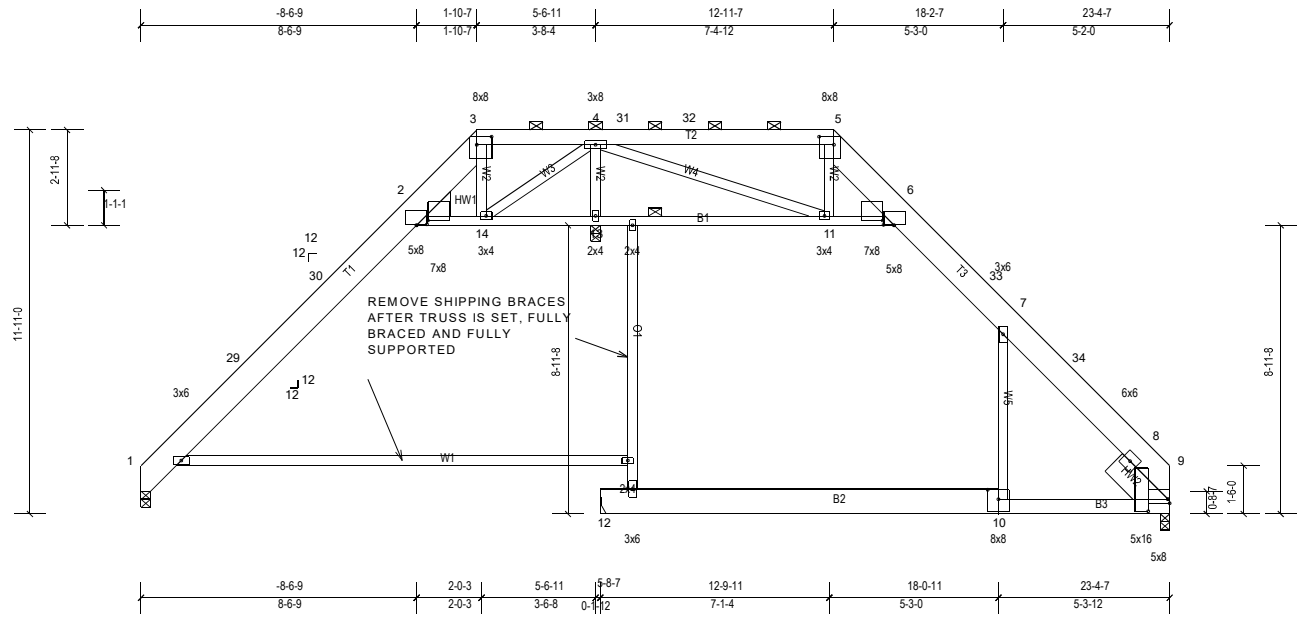
Job	Truss	Truss Type	Qty	Ply	
KELI	A01	Piggyback Base	8	1	Job Reference (optional)



Scale = 1:71.5

Plate Offsets (X, Y): [2:0-3-14,0-0-6], [2:0-4-3,0-1-13], [3:0-5-8,0-3-0], [5:0-5-8,0-3-0], [6:0-3-15,0-0-3], [6:0-4-3,0-1-13], [9:Edge,0-1-8], [9:0-4-8,0-7-6], [10:0-4-0,0-3-8]

Loading	(psf)	Spacing	1-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.26	Vert(LL)	-0.10	26	>999	360	MT20	244/190
Snow (Ps/Pg)	11.8/20.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.18	10-12	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.15	12	n/a	n/a		
BCLL	0.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	10-12	>999	240		
BCDL	10.0										Weight: 308 lb	FT = 20%

LUMBER

TOP CHORD	2x10 SP No.2 *Except* T2:2x6 SP No.2, T3:2x10 SP DSS
BOT CHORD	2x4 SP No.2 *Except* B3:2x6 SP No.2, B2:2x10 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2
WEDGE	Left: 2x10 SP No.2
SLIDER	Right 2x10 SP No.2 -- 2-0-0

BRACING

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

REACTIONS All bearings 0-3-8. except 12= Mechanical
(lb) - Max Horiz 1=-131 (LC 9)
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 13
Max Grav All reactions 250 (lb) or less at joint(s) 1, 12 except 13=946 (LC 2)

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

TOP CHORD	2-30=-79/253, 2-3=-25/526, 3-4=0/411
BOT CHORD	2-14=-455/142, 13-14=-836/151, 11-13=-836/151
WEBS	3-14=-357/51, 4-14=-84/604, 4-13=-866/127, 4-11=0/916

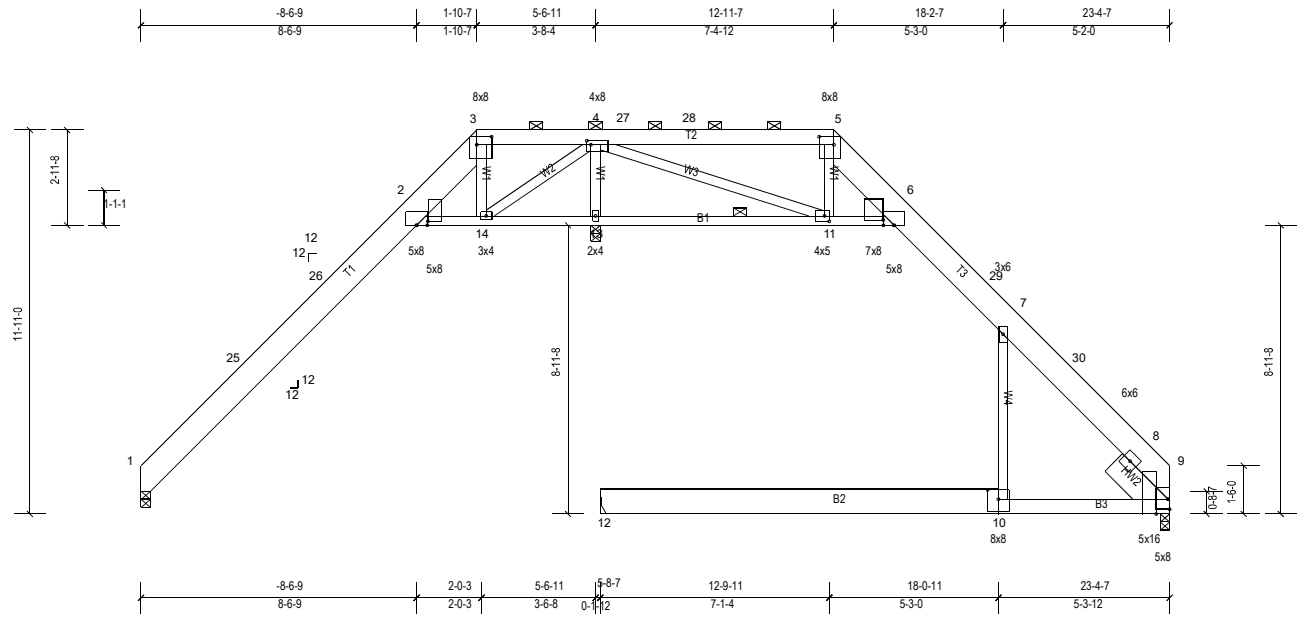
NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-12 to 3-4-1, Interior (1) 3-4-1 to 10-5-0, Exterior (2) 10-5-0 to 14-11-3, Interior (1) 14-11-3 to 21-6-0, Exterior (2) 21-6-0 to 26-0-3, Interior (1) 26-0-3 to 31-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=20.0 psf (ground snow); Ps= varies (min. roof snow=11.8 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Roof design snow load has been reduced to account for slope.
6) Provide adequate drainage to prevent water ponding.
7) Gable studs spaced at 0-0-0 oc.
8) Refer to girder(s) for truss to truss connections.
9) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 1 except (jt=lb) 9=105.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) 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

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-24=-36, 3-24=-22, 3-5=-30, 5-8=-22, 8-20=22, 9-20=-22, 23-26=-10, 12-19=-10

Job	Truss	Truss Type	Qty	Ply	
KELI	A01-ALT1	Piggyback Base	0	1	Job Reference (optional)



Scale = 1:71.5

Plate Offsets (X, Y): [2:0-1-8,0-4-4], [3:0-5-8,0-3-0], [4:0-1-8,0-1-8], [5:0-5-8,0-3-0], [6:0-1-15,0-4-1], [9:Edge,0-0-9], [9:0-5-8,Edge], [10:0-4-0,0-3-8], [11:0-1-12,0-2-0]

Loading	(psf)	Spacing	1-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.95	Vert(LL)	-0.53	10-12	>394	360	MT20	244/190
Snow (Ps/Pg)	11.8/20.0	Lumber DOL	1.25	BC	0.99	Vert(CT)	-0.68	10-12	>308	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.44	12	n/a	n/a		
BCLL	0.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	22	>999	240		
BCDL	10.0										Weight: 272 lb	FT = 20%

LUMBER
TOP CHORD 2x10 SP No.2 *Except* T2:2x6 SP No.2, T3:2x10 SP DSS
BOT CHORD 2x4 SP DSS *Except* B3:2x6 SP No.2, B2:2x10 SP DSS
WEBS 2x4 SP No.2
SLIDER Right 2x10 SP No.2 -- 2-0-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 3-1-0 oc bracing. Except:
6-0-0 oc bracing: 2-14
10-0-0 oc bracing: 6-13

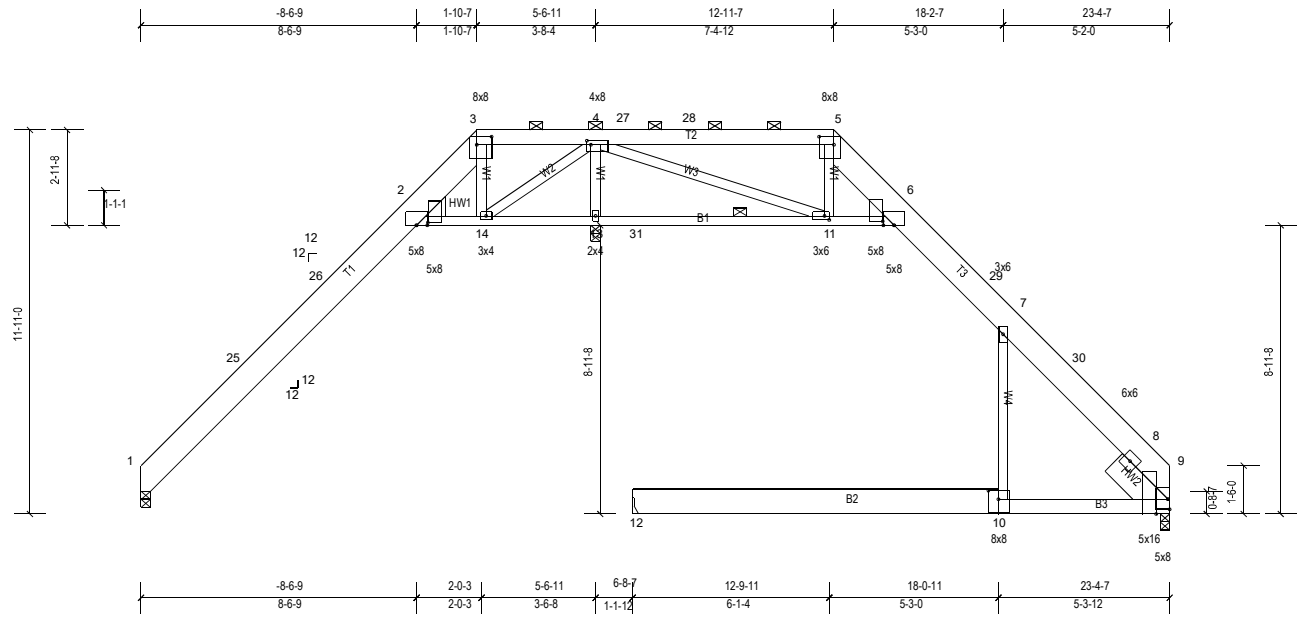
REACTIONS All bearings 0-3-8. except 12= Mechanical
(lb) - Max Horiz 1=131 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) except 1=-117 (LC 14)
Max Grav All reactions 250 (lb) or less at joint(s) 1 except 12=666 (LC 20), 13=1636 (LC 25)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 25-26=-85/265, 2-26=-60/338, 2-3=0/1041, 3-4=0/932, 4-27=-779/112, 27-28=-779/112, 5-28=-779/112, 5-6=-605/145, 7-30=-266/72, 8-30=-298/59
BOT CHORD 2-14=-886/71, 13-14=-1375/84, 11-13=-1375/84, 6-11=-83/772
WEBS 4-13=-1207/68, 3-14=-563/22, 4-14=-86/601, 7-10=0/441, 4-11=0/2028

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-12 to 3-4-1, Interior (1) 3-4-1 to 10-5-0, Exterior (2) 10-5-0 to 14-11-3, Interior (1) 14-11-3 to 21-6-0, Exterior (2) 21-6-0 to 26-0-3, Interior (1) 26-0-3 to 31-9-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=20.0 psf (ground snow); Ps= varies (min. roof snow=11.8 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Roof design snow load has been reduced to account for slope.
5) Provide adequate drainage to prevent water ponding.
6) Refer to girder(s) for truss to truss connections.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=117.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) 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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-20=-36, 3-20=-22, 3-5=-30, 5-8=-22, 8-16=22, 9-16=-22, 13-19=-10, 13-22=-20, 10-12=-20, 10-15=-10

Job	Truss	Truss Type	Qty	Ply	
KELI	A01-ALT2	Piggyback Base	0	1	Job Reference (optional)



Scale = 1:71.5

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

Loading	(psf)	Spacing	1-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.86	Vert(LL)	-0.45	10-12	>439	360	MT20	244/190
Snow (Ps/Pg)	11.8/20.0	Lumber DOL	1.25	BC	0.88	Vert(CT)	-0.58	10-12	>343	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.40	12	n/a	n/a		
BCLL	0.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	22	>999	240		
BCDL	10.0										Weight: 270 lb	FT = 20%

LUMBER

TOP CHORD	2x10 SP No.2 *Except* T2:2x6 SP No.2, T3:2x10 SP DSS
BOT CHORD	2x4 SP DSS *Except* B3:2x6 SP No.1, B2:2x10 SP DSS
WEBS	2x4 SP No.2
WEDGE	Left: 2x8 SP No.2
SLIDER	Right 2x10 SP No.2 -- 2-0-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 5-8-0 oc bracing. Except: 6-0-0 oc bracing: 2-14 10-0-0 oc bracing: 6-13

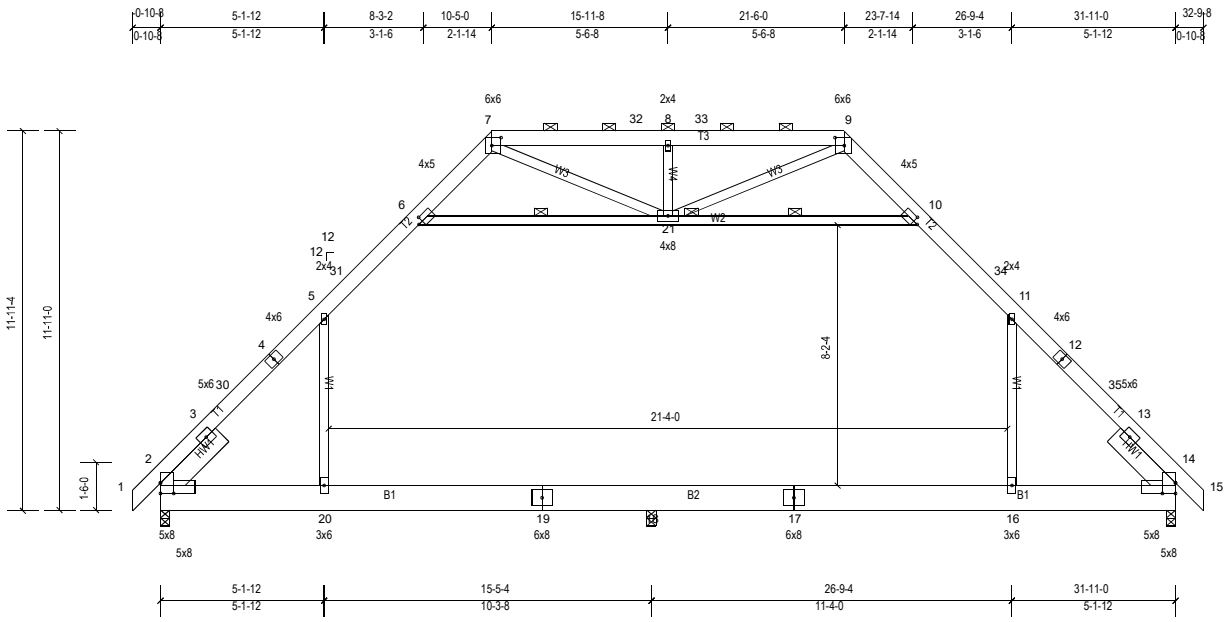
REACTIONS All bearings 0-3-8. except 12= Mechanical
(lb) - Max Horiz 1=-131 (LC 9)
Max Uplift All uplift 100 (lb) or less at joint(s) 13 except 1=-115 (LC 14)
Max Grav All reactions 250 (lb) or less at joint(s) 1 except 12=632 (LC 20), 13=1506 (LC 25)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 25-26=-88/255, 2-26=-62/328, 2-3=0/981, 3-4=0/870, 4-27=-740/116, 27-28=-740/116, 5-28=-740/116, 5-6=-596/145, 8-30=-260/66
BOT CHORD 2-14=-818/81, 13-14=-1313/97, 13-31=-1313/97, 11-31=-1313/97, 6-11=-90/733
WEBS 4-13=-1171/77, 3-14=-538/26, 4-14=-88/602, 7-10=0/338, 4-11=0/1911

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-12 to 3-4-1, Interior (1) 3-4-1 to 10-5-0, Exterior (2) 10-5-0 to 14-11-3, Interior (1) 14-11-3 to 21-6-0, Exterior (2) 21-6-0 to 26-0-3, Interior (1) 26-0-3 to 31-9-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=20.0 psf (ground snow); Ps= varies (min. roof snow=11.8 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Roof design snow load has been reduced to account for slope.
5) Provide adequate drainage to prevent water ponding.
6) Refer to girder(s) for truss to truss connections.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 13 except (jt=lb) 1=115.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) 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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-20=-36, 3-20=-22, 3-5=-30, 5-8=-22, 8-16=22, 9-16=-22, 19-31=-10, 22-31=-20, 10-12=-20, 10-15=-10

Job	Truss	Truss Type	Qty	Ply	
KELI	C01	Attic	9	1	Job Reference (optional)



Scale = 1:72.4

Plate Offsets (X, Y): [2:0-5-0,0-4-0], [6:0-1-13,0-2-0], [7:0-3-8,0-3-0], [9:0-3-8,0-3-0], [10:0-1-13,0-2-0], [14:0-5-0,0-4-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.67	Vert(LL)	-0.22	16-18	>910	360	MT20	244/190
Snow (Ps/Pg)	11.8/20.0	Lumber DOL	1.25	BC	0.85	Vert(CT)	-0.31	16-18	>639	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.04	14	n/a	n/a		
BCLL	0.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.18	16-18	>999	240		
BCDL	10.0										Weight: 303 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP No.2 *Except* B2:2x10 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP No.2 -- 2-6-0, Right 2x8 SP No.2 -- 2-6-0

REACTIONS (lb/size) 2=1156/0-3-8, (min. 0-1-10), 14=1173/0-3-8, (min. 0-1-11), 18=522/0-3-8, (min. 0-1-15)
Max Horiz 2=282 (LC 12)
Max Uplift 2=-13 (LC 13), 14=-15 (LC 14)
Max Grav 2=1374 (LC 3), 14=1419 (LC 3), 18=1619 (LC 20)

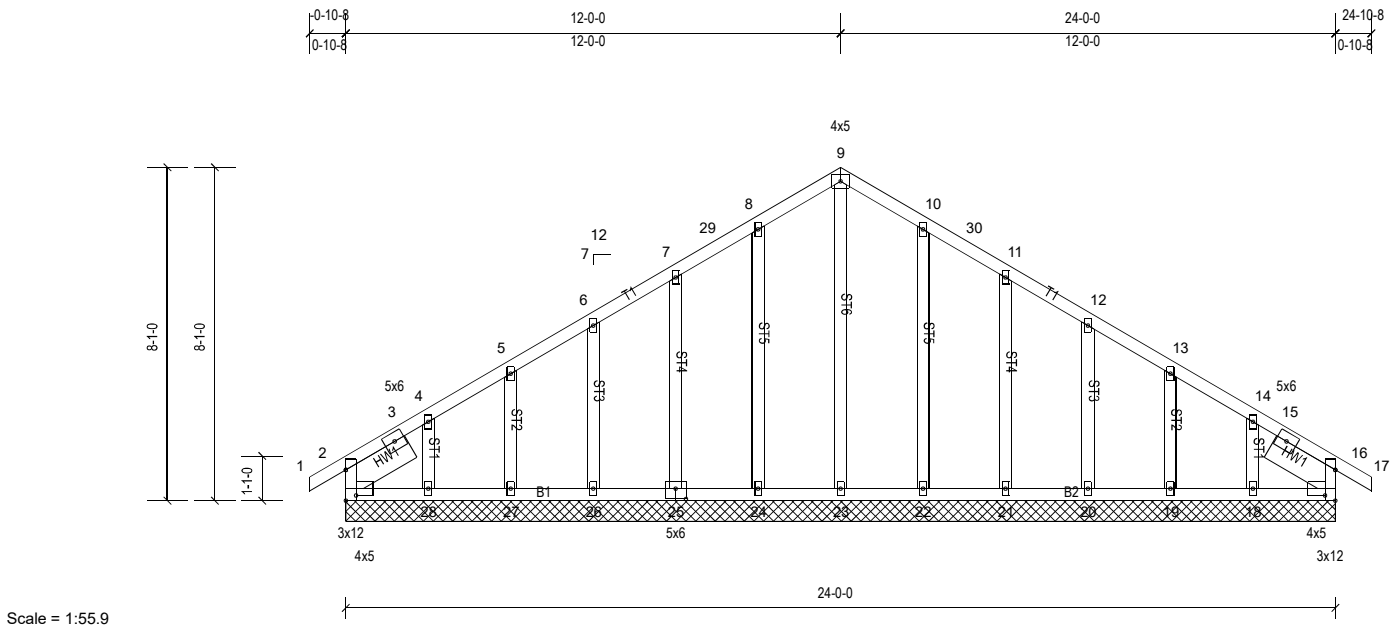
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-4 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 6-10-3 oc bracing.
WEBS 1 Row at midpt 6-21, 10-21
JOINTS 1 Brace at Jt(s): 21

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-681/95, 3-30=-1429/95, 4-30=-1353/101, 4-5=-1313/118, 5-31=-1124/221, 6-31=-998/253, 6-7=-650/241, 7-32=-873/287, 8-32=-873/287, 8-33=-873/287, 9-33=-873/287, 9-10=-649/234, 10-34=-996/253, 11-34=-1122/221, 11-12=-1328/114, 12-35=-1368/96, 13-35=-1445/90, 13-14=-464/52
BOT CHORD 2-20=-108/910, 19-20=-53/910, 18-19=-53/910, 17-18=-53/910, 16-17=-53/910, 14-16=-53/909
WEBS 5-20=-107/448, 11-16=-80/461, 6-21=-793/191, 10-21=-757/178, 7-21=-205/637, 8-21=-380/162, 9-21=-207/628

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-2-1 to 3-0-4, Interior (1) 3-0-4 to 11-1-7, Exterior (2) 11-1-7 to 15-7-10, Interior (1) 15-7-10 to 22-2-7, Exterior (2) 22-2-7 to 26-8-10, Interior (1) 26-8-10 to 33-5-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=20.0 psf (ground snow); Ps= varies (min. roof snow=11.8 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Roof design snow load has been reduced to account for slope.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) Ceiling dead load (5.0 psf) on member(s). 5-6, 10-11, 6-21, 10-21; Wall dead load (5.0psf) on member(s).5-20, 11-16
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 18-20, 16-18
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 14 and 13 lb uplift at joint 2.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-44, 5-6=-54, 6-7=-44, 7-9=-61, 9-10=-44, 10-11=-54, 11-15=-44, 20-26=-20, 16-20=-30, 16-22=-20, 6-21=-10, 10-21=-10
Drag: 5-20=-10, 11-16=-10

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



Scale = 1:55.9

Plate Offsets (X, Y): [2:0-3-0,0-7-7], [16:0-3-0,0-7-7], [25:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	16	n/a	n/a		
BCLL	0.0	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 163 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2
SLIDER Left 2x8 SP No.2 -- 1-10-8, Right 2x8 SP No.2 -- 1-10-8

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

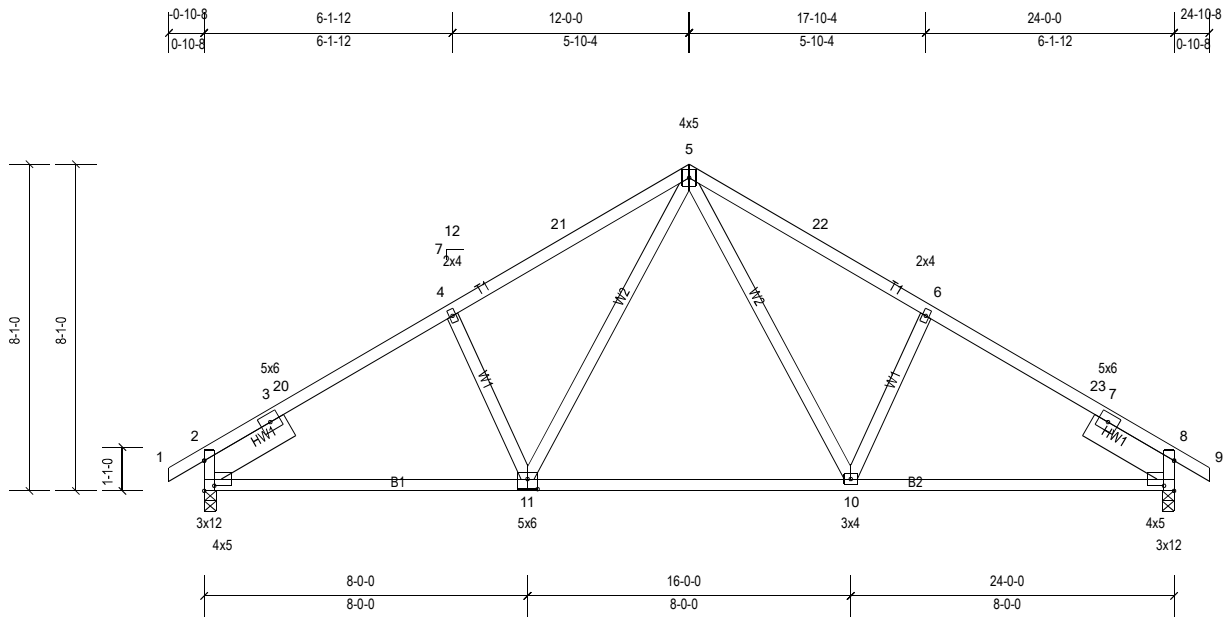
REACTIONS All bearings 24-0-0.
(lb) - Max Horiz 2=191 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 16, 19, 20, 21, 22, 24, 25, 26, 27 except 18=-108 (LC 16), 28=-127 (LC 15)
Max Grav All reactions 250 (lb) or less at joint(s) 2, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28

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

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-10-8 to 2-0-0, Exterior (2) 2-0-0 to 12-0-0, Corner (3) 12-0-0 to 15-0-0, Exterior (2) 15-0-0 to 24-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=20.0 psf (ground snow); Ps=15.4 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Roof design snow load has been reduced to account for slope.
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 2-0-0 oc.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 24, 25, 26, 27, 22, 21, 20, 19, 16 except (jt=lb) 28=126, 18=108.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
KELI	D02	Common	6	1	Job Reference (optional)



Scale = 1:57

Plate Offsets (X, Y): [2:0-3-0,0-7-7], [8:0-3-0,0-7-7], [11:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.51	Vert(LL)	-0.09	10-11	>999	360	MT20	244/190
Snow (Ps/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.22	10-11	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.06	8	n/a	n/a		
BCLL	0.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.05	10-11	>999	240		
BCDL	10.0										Weight: 134 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP No.2 -- 2-6-0, Right 2x8 SP No.2 -- 2-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

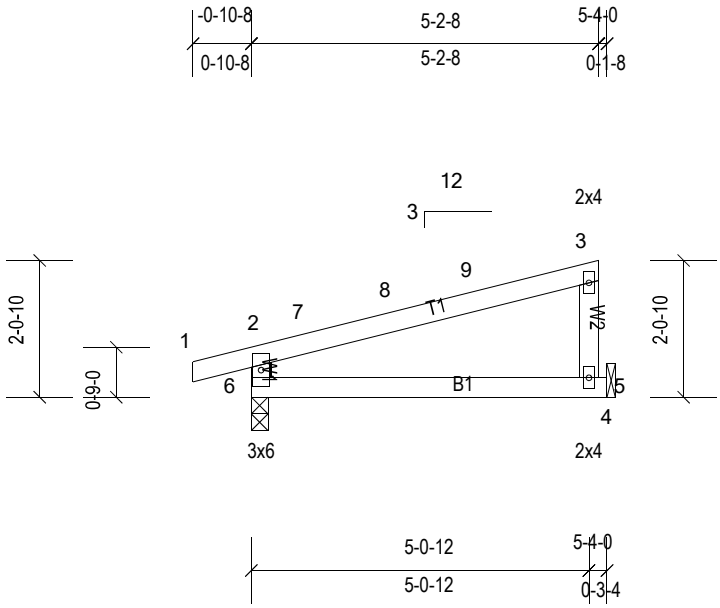
REACTIONS (lb/size) 2=894/0-3-8, (min. 0-1-8), 8=894/0-3-8, (min. 0-1-8)
Max Horiz 2=-186 (LC 13)
Max Uplift 2=-123 (LC 15), 8=-123 (LC 16)
Max Grav 2=1013 (LC 2), 8=1013 (LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-20=-1262/147, 4-20=-1251/171, 4-21=-1156/210, 5-21=-1068/228, 5-22=-1068/228, 6-22=-1156/210, 6-23=-1251/171, 7-23=-1262/147
BOT CHORD 2-11=-209/1045, 10-11=-25/749, 8-10=-56/1019
WEBS 5-10=-121/444, 6-10=-269/217, 5-11=-121/444, 4-11=-269/217

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 12-0-0, Exterior (2) 12-0-0 to 15-0-0, Interior (1) 15-0-0 to 24-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=20.0 psf (ground snow); Ps=15.4 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Roof design snow load has been reduced to account for slope.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 2 and 123 lb uplift at joint 8.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
KELI	J01	Jack-Closed	8	1	Job Reference (optional)



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	1.25	TC	0.23	Vert(LL)	0.00	5-6	>999	360	MT20	244/190
Snow (Ps/Pg)	15.4/20.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	-0.02	5-6	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.01	5-6	>999	240		
BCDL	10.0										Weight: 20 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

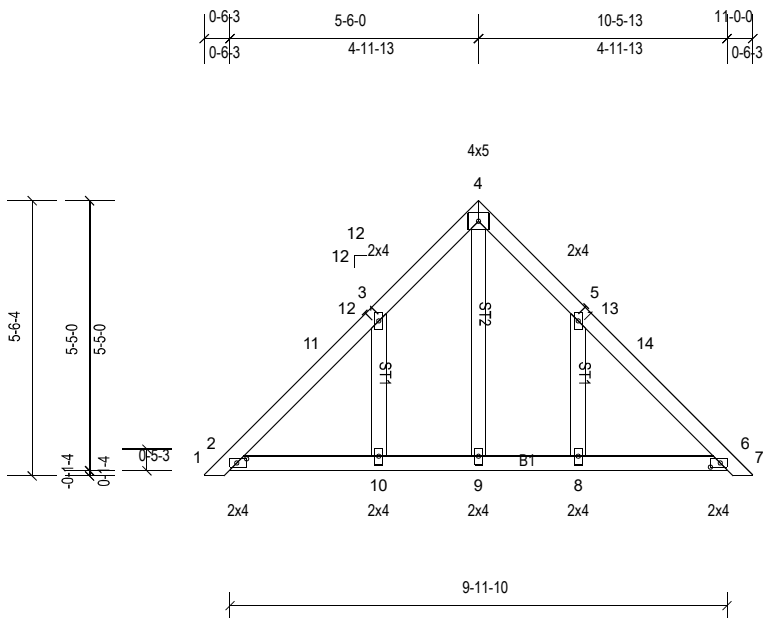
REACTIONS (lb/size) 5=174/ Mechanical, (min. 0-1-8), 6=231/0-3-0, (min. 0-1-8)
Max Horiz 6=73 (LC 12)
Max Uplift 5=-36 (LC 15), 6=-75 (LC 11)
Max Grav 5=196 (LC 2), 6=264 (LC 2)

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

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-0-12 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
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=20.0 psf (ground snow); Ps=15.4 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10; Min. flat roof snow load governs.
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 6 and 36 lb uplift at joint 5.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
KELI	P01	Piggyback	2	1	Job Reference (optional)



Scale = 1:46.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pg)	11.9/20.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 53 lb	FT = 20%

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

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

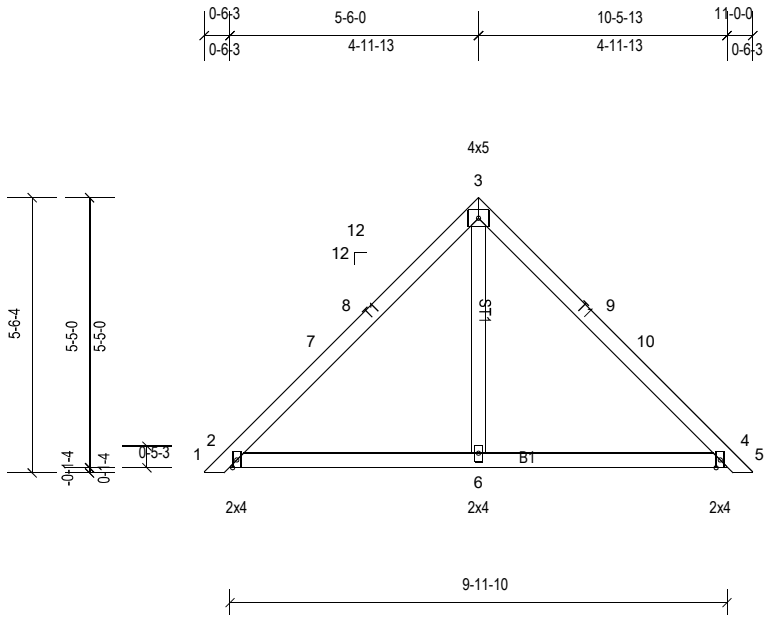
REACTIONS All bearings 9-11-10.
(lb) - Max Horiz 2=-131 (LC 11)
Max Uplift All uplift 100 (lb) or less at joint(s) 2 except 8=-171 (LC 14), 10=-172 (LC 13)
Max Grav All reactions 250 (lb) or less at joint(s) 2, 6, 9 except 8=288 (LC 26), 10=289 (LC 25)

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

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 5-6-8, Exterior (2) 5-6-8 to 8-6-8, Interior (1) 8-6-8 to 10-10-2 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=20.0 psf (ground snow); Ps=11.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Roof design snow load has been reduced to account for slope.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 10=172, 8=171.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
KELI	P02	Piggyback	15	1	Job Reference (optional)



Scale = 1:46.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pg)	11.9/20.0	Lumber DOL	1.25	BC	0.19	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2015/TPI2014	Matrix-S								
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.2

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

REACTIONS (lb/size) 2=185/9-11-10, (min. 0-1-8), 4=185/9-11-10, (min. 0-1-8), 6=293/9-11-10, (min. 0-1-8)
Max Horiz 2=-131 (LC 11)
Max Uplift 2=-43 (LC 14), 4=-47 (LC 14), 6=-11 (LC 13)
Max Grav 2=239 (LC 2), 4=239 (LC 2), 6=358 (LC 2)

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

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 5-6-8, Exterior (2) 5-6-8 to 8-6-8, Interior (1) 8-6-8 to 10-10-2 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=20.0 psf (ground snow); Ps=11.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Roof design snow load has been reduced to account for slope.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 6-0-0 oc.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 2, 47 lb uplift at joint 4 and 11 lb uplift at joint 6.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard