ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 22030100
DRB GROUP - 7 FaNC

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

Pages or sheets covered by this seal: I50831246 thru I50831268

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844

March 17,2022

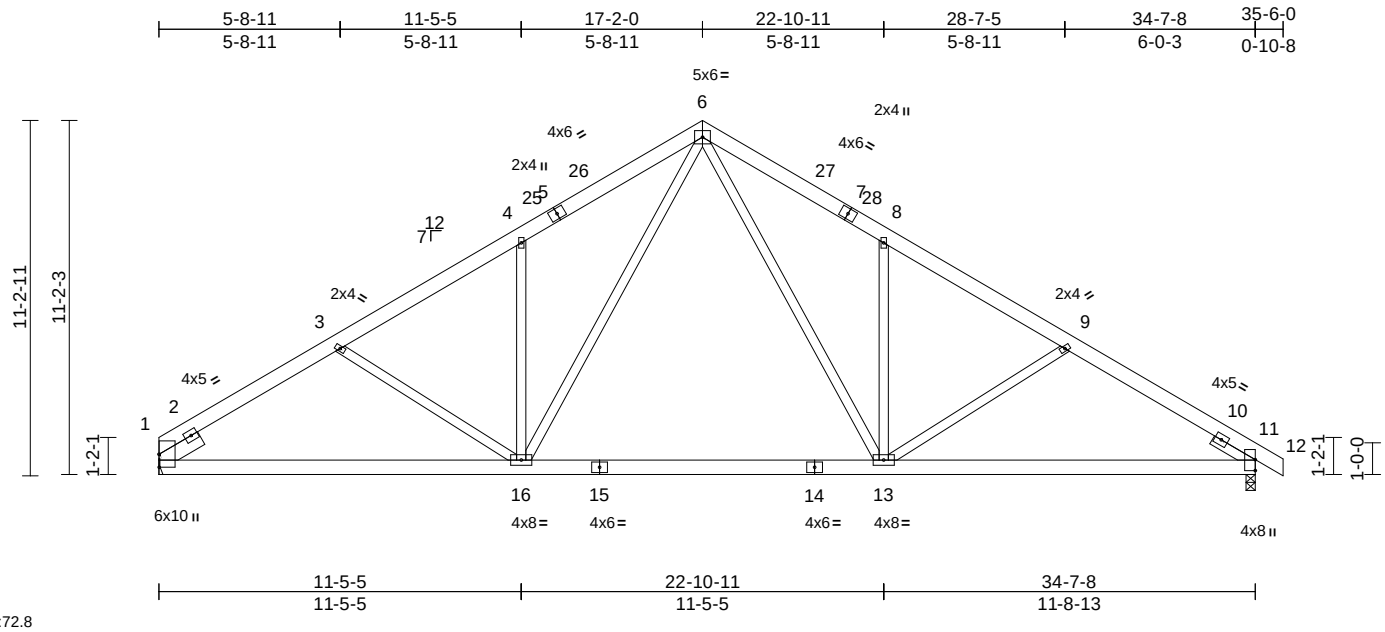
Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	I50831246
22030100	A01	Common	2	1	Job Reference (optional)	

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

Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:20:52 ID:gjaDKQLY7lcou8lik6PeZ7yHzji-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:72.8

Plate Offsets (X, Y): [1:0-4-15,0-0-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.24	13-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.38	13-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.06	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 259 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 13-6,16-6:2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-1-7 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=1384/ Mechanical, 11=1438/0-3-8
Max Horiz 1=-247 (LC 10)
Max Uplift 1=-124 (LC 14), 11=-143 (LC 15)
Max Grav 1=1587 (LC 24), 11=1640 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-3=-2253/226, 3-4=-2039/206, 4-6=-2118/340, 6-8=-2146/342, 8-9=-2091/207, 9-11=-2329/235, 11-12=0/26
BOT CHORD	1-16=-259/2017, 13-16=-9/1345, 11-13=-108/1915
WEBS	6-13=-224/1142, 8-13=-492/237, 9-13=-261/184, 6-16=-223/1091, 4-16=-508/240, 3-16=-204/174

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) 0-3-8 to 3-9-1, Interior (1) 3-9-1 to 13-11-15, Exterior(2R) 13-11-15 to 20-11-1, Interior (1) 20-11-1 to 32-3-15, Exterior(2E) 32-3-15 to 35-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 1.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 17,2022

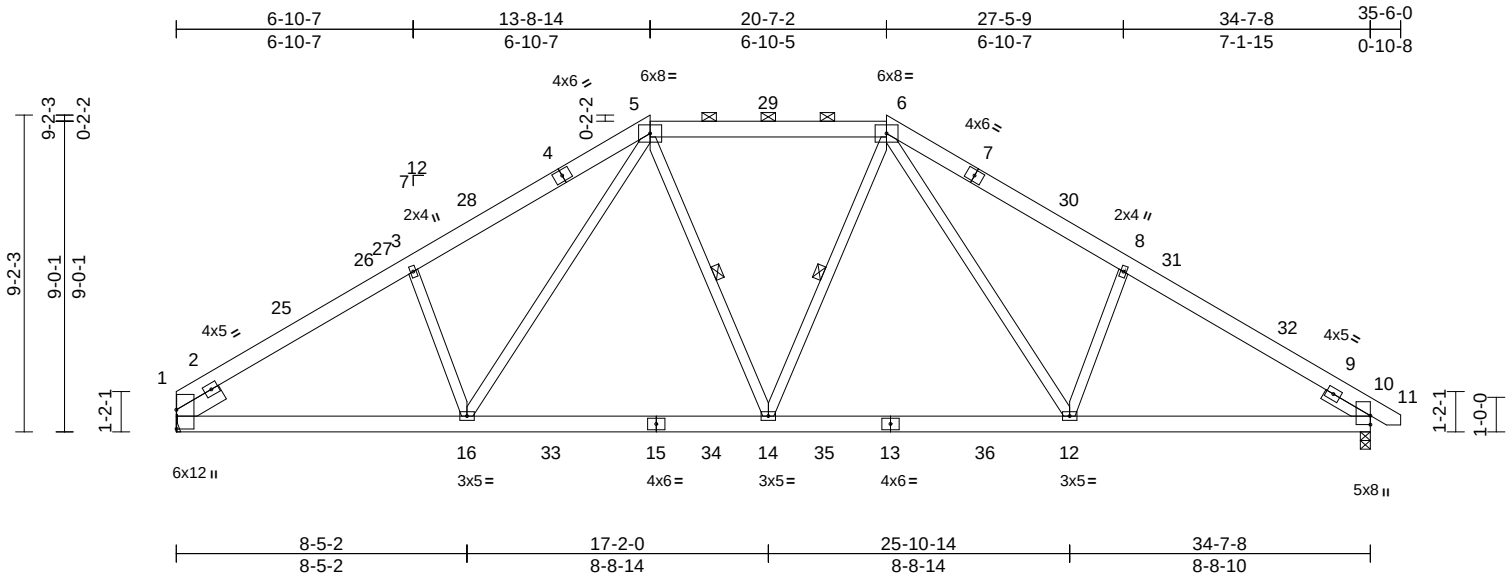
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	A01A	Hip	1	1	Job Reference (optional)	I50831247

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

Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:20:54 ID:gjaDKQLY7lcou8lik6PeZ7yHzji-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:66.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.15	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.24	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.07	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 250 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-8-0 oc purlins, except 2-0-0 oc purlins (5-2-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-14, 6-14

REACTIONS (lb/size) 1=1385/ Mechanical, 10=1426/0-3-8
Max Horiz 1=-196 (LC 10)
Max Uplift 1=-133 (LC 14), 10=-148 (LC 15)
Max Grav 1=1652 (LC 47), 10=1691 (LC 49)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-3=-2432/221, 3-5=-2304/306, 5-6=-1707/228, 6-8=-2396/315, 8-10=-2501/228, 10-11=0/20
BOT CHORD	1-16=-216/2100, 14-16=-67/1612, 12-14=-13/1623, 10-12=-96/2076
WEBS	3-16=-380/231, 5-16=-138/692, 5-14=-43/367, 6-14=-55/345, 6-12=-146/782, 8-12=-424/238

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) 0-3-8 to 3-9-1, Interior (1) 3-9-1 to 9-1-10, Exterior(2R) 9-1-10 to 25-9-6, Interior (1) 25-9-6 to 32-1-8, Exterior(2E) 32-1-8 to 35-7-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) 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 133 lb uplift at joint 1.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	A02	Common	3	1	Job Reference (optional)	I50831248

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

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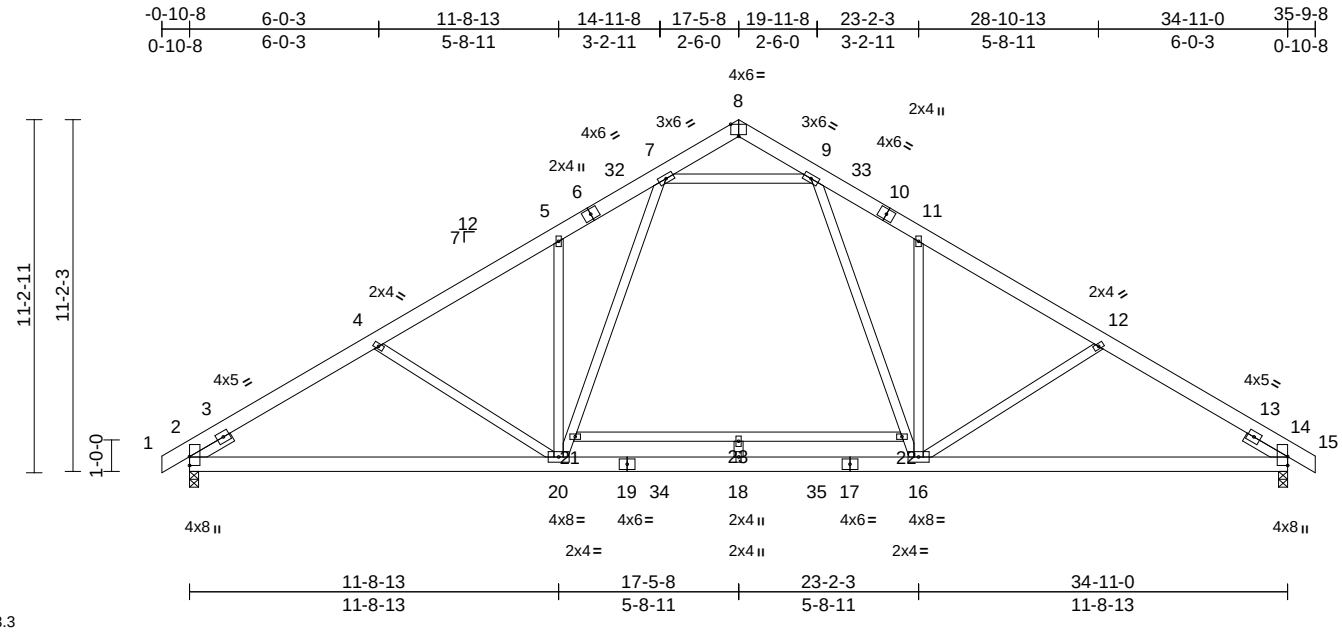

Scale = 1:73.3

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

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	0.45	Vert(LL)	-0.14	20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.35	18	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.07	14	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 278 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 21-22:2x4 SP No.2
SLIDER	Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-2-7 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=1504/0-3-8, 14=1504/0-3-8
Max Horiz 2=-243 (LC 12)
Max Uplift 2=-39 (LC 14), 14=-39 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/26, 2-4=-2218/37, 4-5=-1967/0, 5-7=-2011/119, 7-8=-248/84, 8-9=-248/85, 9-11=-2011/119, 11-12=-1967/0, 12-14=-2218/37, 14-15=0/26
BOT CHORD	2-20=-147/1835, 18-20=0/1321, 16-18=0/1321, 14-16=-4/1822
WEBS	5-20=-481/245, 20-21=-122/952, 7-21=-111/948, 4-20=-242/213, 9-22=-110/948, 16-22=-121/952, 11-16=-481/244, 12-16=-243/214, 7-9=-1246/84, 21-23=-1/61, 22-23=-1/61, 18-23=0/38

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-7-6, Interior (1) 2-7-6 to 13-11-10, Exterior(2R) 13-11-10 to 20-11-6, Interior (1) 20-11-6 to 32-3-10, Exterior(2E) 32-3-10 to 35-9-8 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, 17-5-8 from left end, supported at two points, 5-0-0 apart.
7) All plates are 2x4 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.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 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.

LOAD CASE(S) Standard

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	A02A	Common	5	1	Job Reference (optional)	I50831249

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

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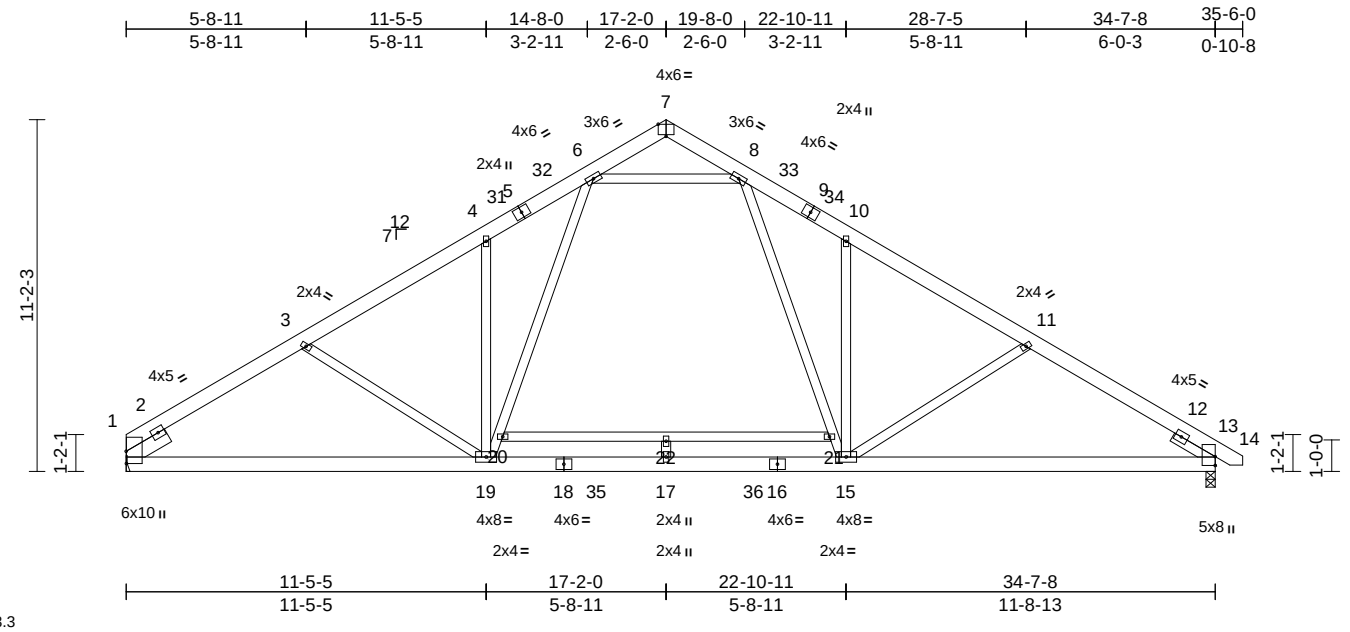

Scale = 1:73.3

Plate Offsets (X, Y): [1:0-4-11,0-0-2], [7:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.15	15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.37	17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.06	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 276 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 20-21:2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-9-1 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=1484/ Mechanical, 13=1526/0-3-8
Max Horiz 1=-245 (LC 10)
Max Uplift 1=-25 (LC 14), 13=-38 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-3=-2193/45, 3-4=-1970/10, 4-6=-2035/134, 6-7=-266/84, 7-8=-250/89, 8-10=-2078/125, 10-11=-2007/4, 11-13=-2268/43, 13-14=0/20
BOT CHORD	1-19=-144/1796, 17-19=0/1337, 15-17=0/1337, 13-15=-10/1863
WEBS	4-19=-513/258, 19-20=-138/937, 6-20=-126/934, 3-19=-187/215, 8-21=-108/1007, 15-21=-119/1010, 10-15=-520/249, 11-15=-254/221, 6-8=-1257/92, 20-22=-1/61, 21-22=-1/61, 17-22=0/39

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) 0-3-8 to 3-9-6, Interior (1) 3-9-6 to 13-11-10, Exterior(2R) 13-11-10 to 20-11-6, Interior (1) 20-11-6 to 32-1-2, Exterior(2E) 32-1-2 to 35-7-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) 200.0lb AC unit load placed on the bottom chord, 17-5-8 from left end, supported at two points, 5-0-0 apart.
7) All plates are 2x4 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.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1.
12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. 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

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC
22030100	A03	Roof Special	1	1	I50831250
					Job Reference (optional)

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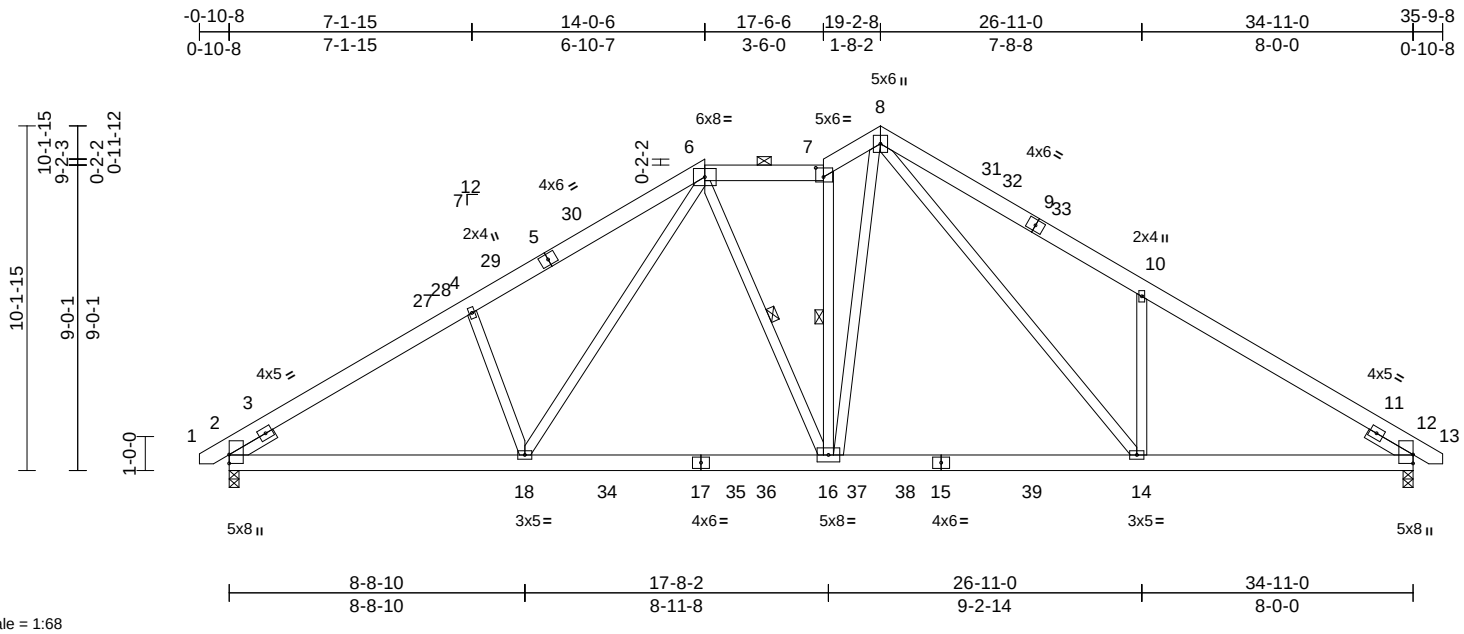


Scale = 1:68

Plate Offsets (X, Y): [7:0-2-12,0-3-4]

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	0.55	Vert(LL)	-0.15	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.29	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.07	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 271 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 14-8:2x4 SP No.2
SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-10-7 oc purlins, except 2-0-0 oc purlins (5-1-14 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-16, 7-16

REACTIONS (lb/size) 2=1537/0-3-8, 12=1537/0-3-8
Max Horiz 2=-224 (LC 12)
Max Uplift 2=-57 (LC 14), 12=-30 (LC 15)
Max Grav 2=1759 (LC 51), 12=1752 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-4=-2590/63, 4-6=-2499/151, 6-7=-1843/56, 7-8=-2058/72, 8-10=-2613/213, 10-12=-2573/29, 12-13=0/20
BOT CHORD 2-18=-164/2298, 16-18=0/1779, 14-16=0/1645, 12-14=-19/2106
WEBS 4-18=-412/252, 6-18=-142/785, 6-16=-1/432, 7-16=-1038/59, 8-16=0/1445, 8-14=-293/909, 10-14=-489/327

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-1 to 2-9-14, Interior (1) 2-9-14 to 10-6-7, Exterior(2R) 10-6-7 to 14-0-6, Exterior (2E) 14-0-6 to 17-6-6, Exterior(2R) 17-6-6 to 22-8-6, Interior (1) 22-8-6 to 32-1-2, Exterior(2E) 32-1-2 to 35-7-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) 200.0lb AC unit load placed on the bottom chord, 17-5-8 from left end, supported at two points, 5-0-0 apart.
7) 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 and 12. 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

March 17,2022

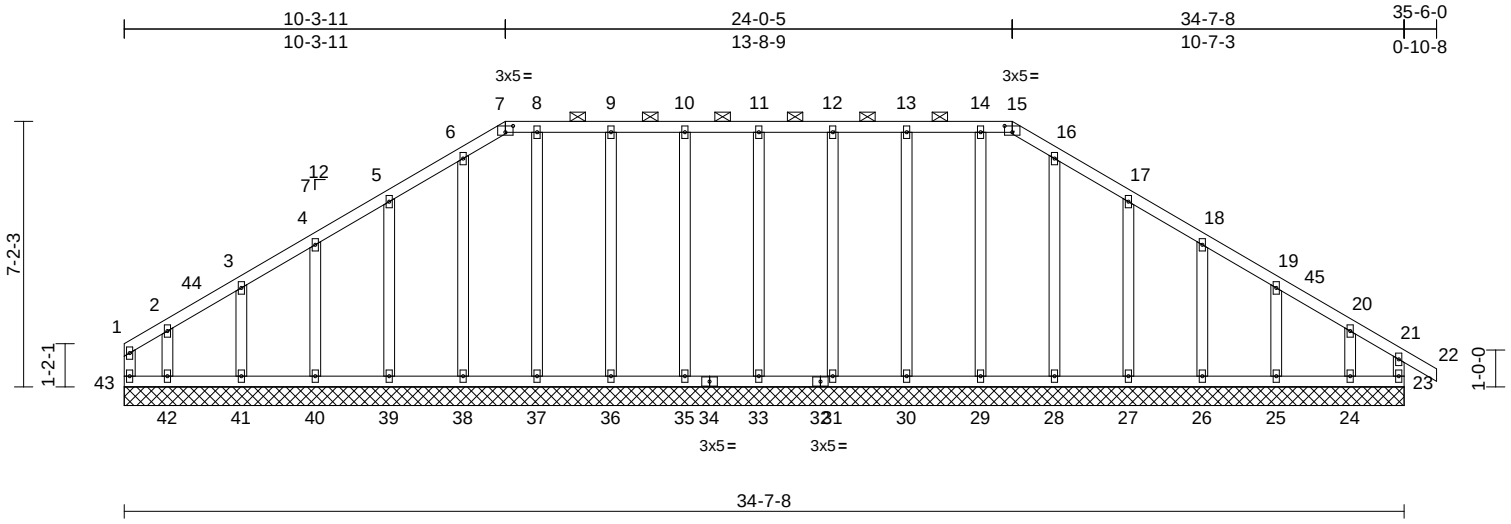
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	I50831251
22030100	A04	Hip Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:20:57
ID:xn3SJVlpx40x6KkiicyXRNyHzfJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:62.3

Plate Offsets (X, Y): [7:0-2-8,0-2-1], [15:0-2-8,0-2-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	23	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 235 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.): 7-15.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 23=131/34-7-8, 24=111/34-7-8, 25=168/34-7-8, 26=158/34-7-8, 27=160/34-7-8, 28=158/34-7-8, 29=159/34-7-8, 30=159/34-7-8, 31=160/34-7-8, 33=160/34-7-8, 35=160/34-7-8, 36=159/34-7-8, 37=159/34-7-8, 38=158/34-7-8, 39=160/34-7-8, 40=159/34-7-8, 41=165/34-7-8, 42=131/34-7-8, 43=29/34-7-8

Max Horiz 43=-182 (LC 10)

Max Uplift 23=-60 (LC 11), 24=-106 (LC 15), 25=-43 (LC 15), 26=-50 (LC 15), 27=-61 (LC 15), 28=-6 (LC 15), 29=-1 (LC 10), 30=-32 (LC 11), 31=-25 (LC 10), 33=-26 (LC 10), 35=-25 (LC 11), 36=-32 (LC 10), 37=-6 (LC 11), 38=-8 (LC 14), 39=-61 (LC 14), 40=-50 (LC 14), 41=-43 (LC 14), 42=-130 (LC 14), 43=-122 (LC 12)

Max Grav 23=157 (LC 47), 24=168 (LC 49), 25=219 (LC 39), 26=221 (LC 39), 27=223 (LC 39), 28=213 (LC 43), 29=203 (LC 38), 30=224 (LC 38), 31=221 (LC 38), 33=221 (LC 38), 35=221 (LC 38), 36=224 (LC 38), 37=203 (LC 38), 38=214 (LC 41), 39=225 (LC 41), 40=223 (LC 41), 41=223 (LC 41), 42=219 (LC 47), 43=145 (LC 11)

FORCES (lb) - Maximum Compression/Maximum Tension

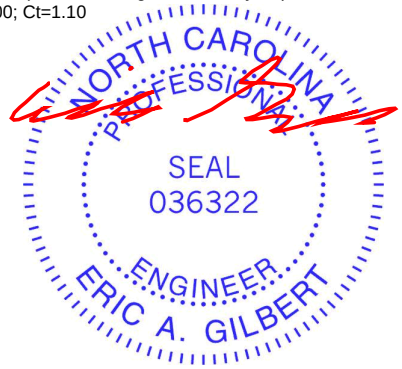
TOP CHORD 1-43=-89/76, 1-2=-116/113, 2-3=-85/83, 3-4=-87/85, 4-5=-76/118, 5-6=-106/170, 6-7=-118/186, 7-8=-106/182, 8-9=-106/182, 9-10=-106/182, 10-11=-106/182, 11-12=-106/182, 12-13=-106/182, 13-14=-106/182, 14-15=-106/182, 15-16=-118/186, 16-17=-106/170, 17-18=-75/118, 18-19=-76/79, 19-20=-72/72, 20-21=-100/89, 21-22=0/31, 21-23=-125/46

BOT CHORD 42-43=-90/100, 41-42=-90/100, 40-41=-90/100, 39-40=-90/100, 38-39=-90/100, 37-38=-90/100, 36-37=-90/100, 35-36=-90/100, 33-35=-90/100, 31-33=-90/100, 30-31=-90/100, 29-30=-90/100, 28-29=-90/100, 27-28=-90/100, 26-27=-90/100, 25-26=-90/100, 24-25=-90/100, 23-24=-90/100

WEBS 11-33=-181/50, 10-35=-181/49, 9-36=-184/59, 8-37=-163/30, 6-38=-174/32, 5-39=-185/85, 4-40=-183/72, 3-41=-182/74, 2-42=-145/103, 12-31=-181/49, 13-30=-184/59, 14-29=-163/25, 16-28=-173/30, 17-27=-183/85, 18-26=-181/73, 19-25=-177/73, 20-24=-115/95

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) 0-5-4 to 3-10-13, Exterior(2N) 3-10-13 to 7-1-11, Corner(3R) 7-1-11 to 14-0-12, Exterior(2N) 14-0-12 to 20-10-4, Corner(3R) 20-10-4 to 27-9-5, Exterior(2N) 27-9-5 to 32-3-15, Corner(3E) 32-3-15 to 35-9-8 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



March 17,2022

Continued on page 2

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Edenton, NC 27932

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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 43, 23, 33, 35, 36, 37, 38, 39, 40, 41, 42, 31, 30, 29, 28, 27, 26, 25, and 24. This connection is for uplift only and does not consider lateral forces.
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 GROUP - 7 FaNC	I50831252
22030100	A05	Roof Special Structural Gable	1	1	Job Reference (optional)	

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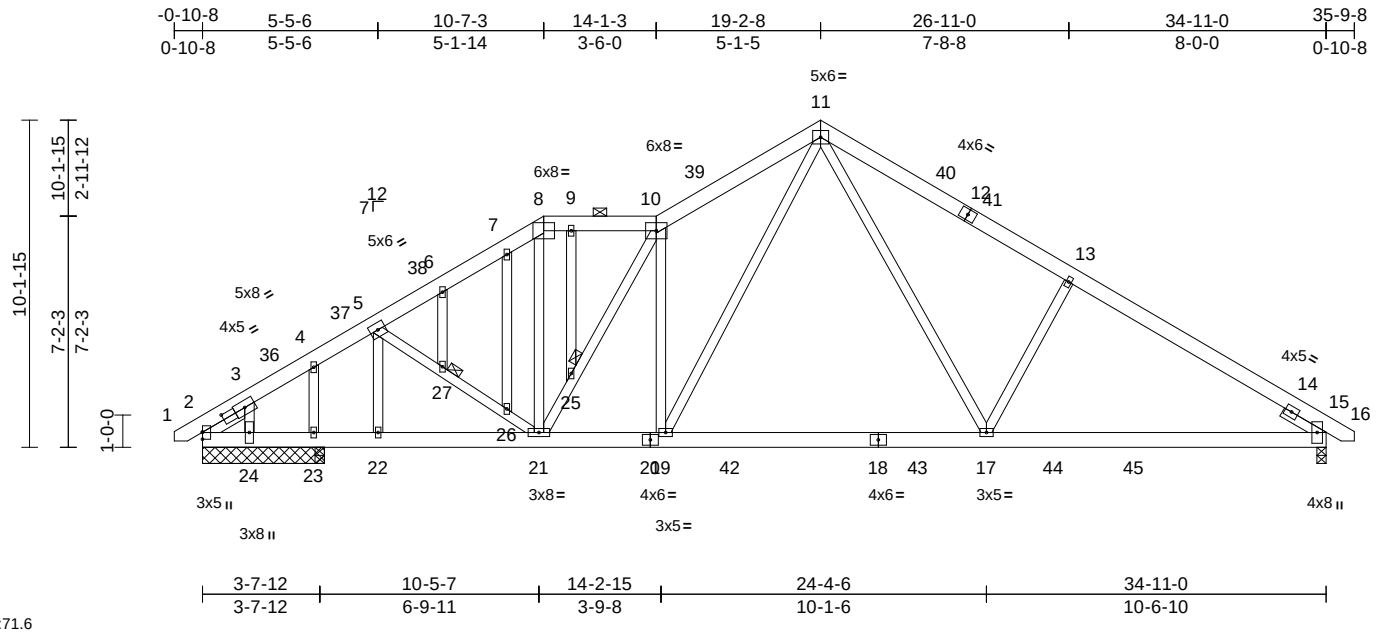


Scale = 1:71.6

Plate Offsets (X, Y): [2:0-9-4,0-2-0], [15:0-4-2,0-1-6]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.16	17-19	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.28	17-19	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.05	15	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 290 lb	FT = 20%

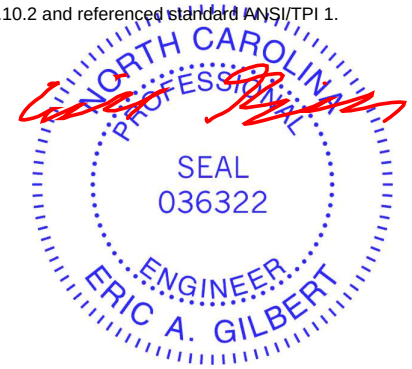
LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 19-11,17-11:2x4 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 1-6-5, Right 2x4 SP No.3 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-5-2 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 25, 27

REACTIONS (lb/size) 2=1047/3-9-8, 15=1331/0-3-8, 23=1482/3-9-8, 24=-987/3-9-8, 28=1047/3-9-8
Max Horiz 2=224 (LC 13), 28=224 (LC 13)
Max Uplift 2=-31 (LC 14), 15=-129 (LC 15), 23=-179 (LC 14), 24=-1152 (LC 49), 28=-31 (LC 14)
Max Grav 2=1220 (LC 53), 15=1546 (LC 25), 23=1745 (LC 51), 24=36 (LC 14), 28=1220 (LC 53)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-1242/51, 3-4=-974/71, 4-5=-1313/119, 5-6=-1591/174, 6-7=-1543/189, 7-8=-1438/200, 8-9=-1325/210, 9-10=-1325/210, 10-11=-1944/312, 11-13=-2016/274, 13-15=-2173/218, 15-16=0/20
BOT CHORD 2-24=-121/1050, 23-24=-121/1050, 22-23=-121/1050, 21-22=-115/1030, 19-21=-93/1675, 17-19=-10/1248, 15-17=-98/1802
WEBS 5-27=-3/640, 26-27=0/609, 21-26=0/665, 8-21=-16/368, 21-25=-679/40, 10-25=-727/43, 10-19=-633/248, 11-19=-169/1000, 11-17=-134/916, 13-17=-459/272, 9-25=-4/60, 7-26=0/97, 6-27=-66/10, 5-22=-383/110, 4-23=-852/102, 3-24=0/487

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-1 to 2-9-14, Interior (1) 2-9-14 to 7-1-5, Exterior(2R) 7-1-5 to 10-7-3, Exterior (2E) 10-7-3 to 14-1-3, Interior (1) 14-1-3 to 15-8-10, Exterior(2R) 15-8-10 to 22-8-6, Interior (1) 22-8-6 to 32-1-2, Exterior(2E) 32-1-2 to 35-7-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
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, with BCDL = 10.0psf.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1152 lb uplift at joint 24.
13) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 23, and 15. This connection is for uplift only and does not consider lateral forces.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Edenton, NC 27932

15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
16) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	B01	Common	1	1	Job Reference (optional)	I50831253

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

Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:20:59

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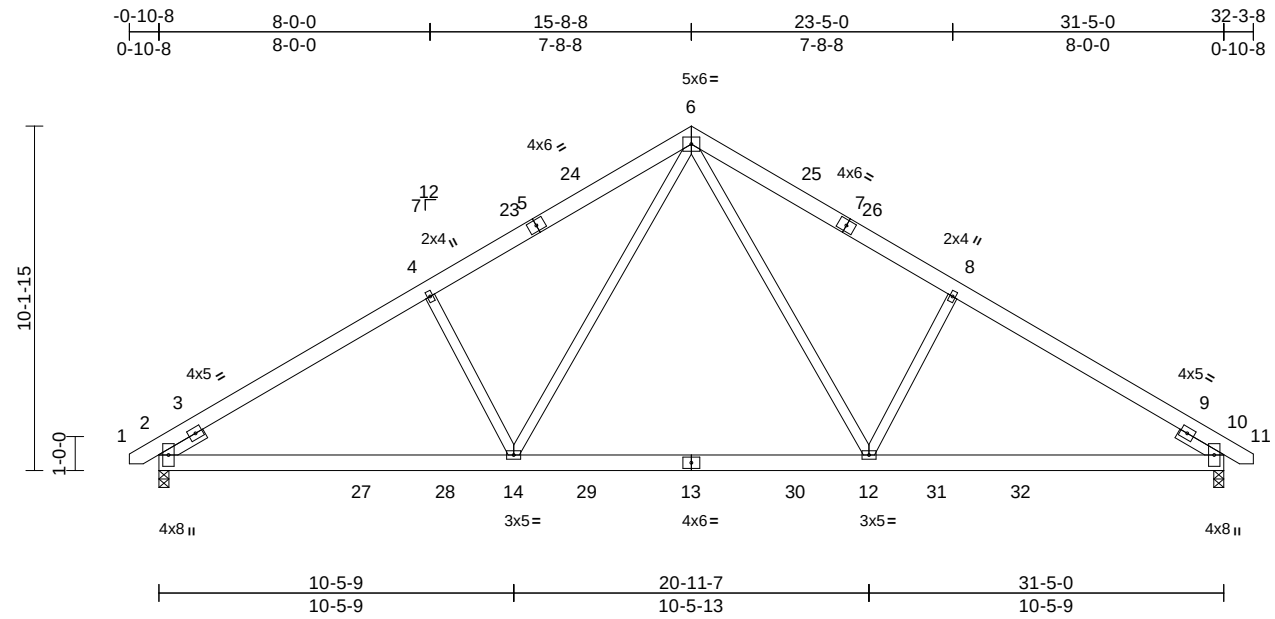
Page: 1



Scale = 1:68

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

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

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 14-6,12-6:2x4 SP No.2
SLIDER	Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-7-1 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=1297/0-3-8, 10=1297/0-3-8
Max Horiz 2=224 (LC 13)
Max Uplift 2=-127 (LC 14), 10=-127 (LC 15)
Max Grav 2=1516 (LC 24), 10=1516 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

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

NOTES

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

LOAD CASE(S) Standard

March 17,2022

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	B02	Roof Special	5	1	Job Reference (optional)	I50831254

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:21:00 Page: 1

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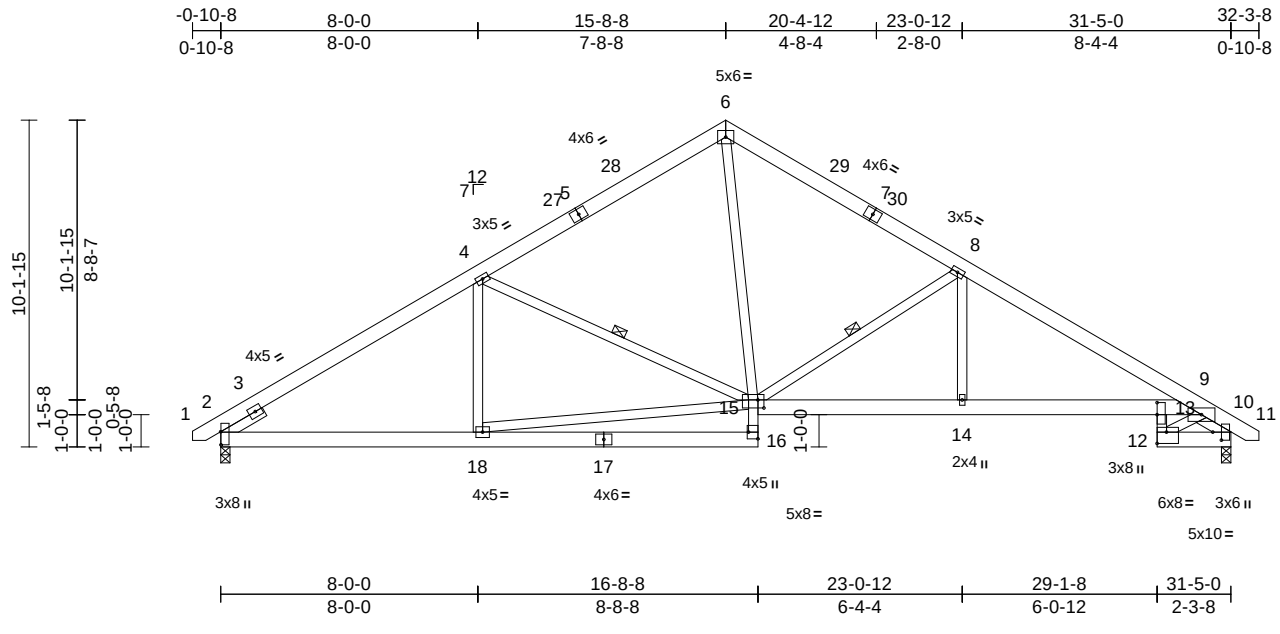


Scale = 1:71.7

Plate Offsets (X, Y): [2:0-4-14,0-0-2], [10:0-3-0,0-3-4], [12:Edge,0-4-4], [13:0-4-8,Edge], [15:0-2-4,0-3-0], [16:Edge,0-3-8]

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	0.54	Vert(LL)	-0.11	13-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.23	13-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.09	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 237 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2

BOT CHORD 2x6 SP No.2 *Except* 16-15,13-12:2x4 SP No.3, 15-9:2x6 SP 2400F 2.0E

WEBS 2x4 SP No.3

SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-0-15

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-14 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 12-13.

WEBS 1 Row at midpt 4-15, 8-15

REACTIONS (lb/size) 2=1297/0-3-8, 10=1297/0-3-8
Max Horiz 2=224 (LC 13)
Max Uplift 2=-127 (LC 14), 10=-127 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-4=-1859/181, 4-6=-1398/216, 6-8=-1507/224, 8-9=-2268/203, 9-10=-894/70, 10-11=0/20

BOT CHORD 2-18=-214/1519, 16-18=0/207, 15-16=0/164, 14-15=-63/1928, 13-14=-63/1928, 9-13=-51/1915, 12-13=-99/1088, 10-12=-100/927

WEBS 4-18=-29/212, 4-15=-525/210, 8-15=-943/232, 8-14=0/455, 9-12=-1211/126, 6-15=-58/932, 15-18=-192/1323

NOTES

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

LOAD CASE(S) Standard

March 17,2022

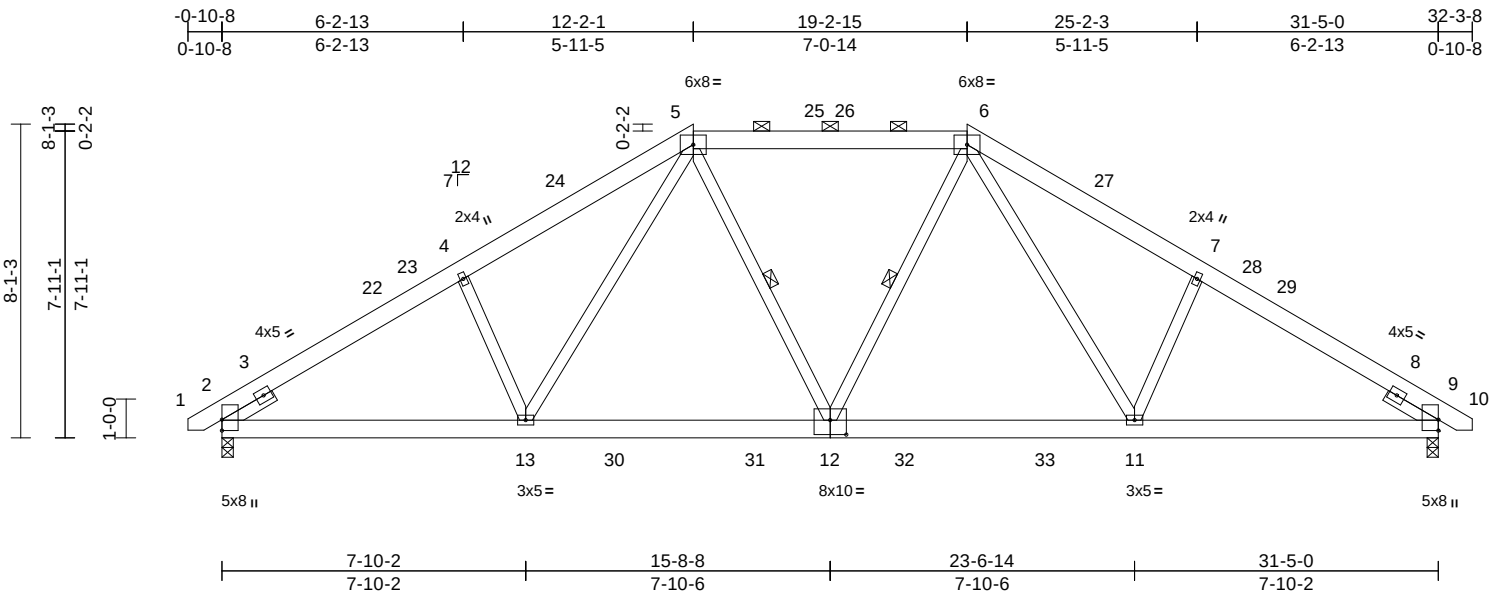
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	B03	Hip	1	1	Job Reference (optional)	I50831255

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

Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:21:00
ID:n0XQrpeEWqLR_iOw19HuR_yHze9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:59.5

Plate Offsets (X, Y): [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	0.51	Vert(LL)	-0.10	12-13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.17	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.06	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 226 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-4-3 oc purlins, except 2-0-0 oc purlins (5-3-8 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-12, 6-12

REACTIONS (lb/size) 2=1297/0-3-8, 9=1297/0-3-8
Max Horiz 2=-174 (LC 12)
Max Uplift 2=-105 (LC 14), 9=-105 (LC 15)
Max Grav 2=1530 (LC 45), 9=1530 (LC 45)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/20, 2-4=-2242/219, 4-5=-2124/273, 5-6=-1572/237, 6-7=-2124/273, 7-9=-2242/219, 9-10=0/20
BOT CHORD	2-13=-162/1930, 11-13=-28/1481, 9-11=-101/1857
WEBS	4-13=-364/207, 5-13=-117/652, 5-12=-35/314, 6-12=-35/314, 6-11=-118/653, 7-11=-364/208

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) -0-8-1 to 2-5-11, Interior (1) 2-5-11 to 9-0-6, Exterior(2R) 9-0-6 to 15-3-12, Interior (1) 15-3-12 to 16-1-4, Exterior(2R) 16-1-4 to 22-4-10, Interior (1) 22-4-10 to 28-11-5, Exterior(2E) 28-11-5 to 32-1-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

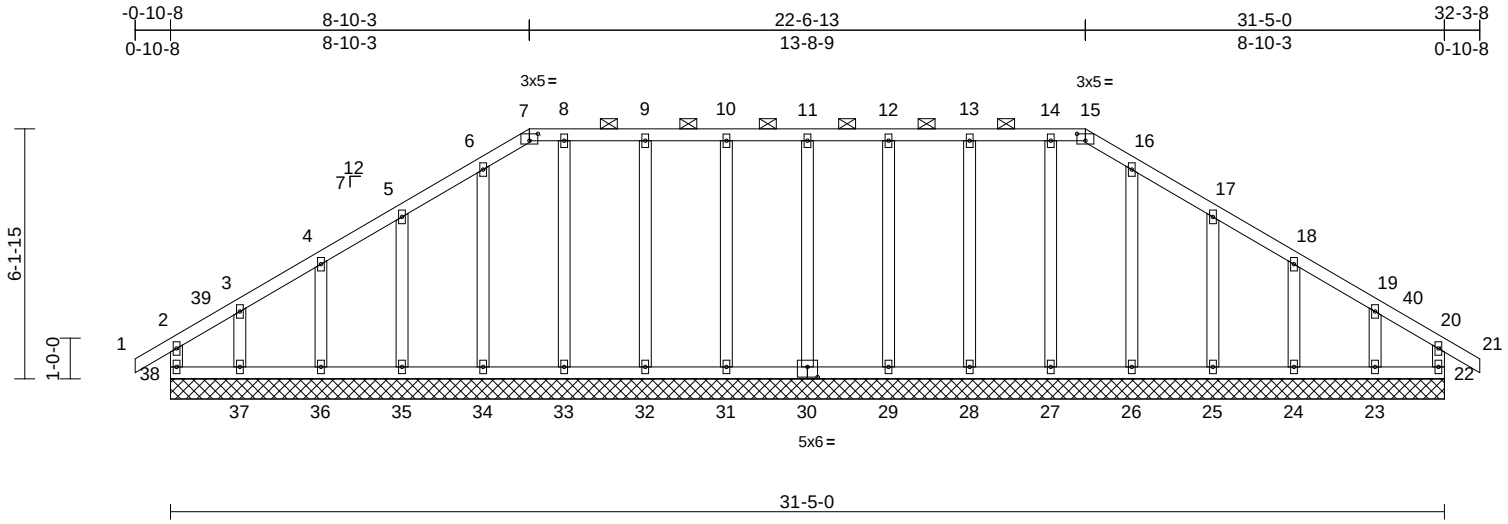
LOAD CASE(S) Standard

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	I50831256
22030100	B04	Hip Supported Gable	1	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:21:01 Page: 1
ID:eDo5c2px20DPopr5qTS5W0yHza4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:56.8

Plate Offsets (X, Y): [7:0-2-8,0-2-1], [15:0-2-8,0-2-1], [30:0-3-0,0-3-0]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	22	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 199 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.): 7-15.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 22=129/31-5-0, 23=125/31-5-0, 24=161/31-5-0, 25=153/31-5-0, 26=155/31-5-0, 27=156/31-5-0, 28=154/31-5-0, 29=155/31-5-0, 30=155/31-5-0, 31=155/31-5-0, 32=154/31-5-0, 33=156/31-5-0, 34=155/31-5-0, 35=153/31-5-0, 36=161/31-5-0, 37=125/31-5-0, 38=129/31-5-0
Max Horiz 38=-155 (LC 12)
Max Uplift 22=-29 (LC 11), 23=-86 (LC 15), 24=-40 (LC 15), 25=-60 (LC 15), 26=-10 (LC 15), 27=-2 (LC 11), 28=-29 (LC 11), 29=-24 (LC 10), 30=-25 (LC 10), 31=-24 (LC 11), 32=-32 (LC 10), 33=-12 (LC 11), 34=-14 (LC 14), 35=-60 (LC 14), 36=-38 (LC 14), 37=-94 (LC 14), 38=-60 (LC 10)
Max Grav 22=131 (LC 22), 23=199 (LC 49), 24=222 (LC 39), 25=214 (LC 39), 26=208 (LC 39), 27=198 (LC 38), 28=217 (LC 38), 29=214 (LC 38), 30=214 (LC 38), 31=214 (LC 38), 32=217 (LC 38), 33=198 (LC 38), 34=208 (LC 39), 35=214 (LC 39), 36=222 (LC 39), 37=213 (LC 47), 38=155 (LC 49)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-38=-124/48, 1-2=0/30, 2-3=-98/96, 3-4=-82/81, 4-5=-77/89, 5-6=-84/136, 6-7=-98/155, 7-8=-86/152, 8-9=-86/152, 9-10=-86/152, 10-11=-86/152, 11-12=-86/152, 12-13=-86/152, 13-14=-86/152, 14-15=-86/152, 15-16=-98/155, 16-17=-84/136, 17-18=-55/86, 18-19=-59/62, 19-20=-64/62, 20-21=0/30, 20-22=-115/48
BOT CHORD 37-38=-68/75, 36-37=-68/75, 35-36=-68/75, 34-35=-68/75, 33-34=-68/75, 32-33=-68/75, 31-32=-68/75, 29-31=-68/75, 28-29=-68/75, 27-28=-68/75, 26-27=-68/75, 25-26=-68/75, 24-25=-68/75, 23-24=-68/75, 22-23=-68/75
WEBS 11-30=-176/48, 10-31=-175/47, 9-32=-178/56, 8-33=-159/35, 6-34=-169/37, 5-35=-175/82, 4-36=-182/67, 3-37=-158/92, 12-29=-175/47, 13-28=-178/56, 14-27=-159/25, 16-26=-169/34, 17-25=-175/82, 18-24=-182/68, 19-23=-150/87

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 2-3-3, Exterior(2N) 2-3-3 to 5-8-8, Corner(3R) 5-8-8 to 11-8-8, Exterior(2N) 11-8-8 to 19-5-1, Corner(3R) 19-5-1 to 25-8-8, Exterior (2N) 25-8-8 to 29-1-13, Corner(3E) 29-1-13 to 32-3-8 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.

March 17,2022

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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 38, 22, 30, 31, 32, 33, 34, 35, 36, 37, 29, 28, 27, 26, 25, 24, and 23. This connection is for uplift only and does not consider lateral forces.
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 GROUP - 7 FaNC	
22030100	C01	Common	3	1	Job Reference (optional)	I50831257

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:21:02 Page: 1
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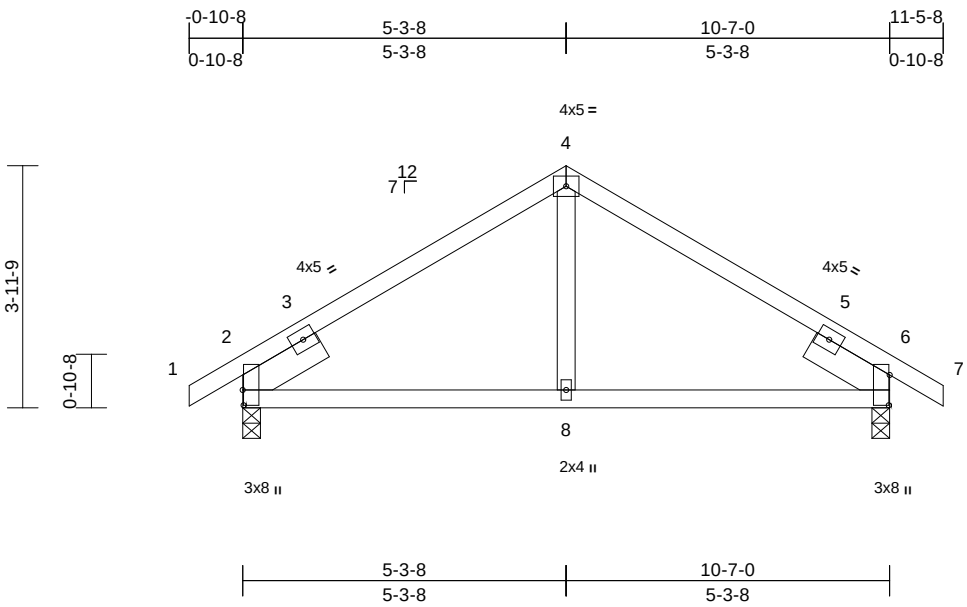


Scale = 1:37.7

Plate Offsets (X, Y): [2:0-3-0,0-0-3], [6:0-5-15,0-0-3]

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	0.46	Vert(LL)	-0.04	8-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.05	8-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.02	2	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
SLIDER Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

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

REACTIONS (lb/size) 2=476/0-3-8, 6=476/0-3-8
Max Horiz 2=-84 (LC 12)
Max Uplift 2=-54 (LC 14), 6=-54 (LC 15)
Max Grav 2=574 (LC 21), 6=574 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/26, 2-4=-451/130, 4-6=-451/130, 6-7=0/26
BOT CHORD 2-8=-115/361, 6-8=-82/361
WEBS 4-8=0/211

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Exterior(2R) 2-1-8 to 8-5-8, Exterior(2E) 8-5-8 to 11-5-8 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) 2 and 6. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

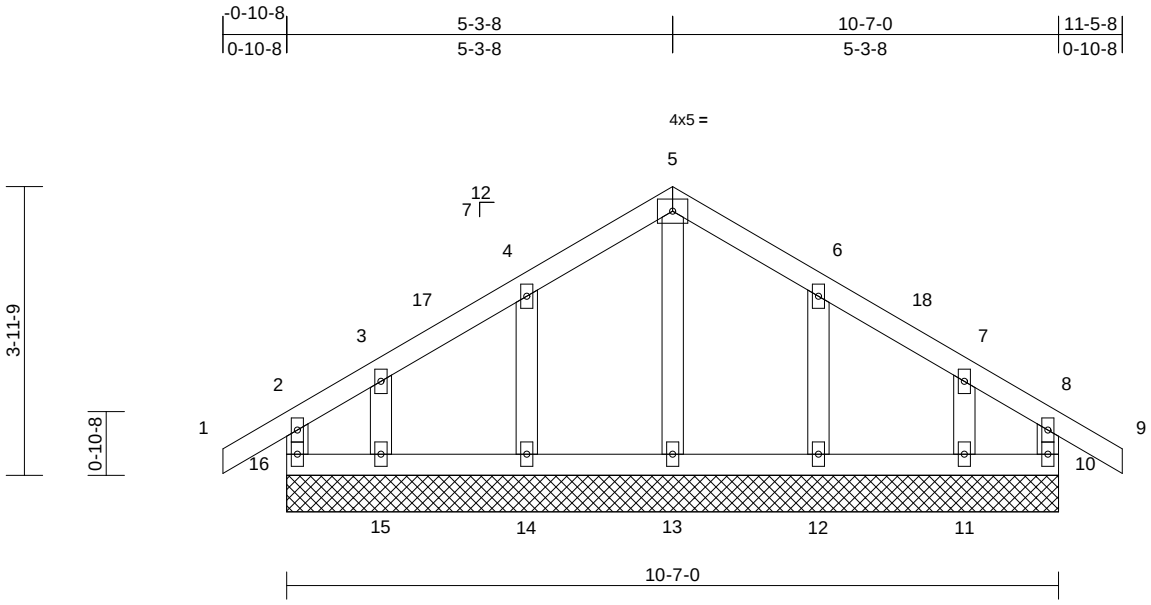
March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	C02	Common Supported Gable	1	1	Job Reference (optional)	I50831258

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

Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:21:02 ID:NcYsop?AlvDxcTp2NmzHFRyAfJw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31.6

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	0.11	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	0.05	Horz(CT)	0.00	10	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	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 (lb/size) 10=106/10-7-0, 11=107/10-7-0, 12=170/10-7-0, 13=151/10-7-0, 14=170/10-7-0, 15=107/10-7-0, 16=106/10-7-0
Max Horiz 16=-103 (LC 12)
Max Uplift 10=-23 (LC 11), 11=-55 (LC 15), 12=-52 (LC 15), 14=-51 (LC 14), 15=-58 (LC 14), 16=-38 (LC 10)
Max Grav 10=125 (LC 22), 11=167 (LC 22), 12=255 (LC 22), 13=155 (LC 21), 14=255 (LC 21), 15=167 (LC 21), 16=125 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-16=-115/109, 1-2=0/30, 2-3=-56/57, 3-4=-41/86, 4-5=-77/158, 5-6=-77/158, 6-7=-41/86, 7-8=-38/42, 8-9=0/30, 8-10=-115/109
BOT CHORD	15-16=-49/73, 14-15=-49/73, 13-14=-49/73, 12-13=-49/73, 11-12=-49/73, 10-11=-49/73
WEBS	5-13=-117/0, 4-14=-214/119, 3-15=-137/96, 6-12=-214/119, 7-11=-137/96

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Corner(3R) 2-1-8 to 8-5-8, Corner(3E) 8-5-8 to 11-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
13) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16, 10, 14, 15, 12, and 11. This connection is for uplift only and does not consider lateral forces.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 17,2022

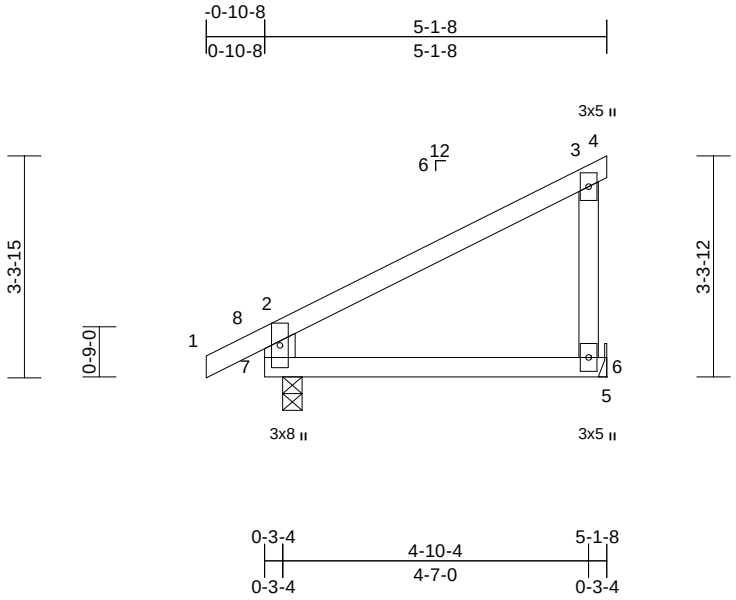
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	D01	Monopitch	7	1	Job Reference (optional)	I50831259

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

Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:21:03 ID:M25sh9MsgfT5neCtu3GLFDyHzY3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:34.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	0.05	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	0.04	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 23 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-1-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 6=199/ Mechanical, 7=259/0-3-8
Max Horiz 7=117 (LC 13)
Max Uplift 6=-69 (LC 11), 7=-34 (LC 14)
Max Grav 6=291 (LC 21), 7=357 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-3=-165/63, 3-4=-12/0, 3-6=-218/112, 2-7=-331/192
BOT CHORD 6-7=-40/59, 5-6=0/0

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 6.
9) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
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

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	D02	Monopitch Supported Gable	1	1	Job Reference (optional)	I50831260

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

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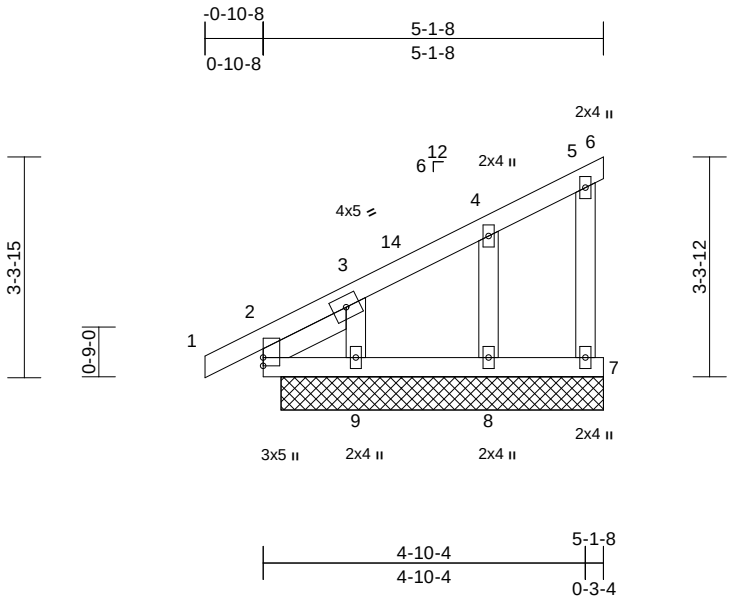

Scale = 1:34.7

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	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 28 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -- 1-5-8

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-1-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=106/4-10-4, 6=4/4-10-4, 7=53/4-10-4, 8=151/4-10-4, 9=129/4-10-4, 10=106/4-10-4
Max Horiz 2=108 (LC 13), 10=108 (LC 13)
Max Uplift 2=-6 (LC 10), 6=-6 (LC 13), 7=-12 (LC 14), 8=-38 (LC 14), 9=-61 (LC 14), 10=-6 (LC 10)
Max Grav 2=123 (LC 21), 6=6 (LC 21), 7=79 (LC 21), 8=217 (LC 21), 9=194 (LC 21), 10=123 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/23, 2-3=-53/45, 3-4=-66/42, 4-5=-53/39, 5-6=-9/3, 5-7=-69/44
BOT CHORD	2-9=-48/64, 8-9=-48/64, 7-8=-48/64
WEBS	4-8=-180/159, 3-9=-157/198

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 5-1-8 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 6.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7, 2, 8, and 9. This connection is for uplift only and does not consider lateral forces.
11) N/A
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	E01	Hip Girder	1	2	Job Reference (optional)	I50831261

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

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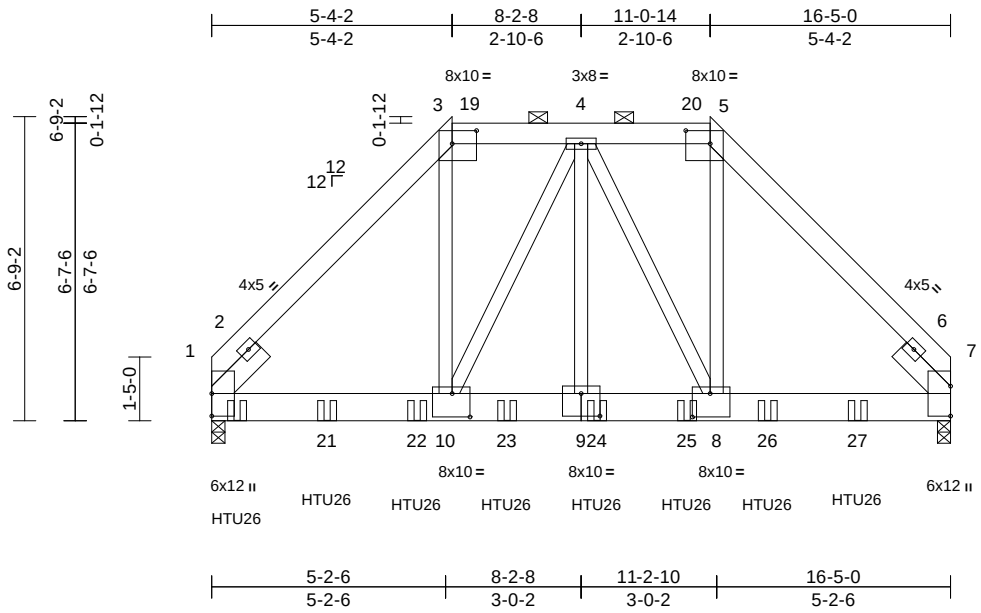

Scale = 1:51.2

Plate Offsets (X, Y): [3:0-6-8,0-3-8], [5:0-6-8,0-3-8], [8:0-4-12,0-6-4], [9:0-5-0,0-6-0], [10:0-4-12,0-6-4]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.05	9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.10	9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.03	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 303 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=6949/0-3-8, 7=5891/0-3-8
Max Horiz 1=-120 (LC 8)
Max Uplift 1=-281 (LC 12), 7=-418 (LC 13)
Max Grav 1=7079 (LC 36), 7=6129 (LC 46)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-5977/320, 3-4=-4025/291, 4-5=-4037/368, 5-7=-5965/429
BOT CHORD 1-10=-219/4116, 8-10=-245/4453, 7-8=-237/4123
WEBS 3-10=-160/3830, 4-10=-1205/203, 4-9=-18/1771, 4-8=-1081/31, 5-8=-235/3916

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) 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.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 7. This connection is for uplift only and does not consider lateral forces.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-6-12 from the left end to 14-4-4 to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-58, 3-5=-58, 5-7=-58, 11-15=-19
Concentrated Loads (lb)
Vert: 13=-1469 (B), 21=-1464 (B), 22=-1464 (B), 23=-1464 (B), 24=-1464 (B), 25=-1365 (B), 26=-1365 (B), 27=-1512 (B)

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC
22030100	E02	Hip Supported Gable	1	1	I50831262 Job Reference (optional)

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

Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:21:04 Page: 1
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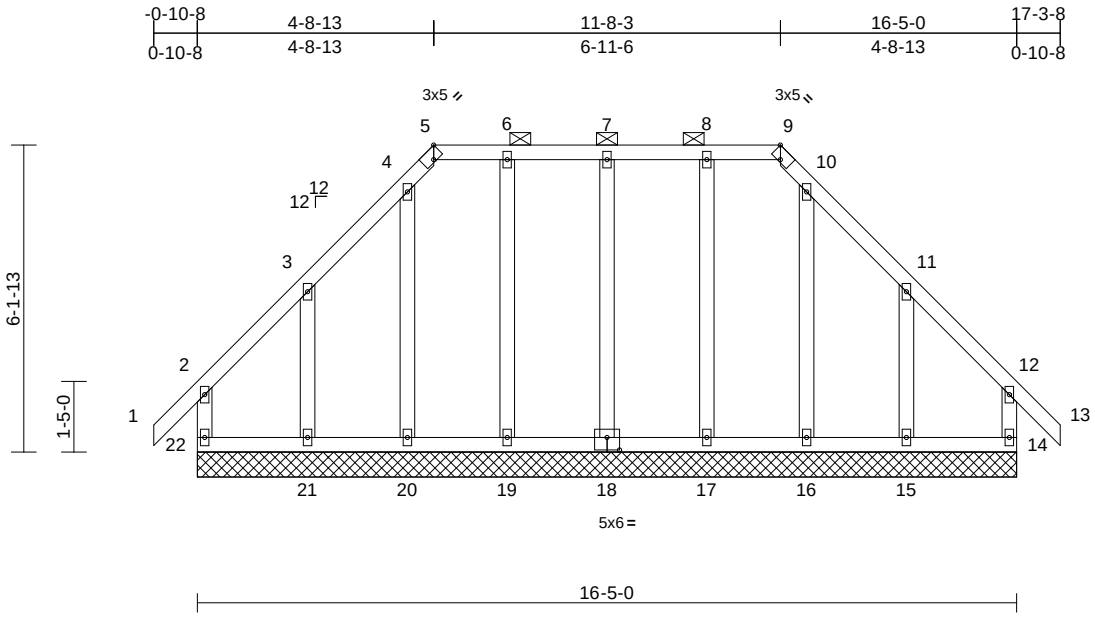


Scale = 1:46.2

Plate Offsets (X, Y): [5:0-2-8,Edge], [9:0-2-8,Edge], [18:0-3-0,0-3-0]

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 111 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.): 5-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 14=145/16-5-0, 15=154/16-5-0, 16=153/16-5-0, 17=155/16-5-0, 18=155/16-5-0, 19=155/16-5-0, 20=153/16-5-0, 21=154/16-5-0, 22=145/16-5-0
Max Horiz 22=-169 (LC 12)
Max Uplift 14=-70 (LC 11), 15=-167 (LC 15), 17=-12 (LC 10), 18=-33 (LC 10), 19=-14 (LC 11), 21=-168 (LC 14), 22=-80 (LC 10)
Max Grav 14=225 (LC 47), 15=294 (LC 49), 16=199 (LC 39), 17=232 (LC 38), 18=234 (LC 38), 19=232 (LC 38), 20=199 (LC 39), 21=298 (LC 47), 22=234 (LC 49)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-22=-202/83, 1-2=0/70, 2-3=-120/117, 3-4=-150/202, 4-5=-137/165, 5-6=-131/182, 6-7=-131/182, 7-8=-131/182, 8-9=-131/182, 9-10=-137/165, 10-11=-150/202, 11-12=-112/109, 12-13=0/70, 12-14=-202/83
BOT CHORD 21-22=-85/84, 20-21=-85/84, 19-20=-85/84, 17-19=-85/84, 16-17=-85/84, 15-16=-85/84, 14-15=-85/84
WEBS 7-18=-195/78, 6-19=-193/35, 4-20=-161/11, 3-21=-228/169, 8-17=-193/33, 10-16=-161/7, 11-15=-226/168

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 2-2-8, Corner(3R) 2-2-8 to 7-8-13, Exterior(2N) 7-8-13 to 8-8-3, Corner(3R) 8-8-3 to 14-2-8, Corner(3E) 14-2-8 to 17-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
11) Gable studs spaced at 2-0-0 oc.
12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
13) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
14) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22, 14, 18, 19, 21, 17, and 15. This connection is for uplift only and does not consider lateral forces.
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

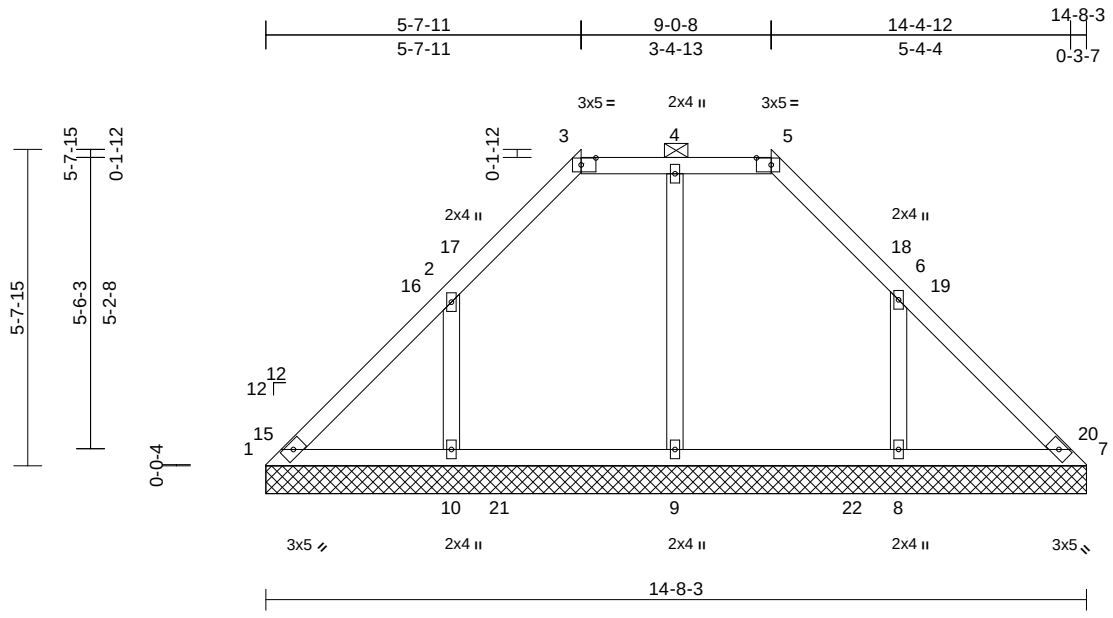
March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	V1	Valley	1	1	Job Reference (optional)	I50831263

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

Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Mar 16 23:21:05 ID:F7THd5F0QxKe2ideDPiXbszaDa2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:41.2

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

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	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 65 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, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=162/14-8-3, 7=163/14-8-3, 8=311/14-8-3, 9=229/14-8-3, 10=310/14-8-3
Max Horiz 1=-126 (LC 12)
Max Uplift 1=-15 (LC 10), 8=-152 (LC 15), 10=-160 (LC 14)
Max Grav 1=220 (LC 38), 7=223 (LC 38), 8=528 (LC 48), 9=394 (LC 43), 10=534 (LC 46)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-248/100, 2-3=-237/92, 3-4=-98/99, 4-5=-98/99, 5-6=-237/92, 6-7=-248/83
BOT CHORD 1-10=-60/199, 9-10=-60/130, 8-9=-60/130, 7-8=-60/177
WEBS 4-9=-236/50, 2-10=-340/190, 6-8=-334/184

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) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 11-8-7, Exterior(2E) 11-8-7 to 14-8-7 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) Provide adequate drainage to prevent water ponding.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 1.
12) 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.
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.

LOAD CASE(S) Standard

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	V2	Valley	1	1	Job Reference (optional)	I50831264

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

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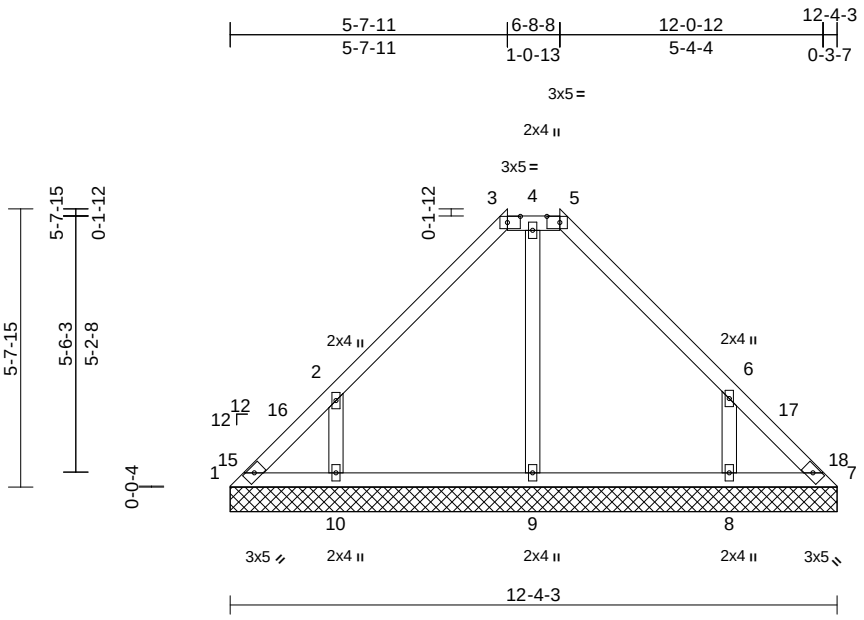

Scale = 1:46.9

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

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	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 55 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, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=99/12-4-3, 7=102/12-4-3, 8=288/12-4-3, 9=212/12-4-3, 10=288/12-4-3
Max Horiz 1=126 (LC 11)
Max Uplift 1=-46 (LC 10), 7=-10 (LC 11), 8=-157 (LC 15), 10=-163 (LC 14)
Max Grav 1=168 (LC 48), 7=152 (LC 38), 8=431 (LC 38), 9=251 (LC 20), 10=435 (LC 46)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-201/111, 2-3=-263/121, 3-4=-144/123, 4-5=-144/123, 5-6=-262/112, 6-7=-179/65
BOT CHORD 1-10=-38/134, 9-10=-34/117, 8-9=-34/117, 7-8=-34/124
WEBS 4-9=-167/19, 2-10=-361/214, 6-8=-357/208

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) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 9-4-7, Exterior(2E) 9-4-7 to 12-4-7 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) Provide adequate drainage to prevent water ponding.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 1 and 10 lb uplift at joint 7.
12) 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.
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.

LOAD CASE(S) Standard

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	V3	Valley	1	1	Job Reference (optional)	I50831265

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

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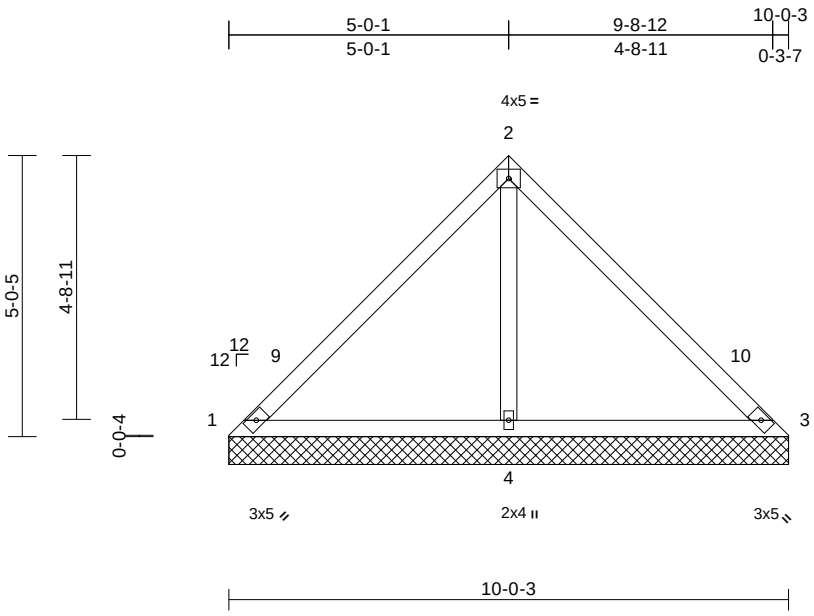

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.47	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.27	Horiz(TL)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 41 lb	FT = 20%

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

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

REACTIONS (lb/size) 1=31/10-0-3, 3=31/10-0-3, 4=740/10-0-3
Max Horiz 1=-113 (LC 10)
Max Uplift 1=-50 (LC 21), 3=-50 (LC 20), 4=-155 (LC 14)
Max Grav 1=92 (LC 20), 3=92 (LC 21), 4=809 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-122/381, 2-3=-121/381
BOT CHORD 1-4=-255/155, 3-4=-255/155
WEBS 2-4=-623/218

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) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 7-0-7, Exterior(2E) 7-0-7 to 10-0-7 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 and 50 lb uplift at joint 3.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	V4	Valley	1	1	Job Reference (optional)	I50831266

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

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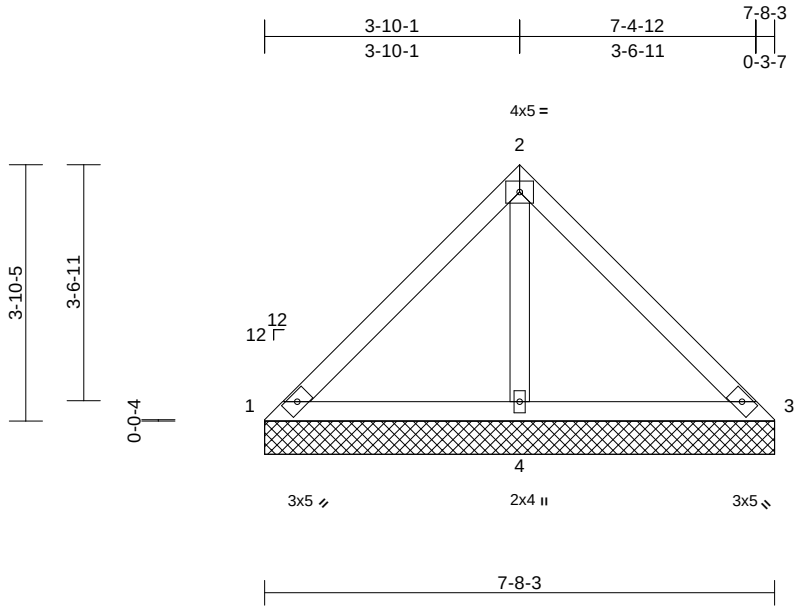
Page: 1



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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	0.31	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 31 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 7-8-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=38/7-8-3, 3=38/7-8-3, 4=537/7-8-3
Max Horiz 1=86 (LC 13)
Max Uplift 1=-23 (LC 21), 3=-23 (LC 20), 4=-111 (LC 14)
Max Grav 1=88 (LC 20), 3=88 (LC 21), 4=582 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-80/243, 2-3=-80/243
BOT CHORD 1-4=-196/126, 3-4=-196/126
WEBS 2-4=-419/149

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) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 4-8-7, Exterior(2E) 4-8-7 to 7-8-7 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 23 lb uplift at joint 1 and 23 lb uplift at joint 3.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC
22030100	V5	Valley	1	1	I50831267
					Job Reference (optional)

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

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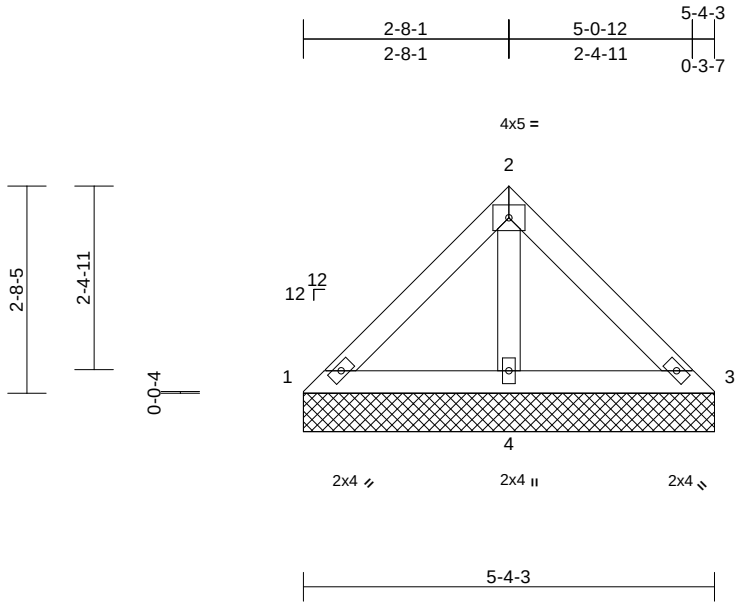

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 21 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 5-4-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=52/5-4-3, 3=52/5-4-3, 4=324/5-4-3
Max Horiz 1=-58 (LC 12)
Max Uplift 4=-54 (LC 14)
Max Grav 1=99 (LC 20), 3=99 (LC 21), 4=342 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-83/121, 2-3=-83/121
BOT CHORD 1-4=-103/72, 3-4=-103/72
WEBS 2-4=-219/68

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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 17,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 7 FaNC	
22030100	V6	Valley	1	1	Job Reference (optional)	I50831268

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

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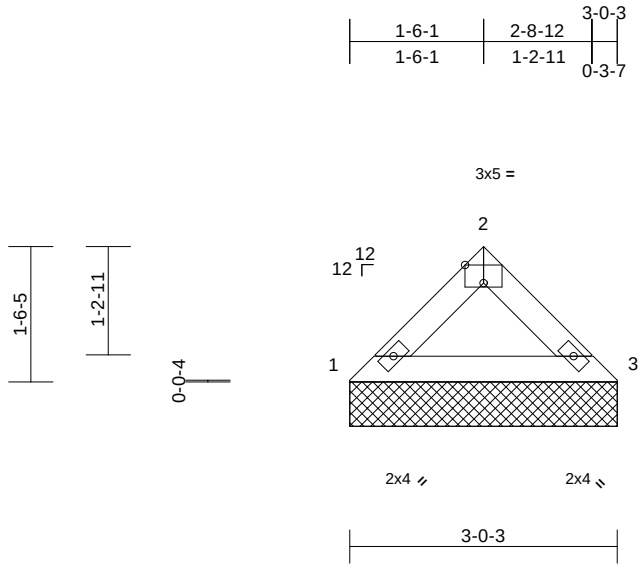

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Plate Offsets (X, Y): [2:0-2-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 10 lb	FT = 20%

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

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

REACTIONS (lb/size) 1=121/3-0-3, 3=121/3-0-3
Max Horiz 1=-31 (LC 12)
Max Uplift 1=-9 (LC 14), 3=-9 (LC 15)
Max Grav 1=141 (LC 20), 3=141 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-165/74, 2-3=-165/74
BOT CHORD 1-3=-37/110

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 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 9 lb uplift at joint 1 and 9 lb uplift at joint 3.
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.

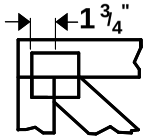
LOAD CASE(S) Standard

March 17,2022

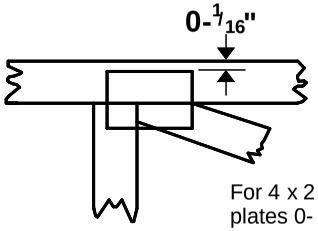
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

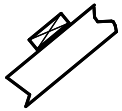
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

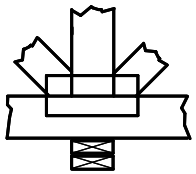
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

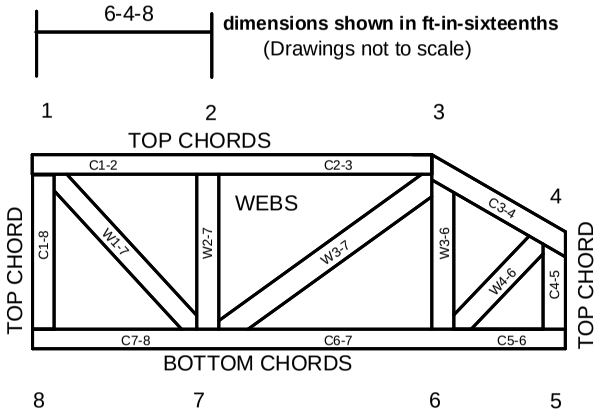


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

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

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

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.