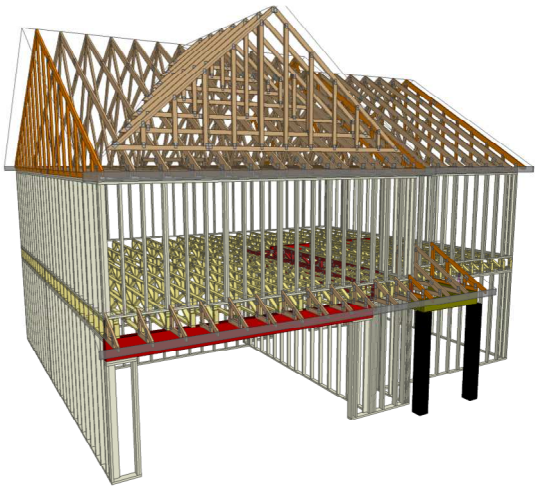
Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450



Builder: DRB HOMES
Model: 82 FaNC
ELMHURST 2

THE PLACEMENT PLAN NOTES:

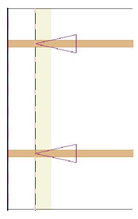
1. The Placement Plan is a diagram for truss installation. It is not an engineered drawing and has not been reviewed by an engineer. The Owner/Building Designer is responsible for obtaining an engineer's review if one is required by the local jurisdiction.
2. The responsibilities of the Owner, Contractor, Building Designer, Component Designer and Component Manufacturer shall be as set forth in ANSI/TPI 1. Capitalized terms shall be as defined in ANSI/TP 1 unless otherwise indicated.
3. Each Component is designed as an individual component utilizing information provided by others. The Owner/Building Designer is responsible for reviewing all Component Submittal Packages and individual Component Design Drawings for compliance with the Construction Documents and compatibility with the overall Building design.
4. Contractor will not proceed with component installation until the Owner/Building Designer has reviewed the Component Submittal Package. Questions on the suitability of any Component will be resolved by the Building Designer.
5. The Building Designer and Contractor are responsible for all temporary and permanent bracing.
6. The Placement Plan assumes the building is dimensionally correct, structurally sound, and in a suitable condition to support each Component during installation and thereafter, including but not limited to installation of all bearing points. Proper design and construction of all structural components, including foundations, headers, beams, walls and columns are the responsibility of the Owner, Building Designer and Contractor.
7. Do not cut, drill, or modify any Component without first consulting the Component Manufacturer or Building Designer. Damaged Components shall not be installed unless directed by the Building Designer or approved by the Component Manufacturer.
8. Components must be handled and installed following all applicable safety standards and best practices, including but not limited to BCSI, OSHA, TPI and local codes. Failure to properly handle, brace or otherwise install Component can result in serious injury or death.

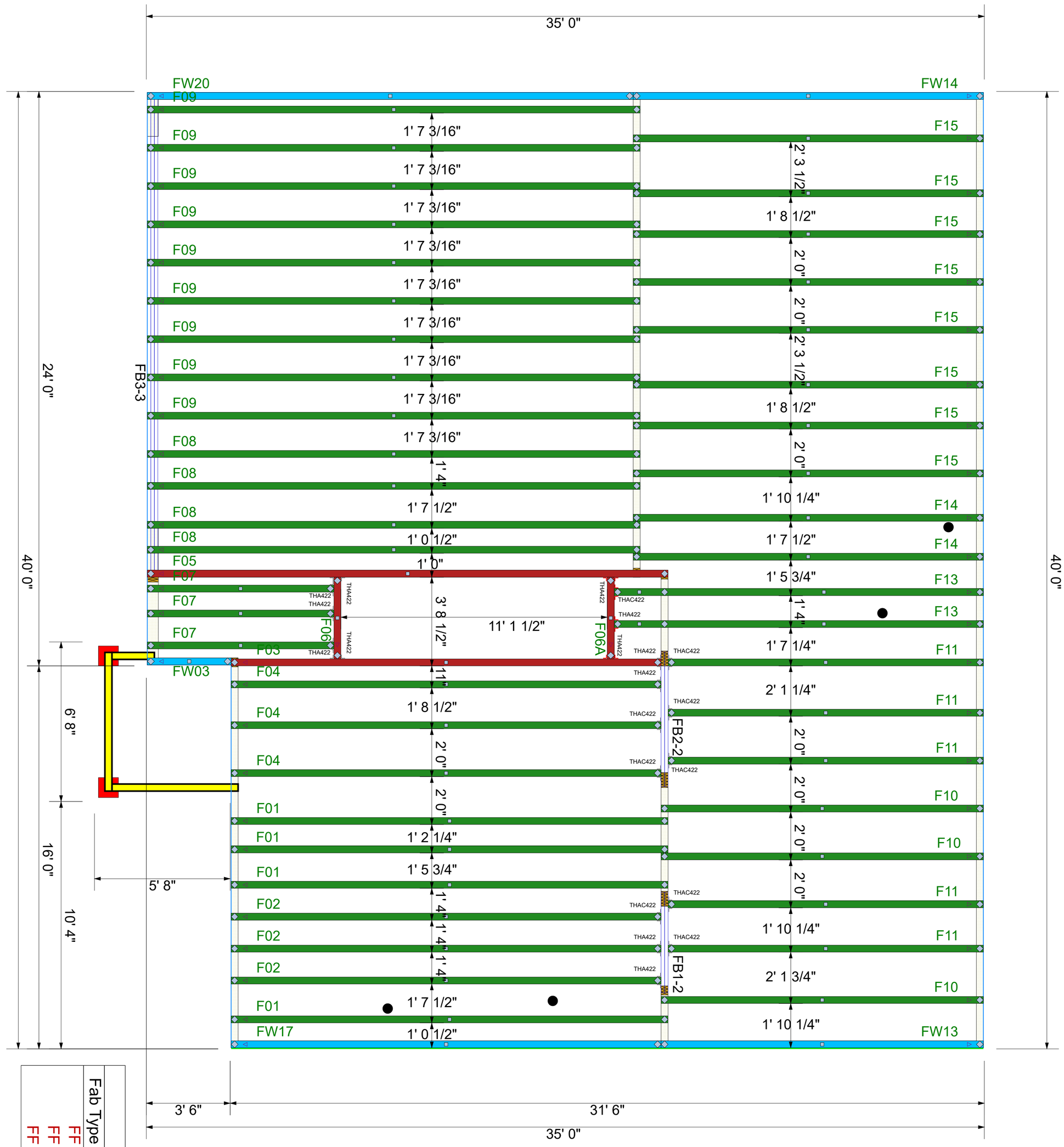
Apprved by: _____ **Date:** _____

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.

** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT.

Truss Drawing Left End Indicator





Truss Connector Total List

Qty	Product	Manuf
12	THA422	Simpson
9	THAC422	Simpson

Products

Fab Type	Net Qty	Plies	Product	Length	PlotID
FF	2	2	2.0 RigidLam DF LVL 1-3/4 x 14	6' 0"	FB1-2
FF	2	2	2.0 RigidLam DF LVL 1-3/4 x 14	6' 0"	FB2-2
FF	3	3	2.0 RigidLam DF LVL 1-3/4 x 16	20' 0"	FB3-3

** TRIANGULAR SYMBOL NEAR END OF TRUSS INDICATES LEFT END OF TRUSS AS SHOWN ON INDIVIDUAL TRUSS DRAWINGS.

** PLUMBING DROPS NOTED ARE IN THE APPROXIMATE LOCATIONS PER PLAN. BUILDER TO VERIFY LOCATIONS BEFORE SETTING TRUSSES.

** REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS.

General Notes:

** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION.

** ALL BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS.

** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS.

** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

** TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE.

Scale: NTS
Date: 1/11/2024
Designer: ND
Project Number: **23120148**
Sheet Number: **1/1**

DRB HOMES

82 FaNC
ELMHURST 2

COMPONENT PLACEMENT PLAN

Kempsville Building Materials
A Division of the Carter Lumber Company

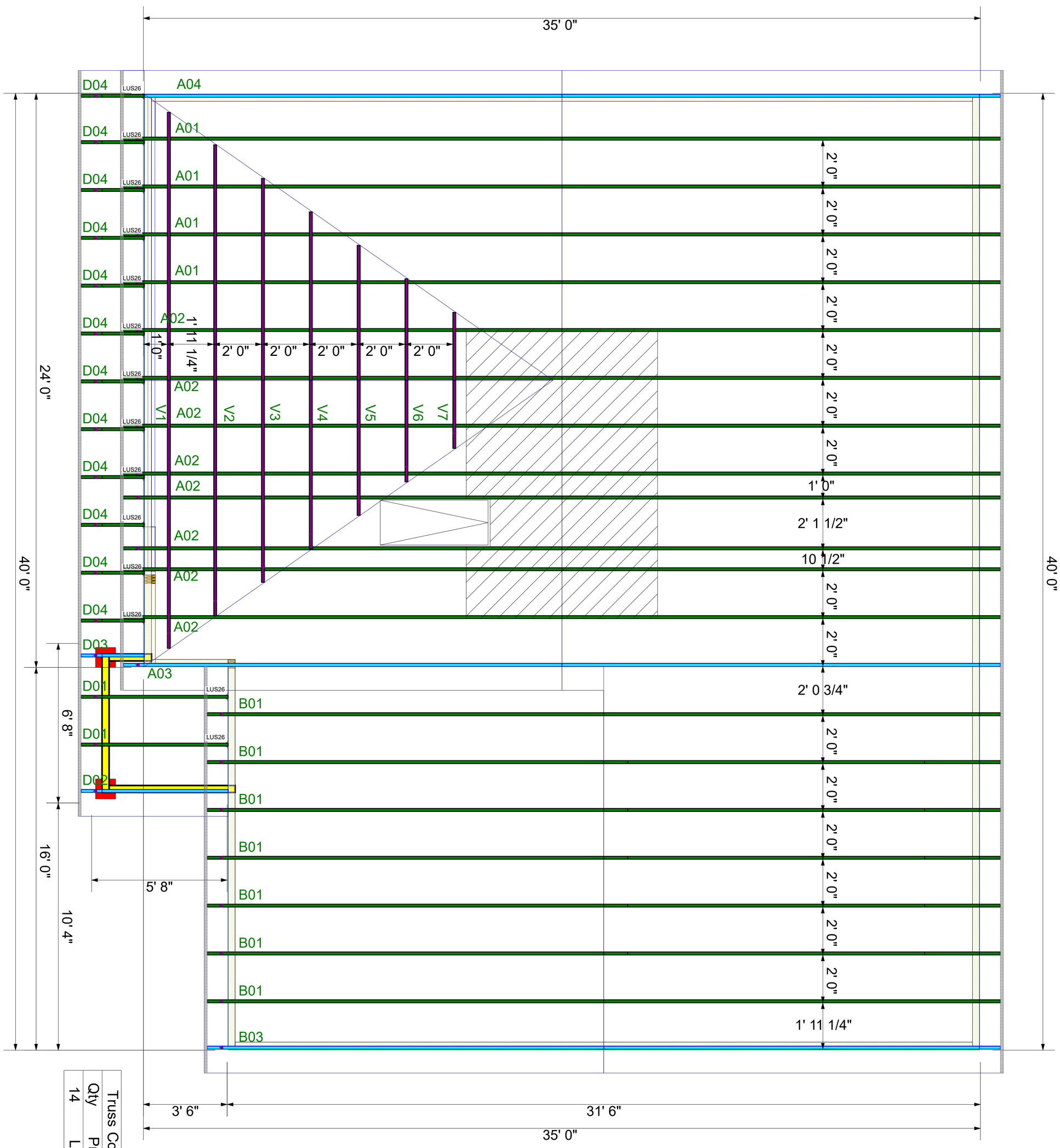
THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual components to be incorporated into the building design at the specification of the building designer. See Individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor systems and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Truss" available from the Truss Plate Institute, 583 D'Onifrio Drive: Madison, WI 53179

Revisions		
00/00/00	Name	
00/00/00	Name	
00/00/00	Name	
00/00/00	Name	
00/00/00	Name	

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.

** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT.

Truss Drawing Left End Indicator



Truss Connector Total List		
Qty	Product	Manuf
14	LUS26	Simpson

** TRIANGULAR SYMBOL NEAR END OF TRUSS INDICATES LEFT END OF TRUSS AS SHOWN ON INDIVIDUAL TRUSS DRAWINGS.

** PLUMBING DROPS NOTED ARE IN THE APPROXIMATE LOCATIONS PER PLAN. BUILDER TO VERIFY LOCATIONS BEFORE SETTING TRUSSES.

** REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS.

General Notes:

** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION.

** ALL BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS.

** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS.

** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

** TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE.

Scale: NTS
Date: 1/11/2024
Designer: ND
Project Number: **23120148**
Sheet Number: **1/1**

DRB HOMES

82 FaNC
ELMHURST 2

COMPONENT PLACEMENT PLAN

Kempsville Building Materials
A Division of the Carter Lumber Company

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual components to be incorporated into the building design at the specification of the building designer. See Individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor systems and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Truss" available from the Truss Plate Institute, 583 D'Onifrio Drive: Madison, WI 53179

Revisions		
00/00/00	Name	
00/00/00	Name	
00/00/00	Name	
00/00/00	Name	
00/00/00	Name	

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 23120148
DRB GROUP - 82 FaNC

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carter Components (Sanford, NC)).

Pages or sheets covered by this seal: I62998107 thru I62998143

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844

January 12,2024

Gilbert, Eric

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.

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	A01	Common	4	1	Job Reference (optional)	I62998107

Carter Components (Sanford, NC), Sanford, NC - 27332,

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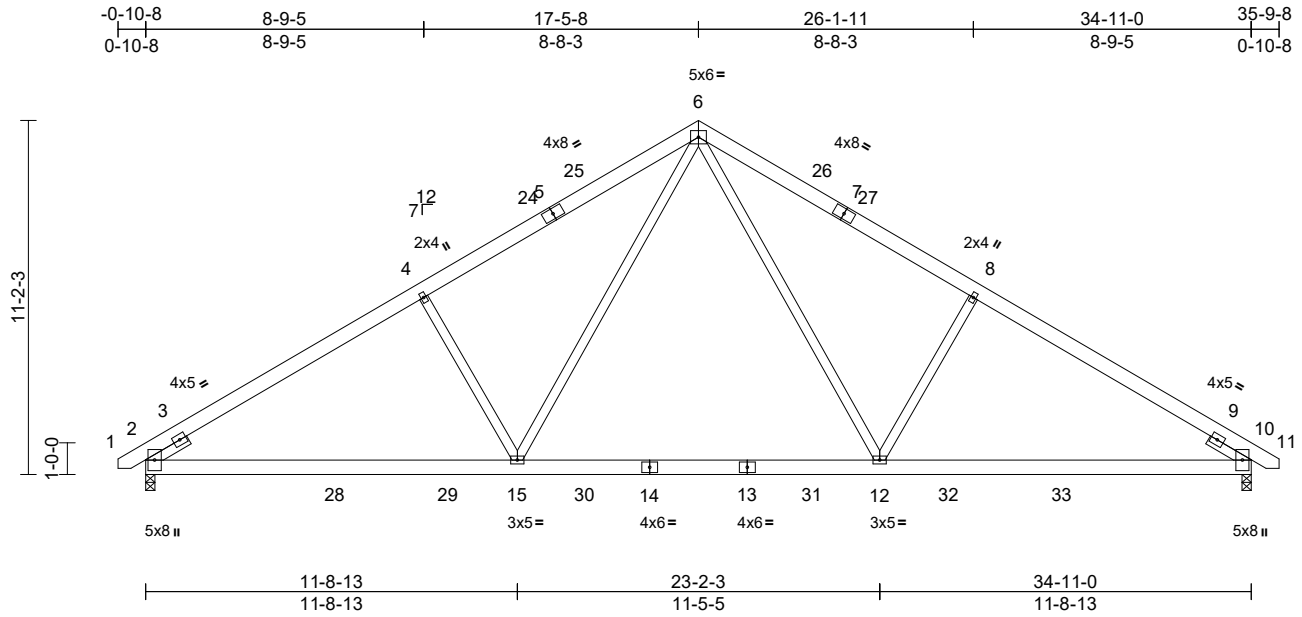

Scale = 1:72.8

Plate Offsets (X, Y): [2:0-4-2,0-0-14], [10:0-4-2,0-0-14]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.20	12-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.33	12-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.06	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 238 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 4-15,8-12:2x4 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 3-8-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=-248 (LC 12)
Max Uplift 2=-139 (LC 14), 10=-139 (LC 15)
Max Grav 2=1696 (LC 24), 10=1696 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-4=-2393/227, 4-6=-2211/285, 6-8=-2211/285, 8-10=-2394/227, 10-11=0/20
BOT CHORD 2-15=-263/2147, 12-15=-18/1423, 10-12=-117/1961
WEBS 6-15=-149/1040, 6-12=-149/1040, 4-15=-511/302, 8-12=-511/302

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-1 to 2-9-14, Interior (1) 2-9-14 to 13-11-10, Exterior(2R) 13-11-10 to 20-11-6, Interior (1) 20-11-6 to 32-1-2, Exterior(2E) 32-1-2 to 35-7-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	A02	Common	8	1	Job Reference (optional)	I62998108

Carter Components (Sanford, NC), Sanford, NC - 27332,

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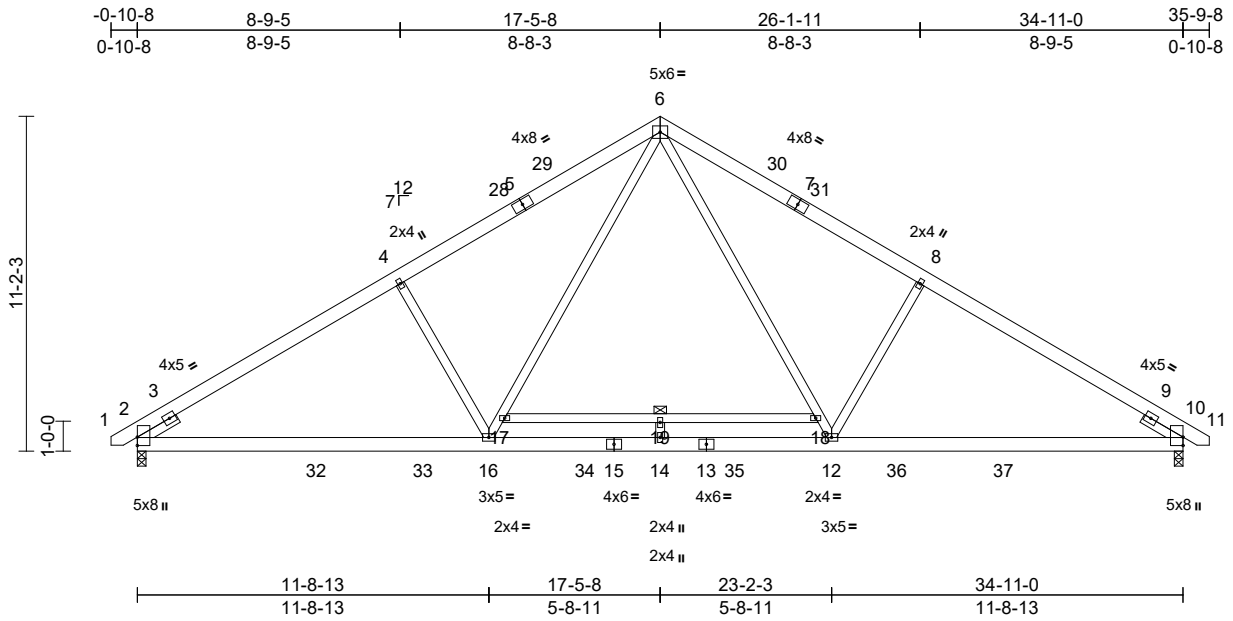

Scale = 1:76.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.14	16-22	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.36	14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.06	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 255 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.2 *Except* 4-16,8-12,19-14:2x4 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 3-3-3 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 17-18

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=-248 (LC 12)
Max Uplift 2=-39 (LC 14), 10=-39 (LC 15)
Max Grav 2=1742 (LC 24), 10=1742 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/20, 2-4=-2481/29, 4-6=-2298/87, 6-8=-2298/87, 8-10=-2481/29, 10-11=0/20
BOT CHORD	2-16=-173/2220, 14-16=0/1573, 12-14=0/1573, 10-12=-26/2034
WEBS	16-17=-55/1030, 6-17=-40/1092, 6-18=-40/1092, 12-18=-55/1030, 4-16=-495/318, 8-12=-495/318, 17-19=-106/0, 18-19=-106/0, 14-19=0/38

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-1 to 2-9-14, Interior (1) 2-9-14 to 13-11-10, Exterior(2R) 13-11-10 to 20-11-6, Interior (1) 20-11-6 to 32-1-2, Exterior(2E) 32-1-2 to 35-7-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) 200.0lb AC unit load placed on the bottom chord, 17-5-8 from left end, supported at two points, 5-0-0 apart.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	A03	Common	1	1	Job Reference (optional)	I62998109

Carter Components (Sanford, NC), Sanford, NC - 27332,

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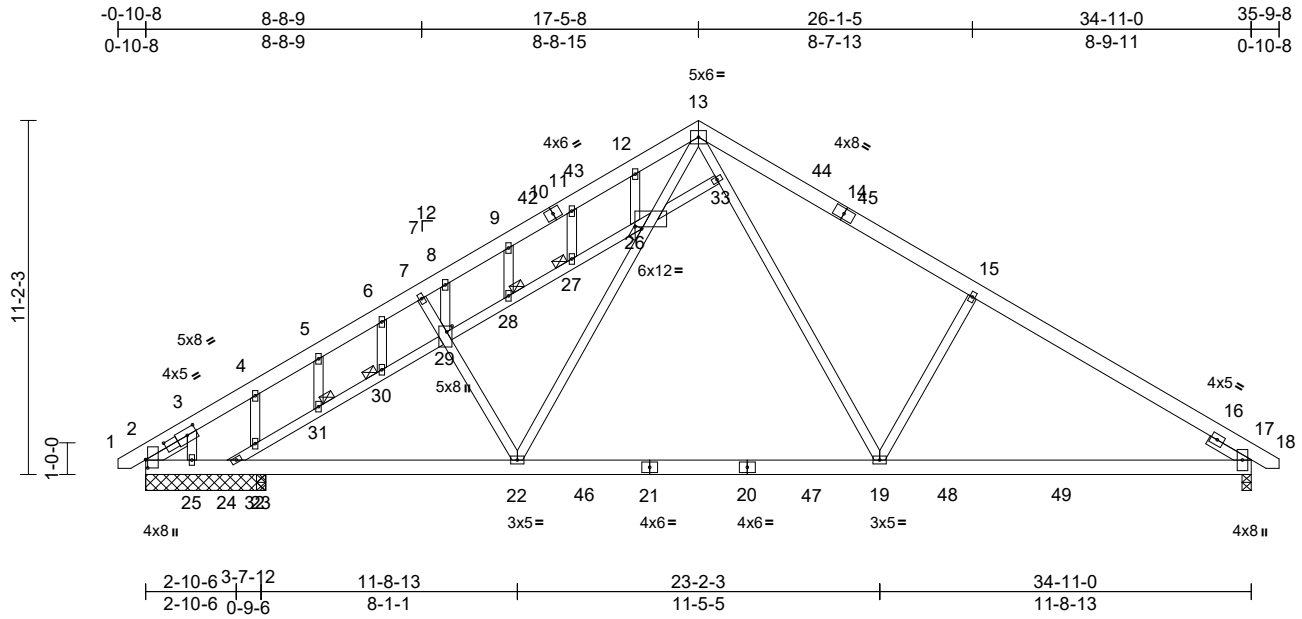

Scale = 1:72.8

Plate Offsets (X, Y): [2:0-3-2,0-0-12], [2:0-9-0,0-2-0], [3:0-3-12,0-2-8], [17:0-4-2,0-1-6], [26:0-2-9,0-0-12], [29:0-2-4,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.23	19-22	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.37	19-22	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.05	17	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 283 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 22-13,19-13:2x4 SP No.2
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -- 1-6-5, Right 2x4 SP No.3 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-2-11 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 26, 27, 28, 30, 31

REACTIONS (size) 2=3-9-8, 17=0-3-8, 23=0-3-8, 24=3-9-8, 25=3-9-8, 34=3-9-8
Max Horiz 2=248 (LC 13), 34=248 (LC 13)
Max Uplift 2=-6 (LC 15), 17=-141 (LC 15), 24=-80 (LC 15), 25=-209 (LC 26), 34=-6 (LC 15)
Max Grav 2=1240 (LC 5), 17=1640 (LC 25), 23=418 (LC 7), 24=191 (LC 25), 25=65 (LC 12), 34=1240 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/20, 2-3=-1616/60, 3-4=-1715/154, 4-5=-1725/187, 5-6=-1654/199, 6-7=-1626/202, 7-8=-1632/212, 8-9=-2100/330, 9-11=-2021/339, 11-12=-2014/365, 12-13=-1892/415, 13-15=-2112/285, 15-17=-2293/224, 17-18=0/20
BOT CHORD	2-25=-198/1563, 24-25=-198/1563, 23-24=-173/1903, 22-23=-173/1903, 19-22=-10/1314, 17-19=-117/1873
WEBS	22-26=-95/844, 13-26=-303/895, 13-33=-145/1061, 19-33=-145/1061, 7-29=0/491, 22-29=-431/245, 15-19=-498/301, 12-26=-8/257, 11-27=-97/28, 9-28=-5/50, 8-29=-970/211, 6-30=-39/0, 5-31=0/33, 4-32=-127/43, 3-25=-328/246, 24-32=-511/45, 31-32=-461/34, 30-31=-476/33, 29-30=-456/36, 28-29=-137/263, 27-28=-134/240, 26-27=-149/292, 26-33=-8/49

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-1 to 2-9-14, Interior (1) 2-9-14 to 13-11-10, Exterior(2R) 13-11-10 to 20-11-6, Interior (1) 20-11-6 to 32-1-2, Exterior(2E) 32-1-2 to 35-7-1 zone; cantilever left and right exposed ; end vertical left and 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) N/A
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	A04	Common Supported Gable	1	1	Job Reference (optional)	I62998110

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Jan 11 14:53:42 Page: 1
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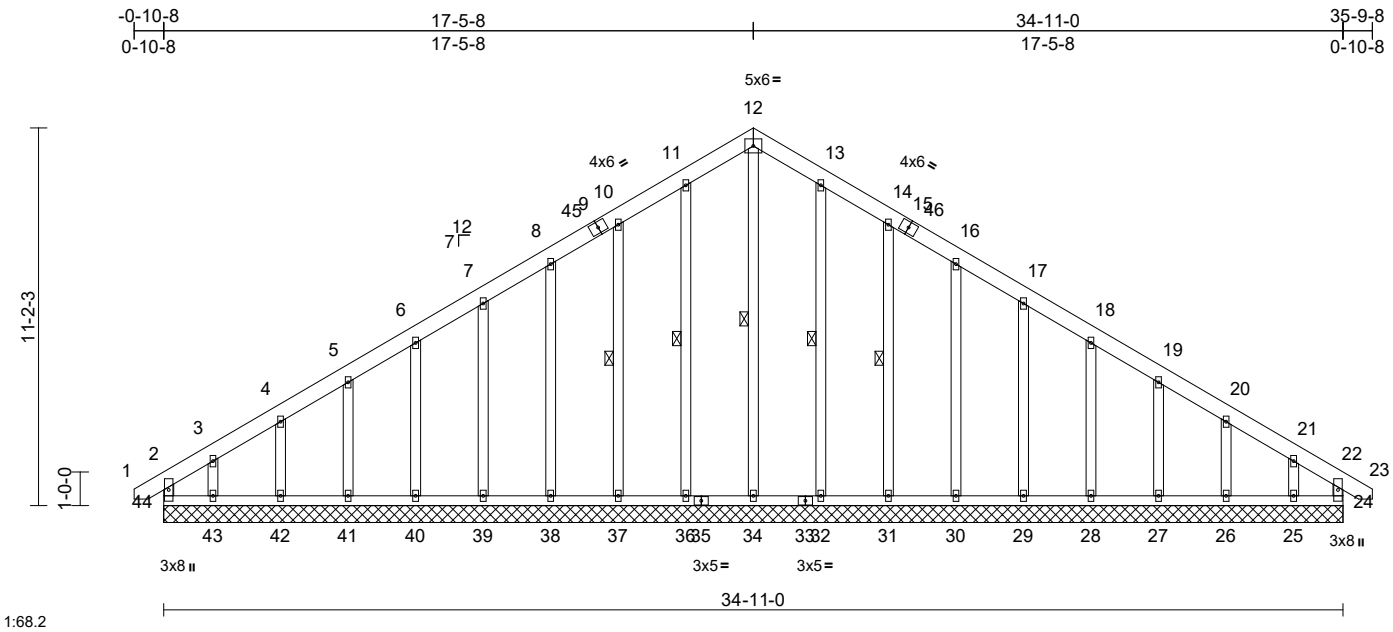

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	24	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 292 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3 *Except* 34-12:2x4 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 12-34, 11-36, 10-37, 13-32, 14-31

REACTIONS (size) 24=34-11-0, 25=34-11-0, 26=34-11-0, 27=34-11-0, 28=34-11-0, 29=34-11-0, 30=34-11-0, 31=34-11-0, 32=34-11-0, 34=34-11-0, 36=34-11-0, 37=34-11-0, 38=34-11-0, 39=34-11-0, 40=34-11-0, 41=34-11-0, 42=34-11-0, 43=34-11-0, 44=34-11-0
Max Horiz 44=271 (LC 13)
Max Uplift 24=-62 (LC 11), 25=-120 (LC 15), 26=-42 (LC 15), 27=-52 (LC 15), 28=-50 (LC 15), 29=-50 (LC 15), 30=-51 (LC 15), 31=-63 (LC 15), 32=-13 (LC 15), 36=-20 (LC 14), 37=-61 (LC 14), 38=-51 (LC 14), 39=-50 (LC 14), 40=-50 (LC 14), 41=-53 (LC 14), 42=-39 (LC 14), 43=-147 (LC 14), 44=-149 (LC 10)
Max Grav 24=152 (LC 24), 25=176 (LC 25), 26=167 (LC 25), 27=167 (LC 25), 28=166 (LC 25), 29=166 (LC 25), 30=170 (LC 22), 31=228 (LC 22), 32=242 (LC 22), 34=217 (LC 15), 36=242 (LC 21), 37=228 (LC 21), 38=170 (LC 21), 39=167 (LC 24), 40=166 (LC 24), 41=168 (LC 24), 42=166 (LC 21), 43=214 (LC 24), 44=219 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-44=-180/123, 1-2=0/25, 2-3=-231/211, 3-4=-174/167, 4-5=-164/158, 5-6=-150/154, 6-7=-136/175, 7-8=-122/203, 8-10=-120/233, 10-11=-151/286, 11-12=-165/312, 12-13=-165/312, 13-14=-151/286, 14-16=-120/233, 16-17=-93/186, 17-18=-66/140, 18-19=-71/99, 19-20=-81/73, 20-21=-89/80, 21-22=-145/108, 22-23=0/25, 22-24=-126/53
BOT CHORD 43-44=-99/122, 42-43=-99/122, 41-42=-99/122, 40-41=-99/122, 39-40=-99/122, 38-39=-99/122, 37-38=-99/122, 36-37=-99/122, 34-36=-99/122, 32-34=-99/122, 31-32=-99/122, 30-31=-99/122, 29-30=-99/122, 28-29=-99/122, 27-28=-99/122, 26-27=-99/122, 25-26=-99/122, 24-25=-99/122
WEBS 12-34=-219/59, 11-36=-202/44, 10-37=-188/85, 8-38=-130/75, 7-39=-127/74, 6-40=-127/74, 5-41=-126/75, 4-42=-126/71, 3-43=-147/127, 13-32=-202/37, 14-31=-188/87, 16-30=-130/75, 17-29=-126/74, 18-28=-127/74, 19-27=-126/75, 20-26=-128/72, 21-25=-124/110

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-8-1 to 2-9-14, Exterior(2N) 2-9-14 to 13-11-10, Corner(3R) 13-11-10 to 20-11-6, Exterior(2N) 20-11-6 to 32-1-2, Corner(3E) 32-1-2 to 35-7-1 zone; cantilever left and right exposed ; end vertical left and 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.

January 12,2024

Continued on page 2

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6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 44, 62 lb uplift at joint 24, 20 lb uplift at joint 36, 61 lb uplift at joint 37, 51 lb uplift at joint 38, 50 lb uplift at joint 39, 50 lb uplift at joint 40, 53 lb uplift at joint 41, 39 lb uplift at joint 42, 147 lb uplift at joint 43, 13 lb uplift at joint 32, 63 lb uplift at joint 31, 51 lb uplift at joint 30, 50 lb uplift at joint 29, 50 lb uplift at joint 28, 52 lb uplift at joint 27, 42 lb uplift at joint 26 and 120 lb uplift at joint 25.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	B01	Common	7	1	Job Reference (optional)	I62998111

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Jan 11 14:53:43 Page: 1
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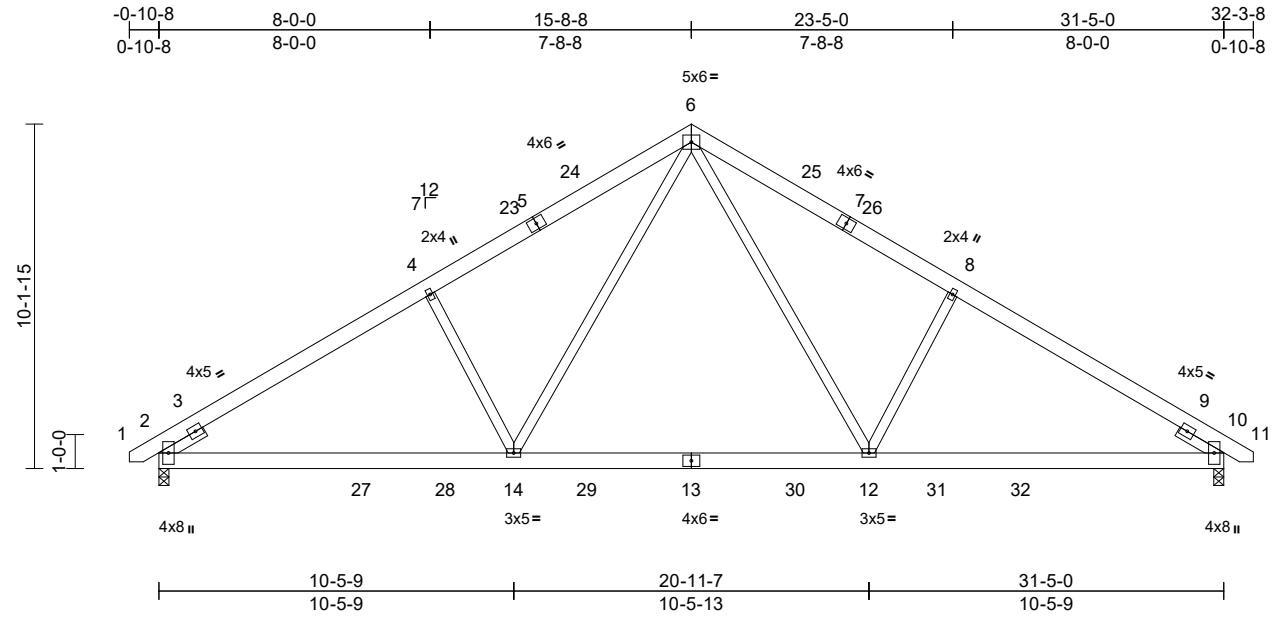

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Plate Offsets (X, Y): [2:0-4-2,0-1-6], [10:0-4-2,0-1-6]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.16	12-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.26	12-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.05	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 215 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 14-6,12-6:2x4 SP No.2
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 4-7-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=224 (LC 13)
Max Uplift 2=-127 (LC 14), 10=-127 (LC 15)
Max Grav 2=1516 (LC 24), 10=1516 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-4=-2112/201, 4-6=-1963/260, 6-8=-1964/260, 8-10=-2112/201, 10-11=0/20
BOT CHORD 2-14=-228/1892, 12-14=-16/1262, 10-12=-96/1724
WEBS 4-14=-462/272, 6-14=-140/925, 6-12=-140/925, 8-12=-462/272

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-1 to 2-5-11, Interior (1) 2-5-11 to 12-6-13, Exterior(2R) 12-6-13 to 18-10-3, Interior (1) 18-10-3 to 28-11-5, Exterior(2E) 28-11-5 to 32-1-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	B03	Common Supported Gable	1	1	Job Reference (optional)	I62998112

Carter Components (Sanford, NC), Sanford, NC - 27332,

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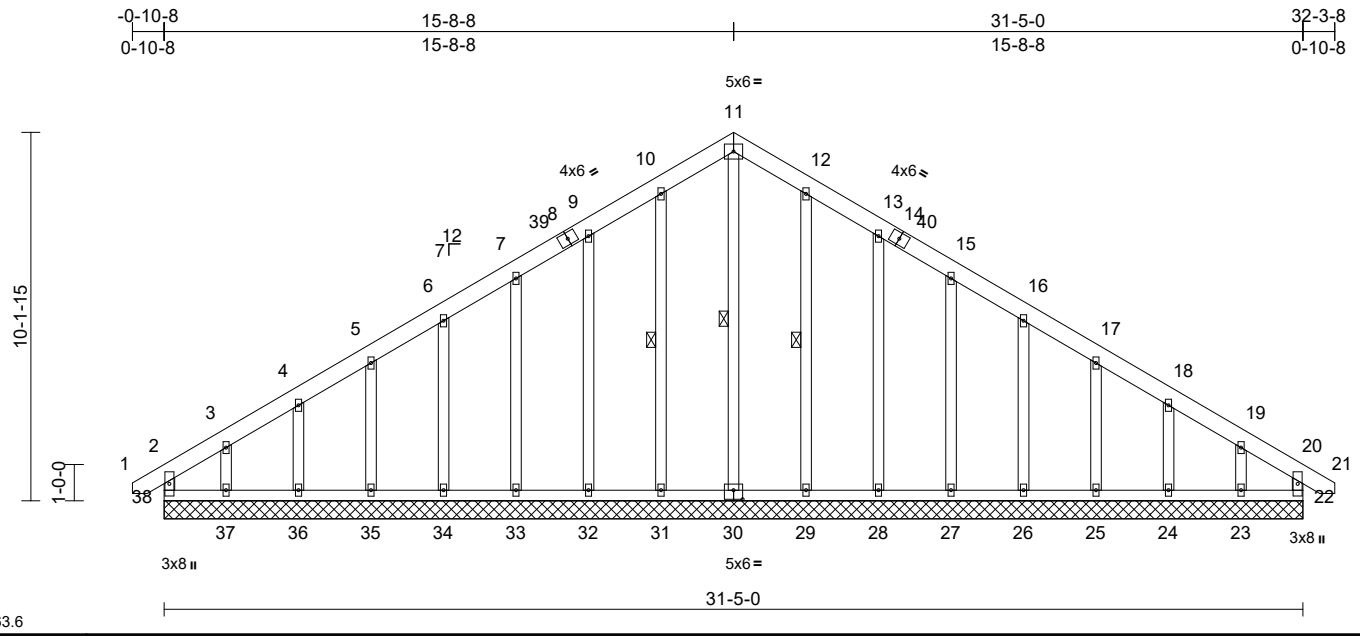

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Plate Offsets (X, Y): [30:0-3-0,0-3-0]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	22	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 251 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 11-30, 10-31, 12-29

REACTIONS (size) 22=31-5-0, 23=31-5-0, 24=31-5-0, 25=31-5-0, 26=31-5-0, 27=31-5-0, 28=31-5-0, 29=31-5-0, 30=31-5-0, 31=31-5-0, 32=31-5-0, 33=31-5-0, 34=31-5-0, 35=31-5-0, 36=31-5-0, 37=31-5-0, 38=31-5-0
Max Horiz 38=-240 (LC 12)
Max Uplift 22=-47 (LC 11), 23=-104 (LC 15), 24=-40 (LC 15), 25=-51 (LC 15), 26=-48 (LC 15), 27=-49 (LC 15), 28=-60 (LC 15), 29=-17 (LC 15), 31=-22 (LC 14), 32=-59 (LC 14), 33=-49 (LC 14), 34=-48 (LC 14), 35=-51 (LC 14), 36=-37 (LC 14), 37=-123 (LC 14), 38=-114 (LC 10)
Max Grav 22=144 (LC 24), 23=176 (LC 29), 24=160 (LC 25), 25=162 (LC 25), 26=161 (LC 25), 27=164 (LC 22), 28=221 (LC 22), 29=236 (LC 22), 30=193 (LC 27), 31=236 (LC 21), 32=221 (LC 21), 33=164 (LC 21), 34=161 (LC 24), 35=163 (LC 28), 36=159 (LC 21), 37=203 (LC 24), 38=195 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-38=-163/99, 1-2=0/24, 2-3=-193/177, 3-4=-149/137, 4-5=-139/136, 5-6=-125/143, 6-7=-112/170, 7-9=-102/198, 9-10=-132/249, 10-11=-147/276, 11-12=-147/276, 12-13=-132/249, 13-15=-102/198, 15-16=-76/153, 16-17=-63/108, 17-18=-73/77, 18-19=-81/68, 19-20=-118/94, 20-21=0/24, 20-22=-120/43
BOT CHORD 37-38=-89/107, 36-37=-89/107, 35-36=-89/107, 34-35=-89/107, 33-34=-89/107, 32-33=-89/107, 31-32=-89/107, 29-31=-89/107, 28-29=-89/107, 27-28=-89/107, 26-27=-89/107, 25-26=-89/107, 24-25=-89/107, 23-24=-89/107, 22-23=-89/107
WEBS 11-30=-190/46, 10-31=-198/45, 9-32=-182/82, 7-33=-125/72, 6-34=-123/72, 5-35=-123/73, 4-36=-121/67, 3-37=-144/116, 12-29=-198/40, 13-28=-182/83, 15-27=-125/72, 16-26=-123/72, 17-25=-123/72, 18-24=-123/68, 19-23=-126/103

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-8-1 to 2-5-11, Exterior(2N) 2-5-11 to 12-6-13, Corner(3R) 12-6-13 to 18-10-3, Exterior(2N) 18-10-3 to 28-11-5, Corner(3E) 28-11-5 to 32-1-1 zone; cantilever left and right exposed ; end vertical left and 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

January 12,2024

Continued on page 2

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12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 38, 47 lb uplift at joint 22, 22 lb uplift at joint 31, 59 lb uplift at joint 32, 49 lb uplift at joint 33, 48 lb uplift at joint 34, 51 lb uplift at joint 35, 37 lb uplift at joint 36, 123 lb uplift at joint 37, 17 lb uplift at joint 29, 60 lb uplift at joint 28, 49 lb uplift at joint 27, 48 lb uplift at joint 26, 51 lb uplift at joint 25, 40 lb uplift at joint 24 and 104 lb uplift at joint 23.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	D01	Monopitch	2	1	Job Reference (optional)	I62998113

Carter Components (Sanford, NC), Sanford, NC - 27332,

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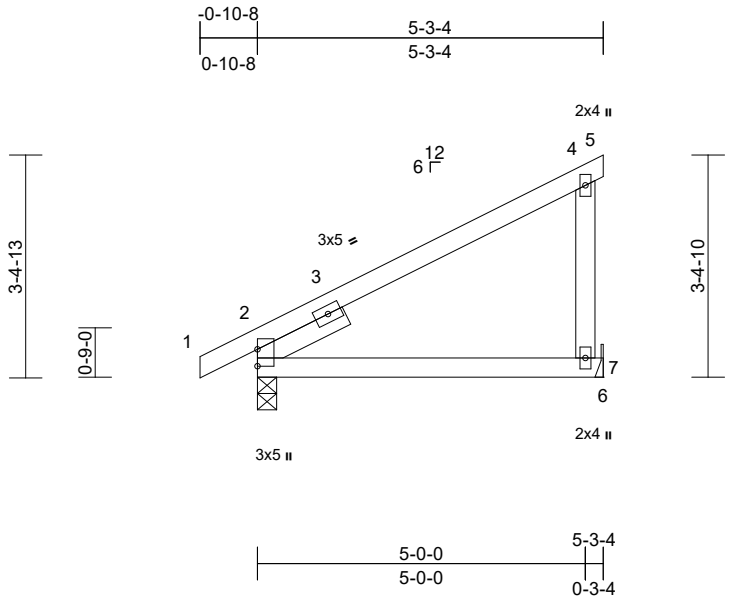

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	0.11	7-10	>566	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.09	7-10	>679	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.03	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 25 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 5-3-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 7= Mechanical
Max Horiz 2=110 (LC 14)
Max Uplift 2=-24 (LC 11), 7=-66 (LC 14)
Max Grav 2=345 (LC 21), 7=316 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-4=-174/209, 4-5=-12/0, 4-7=-232/167
BOT CHORD 2-7=-175/181, 6-7=0/0

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left exposed ; end vertical left exposed; 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 7.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	D02	Monopitch Supported Gable	1	1	Job Reference (optional)	I62998114

Carter Components (Sanford, NC), Sanford, NC - 27332,

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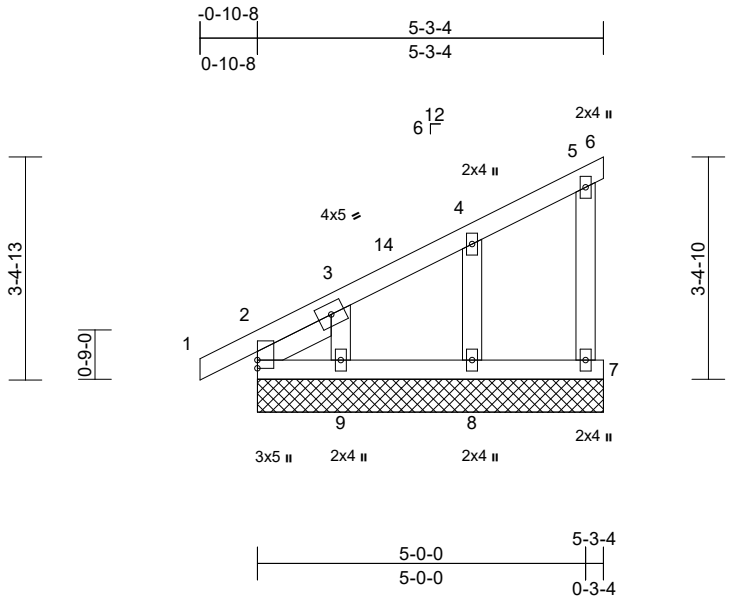

Scale = 1:35.1

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 28 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -- 1-3-13

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=5-3-4, 6=5-3-4, 7=5-3-4, 8=5-3-4, 9=5-3-4, 10=5-3-4
Max Horiz 2=110 (LC 13), 10=110 (LC 13)
Max Uplift 2=-6 (LC 10), 6=-9 (LC 21), 7=-20 (LC 14), 8=-41 (LC 14), 9=-61 (LC 14), 10=-6 (LC 10)
Max Grav 2=117 (LC 21), 6=8 (LC 14), 7=111 (LC 21), 8=234 (LC 21), 9=182 (LC 21), 10=117 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/23, 2-3=-65/49, 3-4=-69/108, 4-5=-57/74, 5-6=-15/8, 5-7=-98/68
BOT CHORD	2-9=-36/66, 8-9=-36/66, 7-8=-36/66
WEBS	4-8=-192/172, 3-9=-148/194

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 5-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 2, 9 lb uplift at joint 6, 20 lb uplift at joint 7, 41 lb uplift at joint 8, 61 lb uplift at joint 9 and 6 lb uplift at joint 2.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	D03	Monopitch Supported Gable	1	1	Job Reference (optional)	I62998115

Carter Components (Sanford, NC), Sanford, NC - 27332,

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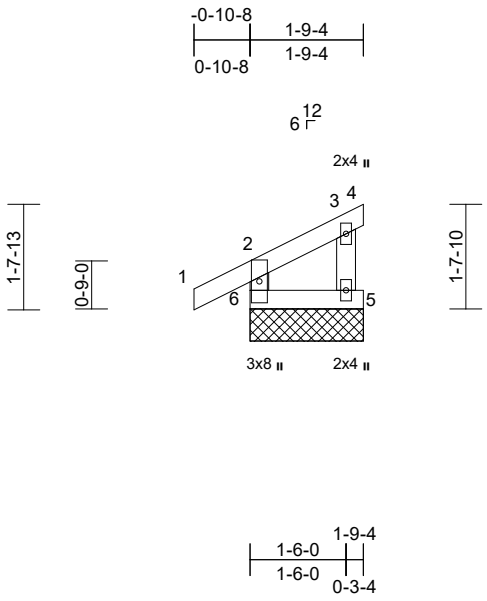

Scale = 1:36

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 9 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 1-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 4=1-9-4, 5=1-9-4, 6=1-9-4
Max Horiz 6=53 (LC 11)
Max Uplift 4=-8 (LC 14), 5=-19 (LC 11), 6=-23 (LC 14)
Max Grav 4=6 (LC 21), 5=55 (LC 21), 6=186 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-164/202, 1-2=0/38, 2-3=-32/26, 3-4=-15/3, 3-5=-52/48
BOT CHORD 5-6=-19/39

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 6, 8 lb uplift at joint 4 and 19 lb uplift at joint 5.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	D04	Monopitch	12	1	Job Reference (optional)	I62998116

Carter Components (Sanford, NC), Sanford, NC - 27332,

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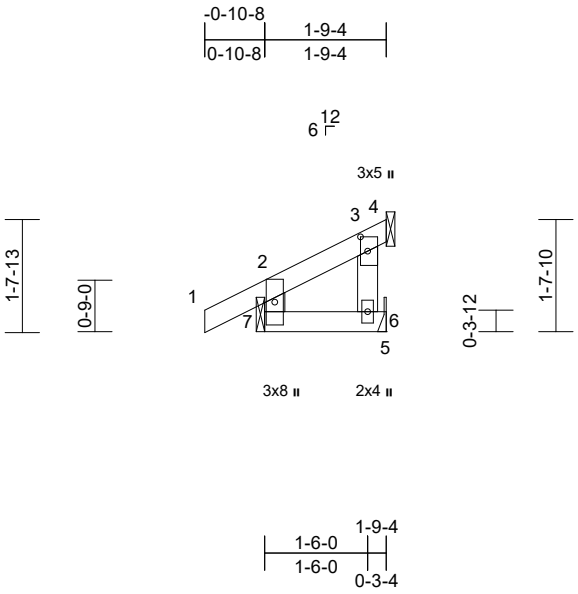

Scale = 1:33.6

Plate Offsets (X, Y): [3:0-2-8,0-1-4]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 9 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 1-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 5= Mechanical, 7= Mechanical
Max Horiz 5=52 (LC 11)
Max Uplift 3=-15 (LC 14), 5=-10 (LC 13), 7=-23 (LC 14)
Max Grav 3=75 (LC 21), 5=5 (LC 10), 7=183 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/38, 2-3=-32/21, 3-4=-10/0, 3-6=0/38, 2-7=-165/108
BOT CHORD 6-7=-25/41, 5-6=-55/52

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: , Joint 7 User Defined crushing capacity of 425 psi.
8) Refer to girder(s) for truss to truss connections.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 5.
11) One RT8A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 3. This connection is for uplift only and does not consider lateral forces.
12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F01	Floor	4	1	Job Reference (optional)	I62998117

Carter Components (Sanford, NC), Sanford, NC - 27332,

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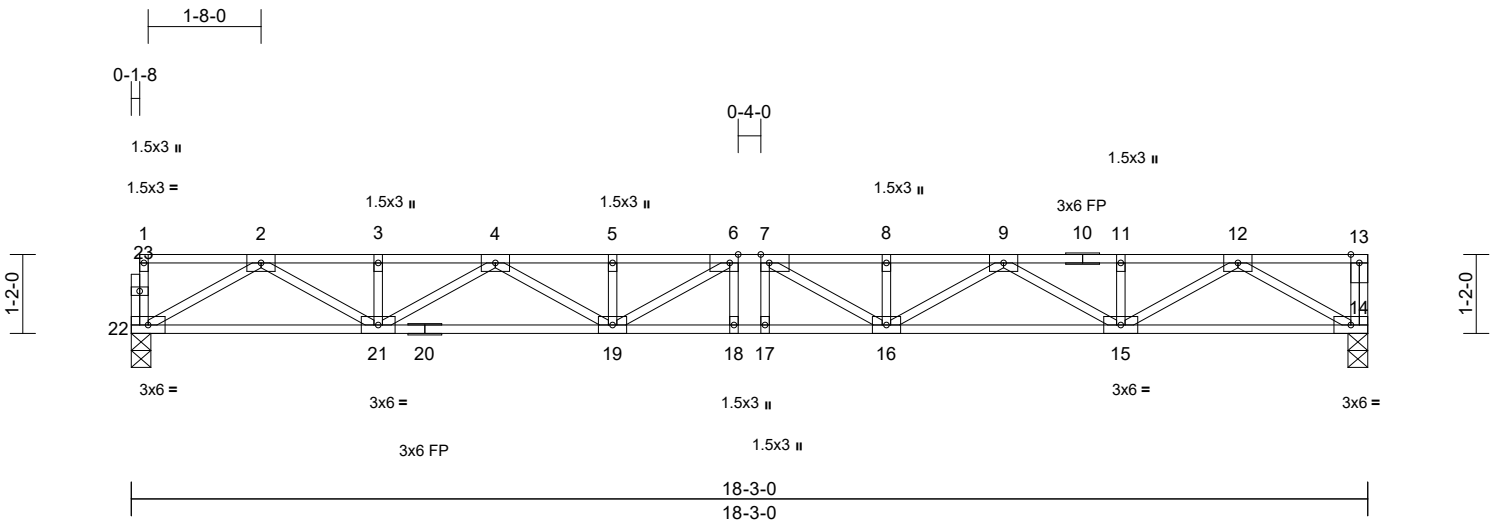

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Plate Offsets (X, Y): [6:0-1-8,Edge], [7:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.24	Vert(LL)	-0.24	17-18	>906	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.33	17-18	>659	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 96 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 (size) 14=0-3-8, 22=0-3-8
Max Grav 14=660 (LC 1), 22=656 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-22=-48/0, 13-14=-49/0, 1-2=-3/0, 2-3=-1808/0, 3-4=-1808/0, 4-5=-2715/0, 5-6=-2715/0, 6-7=-2848/0, 7-8=-2715/0, 8-9=-2715/0, 9-11=-1807/0, 11-12=-1807/0, 12-13=0/0
BOT CHORD 21-22=0/1031, 19-21=0/2357, 18-19=0/2848, 17-18=0/2848, 16-17=0/2848, 15-16=0/2357, 14-15=0/1032
WEBS 12-14=-1194/0, 2-22=-1189/0, 12-15=0/905, 2-21=0/907, 11-15=-111/0, 3-21=-112/0, 9-15=-642/0, 4-21=-641/0, 9-16=0/418, 4-19=0/418, 8-16=-134/0, 5-19=-134/0, 7-16=-331/114, 6-19=-331/114, 6-18=-72/83, 7-17=-72/82

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x5 MT20 unless otherwise indicated.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F02	Floor	3	1	Job Reference (optional)	I62998118

Carter Components (Sanford, NC), Sanford, NC - 27332,

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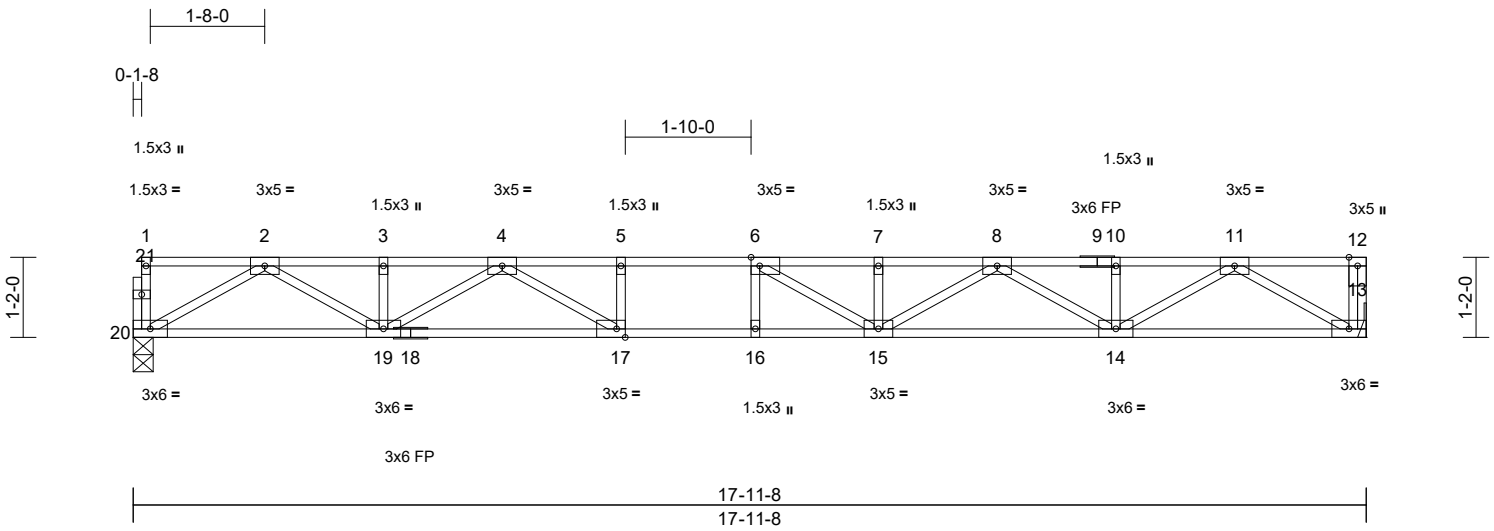

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Plate Offsets (X, Y): [6:0-1-8,Edge], [17:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.59	Vert(LL)	-0.25	15-16	>838	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	1.00	Vert(CT)	-0.35	15-16	>612	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.05	13	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 91 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 13= Mechanical, 20=0-3-8
Max Grav 13=649 (LC 1), 20=645 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-48/0, 12-13=-49/0, 1-2=-3/0, 2-3=-1768/0, 3-4=-1768/0, 4-5=-2702/0, 5-6=-2702/0, 6-7=-2656/0, 7-8=-2656/0, 8-10=-1771/0, 10-11=-1771/0, 11-12=0/0
BOT CHORD 19-20=0/1009, 17-19=0/2303, 16-17=0/2702, 15-16=0/2702, 14-15=0/2304, 13-14=0/1013
WEBS 11-13=-1172/0, 2-20=-1164/0, 11-14=0/884, 2-19=0/887, 10-14=-114/0, 3-19=-120/0, 8-14=-622/0, 4-19=-624/0, 8-15=0/411, 4-17=0/609, 7-15=-181/13, 5-17=-215/0, 6-15=-364/197, 6-16=-99/50

LOAD CASE(S) Standard

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x5 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
6) CAUTION, Do not erect truss backwards.

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F03	Floor Girder	1	1	Job Reference (optional)	I62998119

Carter Components (Sanford, NC), Sanford, NC - 27332,

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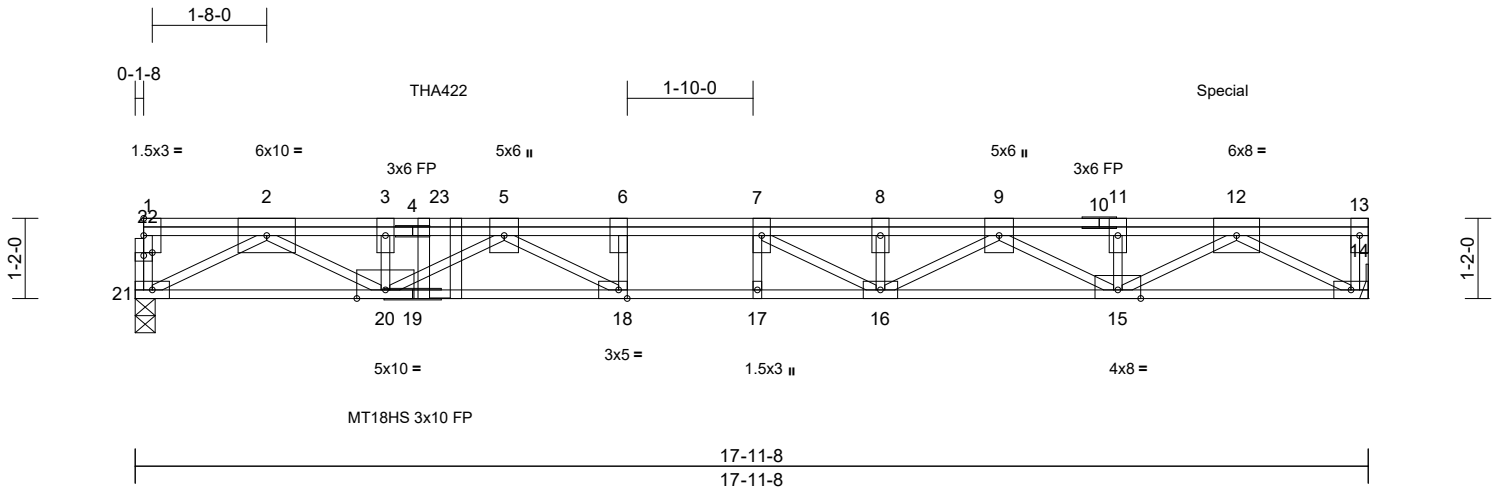

Scale = 1:33.6

Plate Offsets (X, Y): [18:0-1-8,Edge], [22:0-1-8,0-0-8]

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	0.40	Vert(LL)	-0.33	17-18	>653	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.97	Vert(CT)	-0.44	17-18	>481	360	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.98	Horz(CT)	0.09	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 115 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 14= Mechanical, 21=0-3-8
Max Grav 14=1049 (LC 1), 21=1255 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-96/0, 13-14=-89/0, 1-2=-6/0, 2-3=-3894/0, 3-5=-3894/0, 5-6=-5183/0, 6-7=-5183/0, 7-8=-4845/0, 8-9=-4845/0, 9-11=-3125/0, 11-12=-3125/0, 12-13=0/0
BOT CHORD 20-21=0/2097, 18-20=0/4834, 17-18=0/5183, 16-17=0/5183, 15-16=0/4098, 14-15=0/1730
WEBS 12-14=-1971/0, 2-21=-2383/0, 12-15=0/1603, 2-20=0/2064, 11-15=-203/0, 3-20=-460/0, 9-15=-1118/0, 5-20=-1081/0, 9-16=0/859, 5-18=-226/812, 8-16=-302/79, 6-18=-340/100, 7-16=-903/135, 7-17=-31/62

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x6 MT20 unless otherwise indicated.
4) Refer to girder(s) for truss to truss connections.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.
8) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 4-5-4 from the left end to connect truss(es) to front face of top chord.
9) Fill all nail holes where hanger is in contact with lumber.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 314 lb up at 15-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 14-21=-10, 1-13=-100
Concentrated Loads (lb)
Vert: 12=20 (F), 23=-383 (F)

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F04	Floor	3	1	Job Reference (optional)	I62998120

Carter Components (Sanford, NC), Sanford, NC - 27332,

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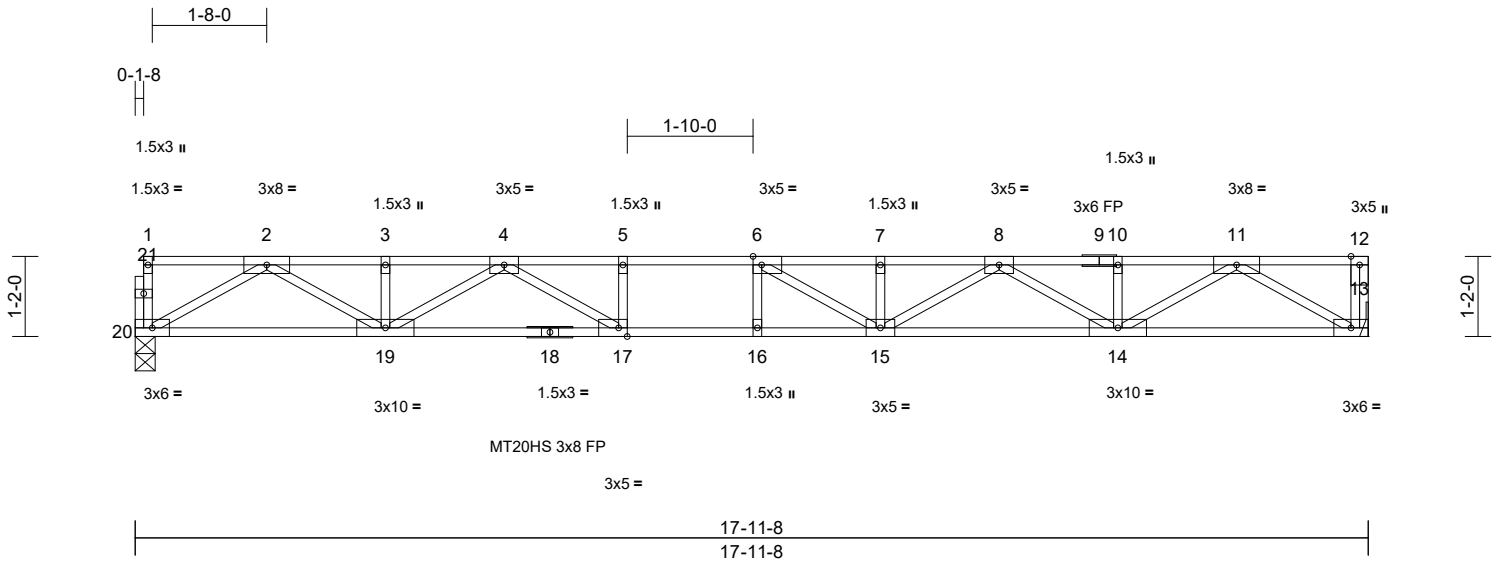

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Plate Offsets (X, Y): [6:0-1-8,Edge], [17:0-1-8,Edge]

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	0.82	Vert(LL)	-0.34	15-16	>629	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.95	Vert(CT)	-0.46	15-16	>459	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 91 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 18-13:2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 17-19.

REACTIONS (size) 13= Mechanical, 20=0-3-8
Max Grav 13=974 (LC 1), 20=968 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-72/0, 12-13=-73/0, 1-2=-4/0, 2-3=-2652/0, 3-4=-2652/0, 4-5=-4051/0, 5-6=-4051/0, 6-7=-3978/0, 7-8=-3978/0, 8-10=-2652/0, 10-11=-2652/0, 11-12=0/0
BOT CHORD 19-20=0/1514, 17-19=0/3459, 16-17=0/4051, 15-16=0/4051, 14-15=0/3458, 13-14=0/1521
WEBS 11-13=-1759/0, 2-20=-1746/0, 11-14=0/1321, 2-19=0/1329, 10-14=-165/0, 3-19=-177/0, 8-14=-941/0, 4-19=-942/0, 8-15=0/607, 4-17=0/897, 7-15=-252/17, 5-17=-293/0, 6-15=-551/295, 6-16=-179/87

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) The Fabrication Tolerance at joint 18 = 11%
5) Refer to girder(s) for truss to truss connections.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F05	Floor Girder	1	1	Job Reference (optional)	I62998121

Carter Components (Sanford, NC), Sanford, NC - 27332,

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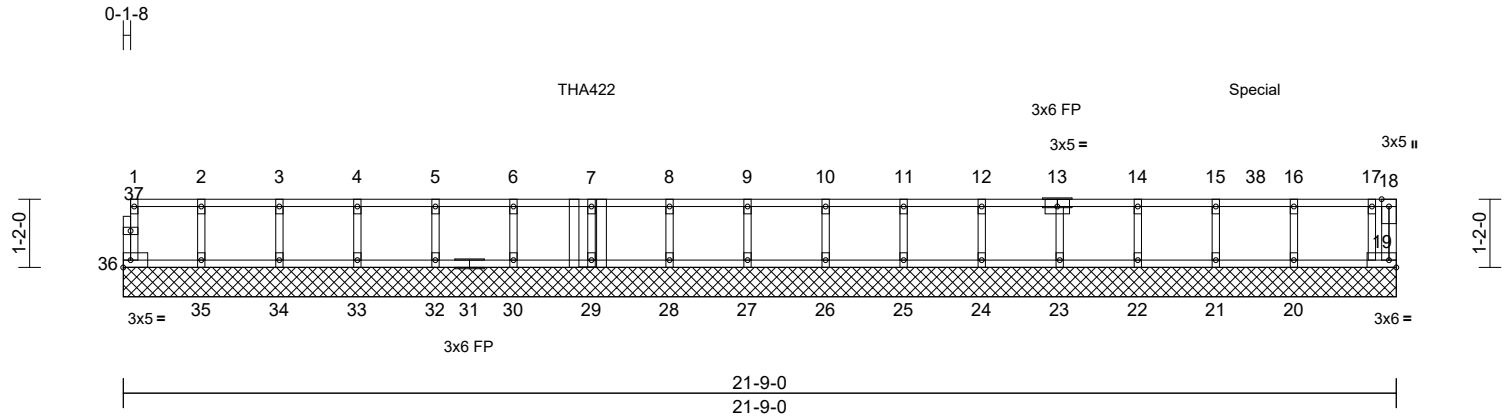

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.95	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.15	Horiz(TL)	0.00	19	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 92 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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

REACTIONS (size) 19=21-9-0, 20=21-9-0, 21=21-9-0, 22=21-9-0, 23=21-9-0, 24=21-9-0, 25=21-9-0, 26=21-9-0, 27=21-9-0, 28=21-9-0, 29=21-9-0, 30=21-9-0, 32=21-9-0, 33=21-9-0, 34=21-9-0, 35=21-9-0, 36=21-9-0
Max Uplift 20=-276 (LC 3), 21=-292 (LC 3)
Max Grav 19=153 (LC 3), 20=69 (LC 1), 21=45 (LC 1), 22=243 (LC 3), 23=141 (LC 1), 24=151 (LC 3), 25=147 (LC 1), 26=147 (LC 3), 27=146 (LC 3), 28=150 (LC 1), 29=633 (LC 1), 30=150 (LC 1), 32=147 (LC 3), 33=146 (LC 1), 34=157 (LC 3), 35=126 (LC 1), 36=86 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-36=-67/0, 18-19=0/69, 1-2=-37/0, 2-3=-37/0, 3-4=-37/0, 4-5=-37/0, 5-6=-37/0, 6-7=-37/0, 7-8=-37/0, 8-9=-37/0, 9-10=-37/0, 10-11=-37/0, 11-12=-37/0, 12-14=-37/0, 14-15=-33/0, 15-16=-33/0, 16-17=-33/0, 17-18=0/6
BOT CHORD 35-36=0/37, 34-35=0/37, 33-34=0/37, 32-33=0/37, 30-32=0/37, 29-30=0/37, 28-29=0/37, 27-28=0/37, 26-27=0/37, 25-26=0/37, 24-25=0/37, 23-24=0/37, 22-23=0/33, 21-22=0/33, 20-21=0/33, 19-20=0/33
WEBS 2-35=-122/0, 3-34=-138/0, 4-33=-133/0, 5-32=-133/0, 6-30=-136/0, 7-29=-619/0, 8-28=-136/0, 9-27=-133/0, 10-26=-134/0, 11-25=-133/0, 12-24=-138/0, 13-23=-127/0, 14-22=-228/0, 15-21=-35/300, 16-20=-46/308, 17-19=-231/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) N/A
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
9) CAUTION, Do not erect truss backwards.
10) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent at 7-11-4 from the left end to connect truss (es) to back face of top chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 739 lb up at 19-4-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 19-36=-10, 1-18=-100
Concentrated Loads (lb)
Vert: 7=-490 (B), 38=162 (B)

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F06	Floor Girder	1	1	Job Reference (optional)	I62998122

Carter Components (Sanford, NC), Sanford, NC - 27332,

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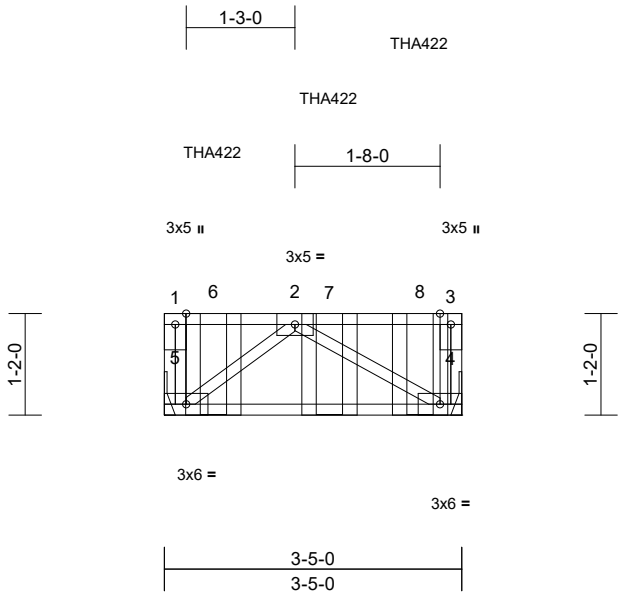

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.54	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.20	Vert(CT)	-0.02	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 21 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5= Mechanical
Max Grav 4=522 (LC 1), 5=483 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-5=-146/0, 3-4=-260/0, 1-2=0/0, 2-3=0/0
BOT CHORD 4-5=0/424
WEBS 2-4=-490/0, 2-5=-532/0

NOTES
1) Refer to girder(s) for truss to truss connections.
2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent spaced at 1-4-0 oc max. starting at 0-6-12 from the left end to 2-11-4 to connect truss(es) to front face of top chord.
5) Fill all nail holes where hanger is in contact with lumber.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 4-5=-10, 1-3=-100
Concentrated Loads (lb)
Vert: 6=-221 (F), 7=-210 (F), 8=-225 (F)

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC
23120148	F06A	Floor Girder	1	1	I62998123 Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332,

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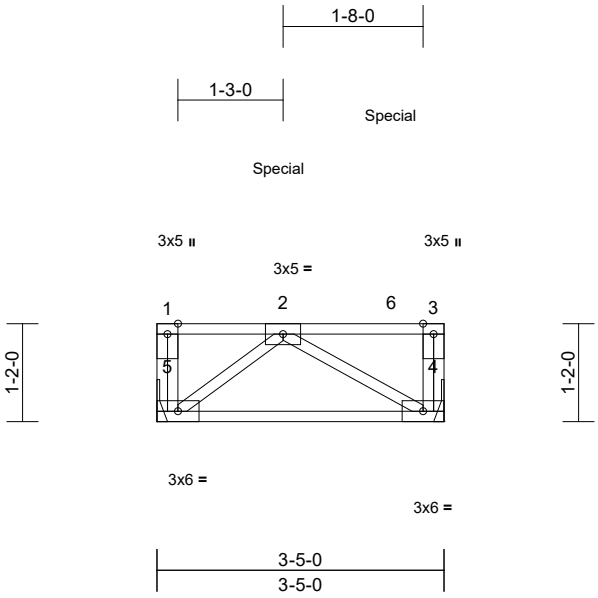

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.92	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.11	Vert(CT)	-0.02	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 21 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS (size) 4= Mechanical, 5= Mechanical
Max Uplift 4=-505 (LC 3), 5=-214 (LC 3)
Max Grav 4=9 (LC 1), 5=80 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-5=-92/0, 3-4=0/275, 1-2=0/0, 2-3=0/0
BOT CHORD 4-5=-424/10
WEBS 2-4=-11/491, 2-5=-12/532

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 214 lb uplift at joint 5 and 505 lb uplift at joint 4.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 538 lb up at 1-5-8, and 530 lb up at 2-9-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 4-5=-10, 1-3=-100
Concentrated Loads (lb)
Vert: 2=130 (B), 6=129 (B)

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F07	Floor	3	1	Job Reference (optional)	I62998124

Carter Components (Sanford, NC), Sanford, NC - 27332,

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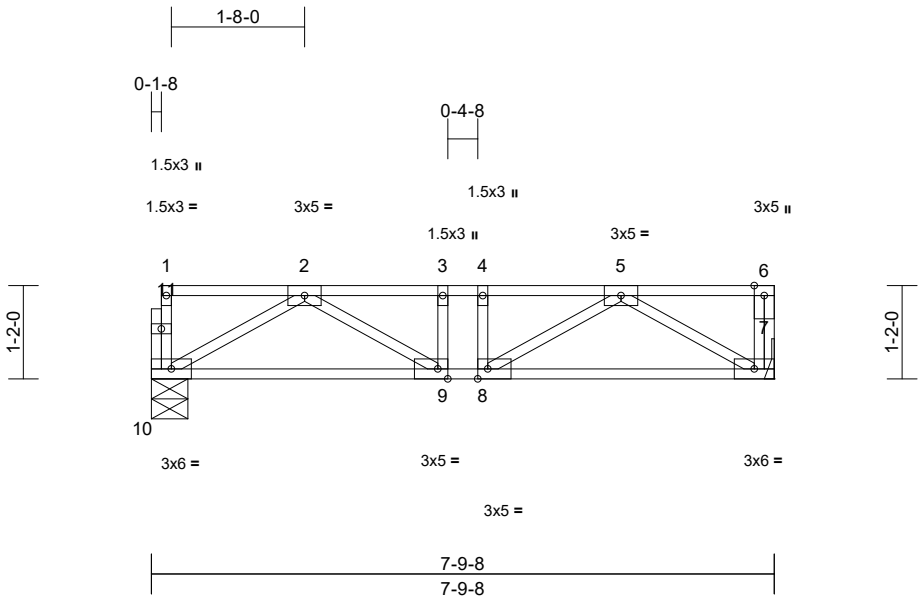

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Plate Offsets (X, Y): [8:0-1-8,Edge], [9:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.12	Vert(LL)	-0.01	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.17	Vert(CT)	-0.02	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 42 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 (size) 7= Mechanical, 10=0-5-8
Max Grav 7=277 (LC 1), 10=272 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-46/0, 6-7=-48/0, 1-2=-3/0, 2-3=-512/0, 3-4=-512/0, 4-5=-512/0, 5-6=0/0
BOT CHORD 9-10=0/376, 8-9=0/512, 7-8=0/377
WEBS 5-7=-436/0, 2-10=-431/0, 5-8=0/182, 2-9=0/182, 3-9=-67/0, 4-8=-66/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F08	Floor	4	1	Job Reference (optional)	I62998125

Carter Components (Sanford, NC), Sanford, NC - 27332,

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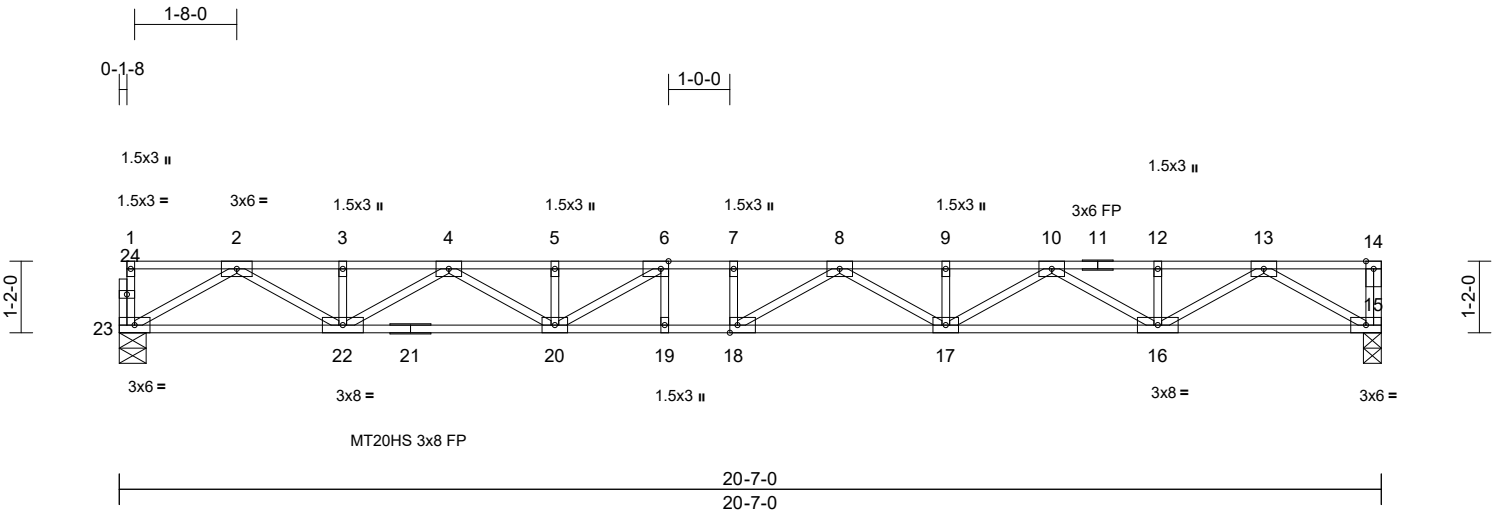

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Plate Offsets (X, Y): [6:0-1-8,Edge], [18:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.43	Vert(LL)	-0.37	17-18	>660	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.51	17-18	>476	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.07	15	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 106 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 21-15:2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 (size) 15=0-3-8, 23=0-5-4
Max Grav 15=746 (LC 1), 23=741 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-23=-48/0, 14-15=-49/0, 1-2=-3/0, 2-3=-2096/0, 3-4=-2096/0, 4-5=-3276/0, 5-6=-3276/0, 6-7=-3601/0, 7-8=-3601/0, 8-9=-3286/0, 9-10=-3286/0, 10-12=-2093/0, 12-13=-2093/0, 13-14=0/0
BOT CHORD 22-23=0/1178, 20-22=0/2786, 19-20=0/3601, 18-19=0/3601, 17-18=0/3560, 16-17=0/2790, 15-16=0/1178
WEBS 13-15=-1363/0, 2-23=-1359/0, 13-16=0/1067, 2-22=0/1072, 12-16=-107/0, 3-22=-112/0, 10-16=-814/0, 4-22=-806/0, 10-17=0/579, 4-20=0/572, 9-17=-105/0, 5-20=-141/24, 8-17=-331/0, 6-20=-575/28, 8-18=-209/330, 6-19=-56/117, 7-18=-103/33

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x5 MT20 unless otherwise indicated.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	I62998126
23120148	F09	Floor	9	1	Job Reference (optional)	

Carter Components (Sanford, NC), Sanford, NC - 27332,

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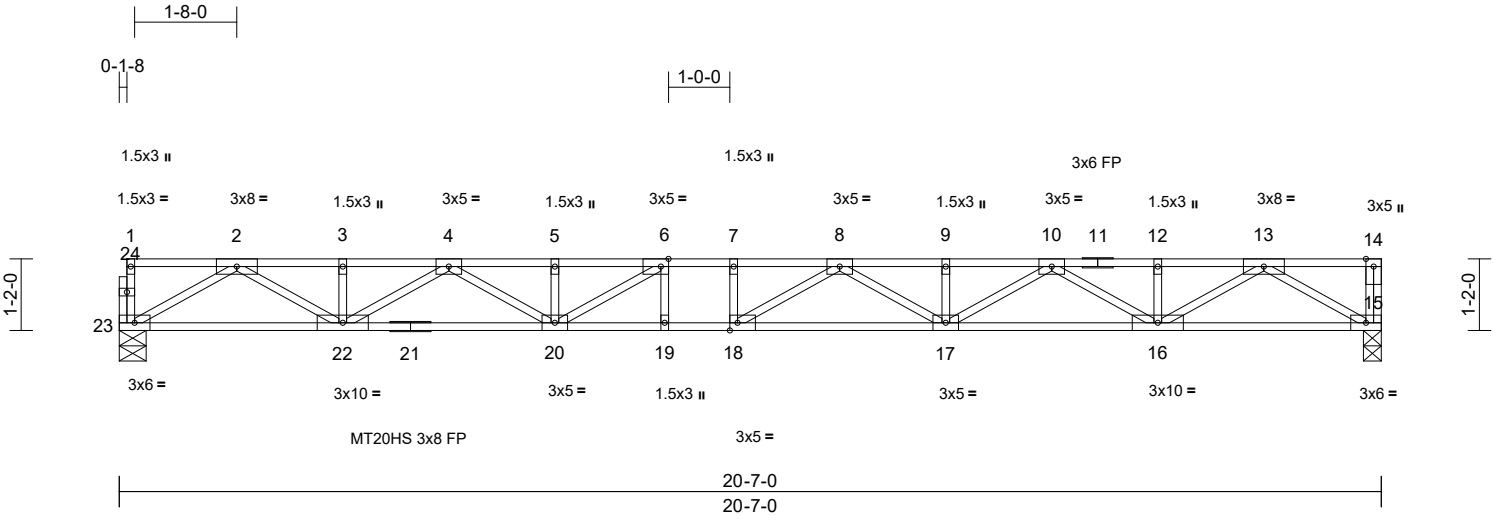

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Plate Offsets (X, Y): [6:0-1-8,Edge], [18:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.55	Vert(LL)	-0.44	17-18	>550	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.93	Vert(CT)	-0.61	17-18	>397	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.09	15	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 106 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 21-15:2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-3-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 20-22.

REACTIONS (size) 15=0-3-8, 23=0-5-4
Max Grav 15=894 (LC 1), 23=889 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-23=-57/0, 14-15=-59/0, 1-2=-3/0, 2-3=-2513/0, 3-4=-2513/0, 4-5=-3929/0, 5-6=-3929/0, 6-7=-4318/0, 7-8=-4318/0, 8-9=-3940/0, 9-10=-3940/0, 10-12=-2510/0, 12-13=-2510/0, 13-14=0/0
BOT CHORD 22-23=0/1412, 20-22=0/3342, 19-20=0/4318, 18-19=0/4318, 17-18=0/4270, 16-17=0/3346, 15-16=0/1413
WEBS 13-15=-1635/0, 2-23=-1630/0, 13-16=0/1280, 2-22=0/1285, 12-16=-128/0, 3-22=-134/0, 10-16=-976/0, 4-22=-967/0, 10-17=0/694, 4-20=0/686, 9-17=-126/0, 5-20=-169/29, 8-17=-397/0, 6-20=-690/33, 8-18=-250/395, 6-19=-67/140, 7-18=-123/40

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F10	Floor	3	1	Job Reference (optional)	I62998127

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Jan 11 14:53:47 Page: 1
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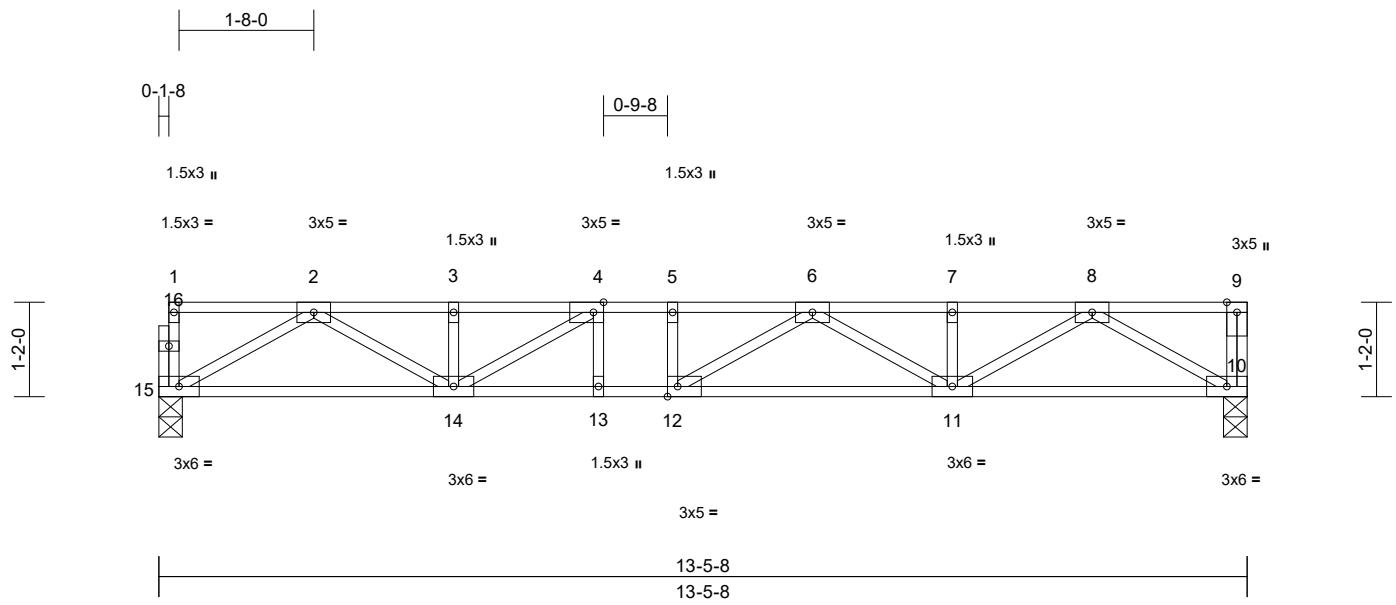

Scale = 1:28.5

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

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	0.36	Vert(LL)	-0.12	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.71	Vert(CT)	-0.18	11-12	>905	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.04	10	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 70 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 (size) 10=0-3-8, 15=0-3-8
Max Grav 10=726 (LC 1), 15=720 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-71/0, 9-10=-73/0, 1-2=-4/0, 2-3=-1817/0, 3-4=-1817/0, 4-5=-2265/0, 5-6=-2265/0, 6-7=-1826/0, 7-8=-1826/0, 8-9=0/0
BOT CHORD 14-15=0/1093, 13-14=0/2265, 12-13=0/2265, 11-12=0/2217, 10-11=0/1099
WEBS 8-10=-1272/0, 2-15=-1260/0, 8-11=0/848, 2-14=0/844, 7-11=-156/0, 3-14=-190/11, 6-11=-457/0, 4-14=-619/0, 6-12=-156/296, 4-13=-42/112, 5-12=-91/13

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F11	Floor	5	1	Job Reference (optional)	I62998128

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Jan 11 14:53:48 Page: 1
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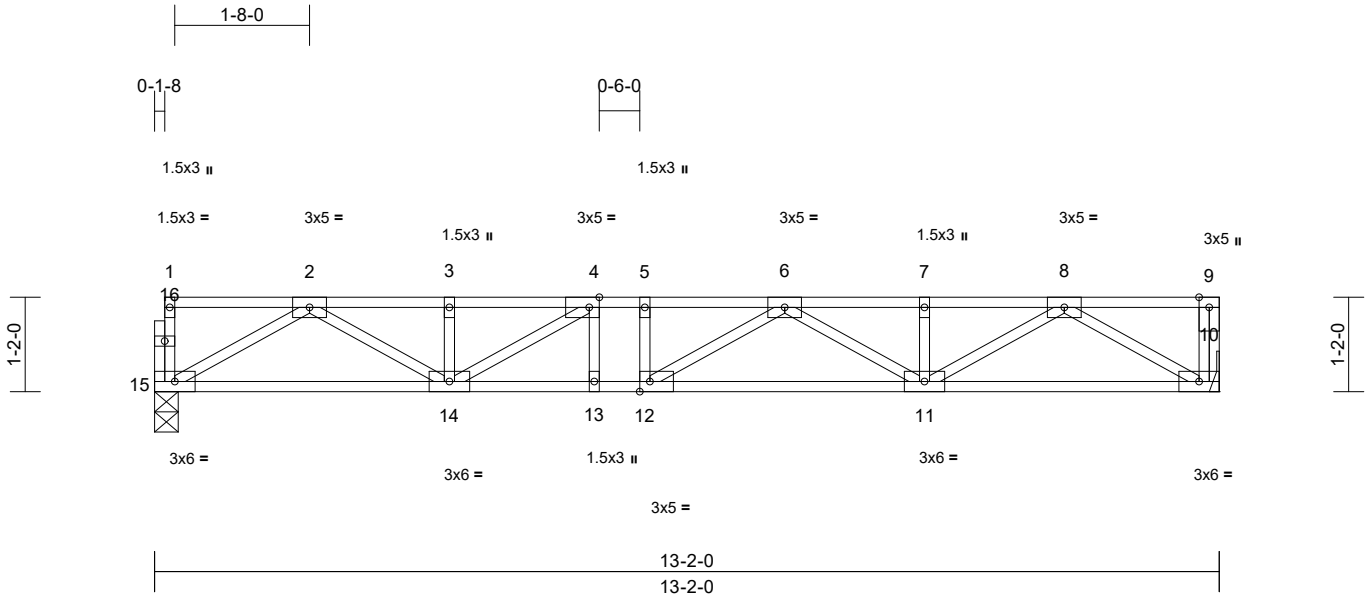

Scale = 1:28.5

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

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	0.30	Vert(LL)	-0.11	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.16	11-12	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 69 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 (size) 10= Mechanical, 15=0-3-8
Max Grav 10=710 (LC 1), 15=704 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-71/0, 9-10=-73/0, 1-2=-4/0, 2-3=-1766/0, 3-4=-1766/0, 4-5=-2170/0, 5-6=-2170/0, 6-7=-1771/0, 7-8=-1771/0, 8-9=0/0
BOT CHORD 14-15=0/1066, 13-14=0/2170, 12-13=0/2170, 11-12=0/2137, 10-11=0/1071
WEBS 8-10=-1239/0, 2-15=-1228/0, 8-11=0/817, 2-14=0/816, 7-11=-158/0, 3-14=-186/0, 6-11=-427/0, 4-14=-555/0, 6-12=-165/263, 4-13=-51/103, 5-12=-67/18

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F13	Floor	2	1	Job Reference (optional)	I62998129

Carter Components (Sanford, NC), Sanford, NC - 27332,

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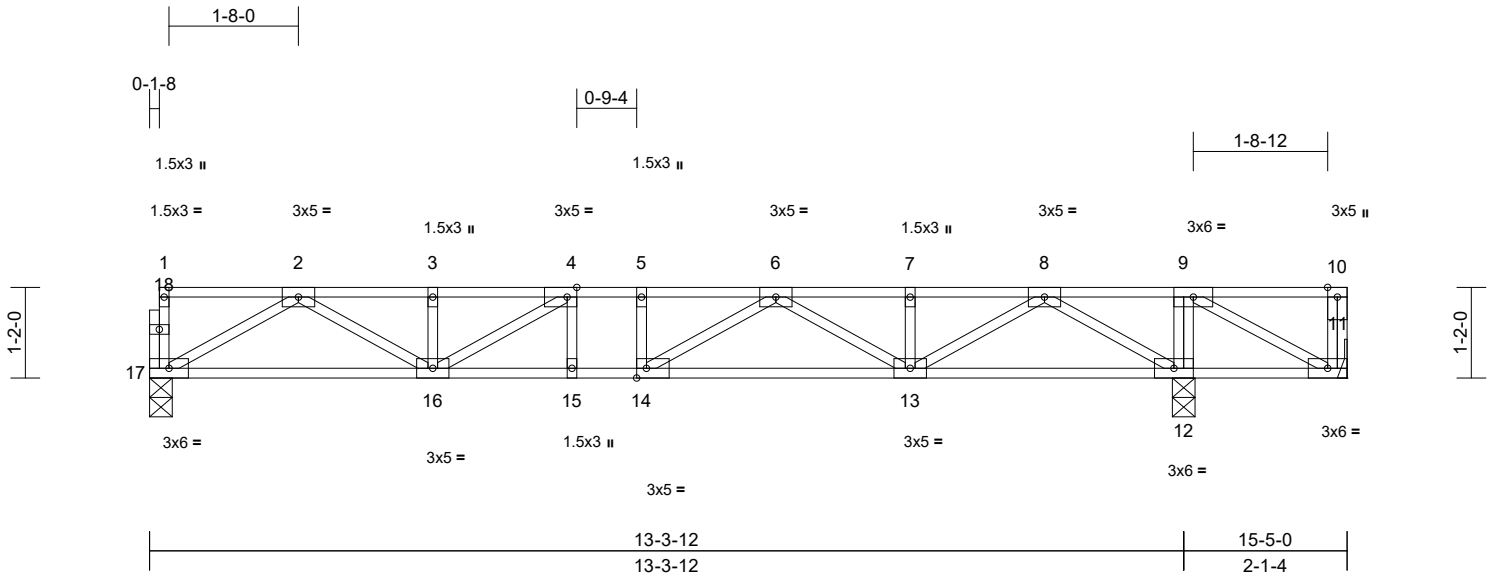

Scale = 1:29.7

Plate Offsets (X, Y): [4:0-1-8,Edge], [14:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.41	Vert(LL)	-0.05	15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.33	Vert(CT)	-0.07	13-14	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.01	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 82 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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

REACTIONS (size) 11= Mechanical, 12=0-3-8, 17=0-3-8
Max Uplift 11=-471 (LC 3)
Max Grav 11=-67 (LC 4), 12=1124 (LC 1), 17=406 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-17=-48/0, 10-11=-55/0, 1-2=-3/0, 2-3=-968/0, 3-4=-968/0, 4-5=-1098/0, 5-6=-1098/0, 6-7=-531/0, 7-8=-531/0, 8-9=0/901, 9-10=0/0
BOT CHORD 16-17=0/602, 15-16=0/1098, 14-15=0/1098, 13-14=0/914, 12-13=-88/0, 11-12=-901/0
WEBS 9-12=-625/0, 8-12=-958/0, 2-17=-693/0, 8-13=0/712, 2-16=0/427, 7-13=-116/0, 3-16=-135/0, 6-13=-447/0, 4-16=-247/18, 6-14=0/288, 4-15=-51/38, 5-14=-88/0, 9-11=0/1019

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x5 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 471 lb uplift at joint 11.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	I62998130
23120148	F14	Floor	2	1	Job Reference (optional)	

Carter Components (Sanford, NC), Sanford, NC - 27332,

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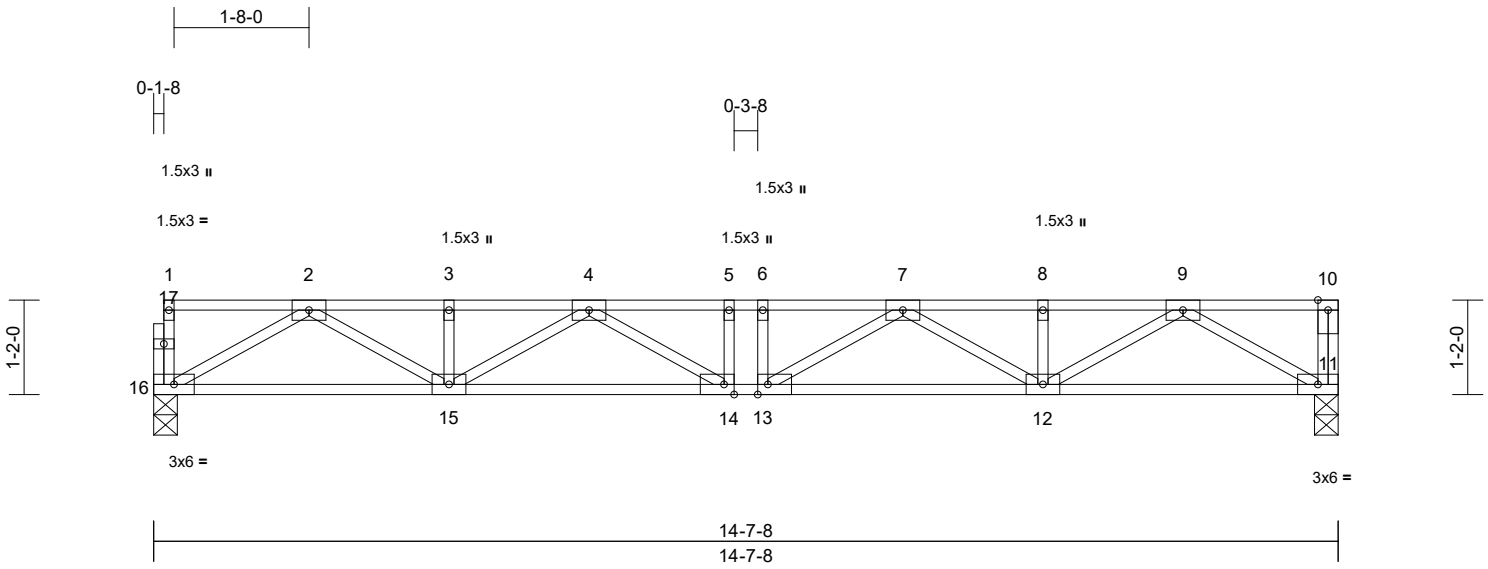

Scale = 1:28.4

Plate Offsets (X, Y): [13:0-1-8,Edge], [14:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.15	Vert(LL)	-0.10	14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.49	Vert(CT)	-0.14	14	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 77 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 (size) 11=0-3-8, 16=0-3-8
Max Grav 11=527 (LC 1), 16=523 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-47/0, 10-11=-49/0, 1-2=-3/0, 2-3=-1360/0, 3-4=-1360/0, 4-5=-1823/0, 5-6=-1823/0, 6-7=-1823/0, 7-8=-1360/0, 8-9=-1360/0, 9-10=0/0
BOT CHORD 15-16=0/803, 14-15=0/1692, 13-14=0/1823, 12-13=0/1692, 11-12=0/805
WEBS 9-11=-931/0, 2-16=-926/0, 9-12=0/648, 2-15=0/650, 8-12=-108/0, 3-15=-109/0, 7-12=-388/0, 4-15=-387/0, 7-13=-48/271, 4-14=-48/271, 5-14=-83/0, 6-13=-83/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x5 MT20 unless otherwise indicated.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	F15	Floor	8	1	Job Reference (optional)	I62998131

Carter Components (Sanford, NC), Sanford, NC - 27332,

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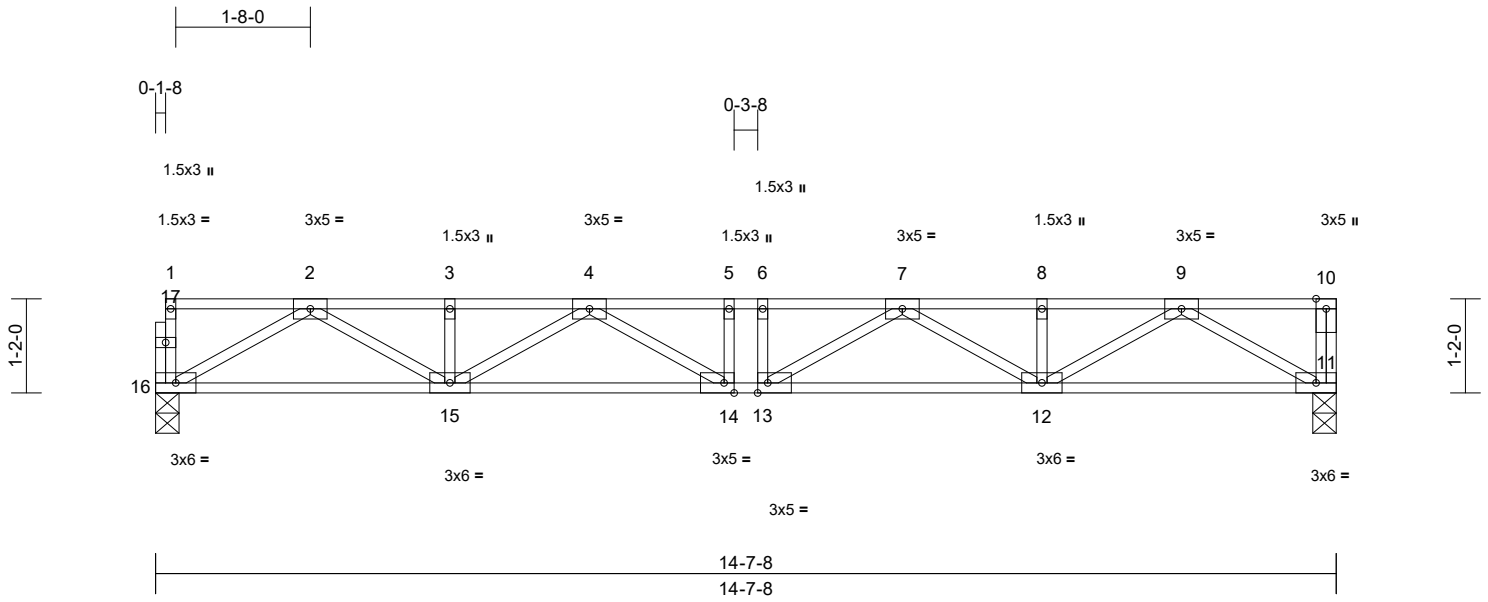
Page: 1



Scale = 1:28.5

Plate Offsets (X, Y): [13:0-1-8,Edge], [14:0-1-8,Edge]

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	0.27	Vert(LL)	-0.15	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.74	Vert(CT)	-0.21	14	>823	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.04	11	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 77 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 (size) 11=0-3-8, 16=0-3-8
Max Grav 11=791 (LC 1), 16=784 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-71/0, 10-11=-73/0, 1-2=-4/0, 2-3=-2040/0, 3-4=-2040/0, 4-5=-2734/0, 5-6=-2734/0, 6-7=-2734/0, 7-8=-2040/0, 8-9=-2040/0, 9-10=0/0
BOT CHORD 15-16=0/1205, 14-15=0/2538, 13-14=0/2734, 12-13=0/2538, 11-12=0/1207
WEBS 9-11=-1396/0, 2-16=-1389/0, 9-12=0/972, 2-15=0/975, 8-12=-163/0, 3-15=-164/0, 7-12=-582/0, 4-15=-581/0, 7-13=-72/406, 4-14=-72/406, 5-14=-125/0, 6-13=-125/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	FW03	Floor Supported Gable	1	1	Job Reference (optional)	I62998132

Carter Components (Sanford, NC), Sanford, NC - 27332,

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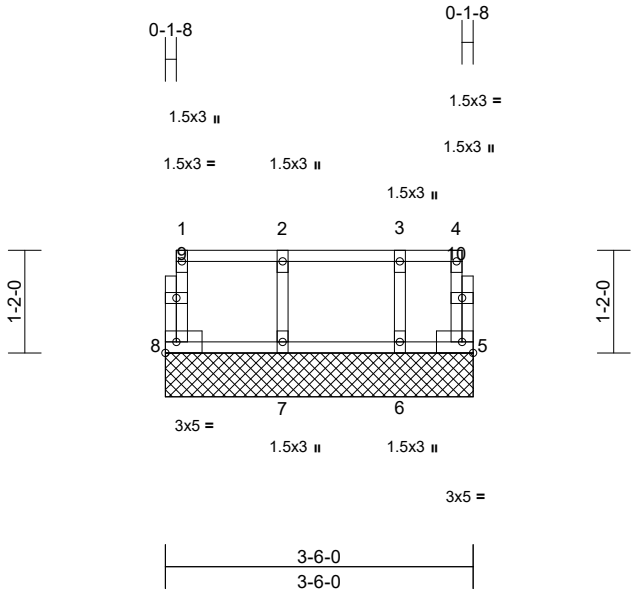

Scale = 1:26.2

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 18 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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

REACTIONS (size) 5=3-6-0, 6=3-6-0, 7=3-6-0, 8=3-6-0
Max Grav 5=18 (LC 1), 6=75 (LC 1), 7=102 (LC 1), 8=34 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-32/0, 4-5=-14/0, 1-2=-4/0, 2-3=-4/0, 3-4=-4/0
BOT CHORD 7-8=0/4, 6-7=0/4, 5-6=0/4
WEBS 2-7=-92/0, 3-6=-72/0

NOTES
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	FW13	Floor Supported Gable	1	1	Job Reference (optional)	I62998133

Carter Components (Sanford, NC), Sanford, NC - 27332,

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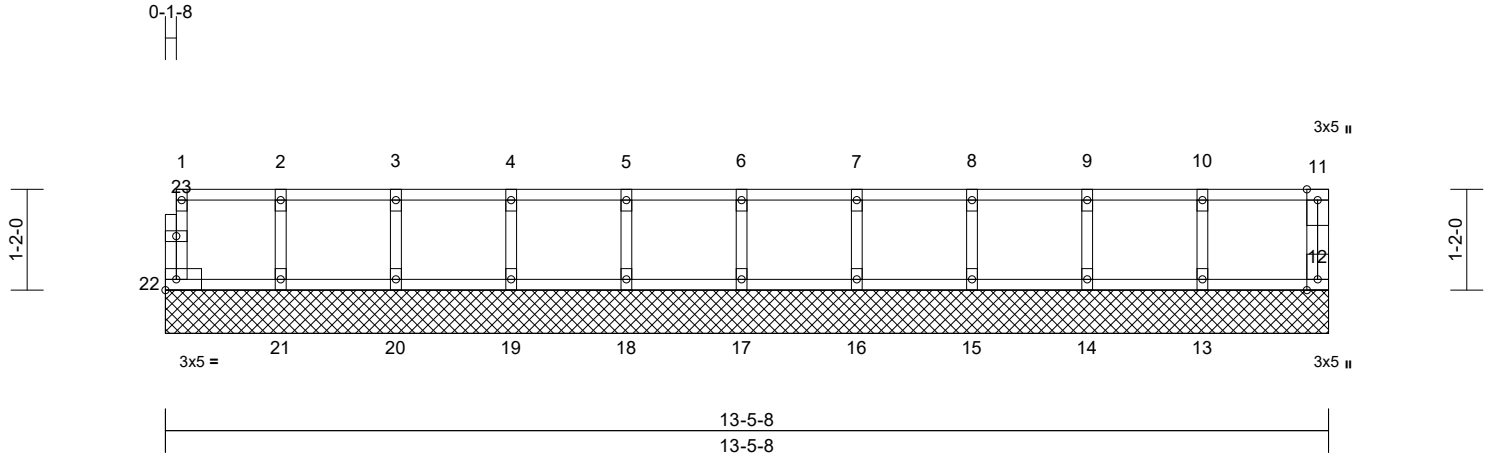

Scale = 1:26.7

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 57 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 (size) 12=13-5-8, 13=13-5-8, 14=13-5-8, 15=13-5-8, 16=13-5-8, 17=13-5-8, 18=13-5-8, 19=13-5-8, 20=13-5-8, 21=13-5-8, 22=13-5-8
Max Grav 12=70 (LC 1), 13=151 (LC 1), 14=146 (LC 1), 15=147 (LC 1), 16=147 (LC 1), 17=147 (LC 1), 18=147 (LC 1), 19=146 (LC 1), 20=148 (LC 1), 21=140 (LC 1), 22=58 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-22=-52/0, 11-12=-64/0, 1-2=-12/0, 2-3=-12/0, 3-4=-12/0, 4-5=-12/0, 5-6=-12/0, 6-7=-12/0, 7-8=-12/0, 8-9=-12/0, 9-10=-12/0, 10-11=-12/0
BOT CHORD 21-22=0/12, 20-21=0/12, 19-20=0/12, 18-19=0/12, 17-18=0/12, 16-17=0/12, 15-16=0/12, 14-15=0/12, 13-14=0/12, 12-13=0/12
WEBS 2-21=-129/0, 3-20=-135/0, 4-19=-133/0, 5-18=-133/0, 6-17=-133/0, 7-16=-133/0, 8-15=-134/0, 9-14=-132/0, 10-13=-137/0

NOTES
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	FW14	Floor	1	1	Job Reference (optional)	I62998134

Carter Components (Sanford, NC), Sanford, NC - 27332,

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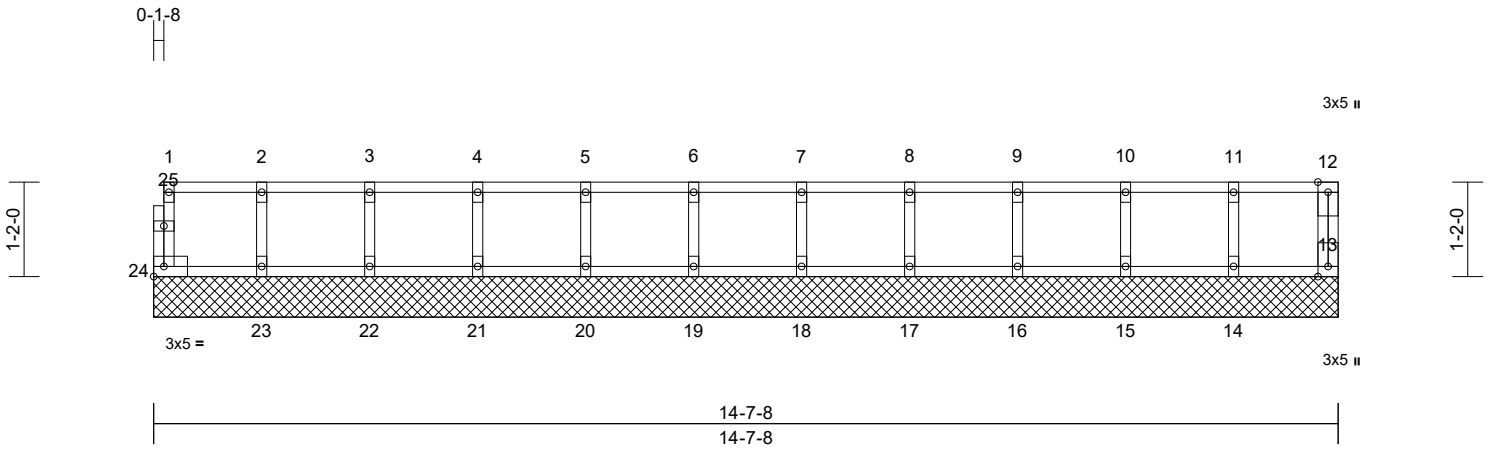

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	13	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 62 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 (size) 13=14-7-8, 14=14-7-8, 15=14-7-8, 16=14-7-8, 17=14-7-8, 18=14-7-8, 19=14-7-8, 20=14-7-8, 21=14-7-8, 22=14-7-8, 23=14-7-8, 24=14-7-8
Max Grav 13=60 (LC 1), 14=140 (LC 1), 15=148 (LC 1), 16=146 (LC 1), 17=147 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=146 (LC 1), 22=148 (LC 1), 23=143 (LC 1), 24=56 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-24=-51/0, 12-13=-54/0, 1-2=-10/0, 2-3=-10/0, 3-4=-10/0, 4-5=-10/0, 5-6=-10/0, 6-7=-10/0, 7-8=-10/0, 8-9=-10/0, 9-10=-10/0, 10-11=-10/0, 11-12=-10/0
BOT CHORD 23-24=0/10, 22-23=0/10, 21-22=0/10, 20-21=0/10, 19-20=0/10, 18-19=0/10, 17-18=0/10, 16-17=0/10, 15-16=0/10, 14-15=0/10, 13-14=0/10
WEBS 2-23=-130/0, 3-22=-134/0, 4-21=-133/0, 5-20=-133/0, 6-19=-133/0, 7-18=-133/0, 8-17=-133/0, 9-16=-133/0, 10-15=-135/0, 11-14=-128/0

NOTES
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	FW17	Floor Supported Gable	1	1	Job Reference (optional)	I62998135

Carter Components (Sanford, NC), Sanford, NC - 27332,

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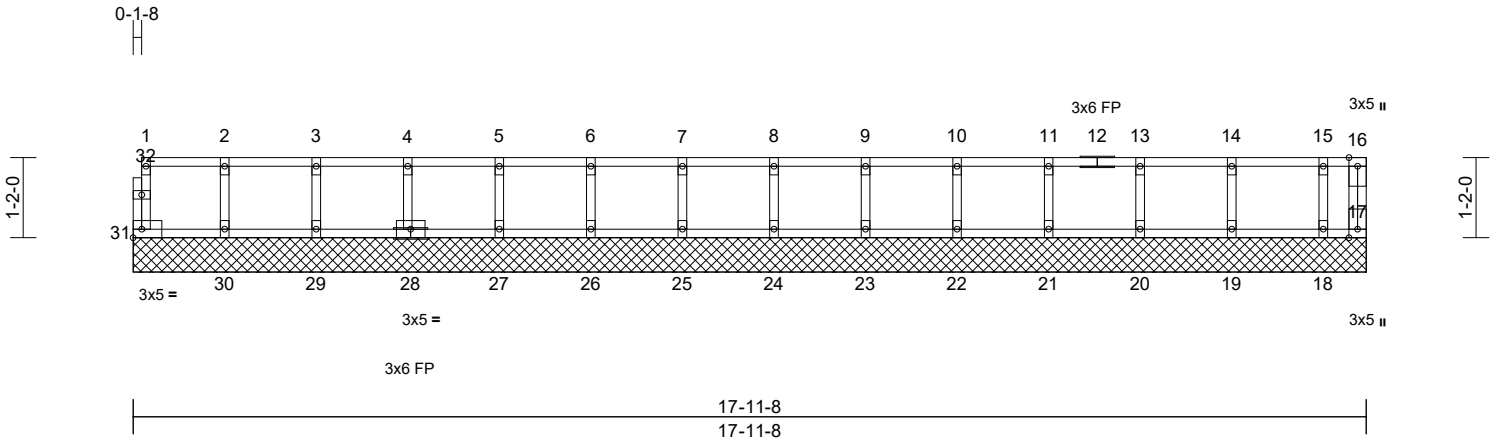

Scale = 1:33.6

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 76 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 (size) 17=17-11-8, 18=17-11-8, 19=17-11-8, 20=17-11-8, 21=17-11-8, 22=17-11-8, 23=17-11-8, 24=17-11-8, 25=17-11-8, 26=17-11-8, 27=17-11-8, 28=17-11-8, 29=17-11-8, 30=17-11-8, 31=17-11-8
Max Grav 17=7 (LC 1), 18=75 (LC 1), 19=102 (LC 1), 20=97 (LC 1), 21=98 (LC 1), 22=98 (LC 1), 23=98 (LC 1), 24=98 (LC 1), 25=98 (LC 1), 26=98 (LC 1), 27=98 (LC 1), 28=98 (LC 1), 29=98 (LC 1), 30=97 (LC 1), 31=36 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-31=-33/0, 16-17=-4/0, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-2/0, 5-6=-2/0, 6-7=-2/0, 7-8=-2/0, 8-9=-2/0, 9-10=-2/0, 10-11=-2/0, 11-13=-2/0, 13-14=-2/0, 14-15=-2/0, 15-16=-2/0
BOT CHORD 30-31=0/6, 29-30=0/6, 27-29=0/6, 26-27=0/2, 25-26=0/2, 24-25=0/2, 23-24=0/2, 22-23=0/2, 21-22=0/2, 20-21=0/2, 19-20=0/2, 18-19=0/2, 17-18=0/2
WEBS 2-30=-87/0, 3-29=-89/0, 4-28=-89/0, 5-27=-89/0, 6-26=-89/0, 7-25=-89/0, 8-24=-89/0, 9-23=-89/0, 10-22=-89/0, 11-21=-89/0, 13-20=-88/0, 14-19=-92/0, 15-18=-71/0

NOTES
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	FW20	Floor Supported Gable	1	1	Job Reference (optional)	I62998136

Carter Components (Sanford, NC), Sanford, NC - 27332,

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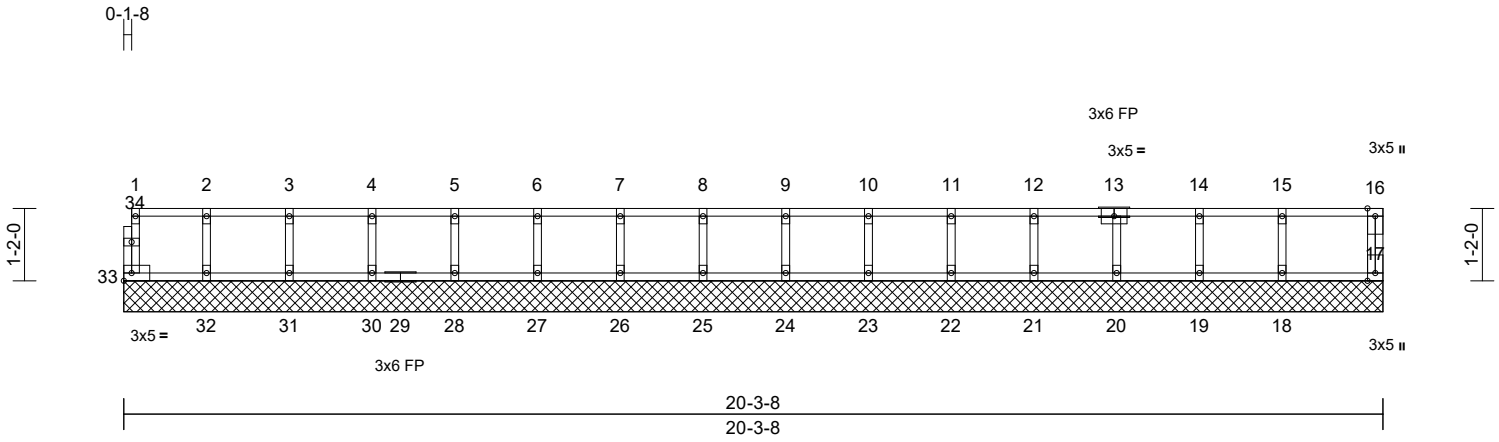

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 84 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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 (size) 17=20-3-8, 18=20-3-8, 19=20-3-8, 20=20-3-8, 21=20-3-8, 22=20-3-8, 23=20-3-8, 24=20-3-8, 25=20-3-8, 26=20-3-8, 27=20-3-8, 28=20-3-8, 30=20-3-8, 31=20-3-8, 32=20-3-8, 33=20-3-8

Max Grav 17=61 (LC 1), 18=132 (LC 1), 19=116 (LC 1), 20=118 (LC 1), 21=115 (LC 1), 22=118 (LC 1), 23=117 (LC 1), 24=117 (LC 1), 25=117 (LC 1), 26=117 (LC 1), 27=117 (LC 1), 28=117 (LC 1), 30=117 (LC 1), 31=120 (LC 1), 32=107 (LC 1), 33=51 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-33=-44/0, 16-17=-57/0, 1-2=-13/0, 2-3=-13/0, 3-4=-13/0, 4-5=-13/0, 5-6=-13/0, 6-7=-13/0, 7-8=-13/0, 8-9=-13/0, 9-10=-13/0, 10-11=-13/0, 11-12=-13/0, 12-14=-13/0, 14-15=-9/0, 15-16=-9/0
BOT CHORD	32-33=0/13, 31-32=0/13, 30-31=0/13, 28-30=0/13, 27-28=0/13, 26-27=0/13, 25-26=0/13, 24-25=0/13, 23-24=0/13, 22-23=0/13, 21-22=0/13, 20-21=0/13, 19-20=0/9, 18-19=0/9, 17-18=0/9
WEBS	2-32=-101/0, 3-31=-108/0, 4-30=-106/0, 5-28=-107/0, 6-27=-107/0, 7-26=-107/0, 8-25=-107/0, 9-24=-107/0, 10-23=-106/0, 11-22=-107/0, 12-21=-104/0, 13-20=-107/0, 14-19=-106/0, 15-18=-118/0

NOTES

1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	I62998137
23120148	V1	Valley	1	1	Job Reference (optional)	

Carter Components (Sanford, NC), Sanford, NC - 27332,

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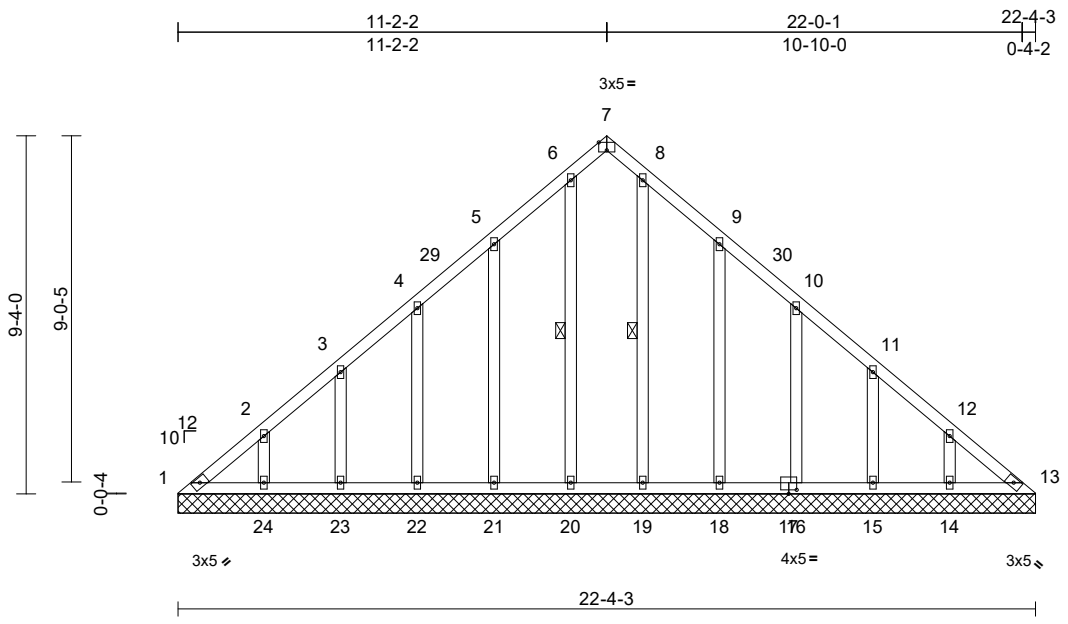

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Plate Offsets (X, Y): [7:0-2-8,Edge], [17:0-2-8,0-1-4]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.01	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 145 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.
WEBS 1 Row at midpt 6-20, 8-19

REACTIONS (size) 1=22-4-3, 13=22-4-3, 14=22-4-3, 15=22-4-3, 16=22-4-3, 18=22-4-3, 19=22-4-3, 20=22-4-3, 21=22-4-3, 22=22-4-3, 23=22-4-3, 24=22-4-3
Max Horiz 1=208 (LC 11)
Max Uplift 1=-47 (LC 12), 13=-8 (LC 13), 14=-39 (LC 15), 15=-84 (LC 15), 16=-68 (LC 15), 18=-97 (LC 15), 20=-2 (LC 11), 21=-92 (LC 14), 22=-69 (LC 14), 23=-81 (LC 14), 24=-49 (LC 14)
Max Grav 1=143 (LC 14), 13=119 (LC 26), 14=192 (LC 21), 15=162 (LC 24), 16=170 (LC 21), 18=247 (LC 21), 19=209 (LC 21), 20=209 (LC 20), 21=247 (LC 20), 22=170 (LC 20), 23=159 (LC 23), 24=200 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-271/164, 2-3=-210/134, 3-4=-130/107, 4-5=-94/79, 5-6=-87/109, 6-7=-66/82, 7-8=-66/78, 8-9=-87/78, 9-10=-63/47, 10-11=-101/64, 11-12=-182/92, 12-13=-240/131
BOT CHORD 1-24=-109/222, 23-24=-109/222, 22-23=-109/222, 21-22=-109/222, 20-21=-109/222, 19-20=-109/222, 18-19=-109/222, 16-18=-109/222, 15-16=-109/222, 14-15=-109/222, 13-14=-109/222
WEBS 6-20=-172/25, 8-19=-172/0, 5-21=-209/115, 4-22=-130/93, 3-23=-127/102, 2-24=-136/79, 9-18=-209/120, 10-16=-130/92, 11-15=-129/104, 12-14=-132/75

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 8-2-6, Exterior(2R) 8-2-6 to 14-1-10, Interior (1) 14-1-10 to 19-4-8, Exterior(2E) 19-4-8 to 22-4-8 zone; cantilever left and right exposed ; end vertical left and 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 1, 8 lb uplift at joint 13, 2 lb uplift at joint 20, 92 lb uplift at joint 21, 69 lb uplift at joint 22, 81 lb uplift at joint 23, 49 lb uplift at joint 24, 97 lb uplift at joint 18, 68 lb uplift at joint 16, 84 lb uplift at joint 15 and 39 lb uplift at joint 14.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	V2	Valley	1	1	Job Reference (optional)	I62998138

Carter Components (Sanford, NC), Sanford, NC - 27332,

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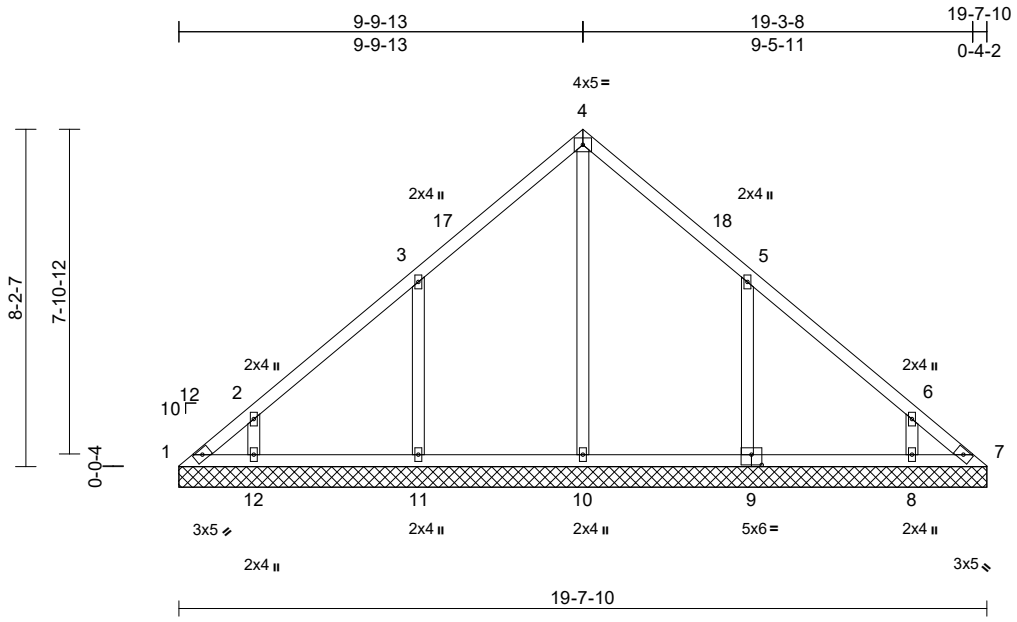

Scale = 1:56

Plate Offsets (X, Y): [9:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 93 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 (size) 1=19-7-10, 7=19-7-10, 8=19-7-10, 9=19-7-10, 10=19-7-10, 11=19-7-10, 12=19-7-10
Max Horiz 1=188 (LC 11)
Max Uplift 1=-64 (LC 12), 7=-19 (LC 13), 8=-94 (LC 15), 9=-179 (LC 15), 11=-175 (LC 14), 12=-99 (LC 14)
Max Grav 1=111 (LC 11), 7=84 (LC 26), 8=317 (LC 24), 9=487 (LC 6), 10=382 (LC 26), 11=478 (LC 5), 12=330 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-213/156, 2-3=-184/119, 3-4=-207/168, 4-5=-209/143, 5-6=-135/71, 6-7=-178/100
BOT CHORD 1-12=-74/142, 11-12=-62/142, 10-11=-62/142, 8-10=-67/147, 7-8=-67/147
WEBS 4-10=-183/8, 3-11=-378/222, 2-12=-223/163, 5-9=-385/226, 6-8=-221/160

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 6-10-2, Exterior(2R) 6-10-2 to 12-10-2, Interior (1) 12-10-2 to 16-7-15, Exterior(2E) 16-7-15 to 19-7-15 zone; cantilever left and right exposed ; end vertical left and 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 1, 19 lb uplift at joint 7, 175 lb uplift at joint 11, 99 lb uplift at joint 12, 179 lb uplift at joint 9 and 94 lb uplift at joint 8.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	I62998139
23120148	V3	Valley	1	1	Job Reference (optional)	

Carter Components (Sanford, NC), Sanford, NC - 27332,

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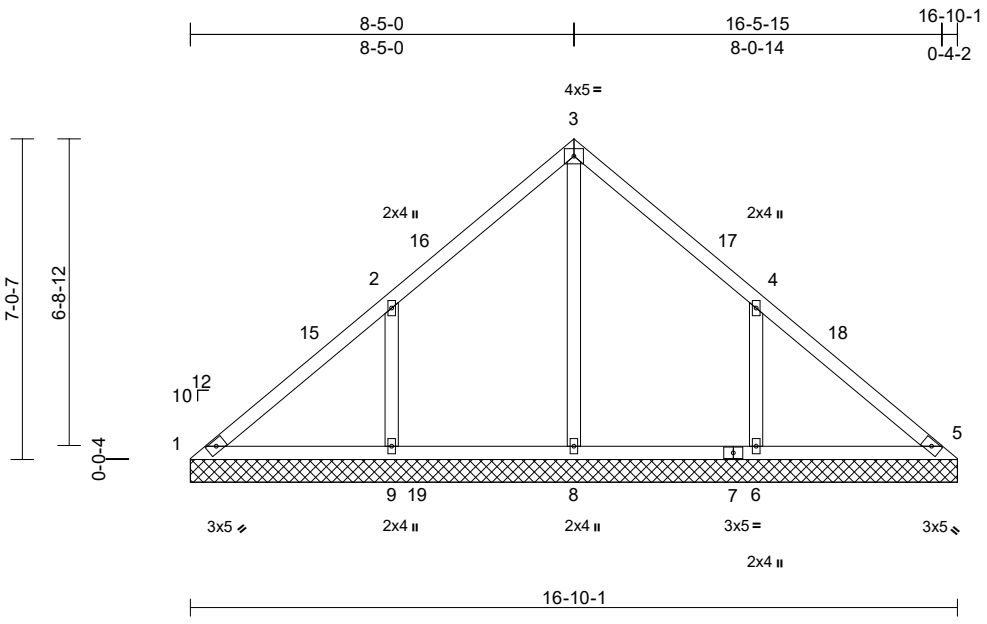

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.41	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 75 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 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=16-10-1, 5=16-10-1, 6=16-10-1, 8=16-10-1, 9=16-10-1, 14=16-10-1
Max Horiz 1=160 (LC 11)
Max Uplift 1=-58 (LC 10), 6=-183 (LC 15), 9=-188 (LC 14)
Max Grav 1=83 (LC 33), 5=1 (LC 24), 6=511 (LC 6), 8=654 (LC 23), 9=511 (LC 5), 14=1 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-105/371, 2-3=-25/320, 3-4=-2/299, 4-5=-139/291
BOT CHORD 1-9=-181/76, 8-9=-181/74, 6-8=-181/74, 5-6=-181/74
WEBS 3-8=-471/0, 2-9=-392/221, 4-6=-392/219

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 5-5-5, Exterior(2R) 5-5-5 to 11-5-5, Interior (1) 11-5-5 to 13-10-6, Exterior(2E) 13-10-6 to 16-10-6 zone; cantilever left and right exposed ; end vertical left and 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 1, 188 lb uplift at joint 9 and 183 lb uplift at joint 6.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	V4	Valley	1	1	Job Reference (optional)	I62998140

Carter Components (Sanford, NC), Sanford, NC - 27332,

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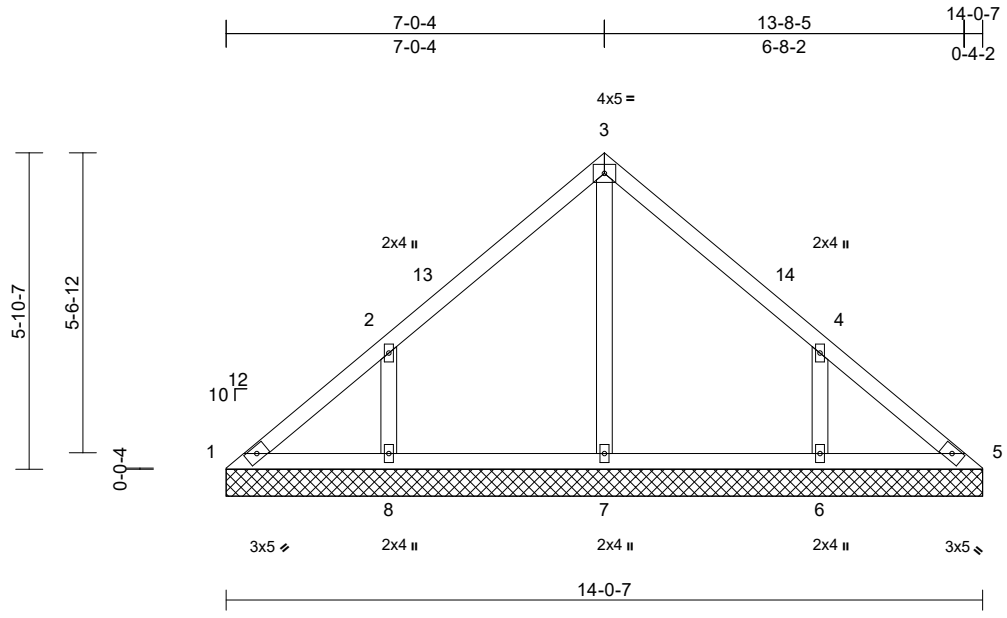

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 60 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 6-0-0 oc bracing.

REACTIONS (size) 1=14-0-7, 5=14-0-7, 6=14-0-7, 7=14-0-7, 8=14-0-7
Max Horiz 1=-133 (LC 10)
Max Uplift 1=-25 (LC 10), 6=-151 (LC 15), 8=-154 (LC 14)
Max Grav 1=117 (LC 24), 5=93 (LC 23), 6=448 (LC 21), 7=294 (LC 21), 8=448 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-145/125, 2-3=-185/117, 3-4=-185/113, 4-5=-114/90
BOT CHORD 1-8=-54/117, 7-8=-54/95, 6-7=-54/95, 5-6=-54/95
WEBS 3-7=-213/0, 2-8=-374/194, 4-6=-374/193

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-8, Interior (1) 3-0-8 to 4-0-8, Exterior(2R) 4-0-8 to 10-0-8, Interior (1) 10-0-8 to 11-0-8, Exterior(2E) 11-0-8 to 14-0-12 zone; cantilever left and right exposed ; end vertical left and 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1, 154 lb uplift at joint 8 and 151 lb uplift at joint 6.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	V5	Valley	1	1	Job Reference (optional)	I62998141

Carter Components (Sanford, NC), Sanford, NC - 27332,

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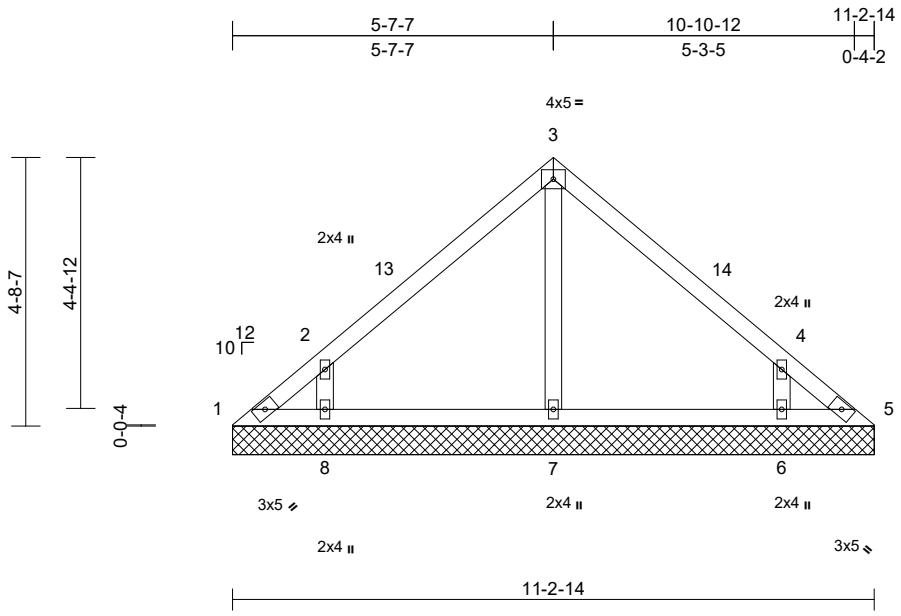

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										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 (size) 1=11-2-14, 5=11-2-14, 6=11-2-14, 7=11-2-14, 8=11-2-14
Max Horiz 1=-106 (LC 10)
Max Uplift 1=-41 (LC 12), 5=-14 (LC 13), 6=-134 (LC 15), 8=-138 (LC 14)
Max Grav 1=72 (LC 24), 5=54 (LC 30), 6=444 (LC 21), 7=251 (LC 20), 8=444 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-126/102, 2-3=-225/112, 3-4=-225/112, 4-5=-102/67
BOT CHORD 1-8=-34/74, 7-8=-25/74, 6-7=-25/74, 5-6=-37/74
WEBS 3-7=-162/0, 2-8=-443/249, 4-6=-443/249

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 8-3-2, Exterior(2E) 8-3-2 to 11-3-2 zone; cantilever left and right exposed ; end vertical left and 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1, 14 lb uplift at joint 5, 138 lb uplift at joint 8 and 134 lb uplift at joint 6.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	V6	Valley	1	1	Job Reference (optional)	I62998142

Carter Components (Sanford, NC), Sanford, NC - 27332,

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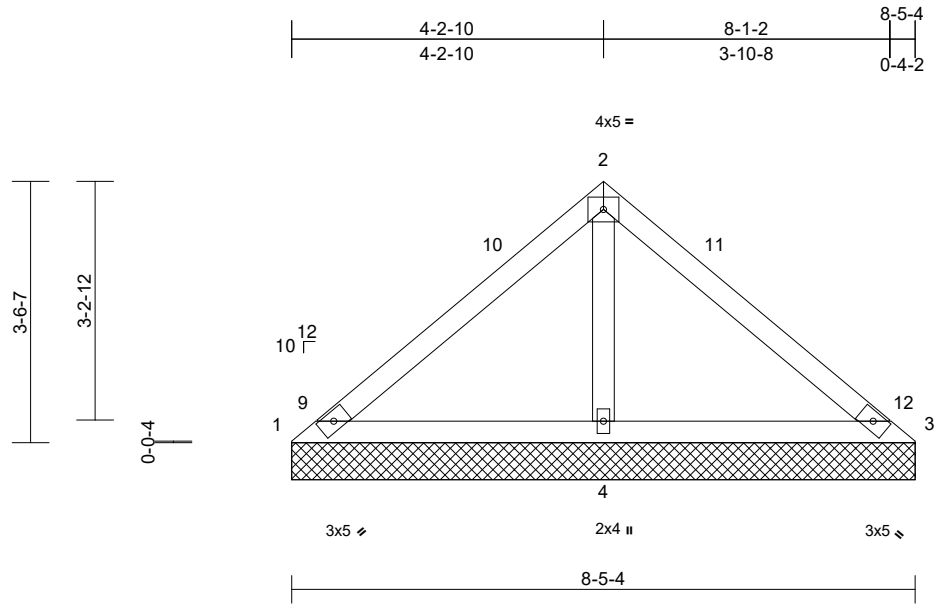

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 32 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 8-5-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=8-5-4, 3=8-5-4, 4=8-5-4
Max Horiz 1=79 (LC 11)
Max Uplift 1=-44 (LC 21), 3=-44 (LC 20), 4=-101 (LC 14)
Max Grav 1=89 (LC 20), 3=89 (LC 21), 4=674 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-122/309, 2-3=-122/309
BOT CHORD 1-4=-209/183, 3-4=-209/183
WEBS 2-4=-500/251

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 5-5-9, Exterior(2E) 5-5-9 to 8-5-9 zone; cantilever left and right exposed ; end vertical left and 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 1, 44 lb uplift at joint 3 and 101 lb uplift at joint 4.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

January 12,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 82 FaNC	
23120148	V7	Valley	1	1	Job Reference (optional)	I62998143

Carter Components (Sanford, NC), Sanford, NC - 27332,

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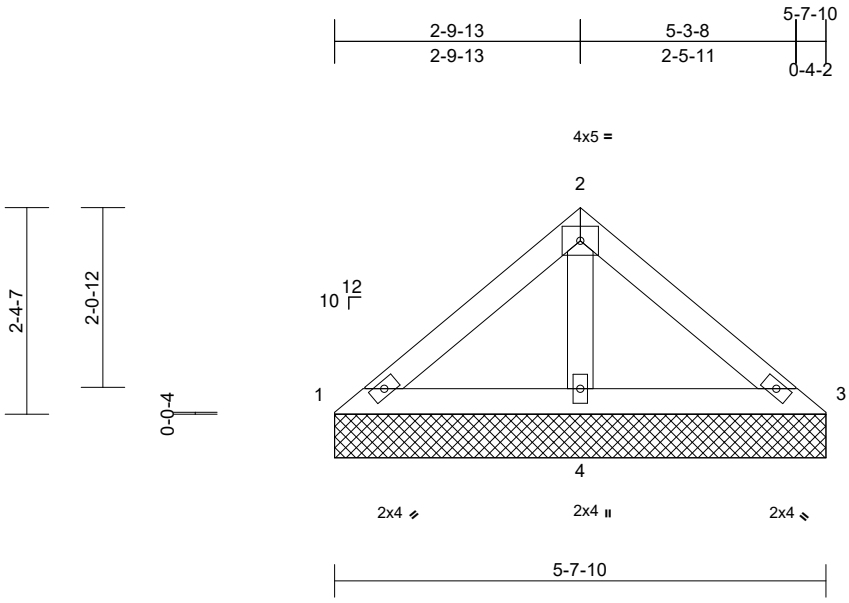

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 20 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 5-7-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=5-7-10, 3=5-7-10, 4=5-7-10
Max Horiz 1=-51 (LC 12)
Max Uplift 3=-5 (LC 15), 4=-45 (LC 14)
Max Grav 1=96 (LC 20), 3=96 (LC 21), 4=366 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-86/139, 2-3=-86/139
BOT CHORD 1-4=-105/110, 3-4=-105/110
WEBS 2-4=-240/131

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and 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.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 3 and 45 lb uplift at joint 4.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

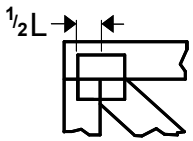
LOAD CASE(S) Standard

January 12,2024

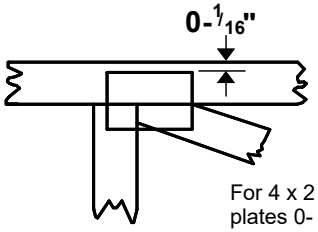
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

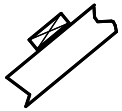
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

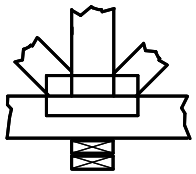
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

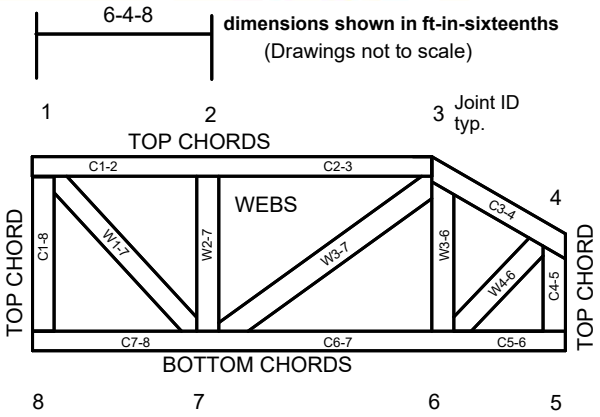


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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®

ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

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.
21. The design does not take into account any dynamic or other loads other than those expressly stated.