

RE: 3897781 - 1084 ROSSER PITTMAN ROAD

Trenco
 818 Soundside Rd
 Edenton, NC 27932

Site Information:

Project Customer: JOSE HURTADO Project Name:
 Lot/Block: 1084 Subdivision: ROSSER PITTMAN ROAD
 Address: 1084 ROSSER PITTMAN ROAD
 City: BROADWAY State: NC

Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name: License #:
 Address: State:
 City, County:

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.6
 Wind Code: ASCE 7-10 Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-10
 Wind Speed: 150 mph
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 9 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Job ID#	Truss Name	Date
1	164513435	3897781	A01	3/28/24
2	164513436	3897781	A02	3/28/24
3	164513437	3897781	A04	3/28/24
4	164513438	3897781	B01	3/28/24
5	164513439	3897781	B02	3/28/24
6	164513440	3897781	V01	3/28/24
7	164513441	3897781	V02	3/28/24
8		3897781	V03	3/28/24
9	164513443	3897781	V04	3/28/24

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Sumter,SC.

Truss Design Engineer's Name: Gilbert, Eric
 My license renewal date for the state of North Carolina is December 31, 2024.



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.

March 28, 2024

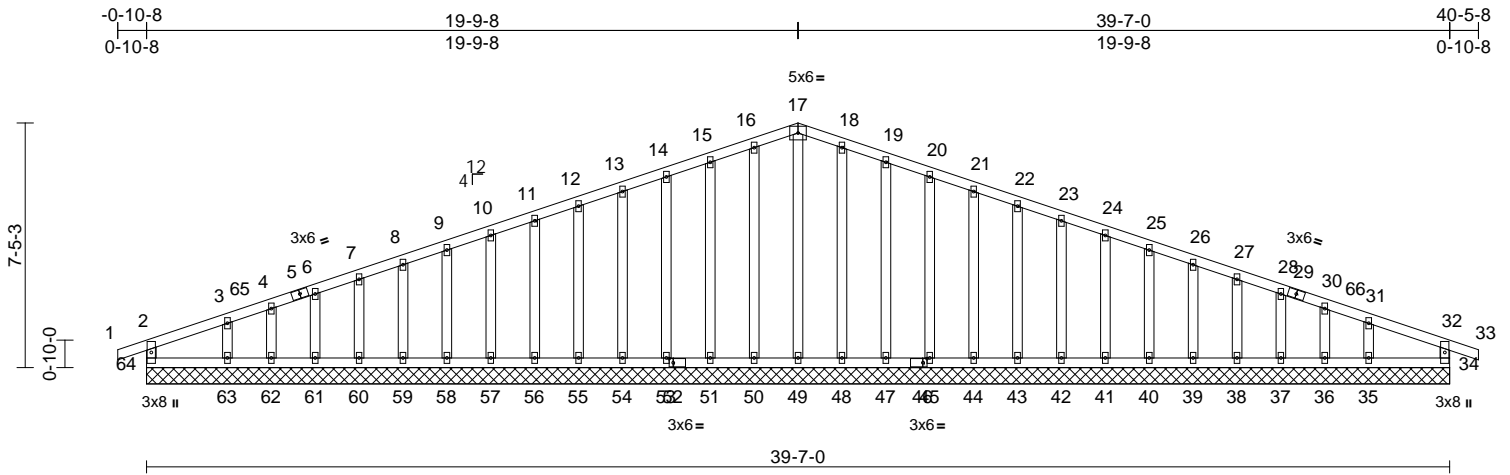
Gilbert, Eric

Job 3897781	Truss A01	Truss Type Common Supported Gable	Qty 2	Ply 1	1084 ROSSER PITTMAN ROAD Job Reference (optional)	164513435
----------------	--------------	--------------------------------------	----------	----------	--	-----------

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 09:48:19
ID:5?hQ1aMxOgK72SRNI6kpgzsch-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:70

Plate Offsets (X, Y): [46:0-1-8,0-1-8], [52:0-1-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	34	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS								
											Weight: 281 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size)

34=39-7-0, 35=39-7-0, 36=39-7-0, 37=39-7-0, 38=39-7-0, 39=39-7-0, 40=39-7-0, 41=39-7-0, 42=39-7-0, 43=39-7-0, 44=39-7-0, 45=39-7-0, 47=39-7-0, 48=39-7-0, 49=39-7-0, 50=39-7-0, 51=39-7-0, 53=39-7-0, 54=39-7-0, 55=39-7-0, 56=39-7-0, 57=39-7-0, 58=39-7-0, 59=39-7-0, 60=39-7-0, 61=39-7-0, 62=39-7-0, 63=39-7-0, 64=39-7-0
Max Horiz 64=173 (LC 12)
Max Uplift 34=-76 (LC 9), 35=-171 (LC 13), 36=-40 (LC 9), 37=-79 (LC 13), 38=-70 (LC 9), 39=-71 (LC 13), 40=-71 (LC 9), 41=-71 (LC 13), 42=-71 (LC 9), 43=-71 (LC 9), 44=-71 (LC 13), 45=-71 (LC 9), 47=-79 (LC 9), 48=-47 (LC 13), 50=-51 (LC 12), 51=-78 (LC 8), 53=-71 (LC 8), 54=-71 (LC 12), 55=-71 (LC 8), 56=-71 (LC 8), 57=-71 (LC 12), 58=-71 (LC 8), 59=-71 (LC 12), 60=-69 (LC 8), 61=-82 (LC 12), 62=-35 (LC 9), 63=-197 (LC 12), 64=-81 (LC 13)

Max Grav 34=159 (LC 1), 35=157 (LC 24), 36=89 (LC 1), 37=111 (LC 24), 38=106 (LC 1), 39=107 (LC 24), 40=107 (LC 1), 41=107 (LC 24), 42=107 (LC 1), 43=107 (LC 24), 44=107 (LC 1), 45=107 (LC 1), 47=107 (LC 24), 48=109 (LC 24), 49=140 (LC 20), 50=109 (LC 23), 51=107 (LC 23), 53=107 (LC 1), 54=107 (LC 1), 55=107 (LC 23), 56=107 (LC 1), 57=107 (LC 23), 58=107 (LC 1), 59=107 (LC 23), 60=106 (LC 1), 61=111 (LC 23), 62=89 (LC 1), 63=157 (LC 23), 64=159 (LC 1)

BOT CHORD 63-64=-45/137, 62-63=-45/137, 61-62=-45/137, 60-61=-45/137, 59-60=-45/137, 58-59=-45/137, 57-58=-45/137, 56-57=-45/137, 55-56=-45/137, 54-55=-45/137, 53-54=-45/137, 51-53=-45/137, 50-51=-45/137, 49-50=-45/137, 48-49=-45/137, 47-48=-45/137, 45-47=-45/137, 44-45=-45/137, 43-44=-45/137, 42-43=-45/137, 41-42=-45/137, 40-41=-45/137, 39-40=-45/137, 38-39=-45/137, 37-38=-45/137, 36-37=-45/137, 35-36=-45/137, 34-35=-45/137

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-174/104, 3-4=-123/116, 4-6=-106/134, 6-7=-83/152, 7-8=-60/171, 8-9=-71/202, 9-10=-84/238, 10-11=-96/274, 11-12=-109/310, 12-13=-121/346, 13-14=-133/381, 14-15=-146/417, 15-16=-160/456, 16-17=-168/481, 17-18=-168/472, 18-19=-160/444, 19-20=-146/405, 20-21=-133/369, 21-22=-121/333, 22-23=-109/297, 23-24=-96/261, 24-25=-84/226, 25-26=-71/190, 26-27=-59/154, 27-28=-46/118, 28-30=-53/81, 30-31=-71/63, 31-32=-118/48, 32-33=0/19, 2-64=-137/247, 32-34=-137/240



March 28, 2024

Continued on page 2

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

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



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1084 ROSSER PITTMAN ROAD	I64513435
3897781	A01	Common Supported Gable	2	1	Job Reference (optional)	

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 09:48:19
ID:5?hQ1haMxOgK72SRNIkpgzgschH-RfC?PsB70Hq3NSgPqnLw3ulTXbGKWRcDoi7J4zJC?I

Page: 2

WEBS 17-49=-140/28, 16-50=-82/131,
15-51=-81/177, 14-53=-80/130,
13-54=-80/97, 12-55=-80/98, 11-56=-80/98,
10-57=-80/98, 9-58=-80/98, 8-59=-80/98,
7-60=-80/97, 6-61=-82/103, 4-62=-69/72,
3-63=-114/245, 18-48=-82/130,
19-47=-81/177, 20-45=-80/130,
21-44=-80/97, 22-43=-80/98, 23-42=-80/98,
24-41=-80/98, 25-40=-80/98, 26-39=-80/98,
27-38=-80/97, 28-37=-82/103, 30-36=-69/71,
31-35=-114/248

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph (3-second gust)
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-10-8 to 3-1-0, Exterior (2) 3-1-0 to 19-9-8, Corner (3) 19-9-8 to 23-9-8, Exterior (2) 23-9-8 to 40-5-8 zone; 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 2x4 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 1-4-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 64, 76 lb uplift at joint 34, 51 lb uplift at joint 50, 78 lb uplift at joint 51, 71 lb uplift at joint 53, 71 lb uplift at joint 54, 71 lb uplift at joint 55, 71 lb uplift at joint 56, 71 lb uplift at joint 57, 71 lb uplift at joint 58, 71 lb uplift at joint 59, 69 lb uplift at joint 60, 82 lb uplift at joint 61, 35 lb uplift at joint 62, 197 lb uplift at joint 63, 47 lb uplift at joint 48, 79 lb uplift at joint 47, 71 lb uplift at joint 45, 71 lb uplift at joint 44, 71 lb uplift at joint 43, 71 lb uplift at joint 42, 71 lb uplift at joint 41, 71 lb uplift at joint 40, 71 lb uplift at joint 39, 70 lb uplift at joint 38, 79 lb uplift at joint 37, 40 lb uplift at joint 36 and 171 lb uplift at joint 35.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

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

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



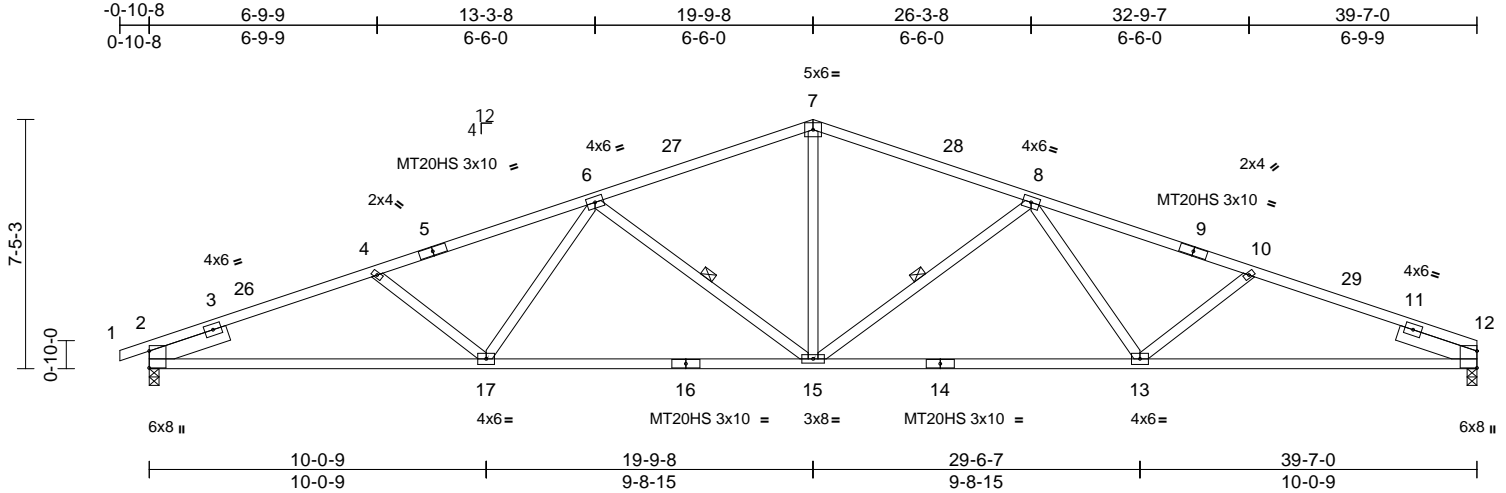
818 Soundside Road
Edenton, NC 27932

Job 3897781	Truss A02	Truss Type Common	Qty 8	Ply 1	1084 ROSSER PITTMAN ROAD Job Reference (optional)	164513436
----------------	--------------	----------------------	----------	----------	--	-----------

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 09:48:20
ID:SyUJ5PdVmYJcEqKPArhvWkzgsC-RfC?PsB70Hq3NSgPqL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:68.7

Plate Offsets (X, Y): [2:Edge,0-0-0], [12:Edge,0-0-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.32	15-17	>999	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.71	15-17	>664	240	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.18	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.47	15-17	>999	240		Weight: 197 lb FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-5-9-12:2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP SS
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-5-12, Right 2x6 SP No.2 -- 2-5-12

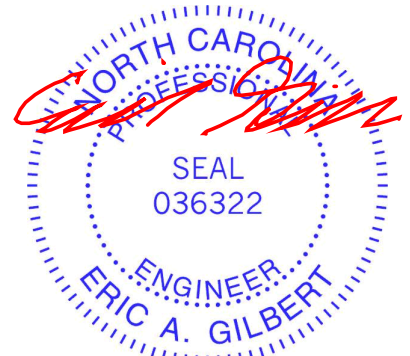
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-15, 6-15

REACTIONS (size) 2=0-3-8, 12=0-3-8
Max Horiz 2=215 (LC 12)
Max Uplift 2=-847 (LC 8), 12=-776 (LC 9)
Max Grav 2=1636 (LC 1), 12=1583 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-4=-3390/1693, 4-6=-3205/1545, 6-7=-2432/1184, 7-8=-2432/1191, 8-10=-3209/1550, 10-12=-3396/1699
BOT CHORD 2-17=-1628/3133, 15-17=-1335/2849, 13-15=-1192/2851, 12-13=-1490/3140
WEBS 7-15=-464/1155, 8-15=-803/628, 8-13=-94/408, 10-13=-213/338, 6-15=-802/627, 6-17=-91/406, 4-17=-209/335

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 847 lb uplift at joint 2 and 776 lb uplift at joint 12.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- LOAD CASE(S)** Standard

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 3-1-0, Interior (1) 3-1-0 to 19-9-8, Exterior (2) 19-9-8 to 23-9-0, Interior (1) 23-9-0 to 39-7-0 zone; 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
 - All plates are MT20 plates unless otherwise indicated.



March 28, 2024

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

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



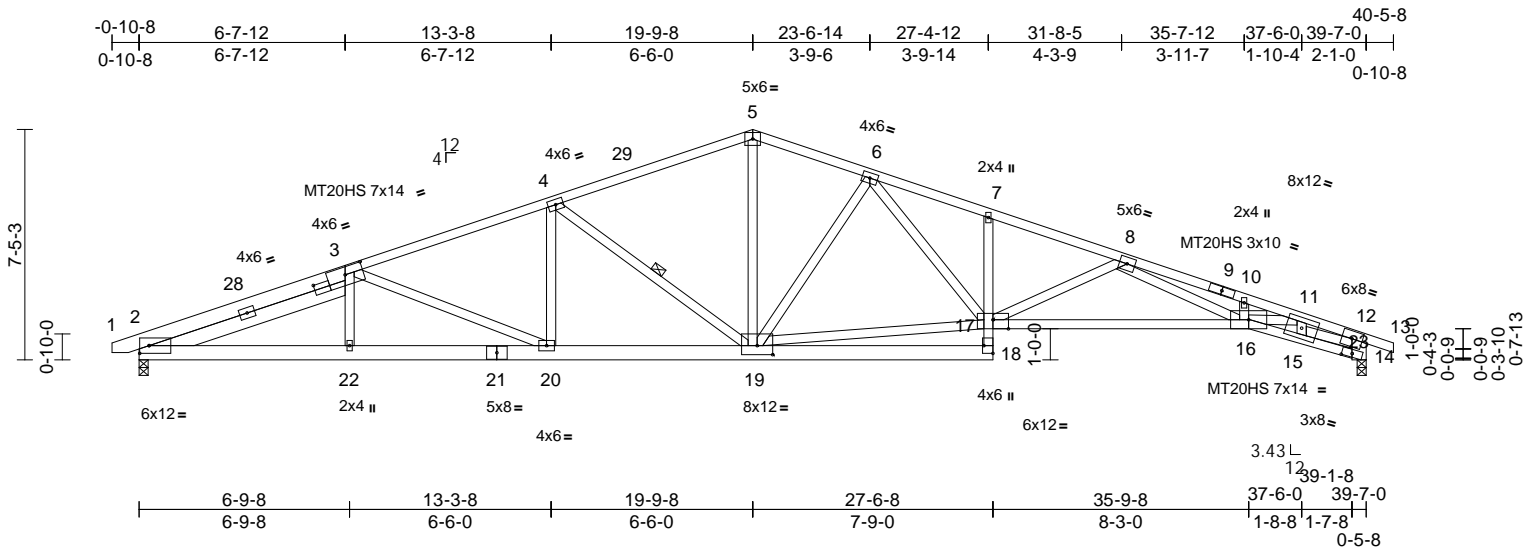
818 Soundside Road
Edenton, NC 27932

Job 3897781	Truss A04	Truss Type Roof Special	Qty 6	Ply 1	1084 ROSSER PITTMAN ROAD Job Reference (optional)	164513437
----------------	--------------	----------------------------	----------	----------	--	-----------

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 09:48:20
ID:OKZBVkZccCEikDWWpxqlOSzgsHd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCoDrJ4zJC7f

Page: 1



Scale = 1:74.3

Plate Offsets (X, Y): [2:5-7-10,0-2-0], [2:0-3-10,0-3-0], [3:0-7-0,0-3-0], [14:0-4-0,0-1-6], [17:0-6-0,Edge], [18:Edge,0-3-8], [19:0-6-0,0-3-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.39	16-17	>999	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.89	16-17	>531	240	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.35	23	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.60	16-17	>789	240		Weight: 268 lb FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1 *Except* 3-5:2x4 SP No.2, 1-3:2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 18-7:2x4 SP No.3, 17-16,16-14:2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 23-12:2x6 SP No.2, 11-16,15-12:2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 6-7-15

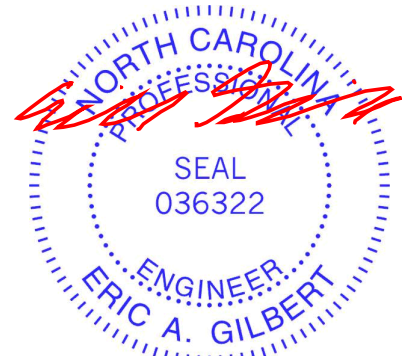
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-19

REACTIONS (size) 2=0-3-8, 23=0-3-8
Max Horiz 2=195 (LC 16)
Max Uplift 2=-830 (LC 8), 23=-858 (LC 9)
Max Grav 2=1613 (LC 1), 23=1635 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/14, 2-4=-3771/1835, 4-5=-2381/1164, 5-6=-2355/1178, 6-7=-3801/1892, 7-8=-3897/1822, 8-10=-6362/3034, 10-11=-6383/2949, 11-12=-3855/1856, 12-13=0/21, 14-23=-1635/858, 12-14=-1596/862
BOT CHORD 2-22=-1776/3561, 20-22=-1766/3557, 19-20=-1285/2878, 18-19=-163/343, 17-18=0/156, 7-17=-196/246, 16-17=-2035/4447, 15-16=-1704/3637, 14-15=-190/429
WEBS 8-17=-884/619, 8-16=-799/1796, 10-16=-56/150, 11-16=-1080/2572, 11-15=-1163/526, 12-15=-1520/3149, 3-22=-59/159, 3-20=-734/513, 4-20=-125/485, 4-19=-874/619, 5-19=-516/1167, 17-19=-868/2418, 6-19=-997/643, 6-17=-698/1359

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-7-5 to 3-4-3, Interior (1) 3-4-3 to 19-9-8, Exterior (2) 19-9-8 to 23-6-14, Interior (1) 23-6-14 to 40-5-8 zone; 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
- All plates are MT20 plates 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 830 lb uplift at joint 2 and 858 lb uplift at joint 23.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



March 28, 2024

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

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



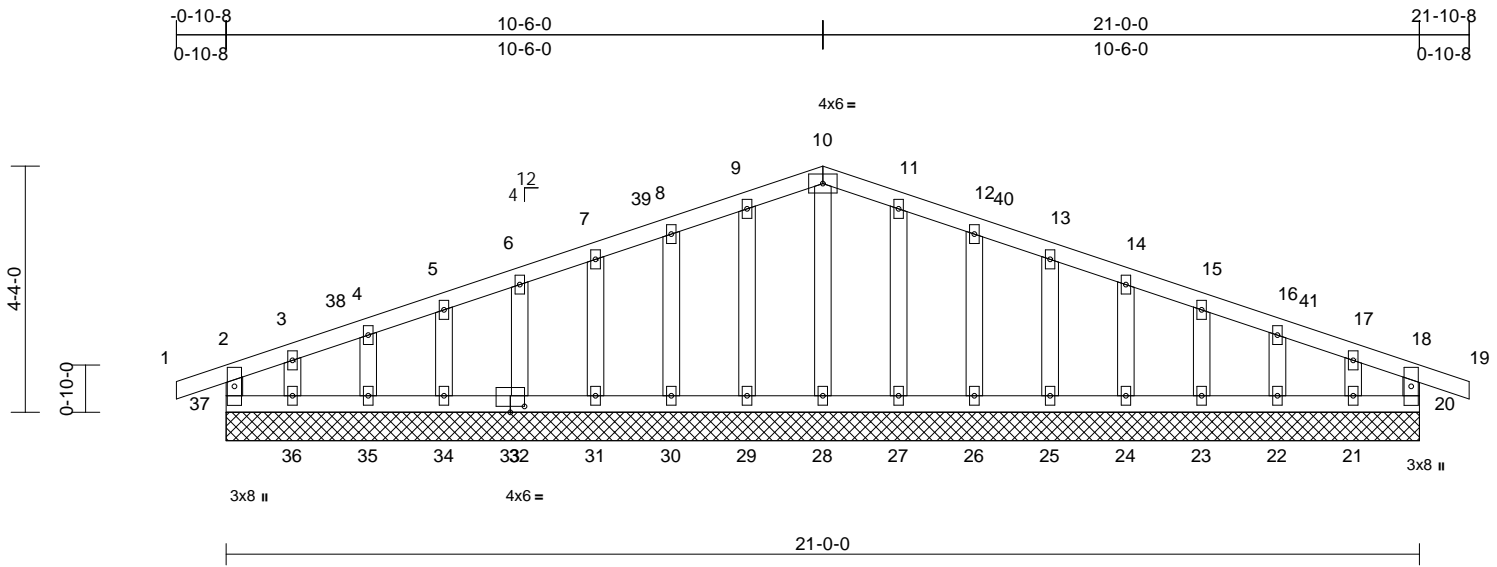
818 Soundside Road
Edenton, NC 27932

Job 3897781	Truss B01	Truss Type Common Supported Gable	Qty 1	Ply 1	1084 ROSSER PITTMAN ROAD Job Reference (optional)	164513438
----------------	--------------	--------------------------------------	----------	----------	--	-----------

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 09:48:20
ID:Gi2GpTNe6AFQsEMqapRr_AzgsBQ-RfC?PsB70Hq3NSgPqnLw3uITxBGKwCDoi7J4zJC?f

Page: 1



Scale = 1:40.5

Plate Offsets (X, Y): [33:0-3:0,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	20	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 115 lb	FT = 20%

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

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

REACTIONS (size)
20=21-0-0, 21=21-0-0, 22=21-0-0, 23=21-0-0, 24=21-0-0, 25=21-0-0, 26=21-0-0, 27=21-0-0, 28=21-0-0, 29=21-0-0, 30=21-0-0, 31=21-0-0, 32=21-0-0, 34=21-0-0, 35=21-0-0, 36=21-0-0, 37=21-0-0
Max Horiz 37=80 (LC 13)
Max Uplift 20=78 (LC 9), 21=98 (LC 13), 22=70 (LC 9), 23=72 (LC 13), 24=71 (LC 9), 25=70 (LC 13), 26=74 (LC 9), 27=65 (LC 13), 29=66 (LC 12), 30=74 (LC 8), 31=71 (LC 12), 32=71 (LC 8), 34=73 (LC 12), 35=68 (LC 8), 36=116 (LC 12), 37=61 (LC 8)
Max Grav 20=123 (LC 24), 21=68 (LC 1), 22=114 (LC 24), 23=105 (LC 1), 24=107 (LC 24), 25=107 (LC 1), 26=106 (LC 24), 27=111 (LC 24), 28=107 (LC 1), 29=111 (LC 23), 30=106 (LC 23), 31=107 (LC 1), 32=107 (LC 23), 34=105 (LC 1), 35=114 (LC 23), 36=72 (LC 22), 37=123 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-93/55, 3-4=-65/61, 4-5=-42/84, 5-6=-38/118, 6-7=-51/155, 7-8=-63/190, 8-9=-76/228, 9-10=-88/259, 10-11=-88/250, 11-12=-76/213, 12-13=-63/176, 13-14=-51/140, 14-15=-38/104, 15-16=-26/69, 16-17=-41/39, 17-18=-66/28, 18-19=0/19, 2-37=-109/210, 18-20=-109/210
BOT CHORD 36-37=-43/106, 35-36=-43/106, 34-35=-43/106, 32-34=-43/106, 31-32=-43/106, 30-31=-43/106, 29-30=-43/106, 28-29=-43/106, 27-28=-43/106, 26-27=-43/106, 25-26=-43/106, 24-25=-43/106, 23-24=-43/106, 22-23=-43/106, 21-22=-43/106, 20-21=-43/106
WEBS 10-28=-80/0, 9-29=-84/158, 8-30=-80/150, 7-31=-80/97, 6-32=-80/98, 5-34=-79/98, 4-35=-86/123, 3-36=-62/109, 11-27=-84/158, 12-26=-80/150, 13-25=-80/97, 14-24=-80/98, 15-23=-79/97, 16-22=-86/122, 17-21=-66/114

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-10-8 to 2-1-8, Exterior (2) 2-1-8 to 10-6-0, Corner (3) 10-6-0 to 13-6-0, Exterior (2) 13-6-0 to 21-10-8 zone; 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 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bracing.

- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 37, 78 lb uplift at joint 20, 66 lb uplift at joint 29, 74 lb uplift at joint 30, 71 lb uplift at joint 31, 71 lb uplift at joint 32, 73 lb uplift at joint 34, 68 lb uplift at joint 35, 116 lb uplift at joint 36, 65 lb uplift at joint 27, 74 lb uplift at joint 26, 70 lb uplift at joint 25, 71 lb uplift at joint 24, 72 lb uplift at joint 23, 70 lb uplift at joint 22 and 98 lb uplift at joint 21.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 28, 2024

Continued on page 2

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

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



818 Soundside Road
Edenton, NC 27932

Job 3897781	Truss B01	Truss Type Common Supported Gable	Qty 1	Ply 1	1084 ROSSER PITTMAN ROAD Job Reference (optional) I64513438
----------------	--------------	--------------------------------------	----------	----------	--

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 09:48:20
ID:Gi2GpTNe6AFQsEMqapRr_AzgsBQ-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrcDoi7J4zJC?f

Page: 2

- 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



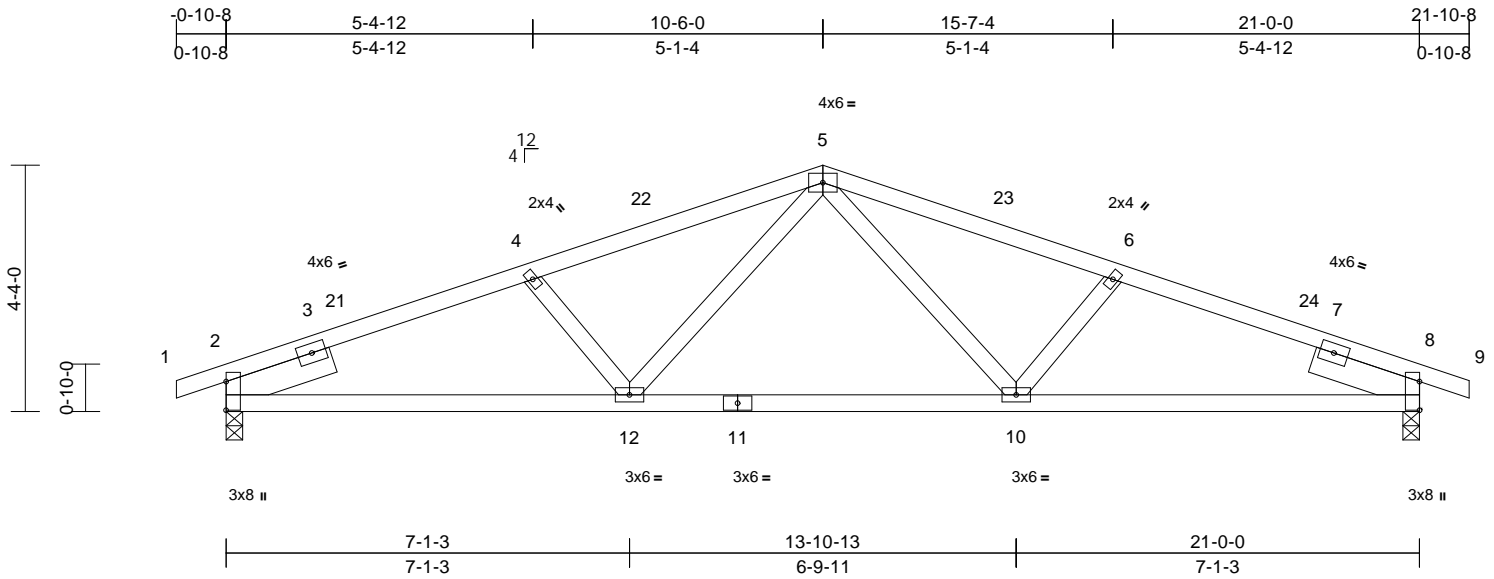
818 Soundside Road
Edenton, NC 27932

Job 3897781	Truss B02	Truss Type Common	Qty 3	Ply 1	1084 ROSSER PITTMAN ROAD Job Reference (optional)	164513439
----------------	--------------	----------------------	----------	----------	--	-----------

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 09:48:21
ID: _vBUUiiZITfbbNwOf_QAatzgsB?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:40.5

Plate Offsets (X, Y): [2:Edge,0-0-0], [8:Edge,0-0-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.10	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.23	10-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.15	10-12	>999	240	Weight: 99 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x6 SP No.2 -- 1-11-12, Right 2x6 SP No.2 -- 1-11-12

BRACING

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

REACTIONS

(size) 2=0-3-8, 8=0-3-8
 Max Horiz 2=-114 (LC 13)
 Max Uplift 2=-482 (LC 8), 8=-482 (LC 9)
 Max Grav 2=893 (LC 1), 8=893 (LC 1)

FORCES

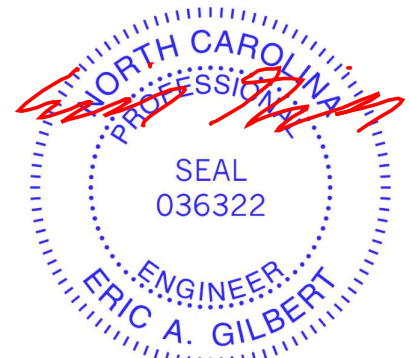
(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/17, 2-4=-1566/785, 4-5=-1425/709, 5-6=-1425/710, 6-8=-1566/785, 8-9=0/17
 BOT CHORD 2-12=-723/1436, 10-12=-435/1103, 8-10=-630/1436
 WEBS 5-10=-189/386, 6-10=-225/294, 5-12=-189/386, 4-12=-225/294

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-6-0, Exterior (2) 10-6-0 to 13-6-0, Interior (1) 13-6-0 to 21-10-8 zone; 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 482 lb uplift at joint 2 and 482 lb uplift at joint 8.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



March 28, 2024

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

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



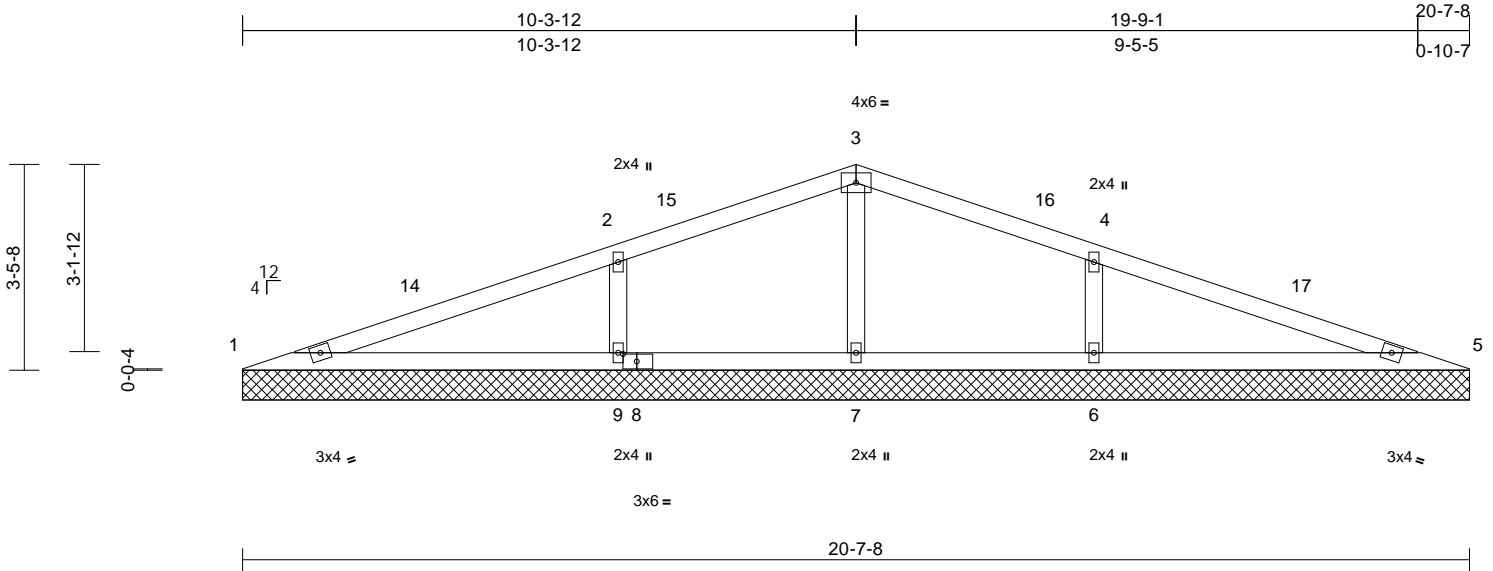
818 Soundside Road
 Edenton, NC 27932

Job 3897781	Truss V01	Truss Type Valley	Qty 1	Ply 1	1084 ROSSER PITTMAN ROAD Job Reference (optional)	164513440
----------------	--------------	----------------------	----------	----------	--	-----------

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 09:48:21
ID:SyUJ5PdVmYJcEqKPArhvWkzgcC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:38.7

Plate Offsets (X, Y): [8:0-2-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 69 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=20-7-8, 5=20-7-8, 6=20-7-8,
7=20-7-8, 9=20-7-8
Max Horiz 1=99 (LC 12)
Max Uplift 1=60 (LC 8), 5=75 (LC 13),
6=338 (LC 13), 7=116 (LC 8),
9=338 (LC 12)
Max Grav 1=139 (LC 23), 5=139 (LC 24),
6=512 (LC 24), 7=404 (LC 1),
9=512 (LC 23)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-253/395, 2-3=-77/362, 3-4=-68/362,
4-5=-253/395
BOT CHORD 1-9=-319/233, 7-9=-319/225, 6-7=-319/225,
5-6=-319/233
WEBS 3-7=-379/209, 2-9=-352/345, 4-6=-352/345

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph (3-second gust)
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 10-4-8, Exterior (2) 10-4-8 to 13-4-8, Interior (1) 13-4-8 to 20-8-4 zone; 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 1, 75 lb uplift at joint 5, 116 lb uplift at joint 7, 338 lb uplift at joint 9 and 338 lb uplift at joint 6.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



March 28, 2024

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

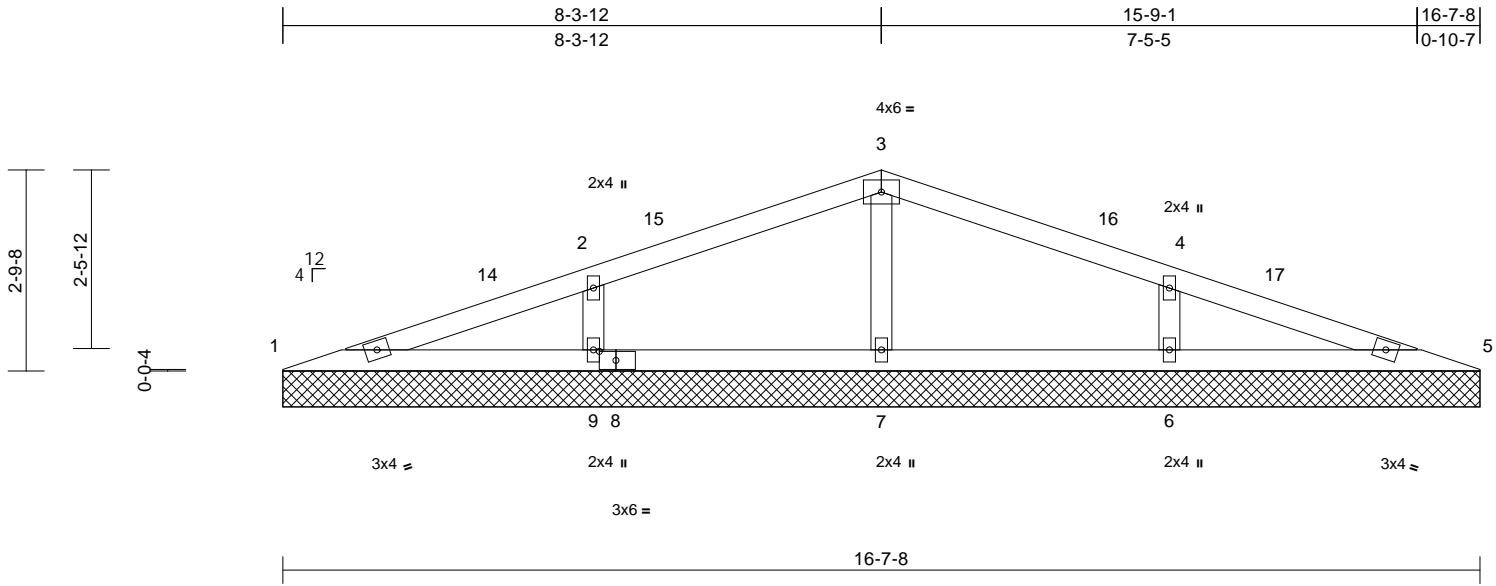
818 Soundside Road
Edenton, NC 27932

Job 3897781	Truss V02	Truss Type Valley	Qty 1	Ply 1	1084 ROSSER PITTMAN ROAD Job Reference (optional)	164513441
----------------	--------------	----------------------	----------	----------	--	-----------

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 09:48:21
ID:HON?wGvwLdCLUMbq0Acyazgsbr-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:32
Plate Offsets (X, Y): [8:0-2-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 54 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=16-7-8, 5=16-7-8, 6=16-7-8, 7=16-7-8, 9=16-7-8
Max Horiz 1=79 (LC 12)
Max Uplift 1=-51 (LC 8), 5=-61 (LC 13), 6=-255 (LC 13), 7=-109 (LC 8), 9=-256 (LC 12)
Max Grav 1=115 (LC 23), 5=115 (LC 24), 6=385 (LC 24), 7=358 (LC 1), 9=385 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-189/161, 2-3=-8/154, 3-4=0/154, 4-5=-189/161
BOT CHORD 1-9=-118/172, 7-9=-118/108, 6-7=-118/108, 5-6=-118/172
WEBS 3-7=-293/192, 2-9=-273/272, 4-6=-273/271

- 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 requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 1, 61 lb uplift at joint 5, 109 lb uplift at joint 7, 256 lb uplift at joint 9 and 255 lb uplift at joint 6.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 8-4-8, Exterior (2) 8-4-8 to 11-4-8, Interior (1) 11-4-8 to 16-8-4 zone; 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



March 28, 2024

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

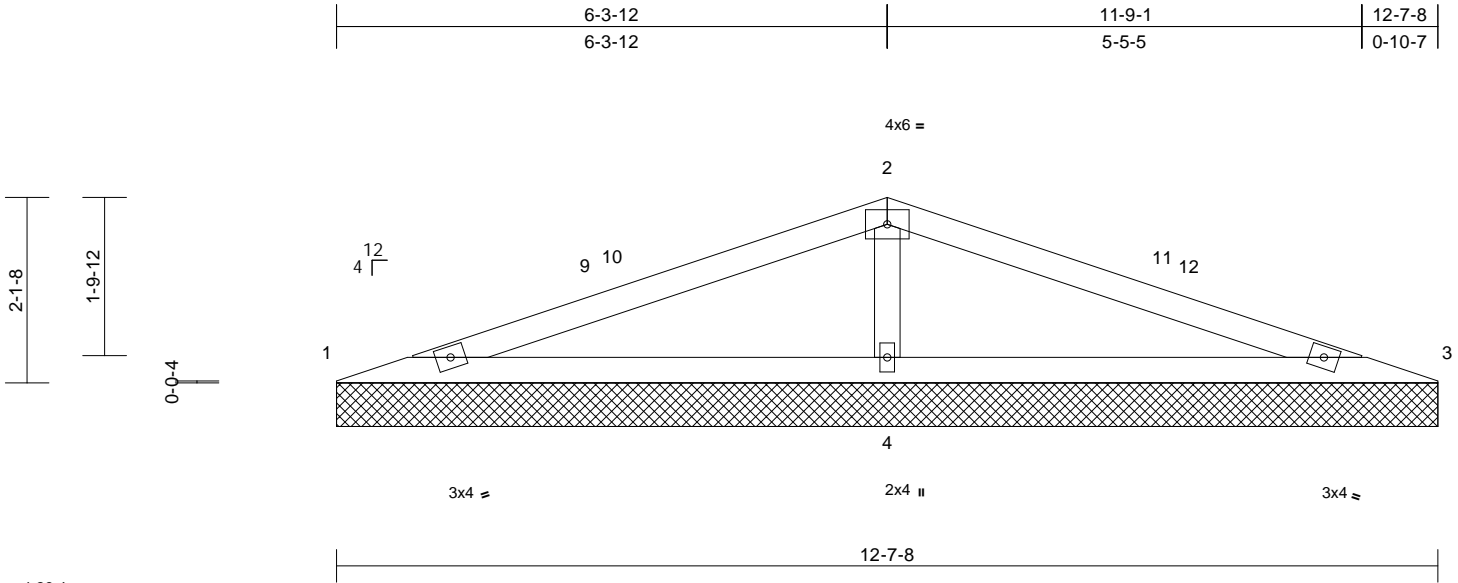
818 Soundside Road
Edenton, NC 27932

Job 3897781	Truss V03	Truss Type Valley	Qty 1	Ply 1	1084 ROSSER PITTMAN ROAD Job Reference (optional)	164513442
----------------	--------------	----------------------	----------	----------	--	-----------

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 09:48:21
ID:laxN7cwZ6wKC6WA0at7XUozgsbq-RFC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 38 lb	FT = 20%

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

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

REACTIONS (size) 1=12-7-8, 3=12-7-8, 4=12-7-8
Max Horiz 1=59 (LC 12)
Max Uplift 1=65 (LC 12), 3=75 (LC 13),
4=379 (LC 8)
Max Grav 1=122 (LC 23), 3=122 (LC 24),
4=853 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-280/523, 2-3=-278/523
BOT CHORD 1-4=-444/327, 3-4=-444/327
WEBS 2-4=-649/472

- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 1, 75 lb uplift at joint 3 and 379 lb uplift at joint 4.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- LOAD CASE(S)** Standard

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 6-4-8, Exterior (2) 6-4-8 to 9-4-8, Interior (1) 9-4-8 to 12-8-4 zone; 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) Gable requires continuous bottom chord bearing.
 - 5) Gable studs spaced at 4-0-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



March 28, 2024

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

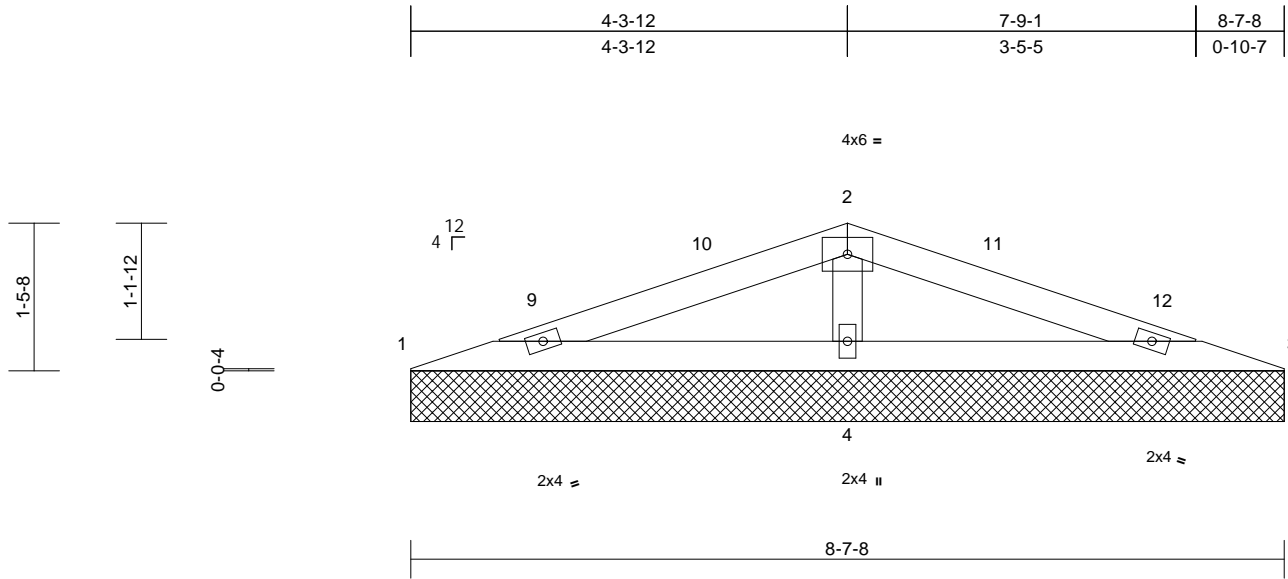
818 Soundside Road
Edenton, NC 27932

Job 3897781	Truss V04	Truss Type Valley	Qty 1	Ply 1	1084 ROSSER PITTMAN ROAD Job Reference (optional)	164513443
----------------	--------------	----------------------	----------	----------	--	-----------

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 09:48:21
ID: _Aiv2WvElioA8_kH92EAmSzgsAk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRcDoi7J4zJC?f

Page: 1



Scale = 1:22.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 25 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=8-7-8, 3=8-7-8, 4=8-7-8
Max Horiz 1=-39 (LC 17)
Max Uplift 1=-58 (LC 12), 3=-65 (LC 13),
4=-229 (LC 8)
Max Grav 1=105 (LC 23), 3=105 (LC 24),
4=524 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-176/266, 2-3=-174/266
BOT CHORD 1-4=-220/223, 3-4=-220/223
WEBS 2-4=-370/331

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust)
Vasd=119mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 4-4-8, Exterior (2) 4-4-8 to 7-4-8, Interior (1) 7-4-8 to 8-8-4 zone; 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 requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 1, 65 lb uplift at joint 3 and 229 lb uplift at joint 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



March 28, 2024

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

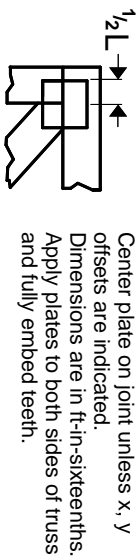
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

ENGINEERING BY
TRENCO
A MiTek Affiliate

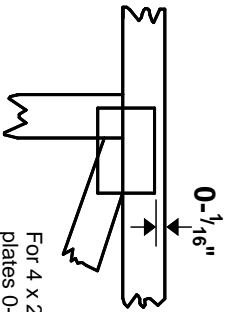
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

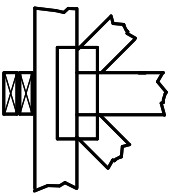
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

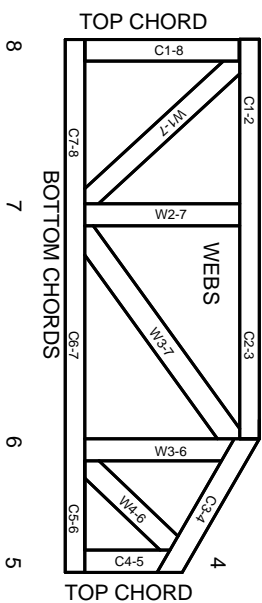
Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



1 TOP CHORDS
2 Joint ID
3 typ.



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

© 2023 MITek® All Rights Reserved

MITek

ENGINEERING BY
TRENGO
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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