Job	Truss	Truss Type	Qty	Ply	
D2745-1	GE1A	Piggyback Base Supported Gable	1	1	Job Reference (optional)

Run: 8.71 S Sep 7 2023 Print: 8.710 S Sep 7 2023 MiTek Industries, Inc. Tue Mar 26 09:10:51 Page: 1
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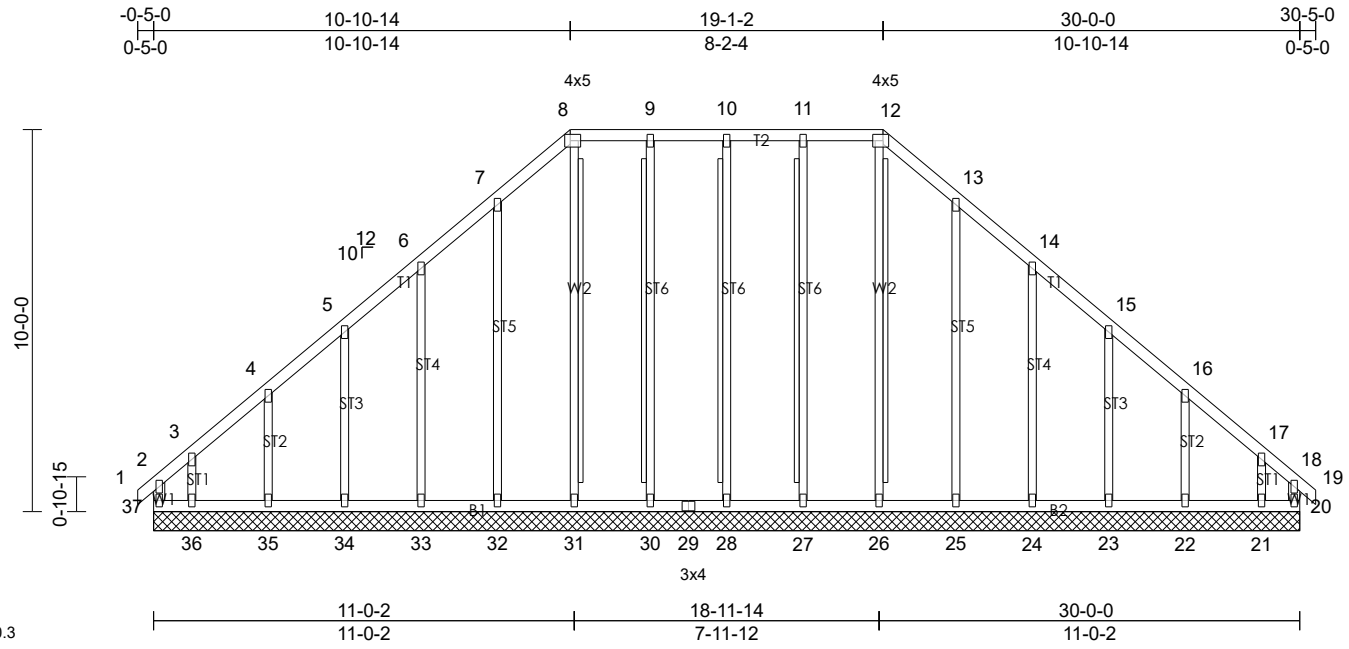


Scale = 1:60.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Ps/Pg)	28.6/40.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	20	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R								
BCDL	10.0										Weight: 154 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 SPF 1650F 1.5E *Except* W2:2x3 SPF 1650F 1.5E
OTHERS	2x3 SPF 1650F 1.5E *Except* O1:2x4 SPF No.2(flat)

BRACING

TOP CHORD	Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	T-Brace: 2x4 SPF No.2 - 10-28, 9-30, 11-27, 8-31, 12-26

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

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

REACTIONS All bearings 30-0-0.

(lb) - Max Horiz 37=-171 (LC 9)
Max Uplift All uplift 100 (lb) or less at joint(s) 20, 22, 23, 24, 25, 27, 28, 30, 31, 32, 33, 34, 35 except 21=-143 (LC 12), 36=-143 (LC 12), 37=-143 (LC 9)
Max Grav All reactions 250 (lb) or less at joint (s) 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37

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

JOINT STRESS INDEX

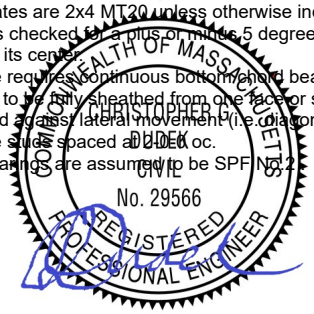
2 = 0.61, 3 = 0.50, 4 = 0.50, 5 = 0.50, 6 = 0.50, 7 = 0.50, 8 = 0.35, 9 = 0.44, 10 = 0.44, 11 = 0.44, 12 = 0.35, 13 = 0.50, 14 = 0.50, 15 = 0.50, 16 = 0.50, 17 = 0.50, 18 = 0.61, 20 = 0.55, 21 = 0.44, 22 = 0.44, 23 = 0.44, 24 = 0.44, 25 = 0.44, 26 = 0.44, 27 = 0.44, 28 = 0.44, 29 = 0.29, 30 = 0.44, 31 = 0.44, 32 = 0.44, 33 = 0.44, 34 = 0.44, 35 = 0.44, 36 = 0.44 and 37 = 0.55

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; B=0ft; L=30ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-5-0 to 2-7-0, Exterior (2N) 2-7-0 to 7-10-14, Corner(3R) 7-10-14 to 13-10-14, Exterior(2N) 13-10-14 to 16-1-2, Corner(3R) 16-1-2 to 22-1-2, Exterior(2N) 22-1-2 to 27-5-0, Corner(3E) 27-5-0 to 30-5-0 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
3) The Overhang is NOT EXPOSED to the wind on the LEFT SIDE.
4) The Overhang is NOT EXPOSED to the wind on the RIGHT SIDE.
5) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
6) ** TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=40.0 psf; Ps= varies (28.6 psf Lum DOL=1.15 Plate DOL=1.15) see load cases; Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=0.93,1.00,0.93; Ct=1.10, Lu=20-0-0
7) Roof design snow load has been reduced to account for slope.
8) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 30.8 psf on overhangs non-concurrent with other live loads.
9) Provide adequate drainage to prevent water ponding.
10) All plates are 2x4 MT20 unless otherwise indicated.
11) Plates checked for a plus or minus 5 degree rotation about its center.
12) Gable requires continuous bottom chord bearing.
13) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
14) Gable studs spaced at 2-0-0 oc.
15) All bearings are assumed to be SPF No.2.
16) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 20, 28, 30, 32, 33, 34, 35, 27, 25, 24, 23, 22 except (jt=lb) 37=142, 36=143, 21=143.
17) 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.
18) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-77, 2-8=-77, 8-12=-82, 12-18=-77, 18-19=-77, 20-37=-20



Job	Truss	Truss Type	Qty	Ply	
D2745-1	GE1B	Piggyback Base Structural Gable	1	1	Job Reference (optional)

Run: 8.71 S Sep 7 2023 Print: 8.710 S Sep 7 2023 MiTek Industries, Inc. Tue Mar 26 09:10:51 Page: 1
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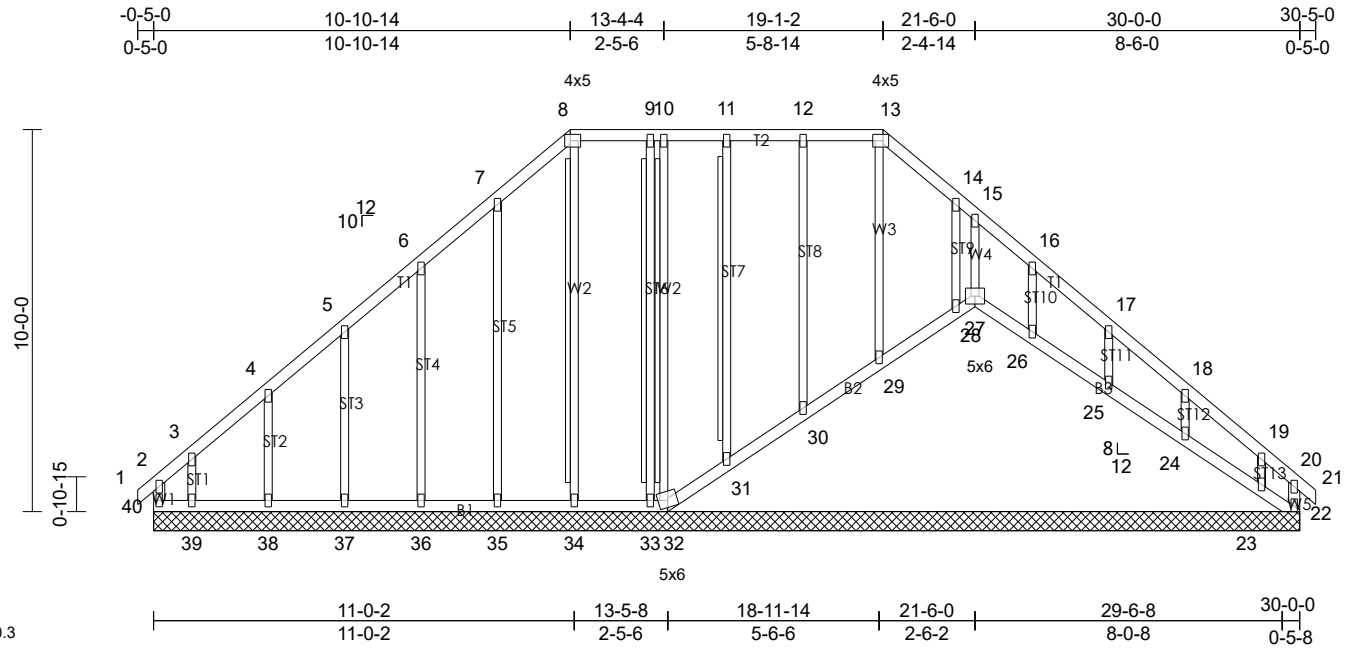


Scale = 1:60.3

Plate Offsets (X, Y): [8:0-3-4,0-2-0], [13:0-3-4,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Ps/Pg)	28.6/40.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	22	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R								
BCDL	10.0										Weight: 150 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x3 SPF 1650F 1.5E *Except* W1,W5:2x4 SPF 1650F 1.5E
OTHERS	2x3 SPF 1650F 1.5E *Except* O1,O2:2x4 SPF No.2(flat)

BRACING

TOP CHORD	Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	T-Brace: 2x4 SPF No.2 - 8-34, 10-32, 11-31, 9-33

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

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

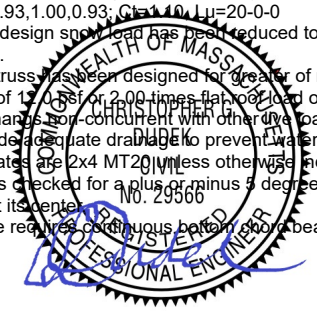
REACTIONS All bearings 30-0-0.
(lb) - Max Horiz 40=174 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 22, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38 except 23=-147 (LC 12), 39=-129 (LC 12), 40=-161 (LC 9)
Max Grav All reactions 250 (lb) or less at joint (s) 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40

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

JOINT STRESS INDEX
2 = 0.67, 3 = 0.50, 4 = 0.50, 5 = 0.50, 6 = 0.50, 7 = 0.50, 8 = 0.35, 9 = 0.44, 10 = 0.44, 11 = 0.44, 12 = 0.44, 13 = 0.35, 14 = 0.50, 15 = 0.50, 16 = 0.50, 17 = 0.50, 18 = 0.50, 19 = 0.50, 20 = 0.50, 22 = 0.60, 23 = 0.49, 24 = 0.49, 25 = 0.49, 26 = 0.49, 27 = 0.28, 28 = 0.49, 29 = 0.49, 30 = 0.49, 31 = 0.49, 32 = 0.27, 33 = 0.44, 34 = 0.44, 35 = 0.44, 36 = 0.44, 37 = 0.44, 38 = 0.44, 39 = 0.44 and 40 = 0.60

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; B=0ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior (1) 2-7-0 to 6-7-15, Exterior(2R) 6-7-15 to 23-4-1, Interior (1) 23-4-1 to 27-5-0, Exterior(2E) 27-5-0 to 30-5-0 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
3) The Overhang is NOT EXPOSED to the wind on the LEFT SIDE.
4) The Overhang is NOT EXPOSED to the wind on the RIGHT SIDE.
5) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
6) ** TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=40.0 psf; Ps= varies (28.6 psf Lum DOL=1.15 Plate DOL=1.15) see load cases; Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=0.93,1.00,0.93; Ct=1.10, Lu=20-0-0
7) Roof design snow load has been reduced to account for slope.
8) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 30.8 psf on overhangs non-concurrent with other live loads.
9) Provide adequate drainage to prevent water ponding.
10) All plates are 2x4 MT20 unless otherwise indicated.
11) Plates checked for a plus or minus 5 degree rotation about its center.
12) Gable requires continuous bottom chord bearing.
13) Gable studs spaced at 2-0-0 oc.
14) All bearings are assumed to be SPF No.2 .
15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 32, 27, 22, 34, 31, 33, 35, 36, 37, 38, 30, 28, 26, 25, 24 except (jt=lb) 40=161, 39=128, 23=147.
16) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 27, 29, 31, 30, 28, 26, 25, 24, 23.
17) 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.
18) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-77, 2-8=-77, 8-13=-82, 13-20=-77, 20-21=-77, 32-40=-20, 27-32=-20, 22-27=-20



Job	Truss	Truss Type	Qty	Ply	
D2745-1	P1	Piggyback	34	1	Job Reference (optional)

Run: 8.71 S Sep 7 2023 Print: 8.710 S Sep 7 2023 MiTek Industries, Inc. Tue Mar 26 09:10:52 Page: 1
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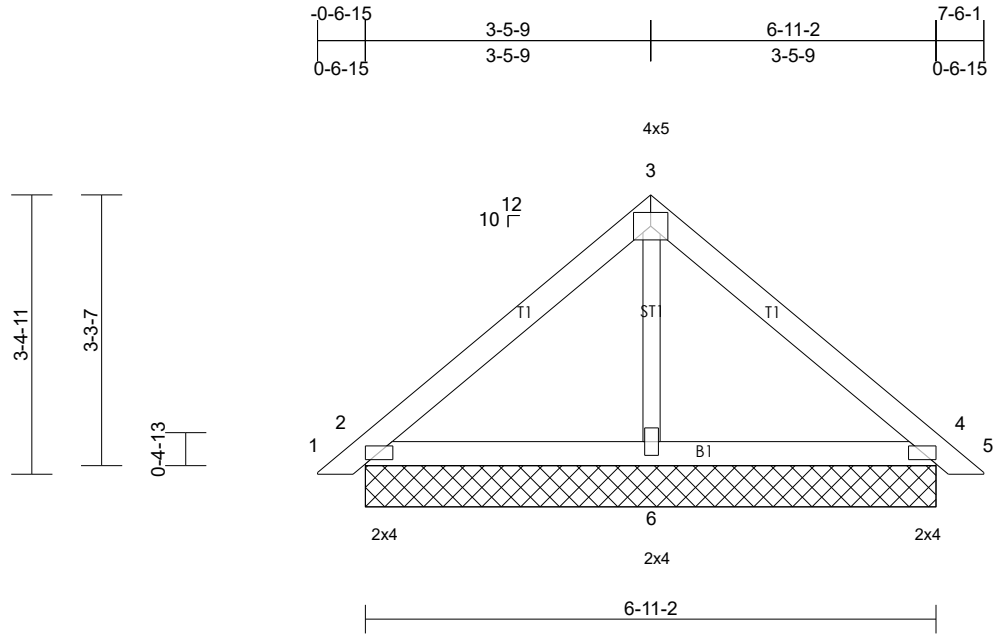


Scale = 1:28

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

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	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Ps/Pg)	28.6/40.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 22 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x3 SPF 1650F 1.5E

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

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

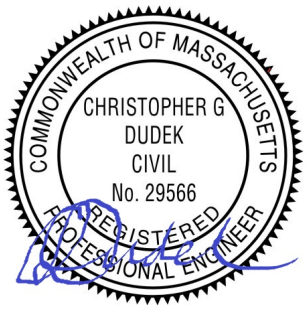
REACTIONS (size) 2=6-11-2, (min. 0-1-8), 4=6-11-2, (min. 0-1-8), 6=6-11-2, (min. 0-1-8)
Max Horiz 2=-54 (LC 9)
Max Uplift 2=-75 (LC 12), 4=-75 (LC 12), 6=-43 (LC 12)
Max Grav 2=235 (LC 1), 4=235 (LC 1), 6=260 (LC 1)

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

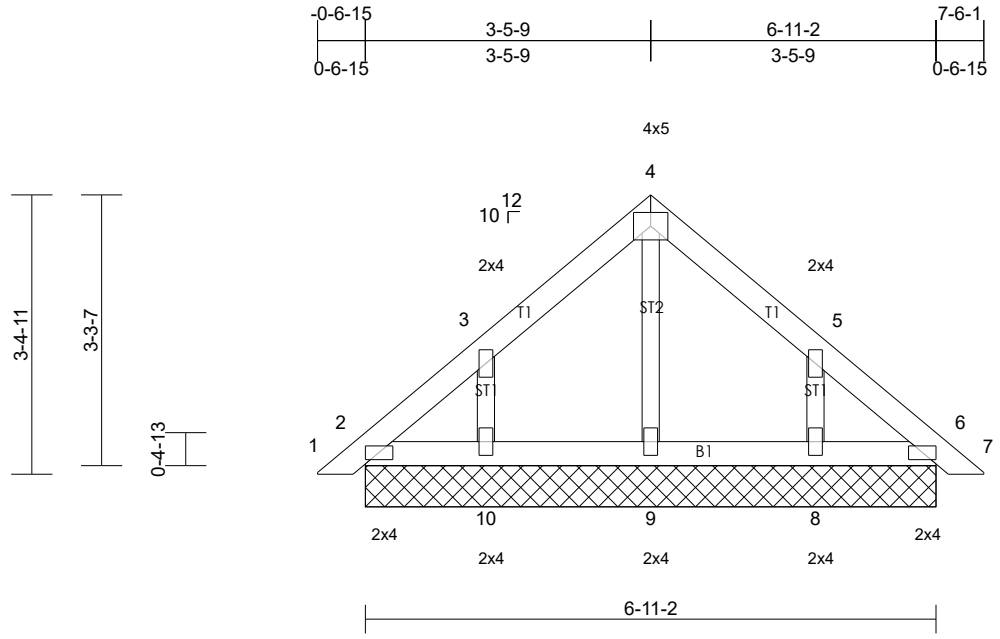
JOINT STRESS INDEX
2 = 0.39, 3 = 0.09, 4 = 0.39 and 6 = 0.09

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; B=0ft; L=7ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-3 to 3-3-3, Exterior (2R) 3-3-3 to 4-11-1, Exterior(2E) 4-11-1 to 7-11-1 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) The Overhang is NOT EXPOSED to the wind on the LEFT SIDE.
4) The Overhang is NOT EXPOSED to the wind on the RIGHT SIDE.
5) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
6) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=40.0 psf; Ps=28.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=0.93; Ct=1.10
7) Roof design snow load has been reduced to account for slope.
8) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 30.8 psf on overhangs non-concurrent with other live loads.
9) Plates checked for a plus or minus 5 degree rotation about its center.
10) Gable requires continuous bottom chord bearing.
11) Gable studs spaced at 4-0-0 oc.
12) All bearings are assumed to be SPF No.2 .
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 2, 75 lb uplift at joint 4 and 43 lb uplift at joint 6.
14) 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.
15) 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	
D2745-1	PG1	Piggyback	2	1	Job Reference (optional)



Scale = 1:28

Plate Offsets (X, Y): [2:0-2-1,0-1-0], [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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Ps/Pg)	28.6/40.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 24 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x3 SPF 1650F 1.5E

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

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

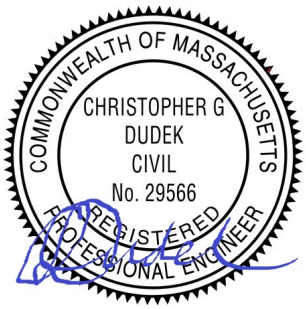
REACTIONS All bearings 6-11-2.
(lb) - Max Horiz 2=54 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 6, 8, 9, 10
Max Grav All reactions 250 (lb) or less at joint (s) 2, 6, 8, 9, 10

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

JOINT STRESS INDEX
2 = 0.17, 3 = 0.11, 4 = 0.04, 5 = 0.11, 6 = 0.17, 8 = 0.09, 9 = 0.04 and 10 = 0.09

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; B=0ft; L=7ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-3 to 3-3-3, Exterior (2R) 3-3-3 to 4-11-1, Exterior(2E) 4-11-1 to 7-11-1 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) The Overhang is NOT EXPOSED to the wind on the LEFT SIDE.
4) The Overhang is NOT EXPOSED to the wind on the RIGHT SIDE.
5) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
6) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=40.0 psf; Ps=28.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=0.93; Ct=1.10
7) Roof design snow load has been reduced to account for slope.
8) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 30.8 psf on overhangs non-concurrent with other live loads.
9) Plates checked for a plus or minus 5 degree rotation about its center.
10) Gable requires continuous bottom chord bearing.
11) Gable studs spaced at 2-0-0 oc.
12) All bearings are assumed to be SPF No.2 .
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 6, 9, 10, 8.
14) 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.
15) 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	
D2745-1	T1A	Piggyback Base	11	1	Job Reference (optional)

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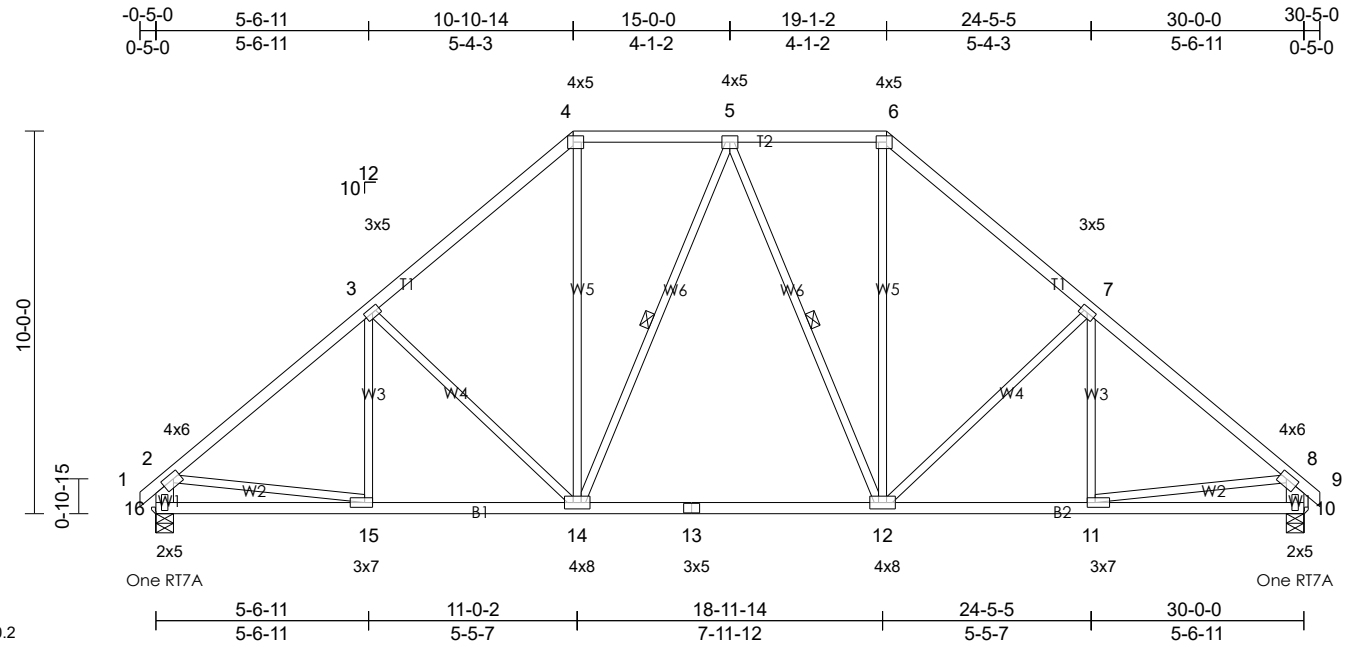

Scale = 1:60.2

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

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	0.40	Vert(LL)	-0.06	12-14	>999	360	MT20	197/144
Snow (Ps/Pg)	28.6/40.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.17	12-14	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.04	10	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P		Wind(LL)	0.03	12-14	>999	240		
BCDL	10.0										Weight: 140 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x3 SPF 1650F 1.5E *Except* W1:2x6 SPF 1650F 1.5E

BRACING
TOP CHORD Sheathed or 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-14, 5-12

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

REACTIONS (size) 10=0-5-8, (min. 0-2-6), 16=0-5-8, (min. 0-2-6)
Max Horiz 16=-172 (LC 9)
Max Uplift 10=-391 (LC 12), 16=-391 (LC 12)
Max Grav 10=1504 (LC 1), 16=1504 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-17=-1738/443, 3-17=-1648/443, 3-18=-1514/448, 4-18=-1350/448, 4-5=-1042/389, 5-6=-1042/389, 6-19=-1350/448, 7-19=-1513/448, 7-20=-1648/443, 8-20=-1738/443, 2-16=-1458/390, 8-10=-1458/390
BOT CHORD 14-15=-273/1277, 13-14=-164/1123, 12-13=-164/1123, 11-12=-273/1277
WEBS 3-14=-349/189, 4-14=-193/574, 6-12=-193/574, 7-12=-349/189, 2-15=-282/1290, 8-11=-282/1290

JOINT STRESS INDEX
2 = 0.71, 3 = 0.71, 4 = 0.40, 5 = 0.51, 6 = 0.40, 7 = 0.71, 8 = 0.71, 10 = 0.56, 11 = 0.66, 12 = 0.51, 13 = 0.63, 14 = 0.51, 15 = 0.66 and 16 = 0.56

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; B=0ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior (1) 2-7-0 to 6-7-15, Exterior(2R) 6-7-15 to 23-4-1, Interior (1) 23-4-1 to 27-5-0, Exterior(2E) 27-5-0 to 30-5-0 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
3) The Overhang is NOT EXPOSED to the wind on the LEFT SIDE.
4) The Overhang is NOT EXPOSED to the wind on the RIGHT SIDE.
5) ** TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=40.0 psf; Ps= varies (28.6 psf Lum DOL=1.15 Plate DOL=1.15) see load cases; Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=0.93,1.00,0.93; Ct=1.10, Lu=20-0-0
6) Roof design snow load has been reduced to account for slope.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 30.8 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) Plates checked for a plus or minus 5 degree rotation about its center.
10) All bearings are assumed to be SPF No.2 .
11) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 10. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-77, 2-4=-77, 4-6=-82, 6-8=-77, 8-9=-77, 10-16=-20

Job	Truss	Truss Type	Qty	Ply	
D2745-1	T1B	Piggyback Base	14	1	Job Reference (optional)

Run: 8.71 S Sep 7 2023 Print: 8.710 S Sep 7 2023 MiTek Industries, Inc. Tue Mar 26 09:10:53 Page: 1
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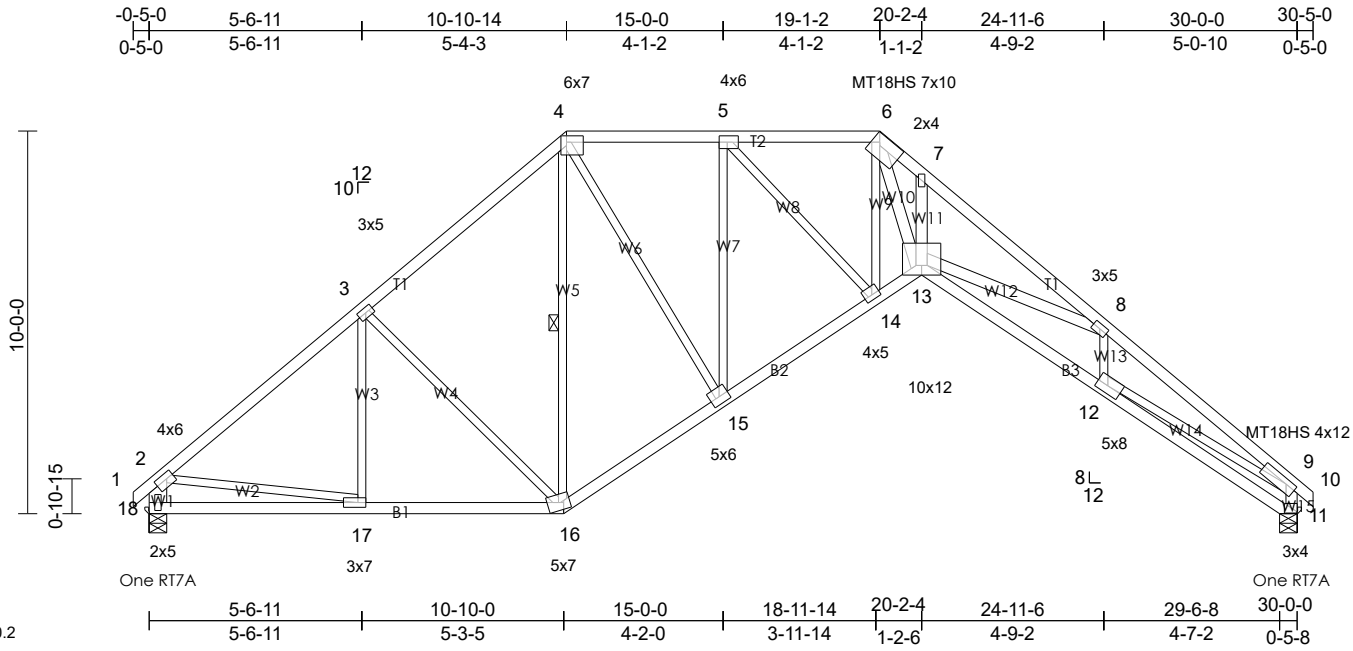


Scale = 1:60.2

Plate Offsets (X, Y): [2:0-2-4,0-1-12], [4:0-5-4,0-2-0], [5:0-2-8,0-2-0], [6:0-7-12,0-2-8], [9:0-3-4,0-1-8], [12:0-3-8,0-2-4], [13:0-6-0,0-3-1], [14:0-2-8,0-1-8], [15:0-3-0,0-2-4], [17:0-2-8,0-1-8]

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	0.84	Vert(LL)	-0.44	13	>811	360	MT18HS	197/144
Snow (Ps/Pg)	28.6/40.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.73	13-14	>486	240	MT20	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.80	11	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P		Wind(LL)	0.15	12-13	>999	240		
BCDL	10.0										Weight: 143 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x3 SPF 1650F 1.5E *Except* W1:2x6 SPF 1650F 1.5E, W15,W10,W11,W12:2x4 SPF 1650F 1.5E

BRACING
TOP CHORD Sheathed or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
7-6-4 oc bracing: 12-13
6-0-0 oc bracing: 11-12.
WEBS 1 Row at midpt 4-16

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

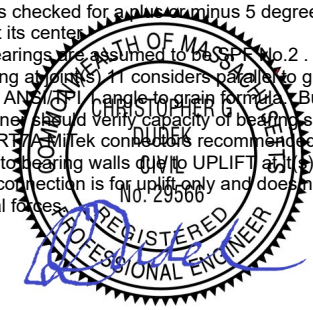
REACTIONS (size) 11=0-5-8, (min. 0-2-6), 18=0-5-8, (min. 0-2-6)
Max Horiz 18=175 (LC 10)
Max Uplift 11=-390 (LC 12), 18=-392 (LC 12)
Max Grav 11=1501 (LC 1), 18=1508 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-19=-1749/444, 3-19=-1659/444, 3-20=-1515/453, 4-20=-1351/453, 4-5=-1603/483, 5-6=-2401/572, 6-7=-5021/1106, 7-21=-4940/999, 8-21=-5072/999, 8-22=-4632/1080, 9-22=-4729/1080, 2-18=-1466/391, 9-11=-1443/381
BOT CHORD 16-17=-272/1285, 15-16=-165/1279, 14-15=-277/1952, 13-14=-385/2904, 12-13=-917/4303
WEBS 3-16=-365/189, 4-16=-375/7, 5-14=-130/1164, 6-14=-1299/150, 2-17=-283/1299, 9-12=-856/3971, 6-13=-871/4570, 7-13=-290/168, 4-15=-180/1102, 5-15=-1236/218, 8-13=-104/329, 8-12=-536/143

JOINT STRESS INDEX
2 = 0.71, 3 = 0.71, 4 = 0.50, 5 = 0.67, 6 = 0.89, 7 = 0.50, 8 = 0.71, 9 = 0.71, 11 = 0.67, 12 = 0.88, 13 = 1.00, 14 = 0.71, 15 = 0.66, 16 = 0.58, 17 = 0.67 and 18 = 0.57

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; B=0ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior (1) 2-7-0 to 6-7-15, Exterior(2R) 6-7-15 to 23-4-1, Interior (1) 23-4-1 to 27-5-0, Exterior(2E) 27-5-0 to 30-5-0 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
3) The Overhang is NOT EXPOSED to the wind on the LEFT SIDE.
4) The Overhang is NOT EXPOSED to the wind on the RIGHT SIDE.
5) ** TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=40.0 psf; Ps= varies (28.6 psf Lum DOL=1.15 Plate DOL=1.15) see load cases; Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=0.93,1.00,0.93; Ct=1.10, Lu=20-0-0
6) Roof design snow load has been reduced to account for slope.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 30.8 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.
10) The Fabrication Tolerance at joint 13 = 0%
11) Plates checked for a plus or minus 5 degree rotation about its center.
12) All bearings are assumed to be SPF No.2 .
13) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
14) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18 and 11. This connection is for uplift only and does not consider lateral forces.
15) 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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-77, 2-4=-77, 4-6=-82, 6-9=-77, 9-10=-77, 16-18=-20, 13-16=-20, 11-13=-20



Job	Truss	Truss Type	Qty	Ply	
D2745-1	T1C	Piggyback Base	3	1	Job Reference (optional)

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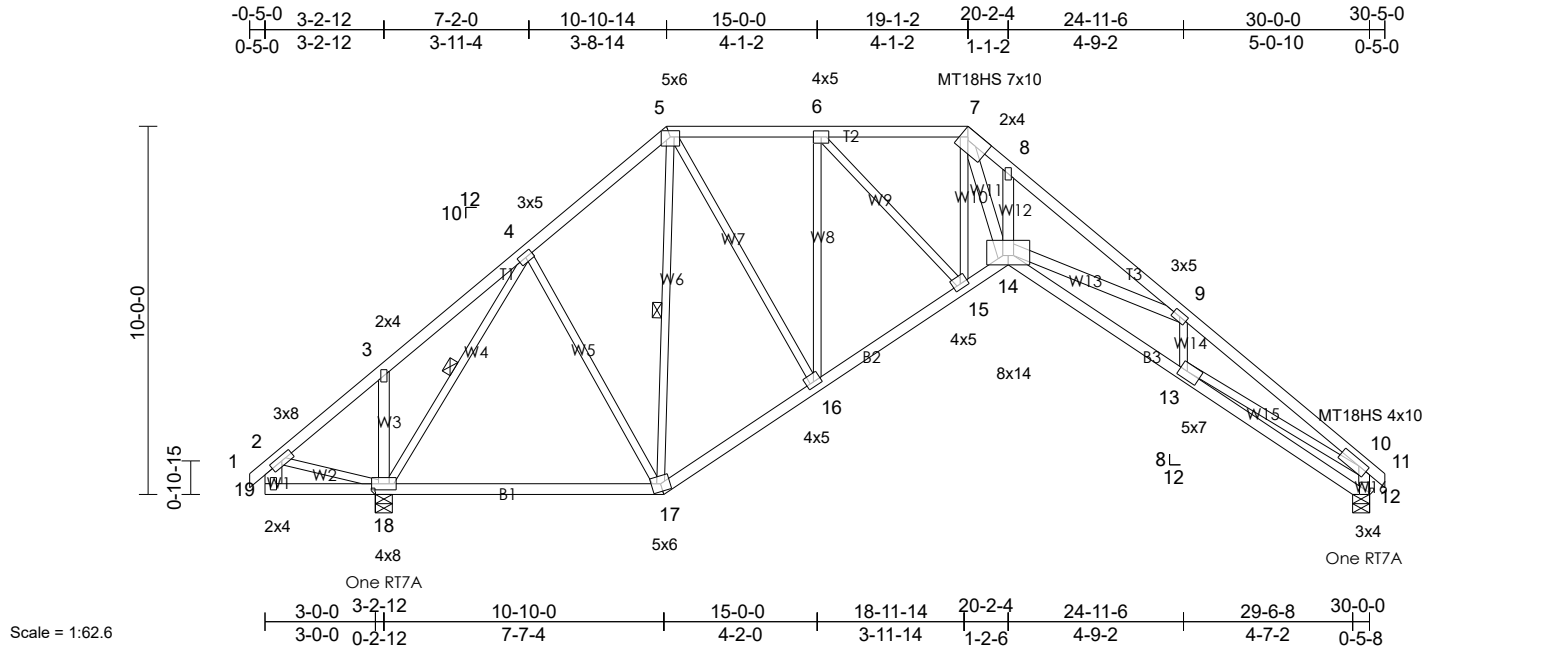


Scale = 1:62.6

Plate Offsets (X, Y): [5:0-3-0,0-2-1], [7:Edge,0-2-11], [10:0-3-0,0-1-12], [12:0-2-5,0-1-8], [13:0-2-8,0-2-8], [14:0-7-0,0-3-1], [15:0-2-8,0-1-8], [16:0-2-8,0-1-8]

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	0.71	Vert(LL)	-0.35	13-14	>907	360	MT20	197/144
Snow (Ps/Pg)	28.6/40.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.59	13-14	>537	240	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.68	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P		Wind(LL)	0.12	13-14	>999	240		
BCDL	10.0										Weight: 146 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x3 SPF 1650F 1.5E *Except* W1:2x6 SPF 1650F 1.5E, W3,W11,W12,W13:2x4 SPF 1650F 1.5E, W16:2x4 SPF No.2

BRACING
TOP CHORD Sheathed or 2-7-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-2-13 oc bracing: 13-14
6-0-0 oc bracing: 12-13.
WEBS 1 Row at midpt 4-18, 5-17

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

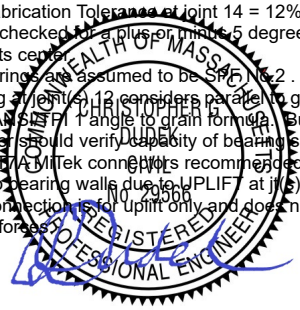
REACTIONS (size) 12=0-5-8, (min. 0-2-1), 18=0-5-8, (min. 0-2-10)
Max Horiz 18=175 (LC 10)
Max Uplift 12=-346 (LC 12), 18=-436 (LC 12)
Max Grav 12=1331 (LC 1), 18=1678 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-1026/354, 5-6=-1237/388, 6-7=-1962/458, 7-8=-4179/887, 8-22=-4098/780, 9-22=-4229/780, 9-23=-4007/918, 10-23=-4104/918, 10-12=-1276/337
BOT CHORD 17-18=-115/609, 16-17=-109/880, 15-16=-162/1511, 14-15=-247/2375, 13-14=-767/3727
WEBS 6-15=-102/1058, 7-15=-1176/118, 3-18=-293/159, 4-18=-1388/330, 7-14=-692/3880, 8-14=-293/169, 6-16=-1167/200, 10-13=-717/3438, 9-13=-449/120, 5-17=-562/17, 5-16=-165/1041

JOINT STRESS INDEX
2 = 0.49, 3 = 0.50, 4 = 0.61, 5 = 0.68, 6 = 0.72, 7 = 0.71, 8 = 0.50, 9 = 0.71, 10 = 0.67, 12 = 0.83, 13 = 0.86, 14 = 0.87, 15 = 0.65, 16 = 0.72, 17 = 0.50, 18 = 0.57 and 19 = 0.44

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; B=0ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior (1) 2-7-0 to 6-8-10, Exterior(2R) 6-8-10 to 23-4-1, Interior (1) 23-4-1 to 27-5-0, Exterior(2E) 27-5-0 to 30-5-0 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
3) The Overhang is NOT EXPOSED to the wind on the LEFT SIDE.
4) The Overhang is NOT EXPOSED to the wind on the RIGHT SIDE.
5) ** TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=40.0 psf; Ps= varies (28.6 psf Lum DOL=1.15 Plate DOL=1.15) see load cases; Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=0.93,1.00,0.93; Ct=1.10, Lu=20-0-0
6) Roof design snow load has been reduced to account for slope.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 30.8 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.
10) The Fabrication Tolerance at joint 14 = 12%
11) Plates checked for a plus or minus 5 degree rotation about its center.
12) All bearings are assumed to be SPF No.2 .
13) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
14) One RT7A MiTek connector is recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 18. This connection is for uplift only and does not consider lateral forces.
15) 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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-77, 2-5=-77, 5-7=-82, 7-10=-77, 10-11=-77, 17-19=-20, 14-17=-20, 12-14=-20



Job	Truss	Truss Type	Qty	Ply	
D2745-1	T1D	Piggyback Base	6	1	Job Reference (optional)

Run: 8.71 S Sep 7 2023 Print: 8.710 S Sep 7 2023 MiTek Industries, Inc. Tue Mar 26 09:10:54 Page: 1
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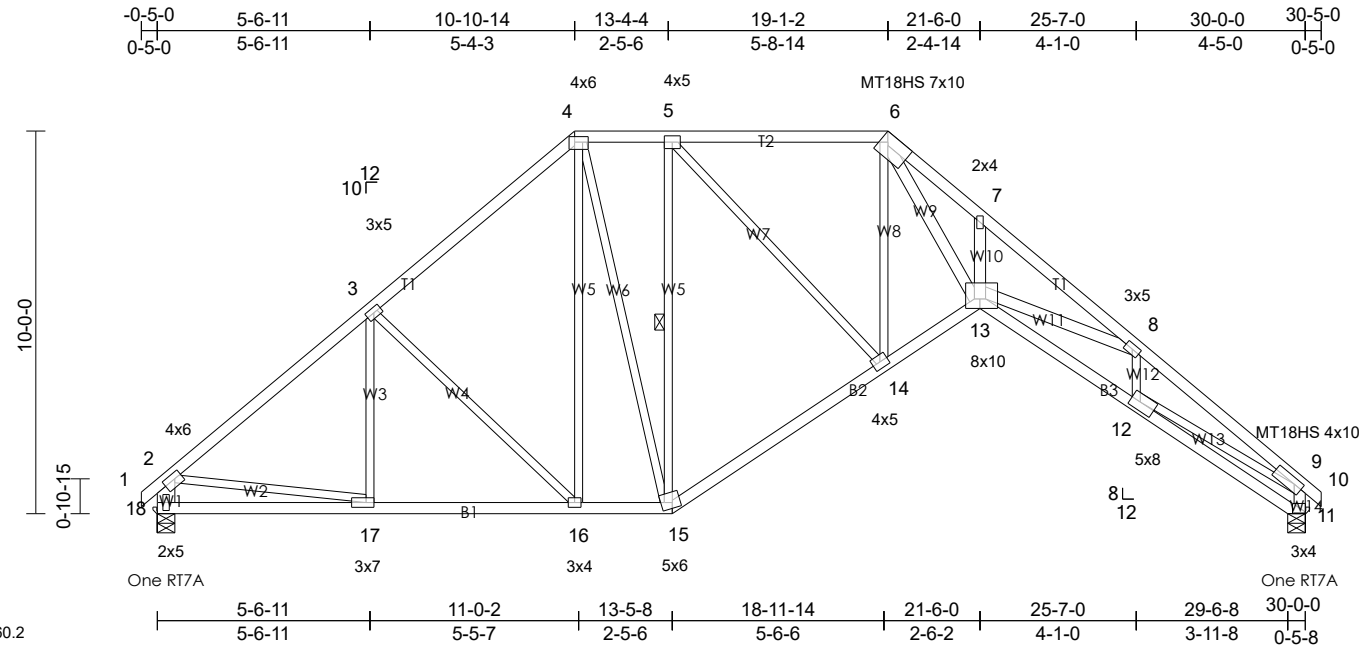

Scale = 1:60.2

Plate Offsets (X, Y): [2:0-2-4,0-1-12], [4:0-4-4,0-1-12], [6:Edge,0-2-11], [9:0-2-12,0-1-12], [12:0-3-0,0-2-8], [13:0-4-8,0-3-0], [15:0-2-8,0-1-12], [17:0-2-8,0-1-8]

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	0.58	Vert(LL)	-0.40	13	>891	360	MT20	197/144
Snow (Ps/Pg)	28.6/40.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.67	12-13	>533	240	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.68	11	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P		Wind(LL)	0.14	13-14	>999	240		
BCDL	10.0										Weight: 149 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x3 SPF 1650F 1.5E *Except* W1:2x6 SPF 1650F 1.5E, W14,W9,W10,W11:2x4 SPF 1650F 1.5E

BRACING
TOP CHORD Sheathed or 2-7-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
7-8-4 oc bracing: 12-13
6-0-0 oc bracing: 11-12.
WEBS 1 Row at midpt 5-15

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

REACTIONS (size) 11=0-5-8, (min. 0-2-6), 18=0-5-8, (min. 0-2-6)
Max Horiz 18=175 (LC 10)
Max Uplift 11=-390 (LC 12), 18=-392 (LC 12)
Max Grav 11=1501 (LC 1), 18=1508 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-19=-1747/444, 3-19=-1657/444, 3-20=-1513/450, 4-20=-1349/450, 4-5=-1135/417, 5-6=-1698/477, 6-7=-5030/1152, 7-21=-4965/1058, 8-21=-5079/1058, 8-22=-4353/1034, 9-22=-4453/1034, 2-18=-1464/391, 9-11=-1445/380
BOT CHORD 16-17=-272/1284, 15-16=-137/1038, 14-15=-194/1390, 13-14=-271/2055, 12-13=-880/4053
WEBS 3-16=-360/189, 4-16=-131/333, 4-15=-105/383, 5-15=-1063/209, 5-14=-92/836, 6-14=-882/109, 2-17=-283/1297, 9-12=-814/3703, 6-13=-874/4338, 7-13=-260/148, 8-13=-55/479, 8-12=-609/158

JOINT STRESS INDEX
2 = 0.71, 3 = 0.71, 4 = 0.53, 5 = 0.57, 6 = 0.80, 7 = 0.50, 8 = 0.71, 9 = 0.72, 11 = 0.67, 12 = 0.86, 13 = 0.96, 14 = 0.70, 15 = 0.74, 16 = 0.70, 17 = 0.67 and 18 = 0.57

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=0.0psf; BCDL=0.0psf; h=0ft; B=0ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior (1) 2-7-0 to 6-7-15, Exterior(2R) 6-7-15 to 23-4-1, Interior (1) 23-4-1 to 27-5-0, Exterior(2E) 27-5-0 to 30-5-0 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
3) The Overhang is NOT EXPOSED to the wind on the LEFT SIDE.
4) The Overhang is NOT EXPOSED to the wind on the RIGHT SIDE.
5) ** TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=40.0 psf; Ps= varies (28.6 psf Lum DOL=1.15 Plate DOL=1.15) see load cases; Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=0.93,1.00,0.93; Ct=1.10, Lu=20-0-0
6) Roof design snow load has been reduced to account for slope.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 30.8 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.
10) The Fabrication Tolerance at joint 13 = 4%
11) Plates checked for a plus or minus 5 degree rotation about its center.
12) All bearings are assumed to be SPF No.2 .
13) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
14) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18 and 11. This connection is for uplift only and does not consider lateral forces.
15) 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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-77, 2-4=-77, 4-6=-82, 6-9=-77, 9-10=-77, 15-18=-20, 13-15=-20, 11-13=-20