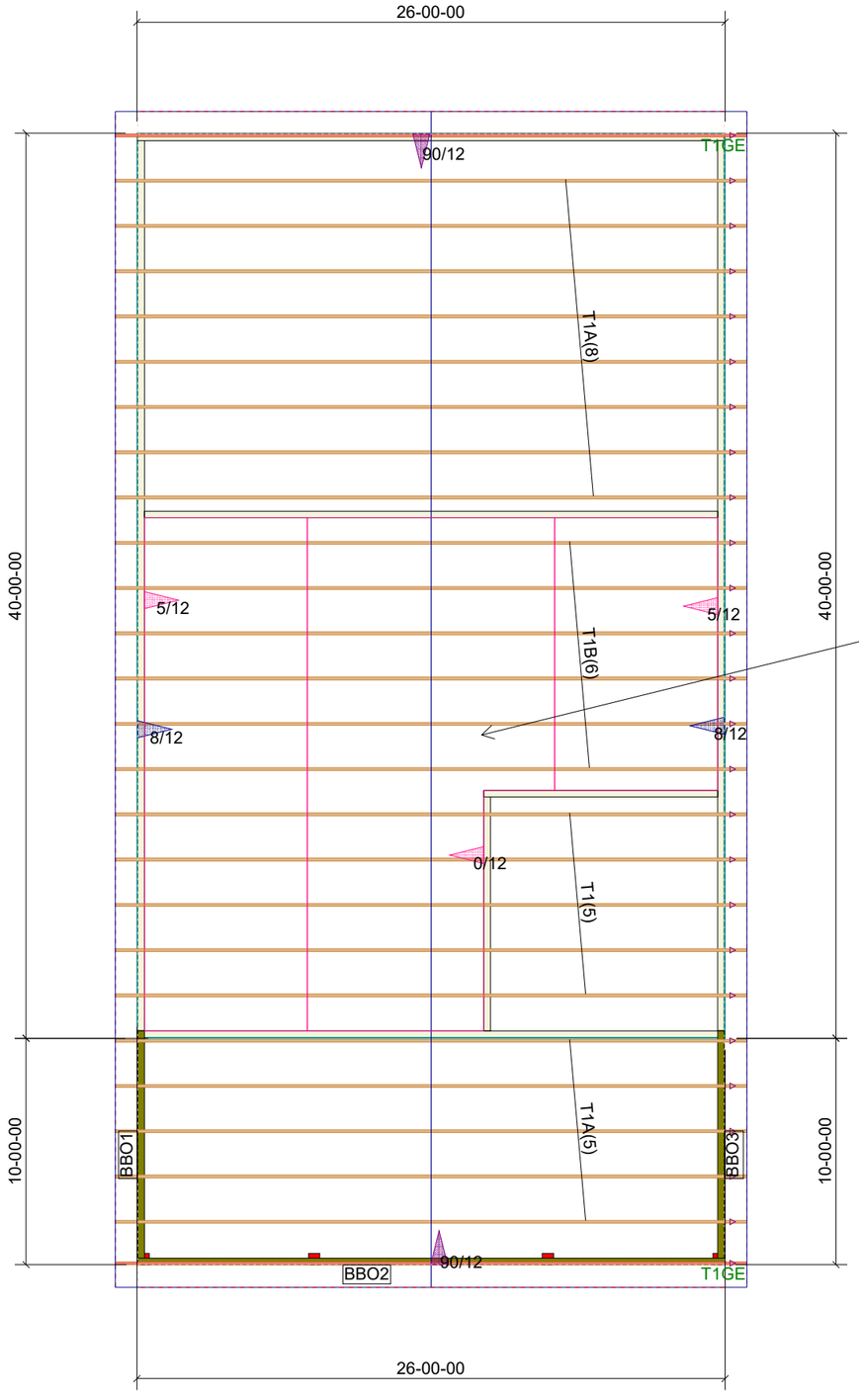
THIS LAYOUT IS TO BE USED AS A TRUSS PLACEMENT GUIDE ONLY. PLEASE REFER TO BUILDING PLANS FOR BUILDING CONSTRUCTION AND DETAILS, SUCH AS PLUMBING OR DUCT DROPS.

PROPOSED DESIGN- NOT FOR CONSTRUCTION



MANCAVE
ROOF TRUSSES
2' OC, 1' OH

THIS DESIGN PROPOSES A 12' FLAT CEILING AT VAULTED AREA FOR FUNCTIONALITY; PLEASE CONFIRM OR CALL TO DISCUSS.

Notes:
1. Exterior dimensions shown are assumed to be:
   ☐ Out-to-out of stud
   ☒ Out-to-out of sheathing
2. Adjust truss locations as needed for plumbing and mechanical clearance. Unless otherwise noted, trusses may be shifted as long as O.C. spacing shown is not exceeded.
3. Do not cut, drill, or otherwise damage any part of any truss without prior approval from Peak Truss.
4. Do not approve drawings if any information herein is unclear. Once ordered trusses will be fabricated as approved.
5. Please contact Peak Truss Builders with any questions. We are available to help any way we can. We can be reached at 919-545-5555 or sales@peaktruss.com

Roof Truss Loading per 2018 NC Residential Code

Top Chord Live Load	20# PSF
Top Chord Dead Load	10# PSF
Bottom Chord Live Load	0# PSF
Bottom Chord Dead Load	10# PSF

Trusses are designed for additional storage load wherever a 42"x24" box will fit between the webs.

△ - This symbol denotes left end of truss as shown on truss drawings

● - Approximate location of toilet drop. Builder please confirm.

Truss connections by others:

Ⓝ -Nailed

Ⓛ -Ledger

Job # Q-1901483

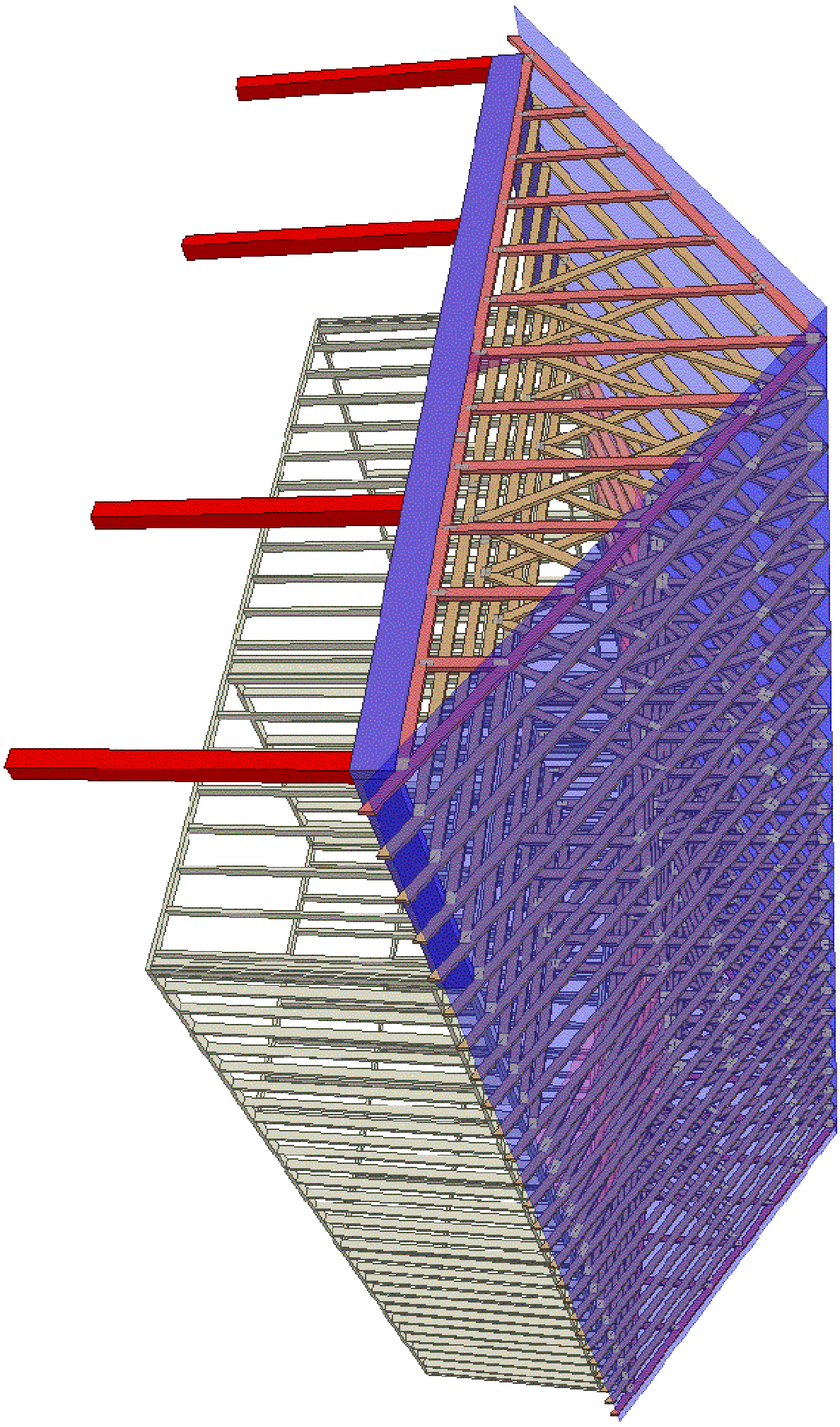
Mancave
Dunn NC

Date Quoted:

Designer: **Sarah Billings**

Guy C Lee - Clayton
151 Hwy 42 E
Clayton,NC
27520

Peak Truss Builders, LLC
PO Box 340, New Hill, NC 27562



Peak Truss Builders, LLC PO Box 340, New Hill, NC 27562	Guy C Lee - Clayton 151 Hwy 42 E Clayton,NC 27520	Date Quoted: Designer: **Sarah Billings**	Mancave Dunn NC	Job # Q-1901483

Job	Truss	Truss Type	Qty	Ply	Mancave-Roof
Q-1901483-1	T1	Roof Special	5	1	Job Reference (optional)

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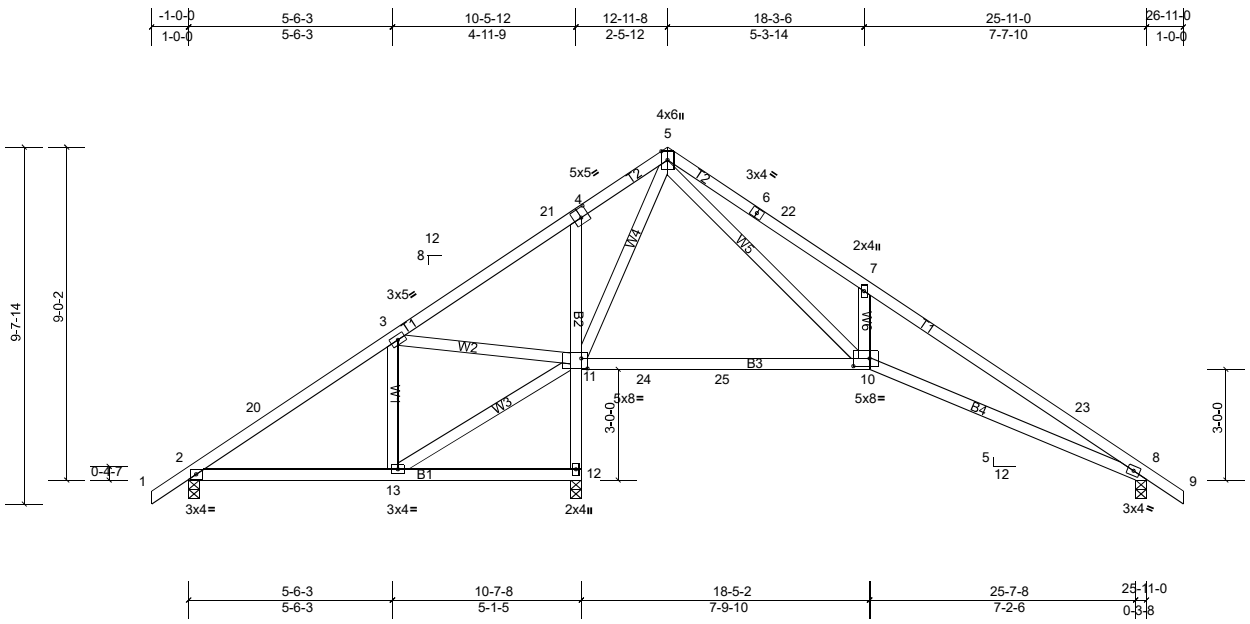


Scale = 1:62.3

Plate Offsets (X, Y): [4:0-2-8,0-3-0], [10:0-5-4,0-2-8], [11:0-2-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	0.11	10-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.22	10-11	>827	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 143 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except* B2:2x4 SP No.3
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-6-8 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=262/0-3-8, (min. 0-1-8), 8=530/0-3-8, (min. 0-1-8), 12=1400/0-3-8, (min. 0-2-3)
Max Horiz 2=-167 (LC 9)
Max Uplift 2=-110 (LC 11), 8=-127 (LC 11), 12=-89 (LC 11)
Max Grav 2=358 (LC 20), 8=532 (LC 21), 12=1400 (LC 1)

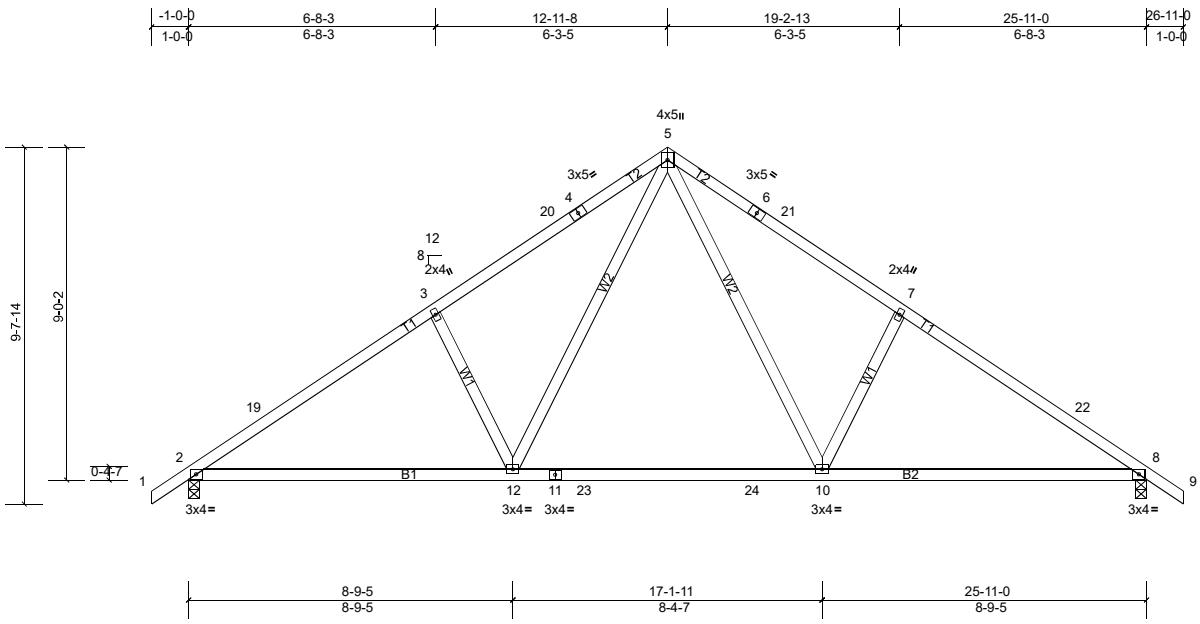
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-20=-277/147, 3-21=0/595, 4-21=0/721, 4-5=0/661, 5-6=-956/318, 6-22=-969/302, 7-22=-1060/286, 7-23=-912/117, 8-23=-1013/79
BOT CHORD 11-12=-1366/115, 4-11=-250/132, 8-10=0/857
WEBS 3-11=-573/188, 5-11=-1021/16, 5-10=-251/1315, 7-10=-457/272

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 12-11-8, Exterior (2) 12-11-8 to 15-11-8, Interior (1) 15-11-8 to 26-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
4) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 2, 89 lb uplift at joint 12 and 127 lb uplift at joint 8.
6) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Mancave-Roof
Q-1901483-1	T1A	Common	13	1	Job Reference (optional)



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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.22	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.28	10-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 131 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1097/0-3-8, (min. 0-1-12), 8=1097/0-3-8, (min. 0-1-12)
Max Horiz 2=-167 (LC 9)
Max Uplift 2=-163 (LC 11), 8=-163 (LC 11)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-19=-1489/195, 3-19=-1428/225, 3-20=-1354/276, 4-20=-1245/277, 4-5=-1237/296, 5-6=-1237/296, 6-21=-1246/277, 7-21=-1354/276, 7-22=-1428/225, 8-22=-1489/195
BOT CHORD 2-12=-63/1272, 11-12=0/823, 11-23=0/823, 23-24=0/823, 10-24=0/823, 8-10=-63/1188
WEBS 5-10=-102/666, 7-10=-378/211, 5-12=-102/665, 3-12=-378/211

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 12-11-8, Exterior (2) 12-11-8 to 15-11-8, Interior (1) 15-11-8 to 26-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 2 and 163 lb uplift at joint 8.
5) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Mancave-Roof
Q-1901483-1	T1B	Roof Special	6	1	Job Reference (optional)

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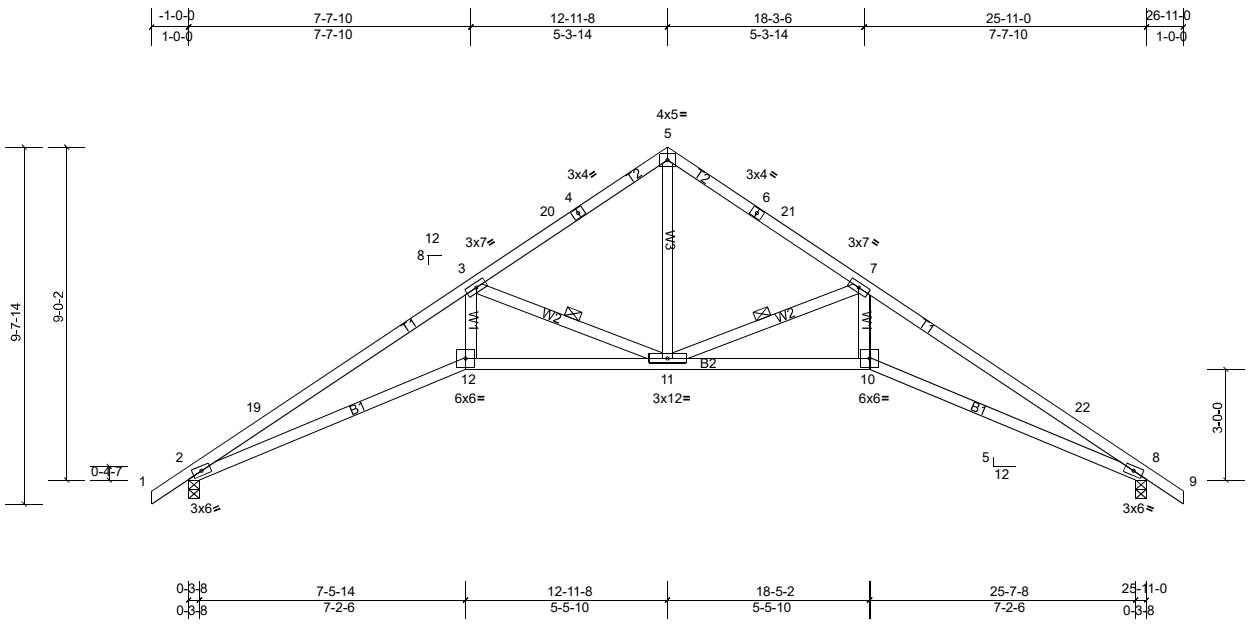

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.23	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.46	11-12	>672	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.46	8	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 121 lb	FT = 20%

LUMBER

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

REACTIONS (lb/size) 2=1097/0-3-8, (min. 0-1-12), 8=1097/0-3-8, (min. 0-1-12)
Max Horiz 2=-167 (LC 9)
Max Uplift 2=-163 (LC 11), 8=-163 (LC 11)

BRACING

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

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

TOP CHORD 2-19=-3430/240, 3-19=-3312/282, 3-20=-1542/158, 4-20=-1445/174, 4-5=-1444/190, 5-6=-1444/190, 6-21=-1445/174, 7-21=-1542/158, 7-22=-3312/282, 8-22=-3430/240

BOT CHORD 2-12=-122/3002, 11-12=-94/2671, 10-11=-94/2671, 8-10=-122/3002

WEBS 5-11=-104/1317, 7-11=-1584/242, 7-10=0/1250, 3-11=-1584/242, 3-12=0/1250

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 12-11-8, Exterior (2) 12-11-8 to 15-11-8, Interior (1) 15-11-8 to 26-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearing at joint(s) 2, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 2 and 163 lb uplift at joint 8.
6) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Mancave-Roof
Q-1901483-1	T1GE	Common Supported Gable	2	1	Job Reference (optional)

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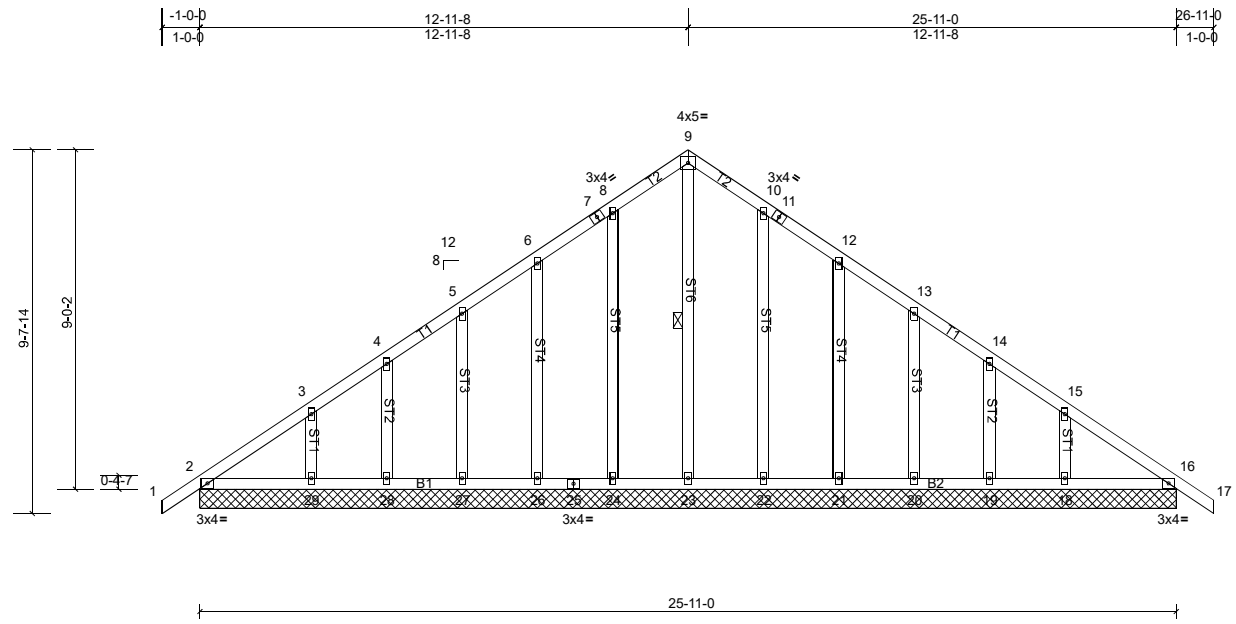

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	16	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-S							Weight: 168 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
OTHERS	2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 9-23

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS All bearings 25-11-0.

(lb) - Max Horiz 2=-167 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 18, 19, 20, 21, 22, 24, 26, 27, 28, 29

Max Grav All reactions 250 (lb) or less at joint(s) 2, 16, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29

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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=26ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -1-0-0 to 2-0-0, Exterior (2) 2-0-0 to 12-11-8, Corner (3) 12-11-8 to 15-11-8, Exterior (2) 15-11-8 to 26-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18.
9) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard