ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0322-1176
Lot 23 Oak Haven

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

Pages or sheets covered by this seal: I50597787 thru I50597812

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

North Carolina COA: C-0844

March 4,2022

Gilbert, Eric

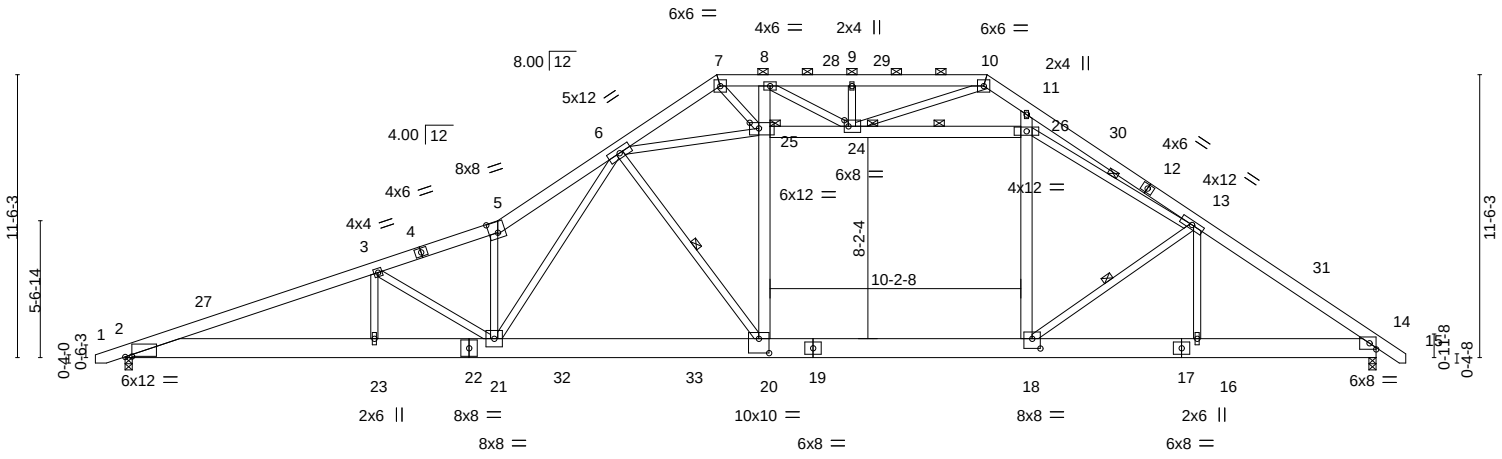
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	A1	ATTIC	3	1	I50597787
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:17 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-3EfAcyZF_wMAOJFFM6Hhntq9OsQdLTvw7F3vj0zeJpy

-1-2-8	10-1-12	15-2-0	20-1-8	24-1-0	26-0-4	29-7-0	35-1-0	36-8-4	43-7-10	50-11-0	52-1-8
1-2-8	10-1-12	5-0-4	4-11-8	3-11-8	1-11-4	3-6-12	5-6-0	1-7-4	6-11-6	7-3-6	1-2-8

Scale = 1:93.8



10-1-12	15-2-0	26-0-4	33-9-0	36-8-4	43-7-10	50-11-0
10-1-12	5-0-4	10-10-4	7-8-12	2-11-4	6-11-6	7-3-6

Plate Offsets (X,Y)-- [2:0-3-5,0-0-4], [5:0-4-4,0-5-4], [18:0-4-0,0-4-12], [20:0-5-0,0-7-0], [24:0-2-0,0-3-0], [25:0-4-8,0-2-12]

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	0.64	Vert(LL)	-0.37	20-21	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.73	20-21	>835	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.12	14	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.21	20-21	>999	240	Weight: 513 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x4 SP No.2 *Except*
8-20,11-18,25-26: 2x6 SP No.1

REACTIONS. (size) 2=0-3-8, 14=0-3-8
Max Horz 2=279(LC 11)
Max Grav 2=2451(LC 2), 14=2696(LC 2)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-3 oc purlins, except 2-0-0 oc purlins (3-11-12 max.): 7-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 13-18, 24-26, 6-20, 13-26
JOINTS 1 Brace at Jt(s): 24, 25

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6601/508, 3-5=-6014/410, 5-6=-6872/566, 6-7=-3051/209, 7-8=-3806/232, 8-9=-3169/282, 9-10=-3169/282, 10-11=-1588/209, 11-13=-1802/79, 13-14=-4130/185
BOT CHORD 2-23=-371/6199, 21-23=-371/6199, 20-21=-20/4083, 18-20=0/3416, 16-18=-23/3268, 14-16=-22/3268
WEBS 3-23=0/275, 3-21=-826/222, 20-25=-32/1859, 8-25=-144/377, 18-26=0/861, 11-26=-235/255, 13-18=-221/357, 24-25=-630/739, 24-26=-2194/158, 9-24=-289/166, 6-20=-1307/319, 6-25=-1370/123, 13-26=-2304/161, 5-21=-2034/251, 6-21=-333/3124, 10-24=-129/2014, 8-24=-781/38, 7-25=-26/1987

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 24-1-13, Exterior(2) 24-1-13 to 28-6-10, Interior(1) 28-6-10 to 35-0-3, Exterior(2) 35-0-3 to 39-5-0, Interior(1) 39-5-0 to 51-11-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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 30.0psf 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) Ceiling dead load (10.0 psf) on member(s). 24-25, 24-26; Wall dead load (5.0psf) on member(s).20-25, 18-26
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Attic room checked for L/360 deflection.

March 4,2022

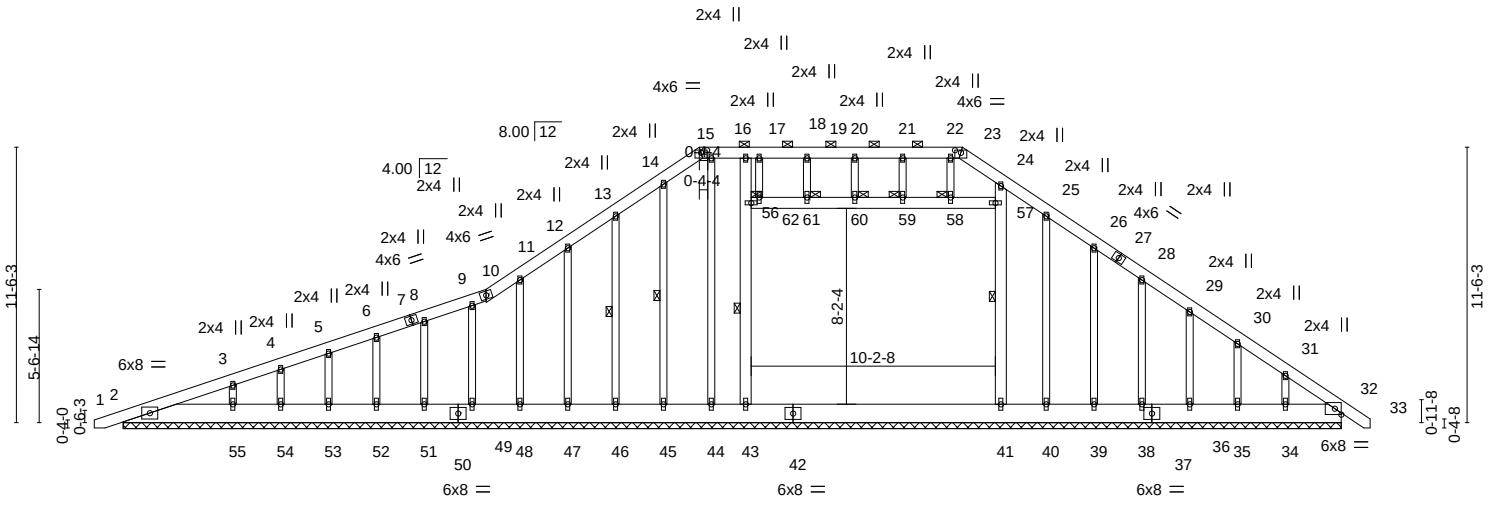
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	A1GE	GABLE	1	1	I50597788
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:20 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-TpLIEzc8GrklFn_q1FqOOVSk03ZTYxQNpCIZJLzeJpv

-1-2-8	8-8-5	14-5-4	15-2-0	20-5-10	24-1-0	29-7-0	35-1-0	36-10-12	43-7-10	50-11-0	52-1-8
1-2-8	8-8-5	5-8-15	0-8-12	5-3-10	3-7-6	5-6-0	5-6-0	1-9-12	6-8-14	7-3-6	1-2-8

Scale: 1/8"=1'



8-8-5	14-5-4	15-2-0	20-5-10	25-9-8	33-9-0	36-10-12	43-7-10	50-11-0
8-8-5	5-8-15	0-8-12	5-3-10	5-3-14	7-11-8	3-1-12	6-8-14	7-3-6

Plate Offsets (X,Y)-- [15:0-3-0,0-1-5], [23:0-3-0,0-1-5]

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)	-0.00	32	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	0.00	32	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	32	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 544 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x10 SP No.1
WEBS	2x6 SP No.1 *Except* 9-49: 2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 15-23.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 43-56, 41-57, 14-45, 13-46
JOINTS	1 Brace at Jt(s): 56, 58, 59, 60, 61

REACTIONS. All bearings 50-11-0.
(lb) - Max Horz 2=369(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 32, 45, 47, 48, 51, 52, 53, 54, 39, 38, 36, 35, 49 except 44=-842(LC 18), 46=-100(LC 12), 55=-113(LC 8), 40=-572(LC 18), 34=-134(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 44, 45, 46, 47, 48, 51, 52, 53, 54, 40, 38, 36, 35, 34, 49 except 2=312(LC 1), 43=1595(LC 27), 41=1233(LC 27), 32=402(LC 1), 55=369(LC 1), 39=293(LC 21)

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

TOP CHORD	2-3=-474/6, 3-4=-436/58, 4-5=-413/83, 5-6=-397/117, 6-8=-379/150, 8-9=-359/183, 9-10=-367/216, 10-11=-368/227, 11-12=-407/237, 12-13=-406/229, 13-14=-420/284, 14-15=-406/312, 15-16=-386/300, 16-17=-386/300, 17-18=-398/299, 18-19=-398/299, 19-20=-398/299, 20-21=-398/299, 21-22=-398/299, 22-23=-398/299, 23-24=-526/321, 24-25=-343/267, 25-26=-405/209, 26-28=-405/137, 28-29=-401/142, 29-30=-401/147, 30-31=-434/153, 31-32=-506/170
BOT CHORD	2-55=-125/415, 54-55=-125/415, 53-54=-125/415, 52-53=-125/415, 51-52=-125/415, 49-51=-125/415, 48-49=-125/415, 47-48=-125/415, 46-47=-125/415, 45-46=-125/415, 44-45=-125/415, 43-44=-125/415, 41-43=-124/409, 40-41=-125/412, 39-40=-125/412, 38-39=-125/412, 36-38=-125/412, 35-36=-125/412, 34-35=-125/412, 32-34=-125/412
WEBS	43-56=-828/217, 17-56=-904/256, 41-57=-563/63, 24-57=-481/91, 18-62=-53/303, 16-44=-133/333

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x6 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

March 4,2022

Continued on page 2

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

NOTES-

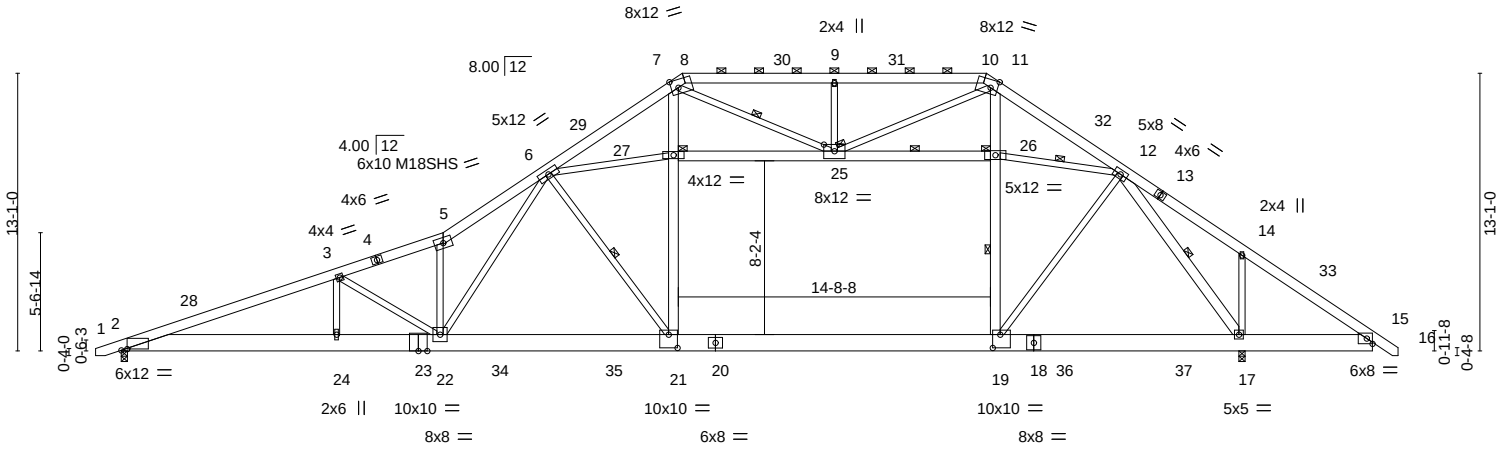
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Ceiling dead load (10.0 psf) on member(s). 56-62, 61-62, 60-61, 59-60, 58-59, 57-58; Wall dead load (5.0psf) on member(s).43-56, 41-57
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 32, 45, 47, 48, 51, 52, 53, 54, 39, 38, 36, 35, 49 except (jt=lb) 44=842, 46=100, 55=113, 40=572, 34=134.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	A2	ATTIC	7	1	I50597789
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:22 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-QCS3ffdOoS_TV58D8ftsUwY?ZtB5?hMgGWnfODzeJpt

-1-2-8	10-1-12	15-2-0	20-1-8	26-0-4	26-5-4	33-7-4	40-9-4	41-2-4	47-1-0	52-9-12	58-11-8	60-2-0
1-2-8	10-1-12	5-0-4	4-11-8	5-10-12	0-5-0	7-2-0	7-2-0	0-5-0	5-10-12	5-8-12	6-1-12	1-2-8

Scale = 1:108.6



10-1-12	15-2-0	26-0-4	33-9-0	41-2-4	52-9-12	52-11-8	58-11-8
10-1-12	5-0-4	10-10-4	7-8-12	7-5-4	11-7-8	0-1-12	6-0-0

Plate Offsets (X,Y)-- [2:0-3-5,0-0-12], [8:0-4-0,Edge], [10:0-4-0,Edge], [19:0-4-4,0-7-8], [21:0-5-0,0-7-8], [25:0-6-0,0-3-12]

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	0.67	Vert(LL)	-0.43	21-22	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.84	21-22	>748	240	M18SHS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.10	17	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.24	21-22	>999	240	Weight: 613 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
7-21,11-19,26-27,12-17: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-0 oc purlins, except 2-0-0 oc purlins (4-10-1 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-17.
WEBS 1 Row at midpt 6-21, 19-26, 25-26, 12-17, 12-26, 7-25
JOINTS 1 Brace at Jt(s): 25, 26, 27

REACTIONS. (size) 2=0-3-8, 17=0-3-8
Max Horz 2=317(LC 11)
Max Grav 2=2663(LC 2), 17=3751(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7245/379, 3-5=-6617/293, 5-6=-7544/427, 6-7=-4411/146, 7-8=-2053/220, 8-9=-2302/186, 9-10=-2302/186, 10-11=-2063/211, 11-12=-589/254, 12-14=-191/505, 14-15=-389/532
BOT CHORD 2-24=-248/6810, 22-24=-248/6810, 21-22=0/4622, 19-21=0/3577, 17-19=0/1936, 15-17=-374/421
WEBS 3-24=0/284, 3-22=-840/209, 6-22=-310/3194, 6-21=-1771/359, 21-27=0/2580, 7-27=0/2653, 19-26=-1214/376, 11-26=-1391/440, 14-17=-445/273, 25-26=-3479/286, 9-25=-369/223, 12-17=-3899/187, 12-26=-3453/283, 12-19=-2/2733, 11-25=-294/2478, 7-25=-1550/44, 6-27=-256/200, 5-22=-2188/206

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 26-6-1, Exterior(2) 26-6-1 to 30-10-14, Interior(1) 30-10-14 to 40-8-7, Exterior(2) 40-8-7 to 45-1-4, Interior(1) 45-1-4 to 60-0-7 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 30.0psf 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.
7) Ceiling dead load (10.0 psf) on member(s). 25-27, 25-26; Wall dead load (5.0psf) on member(s).21-27, 19-26
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 19-21
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Attic room checked for L/360 deflection.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	A3	ATTIC	3	1	I50597790
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:24 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-Maap4LfeK3EBkOHbG4vKZLdP_gkqTazykqGmS6zeJpr

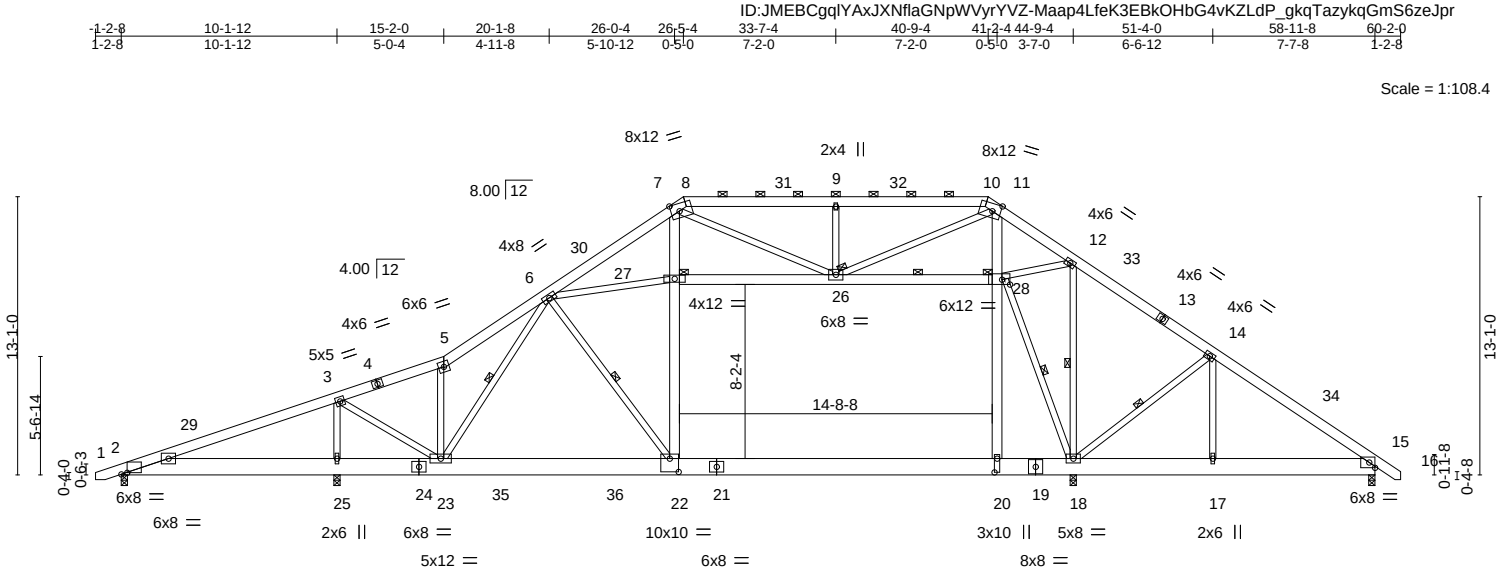


Plate Offsets (X,Y)-- [2:0-3-5,0-0-14], [8:0-4-12,0-4-4], [10:0-4-12,0-4-4], [20:0-7-12,0-1-8], [22:0-5-0,0-7-8], [28:0-4-8,0-2-12]

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	0.42	Vert(LL)	-0.25	20-22	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.42	20-22	>991	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.03	15	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.12	20-22	>999	240	Weight: 615 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E *Except*
15-19,19-21: 2x10 SP No.1
WEBS 2x4 SP No.2 *Except*
7-22,11-20,27-28: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-5 oc purlins, except 2-0-0 oc purlins (5-9-5 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-23, 6-22, 26-28, 12-18, 14-18, 18-28
JOINTS 1 Brace at Jt(s): 26, 27, 28

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 25=317(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 18 except 2=-264(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 2 except 15=1156(LC 2), 18=1968(LC 27), 25=3096(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-177/1197, 3-5=-1304/119, 5-6=-1457/223, 6-7=-2640/421, 7-8=-1591/386, 8-9=-1759/388, 9-10=-1759/388, 10-11=-1580/388, 11-12=-516/90, 12-14=-1226/222, 14-15=-1574/452
BOT CHORD 2-25=-1031/239, 23-25=-1082/233, 22-23=-46/1937, 20-22=0/1907, 18-20=0/1877, 17-18=-209/1190, 15-17=-209/1190
WEBS 6-23=-1172/256, 22-27=-162/1257, 7-27=-43/1343, 20-28=-188/1646, 11-28=-849/234, 26-27=-23/323, 26-28=-1575/373, 9-26=-417/222, 11-26=-298/1607, 7-26=-559/112, 6-27=-24/308, 5-23=-519/146, 12-18=-137/369, 14-18=-526/478, 3-25=-2638/401, 3-23=-171/2704, 18-28=-2459/397, 12-28=-703/239, 14-17=-251/296

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 26-6-1, Exterior(2) 26-6-1 to 30-10-14, Interior(1) 30-10-14 to 40-8-7, Exterior(2) 40-8-7 to 45-1-4, Interior(1) 45-1-4 to 60-0-7 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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 30.0psf 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) Ceiling dead load (10.0 psf) on member(s). 26-27, 26-28; Wall dead load (5.0psf) on member(s).22-27, 20-28
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 2=264.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Attic room checked for L/360 deflection.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	A4	ATTIC	1	1	I50597791
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:26 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-IziZV1gvshVuziR_NVxoemilKUTcxZBFB8ltX_zeJpp

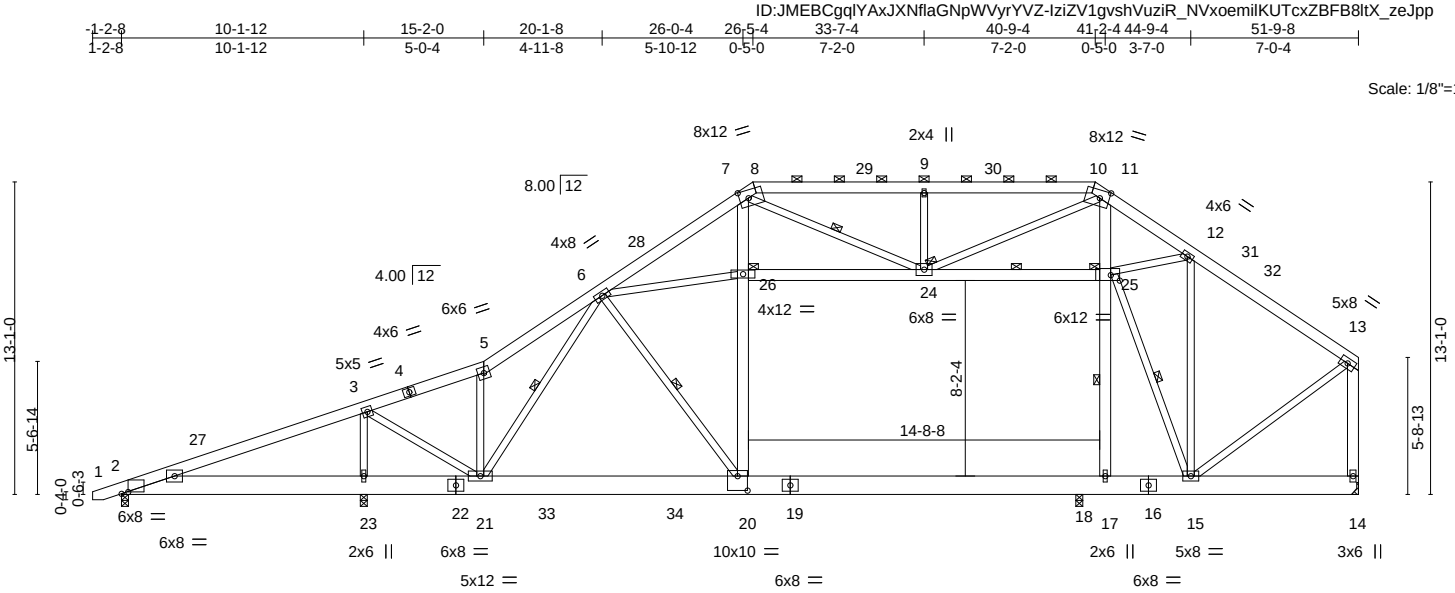


Plate Offsets (X,Y)-- [2:0-3-5,0-0-14], [8:0-4-8,0-4-0], [10:0-4-12,0-4-0], [20:0-5-0,0-7-4], [25:0-4-8,0-2-12]

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	0.43	Vert(LL)	-0.21	18-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.34	18-20	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.02	14	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.10	18-20	>999	240	Weight: 567 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E *Except*
14-16,16-19: 2x10 SP No.1
WEBS 2x4 SP No.2 *Except*
7-20,11-17,25-26,13-14: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-20, 17-25, 24-25, 6-21, 7-24, 15-25
JOINTS 1 Brace at Jt(s): 24, 25, 26

REACTIONS. All bearings 0-3-8 except (jt=length) 14=Mechanical.
(lb) - Max Horz 23=308(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-281(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 2 except 23=2897(LC 26), 14=1241(LC 1), 18=1613(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-216/1386, 3-5=-955/61, 5-6=-1059/158, 6-7=-2636/406, 7-8=-1267/339, 8-9=-1379/332, 9-10=-1379/332, 10-11=-1259/340, 11-12=-70/724, 12-13=-943/182, 13-14=-1166/203
BOT CHORD 2-23=-1211/276, 21-23=-1194/55, 20-21=-201/1501, 18-20=-121/1303, 17-18=-121/1303, 15-17=-122/1297
WEBS 3-23=-2475/383, 6-20=-321/164, 20-26=-166/1381, 7-26=-55/1537, 17-25=-652/195, 11-25=-1410/317, 12-15=-28/905, 24-26=-8/867, 24-25=-1834/408, 13-15=-34/857, 9-24=-429/227, 3-21=-149/2507, 12-25=-1305/351, 6-26=-5/849, 6-21=-1082/247, 11-24=-362/2079, 7-24=-980/93, 5-21=-426/128, 15-25=-1712/219

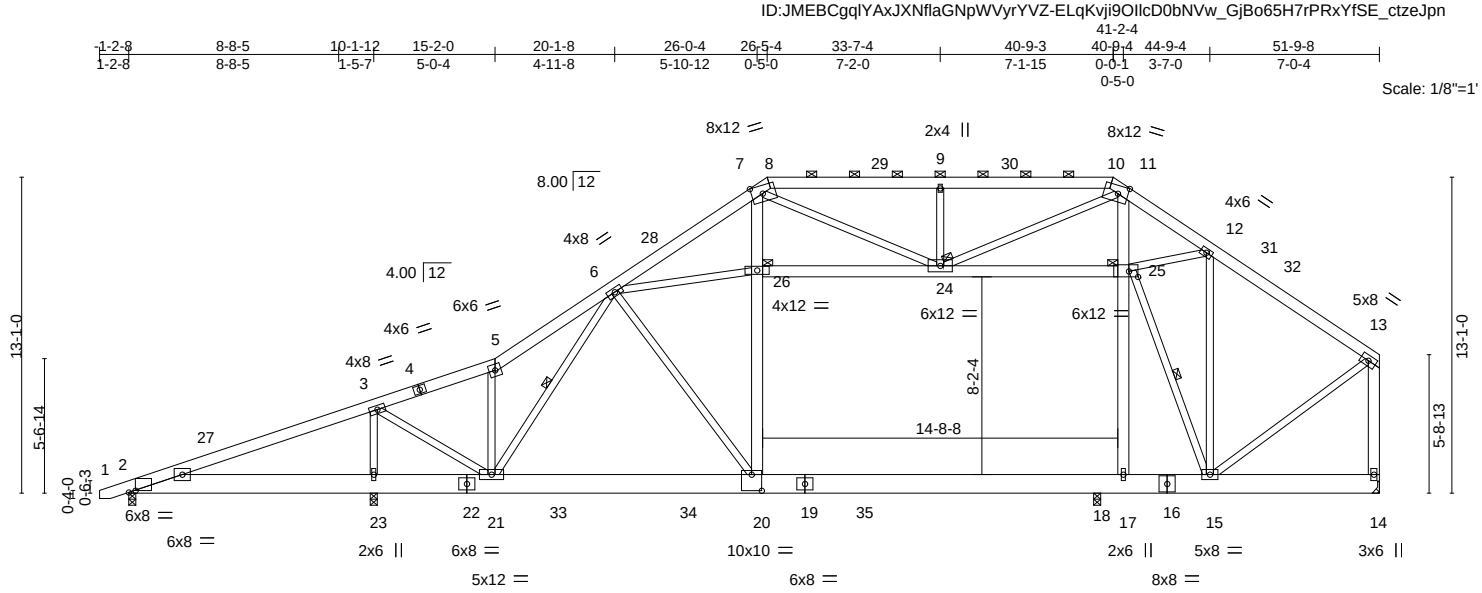
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 26-6-1, Exterior(2) 26-6-1 to 30-10-14, Interior(1) 30-10-14 to 40-8-7, Exterior(2) 40-8-7 to 45-1-4, Interior(1) 45-1-4 to 51-6-12 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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 30.0psf 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) Ceiling dead load (10.0 psf) on member(s). 24-26, 24-25; Wall dead load (5.0psf) on member(s).20-26, 17-25
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20, 17-18
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 281 lb uplift at joint 2.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	A4A	ATTIC	1	2	I50597792
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:28 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-ELqKvji9OIlcD0bNVw_GjBo65H7rPRxYfSE_ctzeJpn



10-0-0	10-1-12	15-2-0	15-4-12	20-1-8	26-0-4	32-11-8	40-1-4	41-2-4	44-9-4	51-9-8
10-0-0	0-1-12	5-0-4	0-2-12	4-8-12	5-10-12	6-11-4	7-1-12	1-1-0	3-7-0	7-0-4

Plate Offsets (X,Y)-- [2:0-3-5,0-0-14], [8:0-5-8,0-4-0], [10:0-5-0,0-4-0], [20:0-5-0,0-8-0], [25:0-4-8,0-2-12]

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	0.35	Vert(LL)	-0.40	18-20	>894	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.59	18-20	>606	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.02	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.35	18-20	>999	240	Weight: 1134 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E *Except*
14-16: 2x10 SP No.1
WEBS 2x4 SP No.2 *Except*
7-20,11-17,25-26,13-14: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-23,21-23.
WEBS 1 Row at midpt 6-21, 15-25
JOINTS 1 Brace at Jt(s): 24, 25, 26

REACTIONS. All bearings 0-3-8 except (jt=length) 14=Mechanical.
(lb) - Max Horz 23=308(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 14 except 2=-703(LC 18), 23=-539(LC 9), 18=-163(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 2 except 23=5171(LC 2), 14=1879(LC 2), 18=3049(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1000/2917, 3-5=-1222/185, 5-6=-1369/301, 6-7=-6607/2398, 7-8=-2206/813, 8-9=-2491/889, 9-10=-2491/889, 10-11=-2212/800, 11-12=-650/1815, 12-13=-1437/425, 13-14=-1739/490
BOT CHORD 2-23=-2697/1042, 21-23=-2697/820, 20-21=-915/2901, 18-20=-884/2850, 17-18=-884/2850, 15-17=-871/2819
WEBS 3-23=-4254/1259, 20-26=-1659/4242, 7-26=-1647/4591, 17-25=-348/769, 11-25=-2939/1078, 12-15=-628/2013, 24-26=-897/2581, 24-25=-4341/1651, 13-15=-310/1413, 9-24=-403/196, 3-21=-1196/4569, 12-25=-2795/1087, 6-26=-878/2530, 6-21=-3430/1413, 11-24=-1494/4350, 7-24=-3214/1290, 5-21=-502/169, 15-25=-4625/1690

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: 2x10 - 2 rows staggered at 0-2-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered 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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 26-6-1, Exterior(2) 26-6-1 to 30-10-14, Interior(1) 30-10-14 to 40-8-6, Exterior(2) 40-8-6 to 45-1-3, Interior(1) 45-1-3 to 51-6-12 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf 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.
8) Ceiling dead load (10.0 psf) on member(s). 24-26, 24-25; Wall dead load (5.0psf) on member(s).20-26, 17-25
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20, 17-18

March 4,2022

Continued on page 2

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

NOTES-

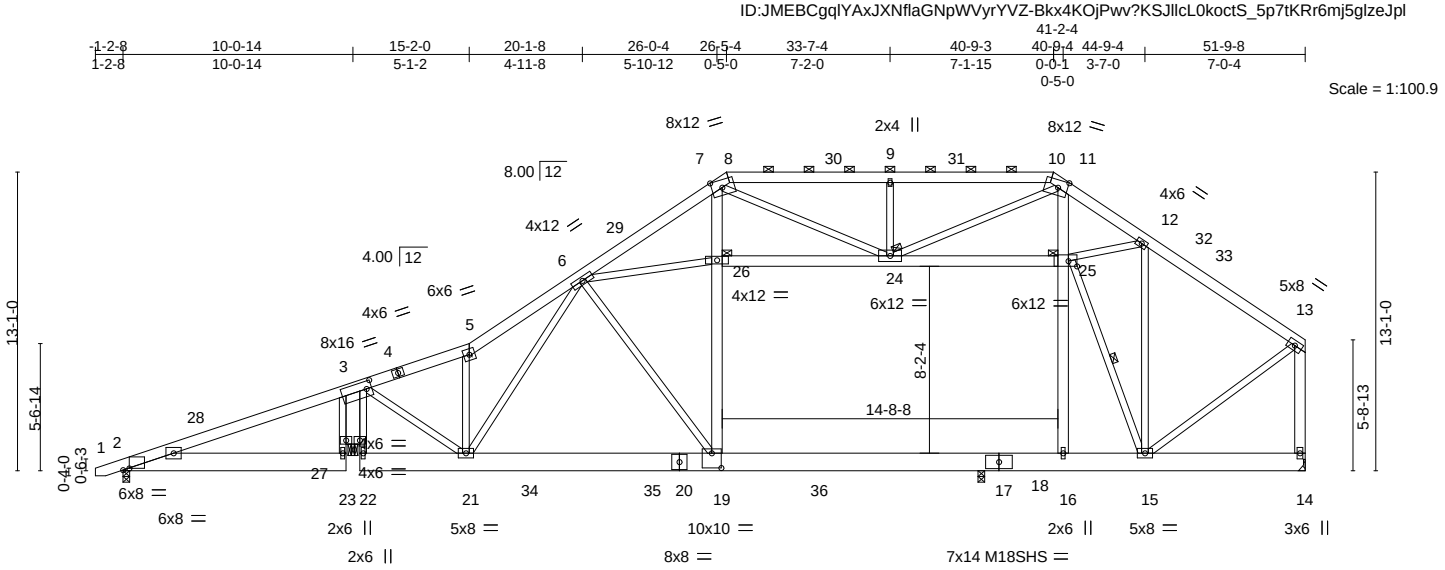
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 2=703, 23=539, 18=163.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3848 lb down and 1908 lb up at 30-3-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-60, 5-8=-60, 8-10=-60, 10-13=-60, 2-20=-20, 17-20=-40, 14-17=-20, 25-26=-20
   Drag: 20-26=-10, 17-25=-10
   Concentrated Loads (lb)
   Vert: 35=-1608(B)

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	A4B	ATTIC	1	2	I50597793
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:30 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-Bkx4KOjPwv?KSJllcL0koctS_5p7tKRr6mj5glzeJpl



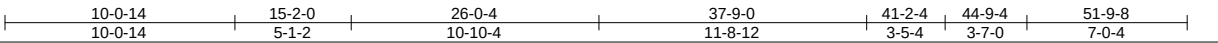


Plate Offsets (X,Y)-- [2:0-3-5,0-0-14], [3:0-2-12,0-4-0], [8:0-5-8,0-4-0], [10:0-5-0,0-4-0], [19:0-5-0,0-7-12], [25:0-4-8,0-2-12]

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	0.32	Vert(LL)	-0.30	18-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.44	18-19	>751	240	M18SHS	244/190
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.14	18-19	>999	240	Weight: 1151 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
17-20,20-22: 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
3-27: 2x8 SP 2400F 2.0E, 7-19,11-16,25-26,13-14: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-23,21-22.
WEBS 1 Row at midpt 15-25
JOINTS 1 Brace at Jt(s): 24, 25, 26

REACTIONS. All bearings 0-3-8 except (jt=length) 14=Mechanical, 27=0-5-4.
(lb) - Max Horz 27=308(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 27 except 2=-104(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except 2=271(LC 1), 14=1773(LC 2), 27=3795(LC 2), 18=3767(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-131/924, 3-5=-2392/260, 5-6=-2693/385, 6-7=-6471/816, 7-8=-1916/406, 8-9=-2151/408, 9-10=-2151/408, 10-11=-1925/391, 11-12=-294/2612, 12-13=-1385/227, 13-14=-1705/257
BOT CHORD 2-23=-796/201, 21-22=-766/19, 19-21=-370/3068, 18-19=-235/2480, 16-18=-235/2480, 15-16=-235/2474
WEBS 23-27=-295/130, 3-27=-3460/510, 6-19=-951/226, 19-26=-482/4252, 7-26=-395/4629, 16-25=-1037/273, 11-25=-3519/546, 12-15=-221/2622, 24-26=-224/2846, 24-25=-4599/697, 13-15=-93/1386, 9-24=-405/222, 3-21=-316/3551, 12-25=-3440/584, 6-26=-217/2790, 6-21=-1618/231, 11-24=-636/4665, 7-24=-3471/370, 5-21=-831/192, 15-25=-3751/415

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: 2x10 - 2 rows staggered at 0-2-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered 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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 26-6-1, Exterior(2) 26-6-1 to 30-10-14, Interior(1) 30-10-14 to 40-8-6, Exterior(2) 40-8-6 to 45-1-3, Interior(1) 45-1-3 to 51-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
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 30.0psf 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.

Continued on page 2

March 4,2022

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

NOTES-

9) Ceiling dead load (10.0 psf) on member(s). 24-26, 24-25; Wall dead load (5.0psf) on member(s).19-26, 16-25
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-19, 16-18
11) Refer to girder(s) for truss to truss connections.
12) Bearing at joint(s) 27 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27 except (jt=lb) 2=104.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2833 lb down and 557 lb up at 30-3-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
16) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

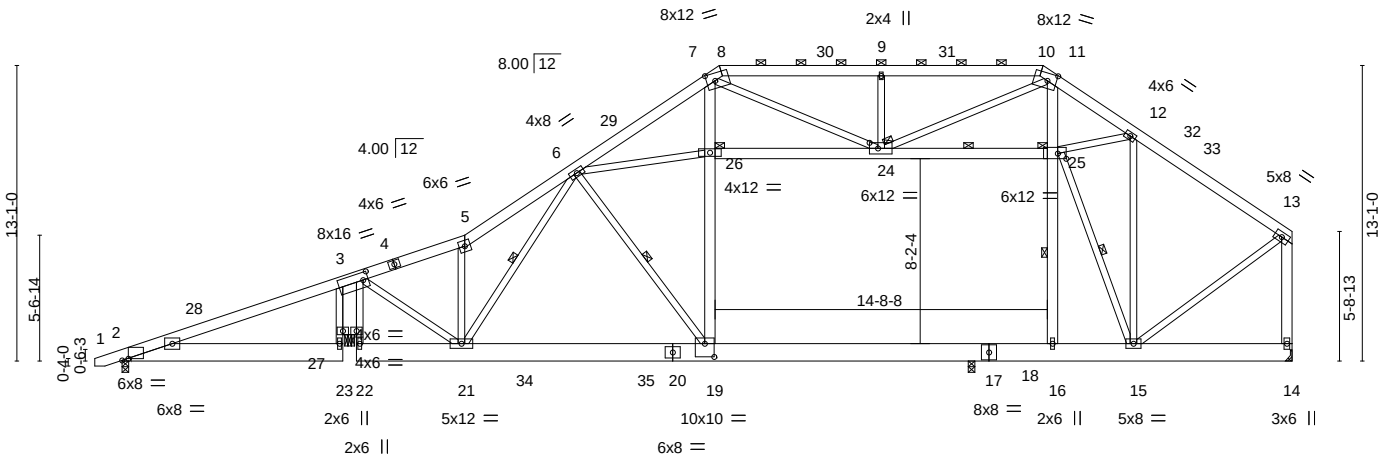
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-60, 5-8=-60, 8-10=-60, 10-13=-60, 2-23=-20, 25-26=-20, 19-22=-20, 16-19=-40, 14-16=-20
   Drag: 19-26=-10, 16-25=-10
   Concentrated Loads (lb)
   Vert: 36=-1608(F)

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	A5	ATTIC	6	1	I50597794
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:32 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-773rl4lfRXF2hdu8km2Ct1ynVuYFLC?8Z4CBlezeJpj

-1-2-8 1-2-8 | 8-8-5 8-8-5 | 10-0-14 1-4-9 | 15-2-0 5-1-2 | 20-1-8 4-11-8 | 26-0-4 5-10-12 | 26-5-4 0-5-0 | 33-7-4 7-2-0 | 40-9-4 7-2-0 | 41-2-4 0-5-0 | 44-9-4 3-7-0 | 51-9-8 7-0-4

Scale = 1:102.0



10-0-14 10-0-14 | 15-2-0 5-1-2 | 26-0-4 10-10-4 | 37-9-0 11-8-12 | 40-1-4 2-4-4 | 41-2-4 1-1-0 | 44-9-4 3-7-0 | 51-9-8 7-0-4

Plate Offsets (X,Y)-- [2:0-3-5,0-0-14], [3:0-2-12,0-4-0], [8:0-4-8,0-4-0], [10:0-4-12,0-4-0], [19:0-5-0,0-7-0], [24:0-4-8,0-3-0], [25:0-4-8,0-2-12]

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	0.39	Vert(LL)	-0.13	18-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.22	18-19	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	19-21	>999	240	Weight: 575 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x4 SP No.2 *Except*
3-27: 2x8 SP No.1, 7-19,11-16,25-26,13-14: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-23,21-22.
WEBS 1 Row at midpt 6-19, 16-25, 24-25, 6-21, 15-25
JOINTS 1 Brace at Jt(s): 24, 25, 26

REACTIONS. All bearings 0-3-8 except (jt=length) 14=Mechanical, 27=0-5-4.
(lb) - Max Horz 27=308(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 27 except 2=-116(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except 2=337(LC 1), 14=1594(LC 1), 27=2448(LC 2), 18=1418(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-81/492, 3-5=-1682/120, 5-6=-1883/226, 6-7=-2586/31, 7-8=-1316/286, 8-9=-1436/266, 9-10=-1436/266, 10-11=-1315/284, 11-12=-225/525, 12-13=-1247/198, 13-14=-1529/223
BOT CHORD 2-23=-357/108, 21-22=-373/0, 19-21=-122/1778, 18-19=-44/1481, 16-18=-44/1481, 15-16=-46/1478
WEBS 3-27=-2333/296, 6-19=-530/155, 19-26=0/1288, 7-26=0/1421, 16-25=-366/120, 11-25=-1228/92, 12-15=-8/966, 24-26=-44/667, 24-25=-1827/155, 13-15=-53/1182, 9-24=-421/230, 3-21=-72/2252, 12-25=-1351/176, 6-26=-45/647, 6-21=-385/0, 11-24=-97/1972, 7-24=-862/172, 5-21=-622/150, 15-25=-1543/29

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 26-6-1, Exterior(2) 26-6-1 to 30-10-14, Interior(1) 30-10-14 to 40-8-7, Exterior(2) 40-8-7 to 45-1-4, Interior(1) 45-1-4 to 51-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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 30.0psf 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) Ceiling dead load (10.0 psf) on member(s). 24-26, 24-25; Wall dead load (5.0psf) on member(s).19-26, 16-25
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-19, 16-18
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 27 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27 except (jt=lb) 2=116.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 4,2022

Continued on page 2

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

NOTES-

12) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven	
J0322-1176	A5GE	GABLE	1	1	Job Reference (optional)	I50597795

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:35 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-XilzN6nYkSddY4djPucvVgaGf6eiYhXaG2QrLzzeJpg

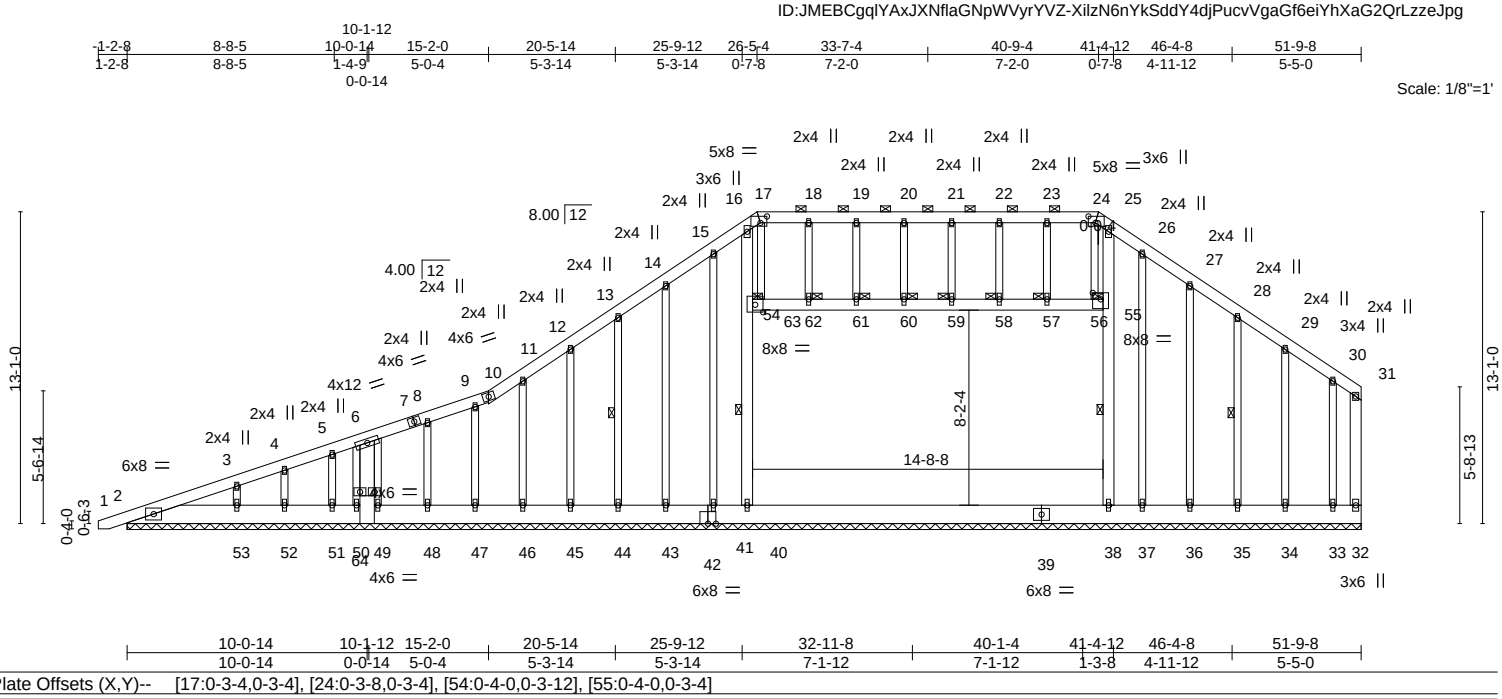


Plate Offsets (X,Y)-- [17:0-3-4,0-3-4], [24:0-3-8,0-3-4], [54:0-4-0,0-3-12], [55:0-4-0,0-3-4]

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	0.46	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.01	32	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 629 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except* 10-17,24-31: 2x6 SP 2400F 2.0E
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 6-64: 2x8 SP No.1, 6-49,6-50: 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 17-24.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 40-54, 38-55, 13-44, 28-35
JOINTS 1 Brace at Jt(s): 54, 55, 57, 58, 59, 60, 61, 62

REACTIONS. All bearings 51-9-8.
(lb) - Max Horz 2=409(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 50, 40, 32, 43, 44, 45, 46, 47, 48, 51, 52, 36, 34, 49 except 2=-105(LC 8), 41=-1650(LC 18), 53=-114(LC 8), 37=-1651(LC 18), 35=-100(LC 13), 33=-107(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 50, 32, 44, 45, 46, 47, 48, 51, 52, 35, 34, 33, 49 except 40=2725(LC 26), 38=2726(LC 2), 43=303(LC 20), 53=365(LC 1), 36=312(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-372/90, 3-4=-322/120, 4-5=-305/141, 5-6=-282/158, 6-8=-275/189, 10-11=-251/255, 11-12=-251/266, 12-13=-228/259, 13-14=-216/300, 14-15=-225/350, 15-16=-151/475, 16-17=-837/512, 17-18=-305/331, 18-19=-305/331, 19-20=-305/331, 20-21=-305/331, 21-22=-305/331, 22-23=-305/331, 23-24=-305/331, 24-25=-844/513, 25-26=-122/461, 26-27=-225/305
WEBS 40-54=-1354/387, 16-54=-2123/631, 38-55=-1354/334, 25-55=-2135/585, 24-56=-342/1178, 17-63=-342/1163, 15-41=-167/486, 26-37=-182/486

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x6 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf 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.
10) Ceiling dead load (10.0 psf) on member(s). 54-63, 62-63, 61-62, 60-61, 59-60, 58-59, 57-58, 56-57, 55-56; Wall dead load (5.0psf) on member(s). 20-54, 38-55

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

March 4,2022

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

NOTES-

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 50, 40, 32, 43, 44, 45, 46, 47, 48, 51, 52, 36, 34, 49 except (jt=lb) 2=105, 41=1650, 53=114, 37=1651, 35=100, 33=107.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
14) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	B1	COMMON	2	1	I50597796
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:37 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-U4skoopoG3tLoOn5XJeNa5fhBvLj0X2tjMvyQszeJpe

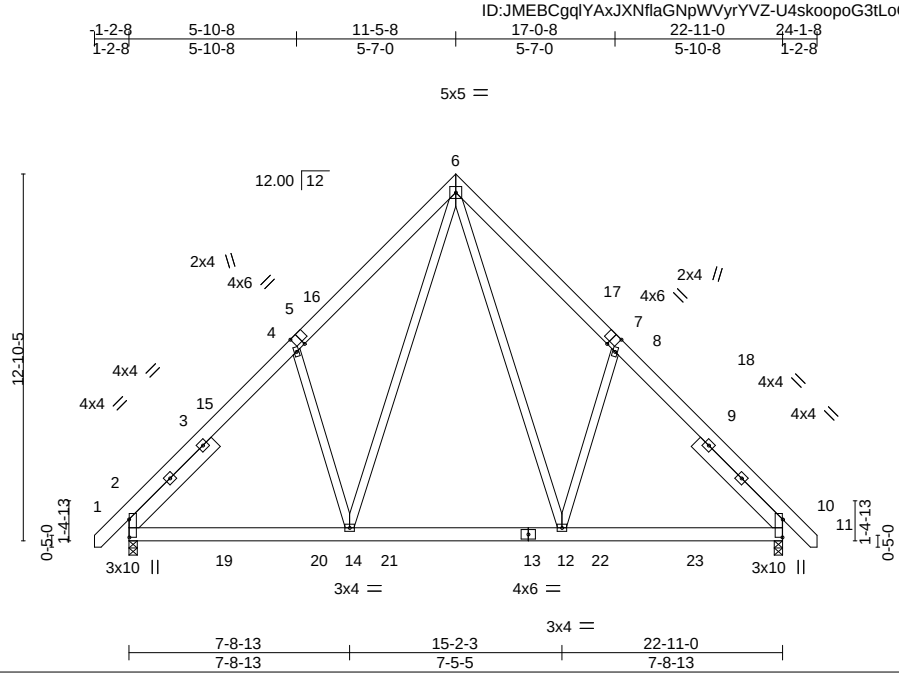


Plate Offsets (X,Y)-- [2:0-7-9,0-0-2], [5:0-3-0,Edge], [7:0-3-0,Edge], [10:0-7-9,0-0-2]

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)	-0.04	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.01	14	>999	240	Weight: 215 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.1 4-3-6, Right 2x6 SP No.1 4-3-6

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=301(LC 11)
Max Uplift 2=-40(LC 12), 10=-40(LC 13)
Max Grav 2=1140(LC 19), 10=1141(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1254/250, 4-6=-1105/451, 6-8=-1106/451, 8-10=-1255/250
BOT CHORD 2-14=-100/908, 12-14=-10/633, 10-12=-4/787
WEBS 6-12=-241/682, 8-12=-419/336, 6-14=-241/679, 4-14=-419/336

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 11-5-8, Exterior(2) 11-5-8 to 15-10-5, Interior(1) 15-10-5 to 24-0-2 zone;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 30.0psf 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) 2, 10.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	B1GE	COMMON SUPPORTED GAB	1	1	I50597797
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:38 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-yHQ607qQ1N?BPYMI409c7ICtOJk7l4z0y0fWyIzeJpd

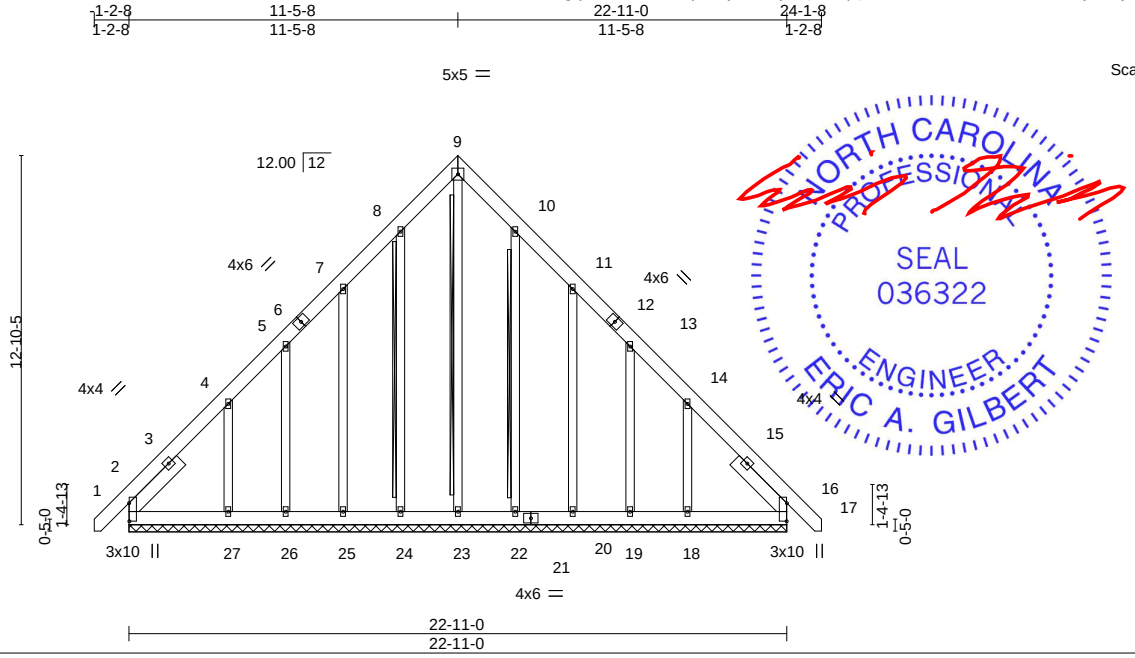


Plate Offsets (X,Y)-- [2:0-7-9,0-0-2], [16:0-7-9,0-0-2]

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	0.10	Vert(LL)	0.00	16	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	16	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	16	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 250 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2
SLIDER Left 2x6 SP No.1 2-6-10, Right 2x6 SP No.1 2-6-10

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.
WEBS T-Brace: 2x4 SPF No.2 - 9-23, 8-24, 10-22
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 22-11-0.
(lb) - Max Horz 2=-376(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 26, 22, 19, 16 except 2=-123(LC 8), 25=-165(LC 12), 27=-355(LC 12), 20=-168(LC 13), 18=-342(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 24, 25, 26, 22, 20, 19 except 2=354(LC 20), 23=314(LC 13), 27=349(LC 19), 18=335(LC 20), 16=315(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-414/284, 7-8=-245/260, 8-9=-301/311, 9-10=-301/311, 14-16=-362/207
BOT CHORD 2-27=-194/335, 26-27=-195/336, 25-26=-195/336, 24-25=-196/336, 23-24=-196/336, 22-23=-196/336, 20-22=-196/336, 19-20=-195/336, 18-19=-195/336, 16-18=-194/334
WEBS 9-23=-315/252, 4-27=-348/350, 14-18=-348/340

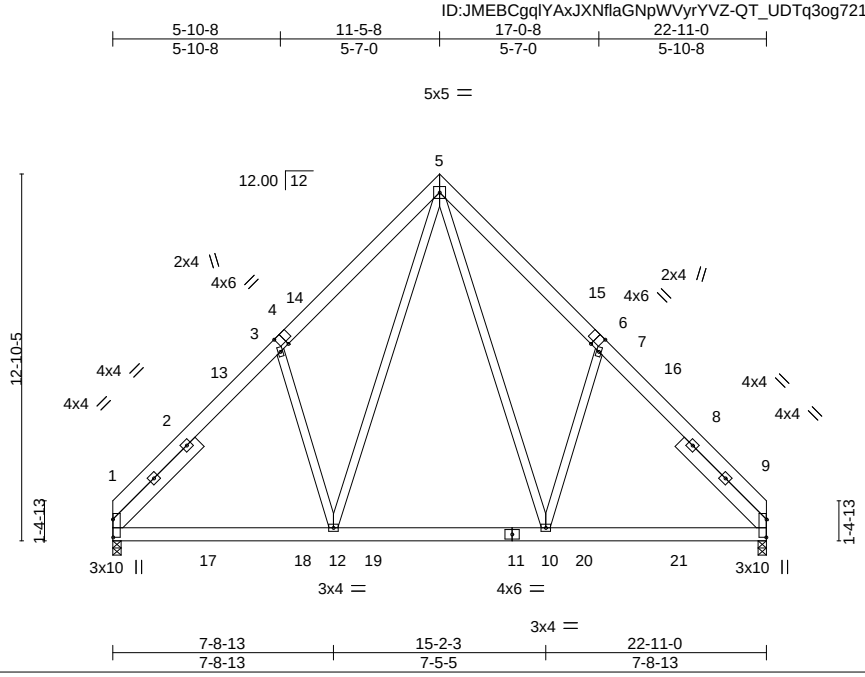
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 30.0psf 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) 23, 24, 26, 22, 19, 16 except (jt=lb) 2=123, 25=165, 27=355, 20=168, 18=342.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	B2	COMMON	4	1	I50597798
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:39 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-QT_UDTq3og721ixUekgrgWl1gj18URRAAgO3UkzeJpc



Scale = 1:80.8

Plate Offsets (X,Y)-- [1:0-7-9,0-0-2], [4:0-3-0,Edge], [6:0-3-0,Edge], [9:0-7-9,0-0-2]

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)	-0.04	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.01	12	>999	240	Weight: 207 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.1 4-3-6, Right 2x6 SP No.1 4-3-6

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

REACTIONS. (size) 1=0-3-8, 9=0-3-8
Max Horz 1=-295(LC 8)
Max Uplift 1=-35(LC 13), 9=-35(LC 12)
Max Grav 1=1094(LC 20), 9=1095(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1258/257, 3-5=-1111/466, 5-7=-1112/466, 7-9=-1259/257
BOT CHORD 1-12=-104/910, 10-12=-13/632, 9-10=-17/788
WEBS 5-10=-243/687, 7-10=-418/338, 5-12=-243/684, 3-12=-418/338

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 11-5-8, Exterior(2) 11-5-8 to 15-10-5, Interior(1) 15-10-5 to 22-11-0 zone;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 30.0psf 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) 1, 9.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	B2GRD	COMMON	1	3	I50597799
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:41 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-Ms6Ee9sJKIOmG?4tm9jJlxqEmXbGyL5TeztAZdzeJpa

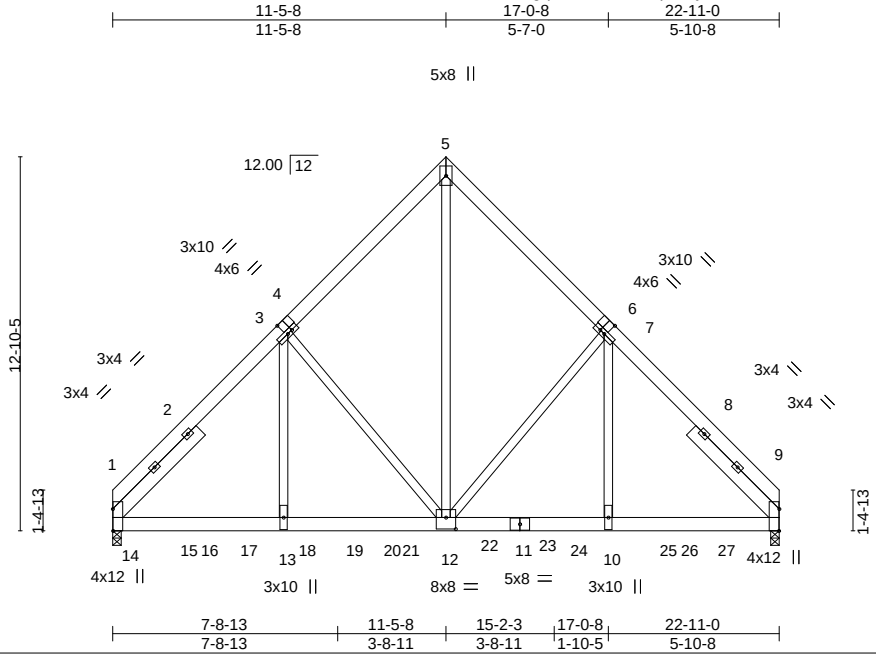


Plate Offsets (X,Y)-- [1:0-9-1,Edge], [4:0-3-0,Edge], [6:0-3-0,Edge], [9:0-9-1,Edge], [12:0-4-0,0-4-12]

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	0.74	Vert(LL)	-0.07	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.15	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	1-13	>999	240	Weight: 636 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.1 4-3-2, Right 2x6 SP No.1 4-3-2

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

REACTIONS. (size) 1=0-3-8, 9=0-3-8
Max Horz 1=-295(LC 6)
Max Grav 1=8541(LC 2), 9=8810(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-8294/0, 3-5=-6330/0, 5-7=-6312/0, 7-9=-9600/0
BOT CHORD 1-13=0/5451, 12-13=0/5457, 10-12=0/6320, 9-10=0/6308
WEBS 5-12=0/8319, 7-10=0/4736, 3-13=0/2678, 3-12=-1510/141, 7-12=-2921/0

NOTES-
1) 3-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 0-4-0 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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
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 30.0psf 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1227 lb down at 0-5-12, 1773 lb down and 46 lb up at 2-6-0, 473 lb down at 4-6-12, 479 lb down at 6-6-12, 504 lb down at 8-6-12, 1726 lb down at 10-1-8, 1574 lb down at 10-11-12, 1574 lb down at 12-11-12, 1574 lb down at 14-11-12, 1574 lb down at 16-11-12, and 1574 lb down at 18-11-12 , and 1574 lb down at 20-11-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60, 5-9=-60, 1-9=-20

March 4,2022

Continued on page 2

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

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 10=-1574(B) 14=-1227(B) 15=-1550(B) 17=-435(B) 18=-435(B) 20=-435(B) 21=-1668(B) 22=-1574(B) 23=-1574(B) 24=-1574(B) 25=-1574(B) 27=-1574(B)

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	C1GE	COMMON SUPPORTED GAB	1	1	I50597800
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:42 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-q2gdsVtx5bWdu9f3JsEYH8NaTw7shwbctddj53zeJpZ

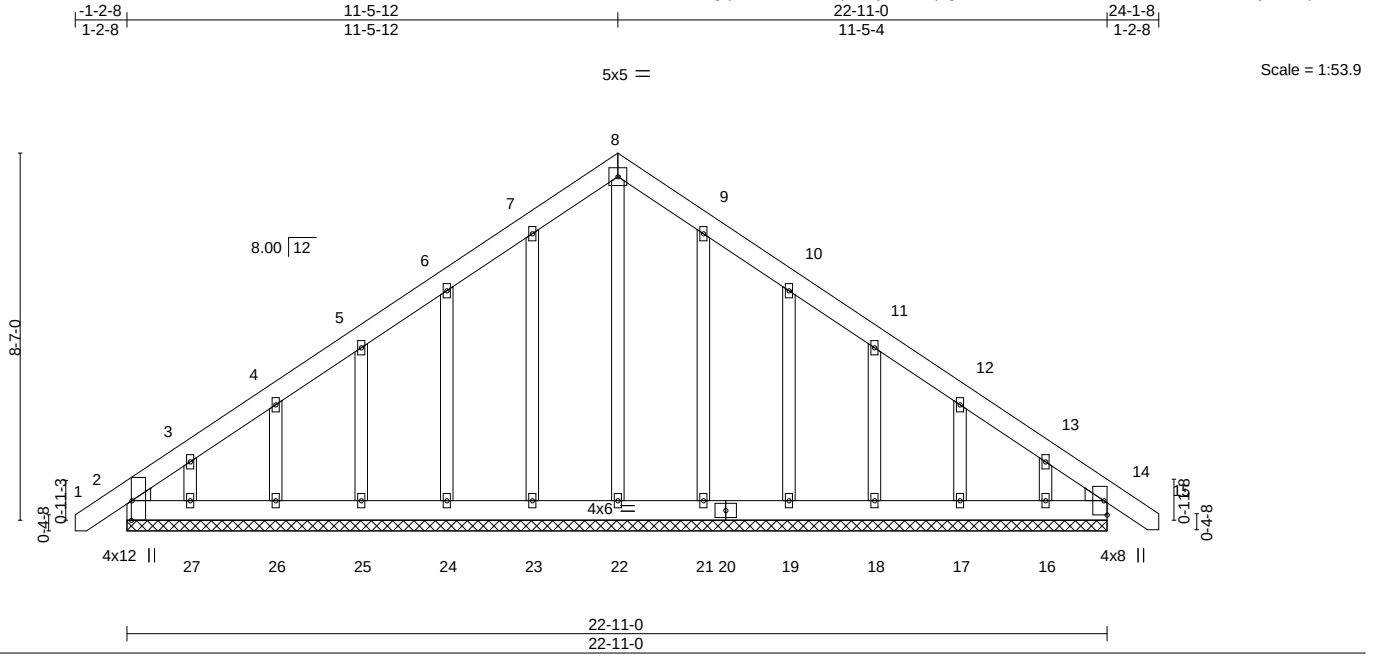


Plate Offsets (X,Y)-- [2:0-5-8,Edge]

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	0.03	Vert(LL)	-0.00	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	14	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 193 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

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

REACTIONS. All bearings 22-11-0.
(lb) - Max Horz 2=251(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 23, 24, 25, 26, 21, 19, 18, 17, 14 except 27=-129(LC 12), 16=-120(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 27, 21, 19, 18, 17, 16, 14

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-270/199

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;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 30.0psf 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) 2, 23, 24, 25, 26, 21, 19, 18, 17, 14 except (jt=lb) 27=129, 16=120.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 14.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	C2	COMMON	5	1	I50597801
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:43 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-IEE?3rtZsveUWJEFtalnqMviGKPXQNel5HMHdVzeJpY

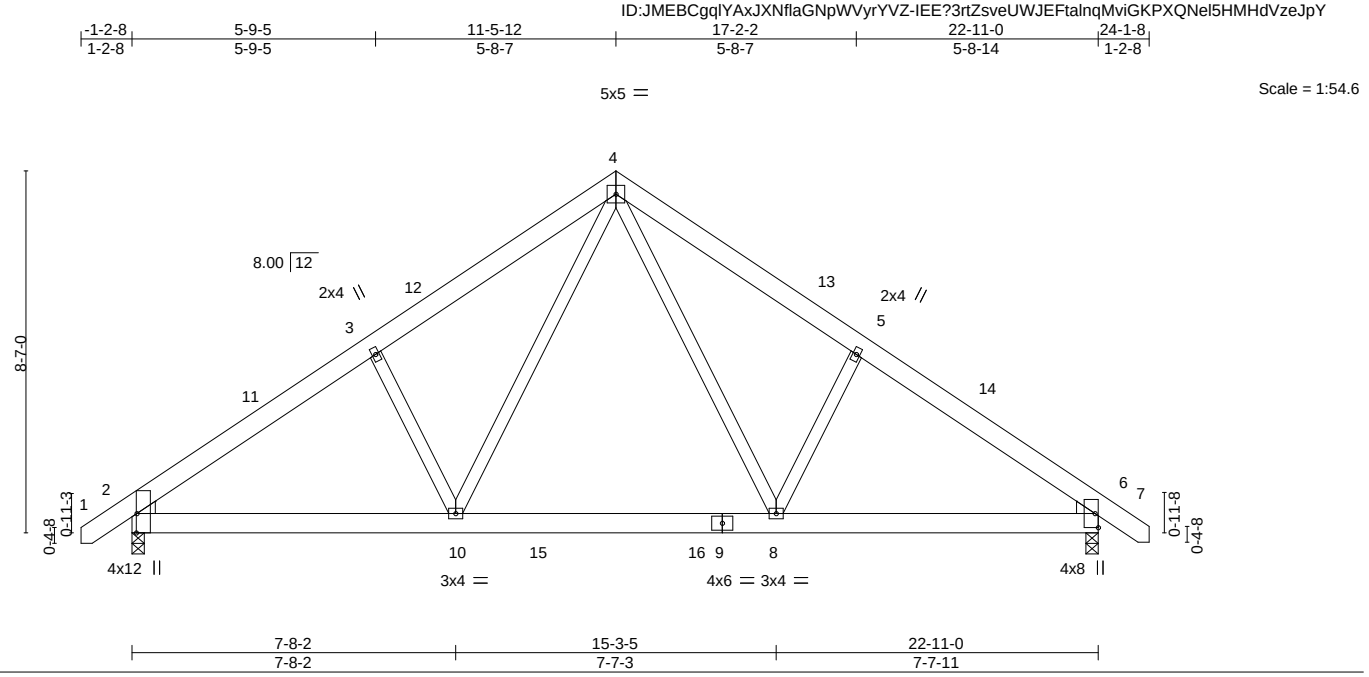


Plate Offsets (X,Y)-- [2:0-5-8,Edge]

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	0.22	Vert(LL)	-0.06	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.09	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.02	10	>999	240	Weight: 165 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=200(LC 11)
Max Uplift 2=-63(LC 12), 6=-63(LC 13)
Max Grav 2=993(LC 19), 6=993(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1278/267, 3-4=-1158/342, 4-5=-1156/342, 5-6=-1276/266
BOT CHORD 2-10=-105/1087, 8-10=0/729, 6-8=-110/955
WEBS 4-8=-121/560, 5-8=-326/224, 4-10=-122/565, 3-10=-331/225

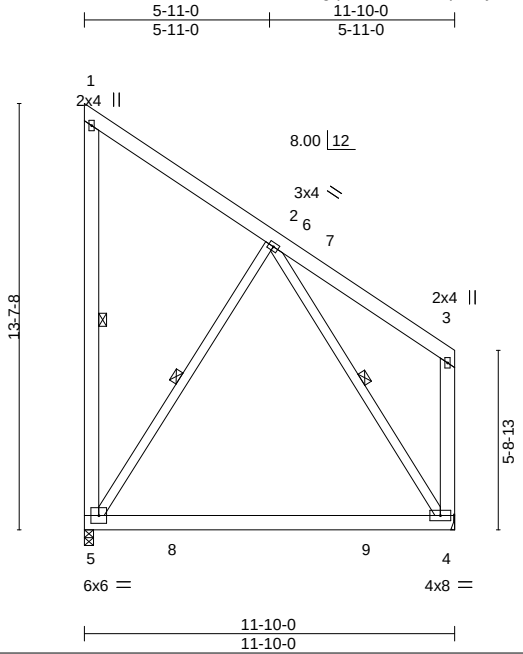
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 11-5-12, Exterior(2) 11-5-12 to 15-10-9, Interior(1) 15-10-9 to 23-11-15 zone;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 30.0psf 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) 2, 6.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	M1	Roof Special	3	1	I50597802
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:44 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-mQnNGBuBdDmL8TpRRHG0NZSrPkee9povKx6qAyzeJpX



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	0.33	Vert(LL)	-0.34	4-5	>397	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.49	4-5	>278	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	-0.00	4-5	>999	240	Weight: 133 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x6 SP No.1 *Except* 2-5,2-4: 2x4 SP No.2

BRACING-

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

REACTIONS. (size) 5=0-3-8, 4=Mechanical
Max Horz 5=-247(LC 13)
Max Uplift 5=-248(LC 13)
Max Grav 5=667(LC 20), 4=544(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-465/384

NOTES-

1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 6-5-7, Interior(1) 6-5-7 to 11-7-4 zone;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 30.0psf 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=248.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	M2	ROOF SPECIAL	3	1	I50597803
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:44 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-mQnNGBuBdDmL8TpRRHG0NZSmgkdM9lXvKx6qAyzeJpX

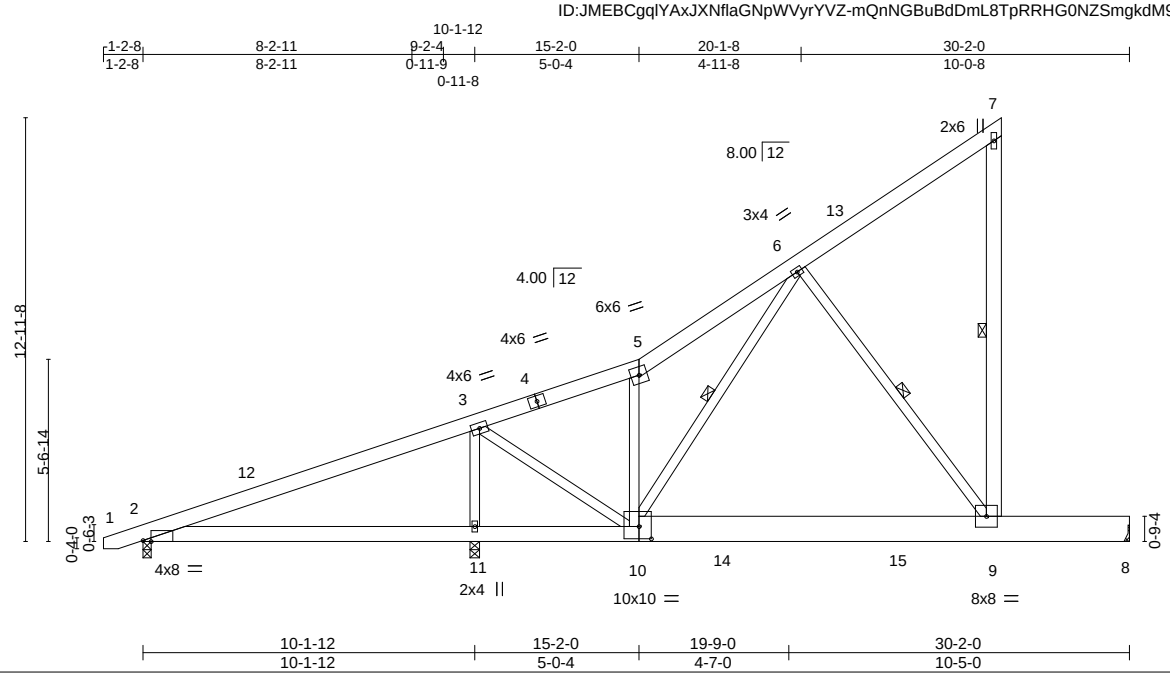


Plate Offsets (X,Y)-- [2:0-2-15,Edge], [10:0-4-8,0-4-8]

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	0.69	Vert(LL)	-0.28	9-10	>847	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.50	9-10	>479	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.51	Horz(CT)	-0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.16	9-10	>999	240	Weight: 241 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
8-10: 2x10 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-9-13 oc bracing.
WEBS 1 Row at midpt 7-9, 6-9, 6-10

REACTIONS. (size) 2=0-3-0, 11=0-3-8, 8=Mechanical
Max Horz 2=408(LC 12)
Max Uplift 2=-509(LC 19), 11=-188(LC 12), 8=-32(LC 12)
Max Grav 2=72(LC 12), 11=2436(LC 2), 8=845(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-584/2375, 3-5=-382/487, 5-6=-369/641
BOT CHORD 2-11=-2159/118, 10-11=-2159/118
WEBS 3-11=-2293/375, 3-10=-79/2072, 6-10=-841/266

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 26-0-4 zone; porch 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 30.0psf 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=509, 11=188.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

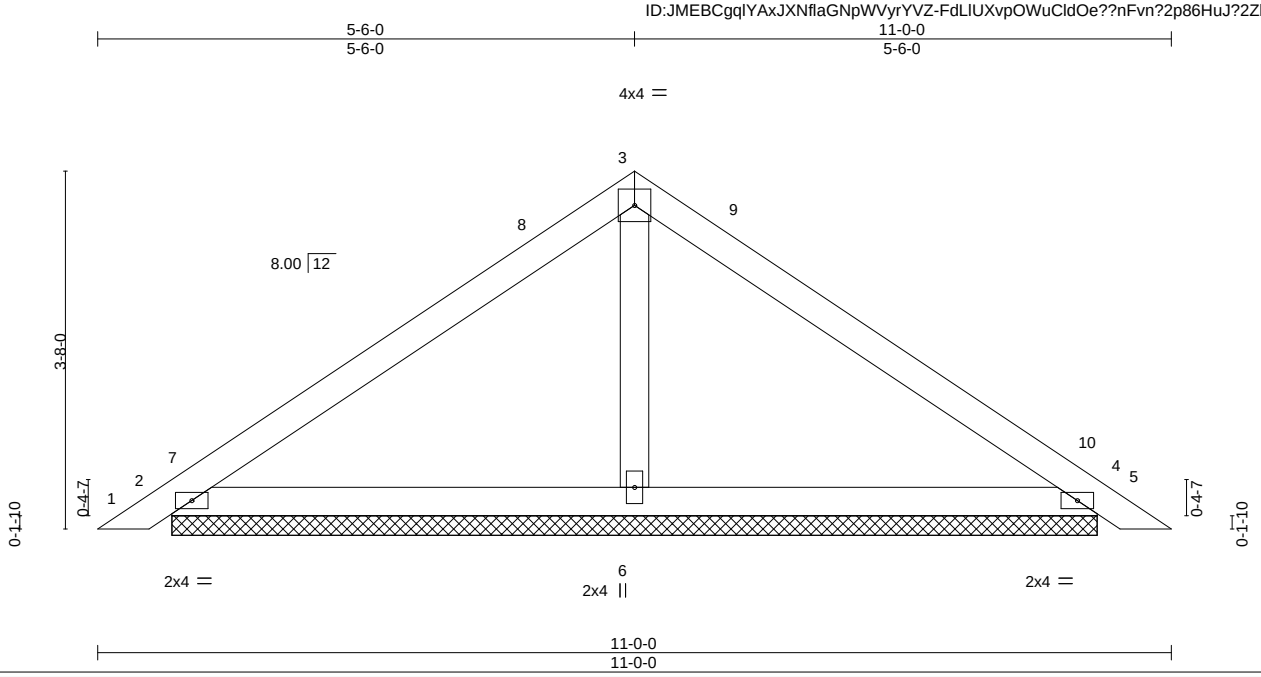
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60, 5-7=-60, 2-9=-20, 8-9=-50

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	PB1	PIGGYBACK	3	1	I50597804
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:45 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-FdLlUXvpOWuCldOe??nFvn?2p86HuJ?2ZbrNiOzeJpW



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	0.22	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	0.01	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	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 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 2=9-5-12, 4=9-5-12, 6=9-5-12
Max Horz 2=-84(LC 10)
Max Uplift 2=-30(LC 12), 4=-39(LC 13)
Max Grav 2=219(LC 1), 4=219(LC 1), 6=380(LC 1)

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

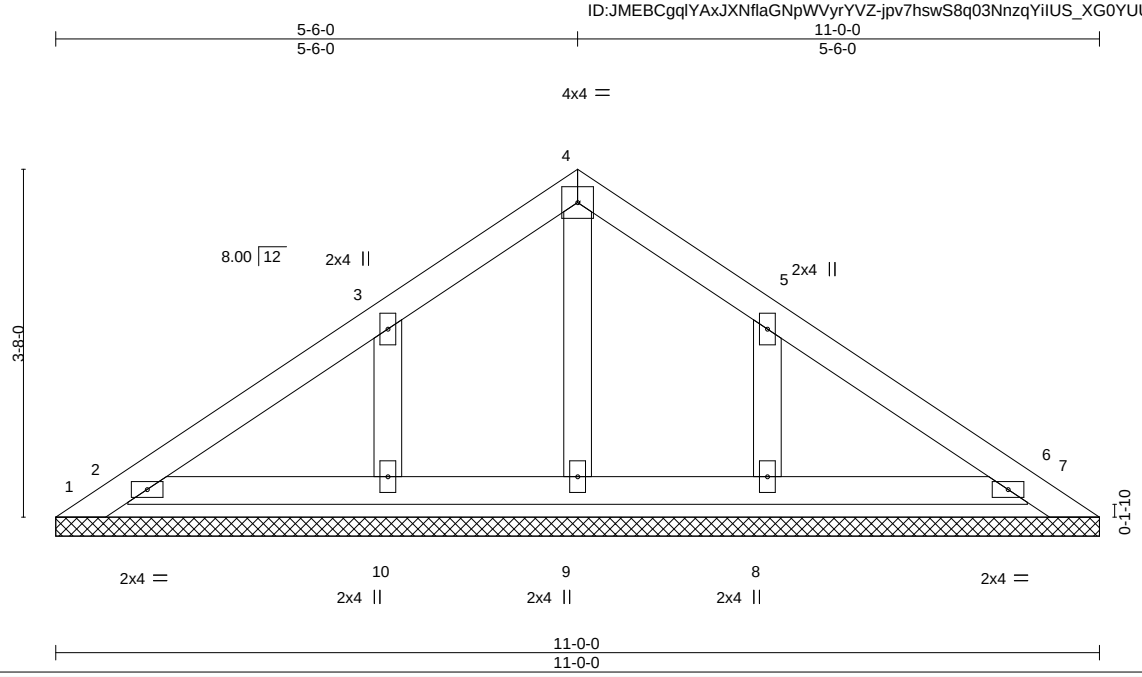
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 5-6-0, Exterior(2) 5-6-0 to 9-10-13, Interior(1) 9-10-13 to 10-8-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 30.0psf 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) 2, 4.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	PB1GE	GABLE	1	1	I50597805
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:46 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-jpv7hswS8q03NnzqYiIUS_XG0YUUdmaCnFbxEqzeJpV



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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	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 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 11-0-0.
(lb) - Max Horz 1=105(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 6 except 1=-105(LC 19), 10=-114(LC 12), 8=-113(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9, 10, 8

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

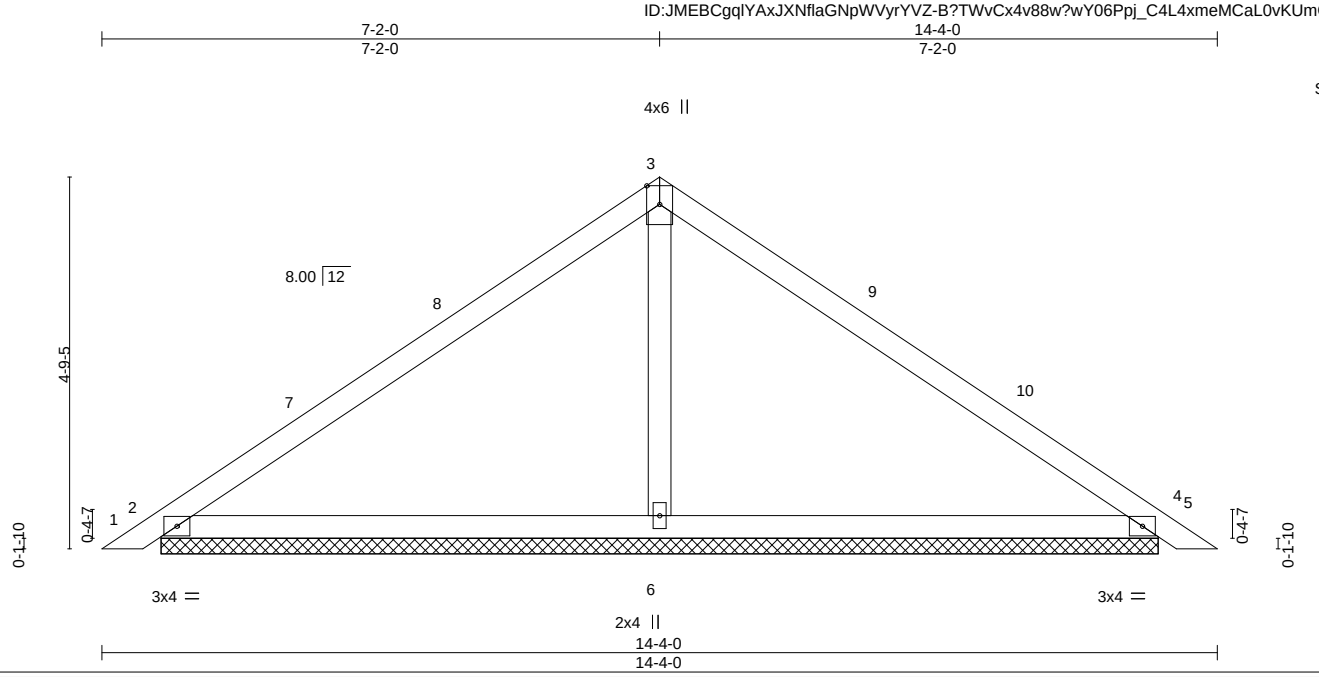
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
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 30.0psf 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) 7, 2, 6 except (jt=lb) 1=105, 10=114, 8=113.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven	
J0322-1176	PB2	PIGGYBACK	16	1	Job Reference (optional)	I50597806

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:47 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-B?TWvCx4v88w?wY06Ppj_C4L4xmeMCaL0vKUmGzeJpU



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	0.43	Vert(LL)	0.02	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	0.03	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 51 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 2=12-9-12, 4=12-9-12, 6=12-9-12
Max Horz 2=-110(LC 10)
Max Uplift 2=-38(LC 12), 4=-49(LC 13)
Max Grav 2=284(LC 1), 4=284(LC 1), 6=517(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-319/123

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 7-2-0, Exterior(2) 7-2-0 to 11-6-13, Interior(1) 11-6-13 to 14-0-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 30.0psf 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) 2, 4.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven	
J0322-1176	PB2A	PIGGYBACK	2	1	Job Reference (optional)	I50597807

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:48 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-fC1u6YxigRGnc47Dg7LyXPdYiL1R5e0UFZ41JjzeJpT

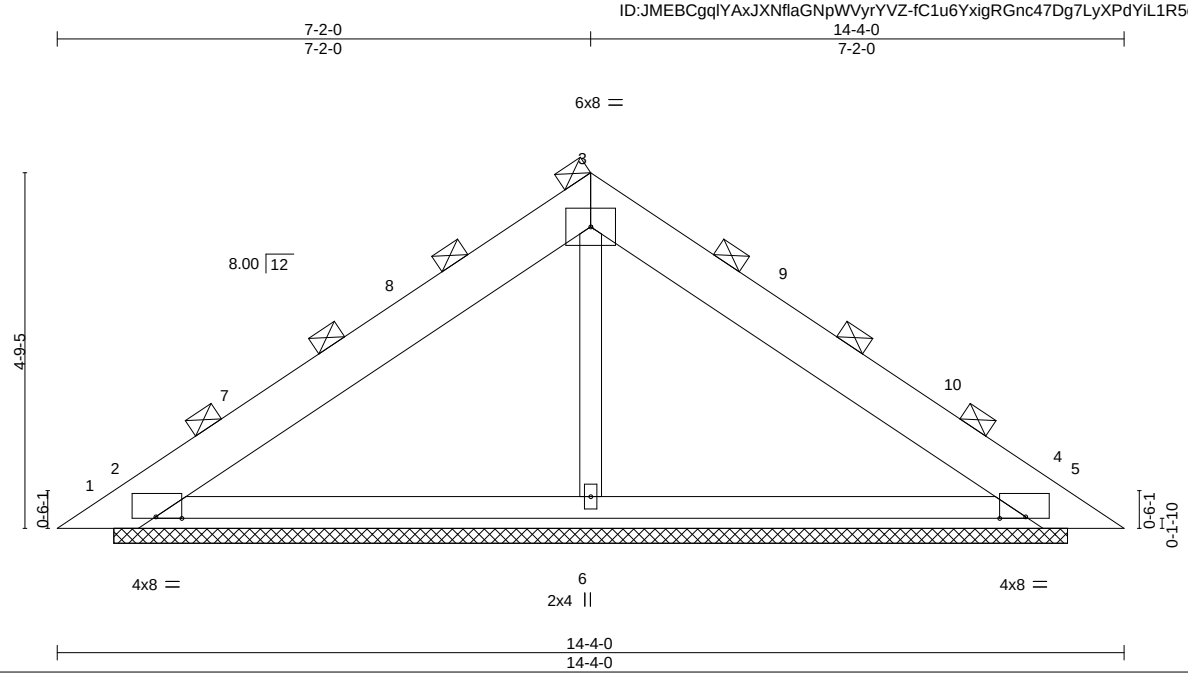


Plate Offsets (X,Y)-- [2:0-4-3,Edge], [4:0-4-3,Edge]

LOADING (psf)		SPACING-	5-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 76 lb	FT = 20%

LUMBER-
TOP CHORD 2x8 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
(Switched from sheeted: Spacing > 2-10-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-9-12.
(lb) - Max Horz 1=265(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-779(LC 19), 5=-703(LC 20), 2=-525(LC 12), 4=-509(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 1=376(LC 12), 5=326(LC 13), 2=1613(LC 19), 4=1589(LC 20), 6=894(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-352/498, 2-3=-498/295, 3-4=-475/293, 4-5=-163/289
WEBS 3-6=-563/142

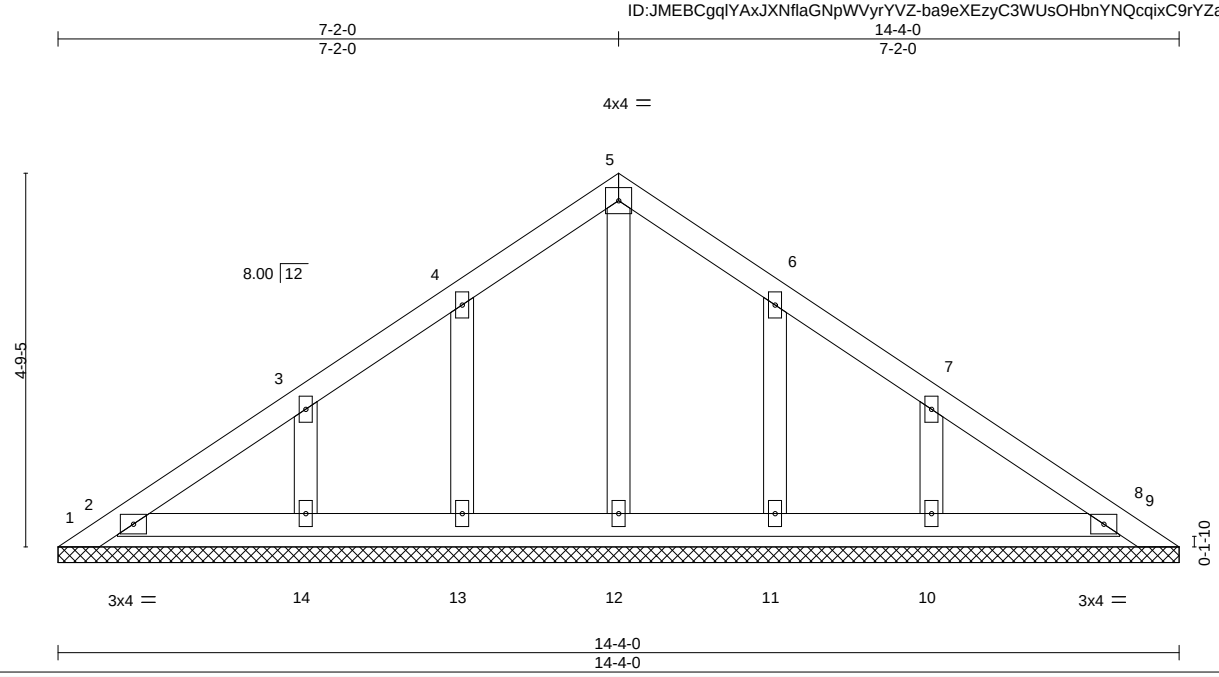
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-6-9 to 4-11-5, Interior(1) 4-11-5 to 7-2-0, Exterior(2) 7-2-0 to 11-6-13, Interior(1) 11-6-13 to 13-9-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 30.0psf 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 779 lb uplift at joint 1, 703 lb uplift at joint 5, 525 lb uplift at joint 2 and 509 lb uplift at joint 4.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	PB2GE	GABLE	2	1	I50597808
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:50 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-ba9eXEzyC3WUsOHbnYNQcqixC9rYZaRnitZ8NbzeJpR



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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 63 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 14-4-0.
(lb) - Max Horz 1=-138(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 8, 13, 11, 10 except 1=-105(LC 10), 14=-100(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 2, 8, 12, 13, 14, 11, 10

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

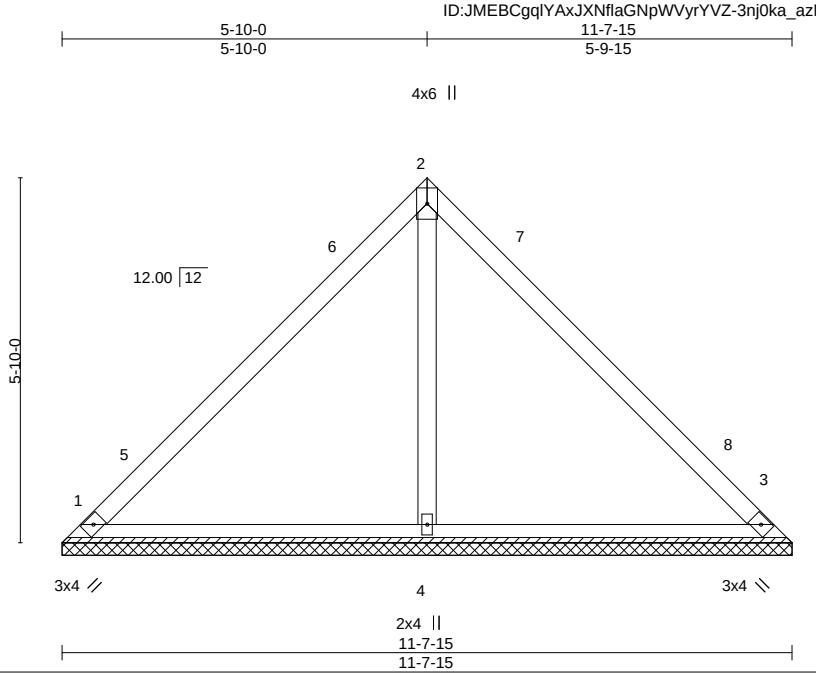
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 30.0psf 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) 9, 2, 8, 13, 11, 10 except (jt=lb) 1=105, 14=100.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	VB1	GABLE	1	1	I50597809
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:51 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-3nj0ka_azMeLTYroLFug92E1UZ8lI0TxxXliw2zeJpQ



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	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 48 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=11-7-15, 3=11-7-15, 4=11-7-15
Max Horz 1=-131(LC 8)
Max Uplift 1=-33(LC 13), 3=-33(LC 13)
Max Grav 1=249(LC 1), 3=248(LC 1), 4=380(LC 1)

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

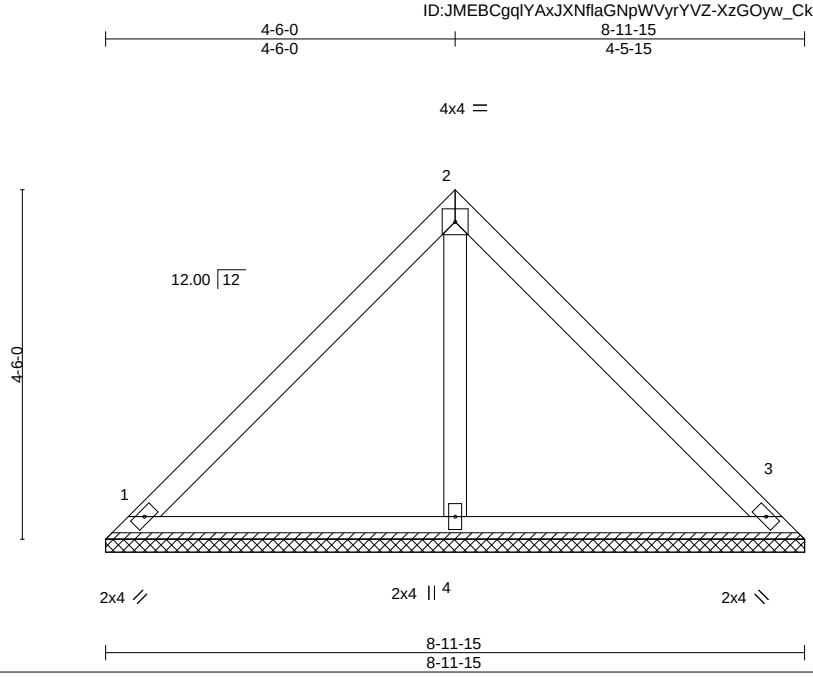
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-10-0, Exterior(2) 5-10-0 to 10-2-12, Interior(1) 10-2-12 to 11-3-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 30.0psf 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) 1, 3.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	VB2	VALLEY	1	1	I50597810
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:52 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-XzGOyw_CkgmC5iQ_vzPvhFnDtyWU1Uk4AB2FSUzeJpP



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	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 37 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=8-11-15, 3=8-11-15, 4=8-11-15
Max Horz 1=-99(LC 8)
Max Uplift 1=-36(LC 13), 3=-36(LC 13)
Max Grav 1=202(LC 1), 3=202(LC 1), 4=259(LC 1)

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

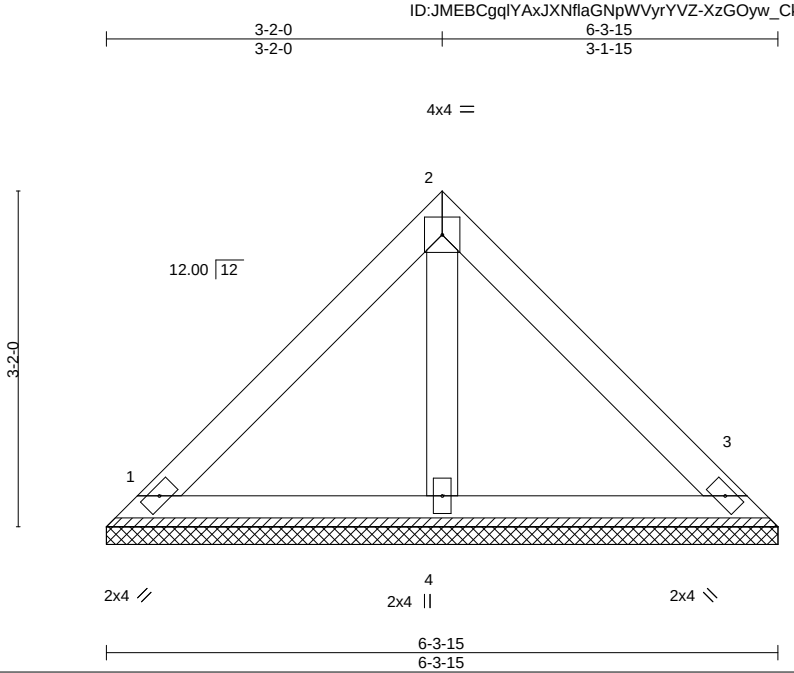
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 30.0psf 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) 1, 3.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	VB3	VALLEY	1	1	I50597811
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:52 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-XzGOyw_CkgmC5iQ_vzPvhFnFSyXY1UB4AB2FSUzeJpP



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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=6-3-15, 3=6-3-15, 4=6-3-15
Max Horz 1=67(LC 11)
Max Uplift 1=-24(LC 13), 3=-24(LC 13)
Max Grav 1=137(LC 1), 3=137(LC 1), 4=176(LC 1)

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

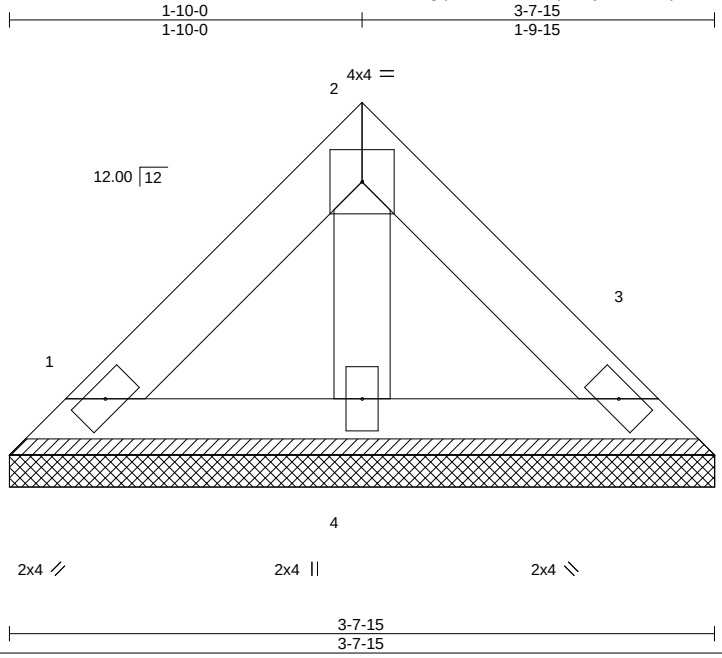
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 30.0psf 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) 1, 3.

March 4,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 23 Oak Haven
J0322-1176	VB4	VALLEY	1	1	I50597812
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 4 11:08:53 2022 Page 1
ID:JMEBCgqlYAxJXNflaGNpWVyrYVZ-09qn9G?rV_u3jr?ATgw8ETKSkMtSmxbEOrno_wzeJpO



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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 14 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-7-15, 3=3-7-15, 4=3-7-15
Max Horz 1=35(LC 9)
Max Uplift 1=-13(LC 13), 3=-13(LC 13)
Max Grav 1=72(LC 1), 3=72(LC 1), 4=93(LC 1)

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

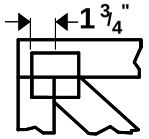
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 30.0psf 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) 1, 3.

March 4,2022

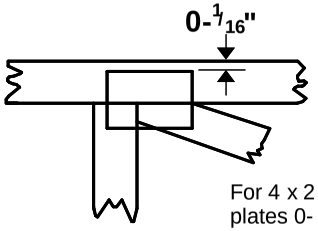
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

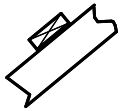
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

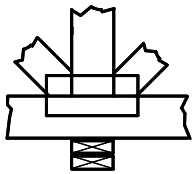
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

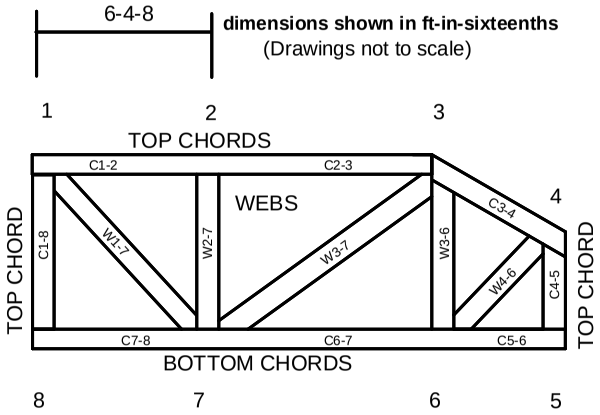


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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