

10401 Chapel Hill Rd
 Morrisville, NC 27560
 Ph. 919-467-9988
 Fax. 919-481-3255

DO210933
 GFD BUILDERS
 STACEY WALKER RESID.
 Linden NC

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: DO210933
DON GILMORE

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

Pages or sheets covered by this seal: I48157169 thru I48157194

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844



October 1, 2021

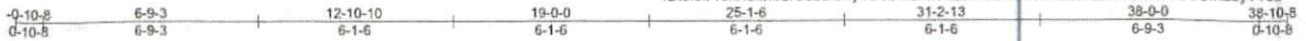
Sevier, Scott

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.

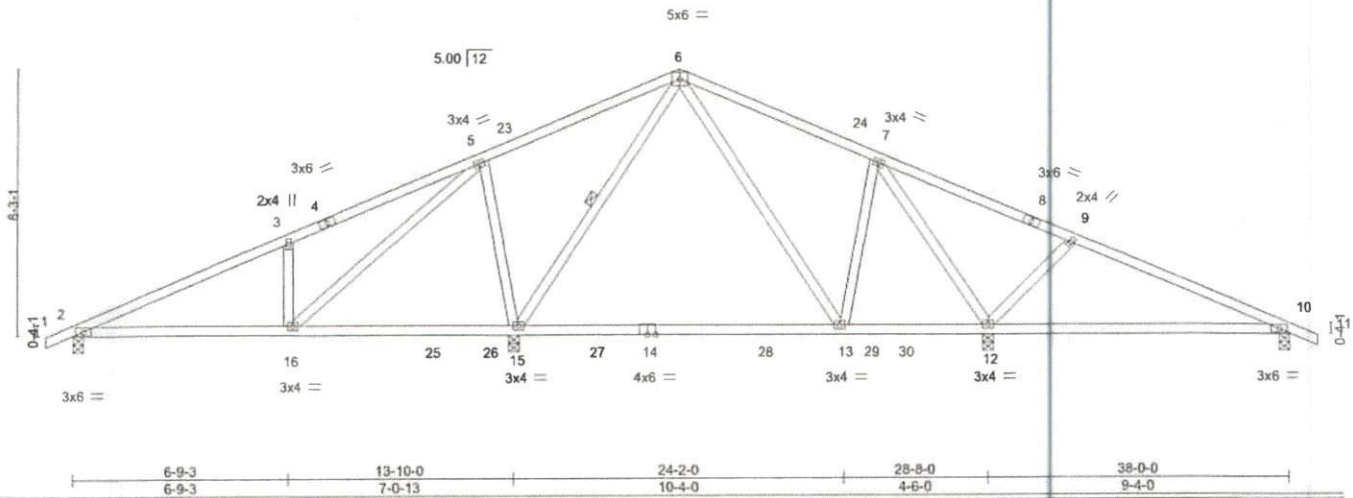
Job	Truss	Truss Type	Qty	Ply	DON GILMORE	
DO210933	CT1	Common	3	1		I48157169

Truss Builders, Inc., Morrisville, NC - 27560.

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:33 2021 Page 1
 ID:9lbiProxNuxtvrUdbBCXyYoO9-ndMJAQZyR6SAMcTY7z6ufQdsRQvFbXkBeClKa0yYTca



Scale: 3/16"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.58	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.92	Vert(LL) -0.37 13-15 >484 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.51	Vert(CT) -0.61 13-15 >291 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.01 10 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 194 lb	FT = 6%

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

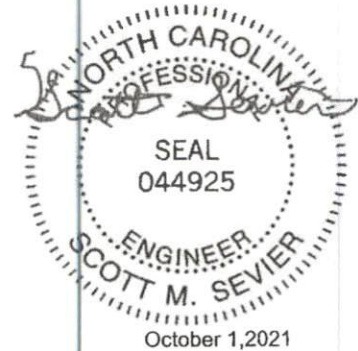
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
 WEBS 1 Row at midpt 6-15

REACTIONS. All bearings 0-4-0.
 (lb) - Max Horz 2=108(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 15, 10
 Max Grav All reactions 250 lb or less at joint(s) except 2=469(LC 30), 12=967(LC 31), 15=1375(LC 3), 10=361(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-528/33, 3-5=-556/96, 5-6=0/404, 6-7=-342/129
 BOT CHORD 2-16=-51/447
 WEBS 3-16=-408/147, 7-12=-642/66, 9-12=-434/138, 6-15=-685/18, 5-15=-633/182, 5-16=-127/850

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully 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 15.0 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 3-6-0 tall by 1-0-0 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 100 lb uplift at joint(s) 2, 12, 15, 10.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



WARNING: Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER. REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	148157170
DO210933	CT1GE	Common Supported Gable	1	1		

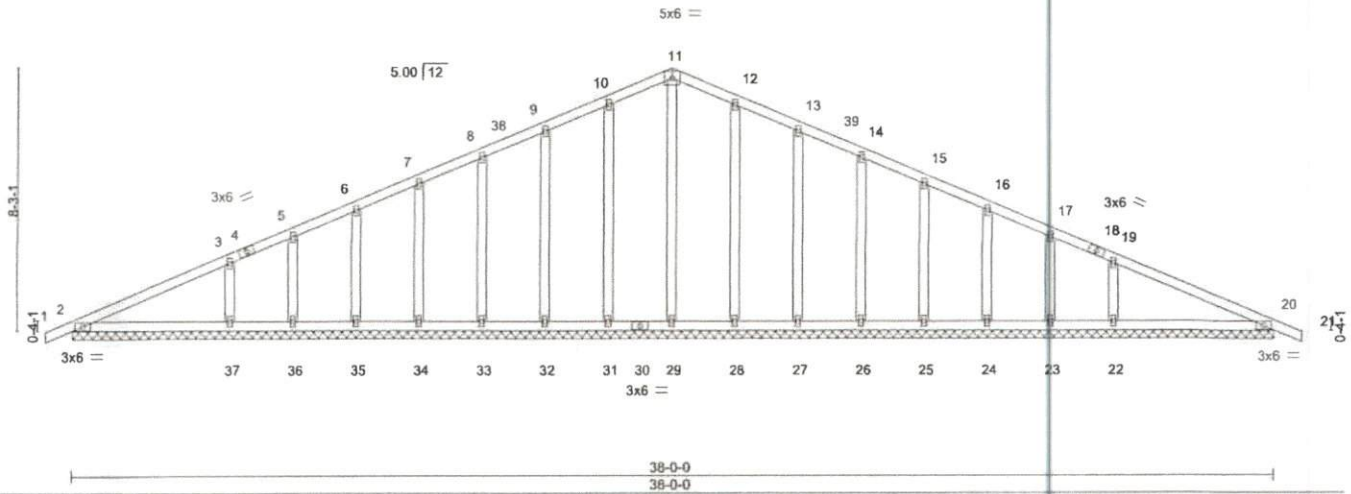
Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:35 2021 Page 1

ID:9IbiProxNuxtvrUdbBCXyYoO9-j7T3b6boNkiubwKxFO9Mkrii-hxDmB3WmJ5WnRevyYtCy

-0-10-8 19-0-0 38-0-0 38-10-8
 0-10-8 19-0-0 19-0-0 0-10-8

Scale: 3/16"=1'



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
Snow (PF) 15.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) 0.01 21 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.16	Vert(CT) 0.02 21 n/r 120		
BCLL 0.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.01 20 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 223 lb	FT = 6%

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

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

REACTIONS. All bearings 38-0-0.
 (lb) - Max Horz 2=-108(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 31, 32, 33, 34, 35, 36, 37, 28, 27, 26, 25, 24, 23, 22, 20
 Max Grav All reactions 250 lb or less at joint(s) 2, 29, 31, 32, 33, 34, 35, 36, 28, 27, 26, 25, 24, 23, 20
 except 37=409(LC 30), 22=409(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-37=-283/101, 19-22=-283/101

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cal. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 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=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully 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 15.0 psf on overhangs non-concurrent with other live loads.
 - 7) All plates are 2x4 MT20 unless otherwise indicated.
 - 8) Gable requires continuous bottom chord bearing.
 - 9) Gable studs spaced at 2-0-0 oc.
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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 100 lb uplift at joint(s) 2, 31, 32, 33, 34, 35, 36, 37, 28, 27, 26, 25, 24, 23, 22, 20.
 - 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 20.
 - 14) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



October 1, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job DO210933	Truss CT1GT	Truss Type Common Girder	Qty 1	Ply 3	DON GILMORE	Job Reference (optional)	148157171
-----------------	----------------	-----------------------------	----------	----------	-------------	--------------------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560,

8:430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:39 2021 Page 1
ID:iC310G5R74f1UmnMaZ7HyYoRf-cnjaRUeJRYCK4XxiUEdlvhtx5r0l?Bn408leogyYTcU



Scale: 3/16"=1'

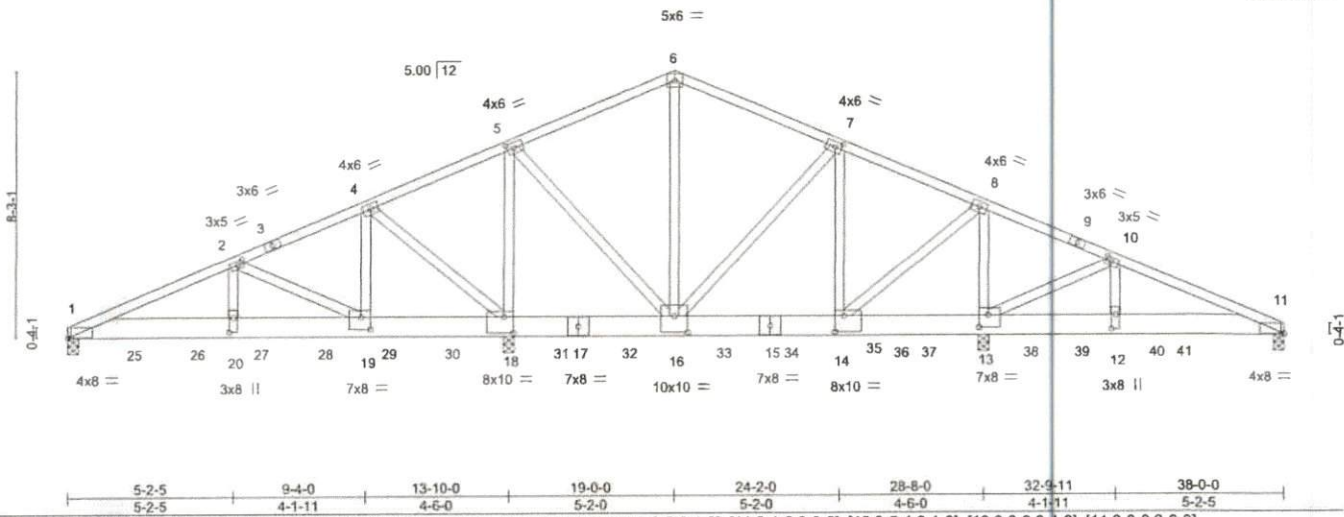


Plate Offsets (X,Y) - [1:0-1-2,0-0-2], [2:0-2-0,0-1-8], [5:0-2-8,0-2-0], [7:0-2-8,0-2-0], [10:0-2-0,0-1-8], [11:0-1-2,0-0-2], [12:0-5-4,0-1-8], [13:0-3-8,0-4-8], [14:0-3-8,0-6-0], [16:0-5-0,0-6-0], [18:0-3-8,0-6-0], [19:0-3-8,0-4-8], [20:0-5-4,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.38	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.66	Vert(LL) -0.04 14-16 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.73	Vert(CT) -0.08 20-22 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-MR	Horz(CT) 0.01 11 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 809 lb	FT = 6%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 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, Except: 6-0-0 oc bracing: 16-18,13-14.

REACTIONS. All bearings 0-4-0 except (jt=length) 18=0-4-2 (input: 0-4-0), 13=0-4-6 (input: 0-4-0).
(lb) - Max Horz 1=103(LC 37)
Max Uplift All uplift 100 lb or less at joint(s) except 1=137(LC 12)
Max Grav All reactions 250 lb or less at joint(s) except 1=2983(LC 29), 18=10446(LC 3), 13=11189(LC 3), 11=2315(LC 32)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=5070/259, 2-4=1049/156, 4-5=59/3123, 5-6=877/0, 6-7=888/0, 7-8=1478/0, 8-10=0/2822, 10-11=2068/0
BOT CHORD 1-20=296/4666, 19-20=296/4666, 18-19=120/927, 16-18=2839/143, 14-16=0/1322, 13-14=2569/0, 12-13=0/1909, 11-12=0/1909
WEBS 5-18=5660/0, 5-16=0/5302, 6-16=30/555, 8-13=5075/0, 10-13=4968/0, 10-12=0/3765, 7-14=577/31, 7-16=835/43, 8-14=0/5047, 4-19=160/4402, 4-18=4822/266, 2-20=61/3164, 2-19=4172/196

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

NOTES-

- 3-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 - 2 rows staggered at 0-5-0 oc.
Webs 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
- WARNING: Required bearing size at joint(s) 18, 13 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 137 lb uplift at joint 1.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

Continued on page 2



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	
DO210933	CT1GT	Common Girder	1	3		I48157171

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:39 2021 Page 2
 ID:iC31OG5R74j1UmnMaZi7HyYoRf-cnjaRUeJRyCK4XxiUEDlvhtx5r0l7Bn408leogyYTcU

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1250 lb down and 53 lb up at 2-0-0, 1250 lb down and 53 lb up at 4-0-0, 1250 lb down and 53 lb up at 6-0-0, 1250 lb down and 53 lb up at 8-0-0, 1250 lb down and 53 lb up at 10-0-0, 1250 lb down and 53 lb up at 12-0-0, 194 lb down and 163 lb up at 13-11-4, 1217 lb down at 17-6-8, 1285 lb down at 18-10-12, 1285 lb down at 20-5-15, 1280 lb down at 22-1-2, 1268 lb down at 23-8-5, 1285 lb down at 25-3-8, 1285 lb down at 26-10-11, 1285 lb down at 28-5-14, 1285 lb down at 30-1-1, 1285 lb down at 31-8-4, 1285 lb down at 33-3-7, and 1285 lb down at 34-10-10, and 1285 lb down at 36-5-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-6=-50, 6-11=-50, 1-11=-20

Concentrated Loads (lb)

Vert: 18=-40 16=-875(F) 13=-875(F) 15=-875(F) 24=-875(F) 25=-1074(F) 26=-1074(F) 27=-1074(F) 28=-1074(F) 29=-1074(F) 30=-1074(F) 32=-875(F) 33=-875(F) 35=-875(F) 36=-875(F) 37=-875(F) 38=-875(F) 39=-875(F) 40=-875(F) 41=-875(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev 5/19/2020 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 ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	148157172
DO210933	CT2	Roof Special	5	1		

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MITek Industries, Inc. Thu Sep 30 10:14:40 2021 Page 1
 ID:9tbiProxNuxtvrUdbBCXyYo09-4zHyeqfCGKBllWu1xXRuQ_bEHkeLDFoJCK8yYtCt

0-10-8	8-3-14	16-0-0	19-0-0	26-6-0	31-11-2	38-0-0	38-10-8
0-10-8	8-3-14	7-8-2	3-0-0	7-6-0	5-5-2	6-0-14	0-10-8

Scale = 1:64.8

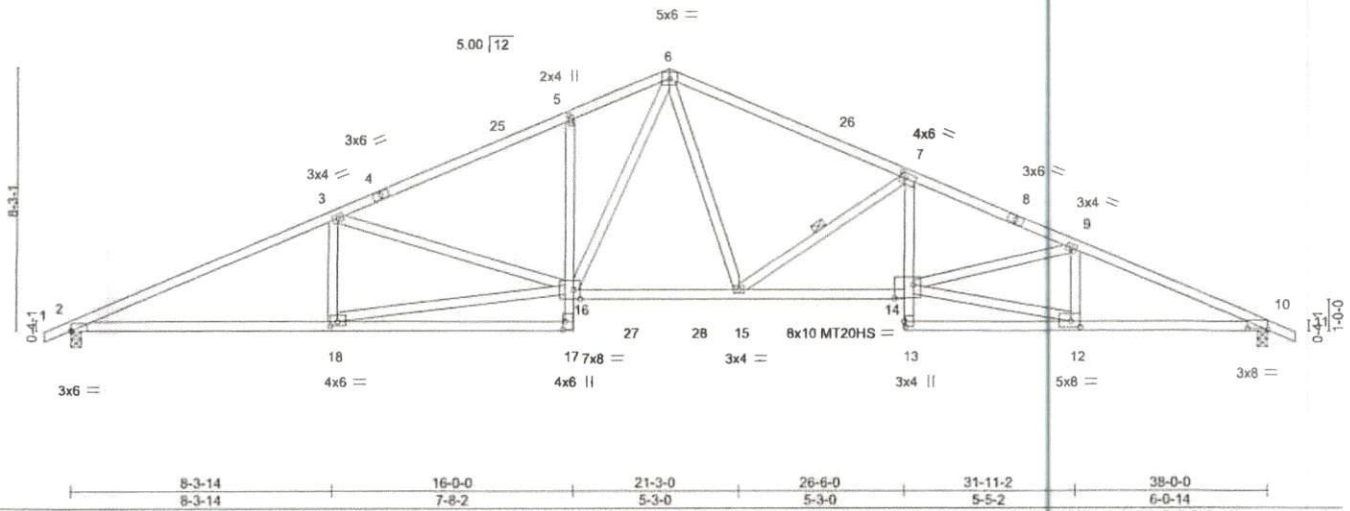


Plate Offsets (X, Y) - [2:0-0-2,Edge], [5:0-2-0,0-0-12], [7:0-1-12,0-2-0], [10:0-8-0,0-0-10], [12:0-3-8,0-2-4], [13:0-2-0,0-0-8], [14:0-7-4,0-5-0], [16:0-2-8,Edge], [17:0-3-0,0-0-12], [18:0-2-12,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.85	in (loc) l/defl L/d	MT20	244/190
Snow (Pr) 15.0	Plate Grip DOL 1.15	BC 0.99	Vert(LL) -0.26 14-15 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.71	Vert(CT) -0.54 14-15 >843 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.21 10 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 213 lb	FT = 6%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
 1-4: 2x4 SP No.1D
 BOT CHORD 2x4 SP No.2 *Except*
 2-17: 2x4 SP No.1D, 5-17,7-13: 2x4 SP No.3
 WEBS 2x4 SP No.3 *Except*
 16-18,12-14: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
 2-2-0 oc bracing: 14-15,10-12.
 WEBS 1 Row at midpt 7-15

REACTIONS.

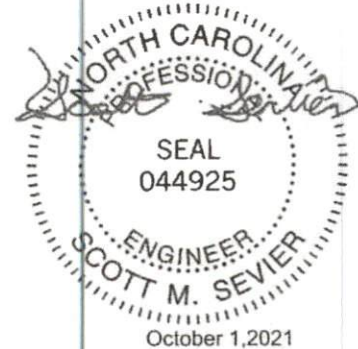
(size) 2=0-4-0, 10=0-4-0
 Max Horz 2=108(LC 12)
 Max Uplift 2=-58(LC 12), 10=-58(LC 13)
 Max Grav 2=1573(LC 2), 10=1573(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3254/94, 3-5=-2803/79, 5-6=-2715/131, 6-7=-2648/56, 7-9=-3693/73,
 9-10=-3391/95
 BOT CHORD 2-18=-115/2952, 17-18=0/257, 5-16=-339/120, 15-16=0/2101, 14-15=0/3422, 7-14=0/755,
 10-12=-26/3078
 WEBS 16-18=-150/2728, 3-16=-561/120, 6-16=-112/975, 6-15=-13/842, 7-15=-1292/143,
 12-14=-22/2901, 9-14=-5/298, 9-12=-521/65

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully 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 15.0 psf on overhangs non-concurrent with other live loads.
- 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 3-6-0 tall by 1-0-0 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 58 lb uplift at joint 2 and 58 lb uplift at joint 10.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

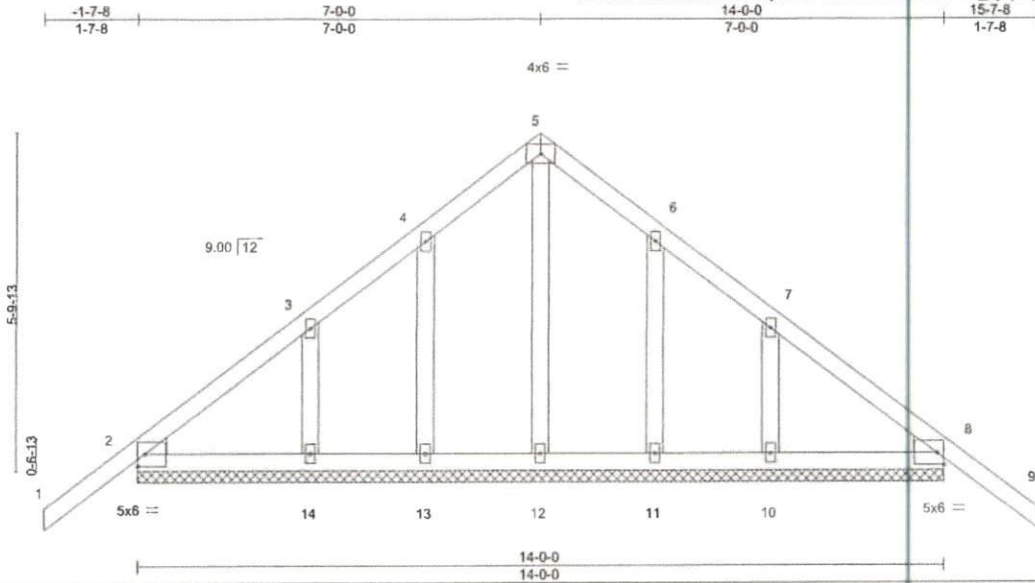
ENGINEERING BY
TRENCO
 A MITEK Alliance

818 Soundside Road
 Edenton, NC 27932

Job DO210933	Truss CT2GE	Truss Type Common Supported Gable	Qty 2	Ply 1	DON GILMORE	I48157173
-----------------	----------------	--------------------------------------	----------	----------	-------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:41 2021 Page 1
ID:9IbiProxNuxtvvurUdbBCXyYoO9-Y9rKrAfZzaS2Jr54bfGm_6yJpeqdTGjMTSEIsZyYtCs



Scale = 1:35.4

LOADING (psf)	SPACING-	1-11-4	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0		TC	0.24	-0.01	9	n/r	120	MT20	244/190
Snow (Pf)	15.0		BC	0.12	-0.01	9	n/r	120		
TCDL	10.0		WB	0.06	0.00	8	n/a	n/a		
BCLL	0.0		Matrix-R							
BCDL	10.0								Weight: 80 lb	FT = 6%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3
 WEDGE
 Left: 2x4 SP No.3, Right: 2x4 SP No.3

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

REACTIONS. All bearings 14-0-0.
 (lb) - Max Horz 2=121(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 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 3-6-0 tall by 1-0-0 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 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



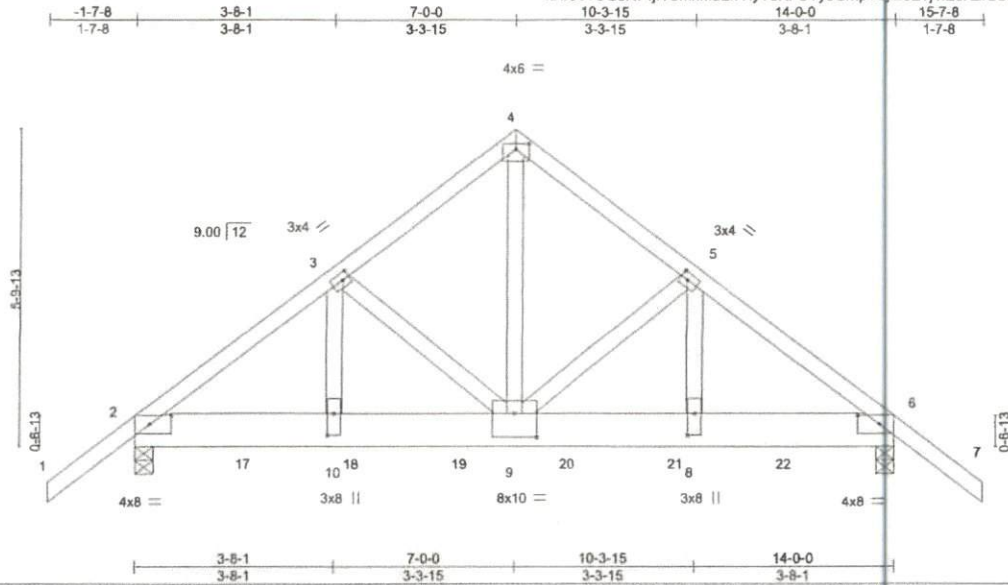
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7474 Rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job DO210933	Truss CT2GT	Truss Type Common Girder	Qty 2	Ply 2	DON GILMORE	I48157174
-----------------	----------------	-----------------------------	----------	----------	-------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MITek Industries, Inc. Thu Sep 30 10:14:43 2021 Page 1
ID:IC31OG5R74jf1UmnMaZ7fHyYoRf-UyY5GrhpV5E1Z9E7j4IE3X2IGSNZxxxmjsxRyYtCQ



Scale = 1:37.6

Plate Offsets (X,Y)-- [2:0-4-13,0-2-0], [3:0-1-8,0-1-8], [4:0-3-0,0-1-4], [5:0-1-8,0-1-8], [6:0-4-13,0-1-15], [8:0-4-12,0-1-8], [9:0-5-0,0-5-4], [10:0-4-12,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	1-11-4	TC 0.24	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.67	Vert(LL) -0.05 8-9 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.98	Vert(CT) -0.10 8-9 >999 180		
BCLL 0.0	Rep Stress Incr NO	Matrix-MR	Horz(CT) 0.02 6 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 204 lb	FT = 6%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x8 SP No.2
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-1-0 oc purfins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-4-0, 6=0-4-0
 Max Horz 2=-121(LC 32)
 Max Uplift 2=-135(LC 10), 6=-135(LC 11)
 Max Grav 2=4352(LC 3), 6=4352(LC 3)

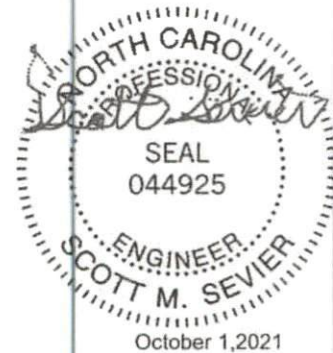
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-5797/156, 3-4=-4148/157, 4-5=-4148/157, 5-6=-5797/154
 BOT CHORD 2-10=-119/4604, 9-10=-119/4604, 8-9=-73/4604, 6-8=-73/4604
 WEBS 4-9=-125/4716, 5-9=-1713/110, 5-8=-23/1982, 3-9=-1713/108, 3-10=-21/1982

NOTES-

- 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 - 2 rows staggered at 0-7-0 oc.
 Webs 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=135, 6=135.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1266 lb down and 42 lb up at 2-0-0, 1266 lb down and 42 lb up at 4-0-0, 1266 lb down and 42 lb up at 6-0-0, 1266 lb down and 42 lb up at 8-0-0, and 1266 lb down and 42 lb up at 10-0-0, and 1266 lb down and 42 lb up at 12-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



TRENCO
 A MITek Affiliate

818 Soundside Road
 Edenon, NC 27932

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	
DO210933	CT2GT	Common Girder	2	2		I48157174
					Job Reference (optional)	

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:43 2021 Page 2
 ID:IC31OG5R74j1UmnMaZf7HyYoRF-Uy5GrhpVBIz9ETj4IE3X2fGSNZxxxcmjxRyYTcQ

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=48, 4-7=48, 11-14=19

Concentrated Loads (lb)

Vert: 17=-1074(B) 18=-1074(B) 19=-1074(B) 20=-1074(B) 21=-1074(B) 22=-1074(B)

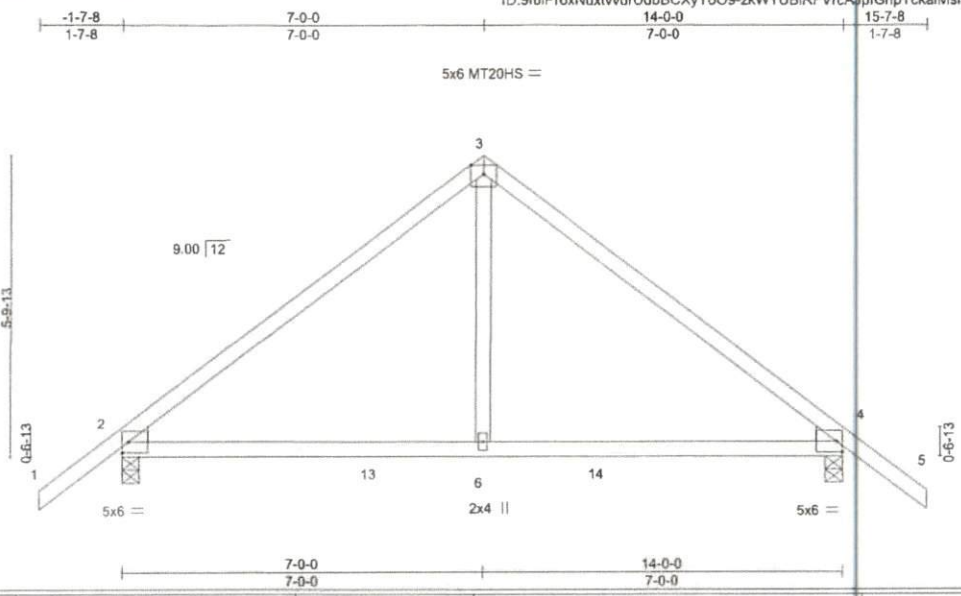
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job DO210933	Truss CT3	Truss Type Common	Qty 2	Ply 1	DON GILMORE	148157175
-----------------	--------------	----------------------	----------	----------	-------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:44 2021 Page 1
 ID:9ibiProxNuxtvrUdbBCXyYo09-zkWTUBiRfVrcAfpfGrpTckalMsmDgcap9QSPtuyYTcP



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	1-11-4	TC 0.54	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.45	Vert(LL) -0.06 6-12 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.12	Vert(CT) -0.10 6-12 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.01 2 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 62 lb	FT = 6%

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

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

REACTIONS. (size) 2=0-4-0, 4=0-4-0
 Max Horz 2=121(LC 9)
 Max Uplift 2=-30(LC 10), 4=-30(LC 11)
 Max Grav 2=643(LC 22), 4=643(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-646/56, 3-4=-646/56
 BOT CHORD 2-6=0/482, 4-6=0/482
 WEBS 3-6=0/309

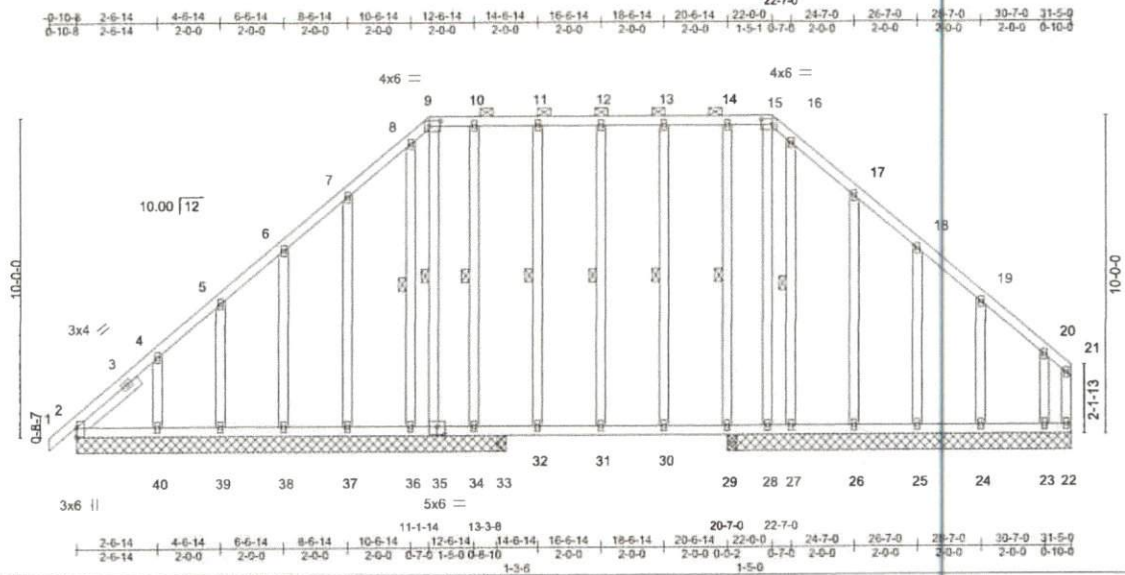
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Expt.; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
 - 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
 - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



Job DO210933	Truss CT3GE	Truss Type Piggyback Base Structural Gable COMMON	Qty 1	Ply 1	DON GILMORE	148157176
-----------------	----------------	--	----------	----------	-------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:46 2021 Page 1
ID:JC31OG5R74jF1UmnMaZ7HyYoRf-v7eDvtjin65KQz2OCrxh9g7AfP88VT6dkxWxmyYTcn



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [2-Edge,0-0-0], [9-0-4-4,0-2-0], [15-0-4-4,0-2-0], [35-0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.39	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.68	Vert(LL) -0.07 30-31 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.16	Vert(CT) -0.12 30-31 >715 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.00 22 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 293 lb	FT = 6%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	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.): 9-15.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 9-35, 12-31, 13-30, 14-29, 10-34, 11-32, 8-36, 16-27
SLIDER Left 2x4 SP No.3 2-6-0	

REACTIONS. All bearings 13-7-0 except (jt=length) 28=10-10-0, 22=10-10-0, 27=10-10-0, 26=10-10-0, 25=10-10-0, 24=10-10-0, 23=10-10-0, 33=0-3-8, 29=0-3-8, 29=0-3-8.
 (lb) - Max Horz 2=214(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 35, 22, 39, 38, 37, 36, 26, 25, 24, 33, 29 except 2=104(LC 6), 28=408(LC 28), 34=329(LC 3), 40=102(LC 10), 23=159(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 2, 35, 28, 22, 34, 40, 39, 38, 37, 36, 27, 26, 25, 24, 23, 2 except 33=798(LC 3), 29=755(LC 28), 29=538(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 14-29=315/50

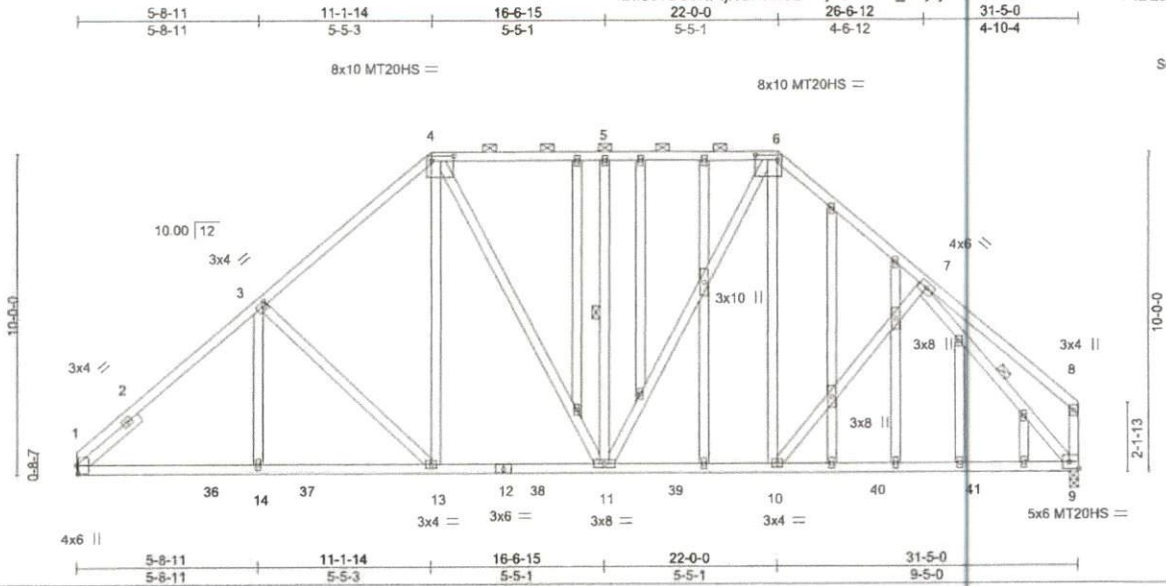
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 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=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - 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 3-6-0 tall by 1-0-0 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 100 lb uplift at joint(s) 35, 22, 39, 38, 37, 36, 26, 25, 24, 33, 29 except (jt=lb) 2=104, 28=408, 34=329, 40=102, 23=159, 2=104.
 - This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.



Job DO210933	Truss CT3SGE	Truss Type GABLE	Qty 1	Ply 1	DON GILMORE	148157177
-----------------	-----------------	---------------------	----------	----------	-------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:48 2021 Page 1
ID:iC31OG5R74j1UmnMaZf7HyYoRf-Vm_JZlyJl2fv7QVduPmalQJT2ucLIO42QdcfyTcl



Scale: 3/16"=1'

Plate Offsets (X, Y) - [1:0-3-0,0-0-8], [3:0-1-8,0-1-8], [4:0-8-4,0-2-0], [5:0-8-4,0-2-0], [9:Edge,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.79	Vert(LL) -0.16 9-10 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.43	Vert(CT) -0.32 9-10 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.05 9 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 289 lb	FT = 6%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-4-10 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-1 max.): 4-6.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 5-11, 7-9
8-9: 2x4 SP No.2	
OTHERS 2x4 SP No.3	
SLIDER Left 2x4 SP No.3 2-6-0	

REACTIONS. (size) 1=Mechanical, 9=0-3-8
 Max Horz 1=204(LC 9)
 Max Uplift 1=-33(LC 10), 9=-23(LC 11)
 Max Grav 1=1270(LC 3), 9=1286(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-1635/73, 3-4=-1359/127, 4-5=-1057/114, 5-6=-1057/114, 6-7=-1255/114, 7-8=-369/46, 8-9=-325/54
 BOT CHORD 1-14=-90/1269, 13-14=-90/1269, 11-13=-57/988, 10-11=0/911, 9-10=-10/872
 WEBS 3-13=-392/142, 4-13=-22/458, 4-11=-115/254, 5-11=-338/114, 6-11=-104/388, 6-10=-11/304, 7-9=-1134/33

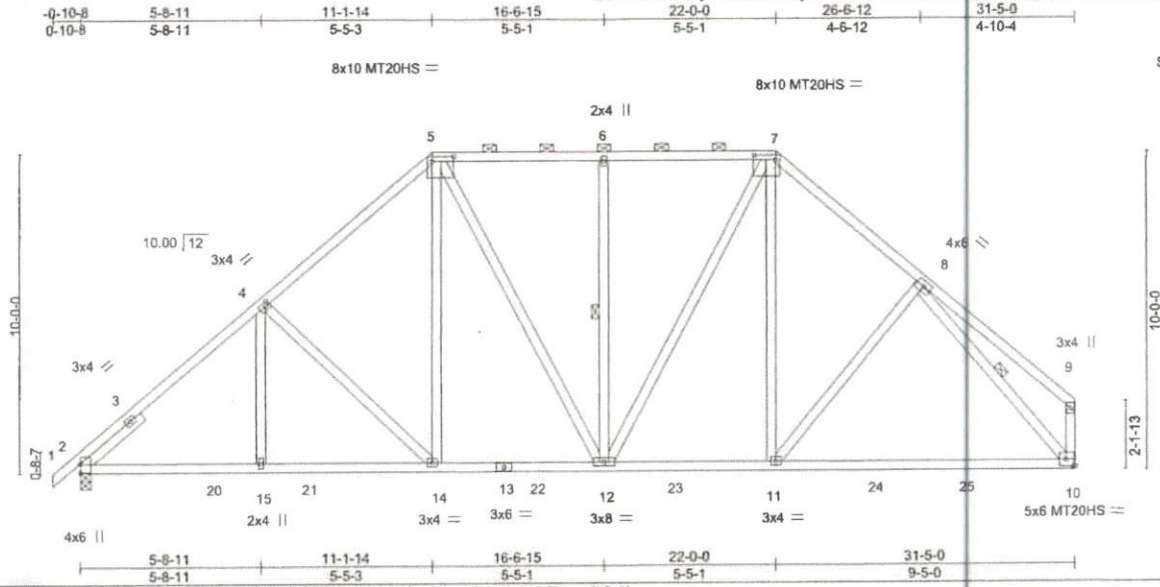
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 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=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9.
 - This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.



October 1, 2021

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	148157178
DO210933	CTS	Piggyback Base	6	1		

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:50 2021 Page 1
 ID:IC31OGSR74f1UmnMaz7fHyYoRf-nutkkEmCrLbmUEHpd2wtr7qmpGkX4EJhYMvkgXyYtCj



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [2:Edge,0-0-0], [4:0-1-8,0-1-8], [5:0-8-4,0-2-0], [7:0-8-4,0-2-0], [10:Edge,0-2-8]

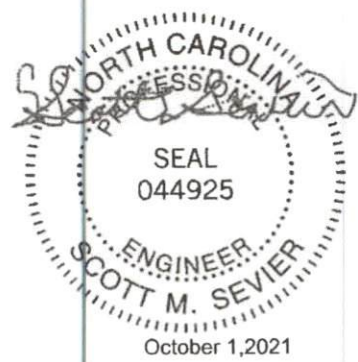
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20 244/190	MT20HS 187/143
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.77	Vert(LL) -0.16 10-11 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.42	Vert(CT) -0.32 10-11 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.05 10 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 224 lb	FT = 6%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-1 max.); 5-7.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 9-10: 2x4 SP No.2	WEBS 1 Row at midpt 6-12, 8-10
SLIDER Left 2x4 SP No.3 2-6-0	

REACTIONS. (size) 2=0-4-0, 10=Mechanical
 Max Horz 2=214(LC 9)
 Max Uplift 2=45(LC 10), 10=23(LC 11)
 Max Grav 2=1314(LC 3), 10=1282(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1631/72, 4-5=-1357/127, 5-6=-1056/114, 6-7=-1056/114, 7-8=-1253/114, 8-9=-365/46, 9-10=-323/54
BOT CHORD 2-15=-88/1265, 14-15=-88/1265, 12-14=-57/986, 11-12=0/909, 10-11=-10/870
WEBS 4-14=-388/141, 5-14=-22/456, 5-12=-115/254, 6-12=-338/114, 7-12=-104/387, 7-11=-11/302, 8-10=-1133/33

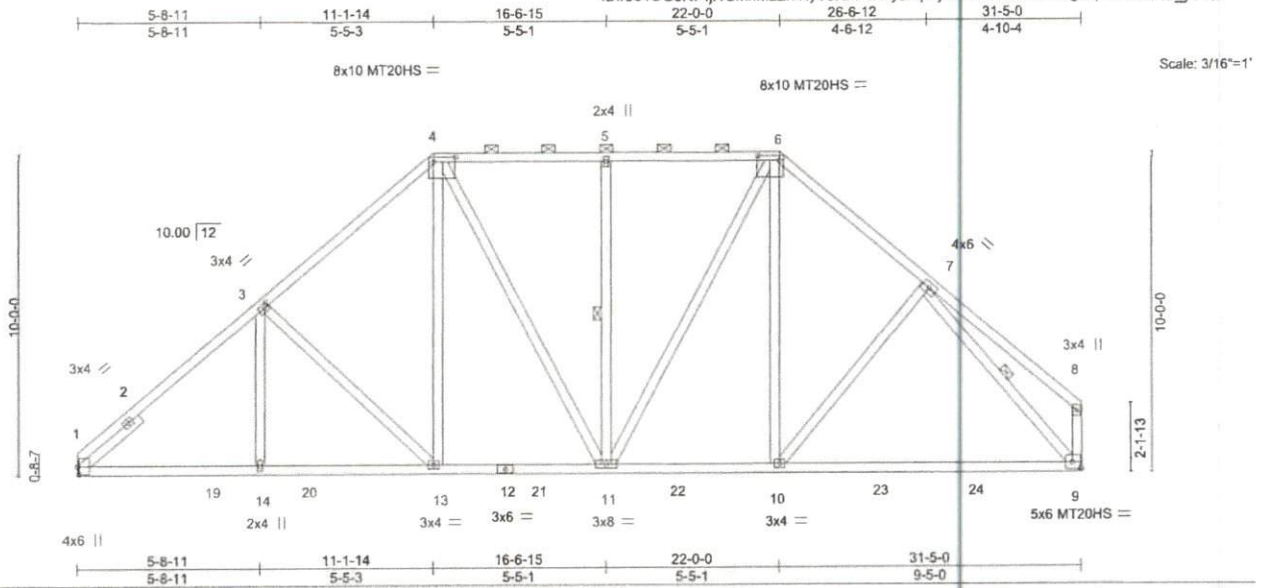
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
 - 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
 - This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.



Job DO210933	Truss CTSA	Truss Type Piggyback Base	Qty 6	Ply 1	DON GILMORE	48157179
-----------------	---------------	------------------------------	----------	----------	-------------	----------

Truss Builders, Inc., Morrisville, NC - 27560,

8 430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:51 2021 Page 1
ID:IC310G5R74jr1UmnaMazf7HyYoRf-F4R6yanqcejdVNr?BIR6ODNxYg4bphUrm?HD_yYTcl



Scale: 3/16"=1'

Plate Offsets (X,Y)- [1-0-3-0,0-0-8], [3-0-1-8,0-1-8], [4-0-8-4,0-2-0], [6-0-8-4,0-2-0], [9-Edge,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.79	Vert(LL) -0.16 9-10 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.43	Vert(CT) -0.32 9-10 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.05 9 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 222 lb	FT = 6%

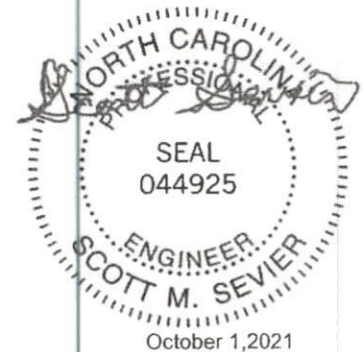
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
8-9: 2x4 SP No.2
SLIDER Left 2x4 SP No.3 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-10 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-1 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-11, 7-9

REACTIONS. (size) 1=Mechanical, 9=Mechanical
Max Horz 1=204(LC 9)
Max Uplift 1=33(LC 10), 9=23(LC 11)
Max Grav 1=1270(LC 3), 9=1286(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1635/73, 3-4=-1359/127, 4-5=-1057/114, 5-6=-1057/114, 6-7=-1255/114,
7-8=-369/46, 8-9=-325/54
BOT CHORD 1-14=-90/1269, 13-14=-90/1269, 11-13=-57/988, 10-11=0/911, 9-10=-10/872
WEBS 3-13=-392/142, 4-13=-22/458, 4-11=-115/254, 5-11=-338/114, 6-11=-104/388,
6-10=-11/304, 7-9=-1134/33

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; PF=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) All plates are MT20 plates unless otherwise indicated.
 - 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 3-6-0 tall by 1-0-0 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 100 lb uplift at joint(s) 1, 9.
 - 10) This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI7473 rev. 5/19/2026 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job DO210933	Truss CT6	Truss Type Piggyback Base	Qty 9	Ply 1	DON GILMORE	148157180
-----------------	--------------	------------------------------	----------	----------	-------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:54 2021 Page 1

ID:IC31OG5R74j1UmnMaZ77HyYoRF-gf7FacpvZ5CNraast?poR?QRu7w0_OHTztplyYTcF

0-10-8	3-10-15	7-6-7	11-1-14	17-10-0	22-0-0	24-10-0	31-5-0	32-3-8
0-10-8	3-10-15	3-7-7	3-7-7	6-8-2	4-2-0	2-10-0	6-7-0	0-10-8

Scale: 3/16"=1'

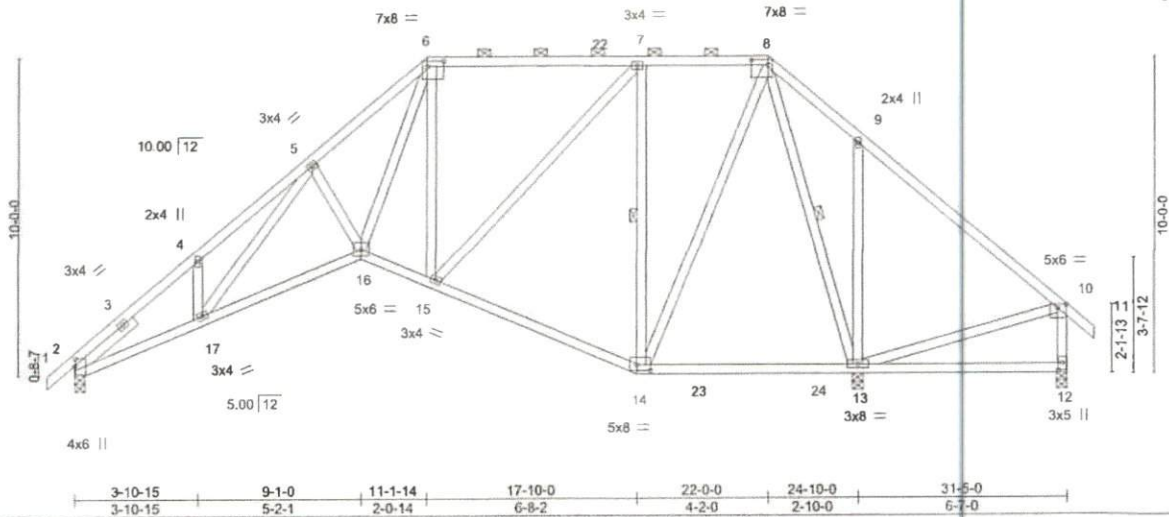


Plate Offsets (X, Y) - [2-0-2-11, 0-0-6], [6-0-6-4, 0-2-0], [8-0-6-4, 0-2-0], [10-0-3-4, 0-1-4], [12-0-2-12, 0-1-8], [14-0-5-4, 0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.69	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.68	Vert(LL) -0.11 13-14 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.70	Vert(CT) -0.19 16-17 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.13 12 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 228 lb	FT = 6%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.); 6-8. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-14.
BOT CHORD
WEBS 1 Row at midpt 7-14, 8-13

REACTIONS. (size) 2=0-4-0, 12=0-4-0, 13=0-4-0
Max Horz 2=219(LC 9)
Max Uplift 2=-35(LC 10), 12=-355(LC 26), 13=-48(LC 10)
Max Grav 2=911(LC 2), 12=99(LC 7), 13=1904(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1721/129, 4-5=-1673/250, 5-6=-1422/154, 6-7=-684/122, 7-8=-302/127, 8-9=-65/585, 9-10=-57/675, 10-12=-62/411
BOT CHORD 2-17=-198/1382, 16-17=-185/1270, 15-16=-117/755, 14-15=-72/341
WEBS 6-15=-501/123, 7-15=-70/580, 7-14=-799/165, 9-13=-360/217, 10-13=-554/108, 8-14=-63/888, 8-13=-1316/109, 5-16=-266/150, 6-16=-113/1125

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 2 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 100 lb uplift at joint(s) 2, 13 except (t=lb) 12=355.
 - This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.



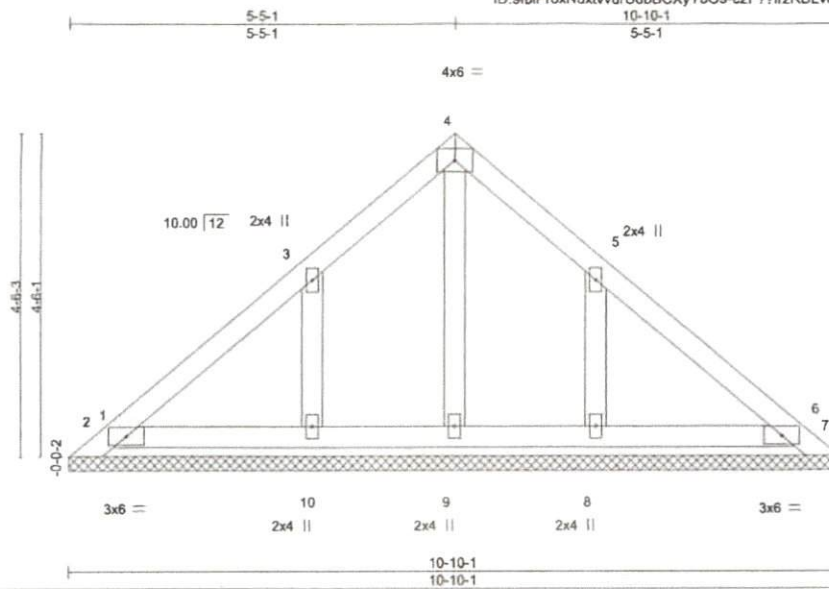
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-747's rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job DO210933	Truss PB1GE	Truss Type GABLE	Qty 2	Ply 1	DON GILMORE	148157181
-----------------	----------------	---------------------	----------	----------	-------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 Mitek Industries, Inc. Thu Sep 30 10:14:56 2021 Page 1
ID:9lbiProxNuxtvrUdbBCXyYo08-c2F??lrzRBLv9kzz11H5G4v5hzJU2sawHM2uByYTcd



Scale = 1:28.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/def	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) 15.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	6	n/a	n/a		
BCLL 0.0 *	Code IBC2015/TPI2014		Matrix-R						Weight: 47 lb	FT = 6%
BCDL 10.0										

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

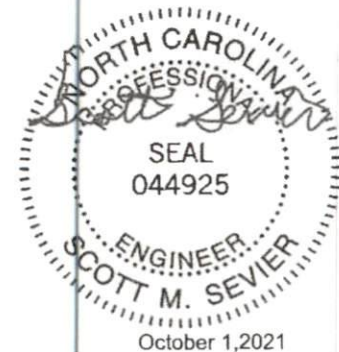
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 10-10-1.
(lb) - Max Horz 1=83(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 6, 10, 8 except 1=138(LC 22)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 6, 9, 10, 8 except 2=265(LC 22)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2, 6, 10, 8 except (jt=lb) 1=138.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

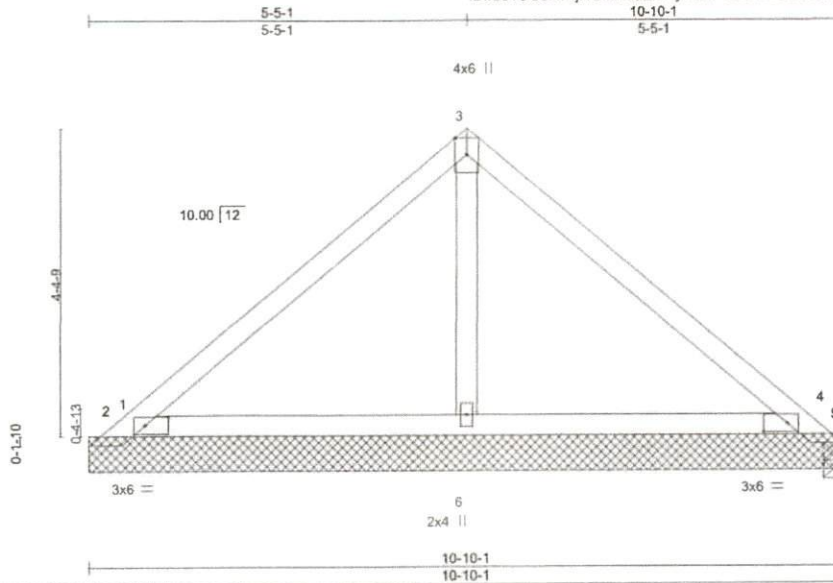
ENGINEERING BY
TRENCO
A MITEK AFFILIATE
818 Soundside Road
Edenton, NC 27932

Job DO210933	Truss PB2	Truss Type Piggyback	Qty 21	Ply 1	DON GILMORE	148157182
-----------------	--------------	-------------------------	-----------	----------	-------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:57 2021 Page 1

ID:IC31OG5R74jf1UmnMaZf7HyYoRf4EoOCesbBUUmEL9X0YWdUd0D5HeDUXj9x6bQdyYTcC



Scale = 1:29.3

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

LOADING (psf)	SPACING-	2-0-0	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof) 20.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	-0.01	4-6	>999	240	MT20	244/190
Snow (Pf) 15.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.01	4-6	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL 0.0	Code IBC2015/TPI2014		Matrix-R							
BCDL 10.0										

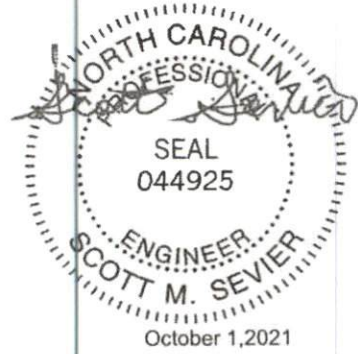
Weight: 41 lb FT = 6%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 10-10-1.
 (lb) - Max Horz 1=84(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) except 1=384(LC 22), 5=278(LC 27), 5=211(LC 1), 2=191(LC 10), 4=140(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=620(LC 22), 4=540(LC 27), 6=315(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=139/282

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCCL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 384 lb uplift at joint 1, 278 lb uplift at joint 5, 191 lb uplift at joint 2 and 140 lb uplift at joint 4.
 - 7) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
 - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

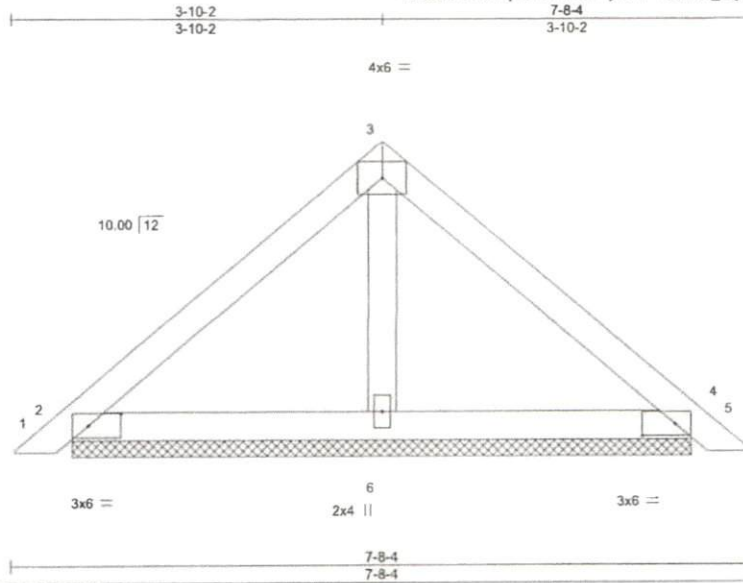


<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7173 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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 1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY TRENCO <small>A MiTek Affiliate</small></p> <p>818 Soundside Road Edenton, NC 27932</p>
---	--

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	
DO210933	PB3	Piggyback	12	1		148157183

Truss Builders, Inc., Morrisville, NC - 27560.

8.430 s Aug 16 2021 MITek Industries, Inc. Thu Sep 30 10:14:58 2021 Page 1
 ID:iC310G5R74j1UmnMaZf7HyYoRf-YQMmQ_idYocdsSul5j3lAh9EvVeCyyWlNbrz4yYTcB



Scale = 1:21.1

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

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	1-7-3	TC 0.15	Vert(LL)	0.00	5	n/r	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	0.01	5	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	4	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IBC2015/TPI2014						Weight: 28 lb	FT = 6%

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

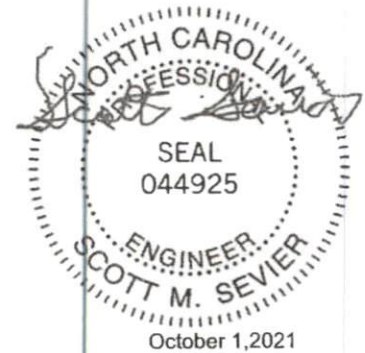
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=6-4-13, 4=6-4-13, 6=6-4-13
 Max Horz 2=46(LC 8)
 Max Uplift 2=17(LC 10), 4=23(LC 11)
 Max Grav 2=138(LC 2), 4=138(LC 2), 6=172(LC 2)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 2 and 23 lb uplift at joint 4.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 Rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
 A MITek Affiliate
 818 Soundside Road
 Edenonton, NC 27932

Job DO210933	Truss PB3GE	Truss Type Piggyback	Qty 1	Ply 1	DON GILMORE	148157184
-----------------	----------------	-------------------------	----------	----------	-------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:59 2021 Page 1
ID:IC31OG5R74Jf1UmnMaZf7HyYoRf0dw8dJtsj6kUUCtYfRa_jviPfv_RhPm0cFbiVWyYTCa

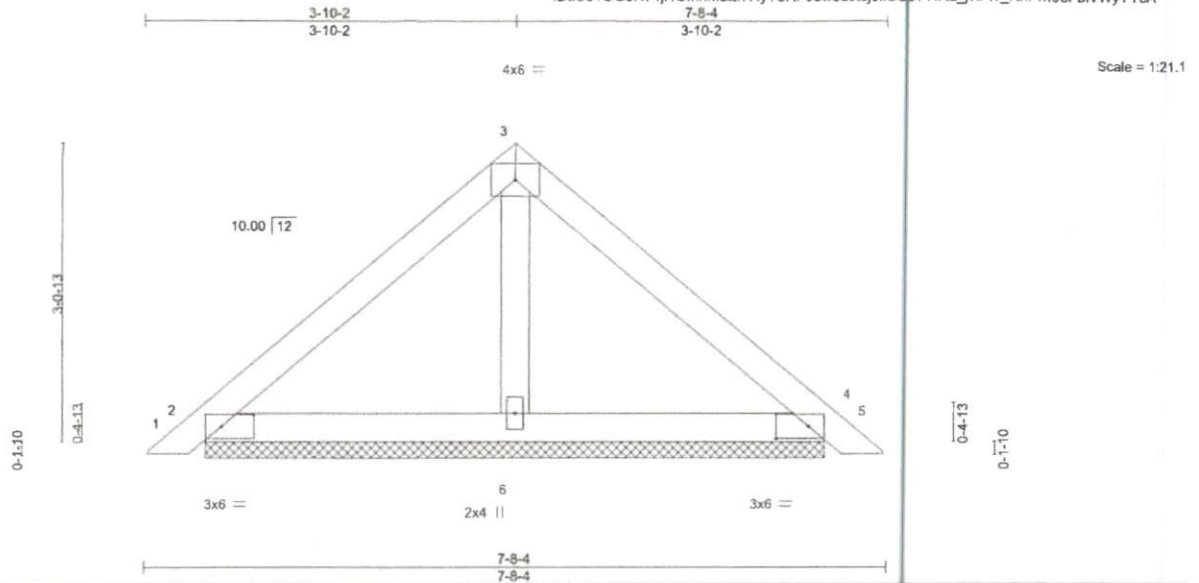


Plate Offsets (X,Y)-		[2-0-4-1,0-1-8], [4-0-4-1,0-1-8]										
LOADING (psf)		SPACING-	1-7-3	CSL		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	0.00	5	n/r	120	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.01	5	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code IBC2015/TPI2014		Matrix-P							Weight: 28 lb	FT = 6%
BCDL	10.0											

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=6-4-13, 4=6-4-13, 6=6-4-13
Max Horz 2=46(LC 8)
Max Uplift 2=17(LC 10), 4=23(LC 11)
Max Grav 2=138(LC 2), 4=138(LC 2), 6=172(LC 2)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 2 and 23 lb uplift at joint 4.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7-173 rev. 6/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
A MITEK COMPANY

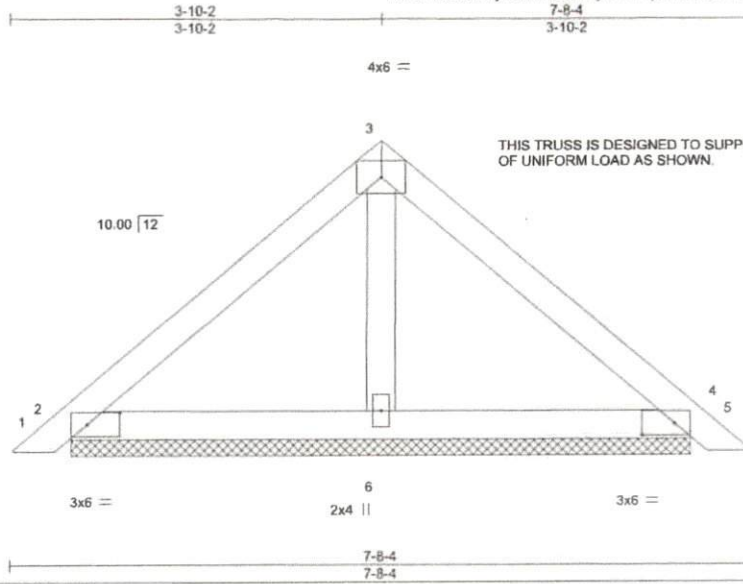
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	I48157185
DO210933	PB4	Piggyback	1	2	Job Reference (optional)	

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 Mitek Industries, Inc. Thu Sep 30 10:15:00 2021 Page 1

ID:IC31OG5R74jfr1UmnMazf7HyYoRf-VpUWrfuUUPsL5m2kC85DF6FbbIKKQsE9rvKG1yyYTc9



Scale = 1:21.1

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	1-7-3	TC 0.07	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) 0.00 5 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.01	Vert(CT) 0.00 5 n/r 120		
BCLL 0.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 56 lb	FT = 6%

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=6-4-13, 4=6-4-13, 6=6-4-13
 Max Horz 2=-46(LC 8)
 Max Uplift 2=-17(LC 10), 4=-23(LC 11)
 Max Grav 2=138(LC 2), 4=138(LC 2), 6=172(LC 2)

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

- NOTES-**
- 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: 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.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
 - Gable requires continuous bottom chord bearing.
 - 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 2 and 23 lb uplift at joint 4.
 - This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.

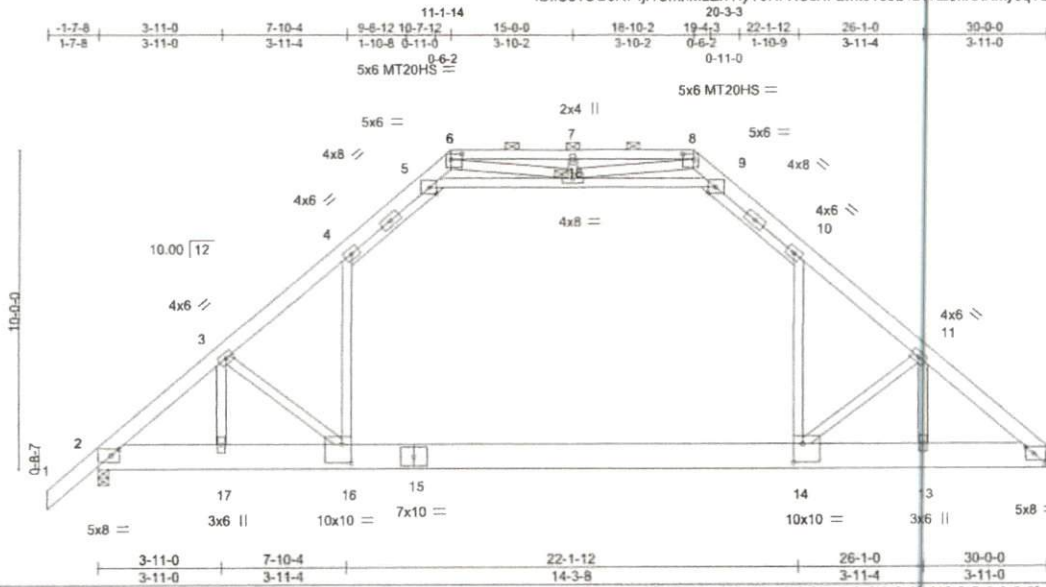


Job DO210933	Truss T1	Truss Type Attic	Qty 12	Ply 1	DON GILMORE	I48157186
-----------------	-------------	---------------------	-----------	----------	-------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:02 2021 Page 1

ID:IC310G5R74j1UmnaZf7HyYoRf-RCcHFLwk0163L4B7KZ8hKXKmy6qYuXPSiDpM6nyYTC7



Scale: 3/16"=1'

Plate Offsets (X,Y)- [2-0-3-3,0-2-8], [5-Edge,0-2-4], [6-0-4-4,0-2-0], [8-0-4-4,0-2-0], [9-Edge,0-2-4], [9-0-0-0,0-0-0], [10-0-0-0,0-0-0], [11-0-0-0,0-0-0], [12-0-3-3,0-2-8], [14-0-3-8-0-7-0], [16-0-3-8,0-7-0]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	1-7-3	TC 0.79	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.83	Vert(LL) -0.32 14-16 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.99	Vert(CT) -0.45 14-16 >801 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.02 12 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014		Attic -0.19 14-16 923 360	Weight: 280 lb	FT = 6%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
1-6,8-12: 2x6 SP No.1D
BOT CHORD 2x10 SP No.2
WEBS 2x4 SP No.3 *Except*
5-9: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.); 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 18

REACTIONS.

(size) 12=Mechanical, 2=0-4-0
Max Horz 2=160(LC 9)
Max Uplift 2=-5(LC 10)
Max Grav 12=1238(LC 3), 2=1306(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1685/1, 3-4=-1789/0, 4-5=-1135/50, 5-6=-25/698, 6-7=-22/1219, 7-8=-22/1219, 8-9=-23/697, 9-10=-1135/49, 10-11=-1791/0, 11-12=-1705/15
BOT CHORD 2-17=-50/1399, 16-17=-50/1399, 14-16=0/1192, 13-14=0/1337, 12-13=0/1337
WEBS 4-16=0/967, 5-18=-2136/109, 9-18=-2129/103, 10-14=0/968, 3-17=-401/69, 3-16=-322/163, 11-13=-392/71, 11-14=-346/176, 8-18=-261/382, 6-18=-257/384

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s), 4-5, 9-10, 5-18, 9-18
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-16
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 2.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

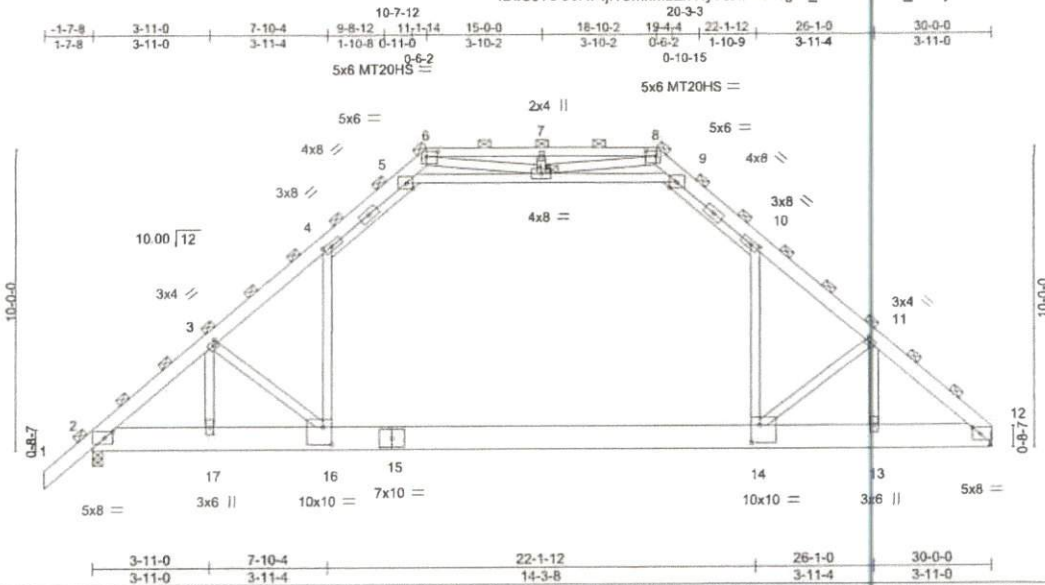
TRENCO
ENGINEERING BY
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	148157187
DO210933	TG1	ATTIC	1	2	Job Reference (optional)	

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:04 2021 Page 1

ID:IC310G5R74j1UmnMaZ7fHyYoRfNak1g1x_YeMnaLVR_AAQyP5SwVbMaelmXITAjyYtCs



Scale = 1:68.0

Plate Offsets (X,Y)- [2:0-3-3,0-2-8], [3:0-1-8,0-1-8], [4:0-3-8,0-1-8], [5:Edge,0-2-4], [6:0-4-4,0-2-0], [8:0-4-4,0-2-0], [9:Edge,0-2-4], [10:0-3-8,0-1-8], [11:0-1-8,0-1-8], [12:0-3-3-0-2-8], [14:0-3-8,0-7-0], [16:0-3-8,0-7-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	3-0-0	TC 0.85	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.85	Vert(LL) -0.30 14-16 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.43	Vert(CT) -0.42 14-16 >854 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-MR	Horz(CT) 0.02 12 n/a n/a		
BCDL 10.0	Code IBC2015/TP12014		Attic -0.17 14-16 984 360	Weight: 560 lb	FT = 6%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
 1-6,8-12: 2x6 SP No.10
BOT CHORD 2x10 SP No.2
WEBS 2x4 SP No.3 *Except*
 5-9: 2x4 SP No.2

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
 (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 6, 8, 18

REACTIONS. (size) 12=Mechanical, 2=0-4-0
 Max Horz 2=300(LC 9)
 Max Uplift 2=-9(LC 10)
 Max Grav 12=2322(LC 3), 2=2451(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3162/0, 3-4=-3355/0, 4-5=-2130/94, 5-6=-47/1309, 6-7=-42/2286, 7-8=-42/2286,
 8-9=-43/1309, 9-10=-2129/91, 10-11=-3358/0, 11-12=-3197/27
BOT CHORD 2-17=-93/2623, 16-17=-93/2623, 14-16=0/2236, 13-14=0/2504, 12-13=0/2504
WEBS 4-16=0/1812, 5-18=-4008/204, 9-18=-3993/194, 10-14=0/1815, 3-17=-748/130,
 3-16=-602/305, 11-13=-732/133, 11-14=-645/331, 7-18=-290/79, 8-18=-490/717,
 6-18=-481/721

- NOTES-**
- 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, 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
 Webs 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.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
 - 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Ceiling dead load (5.0 psf) on member(s) 4-5, 9-10, 5-18, 9-18
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room 14-16



October 1, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 5/18/2020 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 ANSIT/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	
DO210933	TG1	ATTIC	1	2	Job Reference (optional)	I48157187

Truss Builders, Inc., Morrisville, NC - 27560.

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:04 2021 Page 2
 ID:iC31OG5R74jf1UmnMaZf7HyYoRf-Nak1g1x_YeMnaLVR_AAQyP5SwVbMaelmXITAjyYtC5

NOTES-

- 13) Refer to girder(s) for truss to truss connections.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 2.
- 15) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TP1 1.
- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 17) Attic room checked for L/360 deflection.

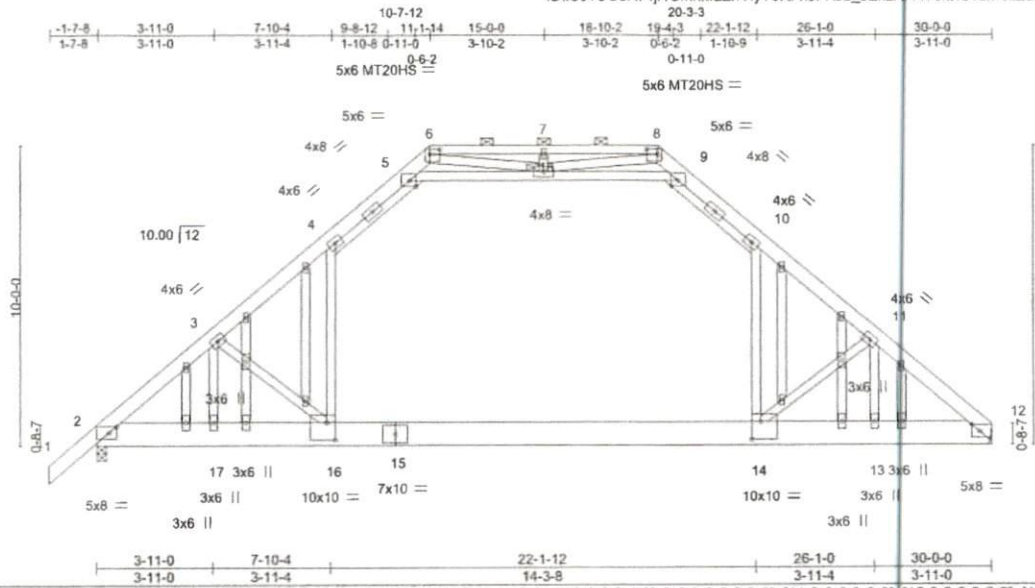
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev 5/19/2020 BEFORE USE
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job DO210933	Truss TGE1	Truss Type GABLE	Qty 1	Ply 1	DON GILMORE	I48157188
-----------------	---------------	---------------------	----------	----------	-------------	-----------

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:07 2021 Page 1
 ID:IC310G5R74f1UmnMaZ7fHyYoRf-n9PAJ2_trZkLR4476kt1b1dh7XizofBSVX7n2yYrC2



Scale = 1:68.4

Plate Offsets (X,Y)-- [2:0-3-3,0-2-8], [5:Edge,0-2-4], [6:0-4-4,0-2-0], [8:0-4-4,0-2-0], [9:Edge,0-2-4], [9:0-0-0,0-0-0], [10:0-0-0,0-0-0], [11:0-0-0,0-0-0], [12:0-3-3,0-2-8], [14:0-3-8,0-7-0], [16:0-3-8,0-7-0], [26:0-0-0,0-0-0], [27:0-0-0,0-0-0], [28:0-0-0,0-0-0], [30:0-0-0,0-0-0], [32:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	1-7-3	TC 0.79	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.83	Vert(LL) -0.32 14-16 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.99	Vert(CT) -0.45 14-16 >801 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.02 12 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014		Attic -0.19 14-16 923 360	Weight: 310 lb	FT = 6%

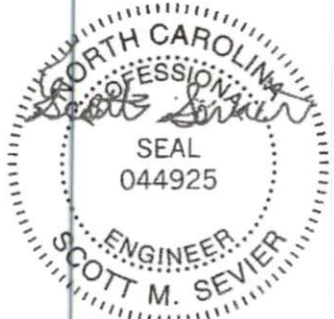
LUMBER-
 TOP CHORD 2x4 SP No.2 *Except*
 1-6,8-12: 2x6 SP No.1D
 BOT CHORD 2x10 SP No.2
 WEBS 2x4 SP No.3 *Except*
 5-9: 2x4 SP No.2
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.); 6-8.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 JOINTS 1 Brace at Jt(s): 18

REACTIONS. (size) 12=Mechanical, 2=0-4-0
 Max Horz 2=160(LC 9)
 Max Uplift 2=5(LC 10)
 Max Grav 12=1238(LC 3), 2=1306(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1685/1, 3-4=-1789/0, 4-5=-1135/50, 5-6=-25/698, 6-7=-22/1219, 7-8=-22/1219, 8-9=-23/697, 9-10=-1135/49, 10-11=-1791/0, 11-12=-1705/15
 BOT CHORD 2-17=-50/1399, 16-17=-50/1399, 14-16=0/1192, 13-14=0/1337, 12-13=0/1337
 WEBS 4-16=0/967, 5-18=-2136/109, 9-18=-2129/103, 10-14=0/968, 3-17=-401/69, 3-16=-322/163, 11-13=-392/71, 11-14=-346/176, 8-18=-261/382, 6-18=-257/384

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 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=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-18, 9-18
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-16
 - Refer to girder(s) for truss to truss connections.
 - Provide a mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 2.



October 1, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7173 Rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	
DO210933	TGE1	GABLE	1	1		148157188
						Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560.

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:07 2021 Page 2
 ID:IC310G5R74jf1UmnMaZf7HyYoRF-n9PAJ2_trZkLR4476kt1b1dh7XiZofBSVX7n2yYTc2

NOTES-

- 16) This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

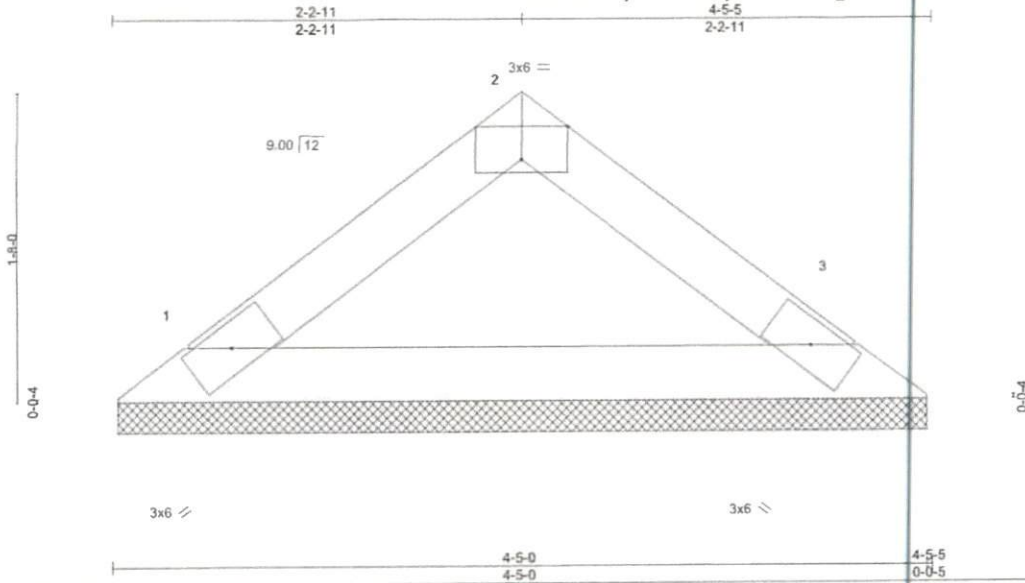
Job	Truss	Truss Type	Qty	Ply	DON GILMORE	148157189
DO210933	V1	Valley	2	1	Job Reference (optional)	

Truss Builders, Inc., Morrisville, NC - 27560.

8.430 s Aug 16 2021 MiTek Industries, Inc.

Thu Sep 30 10:15:08 2021 Page 1

ID:iC31OG5R74j1UmnMaZ7fHyYoRF-GMzYWO_VctsC37fGqF6aoo_uX1QITNLh9GhJvYt1



Scale = 1:11.1

Plate Offsets (X,Y)-- [2-0-3-0,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 0.05	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf) 15.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCLL 0.0	Code IBC2015/TPI2014		Matrix-P					Weight: 13 lb	FT = 6%
BCDL 10.0									

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

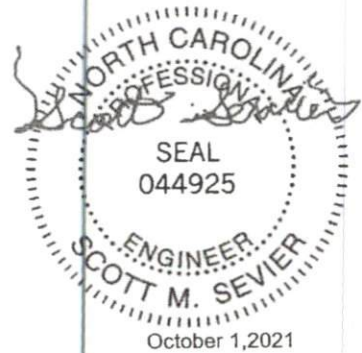
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-5-5 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-4-11, 3=4-4-11
 Max Horz 1=-2(LC 6)
 Max Uplift 1=-2(LC 10), 3=-2(LC 11)
 Max Grav 1=143(LC 2), 3=143(LC 2)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Gable requires continuous bottom chord bearing.
- 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 1 and 2 lb uplift at joint 3.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



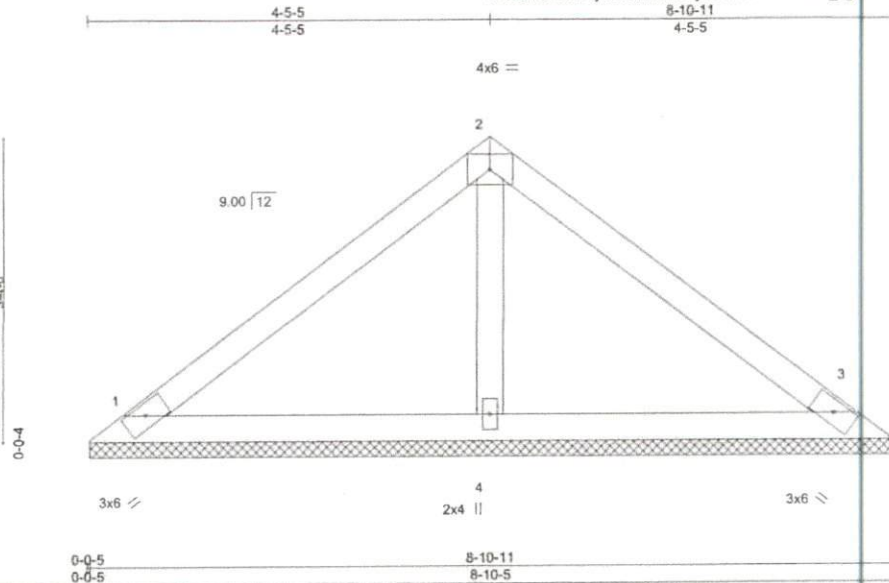
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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, DSB-69 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	148157190
DO210933	V2	Valley	2	1	Job Reference (optional)	

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:09 2021 Page 1
 ID:IC31OG5R74j1UmnMaZl7HyYoRf-kYXwkk77NA_3g8EETEXmL7064cxNX1wwUvp0ExyYTc0



Scale = 1:22.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.31	Vert(LL) n/a	-	n/a	999	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT) 0.00	3	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IBC2015/TPI2014						Weight: 32 lb	FT = 6%

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

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

REACTIONS. (size) 1=8-10-0, 3=8-10-0, 4=8-10-0
 Max Horz 1=-58(LC 6)
 Max Uplift 1=-20(LC 10), 3=-27(LC 11)
 Max Grav 1=179(LC 2), 3=179(LC 2), 4=284(LC 2)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Gable requires continuous bottom chord bearing.
- 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 1 and 27 lb uplift at joint 3.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



Job	Truss	Truss Type	Qty	Ply	DON GILMORE	148157191
DO210933	V3	Valley	1	1		

Truss Builders, Inc., Morrisville, NC - 27560.

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:10 2021 Page 1
ID:iC31OG5R74jf1UmnMaZf7HyYoRf-Ck5x40f8U6wllfoEHafDfGBKdUmNte8TtnONyYTC?

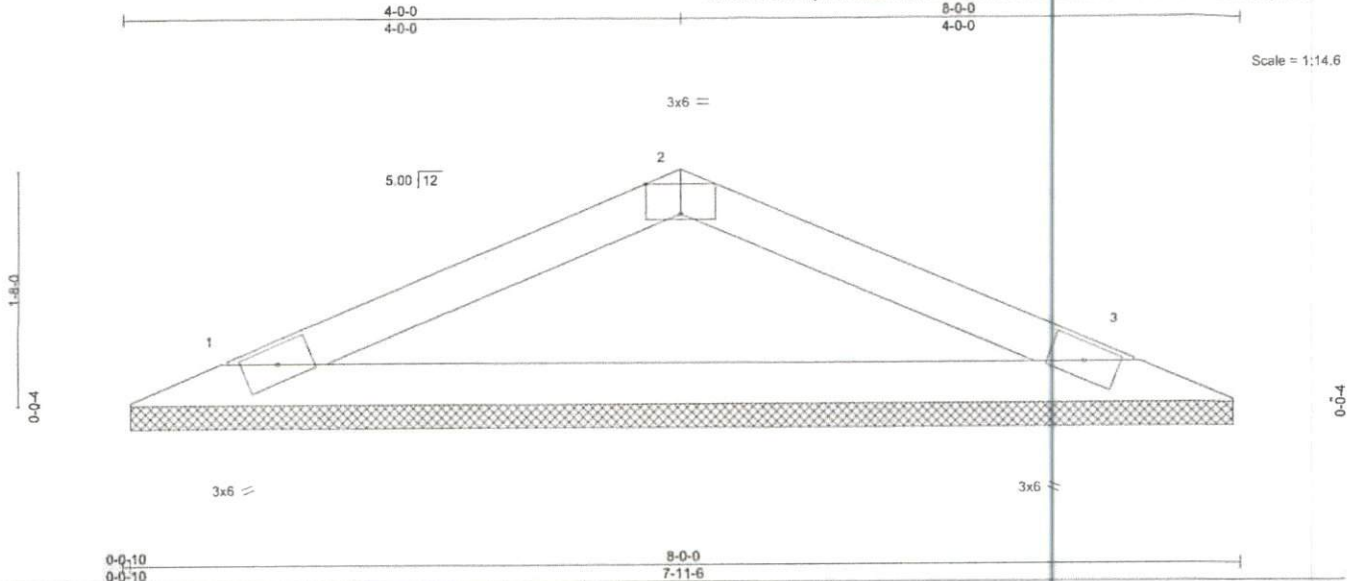


Plate Offsets (X, Y) - [2-0-3-0, Edge]		8-0-0 7-11-6				PLATES	GRIP
LOADING (psf)		SPACING-	2-0-0	CSI.			
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.56		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00		
BCLL	0.0	Code	IBC2015/TPI2014	Matrix-P		Weight: 22 lb	FT = 6%
BCDL	10.0						

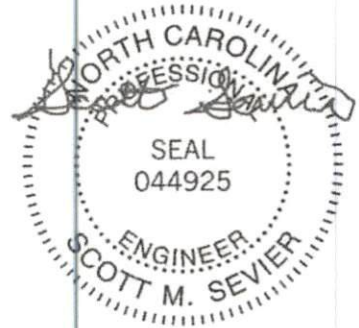
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

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

REACTIONS. (size) 1=7-10-13, 3=7-10-13
Max Horz 1=18(LC 17)
Max Uplift 1=8(LC 12), 3=8(LC 13)
Max Grav 1=260(LC 2), 3=260(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=282/60, 2-3=282/60

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1 and 8 lb uplift at joint 3.
 - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



October 1, 2021

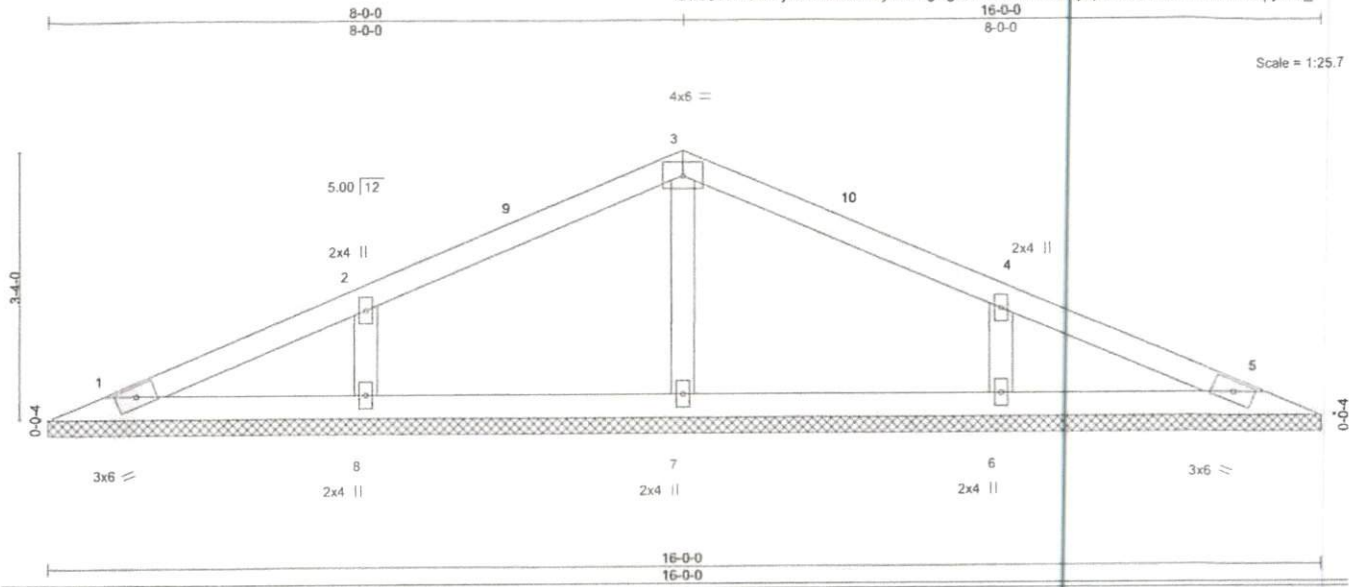
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY TRENCO <small>A MITEK COMPANY</small></p> <p>818 Soundside Road Edenton, NC 27932</p>
--	---

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	48157192
DO210933	V4	GABLE	1	1		

Truss Builders, Inc., Morrisville, NC - 27560,

8:430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:11 2021 Page 1
 ID:IC31OG5R74j1UmnMaZf7HyYoRf-gxfg8Q1NuoEnwSNrMyyopCRCSEk4qVqEnN7VLwpyYTc_

Scale = 1:25.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP	
TCLL (roof) 20.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf) 15.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCLL 0.0	Code	IBC2015/TPI2014	Matrix-R							
BCDL 10.0										

Weight: 54 lb FT = 6%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 16-0-0.
 (lb) - Max Horz 1=40(LC 17)
 Max Uplift All uplift 100 lb or less at joint(s) 5, 8, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=303(LC 2), 8=333(LC 29), 6=333(LC 30)

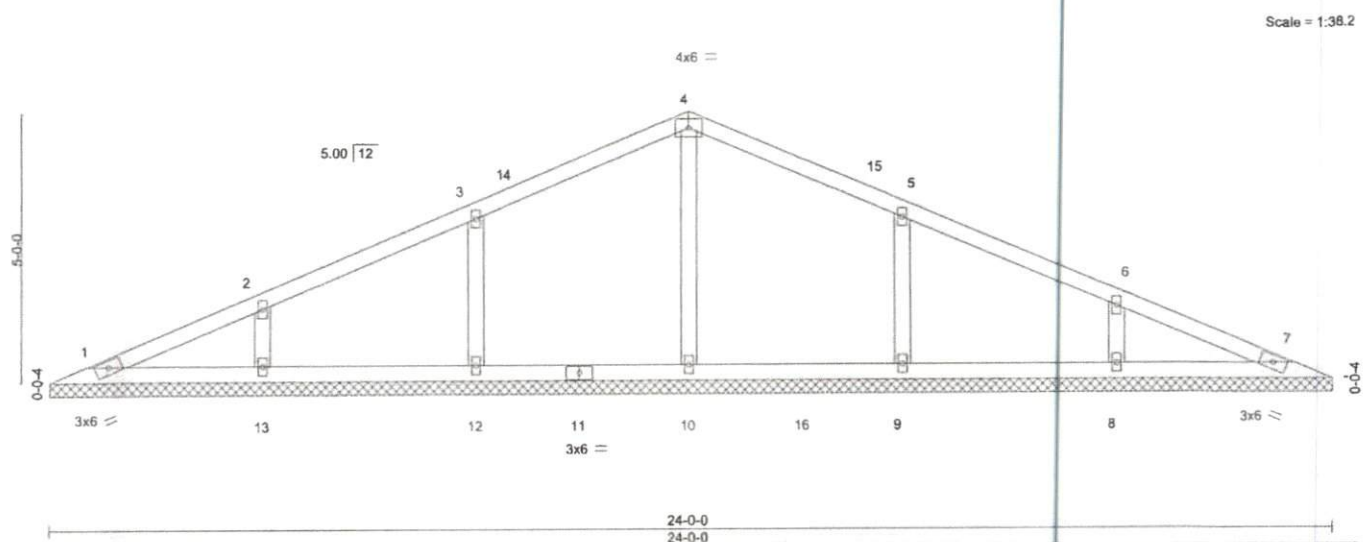
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Gable requires continuous bottom chord bearing.
 - 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 3-6-0 tall by 1-0-0 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 100 lb uplift at joint(s) 5, 8, 6.
 - 9) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



Job	Truss	Truss Type	City	Ply	DON GILMORE	148157193
DO210933	V5	GABLE	1	1		

Truss Builders, Inc., Morrisville, NC
 ID:IC31OG5R74jf1UmnMaZf7HyYcRf-tbMDWJkWB9LdSPwzFEXJF6JWwgT1Fwh7KexSSyXmSa
 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Oct 1 13:37:13 2021 Page 1
 24-0-0 24-0-0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.14	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.10	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 7 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 90 lb	FT = 6%

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

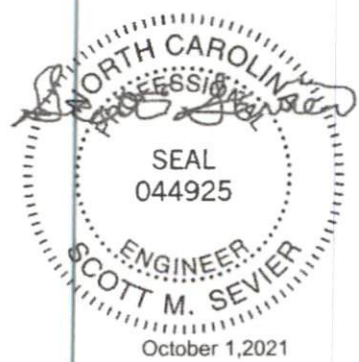
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 24-0-0.
 (lb) - Max Horz 1=61(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 12, 13, 9, 8
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=372(LC 3), 12=331(LC 29), 13=322(LC 2), 9=331(LC 30), 8=322(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-12=252/99, 5-9=252/99

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - 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 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 13, 9, 8.

- LOAD CASE(S)**
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=50, 4-7=50, 1-7=20
 - Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=60, 4-7=60, 1-7=20
 - Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=50, 4-7=50, 1-11=20, 11-16=50, 7-16=20
 - Dead + 0.75 Snow (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=42, 4-7=43, 1-11=20, 11-16=50, 7-16=20



Continued on page 2

WARNING- Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 (REV. 5/19/2020) 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 ANSITP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
 A MiTek Alliance
 818 Soundside Road
 Edenon, NC 27932

Job	Truss	Truss Type	City	Ply	DON GILMORE	148157193
DO210933	V5	GABLE	1	1		

Truss Builders, Inc., Morrisville, NC

8.430 + Aug 16 2021 MiTek Industries, Inc. Fri Oct 1 13:37:13 2021 Page 2
 ID:IC310G5R74jf1UmnMaZf7HyYoRf-IsMDWJkIW89Ld3PwzFEXJF6JWwgT1Fwh7KexSSyXmSa

LOAD CASE(S)

- 5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-14=-42, 4-14=-55, 4-7=-27, 1-11=-20, 11-16=-50, 7-16=-20
- 6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-27, 4-15=-55, 7-15=-43, 1-11=-20, 11-16=-50, 7-16=-20
- 7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-4=-20, 4-7=-20, 1-7=-40
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=10, 4-7=8, 1-7=-12
 Horiz: 1-4=22, 4-7=20
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=8, 4-7=10, 1-7=-12
 Horiz: 1-4=-20, 4-7=22
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=7, 4-7=-9, 1-7=-20
 Horiz: 1-4=-13, 4-7=11
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=9, 4-7=-7, 1-7=-20
 Horiz: 1-4=-11, 4-7=13
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=18, 4-7=5, 1-7=-12
 Horiz: 1-4=-30, 4-7=17
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=5, 4-7=18, 1-7=-12
 Horiz: 1-4=-17, 4-7=30
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=9, 4-7=1, 1-7=-12
 Horiz: 1-4=-21, 4-7=13
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=1, 4-7=9, 1-7=-12
 Horiz: 1-4=-13, 4-7=21
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=2, 4-7=-12, 1-7=-20
 Horiz: 1-4=-22, 4-7=8
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=-12, 4-7=2, 1-7=-20
 Horiz: 1-4=8, 4-7=22
- 18) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-14=-50, 4-14=-67, 4-7=-29, 1-7=-20
- 19) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-29, 4-15=-67, 7-15=-50, 1-7=-20
- 20) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-4=-20, 4-7=-20, 1-11=-20, 11-16=-60, 7-16=-20
- 21) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=-33, 4-7=-34, 1-11=-20, 11-16=-50, 7-16=-20
 Horiz: 1-4=-10, 4-7=8
- 22) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=-34, 4-7=-33, 1-11=-20, 11-16=-50, 7-16=-20
 Horiz: 1-4=-8, 4-7=10
- 23) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=-26, 4-7=-36, 1-11=-20, 11-16=-50, 7-16=-20
 Horiz: 1-4=-16, 4-7=6
- 24) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33

Continued on page 3

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE AN-243 Rev. 5/19/2020 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-1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	I48157193
DO210933	VS	GABLE	1	1	Job Reference (optional)	

Truss Builders, Inc., Morrisville, NC

8.430 s Aug 16 2021 MIT Industries, Inc. Fri Oct 1 13:37:13 2021 Page 3
 ID:IC310GSR74jf1UmnMaz7HyYoRI-tsMDWJkWB9Ld3PwzFEXJF6JWwgT1Fwh7KexSSyXmSa

LOAD CASE(S)

- Uniform Loads (plf)
 Vert: 1-4=-36, 4-7=-26, 1-11=-20, 11-16=-50, 7-16=-20
 Horz: 1-4=6, 4-7=16
- 25) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=-40, 4-7=-42, 1-11=-20, 11-16=-50, 7-16=-20
 Horz: 1-4=10, 4-7=8
- 26) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=-42, 4-7=-40, 1-11=-20, 11-16=-50, 7-16=-20
 Horz: 1-4=8, 4-7=10
- 27) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=-34, 4-7=-44, 1-11=-20, 11-16=-50, 7-16=-20
 Horz: 1-4=16, 4-7=6
- 28) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-4=-44, 4-7=-34, 1-11=-20, 11-16=-50, 7-16=-20
 Horz: 1-4=6, 4-7=16
- 29) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-60, 4-7=-20, 1-7=-20
- 30) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-20, 4-7=-60, 1-7=-20
- 31) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-50, 4-7=-20, 1-11=-20, 11-16=-50, 7-16=-20
- 32) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-20, 4-7=-50, 1-11=-20, 11-16=-50, 7-16=-20

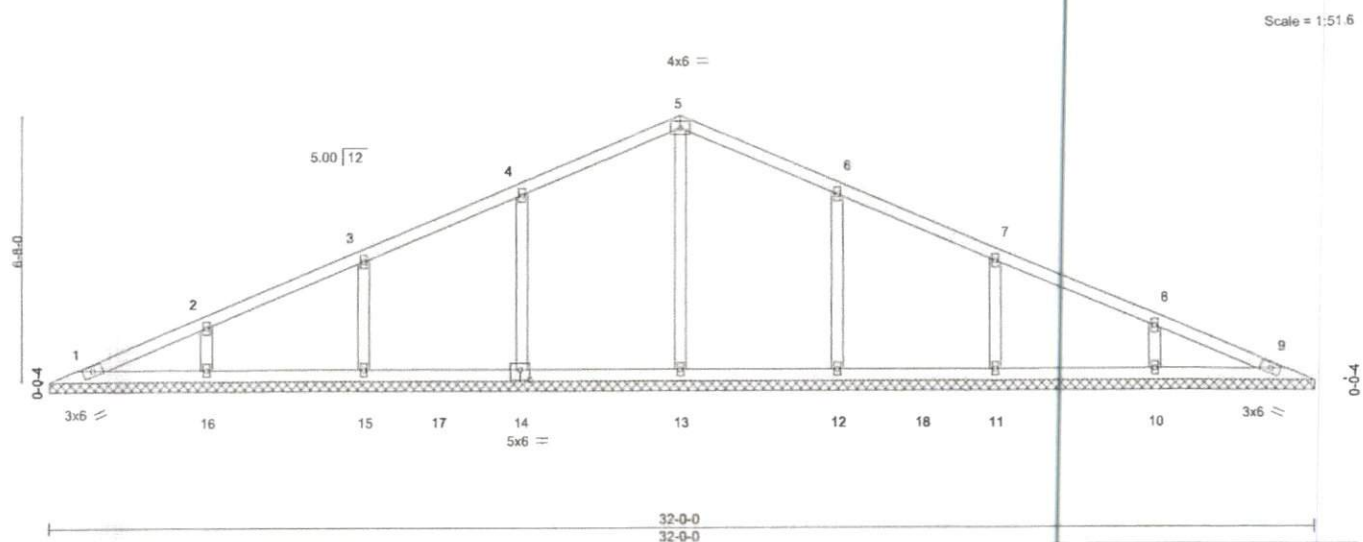
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 5/19/2020 BEFORE USE
 Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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 ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenonton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	148157194
DO210933	V6	GABLE	1	1		

Truss Builders, Inc., Morrisville, NC
 8.430 s Aug 16 2021 M/Tek Industries, Inc. Fri Oct 1 13:38:02 2021 Page 1
 ID:iC31OG5R74jf1UrnMaZf7HyYcRf-xHpk03LT_CK00_eLL2c0aeh8gOV0OtUOS01f7yXmRp



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	2-0-0	Plate Grip DOL	1.15	TC	in	(loc)	V/defl	L/d	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.17	Vert(LL)	n/a	-	n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Vert(CT)	n/a	-	n/a		
BCLL	0.0	Code	IBC2015/TP12014	Matrix-R		Horz(CT)	0.00	9	n/a		
BCDL	10.0									Weight: 130 lb	FT = 6%

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

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

REACTIONS. All bearings 32-0-0.
 (lb) - Max Horz 1=83(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 14, 15, 16, 12, 11, 10
 Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 13=392(LC 28), 14=406(LC 5), 15=319(LC 2), 16=323(LC 29), 12=405(LC 6), 11=320(LC 2), 10=323(LC 30)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 4-14=-257/97, 6-12=-256/97

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - 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'-6" tall by 1'-0" 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 100 lb uplift at joint(s) 1, 14, 15, 16, 12, 11, 10.

- LOAD CASE(S)**
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-50, 5-9=-50, 1-9=-20
 - Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-60, 5-9=-60, 1-9=-20
 - Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-50, 5-9=-50, 1-17=-20, 17-18=-50, 9-18=-20
 - Dead + 0.75 Snow (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15



October 1, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED M/TEK REFERENCE PAGE MH-7473 rev. 5/18/2020 BEFORE USE. Design valid for use only with M/TEK® 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 ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
 A M/TEK Alliance
 818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	
DO210933	V6	GABLE	1	1		48157194

Truss Builders, Inc., Morrisville, NC

8.430 s Aug 16 2021 MITek Industries, Inc. Fri Oct 1 13:38:02 2021 Page 2

ID:IC310G5R74jf1UmnMaZf7HyYoRf-xHpko3LT_CK00_aLL2c0aah8gOV0OtuOS01f7yXmRp

LOAD CASE(S)

- Uniform Loads (plf)
 - Vert: 1-5=-43, 5-9=-43, 1-17=-20, 17-18=-50, 9-18=-20
- 5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-4=-43, 4-5=-59, 5-9=-27, 1-17=-20, 17-18=-50, 9-18=-20
- 6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-5=-27, 5-6=-59, 6-9=-42, 1-17=-20, 17-18=-50, 9-18=-20
- 7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
 - Uniform Loads (plf)
 - Vert: 1-5=-20, 5-9=-20, 1-9=-40
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=10, 5-9=8, 1-9=-12
 - Horz: 1-5=-22, 5-9=20
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=8, 5-9=10, 1-9=-12
 - Horz: 1-5=-20, 5-9=22
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=-7, 5-9=-9, 1-9=-20
 - Horz: 1-5=-13, 5-9=11
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=9, 5-9=-7, 1-9=-20
 - Horz: 1-5=-11, 5-9=13
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=18, 5-9=5, 1-9=-12
 - Horz: 1-5=-30, 5-9=17
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=5, 5-9=18, 1-9=-12
 - Horz: 1-5=-17, 5-9=30
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=9, 5-9=1, 1-9=-12
 - Horz: 1-5=-21, 5-9=13
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=1, 5-9=9, 1-9=-12
 - Horz: 1-5=-13, 5-9=21
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=-2, 5-9=-12, 1-9=-20
 - Horz: 1-5=-22, 5-9=8
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=-12, 5-9=2, 1-9=-20
 - Horz: 1-5=-8, 5-9=22
- 18) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-4=-50, 4-5=-72, 5-9=-29, 1-9=-20
- 19) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-5=-29, 5-6=-72, 6-9=-50, 1-9=-20
- 20) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
 - Uniform Loads (plf)
 - Vert: 1-5=-20, 5-9=-20, 1-17=-20, 17-18=-60, 9-18=-20
- 21) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=-33, 5-9=-34, 1-17=-20, 17-18=-50, 9-18=-20
 - Horz: 1-5=-10, 5-9=8
- 22) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=-34, 5-9=-33, 1-17=-20, 17-18=-50, 9-18=-20
 - Horz: 1-5=-8, 5-9=10
- 23) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
 - Uniform Loads (plf)
 - Vert: 1-5=-26, 5-9=-36, 1-17=-20, 17-18=-50, 9-18=-20
 - Horz: 1-5=-16, 5-9=6

Continued on page 3

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH-7173 rev. 5/19/2020 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 ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DON GILMORE	
DQ210933	V6	GABLE	1	1		148157194

Truss Builders, Inc., Morrisville, NC

8.430 s Aug 16 2021 MITek Industries, Inc. Fri Oct 1 13:38:02 2021 Page 3
 ID:IC310G5R74jf1UmnMaZf7HyYoRf-xHpko3LT_CK00_eLL2c0eah8gOV00tuOS01f7yXmRp

LOAD CASE(S)

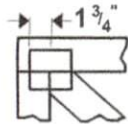
- 24) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-5=-36, 5-9=-26, 1-17=-20, 17-18=-50, 9-18=-20
 Horz: 1-5=-6, 5-9=16
- 25) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-5=-40, 5-9=-42, 1-17=-20, 17-18=-50, 9-18=-20
 Horz: 1-5=-10, 5-9=8
- 26) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-5=-42, 5-9=-40, 1-17=-20, 17-18=-50, 9-18=-20
 Horz: 1-5=-8, 5-9=10
- 27) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-5=-34, 5-9=-44, 1-17=-20, 17-18=-50, 9-18=-20
 Horz: 1-5=-16, 5-9=6
- 28) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33
 Uniform Loads (plf)
 Vert: 1-5=-44, 5-9=-34, 1-17=-20, 17-18=-50, 9-18=-20
 Horz: 1-5=-6, 5-9=16
- 29) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-60, 5-9=-20, 1-9=-20
- 30) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-20, 5-9=-60, 1-9=-20
- 31) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-50, 5-9=-20, 1-17=-20, 17-18=-50, 9-18=-20
- 32) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-20, 5-9=-50, 1-17=-20, 17-18=-50, 9-18=-20

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 ANSIT/PHI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

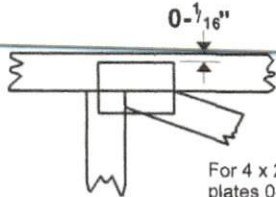
ENGINEERING BY
TRENCO
 A TRUSS AUTHORITY
 818 Soundside Road
 Edenton, NC 27932

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- $\frac{1}{16}$ " 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

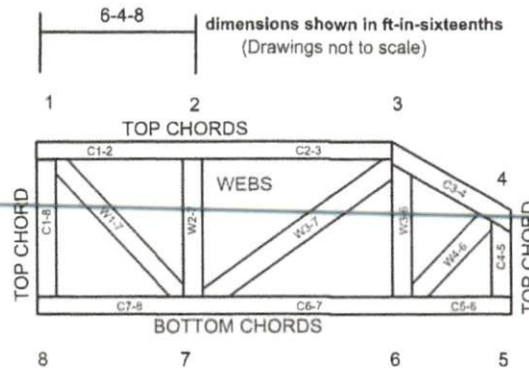


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

© 2012 MiTek® All Rights Reserved



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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.