

RE: 2501-0739-A - The Farm at Neills Creek Lot 00.0057 Roof

Trenco
 818 Soundside Rd
 Edenton, NC 27932

Site Information:

Project Customer: DRB Raleigh Project Name: The Farm at Neills Creek Lot 00.0057
 Lot/Block: 00.0057 Subdivision: The Farm at Neills Creek
 Model: Callaway
 Address: 553 Winding Creek Dr
 City: Lillington State: NC

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

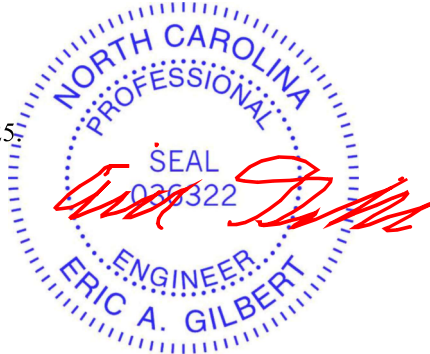
Design Code: IRC2021/TPI2014	Design Program: MiTek 20/20 8.8
Wind Code: ASCE 7-16	Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16
Wind Speed: 120 mph	Floor Load: N/A psf
Roof Load: 40.0 psf	
Mean Roof Height (feet): 25	Exposure Category: B

No.	Seal#	Truss Name	Date
1	I70926623	PB1G	1/22/25
2	I70926624	PB1	1/22/25
3	I70926625	B6	1/22/25
4	I70926626	B6GE	1/22/25
5	I70926627	A6A	1/22/25
6	I70926628	A6	1/22/25
7	I70926629	A6GE	1/22/25
8	I70926630	A6SGE	1/22/25

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Structural, LLC.

Truss Design Engineer's Name: Gilbert, Eric
 My license renewal date for the state of North Carolina is December 31, 2025.

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



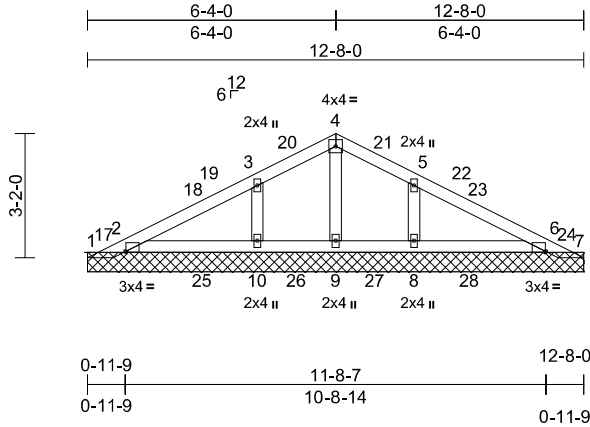
January 22, 2025

Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0057 Roof
2501-0739-A	PB1G	Piggyback	3	1	170926623
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Wed Jan 22 05:43:05
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Page: 1



Scale = 1:57.2

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

Loading	(psf)	Spacing		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-AS								
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 Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS (size)
 1=12-8-0, 2=12-8-0, 6=12-8-0,
 7=12-8-0, 8=12-8-0, 9=12-8-0,
 10=12-8-0
 Max Horiz 1=26 (LC 15)
 Max Uplift 1=-173 (LC 62), 7=-170 (LC 65),
 8=-10 (LC 17), 9=-24 (LC 62),
 10=-10 (LC 16)
 Max Grav 1=214 (LC 52), 2=478 (LC 68),
 6=464 (LC 66), 7=217 (LC 60),
 8=375 (LC 71), 9=297 (LC 70),
 10=376 (LC 69)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-30/94, 2-3=-76/84, 3-4=-96/80,
 4-5=-96/76, 5-6=-76/84, 6-7=-31/93
 BOT CHORD 2-10=-92/42, 9-10=-11/42, 8-9=-11/42,
 6-8=-93/42
 WEBS 4-9=-240/25, 3-10=-311/116, 5-8=-310/116

NOTES
 1) Unbalanced roof live loads have been considered for this design.
 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior (1) 3-3-15 to 6-4-0, Exterior(2R) 6-4-0 to 9-4-0, Interior (1) 9-4-0 to 12-4-1 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

- 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); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Plates checked for a plus or minus 5 degree rotation about its center.
- 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 173 lb uplift at joint 1, 170 lb uplift at joint 7, 24 lb uplift at joint 9, 10 lb uplift at joint 10 and 10 lb uplift at joint 8.
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



January 22, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinstitute.com) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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TRENCO
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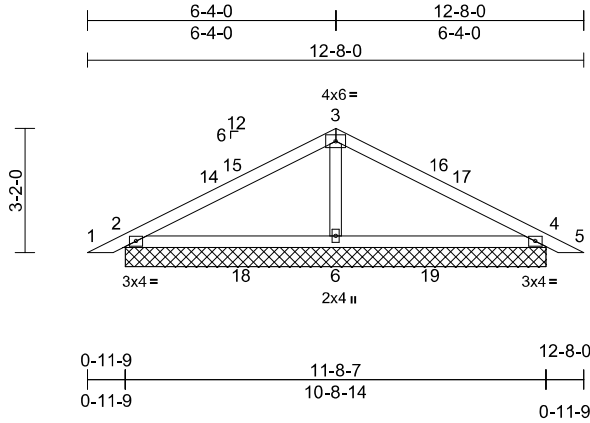
818 Soundside Road
 Edenton, NC 27932

Job 2501-0739-A	Truss PB1	Truss Type Piggyback	Qty 11	Ply 1	The Farm at Neills Creek Lot 00.0057 Roof Job Reference (optional)	170926624
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Structural, LLC, Thurmont, MD - 21788,

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-AS							
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 Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS
(size) 2=10-8-14, 4=10-8-14, 6=10-8-14
Max Horiz 2=26 (LC 15)
Max Uplift 4=5 (LC 17)
Max Grav 2=371 (LC 53), 4=371 (LC 61),
6=473 (LC 59)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-160/85, 3-4=-160/84,
4-5=0/23
BOT CHORD 2-6=-15/126, 4-6=-14/126
WEBS 3-6=-309/89

- 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 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Plates checked for a plus or minus 5 degree rotation about its center.
- 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.
- All bearings are assumed to be SP No.2 .
- N/A

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior (1) 3-3-15 to 6-4-0, Exterior(2R) 6-4-0 to 9-4-0, Interior (1) 9-4-0 to 12-4-1 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
 - 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); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.00

- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



January 22, 2025

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinstitute.com) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0057 Roof
2501-0739-A	B6	Piggyback Base	2	1	170926625
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

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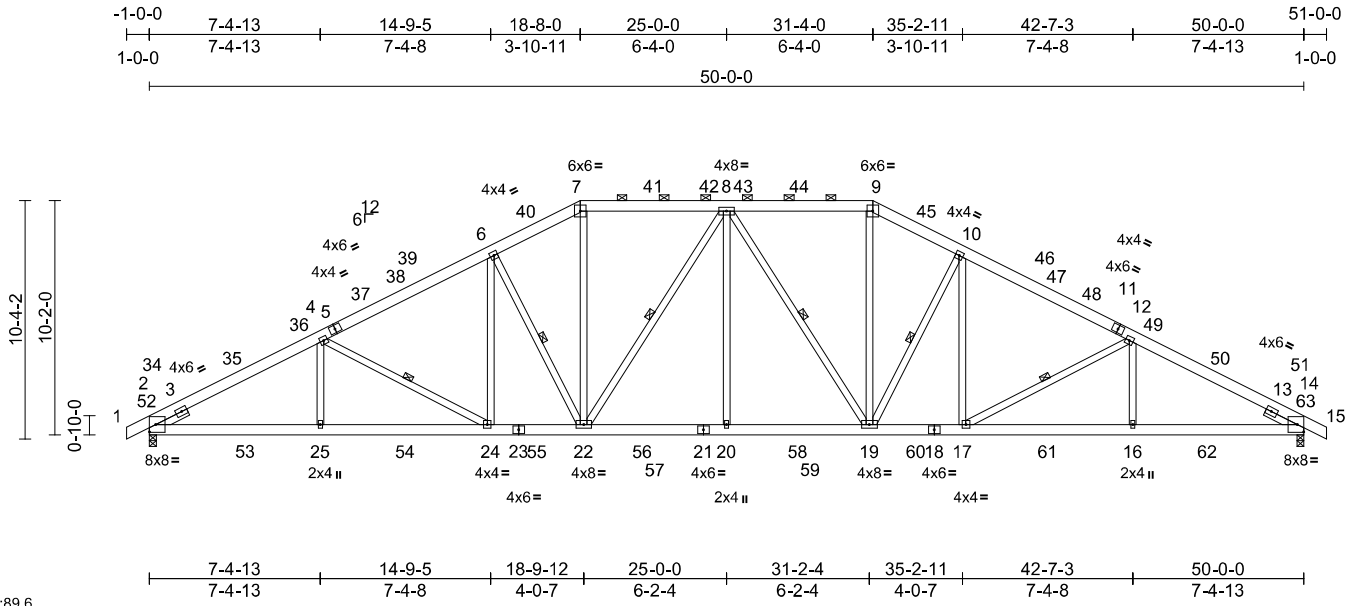


Plate Offsets (X, Y): [14:0-0-0,0-0-0]

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	Vert(LL)	-0.24	20-22	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	Vert(CT)	-0.43	20-22	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.17	14	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-AS	Wind(LL)	0.08	20	>999	240		
BCDL	10.0									Weight: 409 lb	FT = 20%

LUMBER
 TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

BRACING
 TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-2-7 max.): 7-9.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 4-24, 6-22, 8-22, 8-19, 10-19, 12-17

REACTIONS (size) 2=0-3-8, 14=0-3-8
 Max Horiz 2=-86 (LC 14)
 Max Grav 2=2266 (LC 51), 14=2266 (LC 51)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/42, 2-4=-4341/131, 4-6=-3850/177, 6-7=-3404/216, 7-8=-2988/207, 8-9=-2988/207, 9-10=-3404/216, 10-12=-3850/177, 12-14=-4341/131, 14-15=0/42
 BOT CHORD 2-25=-35/3776, 24-25=-35/3776, 22-24=0/3326, 20-22=0/3111, 19-20=0/3111, 17-19=0/3326, 16-17=-44/3778, 14-16=-44/3778
 WEBS 4-24=-515/63, 6-24=0/487, 6-22=-946/93, 7-22=-37/1279, 8-22=-500/43, 8-20=0/373, 8-19=-500/43, 9-19=-37/1279, 4-25=0/329, 10-17=0/487, 12-16=0/329, 10-19=-946/93, 12-17=-515/63

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

- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-0 to 4-0-0, Interior (1) 4-0-0 to 18-8-0, Exterior(2R) 18-8-0 to 25-8-14, Interior (1) 25-8-14 to 31-4-0, Exterior(2R) 31-4-0 to 38-4-14, Interior (1) 38-4-14 to 51-0-0 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); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- 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 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- Plates checked for a plus or minus 5 degree rotation about its center.
- 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.
- All bearings are assumed to be SP No.2.
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 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.

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



January 22, 2025

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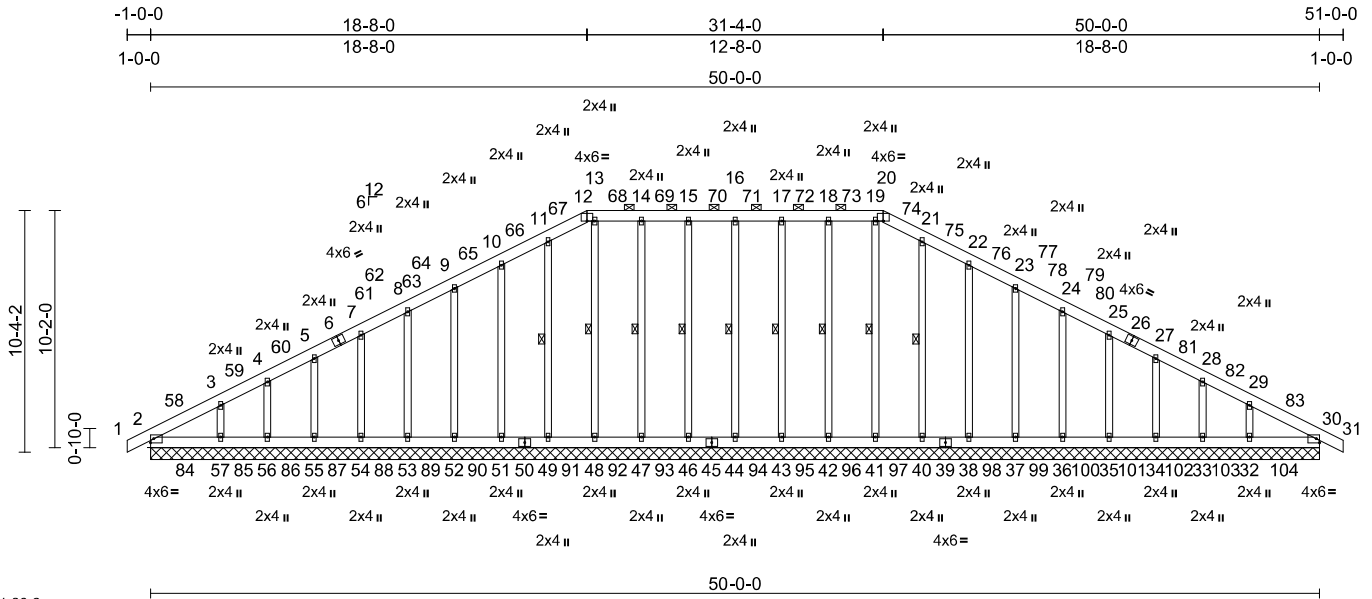
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0057 Roof
2501-0739-A	B6GE	Piggyback Base Supported Gable	1	1	170926626
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

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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	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.00	30	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-S							
BCDL	10.0										
											Weight: 464 lb FT = 20%

LUMBER		WEBS	7-54=-254/37, 5-55=-261/38, 4-56=-263/34, 3-57=-298/70, 25-35=-254/37, 27-34=-261/38, 28-33=-263/34, 29-32=-298/70
TOP CHORD	2x6 SP No.2		
BOT CHORD	2x6 SP No.2		
OTHERS	2x4 SP No.3		

BRACING		NOTES	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 12-20.	1) Unbalanced roof live loads have been considered for this design.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-0 to 4-0-0, Interior (1) 4-0-0 to 18-8-0, Exterior(2R) 18-8-0 to 25-8-14, Interior (1) 25-8-14 to 31-4-0, Exterior(2R) 31-4-0 to 38-4-14, Interior (1) 38-4-14 to 51-0-0 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	
WEBS	1 Row at midpt 16-44, 15-46, 14-47, 13-48, 11-49, 17-43, 18-42, 19-41, 21-40	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.	

REACTIONS	All bearings 50-0-0.	12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
(lb) - Max Horiz	2=86 (LC 14)	13) * 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.
Max Uplift	All uplift 100 (lb) or less at joint(s) 2, 32, 33, 34, 35, 36, 37, 38, 51, 52, 53, 54, 55, 56, 57	14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 51, 52, 53, 54, 55, 56, 57, 38, 37, 36, 35, 34, 33, 32.
Max Grav	All reactions 250 (lb) or less at joint (s) except 2=330 (LC 86), 30=330 (LC 112), 32=369 (LC 159), 33=321 (LC 158), 34=336 (LC 157), 35=333 (LC 156), 36=334 (LC 155), 37=333 (LC 154), 38=334 (LC 153), 40=333 (LC 152), 41=331 (LC 151), 42=334 (LC 150), 43=334 (LC 149), 44=333 (LC 148), 46=334 (LC 147), 47=334 (LC 146), 48=331 (LC 145), 49=333 (LC 144), 51=334 (LC 143), 52=333 (LC 142), 53=334 (LC 141), 54=333 (LC 140), 55=336 (LC 139), 56=321 (LC 138), 57=369 (LC 137)	15) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 30.

FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	16) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
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- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-0 to 4-0-0, Interior (1) 4-0-0 to 18-8-0, Exterior(2R) 18-8-0 to 25-8-14, Interior (1) 25-8-14 to 31-4-0, Exterior(2R) 31-4-0 to 38-4-14, Interior (1) 38-4-14 to 51-0-0 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL); Lum DOL=1.15 Plate DOL=1.15; Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) Plates checked for a plus or minus 5 degree rotation about its center.
- 9) Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 2-0-0 oc.

- 11) 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) 2, 51, 52, 53, 54, 55, 56, 57, 38, 37, 36, 35, 34, 33, 32.
- 14) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 30.
- 15) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 16) 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



January 22, 2025

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0057 Roof
2501-0739-A	A6A	Piggyback Base	2	1	170926627
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.830 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Wed Jan 22 05:43:00
ID:epP6ifq_lQ05dDe?cow7uyzy8xa-RFC?PsB70Hq3NSgPqnl8w3uITXbGKWRcDol7J4zJC?f

Page: 1

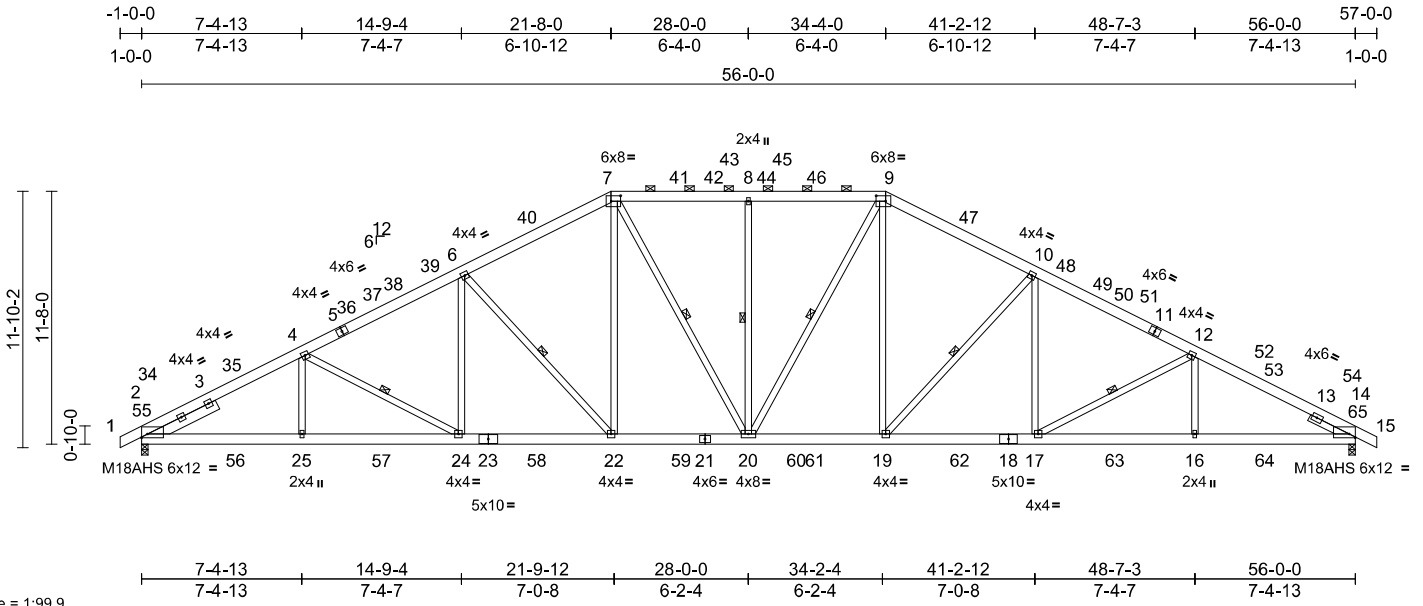


Plate Offsets (X, Y): [2:Edge,0-2-0], [7:0-5-4,0-3-0], [9:0-5-4,0-3-0], [14:Edge,0-2-0]

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	Vert(LL)	-0.26	19-20	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	Vert(CT)	-0.46	19-20	>999	240	M18AHS	186/179
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.18	14	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-AS	Wind(LL)	0.09	19-20	>999	240		
BCDL	10.0										Weight: 461 lb FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP DSS *Except* 21-18,23-21:2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 20-7,20-9:2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 3-6-0, Right 2x4 SP No.3 -- 2-0-0

BRACING
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-10-7 max.): 7-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-24, 6-22, 7-20, 8-20, 9-20, 10-19, 12-17

REACTIONS (size) 2=0-3-8, 14=0-3-8
Max Horiz 2=99 (LC 14)
Max Grav 2=2559 (LC 51), 14=2559 (LC 51)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/42, 2-4=-4958/146, 4-6=-4595/191, 6-7=-3882/232, 7-8=-3534/241, 8-9=-3534/241, 9-10=-3881/232, 10-12=-4597/191, 12-14=-4947/144, 14-15=0/42
BOT CHORD 2-25=-44/4335, 24-25=-44/4335, 22-24=-1/4019, 20-22=0/3290, 19-20=0/3289, 17-19=-10/4021, 16-17=-52/4317, 14-16=-52/4317
WEBS 4-25=0/337, 4-24=-400/63, 6-24=0/520, 6-22=-1104/99, 7-22=0/1094, 7-20=-52/496, 8-20=-608/101, 9-20=-52/496, 9-19=0/1092, 10-19=-1108/99, 10-17=0/525, 12-17=-388/63, 12-16=0/309

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

- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-0 to 4-7-3, Interior (1) 4-7-3 to 21-8-0, Exterior(2R) 21-8-0 to 29-7-1, Interior (1) 29-7-1 to 34-4-0, Exterior(2R) 34-4-0 to 42-3-1, Interior (1) 42-3-1 to 57-0-0 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); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- 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 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- Plates checked for a plus or minus 5 degree rotation about its center.
- 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.
- All bearings are assumed to be SP DSS.
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 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.

14) 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



January 22, 2025

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ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0057 Roof
2501-0739-A	A6	Attic	7	1	170926628
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Wed Jan 22 05:42:58
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Page: 1

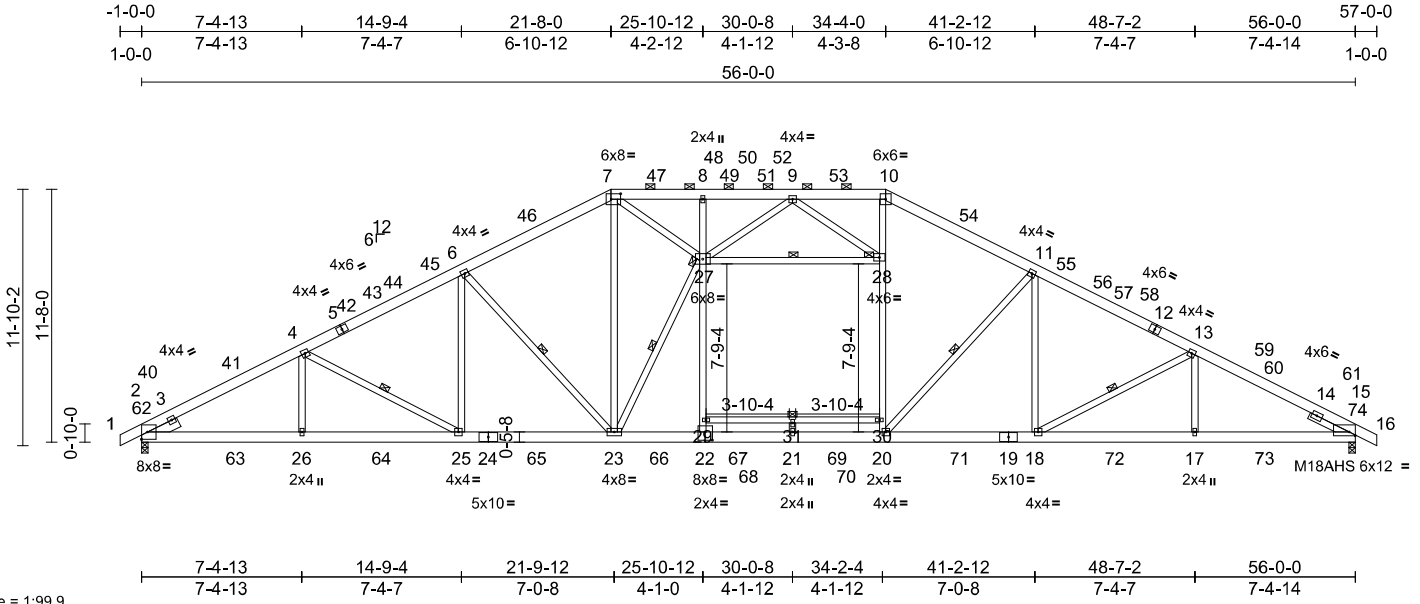


Plate Offsets (X, Y): [7:0-5-4,0-3-0], [15:Edge,0-2-0], [22:0-4-0,0-4-8]

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	0.70	-0.27	21-22	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.58	21-22	>999	M18AHS	186/179
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.19	15	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.10	22	>999	240	
BCDL	10.0										Weight: 479 lb FT = 20%

LUMBER	WEBS	NOTES
TOP CHORD 2x6 SP No.2	7-23=0/1061, 7-27=0/925, 22-29=0/503, 27-29=0/524, 8-27=-339/76, 20-30=0/1216, 28-30=0/1229, 10-28=0/1424, 27-28=-55/639, 29-31=-11/34, 30-31=11/34, 21-31=0/45, 9-27=-212/322, 9-28=-752/88, 6-23=-1113/99, 6-25=0/537, 4-25=-359/86, 4-26=-46/275, 11-20=-1073/126, 11-18=0/485, 13-18=-371/81, 13-17=0/307, 23-27=-517/338	10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
BOT CHORD 2x6 SP DSS *Except* 22-19,24-22:2x6 SP No.2		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, with BCDL = 10.0psf.
WEBS 2x4 SP No.3 *Except* 23-7,8-22,10-20,27-28:2x4 SP No.2		12) All bearings are assumed to be SP DSS .
SLIDER Left 2x6 SP No.2 -- 1-6-0, Right 2x4 SP No.3 -- 2-0-0		13) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
BRACING		14) 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.
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-7-11 max.): 7-10.		15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
BOT CHORD Rigid ceiling directly applied.		16) Attic room checked for L/360 deflection.
WEBS 1 Row at midpt 27-28, 29-30, 6-23, 4-25, 11-20, 13-18, 23-27		LOAD CASE(S) Standard
JOINTS 1 Brace at Jt(s): 27, 28		
REACTIONS (size) 2=0-3-8, 15=0-3-8		
Max Horiz 2=99 (LC 15)		
Max Grav 2=2614 (LC 52), 15=2632 (LC 52)		
FORCES (lb) - Maximum Compression/Maximum Tension		
TOP CHORD 1-2=0/42, 2-4=-5040/0, 4-6=-4717/0, 6-7=-3994/0, 7-8=-4029/0, 8-9=-4018/0, 9-10=-3585/0, 10-11=-4054/0, 11-13=-4744/0, 13-15=-5094/0, 15-16=0/42		
BOT CHORD 2-26=0/4401, 25-26=0/4401, 23-25=0/4127, 21-23=0/3430, 20-21=0/3404, 18-20=0/4153, 17-18=0/4446, 15-17=0/4446		



January 22, 2025

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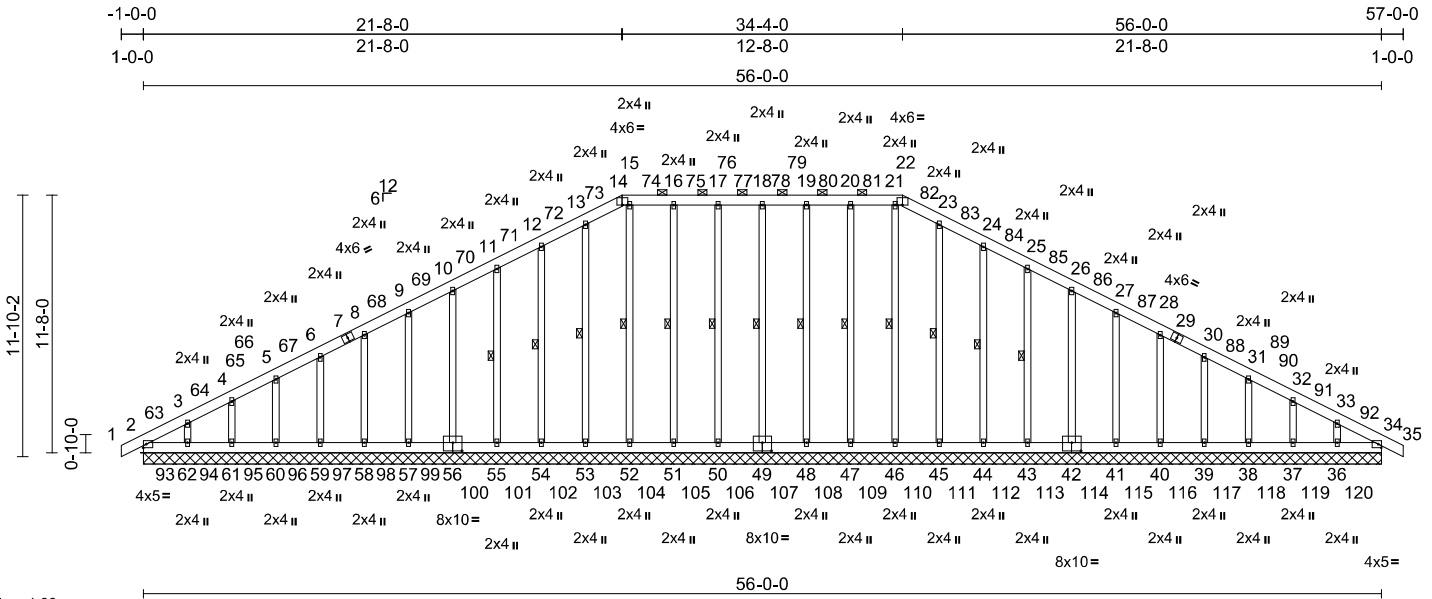
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0057 Roof
2501-0739-A	A6GE	Piggyback Base Supported Gable	1	1	170926629
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 E Dec 4 2024 Print: 8.830 E Dec 4 2024 MiTek Industries, Inc. Wed Jan 22 13:14:44
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Page: 1



Scale = 1:99

Plate Offsets (X, Y): [42:0-5-0,0-4-8], [49:0-5-0,0-4-8], [56:0-5-0,0-4-8]

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	34	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-S								
BCDL	10.0											
											Weight: 488 lb	FT = 20%

LUMBER	Max Grav	All reactions 250 (lb) or less at joint (s) except 2=314 (LC 90), 34=314 (LC 120), 36=335 (LC 175), 37=333 (LC 174), 38=334 (LC 173), 39=333 (LC 172), 40=334 (LC 171), 41=333 (LC 170), 42=333 (LC 169), 43=333 (LC 168), 44=334 (LC 167), 45=333 (LC 166), 46=332 (LC 165), 47=334 (LC 164), 48=334 (LC 163), 49=333 (LC 162), 50=334 (LC 161), 51=334 (LC 160), 52=332 (LC 159), 53=333 (LC 158), 54=334 (LC 157), 55=333 (LC 156), 56=333 (LC 155), 57=333 (LC 154), 58=334 (LC 153), 59=333 (LC 152), 60=334 (LC 151), 61=333 (LC 150), 62=335 (LC 149)	2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-0 to 4-7-3, Interior (1) 4-7-3 to 21-8-0, Exterior(2R) 21-8-0 to 29-7-1, Interior (1) 29-7-1 to 34-4-0, Exterior(2R) 34-4-0 to 42-0-0, Interior (1) 42-0-0 to 57-0-0 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
TOP CHORD	2x6 SPF No.2		
BOT CHORD	2x6 SPF No.2		
OTHERS	2x4 SP 2400F 2.0E		
BRACING			
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 14-22.		
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.		
WEBS	1 Row at midpt 18-49, 17-50, 16-51, 15-52, 13-53, 12-54, 11-55, 19-48, 20-47, 21-46, 23-45, 24-44, 25-43		
REACTIONS All bearings 56-0-0.			
(lb) - Max Horiz	2=99 (LC 15)		
Max Uplift	All uplift 100 (lb) or less at joint(s) 2, 36, 37, 38, 39, 40, 41, 42, 43, 44, 54, 55, 56, 57, 58, 59, 60, 61, 62		
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.			
WEBS	11-55=-251/50, 10-56=-255/43, 9-57=-258/37, 8-58=-262/37, 6-59=-267/37, 5-60=-272/37, 4-61=-278/48, 3-62=-283/59, 25-43=-251/50, 26-42=-255/43, 27-41=-258/37, 28-40=-262/37, 30-39=-267/37, 31-38=-272/37, 32-37=-278/48, 33-36=-283/59		
NOTES			
1) Unbalanced roof live loads have been considered for this design.			



January 22, 2025

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0057 Roof
2501-0739-A	A6GE	Piggyback Base Supported Gable	1	1	170926629 Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 E Dec 4 2024 Print: 8.830 E Dec 4 2024 MiTek Industries, Inc. Wed Jan 22 13:14:44
ID:u6YFIJR5HbIZ1kPY5e5qLjzy9FS-Rn8P9chINKmaLXYwys625b93EaMMzi8N7M6d0Uzsozj

Page: 2

- 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 15.4 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) Plates checked for a plus or minus 5 degree rotation about its center.
- 9) Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 2-0-0 oc.
- 11) 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) N/A

- 14) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0057 Roof	170926630
2501-0739-A	A6SGE	Piggyback Base Structural Gable	1	1	Job Reference (optional)	

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Wed Jan 22 05:43:01
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Page: 1

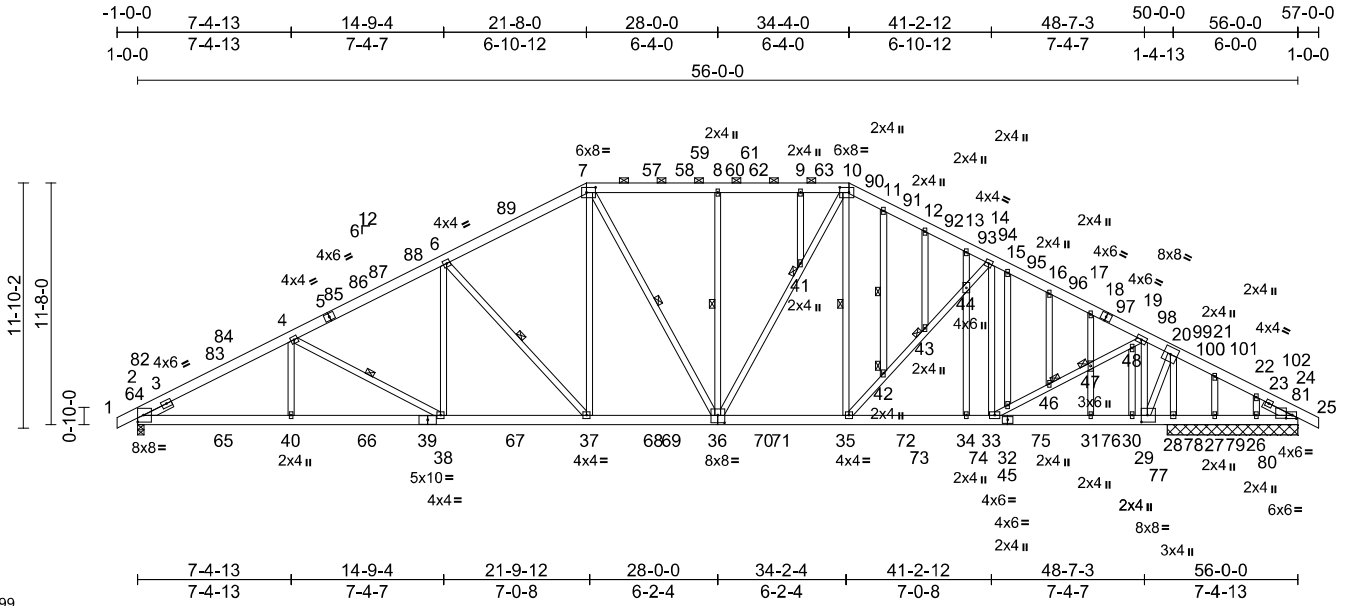


Plate Offsets (X, Y): [7:0-5-4,0-3-0], [10:0-5-4,0-3-0], [24:0-2-9,0-2-0], [24:0-3-7,0-1-13], [29:0-3-8,0-4-0], [36:0-4-0,0-4-8]

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	Vert(LL)	-0.20	37-38	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	Vert(CT)	-0.36	38-40	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.12	28	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-AS	Wind(LL)	0.07	38-40	>999	240		
BCDL	10.0									Weight: 533 lb	FT = 20%

LUMBER		BOT CHORD		NOTES
TOP CHORD	2x6 SP No.2	2-40=-33/3701, 38-40=-33/3701,		1) Unbalanced roof live loads have been considered for this design.
BOT CHORD	2x6 SP No.2	37-38=0/3350, 35-37=0/2609, 34-35=0/2144,		2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-0 to 4-7-3, Interior (1) 4-7-3 to 21-8-0, Exterior(2R) 21-8-0 to 29-7-1, Interior (1) 29-7-1 to 34-4-0, Exterior(2R) 34-4-0 to 42-0-0, Interior (1) 42-0-0 to 57-0-0 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
WEBS	2x4 SP No.3 *Except*	29-30=0/270, 28-29=-629/70, 27-28=-629/70,		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.
OTHERS	2x4 SP No.3	26-27=-629/70, 24-26=-629/70		
SLIDER	Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0	7-37=0/1107, 8-36=-608/100,		
BRACING		10-35=-121/261, 4-40=0/326, 6-38=0/545,		
TOP CHORD	Structural wood sheathing directly applied, except	4-38=-436/64, 19-29=-2068/47,		
BOT CHORD	2-0-0 oc purlins (4-5-0 max.); 7-10.	14-33=-793/14, 7-36=-267/212,		
WEBS	Rigid ceiling directly applied.	35-42=-65/381, 42-43=-69/367,		
JOINTS	1 Brace at Jt(s): 41, 42, 43, 46, 47	43-44=-53/374, 14-44=-75/371,		
REACTIONS	(size)	33-45=-16/2279, 45-46=-12/2163,		
	2=0-3-8, 24=6-3-8, 26=6-3-8,	46-47=-15/2141, 47-48=-14/2191,		
	27=6-3-8, 28=6-3-8	19-48=-13/2204, 36-41=-31/799,		
	Max Horiz 2=99 (LC 15)	10-41=-32/773, 6-37=-1123/100, 9-41=-3/34,		
	Max Uplift 24=-288 (LC 66), 27=-234 (LC 63)	11-42=-12/21, 12-43=-56/11, 13-44=-143/120,		
	2=2237 (LC 51), 24=141 (LC 141),	34-44=-175/119, 15-45=-8/232,		
	26=411 (LC 139), 27=165 (LC 138),	16-46=-24/60, 17-47=-244/60,		
	28=3041 (LC 51)	31-47=-160/119, 30-48=-4/139,		
FORCES	(lb) - Maximum Compression/Maximum Tension	20-28=-2796/76, 21-27=-240/47,		
TOP CHORD		22-26=-283/45, 20-29=-38/2223		
	7-8=-2676/223, 8-9=-2676/223,			
	9-10=-2676/223, 1-2=0/42, 2-4=-4262/128,			
	4-6=-3850/177, 6-7=-3120/217,			
	10-11=-2534/208, 11-12=-2594/198,			
	12-13=-2643/184, 13-14=-2649/154,			
	14-15=-2281/152, 15-16=-2448/150,			
	16-17=-2526/135, 17-19=-2474/99,			
	19-20=-366/70, 20-21=0/738, 21-22=-21/716,			
	22-24=-39/745, 24-25=0/36			

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); ls=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- 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 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- Plates checked for a plus or minus 5 degree rotation about its center.
- 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, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .



January 22, 2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0057 Roof
2501-0739-A	A6SGE	Piggyback Base Structural Gable	1	1	Job Reference (optional) 170926630

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Wed Jan 22 05:43:01
 ID:XYWKiTKCWkiSIUer0Z8Qczy8q2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 2

13) N/A

- 14) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 15) 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.
- 16) 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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

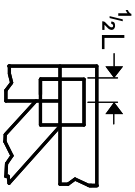
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



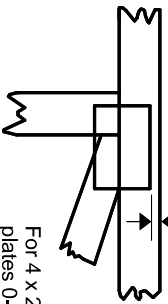
818 Soundside Road
 Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

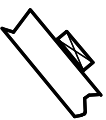
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

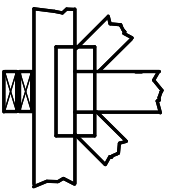
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



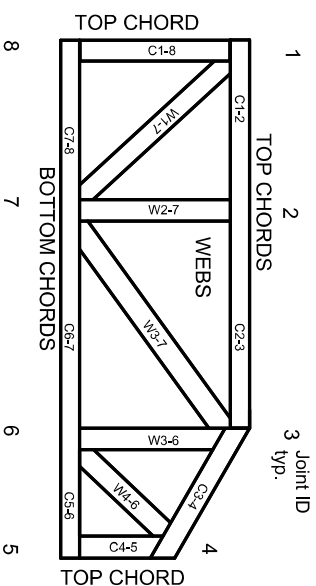
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling
BCSI: Installing, Restraint & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on lumber values established by others.

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ENGINEERING BY
TRENCO
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MITek Engineering Reference Sheet: Mill-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.