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

Phone #:919-775-1450

Builder: DRB HOMES
Model: 83 FaNC
COOPER 3 ELV 4

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.

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

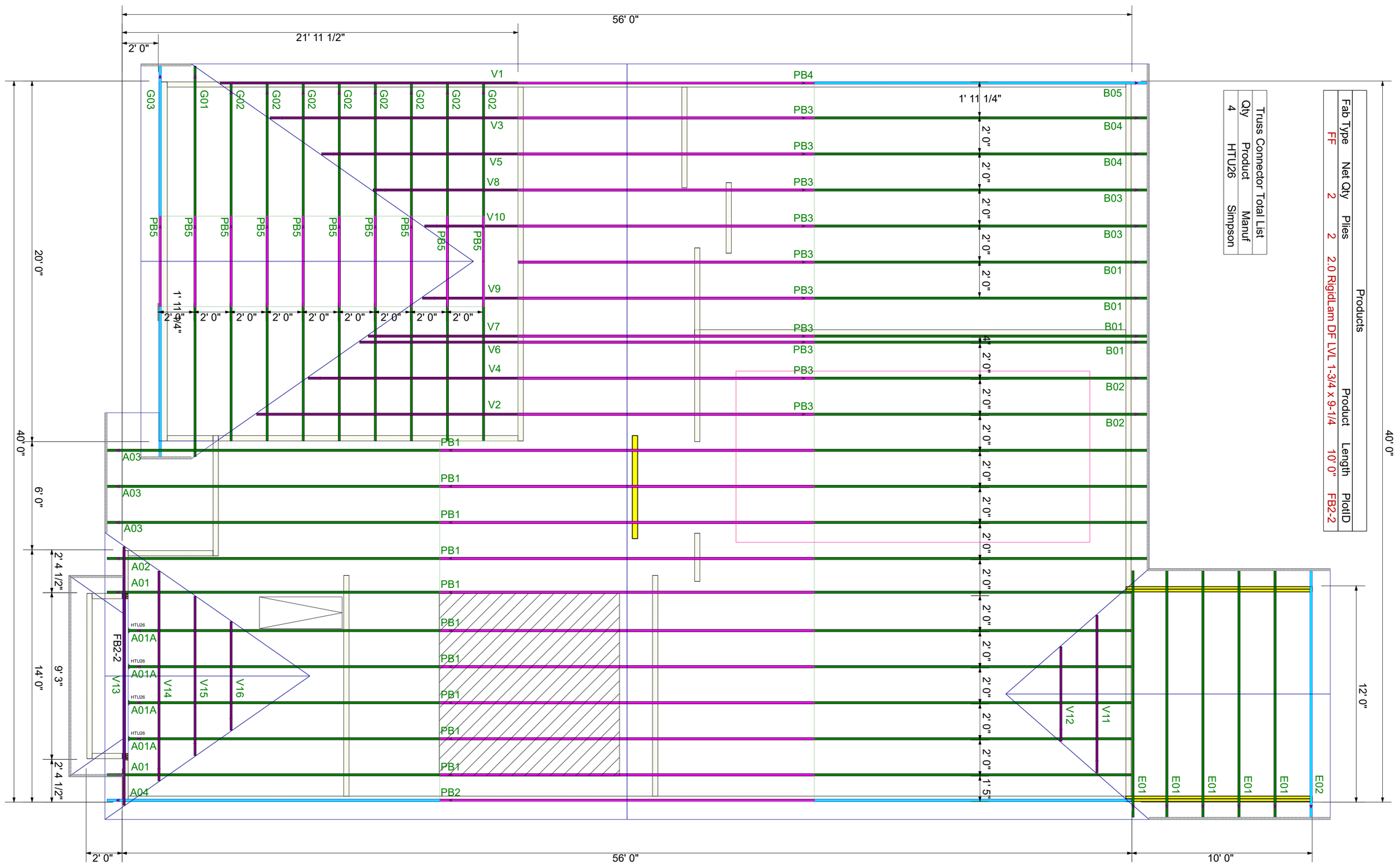
** REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS.

** 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

Qty	Product	Manuf
4	HTU26	Simpson

Products

Fab Type	Net Qty	Plies	Product	Length	PlotID
FF	2	2	2.0 RigidLam DF LVL 1-3/4 x 9-1/4	10' 0"	FB2-2

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

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

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

Scale: NTS
Date: 1/10/2024
Designer: ND
Project Number: **23120150**
Sheet Number: **1/1**

DRB HOMES

83 FaNC
COOPER 3 - ELV 4

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

RE: 23120150
DRB HOMES - 83 FaNC

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: 23120150
Lot/Block: Model:
Address: Subdivision:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 36 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I62065515	A01	11/17/2023	21	I62065535	V1	11/17/2023
2	I62065516	A01A	11/17/2023	22	I62065536	V2	11/17/2023
3	I62065517	A02	11/17/2023	23	I62065537	V3	11/17/2023
4	I62065518	A03	11/17/2023	24	I62065538	V4	11/17/2023
5	I62065519	A04	11/17/2023	25	I62065539	V5	11/17/2023
6	I62065520	B01	11/17/2023	26	I62065540	V6	11/17/2023
7	I62065521	B02	11/17/2023	27	I62065541	V7	11/17/2023
8	I62065522	B03	11/17/2023	28	I62065542	V8	11/17/2023
9	I62065523	B04	11/17/2023	29	I62065543	V9	11/17/2023
10	I62065524	B05	11/17/2023	30	I62065544	V10	11/17/2023
11	I62065525	E01	11/17/2023	31	I62065545	V11	11/17/2023
12	I62065526	E02	11/17/2023	32	I62065546	V12	11/17/2023
13	I62065527	G01	11/17/2023	33	I62065547	V13	11/17/2023
14	I62065528	G02	11/17/2023	34	I62065548	V14	11/17/2023
15	I62065529	G03	11/17/2023	35	I62065549	V15	11/17/2023
16	I62065530	PB1	11/17/2023	36	I62065550	V16	11/17/2023
17	I62065531	PB2	11/17/2023				
18	I62065532	PB3	11/17/2023				
19	I62065533	PB4	11/17/2023				
20	I62065534	PB5	11/17/2023				

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

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

November 17, 2023

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	A01	Piggyback Base	2	1	Job Reference (optional)	I62065515

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

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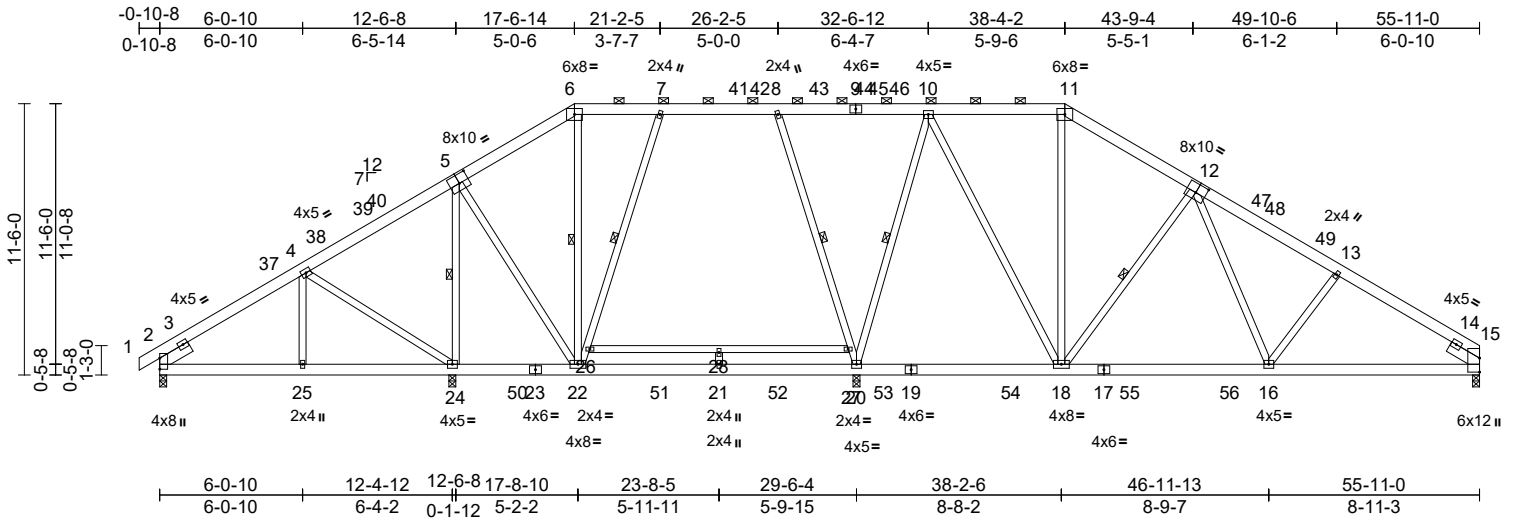

Scale = 1:97.6

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

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	0.50	Vert(LL)	-0.10	16-18	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.31	21-22	>662	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.04	15	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 475 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 22-6,22-7,20-8,20-10,18-10,18-11,26-27:2x4 SP No.2
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 4-7-7 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-11.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 5-24, 6-22, 7-22, 8-20, 10-20, 12-18

REACTIONS (size) 2=0-3-8, 15=0-3-8, 20=0-3-8, 24=0-3-8
Max Horiz 2=249 (LC 13)
Max Uplift 2=-56 (LC 14), 15=-124 (LC 15), 20=-118 (LC 15), 24=-158 (LC 14)
Max Grav 2=427 (LC 41), 15=1277 (LC 37), 20=1924 (LC 44), 24=1914 (LC 35)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/26, 2-4=-355/87, 4-6=-320/523, 6-7=-209/142, 7-8=-312/172, 8-10=-166/145, 10-11=-696/232, 11-13=-1605/227, 13-15=-1765/207
BOT CHORD	2-25=-207/317, 24-25=-170/317, 22-24=-409/158, 21-22=-116/392, 20-21=-116/392, 18-20=-68/478, 16-18=-16/1155, 15-16=-96/1433
WEBS	4-25=0/282, 4-24=-655/165, 5-24=-1429/68, 5-22=0/934, 6-22=-231/42, 22-26=-345/117, 7-26=-333/130, 8-27=-493/142, 20-27=-505/129, 10-20=-1041/310, 10-18=-151/952, 11-18=-7/195, 12-18=-831/226, 12-16=-32/530, 13-16=-244/179, 26-28=-6/7, 27-28=-6/7, 21-28=0/42

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 5-1-6, Interior (1) 5-1-6 to 9-1-3, Exterior(2R) 9-1-3 to 26-1-7, Interior (1) 26-1-7 to 29-10-7, Exterior(2R) 29-10-7 to 46-9-13, Interior (1) 46-9-13 to 49-11-2, Exterior(2E) 49-11-2 to 55-11-0 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, 23-8-8 from left end, supported at two points, 5-0-0 apart.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 24, 20, and 15. 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.
13) 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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	I62065516
23120150	A01A	Piggyback Base	4	1	Job Reference (optional)	

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

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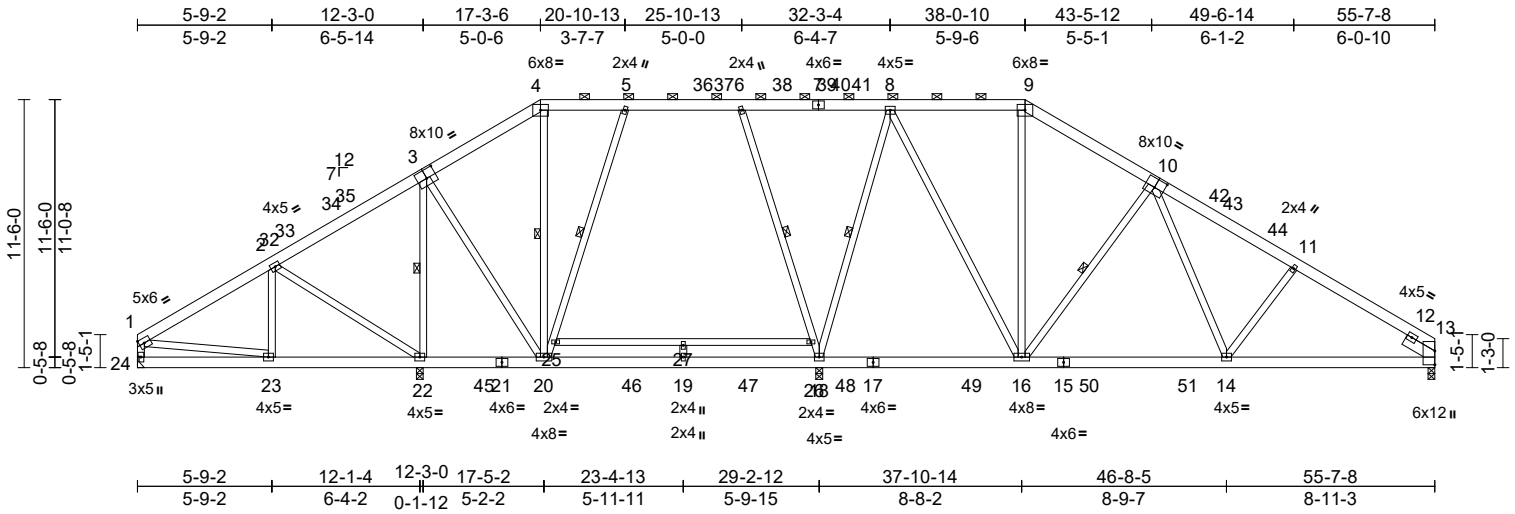

Scale = 1:98.8

Plate Offsets (X, Y): [3:0-5-0,0-4-8], [10:0-5-0,0-4-8]

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	0.48	Vert(LL)	-0.10	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.31	19-20	>663	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 476 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 20-4,20-5,18-6,18-8,16-8,16-9,24-1,25-26:2x 4 SP No.2
SLIDER	Right 2x6 SP No.2 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-8-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-9.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 3-22, 4-20, 5-20, 6-18, 8-18, 10-16

REACTIONS (size) 13=0-3-8, 18=0-3-8, 22=0-3-8, 24= Mechanical
Max Horiz 24=-264 (LC 12)
Max Uplift 13=-121 (LC 15), 18=-116 (LC 15), 22=-183 (LC 14), 24=-15 (LC 14)
Max Grav 13=1254 (LC 36), 18=1941 (LC 43), 22=1910 (LC 34), 24=348 (LC 40)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-343/143, 2-4=-313/579, 4-5=-178/122, 5-6=-282/153, 6-8=-138/127, 8-9=-672/220, 9-11=-1568/221, 11-13=-1727/202, 1-24=-298/39
BOT CHORD	23-24=-238/286, 22-23=-157/267, 20-22=-447/174, 19-20=-124/367, 18-19=-124/367, 16-18=-63/456, 14-16=-4/1125, 13-14=-92/1402
WEBS	2-23=0/276, 2-22=-636/158, 3-22=-1423/92, 3-20=0/950, 4-20=-247/50, 20-25=-349/116, 5-25=-337/129, 6-26=-490/142, 18-26=-502/128, 8-18=-1052/314, 8-16=-155/962, 9-16=0/186, 10-16=-824/227, 10-14=-32/533, 11-14=-240/180, 1-23=-111/179, 25-27=-5/7, 26-27=-5/7, 19-27=0/42

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) 0-5-4 to 6-5-2, Interior (1) 6-5-2 to 9-1-3, Exterior(2R) 9-1-3 to 26-1-7, Interior (1) 26-1-7 to 29-10-7, Exterior(2R) 29-10-7 to 46-9-13, Interior (1) 46-9-13 to 49-11-2, Exterior(2E) 49-11-2 to 55-11-0 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) 200.0lb AC unit load placed on the bottom chord, 23-8-8 from left end, supported at two points, 5-0-0 apart.
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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 24.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22, 18, and 13. 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.
13) 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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	A02	Piggyback Base	1	1	Job Reference (optional)	I62065517

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

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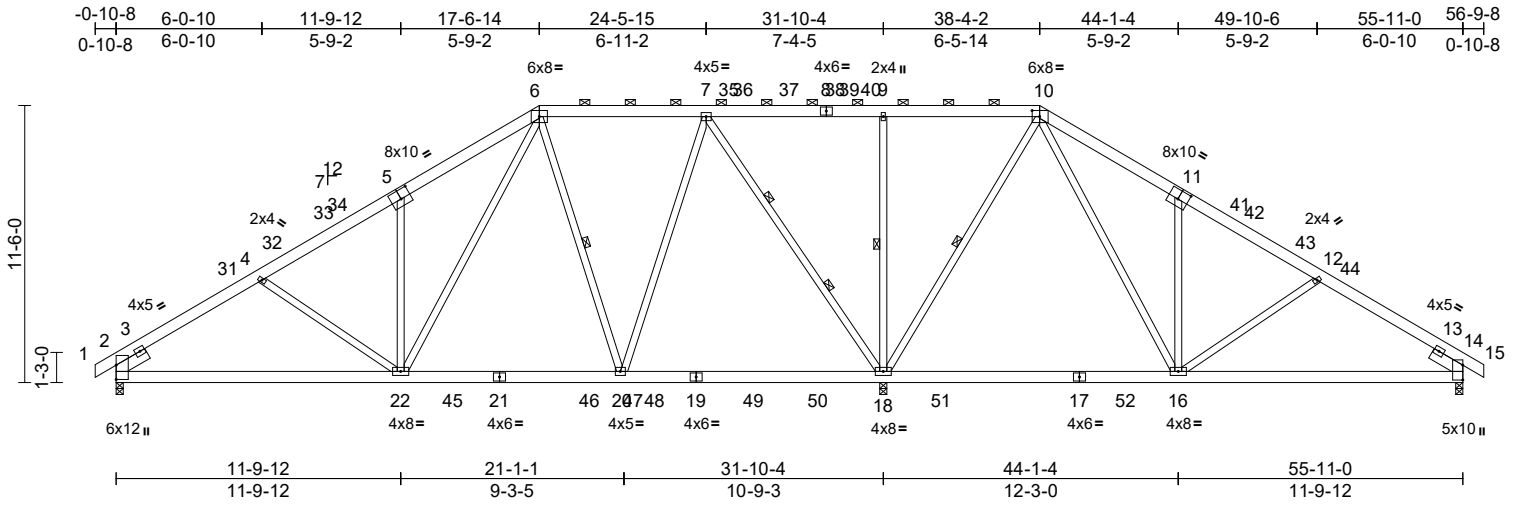

Scale = 1:95.7

Plate Offsets (X, Y): [5:0-5-0,0-4-8], [10:0-3-12,0-3-0], [11:0-5-0,0-4-8]

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	0.47	Vert(LL)	-0.14	16-18	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.18	18-20	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.02	18	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 451 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP 2400F 2.0E *Except* 21-19:2x6 SP No.2
WEBS	2x4 SP No.2 *Except* 22-4,16-11,16-12,5-22:2x4 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 4-7-5 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-10.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-18.
WEBS	1 Row at midpt 9-18, 10-18, 6-20
WEBS	2 Rows at 1/3 pts 7-18

REACTIONS (size) 2=0-3-8, 14=0-3-8, 18=0-3-8
Max Horiz 2=-253 (LC 12)
Max Uplift 2=-113 (LC 14), 14=-133 (LC 15), 18=-44 (LC 15)
Max Grav 2=1402 (LC 35), 14=919 (LC 37), 18=3320 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/26, 2-4=-1855/182, 4-6=-1683/293, 6-7=-673/108, 7-9=0/681, 9-10=0/681, 10-12=-853/325, 12-14=-1102/213, 14-15=0/26
BOT CHORD	2-22=-237/1552, 20-22=-67/867, 18-20=-81/532, 16-18=-196/175, 14-16=-86/883
WEBS	9-18=-592/185, 10-18=-1252/213, 4-22=-271/181, 6-22=-253/1185, 7-20=0/1237, 6-20=-648/239, 7-18=-1659/162, 11-16=-655/236, 10-16=-228/1321, 12-16=-347/181, 5-22=-679/235

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 5-1-6, Interior (1) 5-1-6 to 9-1-3, Exterior(2R) 9-1-3 to 26-0-9, Interior (1) 26-0-9 to 29-10-7, Exterior(2R) 29-10-7 to 46-9-13, Interior (1) 46-9-13 to 50-9-10, Exterior(2E) 50-9-10 to 56-9-8 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) 200.0lb AC unit load placed on the bottom chord, 23-11-12 from left end, supported at two points, 5-0-0 apart.
7) Provide adequate drainage to prevent water ponding.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 18, and 14. 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.
12) 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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	A03	Piggyback Base	3	1	Job Reference (optional)	I62065518

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 Nov 16 11:10:04
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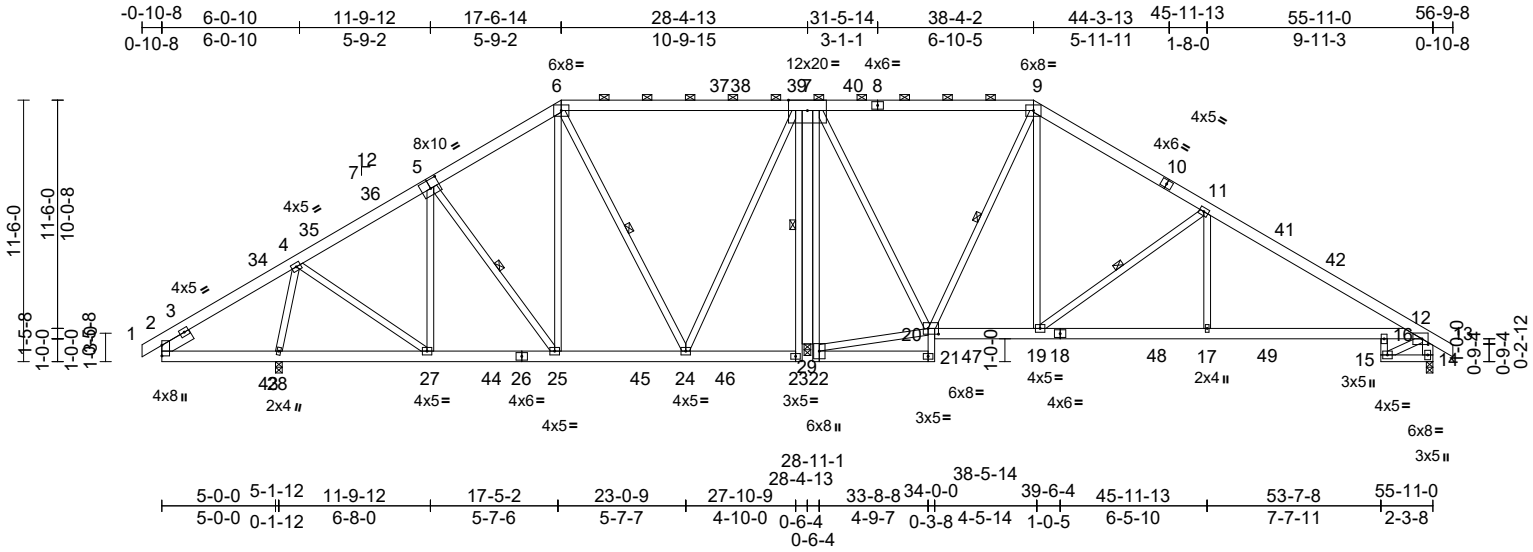

Scale = 1:101.4

Plate Offsets (X, Y): [5:0-5-0,0-4-8], [12:0-3-4,0-2-15], [20:0-5-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.14	16-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.26	16-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.11	14	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 512 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 *Except* 6-8:2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2 *Except* 21-20,16-15:2x4 SP No.3, 15-14:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 25-6,24-6,24-7,20-9,23-7,22-7,20-7:2x4 SP No.2, 14-12:2x6 SP No.2
OTHERS 2x6 SP No.2
SLIDER Left 2x6 SP No.2 -- 1-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-9-2 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-25, 6-24, 9-20, 11-19, 7-23

REACTIONS (size) 14=0-3-8, 28=0-3-8, 29=0-3-8
Max Horiz 28=281 (LC 13)
Max Uplift 14=-183 (LC 15), 28=-223 (LC 14), 29=-128 (LC 15)
Max Grav 14=1287 (LC 49), 28=1606 (LC 35), 29=2608 (LC 44)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/26, 2-4=-232/438, 4-6=-755/242, 6-7=-123/202, 7-9=-244/230, 9-11=-871/271, 11-12=-1813/284, 12-13=0/42, 12-14=-1310/229
BOT CHORD 2-28=-292/248, 27-28=-284/270, 25-27=-172/613, 24-25=-146/467, 23-24=-443/175, 20-21=0/104, 19-20=0/580, 17-19=-111/1503, 16-17=-111/1503, 12-16=-79/1416, 15-16=-76/217, 14-15=-155/357, 21-22=-31/24
WEBS 4-28=-1372/307, 4-27=-108/733, 5-27=-302/167, 5-25=-334/110, 6-25=-26/506, 6-24=-664/123, 7-24=-43/939, 9-20=-994/137, 9-19=-61/891, 11-19=-1153/252, 11-17=0/506, 23-29=-176/118, 22-29=-185/117, 7-29=-2381/147, 20-22=-417/153, 7-20=-55/1156, 12-15=-320/149

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 4-8-10, Interior (1) 4-8-10 to 9-7-15, Exterior(2R) 9-7-15 to 25-5-12, Interior (1) 25-5-12 to 30-5-4, Exterior(2R) 30-5-4 to 45-11-13, Interior (1) 45-11-13 to 51-2-6, Exterior(2E) 51-2-6 to 56-9-8 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) All plates are 4x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Bearing at joint(s) 29 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14, 28, and 29. 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.
13) 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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	A04	Piggyback Base Supported Gable	1	1	Job Reference (optional)	I62065519

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

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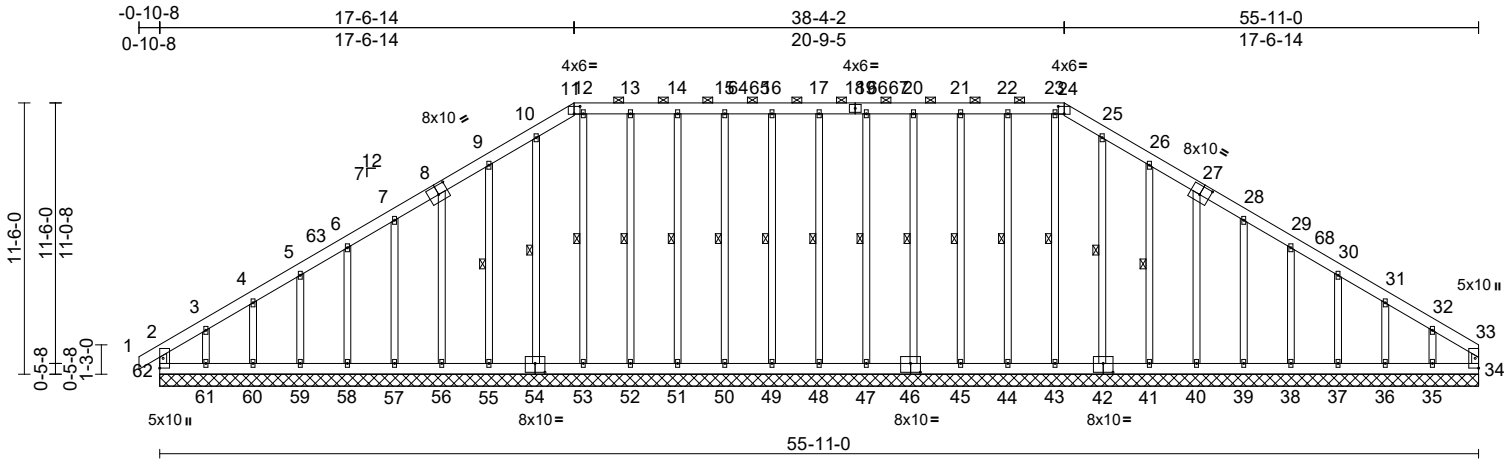

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Plate Offsets (X, Y): [8:0-5-0,0-4-8], [11:0-3-0,0-3-12], [24:0-3-0,0-3-12], [27:0-5-0,0-4-8], [42:0-5-0,0-4-8], [46:0-5-0,0-4-8], [54:0-5-0,0-4-8]

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	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.01	34	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 585 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3 *Except*
48-17,49-16,50-15,51-14,52-13,53-12,47-19,
46-20,45-21,44-22,43-23:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-24.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 17-48, 16-49, 15-50, 14-51, 13-52, 12-53, 10-54, 9-55, 19-47, 20-46, 21-45, 22-44, 23-43, 25-42, 26-41

REACTIONS (size) 34=55-11-0, 35=55-11-0, 36=55-11-0, 37=55-11-0, 38=55-11-0, 39=55-11-0, 40=55-11-0, 41=55-11-0, 42=55-11-0, 43=55-11-0, 44=55-11-0, 45=55-11-0, 46=55-11-0, 47=55-11-0, 48=55-11-0, 49=55-11-0, 50=55-11-0, 51=55-11-0, 52=55-11-0, 53=55-11-0, 54=55-11-0, 55=55-11-0, 56=55-11-0, 57=55-11-0, 58=55-11-0, 59=55-11-0, 60=55-11-0, 61=55-11-0, 62=55-11-0
Max Horiz 62=269 (LC 11)

Max Uplift 34=-60 (LC 13), 35=-132 (LC 15), 36=-32 (LC 15), 37=-52 (LC 15), 38=-49 (LC 15), 39=-39 (LC 15), 40=-53 (LC 15), 41=-62 (LC 15), 42=-10 (LC 15), 44=-26 (LC 11), 45=-26 (LC 11), 46=-26 (LC 10), 47=-27 (LC 11), 48=-24 (LC 10), 49=-25 (LC 11), 50=-25 (LC 11), 51=-28 (LC 10), 52=-24 (LC 10), 53=-1 (LC 11), 54=-15 (LC 14), 55=-60 (LC 14), 56=-53 (LC 14), 57=-39 (LC 14), 58=-49 (LC 14), 59=-53 (LC 14), 60=-27 (LC 14), 61=-155 (LC 14), 62=-127 (LC 10)
Max Grav 34=127 (LC 53), 35=213 (LC 29), 36=155 (LC 39), 37=165 (LC 43), 38=226 (LC 43), 39=220 (LC 43), 40=234 (LC 43), 41=253 (LC 43), 42=226 (LC 43), 43=171 (LC 50), 44=217 (LC 38), 45=220 (LC 38), 46=211 (LC 38), 47=171 (LC 38), 48=156 (LC 55), 49=173 (LC 38), 50=211 (LC 38), 51=218 (LC 38), 52=218 (LC 38), 53=183 (LC 52), 54=225 (LC 41), 55=252 (LC 41), 56=233 (LC 41), 57=219 (LC 41), 58=221 (LC 41), 59=165 (LC 24), 60=159 (LC 39), 61=226 (LC 28), 62=232 (LC 49)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-62=-182/99, 1-2=0/30, 2-3=-211/191, 3-4=-159/150, 4-5=-150/147, 5-6=-136/143, 6-7=-122/162, 7-9=-119/219, 9-10=-148/270, 10-11=-163/292, 11-12=-147/277, 12-13=-147/277, 13-14=-147/277, 14-15=-147/277, 15-16=-147/277, 16-17=-147/277, 17-19=-147/277, 19-20=-147/277, 20-21=-148/277, 21-22=-148/277, 22-23=-148/277, 23-24=-148/277, 24-25=-164/293, 25-26=-149/270, 26-28=-120/219, 28-29=-72/133, 29-30=-72/97, 30-31=-83/73, 31-32=-91/78, 32-33=-146/111, 33-34=-89/45

November 17,2023

Continued on page 2

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

BOT CHORD 61-62=-104/119, 60-61=-104/119, 59-60=-104/119, 58-59=-104/119, 57-58=-104/119, 56-57=-104/119, 55-56=-105/118, 53-55=-105/118, 52-53=-105/118, 51-52=-105/118, 50-51=-105/118, 49-50=-105/118, 48-49=-105/118, 47-48=-105/118, 45-47=-105/118, 44-45=-105/118, 43-44=-105/118, 41-43=-105/118, 40-41=-105/118, 39-40=-103/117, 38-39=-103/117, 37-38=-103/117, 36-37=-103/117, 35-36=-103/117, 34-35=-103/117

WEBS 17-48=-116/48, 16-49=-134/48, 15-50=-172/48, 14-51=-179/51, 13-52=-179/48, 12-53=-143/25, 10-54=-187/38, 9-55=-214/83, 8-56=-194/77, 7-57=-181/62, 6-58=-183/73, 5-59=-123/73, 4-60=-120/65, 3-61=-146/121, 19-47=-134/49, 20-46=-172/49, 21-45=-179/51, 22-44=-179/49, 23-43=-131/2, 25-42=-187/33, 26-41=-215/84, 27-40=-195/76, 28-39=-181/62, 29-38=-187/73, 30-37=-127/73, 31-36=-119/66, 32-35=-147/112

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 5-1-6, Exterior(2N) 5-1-6 to 11-6-15, Corner(3R) 11-6-15 to 23-6-12, Exterior(2N) 23-6-12 to 32-4-4, Corner(3R) 32-4-4 to 44-2-7, Exterior(2N) 44-2-7 to 49-9-6, Corner(3E) 49-9-6 to 55-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 127 lb uplift at joint 62, 60 lb uplift at joint 34, 24 lb uplift at joint 48, 25 lb uplift at joint 49, 25 lb uplift at joint 50, 28 lb uplift at joint 51, 24 lb uplift at joint 52, 1 lb uplift at joint 53, 15 lb uplift at joint 54, 60 lb uplift at joint 55, 53 lb uplift at joint 56, 39 lb uplift at joint 57, 49 lb uplift at joint 58, 53 lb uplift at joint 59, 27 lb uplift at joint 60, 155 lb uplift at joint 61, 27 lb uplift at joint 47, 26 lb uplift at joint 46, 26 lb uplift at joint 45, 26 lb uplift at joint 44, 10 lb uplift at joint 42, 62 lb uplift at joint 41, 53 lb uplift at joint 40, 39 lb uplift at joint 39, 49 lb uplift at joint 38, 52 lb uplift at joint 37, 32 lb uplift at joint 36 and 132 lb uplift at joint 35.
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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	B01	Piggyback Base	4	1	Job Reference (optional)	I62065520

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

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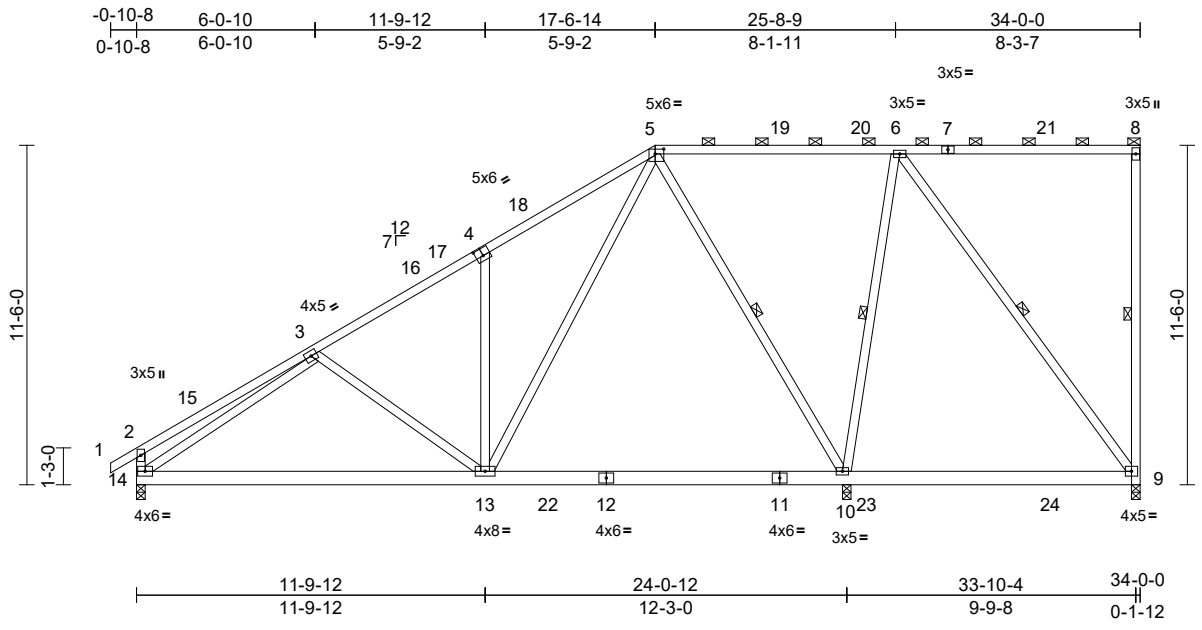

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Plate Offsets (X, Y): [4:0-3-0,0-3-0], [5:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.18	10-13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.26	10-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.01	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 257 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-7:2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 14-2,14-3,13-4,13-3:2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 8-9, 5-10, 6-10, 6-9

REACTIONS (size) 9=0-3-8, 10=0-3-8, 14=0-3-8
Max Horiz 14=381 (LC 14)
Max Uplift 9=-160 (LC 10), 10=-253 (LC 14), 14=-77 (LC 14)
Max Grav 9=433 (LC 35), 10=1964 (LC 37), 14=1087 (LC 40)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-3=-484/118, 3-5=-1119/213, 5-6=-14/252, 6-8=-12/3, 8-9=-289/86, 2-14=-440/139
BOT CHORD 13-14=-398/1075, 10-13=-132/277, 9-10=-198/61
WEBS 3-14=-819/0, 4-13=-531/222, 5-13=-211/1303, 3-13=-249/205, 5-10=-1054/290, 6-10=-833/172, 6-9=-83/343

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 13-3-15, Exterior(2R) 13-3-15 to 21-9-12, Interior (1) 21-9-12 to 30-10-4, Exterior(2E) 30-10-4 to 33-10-4 zone; cantilever left exposed ; end vertical left 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) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14, 10, and 9. 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.
12) 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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	B02	Piggyback Base	2	1	Job Reference (optional)	I62065521

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 Nov 16 11:10:09 Page: 1
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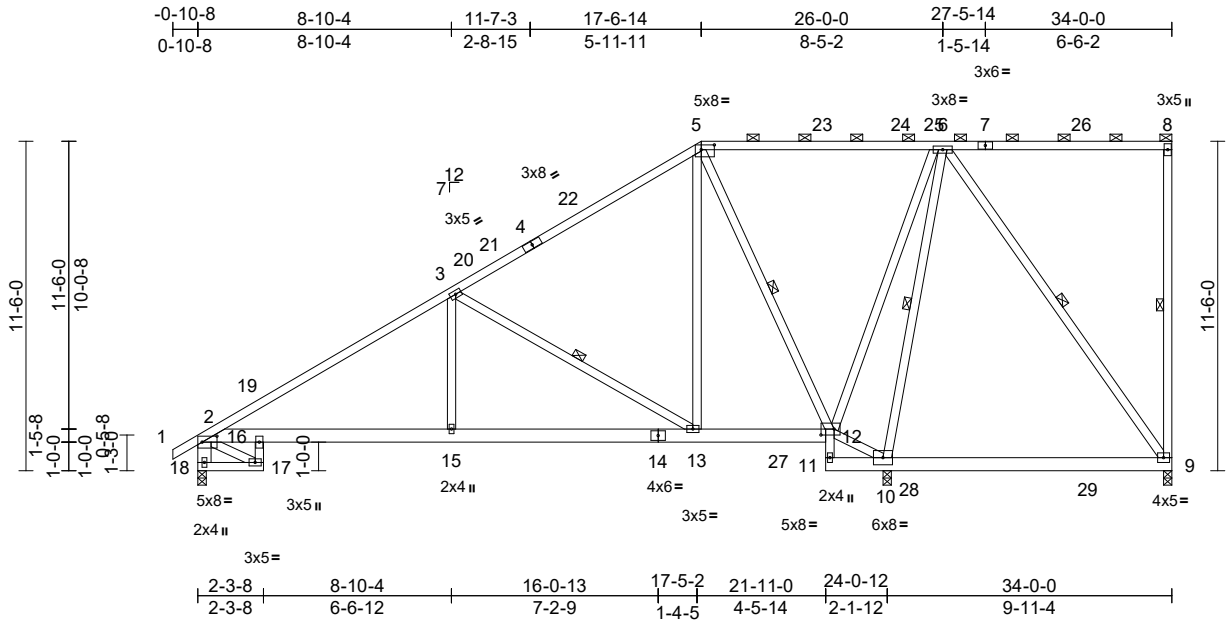

Scale = 1:80.4

Plate Offsets (X, Y): [2:0-6-3,0-2-8], [5:0-5-8,0-2-0], [12:0-5-8,0-2-8]

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	0.86	Vert(LL)	-0.12	9-10	>986	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.18	9-10	>666	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.10	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 268 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* 4-5:2x4 SP No.1, 7-8:2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 18-17:2x4 SP No.2, 17-16,12-11:2x4 SP No.3
WEBS 2x4 SP No.2 *Except* 3-15,13-3,13-5,10-12,2-17:2x4 SP No.3, 18-2:2x6 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 8-9, 3-13, 5-12, 6-10, 6-9

REACTIONS (size) 9=0-3-8, 10=0-3-8, 18=0-3-8
Max Horiz 18=377 (LC 14)
Max Uplift 9=-161 (LC 10), 10=-272 (LC 14), 18=-69 (LC 14)
Max Grav 9=453 (LC 35), 10=1853 (LC 37), 18=1106 (LC 40)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/38, 2-3=-1532/174, 3-5=-619/74, 5-6=-46/93, 6-8=-11/2, 8-9=-273/83, 2-18=-1105/102
BOT CHORD 17-18=-447/386, 16-17=-243/224, 2-16=-337/1233, 15-16=-416/1331, 13-15=-416/1331, 12-13=-125/353, 11-12=-295/0, 10-11=-68/6, 9-10=-174/85
WEBS 3-15=0/408, 3-13=-1123/336, 5-13=-58/829, 5-12=-1093/250, 10-12=-326/88, 6-12=-235/700, 6-10=-1266/369, 6-9=-129/311, 2-17=-325/435

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 13-3-15, Exterior(2R) 13-3-15 to 21-9-12, Interior (1) 21-9-12 to 30-10-4, Exterior(2E) 30-10-4 to 33-10-4 zone; cantilever left exposed ; end vertical left 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) 9, 18, 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.
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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	B03	Piggyback Base	2	1	Job Reference (optional)	I62065522

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 Nov 16 11:10:10
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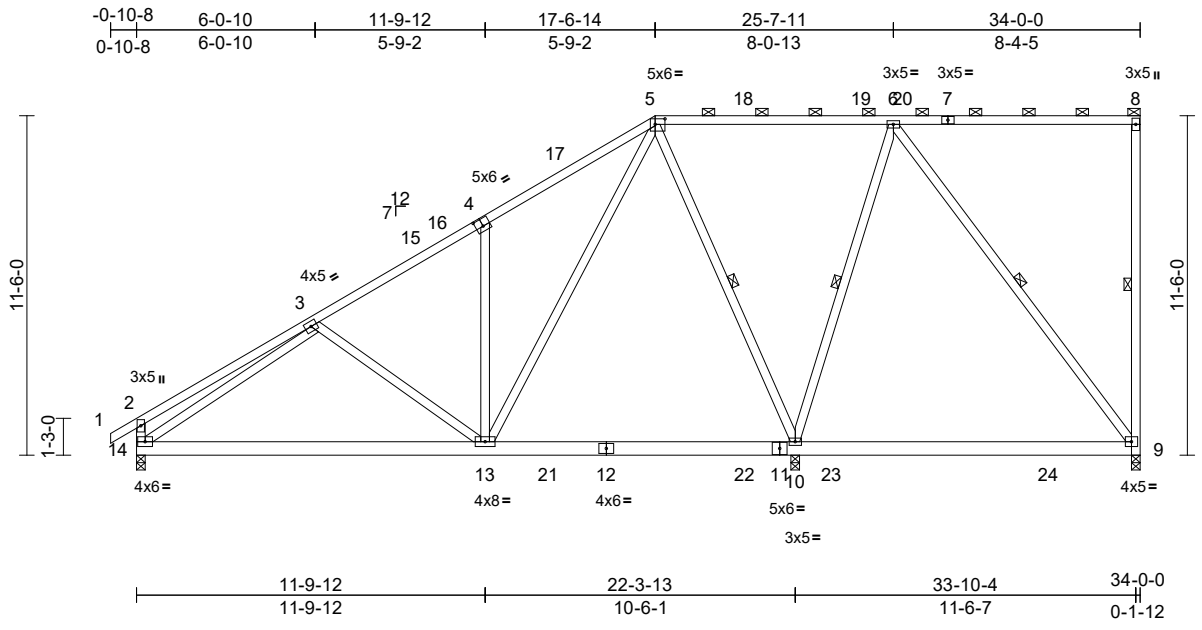

Scale = 1:78.1

Plate Offsets (X, Y): [4:0-3-0,0-3-0], [5:0-4-0,0-2-4]

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	0.83	Vert(LL)	-0.24	9-10	>577	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.38	9-10	>368	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.01	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 257 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-7:2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 14-2,14-3,13-4,13-3:2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 8-9, 5-10, 6-10, 6-9

REACTIONS (size) 9=0-3-8, 10=0-3-8, 14=0-3-8
Max Horiz 14=381 (LC 14)
Max Uplift 9=-154 (LC 10), 10=-164 (LC 14), 14=-48 (LC 14)
Max Grav 9=525 (LC 35), 10=1935 (LC 3), 14=993 (LC 40)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-3=-502/109, 3-5=-937/171, 5-6=-19/257, 6-8=-15/1, 8-9=-295/80, 2-14=-448/134
BOT CHORD 13-14=-362/938, 10-13=-81/158, 9-10=-164/111
WEBS 5-10=-1031/252, 3-14=-669/0, 6-10=-780/165, 4-13=-530/230, 5-13=-240/1241, 3-13=-273/208, 6-9=-164/289

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 14-6-14, Exterior(2R) 14-6-14 to 20-6-14, Interior (1) 20-6-14 to 30-10-4, Exterior(2E) 30-10-4 to 33-10-4 zone; cantilever left exposed ; end vertical left 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) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10, 14, and 9. 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.
12) 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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	B04	Piggyback Base	2	1	Job Reference (optional)	I62065523

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

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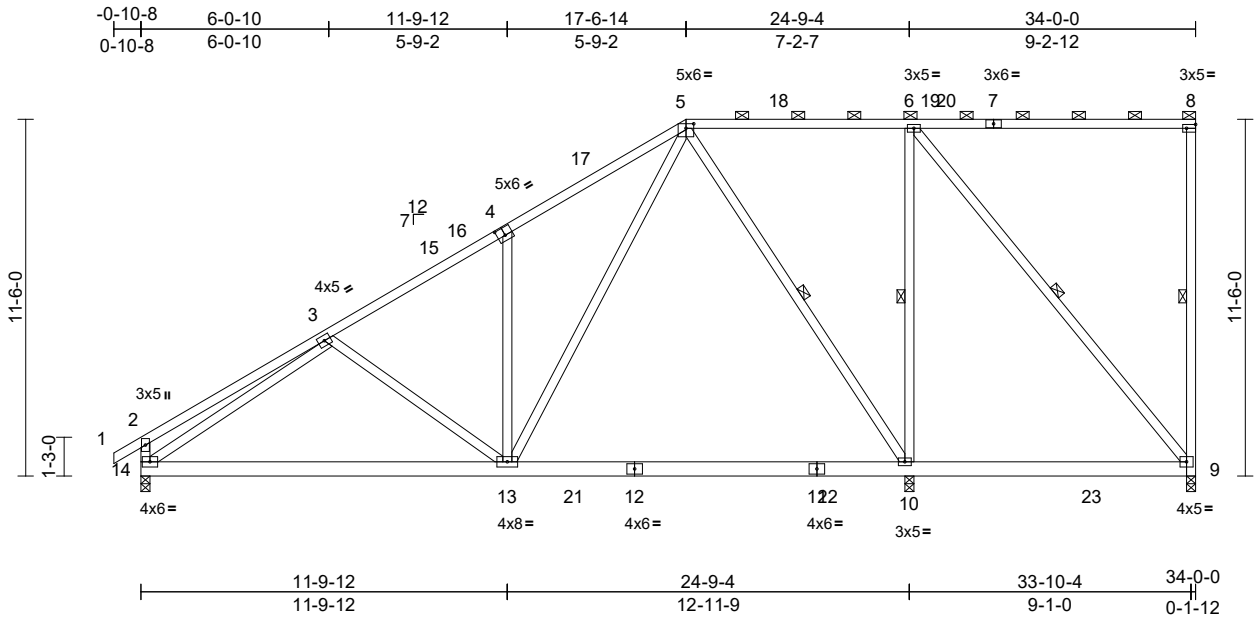

Scale = 1:74.3

Plate Offsets (X, Y): [4:0-3-0,0-3-0], [5:0-3-0,0-1-12], [8:Edge,0-1-8]

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	0.88	Vert(LL)	-0.26	10-13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.37	10-13	>788	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.02	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 258 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-7:2x4 SP 2400F 2.0E, 7-8:2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 14-2,14-3,13-4,13-3:2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-3-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 8-9, 5-10, 6-10, 6-9

REACTIONS (size) 9=0-3-8, 10=0-3-8, 14=0-3-8
Max Horiz 14=381 (LC 14)
Max Uplift 9=-164 (LC 10), 10=-134 (LC 14), 14=-68 (LC 14)
Max Grav 9=418 (LC 35), 10=1936 (LC 37), 14=1136 (LC 40)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-3=-476/121, 3-5=-1213/200, 5-6=-23/222, 6-8=-16/4, 8-9=-341/93, 2-14=-436/140
BOT CHORD 13-14=-385/1145, 10-13=-116/347, 9-10=-222/23
WEBS 3-14=-905/0, 4-13=-535/231, 5-13=-214/1326, 3-13=-235/206, 5-10=-1047/224, 6-10=-877/189, 6-9=-12/356

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 14-6-14, Exterior(2R) 14-6-14 to 20-6-14, Interior (1) 20-6-14 to 30-10-4, Exterior(2E) 30-10-4 to 33-10-4 zone; cantilever left exposed ; end vertical left 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) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14, 10, and 9. 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.
12) 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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	B05	Piggyback Base Supported Gable	1	1	Job Reference (optional)	I62065524

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 Nov 16 11:10:12 Page: 1
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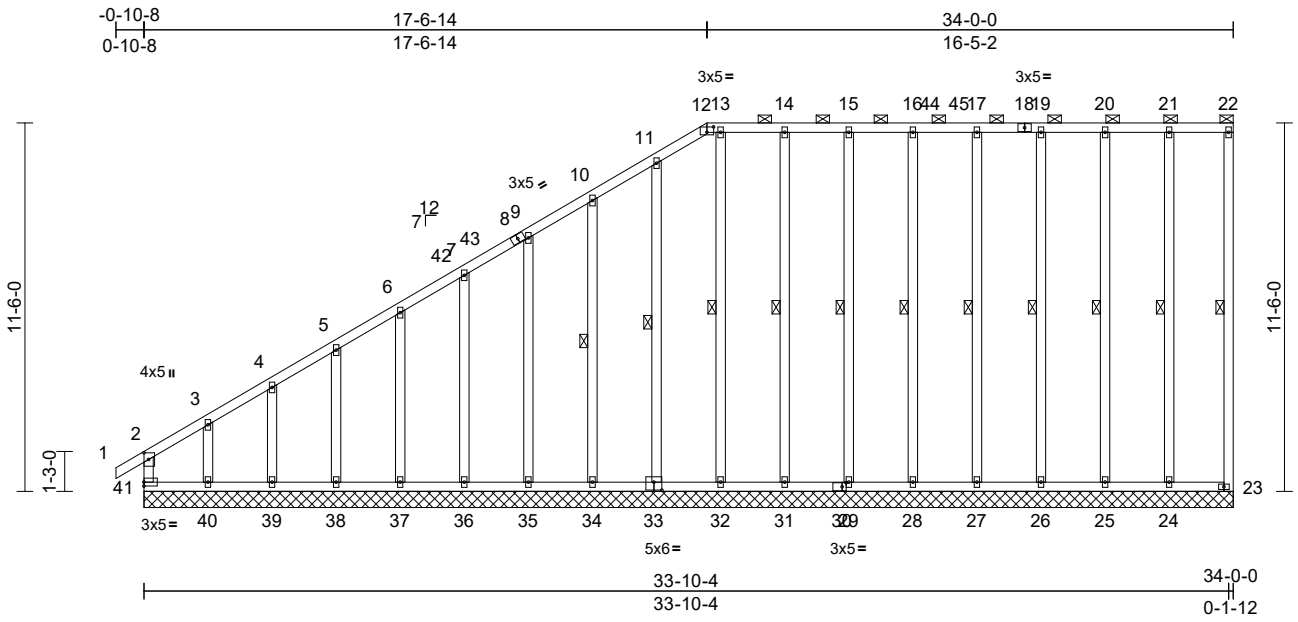

Scale = 1:71.9

Plate Offsets (X, Y): [2:0-2-8,0-1-12], [12:0-2-8,0-2-1], [30:0-1-8,0-1-8], [33:0-3-0,0-3-0]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	33	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 325 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 22-23:2x4 SP No.2
OTHERS 2x4 SP No.2 *Except* 34-10,35-9,36-7,37-6,38-5,39-4,40-3:2x4 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.): 12-22.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 22-23, 21-24, 20-25, 19-26, 17-27, 16-28, 15-29, 14-31, 13-32, 11-33, 10-34

REACTIONS (size) 23=34-0-0, 24=34-0-0, 25=34-0-0, 26=34-0-0, 27=34-0-0, 28=34-0-0, 29=34-0-0, 31=34-0-0, 32=34-0-0, 33=34-0-0, 34=34-0-0, 35=34-0-0, 36=34-0-0, 37=34-0-0, 38=34-0-0, 39=34-0-0, 40=34-0-0, 41=34-0-0
Max Horiz 41=368 (LC 14)
Max Uplift 23=-13 (LC 11), 24=-25 (LC 10), 25=-26 (LC 11), 26=-24 (LC 10), 27=-25 (LC 11), 28=-25 (LC 10), 29=-24 (LC 11), 31=-29 (LC 10), 32=-20 (LC 11), 33=-47 (LC 14), 34=-52 (LC 14), 35=-48 (LC 14), 36=-50 (LC 14), 37=-45 (LC 14), 38=-66 (LC 14), 40=-355 (LC 14), 41=-99 (LC 12)
Max Grav 23=82 (LC 35), 24=223 (LC 35), 25=215 (LC 35), 26=214 (LC 35), 27=201 (LC 35), 28=211 (LC 35), 29=215 (LC 35), 31=220 (LC 35), 32=179 (LC 35), 33=216 (LC 36), 34=213 (LC 36), 35=218 (LC 36), 36=193 (LC 36), 37=160 (LC 24), 38=166 (LC 40), 39=158 (LC 1), 40=245 (LC 40), 41=421 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-41=-297/152, 1-2=0/30, 2-3=-472/268, 3-4=-341/192, 4-5=-310/177, 5-6=-260/148, 6-7=-212/122, 7-9=-164/96, 9-10=-117/70, 10-11=-68/53, 11-12=-46/18, 12-13=-1/1, 13-14=-1/1, 14-15=-1/1, 15-16=-1/1, 16-17=-1/1, 17-19=-1/1, 19-20=-1/1, 20-21=-1/1, 21-22=-1/1, 22-23=-68/20
BOT CHORD 40-41=-1/0, 39-40=-1/0, 38-39=-1/0, 37-38=-1/0, 36-37=-1/0, 35-36=-1/0, 34-35=-1/0, 32-34=-1/1, 31-32=-1/1, 29-31=-1/1, 28-29=-1/1, 27-28=-1/1, 26-27=-1/1, 25-26=-1/1, 24-25=-1/1, 23-24=-1/1
WEBS 21-24=-182/50, 20-25=-177/48, 19-26=-175/48, 17-27=-162/48, 16-28=-172/48, 15-29=-176/48, 14-31=-182/52, 13-32=-139/53, 11-33=-177/70, 10-34=-175/74, 9-35=-179/71, 7-36=-155/72, 6-37=-122/70, 5-38=-125/80, 4-39=-119/36, 3-40=-190/237

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 2-0-0, Exterior(2N) 2-0-0 to 14-6-14, Corner(3R) 14-6-14 to 20-6-14, Exterior(2N) 20-6-14 to 30-10-4, Corner(3E) 30-10-4 to 33-10-4 zone; cantilever left exposed ; end vertical left 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.

November 17,2023

Continued on page 2

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

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) Bearing at joint(s) 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 41, 13 lb uplift at joint 23, 25 lb uplift at joint 24, 26 lb uplift at joint 25, 24 lb uplift at joint 26, 25 lb uplift at joint 27, 25 lb uplift at joint 28, 24 lb uplift at joint 29, 29 lb uplift at joint 31, 20 lb uplift at joint 32, 47 lb uplift at joint 33, 52 lb uplift at joint 34, 48 lb uplift at joint 35, 50 lb uplift at joint 36, 45 lb uplift at joint 37, 66 lb uplift at joint 38 and 355 lb uplift at joint 40.
16) 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.
17) 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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	E01	Common	5	1	Job Reference (optional)	I62065525

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 Nov 16 11:10:13 Page: 1
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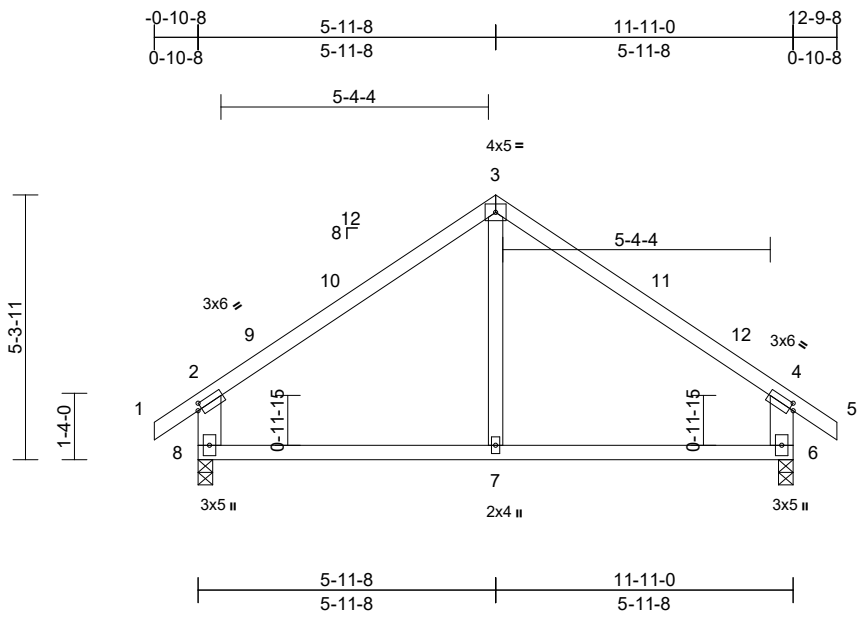

Scale = 1:46.1

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

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	0.71	Vert(LL)	-0.03	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.07	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 54 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x6 SP No.2 *Except* 7-3:2x4 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) 6=0-3-8, 8=0-3-8
Max Horiz 8=-147 (LC 12)
Max Uplift 6=-57 (LC 15), 8=-57 (LC 14)
Max Grav 6=619 (LC 22), 8=619 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-3=-515/127, 3-4=-515/124, 4-5=0/37, 2-8=-557/185, 4-6=-557/181
BOT CHORD 7-8=0/292, 6-7=0/292
WEBS 3-7=0/219

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-11-8, Exterior(2R) 2-11-8 to 8-11-8, Interior (1) 8-11-8 to 9-9-8, Exterior(2E) 9-9-8 to 12-9-8 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 H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	E02	Common Structural Gable	1	1	Job Reference (optional)	I62065526

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 Nov 16 11:10:13
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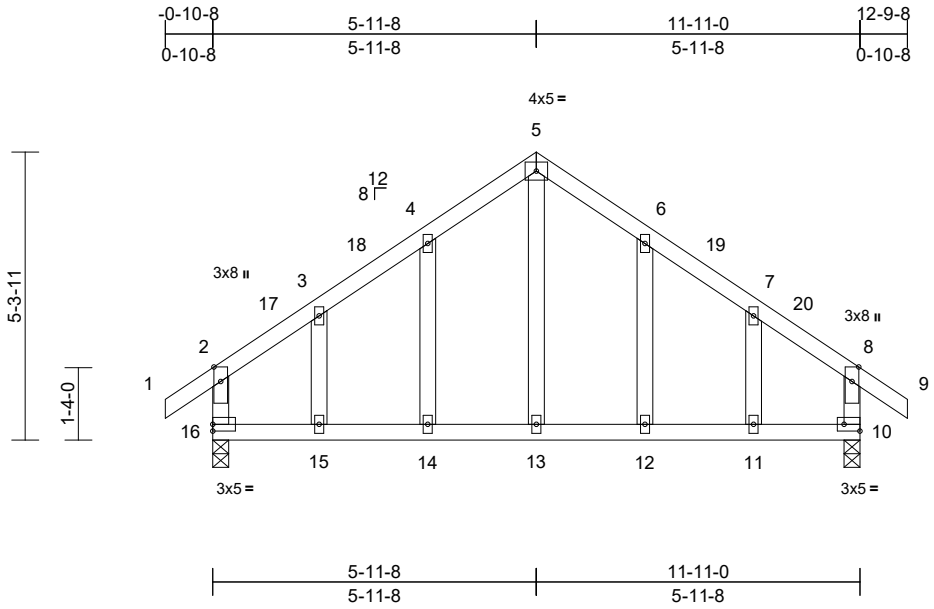

Scale = 1:42.4

Plate Offsets (X, Y): [10:Edge,0-1-8]

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	0.68	Vert(LL)	-0.10	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.13	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 69 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) 10=0-3-8, 16=0-3-8
Max Horiz 16=-145 (LC 12)
Max Uplift 10=-56 (LC 15), 16=-56 (LC 14)
Max Grav 10=619 (LC 22), 16=619 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-486/76, 3-4=-426/115, 4-5=-378/173, 5-6=-378/171, 6-7=-426/114, 7-8=-486/74, 8-9=0/34, 2-16=-474/127, 8-10=-474/123
BOT CHORD 15-16=0/308, 14-15=0/308, 13-14=0/308, 12-13=0/308, 11-12=0/308, 10-11=0/308
WEBS 5-13=-92/204, 4-14=-116/78, 3-15=-46/55, 6-12=-116/77, 7-11=-46/55

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 1-11-8, Interior (1) 1-11-8 to 2-11-8, Exterior(2R) 2-11-8 to 8-11-8, Interior (1) 8-11-8 to 9-9-8, Exterior(2E) 9-9-8 to 12-9-8 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 10. This connection is for uplift only and does not consider lateral forces.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	G01	Piggyback Base	1	1	Job Reference (optional)	I62065527

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

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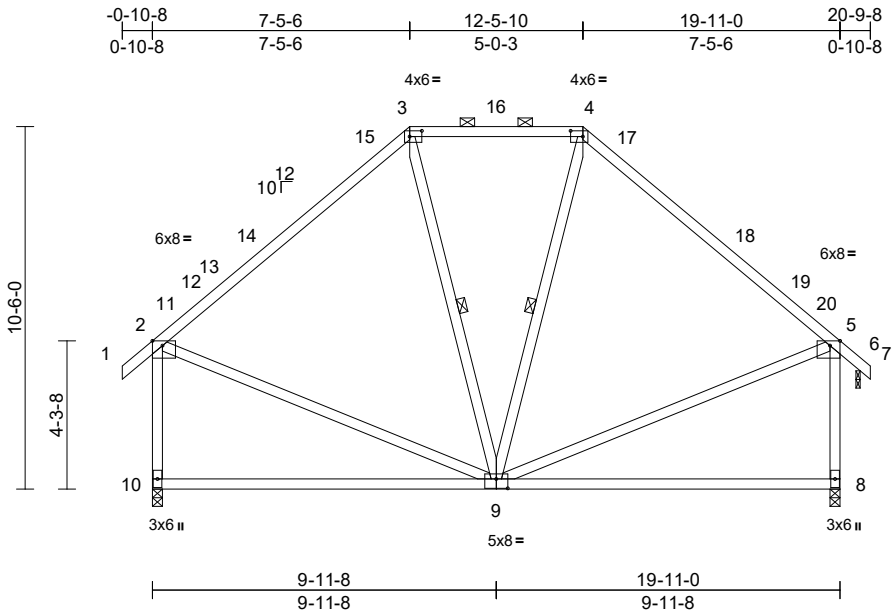

Scale = 1:66.7

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

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	0.97	Vert(LL)	-0.19	9-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.38	8-9	>612	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 142 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1 *Except* 3-4:2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

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

REACTIONS (size) 6=0-1-8, 8=0-3-8, 10=0-3-8
Max Horiz 10=307 (LC 13)
Max Uplift 6=-574 (LC 40), 8=-440 (LC 15), 10=-77 (LC 14)
Max Grav 6=344 (LC 15), 8=1610 (LC 40), 10=998 (LC 40)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-3=-786/154, 3-4=-417/183, 4-5=-794/158, 5-6=-217/406, 6-7=0/14, 2-10=-912/183, 5-8=-1526/488
BOT CHORD 8-10=-270/299
WEBS 2-9=-76/416, 5-9=-81/436, 4-9=-102/146, 3-9=-120/138

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 3-2-8, Exterior(2R) 3-2-8 to 16-8-8, Interior (1) 16-8-8 to 20-9-8 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.
9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 574 lb uplift at joint 6.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 8. This connection is for uplift only and does not consider lateral forces.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	G02	Piggyback Base	8	1	Job Reference (optional)	I62065528

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

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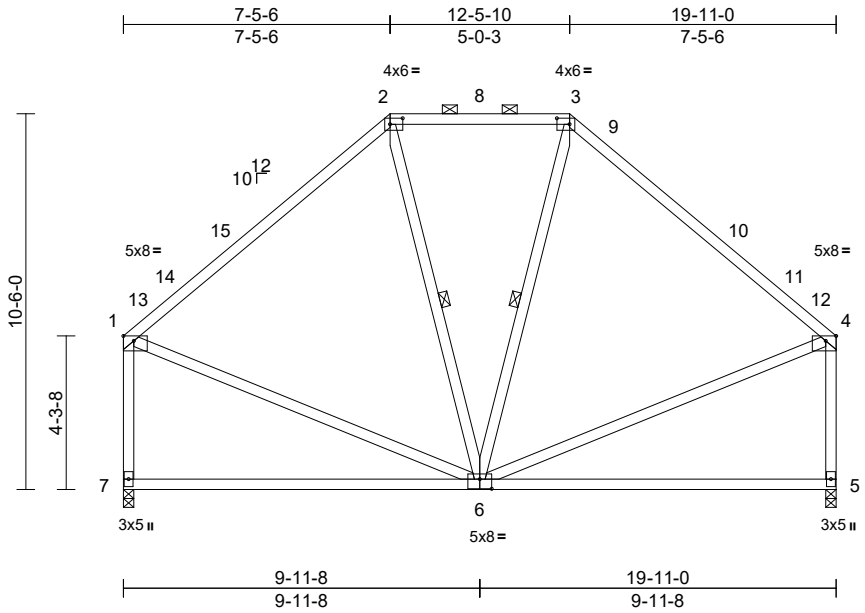

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Plate Offsets (X, Y): [1:Edge,0-1-10], [2:0-4-4,0-2-0], [3:0-4-4,0-2-0], [4:0-3-8,Edge], [6:0-4-0,0-3-4]

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	0.66	Vert(LL)	-0.19	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.38	6-7	>615	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	-0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 139 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* 2-3:2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 6-7-7 oc bracing.
WEBS 1 Row at midpt 3-6, 2-6

REACTIONS (size) 5=0-3-8, 7=0-3-8
Max Horiz 7=-284 (LC 10)
Max Uplift 5=-63 (LC 15), 7=-63 (LC 14)
Max Grav 5=956 (LC 39), 7=956 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-3=-440/183, 3-4=-804/151, 1-7=-871/160, 4-5=-871/111, 1-2=-804/150
BOT CHORD 5-7=-249/272
WEBS 1-6=-78/425, 4-6=-78/439, 3-6=-126/148, 2-6=-126/148

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) 0-1-12 to 3-1-12, Exterior (2R) 3-1-12 to 16-9-4, Exterior(2E) 16-9-4 to 19-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	G03	Piggyback Base Supported Gable	1	1	Job Reference (optional)	I62065529

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

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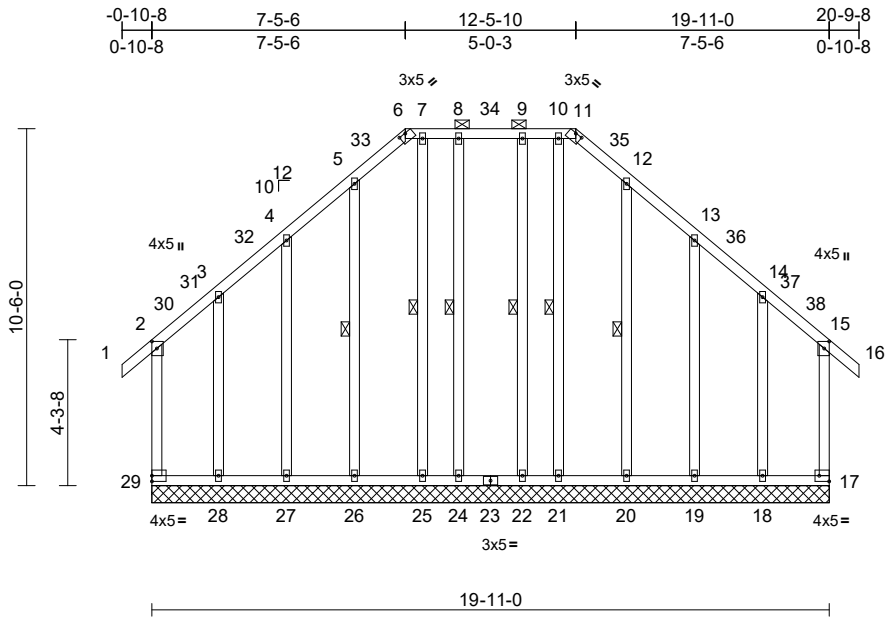

Scale = 1:67.8

Plate Offsets (X, Y): [2:0-2-8,0-1-12], [6:0-2-8,0-0-3], [11:0-2-8,0-0-3], [15:0-2-8,0-1-12], [17:Edge,0-2-0]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	-0.01	17	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 203 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.): 6-11.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 8-24, 9-22, 7-25, 5-26, 10-21, 12-20

REACTIONS (size) 17=19-11-0, 18=19-11-0, 19=19-11-0, 20=19-11-0, 21=19-11-0, 22=19-11-0, 24=19-11-0, 25=19-11-0, 26=19-11-0, 27=19-11-0, 28=19-11-0, 29=19-11-0
Max Horiz 29=-294 (LC 12)
Max Uplift 17=-340 (LC 11), 18=-375 (LC 10), 19=-72 (LC 15), 20=-37 (LC 15), 22=-32 (LC 15), 24=-32 (LC 14), 26=-37 (LC 14), 27=-72 (LC 14), 28=-378 (LC 11), 29=-343 (LC 10)
Max Grav 17=400 (LC 12), 18=495 (LC 13), 19=230 (LC 40), 20=233 (LC 50), 21=166 (LC 23), 22=170 (LC 39), 24=170 (LC 39), 25=166 (LC 22), 26=233 (LC 48), 27=230 (LC 40), 28=498 (LC 12), 29=403 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-29=-247/198, 1-2=0/38, 2-3=-208/206, 3-4=-82/154, 4-5=-95/233, 5-6=-107/270, 6-7=-84/238, 7-8=-84/238, 8-9=-84/238, 9-10=-84/238, 10-11=-84/238, 11-12=-106/271, 12-13=-94/230, 13-14=-81/160, 14-15=-206/205, 15-16=0/38, 15-17=-245/196
BOT CHORD	28-29=-163/145, 27-28=-163/145, 26-27=-163/145, 25-26=-163/145, 24-25=-163/145, 22-24=-163/145, 21-22=-163/145, 20-21=-163/145, 19-20=-163/145, 18-19=-163/145, 17-18=-163/145
WEBS	8-24=-142/55, 9-22=-142/56, 7-25=-138/21, 5-26=-186/59, 4-27=-192/120, 3-28=-296/209, 10-21=-140/20, 12-20=-186/59, 13-19=-192/103, 14-18=-295/208

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 1-11-8, Interior (1) 1-11-8 to 3-2-8, Exterior(2R) 3-2-8 to 16-8-8, Interior (1) 16-8-8 to 17-9-8, Exterior(2E) 17-9-8 to 20-9-8 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.

November 17,2023

Continued on page 2

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

14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 343 lb uplift at joint 29, 340 lb uplift at joint 17, 32 lb uplift at joint 24, 32 lb uplift at joint 22, 37 lb uplift at joint 26, 72 lb uplift at joint 27, 378 lb uplift at joint 28, 37 lb uplift at joint 20, 72 lb uplift at joint 19 and 375 lb uplift at joint 18.
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.
17) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	PB1	Piggyback	10	1	Job Reference (optional)	I62065530

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

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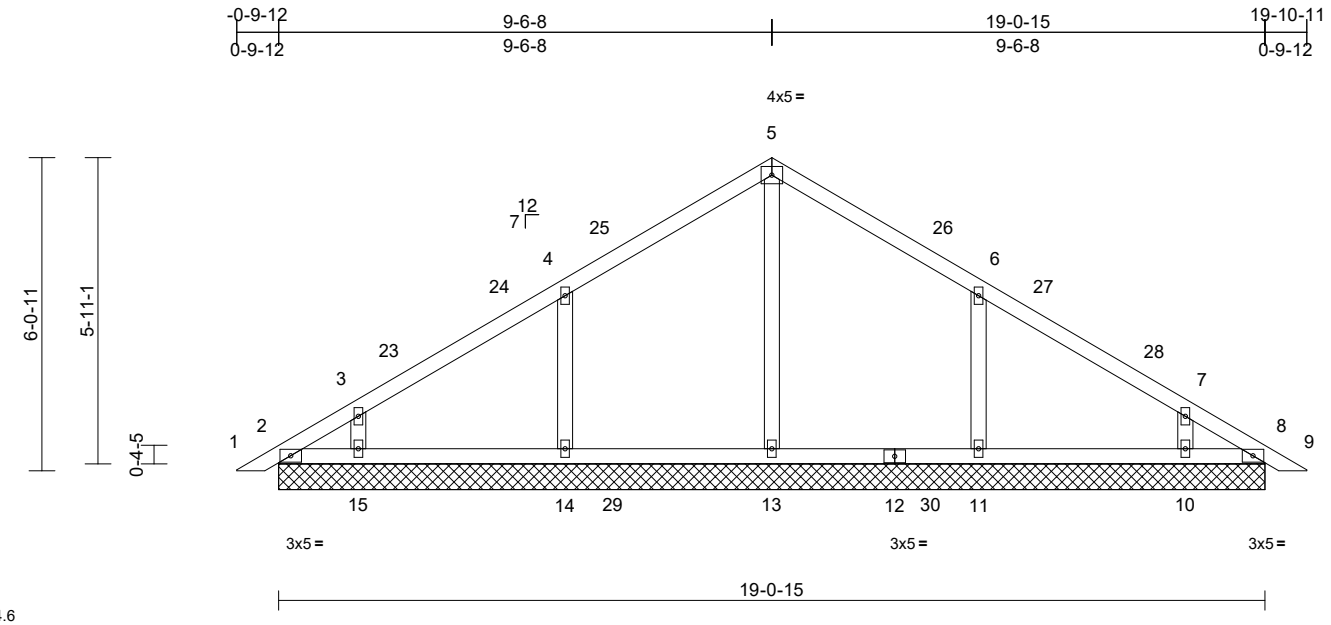

Scale = 1:44.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	19	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 83 lb	FT = 20%

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

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

REACTIONS (size) 2=19-0-15, 8=19-0-15, 10=19-0-15, 11=19-0-15, 13=19-0-15, 14=19-0-15, 15=19-0-15, 16=19-0-15, 19=19-0-15
Max Horiz 2=-138 (LC 12), 16=-138 (LC 12)
Max Uplift 2=-36 (LC 10), 8=-9 (LC 11), 10=-79 (LC 15), 11=-115 (LC 15), 14=-116 (LC 14), 15=-80 (LC 14), 16=-36 (LC 10), 19=-9 (LC 11)
Max Grav 2=89 (LC 25), 8=75 (LC 22), 10=310 (LC 25), 11=479 (LC 6), 13=374 (LC 24), 14=479 (LC 5), 15=311 (LC 24), 16=89 (LC 25), 19=75 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-127/108, 3-4=-130/87, 4-5=-147/128, 5-6=-147/111, 6-7=-90/52, 7-8=-91/55, 8-9=0/16
BOT CHORD 2-15=-39/90, 14-15=-39/90, 13-14=-39/90, 11-13=-39/90, 10-11=-39/90, 8-10=-39/90
WEBS 5-13=-203/0, 4-14=-395/165, 3-15=-206/129, 6-11=-395/164, 7-10=-206/128

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) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 7-4-10, Exterior(2R) 7-4-10 to 13-4-10, Interior (1) 13-4-10 to 17-5-10, Exterior(2E) 17-5-10 to 20-5-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 4-0-0 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, with BCDL = 10.0psf.
12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 14, 15, 11, 10, and 8. This connection is for uplift only and does not consider lateral forces.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	PB2	Piggyback	1	1	Job Reference (optional)	I62065531

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 Nov 16 11:10:17 Page: 1
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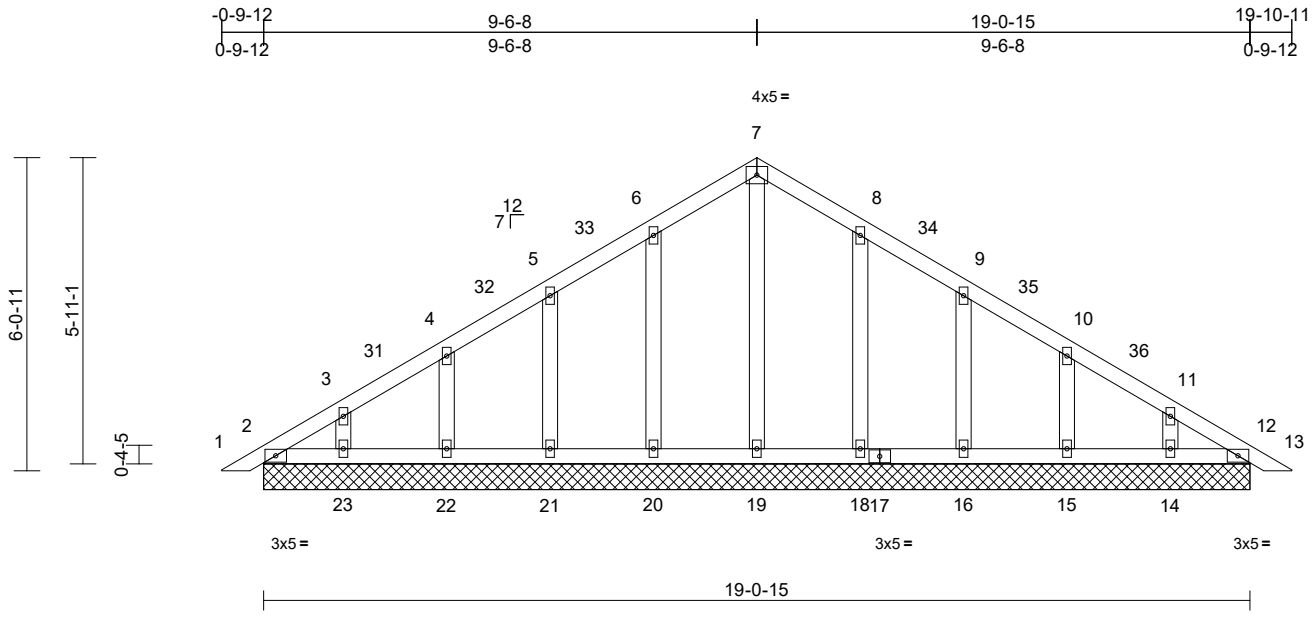

Scale = 1:44.6

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 101 lb	FT = 20%

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

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

REACTIONS (size) 2=19-0-15, 12=19-0-15, 14=19-0-15, 15=19-0-15, 16=19-0-15, 18=19-0-15, 19=19-0-15, 20=19-0-15, 21=19-0-15, 22=19-0-15, 23=19-0-15, 24=19-0-15, 27=19-0-15
Max Horiz 2=-134 (LC 12), 24=-134 (LC 12)
Max Uplift 2=-24 (LC 10), 14=-47 (LC 15), 15=-49 (LC 15), 16=-50 (LC 15), 18=-50 (LC 15), 20=-51 (LC 14), 21=-49 (LC 14), 22=-49 (LC 14), 23=-49 (LC 14), 24=-24 (LC 10)
Max Grav 2=102 (LC 25), 12=91 (LC 22), 14=151 (LC 25), 15=164 (LC 29), 16=219 (LC 22), 18=245 (LC 22), 19=149 (LC 27), 20=245 (LC 21), 21=219 (LC 21), 22=164 (LC 24), 23=153 (LC 24), 24=102 (LC 25), 27=91 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-114/100, 3-4=-96/86, 4-5=-87/74, 5-6=-76/99, 6-7=-82/124, 7-8=-82/116, 8-9=-64/68, 9-10=-49/36, 10-11=-57/34, 11-12=-79/48, 12-13=0/16
BOT CHORD 2-23=-42/92, 22-23=-42/92, 21-22=-42/92, 20-21=-42/92, 19-20=-42/92, 18-19=-42/92, 16-18=-42/92, 15-16=-42/92, 14-15=-42/92, 12-14=-42/92
WEBS 7-19=-110/5, 6-20=-206/74, 5-21=-180/72, 4-22=-126/74, 3-23=-110/64, 8-18=-206/73, 9-16=-180/72, 10-15=-126/74, 11-14=-110/63

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) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 7-4-10, Exterior(2R) 7-4-10 to 13-4-10, Interior (1) 13-4-10 to 17-5-10, Exterior(2E) 17-5-10 to 20-5-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) 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) N/A
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	PB3	Piggyback	10	1	Job Reference (optional)	I62065532

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 Nov 16 11:10:17 Page: 1
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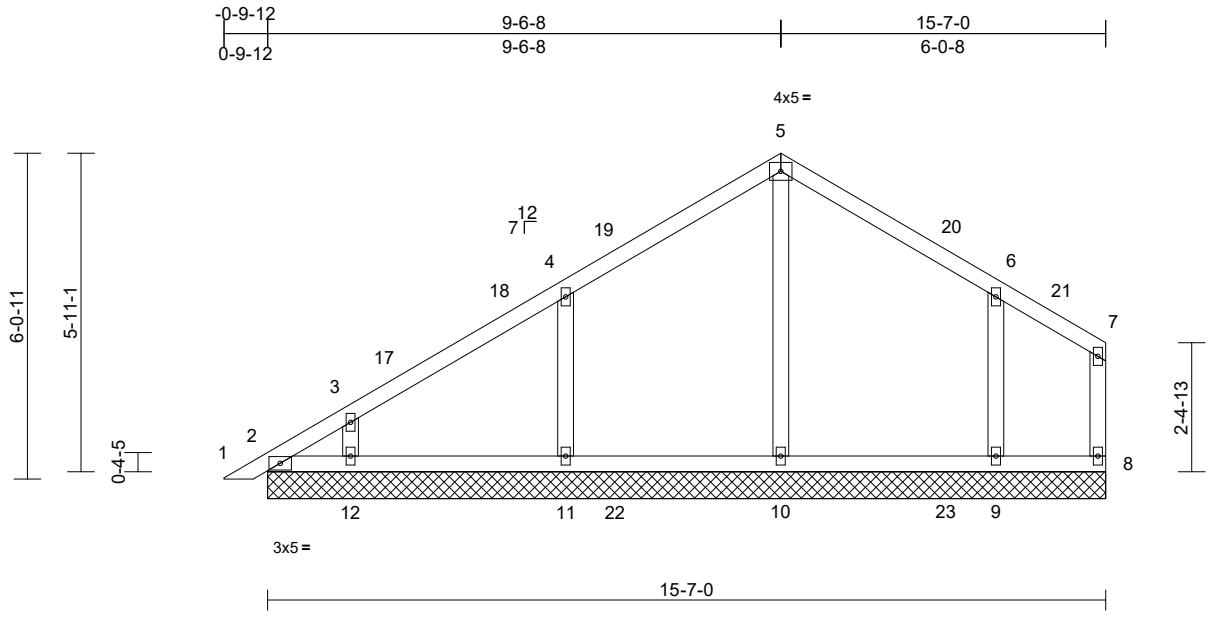

Scale = 1:42.8

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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 73 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 6-0-0 oc bracing.

REACTIONS (size) 2=15-7-0, 8=15-7-0, 9=15-7-0, 10=15-7-0, 11=15-7-0, 12=15-7-0, 13=15-7-0
Max Horiz 2=163 (LC 13), 13=163 (LC 13)
Max Uplift 2=-58 (LC 10), 8=-12 (LC 14), 9=-104 (LC 15), 11=-116 (LC 14), 12=-80 (LC 14), 13=-58 (LC 10)
Max Grav 2=94 (LC 25), 8=34 (LC 25), 9=436 (LC 22), 10=431 (LC 24), 11=478 (LC 5), 12=313 (LC 24), 13=94 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-159/147, 3-4=-143/132, 4-5=-124/146, 5-6=-108/144, 6-7=-31/78, 7-8=-28/31
BOT CHORD 2-12=-32/44, 11-12=-31/44, 10-11=-31/44, 9-10=-31/44, 8-9=-31/44
WEBS 5-10=-244/26, 4-11=-394/164, 3-12=-207/129, 6-9=-369/145

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) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 7-4-10, Exterior(2R) 7-4-10 to 13-3-6, Exterior (2E) 13-3-6 to 16-3-6 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) 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 4-0-0 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, with BCDL = 10.0psf.
12) N/A
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	PB4	Piggyback	1	1	Job Reference (optional)	I62065533

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

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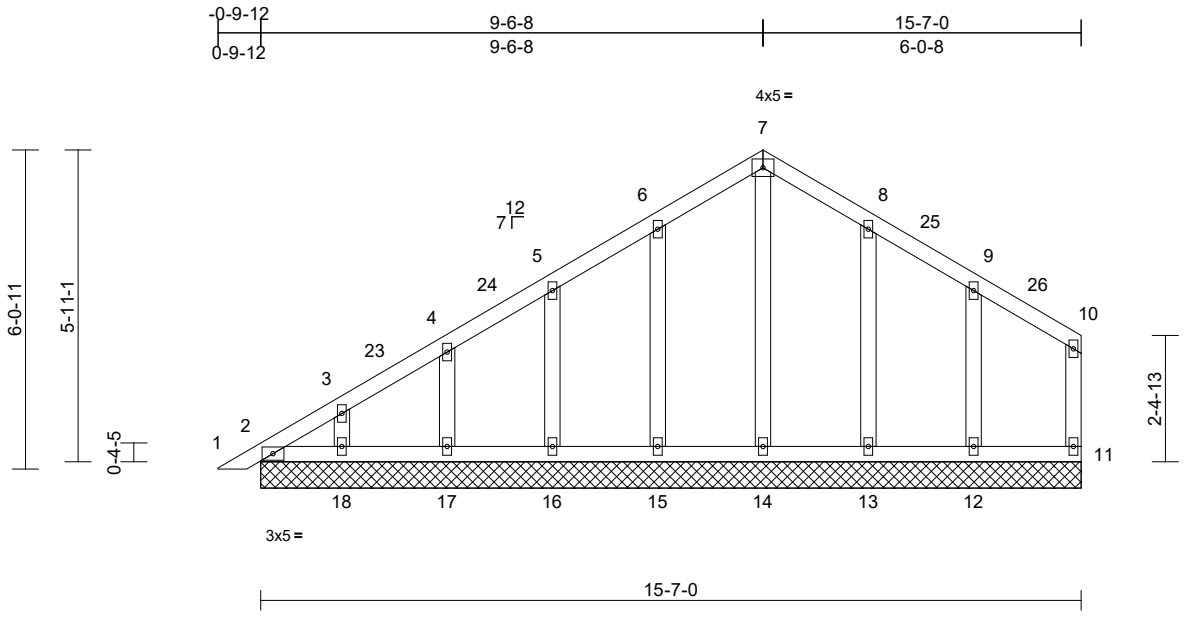

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Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 88 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=15-7-0, 11=15-7-0, 12=15-7-0, 13=15-7-0, 14=15-7-0, 15=15-7-0, 16=15-7-0, 17=15-7-0, 18=15-7-0, 19=15-7-0
Max Horiz 2=158 (LC 13), 19=158 (LC 13)
Max Uplift 2=-46 (LC 10), 11=-12 (LC 14), 12=-56 (LC 15), 13=-49 (LC 15), 14=-3 (LC 11), 15=-51 (LC 14), 16=-49 (LC 14), 17=-49 (LC 14), 18=-49 (LC 14), 19=-46 (LC 10)
Max Grav 2=116 (LC 25), 11=76 (LC 25), 12=226 (LC 22), 13=244 (LC 22), 14=160 (LC 24), 15=245 (LC 21), 16=218 (LC 21), 17=164 (LC 24), 18=154 (LC 24), 19=116 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/16, 2-3=-149/132, 3-4=-138/118, 4-5=-125/115, 5-6=-112/158, 6-7=-97/214, 7-8=-84/214, 8-9=-69/158, 9-10=-51/88, 10-11=-63/73
BOT CHORD	2-18=-27/51, 17-18=-27/51, 16-17=-27/51, 15-16=-27/51, 14-15=-27/51, 13-14=-27/51, 12-13=-27/51, 11-12=-27/51
WEBS	7-14=-148/40, 6-15=-207/87, 5-16=-180/91, 4-17=-126/94, 3-18=-111/93, 8-13=-205/89, 9-12=-186/116

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) 0-3-11 to 3-3-11, Exterior(2N) 3-3-11 to 7-4-10, Corner(3R) 7-4-10 to 13-3-6, Corner (3E) 13-3-6 to 16-3-6 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) 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) N/A
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	PB5	Piggyback	10	1	Job Reference (optional)	I62065534

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

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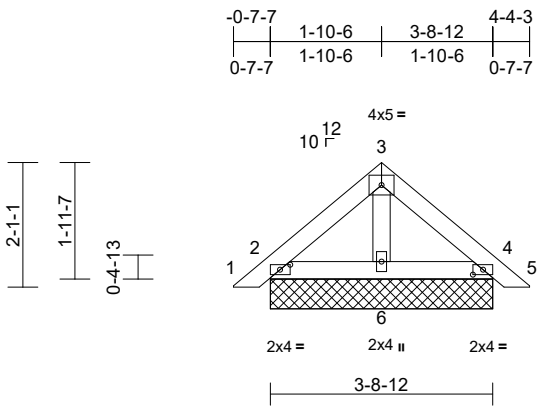

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Plate Offsets (X, Y): [2:0-2-1,0-1-0], [4:0-2-1,0-1-0]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	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
OTHERS 2x4 SP No.3

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

REACTIONS (size) 2=3-8-12, 4=3-8-12, 6=3-8-12, 7=3-8-12, 10=3-8-12
Max Horiz 2=-43 (LC 12), 7=-43 (LC 12)
Max Uplift 2=-18 (LC 14), 4=-24 (LC 15), 7=-18 (LC 14), 10=-24 (LC 15)
Max Grav 2=150 (LC 21), 4=150 (LC 22), 6=123 (LC 21), 7=150 (LC 21), 10=150 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-75/75, 3-4=-75/75, 4-5=0/23
BOT CHORD 2-6=-10/57, 4-6=-8/57
WEBS 3-6=-49/4

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) 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) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) N/A
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V1	Valley	1	1	Job Reference (optional)	I62065535

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

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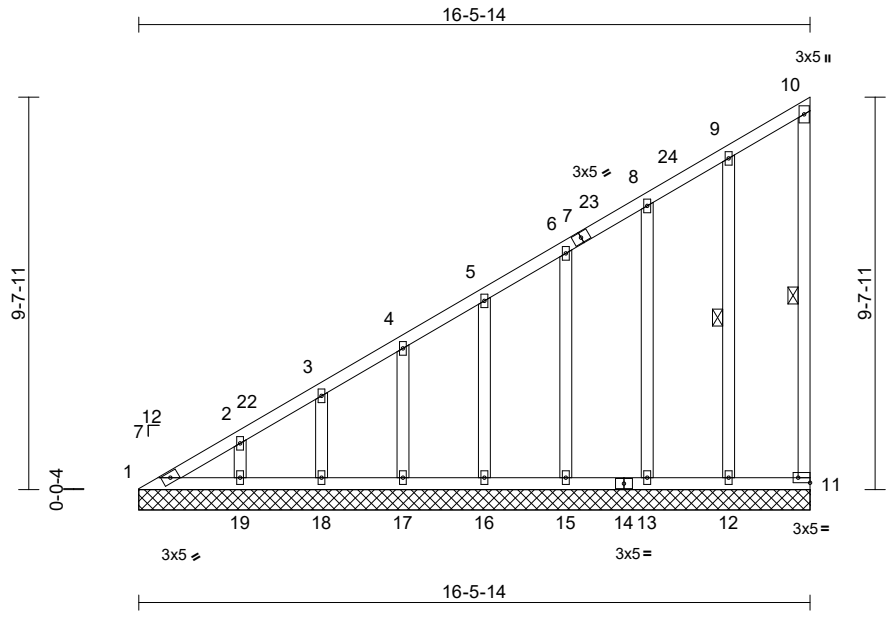

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Plate Offsets (X, Y): [11:Edge,0-1-8]

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	0.64	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.31	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horiz(TL)	0.00	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 112 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-11, 9-12

REACTIONS (size) 1=16-5-14, 11=16-5-14, 12=16-5-14, 13=16-5-14, 15=16-5-14, 16=16-5-14, 17=16-5-14, 18=16-5-14, 19=16-5-14
Max Horiz 1=323 (LC 11)
Max Uplift 1=-35 (LC 10), 11=-53 (LC 13), 12=-56 (LC 14), 13=-44 (LC 14), 15=-51 (LC 14), 16=-48 (LC 14), 17=-48 (LC 14), 18=-55 (LC 14), 19=-30 (LC 14)
Max Grav 1=145 (LC 24), 11=87 (LC 20), 12=241 (LC 20), 13=224 (LC 20), 15=164 (LC 20), 16=161 (LC 23), 17=164 (LC 23), 18=150 (LC 23), 19=202 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-278/370, 2-3=-258/341, 3-4=-231/315, 4-5=-204/288, 5-6=-188/261, 6-8=-173/233, 8-9=-167/215, 9-10=-115/141, 10-11=-73/39
BOT CHORD 1-19=-115/237, 18-19=-115/187, 17-18=-115/187, 16-17=-115/187, 15-16=-115/187, 13-15=-115/187, 12-13=-115/187, 11-12=-115/187
WEBS 9-12=-200/77, 8-13=-185/113, 6-15=-125/82, 5-16=-122/88, 4-17=-124/86, 3-18=-119/90, 2-19=-135/86

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) 0-0-7 to 3-0-7, Exterior(2N) 3-0-7 to 13-4-9, Corner(3E) 13-4-9 to 16-4-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 53 lb uplift at joint 11, 35 lb uplift at joint 1, 56 lb uplift at joint 12, 44 lb uplift at joint 13, 51 lb uplift at joint 15, 48 lb uplift at joint 16, 48 lb uplift at joint 17, 55 lb uplift at joint 18 and 30 lb uplift at joint 19.
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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V2	Valley	1	1	Job Reference (optional)	I62065536

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

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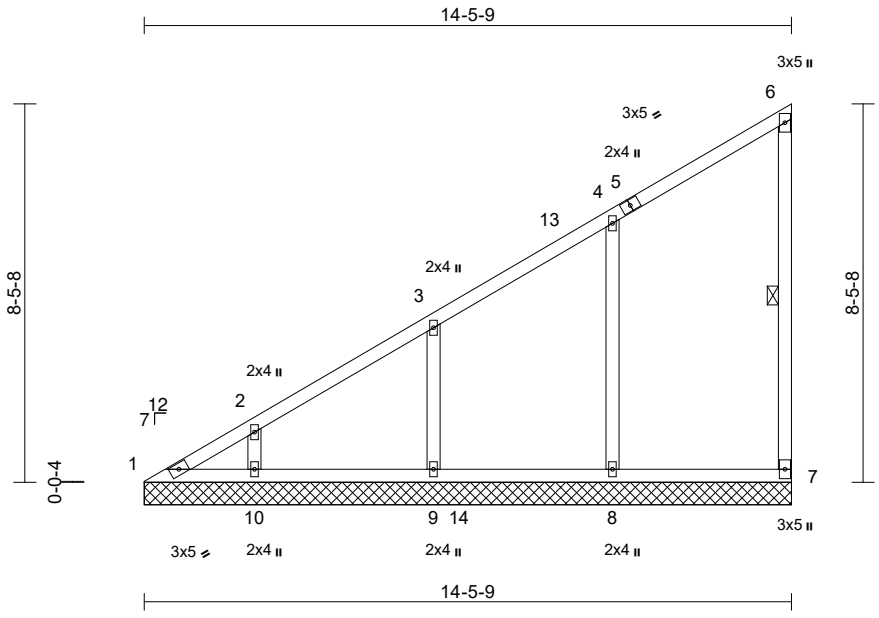

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 72 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.
WEBS	1 Row at midpt 6-7

REACTIONS (size) 1=14-5-9, 7=14-5-9, 8=14-5-9, 9=14-5-9, 10=14-5-9
Max Horiz 1=292 (LC 11)
Max Uplift 1=-34 (LC 10), 7=-42 (LC 11), 8=-107 (LC 14), 9=-104 (LC 14), 10=-67 (LC 14)
Max Grav 1=127 (LC 28), 7=207 (LC 5), 8=530 (LC 5), 9=417 (LC 23), 10=341 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-255/327, 2-3=-220/281, 3-4=-183/224, 4-6=-149/139, 6-7=-159/47
BOT CHORD	1-10=-103/176, 9-10=-103/144, 8-9=-103/144, 7-8=-103/144
WEBS	4-8=-387/140, 3-9=-254/156, 2-10=-223/118

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) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 11-4-4, Exterior(2E) 11-4-4 to 14-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 1, 42 lb uplift at joint 7, 107 lb uplift at joint 8, 104 lb uplift at joint 9 and 67 lb uplift at joint 10.
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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V3	Valley	1	1	Job Reference (optional)	I62065537

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

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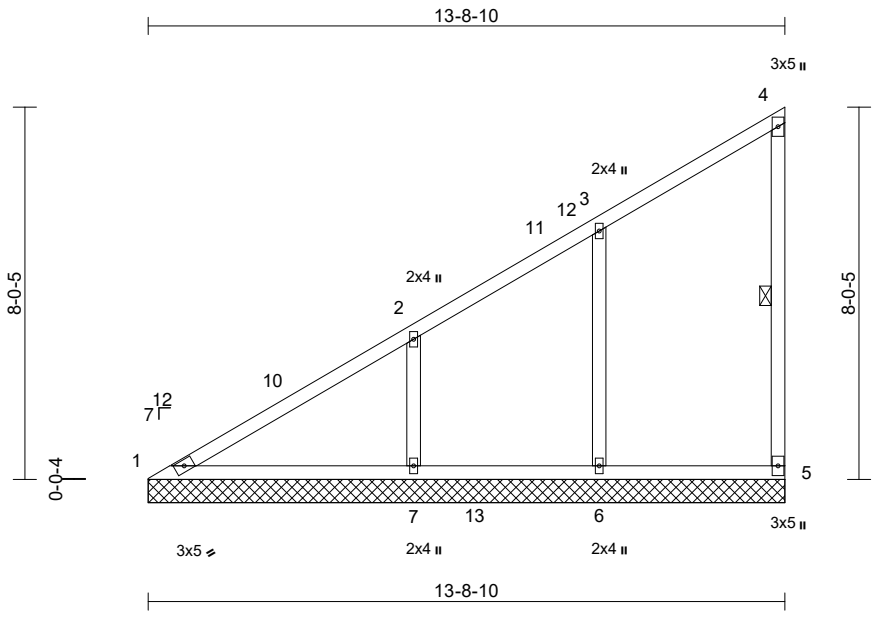

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.34	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horiz(TL)	0.01	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 66 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.
WEBS 1 Row at midpt 4-5

REACTIONS (size) 1=13-8-10, 5=13-8-10, 6=13-8-10, 7=13-8-10
Max Horiz 1=276 (LC 11)
Max Uplift 5=-40 (LC 11), 6=-41 (LC 16), 7=-110 (LC 14)
Max Grav 1=238 (LC 24), 5=216 (LC 5), 6=475 (LC 5), 7=578 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-394/257, 2-3=-179/189, 3-4=-143/131, 4-5=-164/47
BOT CHORD 1-7=-97/320, 6-7=-97/137, 5-6=-97/137
WEBS 3-6=-362/103, 2-7=-338/148

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) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 9-4-7, Exterior(2R) 9-4-7 to 13-7-5 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) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 5, 41 lb uplift at joint 6 and 110 lb uplift at joint 7.
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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V4	Valley	1	1	Job Reference (optional)	I62065538

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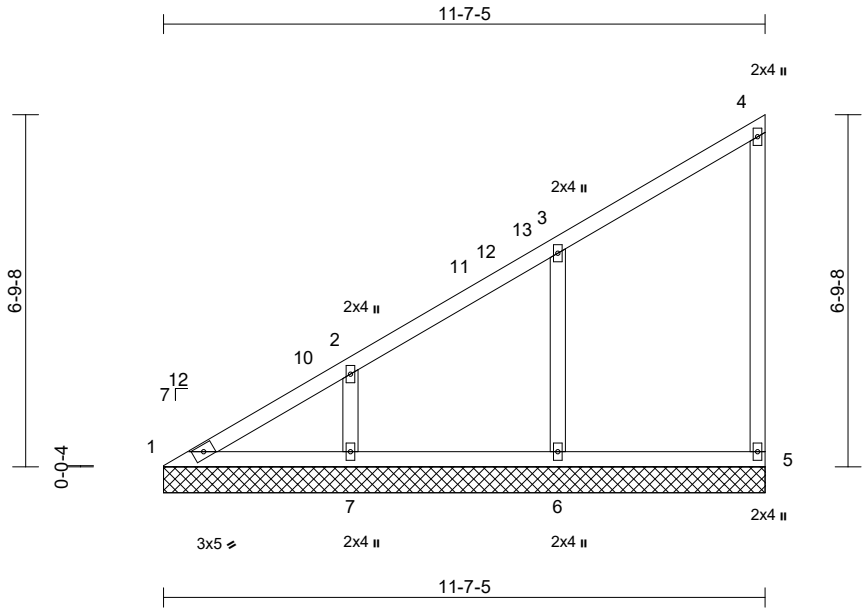

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	5	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.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) 1=11-7-5, 5=11-7-5, 6=11-7-5, 7=11-7-5
Max Horiz 1=232 (LC 11)
Max Uplift 1=-6 (LC 10), 5=-34 (LC 11), 6=-54 (LC 14), 7=-92 (LC 14)
Max Grav 1=159 (LC 24), 5=210 (LC 5), 6=494 (LC 5), 7=398 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-252/228, 2-3=-158/187, 3-4=-135/118, 4-5=-159/45
BOT CHORD 1-7=-81/204, 6-7=-81/117, 5-6=-81/117
WEBS 3-6=-389/133, 2-7=-246/132

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) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 7-3-1, Exterior(2R) 7-3-1 to 11-5-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 5, 6 lb uplift at joint 1, 54 lb uplift at joint 6 and 92 lb uplift at joint 7.
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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V5	Valley	1	1	Job Reference (optional)	I62065539

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

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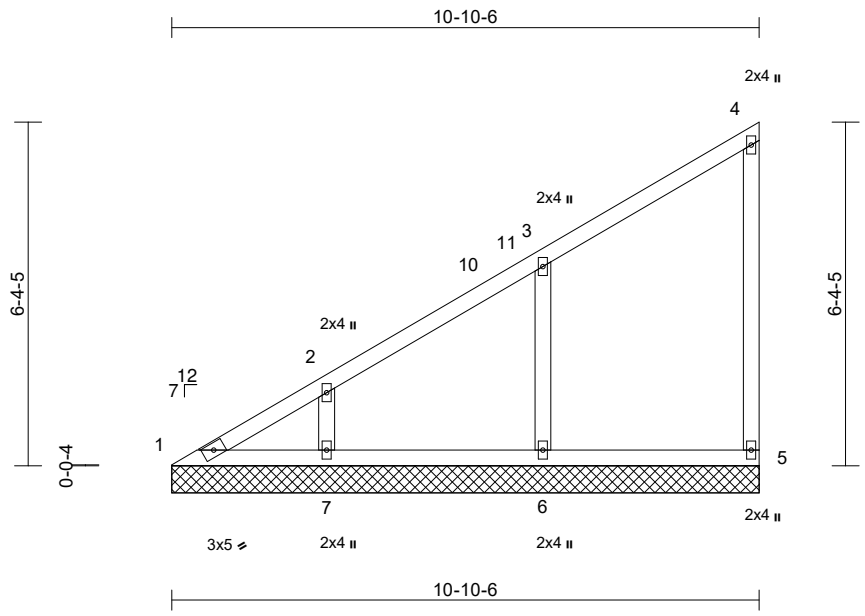

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 49 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) 1=10-10-6, 5=10-10-6, 6=10-10-6, 7=10-10-6
Max Horiz 1=216 (LC 11)
Max Uplift 1=-13 (LC 10), 5=-33 (LC 11), 6=-62 (LC 14), 7=-83 (LC 14)
Max Grav 1=127 (LC 28), 5=209 (LC 5), 6=503 (LC 5), 7=352 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-196/219, 2-3=-151/185, 3-4=-132/113, 4-5=-158/44
BOT CHORD 1-7=-75/165, 6-7=-75/109, 5-6=-75/109
WEBS 3-6=-393/142, 2-7=-223/127

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) 0-0-7 to 2-10-13, Interior (1) 2-10-13 to 6-6-2, Exterior(2R) 6-6-2 to 10-9-1 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
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) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 5, 13 lb uplift at joint 1, 62 lb uplift at joint 6 and 83 lb uplift at joint 7.
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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V6	Valley	1	1	Job Reference (optional)	I62065540

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

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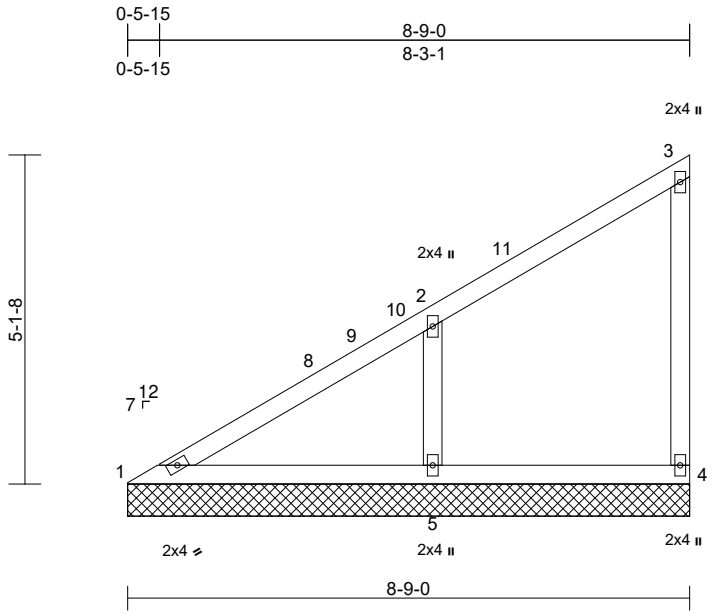

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 37 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) 1=8-9-0, 4=8-9-0, 5=8-9-0
Max Horiz 1=172 (LC 11)
Max Uplift 4=-27 (LC 11), 5=-111 (LC 14)
Max Grav 1=159 (LC 24), 4=168 (LC 20), 5=563 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-252/187, 2-3=-122/103, 3-4=-146/45
BOT CHORD 1-5=-60/230, 4-5=-60/89
WEBS 2-5=-435/188

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) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 4-4-12, Exterior(2R) 4-4-12 to 8-7-11 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) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 27 lb uplift at joint 4 and 111 lb uplift at joint 5.
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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V7	Valley	1	1	Job Reference (optional)	I62065541

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

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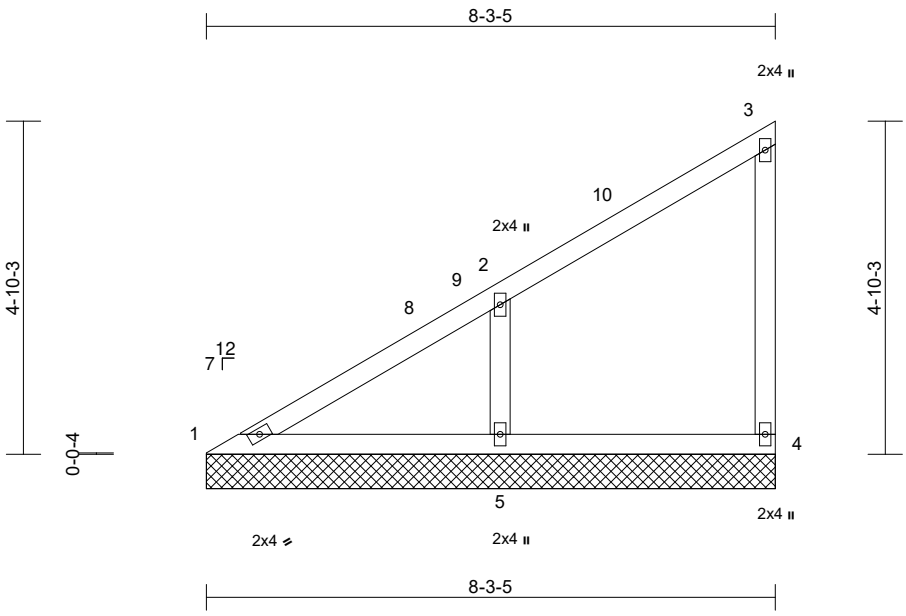

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 35 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) 1=8-3-5, 4=8-3-5, 5=8-3-5
Max Horiz 1=162 (LC 11)
Max Uplift 4=-26 (LC 11), 5=-107 (LC 14)
Max Grav 1=143 (LC 24), 4=174 (LC 20), 5=537 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-224/180, 2-3=-118/101, 3-4=-149/44
BOT CHORD	1-5=-57/205, 4-5=-57/84
WEBS	2-5=-420/187

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) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 3-11-1, Exterior(2R) 3-11-1 to 8-1-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 26 lb uplift at joint 4 and 107 lb uplift at joint 5.
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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V8	Valley	1	1	Job Reference (optional)	I62065542

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

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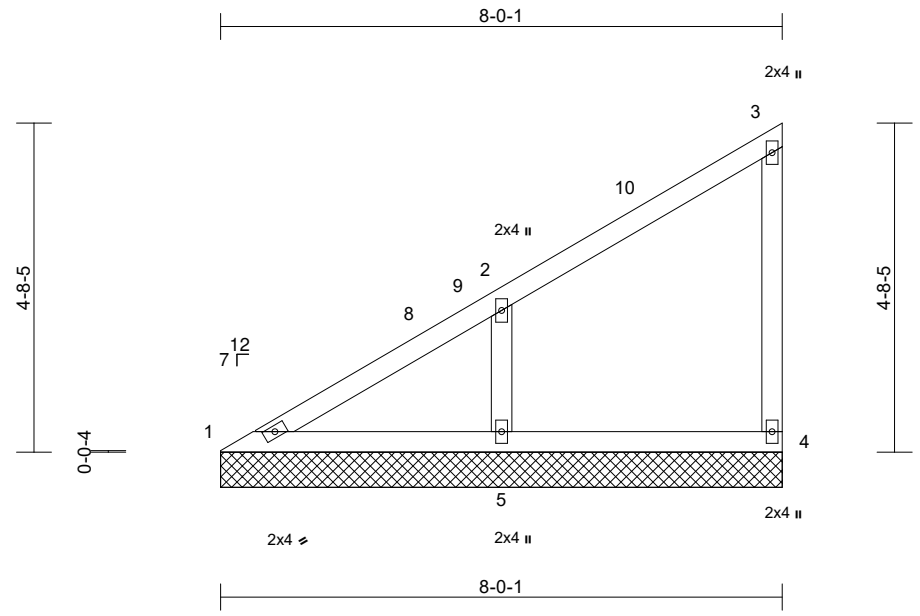

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 34 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) 1=8-0-1, 4=8-0-1, 5=8-0-1
Max Horiz 1=157 (LC 11)
Max Uplift 4=-25 (LC 11), 5=-105 (LC 14)
Max Grav 1=134 (LC 24), 4=177 (LC 20), 5=524 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-207/176, 2-3=-115/99, 3-4=-151/44
BOT CHORD	1-5=-55/190, 4-5=-55/81
WEBS	2-5=-413/185

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) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 3-7-13, Exterior(2R) 3-7-13 to 7-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 25 lb uplift at joint 4 and 105 lb uplift at joint 5.
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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V9	Valley	1	1	Job Reference (optional)	I62065543

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

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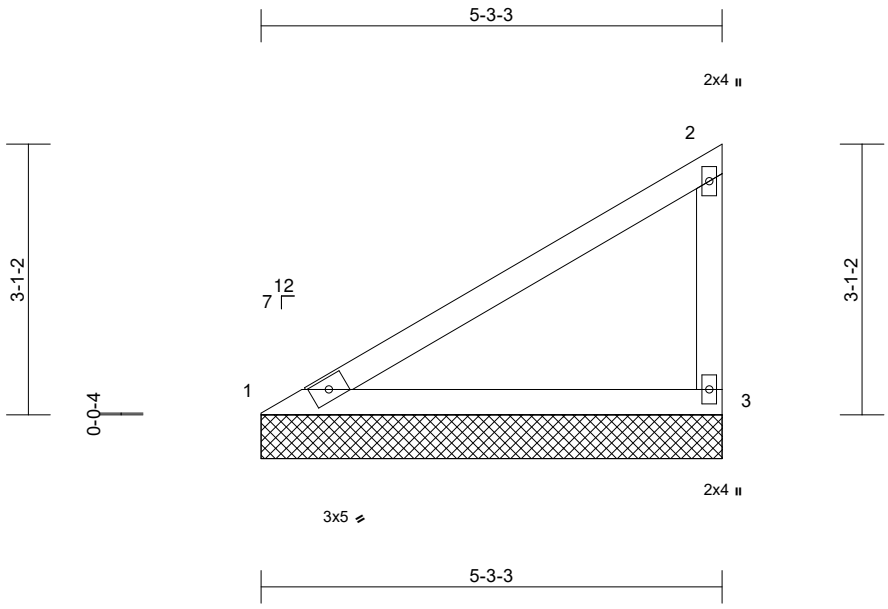

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.57	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 20 lb	FT = 20%

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

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

REACTIONS (size) 1=5-3-3, 3=5-3-3
Max Horiz 1=99 (LC 11)
Max Uplift 1=-18 (LC 14), 3=-47 (LC 14)
Max Grav 1=303 (LC 20), 3=303 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-471/96, 2-3=-208/66
BOT CHORD 1-3=-84/399

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) 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) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 47 lb uplift at joint 3 and 18 lb uplift at joint 1.
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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V10	Valley	1	1	Job Reference (optional)	I62065544

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

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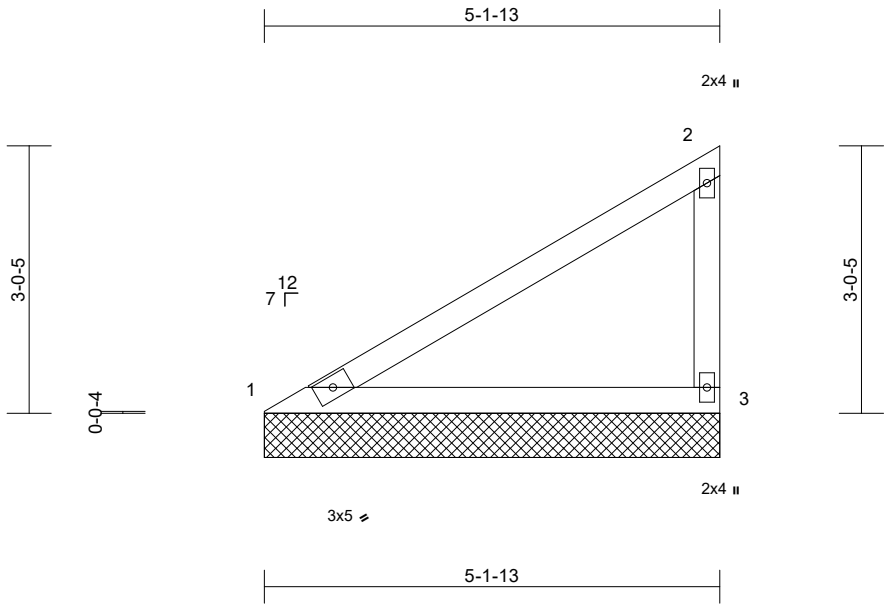

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.55	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.01	3	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
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-1-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-1-13, 3=5-1-13
Max Horiz 1=97 (LC 11)
Max Uplift 1=-17 (LC 14), 3=-46 (LC 14)
Max Grav 1=296 (LC 20), 3=296 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-459/93, 2-3=-203/65
BOT CHORD 1-3=-82/389

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) 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) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 46 lb uplift at joint 3 and 17 lb uplift at joint 1.
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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V11	Valley	1	1	Job Reference (optional)	I62065545

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

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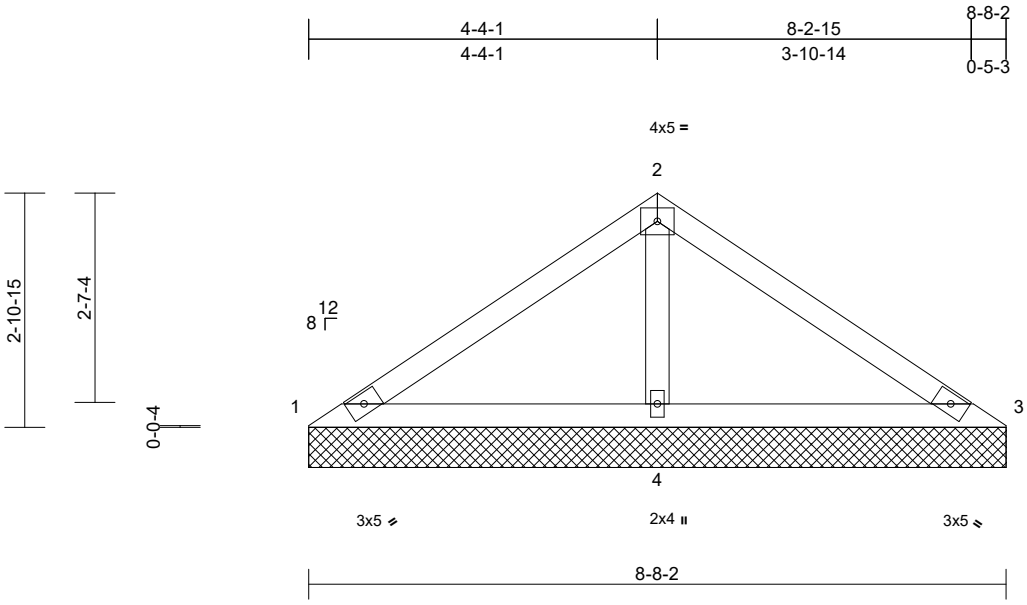

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	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 8-8-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=8-8-2, 3=8-8-2, 4=8-8-2
Max Horiz 1=-64 (LC 10)
Max Uplift 1=-40 (LC 21), 3=-40 (LC 20), 4=-76 (LC 14)
Max Grav 1=104 (LC 20), 3=104 (LC 21), 4=676 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-109/336, 2-3=-109/336
BOT CHORD 1-4=-228/161, 3-4=-228/161
WEBS 2-4=-501/208

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) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 5-8-8, Exterior(2E) 5-8-8 to 8-8-8 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) 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 40 lb uplift at joint 1, 40 lb uplift at joint 3 and 76 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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V12	Valley	1	1	Job Reference (optional)	I62065546

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

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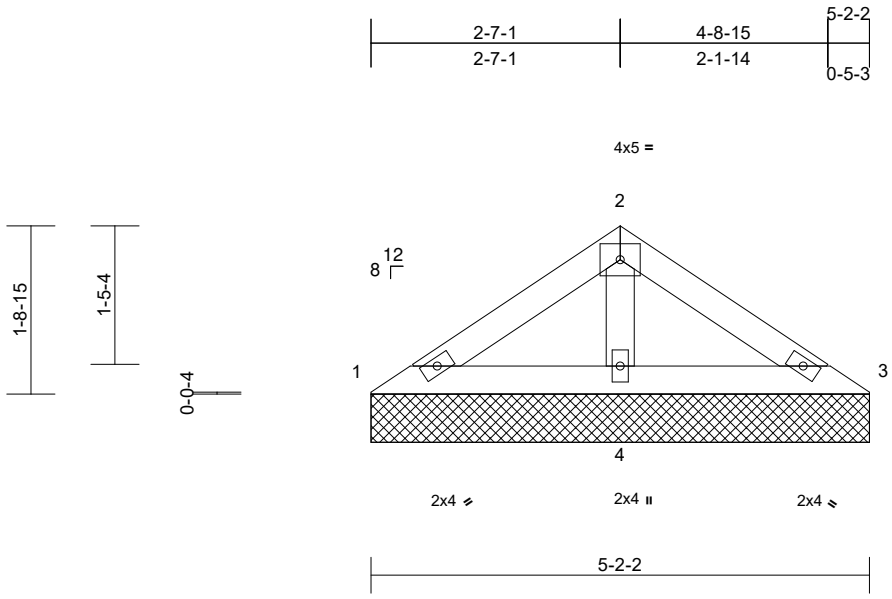

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	4	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
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-2-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=5-2-2, 3=5-2-2, 4=5-2-2
Max Horiz 1=-37 (LC 10)
Max Uplift 1=-5 (LC 14), 3=-11 (LC 15), 4=-28 (LC 14)
Max Grav 1=90 (LC 20), 3=90 (LC 21), 4=314 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-88/120, 2-3=-88/120
BOT CHORD 1-4=-91/83, 3-4=-91/83
WEBS 2-4=-196/100

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 1, 11 lb uplift at joint 3 and 28 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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V13	Valley	1	1	Job Reference (optional)	I62065547

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

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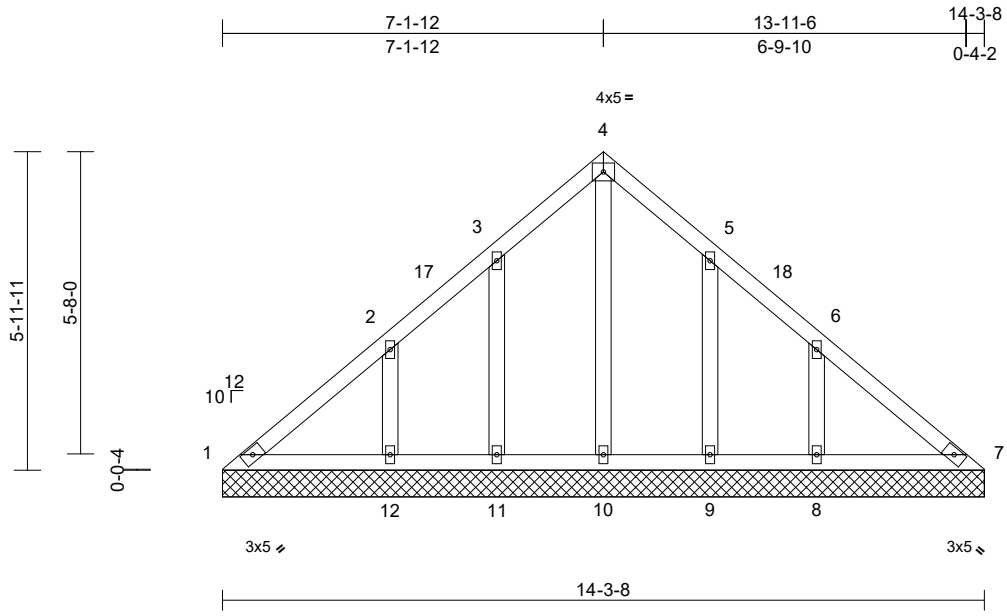

Scale = 1:43.2

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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 73 lb	FT = 20%

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

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

REACTIONS (size) 1=14-3-8, 7=14-3-8, 8=14-3-8, 9=14-3-8, 10=14-3-8, 11=14-3-8, 12=14-3-8
Max Horiz 1=-132 (LC 12)
Max Uplift 1=-18 (LC 10), 8=-98 (LC 15), 9=-69 (LC 15), 11=-69 (LC 14), 12=-101 (LC 14)
Max Grav 1=103 (LC 24), 7=88 (LC 21), 8=284 (LC 21), 9=234 (LC 21), 10=203 (LC 26), 11=234 (LC 20), 12=284 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-121/147, 2-3=-54/99, 3-4=-54/107, 4-5=-54/107, 5-6=-49/83, 6-7=-99/113
BOT CHORD 1-12=-82/111, 11-12=-82/111, 10-11=-82/111, 9-10=-82/111, 8-9=-82/111, 7-8=-82/111
WEBS 4-10=-158/0, 3-11=-213/101, 2-12=-199/115, 5-9=-213/101, 6-8=-199/114

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) 0-0-5 to 3-2-1, Interior (1) 3-2-1 to 4-2-1, Exterior(2R) 4-2-1 to 10-2-1, Interior (1) 10-2-1 to 11-2-1, Exterior(2E) 11-2-1 to 14-3-13 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) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 1, 69 lb uplift at joint 11, 101 lb uplift at joint 12, 69 lb uplift at joint 9 and 98 lb uplift at joint 8.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V14	Valley	1	1	Job Reference (optional)	I62065548

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

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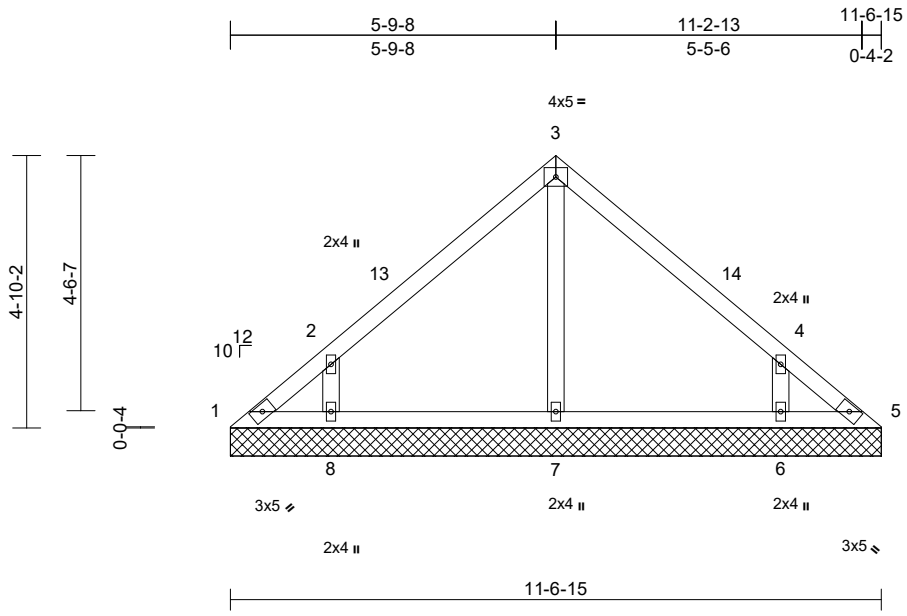

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 47 lb	FT = 20%

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

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

REACTIONS (size) 1=11-6-15, 5=11-6-15, 6=11-6-15, 7=11-6-15, 8=11-6-15
Max Horiz 1=-109 (LC 10)
Max Uplift 1=-37 (LC 10), 5=-10 (LC 11), 6=-134 (LC 15), 8=-138 (LC 14)
Max Grav 1=81 (LC 24), 5=61 (LC 30), 6=438 (LC 21), 7=254 (LC 20), 8=438 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-119/100, 2-3=-222/114, 3-4=-222/114, 4-5=-95/64
BOT CHORD 1-8=-32/73, 7-8=-27/73, 6-7=-27/73, 5-6=-29/73
WEBS 3-7=-166/0, 2-8=-420/234, 4-6=-420/234

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 8-7-4, Exterior(2E) 8-7-4 to 11-7-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 37 lb uplift at joint 1, 10 lb uplift at joint 5, 138 lb uplift at joint 8 and 134 lb uplift at joint 6.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V15	Valley	1	1	Job Reference (optional)	I62065549

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

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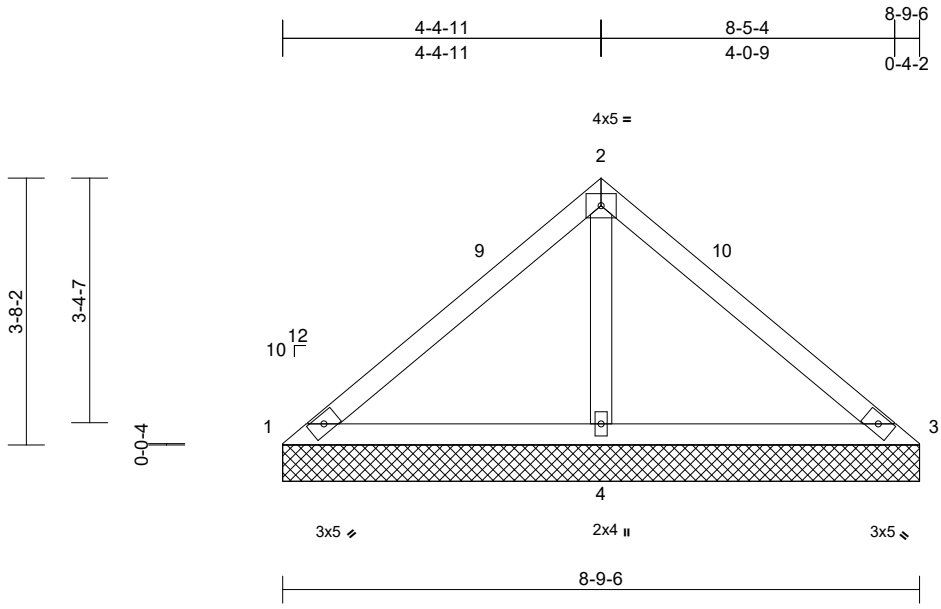

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.39	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 33 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 8-9-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=8-9-6, 3=8-9-6, 4=8-9-6
Max Horiz 1=-82 (LC 10)
Max Uplift 1=-50 (LC 21), 3=-50 (LC 20), 4=-109 (LC 14)
Max Grav 1=76 (LC 20), 3=76 (LC 21), 4=709 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-132/329, 2-3=-132/329
BOT CHORD 1-4=-223/192, 3-4=-223/192
WEBS 2-4=-532/266

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 5-9-10, Exterior(2E) 5-9-10 to 8-9-10 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 50 lb uplift at joint 1, 50 lb uplift at joint 3 and 109 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

November 17,2023

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

Job	Truss	Truss Type	Qty	Ply	DRB HOMES - 83 FaNC	
23120150	V16	Valley	1	1	Job Reference (optional)	I62065550

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

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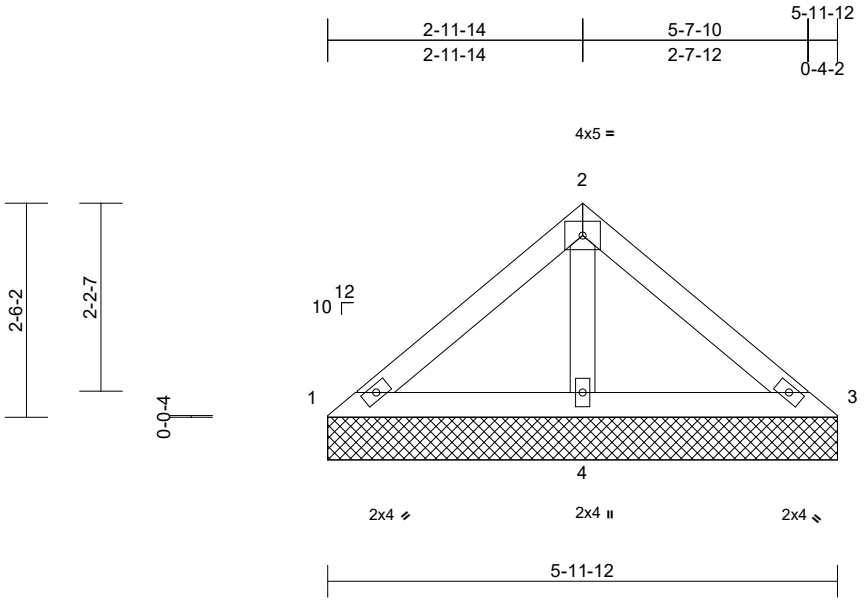

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 22 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 5-11-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=5-11-12, 3=5-11-12, 4=5-11-12
Max Horiz 1=55 (LC 13)
Max Uplift 3=-4 (LC 15), 4=-50 (LC 14)
Max Grav 1=99 (LC 20), 3=99 (LC 21), 4=399 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-88/157, 2-3=-88/157
BOT CHORD 1-4=-116/120, 3-4=-116/120
WEBS 2-4=-267/146

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 4 lb uplift at joint 3 and 50 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.

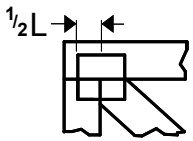
LOAD CASE(S) Standard

November 17,2023

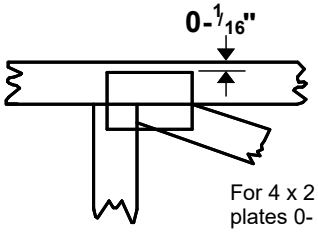
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

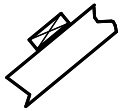
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

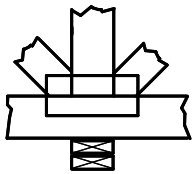
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

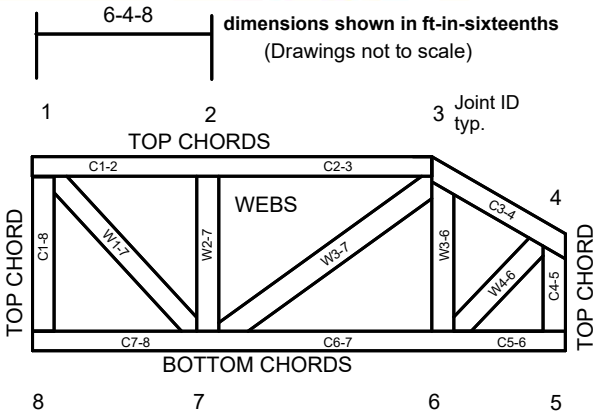


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.