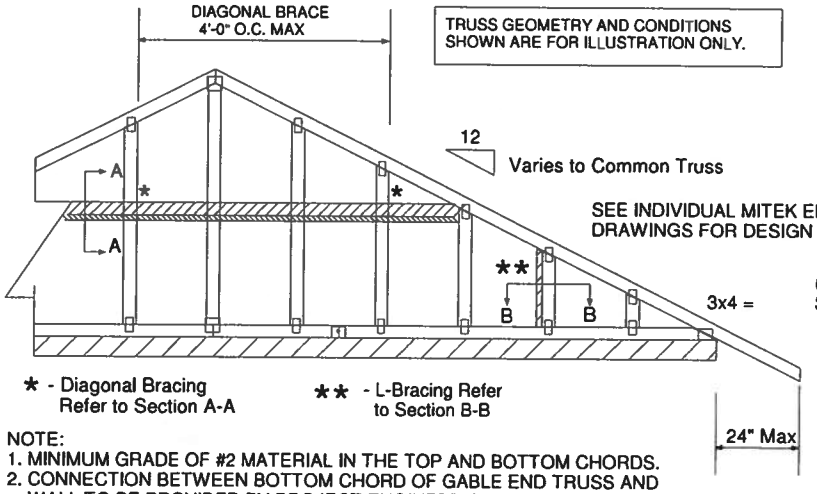




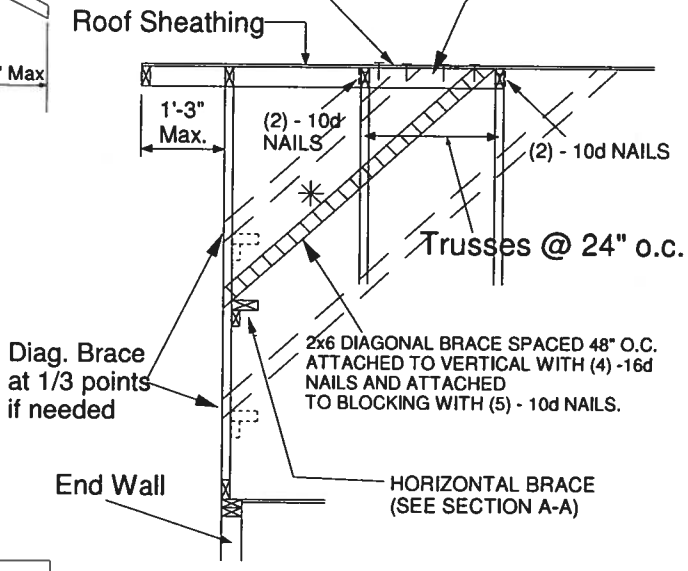


TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

(4) - 8d (0.131" X2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK



* - Diagonal Bracing Refer to Section A-A

** - L-Bracing Refer to Section B-B

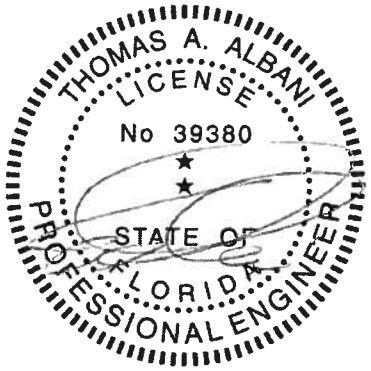
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length				
2x4 SP No. 3 / Stud	12" O.C.	4-0-7	4-5-6	6-3-8	8-0-15	12-1-6
2x4 SP No. 3 / Stud	16" O.C.	3-8-0	3-10-4	5-5-6	7-4-1	11-0-1
2x4 SP No. 3 / Stud	24" O.C.	3-0-10	3-1-12	4-5-6	6-1-5	9-1-15

✳ Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH
ASCE 7-10 160 MPH
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.

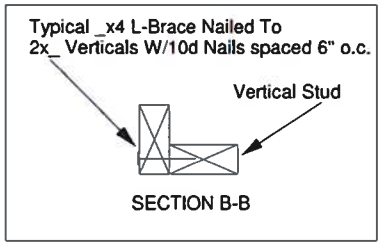


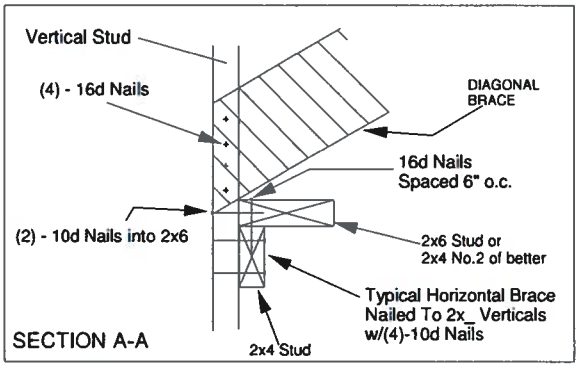
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

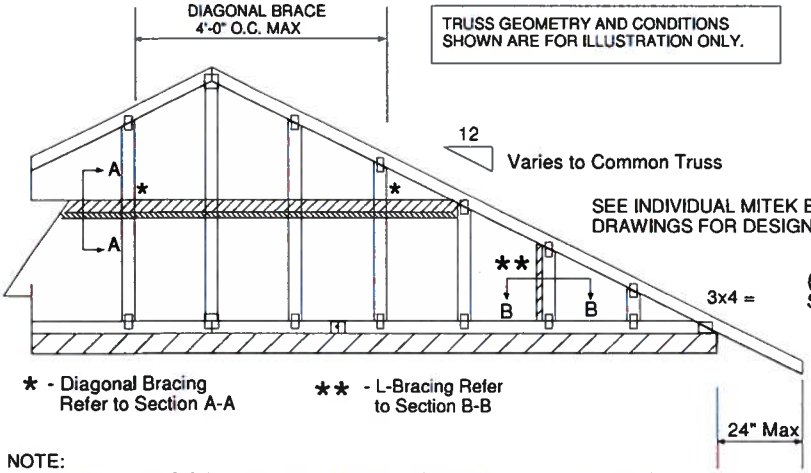
JANUARY 6, 2017	Standard Gable End Detail	MII-GE140-001

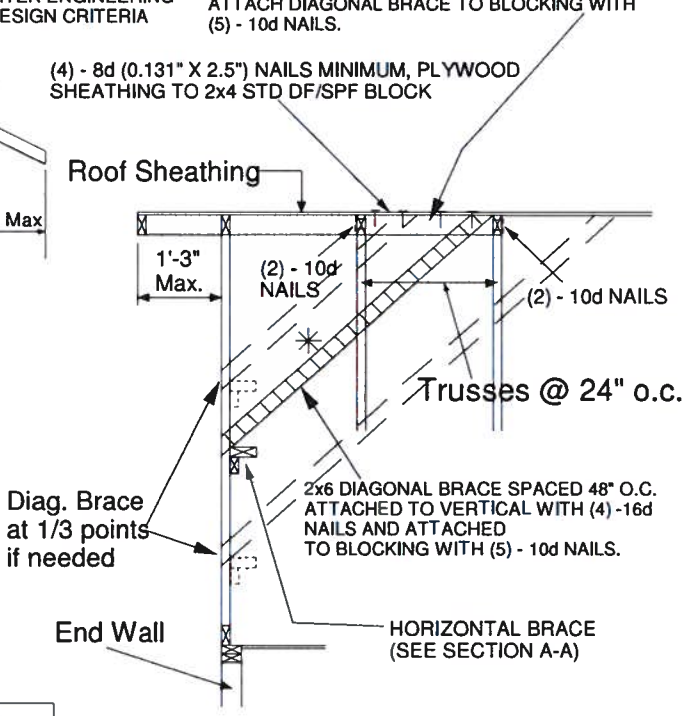
MiTek USA, Inc.

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate









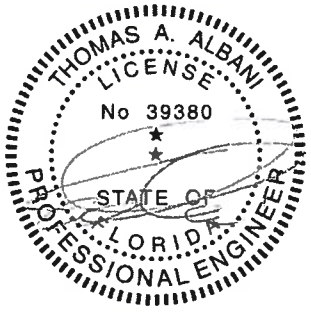
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length				
2x4 DF/SPF Std/Stud	12" O.C.	3-10-1	3-11-7	5-7-2	7-8-2	11-6-4
2x4 DF/SPF Std/Stud	16" O.C.	3-3-14	3-5-1	4-10-2	6-7-13	9-11-11
2x4 DF/SPF Std/Stud	24" O.C.	2-8-9	2-9-8	3-11-7	5-5-2	8-1-12

✳ Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of web with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

MAXIMUM WIND SPEED = 140 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-98, ASCE 7-02, ASCE 7-05
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.



Thomas A. Albani PE No.39380
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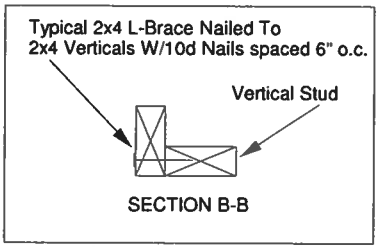
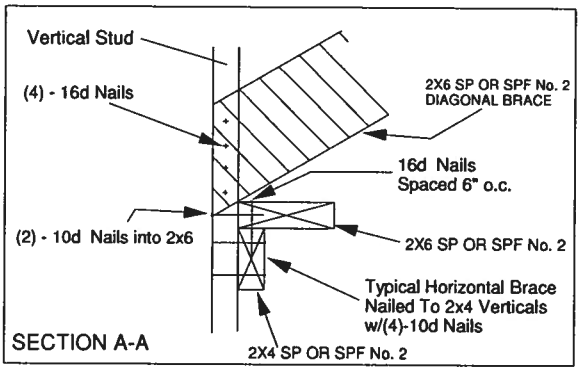
6904 Parke East Blvd. Tampa FL 33610
Date:
January 19, 2018

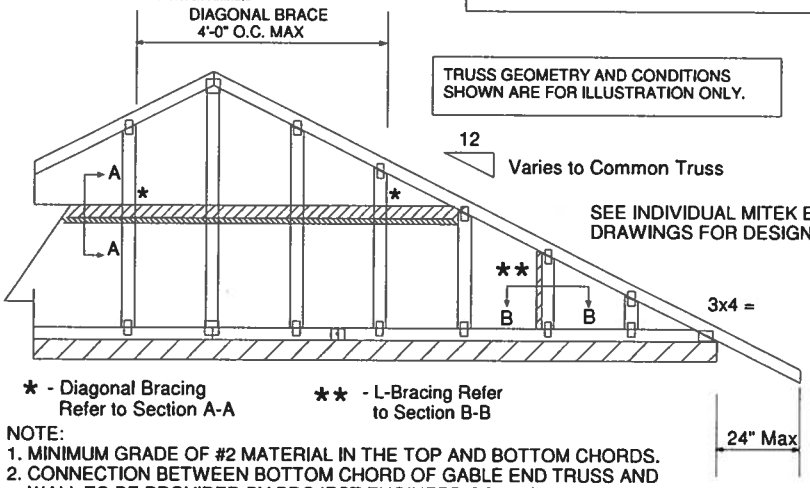
AUGUST 1, 2016	Standard Gable End Detail	MII-GE170-D-SP

MiTek USA, Inc.

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate







* - Diagonal Bracing Refer to Section A-A

** - L-Bracing Refer to Section B-B

NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH, SPF or SP No.3 OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 AND A 2x4 AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST GABLE STUD. ATTACH TO VERTICAL GABLE STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

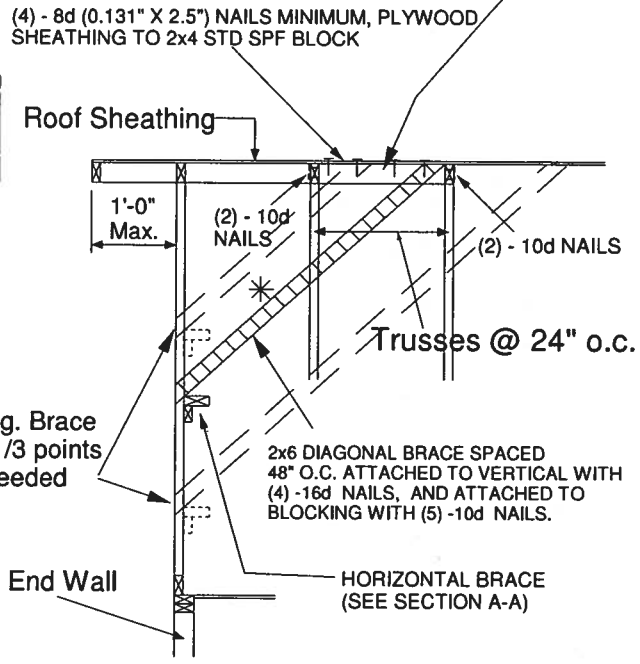
Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No. 3 / Stud	12" O.C.	3-9-7	5-8-8	6-11-1	11-4-4
2x4 SP No. 3 / Stud	16" O.C.	3-4-12	4-11-15	6-9-8	10-2-3
2x4 SP No. 3 / Stud	24" O.C.	2-9-4	4-0-7	5-6-8	8-3-13
2x4 SP No. 2	12" O.C.	3-11-13	5-8-8	6-11-1	11-11-7
2x4 SP No. 2	16" O.C.	3-7-7	4-11-5	6-11-1	10-10-5
2x4 SP No. 2	24" O.C.	3-1-15	4-0-7	6-3-14	9-5-14

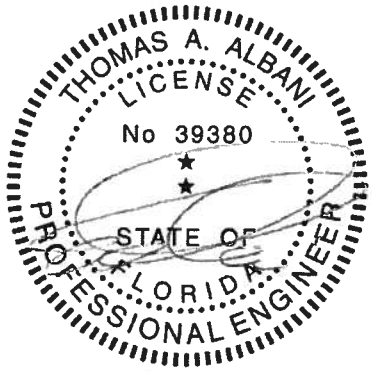
✳ Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 6" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length. T or I braces must be 2x4 SPF No. 2 or SP No. 2.

MAX MEAN ROOF HEIGHT = 30 FEET
EXPOSURE D
ASCE 7-10 170 MPH
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.

PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.





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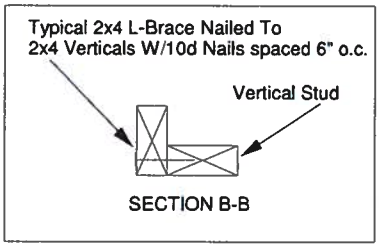
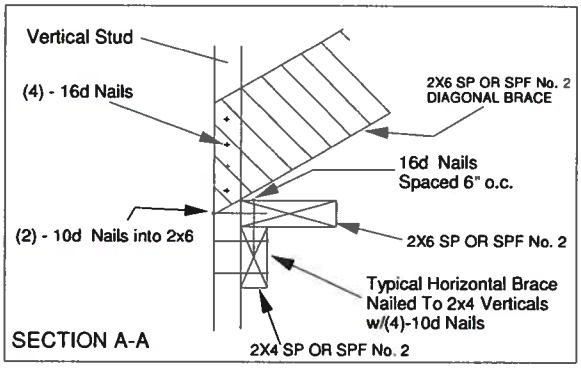
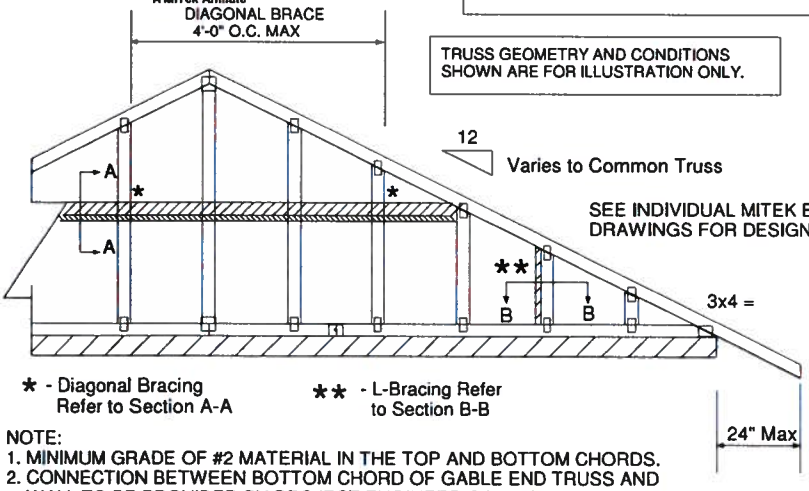
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

AUGUST 1, 2016	Standard Gable End Detail	MII-GE180-D-SP

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate





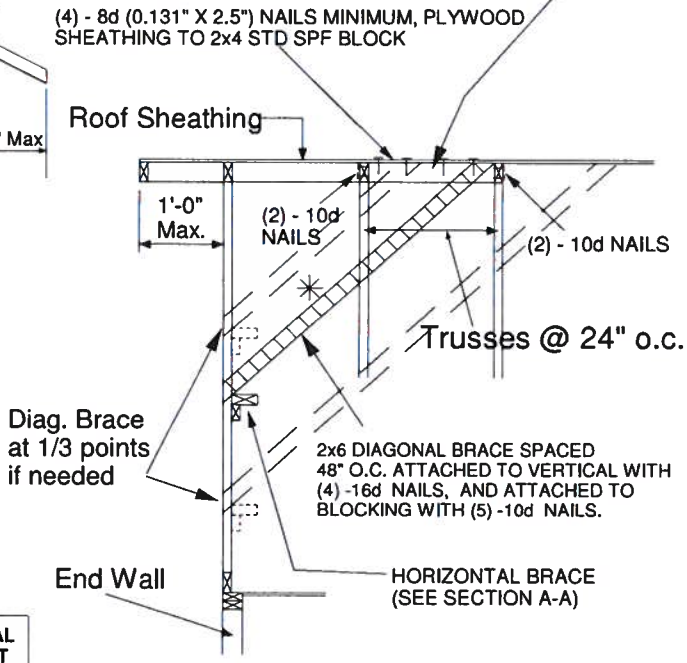


TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

* - Diagonal Bracing Refer to Section A-A

** - L-Bracing Refer to Section B-B

PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.



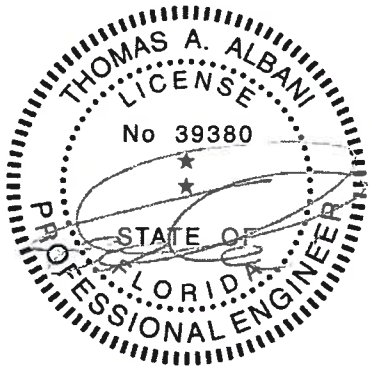
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH, SPF or SP No.3 OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 AND A 2x4 AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST GABLE STUD. ATTACH TO VERTICAL GABLE STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No. 3 / Stud	12" O.C.	3-7-12	5-4-11	6-2-1	10-11-3
2x4 SP No. 3 / Stud	16" O.C.	3-2-8	4-8-1	6-2-1	9-7-7
2x4 SP No. 3 / Stud	24" O.C.	2-7-7	3-9-12	5-2-13	7-10-4
2x4 SP No. 2	12" O.C.	3-10-0	5-4-11	6-2-1	11-6-1
2x4 SP No. 2	16" O.C.	3-5-13	4-8-1	6-2-1	10-5-7
2x4 SP No. 2	24" O.C.	3-0-8	3-9-12	6-1-1	9-1-9

✳ Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 6in o.c., with 3in minimum end distance. Brace must cover 90% of diagonal length. T or I braces must be 2x4 SPF No. 2 or SP No. 2.

MAX MEAN ROOF HEIGHT = 30 FEET
EXPOSURE D
ASCE 7-10 180 MPH
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.



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Date:
February 12, 2018

AUGUST 1, 2016	STANDARD PIGGYBACK TRUSS CONNECTION DETAIL	MII-PIGGY-7-10

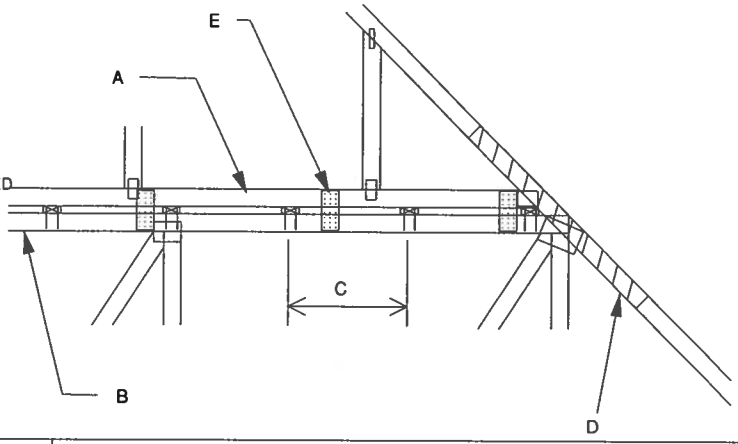
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E
MAX MEAN ROOF HEIGHT = 30 FEET
MAX TRUSS SPACING = 24 " O.C.
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-10
DURATION OF LOAD INCREASE : 1.60

DETAIL IS NOT APPLICABLE FOR TRUSSES TRANSFERING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.

A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
D - 2 X ___ X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.

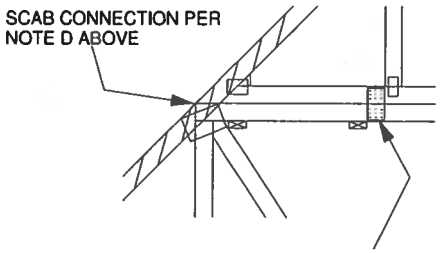
E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) (0.131" X 1.5") NAILS PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)



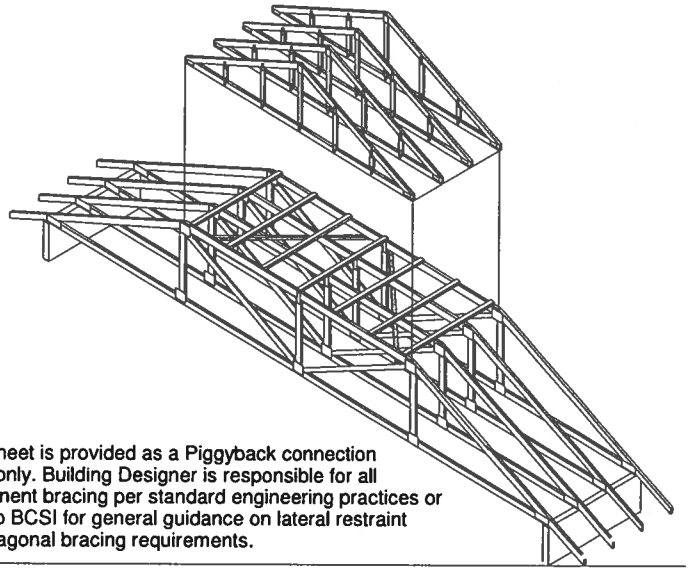
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.

SCAB CONNECTION PER NOTE D ABOVE

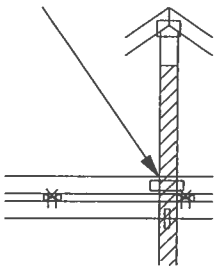


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



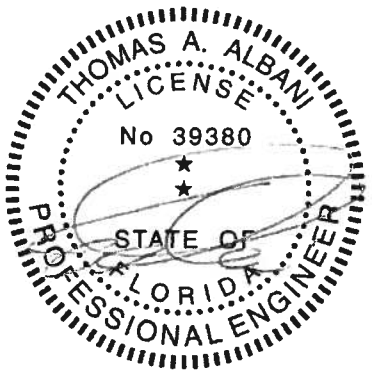
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



FOR LARGE CONCENTRATED LOADS APPLIED TO CAP TRUSS REQUIRING A VERTICAL WEB:

1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL.
2) ATTACH 2 x ___ x 4'-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
3) THIS CONNECTION IS ONLY VALID FOR A MAXIMUM CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.
4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS, NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.



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Date:
February 12, 2018

AUGUST 1, 2016	STANDARD PIGGYBACK TRUSS CONNECTION DETAIL	MII-PIGGY-ALT 7-10

MiTek USA, Inc. Page 1 of 1

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E MAX MEAN ROOF HEIGHT = 30 FEET MAX TRUSS SPACING = 24 " O.C. CATEGORY II BUILDING EXPOSURE B or C ASCE 7-10 DURATION OF LOAD INCREASE : 1.60
DETAIL IS NOT APPLICABLE FOR TRUSSES TRANSFERING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.

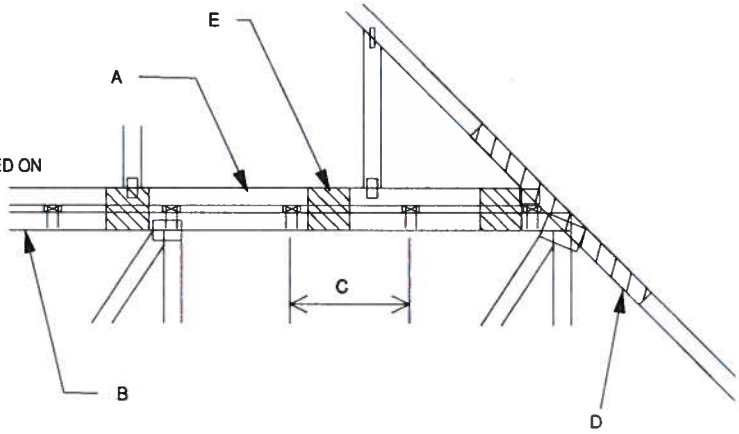
A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) 0(0.131" X 3.5") TOE-NAILED.

B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.

C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.

D - 2 X__ X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.

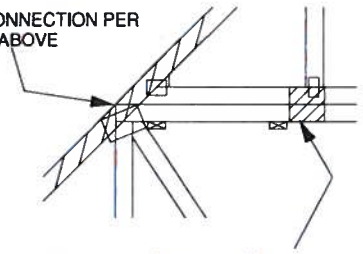
E - FOR WIND SPEED IN THE RANGE 126 MPH - 160 MPH ADD 9" x 9" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 48" O.C. OR LESS. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



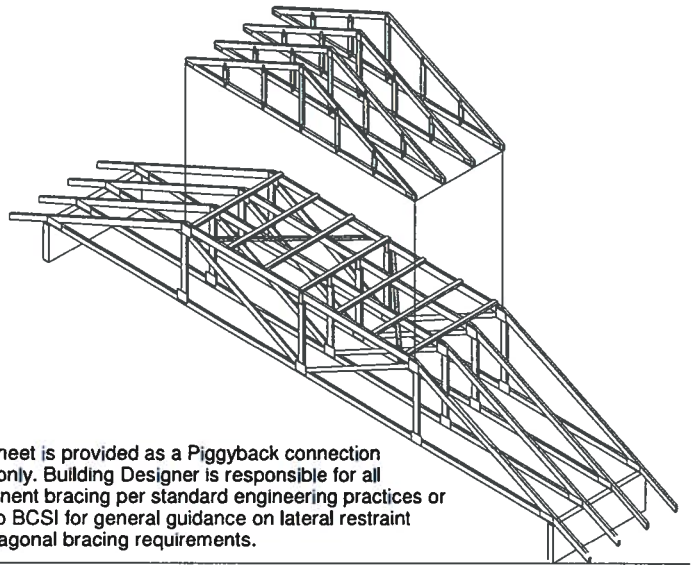
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH PLYWOOD GUSSETS AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.

SCAB CONNECTION PER NOTE D ABOVE

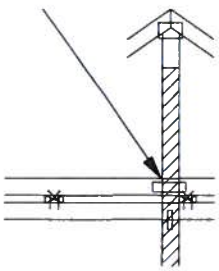


7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



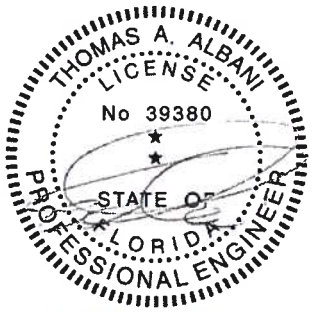
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



FOR LARGE CONCENTRATED LOADS APPLIED TO CAP TRUSS REQUIRING A VERTICAL WEB:

1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL.
2) ATTACH 2 x ___ x 4'-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
3) THIS CONNECTION IS ONLY VALID FOR A MAXIMUM CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.
4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS, NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.



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January 19, 2018

AUGUST 1, 2016	STANDARD REPAIR DETAIL FOR BROKEN CHORDS, WEBS AND DAMAGED OR MISSING CHORD SPLICE PLATES	MII-REP01A1

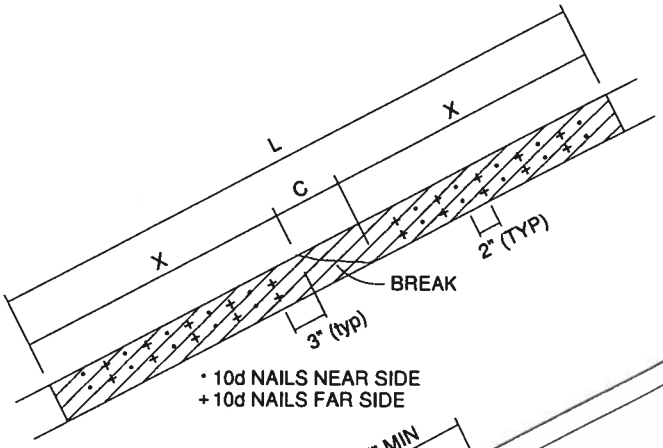
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

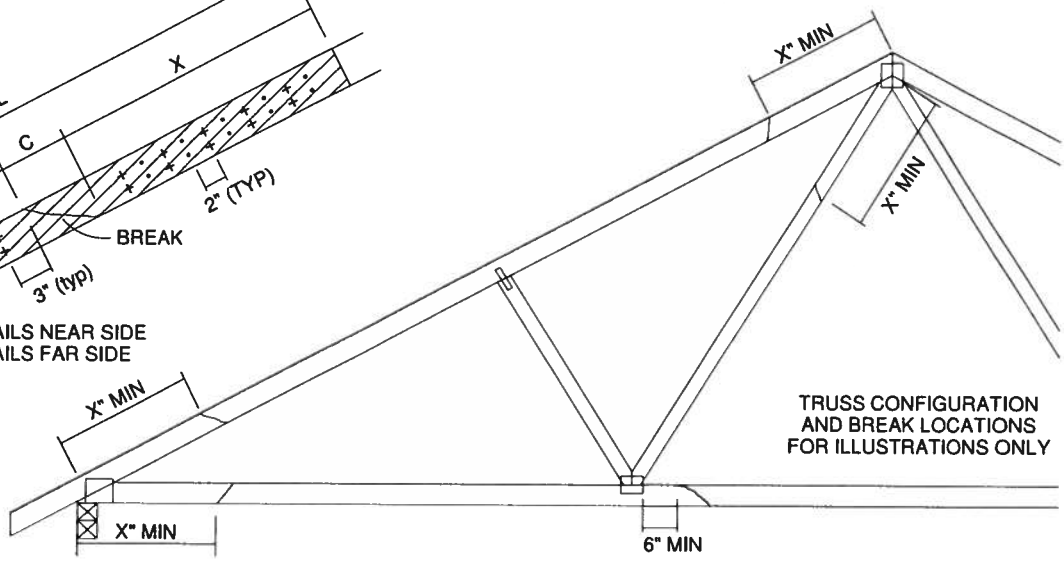
TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	3187
38	57	42"	3169	4754	2900	4350	2451	3677	2511	3767
44	66	48"	3657	5485	3346	5019	2829	4243	2898	4347

* DIVIDE EQUALLY FRONT AND BACK

ATTACH 2x_ SCAB OF THE SAME SIZE AND GRADE AS THE BROKEN MEMBER TO EACH FACE OF THE TRUSS (CENTER ON BREAK OR SPLICE) WITH 10d (0.131" X 3") NAILS (TWO ROWS FOR 2x4, THREE ROWS FOR 2x6) SPACED 4" O.C. AS SHOWN. STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 0-2-0 O.C. SPACING IN THE MAIN MEMBER. USE A MIN. 0-3-0 MEMBER END DISTANCE.

THE LENGTH OF THE BREAK (C) SHALL NOT EXCEED 12". (C=PLATE LENGTH FOR SPLICE REPAIRS)
THE MINIMUM OVERALL SCAB LENGTH REQUIRED (L) IS CALCULATED AS FOLLOWS:
L = (2) X + C

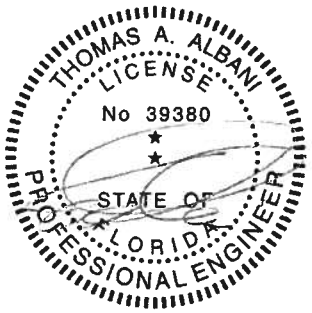




THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

DO NOT USE REPAIR FOR JOINT SPLICES

NOTES:
1. THIS REPAIR DETAIL IS TO BE USED ONLY FOR THE APPLICATION SHOWN. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.
3. THE END DISTANCE, EDGE DISTANCE AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
4. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.
5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 2x_ ORIENTATION ONLY.
6. THIS REPAIR IS LIMITED TO TRUSSES WITH NO MORE THAN THREE BROKEN MEMBERS.



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AUGUST 1, 2016	LATERAL TOE-NAIL DETAIL	MII-TOENAIL_SP

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

NOTES:
1. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 45 DEGREES WITH THE MEMBER AND MUST HAVE FULL WOOD SUPPORT. (NAIL MUST BE DRIVEN THROUGH AND EXIT AT THE BACK CORNER OF THE MEMBER END AS SHOWN.
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
3. ALLOWABLE VALUE SHALL BE THE LESSER VALUE OF THE TWO SPECIES FOR MEMBERS OF DIFFERENT SPECIES.

THIS DETAIL APPLICABLE TO THE THREE END DETAILS SHOWN BELOW

TOE-NAIL SINGLE SHEAR VALUES PER NDS 2001 (lb/nail)

	DIAM.	SP	DF	HF	SPF	SPF-S
3.5" LONG	.131	88.0	80.6	69.9	68.4	59.7
	.135	93.5	85.6	74.2	72.6	63.4
	.162	108.8	99.6	86.4	84.5	73.8
3.25" LONG	.128	74.2	67.9	58.9	57.6	50.3
	.131	75.9	69.5	60.3	59.0	51.1
	.148	81.4	74.5	64.6	63.2	52.5

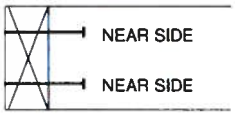
VALUES SHOWN ARE CAPACITY PER TOE-NAIL.
APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

EXAMPLE:
(3) - 16d (0.162" X 3.5") NAILS WITH SPF SPECIES BOTTOM CHORD

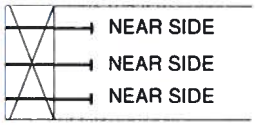
For load duration increase of 1.15:
3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity

VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY

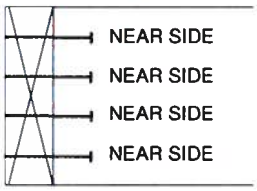
SIDE VIEW
(2x3)
2 NAILS

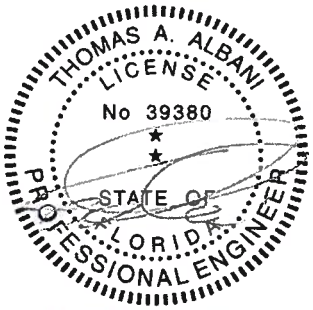


SIDE VIEW
(2x4)
3 NAILS



SIDE VIEW
(2x6)
4 NAILS





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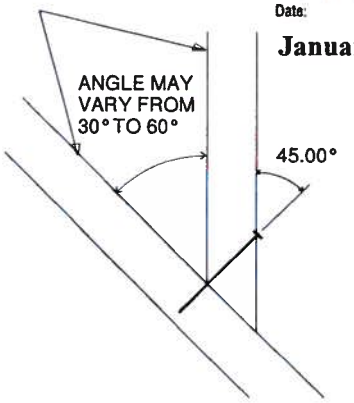
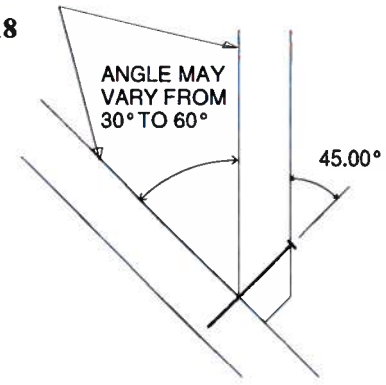
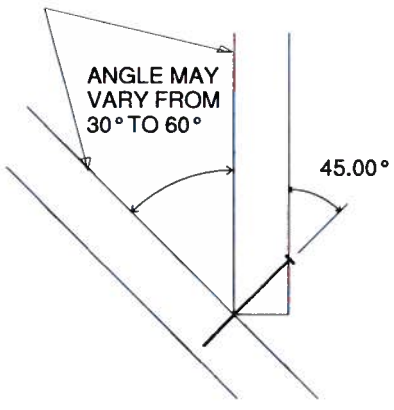




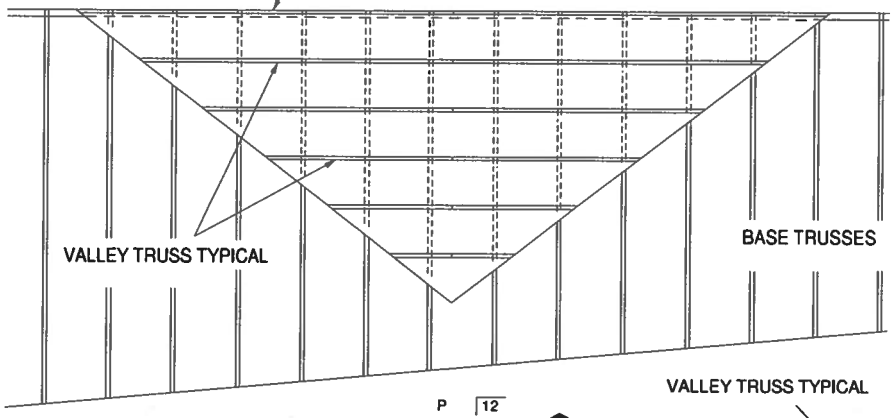


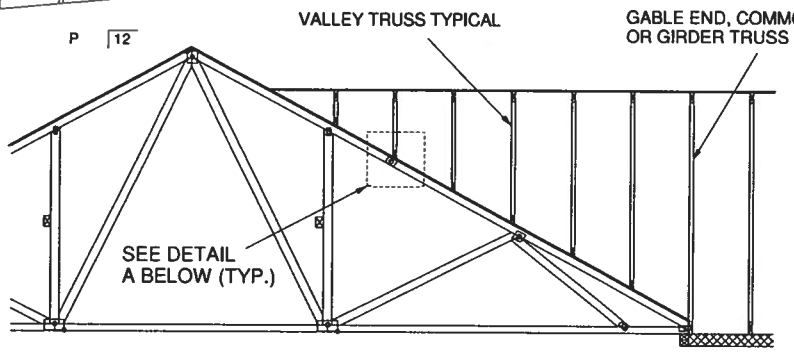
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY HIGH WIND1

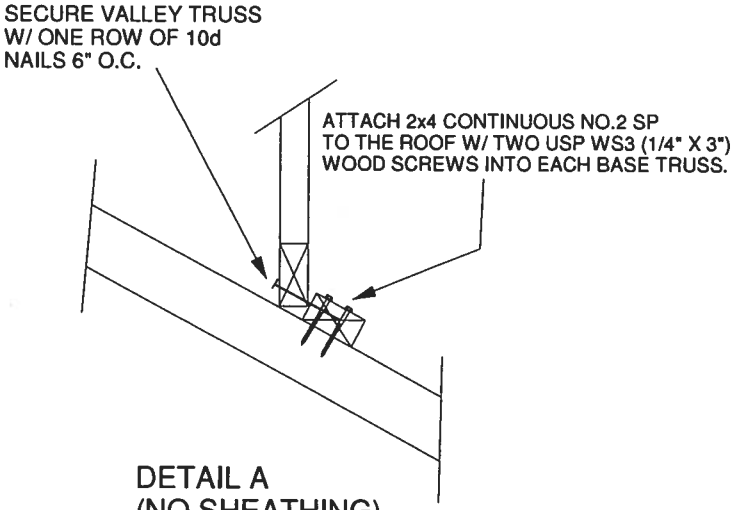
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

GENERAL SPECIFICATIONS

1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 3" WS3 USP OR EQUIVALENT
   DO NOT USE DRYWALL OR DECKING TYPE SCREW
3. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND
   SECURE PER DETAIL A
4. BRACE VALLEY WEBS IN ACCORDANCE WITH THE
   INDIVIDUAL DESIGN DRAWINGS.
5. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING
   EQUILIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
6. NAILING DONE PER NDS - 01
7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.

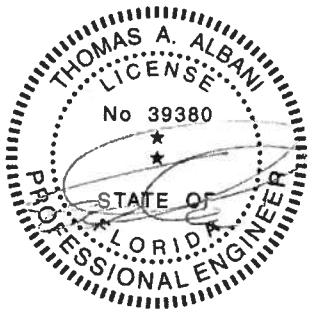






DETAIL A
(NO SHEATHING)
N.T.S.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH
WIND DESIGN PER ASCE 7-10 160 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12
CATEGORY II BUILDING
EXPOSURE C
WIND DURATION OF LOAD INCREASE : 1.60
MAX TOP CHORD TOTAL LOAD = 50 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)
MINIMUM REDUCED DEAD LOAD OF 6 PSF
ON THE TRUSSES



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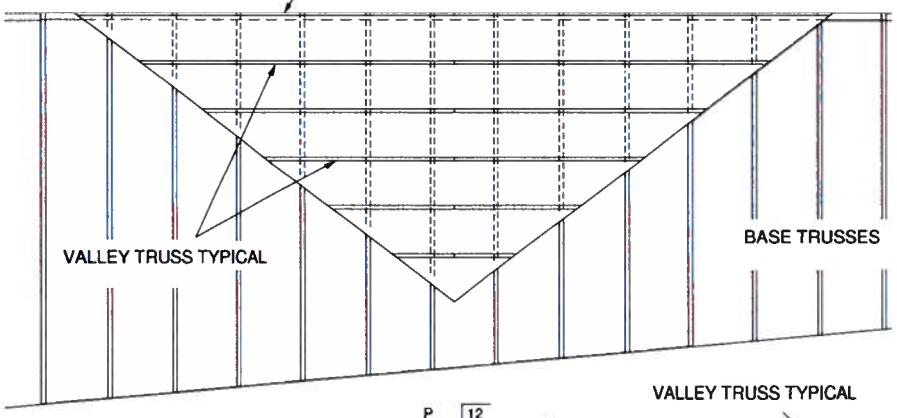
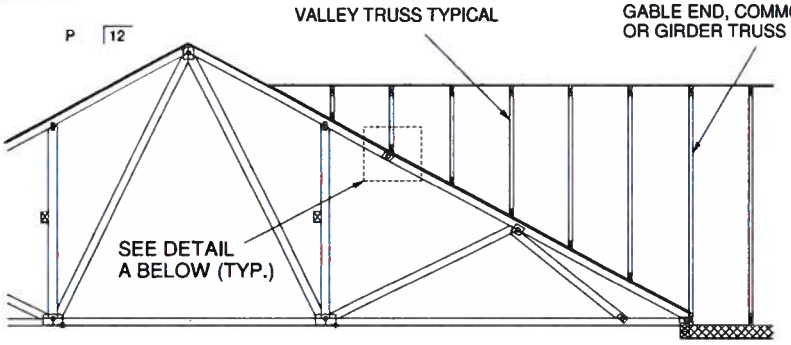
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY HIGH WIND2

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

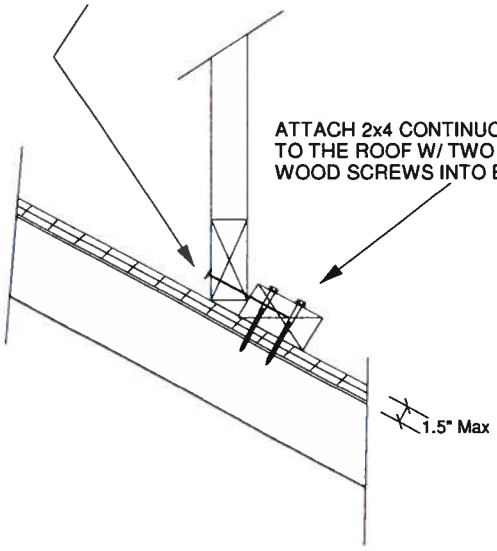
GENERAL SPECIFICATIONS

1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 4.5" WS45 USP OR EQUILIVANT
3. INSTALL SHEATHING TO TOP CHORD OF BASE TRUSSES.
4. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE TO BASE TRUSSES AS PER DETAIL A
5. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
6. NAILING DONE PER NDS-01
7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.

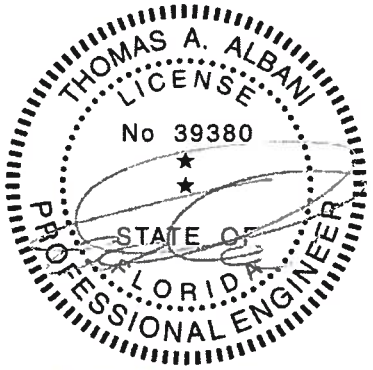




SECURE VALLEY TRUSS W/ ONE ROW OF 10d NAILS 6" O.C.



WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH
WIND DESIGN PER ASCE 7-10 160 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12
CATEGORY II BUILDING
EXPOSURE C
WIND DURATION OF LOAD INCREASE : 1.60
MAX TOP CHORD TOTAL LOAD = 50 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)
MINIMUM REDUCED DEAD LOAD OF 6 PSF ON THE TRUSSES



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February 12, 2018

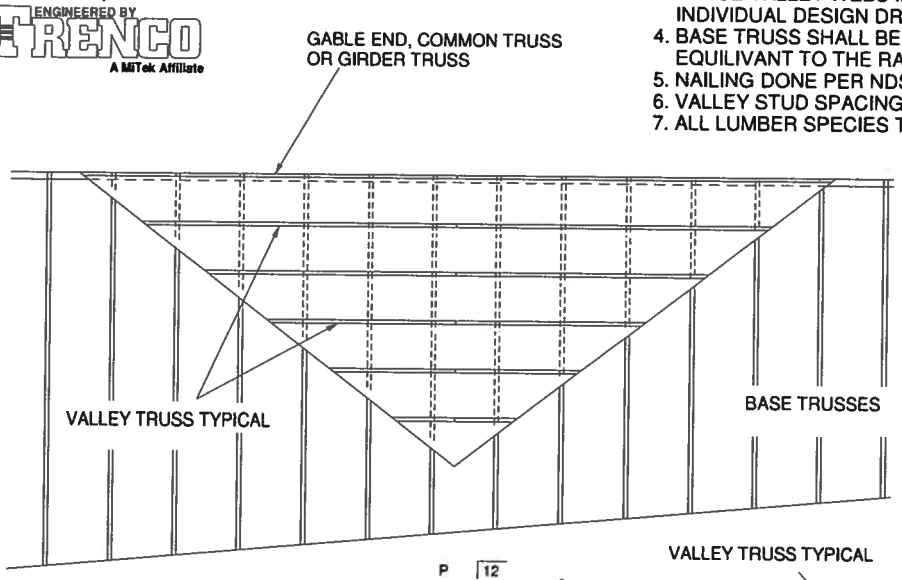
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY SP

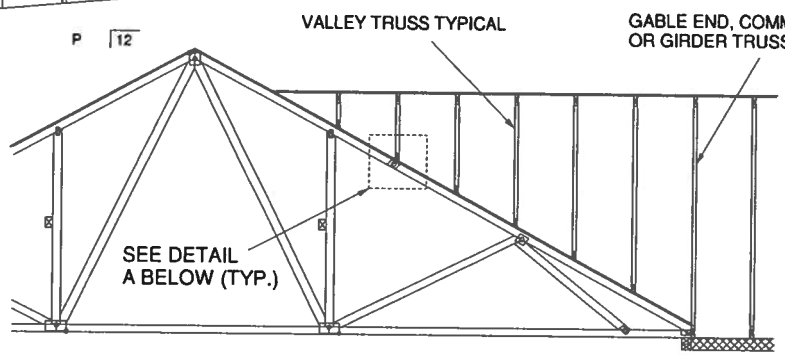
MiTek USA, Inc. Page 1 of 1

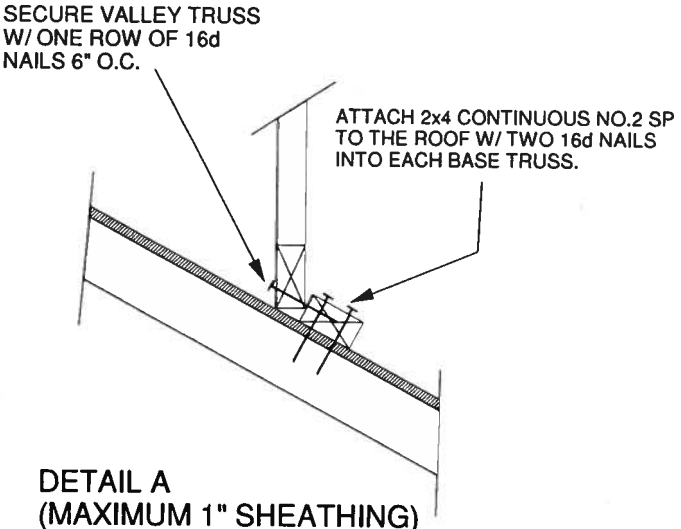
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

GENERAL SPECIFICATIONS

1. NAIL SIZE 16d (0.131" X 3.5")
2. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUILIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
5. NAILING DONE PER NDS - 01
6. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.
7. ALL LUMBER SPECIES TO BE SP.

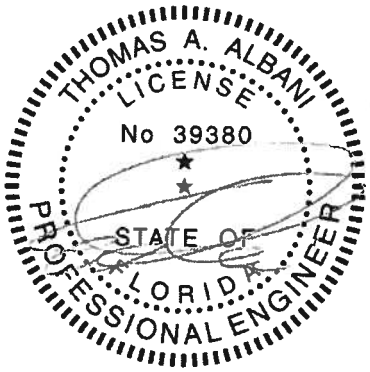






DETAIL A
(MAXIMUM 1" SHEATHING)
N.T.S.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 120 MPH
WIND DESIGN PER ASCE 7-10 150 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
ROOF PITCH = MINIMUM 3/12 MAXIMUM 10/12
CATEGORY II BUILDING
EXPOSURE C OR B
WIND DURATION OF LOAD INCREASE : 1.60
MAX TOP CHORD TOTAL LOAD = 60 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)
MINIMUM REDUCED DEAD LOAD OF 4.2 PSF ON THE TRUSSES



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February 12, 2018

AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL (HIGH WIND VELOCITY)	MII-VALLEY

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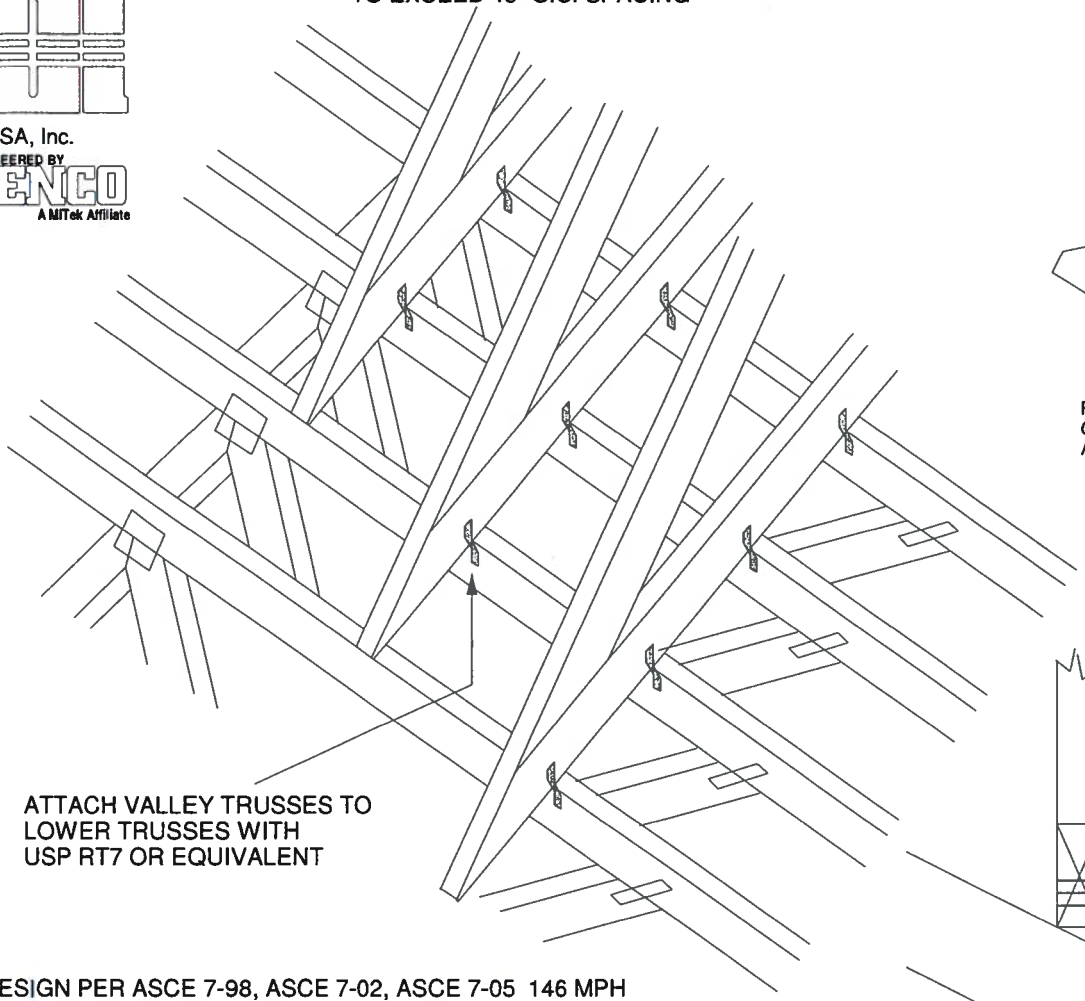
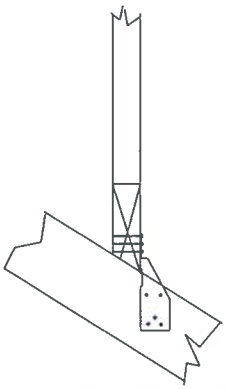
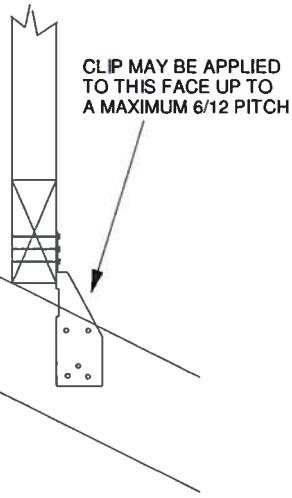
NOTE: VALLEY STUD SPACING NOT TO EXCEED 48" O.C. SPACING



ATTACH VALLEY TRUSSES TO LOWER TRUSSES WITH USP RT7 OR EQUIVALENT



FOR BEVELED BOTTOM CHORD, CLIP MAY BE APPLIED TO EITHER FACE



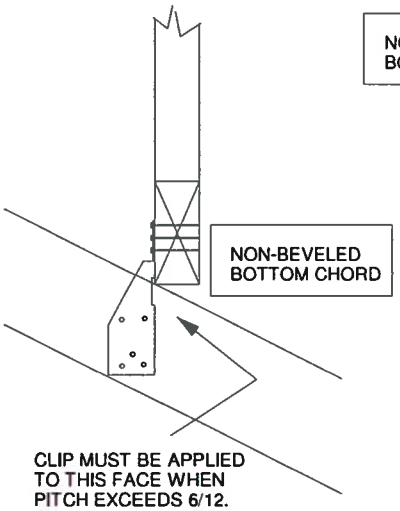
CLIP MAY BE APPLIED TO THIS FACE UP TO A MAXIMUM 6/12 PITCH

NON-BEVELED BOTTOM CHORD

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH
WIND DESIGN PER ASCE 7-10 160 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
WIND DURATION OF LOAD INCREASE : 1.6
MAX TOP CHORD TOTAL LOAD = 50 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)

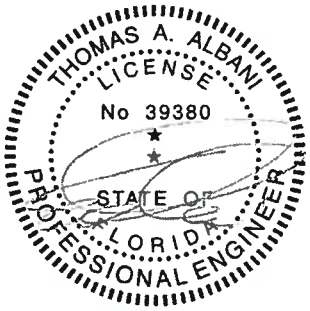
SUPPORTING TRUSSES DIRECTLY UNDER VALLEY TRUSSES MUST BE DESIGNED WITH A MAXIMUM UNBRACED LENGTH OF 2'-10" ON AFFECTED TOP CHORDS.

NOTES:
- SHEATHING APPLIED AFTER INSTALLATION OF VALLEY TRUSSES
- THIS DETAIL IS NOT APPLICABLE FOR SPF-S SPECIES LUMBER.



NON-BEVELED BOTTOM CHORD

CLIP MUST BE APPLIED TO THIS FACE WHEN PITCH EXCEEDS 6/12. (MAXIMUM 12/12 PITCH)



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AUGUST 1, 2016	Standard Gable End Detail	MII-GE146-001

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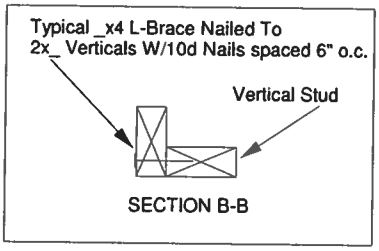
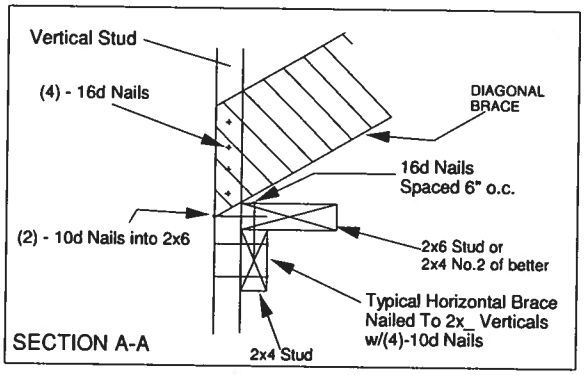
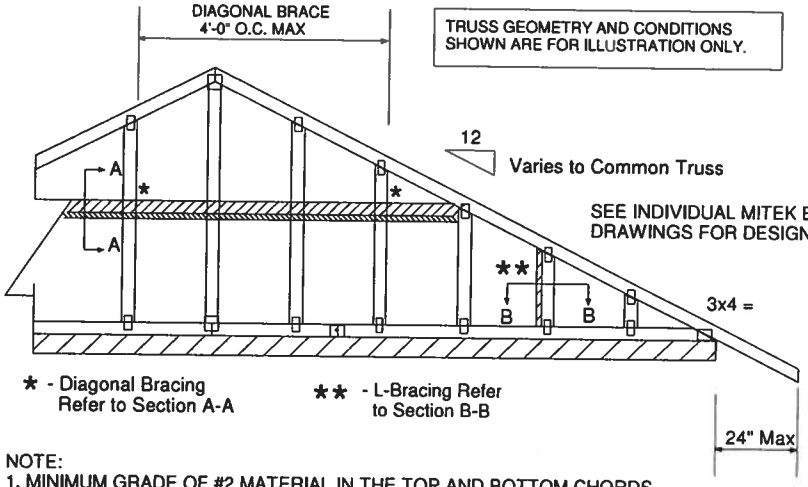
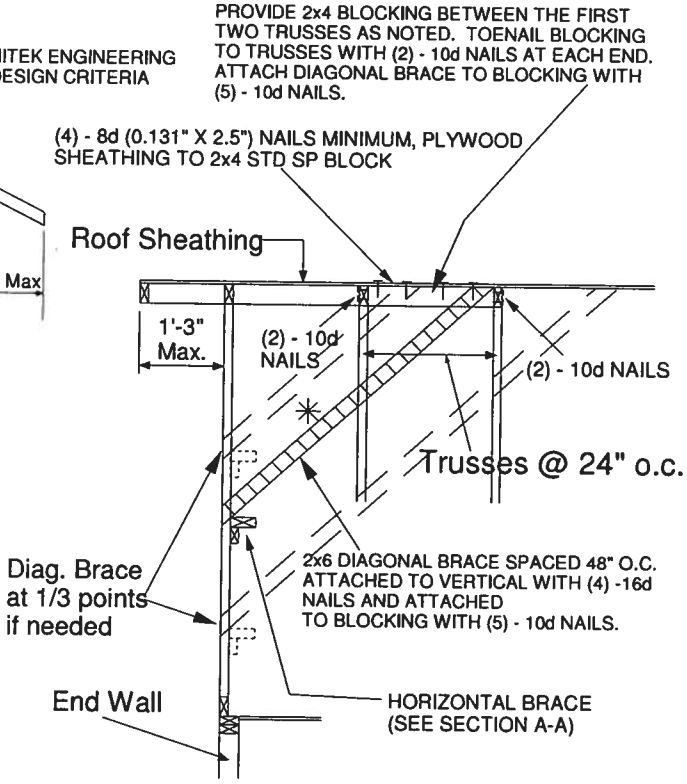








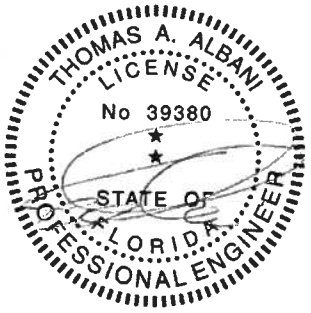
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 2x4 No 3/STUD SP OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No 3/Stud	12" O.C.	3-11-3	6-8-0	7-2-14	11-9-10
2x4 SP No 3/Stud	16" O.C.	3-6-14	5-9-5	7-1-13	10-8-11
2x4 SP No 3/Stud	24" O.C.	3-1-8	4-8-9	6-2-15	9-4-7

✳ Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of web with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

MAXIMUM WIND SPEED = 146 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-98, ASCE 7-02, ASCE 7-05
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.



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January 19, 2018

OCTOBER 5, 2016	REPLACE BROKEN OVERHANG	MII-REP13B

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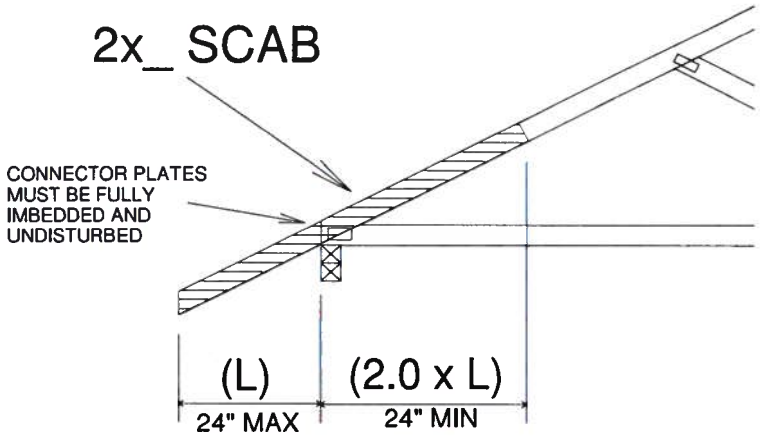
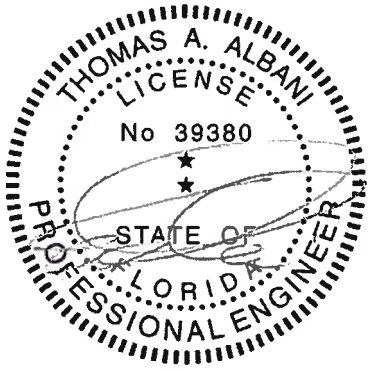
TRUSS CRITERIA:
LOADING: 40-10-0-10
DURATION FACTOR: 1.15
SPACING: 24" O.C.
TOP CHORD: 2x4 OR 2x6
PITCH: 4/12 - 12/12
HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL
END BEARING CONDITION

NOTES:
1. ATTACH 2x_ SCAB (MINIMUM NO.2 GRADE SPF, HF, SP, DF) TO ONE FACE OF TRUSS WITH TWO ROWS OF 10d (0.131" X 3") SPACED 6" O.C.
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
3. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.



IMPORTANT
This detail to be used only with trusses (spans less than 40') spaced 24" o.c. maximum and having pitches between 4/12 and 12/12 and total top chord loads not exceeding 50 psf.
Trusses not fitting these criteria should be examined individually.

REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



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February 12, 2018

AUGUST 1, 2016	LATERAL BRACING RECOMMENDATIONS	MII-STRGBCK

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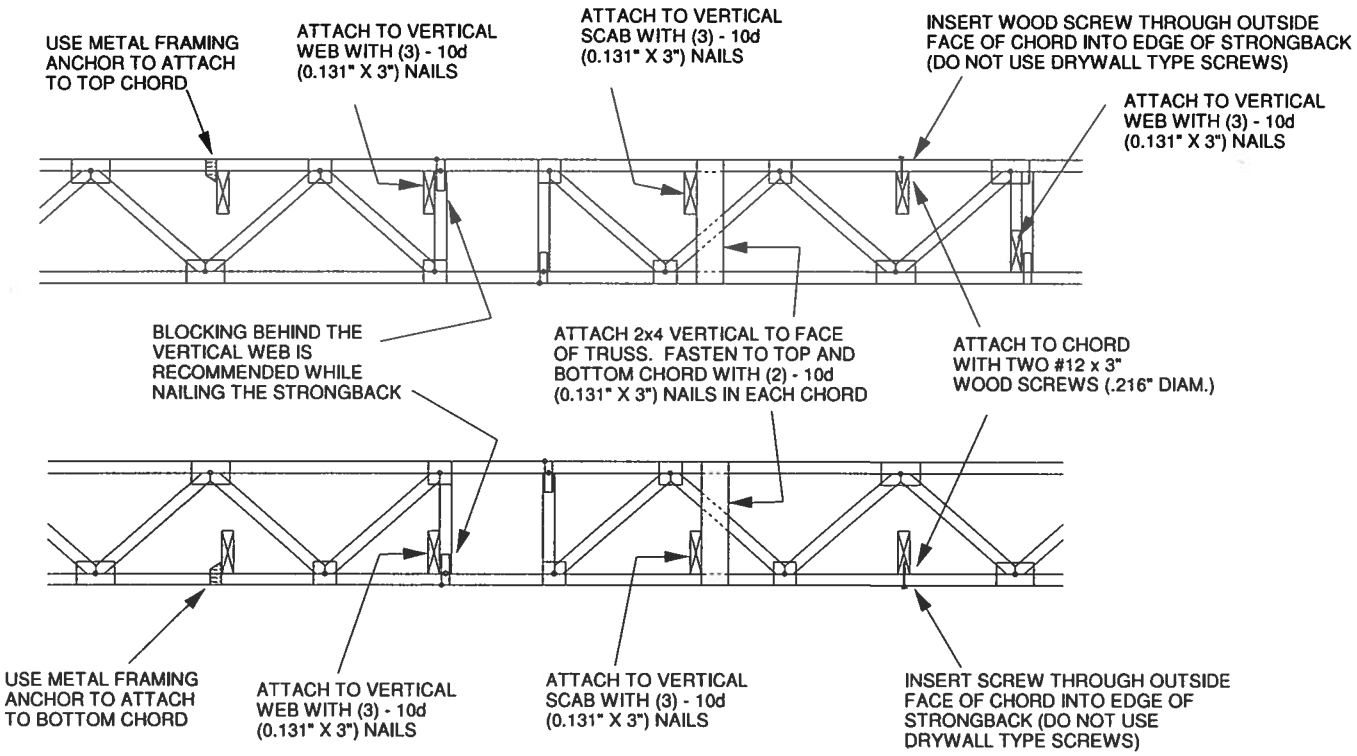
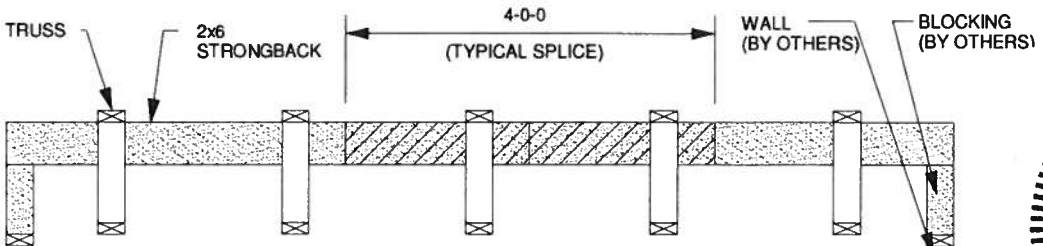
TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

NOTE 1: 2X6 STRONGBACK ORIENTED VERTICALLY MAY BE POSITIONED DIRECTLY UNDER THE TOP CHORD OR DIRECTLY ABOVE THE BOTTOM CHORD. SECURELY FASTENED TO THE TRUSS USING ANY OF THE METHODS ILLUSTRATED BELOW.

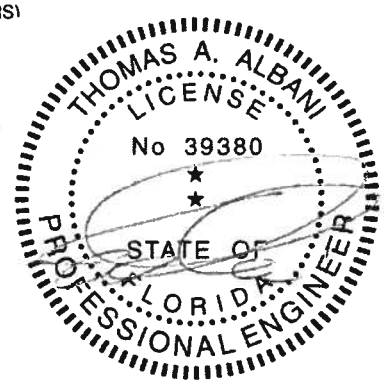
NOTE 2: STRONGBACK BRACING ALSO SATISFIES THE LATERAL BRACING REQUIREMENTS FOR THE BOTTOM CHORD OF THE TRUSS WHEN IT IS PLACED ON TOP OF THE BOTTOM CHORD, IS CONTINUOUS FROM END TO END, CONNECTED WITH A METHOD OTHER THAN METAL FRAMING ANCHOR, AND PROPERLY CONNECTED, BY OTHERS, AT THE ENDS.





THE STRONGBACKS SHALL BE SECURED AT THEIR ENDS TO ADEQUATE SUPPORT, DESIGNED BY OTHERS. IF SPLICING IS NECESSARY, USE A 4'-0" LONG SCAB CENTERED ON THE SPLICE AND JOINED WITH (12) - 10d (0.131" X 3") NAILS EQUALLY SPACED.

ALTERNATE METHOD OF SPLICING:
OVERLAP STRONGBACK MEMBERS A MINIMUM OF 4'-0" AND FASTEN WITH (12) - 10d (0.131" X 3") NAILS STAGGERED AND EQUALLY SPACED.
(TO BE USED ONLY WHEN STRONGBACK IS NOT ALIGNED WITH A VERTICAL)



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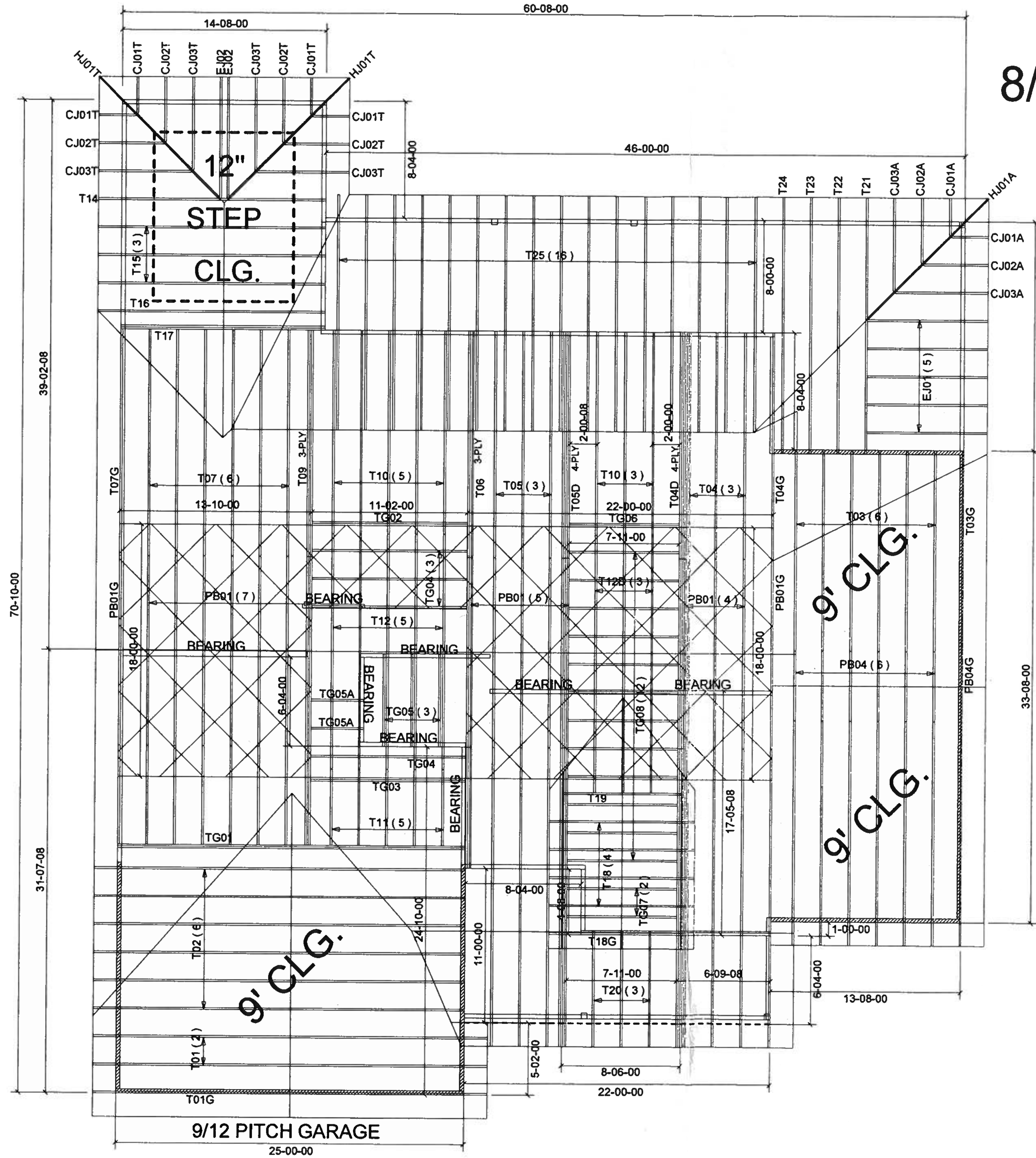
8/12 - 4/12 PITCH
20" O/H



BEARING HEIGHT SCHEDULE	
(blank box)	10' 1-1/8"
(hatched box)	9' 1-1/8"

NOTES:

1.) REFER TO HIB 91 (RECOMMENDATIONS FOR HANDLING INSTALLATION AND TEMPORARY BRACING.) REFER TO ENGINEERED DRAWINGS FOR PERMANENT BRACING REQUIRED.
2.) ALL TRUSSES (INCLUDING TRUSSES UNDER VALLEY FRAMING) MUST BE COMPLETELY DECKED OR REFER TO DETAIL V105 FOR ALTERNATE BRACING REQUIREMENTS.
3.) ALL VALLEYS ARE TO BE CONVENTIONALLY FRAMED BY BUILDER.
4.) ALL TRUSSES ARE DESIGNED FOR 2' o.c. MAXIMUM SPACING, UNLESS OTHERWISE NOTED.
5.) ALL WALLS SHOWN ON PLACEMENT PLAN ARE CONSIDERED TO BE LOAD BEARING, UNLESS OTHERWISE NOTED.
6.) 5Y42 TRUSSES MUST BE INSTALLED WITH THE TOP BEING UP.
7.) BEAM/HEADER/LINTEL (HDR) TO BE FURNISHED BY BUILDER.

Builders FirstSource

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Tampa
PHONE: 813-621-9831 FAX: 813-628-8956

Lake City
PHONE: 386-755-6894 FAX: 386-755-7973

BUILDER	AARON SIMQUE
LEGAL ADDRESS	STEWART RES.
MODEL:	Revision:
	Chk By:
DATE: 1-16-20	DRAWN BY: KLH
Original Reference #:	2217427
1st Level dwg#:	2nd Level dwg#:
Level dwg#:	2217427

FL Approval Codes - Mitek Plates #'s 2197.2 - 2197.4, Versa-Lam #1644-R4 & BCI Joists #1392-R4