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

Phone #:919-775-1450

Builder: DRB HOMES
Model: 192 FaNC
MERLOT 2

THE PLACEMENT PLAN NOTES:

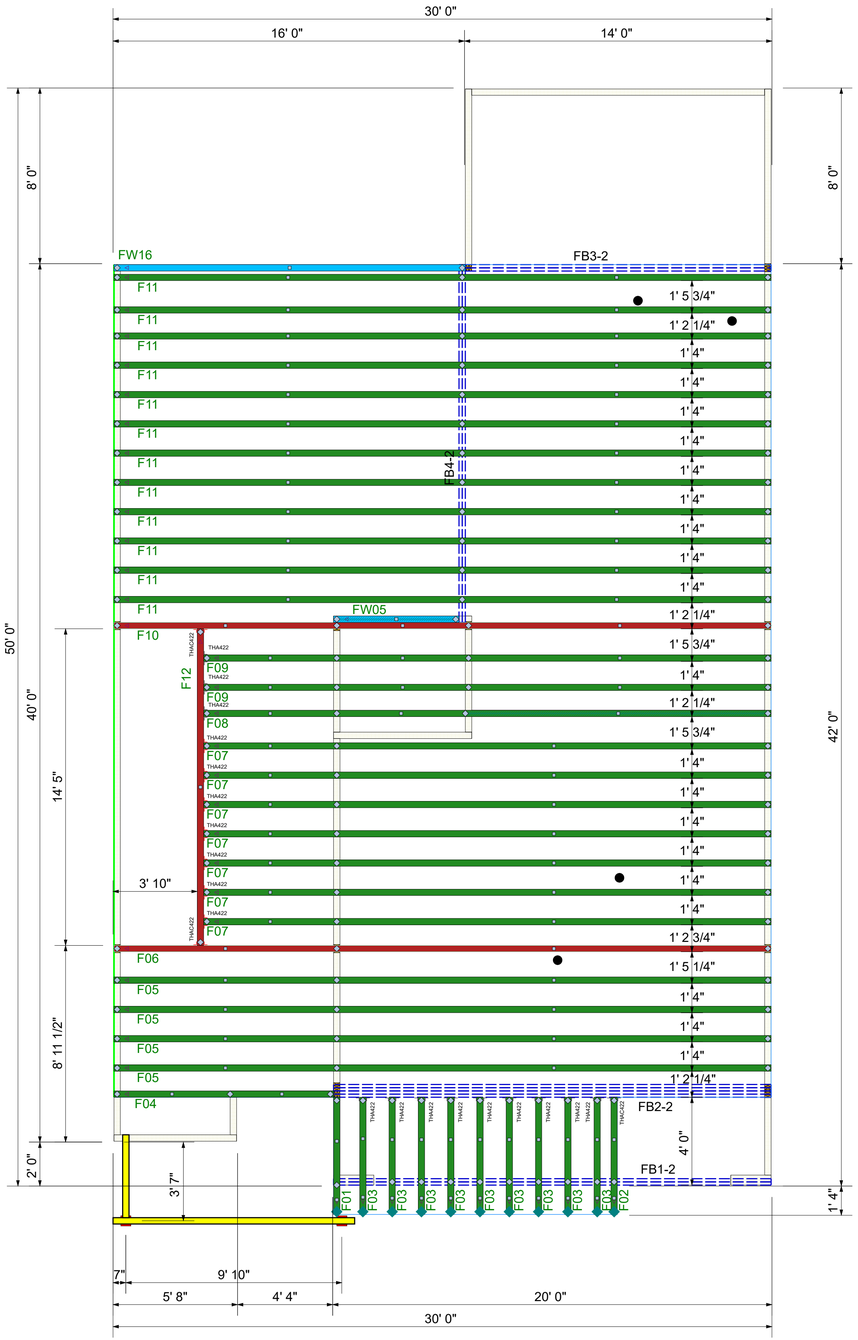
1. The Placement Plan is a diagram for truss installation. It is not an engineered drawing and has not been reviewed by an engineer. The Owner/Building Designer is responsible for obtaining an engineer's review if one is required by the local jurisdiction.
2. The responsibilities of the Owner, Contractor, 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:** _____

General Notes:

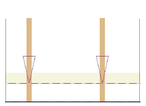
** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION.

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



Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
FB1-2	20' 0"	2.0 RigidLam DF LVL 1-3/4 x 11-7/8	2	2	FF
FB2-2	20' 0"	2.0 RigidLam DF LVL 1-3/4 x 14	4	4	FF
FB4-2	18' 0"	2.0 RigidLam DF LVL 1-3/4 x 14	2	2	FF
FB3-2	14' 0"	2.0 RigidLam DF LVL 1-3/4 x 14	2	2	FF

Truss Connector Total List		
Manuf	Product	Qty
Simpson	THA422	20
Simpson	THAC422	3



Truss Drawing Left End Indicator

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS. ** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT.

** TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE. ** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH. ** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS.

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

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 Trusses" available from the Truss Plate Institute, 583 D'Onofrio Drive: Madison, WI 53179

Kempsville Building Materials
A Division of the Carter Lumber Company

DRB HOMES

192 FARM AT NEILLS CREEK
MERLOT 2

COMPONENT PLACEMENT PLAN

Scale:	*NTS*
Date:	2/15/2024
Designer:	ND
Project Number:	**24020062**
Sheet Number:	**1/1**

** 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.

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

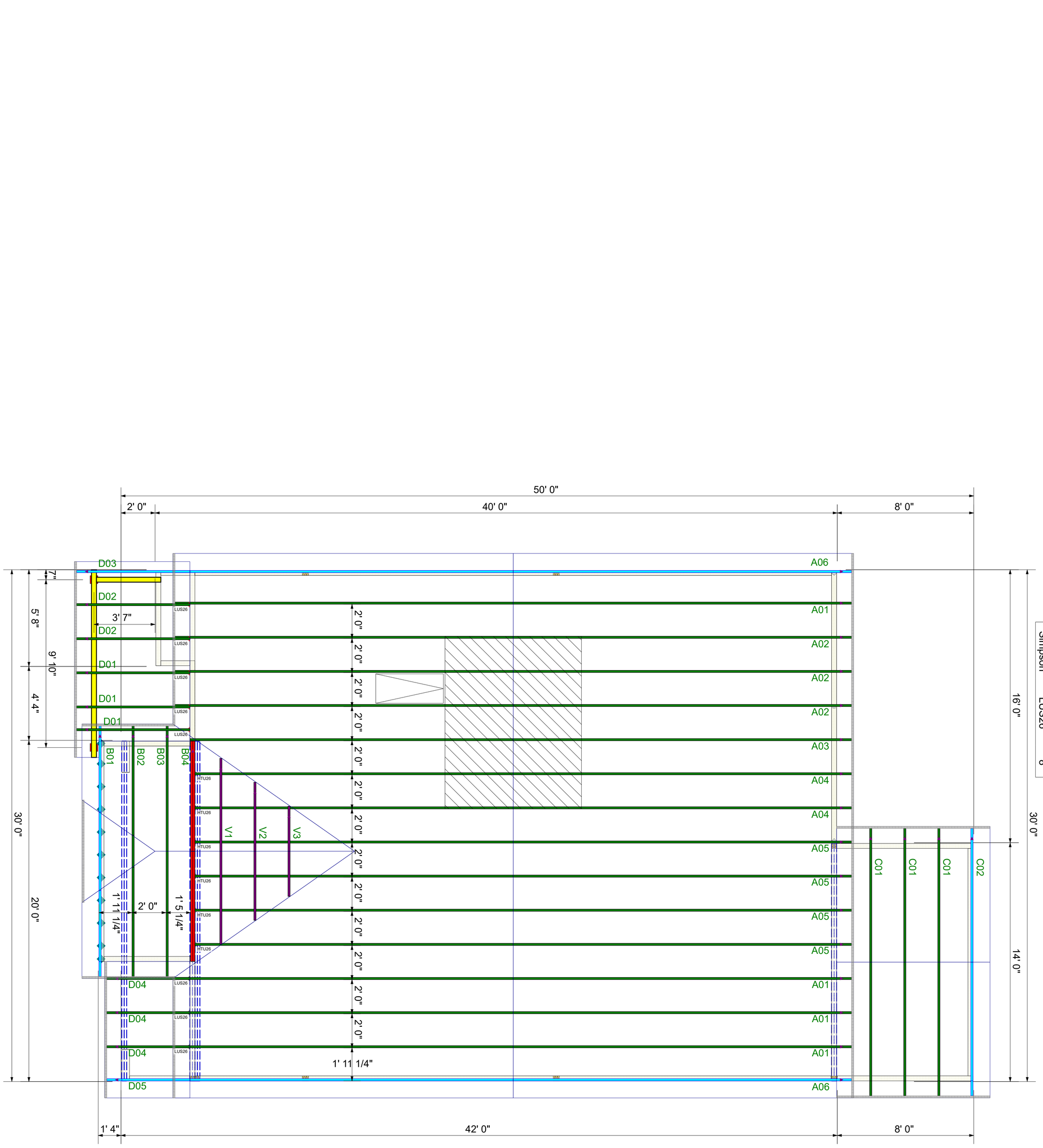
** PLUMBING DROPS NOTED ARE IN THE APPROXIMATE LOCATIONS PER PLAN. BUILDER TO VERIFY LOCATIONS BEFORE SETTING TRUSSES.

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

** 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		
Manuf	Product	Qty
Simpson	HTU26	6
Simpson	LUS26	8

** 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: 2/15/2024
Designer: ND
Project Number: **2402062**
Sheet Number: **1/1**

DRB HOMES

192 FARM AT NEILLS CREEK
MERLOT 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: 24020062
DRB - 192 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: I63648025 thru I63648058

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

North Carolina COA: C-0844

February 15,2024

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 - 192 FaNC	
24020062	A01	Common	4	1	Job Reference (optional)	I63648025

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

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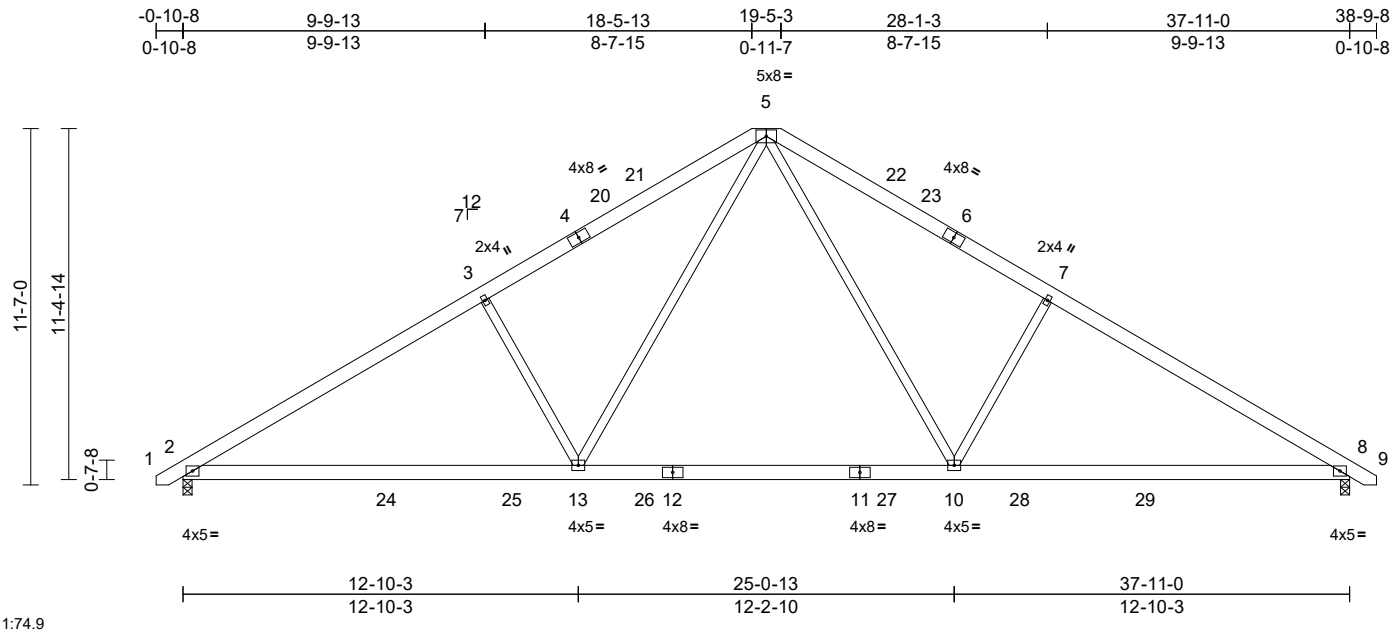

Scale = 1:74.9

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	0.62	Vert(LL)	-0.22	13-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.42	13-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.07	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 251 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 3-13,7-10:2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-266 (LC 12)
Max Uplift 2=-153 (LC 14), 8=-153 (LC 15)
Max Grav 2=1845 (LC 24), 8=1845 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-2746/251, 3-5=-2558/312, 5-7=-2558/312, 7-8=-2746/251, 8-9=0/20
BOT CHORD 2-13=-253/2489, 10-13=-18/1622, 8-10=-91/2290
WEBS 5-13=-166/1229, 5-10=-167/1230, 3-13=-587/325, 7-10=-587/325

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 3-1-7, Interior (1) 3-1-7 to 15-2-0, Exterior(2R) 15-2-0 to 22-9-0, Interior (1) 22-9-0 to 34-9-9, Exterior(2E) 34-9-9 to 38-7-1 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 8. 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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	A02	Common	3	1	Job Reference (optional)	I63648026

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

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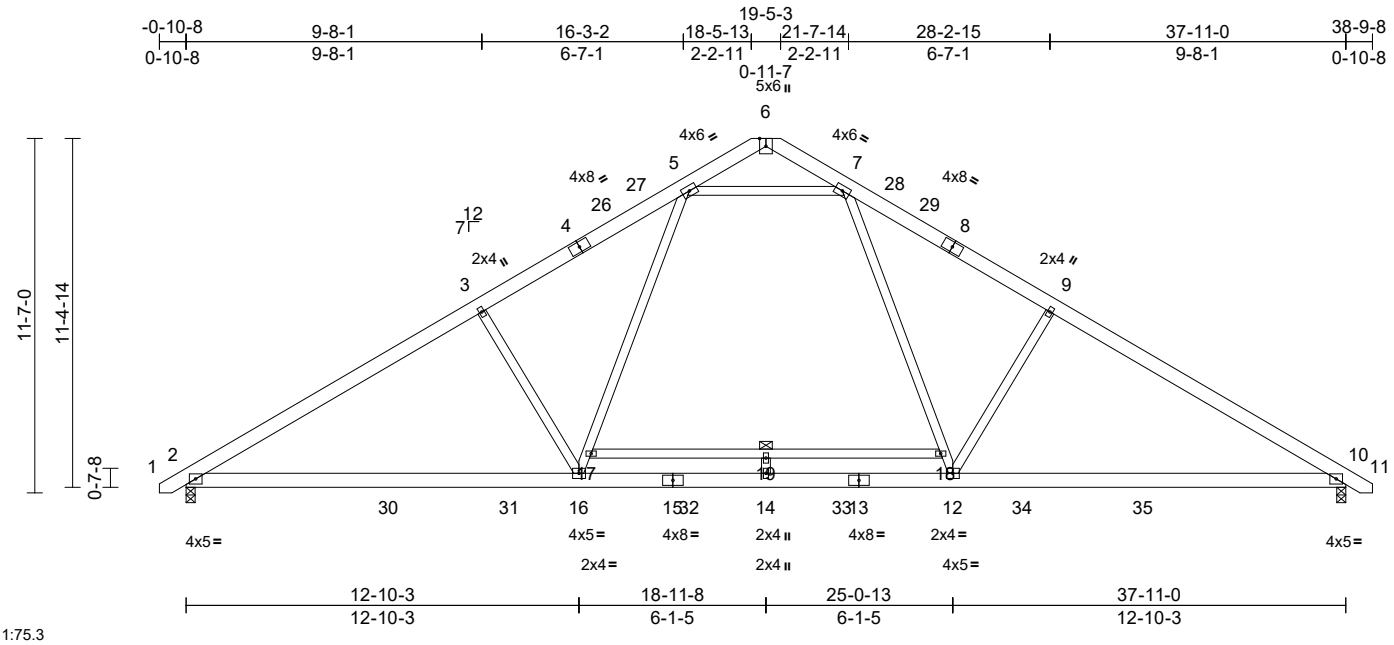

Scale = 1:75.3

Plate Offsets (X, Y): [6:0-0-1,Edge], [9:0-0-0,0-0-0]

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	0.52	Vert(LL)	-0.29	12-25	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.40	12-25	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.05	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 269 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2

BOT CHORD 2x6 SP 2400F 2.0E *Except* 15-13:2x6 SP No.2

WEBS 2x4 SP No.3 *Except* 17-18:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-1 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=266 (LC 13)
Max Uplift 2=-53 (LC 14), 10=-53 (LC 15)
Max Grav 2=1884 (LC 24), 10=1884 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-3=-2822/28, 3-5=-2622/70, 5-6=-228/60, 6-7=-227/60, 7-9=-2622/70, 9-10=-2822/28, 10-11=0/20

BOT CHORD 2-16=-93/2551, 14-16=0/1946, 12-14=0/1946, 10-12=0/2352

WEBS 16-17=-27/1129, 5-17=-13/1164, 7-18=-14/1164, 12-18=-27/1129, 17-19=-83/0, 18-19=-83/0, 14-19=0/26, 5-7=-1661/136, 3-16=-561/331, 9-12=-561/331

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 3-1-7, Interior (1) 3-1-7 to 15-2-0, Exterior(2R) 15-2-0 to 22-9-0, Interior (1) 22-9-0 to 34-9-9, Exterior(2E) 34-9-9 to 38-7-1 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, 18-11-8 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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	A03	Common	1	1	Job Reference (optional)	I63648027

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

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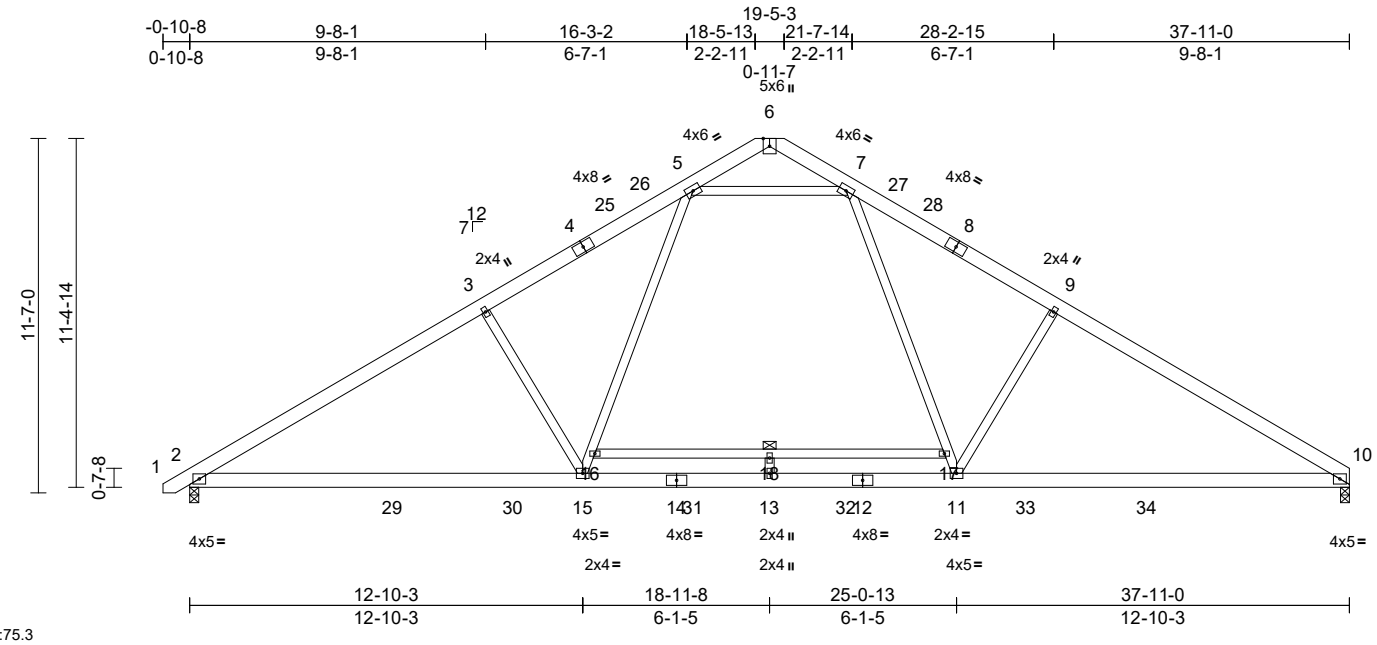

Scale = 1:75.3

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

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	0.52	Vert(LL)	-0.29	11-24	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.40	11-24	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.05	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 267 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2

BOT CHORD 2x6 SP 2400F 2.0E *Except* 14-12:2x6 SP No.2

WEBS 2x4 SP No.3 *Except* 16-17:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 16-17

REACTIONS (size) 2=0-3-8, 10=0-3-8

Max Horiz 2=262 (LC 11)

Max Uplift 2=-53 (LC 14), 10=-40 (LC 15)

Max Grav 2=1884 (LC 24), 10=1846 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-3=-2822/29, 3-5=-2622/71, 5-6=-228/60, 6-7=-227/60, 7-9=-2624/72, 9-10=-2824/29

BOT CHORD 2-15=-98/2547, 13-15=0/1942, 11-13=0/1942, 10-11=0/2356

WEBS 3-15=-561/331, 15-16=-27/1129, 5-16=-13/1164, 7-17=-14/1166, 11-17=-27/1131, 9-11=-562/332, 5-7=-1661/136, 16-18=-83/0, 17-18=-83/0, 13-18=0/26

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 3-1-7, Interior (1) 3-1-7 to 15-2-0, Exterior(2R) 15-2-0 to 22-9-0, Interior (1) 22-9-0 to 34-1-8, Exterior(2E) 34-1-8 to 37-11-0 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, 18-11-8 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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	A04	Common	2	1	Job Reference (optional)	I63648028

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

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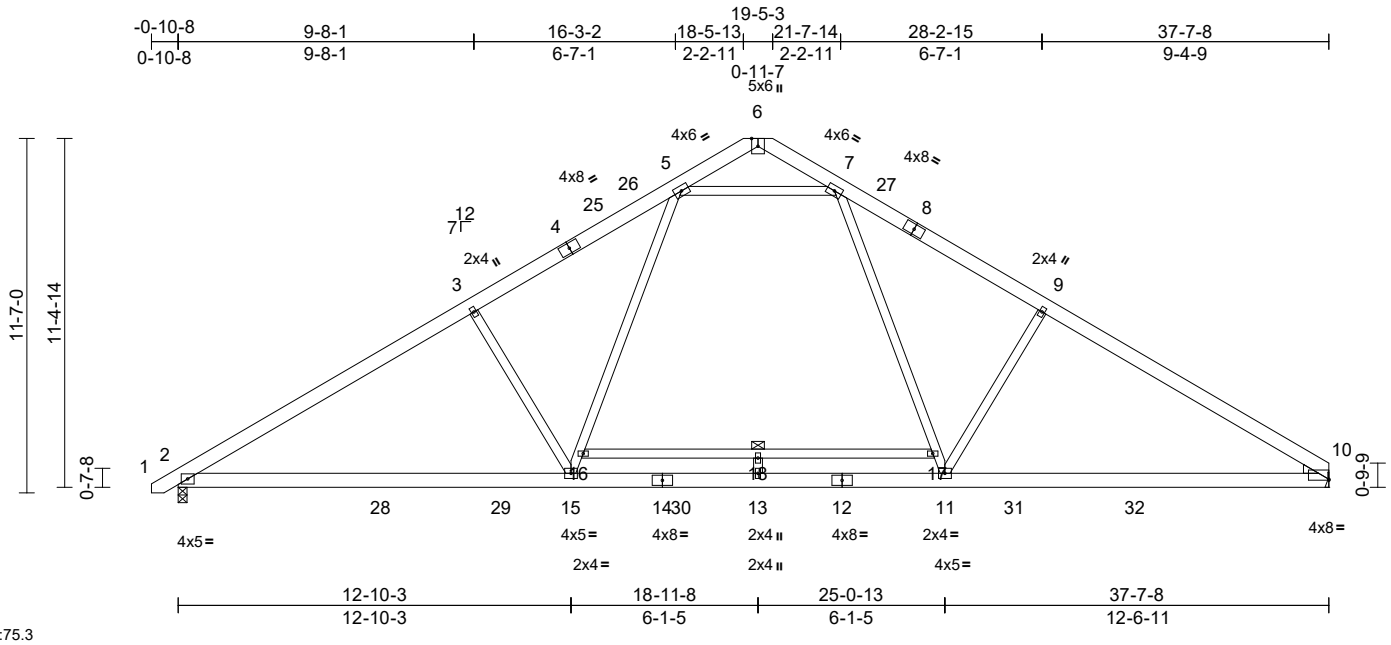

Scale = 1:75.3

Plate Offsets (X, Y): [6:0-0-1,Edge], [10:Edge,0-0-5]

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	0.54	Vert(LL)	-0.30	15-21	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.41	15-21	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.06	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 266 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 2-14:2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 16-17:2x4 SP No.2
WEDGE Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-9-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 16-17

REACTIONS (size) 2=0-3-8, 10= Mechanical
Max Horiz 2=262 (LC 11)
Max Uplift 2=-54 (LC 14), 10=-36 (LC 15)
Max Grav 2=1870 (LC 24), 10=1834 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-2798/29, 3-5=-2598/71, 5-6=-209/62, 6-7=-228/60, 7-9=-2546/75, 9-10=-2769/33
BOT CHORD 2-15=-101/2525, 13-15=0/1907, 11-13=0/1907, 10-11=-47/2277
WEBS 3-15=-569/331, 15-16=-27/1145, 5-16=-13/1180, 7-17=-21/1086, 11-17=-35/1051, 9-11=-521/333, 5-7=-1643/137, 16-18=-79/0, 17-18=-79/0, 13-18=0/29

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 3-1-7, Interior (1) 3-1-7 to 15-2-0, Exterior(2R) 15-2-0 to 22-9-0, Interior (1) 22-9-0 to 33-10-0, Exterior(2E) 33-10-0 to 37-7-8 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) 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, 18-11-8 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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 10.
11) 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.
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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	A05	Common	4	1	Job Reference (optional)	I63648029

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 Feb 15 08:32:42 Page: 1
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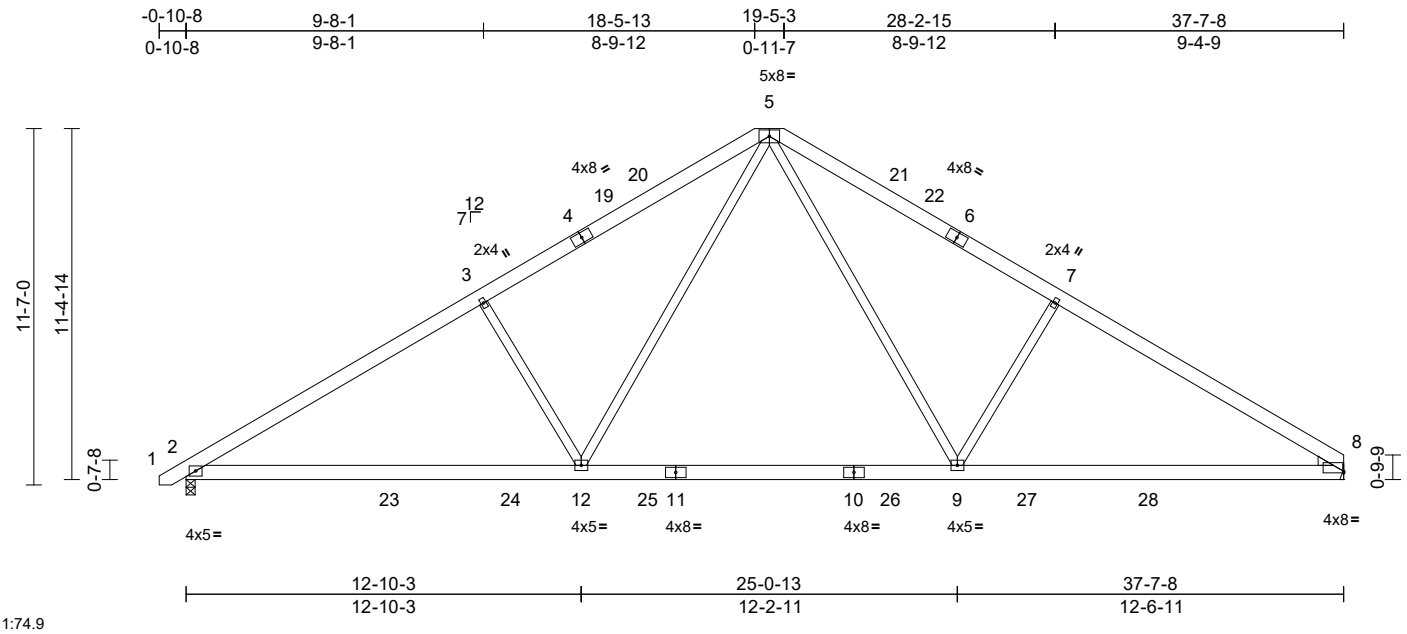


Scale = 1:74.9

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

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	0.72	Vert(LL)	-0.21	12-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.40	12-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.06	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 248 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 12-5,9-5:2x4 SP No.2
WEDGE Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 2=0-3-8, 8= Mechanical
Max Horiz 2=262 (LC 11)
Max Uplift 2=-153 (LC 14), 8=-137 (LC 15)
Max Grav 2=1831 (LC 24), 8=1792 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-2727/251, 3-5=-2527/307, 5-7=-2479/305, 7-8=-2701/249
BOT CHORD 2-12=-268/2469, 9-12=-27/1592, 8-9=-122/2223
WEBS 3-12=-586/325, 5-12=-161/1225, 5-9=-156/1147, 7-9=-556/322

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 3-1-7, Interior (1) 3-1-7 to 15-2-0, Exterior(2R) 15-2-0 to 22-9-0, Interior (1) 22-9-0 to 33-10-0, Exterior(2E) 33-10-0 to 37-7-8 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) 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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 137 lb uplift at joint 8.
10) 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.
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

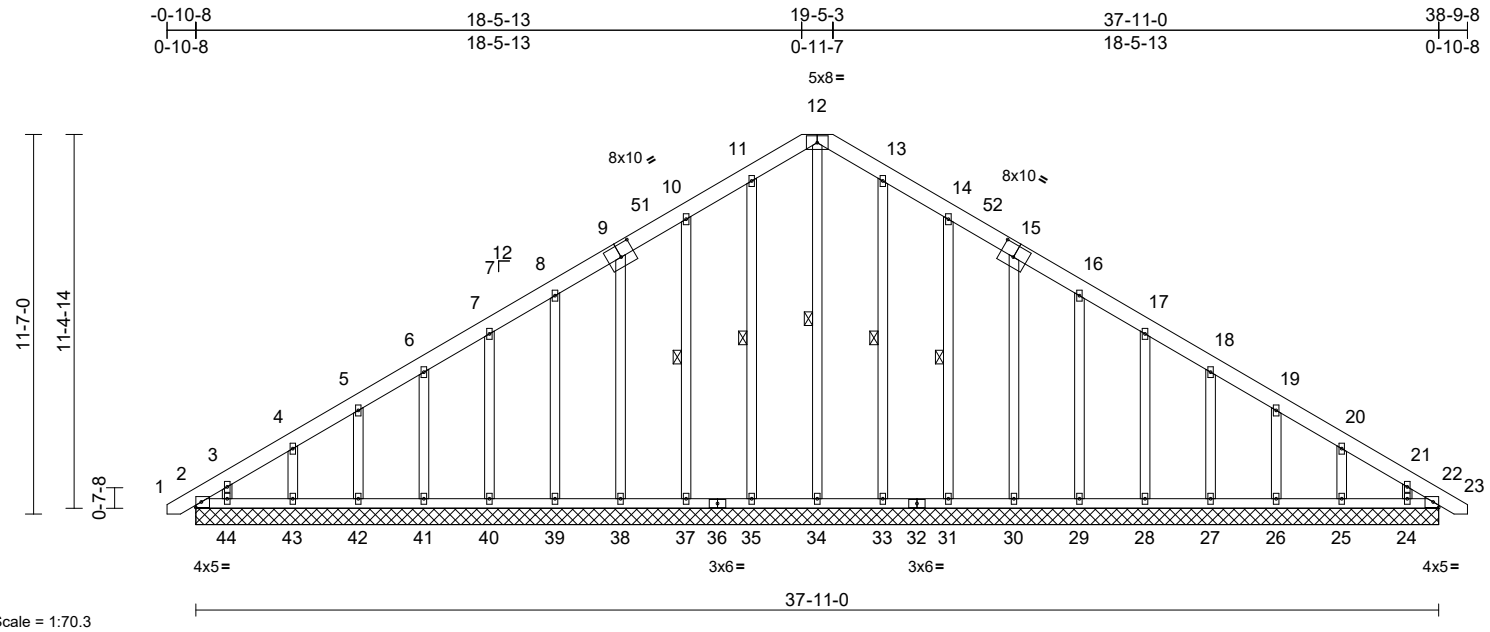
February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	A06	Common Supported Gable	2	1	Job Reference (optional)	I63648030

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 Feb 15 08:32:42 ID:m3SKEq9uIPtUOdLRqf?zWOzylQJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:70.3

Plate Offsets (X, Y): [9:0-5-0,0-4-8], [15:0-5-0,0-4-8]

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	22	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 317 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 12-34, 11-35, 10-37, 13-33, 14-31

REACTIONS (size) 2=37-11-0, 22=37-11-0, 24=37-11-0, 25=37-11-0, 26=37-11-0, 27=37-11-0, 28=37-11-0, 29=37-11-0, 30=37-11-0, 31=37-11-0, 33=37-11-0, 34=37-11-0, 35=37-11-0, 37=37-11-0, 38=37-11-0, 39=37-11-0, 40=37-11-0, 41=37-11-0, 42=37-11-0, 43=37-11-0, 44=37-11-0, 45=37-11-0, 48=37-11-0
Max Horiz 2=-269 (LC 12), 45=-269 (LC 12)
Max Uplift 2=-118 (LC 10), 22=-25 (LC 11), 24=-76 (LC 15), 25=-50 (LC 15), 26=-51 (LC 15), 27=-50 (LC 15), 28=-51 (LC 15), 29=-47 (LC 15), 30=-52 (LC 15), 31=-64 (LC 15), 33=-12 (LC 15), 35=-24 (LC 14), 37=-61 (LC 14), 38=-51 (LC 14), 39=-47 (LC 14), 40=-51 (LC 14), 41=-50 (LC 14), 42=-51 (LC 14), 43=-48 (LC 14), 44=-97 (LC 14), 45=-118 (LC 10), 48=-25 (LC 11)
Max Grav 2=178 (LC 11), 22=113 (LC 27), 24=138 (LC 25), 25=171 (LC 25), 26=166 (LC 25), 27=167 (LC 25), 28=167 (LC 25), 29=162 (LC 25), 30=169 (LC 22), 31=232 (LC 22), 33=240 (LC 22), 34=216 (LC 15), 35=240 (LC 21), 37=232 (LC 21), 38=169 (LC 21), 39=162 (LC 24), 40=167 (LC 24), 41=167 (LC 24), 42=166 (LC 28), 43=170 (LC 24), 44=161 (LC 24), 45=178 (LC 11), 48=113 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-271/232, 3-4=-232/209, 4-5=-204/191, 5-6=-185/173, 6-7=-171/168, 7-8=-157/175, 8-10=-143/231, 10-11=-150/264, 11-12=-164/276, 12-13=-164/276, 13-14=-150/248, 14-16=-119/195, 16-17=-67/104, 17-18=-58/57, 18-19=-68/42, 19-20=-84/58, 20-21=-131/77, 21-22=-175/90, 22-23=0/20
BOT CHORD 2-44=-120/162, 43-44=-76/162, 42-43=-76/162, 41-42=-76/162, 40-41=-76/162, 39-40=-76/162, 38-39=-76/162, 37-38=-76/163, 35-37=-76/163, 34-35=-76/163, 33-34=-76/163, 31-33=-76/163, 30-31=-76/163, 29-30=-75/162, 28-29=-75/162, 27-28=-75/162, 26-27=-75/162, 25-26=-75/162, 24-25=-75/162, 22-24=-75/162
WEBS 12-34=-192/57, 11-35=-200/48, 10-37=-192/85, 9-38=-129/75, 8-39=-122/71, 7-40=-127/75, 6-41=-127/74, 5-42=-126/74, 4-43=-130/75, 3-44=-113/93, 13-33=-200/36, 14-31=-192/88, 15-30=-129/76, 16-29=-122/71, 17-28=-127/75, 18-27=-127/74, 19-26=-126/74, 20-25=-131/76, 21-24=-98/79

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 2-11-8, Exterior(2N) 2-11-8 to 14-11-8, Corner(3R) 14-11-8 to 22-11-8, Exterior(2N) 22-11-8 to 34-9-9, Corner(3E) 34-9-9 to 38-7-1 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

February 15,2024

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

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) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 2, 25 lb uplift at joint 22, 24 lb uplift at joint 35, 61 lb uplift at joint 37, 51 lb uplift at joint 38, 47 lb uplift at joint 39, 51 lb uplift at joint 40, 50 lb uplift at joint 41, 51 lb uplift at joint 42, 48 lb uplift at joint 43, 97 lb uplift at joint 44, 12 lb uplift at joint 33, 64 lb uplift at joint 31, 52 lb uplift at joint 30, 47 lb uplift at joint 29, 51 lb uplift at joint 28, 50 lb uplift at joint 27, 51 lb uplift at joint 26, 50 lb uplift at joint 25, 76 lb uplift at joint 24, 118 lb uplift at joint 2 and 25 lb uplift at joint 22.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	B01	Hip Supported Gable	1	1	Job Reference (optional)	I63648031

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

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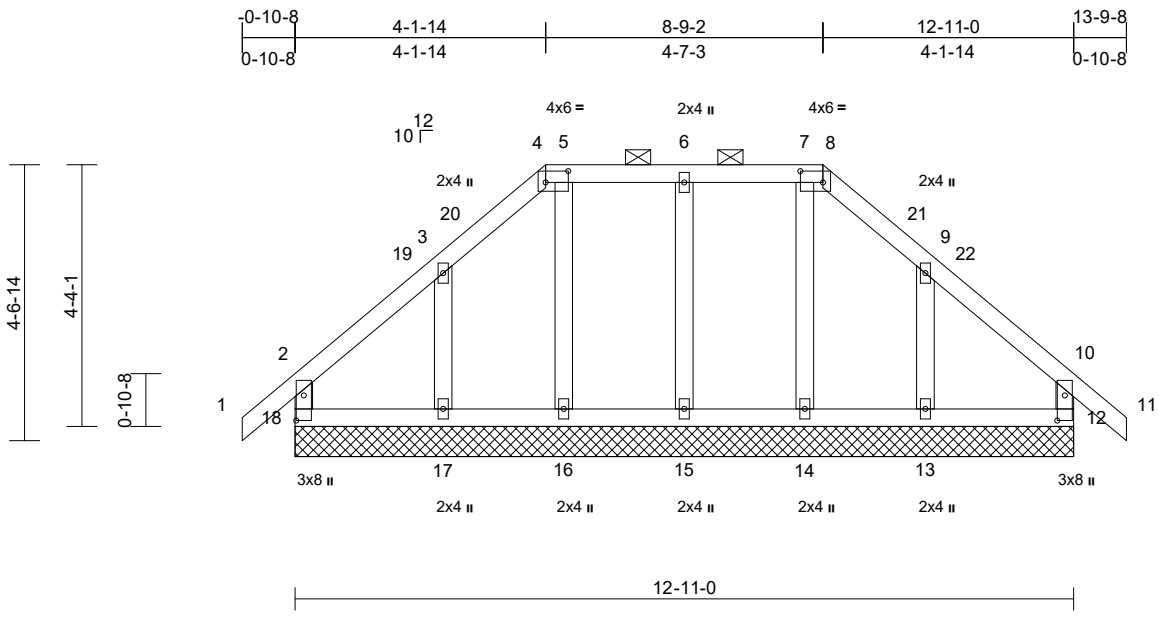
Page: 1



Scale = 1:38.2

Plate Offsets (X, Y): [4:0-4-8,0-2-4], [8:0-4-8,0-2-4], [12:0-5-0,0-1-8], [18:0-5-0,0-1-8]

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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 71 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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-8.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 12=12-11-0, 13=12-11-0, 14=12-11-0, 15=12-11-0, 16=12-11-0, 17=12-11-0, 18=12-11-0
Max Horiz 18=-118 (LC 12)
Max Uplift 12=-41 (LC 14), 13=-95 (LC 15), 15=-35 (LC 10), 17=-97 (LC 14), 18=-46 (LC 15)
Max Grav 12=239 (LC 39), 13=261 (LC 49), 14=205 (LC 22), 15=247 (LC 38), 16=205 (LC 21), 17=266 (LC 47), 18=239 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-18=-218/168, 1-2=0/61, 2-3=-110/91, 3-4=-100/197, 4-5=-80/177, 5-6=-80/177, 6-7=-80/177, 7-8=-80/177, 8-9=-100/197, 9-10=-97/88, 10-11=0/61, 10-12=-218/164
BOT CHORD	17-18=-49/84, 16-17=-49/84, 15-16=-49/84, 14-15=-49/84, 13-14=-49/84, 12-13=-49/84
WEBS	6-15=-207/93, 5-16=-169/20, 3-17=-211/144, 7-14=-169/12, 9-13=-208/150

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) -0-10-8 to 2-1-8, Corner(3R) 2-1-8 to 10-9-8, Corner(3E) 10-9-8 to 13-9-8 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) 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) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
11) Gable studs spaced at 2-0-0 oc.
12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
13) * 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.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 18, 41 lb uplift at joint 12, 35 lb uplift at joint 15, 97 lb uplift at joint 17 and 95 lb uplift at joint 13.
15) 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.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	B02	Hip	1	1	Job Reference (optional)	I63648032

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

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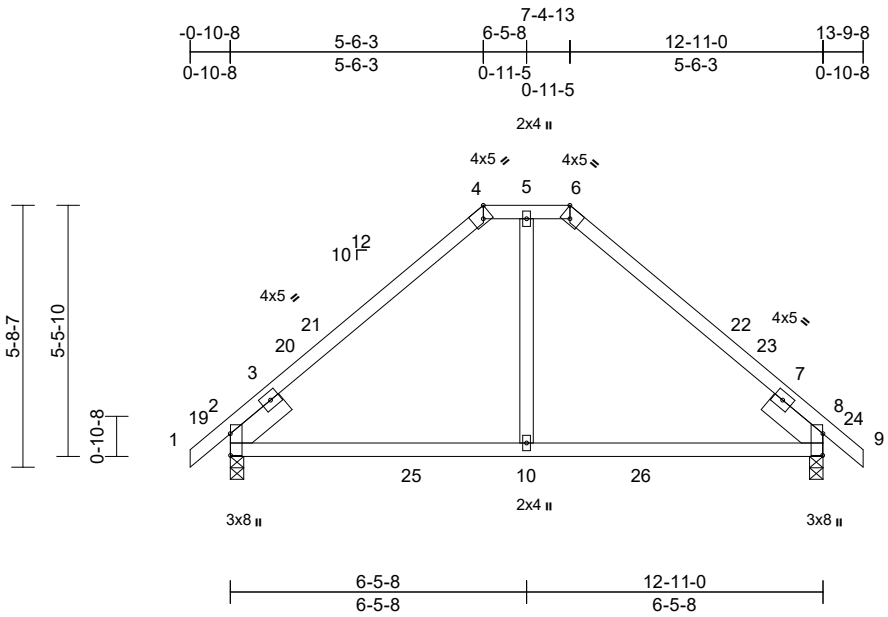


Scale = 1:50.2

Plate Offsets (X, Y): [2:0-5-11,0-0-1], [4:0-2-4,Edge], [6:Edge,0-2-11], [8:0-5-11,0-0-1]

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	0.58	Vert(LL)	-0.08	10-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.11	10-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.04	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 62 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=126 (LC 13)
Max Uplift 2=-57 (LC 14), 8=-57 (LC 15)
Max Grav 2=789 (LC 47), 8=789 (LC 49)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-4=-707/152, 4-5=-456/186, 5-6=-456/186, 6-8=-707/152, 8-9=0/54
BOT CHORD 2-10=-178/488, 8-10=-104/488
WEBS 5-10=0/352

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) -0-10-8 to 2-1-8, Exterior(2R) 2-1-8 to 10-9-8, Exterior(2E) 10-9-8 to 13-9-8 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) 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) Provide adequate drainage to prevent water ponding.
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 8. 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

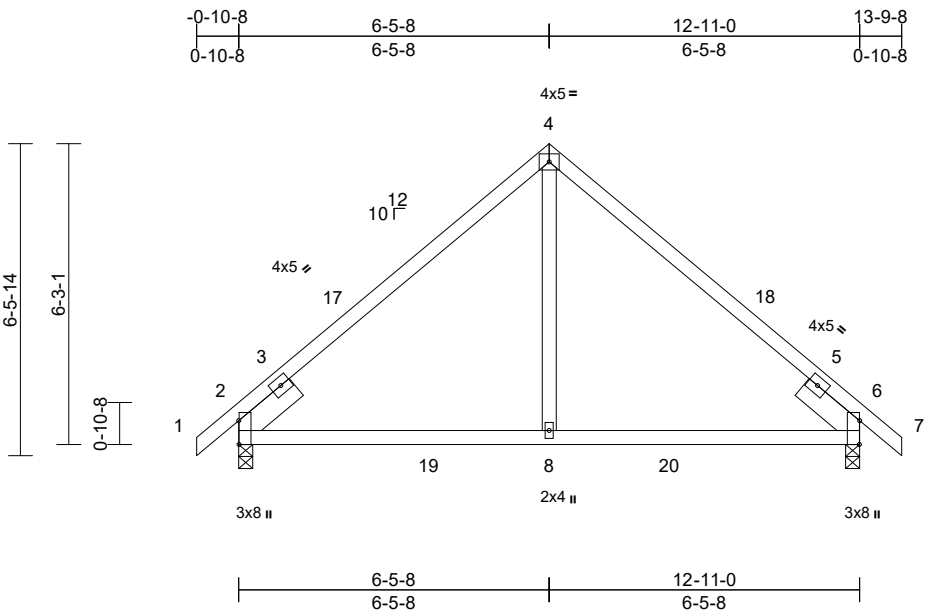
February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	B03	Common	1	1	Job Reference (optional)	I63648033

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 Feb 15 08:32:45 ID:LoSSV0ajn2Y_u1Orj9HpxMzyl?x-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:47.9

Plate Offsets (X, Y): [2:0-5-15,Edge], [6:0-5-15,Edge]

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	0.80	Vert(LL)	-0.08	8-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.11	8-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.04	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 64 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-2-2 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=143 (LC 13)
Max Uplift 2=-52 (LC 14), 6=-52 (LC 15)
Max Grav 2=691 (LC 5), 6=691 (LC 6)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/34, 2-4=-638/215, 4-6=-638/215, 6-7=0/34
BOT CHORD	2-8=-208/438, 6-8=-138/438
WEBS	4-8=0/366

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) -0-10-8 to 2-1-8, Exterior(2R) 2-1-8 to 10-9-8, Exterior(2E) 10-9-8 to 13-9-8 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) 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 6. 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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	B04	Common Girder	1	2	Job Reference (optional)	I63648034

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

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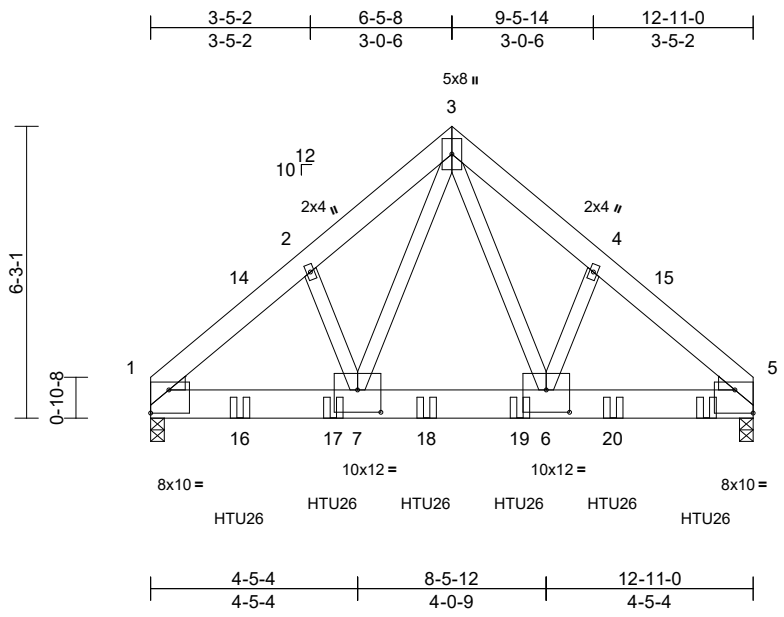

Scale = 1:49.4

Plate Offsets (X, Y): [1:Edge,0-5-15], [5:Edge,0-5-15], [6:0-6-0,0-5-12], [7:0-6-0,0-5-12]

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	0.20	Vert(LL)	-0.04	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.08	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 213 lb	FT = 20%

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

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

REACTIONS (size) 1=0-3-8, 5=0-3-8
Max Horiz 1=-122 (LC 10)
Max Uplift 1=-290 (LC 12), 5=-471 (LC 13)
Max Grav 1=5420 (LC 21), 5=6200 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6171/404, 2-3=-6077/454, 3-4=-6039/525, 4-5=-6127/471
BOT CHORD 1-7=-316/4743, 6-7=-196/3403, 5-6=-321/4658
WEBS 3-6=-409/3909, 4-6=-92/209, 3-7=-247/4003, 2-7=-84/211

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) 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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) 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
6) Unbalanced snow loads have been considered for this design.
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.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. 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.
11) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-11-0 from the left end to 11-11-0 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-58, 3-5=-58, 8-11=-19
Concentrated Loads (lb)
Vert: 13=-1485 (B), 16=-1587 (B), 17=-1587 (B), 18=-1485 (B), 19=-1485 (B), 20=-1485 (B)

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	C01	Common	3	1	Job Reference (optional)	I63648035

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

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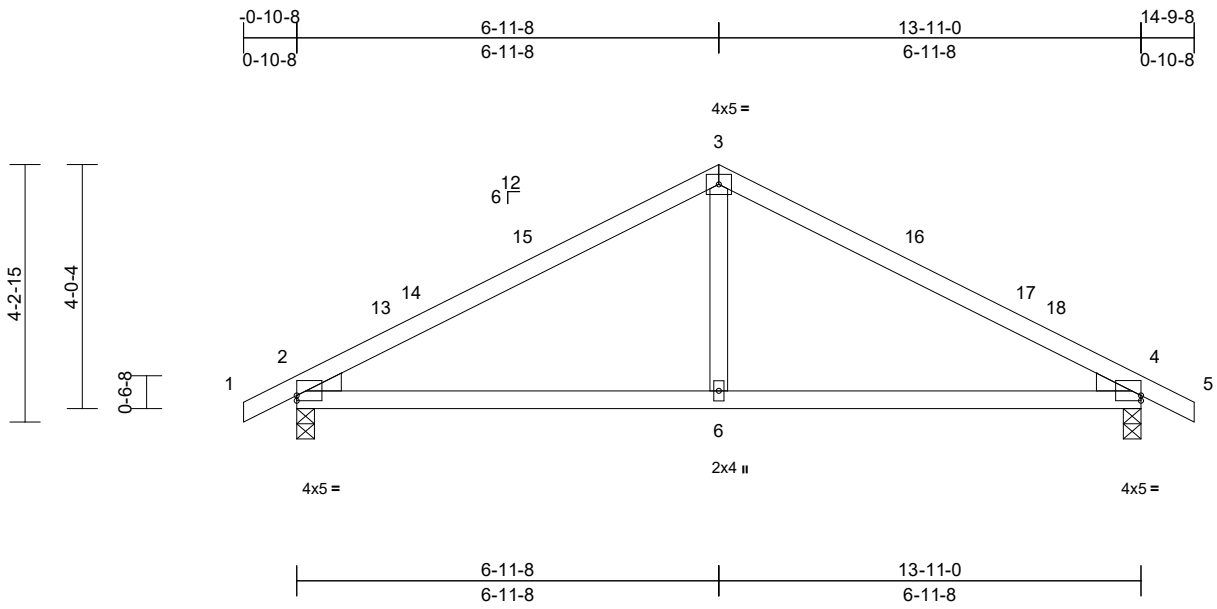

Scale = 1:38

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

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	0.76	Vert(LL)	-0.09	6-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.14	6-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 54 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 4=0-3-8
Max Horiz 2=62 (LC 14)
Max Uplift 2=-70 (LC 14), 4=-70 (LC 15)
Max Grav 2=692 (LC 21), 4=692 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-818/236, 3-4=-818/236, 4-5=0/23
BOT CHORD 2-6=-198/615, 4-6=-190/615
WEBS 3-6=0/310

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) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-11-8, Exterior(2R) 3-11-8 to 9-11-8, Interior (1) 9-11-8 to 11-9-8, Exterior(2E) 11-9-8 to 14-9-8 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) 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.
8) One RT8A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. 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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	C02	Common Supported Gable	1	1	Job Reference (optional)	I63648036

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

Run: 8.63 E Dec 13 2023 Print: 8.630 E Dec 13 2023 MiTek Industries, Inc. Thu Feb 15 08:40:23 Page: 1
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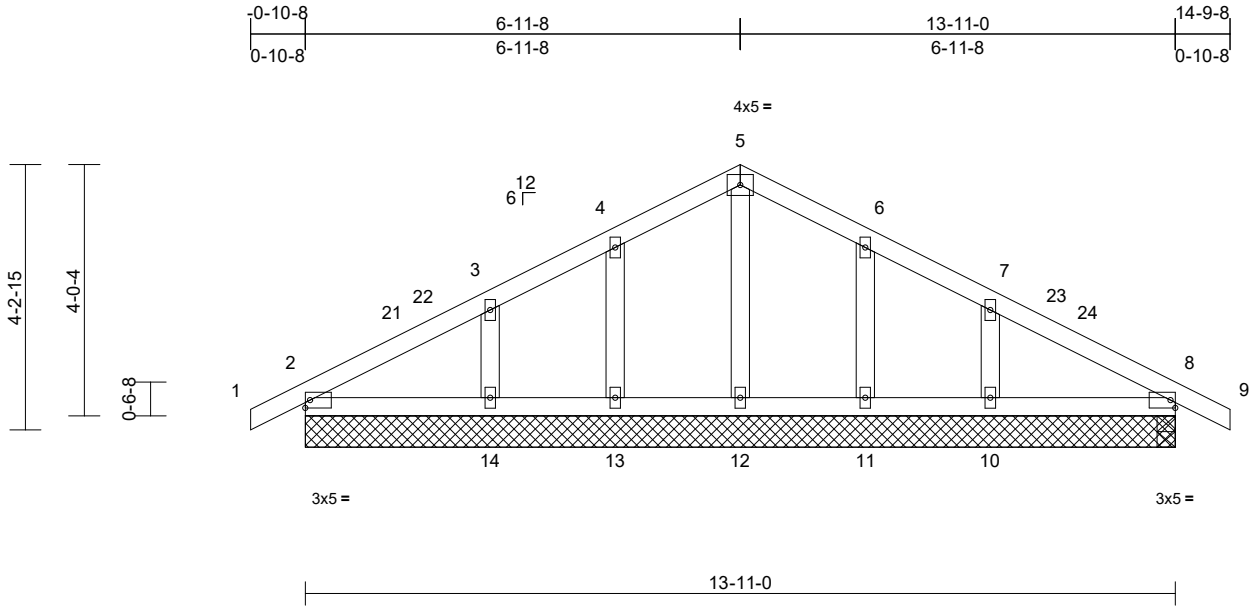

Scale = 1:36.9

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	14-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	10-20	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 64 lb	FT = 20%

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

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

REACTIONS All bearings 13-11-0.
(lb) - Max Horiz 2=60 (LC 14), 15=60 (LC 14)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 8, 10, 11, 13, 14, 15, 18
Max Grav All reactions 250 (lb) or less at joint (s) 2, 8, 11, 12, 13, 15, 18 except 10=292 (LC 22), 14=292 (LC 21)

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

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) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 3-11-8, Corner(3R) 3-11-8 to 9-11-8, Exterior (2N) 9-11-8 to 11-9-8, Corner(3E) 11-9-8 to 14-9-8 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) 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.
11) One RT4 MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, 13, 14, 11, and 10. This connection is for uplift only and does not consider lateral forces.
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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	D01	Monopitch	3	1	Job Reference (optional)	I63648037

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

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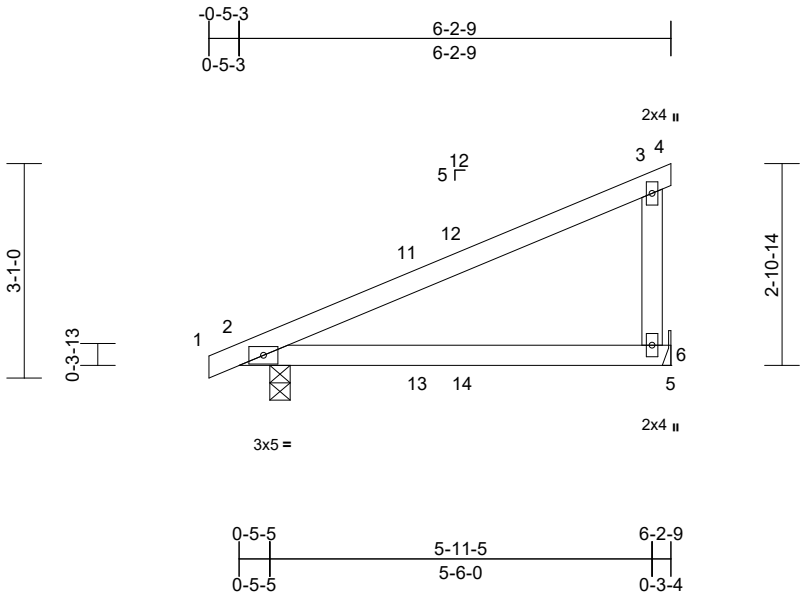

Scale = 1:33.2

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	0.70	Vert(LL)	0.12	6-10	>602	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.09	6-10	>775	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 23 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=103 (LC 13)
Max Uplift 2=-74 (LC 10), 6=-69 (LC 11)
Max Grav 2=384 (LC 21), 6=326 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/10, 2-3=-110/77, 3-4=-10/0, 3-6=-247/132
BOT CHORD 2-6=-91/115, 5-6=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) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 3-7-12, Exterior(2E) 3-7-12 to 6-7-12 zone; cantilever left and right exposed ; end vertical left and right 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 69 lb uplift at joint 6.
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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	D02	Monopitch	2	1	Job Reference (optional)	I63648038

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

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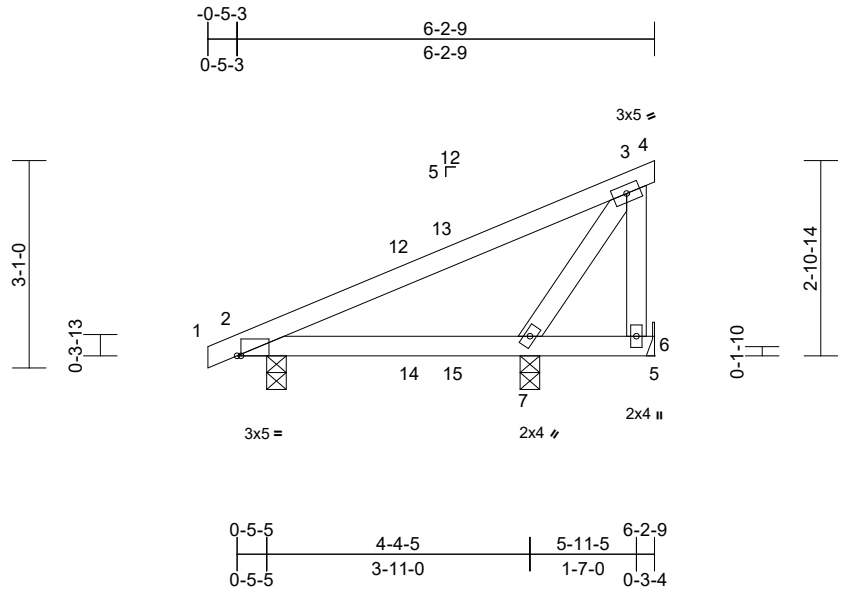

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Plate Offsets (X, Y): [2:0-0-11,Edge]

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	0.62	Vert(LL)	0.02	7-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	0.02	8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 27 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-8, 6= Mechanical, 7=0-3-8
Max Horiz 2=103 (LC 13)
Max Uplift 2=-90 (LC 10), 6=-140 (LC 14), 7=-190 (LC 21)
Max Grav 2=444 (LC 21), 6=456 (LC 21), 7=135 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/10, 2-3=-360/222, 3-4=-10/0, 3-6=-473/333
BOT CHORD 2-7=-161/225, 6-7=-32/47, 5-6=0/0
WEBS 3-7=-371/403

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) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 3-7-12, Exterior(2E) 3-7-12 to 6-7-12 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left 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 140 lb uplift at joint 6.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. 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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	D03	Monopitch Structural Gable	1	1	Job Reference (optional)	I63648039

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

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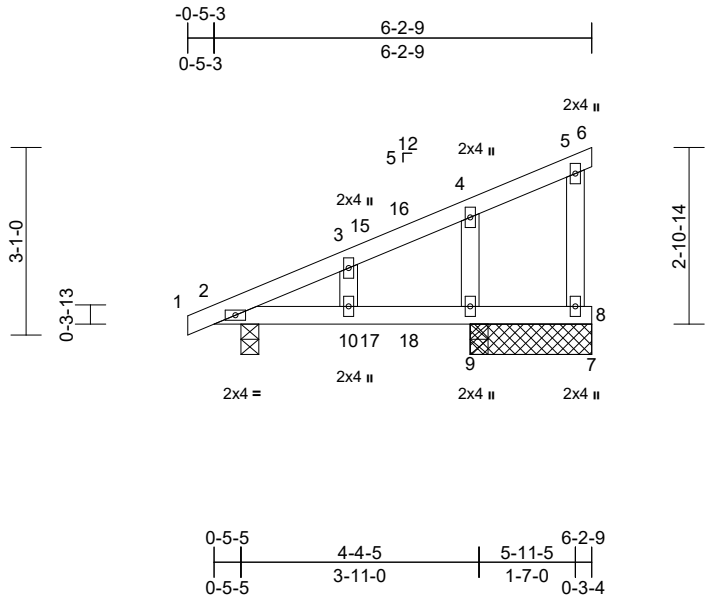

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	0.01	10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.01	10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 27 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

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) 2=0-3-8, 8=2-0-0, 9=0-3-8
Max Horiz 2=103 (LC 13)
Max Uplift 2=-45 (LC 10), 8=-2 (LC 15), 9=-75 (LC 14)
Max Grav 2=257 (LC 21), 8=58 (LC 21), 9=396 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/10, 2-3=-74/88, 3-4=-63/86, 4-5=-54/44, 5-6=-10/0, 5-8=-65/15
BOT CHORD 2-10=-91/115, 9-10=-32/47, 8-9=-32/47, 7-8=0/0
WEBS 4-9=-267/208, 3-10=-79/42

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) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 3-7-12, Exterior(2E) 3-7-12 to 6-7-12 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left 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 studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8, 2, and 9. 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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	D04	Monopitch	3	1	Job Reference (optional)	I63648040

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

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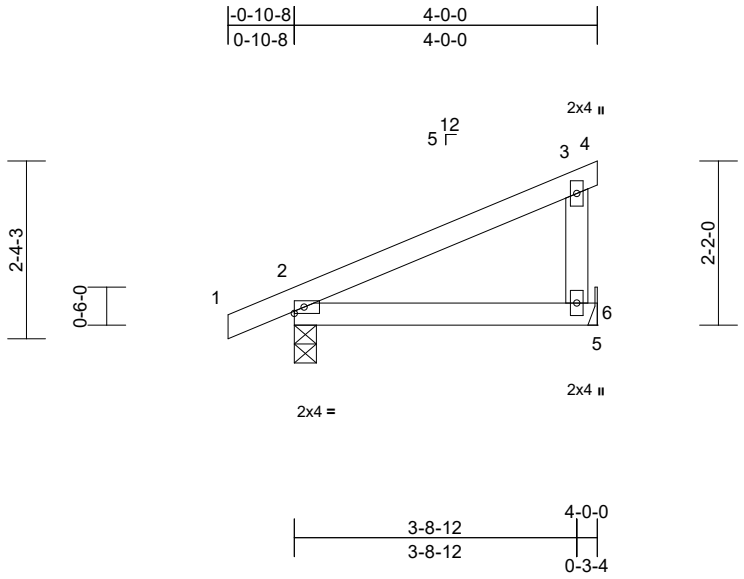

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.01	6-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 16 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=75 (LC 13)
Max Uplift 2=-33 (LC 14), 6=-33 (LC 14)
Max Grav 2=298 (LC 21), 6=231 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-3=-103/89, 3-4=-10/0, 3-6=-173/78
BOT CHORD 2-6=-53/90, 5-6=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 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 6.
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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	D05	Monopitch Supported Gable	1	1	Job Reference (optional)	I63648041

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

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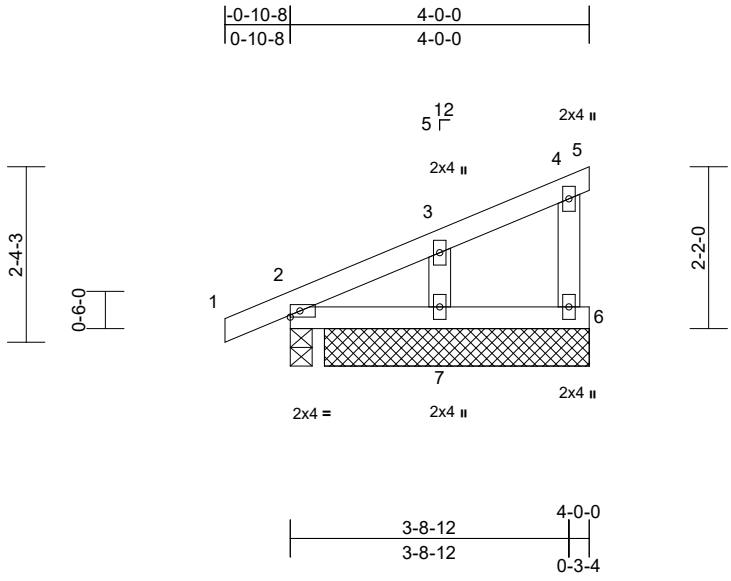

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Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	7-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	7-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 17 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

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

REACTIONS (size) 2=0-3-8, 5=3-6-8, 6=3-6-8, 7=3-6-8
Max Horiz 2=72 (LC 13)
Max Uplift 2=-20 (LC 10), 5=-22 (LC 21), 6=-24 (LC 14), 7=-41 (LC 14)
Max Grav 2=186 (LC 21), 5=8 (LC 14), 6=124 (LC 21), 7=220 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-100/78, 3-4=-40/48, 4-5=-18/7, 4-6=-112/80
BOT CHORD 2-7=-36/66, 6-7=-22/39
WEBS 3-7=-174/172

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 2-0-0, Exterior(2N) 2-0-0 to 4-0-0 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 studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 5.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6, 2, and 7. This connection is for uplift only and does not consider lateral forces.
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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F01	Floor	1	1	Job Reference (optional)	I63648042

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

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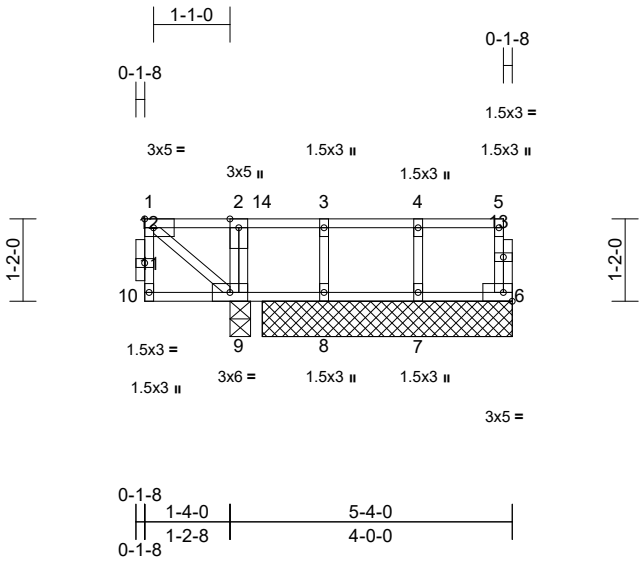

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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.69	Vert(LL)	0.01	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	0.01	8-9	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 28 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 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 5-4-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 9-10.

REACTIONS (size) 6=3-6-8, 7=3-6-8, 8=3-6-8, 9=0-3-8
Max Uplift 6=-25 (LC 3), 8=-540 (LC 3)
Max Grav 6=23 (LC 4), 7=251 (LC 5), 8=-55 (LC 4), 9=887 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-166/0, 5-6=-23/16, 1-2=-1/1, 2-3=-1/1, 3-4=-1/1, 4-5=-1/1
BOT CHORD 9-10=0/0, 8-9=-1/1, 7-8=-1/1, 6-7=-1/1
WEBS 2-9=-485/0, 1-9=-1/2, 3-8=-11/273, 4-7=-177/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
6) One RT8A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 6-10=-7, 1-5=-67
Concentrated Loads (lb)
Vert: 1=-300

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F02	Floor	1	1	Job Reference (optional)	I63648043

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

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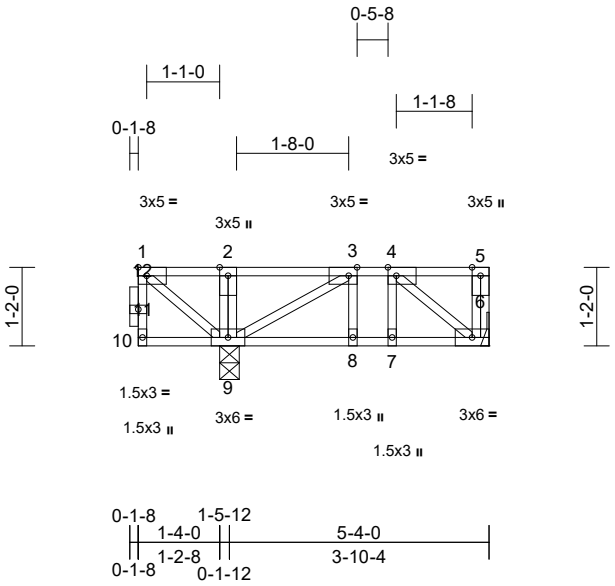

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Plate Offsets (X, Y): [3:0-1-8,Edge], [4:0-1-8,Edge]

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	0.26	Vert(LL)	0.01	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.14	Vert(CT)	0.01	8-9	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 33 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 5-4-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 9-10.

REACTIONS (size) 6= Mechanical, 9=0-3-8
Max Uplift 6=-80 (LC 3)
Max Grav 6=105 (LC 4), 9=648 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=0/4, 5-6=-53/0, 1-2=0/415, 2-3=0/415, 3-4=-80/149, 4-5=0/0
BOT CHORD 9-10=0/0, 8-9=-149/80, 7-8=-149/80, 6-7=-149/80
WEBS 2-9=-116/0, 1-9=-537/0, 4-7=-79/24, 3-9=-398/0, 3-8=-10/87, 4-6=-102/190

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 80 lb uplift at joint 6.
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

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 6-10=-7, 1-5=-67
Concentrated Loads (lb)
Vert: 1=-300

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F03	Floor	9	1	Job Reference (optional)	I63648044

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 Feb 15 08:32:50 Page: 1
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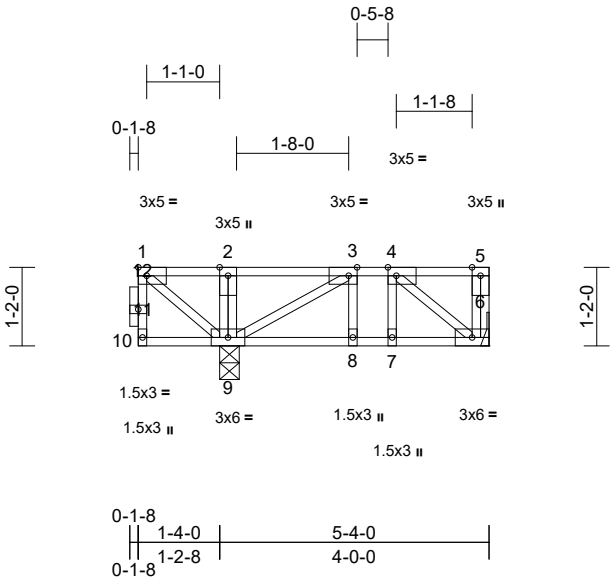

Scale = 1:34.2

Plate Offsets (X, Y): [3:0-1-8,Edge], [4:0-1-8,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	0.26	Vert(LL)	0.01	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.14	Vert(CT)	0.01	8-9	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 33 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 5-4-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 9-10.

REACTIONS (size) 6= Mechanical, 9=0-3-8
Max Uplift 6=-80 (LC 3)
Max Grav 6=105 (LC 4), 9=648 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=0/4, 5-6=-53/0, 1-2=0/415, 2-3=0/415, 3-4=-80/149, 4-5=0/0
BOT CHORD 9-10=0/0, 8-9=-149/80, 7-8=-149/80, 6-7=-149/80
WEBS 1-9=-537/0, 4-7=-79/24, 3-9=-398/0, 3-8=-10/87, 4-6=-102/190, 2-9=-116/0

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 80 lb uplift at joint 6.
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

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 6-10=-7, 1-5=-67
Concentrated Loads (lb)
Vert: 1=-300

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F04	Floor	1	1	Job Reference (optional)	I63648045

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 Feb 15 08:32:50 Page: 1
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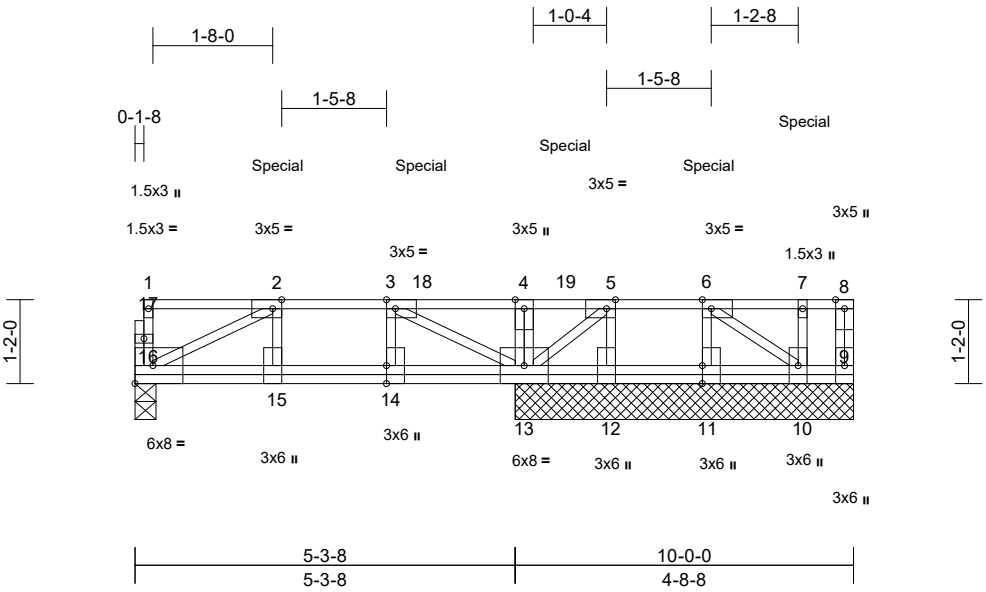

Scale = 1:32.1

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [5:0-1-8,Edge], [6:0-1-8,Edge], [11:0-3-0,Edge], [14:0-3-0,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	0.65	Vert(LL)	-0.01	15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.17	Vert(CT)	-0.01	15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.00	9	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 67 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) 9=4-8-8, 10=4-8-8, 11=4-8-8, 12=4-8-8, 13=4-8-8, 16=0-3-8
Max Uplift 10=-60 (LC 8), 11=-59 (LC 8), 13=-205 (LC 8), 16=-96 (LC 8)
Max Grav 9=8 (LC 12), 10=347 (LC 29), 11=337 (LC 30), 12=120 (LC 11), 13=901 (LC 30), 16=457 (LC 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-52/0, 8-9=-7/0, 1-2=0/0, 2-3=-703/176, 3-4=-27/125, 4-5=-27/125, 5-6=-27/5, 6-7=0/0, 7-8=0/0
BOT CHORD 15-16=-176/703, 14-15=-176/703, 13-14=-176/703, 12-13=-5/27, 11-12=-5/27, 10-11=-5/27, 9-10=0/0
WEBS 4-13=-344/75, 3-13=-904/231, 2-16=-802/201, 2-15=-38/19, 3-14=-3/39, 5-12=-121/0, 6-11=-320/63, 7-10=-335/67, 5-13=-155/31, 6-10=-34/7

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) n/a
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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16, 11, 10, and 13. This connection is for uplift only and does not consider lateral forces.
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.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 444 lb down and 147 lb up at 2-0-0, and 444 lb down and 147 lb up at 4-0-0, and 312 lb down and 77 lb up at 6-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 9-16=-7, 1-8=-67
Concentrated Loads (lb)
Vert: 2=-106 (F), 6=-102 (F), 7=-105 (F), 18=-106 (F), 19=-102 (F)

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F05	Floor	4	1	Job Reference (optional)	I63648046

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

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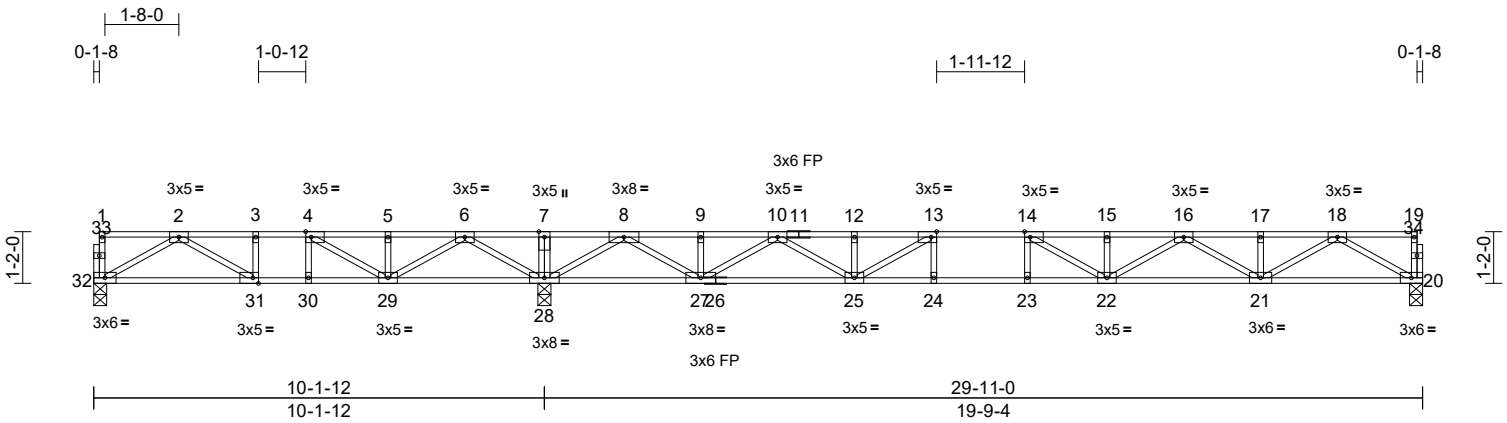

Scale = 1:51.9

Plate Offsets (X, Y): [4:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge], [31:0-1-8,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	0.67	Vert(LL)	-0.26	22-23	>896	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.36	22-23	>657	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.03	20	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 151 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 26-20:2x4 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 6-0-0 oc bracing.

REACTIONS (size) 20=0-3-8, 28=0-3-8, 32=0-3-8
Max Uplift 32=-85 (LC 4)
Max Grav 20=622 (LC 4), 28=1401 (LC 1), 32=284 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-32=-45/0, 19-20=-47/0, 1-2=-3/0, 2-3=-542/482, 3-4=-542/482, 4-5=-329/940, 5-6=-329/940, 6-7=0/1946, 7-8=0/1946, 8-9=-562/69, 9-10=-562/69, 10-12=-1958/0, 12-13=-1958/0, 13-14=-2482/0, 14-15=-2508/0, 15-16=-2508/0, 16-17=-1692/0, 17-18=-1692/0, 18-19=-3/0
BOT CHORD 31-32=-179/395, 30-31=-482/542, 29-30=-482/542, 28-29=-1310/0, 27-28=-669/0, 25-27=0/1367, 24-25=0/2482, 23-24=0/2482, 22-23=0/2482, 21-22=0/2190, 20-21=0/972
WEBS 7-28=-135/0, 6-28=-976/0, 2-32=-454/207, 6-29=0/721, 2-31=-354/172, 5-29=-114/38, 3-31=-72/126, 4-29=-689/0, 4-30=0/129, 8-28=-1478/0, 18-20=-1122/0, 8-27=0/1226, 18-21=0/841, 9-27=-116/0, 17-21=-114/0, 10-27=-961/0, 16-21=-581/0, 10-25=0/711, 16-22=0/371, 12-25=-118/65, 15-22=-186/0, 13-25=-783/0, 14-22=-253/290, 13-24=-5/164, 14-23=-142/27

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 32. This connection is for uplift only and does not consider lateral forces.
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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F06	Floor Girder	1	1	Job Reference (optional)	I63648047

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

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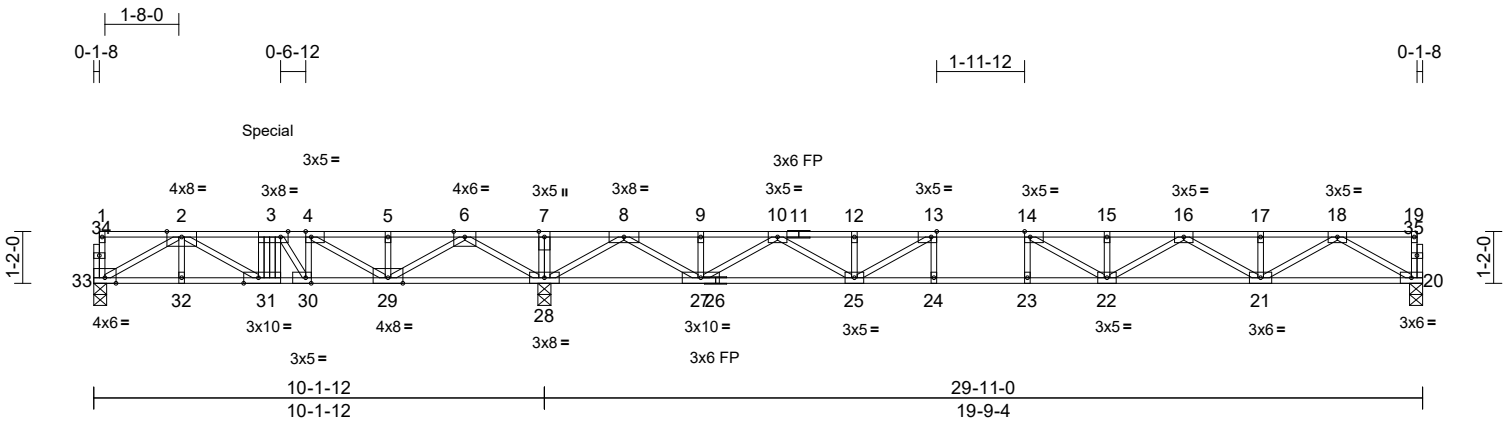

Scale = 1:51.9

Plate Offsets (X, Y): [3:0-2-0,Edge], [4:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge], [30:0-1-8,Edge], [31:0-4-0,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	0.92	Vert(LL)	-0.27	22-23	>861	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.89	Vert(CT)	-0.37	22-23	>639	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.04	20	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 158 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 26-20:2x4 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 6-0-0 oc bracing.

REACTIONS (size) 20=0-3-8, 28=0-3-8, 33=0-3-8
Max Uplift 33=-666 (LC 14)
Max Grav 20=638 (LC 14), 28=1813 (LC 1), 33=756 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-33=-46/0, 19-20=-47/0, 1-2=-3/0, 2-3=-2236/2512, 3-4=-1978/2404, 4-5=-1150/2024, 5-6=-1150/2024, 6-7=0/2503, 7-8=0/2503, 8-9=-798/414, 9-10=-798/414, 10-12=-2146/0, 12-13=-2146/0, 13-14=-2626/0, 14-15=-2606/0, 15-16=-2606/0, 16-17=-1744/0, 17-18=-1744/0, 18-19=-3/0
BOT CHORD 32-33=-1208/1255, 31-32=-1208/1255, 30-31=-2584/2288, 29-30=-2404/1978, 28-29=-1733/117, 27-28=-1179/45, 25-27=-143/1578, 24-25=0/2626, 23-24=0/2626, 22-23=0/2626, 21-22=0/2267, 20-21=0/999
WEBS 7-28=-143/0, 8-28=-1532/0, 18-20=-1152/0, 8-27=0/1286, 18-21=0/870, 9-27=-116/0, 17-21=-115/0, 10-27=-1017/0, 16-21=-610/0, 10-25=0/761, 16-22=0/397, 12-25=-126/76, 15-22=-198/4, 13-25=-871/0, 14-22=-316/379, 13-24=-21/187, 14-23=-165/43, 6-29=-369/1485, 5-29=-126/0, 4-30=-399/567, 6-28=-1730/323, 2-33=-1436/1386, 2-31=-1485/1117, 3-31=-536/738, 2-32=0/18, 3-30=-720/512, 4-29=-1239/653

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 666 lb uplift at joint 33.
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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 876 lb down and 1031 lb up at 3-11-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 20-33=-7, 1-19=-67
Concentrated Loads (lb)
Vert: 3=-840 (B)

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F07	Floor	7	1	Job Reference (optional)	I63648048

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

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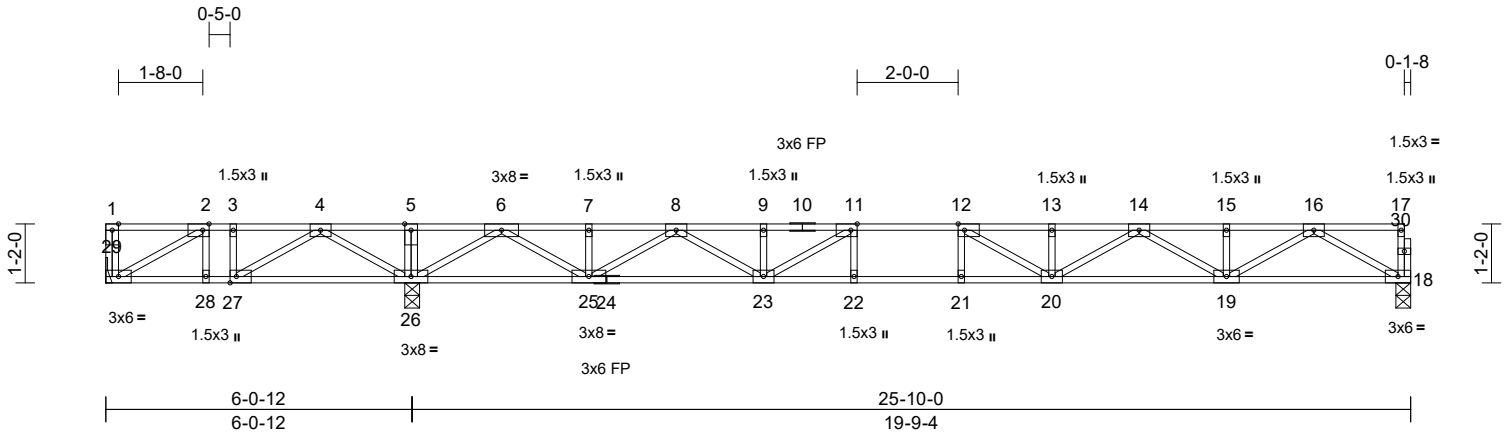

Scale = 1:45.6

Plate Offsets (X, Y): [2:0-1-8,Edge], [11:0-1-8,Edge], [12:0-1-8,Edge], [27:0-1-8,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	0.69	Vert(LL)	-0.26	20-21	>914	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.35	20-21	>667	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.03	18	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 132 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 24-18:2x4 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 6-0-0 oc bracing.

REACTIONS (size) 18=0-3-8, 26=0-3-8, 29= Mechanical
Max Uplift 29=-291 (LC 4)
Max Grav 18=612 (LC 7), 26=1405 (LC 1), 29=109 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-29=-79/0, 17-18=-47/0, 1-2=0/0, 2-3=-77/631, 3-4=-77/631, 4-5=0/2007, 5-6=0/2007, 6-7=-394/0, 7-8=-394/0, 8-9=-1822/0, 9-11=-1822/0, 11-12=-2384/0, 12-13=-2441/0, 13-14=-2441/0, 14-15=-1657/0, 15-16=-1657/0, 16-17=-3/0

BOT CHORD 28-29=-631/77, 27-28=-631/77, 26-27=-1314/0, 25-26=-722/0, 23-25=0/1216, 22-23=0/2384, 21-22=0/2384, 20-21=0/2384, 19-20=0/2138, 18-19=0/955

WEBS 5-26=-148/0, 4-26=-985/0, 2-29=-89/724, 4-27=0/857, 2-28=-185/0, 3-27=-273/0, 6-26=-1491/0, 16-18=-1101/0, 6-25=0/1240, 16-19=0/821, 7-25=-116/0, 15-19=-114/0, 8-25=-966/0, 14-19=-561/0, 8-23=0/715, 14-20=0/354, 9-23=-117/64, 13-20=-185/0, 11-23=-773/0, 12-20=-254/275, 11-22=-4/162, 12-21=-139/26

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 291 lb uplift at joint 29.
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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F08	Floor	1	1	Job Reference (optional)	I63648049

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 Feb 15 08:32:53 Page: 1
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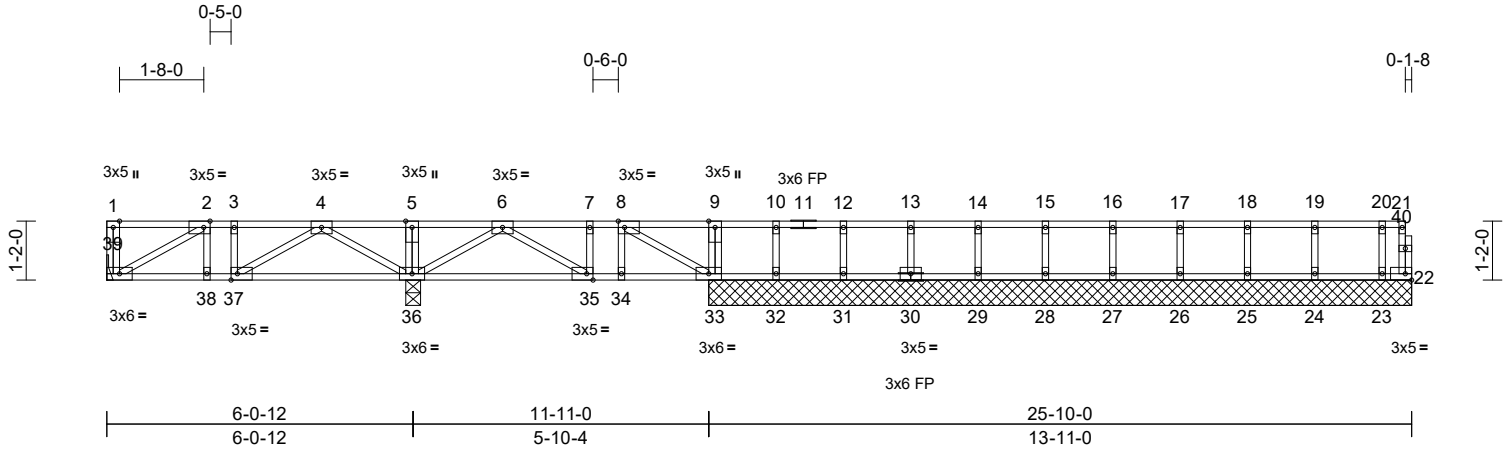

Scale = 1:45.6

Plate Offsets (X, Y): [2:0-1-8,Edge], [8:0-1-8,Edge], [35:0-1-8,Edge], [37:0-1-8,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	0.48	Vert(LL)	-0.01	35-36	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.10	Vert(CT)	-0.01	35-36	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	33	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 123 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, Except:
10-0-0 oc bracing: 38-39,37-38,34-35,33-34.

REACTIONS (size) 22=13-11-0, 23=13-11-0, 24=13-11-0, 25=13-11-0, 26=13-11-0, 27=13-11-0, 28=13-11-0, 29=13-11-0, 30=13-11-0, 31=13-11-0, 32=13-11-0, 33=13-11-0, 36=0-3-8, 39= Mechanical
Max Uplift 22=-39 (LC 1)
Max Grav 22=-10 (LC 3), 23=576 (LC 1), 24=722 (LC 4), 25=691 (LC 1), 26=699 (LC 4), 27=697 (LC 1), 28=698 (LC 4), 29=698 (LC 1), 30=697 (LC 4), 31=700 (LC 1), 32=695 (LC 4), 33=478 (LC 4), 36=527 (LC 1), 39=187 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-39=-51/0, 21-22=0/39, 1-2=0/0, 2-3=-235/0, 3-4=-235/0, 4-5=0/249, 5-6=0/249, 6-7=-204/0, 7-8=-204/0, 8-9=0/2, 9-10=0/2, 10-12=0/2, 12-13=0/2, 13-14=0/2, 14-15=0/2, 15-16=0/2, 16-17=0/2, 17-18=0/2, 18-19=0/2, 19-20=0/2, 20-21=0/2
BOT CHORD 38-39=0/235, 37-38=0/235, 36-37=-65/156, 35-36=-53/133, 34-35=0/204, 33-34=0/204, 32-33=-2/0, 31-32=-2/0, 29-31=-2/0, 28-29=-2/0, 27-28=-2/0, 26-27=-2/0, 25-26=-2/0, 24-25=-2/0, 23-24=-2/0, 22-23=-2/0
WEBS 5-36=-122/0, 9-33=-357/0, 4-36=-380/0, 2-39=-270/0, 4-37=0/137, 2-38=-4/9, 3-37=-52/0, 6-36=-370/0, 8-33=-237/0, 6-35=0/119, 7-35=-58/0, 8-34=0/25, 10-32=-687/0, 12-31=-691/0, 13-30=-689/0, 14-29=-689/0, 15-28=-689/0, 16-27=-688/0, 17-26=-691/0, 18-25=-683/0, 19-24=-713/0, 20-23=-569/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 22-39=-7, 1-9=-67, 9-21=-517

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F09	Floor	2	1	Job Reference (optional)	I63648050

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 Feb 15 08:32:54 Page: 1
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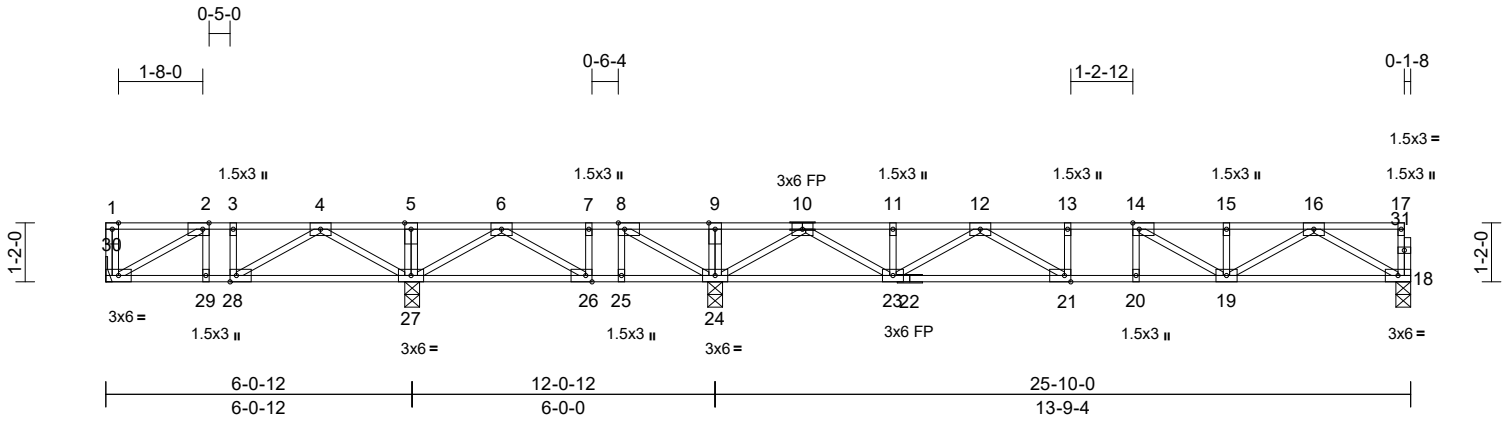

Scale = 1:45.6

Plate Offsets (X, Y): [2:0-1-8,Edge], [8:0-1-8,Edge], [14:0-1-8,Edge], [21:0-1-8,Edge], [26:0-1-8,Edge], [28:0-1-8,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	0.47	Vert(LL)	-0.06	20-21	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.40	Vert(CT)	-0.08	21-23	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.01	18	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 135 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) 18=0-3-8, 24=0-3-8, 27=0-3-8, 30=Mechanical
Max Grav 18=427 (LC 13), 24=911 (LC 11), 27=488 (LC 3), 30=175 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-30=-56/0, 17-18=-48/0, 1-2=0/0, 2-3=-211/10, 3-4=-211/10, 4-5=0/325, 5-6=0/325, 6-7=-45/577, 7-8=-45/577, 8-9=0/921, 9-11=-602/921, 11-12=-602/0, 12-13=-1208/0, 13-14=-1208/0, 14-15=-1039/0, 15-16=-1039/0, 16-17=-3/0
BOT CHORD 29-30=-10/211, 28-29=-10/211, 27-28=-107/112, 26-27=-363/51, 25-26=-577/45, 24-25=-577/45, 23-24=-99/0, 21-23=0/1003, 20-21=0/1208, 19-20=0/1208, 18-19=0/638
WEBS 5-27=-120/0, 9-24=-113/0, 4-27=-407/0, 2-30=-242/12, 4-28=0/172, 2-29=-32/22, 3-28=-66/0, 6-27=-289/171, 8-24=-611/0, 6-26=-249/27, 7-26=-21/83, 8-25=0/100, 10-24=-983/0, 16-18=-735/0, 10-23=0/764, 16-19=0/468, 11-23=-117/0, 15-19=-139/0, 12-23=-474/0, 14-19=-287/0, 12-21=0/328, 13-21=-111/0, 14-20=-47/41

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.

LOAD CASE(S) Standard

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F10	Floor Girder	1	1	Job Reference (optional)	I63648051

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 Feb 15 08:32:55 Page: 1
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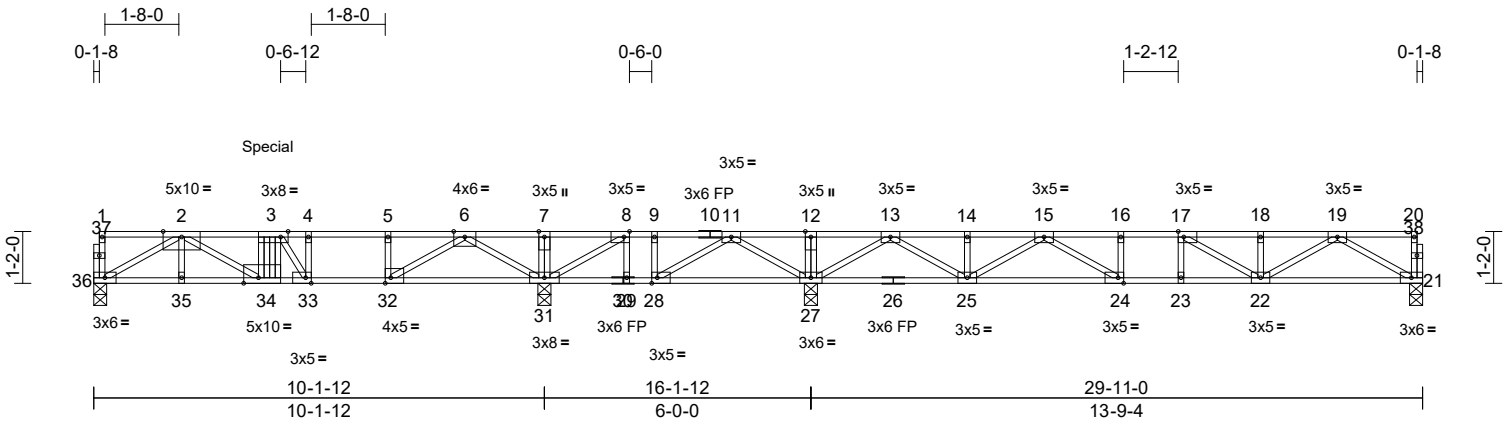

Scale = 1:51.9

Plate Offsets (X, Y): [3:0-2-0,Edge], [8:0-1-8,Edge], [17:0-1-8,Edge], [24:0-1-8,Edge], [28:0-1-8,Edge], [32:0-1-8,Edge], [33:0-1-8,Edge], [34:0-4-0,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	0.79	Vert(LL)	-0.17	33-34	>687	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.94	Vert(CT)	-0.20	33-34	>598	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.03	21	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 158 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat) *Except* 10-1:2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 36-30:2x4 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 21=0-3-8, 27=0-3-8, 31=0-3-8, 36=0-3-8
Max Uplift 36=-67 (LC 26)
Max Grav 21=424 (LC 5), 27=1022 (LC 11), 31=860 (LC 3), 36=997 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-36=-51/0, 20-21=-48/0, 1-2=-3/0, 2-3=-3154/376, 3-4=-2530/270, 4-5=-2530/270, 5-6=-2530/270, 6-7=-304/400, 7-8=-304/400, 8-9=-371/500, 9-11=-371/500, 11-12=0/1012, 12-13=0/1012, 13-14=-566/0, 14-15=-566/0, 15-16=-1188/0, 16-17=-1188/0, 17-18=-1028/0, 18-19=-1028/0, 19-20=-3/0
BOT CHORD 35-36=-143/1669, 34-35=-143/1669, 33-34=-386/3207, 32-33=-270/2530, 31-32=-214/1324, 29-31=-500/371, 28-29=-500/371, 27-28=-720/131, 25-27=-161/0, 24-25=0/974, 23-24=0/1188, 22-23=0/1188, 21-22=0/632
WEBS 7-31=-214/0, 12-27=-139/0, 11-27=-726/0, 8-31=-308/375, 11-28=0/541, 8-29=-58/28, 9-28=-213/0, 13-27=-996/0, 19-21=-728/0, 13-25=0/753, 19-22=0/462, 14-25=-116/0, 18-22=-141/0, 15-25=-491/0, 17-22=-271/9, 15-24=0/345, 16-24=-116/0, 17-23=-51/37, 2-36=-1910/164, 6-32=-75/1423, 5-32=-490/26, 4-33=-154/460, 6-31=-1333/0, 2-35=-5/16, 2-34=-265/1690, 3-34=-556/106, 3-33=-1145/288

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 36. This connection is for uplift only and does not consider lateral forces.
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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1004 lb down and 266 lb up at 3-11-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 21-36=-7, 1-20=-67
Concentrated Loads (lb)
Vert: 3=-968 (F)

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F11	Floor	12	1	Job Reference (optional)	I63648052

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

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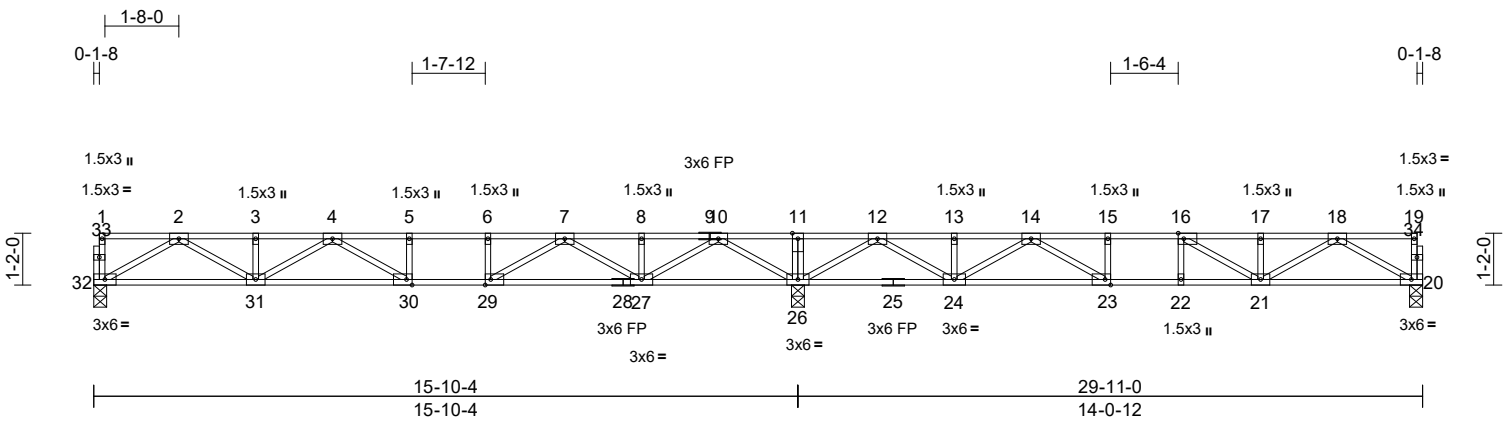


Scale = 1:51.9

Plate Offsets (X, Y): [16:0-1-8,Edge], [23:0-1-8,Edge], [29:0-1-8,Edge], [30:0-1-8,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	0.60	Vert(LL)	-0.13	30-31	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.68	Vert(CT)	-0.19	30-31	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.03	20	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 150 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) 20=0-3-8, 26=0-3-8, 32=0-3-8
Max Grav 20=437 (LC 4), 26=1311 (LC 1), 32=501 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-32=-47/0, 19-20=-49/0, 1-2=-3/0, 2-3=-1291/0, 3-4=-1291/0, 4-5=-1623/0, 5-6=-1623/0, 6-7=-1623/0, 7-8=-691/310, 8-10=-691/310, 10-11=0/1534, 11-12=0/1534, 12-13=-604/444, 13-14=-604/444, 14-15=-1257/18, 15-16=-1257/18, 16-17=-1071/0, 17-18=-1071/0, 18-19=-3/0
BOT CHORD 31-32=0/770, 30-31=0/1583, 29-30=0/1623, 27-29=-101/1223, 26-27=-596/0, 24-26=-730/0, 23-24=-233/1026, 22-23=-18/1257, 21-22=-18/1257, 20-21=0/655
WEBS 11-26=-137/0, 10-26=-1182/0, 2-32=-887/0, 10-27=0/947, 2-31=0/608, 8-27=-130/0, 3-31=-101/0, 7-27=-687/0, 4-31=-341/1, 7-29=0/647, 4-30=-210/134, 5-30=-60/42, 6-29=-235/0, 12-26=-1082/0, 18-20=-754/0, 12-24=0/846, 18-21=0/486, 13-24=-122/0, 17-21=-163/0, 14-24=-586/0, 16-21=-215/141, 14-23=0/510, 15-23=-175/0, 16-22=-84/8

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

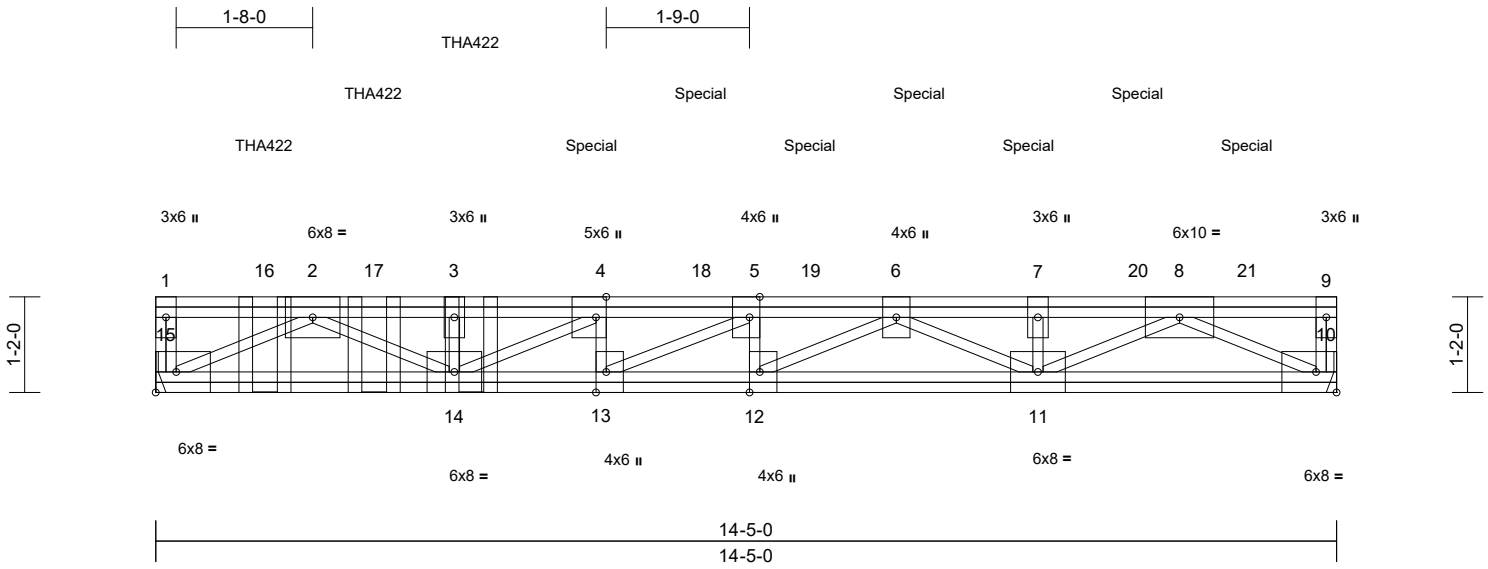
February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	F12	Floor Girder	1	1	Job Reference (optional)	I63648053

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 Feb 15 08:32:57 ID:RzdaQDTUD3vi?aR2M?YDBuzuVbW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:28.1

Plate Offsets (X, Y): [4:0-3-0,Edge], [5:0-3-0,Edge], [12:0-3-0,Edge], [13:0-3-0,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	0.69	Vert(LL)	-0.17	12	>993	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.17	12-13	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.03	10	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.2(flat)
WEBS 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) 10= Mechanical, 15= Mechanical
Max Uplift 10=-987 (LC 3), 15=-221 (LC 3)
Max Grav 10=884 (LC 1), 15=1013 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-79/0, 9-10=-76/63, 1-2=0/0, 2-3=-2896/1425, 3-4=-2896/1425, 4-5=-3448/2670, 5-6=-3592/3411, 6-7=-2608/2822, 7-8=-2608/2822, 8-9=0/0
BOT CHORD 14-15=-554/1790, 13-14=-2670/3448, 12-13=-3411/3592, 11-12=-3413/3289, 10-11=-1808/1549
WEBS 8-10=-1740/2031, 2-15=-2010/622, 8-11=-1147/1199, 2-14=-986/1252, 7-11=-179/259, 3-14=-290/0, 6-11=-771/669, 4-14=-620/1399, 6-12=0/343, 4-13=-344/79, 5-12=-144/21, 5-13=-161/824

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 221 lb uplift at joint 15 and 987 lb uplift at joint 10.
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) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 1-4-0 oc max. starting at 1-4-0 from the left end to 3-10-4 to connect truss(es) to back face of top chord.
7) Fill all nail holes where hanger is in contact with lumber.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 65 lb down and 335 lb up at 5-4-0, 65 lb down and 335 lb up at 6-8-0, 65 lb down and 335 lb up at 8-0-0, 65 lb down and 335 lb up at 9-4-0, 65 lb down and 335 lb up at 10-8-0, and 65 lb down and 335 lb up at 12-0-0, and 65 lb down and 335 lb up at 13-4-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 10-15=-7, 1-9=-67
Concentrated Loads (lb)
Vert: 7=-65 (B), 3=-142 (B), 6=-65 (B), 4=-65 (B), 16=-131 (B), 17=-131 (B), 18=-65 (B), 19=-65 (B), 20=-65 (B), 21=-65 (B)

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	FW05	Floor Supported Gable	1	1	Job Reference (optional)	I63648054

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

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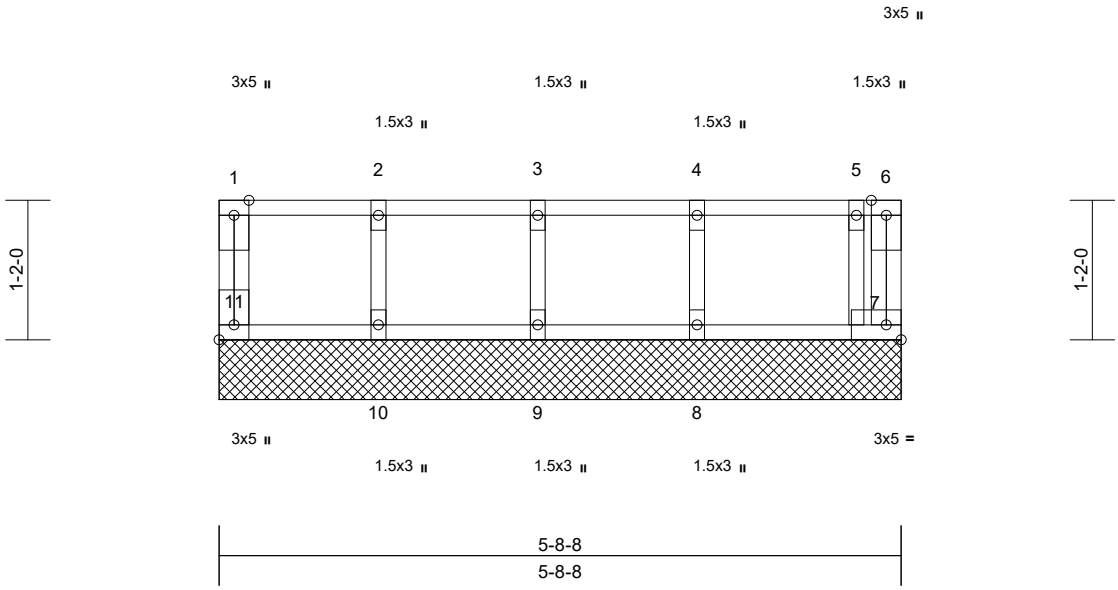


Scale = 1:19.3

Plate Offsets (X, Y): [11:Edge,0-1-8]

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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.09	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 28 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 5-8-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7=5-8-8, 8=5-8-8, 9=5-8-8, 10=5-8-8, 11=5-8-8
Max Grav 7=227 (LC 1), 8=393 (LC 1), 9=364 (LC 1), 10=336 (LC 1), 11=172 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-11=-159/0, 6-7=0/33, 1-2=-41/0, 2-3=-41/0, 3-4=-41/0, 4-5=-41/0, 5-6=-3/0
BOT CHORD 10-11=0/41, 9-10=0/41, 8-9=0/41, 7-8=0/41
WEBS 2-10=-338/0, 3-9=-354/0, 4-8=-377/0, 5-7=-262/0

NOTES
1) Gable requires continuous bottom chord bearing.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.
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) 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: 7-11=-7, 1-6=-267 (F=-200)

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

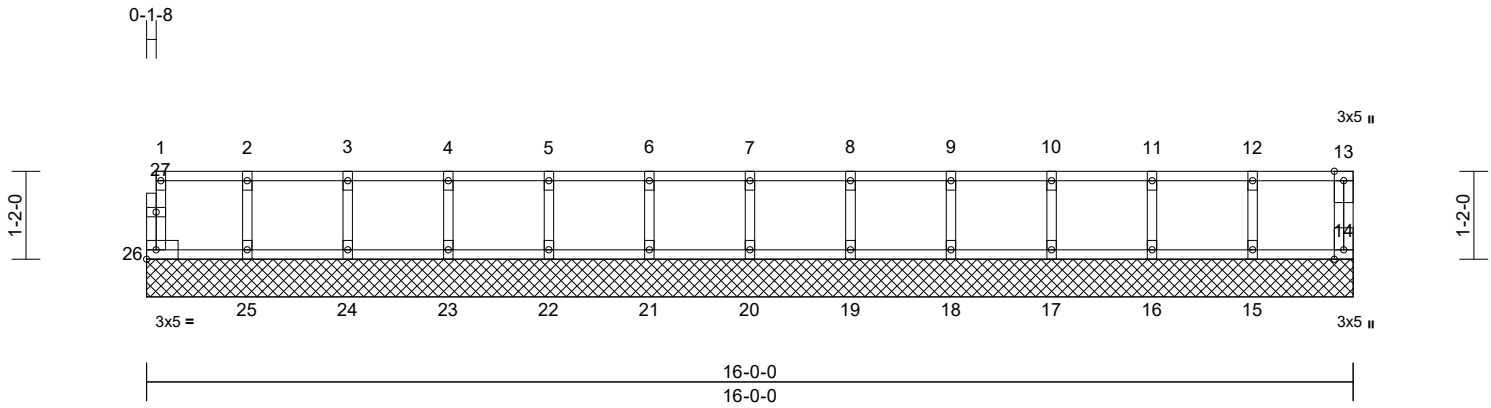
February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	FW16	Floor Supported Gable	1	1	Job Reference (optional)	I63648055

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 Feb 15 08:32:58 ID:yUcnjZmkwxIzFXpWsqxFlSzuVXF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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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	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 68 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=16-0-0, 15=16-0-0, 16=16-0-0, 17=16-0-0, 18=16-0-0, 19=16-0-0, 20=16-0-0, 21=16-0-0, 22=16-0-0, 23=16-0-0, 24=16-0-0, 25=16-0-0, 26=16-0-0

Max Grav 14=42 (LC 1), 15=95 (LC 1), 16=98 (LC 1), 17=98 (LC 1), 18=98 (LC 1), 19=98 (LC 1), 20=98 (LC 1), 21=98 (LC 1), 22=98 (LC 1), 23=98 (LC 1), 24=99 (LC 1), 25=95 (LC 1), 26=38 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-26=-34/0, 13-14=-38/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0, 6-7=-7/0, 7-8=-7/0, 8-9=-7/0, 9-10=-7/0, 10-11=-7/0, 11-12=-7/0, 12-13=-7/0
BOT CHORD	25-26=0/7, 24-25=0/7, 23-24=0/7, 22-23=0/7, 21-22=0/7, 20-21=0/7, 19-20=0/7, 18-19=0/7, 17-18=0/7, 16-17=0/7, 15-16=0/7, 14-15=0/7
WEBS	2-25=-87/0, 3-24=-90/0, 4-23=-89/0, 5-22=-89/0, 6-21=-89/0, 7-20=-89/0, 8-19=-89/0, 9-18=-89/0, 10-17=-89/0, 11-16=-89/0, 12-15=-87/0

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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	V1	Valley	1	1	Job Reference (optional)	I63648056

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 Feb 15 08:32:58 Page: 1
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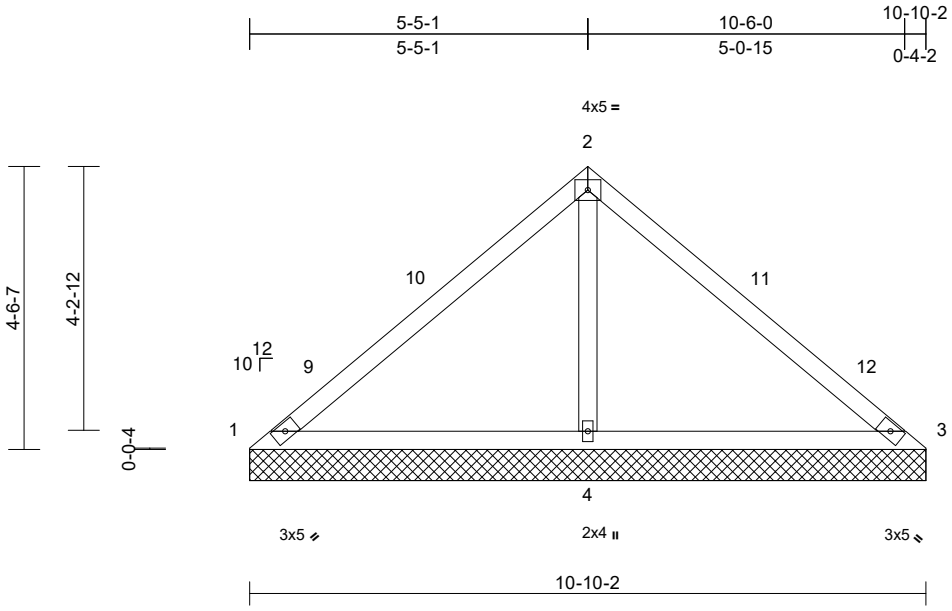

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.51	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horiz(TL)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 42 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=10-10-2, 3=10-10-2, 4=10-10-2
Max Horiz 1=-102 (LC 12)
Max Uplift 1=-74 (LC 21), 3=-74 (LC 20), 4=-137 (LC 14)
Max Grav 1=74 (LC 20), 3=74 (LC 21), 4=904 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-143/451, 2-3=-143/451
BOT CHORD 1-4=-262/198, 3-4=-262/198
WEBS 2-4=-711/312

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 7-10-6, Exterior(2E) 7-10-6 to 10-10-6 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 1, 74 lb uplift at joint 3 and 137 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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	V2	Valley	1	1	Job Reference (optional)	I63648057

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

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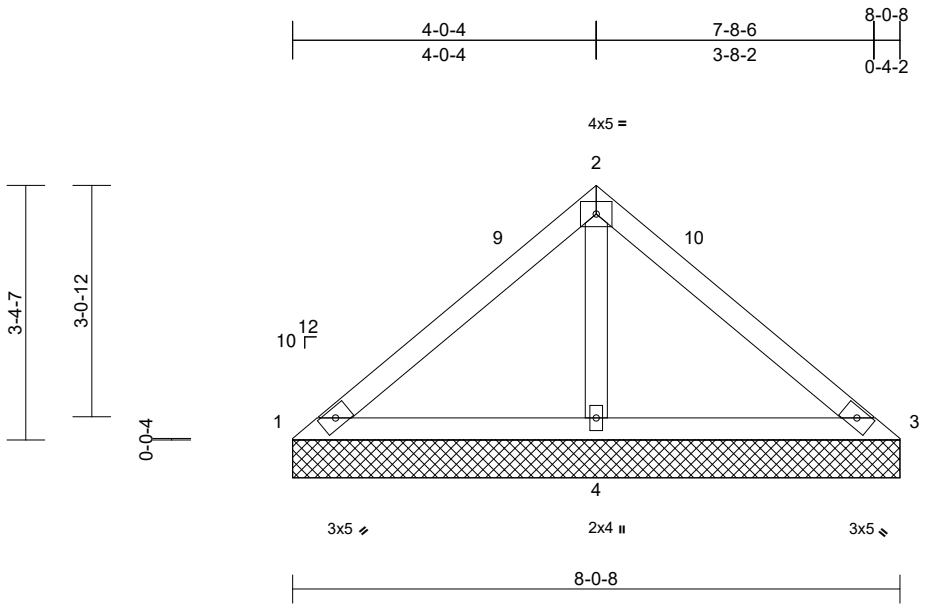

Scale = 1:30.5

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	0.33	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 30 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 8-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=8-0-8, 3=8-0-8, 4=8-0-8
Max Horiz 1=-75 (LC 10)
Max Uplift 1=-35 (LC 21), 3=-35 (LC 20), 4=-91 (LC 14)
Max Grav 1=105 (LC 20), 3=105 (LC 21), 4=628 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-111/282, 2-3=-111/282
BOT CHORD 1-4=-192/173, 3-4=-192/173
WEBS 2-4=-460/234

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 5-0-13, Exterior(2E) 5-0-13 to 8-0-13 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 35 lb uplift at joint 1, 35 lb uplift at joint 3 and 91 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

February 15,2024

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

Job	Truss	Truss Type	Qty	Ply	DRB - 192 FaNC	
24020062	V3	Valley	1	1	Job Reference (optional)	I63648058

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

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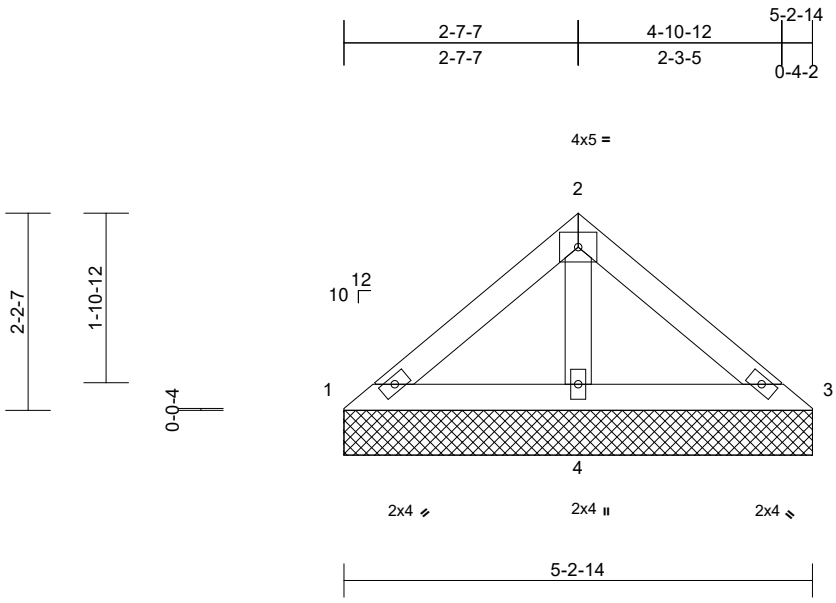


Scale = 1:25.8

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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 19 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 5-2-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=5-2-14, 3=5-2-14, 4=5-2-14
Max Horiz 1=-47 (LC 12)
Max Uplift 3=-6 (LC 15), 4=-39 (LC 14)
Max Grav 1=92 (LC 20), 3=92 (LC 21), 4=329 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-84/121, 2-3=-84/121
BOT CHORD 1-4=-92/99, 3-4=-92/99
WEBS 2-4=-210/114

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 6 lb uplift at joint 3 and 39 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.

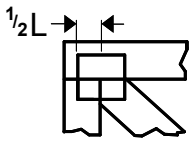
LOAD CASE(S) Standard

February 15,2024

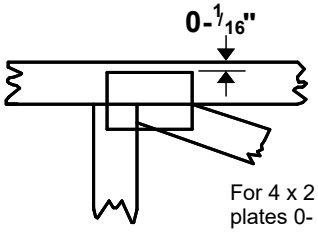
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

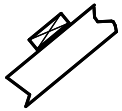
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

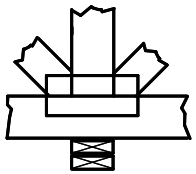
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

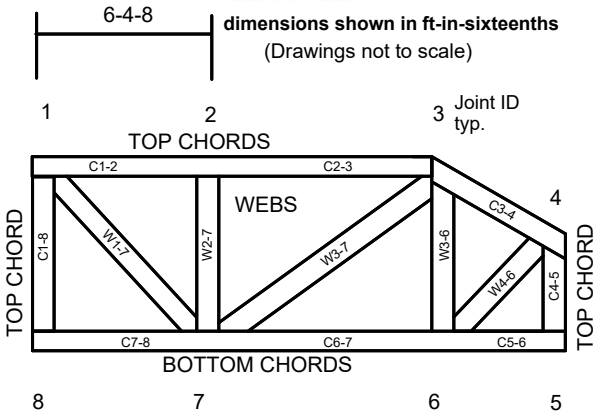


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.