ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

RE: JobNumber2075761 - H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC

Site Information:

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

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

Design Code: IRC2015/TPI2014
Design Program: MiTek 20/20 8.2
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-10
Roof Load: 40.0 psf
Floor Load: N/A psf

Mean Roof Height (feet): 25
Exposure Category: C

No.	Seal#	Truss Name	Date
1	I38499903	A01	9/13/19
2	I38499904	A02	9/13/19
3	I38499905	A03	9/13/19
4	I38499906	A04	9/13/19
5	I38499907	A06	9/13/19
6	I38499908	A07	9/13/19
7	I38499909	A07A	9/13/19
8	I38499910	A08	9/13/19
9	I38499911	B01	9/13/19
10	I38499912	B02	9/13/19
11	I38499913	B03	9/13/19
12	I38499914	C01	9/13/19
13	I38499915	C02	9/13/19
14	I38499916		9/13/19
	I38499917	C04	9/13/19
16	I38499918	D01	9/13/19
17	I38499919		9/13/19
18	I38499920	D03	9/13/19
19	I38499921	D04	9/13/19
20	I38499922	D05	9/13/19
21	I38499923	D06	9/13/19
22	I38499924	D07	9/13/19
23	I38499925	J01	9/13/19
	I38499926	J02	9/13/19
25	I38499927	J03	9/13/19
26	I38499928	J04	9/13/19

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Sumter,SC.

Truss Design Engineer's Name: Sevier, Scott
My license renewal date for the state of North Carolina is December 31, 2019.

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.

September 13,2019
Sevier, Scott

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	A01	GABLE	1	1	I38499903 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:36 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-4yMYPxXDU3VpZNMNoA1ymh5W?v4UzJUY2cgybbyeRH5

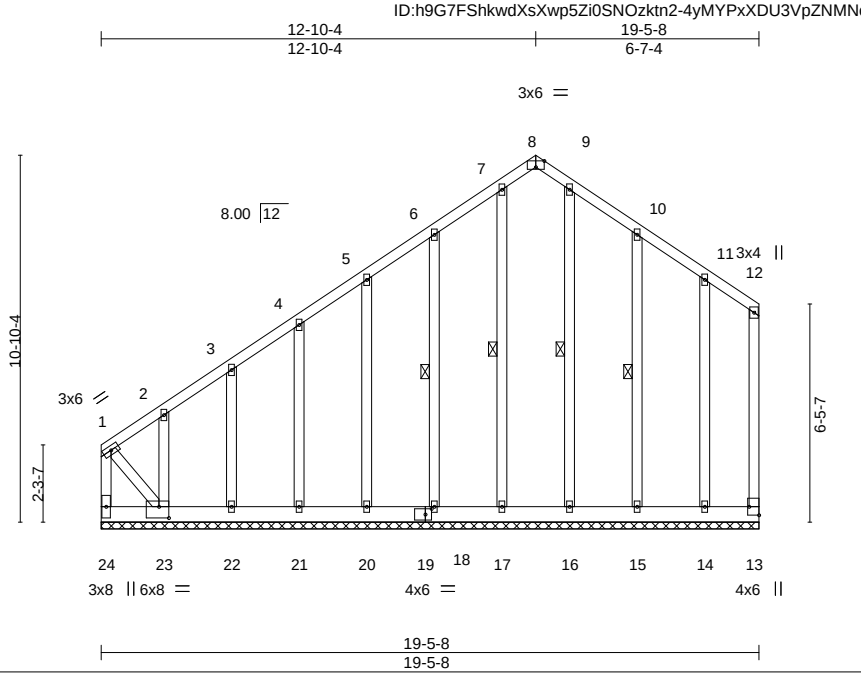


Plate Offsets (X,Y)-- [8:0-3-0,Edge], [13:Edge,0-3-8], [19:0-2-3,0-2-0], [23:0-3-8,0-4-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	-0.00	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 186 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 7-17, 6-18, 9-16, 10-15

REACTIONS. All bearings 19-5-8.
(lb) - Max Horz 24=452(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 13, 20, 16, 14 except 24=-468(LC 10), 17=-104(LC 11), 18=-137(LC 12), 21=-103(LC 12), 22=-104(LC 12), 23=-451(LC 9), 15=-138(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 13, 17, 18, 20, 21, 22, 16, 15, 14 except 24=620(LC 9), 23=478(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-382/315, 2-3=-354/287, 3-4=-330/280, 4-5=-305/275, 5-6=-281/275, 6-7=-326/386, 7-8=-259/299, 8-9=-258/298, 9-10=-327/387, 10-11=-230/272, 1-24=-600/481
BOT CHORD 23-24=-432/419
WEBS 1-23=-472/533

NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 12-10-4, Corner(3) 12-10-4 to 15-10-4, Exterior(2) 15-10-4 to 19-3-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be User Defined crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 20, 16, 14 except (jt=lb) 24=468, 17=104, 18=137, 21=103, 22=104, 23=451, 15=138.
12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	A02	Common	5	1	I38499904 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:37 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-Y8wwcHYrFMdgAXxZLtYBJuehFIKfig6iGGQV81yeRH4

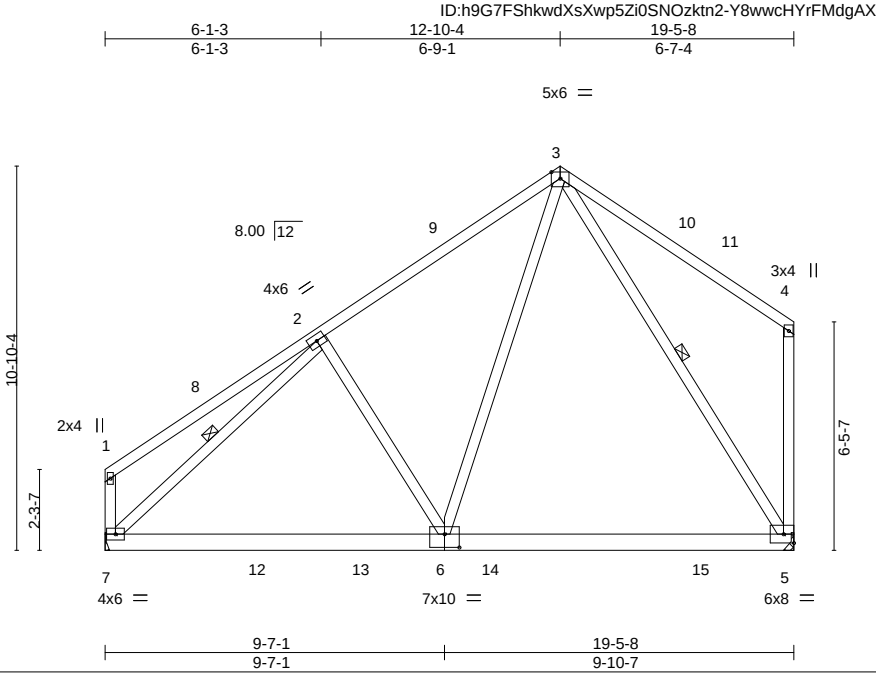


Plate Offsets (X,Y)-- [6:0-5-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.12	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.18	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	6	>999	240	Weight: 147 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-7, 3-5

REACTIONS. (lb/size) 7=767/Mechanical, 5=767/Mechanical
Max Horz 7=314(LC 12)
Max Uplift 7=-157(LC 12), 5=-237(LC 12)
Max Grav 7=832(LC 19), 5=884(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-751/269, 4-5=-259/209
BOT CHORD 6-7=-374/758, 5-6=-122/408
WEBS 2-6=-353/377, 3-6=-189/685, 2-7=-766/86, 3-5=-742/224

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 12-10-4, Exterior(2) 12-10-4 to 15-10-4, Interior(1) 15-10-4 to 19-3-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Bearings are assumed to be: Joint 7 User Defined crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=157, 5=237.
8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	A03	Common	3	1	I38499905 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:38 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-0KUJqdZT0glWohVlvb3Qr6As3igXR9KrVw93gTyeRH3

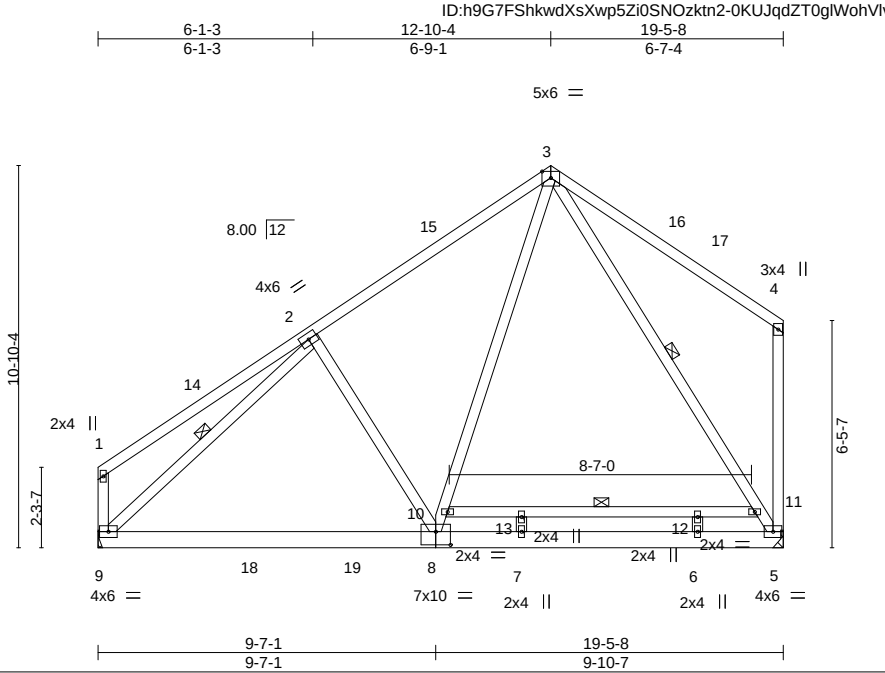


Plate Offsets (X,Y)-- [8:0-5-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.07	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.18	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	8	>999	240	Weight: 161 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
10-11: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-9, 3-5, 10-11

REACTIONS. (lb/size) 9=817/Mechanical, 5=917/Mechanical
Max Horz 9=314(LC 12)
Max Uplift 9=-107(LC 12), 5=-87(LC 12)
Max Grav 9=831(LC 19), 5=917(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-806/186, 4-5=-263/206
BOT CHORD 8-9=-315/754, 7-8=-75/443, 6-7=-75/443, 5-6=-75/443
WEBS 2-8=-335/396, 8-10=-97/658, 3-10=-83/676, 2-9=-797/0, 3-11=-735/163, 5-11=-796/125

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 12-10-4, Exterior(2) 12-10-4 to 15-10-4, Interior(1) 15-10-4 to 19-3-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 14-6-5 from left end, supported at two points, 5-0-0 apart.
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 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearings are assumed to be: Joint 9 User Defined crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 9=107.
9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	A04	Common	1	1	I38499906 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:39 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-UX1h1zZ5n_tNQq4xTIbfOJj036ubAUT_kavcCvyeRH2

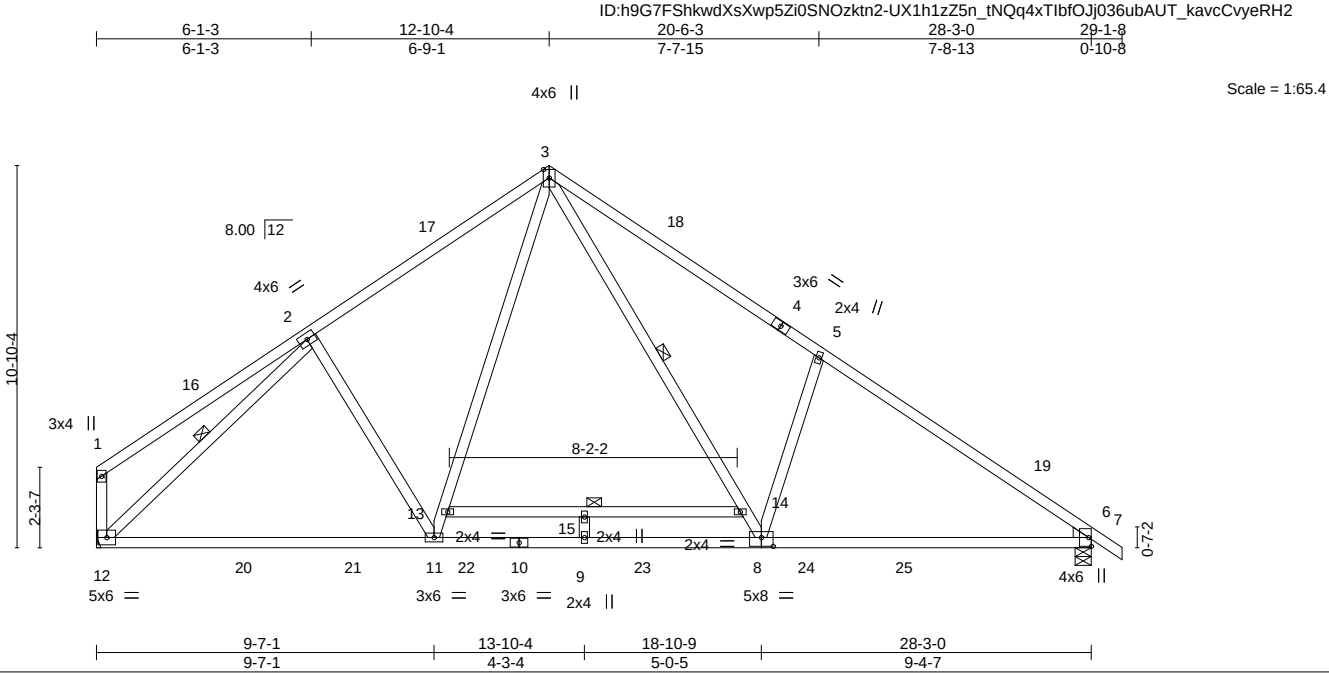


Plate Offsets (X,Y)-- [6:0-0-10,0-4-6], [6:0-0-5,0-0-7], [8:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.25	11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.40	11-12	>841	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.12	6-8	>999	240	Weight: 175 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1 *Except* 1-3: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 13-14: 2x4 SP No.2
WEDGE
Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-8, 2-12, 13-14

REACTIONS. (lb/size) 12=1221/Mechanical, 6=1275/0-5-8
Max Horz 12=-351(LC 8)
Max Uplift 12=-150(LC 12), 6=-224(LC 13)
Max Grav 12=1221(LC 1), 6=1291(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1400/280, 3-5=-1775/418, 5-6=-1748/223
BOT CHORD 11-12=-173/1193, 9-11=0/966, 8-9=0/966, 6-8=-45/1329
WEBS 2-11=-206/379, 11-13=-102/540, 3-13=-74/563, 3-14=-316/941, 8-14=-336/903, 5-8=-544/480, 2-12=-1331/105

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 12-10-4, Exterior(2) 12-10-4 to 15-10-4, Interior(1) 15-10-4 to 29-1-8 zone; cantilever right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 13-0-0 from left end, supported at two points, 5-0-0 apart.
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 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be User Defined crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=150, 6=224.
9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	A06	Common	3	1	I38499907 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:40 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-yjb3FJajYH0E1_f8106uwXGGQWEEvxj8yEe9kMyeRH1

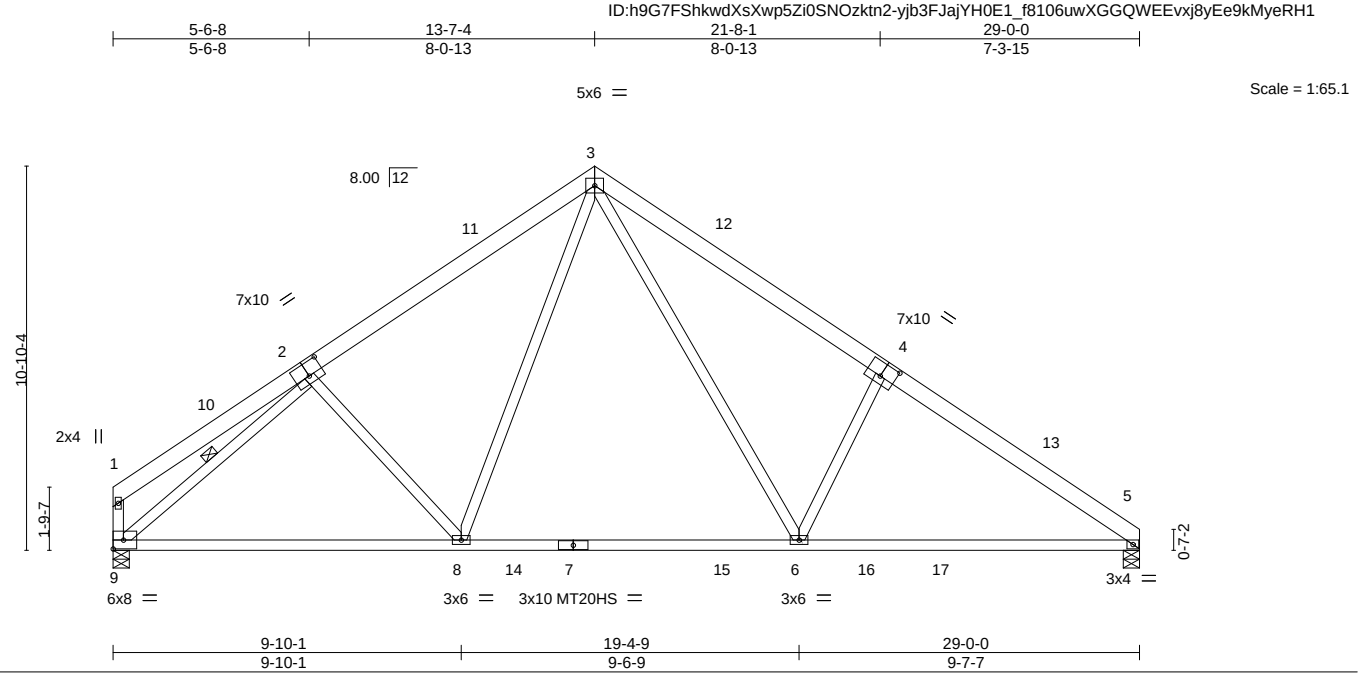


Plate Offsets (X,Y)-- [2:0-5-0,0-4-8], [4:0-5-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.37	6-8	>916	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.48	6-8	>719	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	5-6	>999	240	Weight: 188 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
1-9: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.
WEBS 1 Row at midpt 2-9

REACTIONS. (lb/size) 9=1145/0-5-8, 5=1145/0-5-8
Max Horz 9=-343(LC 8)
Max Uplift 9=-271(LC 12), 5=-288(LC 13)
Max Grav 9=1159(LC 19), 5=1213(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1332/436, 3-4=-1614/549, 4-5=-1720/427
BOT CHORD 8-9=-385/1275, 6-8=-81/942, 5-6=-230/1332
WEBS 2-8=-300/373, 3-8=-166/513, 3-6=-342/895, 4-6=-542/462, 2-9=-1306/351

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-7-4, Exterior(2) 13-7-4 to 16-7-4, Interior(1) 16-7-4 to 28-9-4 zone; cantilever right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
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 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=271, 5=288.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	A07	Common	3	1	I38499908 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:41 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-Rv9RSfbLJb85f8EKajd7TkoRCwZYeO5HBuOjHoyeRH0

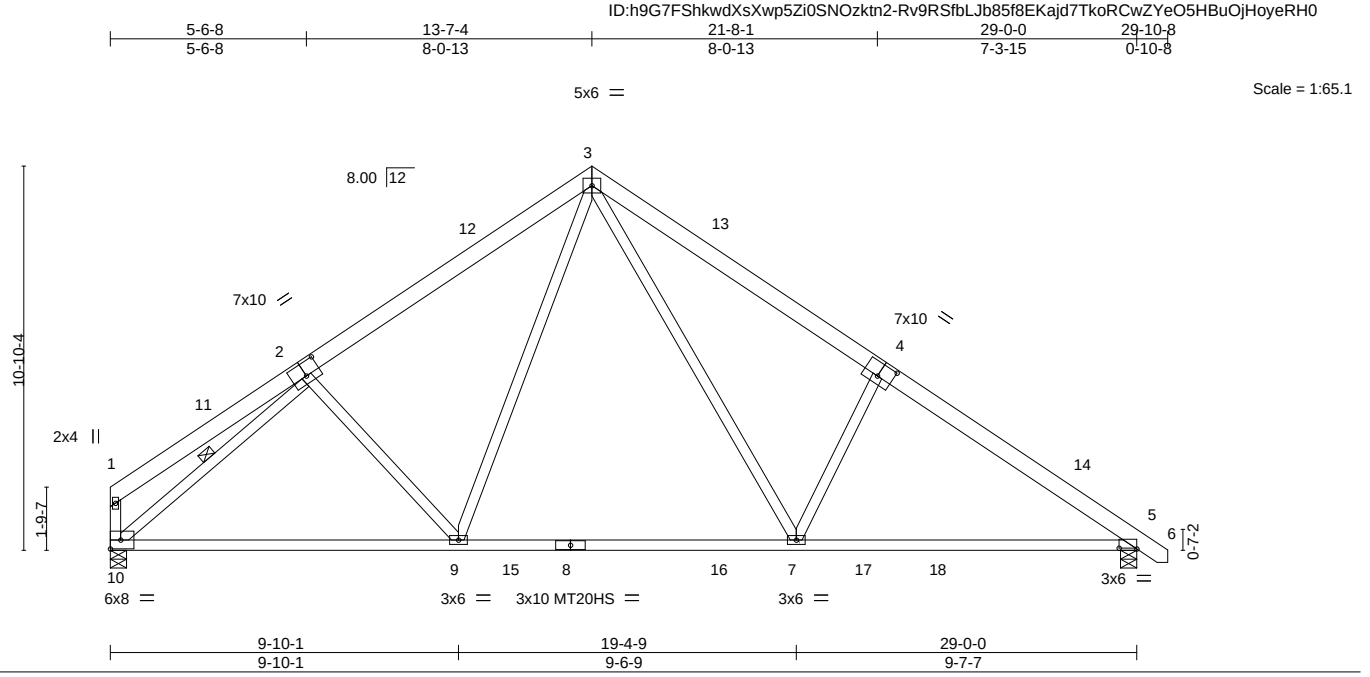


Plate Offsets (X,Y)-- [2:0-5-0,0-4-8], [4:0-5-0,0-4-8], [5:0-6-0,0-0-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.37	7-9	>916	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.48	7-9	>717	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	5-7	>999	240	Weight: 190 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
1-10: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 2-10

REACTIONS. (lb/size) 10=1144/0-5-8, 5=1203/0-5-8
Max Horz 10=-350(LC 8)
Max Uplift 10=-271(LC 12), 5=-319(LC 13)
Max Grav 10=1159(LC 19), 5=1270(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1333/436, 3-4=-1616/547, 4-5=-1716/423
BOT CHORD 9-10=-378/1280, 7-9=-74/946, 5-7=-217/1325
WEBS 2-9=-300/373, 3-9=-166/513, 3-7=-339/890, 4-7=-544/458, 2-10=-1306/347

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-7-4, Exterior(2) 13-7-4 to 16-7-4, Interior(1) 16-7-4 to 29-8-11 zone; cantilever right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
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 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=271, 5=319.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	A07A	COMMON	2	1	I38499909 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:42 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-v6jpf?c_4vGyHIpW8R8M0yLafJ_wNtHRQX7GpEyeRH?

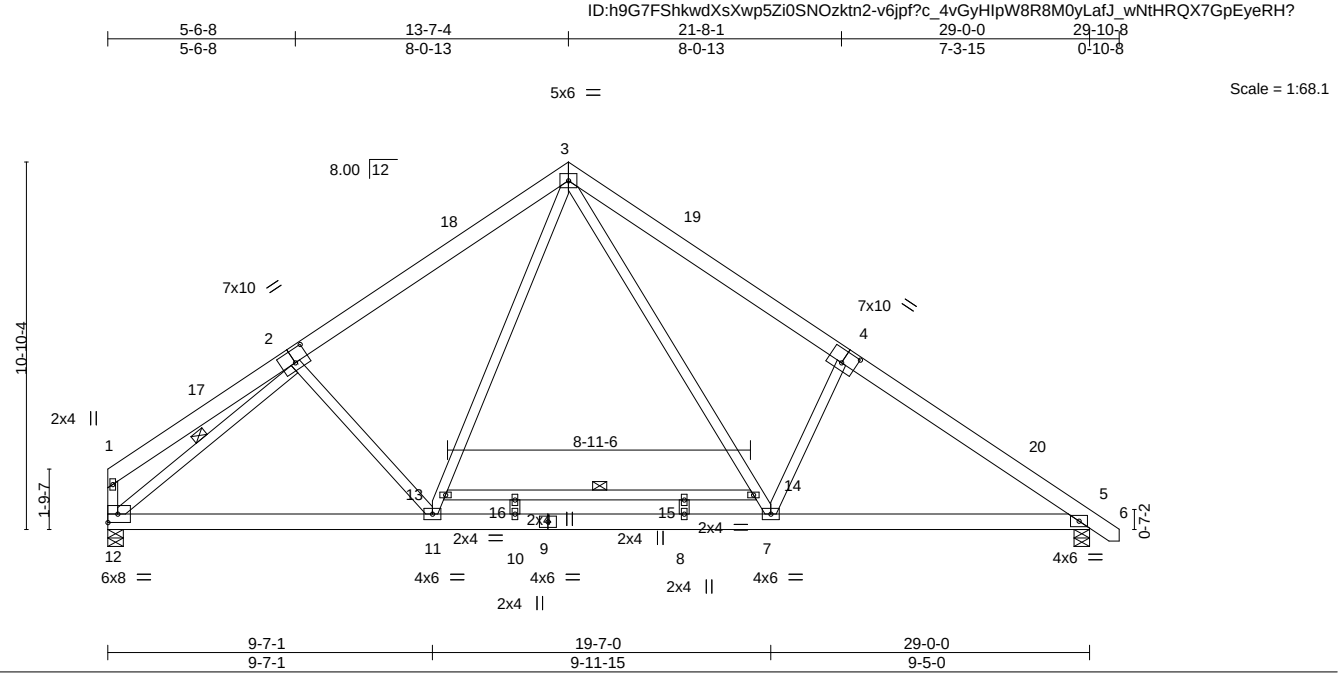


Plate Offsets (X,Y)-- [2:0-5-0,0-4-8], [4:0-5-0,0-4-8]

LOADING (psf)		SPACING-	2-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.07	11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.21	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	5-7	>999	240	Weight: 229 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
1-12,13-14: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-12, 13-14

REACTIONS. (lb/size) 12=1434/0-5-8, 5=1504/0-5-8
Max Horz 12=-407(LC 8)
Max Uplift 12=-217(LC 12), 5=-273(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1742/351, 3-4=-2116/461, 4-5=-2147/304, 1-12=-257/131
BOT CHORD 11-12=-330/1493, 10-11=0/1143, 8-10=0/1143, 7-8=0/1143, 5-7=-98/1665
WEBS 2-11=-330/471, 11-13=-115/593, 3-13=-101/645, 3-14=-288/1080, 7-14=-299/1017, 4-7=-623/541, 2-12=-1654/214

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-7-4, Exterior(2) 13-7-4 to 16-7-4, Interior(1) 16-7-4 to 29-8-11 zone; cantilever right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 14-6-5 from left end, supported at two points, 5-0-0 apart.
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 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 12=217, 5=273.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

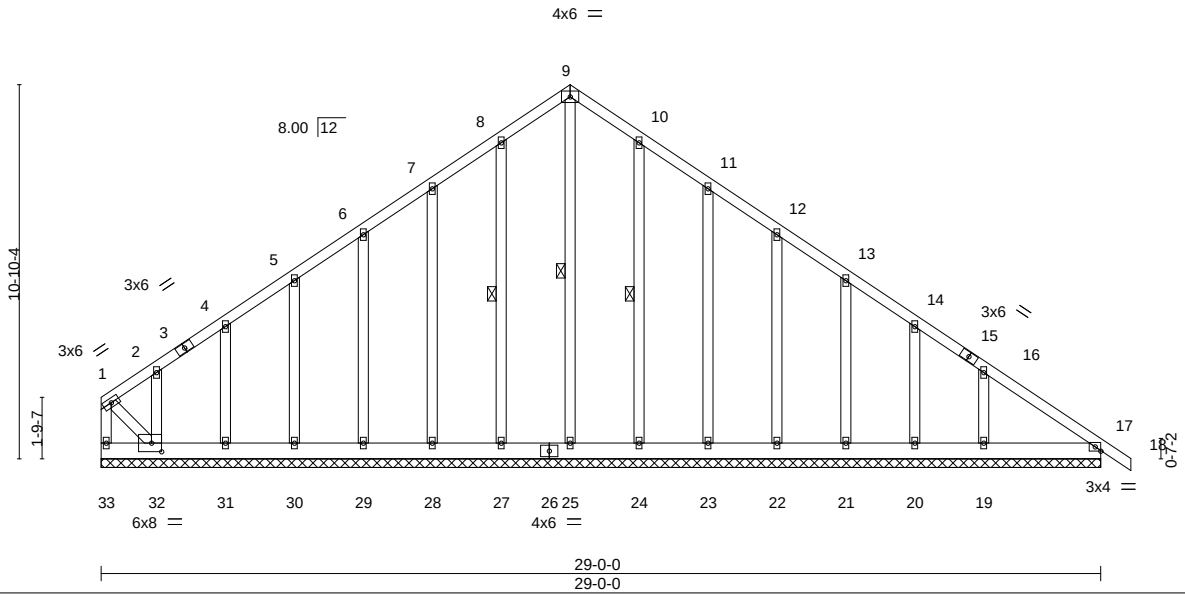
Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	A08	Common Supported Gable	1	1	I38499910 Job Reference (optional)

Builders First Source, Sumter SC

8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:44 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-rUra4gdEcWWgWczvGrAq5NQ_07pprxNktrcNs7yeRGz

13-7-4 | 29-0-0 | 29-10-8
13-7-4 | 15-4-12 | 0-10-8

Scale = 1:66.8



29-0-0
29-0-0

Plate Offsets (X,Y)-- [32:0-3-8,0-3-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	0.00	17	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	18	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	17	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 239 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 9-25, 8-27, 10-24

REACTIONS. All bearings 29-0-0.
(lb) - Max Horz 33=-383(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 27, 24, 20, 17 except 33=-287(LC 10), 28=-108(LC 12), 29=-102(LC 12), 30=-102(LC 12), 31=-105(LC 12), 32=-340(LC 12), 23=-109(LC 13), 22=-100(LC 13), 21=-109(LC 13), 19=-187(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 17 except 33=384(LC 12), 25=251(LC 13), 32=334(LC 10), 19=306(LC 20)

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

TOP CHORD	1-33=-373/288, 1-2=-284/212, 8-9=-265/307, 9-10=-265/307, 16-17=-293/191
BOT CHORD	32-33=-333/362, 31-32=-200/311, 30-31=-200/311, 29-30=-200/311, 28-29=-200/311, 27-28=-200/311, 25-27=-200/311, 24-25=-200/311, 23-24=-200/311, 22-23=-200/311, 21-22=-200/311, 20-21=-200/311, 19-20=-200/311, 17-19=-200/311
WEBS	1-32=-278/335

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 13-7-4, Corner(3) 13-7-4 to 16-7-4, Exterior(2) 16-7-4 to 29-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 24, 20, 17 except (jt=lb) 33=287, 28=108, 29=102, 30=102, 31=105, 32=340, 23=109, 22=100, 21=109, 19=187.

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	B01	ATTIC	1	1	I38499911 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:45 2019 Page 1

ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-JhPyI0esNqeX8lY5pZh3daz_MX1XaL7t6VMwPZyeRGy

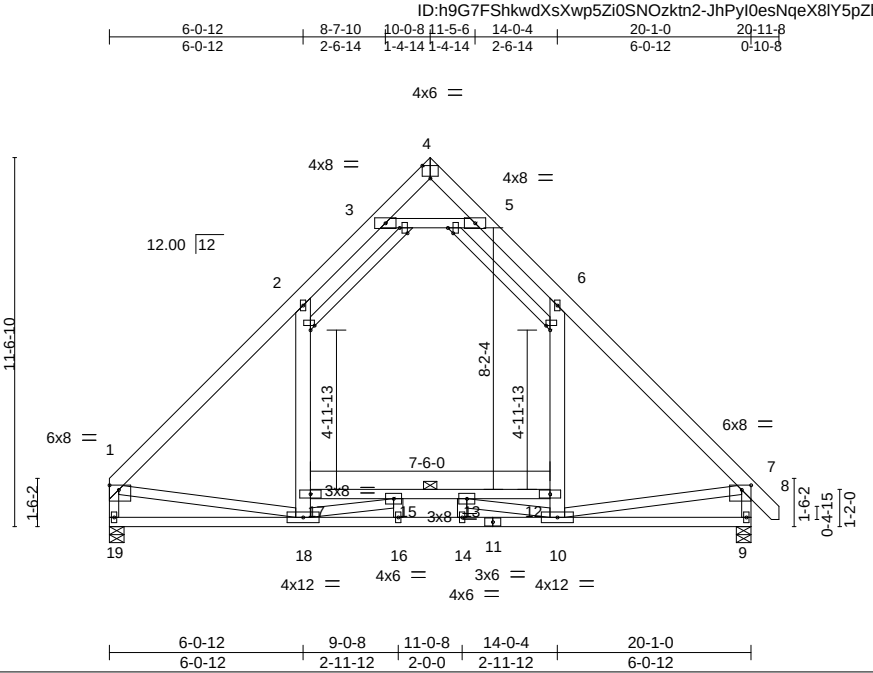


Plate Offsets (X,Y)-- [1:Edge,0-1-12], [4:0-3-0,Edge], [7:0-3-8,0-1-12], [20:0-2-0,Edge], [21:0-1-8,0-1-12], [22:0-2-0,Edge], [23:0-1-8,0-1-12]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.12	15-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.23	15-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.17	18	>999	240	Weight: 191 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except* 20-21,22-23: 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3 *Except* 6-10,2-18: 2x6 SP No.2, 3-5,1-19,7-9: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-10-14 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 9-0-13 oc bracing. Except: 5-7-0 oc bracing: 12-17

REACTIONS. (lb/size) 19=1013/0-5-8, 9=1068/0-5-8
Max Horz 19=-407(LC 10)
Max Uplift 19=-22(LC 13), 9=-29(LC 12)
Max Grav 19=1184(LC 21), 9=1216(LC 20)

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

TOP CHORD 1-2=-1287/85, 2-3=-737/236, 3-4=-118/435, 4-5=-119/433, 5-6=-736/234, 6-7=-1291/92, 1-19=-1131/121, 7-9=-1164/176

BOT CHORD 18-19=-402/547, 16-18=0/1826, 14-16=0/1826, 10-14=0/1826, 9-10=-165/337, 15-17=-457/383, 13-15=-1098/0, 12-13=-467/404

WEBS 10-12=0/339, 6-12=0/547, 17-18=-5/329, 2-17=0/536, 3-5=-1454/508, 1-18=0/714, 7-10=-17/694, 15-18=-1199/210, 10-13=-1206/187

NOTES- (11)

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-1-9 to 3-1-9, Exterior(2) 3-1-9 to 10-0-8, Corner(3) 10-0-8 to 13-0-8, Exterior(2) 13-0-8 to 20-10-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
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 2-0-0 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (5.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).6-12, 2-17
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 15-17, 13-15, 12-13
8) All bearings are assumed to be User Defined crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 9.
10) Attic room checked for L/360 deflection.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	B02	ATTIC	3	1	I38499912 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:46 2019 Page 1

ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-ntyKVMfU87mOlv7INGDIAoW96xNmJoN0L95Ux?yeRGx

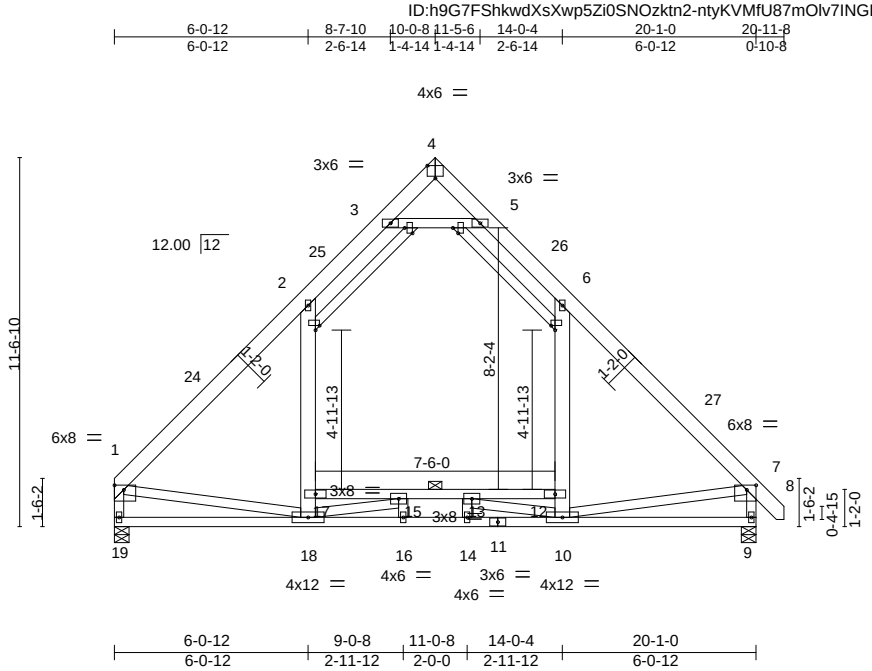


Plate Offsets (X,Y)-- [1:Edge,0-1-12], [4:0-3-0,Edge], [7:0-3-8,0-1-12], [20:0-2-0,Edge], [21:0-1-8,0-1-12], [22:0-2-0,Edge], [23:0-1-8,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.12	15-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.23	15-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.17	18	>999	240	Weight: 191 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except* 20-21,22-23: 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3 *Except* 6-10,2-18: 2x6 SP No.2, 3-5,1-19,7-9: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 9-3-0 oc bracing. Except: 5-7-0 oc bracing: 12-17

REACTIONS. (lb/size) 19=1013/0-5-8, 9=1068/0-5-8
Max Horz 19=383(LC 11)
Max Uplift 19=-23(LC 13), 9=-30(LC 12)
Max Grav 19=1184(LC 21), 9=1215(LC 20)

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

TOP CHORD 1-2=-1288/65, 2-3=-737/201, 3-4=-119/434, 4-5=-116/434, 5-6=-735/201, 6-7=-1290/71, 1-19=-1131/81, 7-9=-1163/131

BOT CHORD 18-19=-386/526, 16-18=0/1825, 14-16=0/1825, 10-14=0/1825, 9-10=-165/334, 15-17=-453/380, 13-15=-1098/0, 12-13=-466/402

WEBS 10-12=0/339, 6-12=0/547, 17-18=-6/329, 2-17=0/536, 3-5=-1454/383, 1-18=0/709, 7-10=-16/693, 15-18=-1198/208, 10-13=-1203/184

NOTES- (11)

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-9 to 3-1-9, Interior(1) 3-1-9 to 10-0-8, Exterior(2) 10-0-8 to 13-0-8, Interior(1) 13-0-8 to 20-10-1 zone; cantilever right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
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 2-0-0 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (5.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).6-12, 2-17
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 15-17, 13-15, 12-13
8) All bearings are assumed to be User Defined crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 9.
10) Attic room checked for L/360 deflection.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	B03	ATTIC	1	1	I38499913
					Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:47 2019 Page 1

ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-F3Wijig6vRuFN3iUx_kXj?2K?KiH2FwAZpr1TSyeRGw

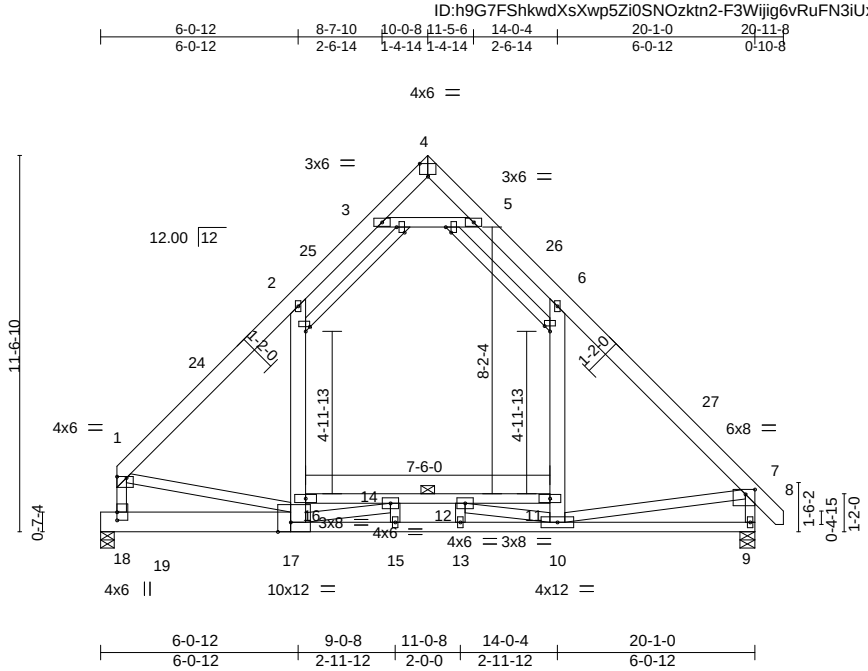


Plate Offsets (X,Y)-- [1:Edge,0-0-8], [4:0-3-0,Edge], [7:0-3-8,0-1-12], [17:0-4-12,Edge], [18:0-3-0,0-0-0], [20:0-2-0,Edge], [21:0-1-8,0-1-12], [22:0-2-0,Edge], [23:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.12	14-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.23	14-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.17	15-17	>999	240	Weight: 198 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except* 20-21,22-23: 2x4 SP No.2

BOT CHORD 2x4 SP No.2 *Except* 17-19: 2x8 SP DSS

WEBS 2x4 SP No.3 *Except* 6-10,2-17: 2x6 SP No.2, 3-5,7-9: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-5-7 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 5-8-0 oc bracing: 11-16

REACTIONS. (lb/size) 19=985/0-5-0, 9=1065/0-5-8
Max Horz 19=-381(LC 8)
Max Uplift 19=-14(LC 13), 9=-27(LC 12)
Max Grav 19=1164(LC 21), 9=1209(LC 20)

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

TOP CHORD 1-2=-1297/73, 2-3=-736/201, 3-4=-107/425, 4-5=-113/428, 5-6=-735/198, 6-7=-1282/66, 1-18=-1202/66, 7-9=-1157/129

BOT CHORD 18-19=-376/381, 17-18=-347/487, 15-17=0/1792, 13-15=0/1789, 10-13=0/1789, 9-10=-165/333, 14-16=-464/442, 12-14=-1056/0, 11-12=-442/386

WEBS 10-11=0/332, 6-11=0/541, 16-17=-121/419, 2-16=0/559, 3-5=-1429/371, 1-17=0/714, 7-10=-12/690, 14-17=-1204/225, 10-12=-1161/188

NOTES- (11)

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 10-0-8, Exterior(2) 10-0-8 to 13-0-8, Interior(1) 13-0-8 to 20-10-1 zone; cantilever right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
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 2-0-0 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (5.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).6-11, 2-16
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 14-16, 12-14, 11-12
8) Bearings are assumed to be: , Joint 9 User Defined crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 9.
10) Attic room checked for L/360 deflection.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	C01	GABLE	1	1	I38499914 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:49 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-CSeT7OhNQ28zcNrs2Pm?oQ8qq8W8WCET17K8YKyeRGu

-0-10-8 | 8-1-12 | 16-3-8 | 17-2-0
0-10-8 | 8-1-12 | 8-1-12 | 0-10-8

Scale = 1:57.2

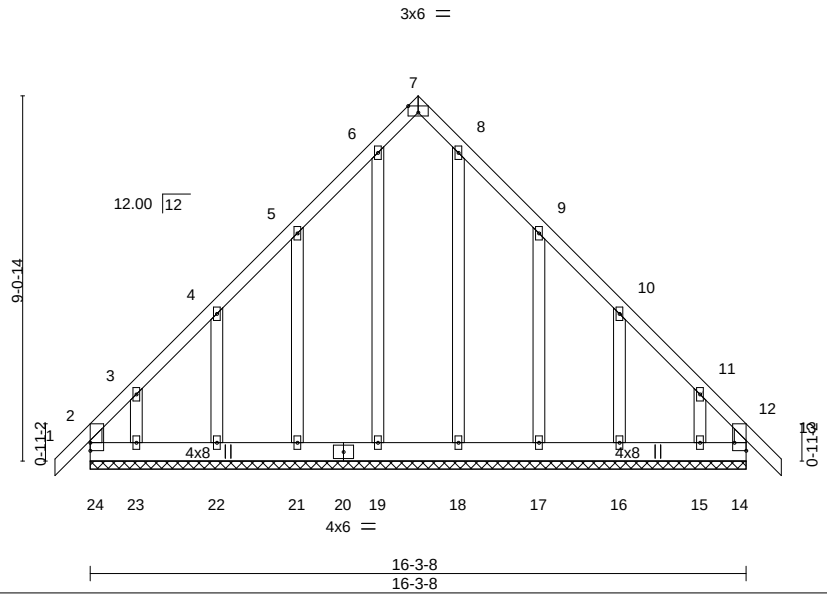


Plate Offsets (X,Y)-- [2:0-1-12,0-1-12], [7:0-3-0,Edge], [12:0-1-12,0-1-12], [14:Edge,0-3-8], [14:0-0-0,0-1-12], [24:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.00	13	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 130 lb	FT = 20%

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

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

REACTIONS. All bearings 16-3-8.
(lb) - Max Horz 24=-332(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 19, 18 except 24=-197(LC 10), 14=-171(LC 11), 21=-198(LC 12), 22=-135(LC 12), 23=-364(LC 12), 17=-200(LC 13), 16=-136(LC 13), 15=-358(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 19, 21, 22, 23, 18, 17, 16, 15 except 24=457(LC 12), 14=443(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-309/252, 2-3=-455/325, 3-4=-288/191, 10-11=-276/189, 11-12=-443/333, 12-14=-298/259
BOT CHORD 23-24=-262/328, 22-23=-262/328, 21-22=-262/328, 19-21=-262/328, 18-19=-262/328, 17-18=-262/328, 16-17=-262/328, 15-16=-262/328, 14-15=-262/328

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 8-1-12, Corner(3) 8-1-12 to 11-1-12, Exterior(2) 11-1-12 to 17-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 18 except (jt=lb) 24=197, 14=171, 21=198, 22=135, 23=364, 17=200, 16=136, 15=358.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	C02	Common	1	1	I38499915 Job Reference (optional)

Builders First Source, Sumter SC 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:49 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-CSeT7OhNQ28zcNrs2Pm?oQ8mE8RwWCXT17K8YKyeRGu

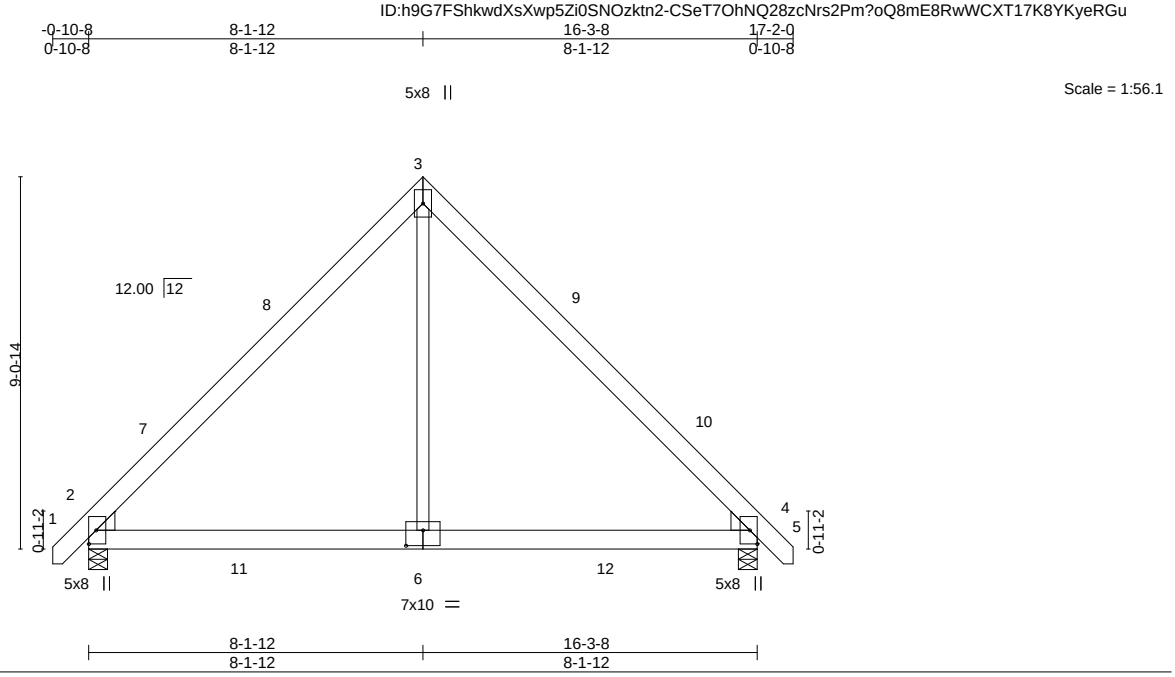


Plate Offsets (X,Y)-- [2:0-1-1,0-1-1], [2:0-2-3,0-5-13], [4:0-2-3,0-5-13], [4:0-1-1,0-1-1], [6:0-5-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.04	4-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.07	4-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	2-6	>999	240	Weight: 113 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x6 SP No.2, Right: 2x6 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. (lb/size) 2=693/0-5-8, 4=693/0-5-8
Max Horz 2=-297(LC 10)
Max Uplift 2=-160(LC 12), 4=-160(LC 13)
Max Grav 2=751(LC 19), 4=751(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-786/235, 3-4=-785/235
BOT CHORD 2-6=-40/520, 4-6=-40/520
WEBS 3-6=0/502

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-1 to 2-2-15, Interior(1) 2-2-15 to 8-1-12, Exterior(2) 8-1-12 to 11-1-12, Interior(1) 11-1-12 to 17-0-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=160, 4=160.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	C03	Common	4	1	I38499916 Job Reference (optional)

Builders First Source, Sumter SC

8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:50 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-geCrLki?BMGqEXQ3c6HEKegwYYoJFfmcGn3h4nyeRGt

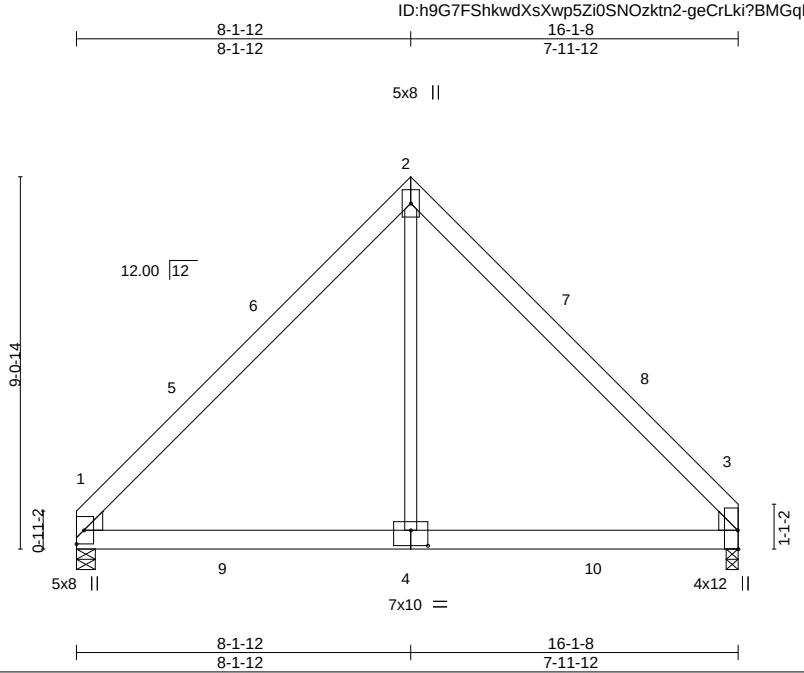


Plate Offsets (X,Y)-- [1:0-1-1,0-1-1], [1:0-2-3,0-5-13], [3:0-0-1,0-0-1], [3:Edge,0-0-3], [3:0-0-3,0-3-13], [4:0-5-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.04	1-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.07	1-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	1-4	>999	240	Weight: 107 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x6 SP No.2, Right: 2x6 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. (lb/size) 1=630/0-5-8, 3=630/0-3-8
Max Horz 1=-284(LC 8)
Max Uplift 1=-140(LC 13), 3=-141(LC 12)
Max Grav 1=705(LC 20), 3=707(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-782/228, 2-3=-784/228
BOT CHORD 1-4=-46/513, 3-4=-46/513
WEBS 2-4=0/502

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 8-1-12, Exterior(2) 8-1-12 to 11-1-12, Interior(1) 11-1-12 to 15-11-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=140, 3=141.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	C04	Common Girder	1	2	I38499917

Builders First Source, Sumter SC

8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:51 2019 Page 1

ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-8rmDY4jdygOgsh?FApoTtrD5Ey3g_2alURpFcDyeRGs

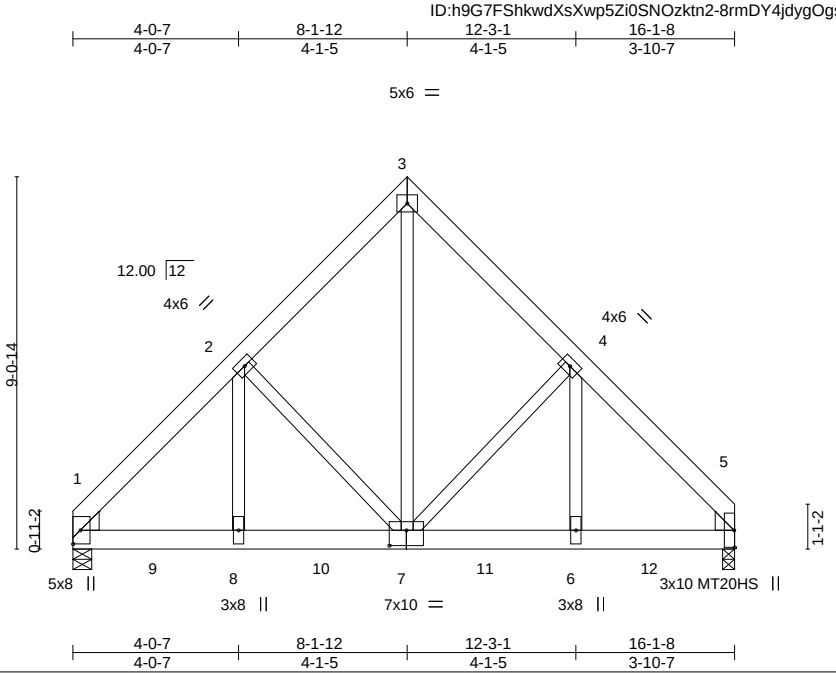


Plate Offsets (X,Y)-- [1:0-1-1,0-1-1], [1:0-2-3,0-5-13], [5:0-0-3,0-3-13], [5:0-0-1,0-0-1], [7:0-5-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	0.05	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.06	6-7	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 271 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2
WEDGE
Left: 2x6 SP No.2, Right: 2x6 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. (lb/size) 1=3300/0-5-8, 5=3487/0-3-8
Max Horz 1=284(LC 5)
Max Uplift 1=-1500(LC 9), 5=-1305(LC 8)
Max Grav 1=3376(LC 2), 5=3487(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3892/1762, 2-3=-2570/1270, 3-4=-2558/1265, 4-5=-3971/1596
BOT CHORD 1-8=-1195/2515, 7-8=-1198/2521, 6-7=-960/2538, 5-6=-958/2531
WEBS 2-8=-779/1719, 2-7=-1081/729, 3-7=-1612/3308, 4-7=-1156/550, 4-6=-543/1840

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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 2-0-0 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) except (jt=lb) 1=1500, 5=1305.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 804 lb down and 411 lb up at 2-0-12, 804 lb down and 411 lb up at 4-0-12, 804 lb down and 411 lb up at 6-0-12, 804 lb down and 411 lb up at 8-0-12, 804 lb down and 411 lb up at 10-0-12, and 897 lb down and 261 lb up at 12-0-12, and 897 lb down and 261 lb up at 14-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

September 13,2019

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

LOAD CASE(S) Standard

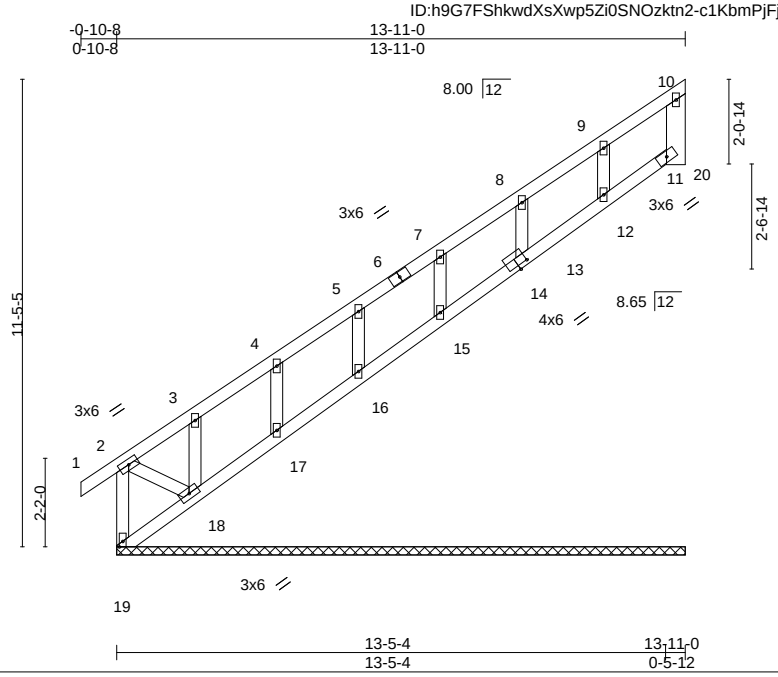
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-5=-60, 1-5=-20
   Concentrated Loads (lb)
   Vert: 8=-747(B) 7=-747(B) 6=-897(B) 9=-747(B) 10=-747(B) 11=-747(B) 12=-897(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	D01	GABLE	1	1	I38499918 Job Reference (optional)

Builders First Source, Sumter SC 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:52 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-c1KbmPjFjzWXTqaRkXJiQ3mMaLYvjYyvj5Yo9fyeRGr



Scale = 1:56.4

Plate Offsets (X,Y)-- [13:0-2-3,0-0-0], [14:0-3-0,0-1-4], [14:0-0-0,0-1-12]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 75 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
10-20: 2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 15-16,12-13.

REACTIONS. All bearings 13-11-0.
(lb) - Max Horz 19=418(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 11, 16 except 19=-295(LC 10), 12=-147(LC 12), 15=-183(LC 12), 17=-117(LC 12), 18=-601(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 11, 16, 17 except 19=716(LC 12), 12=314(LC 19), 15=315(LC 19), 18=380(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-19=-397/326, 2-3=-474/425, 3-4=-400/374, 4-5=-311/299
BOT CHORD 18-19=-630/631
WEBS 2-18=-490/496

NOTES- (13)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 1-11-0, Interior(1) 1-11-0 to 13-8-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 565 psi.
10) Bearing at joint(s) 19, 20, 11, 12, 15, 16, 17, 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 16 except (jt=lb) 19=295, 12=147, 15=183, 17=117, 18=601.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 20, 11, 12, 15, 16, 17, 18.
13) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	D02	Monopitch	9	1	I38499919 Job Reference (optional)

Builders First Source, Sumter SC

8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:54 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-YPRMB5lVFbmFj8kqryMAVUrai96hBL4CAP1vDYyeRGp

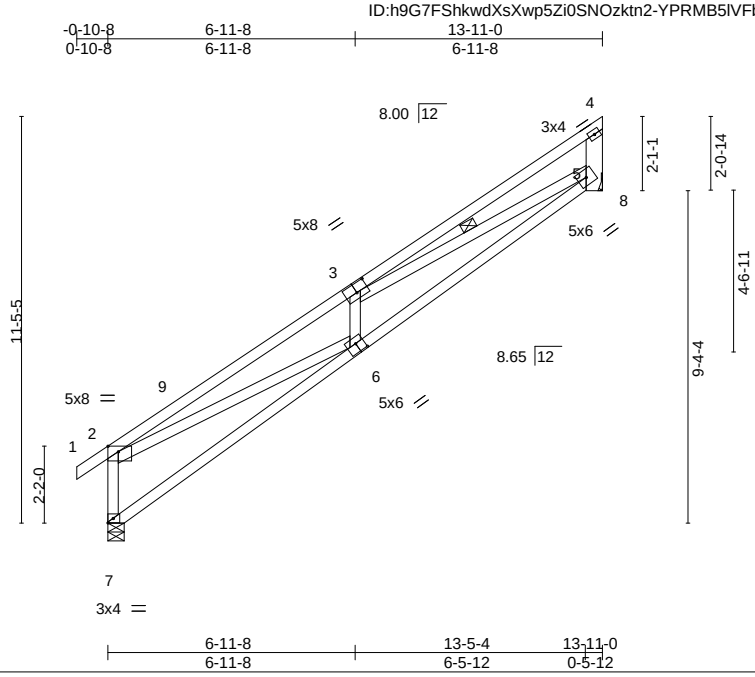


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-4-0,0-3-0], [6:0-2-12,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.08	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.19	6-7	>838	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	-0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.16	6	>999	240	Weight: 83 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
4-8: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-0-8 oc bracing.
WEBS 1 Row at midpt 3-5

REACTIONS. (lb/size) 7=605/0-5-8, 8=539/Mechanical
Max Horz 7=463(LC 12)
Max Uplift 8=-421(LC 12)
Max Grav 7=605(LC 1), 8=635(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-748/412, 2-3=-1829/865, 3-4=-265/0, 5-8=-746/421
BOT CHORD 6-7=-680/731, 5-6=-1302/2188
WEBS 2-6=-561/1374, 3-5=-1753/1046

NOTES- (8)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-8-4 zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be User Defined crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=421.
8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	D03	Roof Special	1	1	I38499920 Job Reference (optional)

Builders First Source, Sumter SC

8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:54 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-YPRMB5lVFbmFj8kqryMAVUrci97LBQHCAP1vDYyeRGp

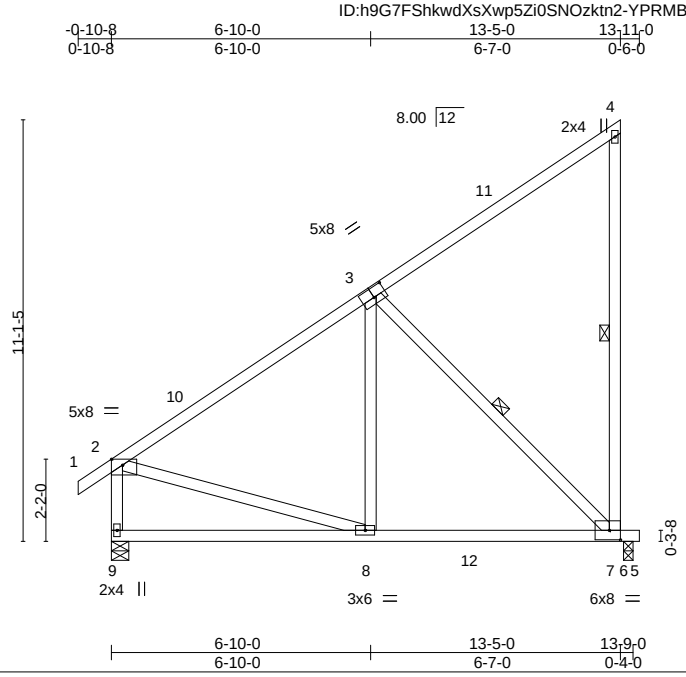


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-4-0,0-3-0], [7:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.07	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.16	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	-0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.09	7-8	>999	240	Weight: 97 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
4-7: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-0-4 oc bracing: 8-9.
WEBS 1 Row at midpt 4-7, 3-7

REACTIONS. (lb/size) 9=602/0-5-8, 6=522/0-3-0
Max Horz 9=452(LC 12)
Max Uplift 9=-9(LC 12), 6=-386(LC 12)
Max Grav 9=602(LC 1), 6=656(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-513/0, 2-9=-552/67
BOT CHORD 8-9=-521/527, 7-8=-291/496
WEBS 3-8=-2/271, 3-7=-679/400, 2-8=-32/359

NOTES- (6)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-3-4 zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
4) Bearings are assumed to be: Joint 9 User Defined crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 6=386.
6) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	D04	Roof Special	5	1	I38499921 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:55 2019 Page 1

ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-0c?kORm70uu6KIJ0PftP1hNkzZTHwthLP3nSl_yeRGo

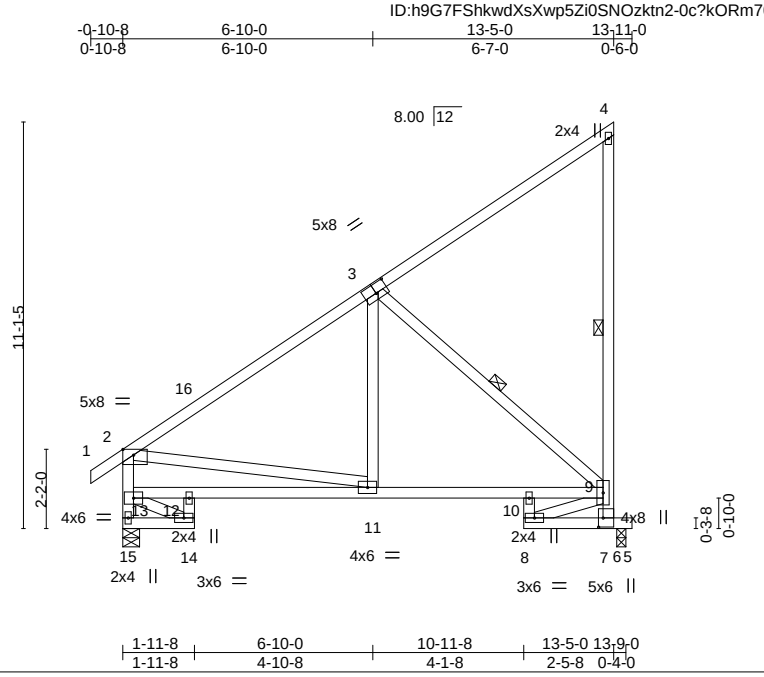


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-4-0,0-3-0], [7:0-3-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.06	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.14	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.07	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	11-12	>999	240	Weight: 107 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
4-7: 2x4 SP No.2

BRACING-

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

REACTIONS. (lb/size) 15=602/0-5-8, 6=522/0-3-0
Max Horz 15=452(LC 12)
Max Uplift 15=-9(LC 12), 6=-386(LC 12)
Max Grav 15=602(LC 1), 6=610(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-572/15, 7-9=-725/436, 13-15=-585/51, 2-13=-541/99
BOT CHORD 14-15=-300/203, 12-13=-759/830, 11-12=-759/830, 10-11=-342/573, 9-10=-342/573
WEBS 2-11=-260/423, 3-11=-43/289, 3-9=-738/442, 13-14=-227/335

NOTES- (6)

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-3-4 zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: Joint 15 User Defined crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 6=386.
6) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	D05	GABLE	1	1	I38499922 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:57 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-z_7Up7nOYW9qacSPW4vt76TBkMFLOn9etNGZqtyeRGm

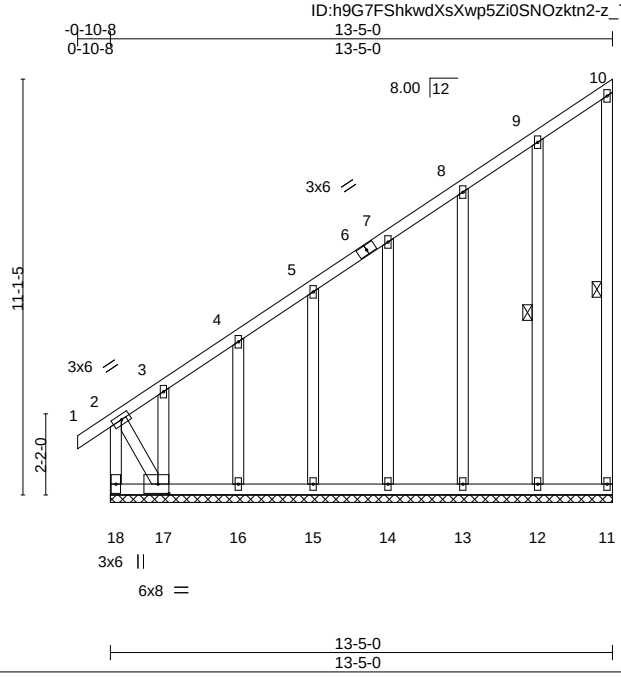


Plate Offsets (X,Y)-- [17:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.00	2	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	-0.00	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 119 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 10-11: 2x4 SP No.2
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 17-18.
WEBS	1 Row at midpt 10-11, 9-12

REACTIONS. All bearings 13-5-0.
(lb) - Max Horz 18=452(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 11 except 18=-347(LC 10), 12=-103(LC 12), 13=-104(LC 12), 14=-103(LC 12), 15=-101(LC 12), 16=-111(LC 12), 17=-777(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 11, 12, 13, 14, 15, 16 except 18=938(LC 12), 17=417(LC 10)

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

TOP CHORD	2-18=-996/758, 2-3=-524/442, 3-4=-464/380, 4-5=-375/306, 5-7=-293/240
BOT CHORD	17-18=-512/416
WEBS	2-17=-758/934

NOTES- (11)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 13-3-4 zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 18=347, 12=103, 13=104, 14=103, 15=101, 16=111, 17=777.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	D06	Monopitch	1	1	I38499923 Job Reference (optional)

Builders First Source, Sumter SC 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:57 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-z_7Up7nOYW9qacSPW4vt76T7pMAAOnAetNGZqtyeRGm

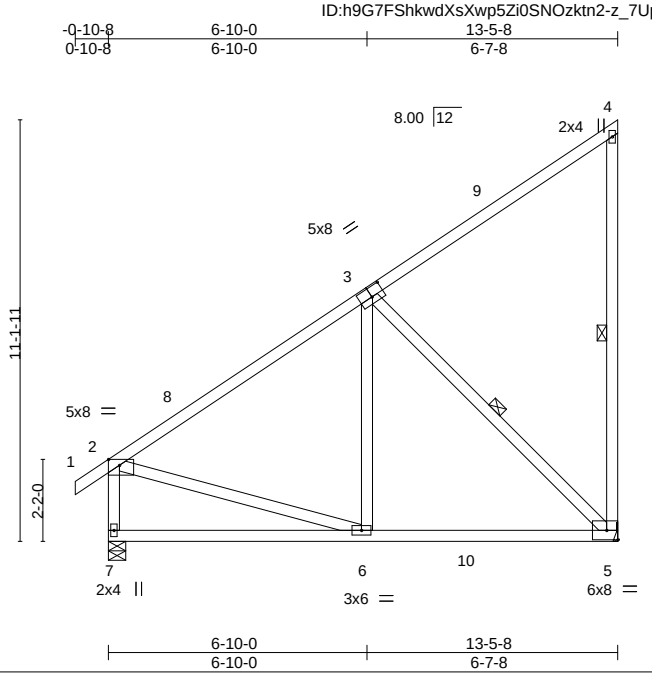


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.04	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.09	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.01	6	>999	240	Weight: 96 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
4-5: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-0-12 oc bracing.
WEBS 1 Row at midpt 4-5, 3-5

REACTIONS. (lb/size) 5=524/Mechanical, 7=590/0-5-8
Max Horz 7=453(LC 12)
Max Uplift 5=-405(LC 12)
Max Grav 5=663(LC 19), 7=590(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-491/0, 2-7=-531/55
BOT CHORD 6-7=-527/535, 5-6=-276/469
WEBS 3-6=0/253, 3-5=-653/385, 2-6=-67/351

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-3-12 zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
4) All bearings are assumed to be User Defined crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=405.
7) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	D07	Monopitch	1	1	I38499924 Job Reference (optional)

Builders First Source, Sumter SC

8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:58 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-RBhs0To0JpHhBl1b4oQ6fK?ECmXA7EUn51?6MJyeRGl

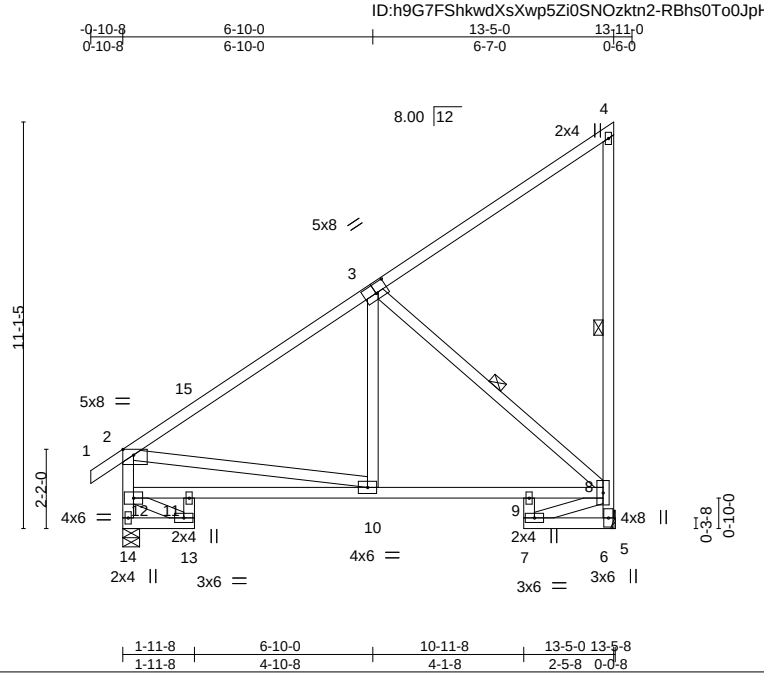


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.04	9-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.08	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	10-11	>999	240	Weight: 106 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
4-6: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-6, 3-8

REACTIONS. (lb/size) 6=526/Mechanical, 14=589/0-5-8
Max Horz 14=452(LC 12)
Max Uplift 6=-402(LC 12)
Max Grav 6=617(LC 19), 14=589(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-544/0, 6-8=-695/419, 12-14=-572/43, 2-12=-519/86
BOT CHORD 13-14=-289/178, 11-12=-771/852, 10-11=-771/852, 9-10=-324/542, 8-9=-324/542
WEBS 2-10=-314/453, 3-10=-21/266, 3-8=-703/423, 12-13=-199/323

NOTES- (7)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-3-4 zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be User Defined crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=402.
7) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	J01	GABLE	1	1	I38499925 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 07:59:59 2019 Page 1

ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-vNFFEppe47PYpvcneVyLCXYRAArfsl_xKhlgulyeRGk

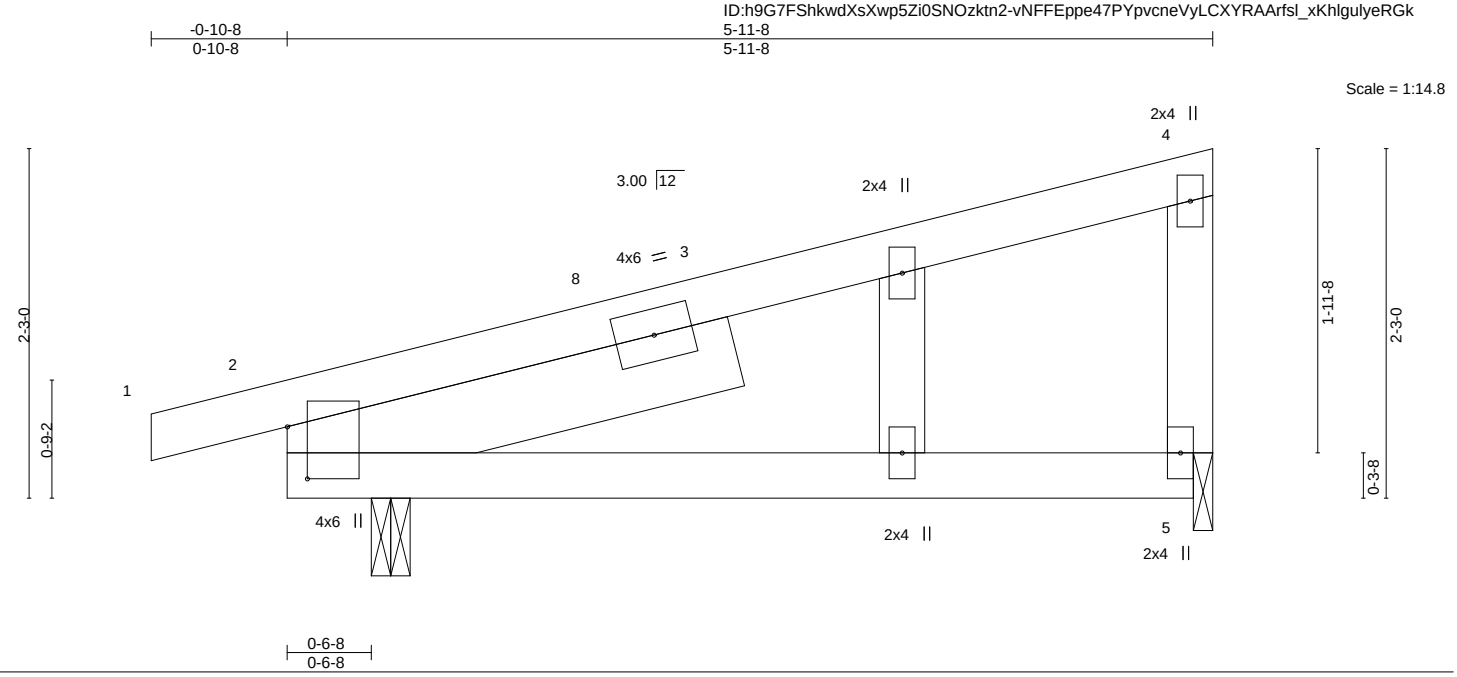


Plate Offsets (X,Y)-- [2:0-4-0,0-1-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.07	2-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.14	2-5	>509	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.17	2-5	>412	240	Weight: 30 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 2-11-9

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=289/0-3-0, 5=229/0-1-8
Max Horz 2=89(LC 12)
Max Uplift 2=-192(LC 8), 5=-166(LC 8)

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

NOTES- (9)

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-9-12 zone; cantilever left exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable studs spaced at 2-0-0 oc.
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 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=192, 5=166.
9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

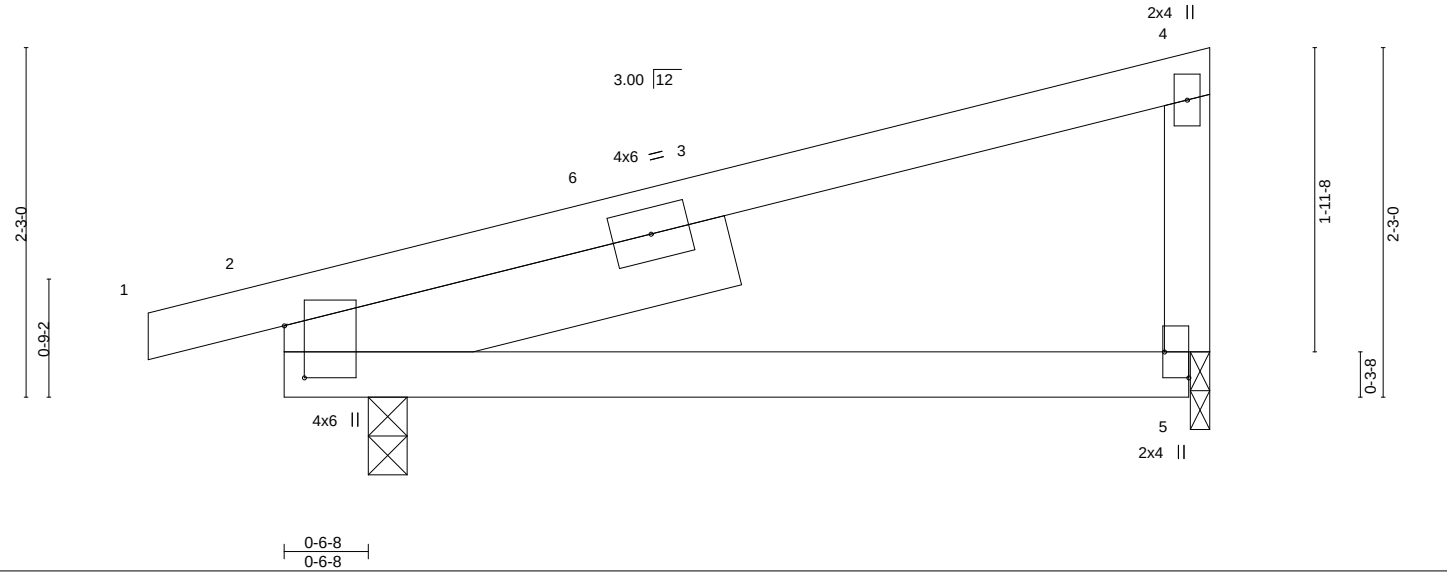
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	J02	Monopitch	7	1	I38499926 Job Reference (optional)

Builders First Source, Sumter SC 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 08:00:00 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-NZpdR9qGrRXPR3B_CCTbkl5bwaAubCE4ZLUDRCyeRGj

-0-10-8 0-10-8 | 5-11-8 5-11-8

Scale = 1:14.8



0-6-8 0-6-8

Plate Offsets (X,Y)-- [2:0-4-0,0-1-9], [5:Edge,0-1-14]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.07	2-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.14	2-5	>509	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.17	2-5	>412	240	Weight: 29 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 2-11-9

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=289/0-3-0, 5=229/0-1-8
Max Horz 2=89(LC 12)
Max Uplift 2=-192(LC 8), 5=-166(LC 8)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-9-12 zone; cantilever left exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=192, 5=166.

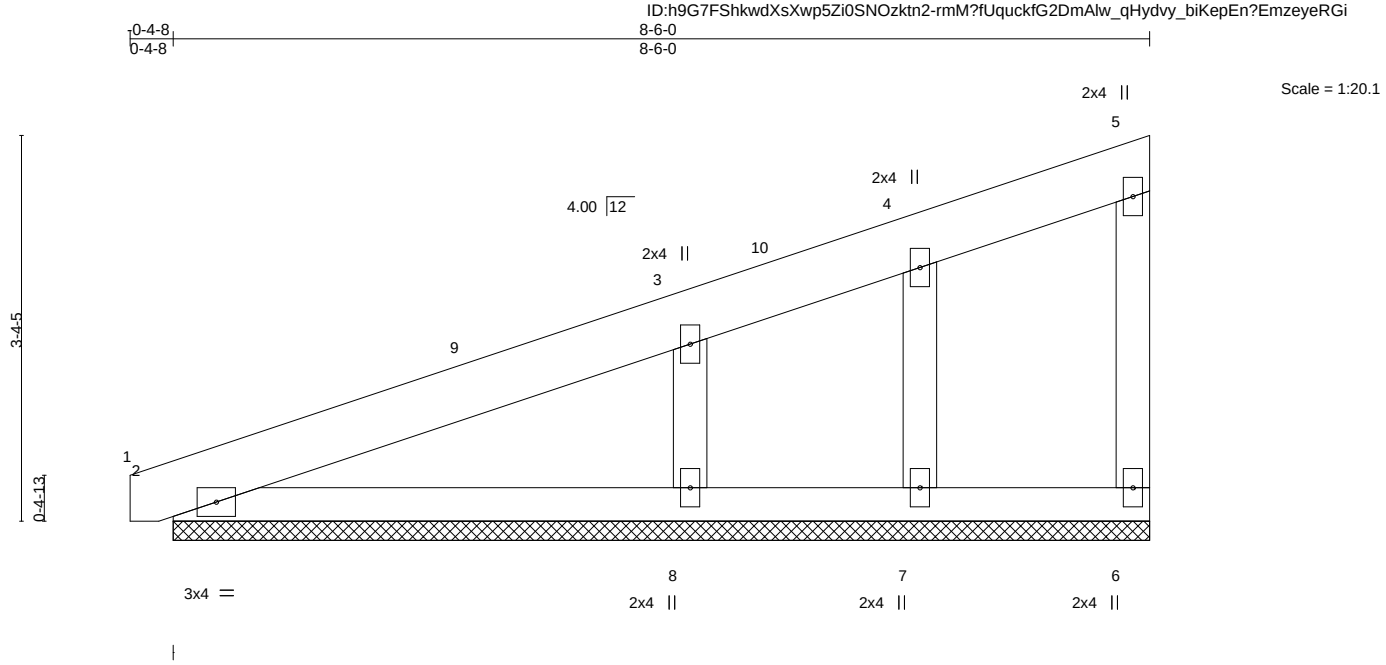
September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	J03	GABLE	2	1	I38499927 Job Reference (optional)

Builders First Source, Sumter SC — 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 08:00:01 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-rmM?fUquckfG2DmAlw_qHydvy_biKepEn?EmzeyeRGi



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 43 lb	FT = 20%

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

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

REACTIONS. All bearings 8-6-0.
(lb) - Max Horz 2=152(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7 except 8=-161(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7 except 8=367(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-8=-275/362

NOTES- (9)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-3-0 to 2-9-0, Exterior(2) 2-9-0 to 8-4-4 zone; cantilever left exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be User Defined crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7 except (jt=lb) 8=161.
9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	H&H/Aiken/Lot1/HiddenLakes/SpringLakeNC
JobNumber2075761	J04	MONOPITCH	5	1	I38499928 Job Reference (optional)

Builders First Source, Sumter SC 8.240 s Jul 14 2019 MiTek Industries, Inc. Thu Sep 12 08:00:01 2019 Page 1
ID:h9G7FShkwdXsXwp5Zi0SNOzktn2-rmM?fUquckfG2DmAlw_qHydlH_X9KfUEn?EmzeyeRGi

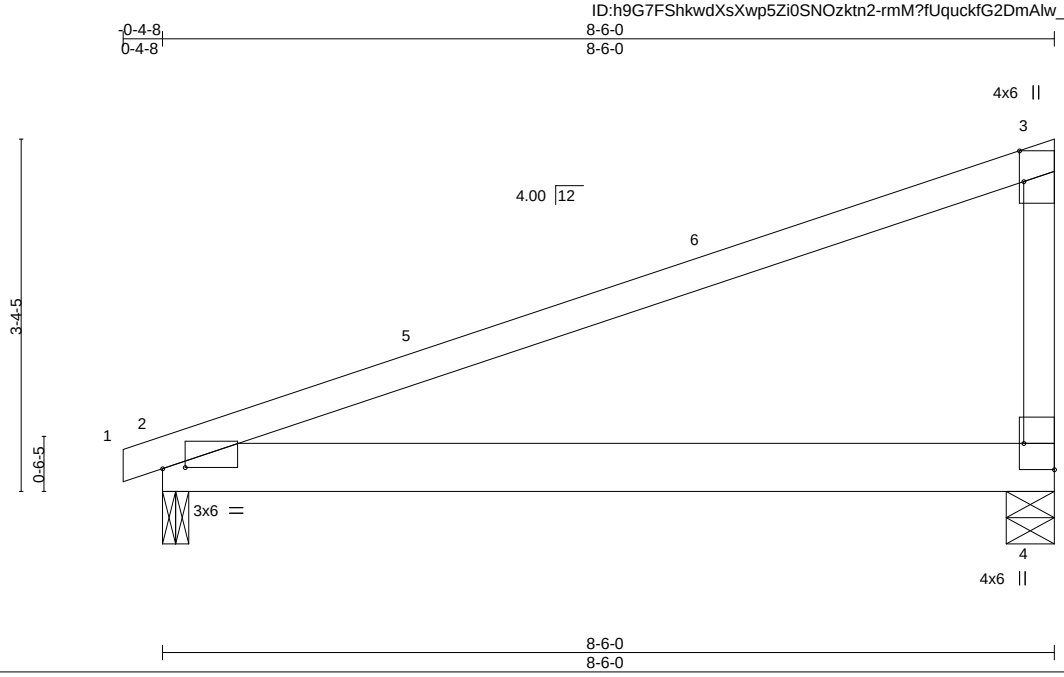


Plate Offsets (X,Y)-- [2:0-2-9,0-0-2], [3:0-3-8,Edge], [4:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	0.17	2-4	>580	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.13	2-4	>776	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 38 lb	FT = 20%

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

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

REACTIONS. (lb/size) 4=328/0-5-8, 2=360/0-3-0
Max Horz 2=152(LC 12)
Max Uplift 4=-244(LC 8), 2=-220(LC 8)

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

NOTES- (6)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-4-8 to 2-7-8, Interior(1) 2-7-8 to 8-4-4 zone; cantilever left exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 4 User Defined crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=244, 2=220.
6) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

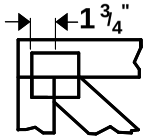
September 13,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

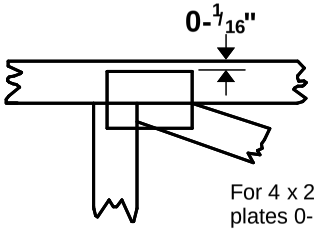
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

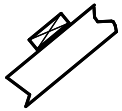
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

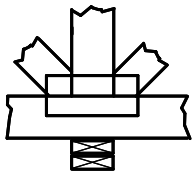
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

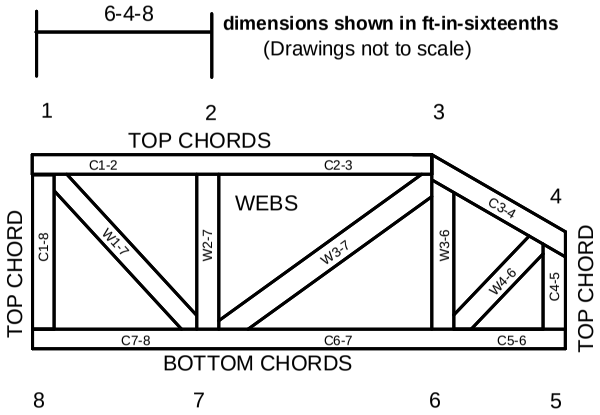


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

© 2012 MiTek® All Rights Reserved

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.