Job	Truss	Truss Type	Qty	Ply	
24090120	A01	Attic Supported Gable	1	1	Job Reference (optional)

Carter Components, Sanford, NC, user
Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:45   Page: 1
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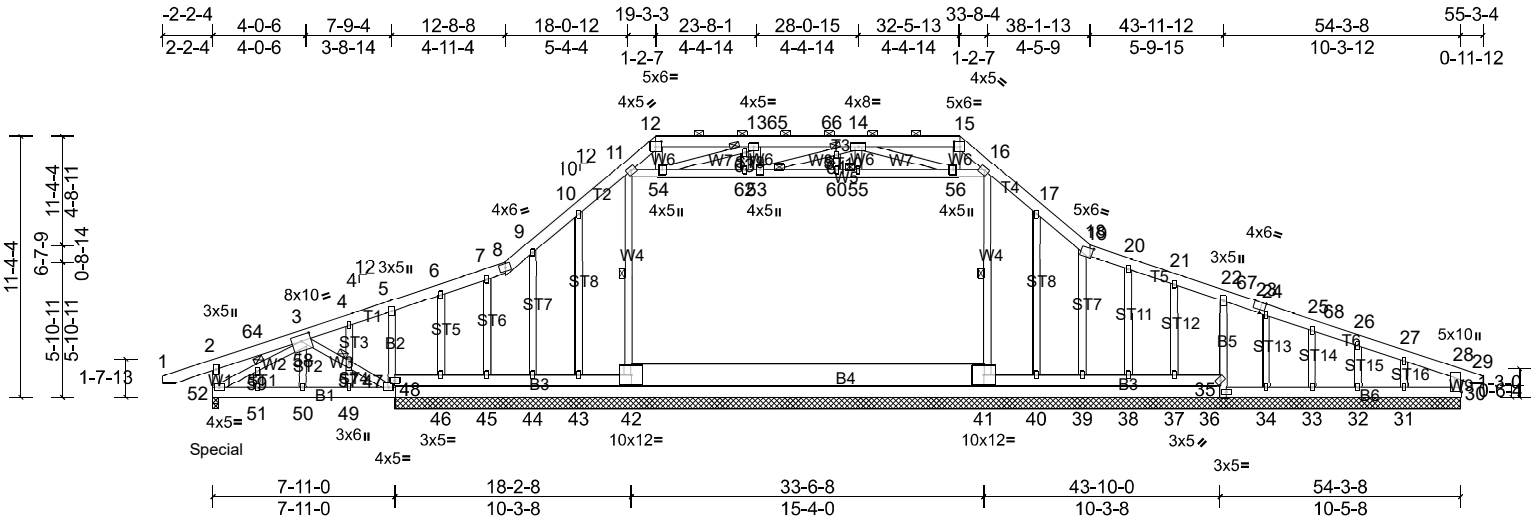
Scale = 1:100.3

Plate Offsets (X, Y): [3:0-5-0,0-3-0], [12:0-3-0,0-2-12], [15:0-3-0,0-2-12], [19:0-0-13,0-4-0], [23:0-2-3,Edge], [36:0-2-6,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.08	41-42	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.13	41-42	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.01	30	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 497 lb FT = 20%	

LUMBER
TOP CHORD   2x6 SP No.2
BOT CHORD   2x6 SP No.2 *Except* B2,B5:2x4 SP No.3, B4:2x12 SP 2400F 2.0E
WEBS   2x4 SP No.3 *Except* W5:2x4 SP No.2
OTHERS   2x4 SP No.3
BRACING
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-15 max.): 12-15.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   11-42, 16-41
JOINTS   1 Brace at Jt(s): 53, 55, 57, 59, 61, 63

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

REACTIONS All bearings 46-4-8. except 52=0-3-0
(lb) - Max Horiz   52=-101 (LC 13)
Max Uplift   All uplift 100 (lb) or less at joint(s) 30, 31, 32, 33, 34, 36, 37, 38, 39, 44, 45, 46, 47, 48 except 40=-305 (LC 70), 43=-303 (LC 22), 52=-101 (LC 11)
Max Grav   All reactions 250 (lb) or less at joint(s) 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 43, 45, 46, 48 except 39=318 (LC 75), 41=1175 (LC 58), 42=1179 (LC 70), 44=334 (LC 65), 47=294 (LC 53), 52=491 (LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-52=-298/131, 7-8=-254/179, 8-9=-257/195, 9-10=-318/291, 10-11=-303/348, 11-12=-881/411, 12-13=-673/332, 13-65=-1888/735, 65-66=-1888/735, 14-66=-1888/735, 14-15=-623/319, 15-16=-838/401, 16-17=-297/356, 17-18=-314/297
BOT CHORD   51-52=-84/333, 50-51=-84/333, 49-50=-84/333, 48-49=-84/333, 5-47=-269/69

WEBS   11-42=-574/119, 16-41=-590/95, 11-54=0/434, 54-62=-395/1687, 53-62=-395/1687, 53-60=-402/1638, 55-60=-402/1638, 55-56=-402/1638, 16-56=0/388, 12-54=-161/355, 15-56=-161/351, 14-56=-1277/454, 54-63=-1267/421, 13-63=-1354/448, 3-57=-285/86, 48-57=-292/87, 52-59=-281/37, 58-59=-299/41, 62-63=-250/84

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) -1-10-13 to 3-6-6, Exterior(2N) 3-6-6 to 19-3-3, Corner(3R) 19-3-3 to 24-8-6, Exterior(2N) 24-8-6 to 32-5-13, Corner(3E) 32-5-13 to 38-1-13, Exterior(2N) 38-1-13 to 54-11-13 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable studs spaced at 2-0-0 oc.

10) * 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.
11) Bearing at joint(s) 35, 36 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 30, 47, 36, 48, 44, 45, 46, 39, 38, 37, 34, 33, 32, 31 except (jt=lb) 52=101, 43=303, 40=305.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.
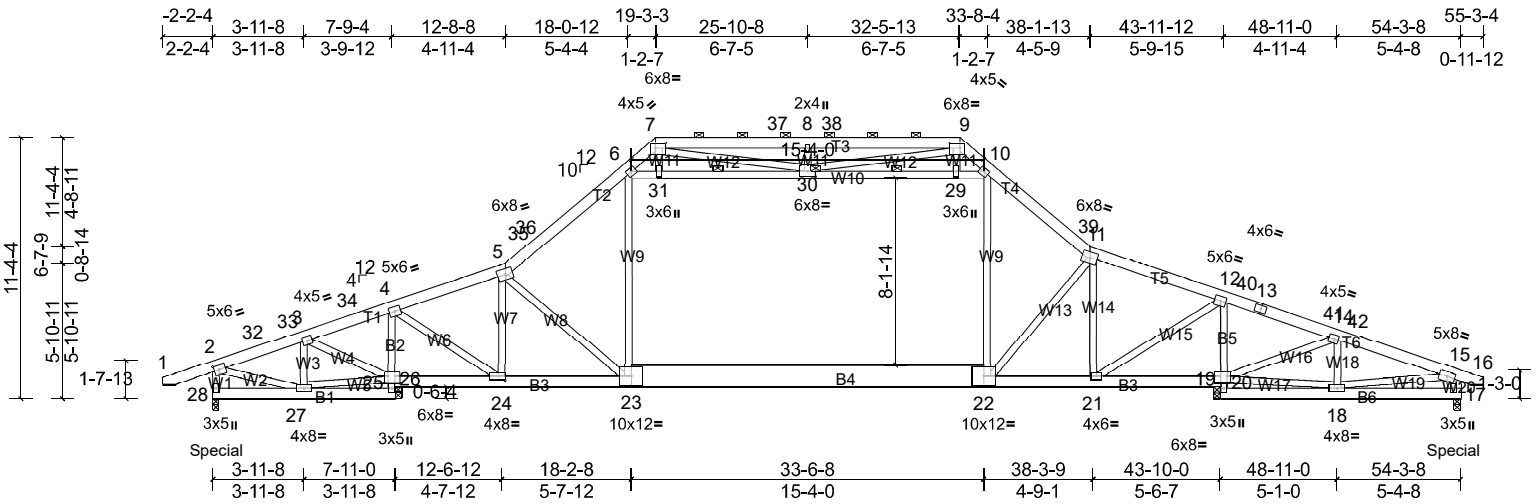
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	A02	Attic	6	1	Job Reference (optional)

Carter Components, Sanford, NC, user

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:46   Page: 1
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Scale = 1:100.3

Plate Offsets (X, Y): [2:0-2-14,0-2-8], [7:0-5-4,0-2-12], [9:0-5-4,0-2-12], [20:0-6-4,0-3-8], [24:0-3-8,0-2-0], [25:0-6-4,0-3-12], [30:0-4-0,0-2-12]

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	0.55	Vert(LL)	-0.25	22-23	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.37	22-23	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.02	17	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH		Attic	-0.20	22-23	>915	360		
BCDL	10.0										Weight: 494 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except* B2,B5:2x4 SP No.3, B3:2x6 SP 2400F 2.0E, B4:2x12 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* W10:2x4 SP No.2, W1:2x4 SP 2400F 2.0E, W20:2x8 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-6 oc purlins, except end verticals, and 2-0-0 oc purlins (3-5-10 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt   6-30, 10-30
JOINTS 1 Brace at Jt(s): 30

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

REACTIONS All bearings 0-3-8. except 28=0-3-0
(lb) - Max Horiz 28=-102 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) except 17=-112 (LC 12), 28=-198 (LC 11)
Max Grav All reactions 250 (lb) or less at joint(s) except 17=334 (LC 2), 20=2545 (LC 75), 25=2517 (LC 74), 28=263 (LC 2)

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

TOP CHORD 2-32=-171/354, 32-33=-150/371, 3-33=-140/374, 3-34=-117/755, 4-34=-104/783, 4-5=-1640/131, 5-35=-2450/128, 35-36=-2435/131, 6-36=-2379/160, 6-7=-1555/151, 7-37=-3067/325, 8-37=-3067/325, 8-38=-3067/325, 9-38=-3067/325, 9-10=-1563/164, 10-39=-2386/189, 11-39=-2446/159, 11-12=-1741/161, 12-40=-88/667, 13-40=-90/661, 13-41=-124/631, 14-41=-127/626, 14-42=-307/258, 15-42=-347/235, 15-17=-284/154

BOT CHORD 26-27=-260/14, 4-25=-2353/218, 24-25=-713/128, 23-24=0/1537, 22-23=0/1833, 21-22=0/1611, 20-21=-600/160, 12-20=-2361/177

WEBS 4-24=-118/2405, 5-24=-1460/101, 6-23=0/794, 10-22=0/804, 11-22=-12/402, 11-21=-1417/50, 12-21=-29/2375, 6-31=-1108/175, 30-31=-1022/176, 29-30=-982/140, 10-29=-1065/137, 2-27=-334/144, 9-29=0/432, 9-30=-240/1926, 5-23=0/455, 7-31=0/444, 8-30=-564/178, 7-30=-264/1931, 3-25=-438/104, 18-20=-68/296, 14-20=-565/98

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-10-13 to 3-6-6, Interior (1) 3-6-6 to 19-3-3, Exterior(2R) 19-3-3 to 24-8-6, Interior (1) 24-8-6 to 32-5-13, Exterior(2E) 32-5-13 to 38-1-13, Interior (1) 38-1-13 to 54-11-13 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=1.33

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
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) Ceiling dead load (10.0 psf) on member(s). 6-31, 30-31, 29-30, 10-29
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 22-23
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 28 and 112 lb uplift at joint 17.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	B01	Attic Supported Gable	1	1	Job Reference (optional)

Carter Components, Sanford, NC, user
Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:47 Page: 1
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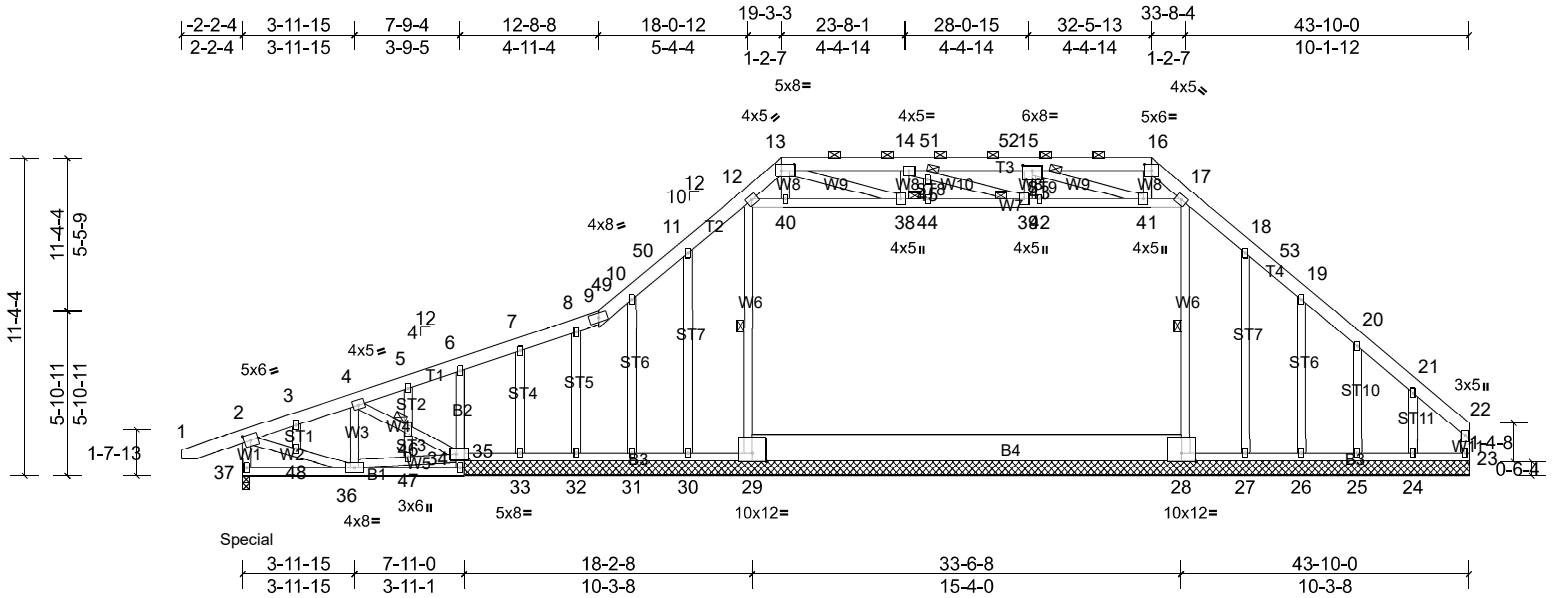
Scale = 1:82.4

Plate Offsets (X, Y): [2:0-2-14,0-2-8], [13:0-5-8,0-2-12], [15:0-4-0,0-2-4], [16:0-3-0,0-2-12], [34:0-5-8,0-2-8]

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	0.34	Vert(LL)	-0.12	28-29	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.17	28-29	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.01	23	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 408 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.3 *Except* B3:2x4 SP No.2, B4:2x12 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* W7:2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-1 max.): 13-16.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 36-37.
WEBS 1 Row at midpt   12-29, 17-28
JOINTS 1 Brace at Jt(s): 38, 39, 43, 45, 46

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

REACTIONS All bearings 35-11-0. except 37=0-3-0
(lb) - Max Horiz 37=228 (LC 12)
        Max Uplift All uplift 100 (lb) or less at joint(s) 23, 24, 25, 26, 27, 30, 31, 32, 33, 34, 37
        Max Grav All reactions 250 (lb) or less at joint(s) 24, 25, 27, 30, 32, 33 except 23=257 (LC 46), 26=293 (LC 63), 28=1038 (LC 54), 29=1070 (LC 66), 31=270 (LC 63), 34=462 (LC 42), 37=479 (LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-37=-478/178, 2-3=-397/104, 3-4=-365/111, 9-49=-229/252, 10-49=-217/260, 10-50=-258/351, 11-50=-227/365, 11-12=-241/421, 12-13=-829/406, 13-14=-1841/698, 14-51=-1879/687, 51-52=-1879/687, 15-52=-1879/687, 15-16=-670/314, 16-17=-871/388, 17-18=-247/357, 18-53=-223/256, 19-53=-254/248
BOT CHORD 6-34=-259/86

WEBS 12-29=-637/137, 17-28=-621/107, 12-40=-69/453, 38-40=-67/442, 38-44=-301/1705, 39-44=-301/1705, 39-42=-377/1743, 41-42=-377/1743, 17-41=-66/500, 14-38=-454/136, 15-39=-116/282, 16-41=-160/340, 13-38=-398/1322, 15-43=-1378/423, 41-43=-1261/388, 2-48=-72/358, 36-48=-72/359, 36-47=-81/263, 34-47=-81/261, 4-46=-287/85, 34-46=-290/86, 42-43=-323/101

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) -1-10-13 to 2-5-13, Exterior(2N) 2-5-13 to 19-3-3, Corner(3R) 19-3-3 to 23-8-1, Exterior(2N) 23-8-1 to 32-5-13, Corner(3R) 32-5-13 to 36-10-6, Exterior(2N) 36-10-6 to 43-8-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
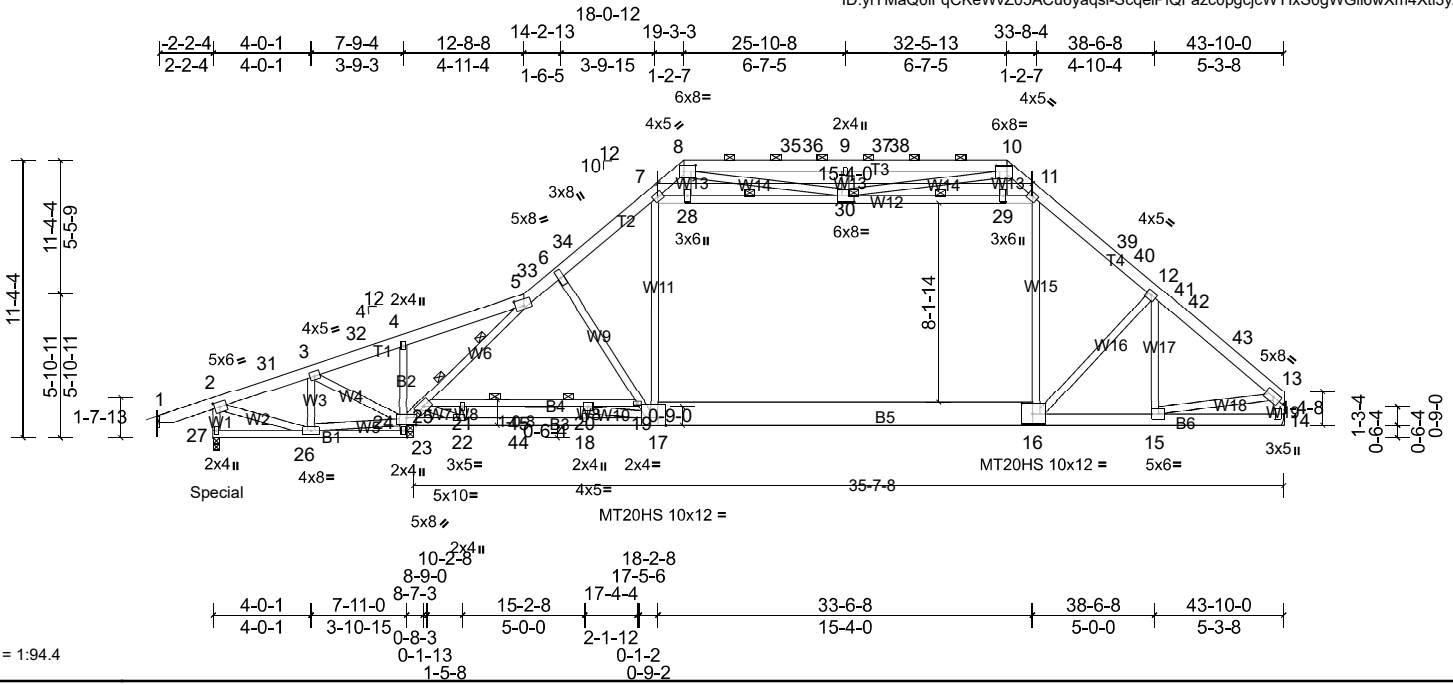3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable studs spaced at 2-0-0 oc.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 37, 23, 34, 30, 31, 32, 33, 27, 26, 25, 24.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	B02	Attic	6	1	Job Reference (optional)

Carter Components, Sanford, NC, user

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:48   Page: 1
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Scale = 1:94.4

Plate Offsets (X, Y): [2:0-2-14,0-2-8], [5:0-4-0,0-3-4], [8:0-5-12,0-3-0], [10:0-5-4,0-2-12], [16:0-5-4,0-5-0], [17:0-3-12,Edge], [24:0-4-12,0-3-4], [30:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.27	16-17	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.41	16-17	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.05	14	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH		Attic	-0.21	16-17	>878	360		
BCDL	10.0										Weight: 414 lb	FT = 20%

LUMBER
TOP CHORD   2x6 SP No.2
BOT CHORD   2x4 SP No.3 *Except* B3:2x4 SP 2400F 2.0E, B5:2x12 SP 2400F 2.0E, B6:2x6 SP 2400F 2.0E
WEBS   2x4 SP No.3 *Except* W12,W6:2x4 SP No.2, W19:2x6 SP No.2

BRACING
TOP CHORD   Structural wood sheathing directly applied or 3-8-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-0 max.): 8-10.
BOT CHORD   Rigid ceiling directly applied or 3-5-15 oc bracing.
WEBS   1 Row at midpt   7-30, 11-30
WEBS   2 Rows at 1/3 pts   5-24
JOINTS   1 Brace at Jt(s): 30

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

REACTIONS (lb/size)   14=1533/ Mechanical, (min. 0-1-8), 24=2285/0-3-8, (min. 0-2-12), 27=200/0-3-0, (min. 0-1-8)
Max Horiz   27=228 (LC 12)
Max Uplift   27=-260 (LC 11)
Max Grav   14=2206 (LC 55), 24=3286 (LC 70), 27=307 (LC 53)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-31=-250/295, 3-31=-227/326, 3-32=-194/732, 4-32=-168/784, 4-5=-233/786, 5-33=-2876/83, 6-33=-2819/92, 6-34=-2775/131, 7-34=-2762/158, 7-8=-1639/142, 8-35=-3032/350, 35-36=-3032/350, 9-36=-3032/350, 9-37=-3032/350, 37-38=-3032/350, 10-38=-3032/350, 10-11=-1600/176, 11-39=-2762/123, 39-40=-2819/103, 12-40=-2869/94, 12-41=-2581/124, 41-42=-2618/119, 42-43=-2669/101, 13-43=-2758/100, 2-27=-276/288, 13-14=-2220/118

BOT CHORD   25-26=-288/0, 4-24=-374/176, 22-24=0/2247, 22-44=0/3006, 18-44=0/3006, 17-18=0/3006, 16-17=0/2149, 15-16=-26/2043, 14-15=-38/352, 21-23=-1182/0, 21-45=-1182/0, 20-45=-1182/0

WEBS   7-17=0/1032, 11-16=0/1059, 12-16=-153/419, 7-28=-1343/100, 28-30=-1246/105, 29-30=-1319/35, 11-29=-1421/26, 2-26=-306/219, 13-15=0/1726, 12-15=-488/0, 8-28=0/504, 10-29=0/526, 10-30=-196/1936, 3-26=-31/259, 24-26=-96/293, 3-24=-499/43, 23-24=-3803/0, 5-23=-3374/0, 22-23=0/961, 6-19=0/473, 17-19=0/516, 9-30=-565/169, 8-30=-280/1861, 17-20=-1323/0

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-10-13 to 2-5-13, Interior (1) 2-5-13 to 19-3-3, Exterior(2R) 19-3-3 to 23-7-13, Interior (1) 23-7-13 to 32-5-13, Exterior(2R) 32-5-13 to 36-10-6, Interior (1) 36-10-6 to 43-7-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf(Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) 200.0lb AC unit load placed on the bottom chord, 12-8-8 from left end, supported at two points, 5-0-0 apart.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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). 7-28, 28-30, 29-30, 11-29
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 16-17
12) Refer to girder(s) for truss to truss connections.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 260 lb uplift at joint 27.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Attic room checked for L/360 deflection.
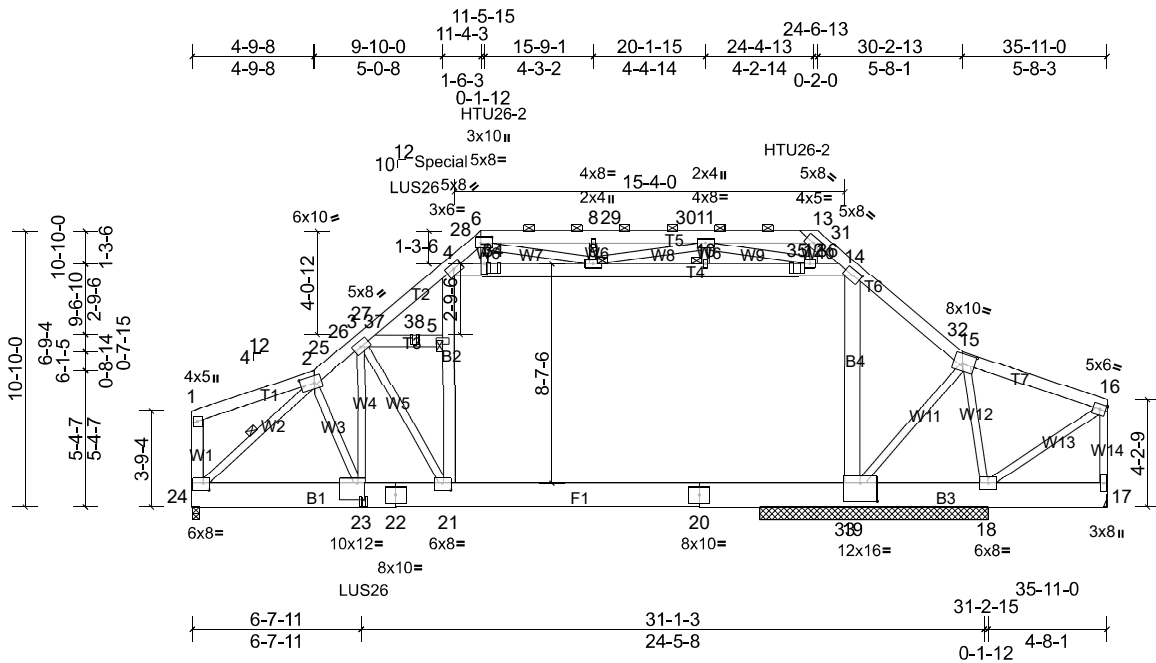
LOAD CASE(S) Standard

Scale = 1:90.5

*** Design Problems ***
REVIEW REQUIRED

Plate Offsets (X, Y): [2:0-6-8,0-3-4], [6:0-5-4,0-2-12], [14:0-3-12,0-2-8], [15:0-5-12,0-4-12], [19:0-8-0,0-8-8], [21:0-4-0,0-3-8], [23:0-3-8,0-7-12], [24:0-2-12,0-3-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.14	19-21	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.27	19-21	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.03	17	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 894 lb	FT = 20%

LUMBER
TOP CHORD   2x6 SP No.2
BOT CHORD   2x12 SP 2400F 2.0E *Except* B4:2x8 SP
             2400F 2.0E, B2:2x6 SP No.2
WEBS   2x4 SP No.3 *Except* W1:2x6 SP No.2,
             W2:2x4 SP No.2

BRACING
TOP CHORD   Structural wood sheathing directly applied or
             5-5-4 oc purlins, except end verticals, and
             2-0-0 oc purlins (6-0-0 max.): 6-13, 4-14, 3-5.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc
             bracing.
WEBS   1 Row at midpt   2-24
JOINTS   1 Brace at Jt(s): 9,
             5, 10

REACTIONS All bearings 8-11-7. except 17= Mechanical,
             24=0-3-8
   (lb) - Max Horiz 24=-178 (LC 9)
           Max Uplift All uplift 100 (lb) or less at joint(s)
                       except 19=-3424 (LC 25)
           Max Grav   All reactions 250 (lb) or less at joint
                      (s) 19 except 17=4261 (LC 25),
                      18=2941 (LC 25), 24=8339 (LC 28)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250
             (lb) or less except when shown.
TOP CHORD   1-2=-586/0, 2-25=-8492/0, 25-26=-8373/0,
             3-26=-8201/0, 3-27=-7485/0, 4-27=-7337/0,
             4-28=-4133/0, 6-28=-4112/0, 6-8=-3908/0,
             8-29=-3908/0, 29-30=-3908/0,
             11-30=-3908/0, 11-13=-1118/0,
             13-31=-1517/0, 14-31=-1590/0,
             14-32=-6888/0, 15-32=-7176/0,
             15-16=-3445/0, 1-24=-929/0, 16-17=-3794/0,
             4-7=-2528/0, 7-34=-2223/0, 9-34=-2223/0,
             9-10=-3454/0, 10-35=-3454/0,
             12-35=-3454/0, 12-36=-4927/0,
             14-36=-4927/0

BOT CHORD   23-24=0/6485, 22-23=0/6589, 21-22=0/6589,
             20-21=0/5636, 20-33=0/5636, 19-33=0/5636,
             18-19=0/4155, 14-19=0/3087, 5-21=0/2379,
             4-5=0/2963
WEBS   16-18=0/3953, 8-9=-316/107, 3-23=0/1473,
             2-23=-78/443, 3-21=-1913/0, 6-7=0/2351,
             6-9=-769/460, 9-11=0/624, 12-13=0/909,
             11-12=-2418/0, 15-19=0/2154,
             15-18=-5663/0, 2-24=-8678/0

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3")
   nails as follows:
   Top chords connected as follows: 2x6 - 3 rows staggered
   at 0-8-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x12 - 2 rows
   staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0
   oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Web 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 7-16; Vult=130mph (3-second gust)
   Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
   II; Exp B; Enclosed; MWFRS (envelope); cantilever left
   and right exposed ; end vertical left and right exposed;
   Lumber DOL=1.60 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
   Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum
   DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully
   Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat
   roof snow load governs. Rain surcharge applied to all
   exposed surfaces with slopes less than 0.500/12 in
   accordance with IBC 1608.3.4.
6) Unbalanced snow loads have been considered for this
   design.
7) Provide adequate drainage to prevent water ponding.

8) * 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.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to
    bearing plate capable of withstanding 3424 lb uplift at
    joint 19.
11) Load case(s) 1, 2, 3 has/have been modified. Building
    designer must review loads to verify that they are correct
    for the intended use of this truss.
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) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d
    Truss, Single Ply Girder) or equivalent at 6-8-12 from the
    left end to connect truss(es) I03 (1 ply 2x4 SP) to back
    face of bottom chord.
15) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d
    Truss, Single Ply Girder) or equivalent at 8-8-12 from the
    left end to connect truss(es) I03 (1 ply 2x4 SP) to back
    face of top chord.
16) Use Simpson Strong-Tie HTU26-2 (20-10d Girder,
    14-10d Truss, Single Ply Girder) or equivalent spaced at
    11-11-0 oc max. starting at 11-10-0 from the left end to
    23-9-0 to connect truss(es) I04 (2 ply 2x6 SP), Q01 (2
    ply 2x6 SP) to back face of top chord.
17) Fill all nail holes where hanger is in contact with lumber.
18) WARNING: The following hangers are manually applied
    but fail due to geometric considerations: LUS26 on back
    face at 8-8-12 from the left end.
19) Hanger(s) or other connection device(s) shall be
    provided sufficient to support concentrated load(s) . The
    design/selection of such connection device(s) is the
    responsibility of others.

Job	Truss	Truss Type	Qty	Ply	
24090120	C01	Attic Girder	1	2	Job Reference (optional)

Carter Components, Sanford, NC, user
Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:49   Page: 2
ID:FMqivo3U2QB?hA3IMn2WSzyaEjC-woO1vkm20t5TdzFoGJ1nq9?E9wkPRbjg?kGQlVyZrK4

20) Special hanger(s) or other connection device(s) shall be
     provided at 9-9-4 from the left end sufficient to connect
     truss(es) I03 (1 ply 2x4 SP) to back face of top chord.
     The design/selection of such special connection device
     (s) is the responsibility of others.
21) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard
1)   Dead + Snow (balanced): Lumber Increase=1.15, Plate
      Increase=1.15
      Uniform Loads (lb/ft)
         Vert: 2-3=-296, 3-27=-296, 4-27=-48, 4-6=-48,
         6-13=-58, 13-31=-48, 14-31=-128, 14-15=-128,
         15-16=-128, 21-24=-113 (F=-93), 19-21=-20,
         18-19=-20, 17-18=-80 (F=-60), 14-36=-80, 3-37=-248
      Concentrated Loads (lb)
         Vert: 5=-408 (B), 23=-388 (B), 34=-1691 (B), 35=-314
         (B), 38=-408 (B)
      Trapezoidal Loads (lb/ft)
         Vert: 1=-319-to-2=-296
2)   Dead + Roof Live (balanced): Lumber Increase=1.15,
      Plate Increase=1.15
      Uniform Loads (lb/ft)
         Vert: 2-3=-308, 3-27=-308, 4-27=-60, 4-6=-60,
         6-13=-60, 13-31=-60, 14-31=-140, 14-15=-140,
         15-16=-140, 21-24=-113 (F=-93), 19-21=-20,
         18-19=-20, 17-18=-80 (F=-60), 14-36=-80, 3-37=-248
      Concentrated Loads (lb)
         Vert: 5=-482 (B), 23=-462 (B), 34=-1805 (B), 35=-346
         (B), 38=-482 (B)
      Trapezoidal Loads (lb/ft)
         Vert: 1=-331-to-2=-308
3)   Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic
      Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate
      Increase=1.15
      Uniform Loads (lb/ft)
         Vert: 2-3=-267, 3-27=-267, 4-27=-50, 4-6=-50,
         6-13=-50, 13-31=-50, 14-31=-120, 14-15=-120,
         15-16=-120, 21-24=-314 (F=-279), 21-33=-50,
         19-33=-35, 18-19=-35, 17-18=-155 (F=-120),
         14-36=-70, 3-37=-217
      Concentrated Loads (lb)
         Vert: 5=-421 (B), 23=-401 (B), 34=-1573 (B), 35=-302
         (B), 38=-421 (B)
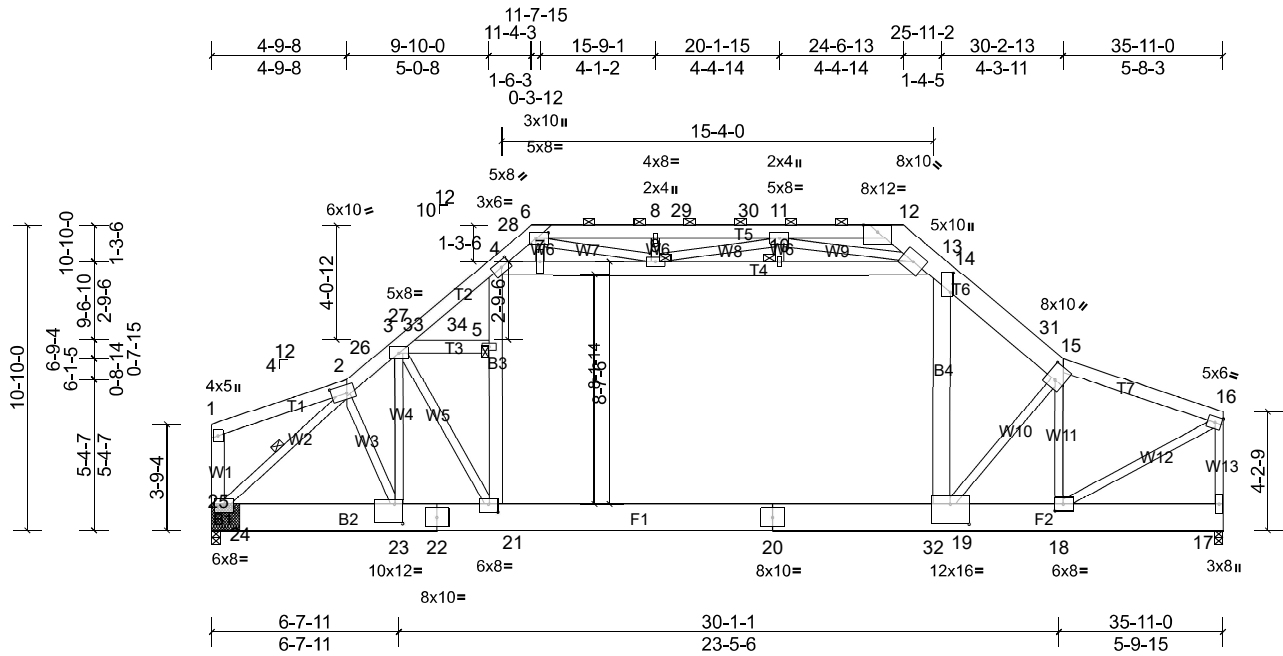   Trapezoidal Loads (lb/ft)
         Vert: 1=-290-to-2=-267

Job	Truss	Truss Type	Qty	Ply	
24090120	C02	Attic Girder	1	2	Job Reference (optional)

Carter Components, Sanford, NC, user

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:50 Page: 1
ID:jZO57846ojJsJKeUwUal?ByaEjB-O_yP74ngmBDKF7q?q1Y0NMYPtK4RA3xpEO0_qyyZrK3

Scale = 1:81.9

*** Design Problems ***
REVIEW REQUIRED

Plate Offsets (X, Y): [2:0-6-8,0-3-8], [4:0-3-12,0-2-8], [6:0-5-4,0-2-8], [14:0-8-8,0-1-2], [15:0-6-8,0-4-0], [18:0-3-8,0-3-0], [19:0-8-0,0-8-4], [21:0-4-0,0-3-8], [23:0-3-8,0-8-0], [25:0-3-12,0-3-8]

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)	-0.17	19-21	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.31	19-21	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.03	17	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 941 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2 *Except* T6:2x10 SP 2400F 2.0E, T4:2x6 SP 2400F 2.0E
BOT CHORD 2x12 SP 2400F 2.0E *Except* B4:2x8 SP 2400F 2.0E, B3:2x6 SP No.2
WEBS 2x4 SP No.3 *Except* W1:2x6 SP No.2, W12,W2:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-12, 4-13, 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-25
JOINTS 1 Brace at Jt(s): 5, 9, 10

REACTIONS (lb/size) 17=4093/0-3-8, (min. 0-2-0), 25=6726/0-3-8, (min. 0-3-8)
Max Horiz 25=-181 (LC 64)
Max Grav 17=4771 (LC 27), 25=8516 (LC 28)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-593/0, 2-26=-8689/0, 3-26=-8424/0, 3-27=-7625/0, 4-27=-7477/0, 4-28=-4144/0, 6-28=-4107/0, 6-8=-3470/0, 8-29=-3464/0, 29-30=-3464/0, 11-30=-3464/0, 11-12=0/1994, 12-13=0/1439, 13-14=-4863/0, 14-31=-6762/0, 15-31=-6874/0, 15-16=-4825/0, 1-25=-935/0, 16-17=-4456/0, 4-7=-2531/0, 7-9=-2402/0, 9-10=-4766/0, 10-13=-4766/0
BOT CHORD 24-25=0/6641, 23-24=0/6641, 22-23=0/6755, 21-22=0/6755, 20-21=0/5701, 20-32=0/5701, 19-32=0/5701, 18-19=0/4418, 14-19=0/3156, 5-21=0/2182, 4-5=0/2810
WEBS 15-18=-4130/0, 16-18=0/5282, 3-23=0/1822, 3-21=-2148/0, 6-7=0/2529, 15-19=0/1871, 8-9=-476/69, 6-9=-1148/108, 9-11=0/1482, 11-13=-3426/0, 2-25=-8918/0, 2-23=-34/455

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 0-4-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x12 - 4 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Web 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) Special connection required to distribute web loads equally between all plies.
4) 2x12 SP 2400F 2.0E bearing block 12" long at jt. 25 attached to each face with 6 rows of 10d (0.131"x3") nails spaced 3" o.c. 24 Total fasteners per block. Bearing is assumed to be SP 2400F 2.0E.
5) Unbalanced roof live loads have been considered for this design.
6) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
7) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
8) Unbalanced snow loads have been considered for this design.
9) Provide adequate drainage to prevent water ponding.
10) * 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.
11) Load case(s) 1, 2, 3 has/have been modified. Building designer must review loads to verify that loads are correct for the intended use of this truss.
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) 2409 lb down at 25-9-0 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 2-3=-296, 3-27=-296, 4-27=-48, 4-6=-48, 6-12=-58, 12-13=-48, 13-15=-48, 15-16=-48, 21-25=-113 (F=-93), 19-21=-20, 17-19=-20, 3-33=-248
Concentrated Loads (lb)
Vert: 5=-408 (F), 23=-408 (F), 7=-2116 (F), 32=-2167 (F), 34=-408 (F)
Trapezoidal Loads (lb/ft)
Vert: 1=-319-to-2=-296
2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 2-3=-308, 3-27=-308, 4-27=-60, 4-6=-60, 6-12=-60, 12-13=-60, 13-15=-60, 15-16=-60, 21-25=-113 (F=-93), 19-21=-20, 17-19=-20, 3-33=-248
Concentrated Loads (lb)
Vert: 5=-482 (F), 23=-482 (F), 7=-2310 (F), 32=-2409 (F), 34=-482 (F)

Trapezoidal Loads (lb/ft)
   Vert: 1=-331-to-2=-308

3)   Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic
   Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate
   Increase=1.15
   Uniform Loads (lb/ft)
     Vert: 2-3=-267, 3-27=-267, 4-27=-50, 4-6=-50,
     6-12=-50, 12-13=-50, 13-15=-50, 15-16=-50,
     21-25=-314 (F=-279), 21-32=-50, 19-32=-35,
     17-19=-35, 3-33=-217
   Concentrated Loads (lb)
     Vert: 5=-421 (F), 23=-421 (F), 7=-2014 (F), 32=-2174
     (F), 34=-421 (F)
   Trapezoidal Loads (lb/ft)
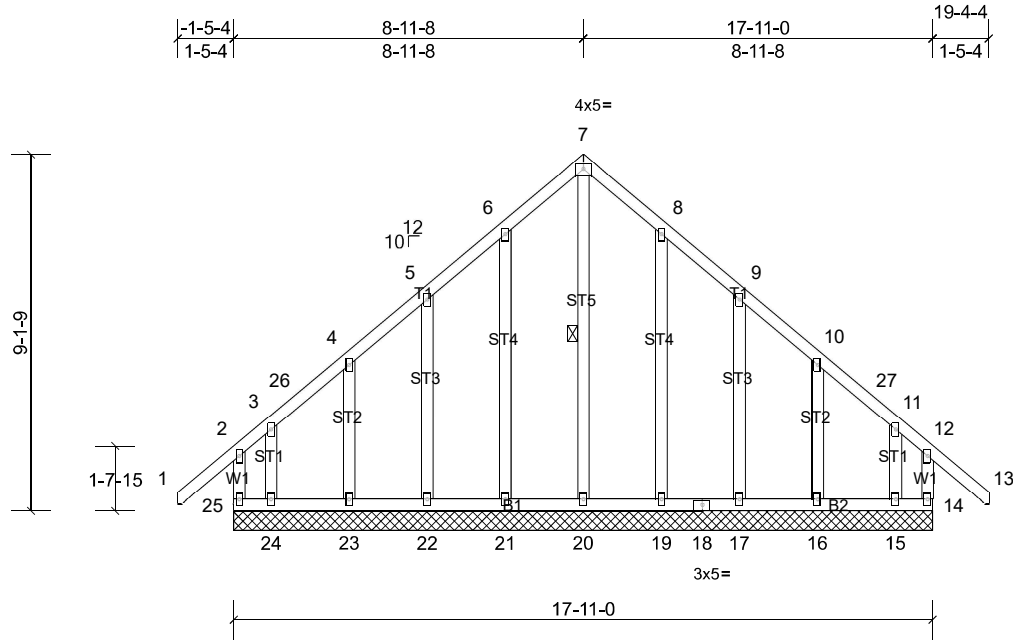   Vert: 1=-290-to-2=-267

Job	Truss	Truss Type	Qty	Ply	
24090120	D01	Common Supported Gable	1	1	Job Reference (optional)

Carter Components, Sanford, NC, user
Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:51   Page: 1
ID:mvkv7erBHuwYXPhqI?kIkAyaEjU-O_yP74ngmBDKF7q?q1Y0NMYS6K9_ACxpEO0_qyyZrK3

Scale = 1:59.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 136 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS   1 Row at midpt   7-20

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

REACTIONS All bearings 17-11-0.
(lb) - Max Horiz   25=201 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 16, 17, 19, 21, 22, 23 except 14=-196 (LC 10), 15=-180 (LC 9), 24=-196 (LC 10), 25=-218 (LC 9)
Max Grav   All reactions 250 (lb) or less at joint(s) 15, 16, 17, 19, 20, 21, 22, 23 except 14=267 (LC 29), 24=258 (LC 11), 25=285 (LC 30)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   5-6=-119/294, 6-7=-160/372, 7-8=-160/372, 8-9=-119/294
WEBS   7-20=-397/108

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) -1-4-10 to 1-7-6, Exterior(2N) 1-7-6 to 8-11-8, Corner(3R) 8-11-8 to 11-11-8, Exterior(2N) 11-11-8 to 19-3-10 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=1.33

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 22, 23, 19, 17, 16 except (jt=lb) 25=218, 14=196, 24=195, 15=179.
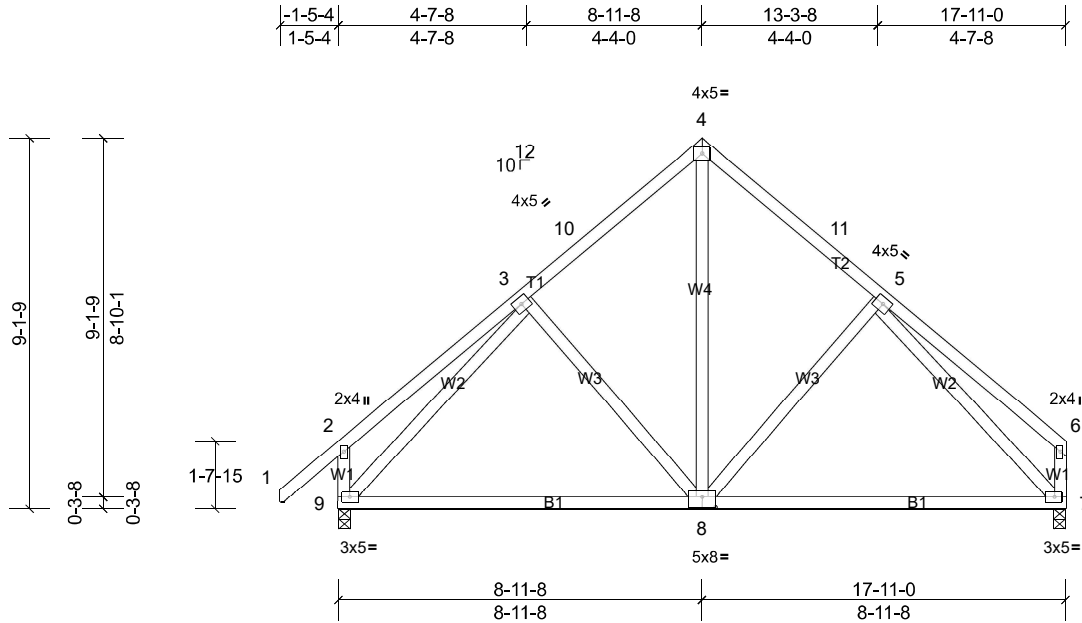
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	D02	Common	5	1	Job Reference (optional)

Carter Components, Sanford, NC, user   Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:51   Page: 1
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Scale = 1:56.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.01	8	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.13	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 119 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
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)   7=594/0-3-8, (min. 0-1-8),
9=673/0-3-8, (min. 0-1-8)
Max Horiz 9=194 (LC 12)
Max Grav 7=701 (LC 2), 9=801 (LC 2)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   3-10=-646/118, 4-10=-569/149, 4-11=-569/150, 5-11=-648/119, 2-9=-307/135
BOT CHORD   8-9=-75/498, 7-8=-60/501
WEBS   4-8=-86/464, 3-9=-611/30, 5-7=-622/76

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-4-10 to 1-7-6, Interior (1) 1-7-6 to 8-11-8, Exterior(2R) 8-11-8 to 11-11-8, Interior (1) 11-11-8 to 17-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	D03	Common Girder	1	3	Job Reference (optional)

Carter Components, Sanford, NC, user   Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:51   Page: 1

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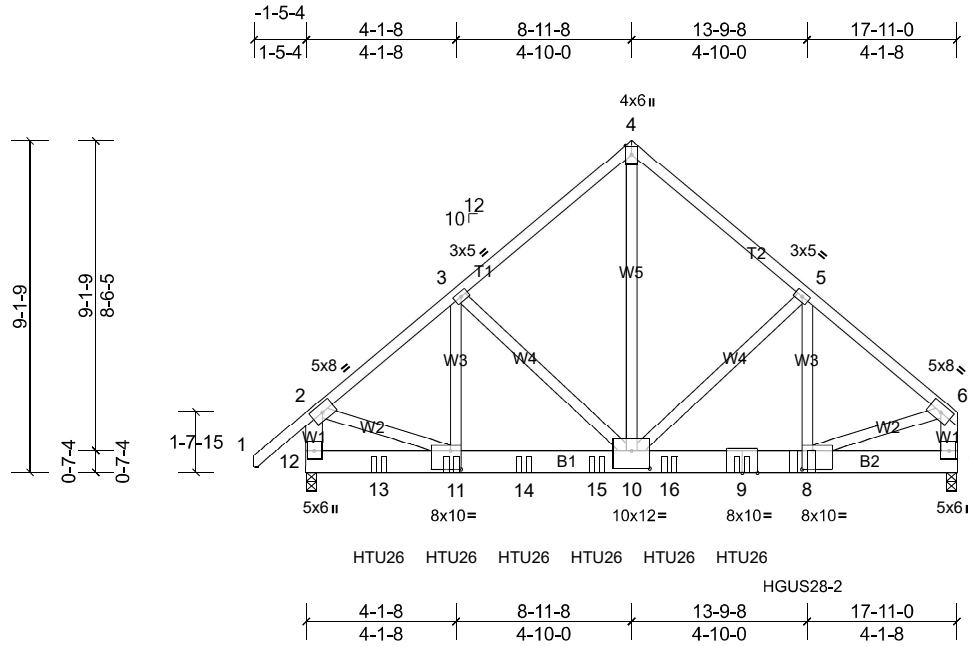
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Plate Offsets (X, Y): [3:0-0-0,0-0-0], [8:0-3-8,0-6-4], [10:0-6-0,0-6-0], [11:0-3-8,0-6-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.07	8-10	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.13	8-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 457 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x8 SP 2400F 2.0E
WEBS   2x4 SP No.3 *Except* W1:2x6 SP No.2, W2,W5:2x4 SP No.2

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

REACTIONS (lb/size)   7=7301/0-3-8, (min. 0-2-7),
                         12=7829/0-3-8, (min. 0-2-10)
  Max Horiz   12=191 (LC 6)
  Max Grav   7=8940 (LC 22), 12=9558 (LC 17)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-9191/0, 3-4=-7417/0, 4-5=-7418/0, 5-6=-9693/0, 2-12=-8241/0, 6-7=-8700/0
BOT CHORD   12-13=0/795, 11-13=0/795, 11-14=0/7088, 14-15=0/7088, 10-15=0/7088, 10-16=0/7399, 9-16=0/7399, 8-9=0/7399, 7-8=0/447
WEBS   2-11=0/6711, 6-8=0/7364, 5-10=-2500/0, 5-8=0/2996, 3-11=0/2297, 3-10=-1905/0, 4-10=0/9179

NOTES
1) 3-ply truss to be connected together as follows:
   Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected with Simpson SDS 1/4 x 4-1/2 screws as follows: 2x8 - 2 rows staggered at 0-5-0 oc.
   Web chords connected with 10d (0.131"x3") nails 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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-0 from the left end to 12-0-0 to connect truss(es) B02 (1 ply 2x6 SP) to back face of bottom chord.
9) Use Simpson Strong-Tie HGUS28-2 (36-16d Girder, 6-16d Truss) or equivalent at 13-8-0 from the left end to connect truss(es) C01 (2 ply 2x12 SP) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S)   Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
     Vert: 1-2=-48, 2-4=-48, 4-6=-48, 7-12=-20
   Concentrated Loads (lb)
     Vert: 9=-1746 (B), 11=-1746 (B), 8=-3396 (B), 13=-1746 (B), 14=-1746 (B), 15=-1746 (B), 16=-1746 (B)
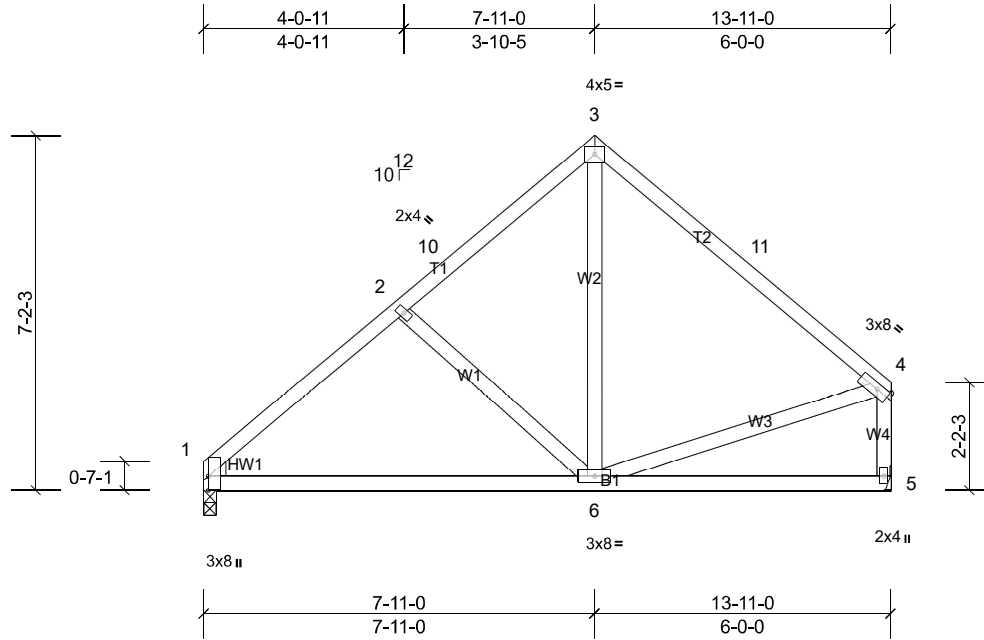
Job	Truss	Truss Type	Qty	Ply	
24090120	E01	Common	4	1	Job Reference (optional)

Carter Components, Sanford, NC, user

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	0.02	6-9	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.08	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 77 lb	FT = 20%

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

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

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

REACTIONS (lb/size)   1=466/0-3-0, (min. 0-1-8), 5=466/
                          Mechanical, (min. 0-1-8)
          Max Horiz 1=147 (LC 12)
          Max Grav 1=551 (LC 2), 5=551 (LC 2)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250
             (lb) or less except when shown.
TOP CHORD   1-2=-663/146, 2-10=-525/130,
             3-10=-410/158, 3-11=-445/121, 4-11=-540/98,
             4-5=-555/120
BOT CHORD   1-6=-145/523
WEBS   3-6=-27/254, 4-6=0/272, 2-6=-254/143

NOTES
1) Unbalanced roof live loads have been considered for this
    design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
    Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
    II; Exp B; Enclosed; MWFRS (envelope) and C-C
    Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 7-11-0,
    Exterior(2R) 7-11-0 to 10-11-0, Interior (1) 10-11-0 to
    13-9-4 zone; cantilever left and right exposed ; end
    vertical left and right exposed;C-C for members and
    forces & MWFRS for reactions shown; Lumber
    DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
    Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum
    DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully
    Exp.; Ce=0.9; Cs=1.00; Ct=1.10

4) * 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.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to
    bearing plate at joint(s) 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	E02	Common Girder	1	**2**	Job Reference (optional)

Carter Components, Sanford, NC, user   Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:51   Page: 1
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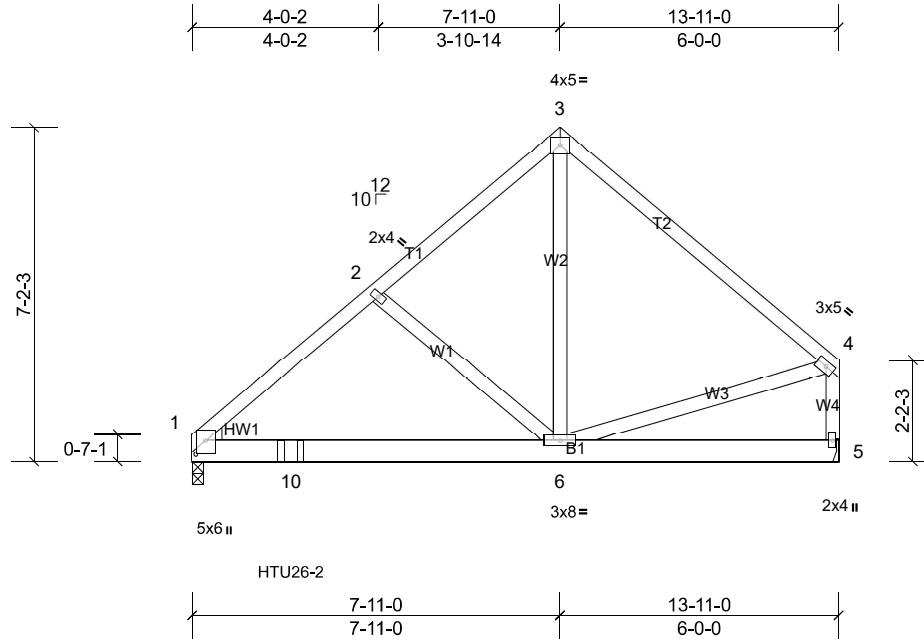
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Plate Offsets (X, Y): [1:0-3-8,0-2-8]

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	0.28	Vert(LL)	-0.03	6-9	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.06	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.00	1	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 177 lb FT = 20%	

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3

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

REACTIONS (lb/size) 1=733/0-3-0, (min. 0-1-8), 5=515/
Mechanical, (min. 0-1-8)
Max Horiz 1=145 (LC 8)
Max Grav 1=848 (LC 2), 5=605 (LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250
(lb) or less except when shown.
TOP CHORD 1-2=-720/0, 2-3=-565/16, 3-4=-596/18,
4-5=-587/0
BOT CHORD 1-10=-36/574, 6-10=-8/574
WEBS 3-6=0/353, 2-6=-262/80, 4-6=0/348

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3")
nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0
oc.
Bottom chords connected as follows: 2x6 - 2 rows
staggered at 0-9-0 oc.
Web 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 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope); cantilever left
and right exposed ; end vertical left and right exposed;
Lumber DOL=1.60 plate grip DOL=1.33

5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum
DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully
Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Use Simpson Strong-Tie HTU26-2 (20-10d Girder,
14-10d Truss, Single Ply Girder) or equivalent at 2-1-8
from the left end to connect truss(es) Q01 (2 ply 2x6 SP)
to back face of bottom chord.
9) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate
Increase=1.15
Uniform Loads (lb/ft)
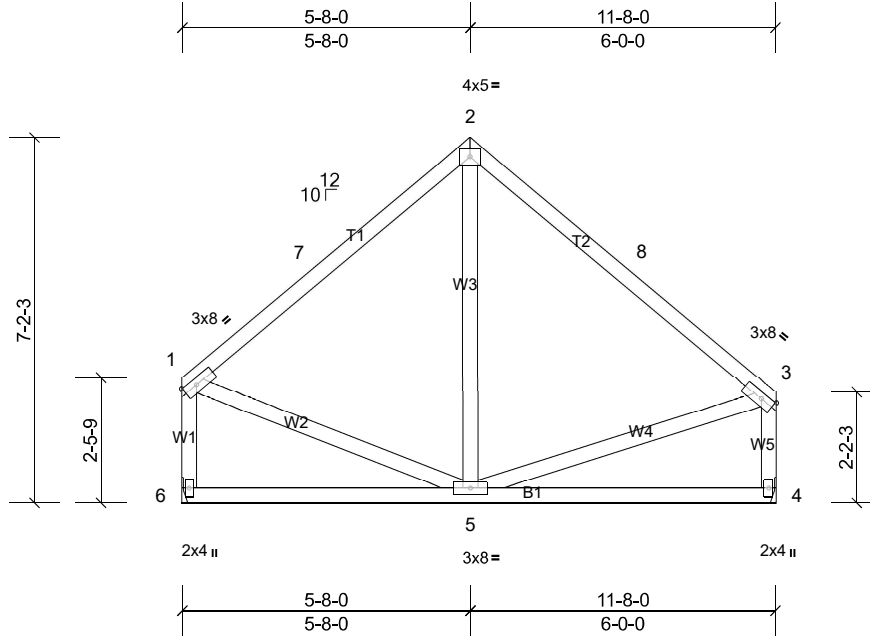Vert: 1-3=-48, 3-4=-48, 5-7=-20
Concentrated Loads (lb)
Vert: 10=-315 (B)

Job	Truss	Truss Type	Qty	Ply	
24090120	E03	Common	1	1	Job Reference (optional)

Carter Components, Sanford, NC, user

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Scale = 1:45.3

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	0.49	Vert(LL)	0.00	5	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.03	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 73 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or
            6-0-0 oc purlins, except end verticals.
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)   4=385/ Mechanical, (min. 0-1-8),
                          6=385/ Mechanical, (min. 0-1-8)
          Max Horiz 6=-148 (LC 11)
          Max Grav 4=455 (LC 2), 6=455 (LC 2)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250
             (lb) or less except when shown.
TOP CHORD   1-7=-415/105, 2-7=-331/128, 2-8=-328/129,
            3-8=-420/106, 1-6=-461/136, 3-4=-455/136

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 1-5-6 to 4-5-6, Interior (1) 4-5-6 to 6-11-10, Exterior(2R) 6-11-10 to 9-11-10, Interior (1) 9-11-10 to 12-9-14 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=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) * 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.
5) Refer to girder(s) for truss to truss connections.
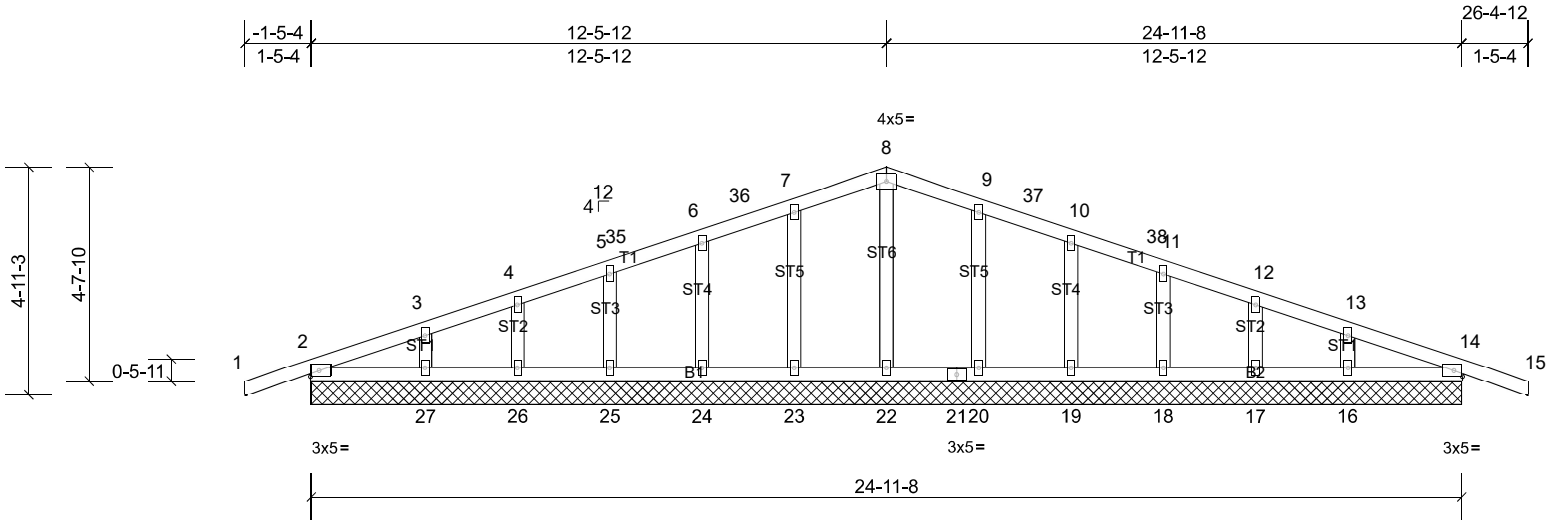
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	G01	Common Supported Gable	2	1	Job Reference (optional)

Carter Components, Sanford, NC, user   Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:52   Page: 1

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Scale = 1:50

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 118 lb	FT = 20%

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

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

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

REACTIONS   All bearings 24-11-8.
(lb) - Max Horiz   2=-43 (LC 16), 31=-43 (LC 16)
Max Uplift   All uplift 100 (lb) or less at joint(s) 2, 14, 16, 17, 18, 19, 20, 23, 24, 25, 26, 27, 28, 31
Max Grav   All reactions 250 (lb) or less at joint(s) 2, 14, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 31

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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) -1-4-15 to 1-7-1, Exterior(2N) 1-7-1 to 12-5-12, Corner(3R) 12-5-12 to 15-5-12, Exterior(2N) 15-5-12 to 26-4-7 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) * This truss has been designed for a 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 23, 24, 25, 26, 27, 20, 19, 18, 17, 16, 2, 14, 2.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 31.
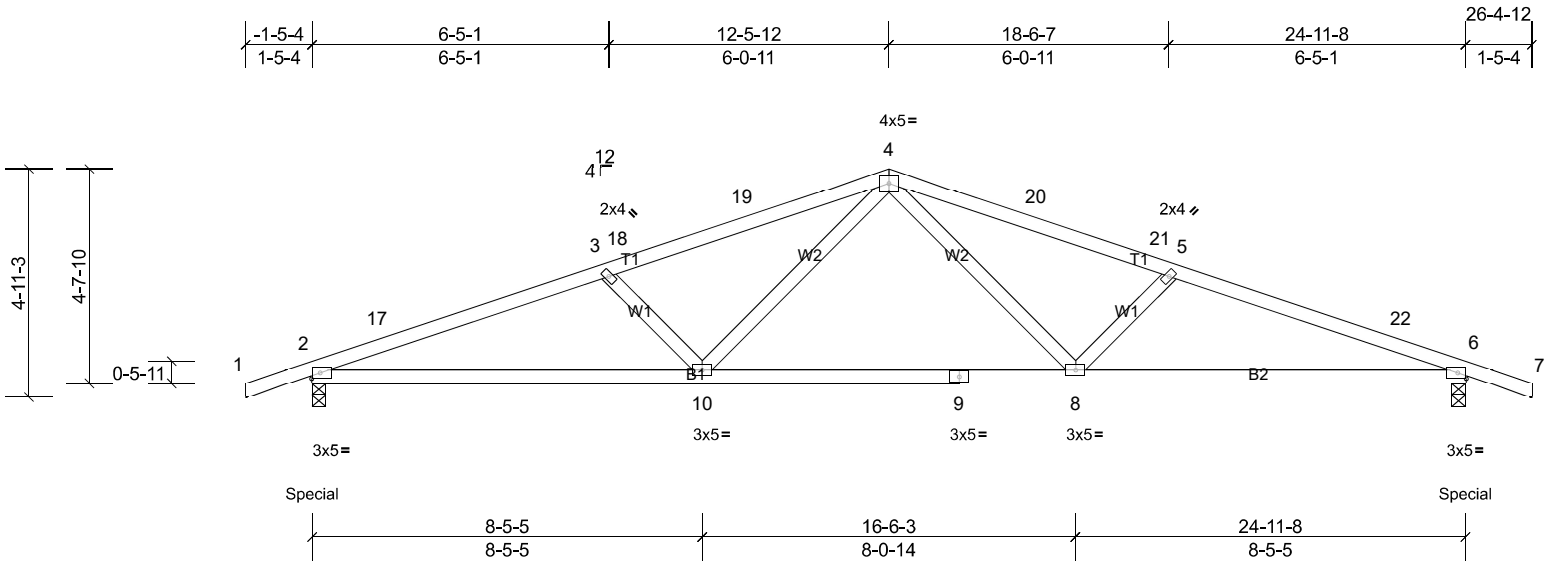
LOAD CASE(S)   Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	G02	Common	12	1	Job Reference (optional)

Carter Components, Sanford, NC, user   Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:52   Page: 1
ID:WCnN4zTep5z_n6qep9bzXYyab1w-LN49XmoxIoU2UR_NySaUSndf07hle4t6hiV5uqyZrK1

Scale = 1:49.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.15	8-10	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.33	8-10	>913	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.07	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 107 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or 2-2-0 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=913/0-3-8, (min. 0-1-8),
                          6=913/0-3-8, (min. 0-1-8)
            Max Horiz   2=-43 (LC 16)
            Max Uplift 2=-34 (LC 11), 6=-34 (LC 12)
            Max Grav   2=1083 (LC 2), 6=1083 (LC 2)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-17=-2286/359, 3-17=-2239/379,
            3-18=-2027/305, 18-19=-2019/317,
            4-19=-1976/328, 4-20=-1976/328,
            20-21=-2019/317, 5-21=-2027/305,
            5-22=-2239/379, 6-22=-2286/359
BOT CHORD   2-10=-286/2111, 9-10=-147/1431,
            8-9=-147/1431, 6-8=-296/2115
WEBS   4-8=-40/620, 5-8=-403/178, 4-10=-40/620,
            3-10=-403/178

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-4-15 to 1-7-1, Interior (1) 1-7-1 to 12-5-12, Exterior(2R) 12-5-12 to 15-5-12, Interior (1) 15-5-12 to 26-4-7 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=1.33

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 6 and 34 lb uplift at joint 2.
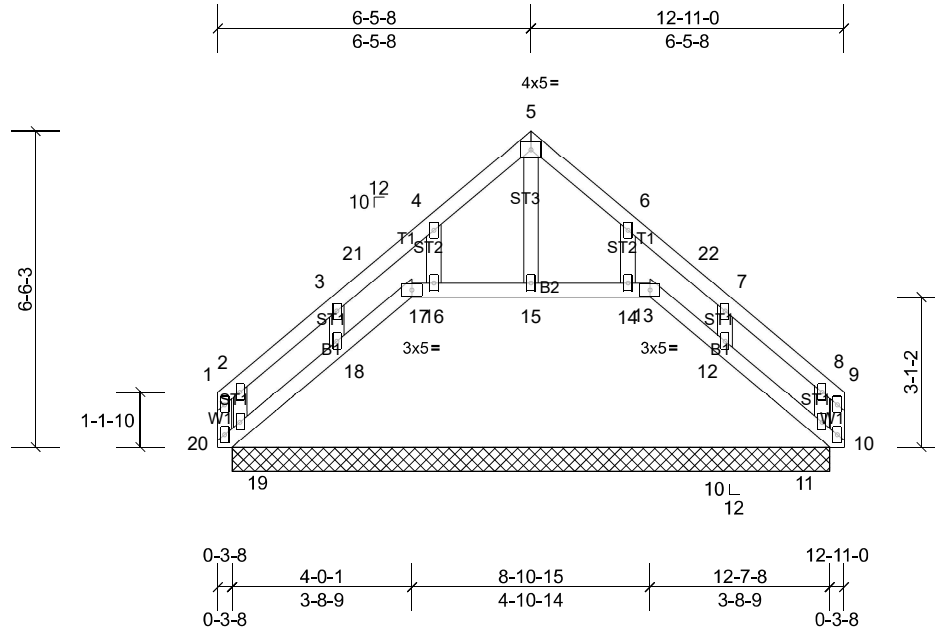
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	I01	Roof Special Supported Gable	1	1	Job Reference (optional)

Carter Components, Sanford, NC, user   Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:52   Page: 1
ID:I_iyU61EWoxHRswvEM02NYyaEjE-LN49XmoxIoU2UR_NySaUSndqd7rDe8?6hiV5uqyZrK1

Scale = 1:47.5

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	12	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 64 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
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 All bearings 12-4-0.
(lb) - Max Horiz 19=126 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 11, 12, 13, 14, 16, 17, 18 except 19=-101 (LC 9)
Max Grav All reactions 250 (lb) or less at joint (s) 11, 12, 13, 14, 15, 16, 17, 18, 19

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-151/287, 5-6=-151/287
WEBS 5-15=-289/94

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 6-5-8, Corner(3R) 6-5-8 to 9-5-8, Exterior(2N) 9-5-8 to 12-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) * This truss has been designed for a 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 17, 13, 16, 18, 14, 12, 11 except (jt=lb) 19=100.
10) Non Standard bearing condition. Review required.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 17, 13, 15, 16, 18, 19, 14, 12, 11.
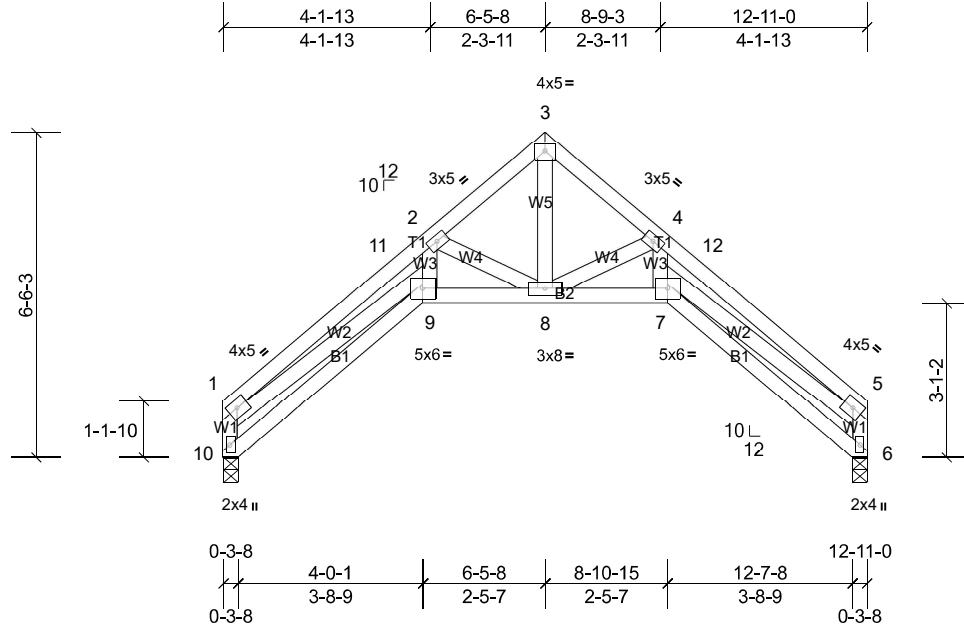
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	I02	Roof Special	3	1	Job Reference (optional)

Carter Components, Sanford, NC, user
Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:52　　Page: 1
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Scale = 1:46.2

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	0.30	Vert(LL)	-0.08	8	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.15	8-9	>984	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.26	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 79 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
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)　　6=427/0-3-8, (min. 0-1-8),
　　　　　　　　　　　　　　10=427/0-3-8, (min. 0-1-8)
　　　　Max Horiz   10=126 (LC 10)
　　　　Max Grav   6=505 (LC 2), 10=505 (LC 2)

FORCES　　(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-10=-616/171, 1-11=-1892/316,
　　　　　　2-11=-1786/332, 2-3=-815/177,
　　　　　　3-4=-815/184, 4-12=-1774/296,
　　　　　　5-12=-1880/280, 5-6=-601/147
BOT CHORD   9-10=-165/256, 8-9=-211/1284,
　　　　　　7-8=-173/1277
WEBS   4-7=-68/836, 5-7=-160/1434, 2-9=-103/847,
　　　　1-9=-159/1418, 3-8=-182/842, 4-8=-821/202,
　　　　2-8=-829/245

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 6-5-8, Exterior(2R) 6-5-8 to 9-5-8, Interior (1) 9-5-8 to 12-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

4) * 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.
5) Bearing at joint(s) 10, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	I03	Roof Special	3	1	Job Reference (optional)

Carter Components, Sanford, NC, user

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:52 Page: 1
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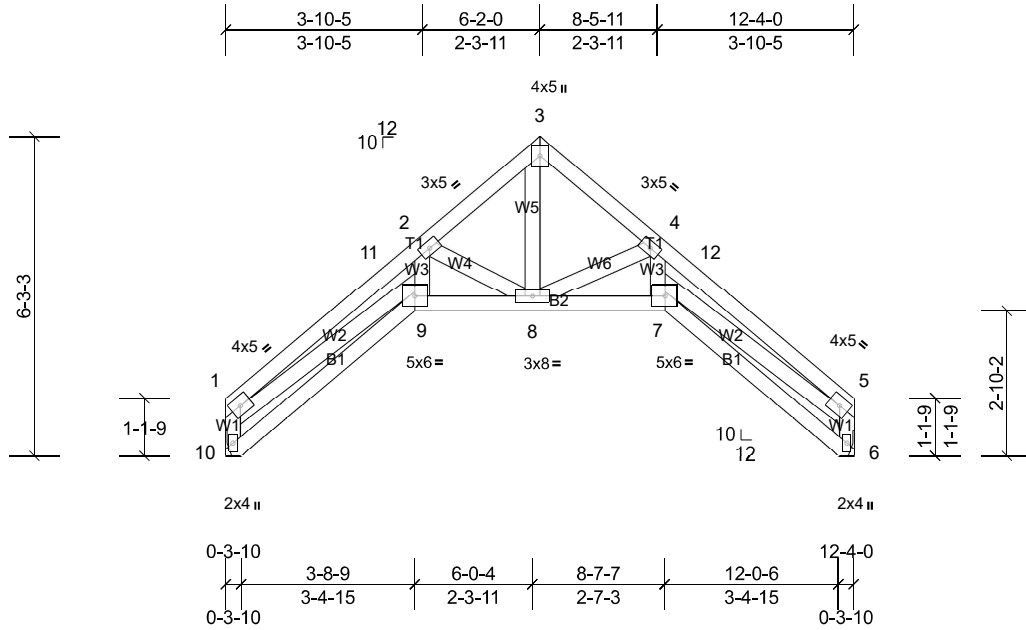
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Loading	(psf)	Spacing		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.06	7-8	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.12	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.20	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 76 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or 4-3-7 oc purlins, except end verticals.
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)   6=408/ Mechanical, (min. 0-1-8),
10=408/ Mechanical, (min. 0-1-8)
Max Horiz 10=121 (LC 12)
Max Grav 6=482 (LC 2), 10=482 (LC 2)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-10=-582/170, 1-11=-1705/317, 2-11=-1608/332, 2-3=-776/185, 3-4=-729/181, 4-12=-1597/295, 5-12=-1694/280, 5-6=-568/146
BOT CHORD   8-9=-214/1160, 7-8=-176/1152
WEBS   4-7=-67/731, 5-7=-165/1284, 2-9=-104/736, 1-9=-164/1269, 3-8=-178/760, 4-8=-742/199, 2-8=-730/238

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 6-2-0, Exterior(2R) 6-2-0 to 9-2-0, Interior (1) 9-2-0 to 12-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

4) * 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.
5) Refer to girder(s) for truss to truss connections.
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	I04	Roof Special Girder	1	2	Job Reference (optional)

Carter Components, Sanford, NC, user   Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:52   Page: 1
ID:xXRdpSzTj_7BsjAiOu2VeYyasWg-LN49XmoxIoU2UR_NySaUSndlA7mJezE6hiV5uqyZrK1

Scale = 1:53.5

Plate Offsets (X, Y): [2:0-5-4,0-1-8], [4:0-5-4,0-1-8], [7:0-3-8,0-2-0], [9:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.06	8	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.12	8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 159 lb	FT = 20%

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

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

REACTIONS (lb/size)   6=1565/ Mechanical, (min. 0-1-8), 10=1990/ Mechanical, (min. 0-1-8)
Max Horiz   10=-70 (LC 9)
Max Grav   6=1805 (LC 2), 10=2310 (LC 2)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-10=-1391/0, 1-11=-3587/0, 11-12=-3587/0, 2-12=-3587/0, 2-3=-2673/0, 3-4=-2673/0, 4-13=-3595/0, 13-14=-3595/0, 5-14=-3595/0, 5-6=-1392/0
BOT CHORD   8-9=0/3549, 7-8=0/3557
WEBS   1-9=0/3616, 2-9=-427/1, 4-7=-419/2, 5-7=0/3618, 3-8=0/3152, 2-8=-1998/0, 4-8=-2010/0

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web 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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough 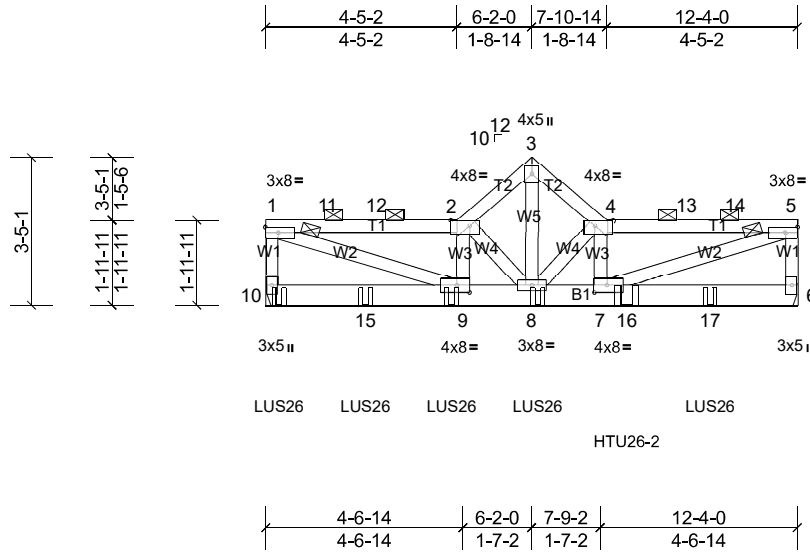Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
6) Unbalanced snow loads have been considered for this design.
7) Provide adequate drainage to prevent water ponding.
8) * 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.
9) Refer to girder(s) for truss to truss connections.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 4-0-0 oc max. starting at 0-3-12 from the left end to 10-3-12 to connect truss(es) E01 (1 ply 2x4 SP), E03 (1 ply 2x4 SP) to back face of bottom chord.
12) Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss, Single Ply Girder) or equivalent at 8-4-8 from the left end to connect truss(es) E02 (2 ply 2x6 SP) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S)   Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-58, 2-3=-48, 3-4=-48, 4-5=-58, 6-10=-20
Concentrated Loads (lb)
Vert: 10=-455 (B), 9=-446 (B), 8=-446 (B), 15=-446 (B), 16=-495 (B), 17=-365 (B)
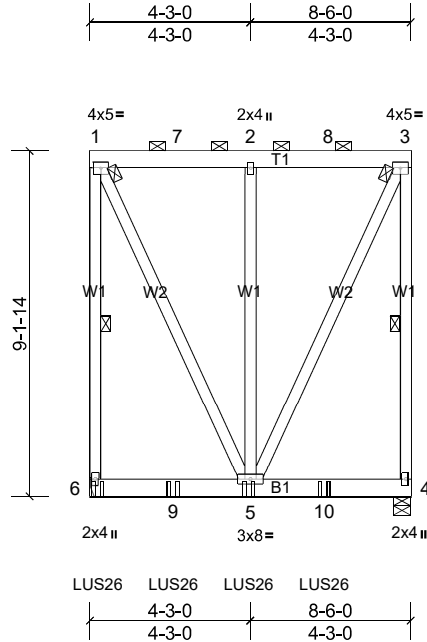
Job	Truss	Truss Type	Qty	Ply	
24090120	K01	Flat Girder	1	**2**	Job Reference (optional)

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ID:FuHFCLXKbkLUn4S6lEyv7fyasb6-pZeXl6pZ36cv6aZZV95j??Av1XAaNVGGwMEeRHyZrK0

4-3-0 | 8-6-0
4-3-0 | 4-3-0

Scale = 1:61.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.03	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 207 lb	FT = 20%

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

BRACING
TOP CHORD   2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   1-6, 3-4

REACTIONS (lb/size) 4=2126/0-5-8, (min. 0-1-8),
6=2182/ Mechanical, (min. 0-1-8)
Max Horiz 6=237 (LC 6)
Max Grav 4=2393 (LC 2), 6=2429 (LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-6=-1906/0, 1-7=-532/0, 2-7=-532/0, 2-8=-532/0, 3-8=-532/0, 3-4=-2225/0
WEBS   1-5=-38/1289, 2-5=-1420/0, 3-5=-38/1289

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
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) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.

5) Provide adequate drainage to prevent water ponding.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-2-8 from the left end to 6-2-8 to connect truss(es) M02 (1 ply 2x4 SP) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
      Vert: 1-3=-58, 4-6=-20
   Concentrated Loads (lb)
      Vert: 6=-334 (B), 5=-325 (B), 1=-433, 2=-409, 3=-704, 7=-409, 8=-409, 9=-325 (B), 10=-325 (B)
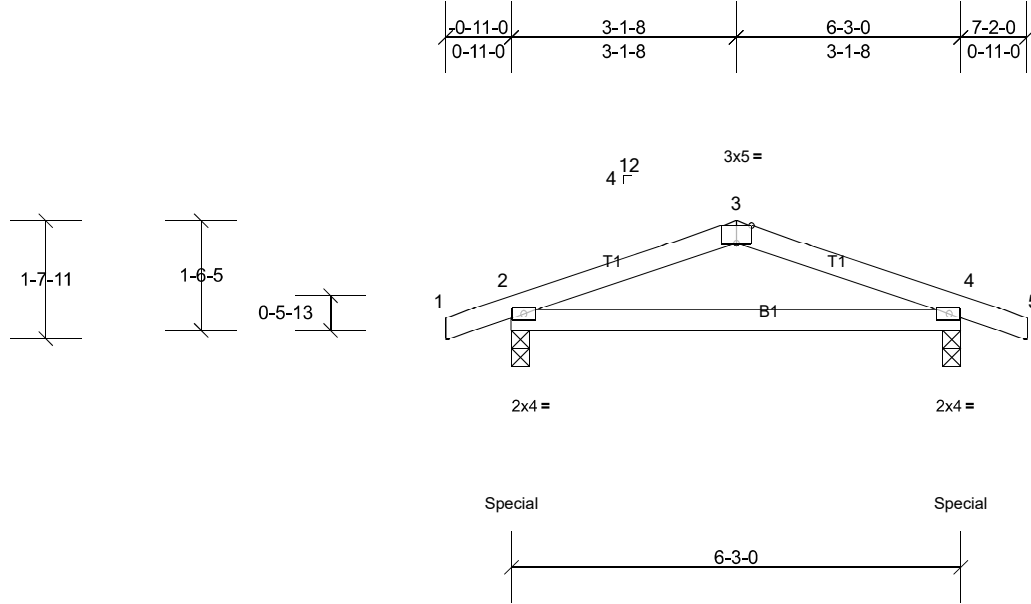
Job	Truss	Truss Type	Qty	Ply	
24090120	L01	Common	5	1	Job Reference (optional)

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Scale = 1:32

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	0.01	8-11	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.04	8-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 22 lb	FT = 20%

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

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

REACTIONS (lb/size)   2=254/0-3-0, (min. 0-1-8),
                 4=254/0-3-0, (min. 0-1-8),
       Max Horiz 2=-14 (LC 12)
       Max Uplift 2=-23 (LC 11), 4=-23 (LC 12)
       Max Grav 2=310 (LC 22), 4=310 (LC 23)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-329/237, 3-4=-330/237
BOT CHORD   2-4=-157/291

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-11 to 2-1-5, Interior (1) 2-1-5 to 3-1-8, Exterior(2R) 3-1-8 to 5-10-13, Interior (1) 5-10-13 to 7-1-11 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=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 2 and 23 lb uplift at joint 4.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	M01	Monopitch	7	1	Job Reference (optional)

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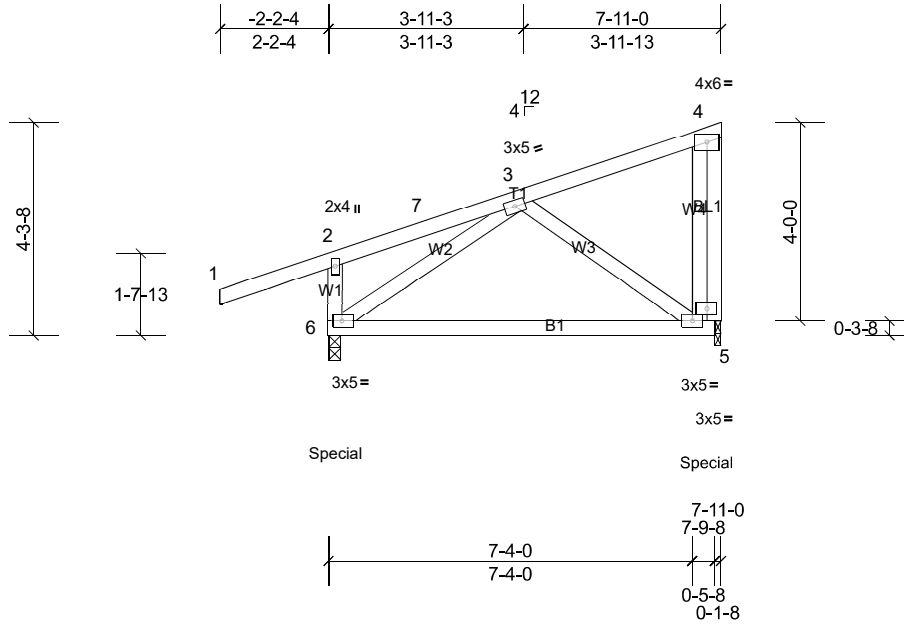
Scale = 1:46.5

Loading	(psf)	Spacing		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.19	5-6	>477	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 53 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
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)   5=236/0-1-8, (min. 0-1-8),
6=380/0-3-0, (min. 0-1-8)
Max Horiz   6=124 (LC 14)
Max Uplift   5=-13 (LC 15), 6=-66 (LC 11)
Max Grav   5=319 (LC 22), 6=459 (LC 2)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-6=-294/293
BOT CHORD   5-6=-274/263
WEBS   3-5=-271/275

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -2-1-15 to 0-10-1, Interior (1) 0-10-1 to 7-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 6 and 13 lb uplift at joint 5.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	M02	Monopitch	4	1	Job Reference (optional)

Scale = 1:67.6

Plate Offsets (X, Y): [10:0-5-8,0-3-12]

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	0.61	Vert(LL)	0.02	8-9	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.04	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	-0.01	8	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 141 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2 *Except* B2:2x4 SP No.3
WEBS   2x4 SP No.3 *Except* W9:2x4 SP No.2

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

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

REACTIONS (lb/size)   8=301/ Mechanical, (min. 0-1-8),
10=758/0-3-8, (min. 0-1-8),
13=361/0-3-8, (min. 0-1-8)
Max Horiz   13=288 (LC 12)
Max Uplift   8=-54 (LC 12), 10=-12 (LC 11),
13=-41 (LC 11)
Max Grav   8=357 (LC 2), 10=893 (LC 2),
13=432 (LC 2)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-14=-467/61, 3-14=-425/73, 5-6=-326/111, 2-13=-409/149
BOT CHORD   12-13=-557/438, 5-10=-602/149
WEBS   10-12=-299/470, 3-10=-483/106, 5-9=0/285, 6-8=-326/139, 2-12=-23/285

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-11-7 to 2-0-9, Interior (1) 2-0-9 to 20-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
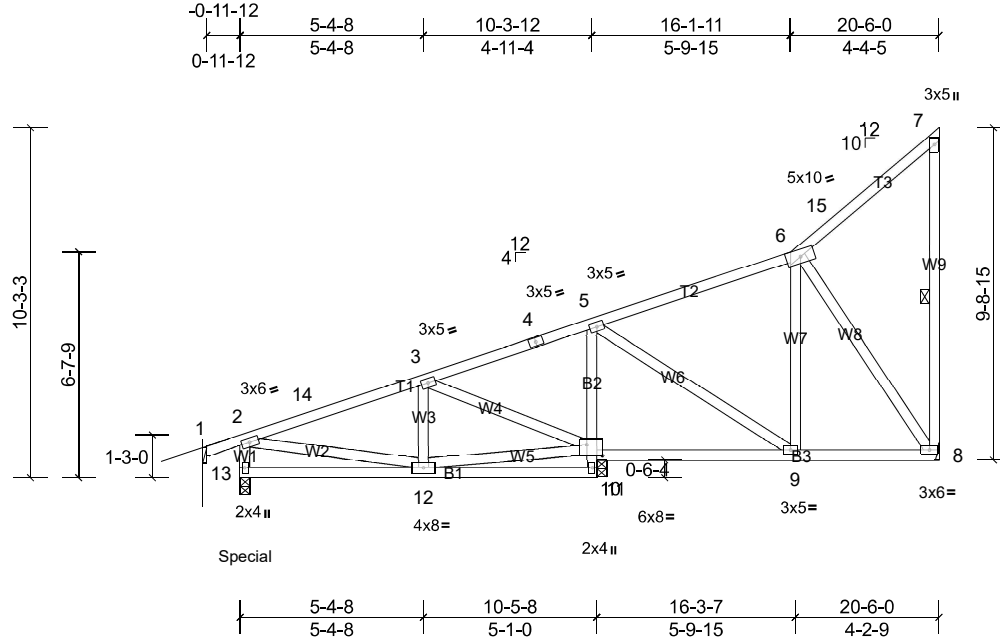5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 8, 41 lb uplift at joint 13 and 12 lb uplift at joint 10.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	N01	Roof Special Girder	1	**2**	Job Reference (optional)

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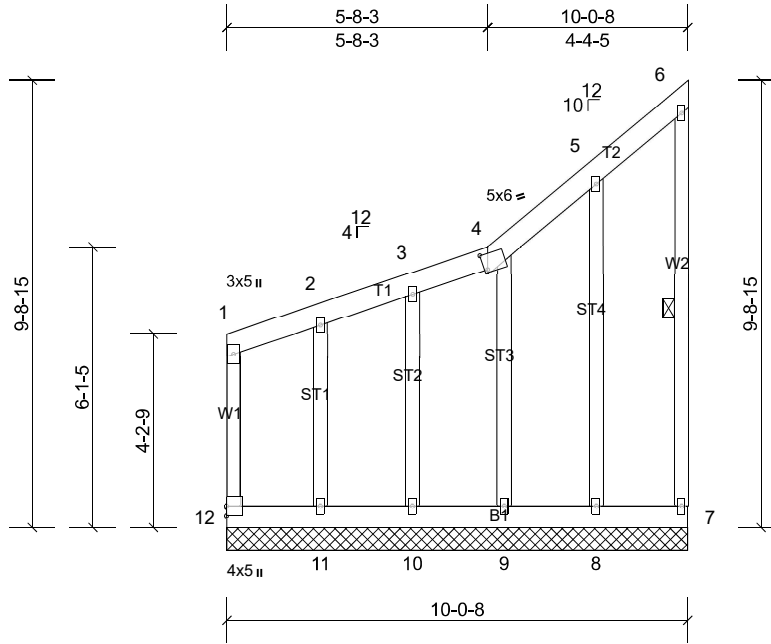
Scale = 1:50.2

Plate Offsets (X, Y): [4:0-0-13,0-4-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.09	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 203 lb	FT = 20%

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

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

REACTIONS All bearings 10-0-8.
(lb) - Max Horiz 12=260 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 10 except 7=-153 (LC 10), 9=-299 (LC 8), 11=-463 (LC 8), 12=-103 (LC 9)
Max Grav All reactions 250 (lb) or less at joint(s) 7 except 8=521 (LC 25), 9=361 (LC 24), 10=565 (LC 25), 11=411 (LC 24), 12=440 (LC 8)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-8=-381/0, 4-9=-310/285, 3-10=-477/76, 2-11=-298/242

NOTES
1) 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 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) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33

4) 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.
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) * This truss has been designed for a 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.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 12=103, 7=153, 9=299, 11=462.
13) Load case(s) 1, 2 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-128, 4-6=-128, 7-12=-20
2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
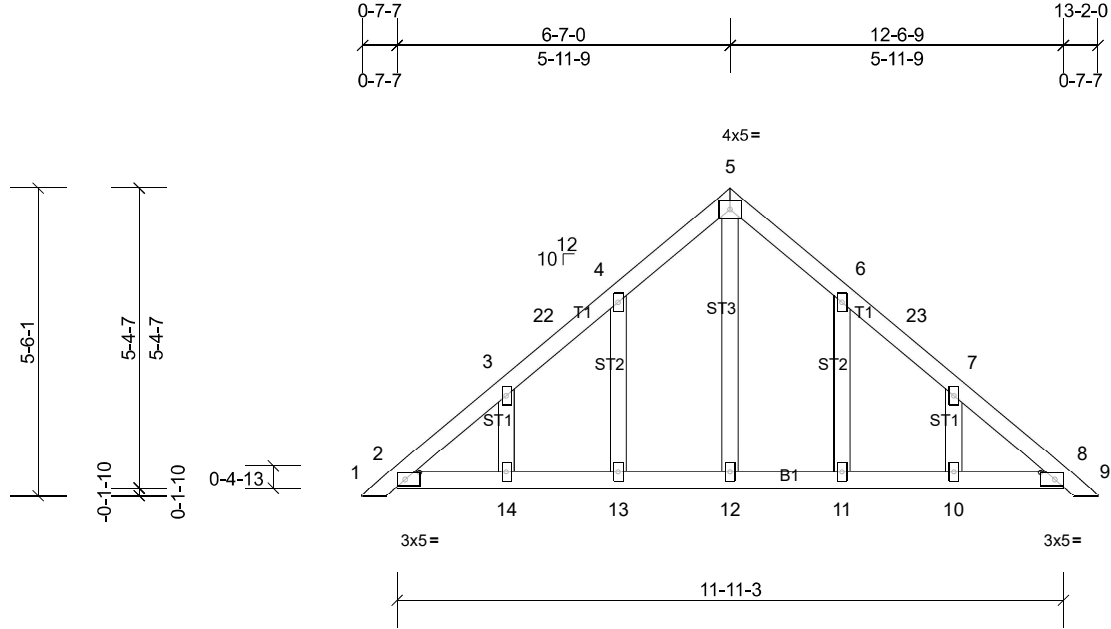Vert: 1-4=-140, 4-6=-140, 7-12=-20

Job	Truss	Truss Type	Qty	Ply	
24090120	PB1	Piggyback	2	1	Job Reference (optional)

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Scale = 1:41.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 64 lb	FT = 20%

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

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

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

REACTIONS All bearings 11-11-3.
(lb) - Max Horiz 2=-100 (LC 11), 15=-100 (LC 11)
        Max Uplift All uplift 100 (lb) or less at joint(s) 2, 10, 11, 13, 14, 15
        Max Grav All reactions 250 (lb) or less at joint(s) 2, 8, 10, 11, 12, 13, 14, 15, 19

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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 6-7-5, Exterior(2R) 6-7-5 to 9-7-5, Interior (1) 9-7-5 to 12-11-11 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 13, 14, 11, 10, 2.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	PB2	Piggyback	12	1	Job Reference (optional)

Carter Components, Sanford, NC, user

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:54   Page: 1
ID:ms2rGrkQUp8i3GYangCScJyaryq-HmCwySqBqQkmkk7m3scyXCi9jxWQ61AP90_BzjyZrK?

Scale = 1:41.3

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

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	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	15	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 55 lb	FT = 20%

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

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

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

REACTIONS All bearings 11-11-3.
(lb) - Max Horiz 2=-100 (LC 11), 11=-100 (LC 11)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 6, 8, 10, 11, 15
Max Grav All reactions 250 (lb) or less at joint(s) 2, 6, 9, 11, 15 except 8=309 (LC 30), 10=310 (LC 29)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   3-10=-303/219, 5-8=-303/219

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 6-7-5, Exterior(2R) 6-7-5 to 9-7-5, Interior (1) 9-7-5 to 12-11-11 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) * 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 6, 10, 8, 2, 6.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
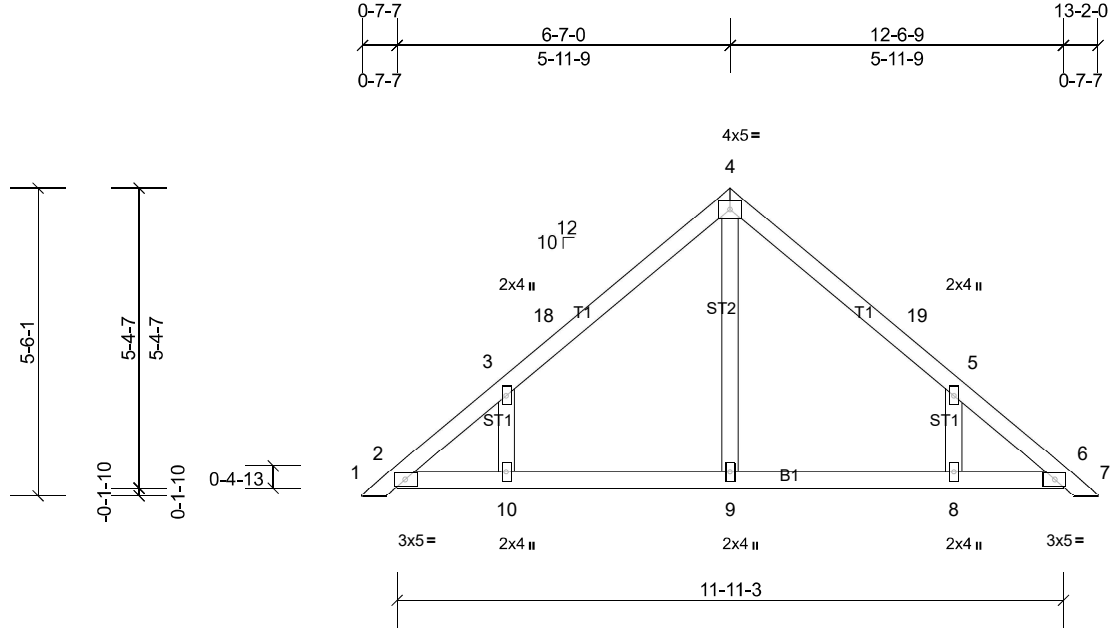
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	PB3	Piggyback	2	2	Job Reference (optional)

Carter Components, Sanford, NC, user

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:54   Page: 1
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Scale = 1:41.2

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 109 lb	FT = 20%

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

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

REACTIONS All bearings 13-2-10.
  (lb) - Max Horiz 1=-100 (LC 9)
        Max Uplift All uplift 100 (lb) or less at joint(s) 1, 8, 10
        Max Grav   All reactions 250 (lb) or less at joint (s) 1, 2, 7, 11 except 8=323 (LC 30), 9=253 (LC 2), 10=318 (LC 29)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   3-10=-305/221, 5-8=-308/215

NOTES
1) 2-ply truss to be connected together as follows:
   Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected with 10d (0.131"x3") nails 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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 6-7-5, Exterior(2R) 6-7-5 to 9-7-5, Interior (1) 9-7-5 to 12-11-11 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=1.33

5) 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.
6) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 oc.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 1, 10, 8.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
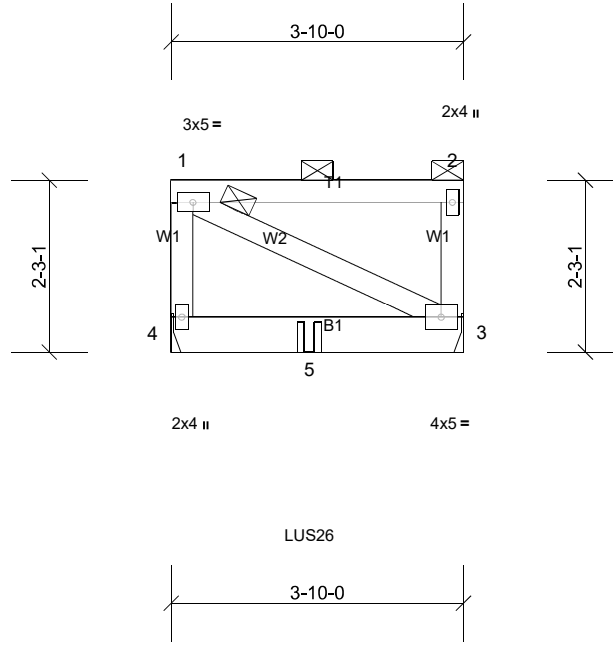
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
24090120	Q01	Flat Girder	1	2	Job Reference (optional)

Carter Components, Sanford, NC, user
Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:54   Page: 1
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Scale = 1:30.2

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	0.13	Vert(LL)	-0.01	3-4	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.01	3-4	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 49 lb	FT = 20%

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

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

REACTIONS (lb/size)   3=309/ Mechanical, (min. 0-1-8),
                          4=331/ Mechanical, (min. 0-1-8)
               Max Horiz 4=-51 (LC 7)
               Max Grav   3=346 (LC 2), 4=372 (LC 2)

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

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3")
   nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0
   oc.
   Bottom chords connected as follows: 2x6 - 2 rows
   staggered at 0-9-0 oc.
   Web 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) Wind: ASCE 7-16; Vult=130mph (3-second gust)
   Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
   II; Exp B; Enclosed; MWFRS (envelope); cantilever left
   and right exposed ; end vertical left and right exposed;
   Lumber DOL=1.60 plate grip DOL=1.33
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
   Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum
   DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully
   Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat
   roof snow load governs. Rain surcharge applied to all
   exposed surfaces with slopes less than 0.500/12 in
   accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this
   design.
6) Provide adequate drainage to prevent water ponding.

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) Refer to girder(s) for truss to truss connections.
9) Graphical purlin representation does not depict the size
   or the orientation of the purlin along the top and/or
   bottom chord.
10) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d
   Truss, Single Ply Girder) or equivalent at 1-9-12 from the
   left end to connect truss(es) E03 (1 ply 2x4 SP) to front
   face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S)   Standard
1)   Dead + Snow (balanced): Lumber Increase=1.15, Plate
     Increase=1.15
   Uniform Loads (lb/ft)
     Vert: 1-2=-58, 3-4=-20
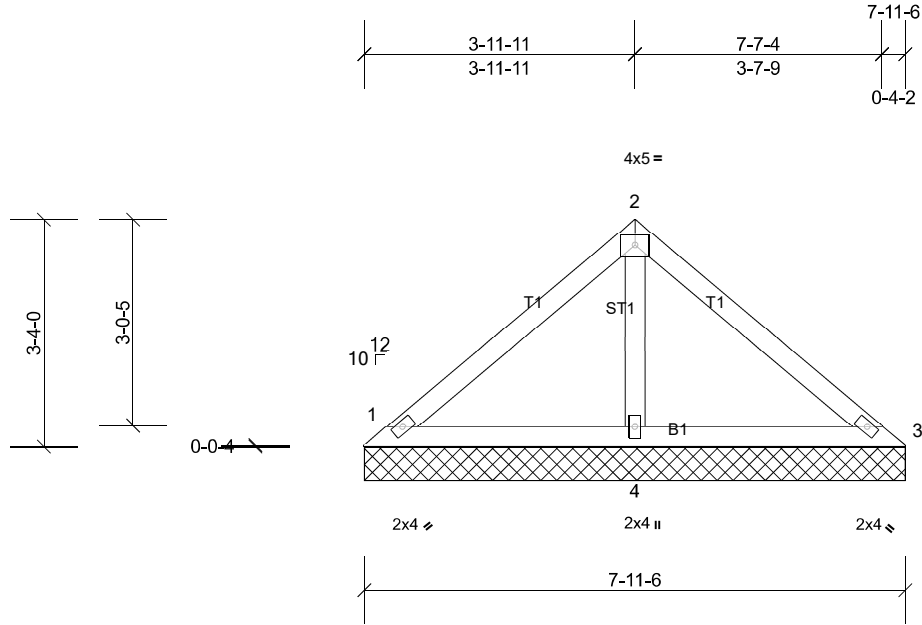   Concentrated Loads (lb)
     Vert: 5=-365 (F)

Job	Truss	Truss Type	Qty	Ply	
24090120	VL1	Valley	1	1	Job Reference (optional)

Carter Components, Sanford, NC, user   Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Thu Sep 26 18:26:54   Page: 1
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                                3-11-11              7-7-4        7-11-6
                                3-11-11              3-7-9
                                                                  0-4-2
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4x5 =

Scale = 1:33.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 30 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or 7-11-6 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS (lb/size)   1=51/7-11-6, (min. 0-1-8),
                     3=70/7-11-6, (min. 0-1-8),
                     4=392/7-11-6, (min. 0-1-8),
        Max Horiz 1=-59 (LC 9)
        Max Uplift 1=-17 (LC 35), 4=-7 (LC 14)
        Max Grav 1=106 (LC 34), 3=84 (LC 2), 4=461 (LC 2)

FORCES   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-4=-353/163

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-13 to 3-4-13, Interior (1) 3-4-13 to 4-0-0, Exterior(2R) 4-0-0 to 7-2-5, Interior (1) 7-2-5 to 7-11-11 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=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) * 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.
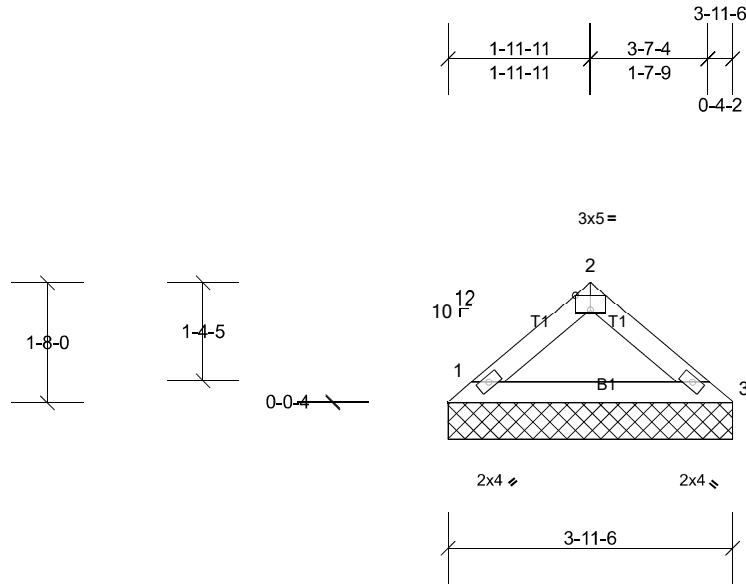6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1 and 7 lb uplift at joint 4.

LOAD CASE(S) Standard

Scale = 1:32

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 12 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or
3-11-6 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)   1=121/3-11-6, (min. 0-1-8),
3=121/3-11-6, (min. 0-1-8)
Max Horiz 1=-28 (LC 9)
Max Grav 1=143 (LC 2), 3=143 (LC 2)

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

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 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=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) * 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.

LOAD CASE(S) Standard