

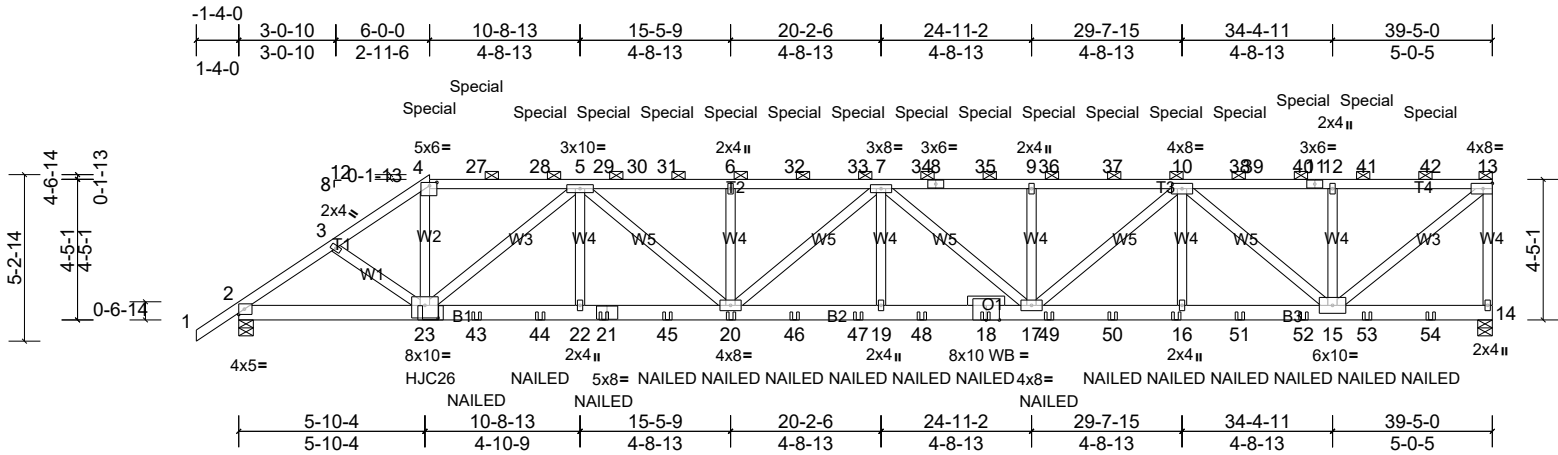
Job 21030029-A	Truss A01	Truss Type Half Hip Girder	Qty 1	Ply 2	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Carter Components, Sanford, NC, user

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Scale = 1:72.8

Plate Offsets (X, Y): [4:0-2-12,0-1-4], [23:0-5-0,0-4-12]

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	0.79	Vert(LL)	-0.40	19-20	>999	240	MT20 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.63	19-20	>744	180	
TCDL	10.0	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.12	14	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										Weight: 532 lb FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except* B1:2x6 SP No.2
WEBS 2x4 SP No.3 *Except* W3:2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-15 max.): 4-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=4096/0-5-8, (min. 0-2-7), 14=4103/0-5-8, (min. 0-1-12)
Max Horiz 2=156 (LC 11)
Max Uplift 2=-635 (LC 9), 14=-722 (LC 9)
Max Grav 2=4166 (LC 19), 14=4245 (LC 33)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6548/1089, 3-4=-6583/1120, 4-27=-5456/950, 27-28=-5458/950, 5-28=-5462/951, 5-29=-10048/1727, 29-30=-10048/1727, 30-31=-10048/1727, 6-31=-10048/1727, 6-32=-10048/1727, 32-33=-10048/1727, 7-33=-10048/1727, 7-34=-9654/1650, 8-34=-9654/1650, 8-35=-9654/1650, 9-35=-9654/1650, 9-36=-9654/1650, 36-37=-9654/1650, 10-37=-9654/1650, 10-38=-4617/806, 38-39=-4617/806, 39-40=-4617/806, 11-40=-4617/806, 11-12=-4617/806, 12-41=-4617/806, 41-42=-4617/806, 13-42=-4617/806, 13-14=-4099/744
BOT CHORD 2-23=-1000/5324, 23-43=-1541/8572, 43-44=-1541/8572, 22-44=-1541/8572, 21-22=-1541/8572, 21-45=-1541/8572, 20-45=-1541/8572, 20-46=-1869/10516, 46-47=-1869/10516, 19-47=-1869/10516, 19-48=-1869/10516, 18-48=-1869/10516, 17-18=-1869/10516, 17-49=-1382/7777, 49-50=-1382/7777, 16-50=-1382/7777, 16-51=-1382/7777, 51-52=-1382/7777, 15-52=-1382/7777
WEBS 3-23=-123/362, 4-23=-391/2965, 5-23=-4046/725, 5-22=0/417, 5-20=-355/1969, 6-20=-710/278, 7-20=-649/141, 7-19=0/407, 7-17=-1137/209, 9-17=-708/283, 10-17=-433/2477, 10-16=0/389, 10-15=-4158/737, 12-15=-881/320, 13-15=-1010/5931

- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.

Job 21030029-A	Truss A01	Truss Type Half Hip Girder	Qty 1	Ply 2	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) One RT8A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 2. This connection is for uplift only and does not consider lateral forces.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent at 6-0-6 from the left end to connect truss(es) EJ01 (1 ply 2x4 SP), HJ01 (1 ply 2x4 SP) to front face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.
- 17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 18) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 209 lb down and 93 lb up at 6-0-0, 229 lb down and 93 lb up at 7-5-12, 229 lb down and 93 lb up at 9-5-12, 229 lb down and 93 lb up at 11-5-12, 229 lb down and 93 lb up at 13-5-12, 229 lb down and 93 lb up at 15-5-12, 229 lb down and 93 lb up at 17-5-12, 229 lb down and 93 lb up at 19-5-12, 229 lb down and 93 lb up at 21-5-12, 229 lb down and 93 lb up at 23-5-12, 229 lb down and 93 lb up at 25-5-12, 229 lb down and 93 lb up at 27-5-12, 229 lb down and 93 lb up at 29-5-12, 229 lb down and 93 lb up at 31-5-12, 229 lb down and 93 lb up at 33-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 37-5-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (lb/ft)

Vert: 1-4=-60, 4-13=-60, 14-24=-20

Concentrated Loads (lb)

Vert: 4=-190, 21=-74, 23=-560, 20=-74, 6=-190, 16=-74, 10=-190, 18=-74, 27=-190, 28=-190, 29=-190, 31=-190, 32=-190, 33=-190, 34=-190, 35=-190, 36=-190, 37=-190, 38=-190, 40=-190, 41=-190, 42=-190, 43=-74, 44=-74, 45=-74, 46=-74, 47=-74, 48=-74, 49=-74, 50=-74, 51=-74, 52=-74, 53=-74, 54=-74

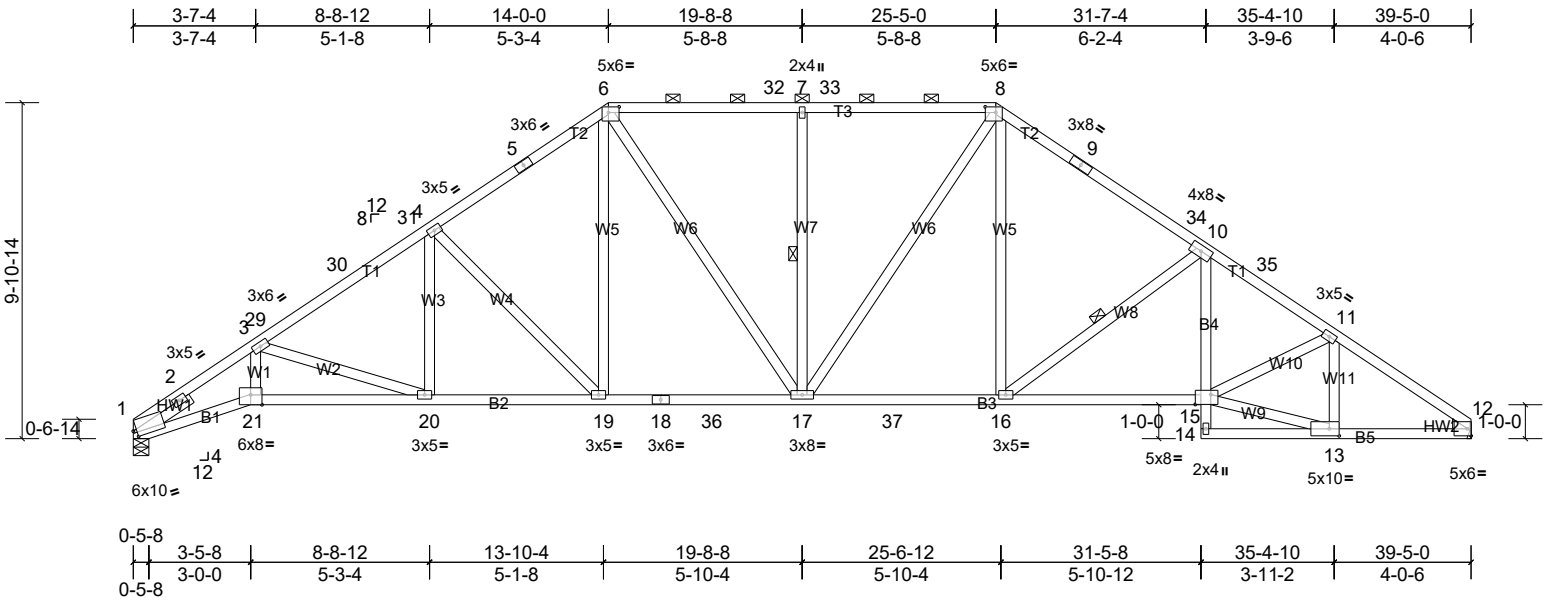
Job 21030029-A	Truss A010	Truss Type Piggyback Base	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:68.2

Plate Offsets (X, Y): [1:0-1-3,0-2-6], [6:0-3-12,0-2-0], [8:0-3-12,0-2-0], [13:0-3-8,0-2-8], [15:0-5-8,0-3-8], [21:0-4-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.22	17-19	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.40	17-19	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.26	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 257 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1 *Except* T3:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* B1:2x4 SP 2400F 2.0E, B2:2x4 SP No.1, B4:2x4 SP No.3
WEBS 2x4 SP No.3 *Except* W6:2x4 SP No.2
WEDGE Right: 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 2-0-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-1-0 oc purlins, except
2-0-0 oc purlins (3-3-3 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
9-0-13 oc bracing: 20-21
2-2-0 oc bracing: 12-13.
1 Row at midpt 7-17, 10-16

REACTIONS (lb/size) 1=1577/0-5-8, (min. 0-1-8), 12=1577/ Mechanical, (min. 0-1-8)
Max Horiz 1=-220 (LC 12)
Max Uplift 1=-153 (LC 14), 12=-153 (LC 15)
Max Grav 1=1791 (LC 47), 12=1791 (LC 47)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2359/252, 2-3=-4399/489, 3-29=-3032/272, 29-30=-3027/286, 30-31=-2965/304, 4-31=-2867/306, 4-5=-2406/299, 5-6=-2286/316, 6-32=-2081/327, 7-32=-2081/327, 7-33=-2081/327, 8-33=-2081/327, 8-9=-2277/308, 9-34=-2404/289, 10-34=-2429/267, 10-35=-3040/288, 11-35=-3139/279, 11-12=-2723/242
BOT CHORD 1-21=-518/3844, 20-21=-484/3592, 19-20=-244/2536, 18-19=-88/1878, 18-36=-88/1878, 17-36=-88/1878, 17-37=-36/1886, 16-37=-36/1886, 15-16=-144/2636, 10-15=-3/571, 12-13=-136/2192
WEBS 3-21=-97/1141, 3-20=-1110/252, 4-20=-15/558, 4-19=-959/218, 6-19=-87/896, 6-17=-162/455, 7-17=-609/168, 8-17=-166/447, 8-16=-53/843, 10-16=-1003/217, 11-13=-539/74, 11-15=-30/461, 13-15=-116/2148

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-11-5, Interior (1) 3-11-5 to 8-5-2, Exterior(2R) 8-5-2 to 30-11-14, Interior (1) 30-11-14 to 35-4-10, Exterior(2E) 35-4-10 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 153 lb uplift at joint 12.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job 21030029-A	Truss A010	Truss Type Piggyback Base	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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LOAD CASE(S) Standard

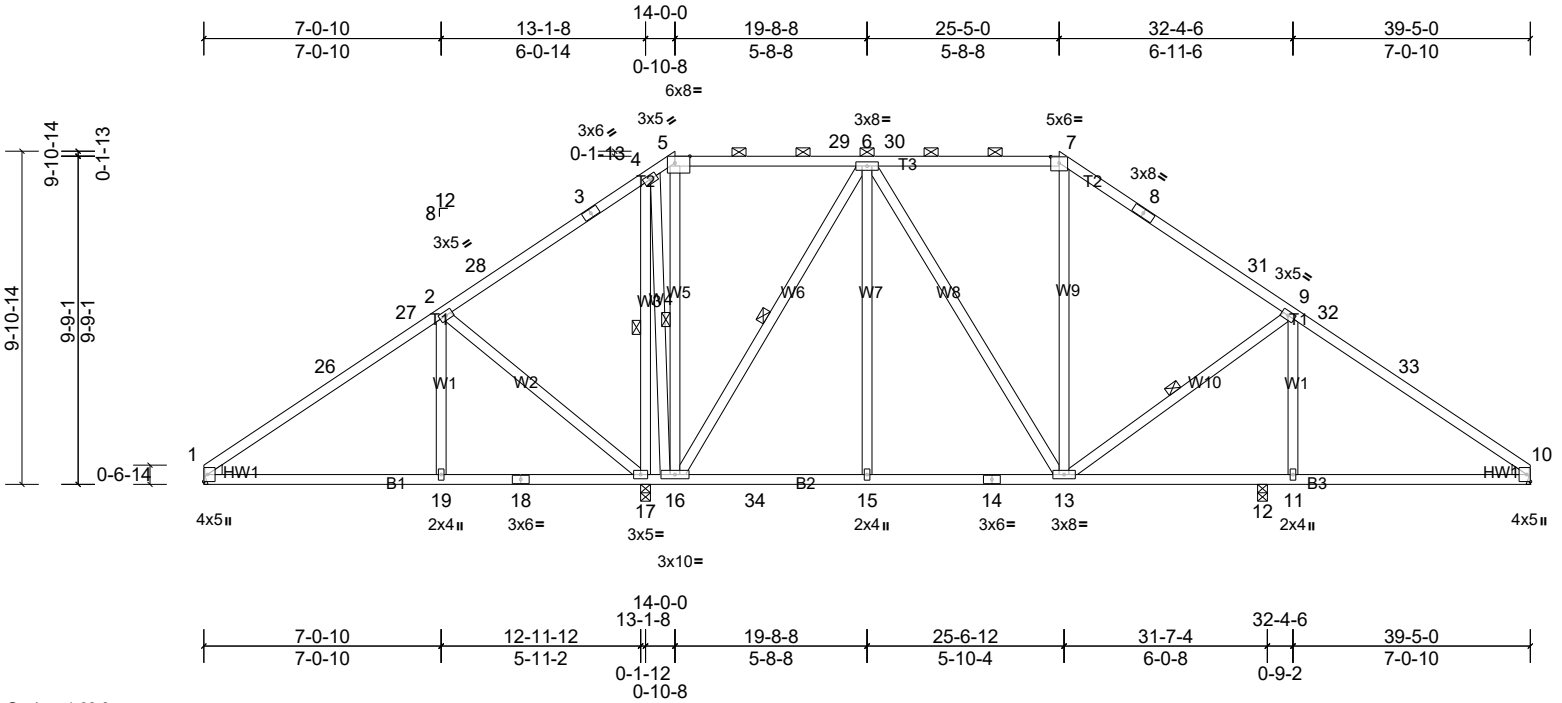
Job 21030029-A	Truss A011	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:68.8

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

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	0.89	Vert(LL)	-0.10	11-25	>977	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.19	11-25	>506	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.03	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 264 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
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-16, 6-16, 9-13, 4-17

REACTIONS All bearings 0-1-8. except 17=0-3-8, 12=0-3-8
(lb) - Max Horiz 1=-217 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 1 except 10=-162 (LC 15),
17=-144 (LC 14)
Max Grav All reactions 250 (lb) or less at joint(s) except 1=606 (LC 49),
10=971 (LC 51), 12=401 (LC 39), 17=1687 (LC 47)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-26=-668/74, 26-27=-567/77, 2-27=-513/98, 6-30=-740/272, 7-30=-740/272, 7-8=-874/260, 8-31=-892/240,
9-31=-997/219, 9-32=-1091/266, 32-33=-1108/262, 10-33=-1236/242
BOT CHORD 1-19=-157/624, 18-19=-123/624, 17-18=-123/624, 16-34=-54/692, 15-34=-54/692, 14-15=-54/692, 13-14=-54/692,
12-13=-119/968, 11-12=-119/968, 10-11=-119/968
WEBS 6-16=-996/125, 6-15=0/366, 6-13=-85/376, 9-13=-471/230, 2-17=-714/200, 2-19=0/279, 4-17=-1056/132, 4-16=-105/869

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-0-0 to 3-11-5, Interior (1) 3-11-5 to 8-5-2, Exterior(2R) 8-5-2 to 30-11-14, Interior (1) 30-11-14 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 10=162.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

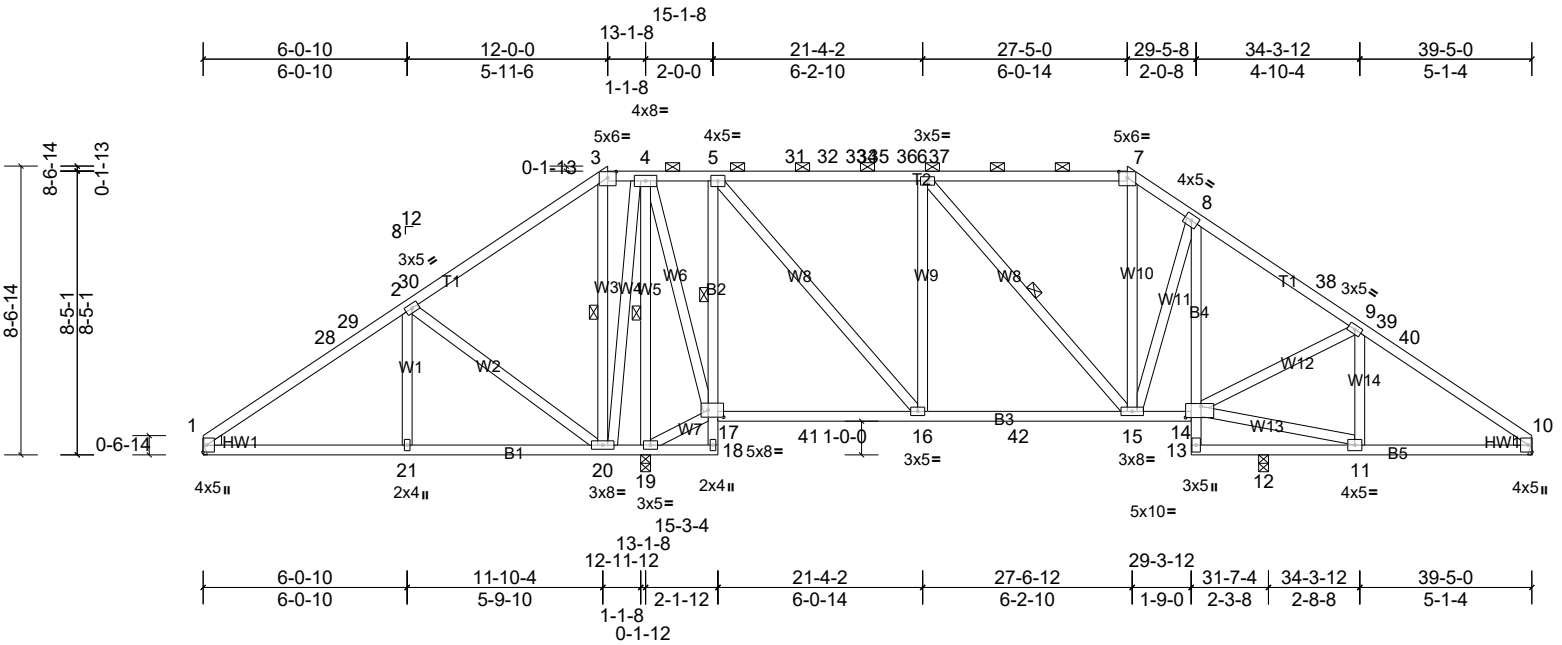
Job 21030029-A	Truss A012	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:68.6

Plate Offsets (X, Y): [3:0-3-0,0-2-3], [7:0-3-0,0-2-3], [14:0-5-8,0-4-0], [17:0-5-8,0-2-8]

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	0.75	Vert(LL)	-0.08	15-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.13	15-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.05	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 289 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except* B2,B4:2x4 SP No.3
 WEBS 2x4 SP No.3
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

REACTIONS All bearings 0-1-8. except 19=0-3-8, 12=0-3-8

(lb) - Max Horiz 1=-186 (LC 12)
 Max Uplift All uplift 100 (lb) or less at joint(s) 1, 12 except 10=-139 (LC 15), 19=-140 (LC 14)
 Max Grav All reactions 250 (lb) or less at joint(s) except 1=507 (LC 43), 10=869 (LC 51), 12=352 (LC 39), 19=2024 (LC 46)

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-28=-612/88, 28-29=-499/96, 2-29=-417/110, 3-30=-56/357, 3-4=0/261, 5-31=-729/209, 31-32=-729/209, 32-33=-729/209, 33-34=-729/209, 34-35=-729/209, 35-36=-729/209, 6-36=-729/209, 6-37=-748/242, 7-37=-747/243, 7-8=-886/271, 8-38=-988/246, 9-38=-1095/217, 9-39=-1040/223, 39-40=-1041/220, 10-40=-1164/206
 BOT CHORD 1-21=-134/489, 20-21=-128/489, 19-20=-338/165, 5-17=-1151/198, 16-42=-81/729, 15-42=-81/729, 14-15=-4/817, 10-11=-109/925
 WEBS 2-21=0/274, 2-20=-722/188, 3-20=-421/70, 5-16=-132/1070, 6-16=-621/180, 6-15=-49/332, 7-15=-54/347, 8-15=-466/156, 11-14=-129/1005, 9-11=-291/88, 4-19=-1594/81, 4-20=-95/788, 4-17=-95/1073, 17-19=-326/198

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior(2E) 0-0-0 to 3-11-5, Interior (1) 3-11-5 to 6-5-2, Exterior(2R) 6-5-2 to 17-6-14, Interior (1) 17-6-14 to 21-10-2, Exterior(2R) 21-10-2 to 32-11-14, Interior (1) 32-11-14 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 10=139.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19. This connection is for uplift only and does not consider lateral forces.
- One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-3-12 oc purlins, except 2-0-0 oc purlins (5-8-12 max.): 3-7.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 5-17
 WEBS 1 Row at midpt 3-20, 6-15, 4-19

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

Job 21030029-A	Truss A012	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

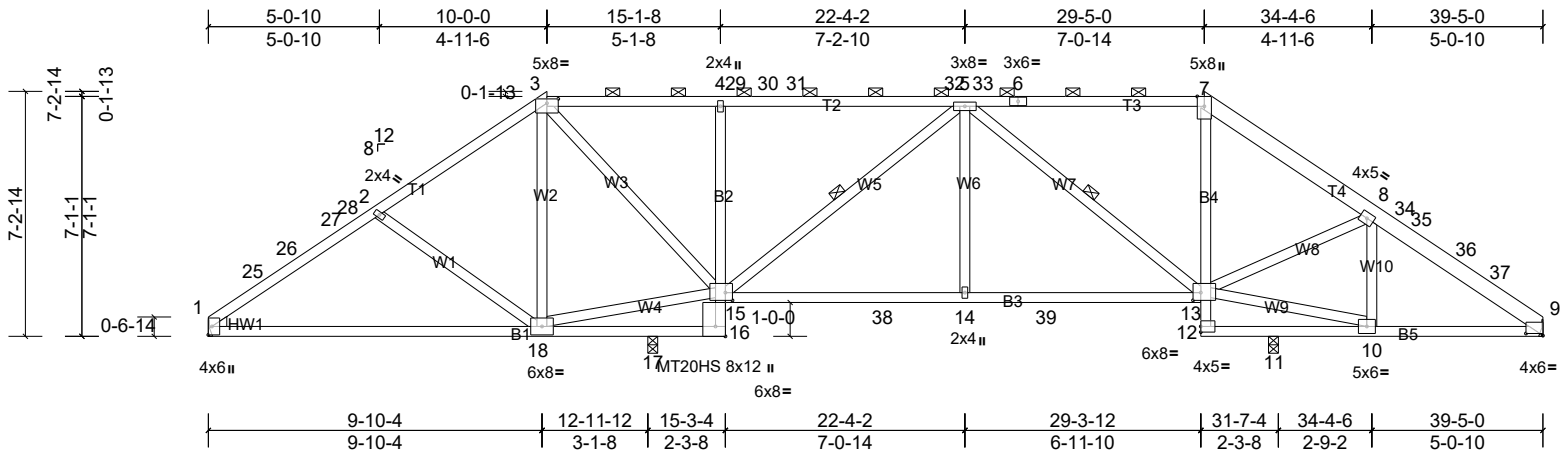
Job 21030029-A	Truss A013	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:68.3

Plate Offsets (X, Y): [3:0-4-0,0-1-9], [9:0-6-0,0-0-12], [13:0-2-12,0-2-12], [15:0-2-8,0-2-12], [16:Edge,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	0.95	Vert(LL)	-0.21	18-24	>750	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.43	18-24	>369	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.12	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 245 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* T4:2x6 SP No.2
 BOT CHORD 2x4 SP No.2 *Except* B1,B5:2x4 SP No.1
 WEBS 2x4 SP No.3
 WEDGE Left: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-2-1 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 3-7.
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
 WEBS 1 Row at midpt 5-15, 5-13

REACTIONS All bearings 0-1-8, except 17=0-3-8, 11=0-3-8

(lb) - Max Horiz 1=-157 (LC 10)
 Max Uplift All uplift 100 (lb) or less at joint(s) 1, 9, 11, 17
 Max Grav All reactions 250 (lb) or less at joint(s) except 1=1227 (LC 37), 9=1069 (LC 39), 11=661 (LC 46), 17=646 (LC 46)

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

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-25=-1688/162, 25-26=-1653/166, 26-27=-1627/182, 27-28=-1551/185, 2-28=-1550/188, 2-3=-1456/172, 3-4=-1805/195, 4-29=-1811/192, 29-30=-1811/192, 30-31=-1811/192, 31-32=-1811/192, 5-32=-1811/192, 5-33=-1344/213, 6-33=-1344/213, 6-7=-1344/213, 7-8=-1631/207, 8-34=-1328/170, 34-35=-1335/166, 35-36=-1413/154, 36-37=-1431/152, 9-37=-1477/147
 BOT CHORD 1-18=-168/1376, 17-18=-337/16, 16-17=-337/16, 15-16=-385/58, 4-15=-550/165, 15-38=-172/2099, 14-38=-172/2099, 14-39=-172/2099, 13-39=-172/2099, 12-13=-319/37, 7-13=0/568, 11-12=-257/0, 10-11=-257/0, 9-10=-82/1191
 WEBS 2-18=-460/184, 15-18=-125/1552, 3-15=-169/930, 5-15=-419/103, 5-14=0/414, 5-13=-974/168, 10-13=-81/1445, 8-13=-147/365, 8-10=-445/86

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior(2E) 0-0-0 to 3-11-5, Interior (1) 3-11-5 to 4-5-2, Exterior(2R) 4-5-2 to 15-6-14, Interior (1) 15-6-14 to 23-10-2, Exterior(2R) 23-10-2 to 34-11-14, Interior (1) 34-11-14 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 1.
- One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17 and 11. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job 21030029-A	Truss A013	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

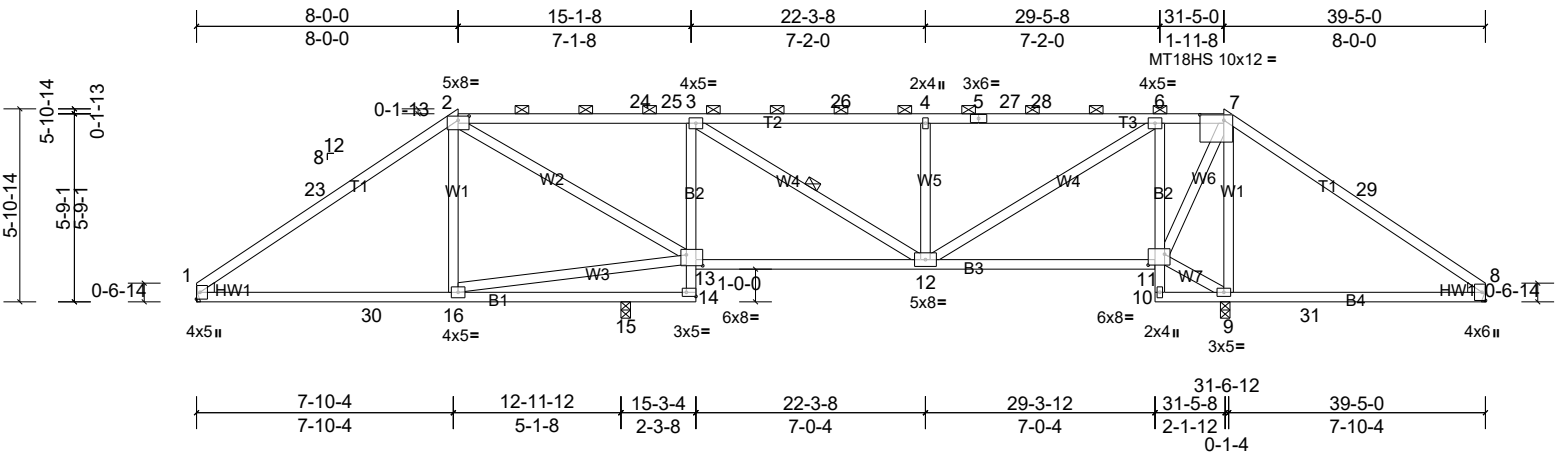
Job 21030029-A	Truss A014	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:70.8

Plate Offsets (X, Y): [2:0-4-0,0-1-9], [7:0-8-12,0-2-0], [11:0-6-0,0-4-0], [13:0-6-0,0-4-0], [14:Edge,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	0.88	Vert(LL)	-0.21	16-19	>752	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.34	16-19	>458	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.08	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 217 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* T2:2x4 SP No.1, T3:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* B2:2x4 SP No.3
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-6 oc purlins, except 2-0-0 oc purlins (2-2-0 max.); 2-7.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-12

REACTIONS All bearings 0-3-8. except 1= Mechanical, 8= Mechanical
(lb) - Max Horiz 1=-123 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 15 except 1=-175 (LC 14), 8=-269 (LC 54), 9=-288 (LC 11)
Max Grav All reactions 250 (lb) or less at joint(s) except 1=1163 (LC 37), 8=507 (LC 51), 9=2210 (LC 46), 15=418 (LC 46)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-23=-1461/245, 2-23=-1337/272, 2-24=-1759/379, 24-25=-1761/378, 3-25=-1761/378, 3-26=-1374/291, 4-26=-1374/291, 4-5=-1374/291, 5-27=-1374/291, 27-28=-1374/291, 6-28=-1374/291, 6-7=-397/264, 7-29=-300/823, 8-29=-322/744
BOT CHORD 1-30=-184/1121, 16-30=-184/1121, 3-13=-338/200, 12-13=-270/1756, 11-12=-119/370, 6-11=-1354/339, 9-31=-622/243, 8-31=-622/243
WEBS 13-16=-179/1333, 2-13=-207/791, 3-12=-505/202, 4-12=-493/179, 6-12=-318/1677, 9-11=-654/306, 7-11=-184/1087, 7-9=-1571/238

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-0-0 to 3-11-5, Exterior(2R) 3-11-5 to 13-6-14, Interior (1) 13-6-14 to 25-10-2, Exterior(2R) 25-10-2 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - The Fabrication Tolerance at joint 7 = 12%
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=175, 8=269.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
 - One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job 21030029-A	Truss A014	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job 21030029-A	Truss A015	Truss Type Half Hip Girder	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 209 lb down and 93 lb up at 6-0-0, 229 lb down and 93 lb up at 7-9-12, 229 lb down and 93 lb up at 9-9-12, 229 lb down and 93 lb up at 11-9-12, 229 lb down and 93 lb up at 13-9-12, 229 lb down and 93 lb up at 15-9-12, 229 lb down and 93 lb up at 17-9-12, 229 lb down and 93 lb up at 33-9-12, 229 lb down and 93 lb up at 37-9-12, and 229 lb down and 93 lb up at 39-9-12, and 228 lb down and 94 lb up at 41-9-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 16) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (lb/ft)

Vert: 1-2=-60, 2-13=-60, 22-27=-20, 18-21=-20, 14-17=-20

Concentrated Loads (lb)

Vert: 2=-190 (B), 7=-160 (B), 10=-190 (B), 26=-74 (B), 11=-190 (B), 18=-74 (B), 28=-190 (B), 29=-190 (B), 30=-190 (B), 32=-190 (B), 33=-190 (B), 34=-190 (B), 35=-160 (B), 36=-160 (B), 37=-160 (B), 38=-160 (B), 39=-160 (B), 40=-160 (B), 42=-190 (B), 43=-190 (B), 44=-190 (B), 45=-74 (B), 46=-74 (B), 47=-74 (B), 48=-74 (B), 49=-74 (B), 50=-74 (B), 51=-105 (B), 52=-105 (B), 53=-105 (B), 54=-105 (B), 55=-105 (B), 56=-105 (B), 57=-105 (B), 58=-74 (B), 59=-74 (B), 60=-77 (B)

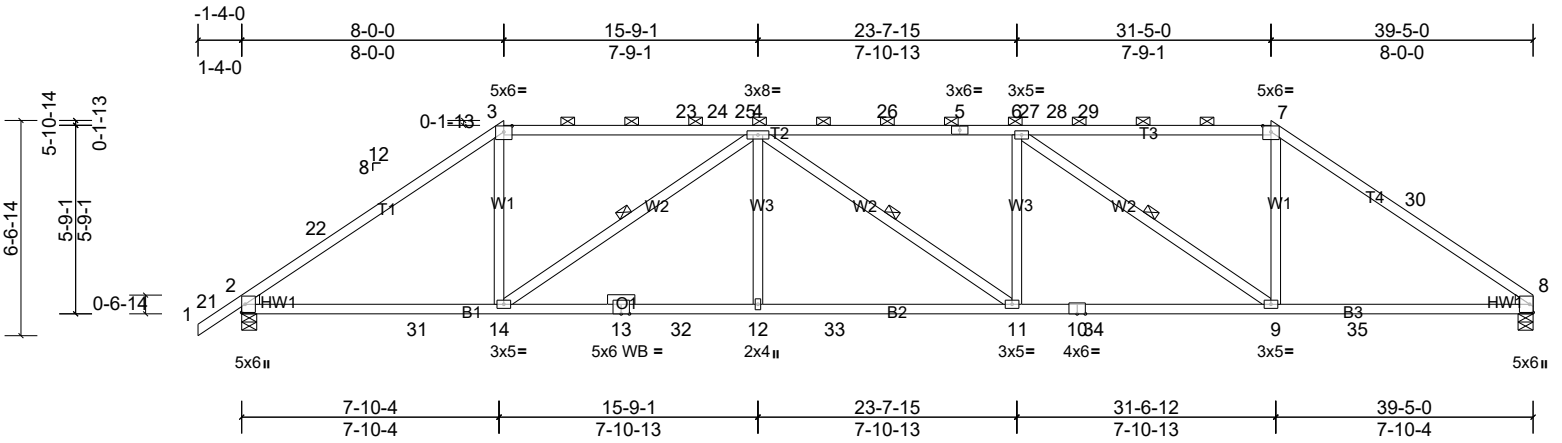
Job 21030029-A	Truss A02	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:70.6

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

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	0.80	Vert(LL)	-0.28	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.48	11-12	>985	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.17	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 200 lb	FT = 20%

LUMBER
 TOP CHORD 2x4 SP 2400F 2.0E
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.3
 OTHERS 2x4 SP No.3
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

BRACING
 TOP CHORD Structural wood sheathing directly applied or 3-3-3 oc purlins, except
 2-0-0 oc purlins (3-8-6 max.): 3-7.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 4-14, 4-11, 6-9

REACTIONS (lb/size) 2=1658/0-5-8, (min. 0-2-3), 8=1575/0-5-8, (min. 0-2-2)
 Max Horiz 2=137 (LC 11)
 Max Uplift 2=-192 (LC 14), 8=-166 (LC 15)
 Max Grav 2=1859 (LC 5), 8=1786 (LC 6)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-22=-2765/216, 3-22=-2658/251, 3-23=-2227/278, 23-24=-2228/278, 24-25=-2229/277, 4-25=-2229/277,
 4-26=-3442/327, 5-26=-3442/327, 5-6=-3442/327, 6-27=-2226/281, 27-28=-2226/281, 28-29=-2225/282, 7-29=-2224/282,
 7-30=-2653/255, 8-30=-2760/228
 BOT CHORD 2-31=-226/2257, 14-31=-226/2257, 13-14=-342/3456, 13-32=-342/3456, 12-32=-342/3456, 12-33=-342/3456,
 11-33=-342/3456, 10-11=-308/3442, 10-34=-308/3442, 9-34=-308/3442, 9-35=-104/2254, 8-35=-104/2254
 WEBS 3-14=-34/1134, 4-14=-1493/269, 4-12=0/399, 6-11=0/386, 6-9=-1480/269, 7-9=-34/1131

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) -1-4-0 to 2-7-5, Exterior(2R) 2-7-5 to 13-6-14, Interior (1) 13-6-14 to 25-10-2, Exterior(2R) 25-10-2 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

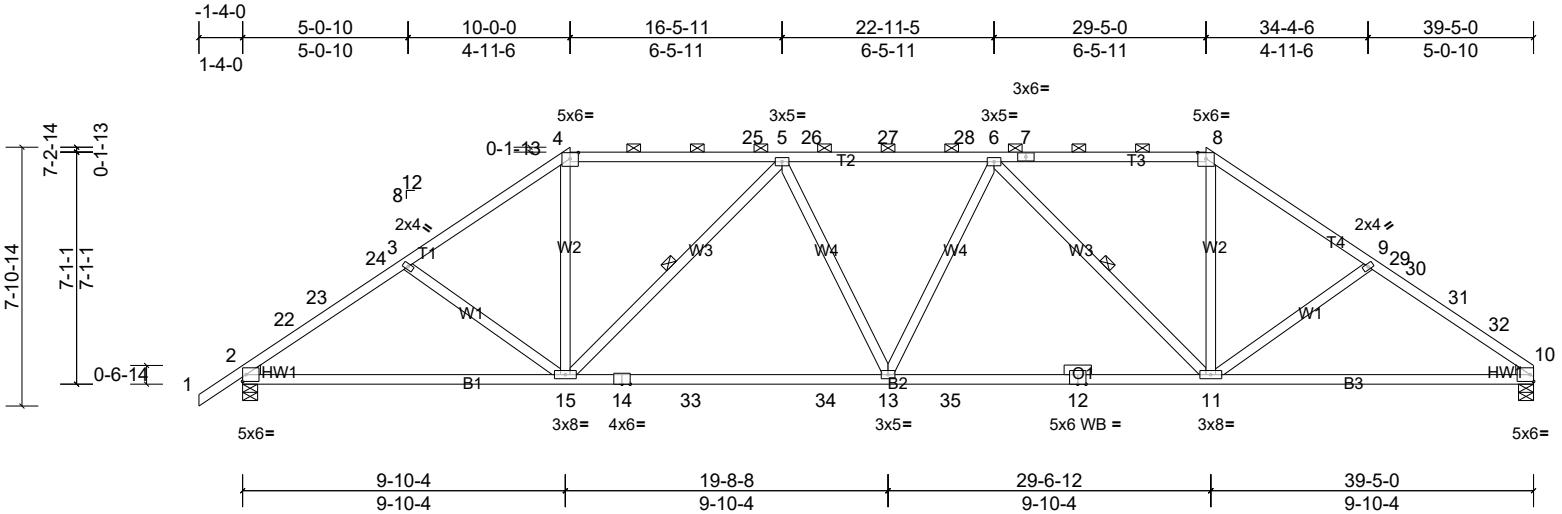
Job 21030029-A	Truss A03	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:70.7

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

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	0.85	Vert(LL)	-0.30	13-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.50	13-15	>938	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.11	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 214 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* T2,T3:2x4 SP No.1
 BOT CHORD 2x4 SP 2400F 2.0E *Except* B1:2x4 SP No.1
 WEBS 2x4 SP No.3
 OTHERS 2x4 SP No.3
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-10-0 oc purlins, except
 2-0-0 oc purlins (2-8-10 max.): 4-8.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 5-15, 6-11

REACTIONS (lb/size) 2=1658/0-5-8, (min. 0-2-2), 10=1575/0-5-8, (min. 0-1-8)
 Max Horiz 2=169 (LC 13)
 Max Uplift 2=-189 (LC 14), 10=-162 (LC 15)
 Max Grav 2=1824 (LC 5), 10=1755 (LC 6)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-22=-2631/260, 22-23=-2601/264, 23-24=-2559/283, 3-24=-2538/286, 3-4=-2505/259, 4-25=-2059/261, 5-25=-2061/261, 5-26=-2828/243, 26-27=-2828/243, 27-28=-2828/243, 6-28=-2828/243, 6-7=-2061/262, 7-8=-2061/263, 8-9=-2508/262, 9-29=-2543/291, 29-30=-2551/288, 30-31=-2572/277, 31-32=-2616/276, 10-32=-2639/265
 BOT CHORD 2-15=-261/2129, 14-15=-237/2722, 14-33=-237/2722, 33-34=-237/2722, 13-34=-237/2722, 13-35=-196/2724, 12-35=-196/2724, 11-12=-196/2724, 10-11=-163/2140
 WEBS 3-15=-399/169, 4-15=-8/1055, 5-15=-950/221, 5-13=-27/313, 6-13=-26/311, 6-11=-950/221, 8-11=-8/1059, 9-11=-416/174

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior(2E) -1-4-0 to 2-7-5, Interior (1) 2-7-5 to 4-5-2, Exterior(2R) 4-5-2 to 15-6-14, Interior (1) 15-6-14 to 23-10-2, Exterior(2R) 23-10-2 to 34-11-14, Interior (1) 34-11-14 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

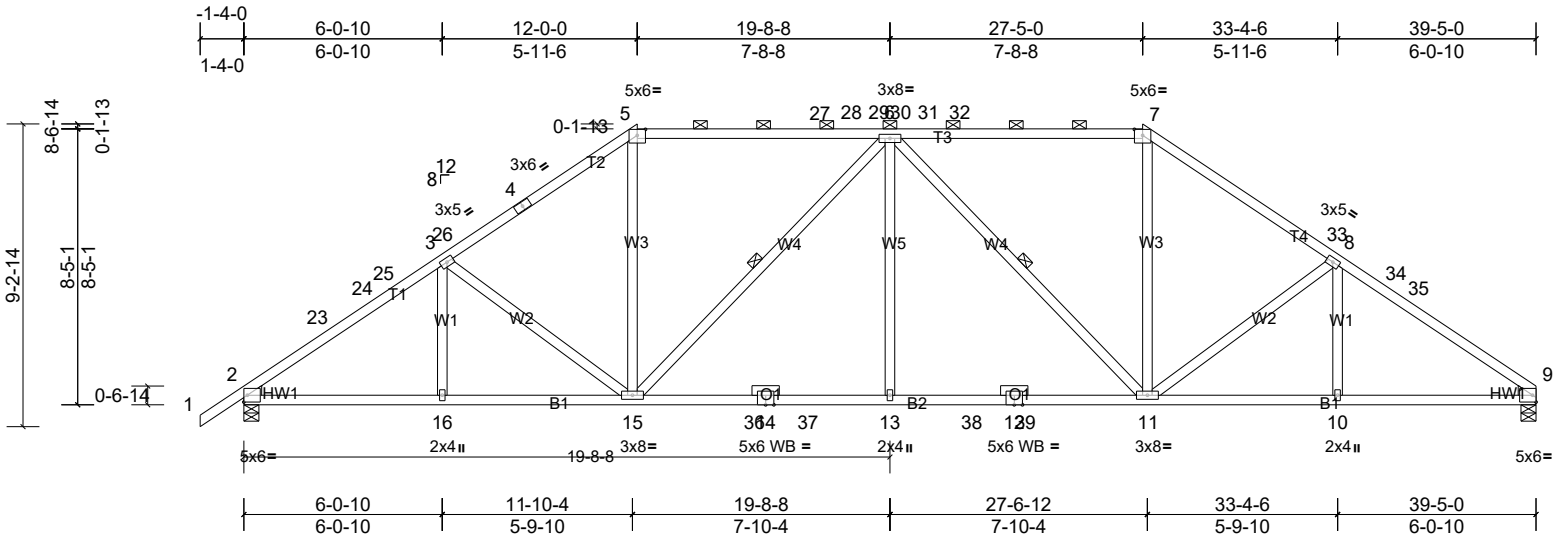
Job 21030029-A	Truss A04	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Carter Components, Sanford, NC, user

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Scale = 1:70.6

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

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	0.62	Vert(LL)	-0.17	13-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.35	13-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.11	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 231 lb	FT = 20%

LUMBER
 TOP CHORD 2x4 SP 2400F 2.0E
 BOT CHORD 2x4 SP 2400F 2.0E
 WEBS 2x4 SP No.3 *Except* W4:2x4 SP No.2
 OTHERS 2x4 SP No.3
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

BRACING
 TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins, except
 2-0-0 oc purlins (5-1-3 max.): 5-7.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 6-15, 6-11

REACTIONS (lb/size) 2=1758/0-5-8, (min. 0-1-9), 9=1675/0-5-8, (min. 0-1-9)
 Max Horiz 2=200 (LC 13)
 Max Uplift 2=-85 (LC 14), 9=-58 (LC 15)
 Max Grav 2=1924 (LC 48), 9=1855 (LC 48)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-23=-2822/65, 23-24=-2736/67, 24-25=-2726/74, 3-25=-2699/88, 3-26=-2504/48, 4-26=-2500/62, 4-5=-2425/86,
 5-27=-2053/123, 27-28=-2054/123, 28-29=-2055/123, 6-29=-2055/123, 6-30=-2057/124, 30-31=-2057/124,
 31-32=-2057/124, 7-32=-2055/125, 7-33=-2505/90, 8-33=-2514/51, 8-34=-2688/94, 34-35=-2740/80, 9-35=-2834/73
 BOT CHORD 2-16=-109/2276, 15-16=-109/2276, 15-36=0/2641, 14-36=0/2641, 14-37=0/2641, 13-37=0/2641, 13-38=0/2641,
 12-38=0/2641, 12-39=0/2641, 11-39=0/2641, 10-11=0/2291, 9-10=0/2291
 WEBS 3-15=-533/191, 5-15=0/1018, 6-15=-847/65, 6-13=0/621, 6-11=-843/64, 7-11=0/1023, 8-11=-549/196

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) -1-4-0 to 2-7-5, Interior (1) 2-7-5 to 6-5-2, Exterior(2R) 6-5-2 to 17-6-14, Interior (1) 17-6-14 to 21-10-2, Exterior(2R) 21-10-2 to 32-11-14, Interior (1) 32-11-14 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 200.0lb AC unit load placed on the bottom chord, 19-8-8 from left end, supported at two points, 5-0-0 apart.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job 21030029-A	Truss A04	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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LOAD CASE(S) Standard

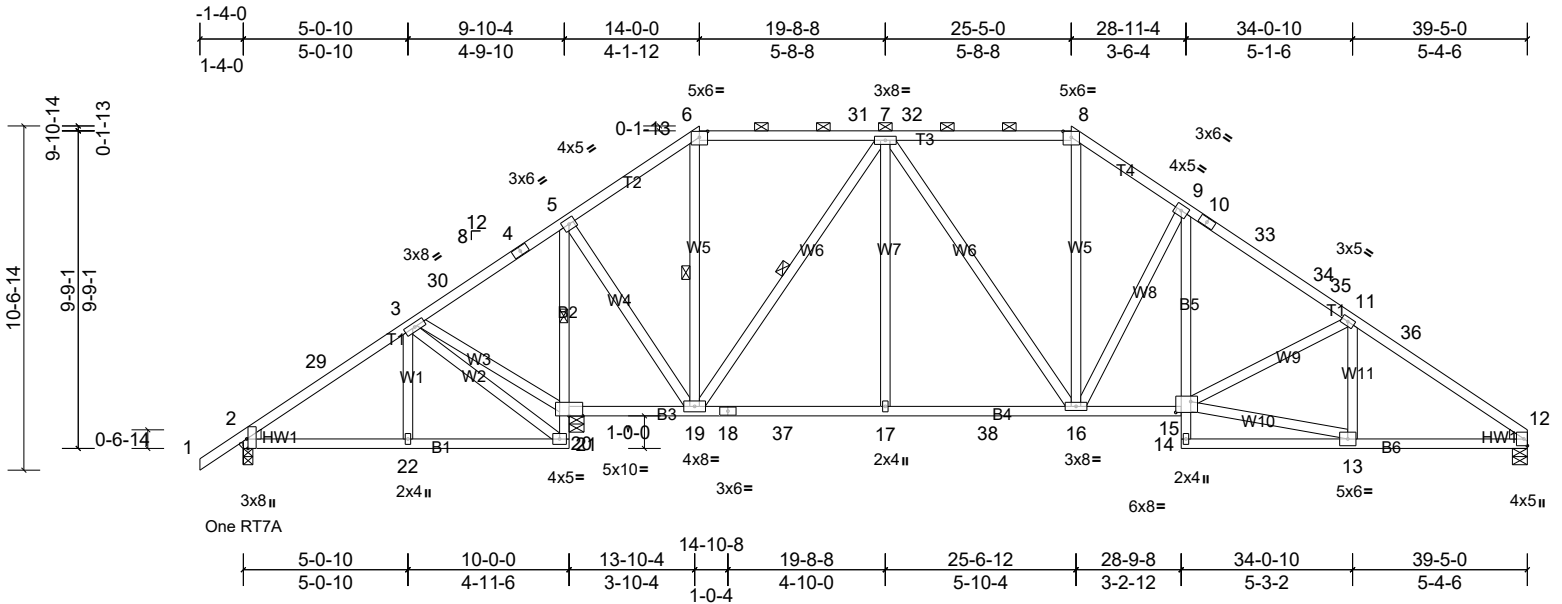
Job 21030029-A	Truss A05	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:71

Plate Offsets (X, Y): [2:0-3-8,Edge], [6:0-3-0,0-2-3], [8:0-3-0,0-2-3], [15:0-5-8,0-4-0]

Loading	(psf)	Spacing		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.73	Vert(LL)	-0.09	16-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.16	16-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.05	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 278 lb FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except* B2,B5:2x4 SP No.3
 WEBS 2x4 SP No.3
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-5 oc purlins, except
 2-0-0 oc purlins (5-0-6 max.): 6-8.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
 6-0-0 oc bracing: 2-22,21-22,19-20.
 1 Row at midpt 5-20
 WEBS 1 Row at midpt 6-19, 7-19

REACTIONS

(lb/size) 2=295/0-3-8, (min. 0-1-8), 12=0/0-5-8, (min. 0-1-8),
 20=1817/0-5-8, (min. 0-2-7)
 Max Horiz 2=231 (LC 13)
 Max Uplift 2=-44 (LC 14), 12=-154 (LC 15), 20=-182 (LC 14)
 Max Grav 2=360 (LC 44), 12=1286 (LC 52), 20=2090 (LC 48)

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

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-30=-43/372, 4-30=-27/440, 4-5=-15/538, 5-6=-518/185, 6-31=-409/187, 7-31=-411/187, 7-32=-1098/263,
 8-32=-1096/263, 8-9=-1368/282, 9-10=-1621/270, 10-33=-1664/256, 33-34=-1682/254, 34-35=-1734/241,
 11-35=-1776/239, 11-36=-1753/248, 12-36=-1873/231
 BOT CHORD 5-20=-1733/175, 19-20=-388/161, 18-19=-44/1016, 18-37=-44/1016, 17-37=-44/1016, 17-38=-44/1016, 16-38=-44/1016,
 15-16=-34/1402, 9-15=-46/579, 12-13=-126/1502
 WEBS 3-20=-411/153, 5-19=-19/1271, 7-19=-1067/116, 7-17=0/347, 7-16=-68/422, 8-16=-46/529, 9-16=-819/184,
 13-15=-136/1440

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior(2E) -1-4-0 to 2-7-5, Interior (1) 2-7-5 to 8-5-2, Exterior(2R) 8-5-2 to 30-11-14, Interior (1) 30-11-14 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
- One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job 21030029-A	Truss A05	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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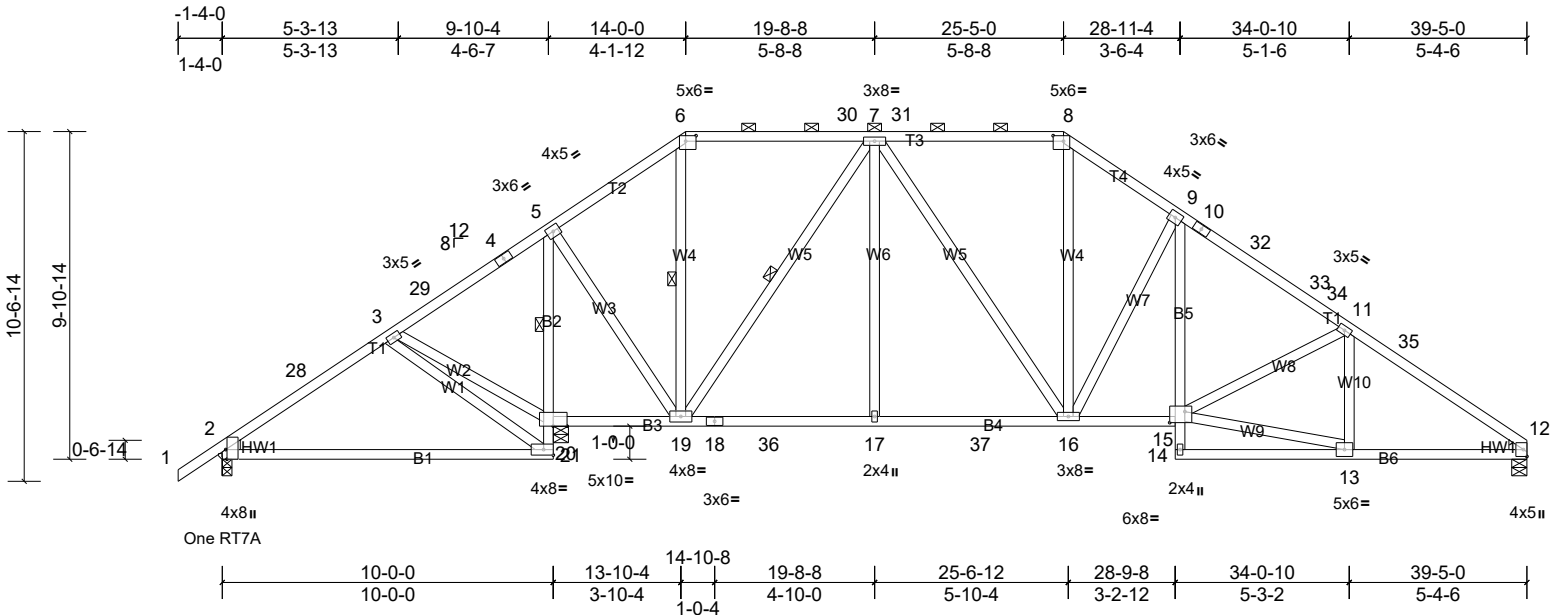
Job 21030029-A	Truss A06	Truss Type Piggyback Base	Qty 3	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:69.9

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

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	0.73	Vert(LL)	-0.22	21-24	>540	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.45	21-24	>264	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.06	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 274 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* B2,B5:2x4 SP No.3
WEBS 2x4 SP No.3 *Except* W5:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-14 oc purlins, except 2-0-0 oc purlins (4-10-14 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-21,19-20.
1 Row at midpt
WEBS 5-20
1 Row at midpt 6-19, 7-19

REACTIONS (lb/size) 2=370/0-3-8, (min. 0-1-8), 12=1146/0-5-8, (min. 0-1-9), 20=1717/0-5-8, (min. 0-2-4)
Max Horiz 2=234 (LC 11)
Max Uplift 2=-6 (LC 15), 12=-142 (LC 15), 20=-219 (LC 14)
Max Grav 2=451 (LC 38), 12=1324 (LC 52), 20=1933 (LC 48)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-28=-323/44, 4-5=-81/338, 5-6=-660/148, 6-30=-522/156, 7-30=-522/156, 7-31=-1148/246, 8-31=-1148/246, 8-9=-1451/262, 9-10=-1704/246, 10-32=-1747/232, 32-33=-1765/230, 33-34=-1816/217, 11-34=-1859/215, 11-35=-1820/229, 12-35=-1940/211
BOT CHORD 2-21=-124/294, 20-21=-35/270, 5-20=-1548/227, 18-19=-21/1089, 18-36=-21/1089, 17-36=-21/1089, 17-37=-21/1089, 16-37=-21/1089, 15-16=-15/1471, 9-15=-44/587, 12-13=-110/1557
WEBS 3-20=-367/171, 5-19=-53/1125, 7-19=-1008/128, 7-17=0/347, 7-16=-84/386, 8-16=-37/588, 9-16=-851/189, 13-15=-121/1493

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) -1-4-0 to 2-7-5, Interior (1) 2-7-5 to 8-5-2, Exterior(2R) 8-5-2 to 30-11-14, Interior (1) 30-11-14 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
 - One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job 21030029-A	Truss A06	Truss Type Piggyback Base	Qty 3	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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LOAD CASE(S) Standard

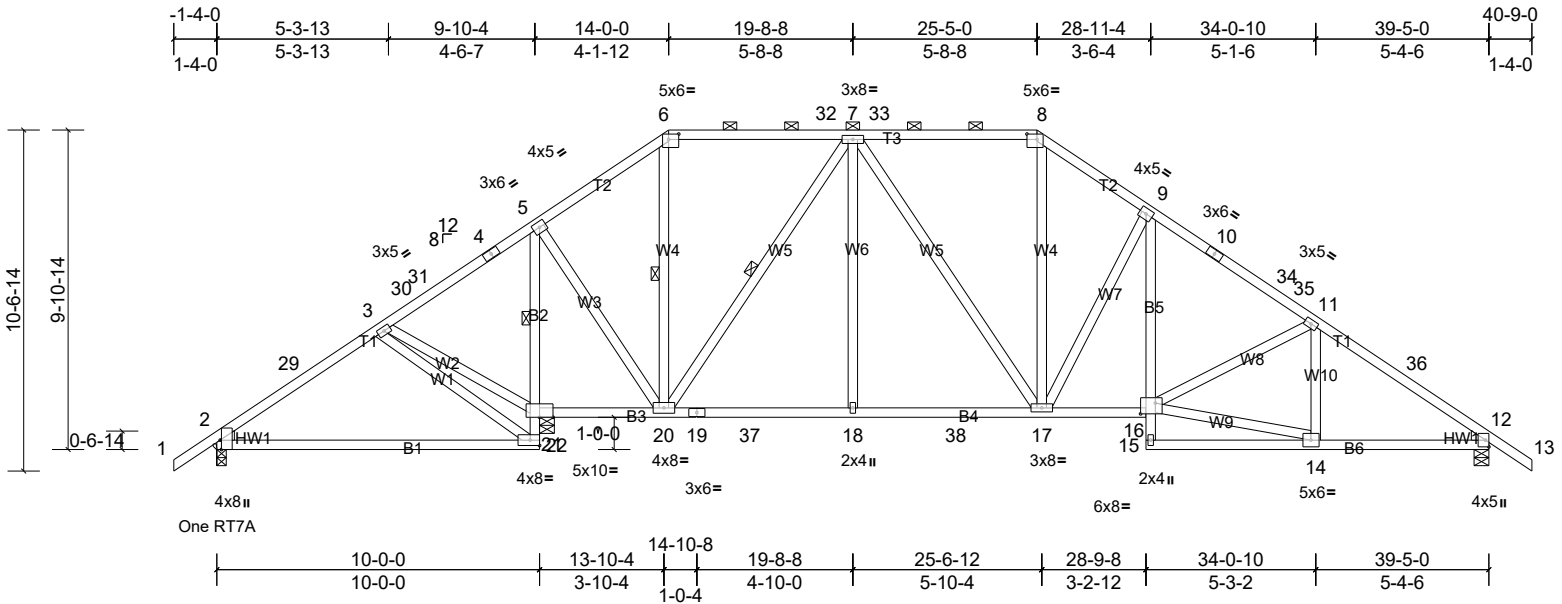
Job 21030029-A	Truss A07	Truss Type Piggyback Base	Qty 5	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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ID:qYV9Xda?GNoErtFBhWprjSzXV2B-TLNHnOQC6_uAbPhCMFnia9MNsAUF9oxyCRDkzXMUL



Scale = 1:71.7

Plate Offsets (X, Y): [2:0-3-8,Edge], [6:0-3-12,0-2-0], [8:0-3-12,0-2-0], [16:0-5-8,0-4-0]

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	0.73	Vert(LL)	-0.22 22-25	>540	240	MT20 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.45 22-25	>264	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.06 12	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH						
BCDL	10.0									Weight: 276 lb FT = 20%

LUMBER
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except* B2,B5:2x4 SP No.3
 WEBS 2x4 SP No.3 *Except* W5:2x4 SP No.2
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

BRACING
 TOP CHORD Structural wood sheathing directly applied or 3-11-12 oc purlins, except 2-0-0 oc purlins (4-10-14 max.): 6-8.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-22,20-21.
 1 Row at midpt 5-21
 WEBS 1 Row at midpt 6-20, 7-20

REACTIONS (lb/size) 2=368/0-3-8, (min. 0-1-8), 12=1227/0-5-8, (min. 0-1-10), 21=1718/0-5-8, (min. 0-2-4)
 Max Horiz 2=241 (LC 13)
 Max Uplift 2=-20 (LC 14), 12=-172 (LC 15), 21=-212 (LC 14)
 Max Grav 2=451 (LC 38), 12=1401 (LC 52), 21=1926 (LC 48)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-29=-323/62, 4-5=-76/336, 5-6=-659/156, 6-32=-521/163, 7-32=-521/163, 7-33=-1144/246, 8-33=-1144/246, 8-9=-1447/263, 9-10=-1738/244, 10-34=-1759/227, 34-35=-1809/215, 11-35=-1852/213, 11-36=-1815/228, 12-36=-1927/210
 BOT CHORD 2-22=-120/295, 21-22=-33/271, 5-21=-1544/209, 19-20=-14/1088, 19-37=-14/1088, 18-37=-14/1088, 18-38=-14/1088, 17-38=-14/1088, 16-17=0/1465, 9-16=-37/579, 12-14=-80/1544
 WEBS 3-21=-370/186, 5-20=-38/1126, 7-20=-1008/123, 7-18=0/347, 7-17=-79/384, 8-17=-38/586, 9-17=-846/184, 14-16=-91/1479

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) -1-4-0 to 2-7-5, Interior (1) 2-7-5 to 8-5-2, Exterior(2R) 8-5-2 to 30-11-14, Interior (1) 30-11-14 to 36-9-11, Exterior(2E) 36-9-11 to 40-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
 - One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 21. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job 21030029-A	Truss A07	Truss Type Piggyback Base	Qty 5	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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LOAD CASE(S) Standard

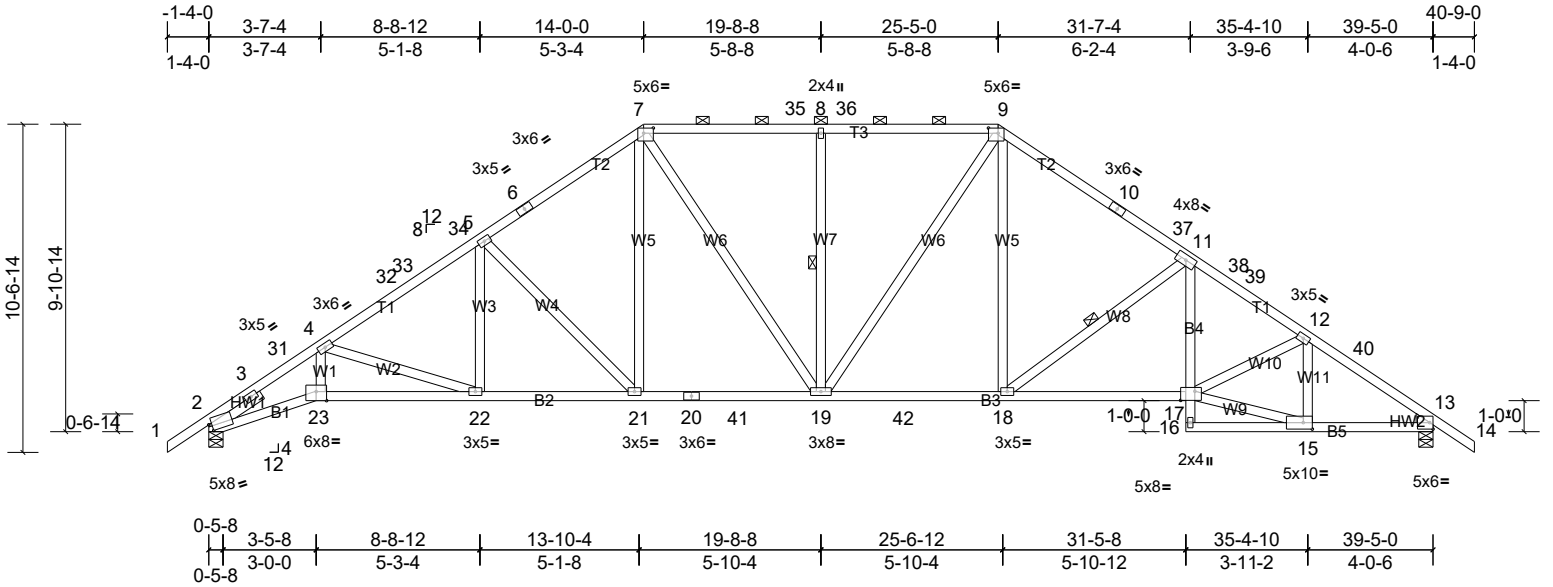
Job 21030029-A	Truss A08	Truss Type Piggyback Base	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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ID:7RUf7e3jczQFAu3bd2St5zXV1Y-TLNNhOQC6r_uAbPhCMFnia9Jys5xF7wxyCRDIkzXML



Scale = 1:74.5

Plate Offsets (X, Y): [2:0-1-2,0-2-11], [7:0-3-12,0-2-0], [9:0-3-12,0-2-0], [15:0-3-8,0-2-8], [17:0-5-8,0-3-8], [23:0-4-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL) -0.22	19-21	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT) -0.40	19-21	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT) 0.26	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										Weight: 262 lb FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* T1:2x4 SP No.1
BOT CHORD 2x4 SP No.2 *Except* B1:2x4 SP 2400F 2.0E, B2:2x4 SP No.1, B4:2x4 SP No.3
WEBS 2x4 SP No.3 *Except* W6:2x4 SP No.2
WEDGE Right: 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 2-0-0

BRACING
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-2-15 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 9-4-14 oc bracing: 22-23
2-2-0 oc bracing: 13-15.
WEBS 1 Row at midpt 8-19, 11-18

REACTIONS (lb/size) 2=1657/0-5-8, (min. 0-1-8), 13=1657/0-5-8, (min. 0-2-3)
Max Horiz 2=-241 (LC 12)
Max Uplift 2=-179 (LC 14), 13=-179 (LC 15)
Max Grav 2=1851 (LC 48), 13=1851 (LC 48)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2301/223, 3-31=-4351/449, 4-31=-4298/464, 4-32=-3004/279, 32-33=-2949/281, 33-34=-2869/297, 5-34=-2847/299, 5-6=-2394/267, 6-7=-2269/299, 7-35=-2078/313, 8-35=-2078/313, 8-36=-2078/313, 8-36=-2078/313, 9-36=-2078/313, 9-10=-2278/291, 10-37=-2392/265, 11-37=-2417/250, 11-38=-3018/268, 38-39=-3051/260, 12-39=-3113/245, 12-40=-2605/232, 13-40=-2692/221
BOT CHORD 2-23=-480/3808, 22-23=-450/3561, 21-22=-225/2531, 20-21=-74/1867, 20-41=-74/1867, 19-41=-74/1867, 19-42=0/1875, 18-42=0/1875, 17-18=-82/2618, 11-17=0/557, 13-15=-99/2163
WEBS 4-23=-84/1124, 4-22=-1082/236, 5-22=-10/550, 5-21=-950/215, 7-21=-85/890, 7-19=-162/456, 8-19=-612/169, 9-19=-167/449, 9-18=-50/836, 11-18=-992/212, 12-15=-538/67, 12-17=-27/471, 15-17=-78/2118

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-0 to 2-7-5, Interior (1) 2-7-5 to 8-5-2, Exterior(2R) 8-5-2 to 30-11-14, Interior (1) 30-11-14 to 36-9-11, Exterior(2E) 36-9-11 to 40-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job 21030029-A	Truss A08	Truss Type Piggyback Base	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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LOAD CASE(S) Standard

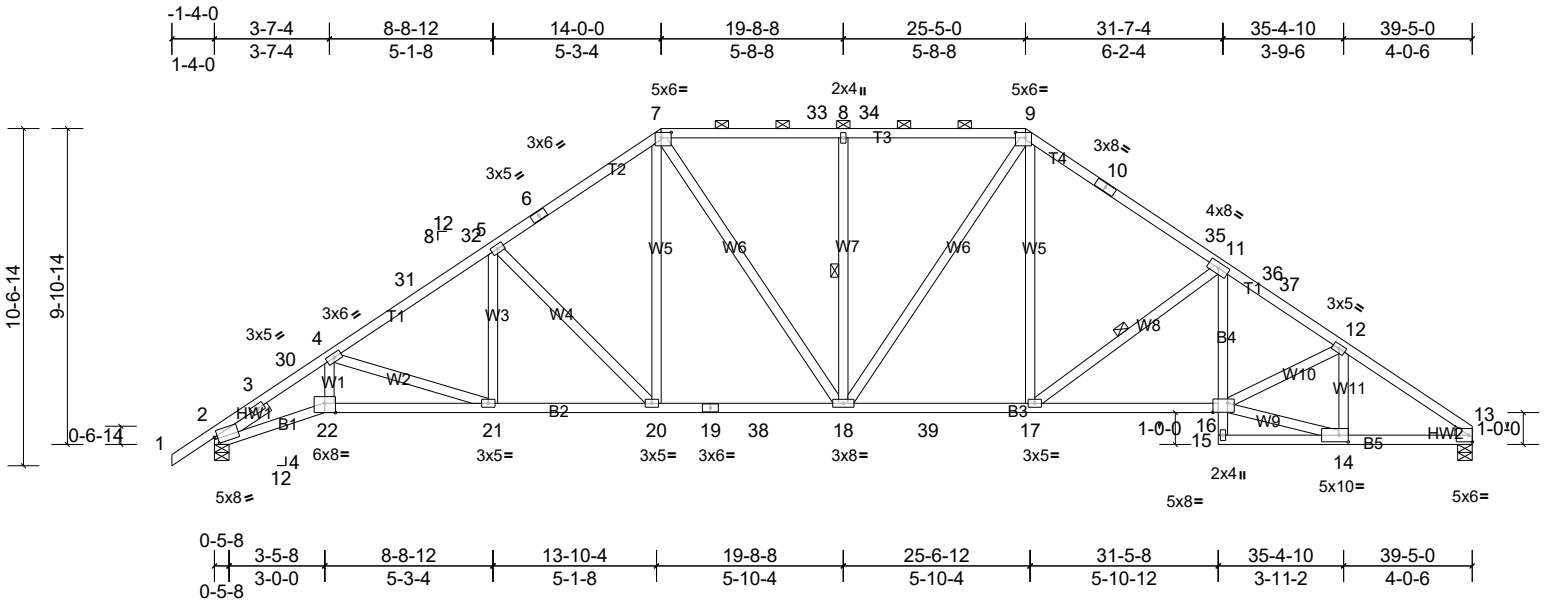
Job 21030029-A	Truss A09	Truss Type Piggyback Base	Qty 4	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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ID:J8zW2TWKhqn?4fwOXs0klczXX4f-TLNNhOQC6r_uAbPhCMFnia9Kms6aF7byCRDlkzXMUL



Scale = 1:72.5

Plate Offsets (X, Y): [2:0-1-2,0-2-11], [7:0-3-12,0-2-0], [9:0-3-12,0-2-0], [14:0-3-8,0-2-8], [16:0-5-8,0-3-8], [22:0-4-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.22	18-20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.40	18-20	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.26	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 260 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1 *Except* T2,T3:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* B1:2x4 SP 2400F 2.0E, B2:2x4 SP No.1, B4:2x4 SP No.3
WEBS 2x4 SP No.3 *Except* W6:2x4 SP No.2
WEDGE Right: 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 2-0-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-0-11 oc purlins, except
2-0-0 oc purlins (3-2-12 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
9-2-3 oc bracing: 21-22
2-2-0 oc bracing: 13-14.
WEBS 1 Row at midpt 8-18, 11-17

REACTIONS (lb/size) 2=1658/0-5-8, (min. 0-1-8), 13=1575/0-5-8, (min. 0-2-2)
Max Horiz 2=234 (LC 13)
Max Uplift 2=-179 (LC 14), 13=-153 (LC 15)
Max Grav 2=1858 (LC 48), 13=1784 (LC 48)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2308/230, 3-30=-4362/461, 4-30=-4310/476, 4-31=-3017/283, 31-32=-2955/301, 5-32=-2857/303, 5-6=-2400/277, 6-7=-2275/309, 7-33=-2080/322, 8-33=-2080/322, 8-34=-2080/322, 9-34=-2080/322, 9-10=-2270/304, 10-35=-2398/285, 11-35=-2423/263, 11-36=-3030/284, 36-37=-3064/276, 12-37=-3125/272, 12-13=-2711/241
BOT CHORD 2-22=-504/3806, 21-22=-473/3559, 20-21=-242/2527, 19-20=-86/1872, 19-38=-86/1872, 18-38=-86/1872, 18-39=-33/1880, 17-39=-33/1880, 16-17=-141/2626, 11-16=-3/569, 13-14=-136/2183
WEBS 4-22=-91/1123, 4-21=-1084/242, 5-21=-12/550, 5-20=-955/217, 7-20=-87/893, 7-18=-162/456, 8-18=-611/168, 9-18=-166/447, 9-17=-53/839, 11-17=-997/217, 12-14=-535/74, 12-16=-30/460, 14-16=-116/2139

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) -1-4-0 to 2-7-5, Interior (1) 2-7-5 to 8-5-2, Exterior(2R) 8-5-2 to 30-11-14, Interior (1) 30-11-14 to 35-4-10, Exterior(2E) 35-4-10 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job 21030029-A	Truss A09	Truss Type Piggyback Base	Qty 4	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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LOAD CASE(S) Standard

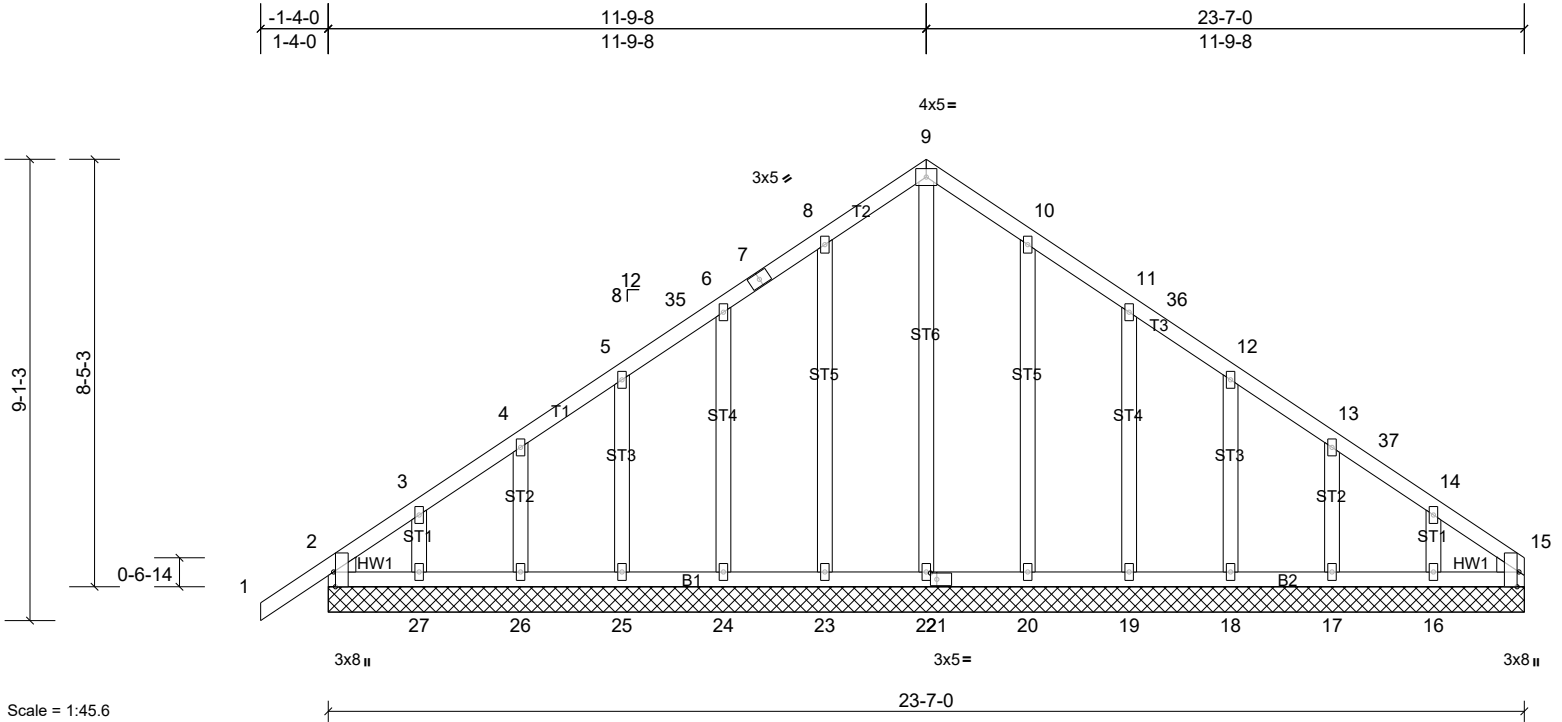
Job 21030029-A	Truss B01	Truss Type Common Supported Gable	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:45.6

Plate Offsets (X, Y): [2:0-3-8,Edge], [15:0-3-8,Edge], [21:0-1-8,0-1-8]

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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	15	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 151 lb	FT = 20%	

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

BRACING
TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
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 23-7-0.
(lb) - Max Horiz 2=198 (LC 13), 28=198 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 15, 16, 17, 18, 19, 20, 23, 24, 25, 26, 27, 28, 32
Max Grav All reactions 250 (lb) or less at joint(s) 2, 15, 16, 17, 18, 19, 22, 24, 25, 26, 27, 28, 32 except 20=259 (LC 22), 23=259 (LC 21)

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

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -1-4-0 to 1-9-8, Exterior(2N) 1-9-8 to 8-9-8, Corner(3R) 8-9-8 to 14-9-8, Exterior(2N) 14-9-8 to 20-7-0, Corner(3E) 20-7-0 to 23-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 15, 23, 24, 25, 26, 27, 20, 19, 18, 17, and 16. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

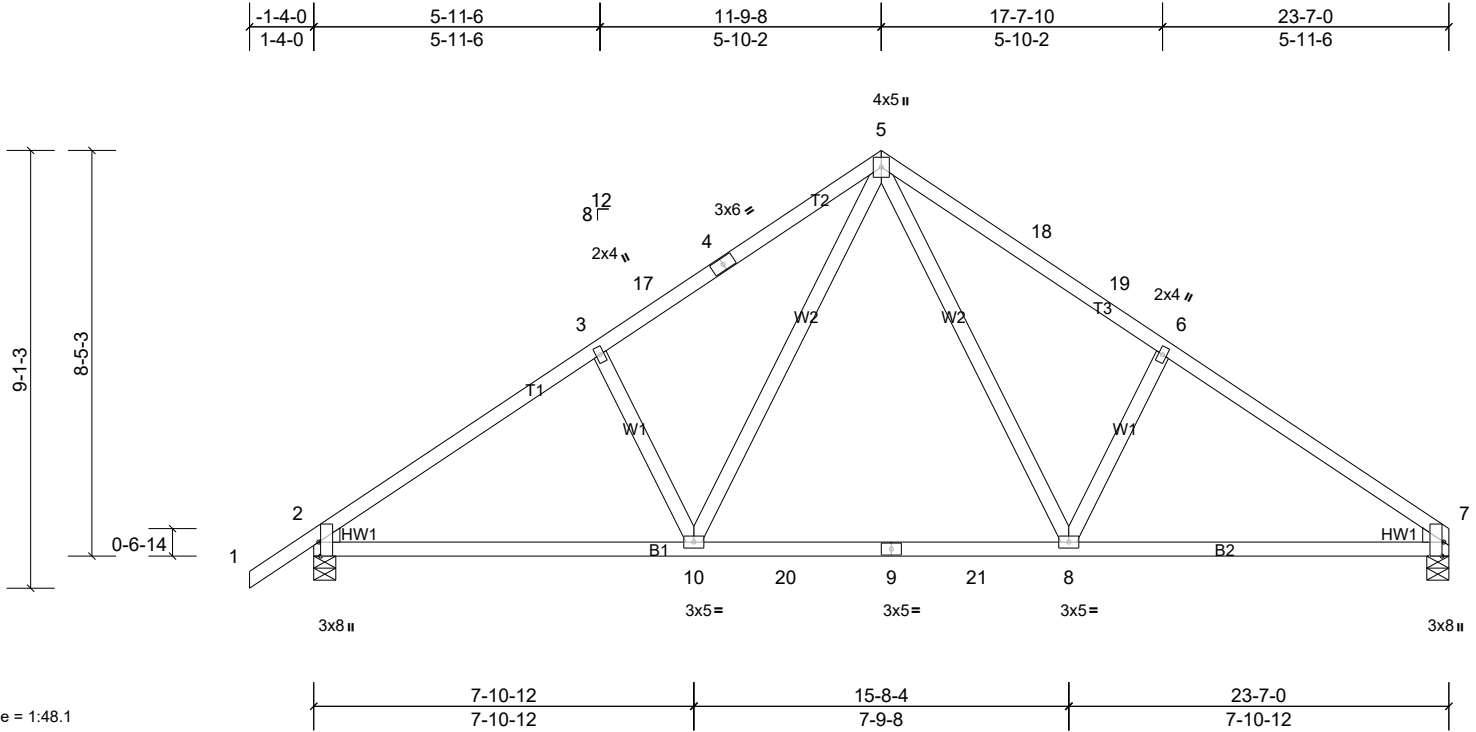
Job 21030029-A	Truss B02	Truss Type Common	Qty 4	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:48.1

Plate Offsets (X, Y): [2:0-3-8,Edge], [7:0-3-8,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	0.82	Vert(LL)	-0.15	8-10	>999	240	MT20 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.23	8-10	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.03	7	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										Weight: 120 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
 Right: 2x4 SP No.3

BRACING

TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 2-2-0 oc purlins.
 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=1026/0-5-8, (min. 0-1-8), 7=941/0-5-8, (min. 0-1-8)
 Max Horiz 2=198 (LC 13)
 Max Uplift 2=-108 (LC 14), 7=-81 (LC 15)
 Max Grav 2=1149 (LC 24), 7=1071 (LC 25)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1471/149, 3-17=-1367/174, 4-17=-1280/188, 4-5=-1262/210, 5-18=-1270/215, 18-19=-1280/195, 6-19=-1374/179, 6-7=-1478/154
 BOT CHORD 2-10=-148/1275, 10-20=-2/832, 9-20=-2/832, 9-21=-2/832, 8-21=-2/832, 7-8=-55/1182
 WEBS 5-8=-124/696, 6-8=-395/220, 5-10=-119/684, 3-10=-389/218

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior(2E) -1-4-0 to 1-8-0, Interior (1) 1-8-0 to 8-9-8, Exterior(2R) 8-9-8 to 14-9-8, Interior (1) 14-9-8 to 20-7-0, Exterior(2E) 20-7-0 to 23-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

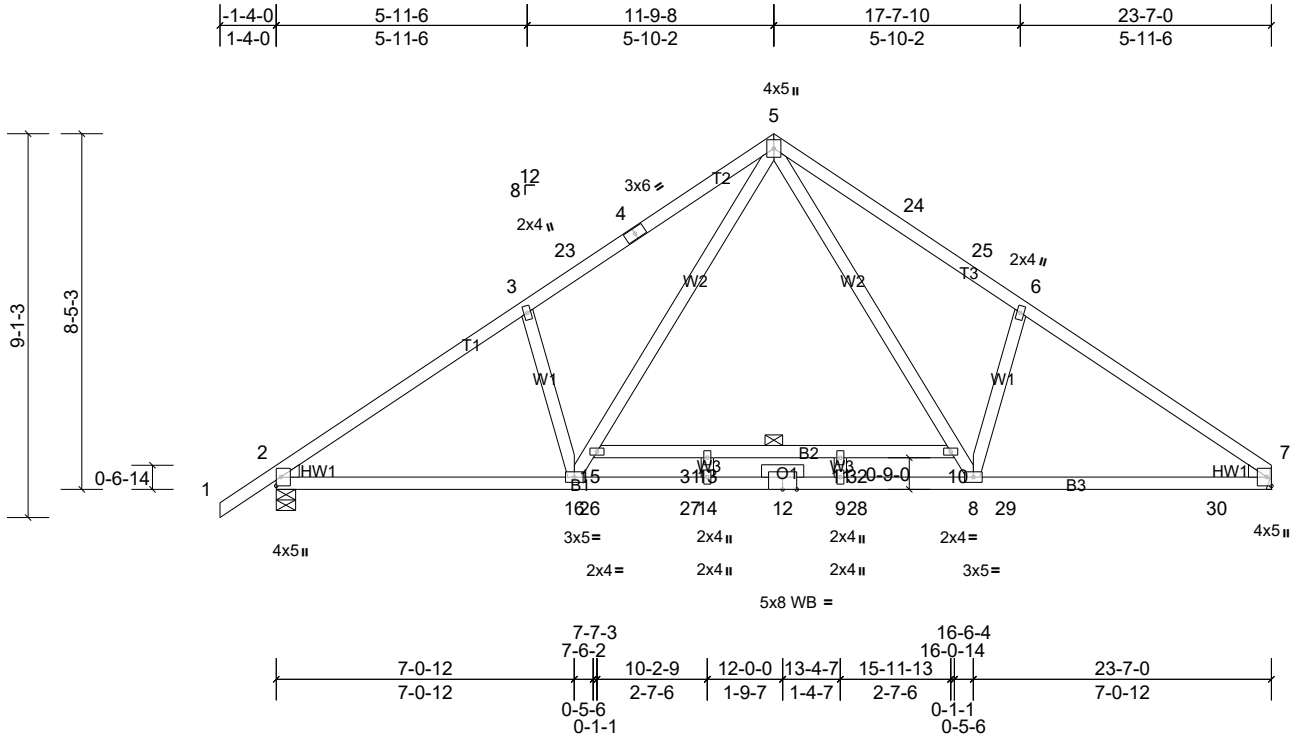
Job 21030029-A	Truss B03	Truss Type Common	Qty 7	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:54.8

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	0.93	Vert(LL)	-0.42	9-14	>671	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.67	9-14	>421	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.04	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 136 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.1 *Except* B2:2x4 SP No.2
 WEBS 2x4 SP No.3
 OTHERS 2x4 SP No.3
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
 6-0-0 oc bracing: 10-15

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

REACTIONS (lb/size) 2=1145/0-5-8, (min. 0-1-10), 7=1196/ Mechanical, (min. 0-1-8)
 Max Horiz 2=198 (LC 13)
 Max Uplift 2=-23 (LC 14)
 Max Grav 2=1364 (LC 27), 7=1421 (LC 28)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1888/0, 3-23=-1834/52, 4-23=-1753/66, 4-5=-1738/88, 5-24=-1839/1, 24-25=-1847/0, 6-25=-1935/0, 6-7=-1984/0
 BOT CHORD 2-16=-67/1611, 16-26=0/1156, 26-27=0/1156, 14-27=0/1156, 12-14=0/1156, 9-12=0/1156, 9-28=0/1156, 8-28=0/1156,
 8-29=0/1595, 29-30=0/1595, 7-30=0/1595
 WEBS 5-10=0/1132, 8-10=0/966, 6-8=-408/226, 15-16=-139/798, 5-15=-97/969, 3-16=-391/235

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-0 to 1-8-0, Interior (1) 1-8-0 to 8-9-8, Exterior(2R) 8-9-8 to 14-9-8, Interior (1) 14-9-8 to 20-7-0, Exterior(2E) 20-7-0 to 23-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 19-9-8 from left end, supported at two points, 5-0-0 apart.
- All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job 21030029-A	Truss B04	Truss Type Common Girder	Qty 1	Ply 2	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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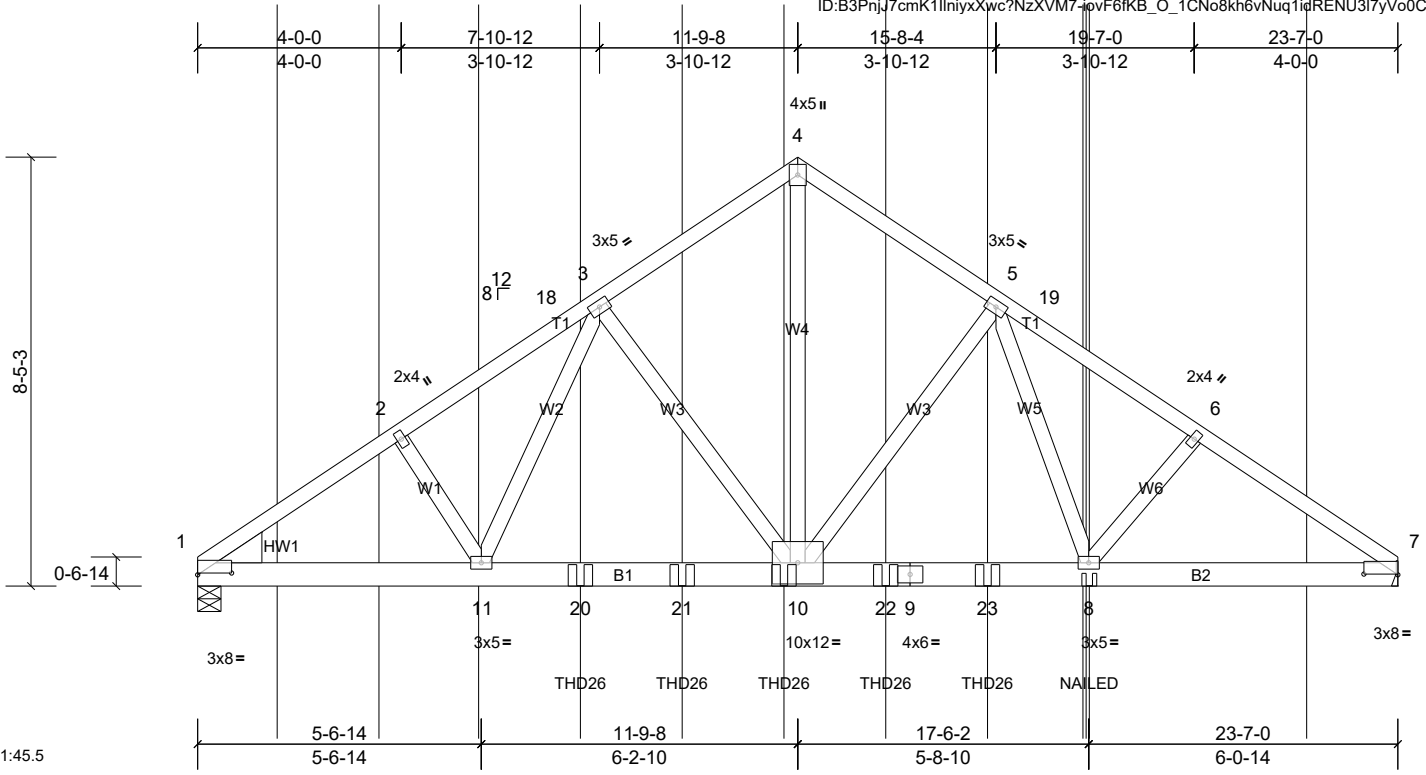


Plate Offsets (X, Y): [1:0-8-0,0-0-7], [7:0-8-0,0-0-3]

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	0.58	Vert(LL)	-0.15	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.28	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.04	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 312 lb	FT = 20%

LUMBER
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP 2400F 2.0E
 WEBS 2x4 SP No.3
 WEDGE Left: 2x8 SP 2400F 2.0E

BRACING
 TOP CHORD Structural wood sheathing directly applied or 4-4-1 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=3616/0-5-8, (min. 0-1-9), 7=3228/ Mechanical, (min. 0-1-8)
 Max Horiz 1=-185 (LC 8)
 Max Uplift 1=-456 (LC 12), 7=-411 (LC 13)
 Max Grav 1=3753 (LC 21), 7=3332 (LC 22)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-6426/800, 2-18=-6320/818, 3-18=-6232/833, 3-4=-4749/702, 4-5=-4748/702, 5-19=-5279/726, 6-19=-5368/712, 6-7=-5487/709
 BOT CHORD 1-11=-724/5380, 11-20=-587/4657, 20-21=-587/4657, 10-21=-587/4657, 10-22=-477/4248, 9-22=-477/4248, 9-23=-477/4248, 8-23=-477/4248, 7-8=-525/4481
 WEBS 3-11=-199/1735, 3-10=-1210/257, 4-10=-695/4997, 5-10=-688/195, 5-8=-80/658

- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 411 lb uplift at joint 7.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 7-6-4 from the left end to 15-6-4 to connect truss(es) A010 (1 ply 2x4 SP), A011 (1 ply 2x4 SP), A012 (1 ply 2x4 SP), A013 (1 ply 2x4 SP), A014 (1 ply 2x4 SP) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.

Job 21030029-A	Truss B04	Truss Type Common Girder	Qty 1	Ply 2	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

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

Uniform Loads (lb/ft)

Vert: 1-4=-60, 4-7=-60, 12-15=-20

Concentrated Loads (lb)

Vert: 10=-821 (B), 8=-182 (B), 20=-1647 (B), 21=-865 (B), 22=-1001 (B), 23=-441 (B)

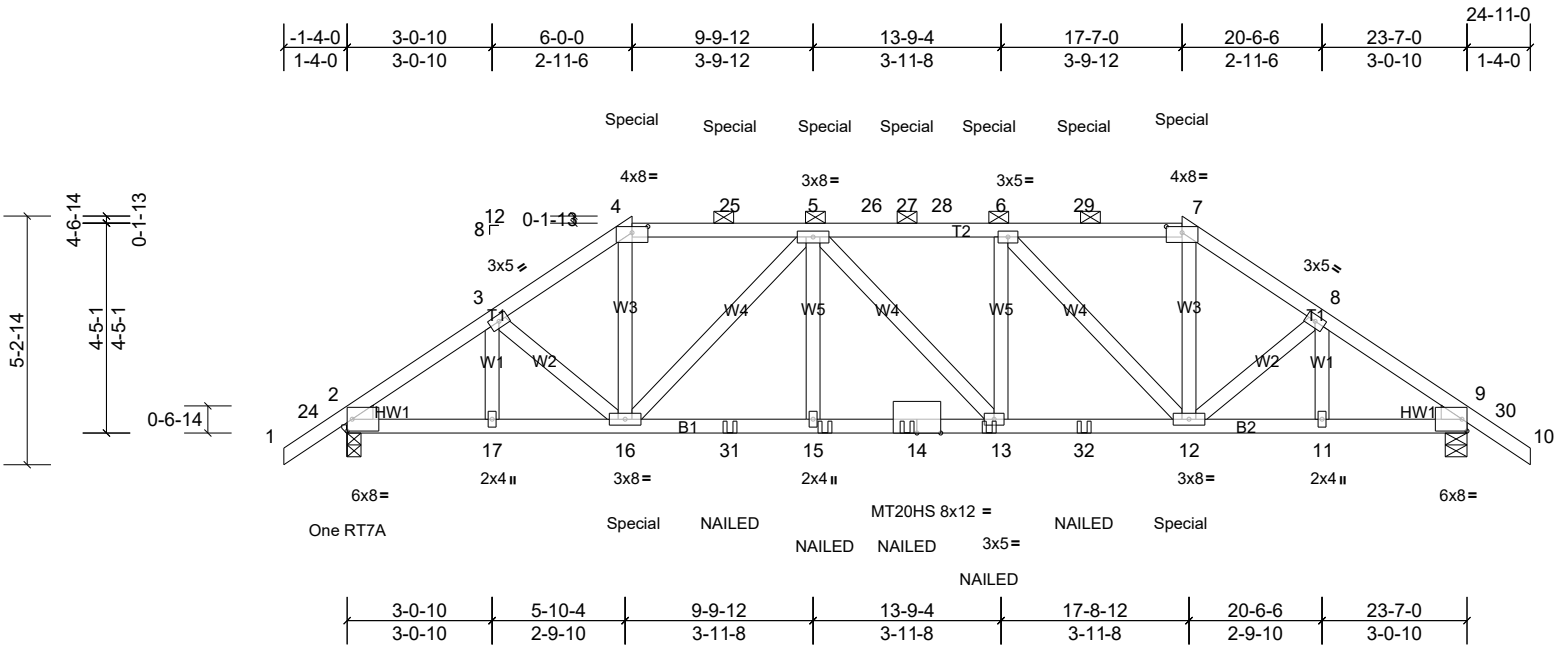
Job 21030029-A	Truss B05	Truss Type Hip Girder	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:48.7

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

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	0.82	Vert(LL)	-0.17	13-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.27	13-15	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.09	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 143 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-5-14 oc purlins, except
2-0-0 oc purlins (2-4-15 max.): 4-7.
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=2434/0-3-8, (min. 0-2-2), 9=2435/0-5-8, (min. 0-2-2)
Max Horiz 2=-113 (LC 10)
Max Uplift 2=-426 (LC 12), 9=-426 (LC 13)
Max Grav 2=2581 (LC 37), 9=2582 (LC 37)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3637/618, 3-4=-3673/671, 4-25=-3036/587, 5-25=-3040/588, 5-26=-3970/709, 26-27=-3970/709, 27-28=-3970/709, 6-28=-3970/709, 6-29=-3042/587, 7-29=-3038/587, 7-8=-3675/670, 8-9=-3639/618
BOT CHORD 2-17=-504/2923, 16-17=-504/2923, 16-31=-647/3968, 15-31=-647/3968, 14-15=-647/3968, 13-14=-647/3968, 13-32=-623/3970, 12-32=-623/3970, 11-12=-428/2924, 9-11=-428/2924
WEBS 3-16=-143/377, 4-16=-181/1507, 5-16=-1347/260, 5-15=0/299, 6-13=0/305, 6-12=-1348/257, 7-12=-181/1507, 8-12=-144/378

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

Job 21030029-A	Truss B05	Truss Type Hip Girder	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 218 lb down and 93 lb up at 6-0-0, 229 lb down and 93 lb up at 8-0-12, 229 lb down and 93 lb up at 10-0-12, 229 lb down and 90 lb up at 11-9-8, 229 lb down and 93 lb up at 13-6-4, and 229 lb down and 93 lb up at 15-6-4, and 218 lb down and 93 lb up at 17-7-0 on top chord, and 560 lb down and 88 lb up at 6-0-0, and 560 lb down and 88 lb up at 17-6-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (lb/ft)

Vert: 1-4=-60, 4-7=-60, 7-10=-60, 18-21=-20

Concentrated Loads (lb)

Vert: 4=-190, 7=-190, 14=-74, 16=-560, 5=-190, 15=-74, 13=-74, 6=-190, 12=-560, 25=-190, 27=-190, 29=-190, 31=-74, 32=-74

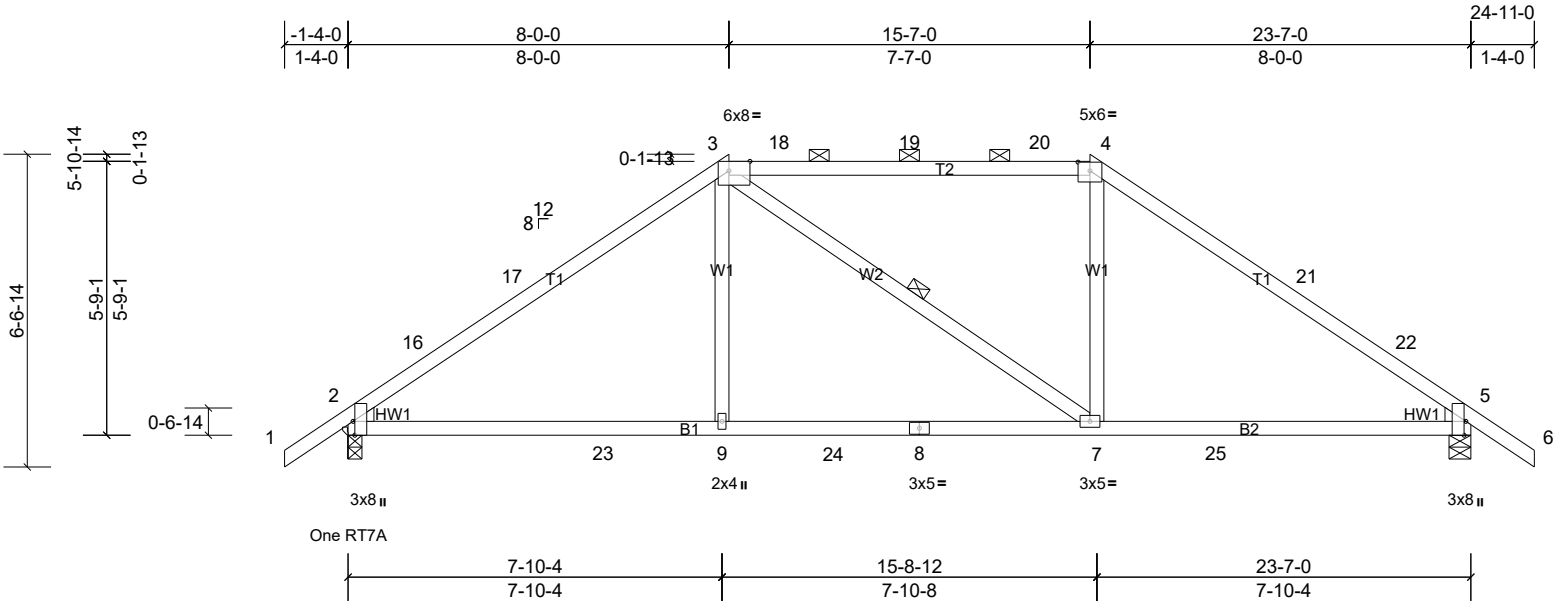
Job 21030029-A	Truss B06	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:48.6

Plate Offsets (X, Y): [2:0-3-8,Edge], [3:0-5-5,Edge], [4:0-3-0,0-2-3], [5:0-3-8,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	0.72	Vert(LL)	-0.17	7-15	>999	240	MT20 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.25	7-15	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	5	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										Weight: 111 lb FT = 20%

LUMBER
 TOP CHORD 2x4 SP 2400F 2.0E
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

BRACING
 TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except 2-0-0 oc purlins (5-7-14 max.): 3-4.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 3-7

REACTIONS (lb/size) 2=1023/0-3-8, (min. 0-1-8), 5=1023/0-5-8, (min. 0-1-8)
 Max Horiz 2=-144 (LC 12)
 Max Uplift 2=-119 (LC 14), 5=-119 (LC 15)
 Max Grav 2=1232 (LC 45), 5=1223 (LC 45)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-16=-1513/117, 16-17=-1408/133, 3-17=-1399/161, 3-18=-1149/194, 18-19=-1149/194, 19-20=-1149/194, 4-20=-1149/194, 4-21=-1384/161, 21-22=-1392/133, 5-22=-1498/117
 BOT CHORD 2-23=-88/1169, 9-23=-50/1169, 9-24=-52/1160, 8-24=-52/1160, 7-8=-52/1160, 7-25=0/1157, 5-25=0/1157
 WEBS 3-9=0/406, 4-7=0/394

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) -1-4-0 to 1-8-0, Interior (1) 1-8-0 to 3-9-1, Exterior(2R) 3-9-1 to 19-9-15, Interior (1) 19-9-15 to 21-11-0, Exterior(2E) 21-11-0 to 24-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

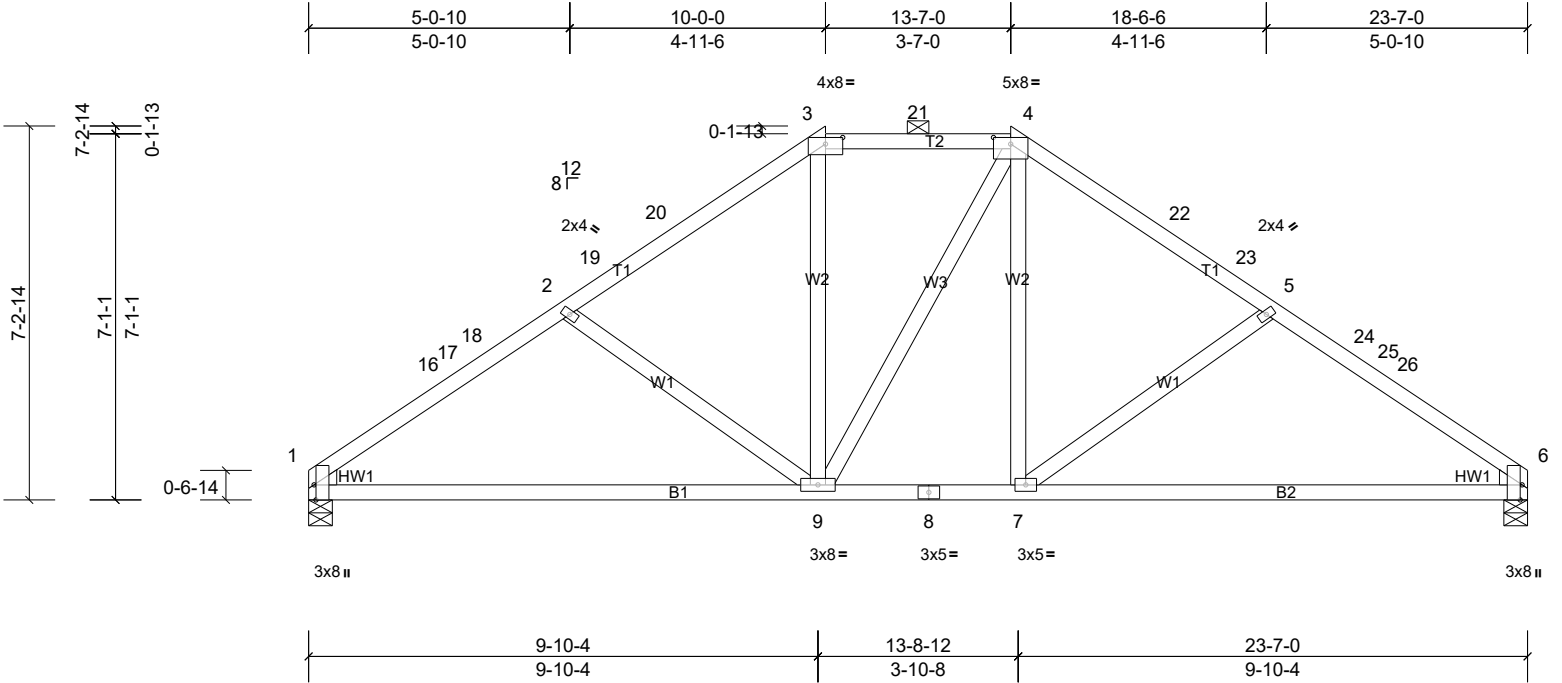
Job 21030029-A	Truss B07	Truss Type Hip	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:44.8

Plate Offsets (X, Y): [1:0-3-8,Edge], [3:0-4-0,0-1-9], [4:0-4-0,0-1-9], [6:0-3-8,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	0.47	Vert(LL)	-0.19	7-15	>999	240	MT20 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.38	7-15	>751	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.04	6	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										Weight: 126 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
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-5-3 oc purlins, except
2-0-0 oc purlins (5-9-15 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=943/0-5-8, (min. 0-1-8), 6=943/0-5-8, (min. 0-1-8)
Max Horiz 1=-155 (LC 10)
Max Uplift 1=-87 (LC 14), 6=-87 (LC 15)
Max Grav 1=1135 (LC 38), 6=1135 (LC 38)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-1643/148, 16-17=-1574/161, 17-18=-1554/164, 2-18=-1478/174, 2-19=-1306/137, 19-20=-1199/147,
3-20=-1164/166, 3-21=-967/181, 4-21=-967/181, 4-22=-1163/167, 22-23=-1198/147, 5-23=-1306/137, 5-24=-1478/174,
24-25=-1554/164, 25-26=-1573/161, 6-26=-1643/148
BOT CHORD 1-9=-166/1313, 8-9=0/966, 7-8=0/966, 6-7=-79/1313
WEBS 2-9=-417/179, 3-9=-19/368, 4-7=-30/373, 5-7=-418/179

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 5-9-1, Exterior(2R) 5-9-1 to 17-9-15, Interior (1) 17-9-15 to 20-7-0, Exterior(2E) 20-7-0 to 23-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 6. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

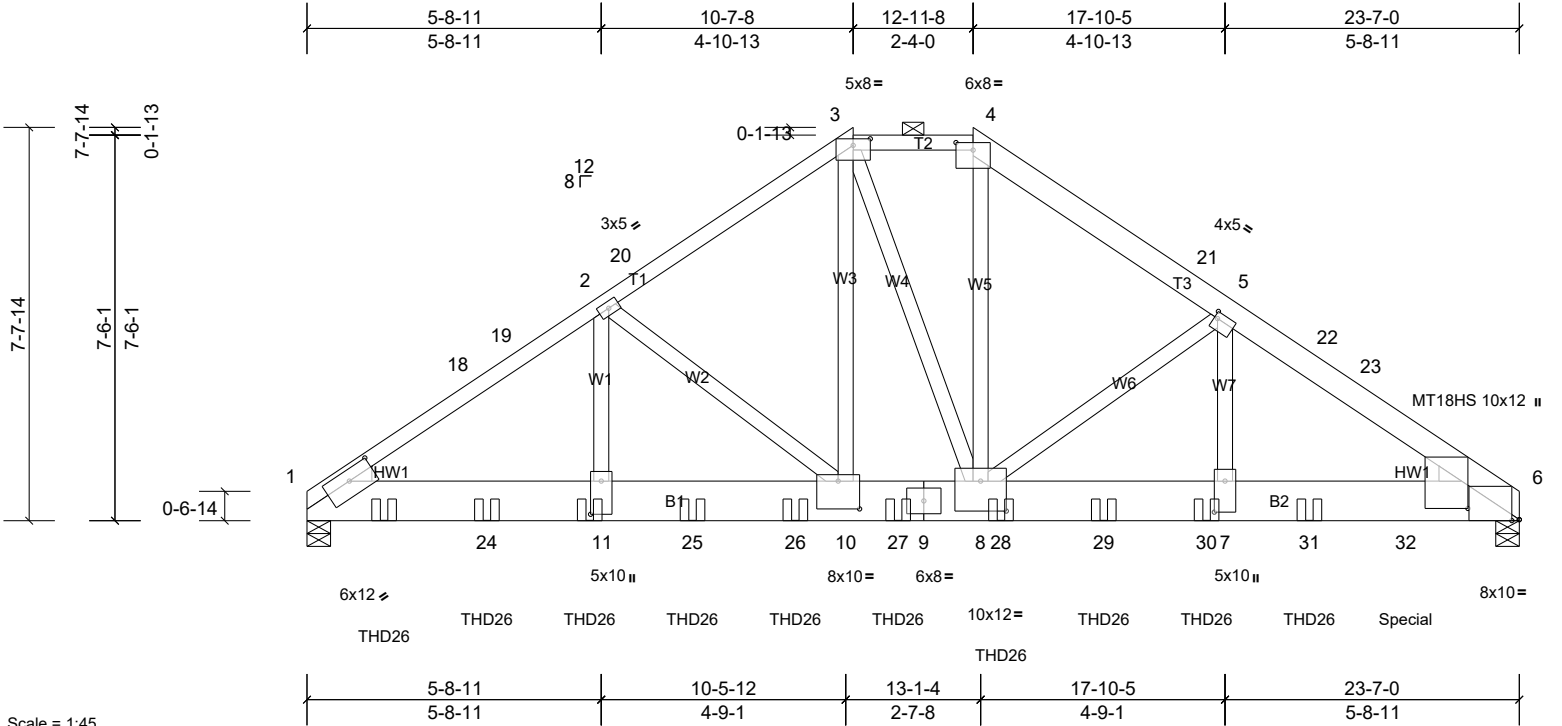
Job 21030029-A	Truss B08	Truss Type Hip Girder	Qty 1	Ply 3	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:45

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

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	0.76	Vert(LL)	-0.10	7-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.19	7-17	>999	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.05	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 608 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* T2:2x4 SP No.2, T3:2x6 SP No.2
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-1-14 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=7810/0-5-8, (min. 0-2-7), 6=14117/0-5-8, (min. 0-4-3)
Max Horiz 1=-167 (LC 8)
Max Grav 1=8844 (LC 44), 6=15145 (LC 46)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-18=-13233/0, 18-19=-13190/0, 2-19=-13155/0, 2-20=-10475/0, 3-20=-10369/0, 3-4=-9097/0, 4-21=-11139/0, 5-21=-11168/0, 5-22=-17448/0, 22-23=-17483/0, 6-23=-17529/0
BOT CHORD 1-24=0/11079, 11-24=0/11079, 11-25=0/11079, 25-26=0/11079, 10-26=0/11079, 10-27=0/8662, 9-27=0/8662, 8-9=0/8662, 8-28=0/14699, 28-29=0/14699, 29-30=0/14699, 7-30=0/14699, 7-31=0/14699, 31-32=0/14699, 6-32=0/14699
WEBS 2-11=0/3110, 2-10=-2987/54, 3-10=0/4320, 3-8=0/1517, 4-8=0/5778, 5-8=-7058/0, 5-7=0/7245

- NOTES**
- Special connection required to distribute bottom chord loads equally between all plies.
 - 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 5 rows staggered at 0-4-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 2-11 2x4 - 1 row at 0-5-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); PF=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-6-0 from the left end to 19-6-0 to connect truss(es) B02 (1 ply 2x4 SP), B03 (1 ply 2x4 SP) to back face of bottom chord.

Job 21030029-A	Truss B08	Truss Type Hip Girder	Qty 1	Ply 3	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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- 15) Fill all nail holes where hanger is in contact with lumber.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 8768 lb down and 1151 lb up at 21-4-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (lb/ft)

Vert: 1-3=-60, 3-4=-60, 4-6=-60, 12-15=-20

Concentrated Loads (lb)

Vert: 11=-953, 14=-953, 24=-953, 25=-1208, 26=-1208, 27=-1208, 28=-1208, 29=-1208, 30=-1208, 31=-1208, 32=-8727

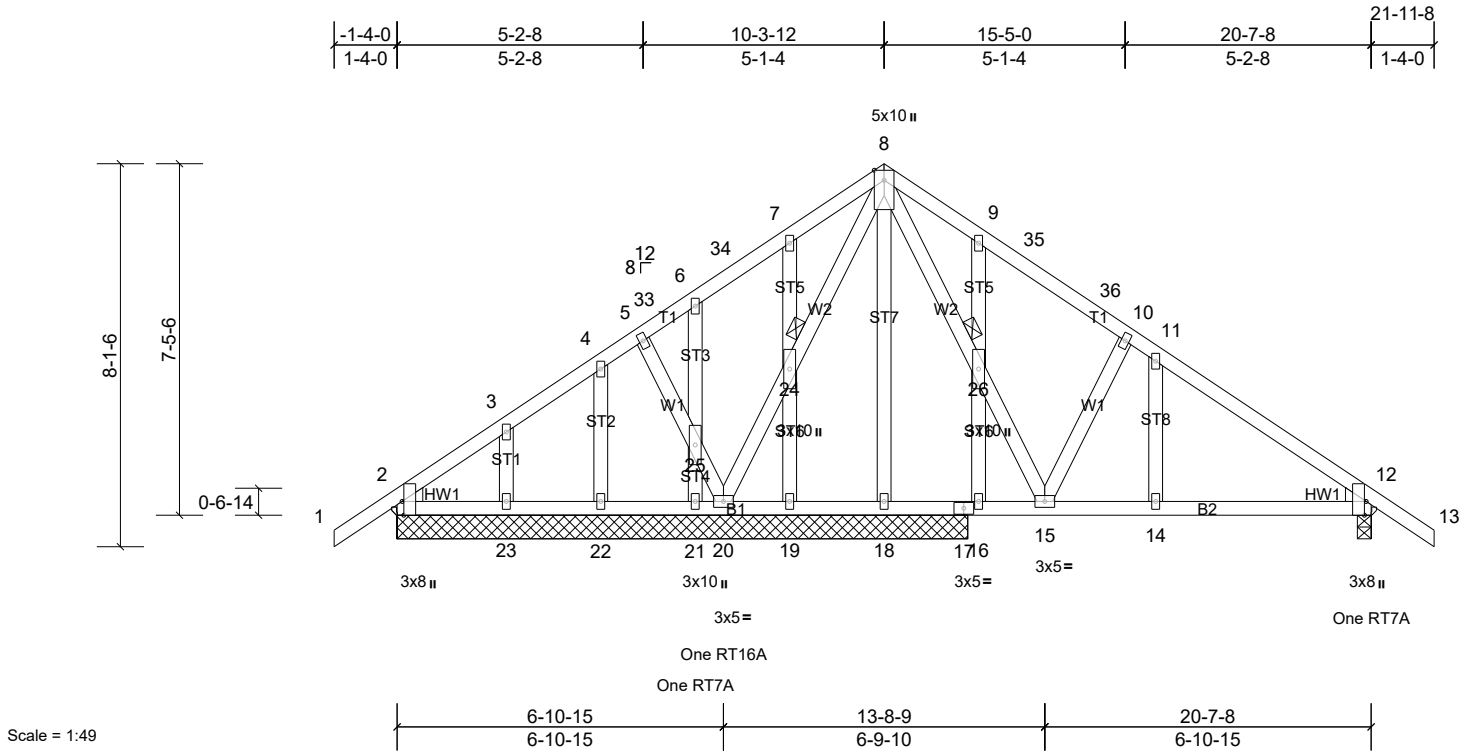
Job 21030029-A	Truss C01	Truss Type Common Structural Gable	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:49

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

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	0.02	14-32	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.04	14-32	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.01	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 152 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
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 24, 26

REACTIONS All bearings 12-1-0. except 12=0-3-8
(lb) - Max Horiz 2=-174 (LC 12), 27=-174 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 12, 19, 20, 21, 22, 23, 27
Max Grav All reactions 250 (lb) or less at joint(s) 2, 19, 20, 21, 22, 23, 27
except 12=530 (LC 22), 18=534 (LC 22)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 8-9=-337/214, 9-35=-284/165, 35-36=-313/158, 10-36=-394/147, 10-11=-369/128, 11-12=-523/103
BOT CHORD 14-15=0/379, 12-14=0/379
WEBS 8-26=-139/505, 15-26=-142/513, 10-15=-297/119, 8-18=-340/0

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) -1-4-0 to 1-8-0, Interior (1) 1-8-0 to 7-2-1, Exterior(2R) 7-2-1 to 13-2-1, Interior (1) 13-2-1 to 18-11-8, Exterior(2E) 18-11-8 to 21-11-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 12, 19, 21, 22, and 23. This connection is for uplift only and does not consider lateral forces.
 - One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job 21030029-A	Truss C02	Truss Type Common	Qty 3	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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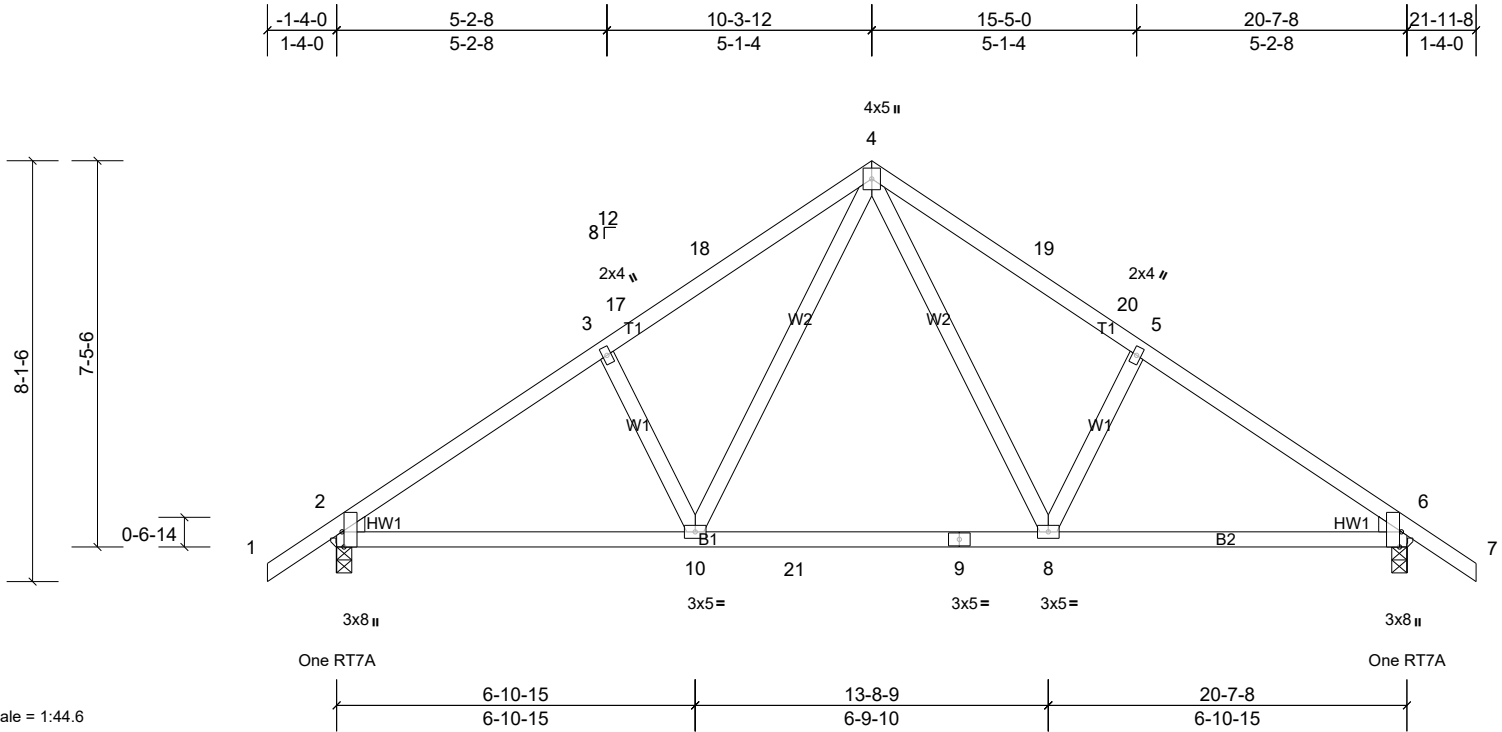


Plate Offsets (X, Y): [2:0-3-8,Edge], [6:0-3-8,Edge]

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	Vert(LL)	-0.10	8-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	Vert(CT)	-0.16	8-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.03	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										
										Weight: 108 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
Right: 2x4 SP No.3

BRACING
TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 4-4-9 oc purlins.
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=905/0-3-8, (min. 0-1-8), 6=905/0-3-8, (min. 0-1-8)
Max Horiz 2=-182 (LC 12)
Max Uplift 2=-97 (LC 14), 6=-97 (LC 15)
Max Grav 2=1011 (LC 28), 6=1011 (LC 25)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1288/128, 3-17=-1200/150, 17-18=-1112/161, 4-18=-1085/181, 4-19=-1086/181, 19-20=-1113/161, 5-20=-1201/150, 5-6=-1289/128
BOT CHORD 2-10=-113/1106, 10-21=0/729, 9-21=0/729, 8-9=0/729, 6-8=-11/1028
WEBS 4-8=-103/586, 5-8=-351/189, 4-10=-103/584, 3-10=-351/189

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) -1-4-0 to 1-8-0, Interior (1) 1-8-0 to 7-3-12, Exterior(2R) 7-3-12 to 13-3-12, Interior (1) 13-3-12 to 18-11-8, Exterior(2E) 18-11-8 to 21-11-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job 21030029-A	Truss C03	Truss Type Common	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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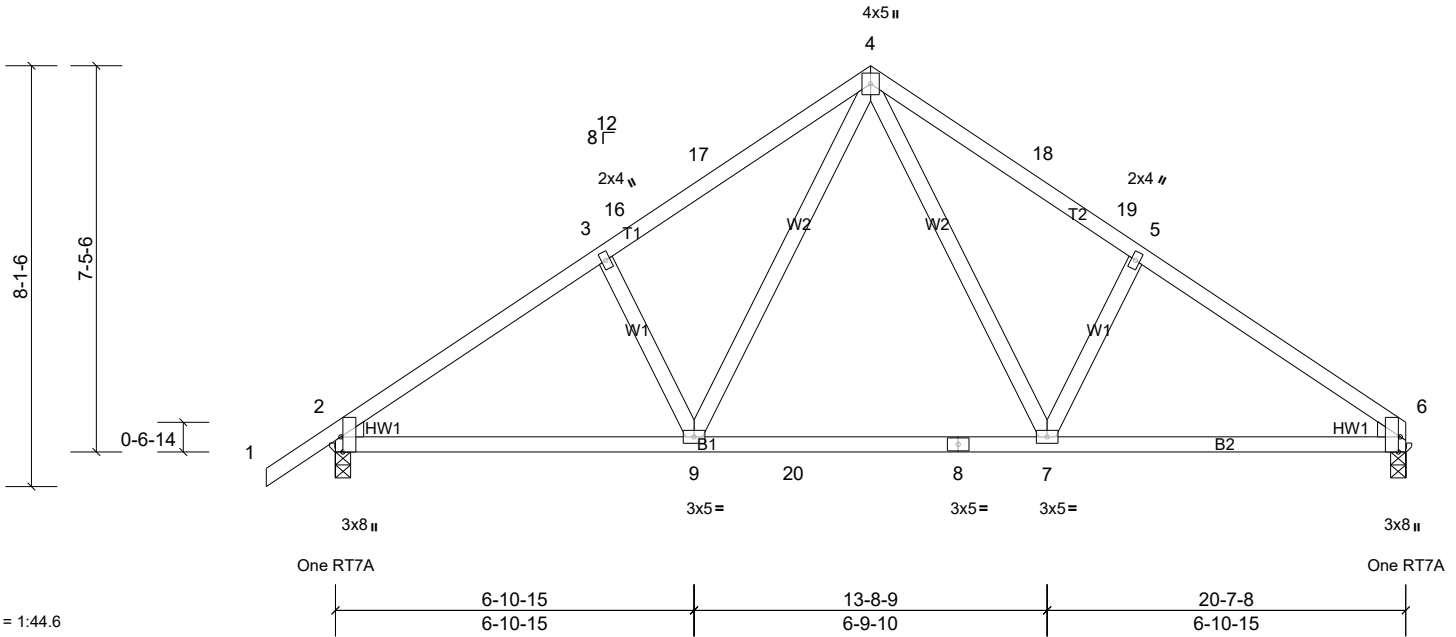
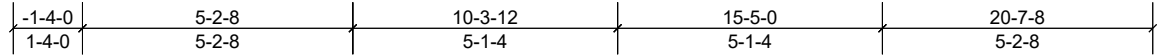


Plate Offsets (X, Y): [2:0-3-8,Edge], [6:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	0.62	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.10	7-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.15	7-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.03	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 106 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
 Right: 2x4 SP No.3

BRACING
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 4-4-9 oc purlins.
 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=908/0-3-8, (min. 0-1-8), 6=0/0-3-8, (min. 0-1-8)
 Max Horiz 2=175 (LC 13)
 Max Uplift 2=-97 (LC 14), 6=-70 (LC 15)
 Max Grav 2=1012 (LC 24), 6=934 (LC 25)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1290/130, 3-16=-1202/153, 16-17=-1114/164, 4-17=-1087/184, 4-18=-1096/190, 18-19=-1124/170, 5-19=-1211/159, 5-6=-1298/136
 BOT CHORD 2-9=-128/1098, 9-20=-2/721, 8-20=-2/721, 7-8=-2/721, 6-7=-50/1038
 WEBS 4-7=-108/598, 5-7=-358/192, 4-9=-102/583, 3-9=-352/189

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) -1-4-0 to 1-8-0, Interior (1) 1-8-0 to 7-3-12, Exterior(2R) 7-3-12 to 13-3-12, Interior (1) 13-3-12 to 17-7-8, Exterior(2E) 17-7-8 to 20-7-8 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=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

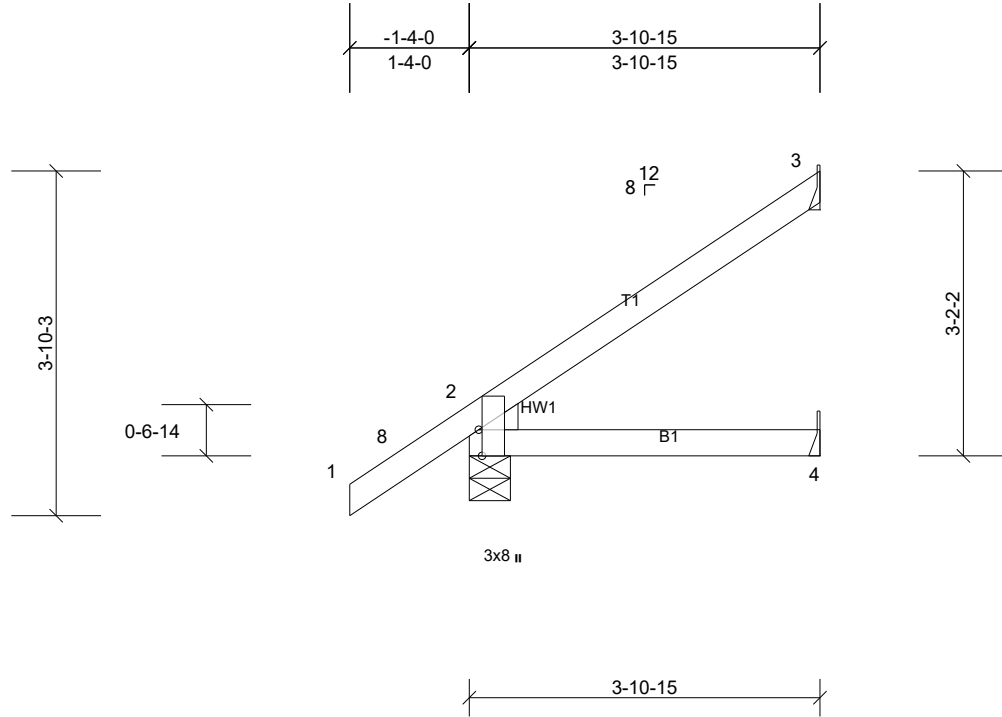
Job 21030029-A	Truss CJ01	Truss Type Jack-Open	Qty 6	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Carter Components, Sanford, NC, user

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Scale = 1:25.8

Plate Offsets (X, Y): [2:0-3-8,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	0.30	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.03	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 16 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 3-10-15 oc purlins.
Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=248/0-5-8, (min. 0-1-8), 3=94/ Mechanical, (min. 0-1-8),
4=46/ Mechanical, (min. 0-1-8)
Max Horiz 2=122 (LC 14)
Max Uplift 2=-19 (LC 14), 3=-61 (LC 14)
Max Grav 2=361 (LC 21), 3=156 (LC 21), 4=70 (LC 7)

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

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

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) exterior zone 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=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 3.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

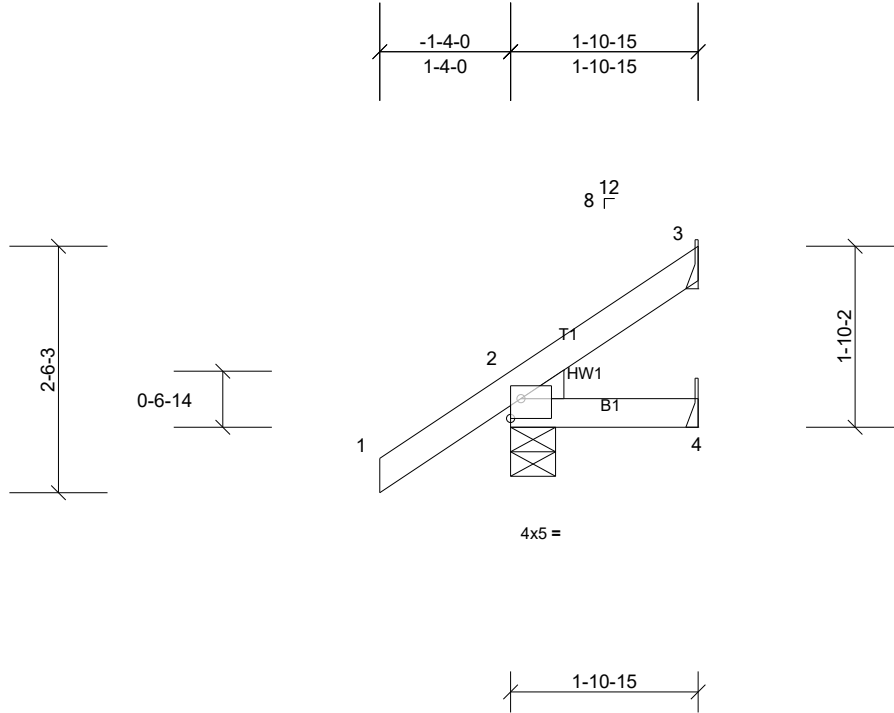
Job 21030029-A	Truss CJ02	Truss Type Jack-Open	Qty 10	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:23.6

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

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	0.19	Vert(LL)	0.00	4-7	>999	240	MT20 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	4-7	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP							
BCDL	10.0										Weight: 10 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 1-10-15 oc purlins.
 Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=184/0-5-8, (min. 0-1-8), 3=35/ Mechanical, (min. 0-1-8),
 4=13/ Mechanical, (min. 0-1-8)
 Max Horiz 2=74 (LC 14)
 Max Uplift 2=-28 (LC 14), 3=-25 (LC 14)
 Max Grav 2=275 (LC 21), 3=52 (LC 21), 4=30 (LC 7)

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

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

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) exterior zone 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=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 3.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

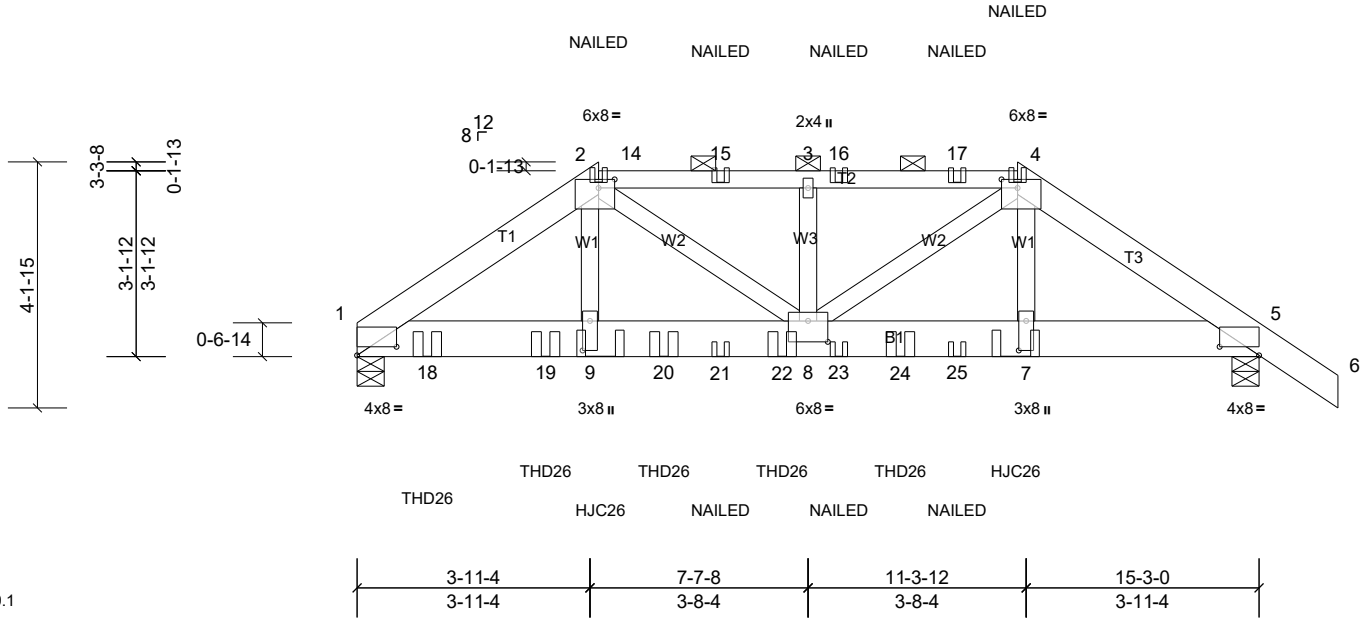
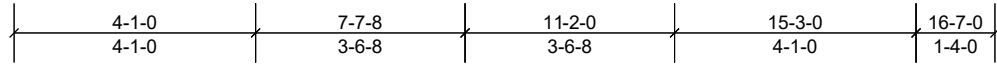
Job 21030029-A	Truss D01	Truss Type Hip Girder	Qty 1	Ply 2	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:39.1

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

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	0.35	Vert(LL)	-0.06	8-9	>999	240	MT20 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.10	8-9	>999	180	
TCDL	10.0	Rep Stress Incr		WB	0.50	Horz(CT)	0.02	5	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										Weight: 215 lb FT = 20%

LUMBER
 TOP CHORD 2x6 SP 2400F 2.0E *Except* T2:2x4 SP No.2
 BOT CHORD 2x8 SP 2400F 2.0E
 WEBS 2x4 SP No.3

BRACING
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
 2-0-0 oc purlins (4-9-14 max.): 2-4.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=3816/0-5-8, (min. 0-1-10), 5=2956/0-5-8, (min. 0-1-8)
 Max Horiz 1=-77 (LC 8)
 Max Uplift 1=-541 (LC 12), 5=-453 (LC 13)
 Max Grav 1=3887 (LC 37), 5=3081 (LC 37)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-6089/856, 2-14=-6066/888, 14-15=-6066/888, 3-15=-6066/888, 3-16=-6066/888, 16-17=-6066/888, 4-17=-6066/888, 4-5=-5109/756
 BOT CHORD 1-18=-689/5055, 18-19=-689/5055, 9-19=-689/5055, 9-20=-678/4944, 20-21=-678/4944, 21-22=-678/4944, 8-22=-678/4944, 8-23=-564/4178, 23-24=-564/4178, 24-25=-564/4178, 7-25=-564/4178, 5-7=-567/4228
 WEBS 2-9=-211/2145, 2-8=-262/1447, 3-8=-462/170, 4-8=-350/2412, 4-7=-89/944

- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-2-4 from the left end to 9-2-4 to connect truss(es) A011 (1 ply 2x4 SP), A012 (1 ply 2x4 SP), A013 (1 ply 2x4 SP), A014 (1 ply 2x4 SP), A015 (1 ply 2x6 SP) to front face of bottom chord.

Job 21030029-A	Truss D01	Truss Type Hip Girder	Qty 1	Ply 2	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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- 15) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 7-0-4 oc max. starting at 4-1-6 from the left end to 11-1-10 to connect truss(es) EJ04 (1 ply 2x4 SP), HJ02 (1 ply 2x4 SP), EJ04 (1 ply 2x4 SP), HJ02 (1 ply 2x4 SP) to back face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.
- 17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-4=-60, 4-6=-60, 1-5=-20
Concentrated Loads (lb)
Vert: 9=-310 (B), 2=-105 (B), 4=-105 (B), 7=-310 (B), 15=-105 (B), 16=-105 (B), 17=-105 (B), 18=-545 (F), 19=-487 (F), 20=-1132 (F), 21=-43 (B), 22=-1102 (F), 23=-43 (B), 24=-932 (F), 25=-43 (B)

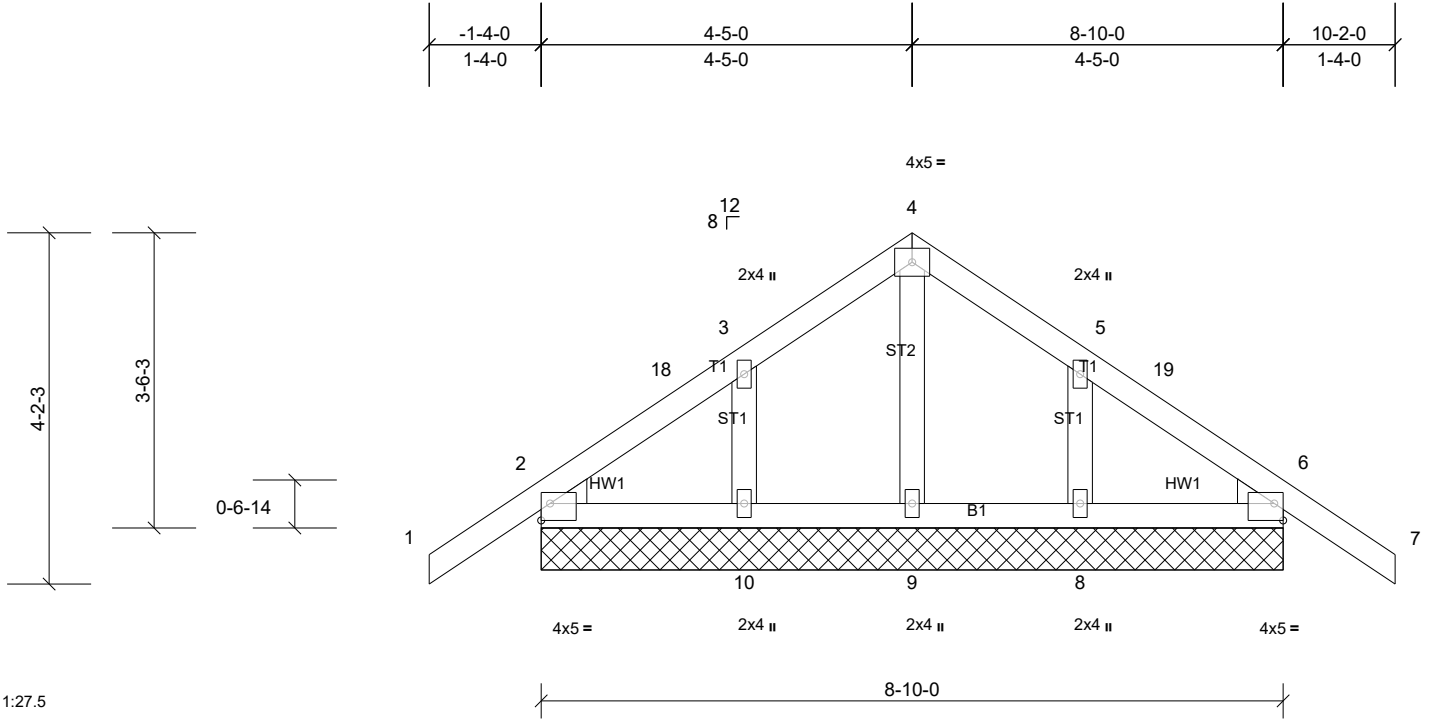
Job 21030029-A	Truss E01	Truss Type Common Supported Gable	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:27.5

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

Loading	(psf)	Spacing	1-11-4	CSI	0.15	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 45 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS All bearings 8-10-0.

(lb) - Max Horiz 2=-87 (LC 12), 11=-87 (LC 12)
 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=284 (LC 22), 10=284 (LC 21)

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

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -1-4-0 to 1-8-0, Corner(3R) 1-8-0 to 7-2-0, Corner(3E) 7-2-0 to 10-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

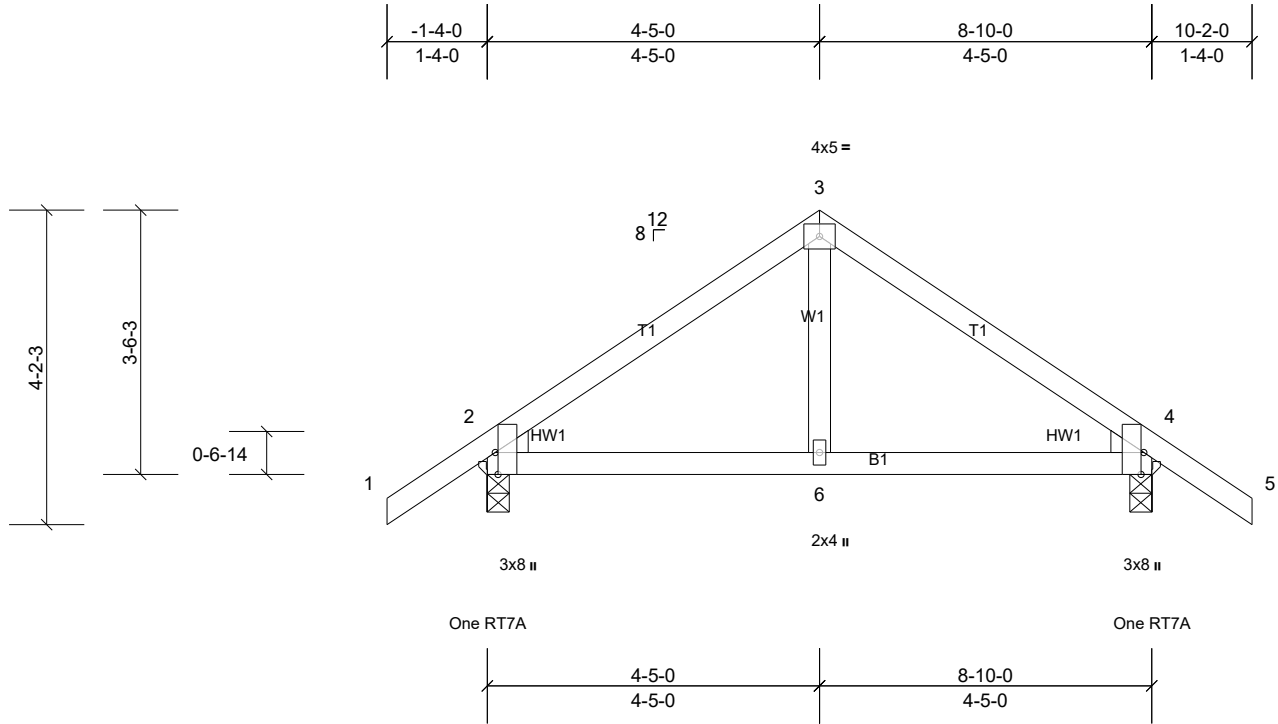
Job 21030029-A	Truss E02	Truss Type Common	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Carter Components, Sanford, NC, user

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ID:qj51eNaVqHRTyov2B3Rm93zXV9w-mPnVhZlXtmKJz3emdG4RITlIQqqvotSff0hxJzXMUV



Scale = 1:30.8

Plate Offsets (X, Y): [2:0-3-8,Edge], [4:0-3-8,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	0.38	Vert(LL)	-0.02	6-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.03	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 40 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
 Right: 2x4 SP No.3

BRACING

TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
 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=433/0-3-8, (min. 0-1-8), 4=433/0-3-8, (min. 0-1-8)
 Max Horiz 2=90 (LC 13)
 Max Uplift 2=-57 (LC 14), 4=-57 (LC 15)
 Max Grav 2=541 (LC 21), 4=541 (LC 22)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=450/101, 3-4=450/101
 BOT CHORD 2-6=-19/273, 4-6=0/273

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior(2E) -1-4-0 to 1-8-0, Exterior(2R) 1-8-0 to 7-2-0, Exterior(2E) 7-2-0 to 10-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

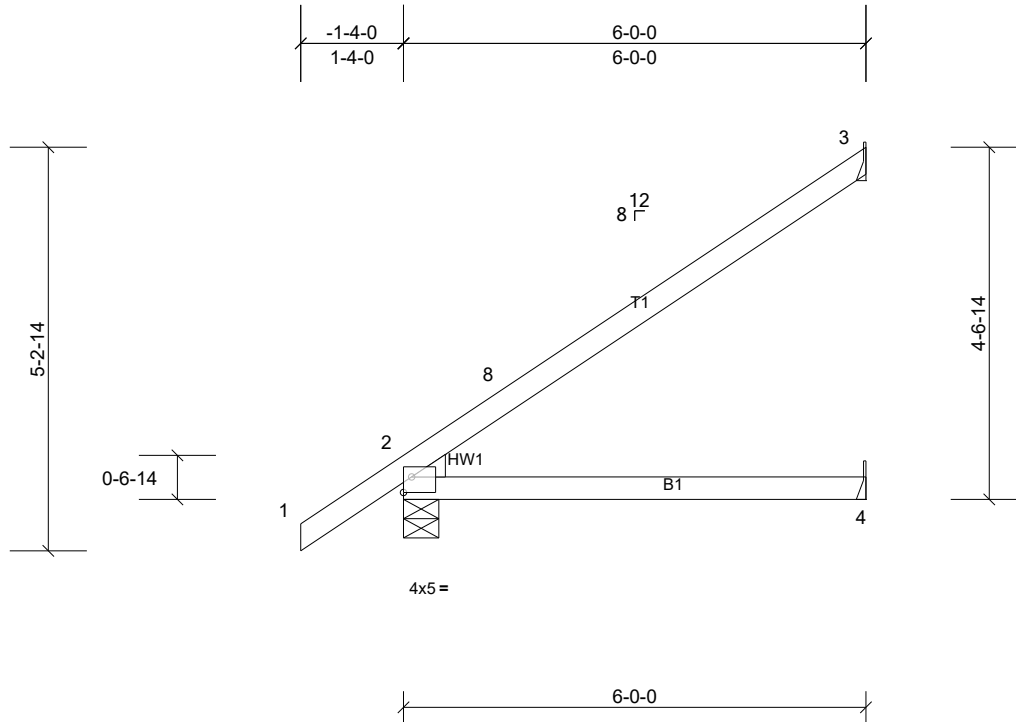
Job 21030029-A	Truss EJ01	Truss Type Jack-Open	Qty 35	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Carter Components, Sanford, NC, user

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ID:Cijuw43psZGzGU75jd_LcizXXGt-mPnVhZlxTmkJz3emdG4RITldBqmfvpzSff0hxJzXMUV



Scale = 1:30

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

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	0.84	Vert(LL)	-0.10	4-7	>691	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.18	4-7	>404	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 23 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD
 BOT CHORD

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

REACTIONS (lb/size) 2=326/0-5-8, (min. 0-1-8), 3=152/ Mechanical, (min. 0-1-8),
 4=76/ Mechanical, (min. 0-1-8)
 Max Horiz 2=173 (LC 14)
 Max Uplift 2=-13 (LC 14), 3=-97 (LC 14)
 Max Grav 2=400 (LC 21), 3=250 (LC 21), 4=110 (LC 7)

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

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

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 3.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

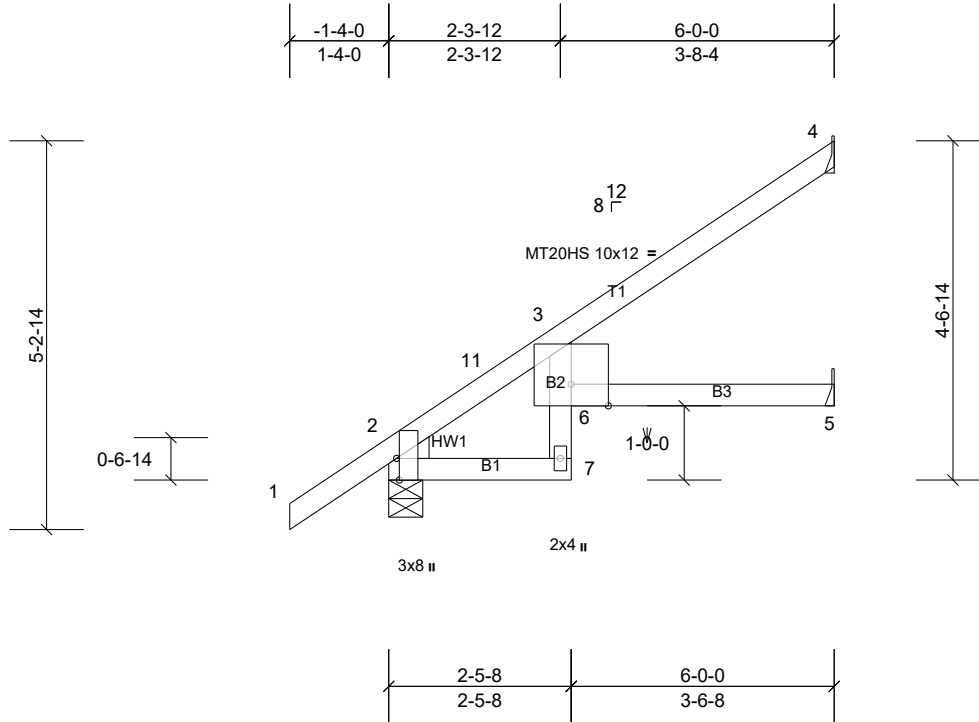
Job 21030029-A	Truss EJ02	Truss Type Jack-Open	Qty 7	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:31.2

Plate Offsets (X, Y): [2:0-3-8,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	0.61	Vert(LL)	-0.11	5-6	>621	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.18	5-6	>402	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.07	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 25 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except* B2:2x4 SP No.3
 WEDGE Left: 2x4 SP No.3

BRACING

TOP CHORD
 BOT CHORD

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

REACTIONS (lb/size) 2=326/0-5-8, (min. 0-1-8), 4=136/ Mechanical, (min. 0-1-8),
 5=93/ Mechanical, (min. 0-1-8)
 Max Horiz 2=173 (LC 14)
 Max Uplift 2=-13 (LC 14), 4=-79 (LC 14), 5=-9 (LC 14)
 Max Grav 2=400 (LC 21), 4=220 (LC 21), 5=125 (LC 21)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-11=-378/23, 3-11=-310/0
 BOT CHORD 2-7=-119/258

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) exterior zone 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=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 4 and 9 lb uplift at joint 5.
- 10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

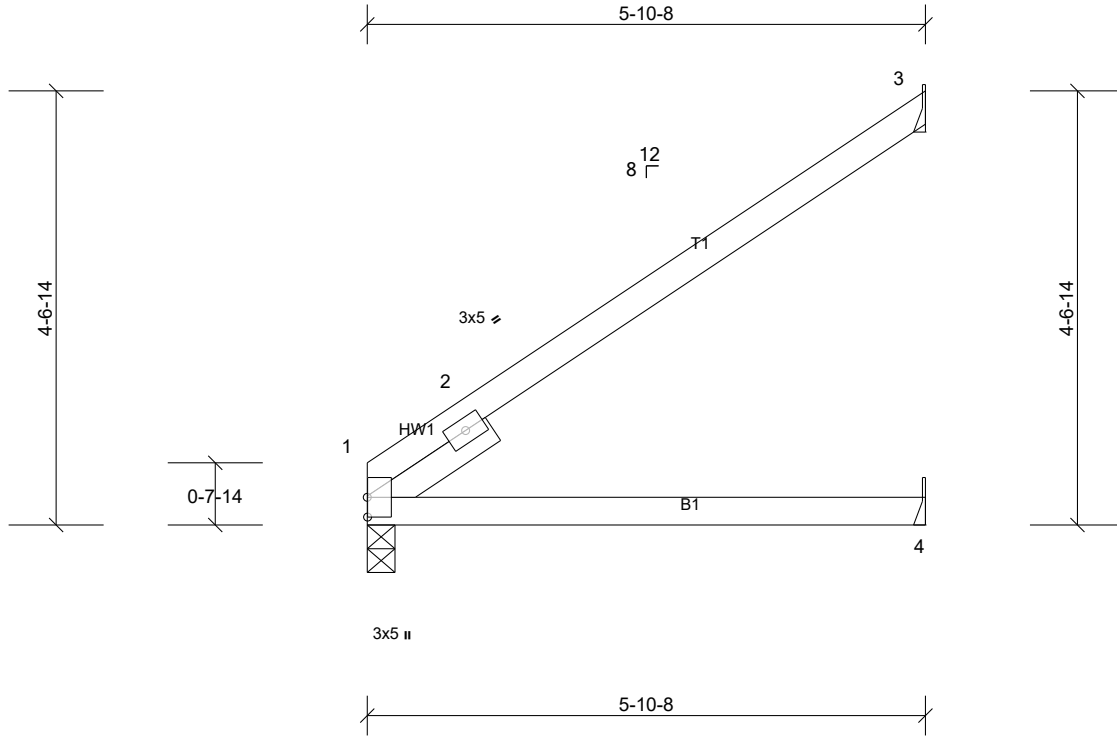
Job 21030029-A	Truss EJ03	Truss Type Jack-Open	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Carter Components, Sanford, NC, user

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Scale = 1:24.4

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

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	0.84	Vert(LL)	-0.11	4-7	>646	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.18	4-7	>390	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 22 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 SLIDER Left 2x4 SP No.3 -- 1-6-0

BRACING

TOP CHORD
 BOT CHORD

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

REACTIONS (lb/size) 1=232/0-3-8, (min. 0-1-8), 3=153/ Mechanical, (min. 0-1-8),
 4=79/ Mechanical, (min. 0-1-8)
 Max Horiz 1=142 (LC 14)
 Max Uplift 3=-98 (LC 14)
 Max Grav 1=313 (LC 20), 3=250 (LC 20), 4=109 (LC 7)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-378/218
 BOT CHORD 1-4=-311/315

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) exterior zone 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=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 98 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

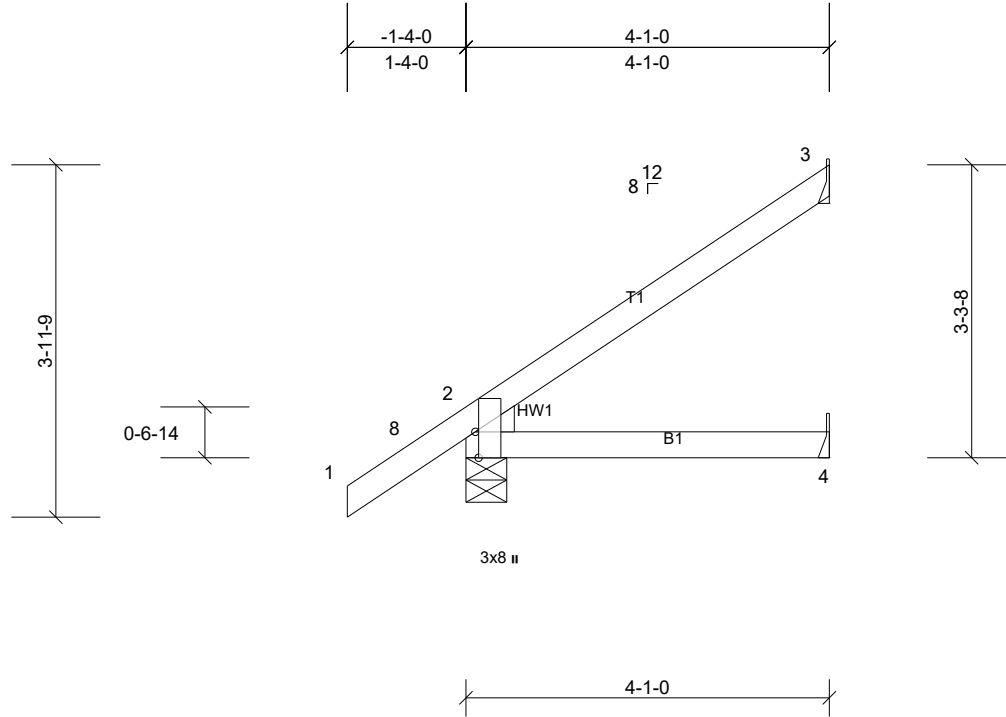
Job 21030029-A	Truss EJ04	Truss Type Jack-Open	Qty 5	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:26

Plate Offsets (X, Y): [2:0-3-8,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	0.34	Vert(LL)	-0.02	4-7	>999	240	MT20 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.04	4-7	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP							
BCDL	10.0										Weight: 17 lb FT = 20%

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

BRACING
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 4-1-0 oc purlins.
 Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=254/0-5-8, (min. 0-1-8), 3=99/ Mechanical, (min. 0-1-8),
 4=49/ Mechanical, (min. 0-1-8)
 Max Horiz 2=126 (LC 14)
 Max Uplift 2=-18 (LC 14), 3=-64 (LC 14)
 Max Grav 2=363 (LC 21), 3=165 (LC 21), 4=73 (LC 7)

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

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

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) exterior zone 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=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 3.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

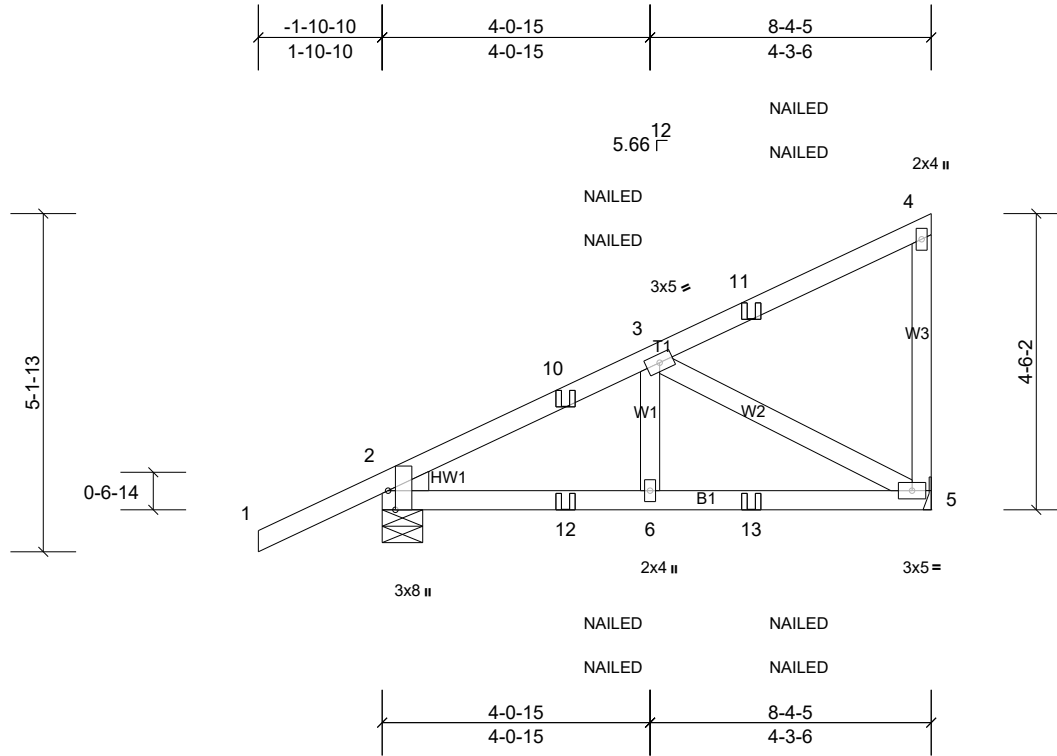
Job 21030029-A	Truss HJ01	Truss Type Diagonal Hip Girder	Qty 3	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:35.2

Plate Offsets (X, Y): [2:0-3-8,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	0.56	Vert(LL)	-0.02	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.04	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 45 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
BOT CHORD

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

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=519/0-7-6, (min. 0-1-8), 5=456/ Mechanical, (min. 0-1-8)
Max Horiz 2=170 (LC 11)
Max Uplift 2=-87 (LC 12), 5=-95 (LC 12)
Max Grav 2=550 (LC 19), 5=514 (LC 19)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-634/64, 3-10=-546/66
BOT CHORD 2-12=-118/529, 6-12=-118/529, 6-13=-118/529, 5-13=-118/529
WEBS 3-5=-598/139

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) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 5.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 11=-143, 12=1, 13=-62

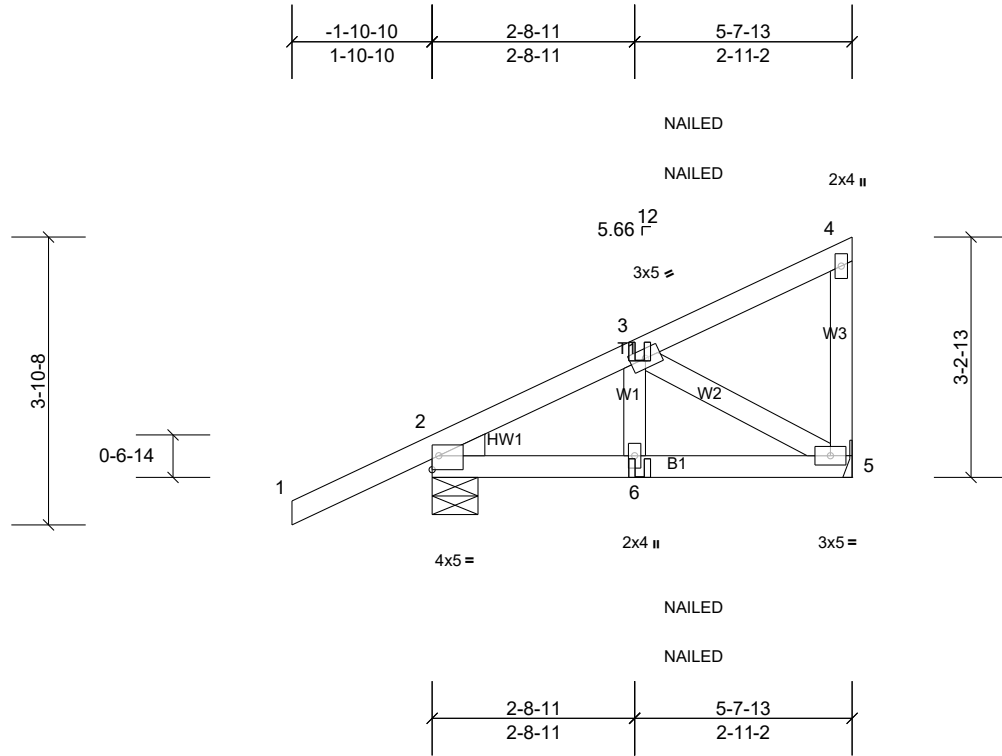
Job 21030029-A	Truss HJ02	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Carter Components, Sanford, NC, user

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Scale = 1:31.1

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

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	0.29	Vert(LL)	0.00	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 32 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
 BOT CHORD

Structural wood sheathing directly applied or 5-7-13 oc purlins, except end verticals.

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=352/0-7-6, (min. 0-1-8), 5=200/ Mechanical, (min. 0-1-8)
 Max Horiz 2=121 (LC 11)
 Max Uplift 2=-65 (LC 12), 5=-41 (LC 12)
 Max Grav 2=447 (LC 19), 5=295 (LC 19)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-343/100
 BOT CHORD 2-6=-99/277, 5-6=-41/277
 WEBS 3-5=-317/58

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) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 5.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-4=-60, 5-7=-20
 Concentrated Loads (lb)
 Vert: 6=1 (F=0, B=0)

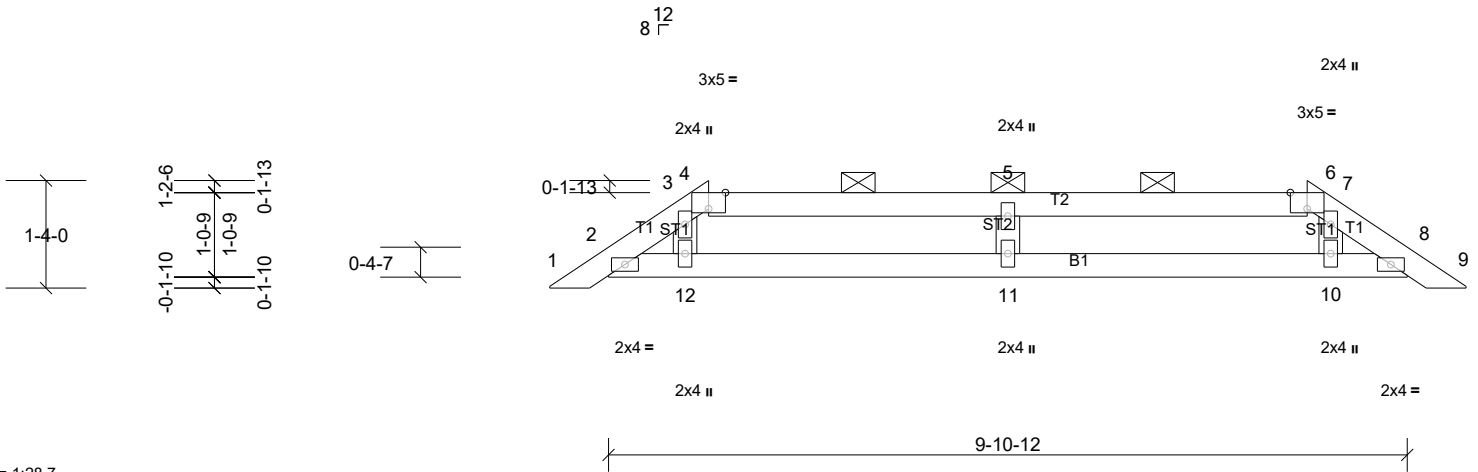
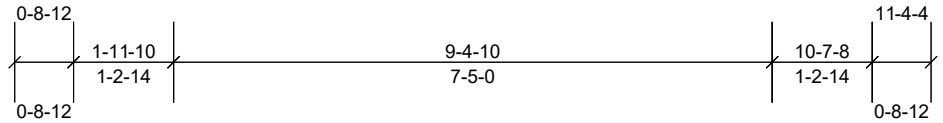
Job 21030029-A	Truss PB01	Truss Type Piggyback	Qty 2	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:28.7

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

Loading	(psf)	Spacing	2-0-0	CSI	0.33	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 35 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, except
 2-0-0 oc purlins (6-0-0 max.): 4-6.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS All bearings 9-10-12.
 (lb) - Max Horiz 2=25 (LC 13), 13=25 (LC 13)
 Max Uplift All uplift 100 (lb) or less at joint(s) 2, 8, 10, 11, 13, 17
 Max Grav All reactions 250 (lb) or less at joint(s) 2, 8, 10, 13, 17 except
 11=524 (LC 38)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-294/39, 3-4=-300/74, 4-5=-269/61, 5-6=-269/61, 6-7=-302/74, 7-8=-284/48
 BOT CHORD 2-12=-28/267, 11-12=-28/267, 10-11=-28/267, 8-10=-28/267
 WEBS 5-11=-419/137

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-3-5 to 2-0-0, Exterior(2R) 2-0-0 to 9-5-0, Exterior(2E) 9-5-0 to 11-1-11 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=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, 11, and 10. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

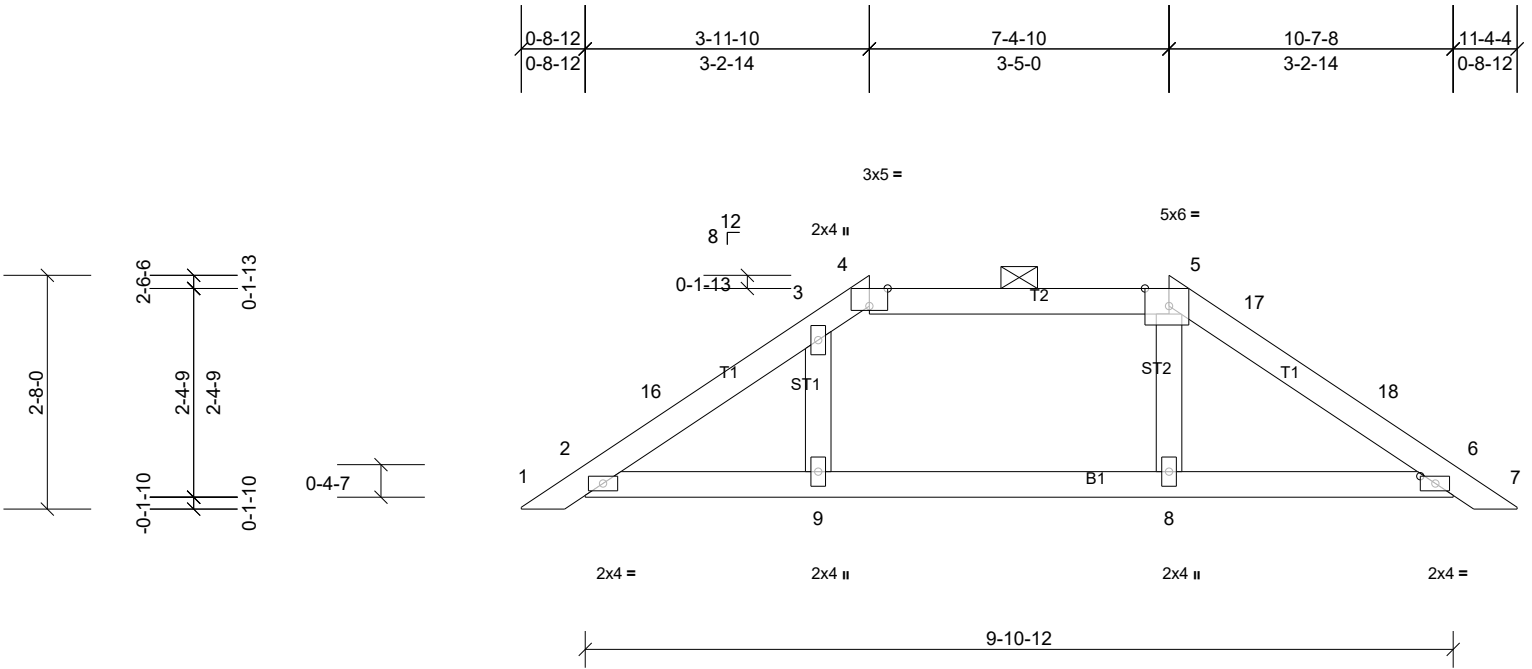
Job 21030029-A	Truss PB02	Truss Type Piggyback	Qty 2	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:26.4

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

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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 39 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" oc purlins, except
 2'-0" oc purlins (6'-0" max.): 4-5.
 BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS All bearings 9-10-12.
 (lb) - Max Horiz 2=57 (LC 13), 10=57 (LC 13)
 Max Uplift All uplift 100 (lb) or less at joint(s) 2, 6, 8, 9, 10, 13
 Max Grav All reactions 250 (lb) or less at joint(s) 2, 6, 10, 13 except
 8=309 (LC 22), 9=320 (LC 21)

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

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

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-3-5 to 3-5-0, Exterior(2R) 3-5-0 to 8-1-11, Exterior(2E) 8-1-11 to 11-1-11 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=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4'-0" oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 8, and 9. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

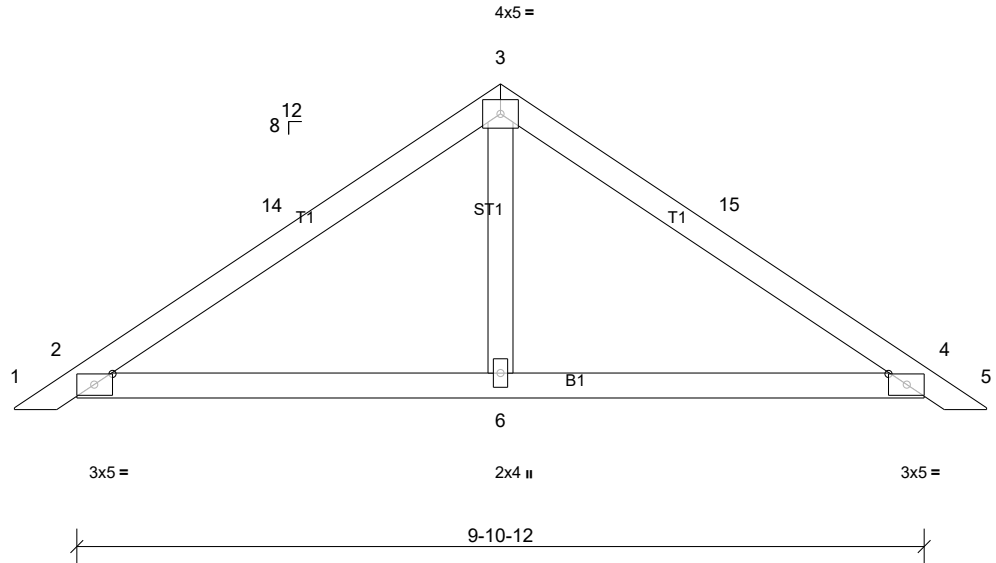
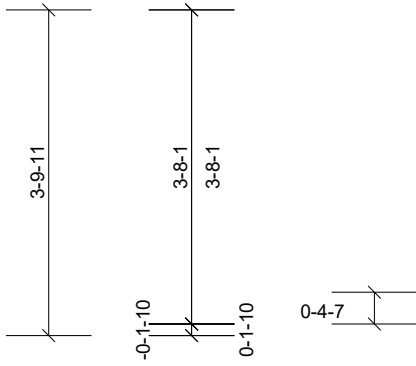
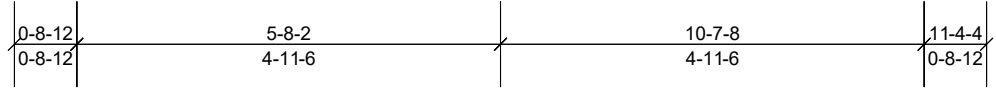
Job 21030029-A	Truss PB03	Truss Type Piggyback	Qty 10	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:27

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

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	0.47	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 40 lb	FT = 20%

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

BRACING
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
 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 9-10-12.
 (lb) - Max Horiz 2=85 (LC 13), 7=85 (LC 13)
 Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 7, 11
 Max Grav All reactions 250 (lb) or less at joint(s) except 2=348 (LC 21),
 4=348 (LC 22), 6=358 (LC 22), 7=348 (LC 21), 11=348 (LC 22)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-14=-256/93, 4-15=-256/93

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-5 to 3-3-5, Exterior(2R) 3-3-5 to 8-1-11, Exterior(2E) 8-1-11 to 11-1-11 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=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

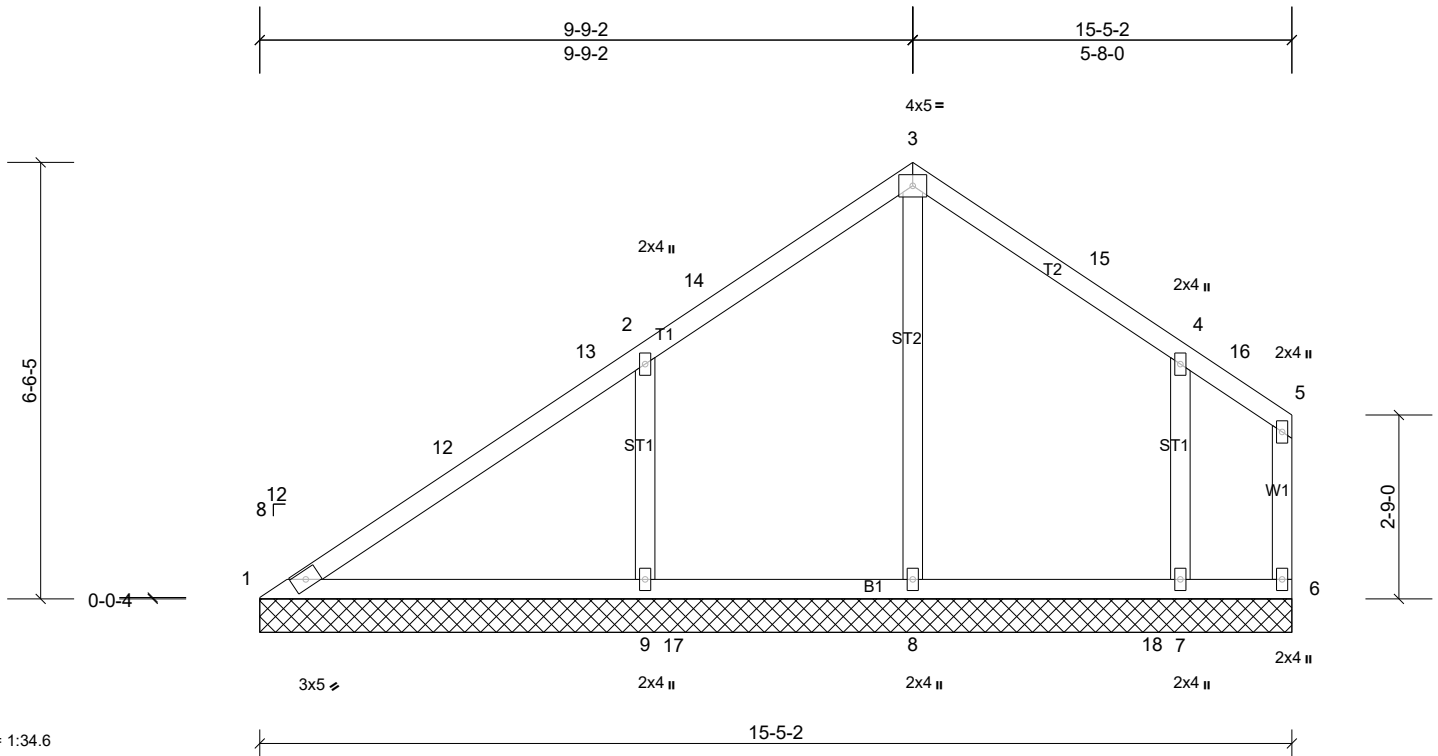
Job 21030029-A	Truss VL01	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:34.6

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)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horiz(TL)	0.01	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 72 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
 BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 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 15-5-2.
 (lb) - Max Horiz 1=180 (LC 11)
 Max Uplift All uplift 100 (lb) or less at joint(s) 1, 6 except 7=-122 (LC 15), 9=-175 (LC 14)
 Max Grav All reactions 250 (lb) or less at joint(s) 1, 6 except 7=477 (LC 6), 8=401 (LC 23), 9=623 (LC 5)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-12=-346/138
 BOT CHORD 1-9=-59/272
 WEBS 2-9=-455/209, 4-7=-387/162

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 6-9-8, Exterior(2R) 6-9-8 to 12-3-12, Exterior(2E) 12-3-12 to 15-3-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 1 except (jt=lb) 9=174, 7=122.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

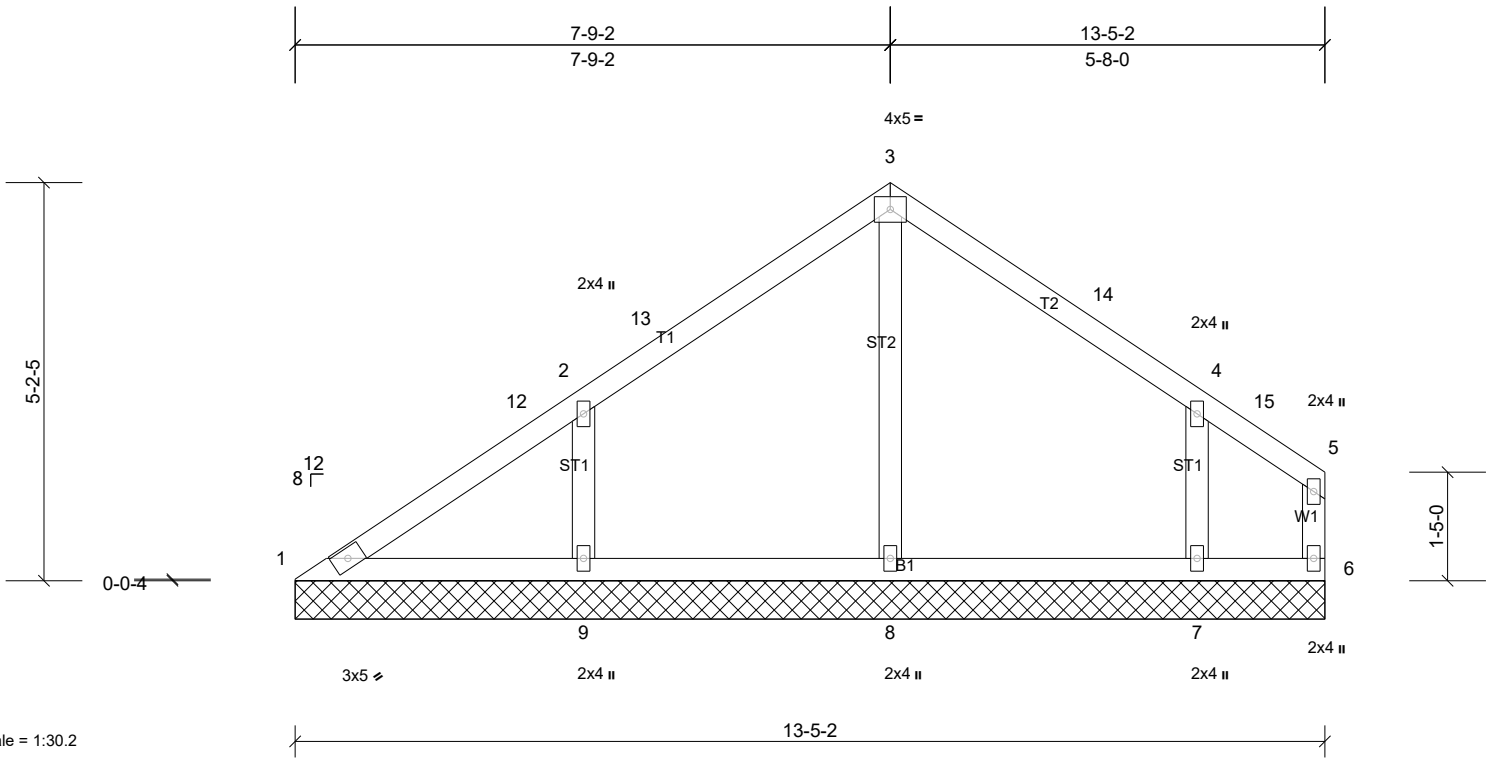
Job 21030029-A	Truss VL02	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:30.2

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	0.31	Vert(LL)	n/a	-	n/a	999	MT20 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	9	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										Weight: 58 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
 BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 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 13-5-2.
 (lb) - Max Horiz 1=132 (LC 11)
 Max Uplift All uplift 100 (lb) or less at joint(s) 1, 6 except 7=-129 (LC 15), 9=-132 (LC 14)
 Max Grav All reactions 250 (lb) or less at joint(s) 1, 6 except 7=451 (LC 21), 8=337 (LC 21), 9=487 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-8=-257/18, 2-9=-393/167, 4-7=-383/163

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 4-9-8, Exterior(2R) 4-9-8 to 10-3-12, Exterior(2E) 10-3-12 to 13-3-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 1 except (jt=lb) 9=132, 7=128.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

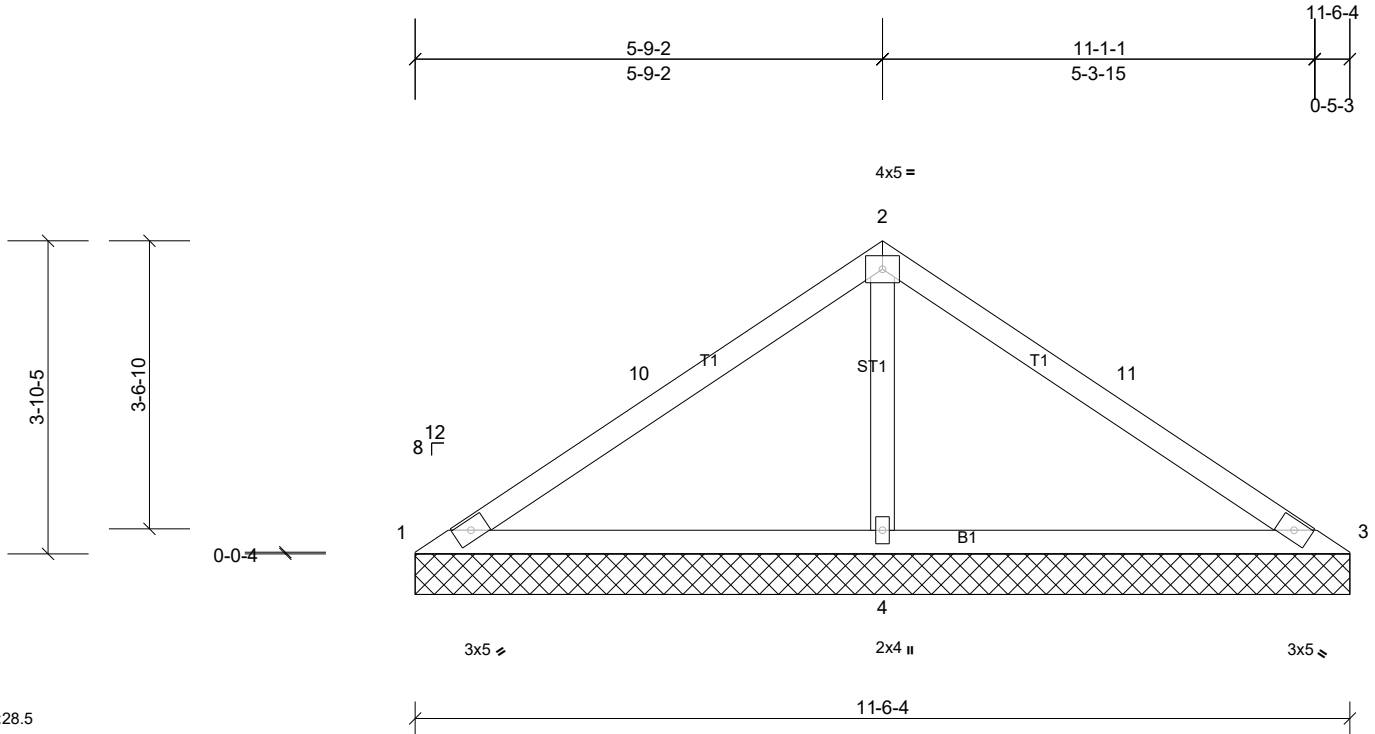
Job 21030029-A	Truss VL03	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Carter Components, Sanford, NC, user

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Scale = 1:28.5

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	0.65	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.61	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horiz(TL)	0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 41 lb	FT = 20%

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

BRACING
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 10-0-0 oc purlins.
 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 11-6-4.
 (lb) - Max Horiz 1=-87 (LC 12)
 Max Uplift All uplift 100 (lb) or less at joint(s) 3, 4, 9 except 1=-169 (LC 21)
 Max Grav All reactions 250 (lb) or less at joint(s) 1, 3, 9 except 4=1122 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-10=-187/550, 2-10=-58/600, 2-11=-58/687, 3-11=-74/532
 BOT CHORD 1-4=-458/164, 3-4=-458/130
 WEBS 2-4=-946/205

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 8-6-10, Exterior(2E) 8-6-10 to 11-6-10 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=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 3 except (jt=lb) 1=169.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

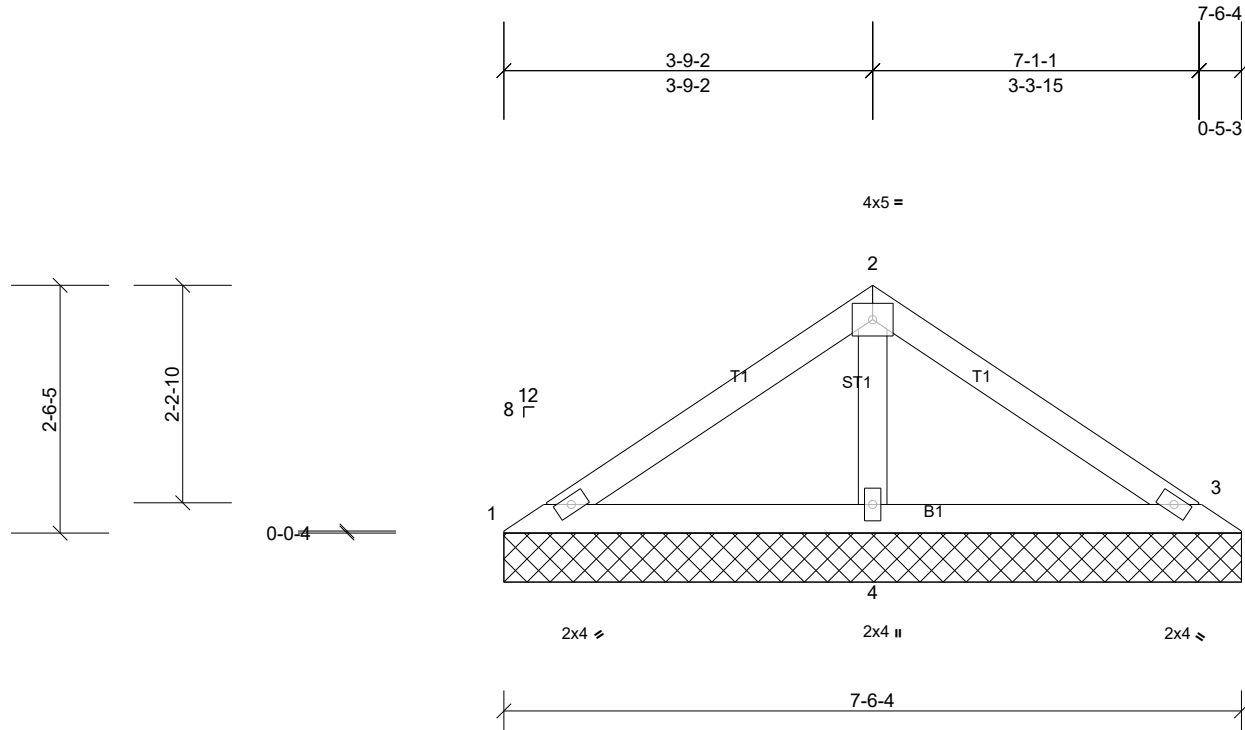
Job 21030029-A	Truss VL04	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:23.6

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	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 26 lb	FT = 20%	

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

BRACING
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 7-6-4 oc purlins.
 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=81/7-6-4, (min. 0-1-8), 3=53/7-6-4, (min. 0-1-8), 4=431/7-6-4, (min. 0-1-8)
 Max Horiz 1=55 (LC 11)
 Max Uplift 1=6 (LC 15), 3=30 (LC 20), 4=64 (LC 14)
 Max Grav 1=112 (LC 20), 3=144 (LC 21), 4=517 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-4=358/130

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 4-1-4, Exterior(2E) 4-1-4 to 7-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 1, 30 lb uplift at joint 3 and 64 lb uplift at joint 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

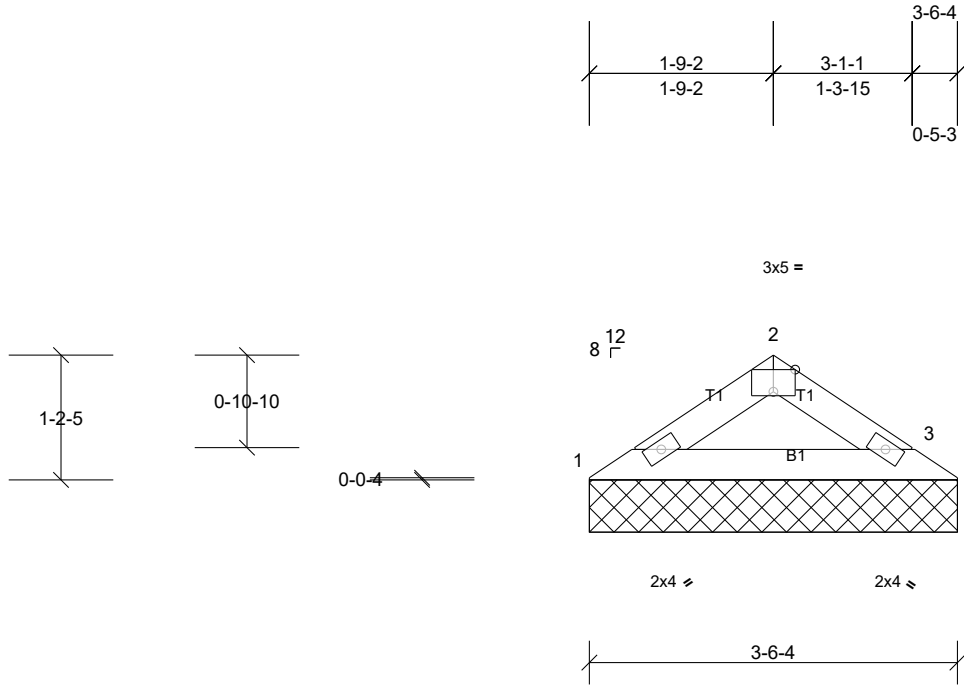
Job 21030029-A	Truss VL05	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:22.1

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	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	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 10 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 3-6-4 oc purlins.
Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=123/3-6-4, (min. 0-1-8), 3=123/3-6-4, (min. 0-1-8)
Max Horiz 1=24 (LC 11)
Max Uplift 1=-12 (LC 14), 3=-9 (LC 15)
Max Grav 1=142 (LC 20), 3=134 (LC 21)

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

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

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone 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=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 9 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

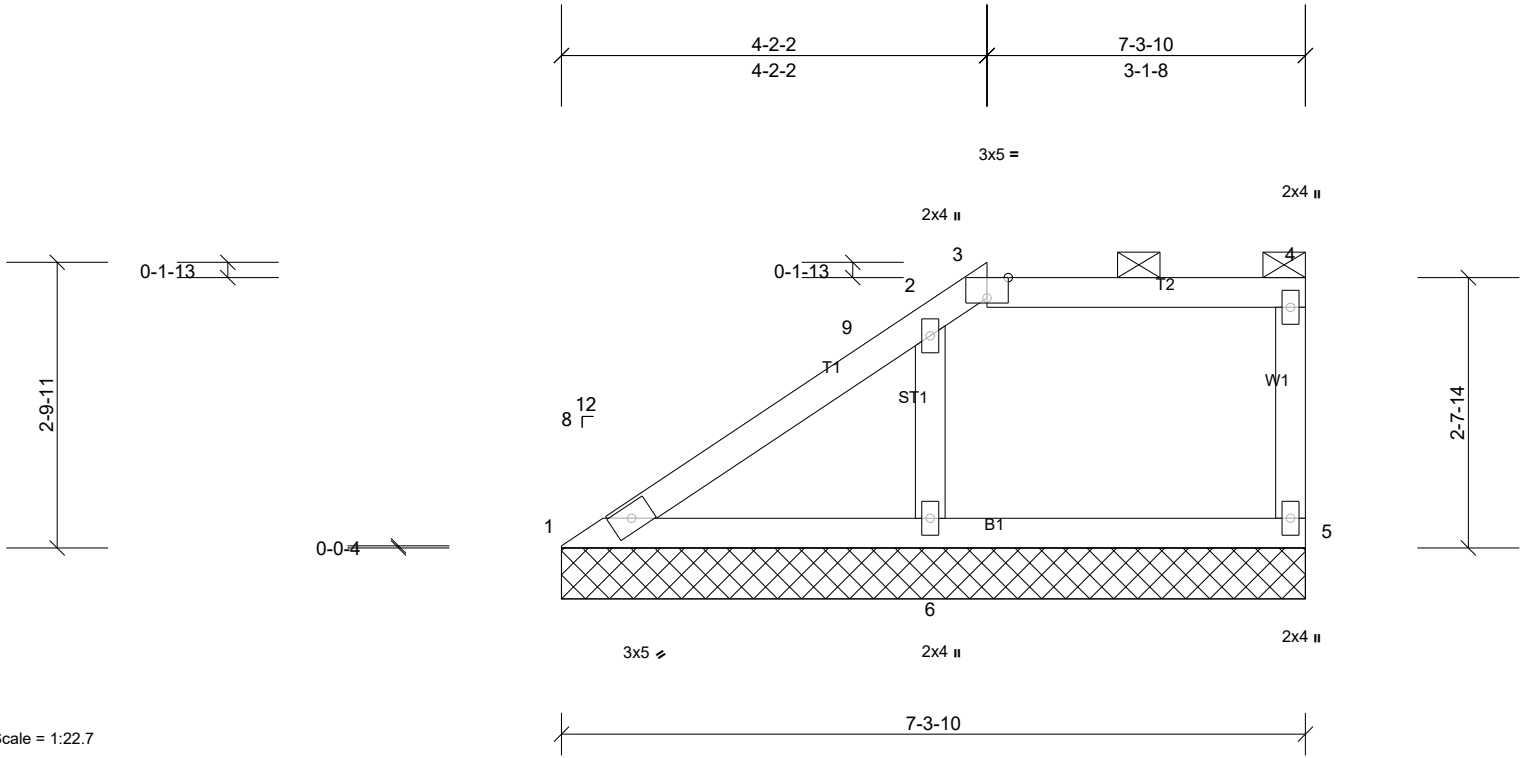
Job 21030029-A	Truss VL06	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:22.7

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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 28 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
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
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=116/7-3-10, (min. 0-1-8), 5=112/7-3-10, (min. 0-1-8), 6=344/7-3-10, (min. 0-1-8)
Max Horiz 1=87 (LC 11)
Max Uplift 1=-5 (LC 14), 5=-23 (LC 10), 6=-45 (LC 14)
Max Grav 1=176 (LC 35), 5=165 (LC 34), 6=383 (LC 35)

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

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 4-2-8, Exterior(2E) 4-2-8 to 7-2-4 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=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 5, 5 lb uplift at joint 1 and 45 lb uplift at joint 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

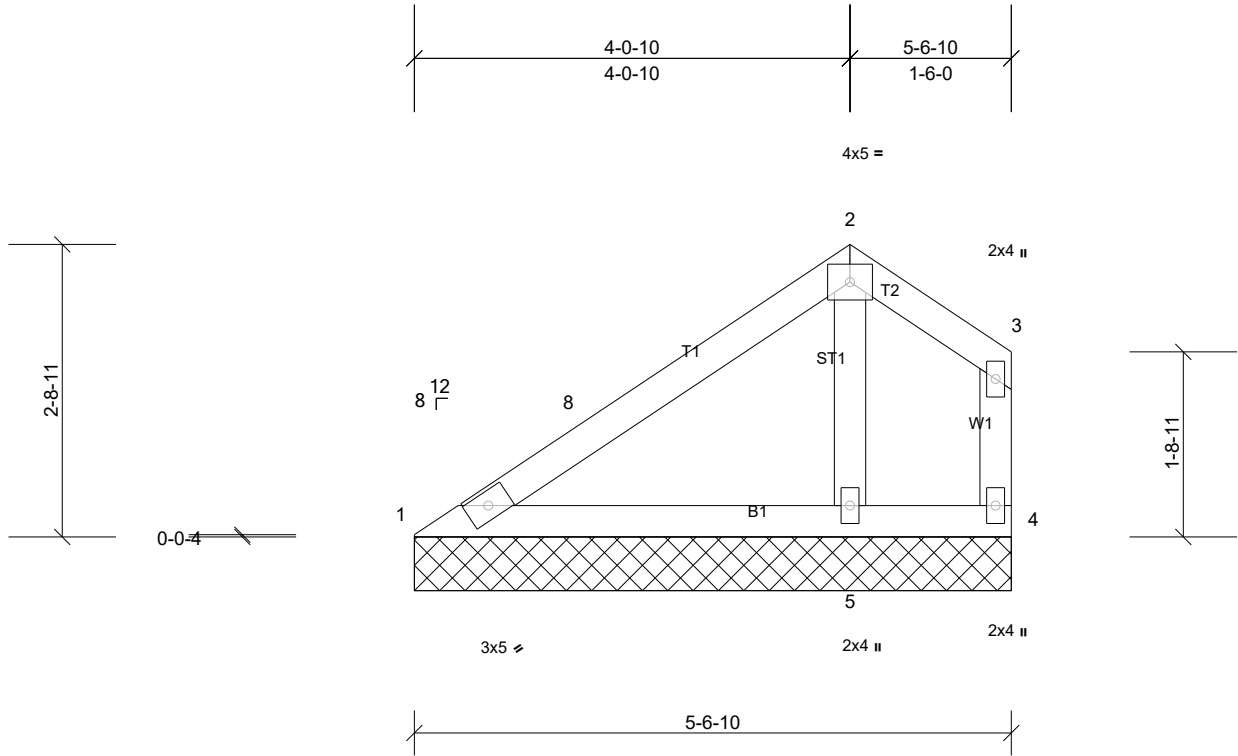
Job 21030029-A	Truss VL07	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:21.5

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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.29	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 23 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
 BOT CHORD

Structural wood sheathing directly applied or 5-6-10 oc purlins, except end verticals.
 Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=145/5-6-10, (min. 0-1-8), 4=4/5-6-10, (min. 0-1-8), 5=283/5-6-10, (min. 0-1-8)
 Max Horiz 1=78 (LC 11)
 Max Uplift 1=-14 (LC 14), 4=-32 (LC 10), 5=-29 (LC 14)
 Max Grav 1=159 (LC 20), 4=44 (LC 21), 5=310 (LC 20)

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

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

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 4-1-0, Exterior(2E) 4-1-0 to 5-5-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 4, 14 lb uplift at joint 1 and 29 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

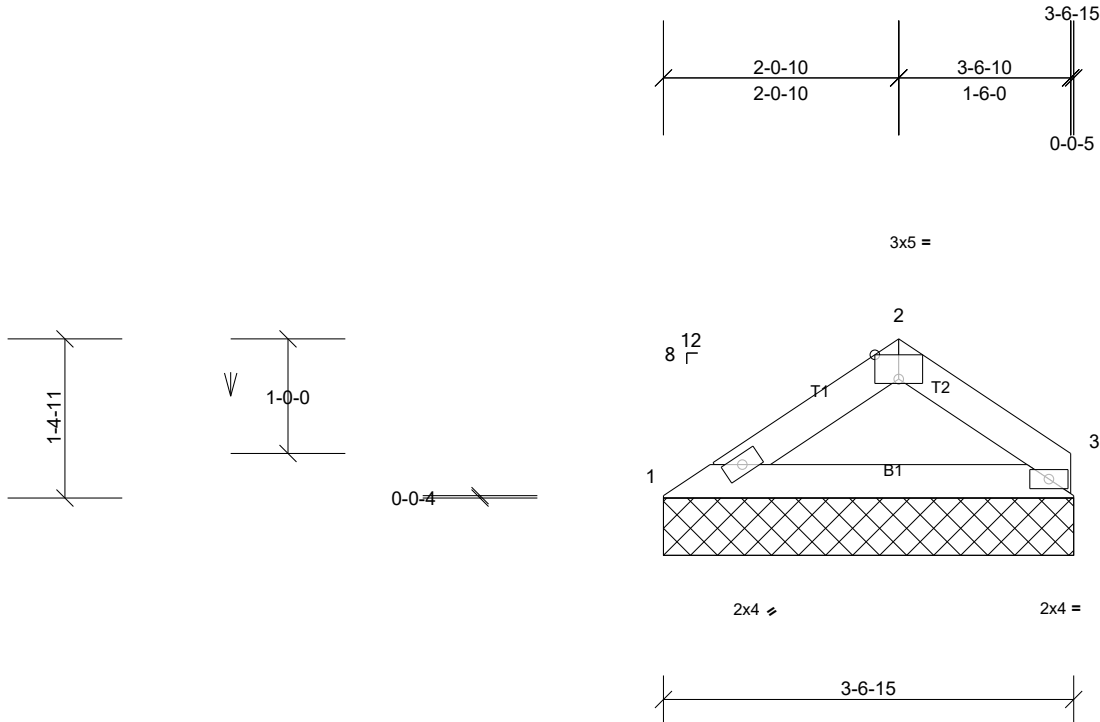
Job 21030029-A	Truss VL08	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:20.2

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 11 lb	FT = 20%	

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 3-7-0 oc purlins.
Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=143/3-6-15, (min. 0-1-8), 3=143/3-6-15, (min. 0-1-8),
4=143/3-6-15, (min. 0-1-8)
Max Horiz 1=28 (LC 11)
Max Uplift 1=-14 (LC 14), 3=-10 (LC 15), 4=-10 (LC 15)
Max Grav 1=167 (LC 20), 3=158 (LC 21), 4=158 (LC 21)

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

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

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone 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=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 3, 14 lb uplift at joint 1 and 10 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

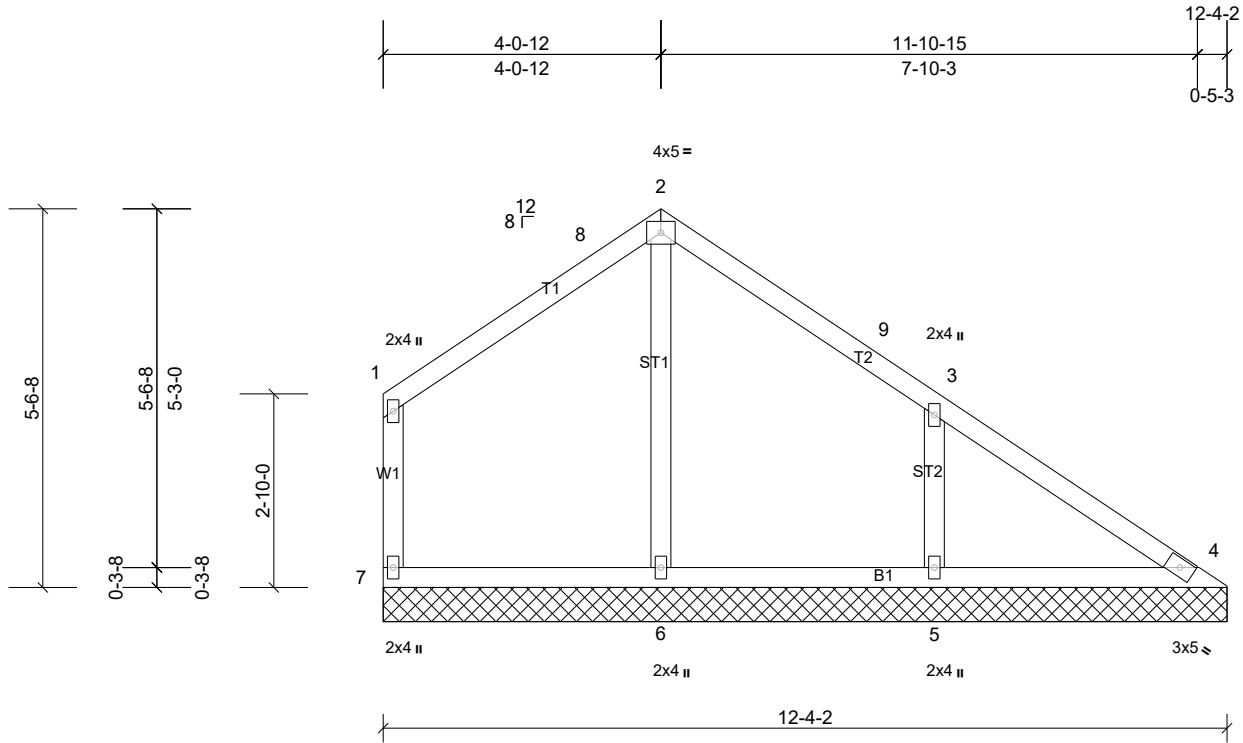
Job 21030029-A	Truss VL09	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Carter Components, Sanford, NC, user

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Scale = 1:33.8

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	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 54 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
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
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 12-4-2.
(lb) - Max Horiz 7=-155 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 4, 7 except 5=-141 (LC 15)
Max Grav All reactions 250 (lb) or less at joint(s) 4 except 5=454 (LC 21), 6=313 (LC 21), 7=255 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-5=-361/184

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Exterior(2R) 3-1-12 to 7-0-12, Interior (1) 7-0-12 to 8-10-12, Exterior(2E) 8-10-12 to 11-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 4 except (jt=lb) 5=140.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

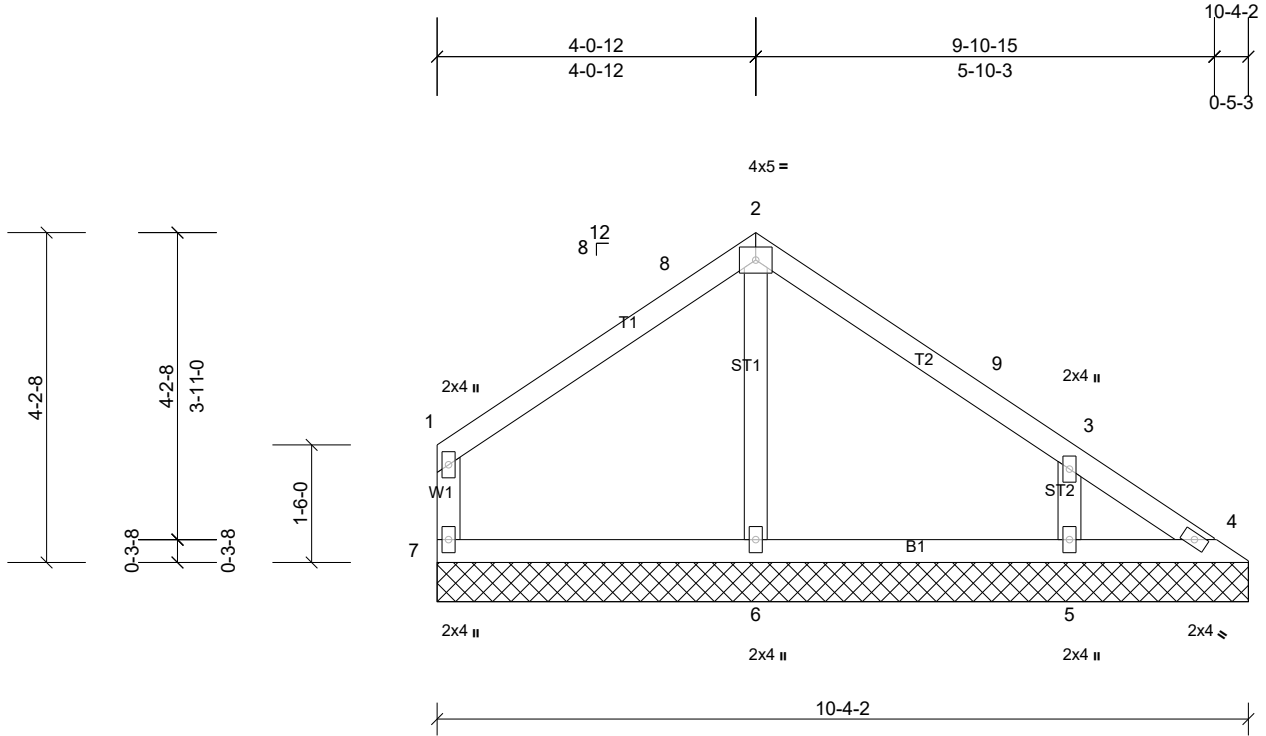
Job 21030029-A	Truss VL10	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:29.5

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	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-SH								
BCDL	10.0											
											Weight: 42 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
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
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 10-4-2.
(lb) - Max Horiz 7=-107 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 4, 7 except 5=-117 (LC 15)
Max Grav All reactions 250 (lb) or less at joint(s) 4 except 5=398 (LC 21), 6=305 (LC 21), 7=281 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-5=-345/181

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Exterior(2R) 3-1-12 to 6-10-12, Exterior(2E) 6-10-12 to 9-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 4 except (jt=lb) 5=116.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

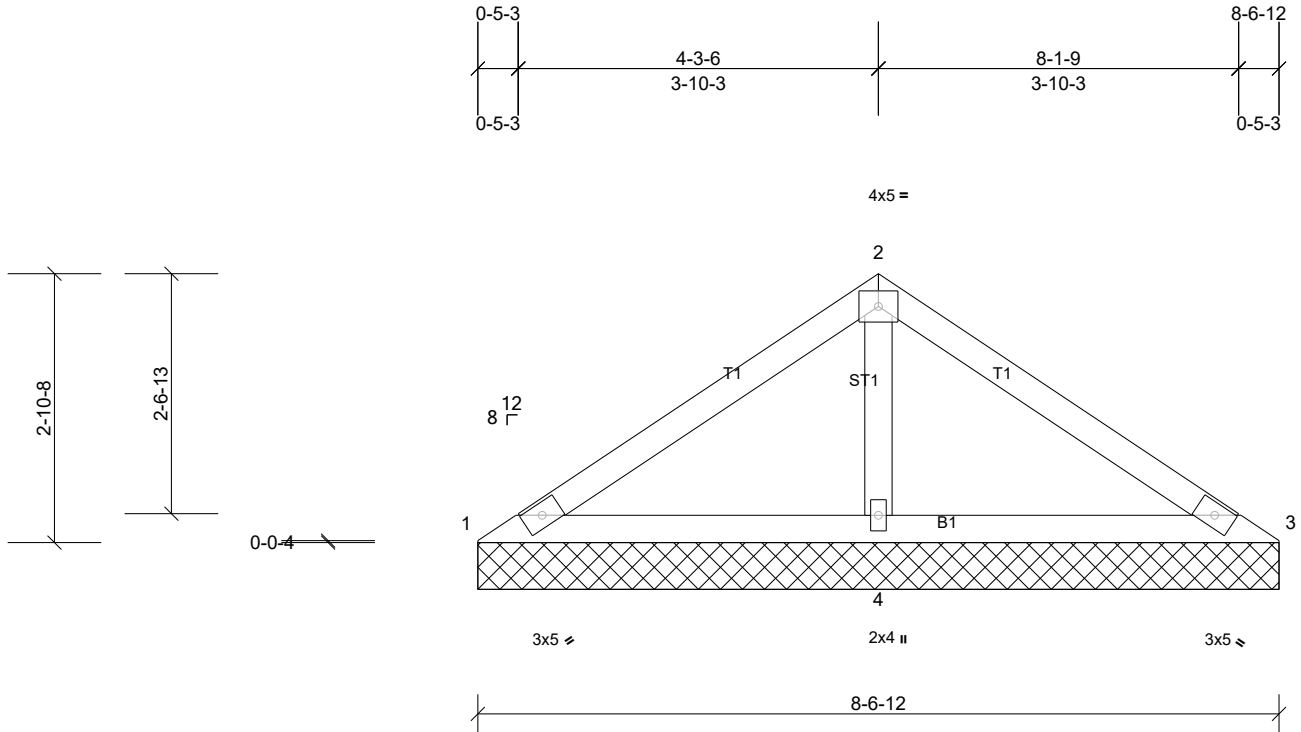
Job 21030029-A	Truss VL11	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:24.7

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)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/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
 BOT CHORD

Structural wood sheathing directly applied or 8-4-8 oc purlins.
 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 8-6-12.
 (lb) - Max Horiz 1=-63 (LC 10)
 Max Uplift All uplift 100 (lb) or less at joint(s) 3, 4, 9 except 1=-146 (LC 21)
 Max Grav All reactions 250 (lb) or less at joint(s) 1, 3, 9 except 4=871 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-152/498, 2-3=-89/548
 BOT CHORD 1-4=-400/145, 3-4=-400/145
 WEBS 2-4=-728/189

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) -0-2-10 to 2-9-6, Exterior(2R) 2-9-6 to 5-4-2, Exterior(2E) 5-4-2 to 8-4-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 3 except (jt=lb) 1=145.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

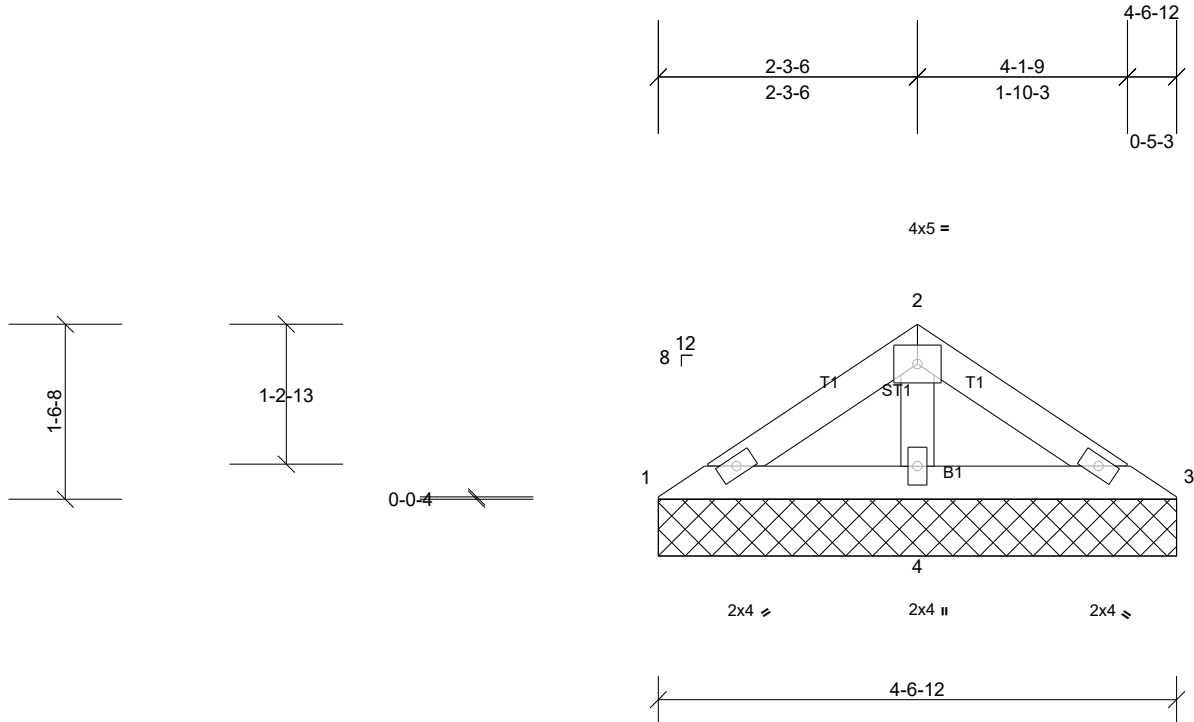
Job 21030029-A	Truss VL12	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:20.4

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 15 lb	FT = 20%

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

BRACING
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 4-6-12 oc purlins.
 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=51/4-6-12, (min. 0-1-8), 3=51/4-6-12, (min. 0-1-8),
 4=264/4-6-12, (min. 0-1-8)
 Max Horiz 1=-32 (LC 10)
 Max Uplift 1=-5 (LC 14), 3=-11 (LC 15), 4=-22 (LC 14)
 Max Grav 1=82 (LC 20), 3=82 (LC 21), 4=264 (LC 1)

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

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 1, 11 lb uplift at joint 3 and 22 lb uplift at joint 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

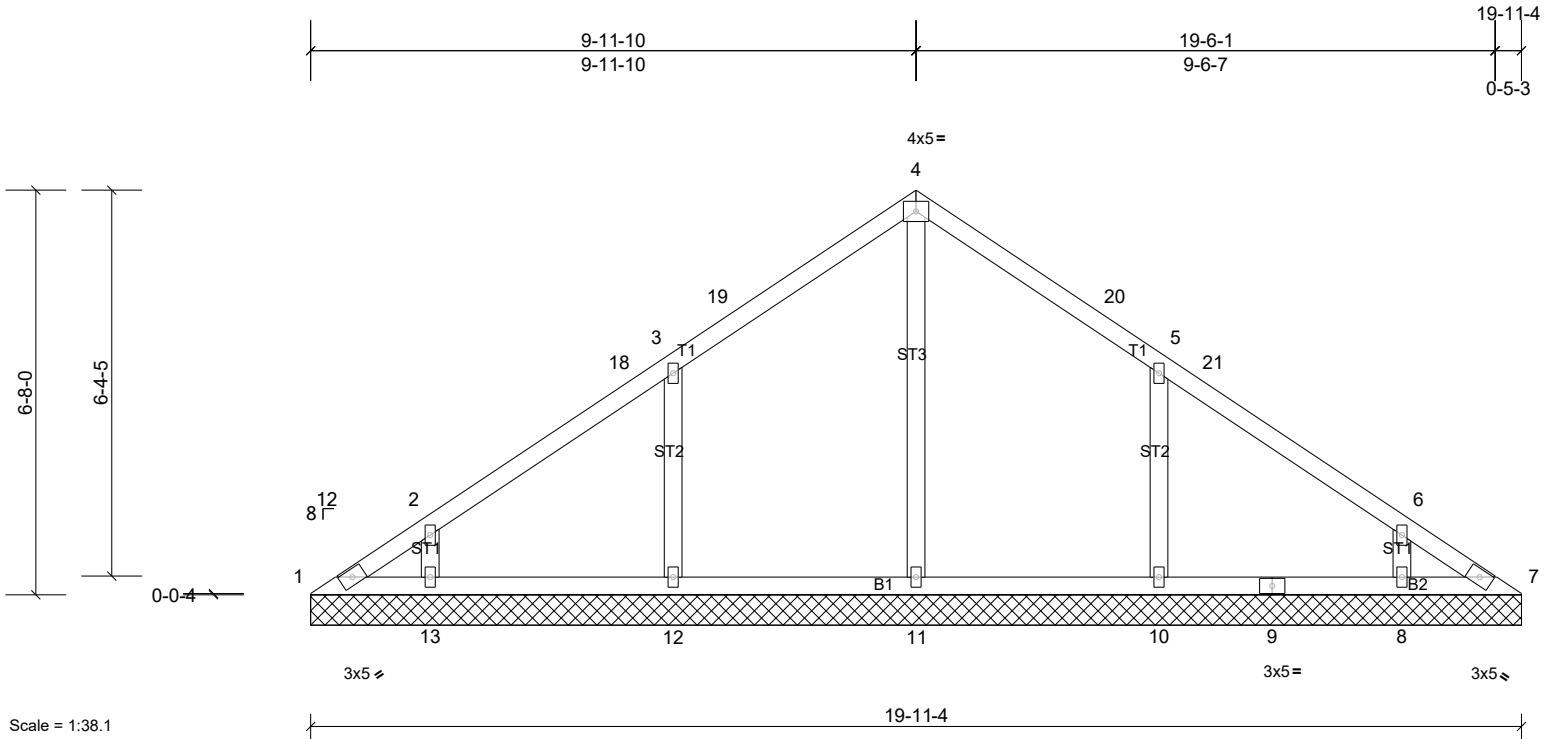
Job 21030029-A	Truss VL13	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 85 lb	FT = 20%

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

BRACING
TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
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 19-11-4.
(lb) - Max Horiz 1=152 (LC 11)
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 8, 13 except 10=-134 (LC 15), 12=-134 (LC 14)
Max Grav All reactions 250 (lb) or less at joint(s) 1, 7 except 8=324 (LC 24), 10=489 (LC 6), 11=376 (LC 26), 12=489 (LC 5), 13=328 (LC 23)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-391/182, 5-10=-391/182

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0, Interior (1) 13-0-0 to 16-11-10, Exterior(2E) 16-11-10 to 19-11-10 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=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 8 except (jt=lb) 12=134, 10=134.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

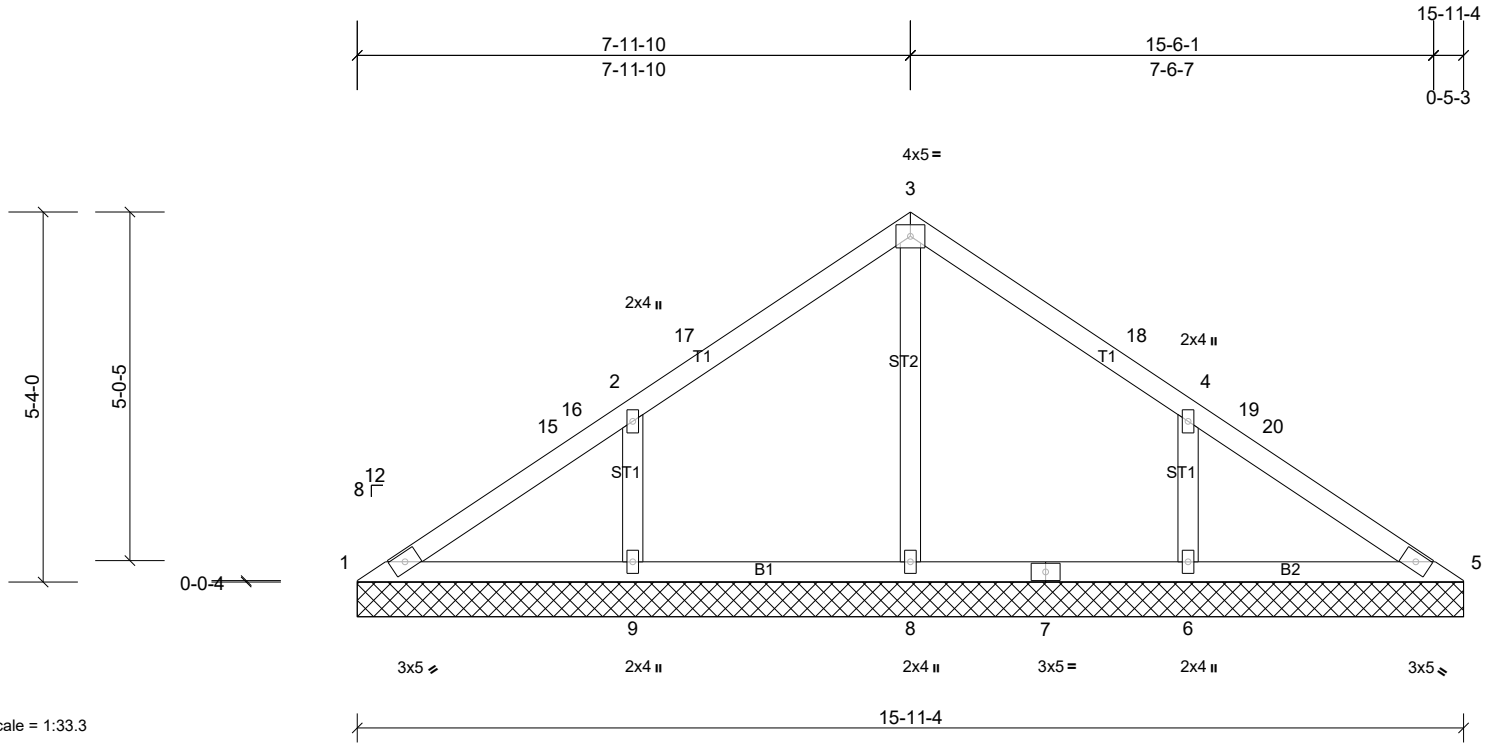
Job 21030029-A	Truss VL14	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:33.3

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	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horiz(TL)	-0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/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
 BOT CHORD

Structural wood sheathing directly applied or 10-0-0 oc purlins.
 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 15-11-4.
 (lb) - Max Horiz 1=121 (LC 13)
 Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5, 14 except 6=-133 (LC 15), 9=-136 (LC 14)
 Max Grav All reactions 250 (lb) or less at joint(s) 1 except 6=492 (LC 21), 8=564 (LC 21), 9=485 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-15=-70/277, 15-16=-54/318, 2-16=-52/335, 3-17=0/304, 3-18=0/324, 4-19=-22/319, 19-20=-24/295, 5-20=-40/272
 WEBS 3-8=-492/0, 2-9=-392/171, 4-6=-395/170

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 5-0-0, Exterior(2R) 5-0-0 to 11-0-0, Interior (1) 11-0-0 to 12-11-10, Exterior(2E) 12-11-10 to 15-11-10 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=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (t=lb) 9=136, 6=133.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

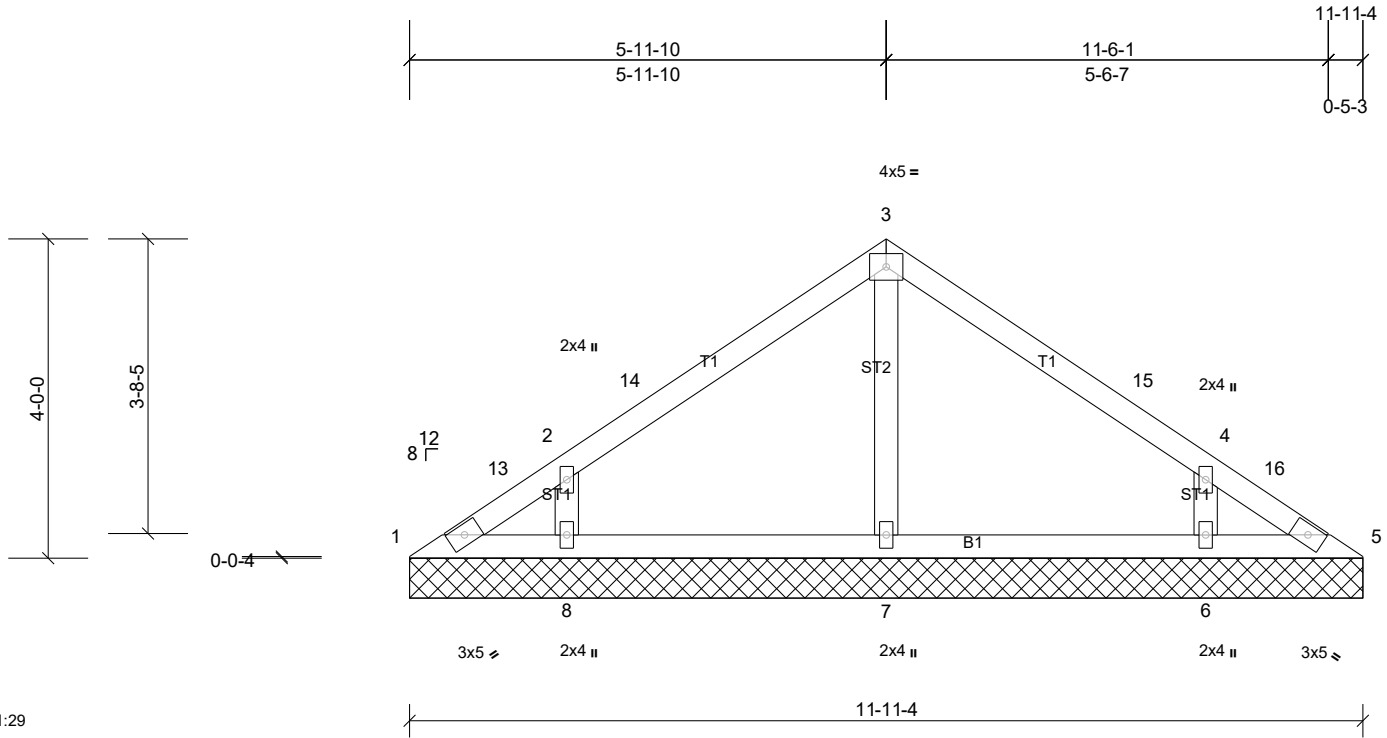
Job 21030029-A	Truss VL15	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Carter Components, Sanford, NC, user

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Scale = 1:29

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)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 45 lb	FT = 20%

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

BRACING
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
 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 11-11-4.
 (lb) - Max Horiz 1=-90 (LC 10)
 Max Uplift All uplift 100 (lb) or less at joint(s) 1 except 6=-107 (LC 15), 8=-109 (LC 14)
 Max Grav All reactions 250 (lb) or less at joint(s) 1, 5 except 6=443 (LC 21), 7=276 (LC 21), 8=443 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=-416/178, 4-6=-416/178

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 8-11-10, Exterior(2E) 8-11-10 to 11-11-10 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=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=108, 6=106.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

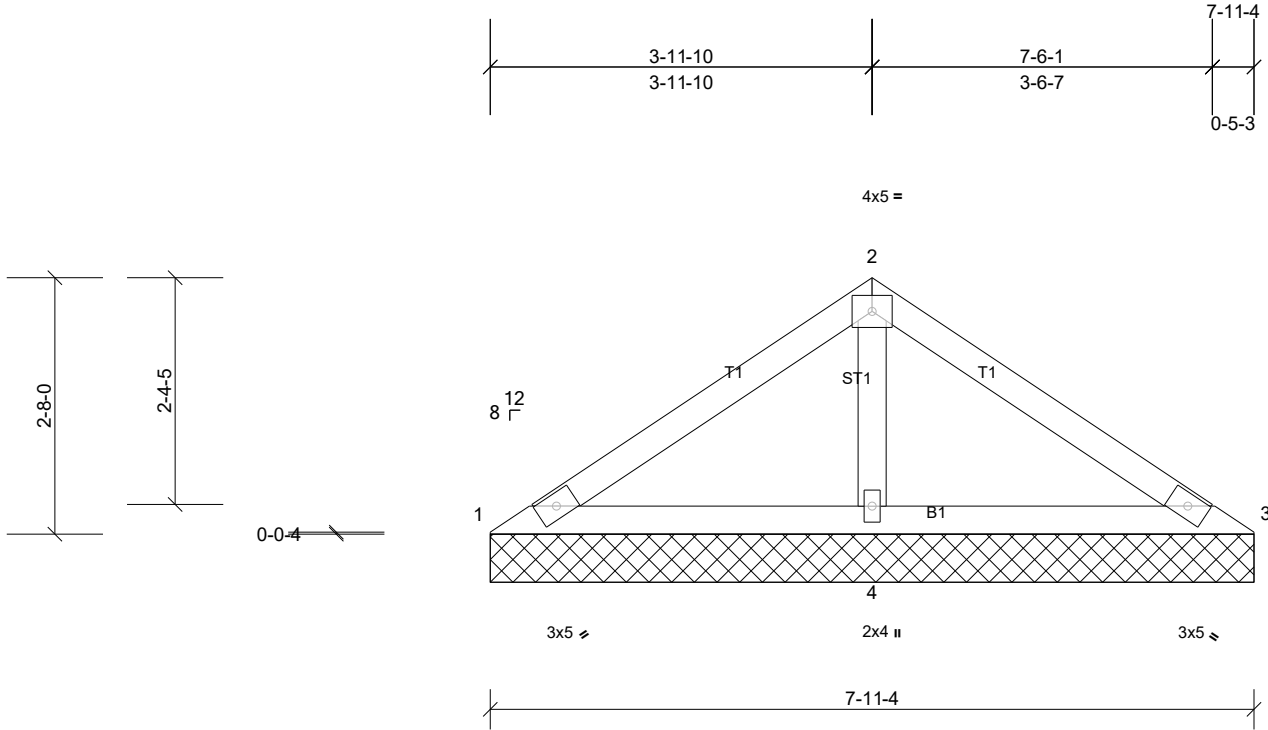
Job 21030029-A	Truss VL16	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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Scale = 1:24

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)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 27 lb	FT = 20%

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

BRACING
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 7-11-4 oc purlins.
 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=38/7-11-4, (min. 0-1-8), 3=38/7-11-4, (min. 0-1-8),
 4=558/7-11-4, (min. 0-1-8)
 Max Horiz 1=58 (LC 12)
 Max Uplift 1=-24 (LC 21), 3=-24 (LC 20), 4=-63 (LC 14)
 Max Grav 1=105 (LC 20), 3=105 (LC 21), 4=589 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-94/281, 2-3=-93/281
 WEBS 2-4=-426/188

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 4-11-10, Exterior(2E) 4-11-10 to 7-11-10 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=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 1, 24 lb uplift at joint 3 and 63 lb uplift at joint 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

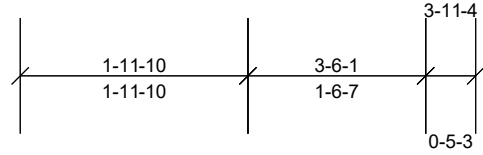
Job 21030029-A	Truss VL17	Truss Type Valley	Qty 1	Ply 1	165 Beechleaf-Roof-BB-2230 Job Reference (optional)
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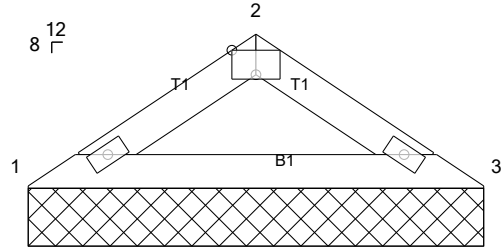
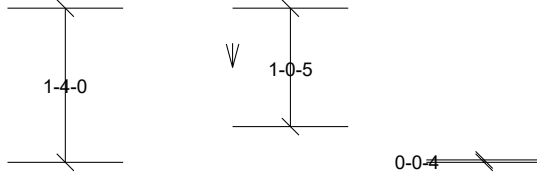
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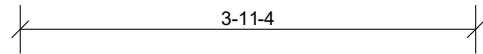


3x5 =



2x4

2x4



Scale = 1:20

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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	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	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 11 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 3-11-4 oc purlins.
Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=157/3-11-4, (min. 0-1-8), 3=157/3-11-4, (min. 0-1-8)
Max Horiz 1=27 (LC 13)
Max Uplift 1=-14 (LC 14), 3=-14 (LC 15)
Max Grav 1=182 (LC 20), 3=182 (LC 21)

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

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-263/97

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone 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=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 14 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard