

Trenco
818 Soundside Rd
Edenton, NC 27932

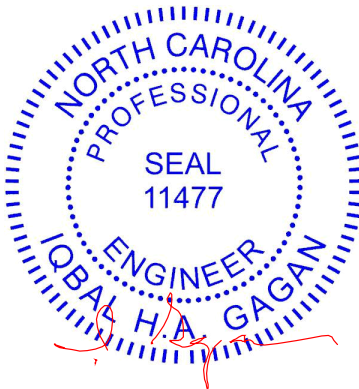
Re: 3882924
nash rf

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

Pages or sheets covered by this seal: I64037344 thru I64037361

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

North Carolina COA: C-0844



March 5, 2024

Gagan, Iqbal

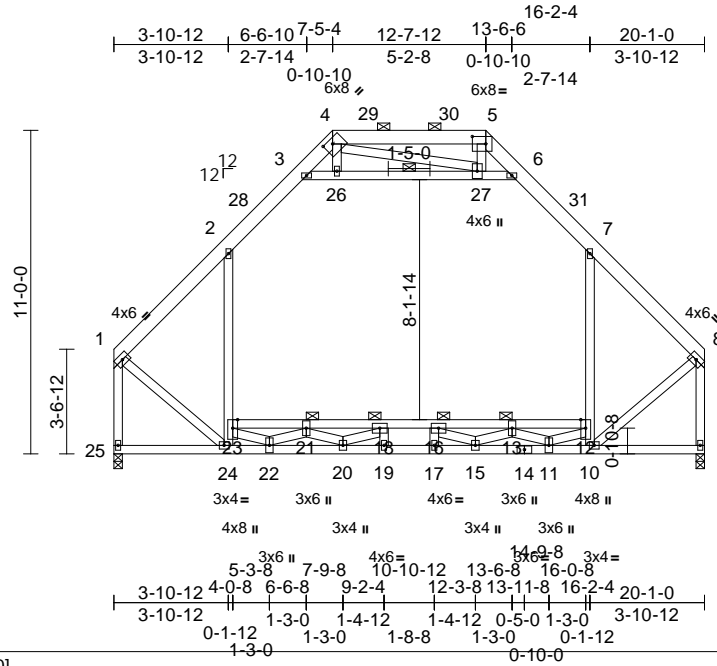
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 3882924	Truss A1B	Truss Type Attic	Qty 7	Ply 1	nash rf Job Reference (optional)	164037345
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Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:44
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Page: 1



Scale = 1:78.3
 Plate Offsets (X, Y): [4:0-3-8,0-2-0], [5:0-5-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.15	17-19	>999	360	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.26	17-19	>906	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	-0.11	24-25	>999	240		
BCDL	10.0											

Weight: 191 lb FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except* 25-1,9-8;2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
 3-9-0 oc bracing: 13-21
 6-0-0 oc bracing: 21-23, 12-13

WEBS 1 Row at midpt 3-6
 JOINTS 1 Brace at Jt(s): 21, 13

REACTIONS (size) 9=0-3-8, 25=0-3-8
 Max Horiz 25=144 (LC 10)
 Max Grav 9=1419 (LC 41), 25=1419 (LC 41)

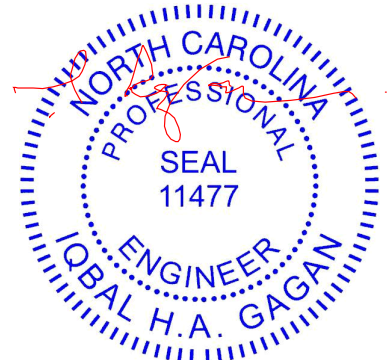
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-1062/0, 2-3=-714/19, 3-4=-370/141, 4-5=-223/379, 5-6=-361/182, 6-7=-714/20, 7-8=-1062/0, 1-25=-1398/0, 8-9=-1397/0
 BOT CHORD 24-25=-149/164, 22-24=-51/766, 20-22=0/2217, 19-20=0/3008, 17-19=0/3008, 15-17=0/3008, 11-15=0/2220, 10-11=0/663, 9-10=-10/25, 21-23=-844/23, 18-21=-2074/0, 16-18=-2448/0, 13-16=-2076/0, 12-13=-854/34
 WEBS 23-24=-435/29, 2-23=-78/445, 10-12=-441/33, 7-12=-79/443, 3-26=-973/47, 26-27=-965/49, 6-27=-1017/51, 1-24=0/844, 4-26=0/75, 5-27=-15/103, 4-27=-184/151, 11-12=0/992, 22-23=0/990, 21-22=-1065/0, 13-15=0/507, 20-21=0/509, 15-16=-439/0, 18-20=-441/1, 18-19=-17/51, 16-17=-16/50, 8-10=0/846, 11-13=-1064/0

- NOTES (14)**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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 1-00-00 wide will fit between the bottom chord and any other members.
 - Ceiling dead load (5.0 psf) on member(s). 2-3, 6-7, 3-26, 26-27, 6-27; Wall dead load (5.0psf) on member (s).2-23, 7-12
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 18-21, 16-18, 13-16, 12-13
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Attic room checked for L/360 deflection.

14) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



March 5, 2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



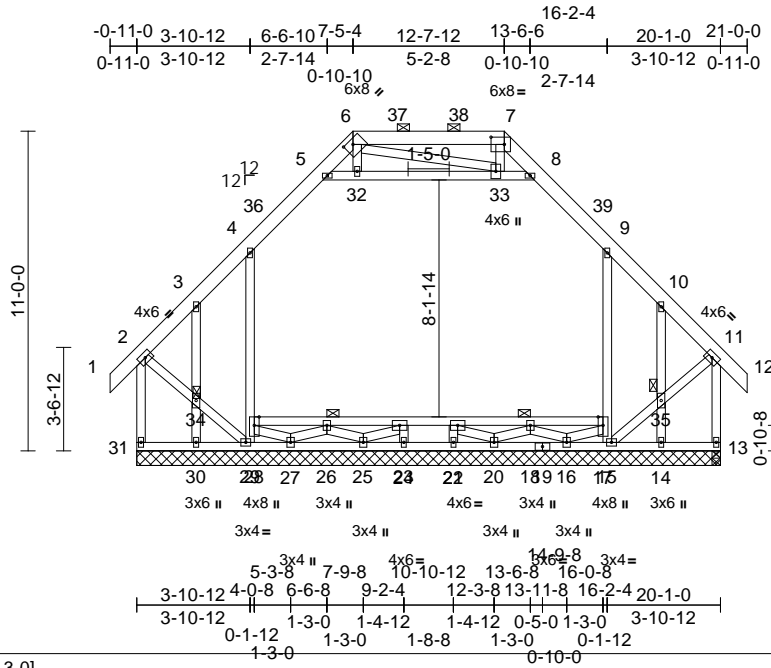
818 Soundside Road
 Edenton, NC 27932

Job 3882924	Truss A1E	Truss Type Attic Supported Gable	Qty 1	Ply 1	nash rf Job Reference (optional)	164037346
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Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:45
ID:W9epngAScu7FYLbtWlqV?NzDI07-RfC?PsB70Hq3NSgPqnL8w3uTxbGKWrCDoi7J4zJC?F

Page: 1



Scale = 1:79.3

Plate Offsets (X, Y): [6:0-3-8,0-2-0], [7:0-5-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.01	26-28	>999	360	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.01	17-18	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	15	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.00	4	>999	240		
BCDL	10.0											
											Weight: 211 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 31-2,13-11:2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 26, 18, 34, 35

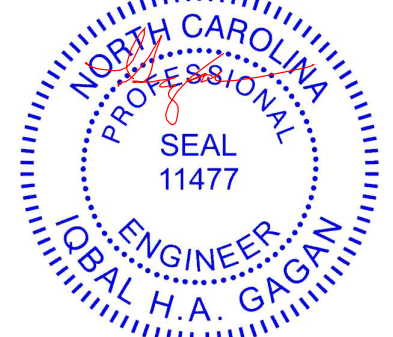
REACTIONS (size)
13=20-1-0, 14=20-1-0, 15=20-1-0, 16=20-1-0, 20=20-1-0, 22=20-1-0, 24=20-1-0, 25=20-1-0, 27=20-1-0, 29=20-1-0, 30=20-1-0, 31=20-1-0
Max Horiz 31=164 (LC 10)
Max Uplift 13=39 (LC 9), 14=42 (LC 13), 15=184 (LC 13), 29=170 (LC 12), 30=42 (LC 12), 31=44 (LC 8)
Max Grav 13=690 (LC 2), 14=173 (LC 36), 15=237 (LC 11), 16=278 (LC 19), 20=238 (LC 19), 22=232 (LC 19), 24=232 (LC 19), 25=238 (LC 19), 27=282 (LC 44), 29=219 (LC 44), 30=174 (LC 36), 31=690 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=461/66, 3-4=434/73, 4-5=510/47, 5-6=470/48, 6-7=391/60, 7-8=475/48, 8-9=510/47, 9-10=433/68, 10-11=462/62, 11-12=0/44, 2-31=672/53, 11-13=673/48

BOT CHORD 30-31=-162/164, 29-30=-162/164, 27-29=-40/351, 25-27=0/348, 24-25=-16/126, 22-24=-16/126, 20-22=-16/126, 16-20=0/349, 15-16=-7/334, 14-15=-2/1, 13-14=-2/1, 26-28=0/130, 23-26=-3/185, 21-23=-18/189, 18-21=-3/185, 17-18=0/128
WEBS 28-29=-316/44, 4-28=-346/109, 15-17=-333/59, 9-17=-344/107, 5-32=-89/136, 32-33=-83/141, 8-33=-90/142, 2-34=44/420, 29-34=45/423, 6-32=0/49, 7-33=-2/61, 6-33=-58/61, 16-17=-187/0, 27-28=-210/6, 26-27=-267/0, 18-20=-301/0, 25-26=-301/0, 20-21=-43/37, 23-25=-43/37, 23-24=-204/0, 21-22=-204/0, 15-35=-42/422, 11-35=-41/419, 16-18=-267/0, 3-34=-131/69, 30-34=-134/67, 10-35=-129/69, 14-35=-132/67

NOTES (19)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 2.00 times flat roof load of 10.0 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) 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 1-00-00 wide will fit between the bottom chord and any other members.
13) Ceiling dead load (5.0 psf) on member(s). 4-5, 8-9, 5-32, 32-33, 8-33; Wall dead load (5.0psf) on member (s).4-28, 9-17
14) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 26-28, 23-26, 21-23, 18-21, 17-18
15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 13, 44 lb uplift at joint 31, 170 lb uplift at joint 29, 184 lb uplift at joint 15, 42 lb uplift at joint 30 and 42 lb uplift at joint 14.



March 5, 2024

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss A1E	Truss Type Attic Supported Gable	Qty 1	Ply 1	nash rf Job Reference (optional)	I64037346
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Builders FirstSource (Albermarle), Albermarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:45
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Page: 2

- 16) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 17) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 18) Attic room checked for L/360 deflection.
- 19) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



March 5, 2024

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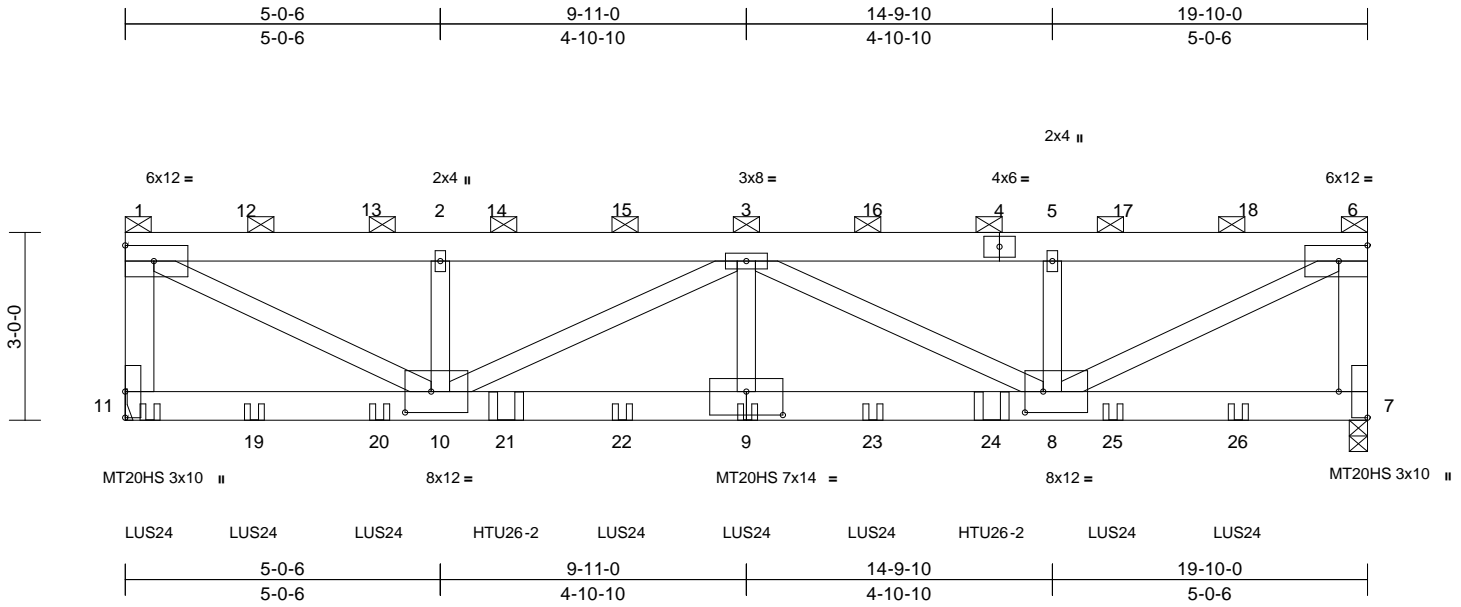
818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss FG-2	Truss Type Flat Girder	Qty 1	Ply 2	nash rf Job Reference (optional)	I64037347
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Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:46
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Page: 1



Scale = 1:36.8

Plate Offsets (X, Y): [7:Edge,0-5-8], [8:0-3-8,0-4-0], [9:0-7-0,0-4-8], [10:0-5-0,0-4-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.17	9-10	>999	360	MT20HS	187/143
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.35	9-10	>658	240	MT20	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.05	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.14	9-10	>999	240		
BCDL	10.0											
											Weight: 283 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E or 2x6 SP DSS
WEBS 2x4 SP No.3 *Except* 11-1,6-7:2x6 SP No.2, 10-1,8-6:2x4 SP No.1

BRACING
TOP CHORD 2-0-0 oc purlins (3-10-0 max.): 1-6, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7=0-3-8, 11= Mechanical
Max Uplift 7=623 (LC 8), 11=785 (LC 8)
Max Grav 7=6791 (LC 2), 11=7343 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-11=-6221/506, 1-2=-10728/902, 2-3=-10728/902, 3-5=-10740/903, 5-6=-10740/903, 6-7=-6241/513
BOT CHORD 10-11=-45/409, 8-10=-1088/14170, 7-8=-45/412
WEBS 1-10=-969/11676, 3-9=-89/1494, 6-8=-971/11685, 2-10=-2056/83, 3-10=-3880/210, 5-8=-2055/83, 3-8=-3867/209

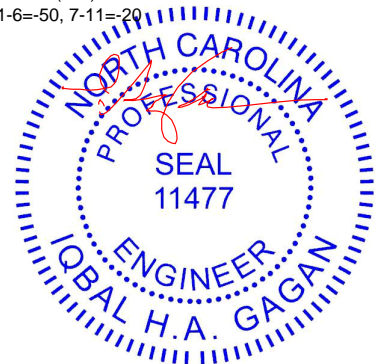
- NOTES (17)**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are 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.

- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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 1-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 785 lb uplift at joint 11 and 623 lb uplift at joint 7.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 3-10-8 oc max. starting at 0-4-12 from the left end to 17-9-4 to connect truss(es) to front face of bottom chord.
- Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss, Single Ply Girder) or equivalent spaced at 7-9-0 oc max. starting at 6-1-0 from the left end to 13-10-0 to connect truss(es) to front face of bottom chord.

- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 750 lb down and 2 lb up at 1-11-4, 750 lb down and 2 lb up at 3-11-4, 750 lb down and 2 lb up at 5-11-4, 750 lb down and 2 lb up at 7-11-4, 750 lb down and 2 lb up at 9-11-4, 750 lb down and 2 lb up at 11-11-4, 750 lb down and 2 lb up at 13-11-4, 750 lb down and 2 lb up at 15-11-4, and 750 lb down and 2 lb up at 17-11-4, and 35 lb down and 6 lb up at 19-7-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-6=-50, 7-11=-20



March 5, 2024

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss FG-2	Truss Type Flat Girder	Qty 1	Ply 2	nash rf Job Reference (optional)	I64037347
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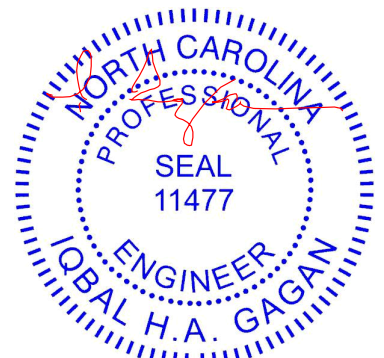
Builders FirstSource (Albermarle), Albermarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:46
ID:UZnDvNHF61mqv1fcRvSw2YzDJIR-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 2

Concentrated Loads (lb)

Vert: 11=-428 (F), 4=-542, 3=-542, 9=-404 (F),
12=-542, 13=-542, 14=-542, 15=-542, 16=-542,
17=-542, 18=-542, 19=-420 (F), 20=-420 (F),
21=-652 (F), 22=-404 (F), 23=-404 (F), 24=-652 (F),
25=-420 (F), 26=-420 (F)



March 5, 2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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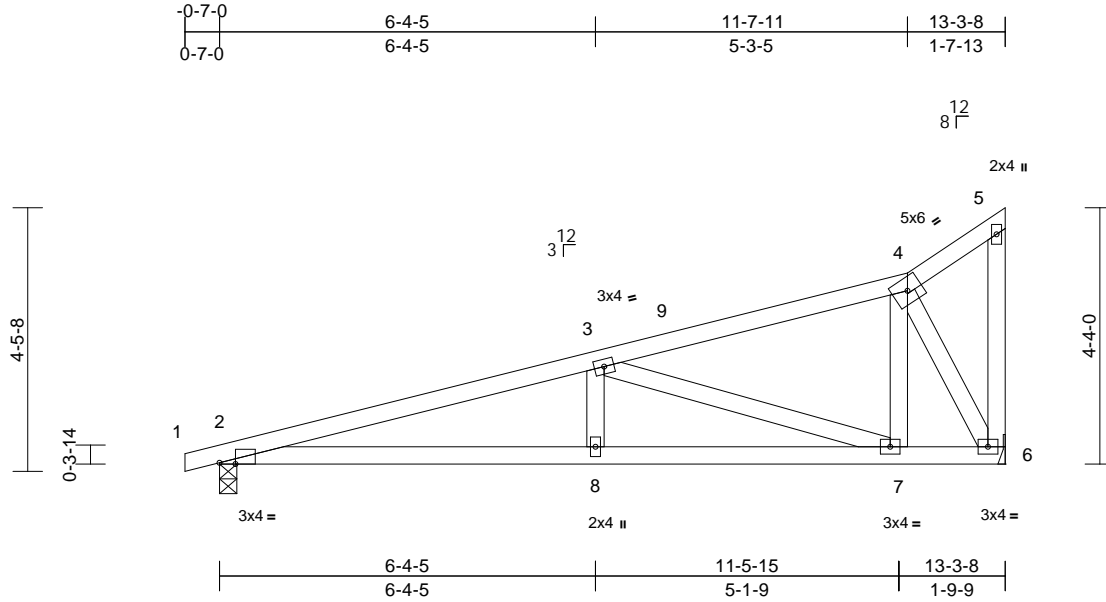
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	nash rf	I64037348
3882924	J01	Jack-Closed	3	1	Job Reference (optional)	

Builders FirstSource (Albermarle), Albermarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:47
ID:Ea8mVHmfxf7DJ?o_R?0fpFzelyU-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:39

Plate Offsets (X, Y): [2:0-3-4,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	0.47	Vert(LL)	-0.05	2-8	>999	360	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.13	2-8	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.02	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	2-8	>999	240		
BCDL	10.0										Weight: 65 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=0-3-8, 6= Mechanical
Max Horiz 2=122 (LC 12)
Max Uplift 2=-50 (LC 8), 6=-58 (LC 12)
Max Grav 2=565 (LC 2), 6=519 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/7, 2-3=-1275/60, 3-4=-333/5,
4-5=-44/15, 5-6=-28/12
BOT CHORD 2-8=-124/1194, 7-8=-124/1194, 6-7=-24/262
WEBS 3-8=0/256, 3-7=-959/106, 4-7=0/369,
4-6=-568/51

NOTES (10)

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 2.00 times flat roof load of 10.0 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 1-00-00 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 58 lb uplift at joint 6 and 50 lb uplift at joint 2.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



March 5, 2024

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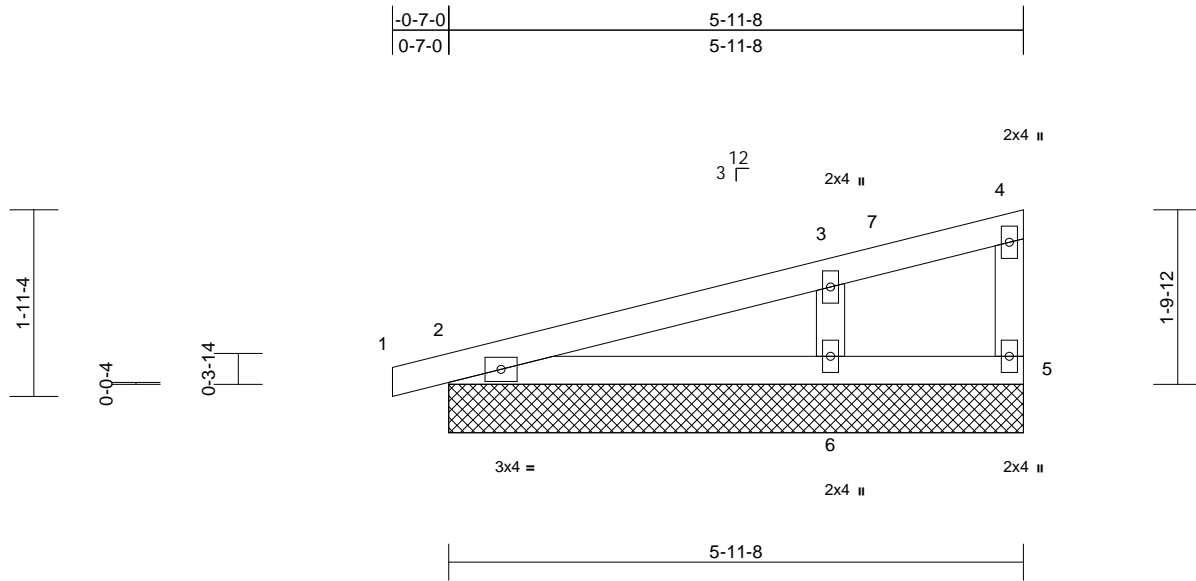
818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss J02	Truss Type Monopitch Structural Gable	Qty 2	Ply 1	nash rf Job Reference (optional)	164037349
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Builders FirstSource (Albermarle), Albermarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:47
ID:63dyXLTwaFH?3TMQ61a1RzeGEj-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:23.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	n/a	-	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 22 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 5-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

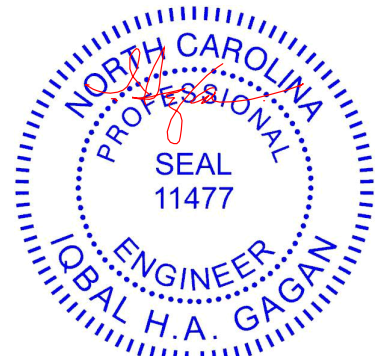
REACTIONS (size) 2=5-11-8, 5=5-11-8, 6=5-11-8
Max Horiz 2=50 (LC 8)
Max Uplift 2=-20 (LC 8), 5=-2 (LC 8), 6=-32 (LC 12)
Max Grav 2=167 (LC 2), 5=13 (LC 2), 6=320 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/7, 2-3=-37/34, 3-4=-24/0, 4-5=-10/4
BOT CHORD 2-6=0/0, 5-6=0/0
WEBS 3-6=-238/81

- NOTES (12)**
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 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 2 lb uplift at joint 5, 20 lb uplift at joint 2 and 32 lb uplift at joint 6.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



March 5, 2024

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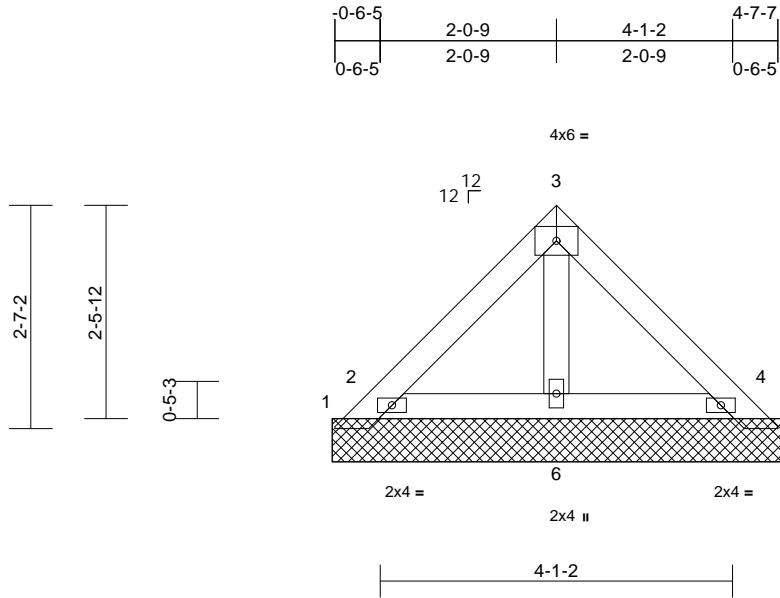
818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss PB1	Truss Type Piggyback	Qty 11	Ply 1	nash rf Job Reference (optional)	164037350
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Builders FirstSource (Albermarle), Albermarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:47
ID:anX2M_9C4HtYJ1RVpKn1vyzDI09-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRCDoi7J4zJC?

Page: 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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0											
											Weight: 20 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-2-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

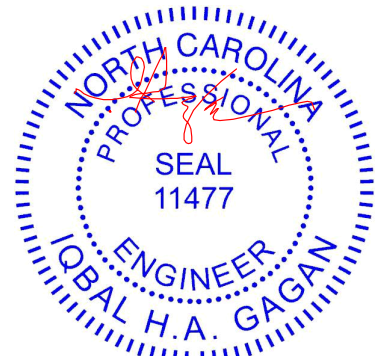
REACTIONS (size) 1=5-2-8, 2=5-2-8, 4=5-2-8, 5=5-2-8, 6=5-2-8
Max Horiz 1=46 (LC 9)
Max Uplift 1=-104 (LC 26), 2=-106 (LC 12), 4=-88 (LC 13), 5=-79 (LC 27)
Max Grav 1=90 (LC 12), 2=224 (LC 26), 4=203 (LC 27), 5=66 (LC 13), 6=124 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-78/105, 2-3=-75/31, 3-4=-74/24, 4-5=-39/62
BOT CHORD 2-6=-16/40, 4-6=-16/40
WEBS 3-6=-66/4

- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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 1-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 1, 79 lb uplift at joint 5, 106 lb uplift at joint 2 and 88 lb uplift at joint 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

- NOTES (13)**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.



March 5, 2024

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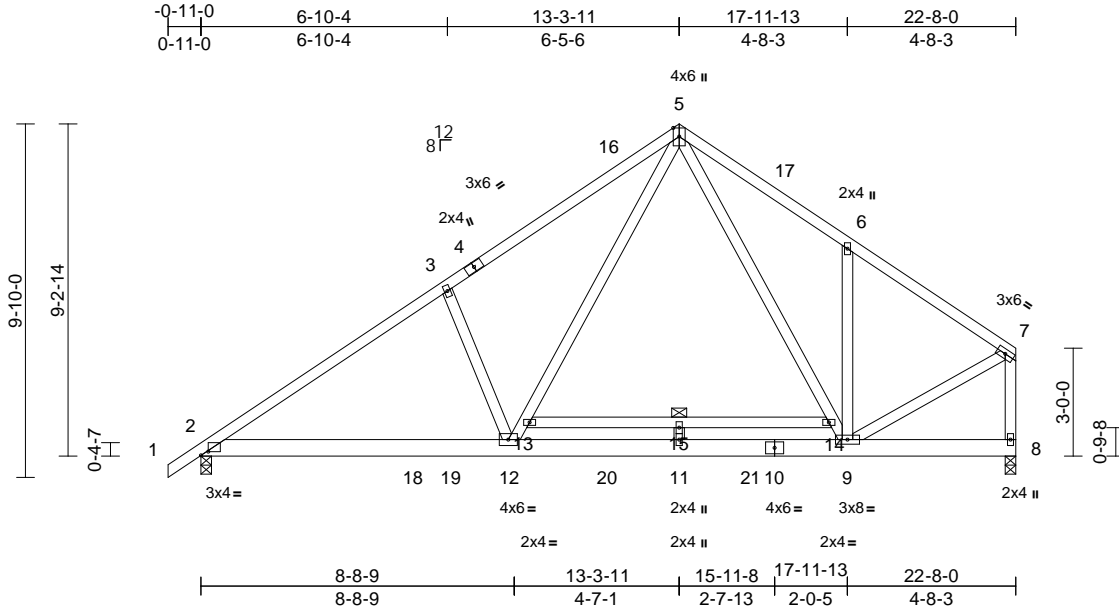
818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss T1	Truss Type Common	Qty 9	Ply 1	nash rf Job Reference (optional)	164037351
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Builders FirstSource (Albermarle), Albermarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:48
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Page: 1



Scale = 1:64.1

Plate Offsets (X, Y): [2:0-6-7,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	0.48	Vert(LL)	-0.05	11	>999	360	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.13	11	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.32	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.03	11-12	>999	240		
BCDL	10.0										Weight: 163 lb	FT = 20%

LUMBER
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3 *Except* 8-7:2x4 SP No.2

BRACING
 TOP CHORD Structural wood sheathing directly applied or 4-10-14 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 13-14

REACTIONS
 (size) 2=0-3-8, 8=0-3-8
 Max Horiz 2=178 (LC 12)
 Max Uplift 2=-39 (LC 12), 8=-7 (LC 13)
 Max Grav 2=1015 (LC 2), 8=972 (LC 2)

FORCES
 (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/33, 2-3=-1396/57, 3-5=-1249/141, 5-6=-896/154, 6-7=-881/41, 7-8=-963/21
 BOT CHORD 2-12=-126/1093, 11-12=-9/599, 9-11=-9/599, 8-9=-8/18
 WEBS 3-12=-380/197, 7-9=0/768, 5-14=-111/261, 9-14=-112/251, 12-13=-92/753, 5-13=-89/759, 13-15=-3/5, 14-15=-3/5, 11-15=0/26, 6-9=-317/167

- NOTES (12)**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 2 and 7 lb uplift at joint 8.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 67 lb down and 5 lb up at 11-3-11, and 67 lb down and 5 lb up at 15-3-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-5=-40, 5-7=-40, 2-8=-20
 Concentrated Loads (lb)
 Vert: 20=-50 (F), 21=-50 (F)



March 5, 2024

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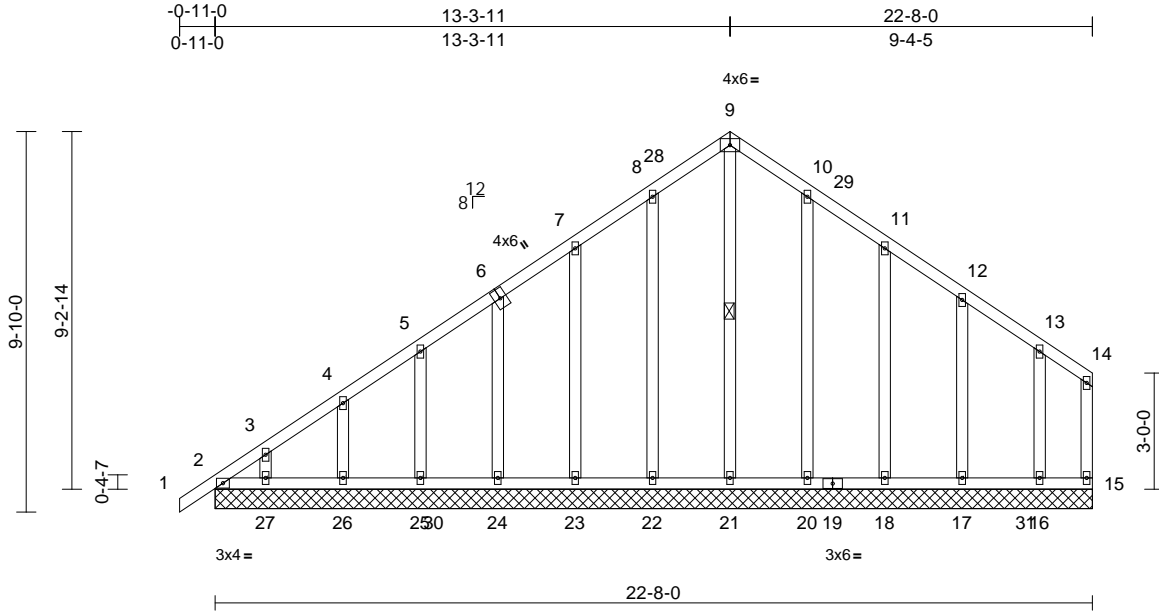


Job 3882924	Truss T1E	Truss Type Common Supported Gable	Qty 1	Ply 1	nash rf Job Reference (optional)	164037352
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Builders FirstSource (Albermarle), Albermarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:48
ID: jofWVT?_zAMLO_KT6T_vOlzDHyV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Page: 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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	15	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0											
											Weight: 161 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.3 *Except* 26-4:2x4 SP No.2

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 9-21

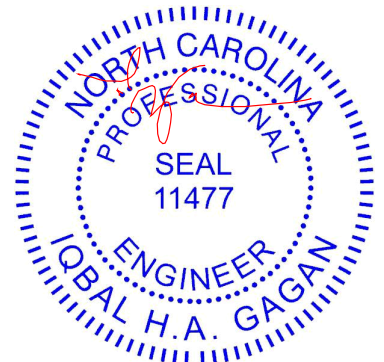
REACTIONS	(size)
Max Horiz	2=179 (LC 12)
Max Uplift	2=-69 (LC 8), 16=-51 (LC 13), 17=-38 (LC 13), 18=-44 (LC 13), 20=-32 (LC 13), 21=-1 (LC 11), 22=-37 (LC 12), 23=-42 (LC 12), 24=-39 (LC 12), 25=-38 (LC 12), 26=-42 (LC 12), 27=-32 (LC 12)
Max Grav	2=152 (LC 27), 15=38 (LC 2), 16=170 (LC 27), 17=230 (LC 27), 18=222 (LC 27), 20=229 (LC 27), 21=280 (LC 29), 22=234 (LC 26), 23=221 (LC 26), 24=227 (LC 26), 25=180 (LC 26), 26=168 (LC 26), 27=130 (LC 26)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/29, 2-3=-196/179, 3-4=-172/166, 4-5=-149/147, 5-7=-136/154, 7-8=-109/183, 8-9=-93/206, 9-10=-83/197, 10-11=-67/153, 11-12=-54/102, 12-13=-39/53, 13-14=-17/24, 14-15=-28/3

BOT CHORD	
	2-27=-3/5, 26-27=-3/5, 25-26=-3/5, 24-25=-3/5, 23-24=-3/5, 22-23=-3/5, 21-22=-3/5, 20-21=-3/5, 18-20=-3/5, 17-18=-3/5, 16-17=-3/5, 15-16=-3/5
WEBS	
	9-21=-185/41, 8-22=-133/61, 7-23=-122/66, 6-24=-124/63, 5-25=-121/62, 4-26=-129/66, 3-27=-100/55, 10-20=-128/57, 11-18=-123/67, 12-17=-127/64, 13-16=-110/63

- NOTES (14)**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 2, 1 lb uplift at joint 21, 37 lb uplift at joint 22, 42 lb uplift at joint 23, 39 lb uplift at joint 24, 38 lb uplift at joint 25, 42 lb uplift at joint 26, 32 lb uplift at joint 27, 32 lb uplift at joint 20, 44 lb uplift at joint 18, 38 lb uplift at joint 17 and 51 lb uplift at joint 16.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- LOAD CASE(S)** Standard



March 5, 2024

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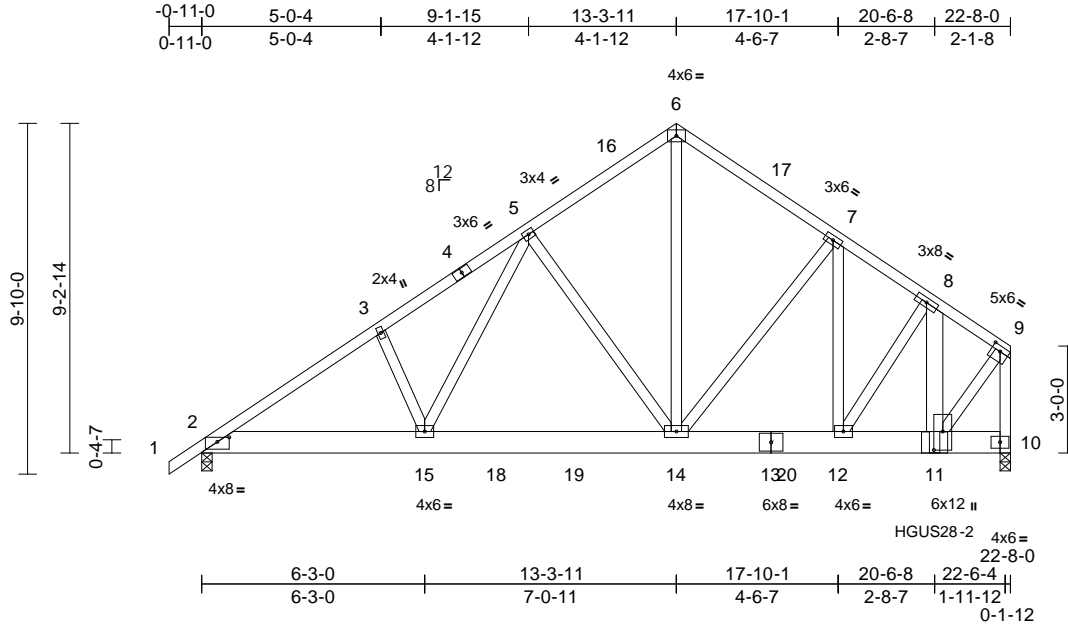
818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss T1G-2	Truss Type Common Girder	Qty 1	Ply 2	nash rf Job Reference (optional)	I64037353
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Builders FirstSource (Albermarle), Albermarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:49
ID:ylLc6jltLuhXBEo_cz9amzDJiQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwKRCDoi7J4zJC?f

Page: 1



Scale = 1:64.6

Plate Offsets (X, Y): [2:0-4-0,0-1-9], [9:Edge,0-1-12], [11:0-6-4,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.03	11-12	>999	360	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.06	11-12	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.01	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.02	11-12	>999	240		
BCDL	10.0											
											Weight: 378 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E or 2x8 SP DSS
WEBS 2x4 SP No.3 *Except* 10-9,11-9:2x4 SP No.2, 11-8:2x6 SP No.2

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

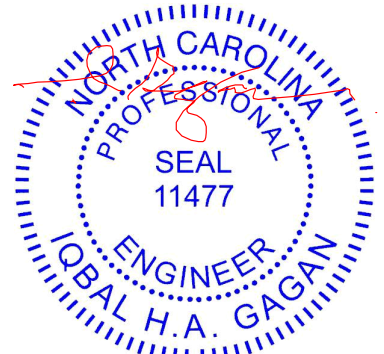
REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=178 (LC 12)
Max Uplift 2=-106 (LC 12), 10=-727 (LC 13)
Max Grav 2=1608 (LC 2), 10=7568 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/36, 2-3=-2488/160, 3-5=-2375/212, 5-6=-1928/220, 6-7=-1937/229, 7-8=-3124/311, 8-9=-4135/411, 9-10=-6766/653
BOT CHORD 2-15=-230/2049, 14-15=-172/1785, 12-14=-217/2597, 11-12=-323/3386, 10-11=-8/69
WEBS 3-15=-237/121, 5-15=-53/401, 5-14=-422/145, 6-14=-184/1810, 7-14=-1760/287, 7-12=-255/1819, 9-11=-525/5502, 8-11=-332/1826, 8-12=-1478/286

NOTES (14)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-2-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

- 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 106 lb uplift at joint 2 and 727 lb uplift at joint 10.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- Use Simpson Strong-Tie HGUS28-2 (36-16d Girder, 12-16d Truss) or equivalent at 20-6-8 from the left end to connect truss(es) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-6=-40, 6-9=-40, 2-10=-20
Concentrated Loads (lb)
Vert: 11=-5614 (B)



March 5, 2024

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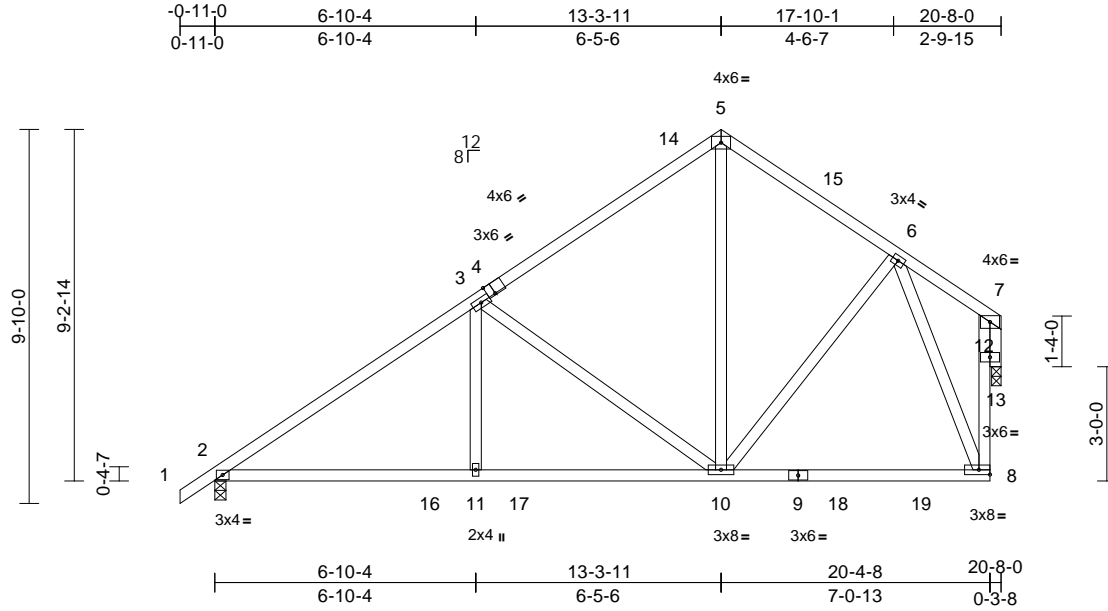
818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss T2	Truss Type Common	Qty 9	Ply 1	nash rf Job Reference (optional)	I64037354
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Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:49
ID:7b_KsgE7HV8XpGneeMtlLvzDJIW-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:60.6

Plate Offsets (X, Y): [4:0-2-5,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	0.50	Vert(LL)	-0.06	8-10	>999	360	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.12	2-11	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.05	13	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.03	2-11	>999	240		
BCDL	10.0											
											Weight: 127 lb	FT = 20%

LUMBER

- TOP CHORD 2x4 SP No.1
- BOT CHORD 2x4 SP No.1
- WEBS 2x4 SP No.3 *Except* 8-7:2x4 SP No.2
- OTHERS 2x4 SP No.2

BRACING

- TOP CHORD Structural wood sheathing directly applied or 5-3-1 oc purlins, except end verticals.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

- (size) 2=0-3-8, 13=0-3-0
- Max Horiz 2=205 (LC 12)
- Max Uplift 2=-29 (LC 12), 13=-21 (LC 12)
- Max Grav 2=881 (LC 2), 13=794 (LC 26)

FORCES

- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=0/30, 2-3=-1153/30, 3-5=-656/75, 5-6=-610/91, 6-7=-83/15, 8-12=-16/736, 7-12=-16/736
- BOT CHORD 2-11=-132/953, 10-11=-132/953, 8-10=-17/324
- WEBS 3-11=0/283, 3-10=-594/146, 5-10=-3/354, 6-10=-7/247, 6-8=-717/56, 7-13=-812/21

NOTES (11)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 2 and 21 lb uplift at joint 13.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



March 5, 2024

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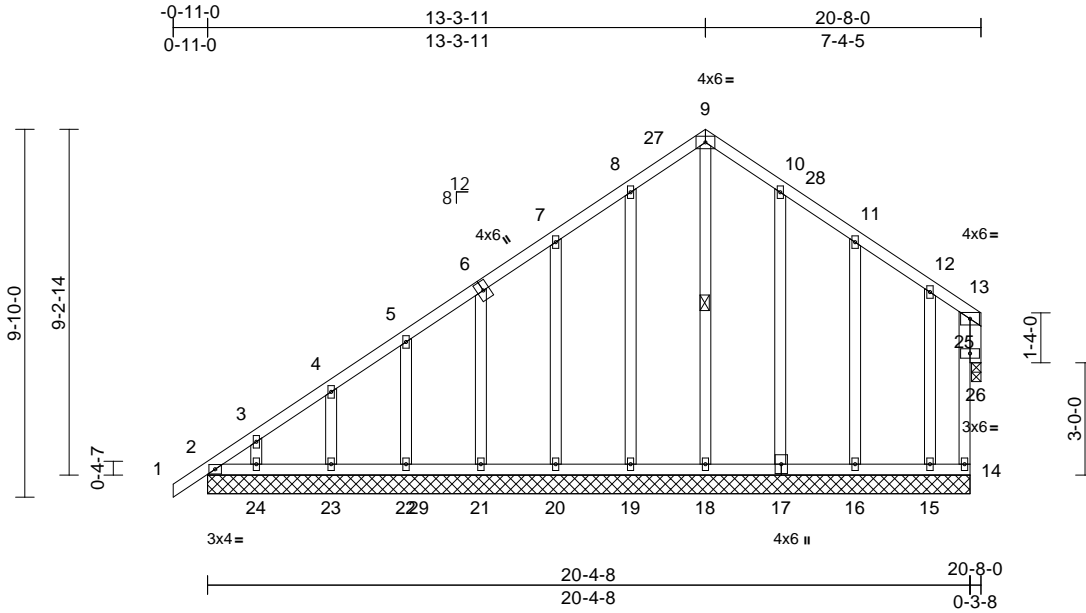
818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss T2E	Truss Type Common Supported Gable	Qty 1	Ply 1	nash rf Job Reference (optional)	164037355
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Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:49
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Page: 1



Scale = 1:61.6

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	0.06	Vert(LL)	0.00	21-22	>999	360	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	15-16	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	26	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-R		Wind(LL)	0.00	2	>999	240		
BCDL	10.0											
											Weight: 153 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.3 *Except* 25-13:2x4 SP No.2

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

REACTIONS	(size)
Max Horiz	2=205 (LC 12)
Max Uplift	2=-51 (LC 8), 14=-19 (LC 13), 15=40 (LC 13), 16=-43 (LC 13), 17=-35 (LC 13), 19=-39 (LC 12), 20=-41 (LC 12), 21=-39 (LC 12), 22=38 (LC 12), 23=-42 (LC 12), 24=33 (LC 12), 26=-16 (LC 11)
Max Grav	2=144 (LC 27), 14=21 (LC 11), 15=171 (LC 27), 16=231 (LC 27), 17=227 (LC 27), 18=252 (LC 29), 19=233 (LC 26), 20=221 (LC 26), 21=227 (LC 26), 22=181 (LC 26), 23=168 (LC 26), 24=130 (LC 26), 26=24 (LC 13)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/29, 2-3=-219/164, 3-4=-178/151, 4-5=-140/132, 5-7=-117/115, 7-8=-90/130, 8-9=-79/154, 9-10=-69/146, 10-11=-53/100, 11-12=-37/50, 12-13=-11/20, 14-25=-21/27, 13-25=-21/27

BOT CHORD	
	2-24=-2/4, 23-24=-2/4, 22-23=-2/4, 21-22=-2/4, 20-21=-2/3, 19-20=-2/3, 18-19=-2/3, 16-18=-2/3, 15-16=-2/3, 14-15=-2/3
WEBS	
	9-18=-151/21, 8-19=-133/63, 7-20=-122/65, 6-21=-124/63, 5-22=-121/62, 4-23=-129/66, 3-24=-100/56, 10-17=-128/59, 11-16=-128/69, 12-15=-100/54, 13-26=-25/16

NOTES (15)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

- Bearing at joint(s) 26 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 26.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 14, 51 lb uplift at joint 2, 39 lb uplift at joint 19, 41 lb uplift at joint 20, 39 lb uplift at joint 21, 38 lb uplift at joint 22, 42 lb uplift at joint 23, 33 lb uplift at joint 24, 35 lb uplift at joint 17, 43 lb uplift at joint 16, 40 lb uplift at joint 15 and 16 lb uplift at joint 26.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This manufactured truss is designed as an individual building component. The suitability and use of this responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



March 5, 2024

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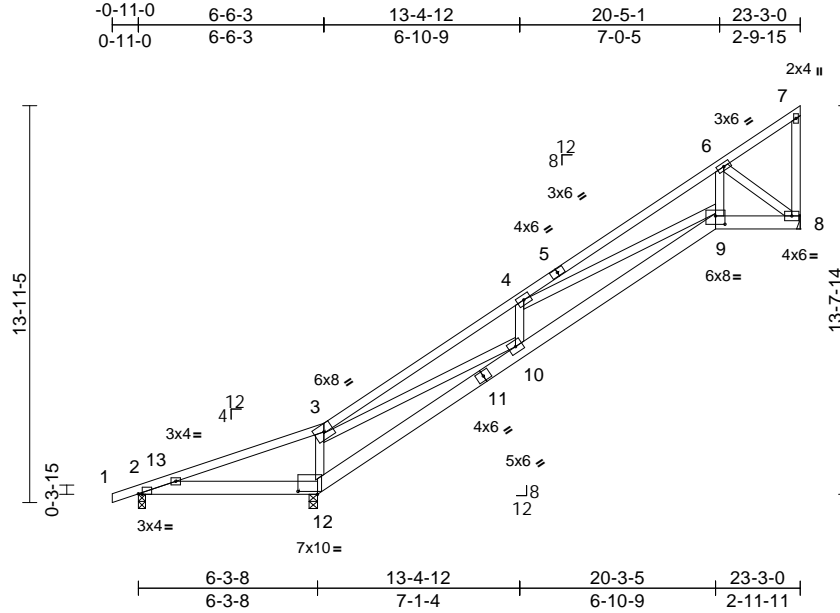
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	nash rf	I64037356
3882924	T3	Jack-Closed	5	1	Job Reference (optional)	

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:50
 ID:3_65HMFNp6OF2ax1lmvDQwzDJU-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:81

Plate Offsets (X, Y): [2:0-1-10,Edge], [9:0-4-0,0-3-8], [12:0-8-4,0-1-4]

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	0.42	Vert(LL)	-0.08	9-10	>999	360	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.16	9-10	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.08	9-10	>999	240		
BCDL	10.0										Weight: 144 lb	FT = 20%

LUMBER
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3

BRACING
 TOP CHORD Structural wood sheathing directly applied or 4-5-10 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

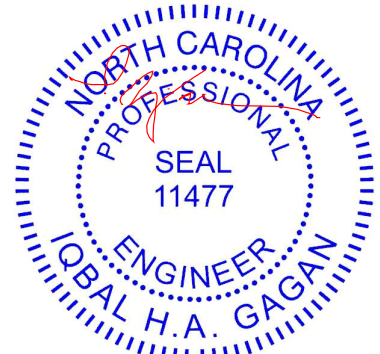
REACTIONS (size) 2=0-3-0, 8= Mechanical, 12=0-3-8
 Max Horiz 2=407 (LC 12)
 Max Uplift 2=-124 (LC 10), 8=-162 (LC 12), 12=-86 (LC 12)
 Max Grav 2=103 (LC 19), 8=605 (LC 26), 12=1234 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/20, 2-3=-392/740, 3-4=-1472/143, 4-6=-1060/150, 6-7=-82/2, 7-8=-12/6
 BOT CHORD 10-12=-692/4, 9-10=-473/1475, 8-9=-217/751, 2-12=-605/0
 WEBS 3-12=-690/162, 3-10=-374/1839, 4-10=-356/200, 4-9=-420/154, 6-9=-135/752, 6-8=-945/275

- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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 1-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 162 lb uplift at joint 8, 86 lb uplift at joint 12 and 124 lb uplift at joint 2.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

- NOTES (10)**
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.



March 5, 2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



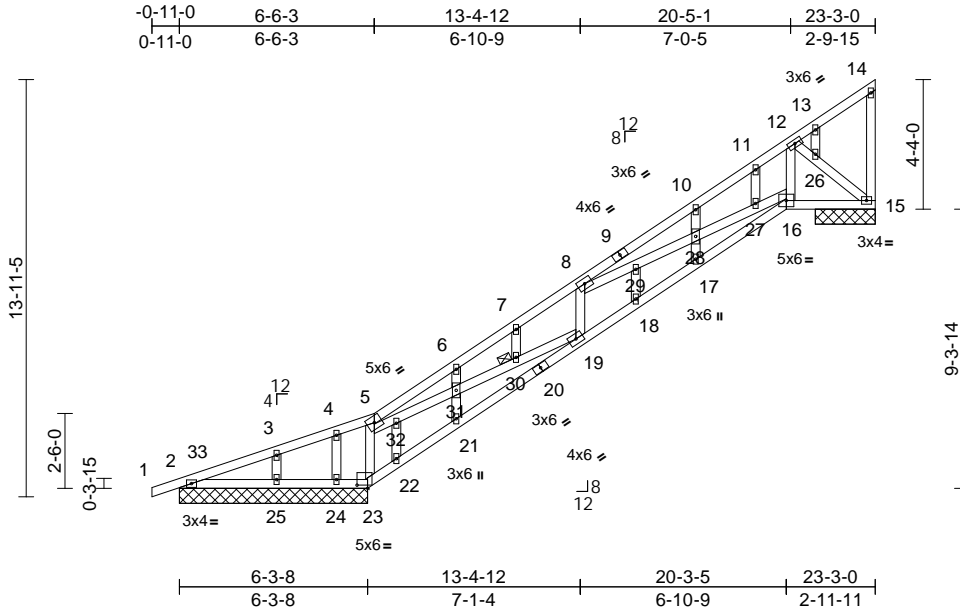
818 Soundside Road
 Edenton, NC 27932

Job 3882924	Truss T3E	Truss Type Roof Special Structural Gable	Qty 1	Ply 1	nash rf Job Reference (optional)	164037357
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Builders FirstSource (Albermarle), Albermarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:50
ID:cZv1JN1U1PmsmceELJ3rZ8zDHyR-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:77

Plate Offsets (X, Y): [23:0-4-4,0-1-4]

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	0.41	Vert(LL)	-0.12	17-18	>999	360	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.25	17-18	>810	240		
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.07	15	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.13	17-18	>999	240		
BCDL	10.0											
											Weight: 139 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 19-5,16-8:2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

JOINTS 1 Brace at Jt(s): 30

REACTIONS (size) 2=6-3-8, 15=2-0-0, 23=6-3-8, 24=6-3-8, 25=6-3-8
Max Horiz 2=408 (LC 12)
Max Uplift 2=-120 (LC 10), 15=-163 (LC 12), 23=-78 (LC 12), 24=-52 (LC 10), 25=-33 (LC 12)
Max Grav 2=105 (LC 12), 15=619 (LC 26), 23=1035 (LC 2), 24=32 (LC 19), 25=269 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-401/615, 3-4=-367/613, 4-5=-355/641, 5-6=-1457/76, 6-7=-1500/150, 7-8=-1362/155, 8-10=-1000/78, 10-11=-902/134, 11-12=-875/158, 12-13=-69/0, 13-14=-44/17, 14-15=-42/27
BOT CHORD 2-25=-512/0, 24-25=-512/0, 23-24=-512/0, 22-23=-429/0, 21-22=-604/3, 19-21=-508/0, 18-19=-436/1417, 17-18=-439/1472, 16-17=-450/1494, 15-16=-192/713

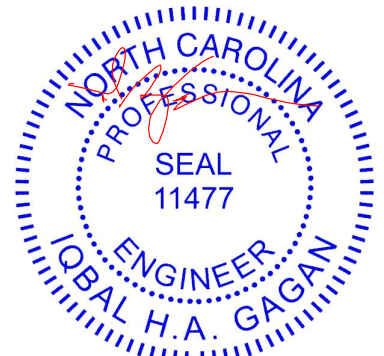
WEBS 5-23=-862/138, 5-32=-338/1621, 31-32=-362/1733, 30-31=-369/1779, 19-30=-362/1730, 8-19=-279/110, 8-29=-475/166, 28-29=-502/177, 27-28=-463/166, 16-27=-451/159, 12-16=-191/842, 12-26=-907/241, 15-26=-909/247, 13-26=-3/10, 11-27=-68/29, 10-28=-68/72, 17-28=0/101, 18-29=-63/27, 7-30=-16/130, 6-31=-246/109, 21-31=-137/93, 22-32=-67/336, 4-24=-37/53, 3-25=-193/67

NOTES (12)

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 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 163 lb uplift at joint 15, 120 lb uplift at joint 2, 78 lb uplift at joint 23, 52 lb uplift at joint 24 and 33 lb uplift at joint 25.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



March 5, 2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



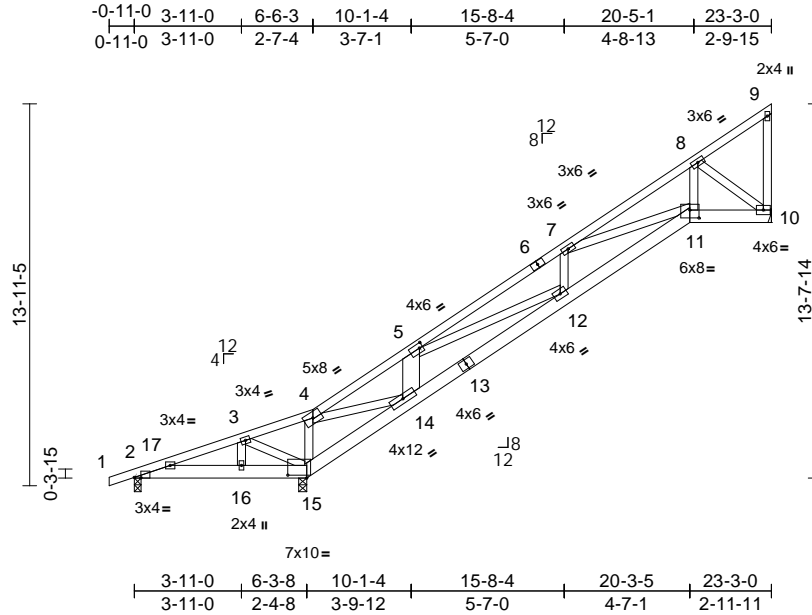
818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss T3G-2	Truss Type Jack-Closed Girder	Qty 2	Ply 2	nash rf Job Reference (optional)	164037358
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Builders FirstSource (Albermarle), Albermarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:51
ID:Xp?o_oBpOGgWoy?HmAotoOzDKFQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?F

Page: 1



Scale = 1:84.1

Plate Offsets (X, Y): [2:0-2-14,Edge], [5:0-1-8,0-2-0], [11:0-4-0,0-3-8], [15:0-8-4,0-1-4]

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	0.38	Vert(LL)	-0.05	12-14	>999	360	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.11	12-14	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.92	Horz(CT)	0.04	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	12-14	>999	240		
BCDL	10.0											
											Weight: 304 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 9-10:2x4 SP No.2, 5-14:2x8 SP 2400F 2.0E or 2x8 SP DSS

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

REACTIONS (size) 2=0-3-0, 10= Mechanical, 15=0-3-8
Max Horiz 2=407 (LC 12)
Max Uplift 2=641 (LC 26), 10=79 (LC 12)
Max Grav 2=23 (LC 12), 10=878 (LC 26), 15=3601 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-170/2315, 3-4=-152/2776, 4-5=-2337/0, 5-7=-2964/0, 7-8=-1432/2, 8-9=-58/32, 9-10=-67/15
BOT CHORD 2-16=-2099/0, 15-16=-2102/0, 14-15=-3062/0, 12-14=-145/2383, 11-12=-18/2828, 10-11=-101/1033
WEBS 3-16=0/243, 3-15=-612/16, 4-15=-1647/18, 4-14=0/4466, 5-14=-673/0, 5-12=0/469, 7-12=-102/110, 7-11=-1245/0, 8-11=0/1334, 8-10=-1291/128

NOTES (13)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.

- 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.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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 1-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 10 and 641 lb uplift at joint 2.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1667 lb down and 130 lb up at 10-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- LOAD CASE(S)** Standard
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-40, 4-5=-40, 7-9=-40, 2-15=-20, 11-15=-20, 10-11=-20
Concentrated Loads (lb)
Vert: 14=-1250 (F)
Trapezoidal Loads (lb/ft)
Vert: 5=-124-to-6=-93, 6=-93-to-7=-87



March 5, 2024

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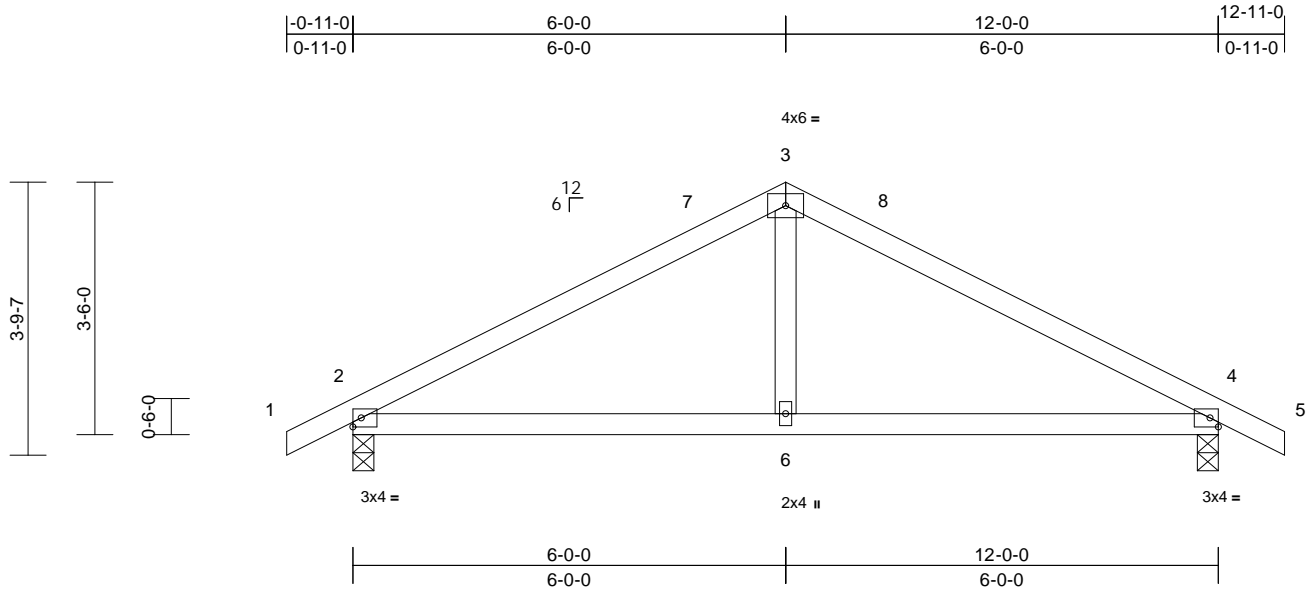
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss T5	Truss Type Common	Qty 7	Ply 1	nash rf Job Reference (optional)	164037360
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Builders FirstSource (Albermarle), Albermarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:51
ID:I4HLXNOKCCTFaaow2xELHkye5es-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:31.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.03	4-6	>999	360	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.07	4-6	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.02	2-6	>999	240		
BCDL	10.0										Weight: 46 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=0-3-8, 4=0-3-8
Max Horiz 2=45 (LC 16)
Max Uplift 2=-27 (LC 12), 4=-27 (LC 13)
Max Grav 2=532 (LC 2), 4=532 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

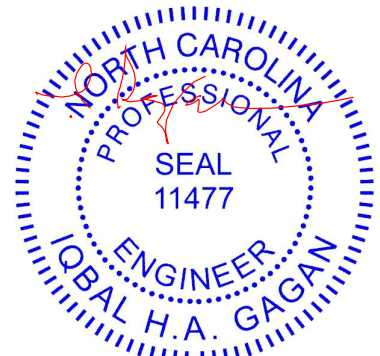
TOP CHORD 1-2=0/15, 2-3=-638/25, 3-4=-638/25, 4-5=0/15
BOT CHORD 2-6=0/488, 4-6=0/488
WEBS 3-6=0/284

NOTES (10)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 2.00 times flat roof load of 10.0 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 1-00-00 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 2 and 27 lb uplift at joint 4.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



March 5, 2024

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ENGINEERING BY
TRENCO
A MiTek Affiliate

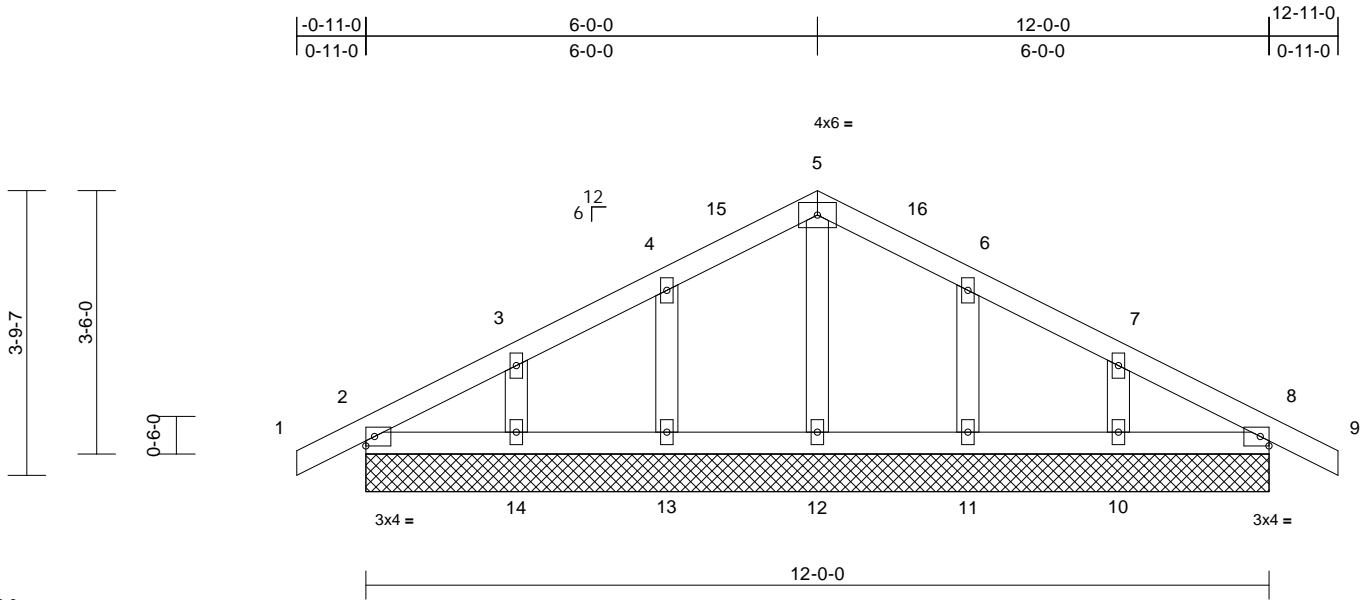
818 Soundside Road
Edenton, NC 27932

Job 3882924	Truss T5E	Truss Type Common Supported Gable	Qty 1	Ply 1	nash rf Job Reference (optional)	164037361
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Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 05 09:23:52
ID:YpJkPSVO4zcz9z_f4KuS9eye5ej-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRcDoi7J4zJC?f

Page: 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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0											
											Weight: 54 lb	FT = 20%

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

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

REACTIONS (size) 2=12-0-0, 8=12-0-0, 10=12-0-0, 11=12-0-0, 12=12-0-0, 13=12-0-0, 14=12-0-0
 Max Horiz 2=45 (LC 12)
 Max Uplift 2=-5 (LC 13), 8=-10 (LC 13), 10=-30 (LC 13), 11=-30 (LC 13), 13=-31 (LC 12), 14=-31 (LC 12)
 Max Grav 2=141 (LC 2), 8=141 (LC 2), 10=158 (LC 2), 11=169 (LC 31), 12=137 (LC 2), 13=169 (LC 30), 14=158 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/15, 2-3=-62/33, 3-4=-40/45, 4-5=-43/64, 5-6=-43/58, 6-7=-39/27, 7-8=-47/21, 8-9=0/15
 BOT CHORD 2-14=0/42, 13-14=0/42, 12-13=0/42, 11-12=0/42, 10-11=0/42, 8-10=0/42
 WEBS 5-12=-97/0, 4-13=-130/54, 3-14=-116/56, 6-11=-130/54, 7-10=-116/54

NOTES (14)
 1) Unbalanced roof live loads have been considered for this design.
 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCCL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60

- 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.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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 1'-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 2, 10 lb uplift at joint 8, 31 lb uplift at joint 13, 31 lb uplift at joint 14, 30 lb uplift at joint 11 and 30 lb uplift at joint 10.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



March 5, 2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

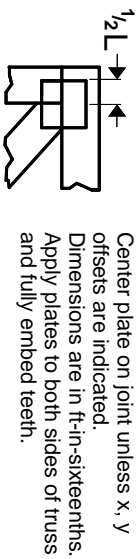
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbccomponents.com)



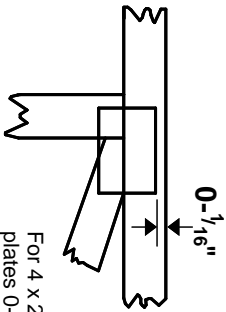
818 Soundside Road
Edenton, NC 27932

Symbols

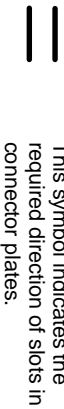
PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

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

PLATE SIZE

4 X 4

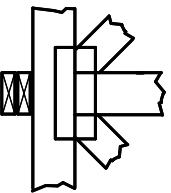
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

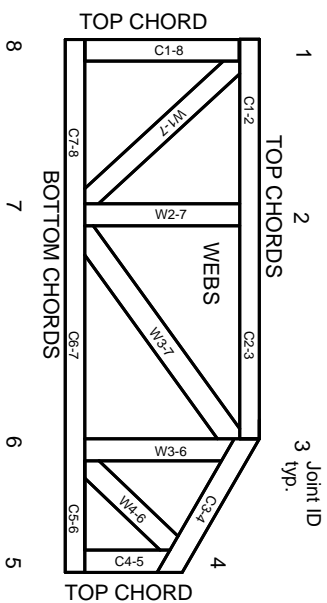


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on Lumber values established by others.

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ENGINEERING BY
TRENGO
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability/bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.