

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 2000456-2000456A
Wellons Reser

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I47996617 thru I47996661

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844



September 22, 2021

Sevier, Scott

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.

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996617
2000456-2000456A	A	Piggyback Base	5	1	Job Reference (optional)	

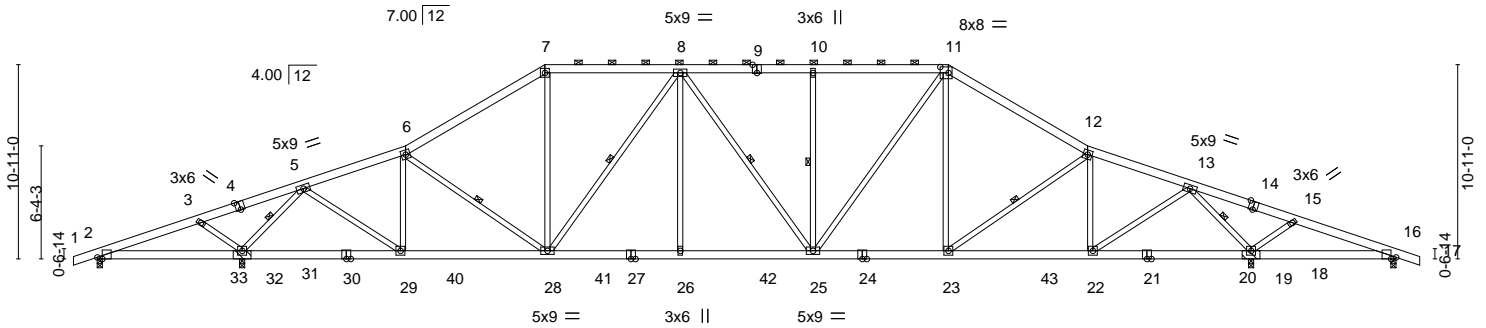
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:31:41 2021 Page 1

ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-yLK6AYw1SE?VLv2kivJgpwG2oLo4_4HiMr03uzybS4m

-1-4-0	5-9-15	11-7-0	17-4-0	25-1-15	32-9-4	40-2-12	47-10-1	55-8-0	61-5-0	67-2-1	73-0-0	74-4-0
1-4-0	5-9-15	5-9-0	5-9-0	7-9-15	7-7-5	7-5-9	7-7-5	7-9-15	5-9-0	5-9-0	5-9-15	1-4-0

Scale = 1:129.5



	8-1-12	17-4-0	25-1-15	32-9-4	40-2-12	47-10-1	55-8-0	64-10-4	73-0-0
	8-1-12	9-2-4	7-9-15	7-7-5	7-5-9	7-7-5	7-9-15	9-2-4	8-1-12
Plate Offsets (X,Y)--	[2:0-3-6,Edge], [4:0-3-0,Edge], [9:0-3-0,Edge], [11:0-5-8,0-4-0], [14:0-3-0,Edge], [16:0-3-6,Edge]								

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.51	Vert(LL)	-0.19 25-26	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.37 25-26	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.11 19	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 566 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-1 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (4-2-6 max.): 7-11.
WEBS 2x4 SP No.3 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-28,8-25,11-25: 2x4 SP No.2 or 2x4 SPF No.2	6-0-0 oc bracing: 2-32,16-19.
	WEBS 1 Row at midpt 5-32, 6-28, 8-28, 8-25, 10-25, 12-23, 13-19

REACTIONS. All bearings 0-3-8 except (jt=length) 32=0-4-14 (input: 0-3-8 + bearing block), 19=0-4-14 (input: 0-3-8 + bearing block).
 (lb) - Max Horz 2=180(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=-270(LC 26), 32=-300(LC 12), 19=-262(LC 13), 16=-266(LC 25)
 Max Grav All reactions 250 lb or less at joint(s) 2, 16 except 32=3116(LC 1), 19=3111(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-183/1261, 3-5=-296/1594, 5-6=-2477/542, 6-7=-2741/636, 7-8=-2298/614, 8-10=-2773/700, 10-11=-2773/700, 11-12=-2757/637, 12-13=-2490/546, 13-15=-285/1590, 15-16=-170/1257
 BOT CHORD 2-32=-1136/225, 29-32=-120/798, 28-29=-284/2327, 26-28=-269/2795, 25-26=-269/2795, 23-25=-182/2302, 22-23=-287/2340, 19-22=-93/805, 16-19=-1132/222
 WEBS 3-32=-492/237, 5-32=-3452/757, 5-29=-233/1860, 6-29=-880/246, 7-28=-110/949, 8-28=-955/221, 8-26=0/413, 10-25=-478/222, 11-25=-218/899, 11-23=-28/357, 12-22=-878/245, 13-22=-230/1866, 13-19=-3458/750, 15-19=-492/237

- NOTES-**
- 2x6 SP No.2 bearing block 12" long at jt. 32 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - 2x6 SP No.2 bearing block 12" long at jt. 19 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 6x6 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



September 22, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job 2000456-2000456A	Truss A	Truss Type Piggyback Base	Qty 5	Ply 1	Wellons Reser Job Reference (optional)	I47996617
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:31:41 2021 Page 2
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-yLK6AYw1SE?VLv2kivJgpwG2oLO4_4HiMr03uzybS4m

NOTES-

- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 16. This connection is for uplift only and does not consider lateral forces.
- 11) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 32 and 19. This connection is for uplift only and does not consider lateral forces.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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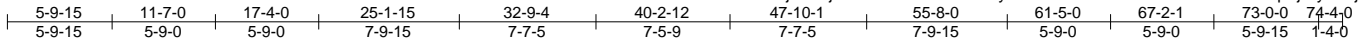
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996618
2000456-2000456A	A1	PIGGYBACK BASE	4	1	Job Reference (optional)	

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8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:31:44 2021 Page 1

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Scale: 3/32"=1'

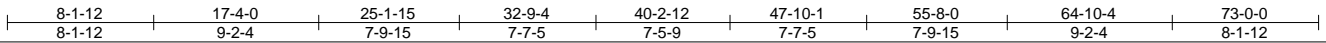
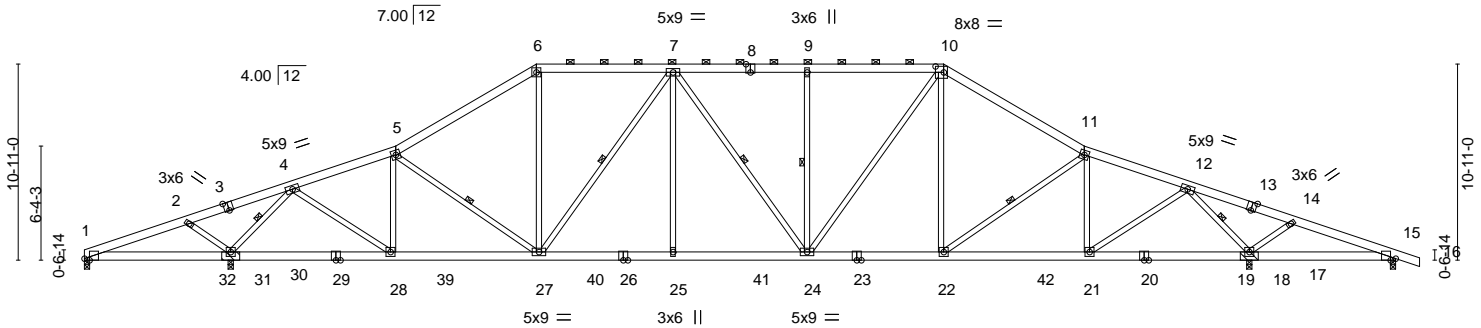


Plate Offsets (X,Y)--	[1:0-3-6,Edge], [3:0-3-0,Edge], [8:0-3-0,Edge], [10:0-5-8,0-4-0], [13:0-3-0,Edge], [15:0-3-6,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.51	Vert(LL)	-0.19 24-25	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.37 24-25	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.11 18	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 562 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-1 oc purlins, except 2-0-0 oc purlins (4-2-6 max.): 6-10.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-31,15-18.
WEBS 2x4 SP No.3 *Except* 7-27,7-24,10-24: 2x4 SP No.2 or 2x4 SPF No.2	WEBS 1 Row at midpt 4-31, 5-27, 7-27, 7-24, 9-24, 11-22, 12-18

REACTIONS. All bearings 0-3-8 except (jt=length) 31=0-4-14 (input: 0-3-8 + bearing block), 18=0-4-14 (input: 0-3-8 + bearing block).
 (lb) - Max Horz 1=-188(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) except 1=-299(LC 26), 31=-302(LC 12), 18=-262(LC 13), 15=-265(LC 25)
 Max Grav All reactions 250 lb or less at joint(s) 1, 15 except 31=3123(LC 1), 18=3111(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-173/1254, 2-4=-293/1592, 4-5=-2476/542, 5-6=-2741/636, 6-7=-2297/614, 7-9=-2773/700, 9-10=-2773/700, 10-11=-2757/637, 11-12=-2490/546, 12-14=-285/1590, 14-15=-169/1257
 BOT CHORD 1-31=-1128/221, 28-31=-120/798, 27-28=-284/2326, 25-27=-269/2795, 24-25=-269/2795, 22-24=-182/2302, 21-22=-287/2340, 18-21=-93/805, 15-18=-1132/222
 WEBS 2-31=-502/242, 4-31=-3449/753, 4-28=-233/1860, 5-28=-881/247, 6-27=-110/948, 7-27=-955/221, 7-25=0/413, 9-24=-478/222, 10-24=-218/899, 10-22=-28/357, 11-21=-878/245, 12-21=-230/1865, 12-18=-3458/750, 14-18=-492/237

- NOTES-**
- 2x6 SP No.2 bearing block 12" long at jt. 31 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - 2x6 SP No.2 bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 6x6 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



September 22, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000456-2000456A	Truss A1	Truss Type PIGGYBACK BASE	Qty 4	Ply 1	Wellons Reser Job Reference (optional)	I47996618
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:31:44 2021 Page 2
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-Mw?EoaywI9N3CMmJN2tNQYuXxYQnBR082pFjVlybS4j

NOTES-

- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 15. This connection is for uplift only and does not consider lateral forces.
- 11) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 31 and 18. This connection is for uplift only and does not consider lateral forces.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996619
2000456-2000456A	A1E	GABLE	1	1	Job Reference (optional)	

84 Components (Dunn),

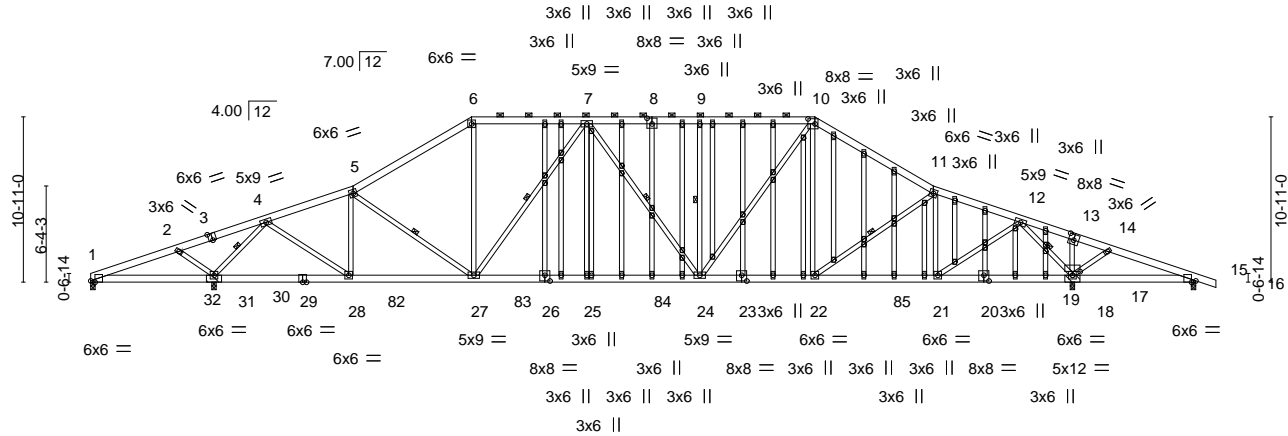
Dunn, NC - 28334,

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5-9-15	11-7-0	17-4-0	25-1-15	32-9-4	40-2-12	47-10-1	55-8-0	61-5-0	67-2-1	73-0-0	74-4-0
5-9-15	5-9-0	5-9-0	7-9-15	7-7-5	7-5-9	7-7-5	7-9-15	5-9-0	5-9-0	5-9-15	1-4-0

Scale = 1:152.2



8-1-12	17-4-0	25-1-15	32-9-4	40-2-12	47-10-1	55-8-0	64-10-4	73-0-0
8-1-12	9-2-4	7-9-15	7-7-5	7-5-9	7-7-5	7-9-15	9-2-4	8-1-12

Plate Offsets (X, Y)-- [1:0-3-6,Edge], [3:0-3-0,Edge], [8:0-4-0,0-4-8], [10:0-5-8,0-4-0], [13:0-4-0,0-4-8], [15:0-3-6,Edge], [18:0-6-0,0-3-0], [20:0-4-0,0-4-8], [23:0-4-0,0-4-8], [26:0-4-0,0-4-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.51	Vert(LL)	-0.19 24-25	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.37 24-25	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.11 18	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 773 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-1 oc purlins, except 2-0-0 oc purlins (4-2-6 max.): 6-10.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-31,15-18.
WEBS 2x4 SP No.3 *Except* 7-27,7-24,10-24: 2x4 SP No.2 or 2x4 SPF No.2	WEBS 1 Row at midpt 4-31, 5-27, 7-27, 7-24, 9-24, 11-22, 12-18
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 0-3-8 except (jt=length) 31=0-4-14 (input: 0-3-8 + bearing block), 18=0-4-14 (input: 0-3-8 + bearing block).
 (lb) - Max Horz 1=-188(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) except 1=-299(LC 26), 31=-302(LC 12), 18=-262(LC 13), 15=-265(LC 25)
 Max Grav All reactions 250 lb or less at joint(s) 1, 15 except 31=3123(LC 1), 18=3111(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-173/1254, 2-4=-293/1592, 4-5=-2476/542, 5-6=-2741/636, 6-7=-2297/614, 7-9=-2773/700, 9-10=-2773/700, 10-11=-2757/637, 11-12=-2490/546, 12-14=-285/1590, 14-15=-169/1257
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- NOTES-**
- 2x6 SP No.2 bearing block 12" long at jt. 31 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - 2x6 SP No.2 bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 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.



September 22, 2021

Continued on page 2

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818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	I47996619
2000456-2000456A	A1E	GABLE	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:31:55 2021 Page 2
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-X1AP6L5p9YmV126QXsZyNtrQ9_ALGQlla0PpO9ybS4Y

NOTES-

- 6) **WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 3x4 MT20 unless otherwise indicated.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 15. This connection is for uplift only and does not consider lateral forces.
- 13) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 31 and 18. This connection is for uplift only and does not consider lateral forces.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



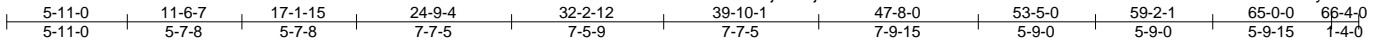
818 Soundside Road
Edenton, NC 27932

Job 2000456-2000456A	Truss A2	Truss Type Piggyback Base	Qty 12	Ply 1	Wellons Reser	147996620
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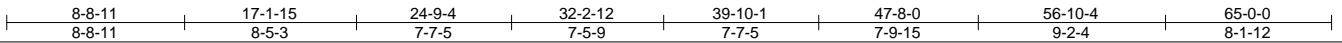
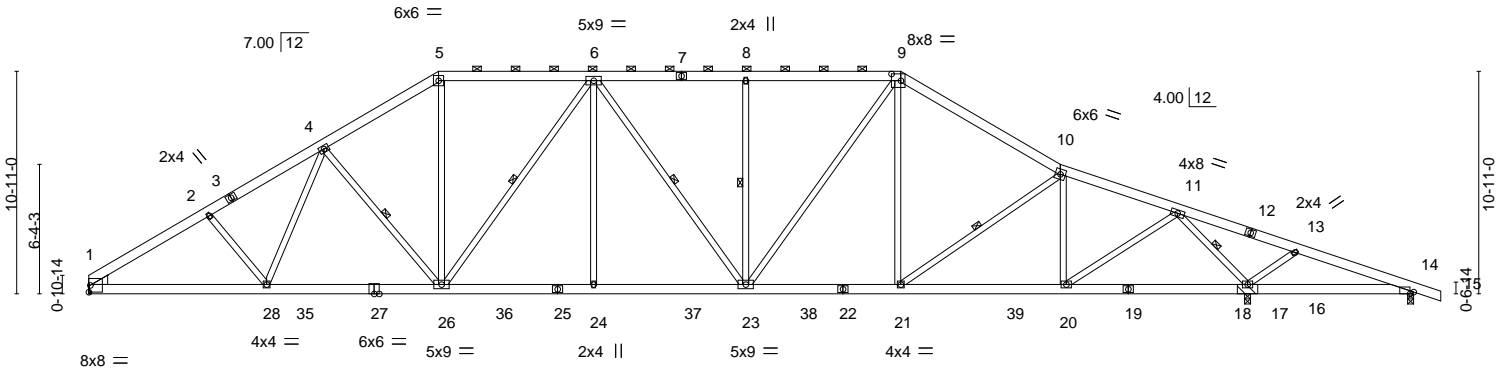
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:31:57 2021 Page 1

ID:KQ1KS2Sn3ljdZGzjx5z8lzz3hVz-UQH9X064h90DGMGoeGcQSlwheomOkJV21KuvS2ybS4W



Scale = 1:113.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.84	Vert(LL)	-0.23 23-24	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.97	Vert(CT)	-0.43 23-24	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.86	Horz(CT)	0.15 17	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 512 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-6-3 oc purlins, except 2-0-0 oc purlins (4-0-10 max.): 5-9.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 1-28 6-0-0 oc bracing: 14-17.
WEBS 2x4 SP No.3 *Except* 6-26,6-23,9-23: 2x4 SP No.2 or 2x4 SPF No.2	WEBS 1 Row at midpt 4-26, 6-26, 6-23, 8-23, 10-21, 11-17
WEDGE Left: 2x6 SP No.2	

REACTIONS. (size) 1=Mechanical, 17=(0-3-8 + bearing block) (req. 0-5-2), 14=0-3-8
 Max Horz 1=-290(LC 8)
 Max Uplift 1=-168(LC 12), 17=-256(LC 13), 14=-323(LC 25)
 Max Grav 1=2209(LC 2), 17=3255(LC 1), 14=11(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-3660/675, 2-4=-3492/689, 4-5=-3111/693, 5-6=-2633/642, 6-8=-2960/718, 8-9=-2960/718, 9-10=-2890/650, 10-11=-2563/551, 11-13=-308/1768, 13-14=-192/1431
 BOT CHORD 1-28=-432/3038, 26-28=-336/2902, 24-26=-296/3053, 23-24=-296/3053, 21-23=-193/2416, 20-21=-292/2411, 17-20=-86/771, 14-17=-1296/242
 WEBS 4-28=-43/316, 4-26=-586/244, 5-26=-186/1234, 6-26=-831/270, 6-24=0/393, 8-23=-475/221, 9-23=-219/1017, 9-21=-29/336, 10-20=-947/254, 11-20=-245/1995, 11-17=-3660/773, 13-17=-498/238

- NOTES-**
- 2x6 SP No.2 bearing block 12" long at jt. 17 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 4x6 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - On truss to girder mechanical connection (by others) of truss to bearing plate capable of withstanding 168 lb uplift at joint 1.



September 22, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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 Edenton, NC 27932

Job 2000456-2000456A	Truss A2	Truss Type Piggyback Base	Qty 12	Ply 1	Wellons Reser Job Reference (optional)	I47996620
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:31:57 2021 Page 2
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-UQH9X064h90DGMGoeGcQSlwheomOkJV21KuvS2ybS4W

NOTES-

- 11) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996621
2000456-2000456A	A2E	GABLE	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:02 2021 Page 1
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-qN52akACVheWM78mRqBb9LdaSpWoPjxnBccg7FybS4R



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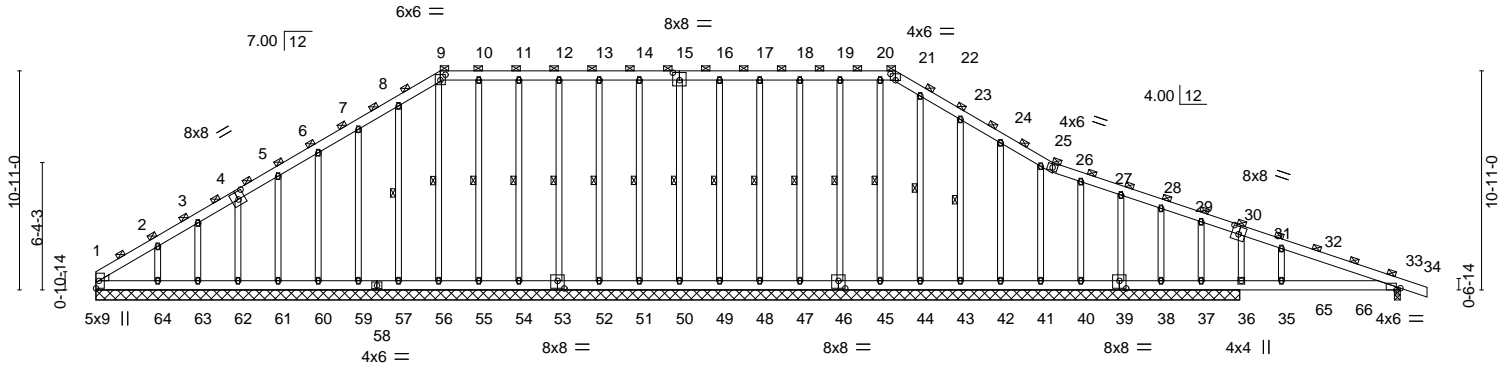


Plate Offsets (X,Y)--	[4:0-4-0,0-4-8], [9:0-3-0,0-3-4], [15:0-4-0,0-4-8], [21:0-3-0,0-3-12], [31:0-4-0,0-4-8], [33:0-2-6,Edge], [39:0-4-0,0-4-8], [46:0-4-0,0-4-8], [53:0-4-0,0-4-8]
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LOADING (psf)	SPACING-	2-2-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.70	Vert(LL)	0.10 33-35	>964	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.82	Vert(CT)	-0.19 33-35	>494	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.21	Horz(CT)	0.01 33	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 629 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
BOT CHORD 2x6 SP No.2	(Switched from sheeted: Spacing > 2-0-0).
OTHERS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	WEBS 1 Row at midpt
Left: 2x4 SP No.3	15-50, 14-51, 13-52, 11-54, 10-55, 9-56, 8-57, 16-49, 17-48, 18-47, 19-46, 20-45, 22-44, 23-43

REACTIONS. All bearings 57-0-0 except (jt=length) 33=0-3-8.
 (lb) - Max Horz 1=315(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 50, 51, 52, 53, 54, 55, 57, 59, 60, 61, 62, 63, 49, 48, 47, 46, 44 except 33=184(LC 9), 64=132(LC 35), 43=160(LC 13), 42=151(LC 13), 41=156(LC 13), 40=142(LC 9), 39=120(LC 9), 38=179(LC 13), 37=537(LC 24), 36=541(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 50, 51, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62, 63, 49, 48, 47, 46, 45, 37 except 33=710(LC 1), 64=305(LC 19), 44=451(LC 24), 43=460(LC 1), 42=459(LC 1), 41=464(LC 1), 40=471(LC 1), 39=417(LC 24), 38=663(LC 1), 36=2132(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-287/275, 7-8=-154/260, 8-9=-196/307, 9-10=-182/288, 10-11=-182/289, 11-12=-182/289, 12-13=-182/289, 13-14=-182/289, 14-15=-182/289, 15-16=-182/289, 16-17=-182/289, 17-18=-182/289, 18-19=-182/289, 19-20=-183/289, 20-21=-183/289, 21-22=-194/297, 22-23=-176/285
 WEBS 30-37=-52/305, 31-36=-925/255, 32-35=-158/322

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 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.
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
- Continued on page 2
 This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996621
2000456-2000456A	A2E	GABLE	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:04 2021 Page 2
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NOTES-

- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) N/A
- 11) N/A
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 286 lb down and 97 lb up at 40-11-4, 286 lb down and 97 lb up at 42-11-4, 286 lb down and 97 lb up at 44-11-4, 286 lb down and 97 lb up at 46-11-4, 286 lb down and 97 lb up at 48-11-4, 286 lb down and 97 lb up at 50-11-4, 286 lb down and 97 lb up at 52-11-4, 286 lb down and 97 lb up at 54-11-4, 286 lb down and 97 lb up at 56-11-4, 286 lb down and 81 lb up at 58-11-4, and 286 lb down and 78 lb up at 60-11-4, and 290 lb down and 79 lb up at 62-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)

Vert: 1-9=-65, 9-21=-65, 21-26=-65, 26-34=-65, 1-33=-22

Concentrated Loads (lb)

Vert: 44=-286(B) 43=-286(B) 42=-286(B) 41=-286(B) 40=-286(B) 39=-286(B) 38=-286(B) 37=-286(B) 36=-286(B) 35=-286(B) 65=-286(B) 66=-290(B)

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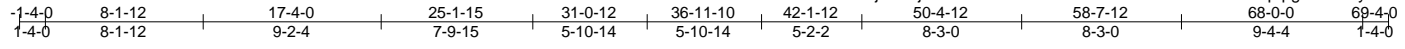


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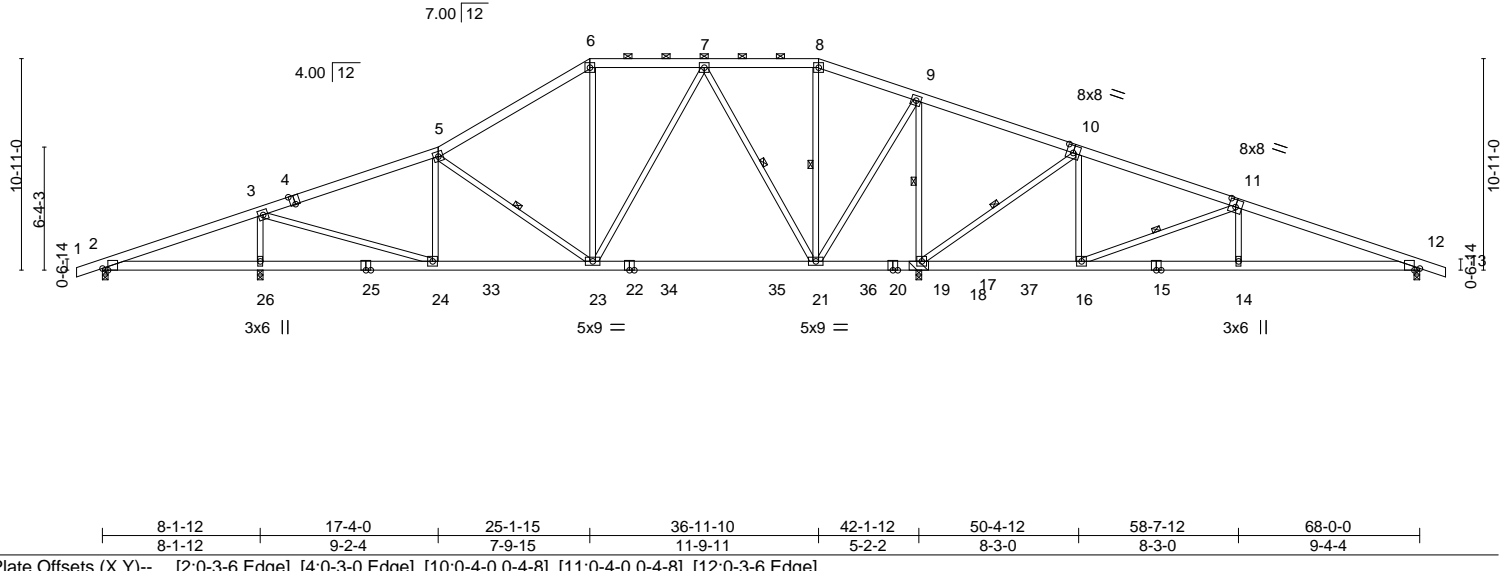
Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996622
2000456-2000456A	B	Piggyback Base	14	1		

84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:08 2021 Page 1
 ID:kQ1KS2Sn3ldzGzjx5z8lzz3hVz-fXSJrnFz5XPf42cwn4l?PctfKEC2plpgZY3?LvybS4L



Scale = 1:118.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.19 21-23	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.33 21-23	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.83	Horz(CT)	0.03 12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 506 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-23, 7-21, 8-21, 9-18, 10-18, 11-16

REACTIONS. All bearings 0-3-8 except (jt=length) 18=0-4-9 (input: 0-3-8 + bearing block).
 (lb) - Max Horz 2=180(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=116(LC 8), 26=267(LC 12), 18=434(LC 9), 12=197(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) except 2=318(LC 23), 26=1640(LC 23), 18=2902(LC 1), 12=836(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-5=-1410/317, 5-6=-1109/312, 6-7=-872/329, 9-10=-74/972, 10-11=-299/147, 11-12=-1377/334
 BOT CHORD 23-24=-151/1252, 21-23=0/635, 18-21=-851/391, 14-16=-217/1253, 12-14=-214/1259
 WEBS 3-26=-1406/416, 3-24=-137/1333, 5-24=-259/142, 5-23=-508/232, 7-23=-65/629, 7-21=-1013/248, 8-21=-284/79, 9-21=-206/1605, 9-18=-2028/465, 10-18=-1211/354, 10-16=-14/640, 11-16=-1130/342, 11-14=0/371

- NOTES-**
- 2x6 SP No.2 bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 6x6 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 26, and 12. This connection is for uplift only and does not consider lateral forces.
 - Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.



September 22, 2021

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 Edenton, NC 27932

Job 2000456-2000456A	Truss B	Truss Type Piggyback Base	Qty 14	Ply 1	Wellons Reser Job Reference (optional)	I47996622
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:08 2021 Page 2
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-fXSJrnFz5XPf42cwn4l?PctfKEc2plpgZY3?LvybS4L

NOTES-

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996623
2000456-2000456A	B1	ROOF TRUSS	3	1		

84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:10 2021 Page 1

ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-bwa4GTGDd9fNKMIivVKTU1z?r1K5HCWz1rY5PoybS4J

-1-4-0	8-1-12	17-4-0	25-1-15	31-0-12	36-11-10	42-1-12	50-4-12	58-7-12	68-0-0	69-4-0
1-4-0	8-1-12	9-2-4	7-9-15	5-10-14	5-10-14	5-2-2	8-3-0	8-3-0	9-4-4	1-4-0

Scale = 1:120.9

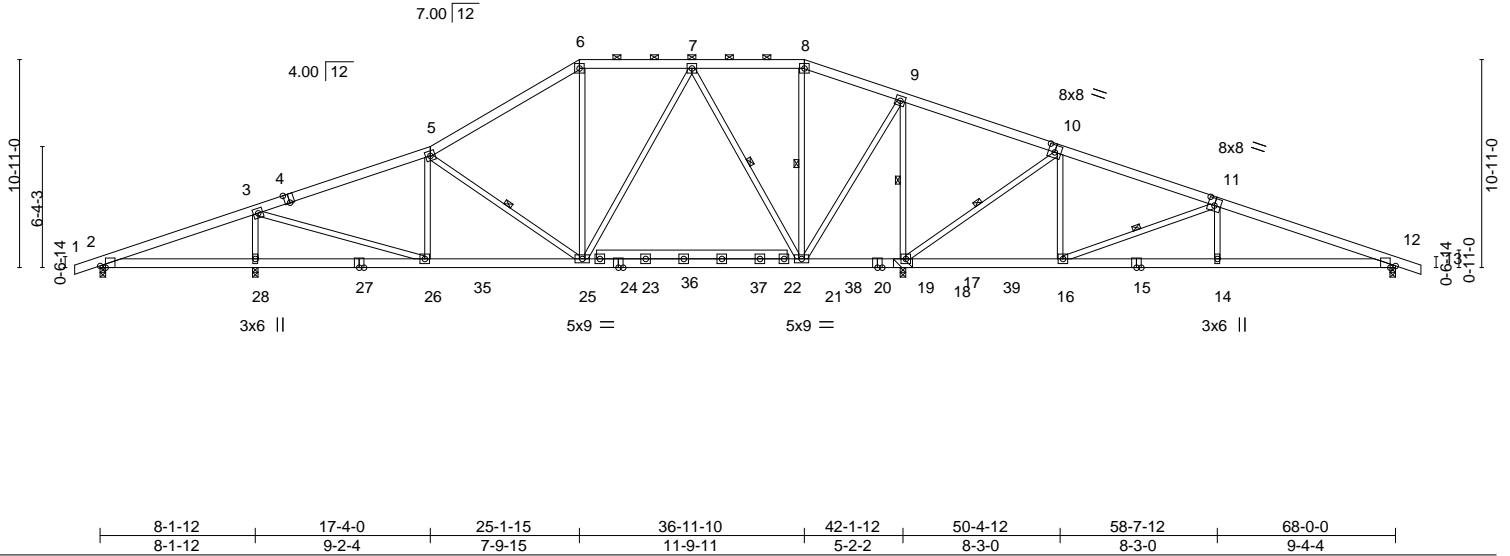


Plate Offsets (X, Y)--	[2:0-3-6,Edge], [4:0-3-0,Edge], [10:0-4-0,0-4-8], [11:0-4-0,0-4-8], [12:0-3-6,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	-0.09	21-25	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.16	21-25	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.02	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 530 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-6 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (6-0-0 max.): 6-8.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
	WEBS 1 Row at midpt 5-25, 7-21, 8-21, 9-18, 10-18, 11-16

REACTIONS. All bearings 0-3-8 except (jt=length) 18=0-4-9 (input: 0-3-8 + bearing block).
 (lb) - Max Horz 2=180(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=115(LC 8), 28=268(LC 12), 18=436(LC 9), 12=196(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) except 2=322(LC 24), 28=1639(LC 24), 18=2896(LC 1), 12=838(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-5=-1423/313, 5-6=-1100/313, 6-7=-857/330, 9-10=-79/958, 10-11=-304/139, 11-12=-1384/330
 BOT CHORD 25-26=-149/1264, 21-25=0/620, 18-21=-838/396, 14-16=-213/1260, 12-14=-211/1266
 WEBS 3-28=-1409/415, 3-26=-136/1331, 5-25=-521/225, 7-25=-63/629, 7-21=-1015/247, 8-21=-285/78, 9-21=-218/1541, 9-18=-1997/477, 10-18=-1207/356, 10-16=-15/634, 11-16=-1131/341, 11-14=0/373

- NOTES-**
- 2x6 SP No.2 bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 6x6 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 28, and 12. This connection is for uplift only and does not consider lateral forces.
 - Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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 818 Soundside Road
 Edenton, NC 27932

Job 2000456-2000456A	Truss B1	Truss Type ROOF TRUSS	Qty 3	Ply 1	Wellons Reser Job Reference (optional)	I47996623
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:10 2021 Page 2
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-bwa4GTGDd9fNKMIivVKTU1z?r1K5HCWz1rY5PoybS4J

NOTES-

- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

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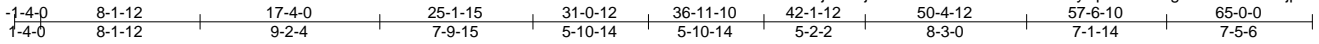
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996624
2000456-2000456A	B2	ROOF TRUSS	3	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:13 2021 Page 1

ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-0VFCuVI6w41yBpUtaduA6gbTOFGxUYPpjm07ybS4G



Scale = 1:117.8

Plate Offsets (X,Y)--	[2:0-2-6,Edge], [14:Edge,0-5-8], [15:0-3-8,0-4-0], [22:0-4-0,0-3-0], [25:0-3-8,0-2-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.68	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.79	Vert(LL) -0.26 20-24 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.87	Vert(CT) -0.54 16-18 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.11 14 n/a n/a		
	Code IRC2015/TPI2014			Weight: 523 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-3-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-1-6 max.): 6-8.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 3-25, 5-24, 7-24, 9-20, 10-18
3-25,13-15: 2x4 SP No.2 or 2x4 SPF No.2, 13-14: 2x6 SP No.2	

REACTIONS. (size) 2=0-3-8, 28=(0-3-8 + bearing block) (req. 0-4-12), 14=0-3-8
 Max Horz 2=190(LC 16)
 Max Uplift 2=152(LC 27), 28=287(LC 12), 14=356(LC 9)
 Max Grav 2=114(LC 24), 28=3032(LC 1), 14=2209(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-219/958, 3-5=-2754/617, 5-6=-2901/722, 6-7=-2435/687, 7-8=-2971/821,
 8-9=-3172/843, 9-10=-3690/914, 10-12=-4278/1004, 12-13=-4178/940, 13-14=-2102/516
 BOT CHORD 2-28=-833/240, 25-28=-833/240, 24-25=-412/2545, 20-24=-417/2785, 18-20=-601/3436,
 16-18=-799/4001, 15-16=-836/3893, 14-15=-106/404
 WEBS 3-28=-2770/738, 3-25=-648/3516, 5-25=-918/306, 5-24=-283/187, 6-24=-175/1064,
 7-24=-877/256, 7-20=-104/463, 8-20=-132/749, 9-20=-968/316, 9-18=-64/587,
 10-18=-743/247, 10-16=0/294, 12-16=0/266, 12-15=-481/222, 13-15=-739/3535

- NOTES-**
- 2x6 SP No.2 bearing block 12" long at jt. 28 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 4x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
 - Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 28. This connection is for uplift only and does not consider lateral forces.



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TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000456-2000456A	Truss B2	Truss Type ROOF TRUSS	Qty 3	Ply 1	Wellons Reser Job Reference (optional)	I47996624
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:13 2021 Page 2
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-0VFCuVI6w41yBpUtaduA6gbT0FGxUYPpJmm07ybS4G

NOTES-

- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

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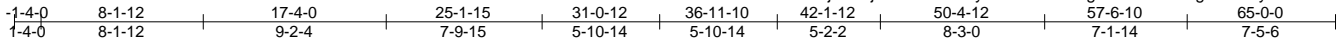
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996625
2000456-2000456A	B3	Piggyback Base	1	1	Job Reference (optional)	

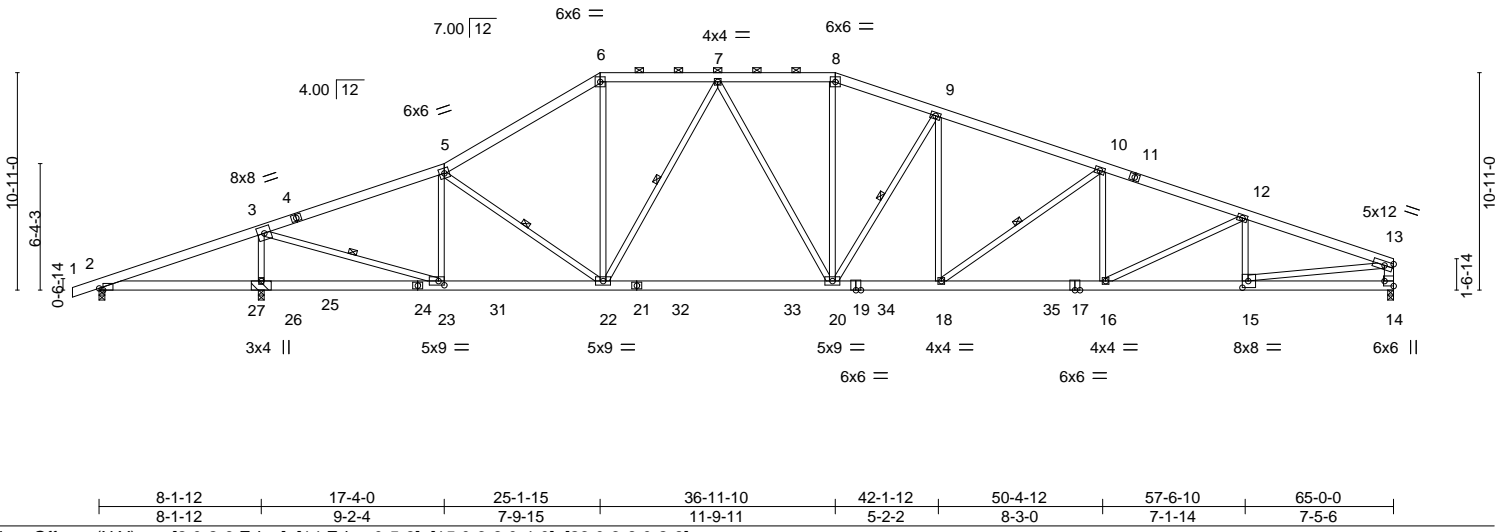
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:15 2021 Page 1

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Scale = 1:115.7



Job 2000456-2000456A	Truss B3	Truss Type Piggyback Base	Qty 1	Ply 1	Wellons Reser Job Reference (optional)	I47996625
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:15 2021 Page 2
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-ytNzJAKMRhHgQ7eGi2weB4goK2wHyS0iA7Fs5?ybS4E

NOTES-

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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818 Soundside Road
Edenton, NC 27932

Job 2000456-2000456A	Truss BE	Truss Type GABLE	Qty 1	Ply 1	Wellons Reser	147996626
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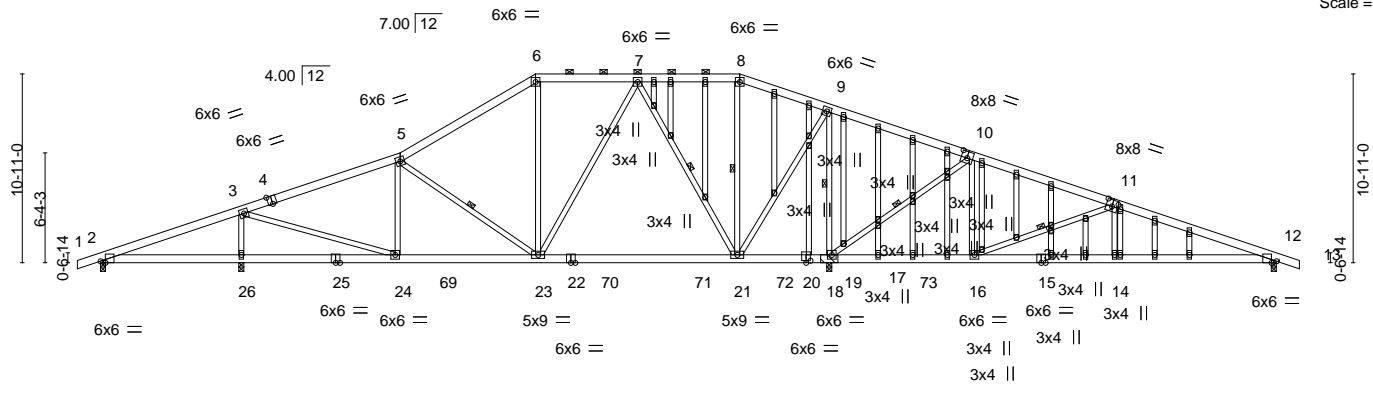
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:22 2021 Page 1

ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-FElcnaPlorAgmCgcc0YHzZT2otOK5dHknjSkr5ybS47

1-4-0	8-1-12	17-4-0	25-1-15	31-0-12	36-11-10	42-1-12	50-4-12	58-7-12	68-0-0	69-4-0
1-4-0	8-1-12	9-2-4	7-9-15	5-10-14	5-10-14	5-2-2	8-3-0	8-3-0	9-4-4	1-4-0

Scale = 1:133.2



8-1-12	17-4-0	25-1-15	36-11-10	42-1-12	50-4-12	58-7-12	68-0-0
8-1-12	9-2-4	7-9-15	11-9-11	5-2-2	8-3-0	8-3-0	9-4-4

Plate Offsets (X, Y)-- [2:0-3-6,Edge], [4:0-3-0,Edge], [10:0-4-0,0-4-8], [11:0-4-0,0-4-8], [12:0-3-6,Edge], [20:0-3-0,0-1-8], [54:0-1-12,0-1-8], [58:0-3-0,0-1-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.19 21-23	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.33 21-23	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.83	Horz(CT)	0.03 12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 617 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-23, 7-21, 8-21, 9-18, 10-18, 11-16
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 0-3-8 except (jt=length) 18=0-4-9 (input: 0-3-8 + bearing block).
 (lb) - Max Horz 2=-180(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=-116(LC 8), 26=-267(LC 12), 18=-434(LC 9), 12=-197(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) except 2=318(LC 23), 26=1640(LC 23), 18=2902(LC 1), 12=836(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-5=-1410/317, 5-6=-1109/312, 6-7=-872/329, 9-10=-74/972, 10-11=-299/147, 11-12=-1377/334
 BOT CHORD 23-24=-151/1252, 21-23=0/635, 18-21=-851/391, 14-16=-217/1253, 12-14=-214/1259
 WEBS 3-26=-1406/416, 3-24=-137/1333, 5-24=-259/142, 5-23=-508/232, 7-23=-65/629, 7-21=-1013/248, 8-21=-284/79, 9-21=-206/1605, 9-18=-2028/465, 10-18=-1211/354, 10-16=-14/640, 11-16=-1130/342, 11-14=0/371

- NOTES-**
- 2x6 SP No.2 bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 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.
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 3x6 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide is provided on the bottom chord and any other members, with BCDL = 10.0psf.



September 22, 2021

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 Edenton, NC 27932

Job 2000456-2000456A	Truss BE	Truss Type GABLE	Qty 1	Ply 1	Wellons Reser Job Reference (optional)	I47996626
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:22 2021 Page 2
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-FElcnaPlorAgmCgcc0YHzZT2otOK5dHknjSkr5ybS47

NOTES-

- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 26, and 12. This connection is for uplift only and does not consider lateral forces.
- 12) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18. This connection is for uplift only and does not consider lateral forces.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996628
2000456-2000456A	C1	Piggyback Base	1	1	Job Reference (optional)	

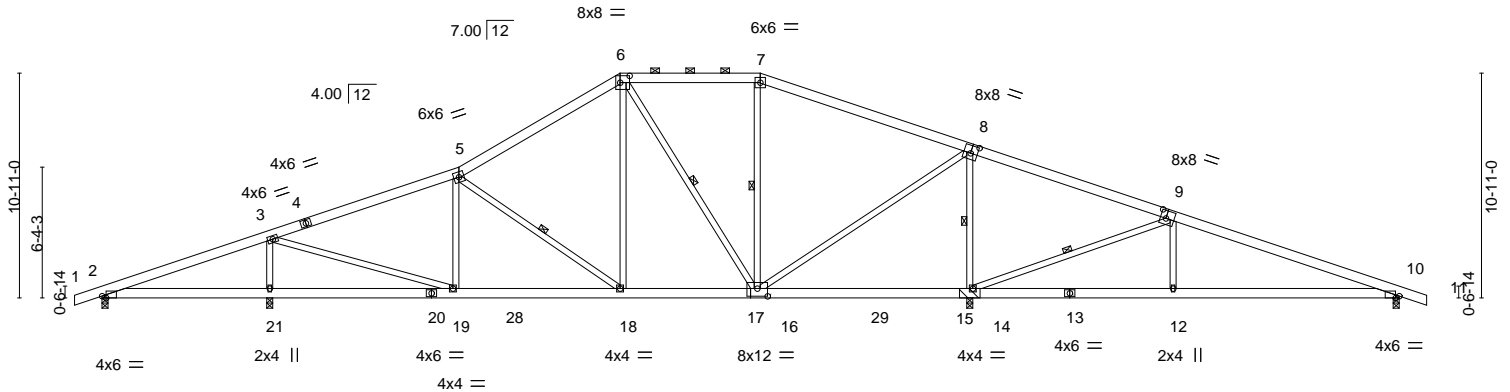
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:28 2021 Page 1

ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-4Nft1dUWNhwqU78myHfhCqj2EISqUMvcAvf22lybS41

-1-4-0	8-1-12	17-4-0	25-1-15	31-11-10	42-1-12	52-0-4	63-0-0	64-4-0
1-4-0	8-1-12	9-2-4	7-9-15	6-9-11	10-2-2	9-10-8	10-11-12	1-4-0

Scale = 1:111.9



Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996629
2000456-2000456A	C2	Piggyback Base	4	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:30 2021 Page 1

ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-0mndSJWmvlAYjRH84ih9lFolN51WyC?vdzO97eybS4?

-1-4-0	8-1-12	17-4-0	25-1-15	31-11-10	42-1-12	52-0-4	63-0-0	64-4-0
1-4-0	8-1-12	9-2-4	7-9-15	6-9-11	10-2-2	9-10-8	10-11-12	1-4-0

Scale = 1:112.0

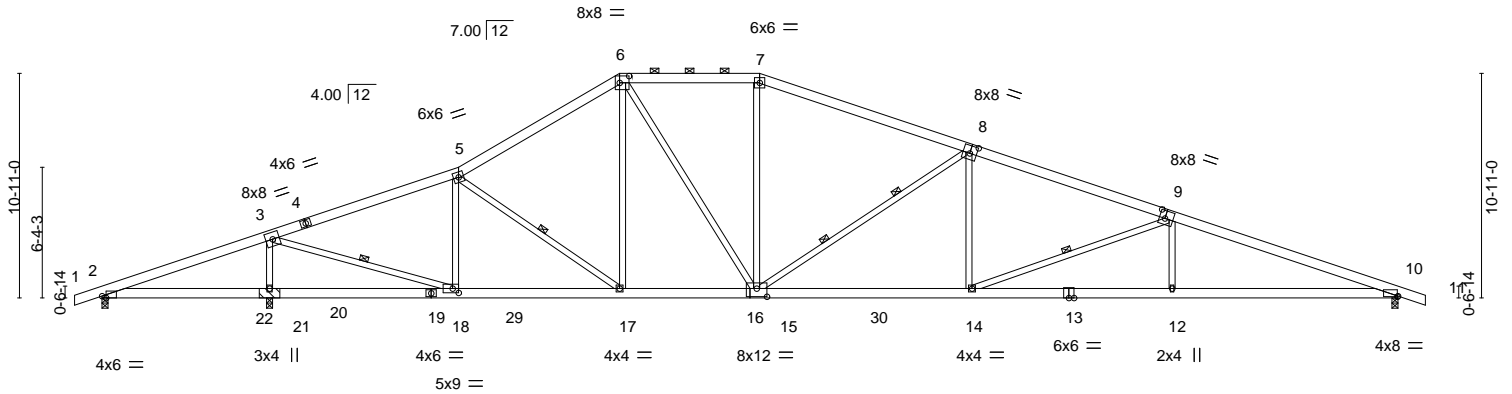


Plate Offsets (X,Y)--	[2:0-2-6,Edge], [6:0-5-8,0-4-0], [8:0-4-0,0-4-8], [9:0-3-4,0-4-8], [10:0-0-6,0-0-5], [15:0-6-0,0-4-12], [18:0-3-8,0-2-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.96	Vert(LL)	-0.32 14-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.68 14-15	>962	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.14 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 448 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-4-10 max.): 6-7.
BOT CHORD 2x6 SP DSS *Except* 13-16,16-19: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.
WEBS 2x4 SP No.3 *Except* 3-18,8-15: 2x4 SP No.2 or 2x4 SPF No.2	WEBS 1 Row at midpt 3-18, 5-17, 9-14 2 Rows at 1/3 pts 8-15

REACTIONS. (size) 2=0-3-8, 21=(0-3-8 + bearing block) (req. 0-4-14), 10=0-3-8
 Max Horz 2=-180(LC 13)
 Max Uplift 2=-251(LC 24), 21=-288(LC 12), 10=-396(LC 9)
 Max Grav 2=49(LC 23), 21=3099(LC 1), 10=2196(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-245/1309, 3-5=-2484/586, 5-6=-2673/704, 6-7=-2609/777, 7-8=-2853/768,
 8-9=-4184/1002, 9-10=-5364/1206
 BOT CHORD 2-21=-1153/323, 18-21=-1153/323, 17-18=-313/2284, 16-17=-210/2208, 14-15=-691/3898,
 12-14=-1031/4986, 10-12=-1023/5001
 WEBS 3-21=-2815/739, 3-18=-656/3575, 5-18=-945/313, 6-17=-19/366, 6-15=-214/871,
 15-16=-210/2208, 7-15=0/481, 8-15=-1559/450, 8-14=0/773, 9-14=-1192/366,
 9-12=0/406

- NOTES-**
- 2x6 SP DSS bearing block 12" long at jt. 21 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 21, and 10. This connection is for uplift only and does not consider lateral forces.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 22, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000456-2000456A	Truss CE	Truss Type GABLE	Qty 1	Ply 1	Wellons Reser Job Reference (optional)	I47996630
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:38 2021 Page 2
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-nJGf82co1IBPhuhYOr1cx7jjKp4qpp5TCKaOAYbS3t

NOTES-

- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 14, and 10. This connection is for uplift only and does not consider lateral forces.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



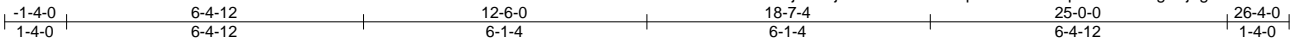
818 Soundside Road
Edenton, NC 27932

Job 2000456-2000456A	Truss D	Truss Type Common	Qty 9	Ply 1	Wellons Reser	147996631
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84 Components (Dunn), Dunn, NC - 28334,

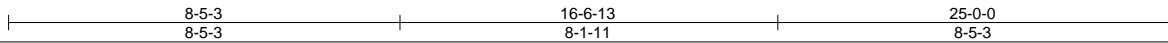
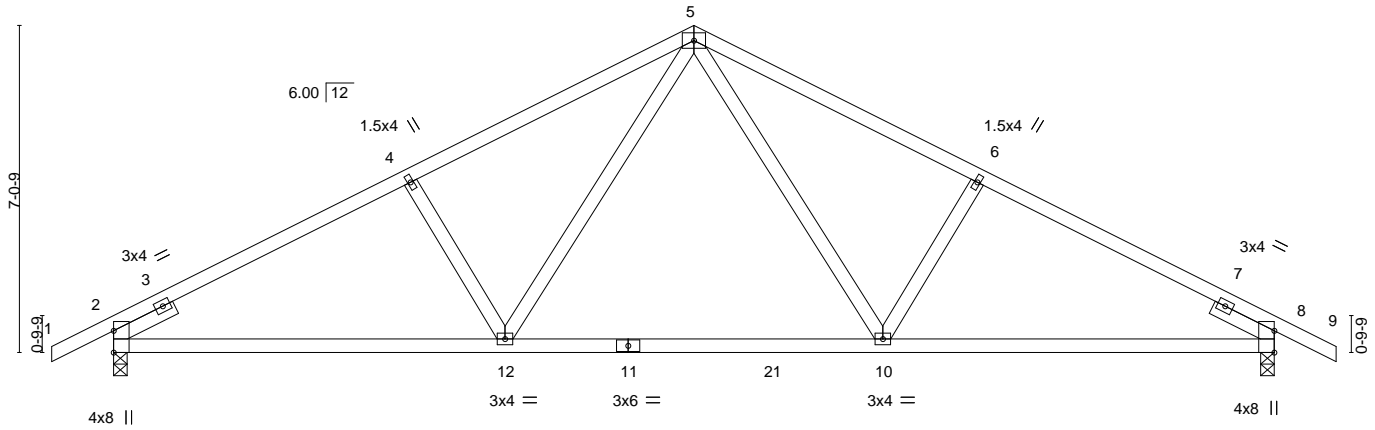
8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:39 2021 Page 1

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4x6 =

Scale = 1:49.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.76	Vert(LL)	-0.23 10-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.75	Vert(CT)	-0.38 10-12	>791	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	0.06 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 122 lb	FT = 20%

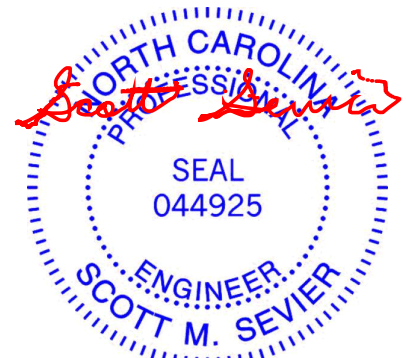
LUMBER-
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6-0

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-9-7 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=115(LC 12)
 Max Uplift 2=144(LC 12), 8=144(LC 13)
 Max Grav 2=1080(LC 1), 8=1080(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-1546/405, 4-5=-1387/425, 5-6=-1387/425, 6-8=-1546/405
 BOT CHORD 2-12=-245/1312, 10-12=-79/926, 8-10=-250/1312
 WEBS 5-10=-111/495, 6-10=-315/227, 5-12=-111/495, 4-12=-315/227

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.



September 22, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000456-2000456A	Truss D1	Truss Type Common	Qty 5	Ply 1	Wellons Reser	147996632
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84 Components (Dunn), Dunn, NC - 28334,

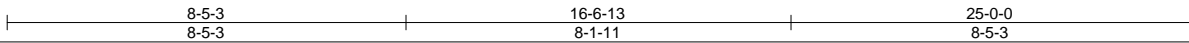
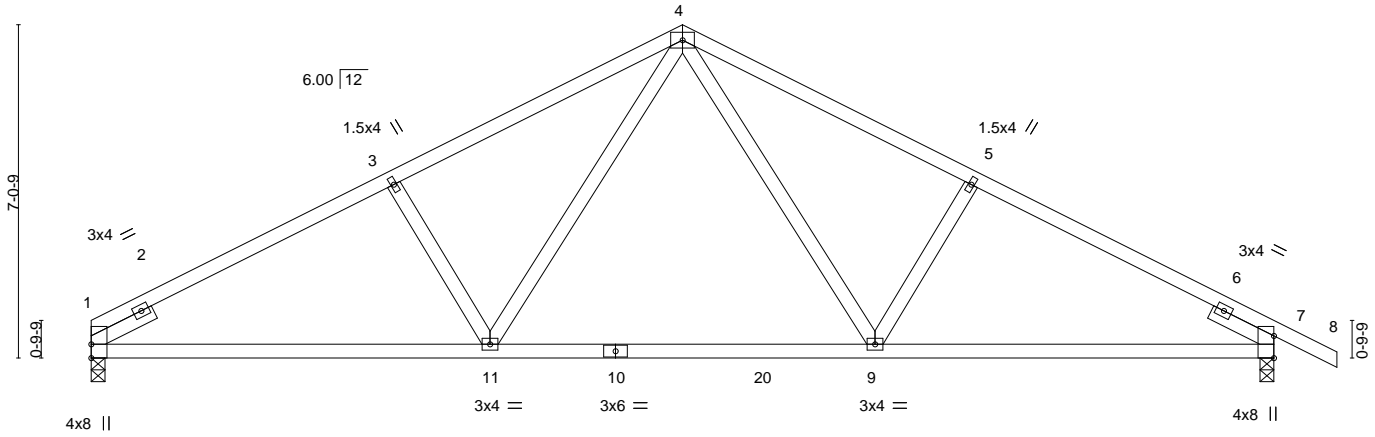
8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:40 2021 Page 1

ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-jhOPZjd2ZNR7wz23fotViMC3v7VrIvNNwWphS2ybS3r



4x6 =

Scale = 1:48.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.76	Vert(LL)	-0.23 9-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.75	Vert(CT)	-0.37 9-11	>803	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	0.06 7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 120 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF 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 or 2-9-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-126(LC 13)
Max Uplift 1=-116(LC 12), 7=-145(LC 13)
Max Grav 1=998(LC 1), 7=1082(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1558/411, 3-4=-1399/430, 4-5=-1391/428, 5-7=-1550/408
BOT CHORD 1-11=-256/1325, 9-11=-82/930, 7-9=-253/1316
WEBS 4-9=-110/495, 5-9=-315/227, 4-11=-115/506, 3-11=-322/229

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 7. This connection is for uplift only and does not consider lateral forces.



September 22, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



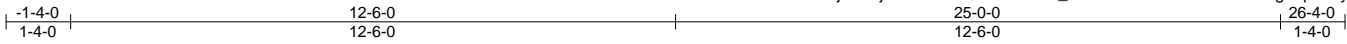
818 Soundside Road
Edenton, NC 27932

Job 2000456-2000456A	Truss DE	Truss Type Common Supported Gable	Qty 1	Ply 1	Wellons Reser	147996633
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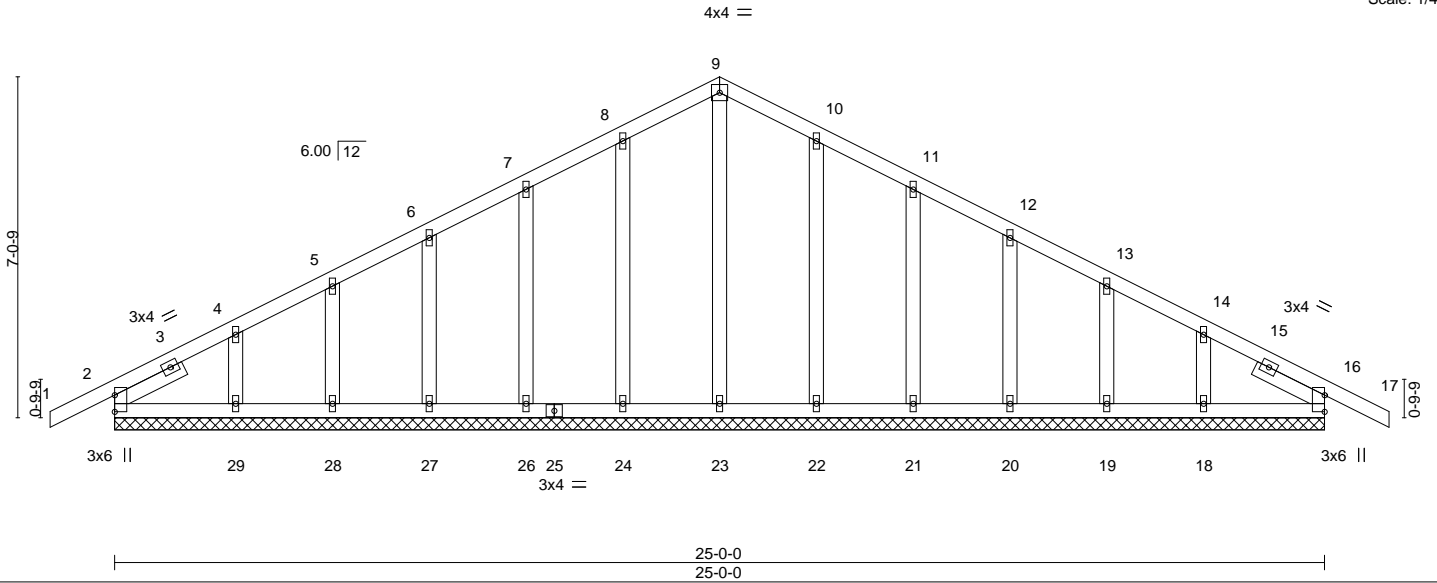
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:42 2021 Page 1

ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-f4VAzPfi4_hr9HCSnDvznnlZZxMMmrTgOqloXxybS3p



Scale: 1/4"=1'



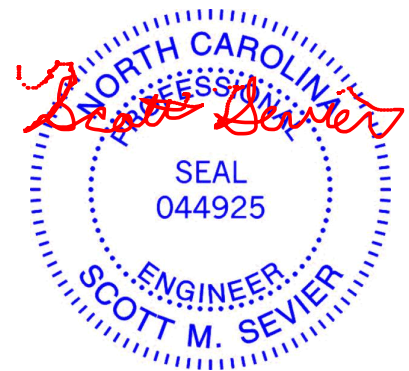
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	17	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	17	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	16	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 150 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	
SLIDER Left 2x4 SP No.3 1-7-8, Right 2x4 SP No.3 1-7-8	

REACTIONS. All bearings 25-0-0.
 (lb) - Max Horz 2=115(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18, 16
 Max Grav All reactions 250 lb or less at joint(s) 2, 23, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18, 16

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 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.
 - All plates are 1.5x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

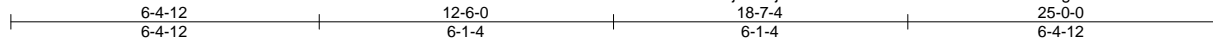


Job 2000456-2000456A	Truss DGR	Truss Type COMMON GIRDER	Qty 1	Ply 4	Wellons Reser	147996634
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:45 2021 Page 1

ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-4fBlcRhBNv3P0kx1SMTgPPv0b8Giz2P74oWS8GybS3m



Scale: 1/4"=1'

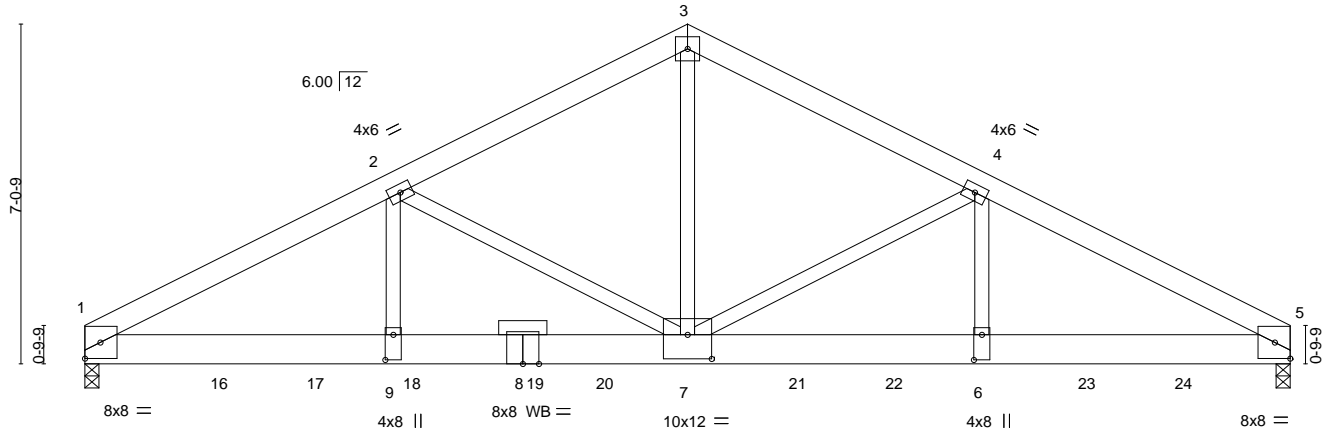


Plate Offsets (X, Y)--	[6:0-6-4,0-2-0], [7:0-6-0,0-6-0], [9:0-6-4,0-2-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	-0.14	7-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.29	7-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.07	5	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-MS						
								Weight: 727 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	
3-7: 2x4 SP No.1	
OTHERS 2x4 SP No.3	

REACTIONS. (size) 1=0-3-8 (req. 0-3-12), 5=0-3-8
 Max Horz 1=-104(LC 36)
 Max Uplift 1=-1261(LC 12), 5=-1128(LC 13)
 Max Grav 1=14839(LC 1), 5=13218(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-23025/2180, 2-3=-16458/1626, 3-4=-16456/1626, 4-5=-22781/2160
 BOT CHORD 1-9=-1861/20477, 7-9=-1861/20477, 6-7=-1842/20249, 5-6=-1842/20249
 WEBS 3-7=-1251/14126, 4-7=-6384/693, 4-6=-413/5869, 2-7=-6646/714, 2-9=-430/6085

- NOTES-**
- 1) 4-ply truss to be connected together with 10d (0.120"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-4-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 2-9 2x4 - 2 rows staggered at 0-4-0 oc.
 Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
 - 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - 3) Unbalanced roof live loads have been considered for this design.
 - 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
 - 8) One HTS20 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
 - 9) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.



September 22, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job 2000456-2000456A	Truss DGR	Truss Type COMMON GIRDER	Qty 1	Ply 4	Wellons Reser Job Reference (optional)	I47996634
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:46 2021 Page 2
ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-Yrhpnip8DBGeuWD03_vxdSALYc6IVfGISG?gijbS3I

NOTES-

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2191 lb down and 185 lb up at 0-9-4, 2189 lb down and 188 lb up at 2-9-4, 2189 lb down and 188 lb up at 4-9-4, 2189 lb down and 188 lb up at 6-9-4, 2189 lb down and 188 lb up at 8-9-4, 2189 lb down and 188 lb up at 10-9-4, 2189 lb down and 188 lb up at 12-9-4, 2189 lb down and 188 lb up at 14-9-4, 2189 lb down and 188 lb up at 16-9-4, 2189 lb down and 188 lb up at 18-9-4, and 2189 lb down and 188 lb up at 20-9-4, and 2189 lb down and 188 lb up at 22-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 10-13=-20

Concentrated Loads (lb)

Vert: 6=-2171(F) 7=-2171(F) 12=-2174(F) 16=-2171(F) 17=-2171(F) 18=-2171(F) 19=-2171(F) 20=-2171(F) 21=-2171(F) 22=-2171(F) 23=-2171(F) 24=-2171(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

Job 2000456-2000456A	Truss E1	Truss Type Common	Qty 4	Ply 1	Wellons Reser	147996636
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84 Components (Dunn), Dunn, NC - 28334,

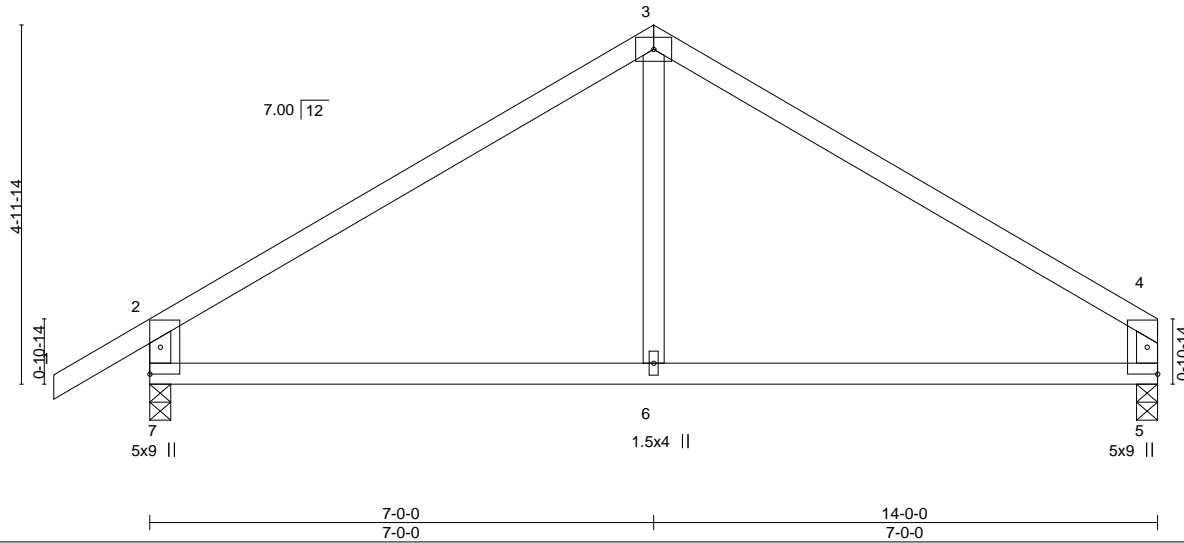
8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:47 2021 Page 1

ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-01J317jRvWJ7G24PamV8Uq?E6yz7R6gPX6?ZC9ybS3k



4x6 =

Scale: 3/8"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.83	Vert(LL)	-0.05	6-7	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.39	Vert(CT)	-0.11	6-7	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR					Weight: 56 lb	FT = 20%
	Code IRC2015/TPI2014							

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-13 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-3-8, 5=0-3-8
 Max Horz 7=138(LC 9)
 Max Uplift 7=-92(LC 12), 5=-59(LC 13)
 Max Grav 7=642(LC 1), 5=544(LC 1)

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

TOP CHORD 2-3=-619/129, 3-4=-612/127, 2-7=-572/208, 4-5=-469/137
 BOT CHORD 6-7=-34/435, 5-6=-34/435
 WEBS 3-6=0/285

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.



September 22, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

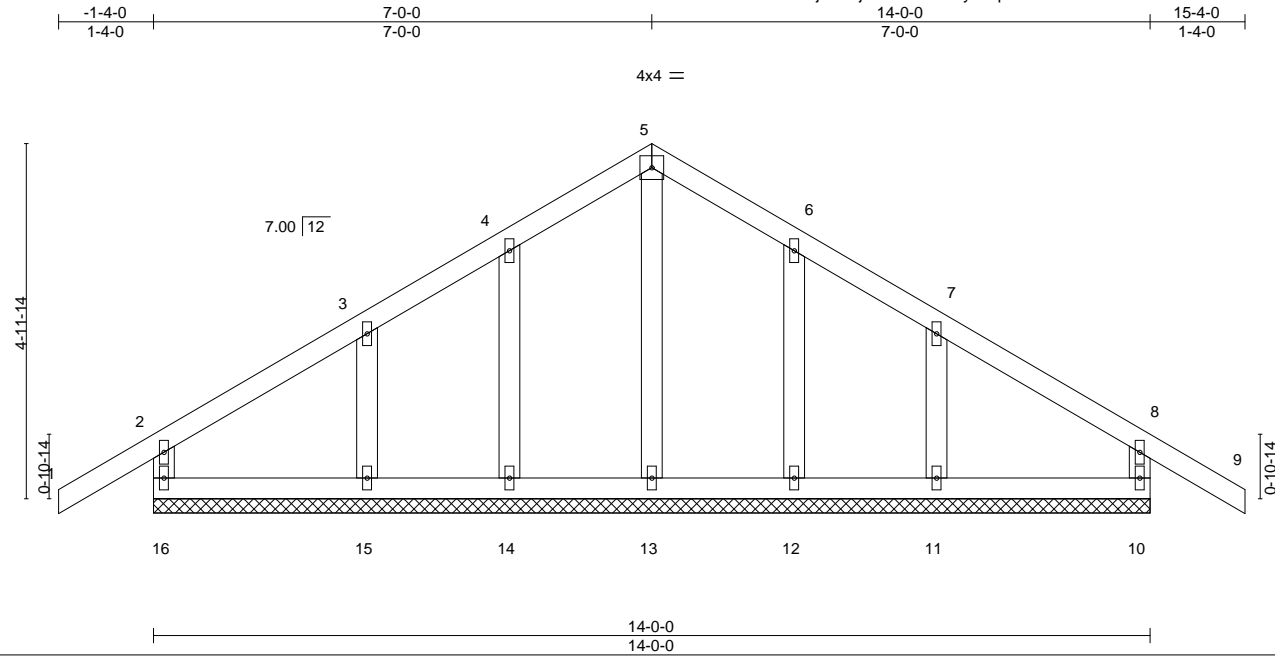


818 Soundside Road
 Edenton, NC 27932

Job 2000456-2000456A	Truss EE	Truss Type Common Supported Gable	Qty 1	Ply 1	Wellons Reser	147996637
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:49 2021 Page 1
ID:kQ1KS2Sn3ljdzGzjx5z8lzz3hVz-yQqRokhR8ZrVLEohBxcZF4kBllov13i?QUfH1ybS3i



Scale = 1:32.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.01	9	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01	9	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R						Weight: 74 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 14-0-0.
 (lb) - Max Horz 16--145(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
 Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 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) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 oc.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



September 22, 2021

Job 2000456-2000456A	Truss F	Truss Type Common	Qty 3	Ply 1	Wellons Reser	147996638
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84 Components (Dunn), Dunn, NC - 28334,

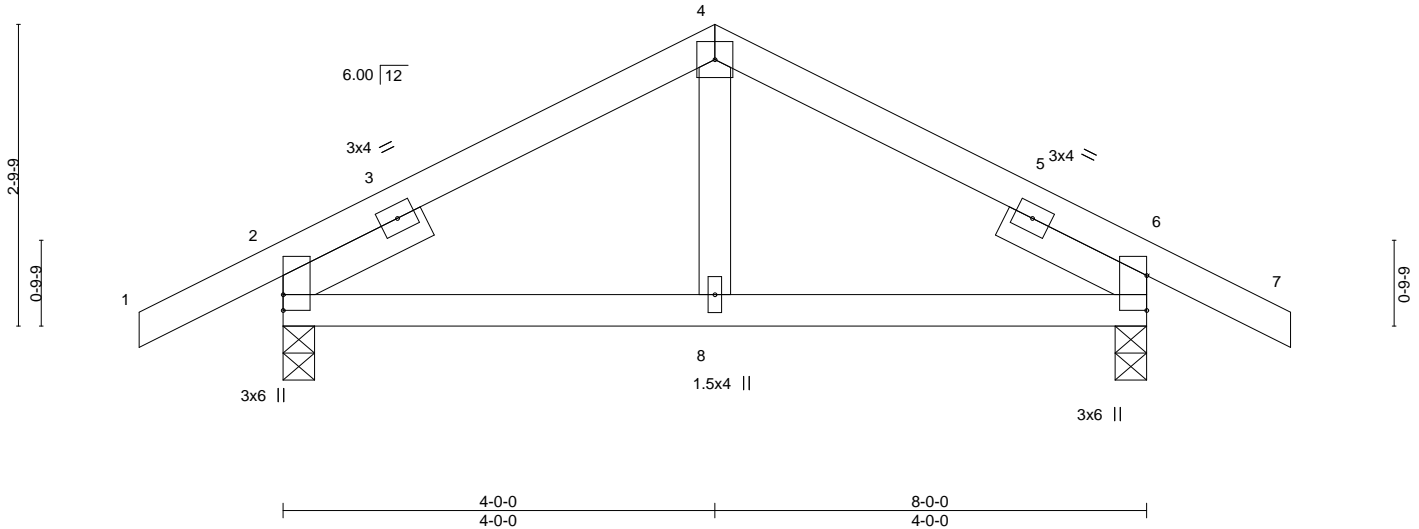
8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:50 2021 Page 1

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4x4 =

Scale = 1:21.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.01 8-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.01 8-15	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00 2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP					Weight: 38 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
 BOT CHORD 2x4 SP No.2 or 2x4 SPF 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 or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
 Max Horz 2=-45(LC 13)
 Max Uplift 2=-65(LC 12), 6=-65(LC 13)
 Max Grav 2=400(LC 1), 6=400(LC 1)

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

TOP CHORD 2-4=-277/128, 4-6=-277/128

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.



September 22, 2021

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job 2000456-2000456A	Truss FE	Truss Type GABLE	Qty 1	Ply 1	Wellons Reser	147996639
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84 Components (Dunn), Dunn, NC - 28334,

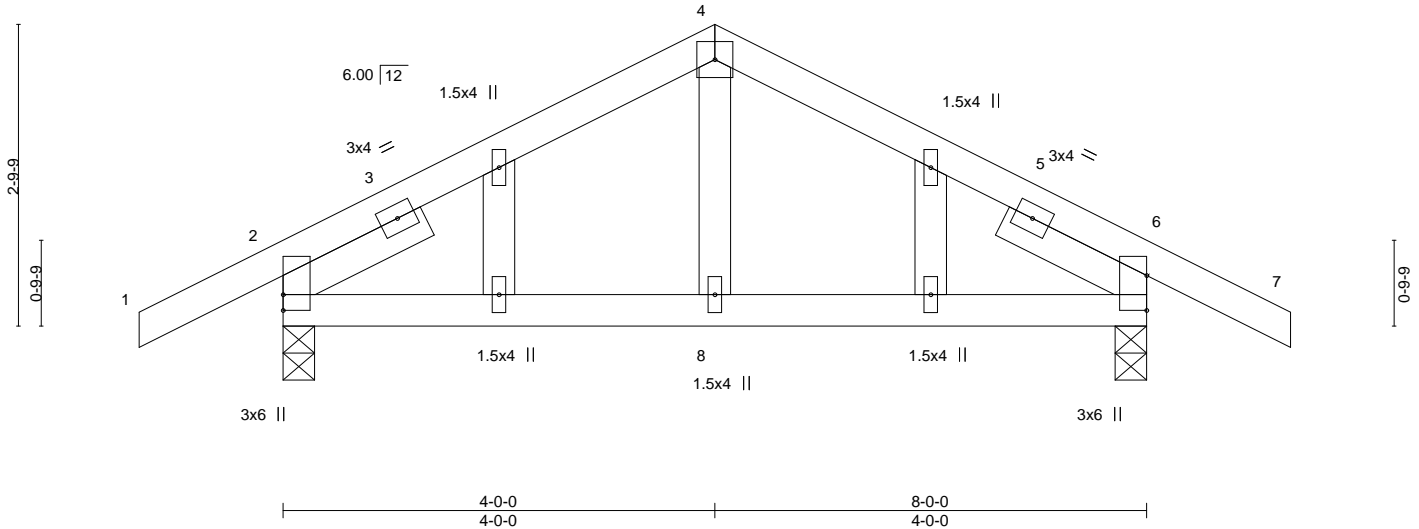
8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:51 2021 Page 1

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4x4 =

Scale = 1:21.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.01 8-19	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.01 8-19	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00 2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP					Weight: 41 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
 WEBS 2x4 SP No.3
 OTHERS 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 or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
 Max Horz 2=-45(LC 13)
 Max Uplift 2=-65(LC 12), 6=-65(LC 13)
 Max Grav 2=400(LC 1), 6=400(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-277/128, 4-6=-277/128

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
- 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.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.



September 22, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

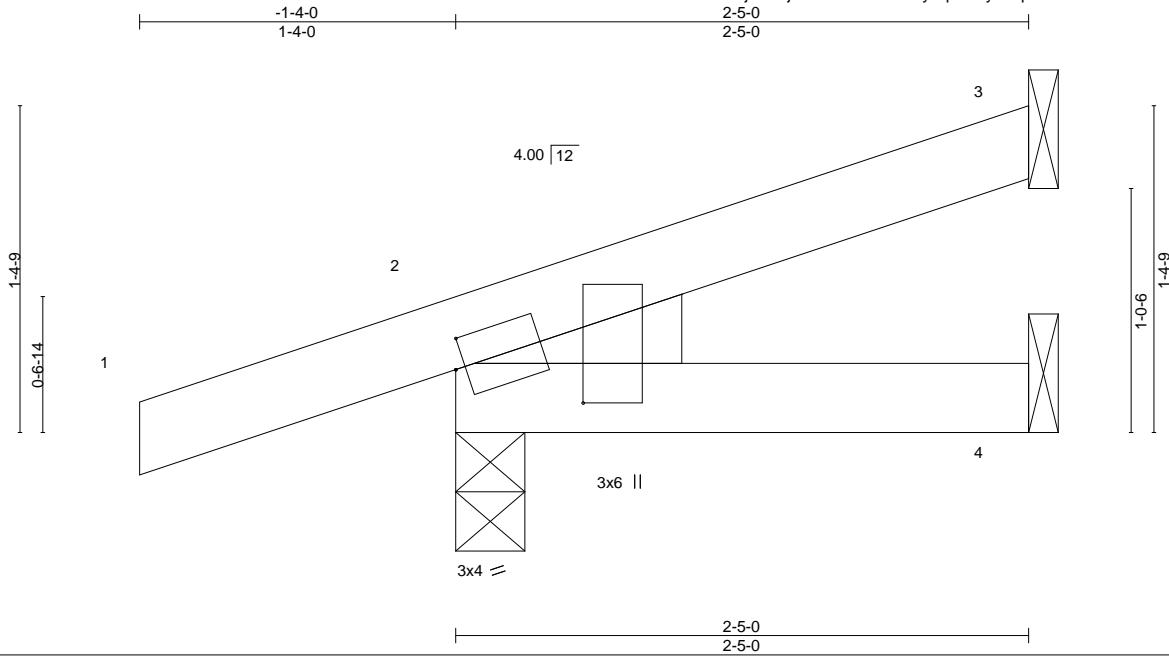


818 Soundside Road
 Edenton, NC 27932

Job 2000456-2000456A	Truss J1	Truss Type Jack-Open	Qty 2	Ply 1	Wellons Reser	147996640
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:52 2021 Page 1
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Scale = 1:9.7

Plate Offsets (X,Y)--	[2:0-0-8,0-1-8], [2:0-1-11,0-6-7]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.12	Vert(LL) -0.00 7 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00 7 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP		Weight: 11 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=53(LC 8)
Max Uplift 3=-21(LC 12), 2=-76(LC 8)
Max Grav 3=47(LC 1), 2=197(LC 1), 4=37(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



September 22, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

Job 2000456-2000456A	Truss J1H	Truss Type Half Hip Girder	Qty 1	Ply 1	Wellons Reser	147996641
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:54 2021 Page 1

ID:kQ1KS2Sn3jdzGzjx5z8lzz3hVz-JOEiVWoqGgC8c77mUI7oGJnb8mQ?aDuR8iCQyFybS3d



Scale = 1:18.1

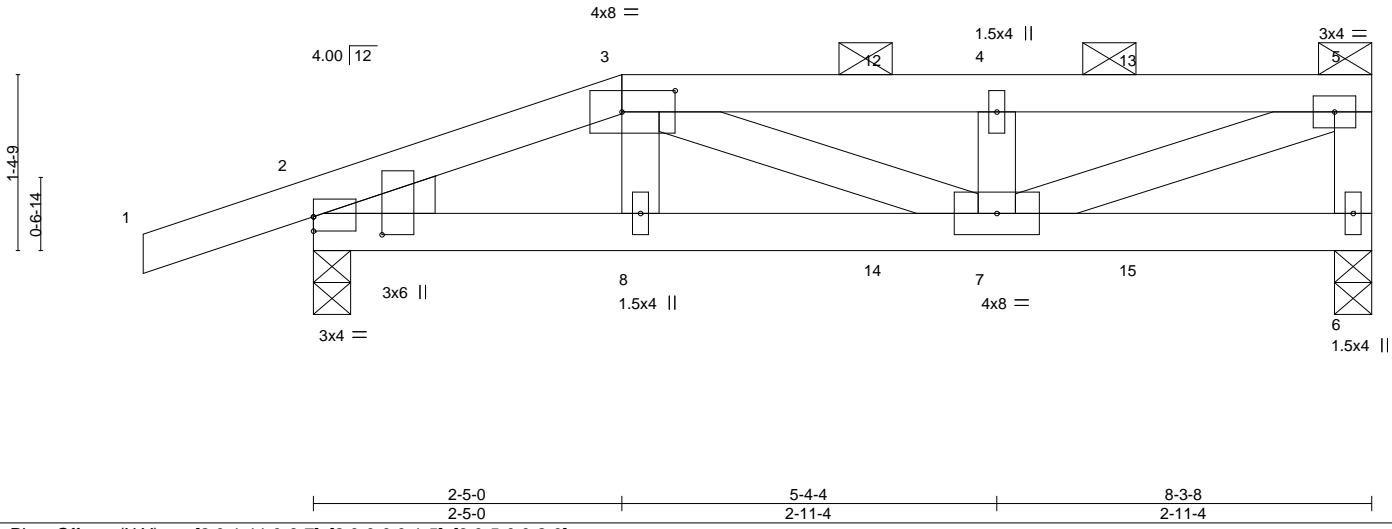


Plate Offsets (X,Y)--	[2:0-1-11,0-6-7], [2:0-0-0,0-1-5], [3:0-5-0,0-2-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) -0.01 7 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.27	Vert(CT) -0.02 7-8 >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MP	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 40 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

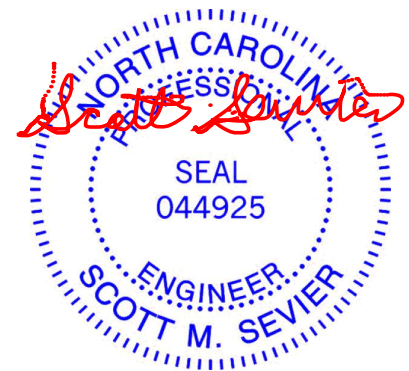
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=51(LC 11)
Max Uplift 6=66(LC 9), 2=-118(LC 8)
Max Grav 6=340(LC 1), 2=422(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-540/181, 3-4=-607/238, 4-5=-607/238, 5-6=-307/137
BOT CHORD 2-8=-205/492, 7-8=-201/496
WEBS 5-7=-252/651

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. This connection is for uplift only and does not consider lateral forces.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 19 lb down and 49 lb up at 2-5-0, and 19 lb down and 46 lb up at 4-5-12, and 22 lb down and 52 lb up at 6-5-12 on top chord, and 8 lb down and 0 lb up at 2-5-12, and 8 lb down and 0 lb up at 4-5-12, and 17 lb down and 16 lb up at 6-5-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-60, 6-9=-20



Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	I47996641
2000456-2000456A	J1H	Half Hip Girder	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:54 2021 Page 2
 ID:kQ1KS2Sn3jdzGzjx5z8lzz3hVz-JOEiVWoqGgC8c77mUI7oGJnb8mQ?aDuR8iCQyFybS3d

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 8=-5(B) 13=-3(B) 14=-5(B) 15=-17(B)

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Job 2000456-2000456A	Truss J1H1	Truss Type Half Hip	Qty 1	Ply 1	Wellons Reser	I47996642
84 Components (Dunn), Dunn, NC - 28334,					Job Reference (optional)	

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:55 2021 Page 1
 ID:kQ1KS2Sn3JdzGzjx5z8lzz3hVz-nao4ispS0_K?DGiy2Se1oWkKpAl2Ji6bNMx_UhybS3c



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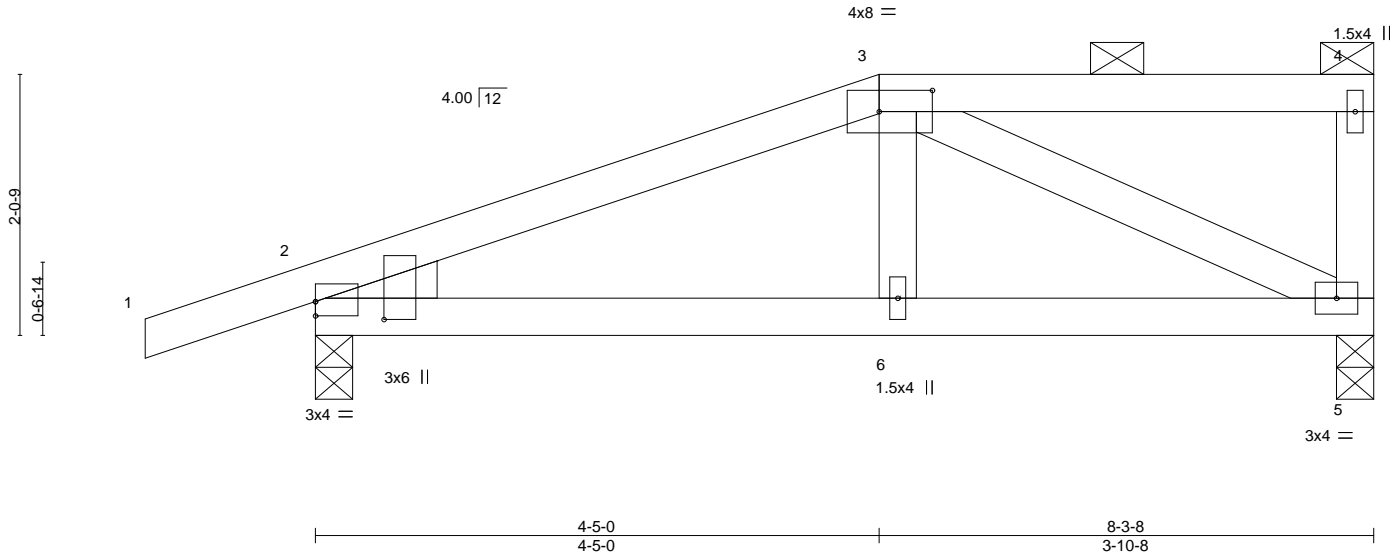


Plate Offsets (X,Y)--	[2:0-0-0,0-1-5], [2:0-1-11,0-6-7], [3:0-5-0,0-2-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL) -0.01 6-9 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.19	Vert(CT) -0.02 6-9 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP		Weight: 38 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
 WEBS 2x4 SP No.3
 WEDGE
 Left: 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=0-3-8
 Max Horz 2=79(LC 11)
 Max Uplift 2=-113(LC 8), 5=-59(LC 8)
 Max Grav 2=412(LC 1), 5=319(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-436/144
 BOT CHORD 2-6=-177/379, 5-6=-174/388
 WEBS 3-5=-429/170

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 22, 2021

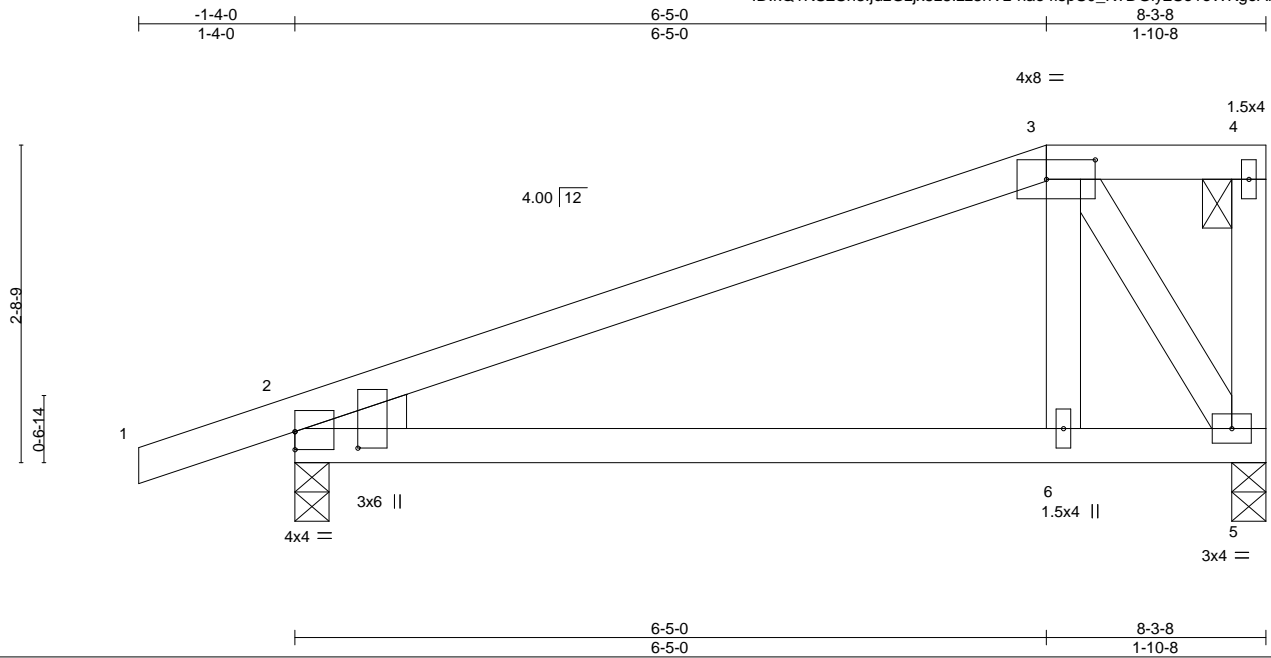
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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 Edenton, NC 27932

Job 2000456-2000456A	Truss J1H2	Truss Type Half Hip	Qty 1	Ply 1	Wellons Reser	147996643
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:55 2021 Page 1
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Scale = 1:19.7

Plate Offsets (X,Y)--	[2:0-0,0-1-13], [2:0-1-11,0-6-7], [3:0-5-0,0-2-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.53	Vert(LL) 0.06 6-9 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.11 6-9 >931 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.02 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP		Weight: 39 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 5=0-3-8
 Max Horz 2=107(LC 11)
 Max Uplift 2=-110(LC 8), 5=-62(LC 8)
 Max Grav 2=412(LC 1), 5=319(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-299/92
 WEBS 3-6=-11/276, 3-5=-420/168

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 2) Provide adequate drainage to prevent water ponding.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
 - 6) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



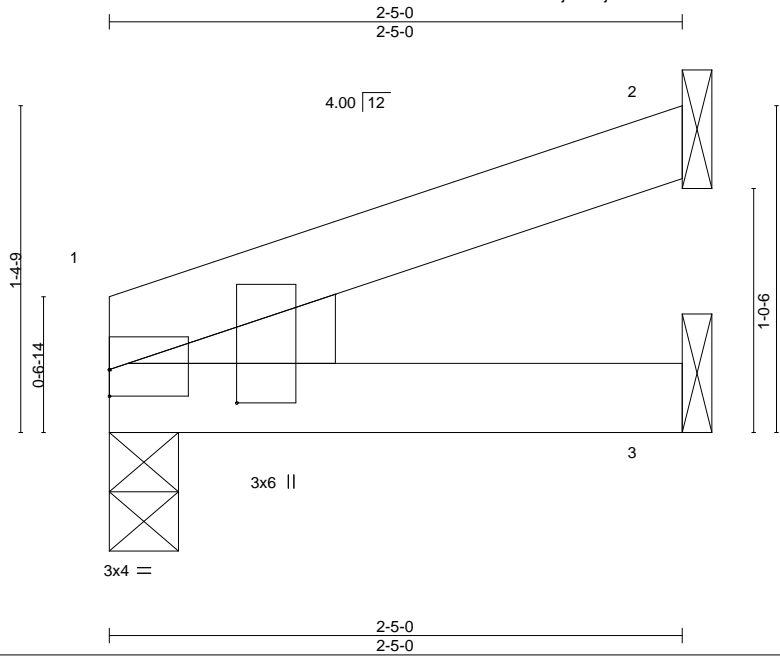
September 22, 2021

Job 2000456-2000456A	Truss J2	Truss Type Jack-Open	Qty 1	Ply 1	Wellons Reser	147996644
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:56 2021 Page 1

ID:kQ1KS2Sn3jdzGzjx5z8lzz3hVz-FmMTvCq4nHSrQH8b99GLktzva7C2Bbk0hX17ybS3b



Scale = 1:9.7

Plate Offsets (X,Y)--	[1:0-0-0,0-1-5], [1:0-1-11,0-6-7]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	6	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.00	6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	1	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP						
								Weight: 9 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-5-0 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2x4 SP No.3	

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 1=0-3-8
 Max Horz 1=30(LC 8)
 Max Uplift 2=-24(LC 8), 3=-1(LC 8), 1=-9(LC 8)
 Max Grav 2=57(LC 1), 3=41(LC 3), 1=94(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3.
 - 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.



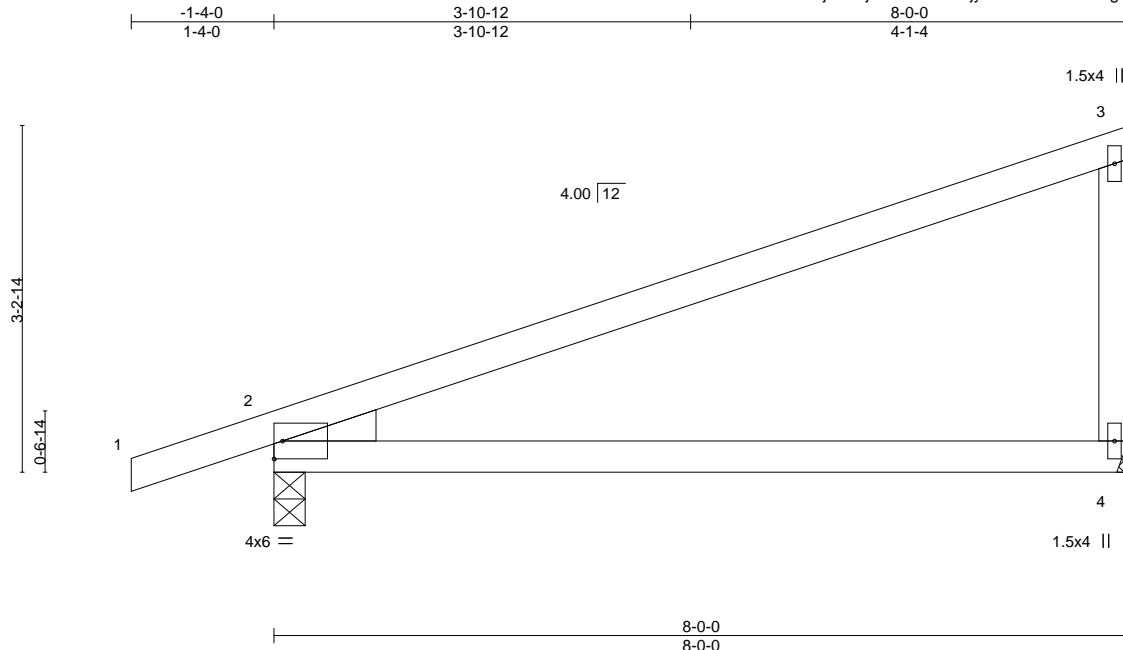
September 22, 2021

Job 2000456-2000456A	Truss J3	Truss Type Jack-Partial	Qty 9	Ply 1	Wellons Reser	147996645
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84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:57 2021 Page 1
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Scale = 1:21.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.96	Vert(LL)	0.20 4-7	>483	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.75	Vert(CT)	-0.39 4-7	>243	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.05 2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP					Weight: 32 lb	FT = 20%

LUMBER-

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

BRACING-

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

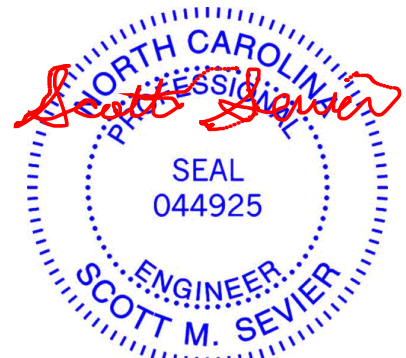
REACTIONS.

(size) 2=0-3-8, 4=Mechanical
 Max Horz 2=124(LC 8)
 Max Uplift 2=94(LC 8), 4=76(LC 12)
 Max Grav 2=401(LC 1), 4=307(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



September 22, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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818 Soundside Road
 Edenton, NC 27932

Job 2000456-2000456A	Truss J4	Truss Type Jack-Open	Qty 3	Ply 1	Wellons Reser	147996646
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:58 2021 Page 1

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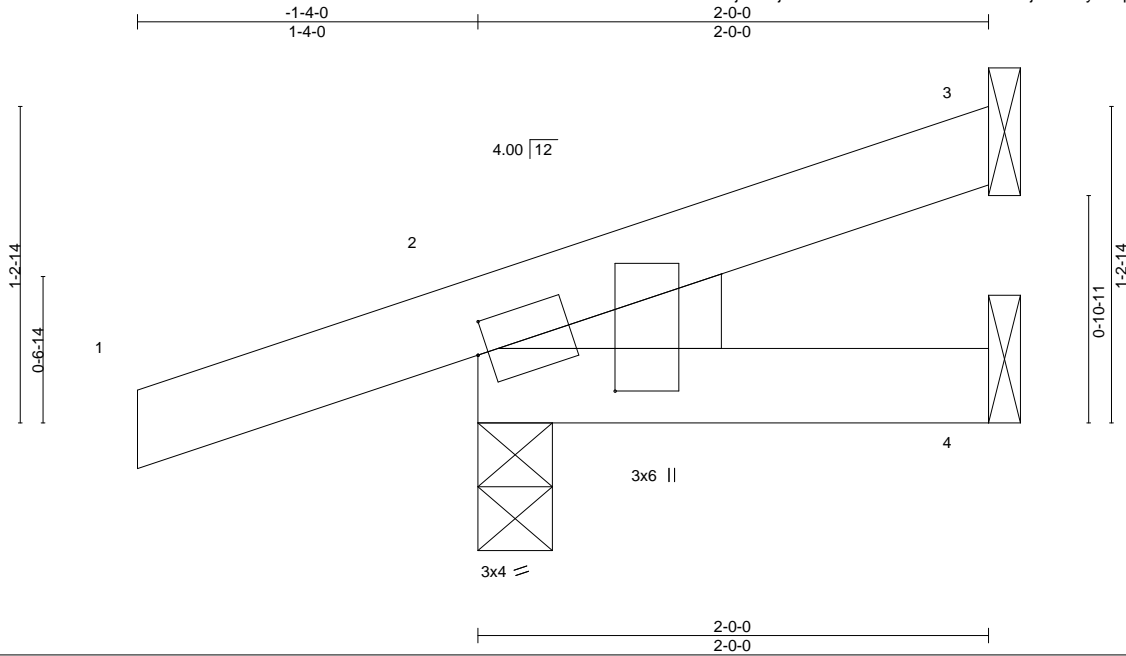


Plate Offsets (X,Y)--	[2:0-0-8,0-1-8], [2:0-1-11,0-6-7]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.12	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 7 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 7 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP	Horz(CT) 0.00 2 n/a n/a		
	Code IRC2015/TPI2014			Weight: 10 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2x4 SP No.3	

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
 Max Horz 2=48(LC 8)
 Max Uplift 3=-15(LC 12), 2=-76(LC 8)
 Max Grav 3=34(LC 1), 2=186(LC 1), 4=30(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
 - 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



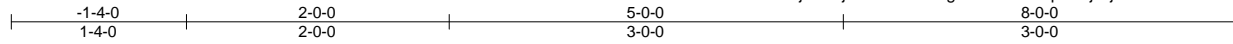
September 22, 2021

Job 2000456-2000456A	Truss J4H	Truss Type Half Hip Girder	Qty 1	Ply 1	Wellons Reser	147996647
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:59 2021 Page 1

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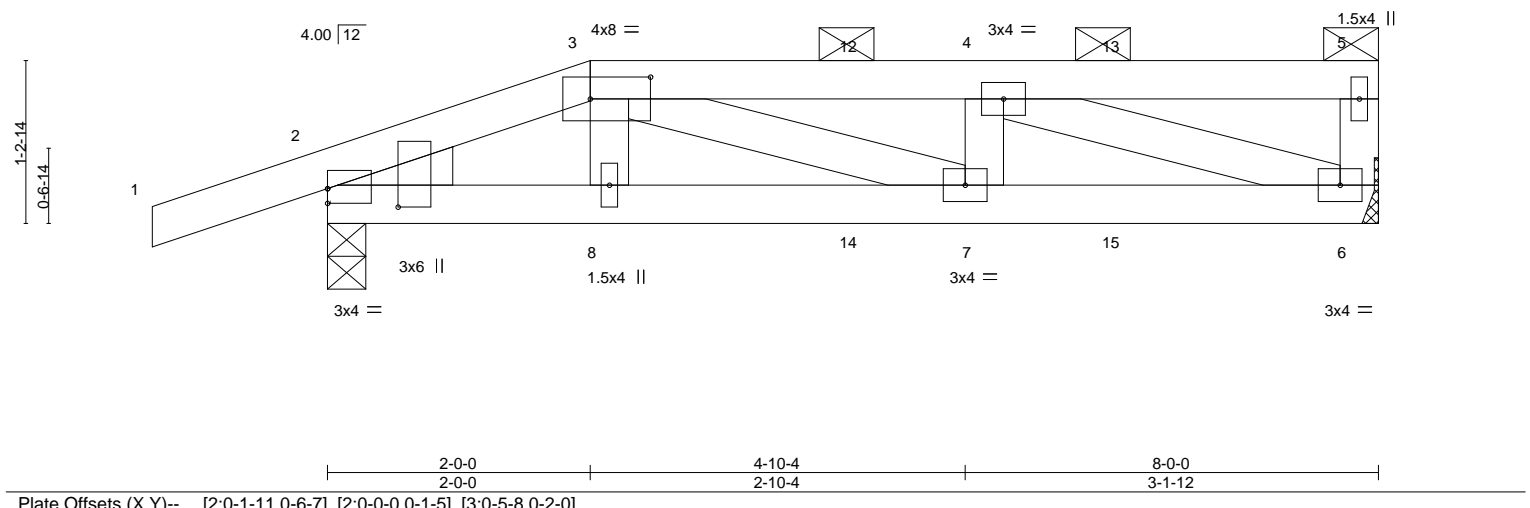


Plate Offsets (X,Y)--	[2:0-1-11,0-6-7], [2:0-0-0,0-1-5], [3:0-5-8,0-2-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL) -0.01 7 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.02 7-8 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.16	Horz(CT) 0.01 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP		Weight: 38 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

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

REACTIONS. (size) 2=0-3-8, 6=Mechanical
Max Horz 2=45(LC 11)
Max Uplift 2=-114(LC 8), 6=-56(LC 9)
Max Grav 2=405(LC 1), 6=312(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-506/173, 3-4=-629/244
BOT CHORD 2-8=-191/461, 7-8=-187/465, 6-7=-254/629
WEBS 4-6=-663/256

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 13 lb down and 41 lb up at 2-0-0, and 13 lb down and 38 lb up at 4-0-12, and 13 lb down and 38 lb up at 6-0-12 on top chord, and 5 lb down at 2-0-12, and 5 lb down at 4-0-12, and 5 lb down at 6-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



September 22, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	I47996647
2000456-2000456A	J4H	Half Hip Girder	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:32:59 2021 Page 2
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LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 6-9=-20

Concentrated Loads (lb)

Vert: 8=-3(B) 14=-3(B) 15=-3(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellons Reser	147996648
2000456-2000456A	J4H1	Half Hip	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:01 2021 Page 1
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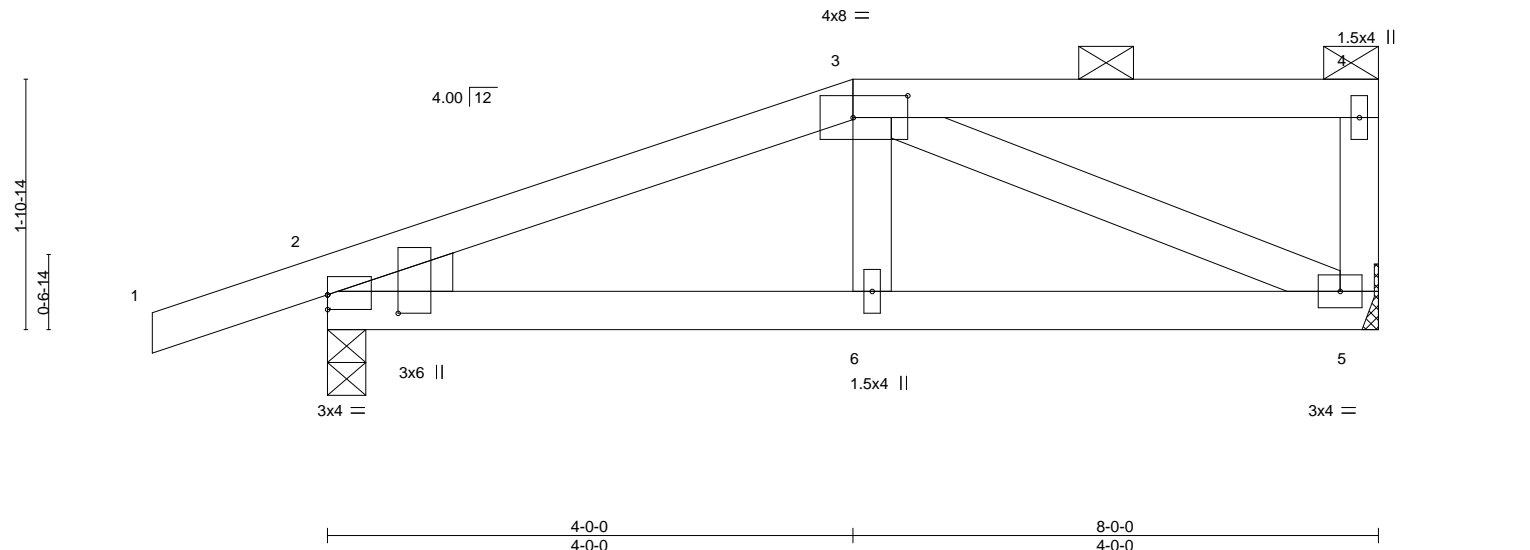


Plate Offsets (X,Y)--	[2:0-0-0,0-1-5], [2:0-1-11,0-6-7], [3:0-5-0,0-2-0]
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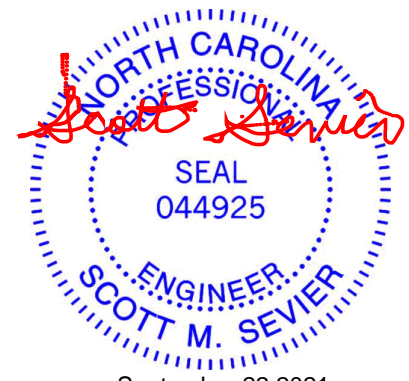
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	-0.01	5-6	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.02	5-6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP					Weight: 37 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 5=Mechanical
 Max Horz 2=73(LC 11)
 Max Uplift 2=-112(LC 8), 5=-56(LC 8)
 Max Grav 2=401(LC 1), 5=307(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-433/144
 BOT CHORD 2-6=-176/379, 5-6=-173/388
 WEBS 3-5=-421/167

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 2) Provide adequate drainage to prevent water ponding.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
 - 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job 2000456-2000456A	Truss J4H2	Truss Type Half Hip	Qty 1	Ply 1	Wellons Reser	147996649
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:02 2021 Page 1
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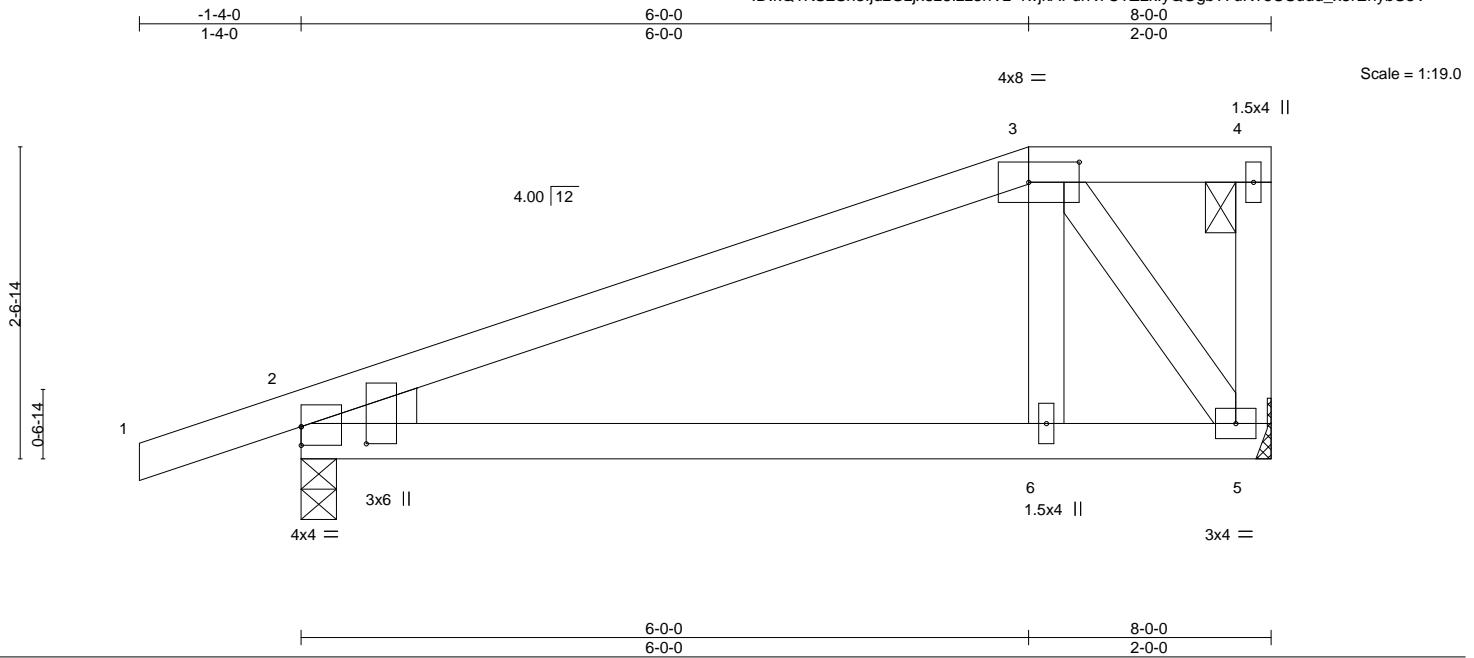


Plate Offsets (X, Y)--	[2:0-0-0,0-1-13], [2:0-1-11,0-6-7], [3:0-5-0,0-2-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.45	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.40	Vert(LL) -0.04 6-9 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.09	Vert(CT) -0.08 6-9 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP	Horz(CT) 0.01 2 n/a n/a		
	Code IRC2015/TPI2014			Weight: 37 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 5=Mechanical
 Max Horz 2=101(LC 11)
 Max Uplift 2=-109(LC 8), 5=-59(LC 8)
 Max Grav 2=401(LC 1), 5=307(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-299/95
 WEBS 3-5=-392/161

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 2) Provide adequate drainage to prevent water ponding.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
 - 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job 2000456-2000456A	Truss PB1	Truss Type Piggyback	Qty 1	Ply 1	Wellons Reser Job Reference (optional)	147996650
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:03 2021 Page 1
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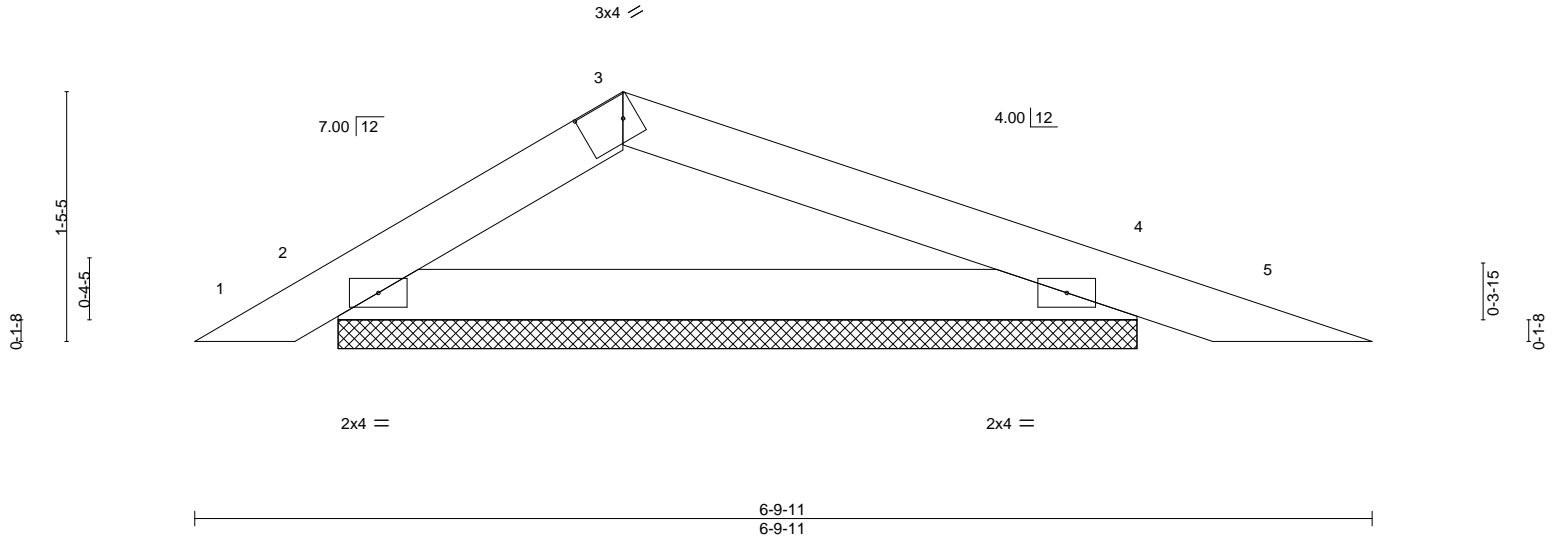


Plate Offsets (X,Y)--	[3:0-3-0,0-1-8]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15		TC 0.13	Vert(LL) 0.00	5	n/r	120		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.27	Vert(CT) 0.01	5	n/r	90			
BCLL 0.0 *	Rep Stress Incr YES		WB 0.00	Horz(CT) 0.00	4	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 18 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2

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

REACTIONS. (size) 2=4-7-7, 4=4-7-7
Max Horz 2=-38(LC 10)
Max Uplift 2=-28(LC 12), 4=-66(LC 9)
Max Grav 2=214(LC 1), 4=242(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) N/A
- 7) N/A
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 22, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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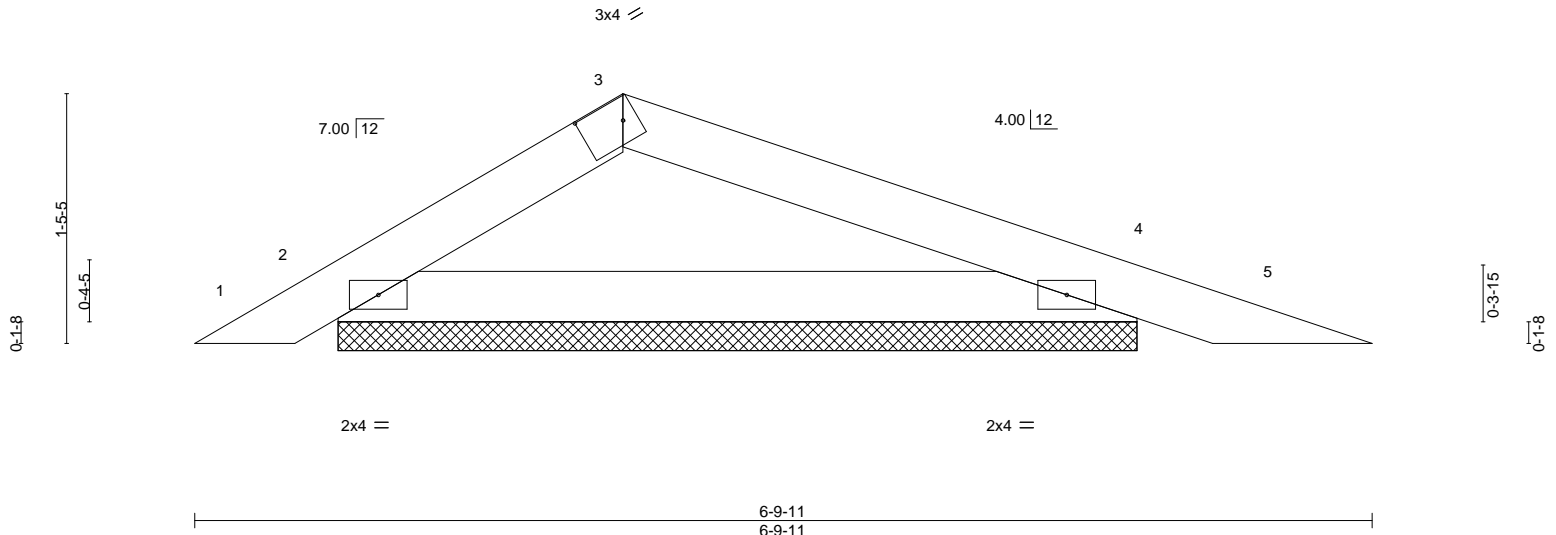
Job 2000456-2000456A	Truss PB2	Truss Type Piggyback	Qty 8	Ply 1	Wellons Reser Job Reference (optional)	147996651
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:04 2021 Page 1
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Scale = 1:13.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	0.00	5	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	0.01	5	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 18 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=4-7-7, 4=4-7-7
 Max Horz 2=-38(LC 10)
 Max Uplift 2=-28(LC 12), 4=-66(LC 9)
 Max Grav 2=214(LC 1), 4=242(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) N/A
 - 7) N/A
 - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 22, 2021

Job 2000456-2000456A	Truss PB4	Truss Type Piggyback	Qty 1	Ply 1	Wellons Reser Job Reference (optional)	147996652
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:05 2021 Page 1
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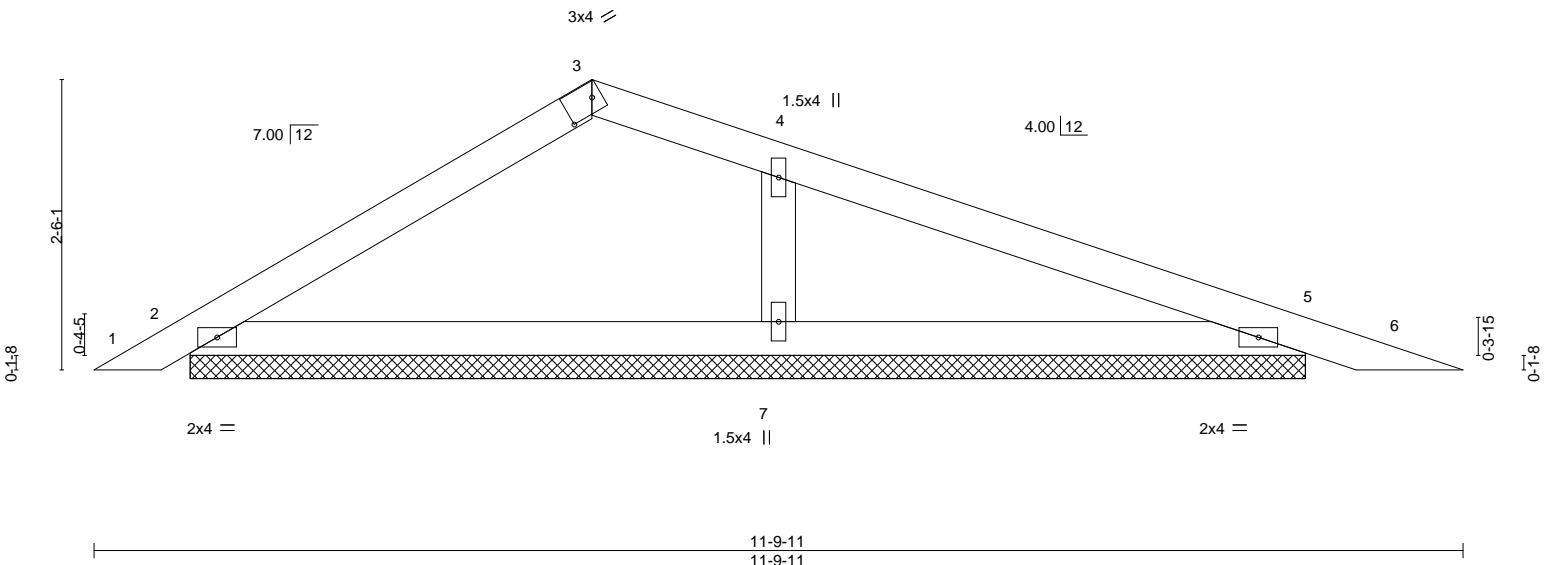


Plate Offsets (X, Y)--	[3:0-3-0,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	0.01	6	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	0.02	6	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							
									Weight: 35 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. (size) 2=9-7-7, 5=9-7-7, 7=9-7-7
 Max Horz 2=-69(LC 10)
 Max Uplift 2=-55(LC 12), 5=-62(LC 9), 7=-64(LC 13)
 Max Grav 2=244(LC 23), 5=241(LC 1), 7=382(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 4-7=-255/173

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) N/A
 - 7) N/A
 - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Job 2000456-2000456A	Truss PB5	Truss Type Piggyback	Qty 21	Ply 1	Wellons Reser 147996653
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:06 2021 Page 1

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11-9-11
7-6-3

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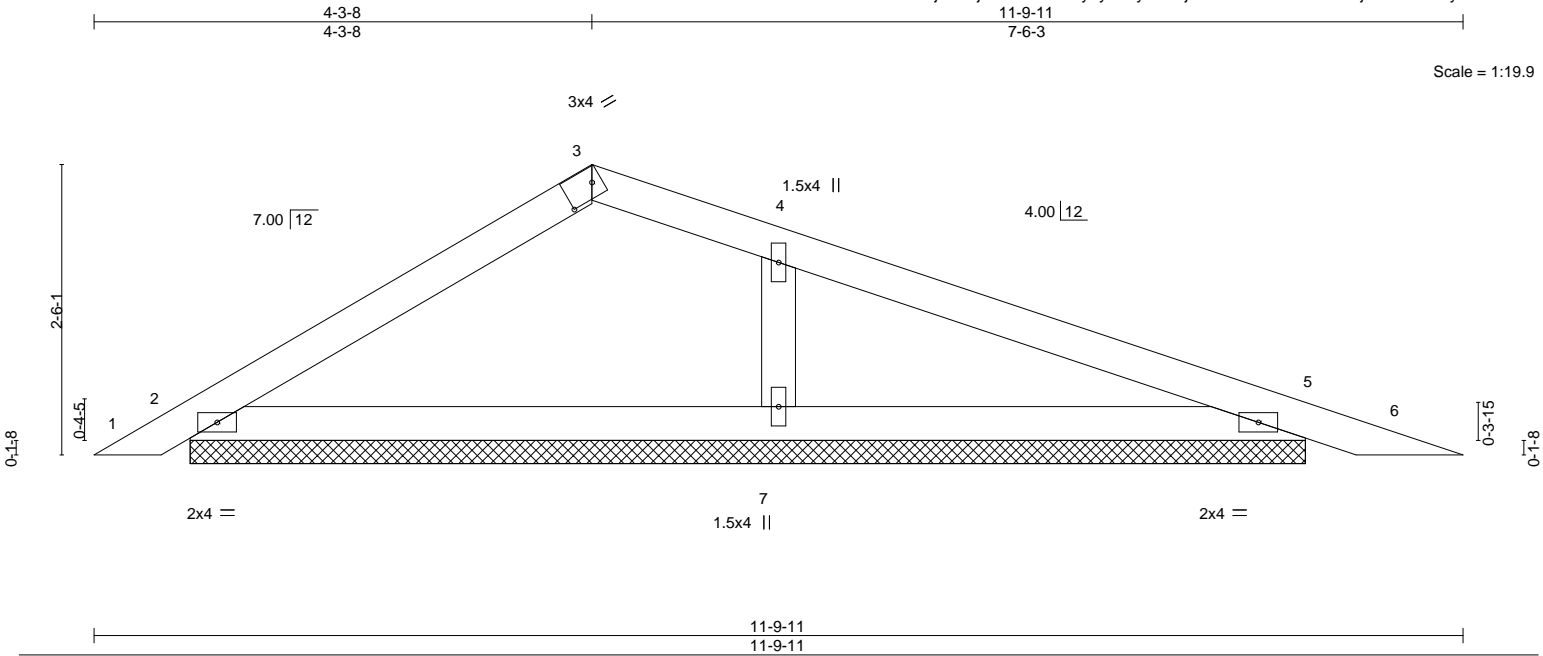


Plate Offsets (X, Y)--	[3:0-3:0, 0-1-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) 0.01 6 n/r 120	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.23	Vert(CT) 0.02 6 n/r 90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 35 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. (size) 2=9-7-7, 5=9-7-7, 7=9-7-7
 Max Horz 2=-69(LC 10)
 Max Uplift 2=-55(LC 12), 5=-62(LC 9), 7=-64(LC 13)
 Max Grav 2=244(LC 23), 5=241(LC 1), 7=382(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-255/173

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) N/A
 - 7) N/A
 - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

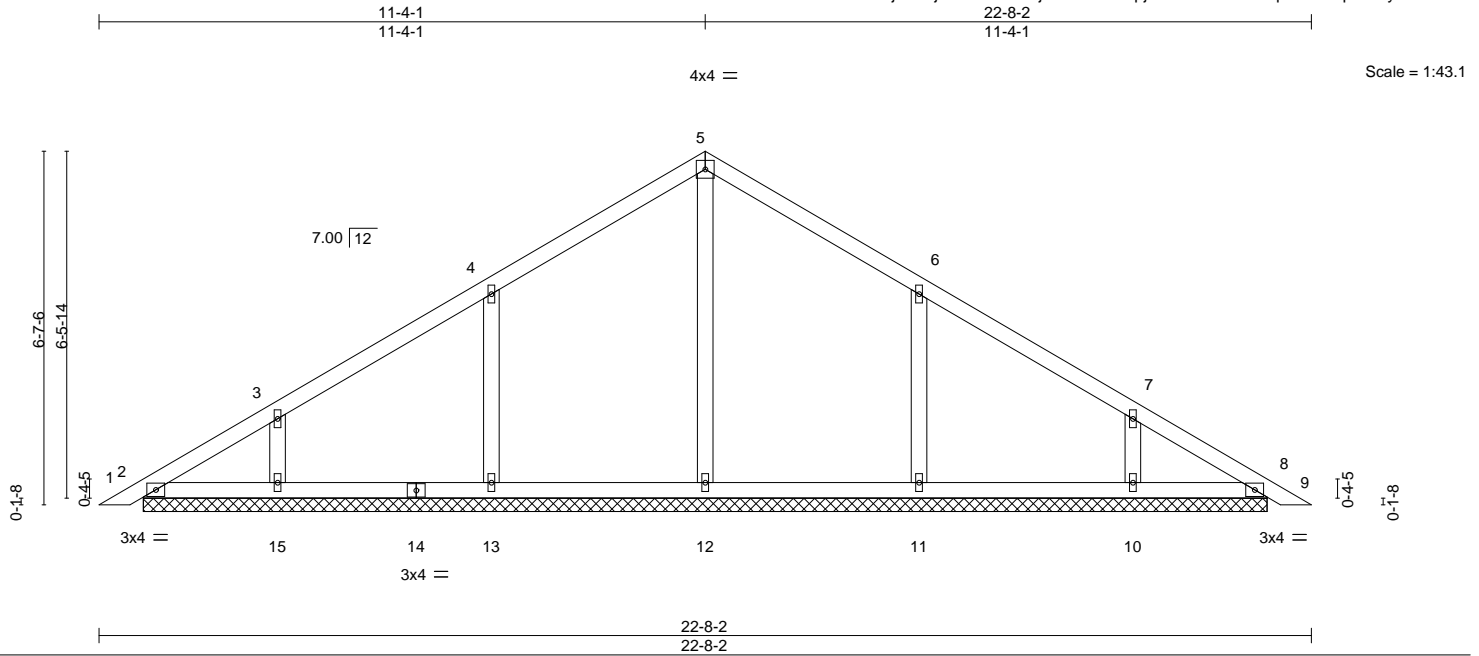


September 22, 2021

Job 2000456-2000456A	Truss PB6	Truss Type Piggyback	Qty 21	Ply 1	Wellons Reser	147996654
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:14 2021 Page 1
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	0.00	8	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	0.00	8	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 94 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 21-0-4.
 (lb) - Max Horz 2=159(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 15, 10 except 13=126(LC 12), 11=-126(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 8 except 12=390(LC 19), 13=422(LC 19), 15=287(LC 19), 11=422(LC 20), 10=286(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 4-13=282/176, 6-11=282/176

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 3) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) N/A
 - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

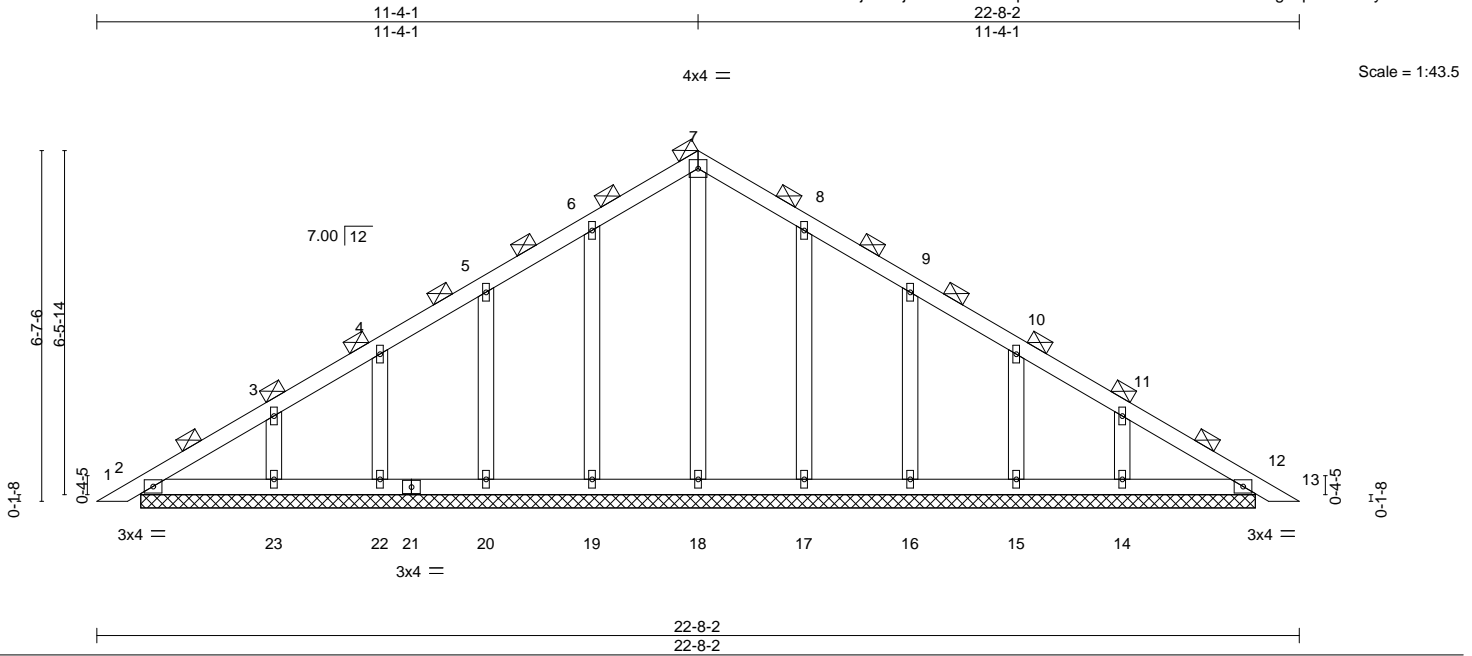


September 22, 2021

Job 2000456-2000456A	Truss PB7	Truss Type Piggyback	Qty 2	Ply 1	Wellons Reser Job Reference (optional)	147996655
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:17 2021 Page 1
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LOADING (psf)	SPACING-	2-2-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	0.00	12	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	0.00	13	n/r	90		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.10	Horz(CT)	0.00	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 115 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	(Switched from sheeted: Spacing > 2-0-0).
WEBS 2x4 SP No.3	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 21-0-4.
 (lb) - Max Horz 2=173(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 23, 16, 14, 22, 19, 17, 15
 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 20, 23, 16, 14, 12, 22, 19, 17, 15

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 3) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) N/A
 - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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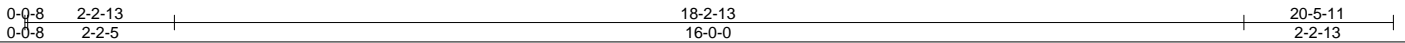
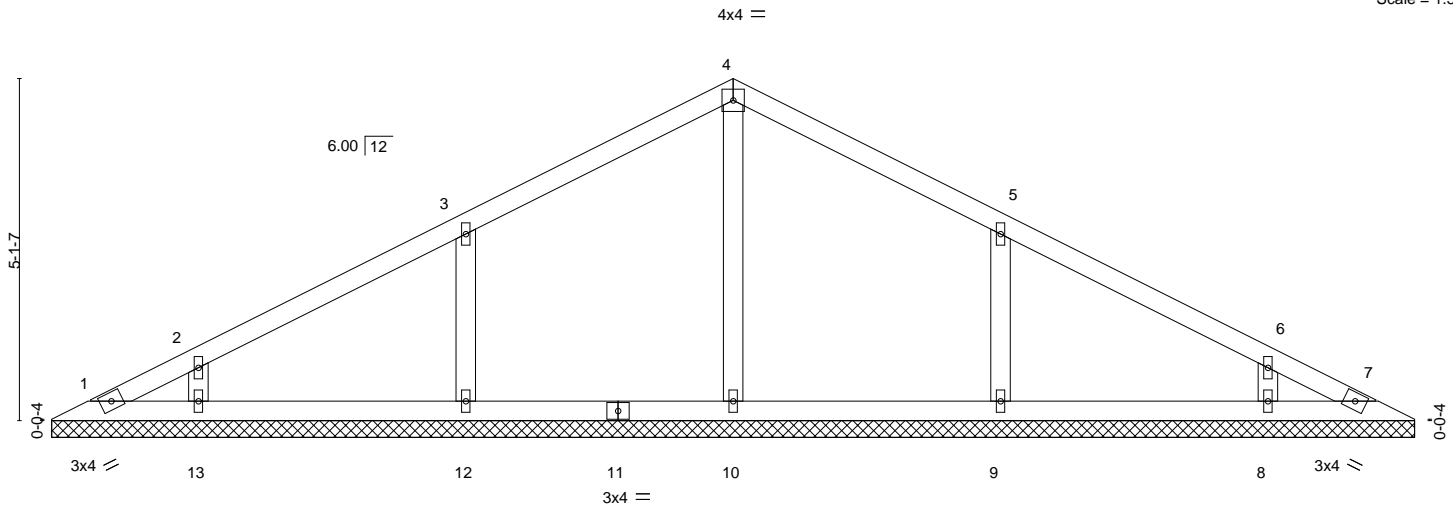
Job 2000456-2000456A	Truss V1	Truss Type Valley	Qty 1	Ply 1	Wellons Reser	147996656
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:18 2021 Page 1
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Scale = 1:34.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 78 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.3	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 20-4-11.
 (lb) - Max Horz 1=80(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 8 except 12=-112(LC 12), 9=-112(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=271(LC 1), 12=351(LC 23), 9=351(LC 24), 13=261(LC 1), 8=261(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-12=-268/180, 5-9=-268/180

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 3) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



September 22, 2021

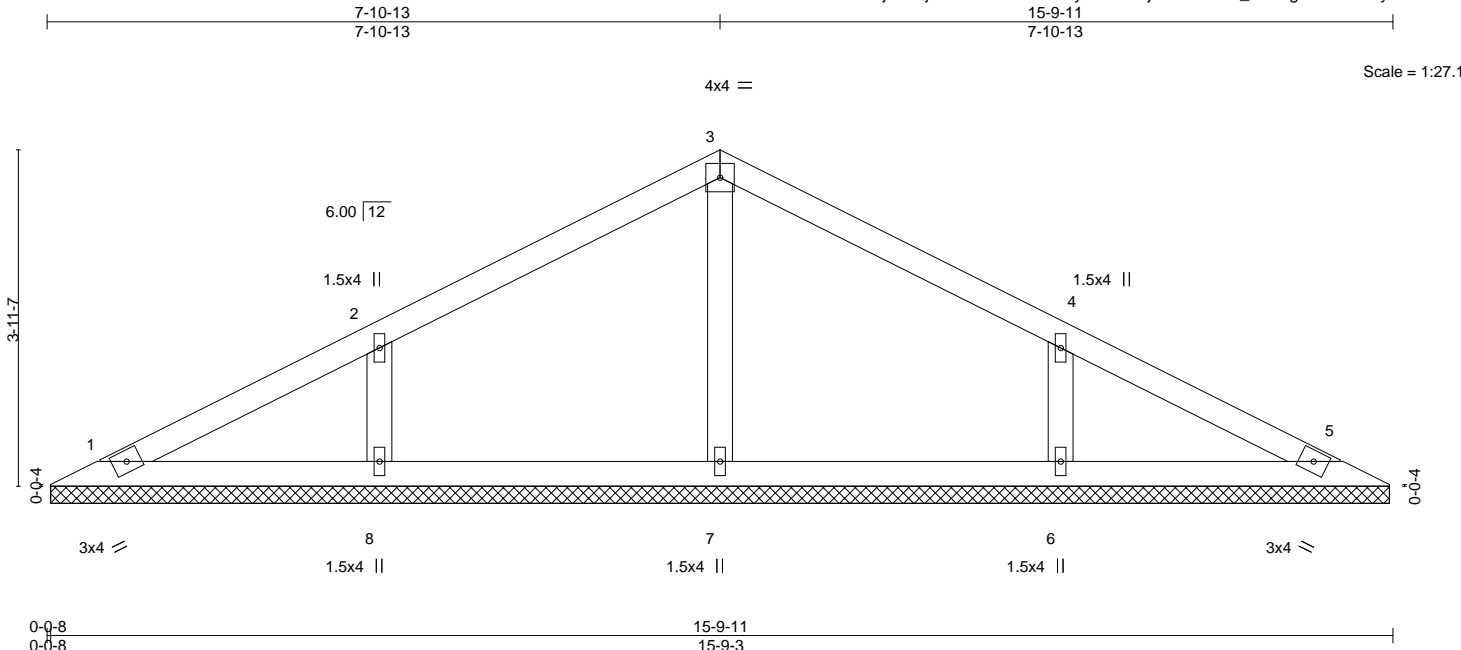
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job 2000456-2000456A	Truss V2	Truss Type Valley	Qty 1	Ply 1	Wellons Reser	147996657
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:20 2021 Page 1
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 57 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.3
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
 OTHERS 2x4 SP No.3

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

REACTIONS. All bearings 15-8-11.
 (lb) - Max Horz 1=61(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=110(LC 12), 6=110(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=274(LC 1), 8=344(LC 23), 6=344(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-260/179, 4-6=-260/179

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



September 22, 2021

Job 2000456-2000456A	Truss V3	Truss Type Valley	Qty 1	Ply 1	Wellons Reser	147996658
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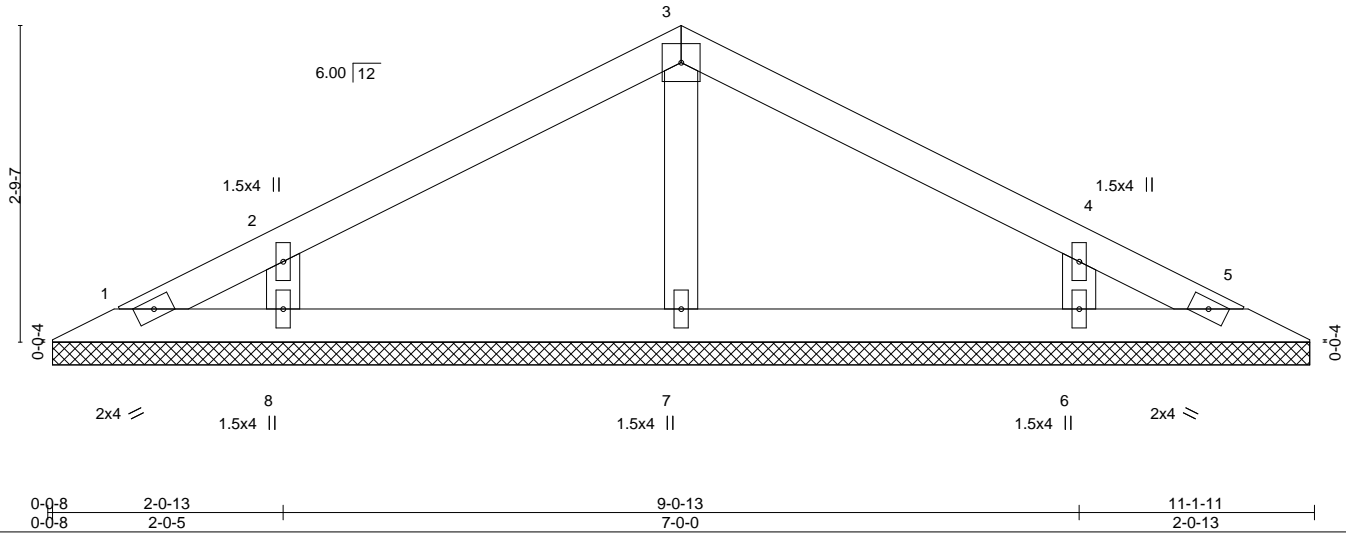
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:21 2021 Page 1
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4x4 =

Scale = 1:20.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 38 lb	FT = 20%

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

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

REACTIONS. All bearings 11-0-11.
 (lb) - Max Horz 1=41(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=252(LC 1), 6=258(LC 24), 8=258(LC 23)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



September 22, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



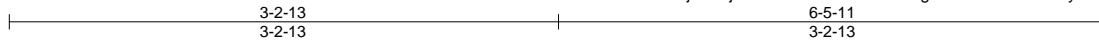
818 Soundside Road
 Edenton, NC 27932

Job 2000456-2000456A	Truss V4	Truss Type Valley	Qty 1	Ply 1	Wellons Reser Job Reference (optional)	147996659
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:22 2021 Page 1

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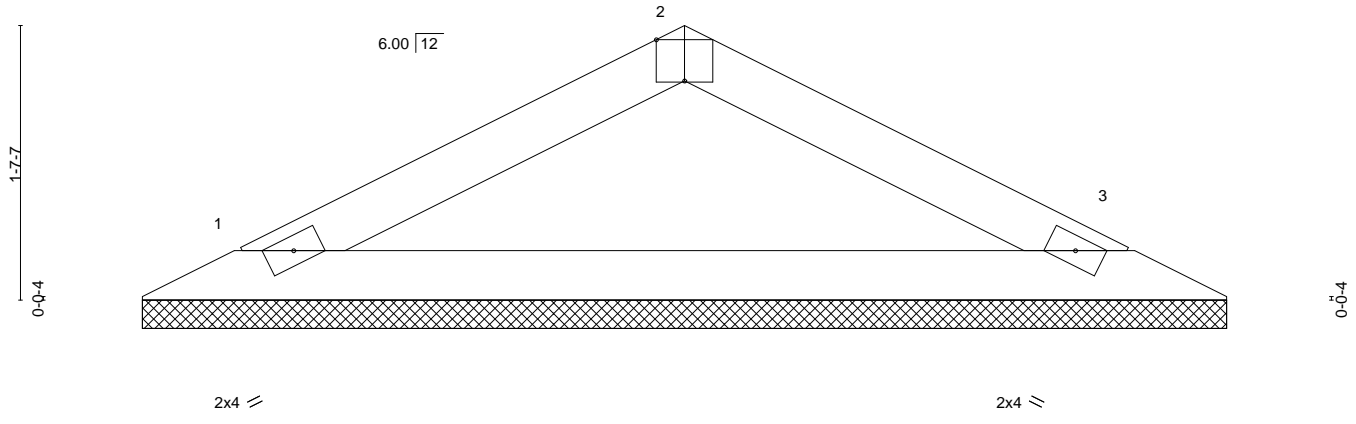


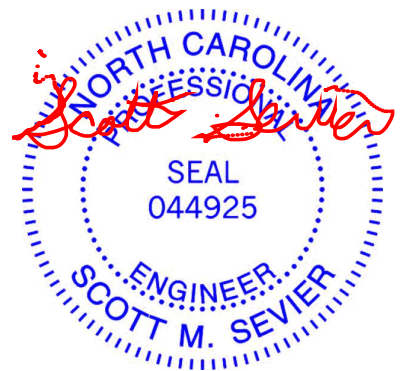
Plate Offsets (X, Y)--	[2:0-2-0, Edge]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.59	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P							
									Weight: 18 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.3	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=6-4-11, 3=6-4-11
 Max Horz 1=-22(LC 13)
 Max Uplift 1=-25(LC 12), 3=-25(LC 13)
 Max Grav 1=208(LC 1), 3=208(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



September 22, 2021

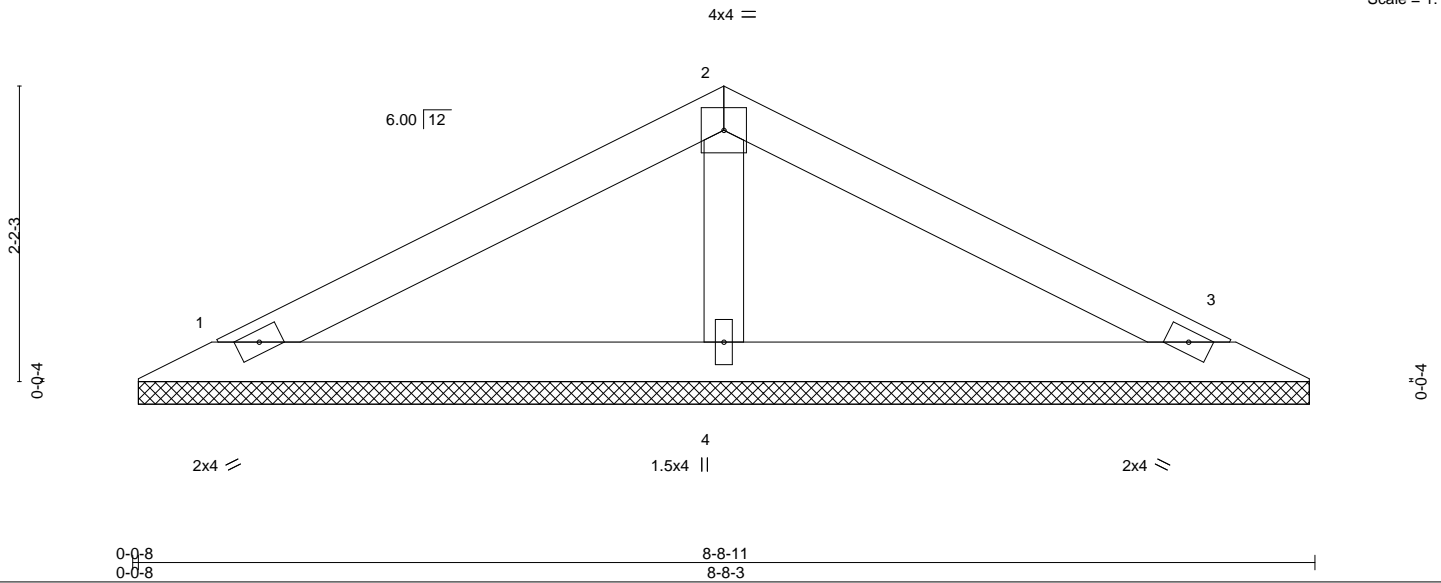
Job 2000456-2000456A	Truss V5	Truss Type Valley	Qty 1	Ply 1	Wellons Reser Job Reference (optional)	147996660
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:23 2021 Page 1
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Scale = 1:17.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.44	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.24	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 28 lb	FT = 20%
	Code IRC2015/TPI2014							

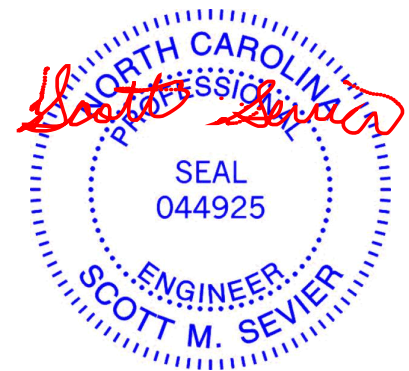
LUMBER-
 TOP CHORD 2x4 SP No.3
 BOT CHORD 2x4 SP No.3
 OTHERS 2x4 SP No.3

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

REACTIONS. (size) 1=8-7-11, 3=8-7-11, 4=8-7-11
 Max Horz 1=31(LC 12)
 Max Uplift 1=-35(LC 12), 3=-41(LC 13), 4=-1(LC 12)
 Max Grav 1=151(LC 1), 3=151(LC 1), 4=296(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



September 22, 2021

Job 2000456-2000456A	Truss V6	Truss Type Valley	Qty 1	Ply 1	Wellons Reser Job Reference (optional)	147996661
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84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 21 09:33:24 2021 Page 1

ID:kQ1KS2Sn3ljdZGzjx5z8lzz3hVz-R922om9eBu_tCkQXE2fqUe1j2sa4csXs2MT00VybS39



Scale = 1:13.0

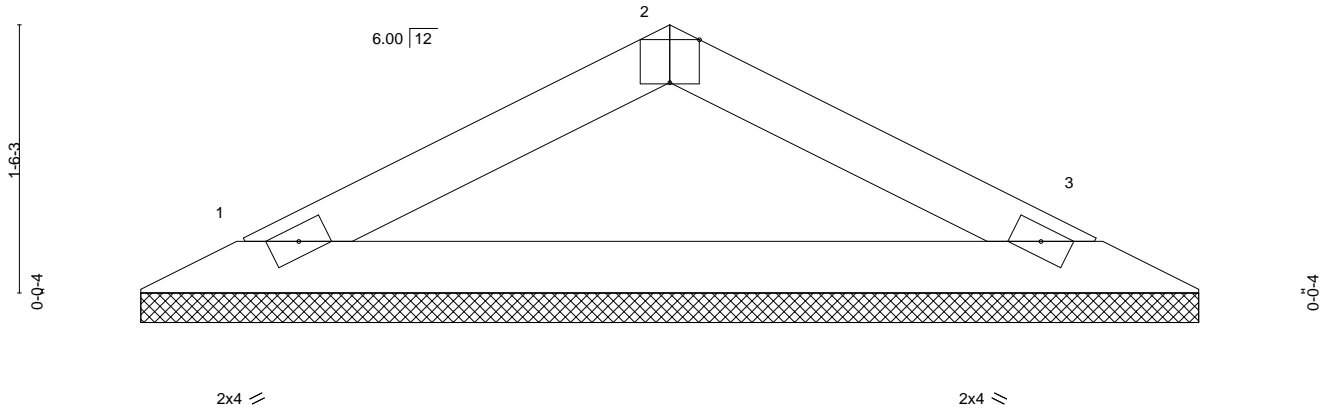


Plate Offsets (X,Y)--	[2:0-2-0,Edge]	6-0-3 6-0-3	6-0-11 0-0-8		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.17	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.50	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 17 lb	FT = 20%

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

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

REACTIONS. (size) 1=5-11-11, 3=5-11-11
Max Horz 1=-20(LC 13)
Max Uplift 1=-23(LC 12), 3=-23(LC 13)
Max Grav 1=192(LC 1), 3=192(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.



September 22, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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 20/20 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 where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & 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-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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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MITek Engineering Reference Sheet: MII-7473 rev. 5/19/2020



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.