Job	Truss	Truss Type	Qty	Ply	
Joe Collins Barn - Roof	A01	Common	19	1	Job Reference (optional)

ID:A7AWQgYeAhW?JkOtd6wc?VyuCnZ-12WBOE4epcIN2Ayo?t5UxiSuapiduX?7bwyZpSysXkG



```
Scale = 1:56.3
```

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

			-										
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.89	Vert(LL)	-0.42	9-11	>831	240	MT20	244/190	
Snow (Ps/Pf)	14.5/20.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.56	9-11	>626	180	MT20HS	187/143	
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.06	8	n/a	n/a			
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS									
BCDL	10.0										Weight: 166 lb	FT = 20%	

BRACING

# LUMBER

LUWIDER		DRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 3-12, 5-8
REACTIONS	(lb/size) 8=1069/0-5-8, (min. 0-1-8), 12=1069/0-5-8, (min. 0-1-8) Max Horiz 12=106 (LC 15) Max Uplift 8=-82 (LC 17), 12=-82 (LC 16) Max Grav 8=1244 (LC 2), 12=1244 (LC 2)		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 sho	wn.	22 2 12- 520/220
TOP CHORD	6-8=-520/220	-1025/555, 5-0002/22	22, 2-12320/220,
BOT CHORD	11-12=-184/1500, 11-15=-34/1067, 10-15=-34/1067, 10-16=-34/1067, 9-	16=-34/1067.8-9=-182	/1500

WEBS 4-9=-96/619, 5-9=-350/229, 4-11=-96/619, 3-11=-350/229, 3-12=-1257/131, 5-8=-1257/131

NOTES

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (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=1.33

 TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=14.5 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface

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 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

7) All plates are MT20 plates unless otherwise indicated.

8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 12 and 82 lb uplift at joint 8.

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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
Joe Collins Barn - Roof	A01A	Common	5	1	Job Reference (optional)

ID:24qIYc 9FFbgAWIrNkaabbyuCol-12WBOE4epclN2Ayo?t5UxiStUpiJuR37bwyZpSysXkG



Vert: 1-2=-49, 2-5=-49, 5-8=-49, 8-9=-49, 10-15=-20, 16-18=-40 (F), 18-21=-40 (F)

Job	Truss	Truss Type	Qty	Ply	
Joe Collins Barn - Roof	A01G	Common Supported Gable	2	1	Job Reference (optional)

ID:2AxSqsopE890KyVvM0oXMxyuCnE-12WBOE4epcIN2Ayo?t5UxiS37pxsudU7bwyZpSysXkG



1) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

12) \* 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.

13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 39, 22, 32, 33, 34, 35, 36, 37, 29, 28, 27, 26, 25, 24 except (jt=lb) 38=138, 23=113.

14) 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	
Joe Collins Barn - Roof	B01	Нір	1	1	Job Reference (optional)

ID:4bhlxAfnC9RJBThJaf2P3CvuCkr-12WBOE4epclN2Avo?t5UxiSztpkauRm7bwvZpSvsXkG







### Scale = 1:43.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.55	Vert(LL)	-0.17	11	>999	240	MT20	244/190
Snow (Ps/Pf)	14.5/20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.27	11-13	>873	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.07	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 101 lb	FT = 20%

LUMBER TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2	BRACING TOP CHORD	Structural wood sheathing directly applied or 4-8-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-3 max.): 3-6.
REACTIONS (I N N	2x4 SP No.3 Ib/size) 9=818/0-3-0, (min. 0-1-8), 14=818/0-3-0, (min. 0-1-8) /lax Horiz 14=-42 (LC 14) /lax Uplift 9=-71 (LC 17), 14=-71 (LC 16)	BOT CHORD	Migid ceiling directly applied or 5-0-0 cc bracing. MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
Ν	/lax Grav 9=1074 (LC 38), 14=1074 (LC 38)		

FORCES

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

TOP CHORD 2-3=-1431/126, 3-15=-1300/127, 4-15=-1300/127, 4-16=-2927/229, 5-16=-2927/229, 5-17=-1300/127, 6-17=-1300/127,

6-7=-1431/126, 2-14=-1069/152, 7-9=-1069/152

BOT CHORD 12-13=-226/2835, 11-12=-226/2835, 10-11=-223/2835

WEBS 3-13=0/347. 6-10=0/347. 2-13=-65/1320. 7-10=-66/1320. 4-13=-1652/182. 5-10=-1652/182

## NOTES

Unbalanced roof live loads have been considered for this design. 1)

- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 2) Exterior (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=1.33 \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=14.5 psf Lumber DOL=1.15 3) Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface

4) Roof design snow load has been reduced to account for slope.

Unbalanced snow loads have been considered for this design. 5)

This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 6)

7) Provide adequate drainage to prevent water ponding.

8) All plates are MT20 plates unless otherwise indicated.

9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 14 and 71 lb uplift at joint 9. 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)

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

1)

Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 1-2=-49, 2-3=-49, 3-6=-60, 6-7=-49, 7-8=-49, 9-14=-20

Job	Truss	Truss Type	Qty	Ply	
Joe Collins Barn - Roof	B01GR	Hip Girder	1	1	Job Reference (optional)

ID:FGvJNZC0cz6w4OezzcLyNhyuCk8-12WBOE4epclN2Ayo?t5UxiSvWppuuRD7bwyZpSysXkG





Scale = 1:43.9

Plate Offsets (X,	late Offsets (X, Y): [3:0-3-12,0-2-4], [7:0-3-12,0-2-4], [10:Edge,0-6-8], [12:0-5-0,0-4-12], [14:Edge,0-6-8]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.83	Vert(LL)	-0.36	12	>653	240	MT20	244/190
Snow (Ps/Pf)	14.5/20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.55	12	>428	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.07	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 115 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS REACTIONS (I M M	2x4 SP No.2 *Exc 2x6 SP DSS 2x4 SP No.3 b/size) 10=1112 1ax Horiz 14=-33 (L 1ax Uplift 10=-185 1ax Grav 10=143	ept* T2,T3:2x4 SP S /0-3-0, (min. 0-1-8), 1 _C 10) (LC 8), 14=-184 (LC 9 (LC 34) 14=1440 (1)	S 4=1110/0-3-0, (min. 0- 9) C 34)	1-8)	BRACIN TOP CH BOT CH WEBS	<b>G</b> ORD ORD	Structur except Rigid ce <u>1 Row a</u> MiTek installe Installa	ral wood end ver eiling dii at midpt recomm d during tion gui	d sheath ticals, a rectly ap nends th g truss e ide.	ning dir nd 2-0 oplied o nat Stal	rectly applied or 3 -0 oc purlins (2-3 or 6-0-0 oc bracin <u>4-13, 5-11</u> bilizers and requi n, in accordance	i-10-7 oc purlins, -15 max.): 3-7. g. red cross bracing be with Stabilizer

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

2-3=-1864/239, 3-4=-1683/225, 4-15=-5604/753, 5-15=-5604/753, 5-6=-1690/228, 6-7=-1690/228, 7-8=-1871/242, TOP CHORD 2-14=-1816/218.8-10=-1823/220

13-16=-756/5230, 16-17=-756/5230, 17-18=-756/5230, 18-19=-756/5230, 12-19=-756/5230, 12-20=-752/5232, BOT CHORD

20-21=-752/5232, 21-22=-752/5232, 22-23=-752/5232, 11-23=-752/5232

WEBS 3-13=-32/431, 7-11=-33/435, 2-13=-239/1965, 8-11=-243/1973, 4-12=-73/560, 4-13=-3631/563, 5-12=-72/559, 5-11=-3626/561

# NOTES

Unbalanced roof live loads have been considered for this design. 1)

Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left 2) and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33

\*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=14.5 psf Lumber DOL=1.15 3)

Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface

4) Roof design snow load has been reduced to account for slope.

Unbalanced snow loads have been considered for this design. 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 6)

7) Provide adequate drainage to prevent water ponding.

8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 14 and 185 lb uplift at joint 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)

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 72 lb down and 27 lb up at 3-0-12, 72 lb down and 27 lb up at 5-0-12, 72 Ib down and 27 lb up at 7-0-12, 72 lb down and 27 lb up at 9-0-12, 72 lb down and 27 lb up at 11-0-12, 72 lb down and 27 lb up at 13-0-12, and 72 lb down and 27 lb up at 15-0-12, and 72 lb down and 27 lb up at 16-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00 1) Uniform Loads (lb/ft)

Job	Truss	Truss Type	Qty	Ply	
Joe Collins Barn - Roof	B01GR	Hip Girder	1	1	Job Reference (optional)

Run: 8.63 S Jan 12 2023 Print: 8.630 S Jan 12 2023 MiTek Industries, Inc. Mon Jul 31 14:11:57 Page: 2 ID:FGvJNZC0cz6w4OezzcLyNhyuCk8-12WBOE4epclN2Ayo?t5UxiSvWppuuRD7bwyZpSysXkG

Vert: 1-2=-49, 2-3=-49, 3-7=-60, 7-8=-49, 8-9=-49, 10-14=-20 Concentrated Loads (lb)

Vert: 16=-70, 17=-70, 18=-70, 19=-70, 20=-70, 21=-70, 22=-70, 23=-70

Job	Truss	Truss Type	Qty	Ply	
Joe Collins Barn - Roof	B02	Hip	1	1	Job Reference (optional)

ID:y5OOCkVeG9o97TCpZQJM1SyuCl2-12WBOE4epclN2Ayo?t5UxiSwlpr3uXK7bwyZpSysXkG





# Scale = 1:41.9

2-10-0

# Plate Offsets (X, Y): [3:0-5-12,0-2-0], [5:0-5-12,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.75	Vert(LL)	-0.11	10	>999	240	MT20	244/190	
Snow (Ps/Pf)	14.5/20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.17	10-12	>999	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.03	8	n/a	n/a			
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS									
BCDL	10.0										Weight: 105 lb	FT = 20%	

LUMBE TOP CH	R HORD 2x4 SP No.2 *Except* T2:2x4 SP No.1	BRACING TOP CHORD	Structural wood sheathing directly applied or 4-8-2 oc purlins,					
BOT CH WEBS	HORD 2x4 SP No.2 2x4 SP No.3	BOT CHORD	except end verticals, and 2-0-0 oc purlins (2-11-15 max.): 3-5. Rigid ceiling directly applied or 6-0-0 oc bracing.					
REACTI	IONS (Ib/size)         8=806/0-3-0, (min. 0-1-8), 13=806/0-3-0, (min. 0- Max Horiz         13=48 (LC 15)           Max Uplift         8=-70 (LC 17), 13=-70 (LC 16)         8=987 (LC 38), 13=987 (LC 38)	-1-8)	MiTek recommends that Stabilizers and required cross bracing installed during truss erection, in accordance with Stabilizer Installation guide.					
FORCE: TOP CH	<ul> <li>(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less</li> <li>HORD 2-3=-1433/153, 3-14=-2357/249, 4-14=-2357/249, 4-15</li> <li>6-8=-957/173</li> </ul>	s except when shown. 5=-2357/249, 5-15=-2357/249, 5-6=-1433/	153, 2-13=-957/173,					
BOT CH WEBS	HORD 11-12=-70/1259, 10-11=-70/1259, 9-10=-64/1259 3-10=-115/1183, 4-10=-759/157, 5-10=-115/1183, 2-12	2=-65/1255, 6-9=-66/1255						

NOTES

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (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=1.33

grip DOL=1.33
\*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=14.5 psf Lumber DOL=1.15 Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface

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 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

7) Provide adequate drainage to prevent water ponding.

8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 13 and 70 lb uplift at joint 8.

- 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=1.00

Uniform Loads (lb/ft) Vert: 1-2=-49, 2-3=-49, 3-5=-60, 5-6=-49, 6-7=-49, 8-13=-20

Job	Truss	Truss Type	Qty	Ply	
Joe Collins Barn - Roof	B03	Hip	1	1	Job Reference (optional)

ID:n EEuzMkrnPjInsiQccn48yuCID-12WBOE4epcIN2Ayo?t5UxiSx?ps9uZa7bwyZpSysXkG





## Scale = 1:41.9

## Plate Offsets (X, Y): [2:0-3-0,0-1-12], [3:0-3-0,0-2-0], [5:0-3-0,0-2-0], [6:0-3-0,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.67	Vert(LL)	-0.07	10	>999	240	MT20	244/190	
Snow (Ps/Pf)	14.5/20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.11	10-12	>999	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.02	8	n/a	n/a			
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS									
BCDL	10.0										Weight: 109 lb	FT = 20%	

. . . . . .

## ......

LUMBER		BRACING					
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-0-9 oc purlins,				
BOT CHORD	2x4 SP No.2		except end verticals, and 2-0-0 oc purlins (3-8-7 max.): 3-5.				
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.				
REACTIONS	(lb/size) 8=793/0-3-0, (min. 0-1-8), 13=793/0-3-0, (min. 0-1-8) Max Horiz 13=54 (LC 15) Max Uplift 8=-69 (LC 17), 13=-69 (LC 16)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.				
	Max Grav 8=902 (LC 39), 13=902 (LC 39)						
FORCES	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when s	hown.					
TOP CHORD	2-3=-1317/159 3-14=-1755/219 4-14=-1755/219 4-15=-1755/219 5-	15=1755/219 5-6=131	7/159 2-13=-858/185				

6-8=-858/185 BOT CHORD

11-12=-67/1153, 10-11=-67/1153, 9-10=-63/1153

WEBS 4-10=-622/126, 5-10=-77/703, 2-12=-32/1067, 6-9=-34/1067, 3-10=-77/703

# NOTES

Unbalanced roof live loads have been considered for this design. 1)

Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 2) Exterior (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=1.33 \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=14.5 psf Lumber DOL=1.15 3) Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface

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 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

7) Provide adequate drainage to prevent water ponding.

8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 13 and 69 lb uplift at joint 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. 11)
- 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

Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00 1)

Uniform Loads (lb/ft) Vert: 1-2=-49, 2-3=-49, 3-5=-60, 5-6=-49, 6-7=-49, 8-13=-20

Job	Truss	Truss Type	Qty	Ply	
Joe Collins Barn - Roof	J01	Roof Special	8	1	Job Reference (optional)

ID:rhDAIX98J2jLDwvOHToFm3yuCkB-12WBOE4epclN2Ayo?t5UxiS3HpwNuf87bwyZpSysXkG

![](_page_8_Figure_3.jpeg)

![](_page_8_Figure_4.jpeg)

-8-0

![](_page_8_Figure_5.jpeg)

![](_page_8_Figure_6.jpeg)

Structural wood sheathing directly applied or 3-0-0 oc purlins,

installed during truss erection, in accordance with Stabilizer

MiTek recommends that Stabilizers and required cross bracing be

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

Installation guide.

![](_page_8_Figure_7.jpeg)

4x6

Scale = 1:27.6

# Plate Offsets (X, Y): [4:0-3-0,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.14	Vert(LL)	0.00	4-5	>999	240	MT20	244/190	
Snow (Ps/Pf)	17.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-5	>999	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	n/a	-	n/a	n/a			
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 16 lb	FT = 20%	

BRACING TOP CHORD

BOT CHORD

6x8

# LUMBER

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

 REACTIONS
 (lb/size)
 4=185/0-3-0, (min. 0-1-8), 5=87/ Mechanical, (min. 0-1-8)

 Max Horiz
 5=-33 (LC 13)

 Max Uplift
 4=-47 (LC 13), 5=-15 (LC 17)

Max Grav 4=196 (LC 2), 5=92 (LC 2)

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

### NOTES

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (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=1.33

 TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=17.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface

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 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

9) Refer to girder(s) for truss to truss connections.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 5 and 47 lb uplift at joint 4.

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.

LOAD CASE(S) Standard