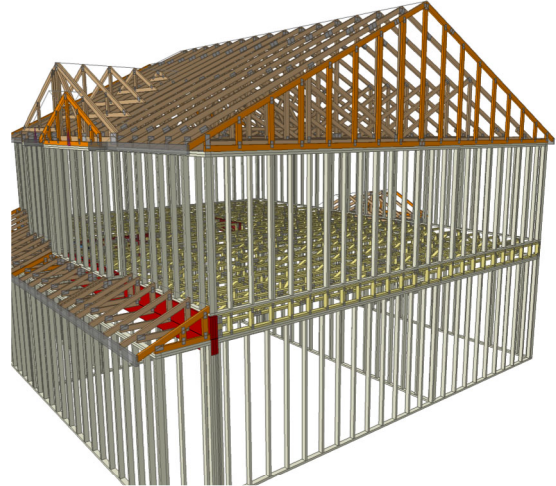




Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450



Builder: Glenwood Homes

**Model: Forsyth 3 GRH 10x10 CP
Lot 4 Carolina Seasons**

THE PLACEMENT PLAN NOTES:

1. The Placement Plan is a diagram for truss installation. It is not an engineered drawing and has not been reviewed by an engineer. The Owner/Building Designer is responsible for obtaining an engineer's review if one is required by the local jurisdiction.
2. The responsibilities of the Owner, Contractor, Building Designer, Component Designer and Component Manufacturer shall be as set forth in ANSI/TPI 1. Capitalized terms shall be as defined in ANSI/TP 1 unless otherwise indicated.
3. Each Component is designed as an individual component utilizing information provided by others. The Owner/Building Designer is responsible for reviewing all Component Submittal Packages and individual Component Design Drawings for compliance with the Construction Documents and compatibility with the overall Building design.
4. Contractor will not proceed with component installation until the Owner/Building Designer has reviewed the Component Submittal Package. Questions on the suitability of any Component will be resolved by the Building Designer.
5. The Building Designer and Contractor are responsible for all temporary and permanent bracing.
6. The Placement Plan assumes the building is dimensionally correct, structurally sound, and in a suitable condition to support each Component during installation and thereafter, including but not limited to installation of all bearing points. Proper design and construction of all structural components, including foundations, headers, beams, walls and columns are the responsibility of the Owner, Building Designer and Contractor.
7. Do not cut, drill, or modify any Component without first consulting the Component Manufacturer or Building Designer. Damaged Components shall not be installed unless directed by the Building Designer or approved by the Component Manufacturer.
8. Components must be handled and installed following all applicable safety standards and best practices, including but not limited to BCSI, OSHA, TPI and local codes. Failure to properly handle, brace or otherwise install Component can result in serious injury or death.
9. All uplift connectors shown within these documents are recommendations only. Per ANSI/TPI 1, all uplift connectors are the responsibility of the building designer and or contractor.

Approved By: _____

Date: _____

General Notes:

CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION.

ALL POINT LOADS FROM ABOVE MUST BE TRANSFERRED TO BEARING FROM UNDER SIDE OF SHEATHING.

Revisions	
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed and manufactured to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor systems and for the overall structure. The design of the truss support structure (including headers, beams, walls, and columns) is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Trusses" available from the Truss Plate Institute, 533 O'Donoghue Drive.



Glenwood Homes

FORSYTH 3 GRH 10x10 CP

FLOOR PLACEMENT PLAN

Scale:

NTS

Date: 1/16/2025

Designer:

Blake Scrivner

Project Number: 05040100-1

25010102-

Sheet Number:

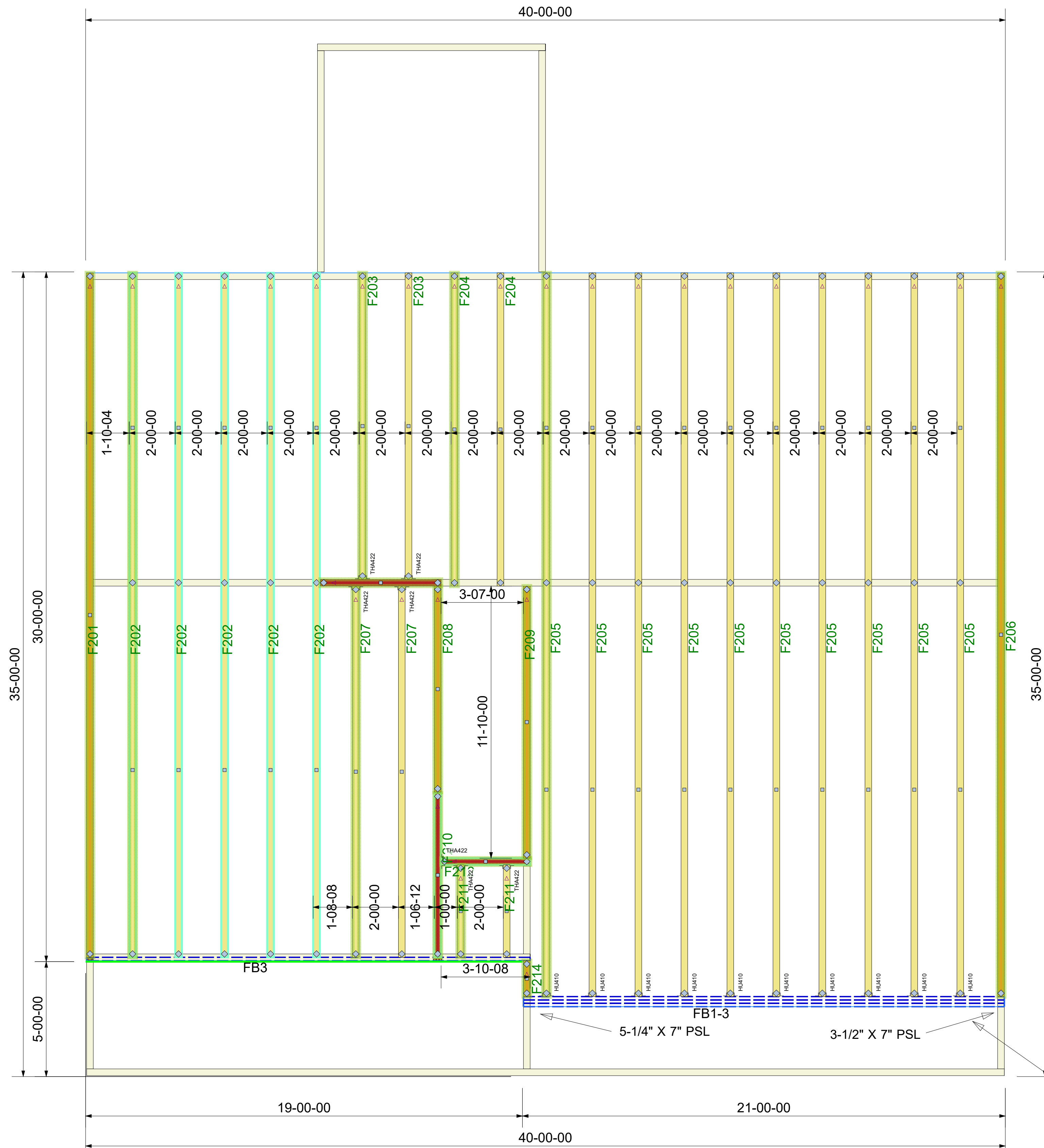
1/1

*** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS. ***
 *** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT. ***
 *** ALL BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS. ***

★★ TRIANGULAR SYMBOL NEAR END OF TRUSS INDICATES LEFT END OF TRUSS AS SHOWN ON INDIVIDUAL TRUSS DRAWINGS.

PLUMBING DROPS NOTED ARE IN THE APPROXIMATE LOCATIONS PER PLAN. BUILDER TO VERIFY LOCATIONS BEFORE SETTING TRUSSES.

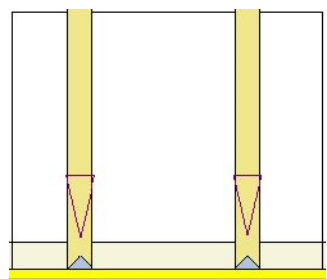
REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS.



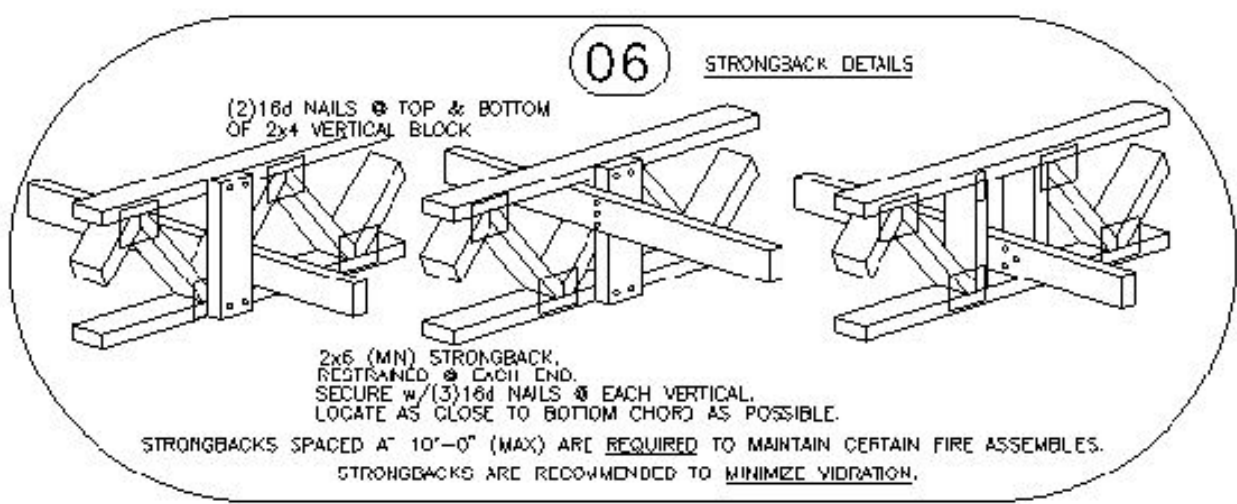
Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
FB1-3	22-00-00	2.0 RigidLam DF LVL 1-3/4 x 24	3	3	FF
FB3	20-00-00	2.1 RigidLam SP LVL 1-3/4 x 14	1	1	FF

HANGER LIST	
HU410	10
THA422	7

24" Beam in Lieu of 22"



Truss Drawing Left
End Indicator



**	GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS.	**
**	DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.	**
**	TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE.	**

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 25010102-B
Install 4 Carolina Seasons-2nd Floor-Forsyth 3 GRH 10x10 CP

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carter Components (Sanford, NC)).

Pages or sheets covered by this seal: I70832480 thru I70832492

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844



January 17, 2025

Velez, Joaquin

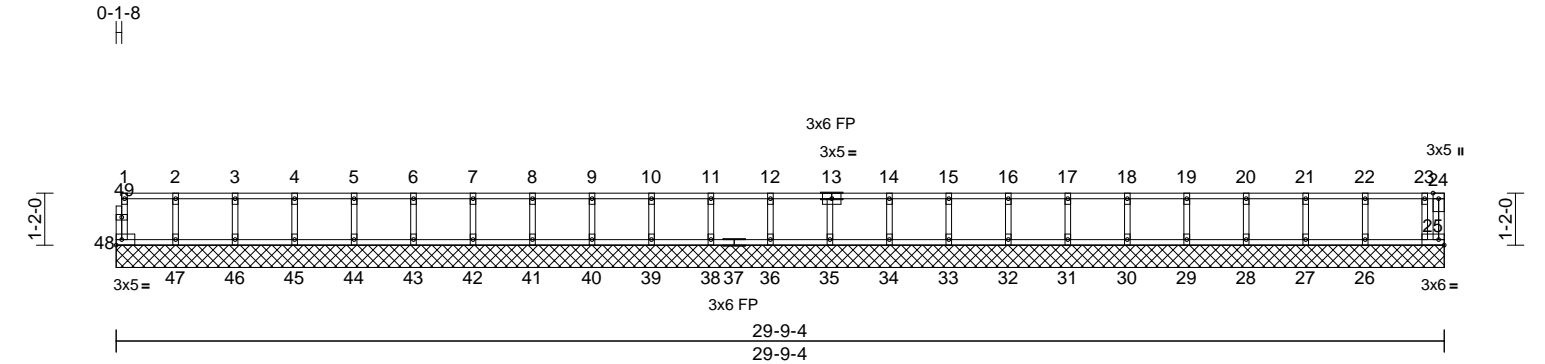
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	2nd Floor-Forsyth 3 GRH 10x10 CP
25010102-B	F201	Floor Supported Gable	1	1	Job Reference (optional)
					I70832480

Carter Components (Sanford, NC), Sanford, NC - 27332,

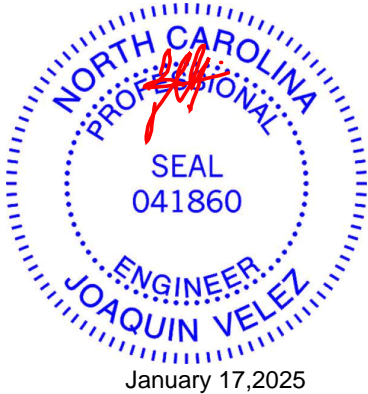
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ID:3dp5enpHnF8WalNVxz?_DgzHz?A-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?i

Page: 1

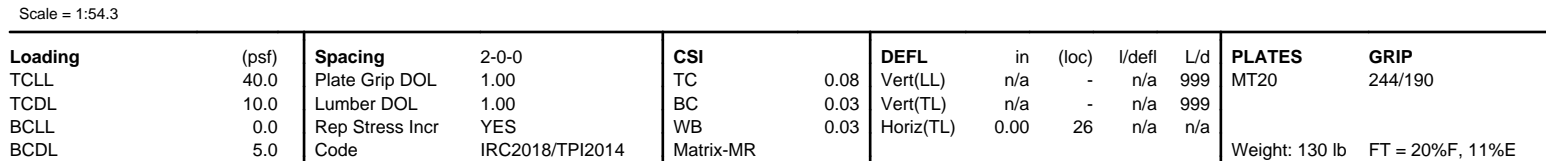


Scale = 1:51.7																			
Loading		(psf)	Spacing		2-0-0	CSI		DEFL				in	(loc)	l/defl	L/d	PLATES		GRIP	
TCLL		40.0	Plate Grip DOL		1.00	TC		0.09	Vert(LL)		n/a	-	n/a	999	MT20		244/190		
TCDL		10.0	Lumber DOL		1.00	BC		0.02	Vert(TL)		n/a	-	n/a	999					
BCLL		0.0	Rep Stress Incr		YES	WB		0.03	Horiz(TL)		0.00	25	n/a	n/a					
BCDL		5.0	Code		IRC2018/TPI2014	Matrix-MR									Weight: 124 lb		FT = 20%F, 11%E		

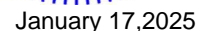
LUMBER		BOT CHORD		47-48=0/12, 46-47=0/12, 45-46=0/12, 44-45=0/12, 43-44=0/12, 42-43=0/12, 41-42=0/12, 40-41=0/12, 39-40=0/12, 38-39=0/12, 36-38=0/12, 35-36=0/12, 34-35=0/18, 33-34=0/18, 32-33=0/18, 31-32=0/18, 30-31=0/18, 29-30=0/18, 28-29=0/18, 27-28=0/18, 26-27=0/18, 25-26=0/18
TOP CHORD	2x4 SP No.2(flat)	WEBS		2-47=-128/0, 3-46=-135/0, 4-45=-133/0, 5-44=-133/0, 6-43=-133/0, 7-42=-133/0, 8-41=-133/0, 9-40=-133/0, 10-39=-134/0, 11-38=-133/0, 12-36=-136/0, 13-35=-134/0, 14-34=-130/0, 15-33=-134/0, 16-32=-133/0, 17-31=-133/0, 18-30=-133/0, 19-29=-133/0, 20-28=-134/0, 21-27=-131/0, 22-26=-142/0, 23-25=-97/0
BOT CHORD	2x4 SP No.2(flat)	NOTES		1) All plates are 1.5x3 MT20 unless otherwise indicated. 2) Gable requires continuous bottom chord bearing. 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web). 4) Gable studs spaced at 1-4-0 oc. 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means. 7) CAUTION, Do not erect truss backwards.
WEBS	2x4 SP No.3(flat)	LOAD CASE(S)		Standard
OTHERS	2x4 SP No.3(flat)			
BRACING				
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.			
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.			
REACTIONS				
(size)	25=29-9-4, 26=29-9-4, 27=29-9-4, 28=29-9-4, 29=29-9-4, 30=29-9-4, 31=29-9-4, 32=29-9-4, 33=29-9-4, 34=29-9-4, 35=29-9-4, 36=29-9-4, 38=29-9-4, 39=29-9-4, 40=29-9-4, 41=29-9-4, 42=29-9-4, 43=29-9-4, 44=29-9-4, 45=29-9-4, 46=29-9-4, 47=29-9-4, 48=29-9-4			
Max Grav	25=96 (LC 1), 26=160 (LC 1), 27=143 (LC 1), 28=148 (LC 1), 29=146 (LC 1), 30=147 (LC 1), 31=147 (LC 1), 32=146 (LC 1), 33=148 (LC 1), 34=143 (LC 1), 35=147 (LC 1), 36=150 (LC 1), 38=146 (LC 1), 39=147 (LC 1), 40=147 (LC 1), 41=147 (LC 1), 42=147 (LC 1), 43=147 (LC 1), 44=147 (LC 1), 45=146 (LC 1), 46=149 (LC 1), 47=139 (LC 1), 48=59 (LC 1)			
FORCES				
(lb) - Maximum Compression/Maximum Tension				
TOP CHORD	1-48=-52/0, 24-25=0/5, 1-2=-12/0, 2-3=-12/0, 3-4=-12/0, 4-5=-12/0, 5-6=-12/0, 6-7=-12/0, 7-8=-12/0, 8-9=-12/0, 9-10=-12/0, 10-11=-12/0, 11-12=-12/0, 12-14=-18/0, 14-15=-18/0, 15-16=-18/0, 16-17=-18/0, 17-18=-18/0, 18-19=-18/0, 19-20=-18/0, 20-21=-18/0, 21-22=-18/0, 22-23=-18/0, 23-24=-1/0			



Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Jan 16 14:01:25 Page: 1
ID:XpNTr7qvYYGNCvyyhVhWDMtzHz?9-RfC?PsB70Hg3NSGpQnL8w3uITXbGKWRCdoi7J4zJC?#



		9=12, 12, 36-37, 8-12, 51=31-5-12	NOTES
	Max Grav	26=36 (LC 1), 27=108 (LC 1), 28=153 (LC 1), 29=145 (LC 1), 30=147 (LC 1), 31=147 (LC 1), 32=147 (LC 1), 33=147 (LC 1), 34=147 (LC 1), 35=146 (LC 1), 36=147 (LC 1), 37=144 (LC 1), 38=146 (LC 1), 40=150 (LC 1), 41=146 (LC 1), 42=147 (LC 1), 43=147 (LC 1), 44=147 (LC 1), 45=147 (LC 1), 46=147 (LC 1), 47=147 (LC 1), 48=147 (LC 1), 49=146 (LC 1), 50=151 (LC 1), 51=50 (LC 1)	1) All plates are 1.5x3 MT20 unless otherwise indicated. 2) Gable requires continuous bottom chord bearing. 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web). 4) Gable studs spaced at 1-4-0 oc. 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means. 7) CAUTION, Do not erect truss backwards.
FORCES	(lb) - Maximum Compression/Maximum Tension		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 1 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

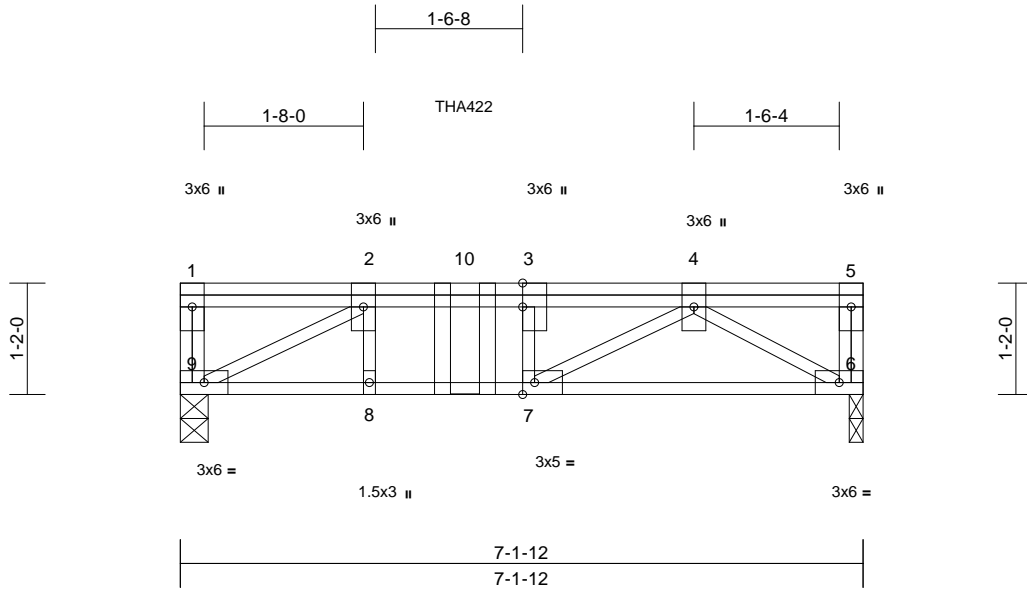
Job	Truss	Truss Type	Qty	Ply	2nd Floor-Forsyth 3 GRH 10x10 CP
25010102-B	F210	Floor Girder	1	1	Job Reference (optional)

I70832482

Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1



Scale = 1:24.1

Plate Offsets (X, Y): [3:0-3-0,Edge], [7:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.35	Vert(LL)	-0.04	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.43	Vert(CT)	-0.06	6-7	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.01	6	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 47 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6=0-1-12, 9=0-3-8
Max Grav 6=496 (LC 4), 9=526 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-9=-36/66, 5-6=-62/0, 1-2=0/0, 2-3=-971/0, 3-4=-971/0, 4-5=0/0

BOT CHORD 8-9=0/971, 7-8=0/971, 6-7=0/700

WEBS 2-9=-1098/0, 2-8=0/49, 4-6=-814/0, 4-7=0/470, 3-7=-211/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 2-11-12 from the left end to connect truss(es) to back face of top chord.
- Fill all nail holes where hanger is in contact with lumber.
- 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

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 6-9=-10, 1-5=-100
Concentrated Loads (lb)
Vert: 10=-250 (B)



January 17, 2025

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/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

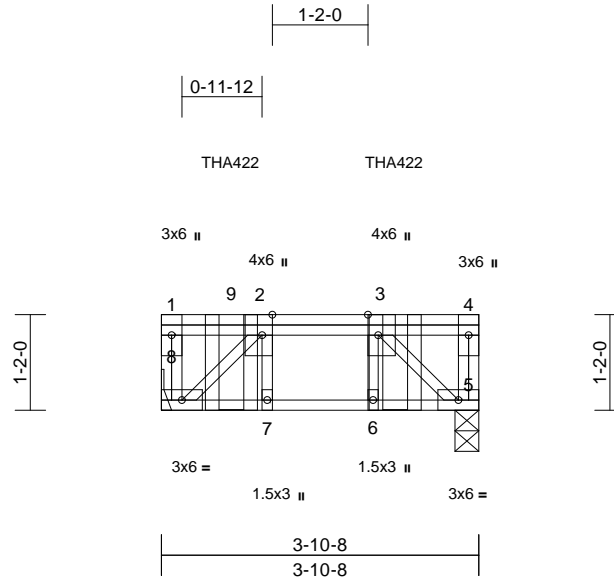
Job	Truss	Truss Type	Qty	Ply	2nd Floor-Forsyth 3 GRH 10x10 CP
25010102-B	F212	Floor Girder	1	1	Job Reference (optional)

I70832483

Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1



Scale = 1:28.1

Plate Offsets (X, Y): [2:0-3-0,Edge], [3:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	0.00	6	>999	360	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.13	Vert(CT)	-0.01	6	>999	240	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	5	n/a	n/a	
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							
										Weight: 28 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

Uniform Loads (lb/ft)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 3=-113 (F), 9=-121 (F)

BRACING

TOP CHORD Structural wood sheathing directly applied or
3-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 5=0-3-8, 8= Mechanical
Max Grav 5=327 (LC 4), 8=350 (LC 3)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-8=-121/17, 4-5=-78/21, 1-2=0/0,
2-3=-275/0, 3-4=0/0

BOT CHORD 7-8=0/274, 6-7=0/275, 5-6=0/274

WEBS 2-8=-370/0, 3-5=-370/0, 2-7=-7/33, 3-6=-8/32

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-10-4 from the left end to 2-10-4 to connect truss(es) to front face of top chord.
- 6) Fill all nail holes where hanger is in contact with lumber.
- 7) 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 + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00



January 17, 2025

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/TPI1 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.sbcacompnents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

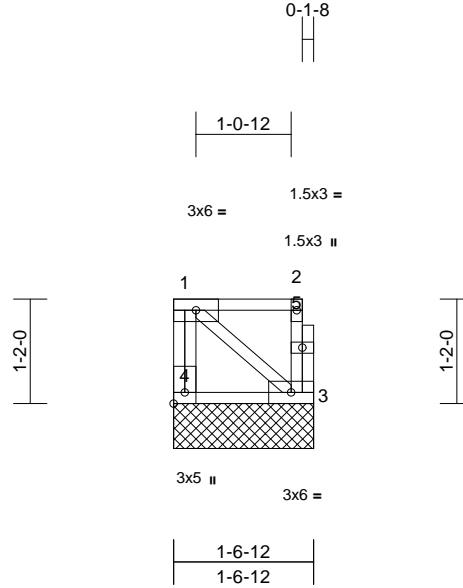
Job	Truss	Truss Type	Qty	Ply	2nd Floor-Forsyth 3 GRH 10x10 CP
25010102-B	F214	Floor Supported Gable	1	1	Job Reference (optional)

I70832484

Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1



Scale = 1:25.7

Plate Offsets (X, Y): [4:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 12 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or
1-6-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 3=1-6-12, 4=1-6-12
Max Grav 3=66 (LC 1), 4=72 (LC 1)

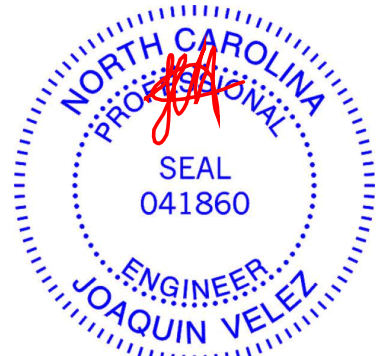
FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-4=-65/0, 2-3=-63/0, 1-2=-4/0
BOT CHORD 3-4=0/0
WEBS 1-3=0/5

NOTES

- 1) Gable requires continuous bottom chord bearing.
- 2) Truss to be fully sheathed from one face or securely
braced against lateral movement (i.e. diagonal web).
- 3) Gable studs spaced at 1-4-0 oc.
- 4) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at
10-00-00 oc and fastened to each truss with 3-10d
(0.131" X 3") nails. Strongbacks to be attached to walls
at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



January 17, 2025

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

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	2nd Floor-Forsyth 3 GRH 10x10 CP
25010102-B	F209	Floor Supported Gable	1	1	Job Reference (optional)

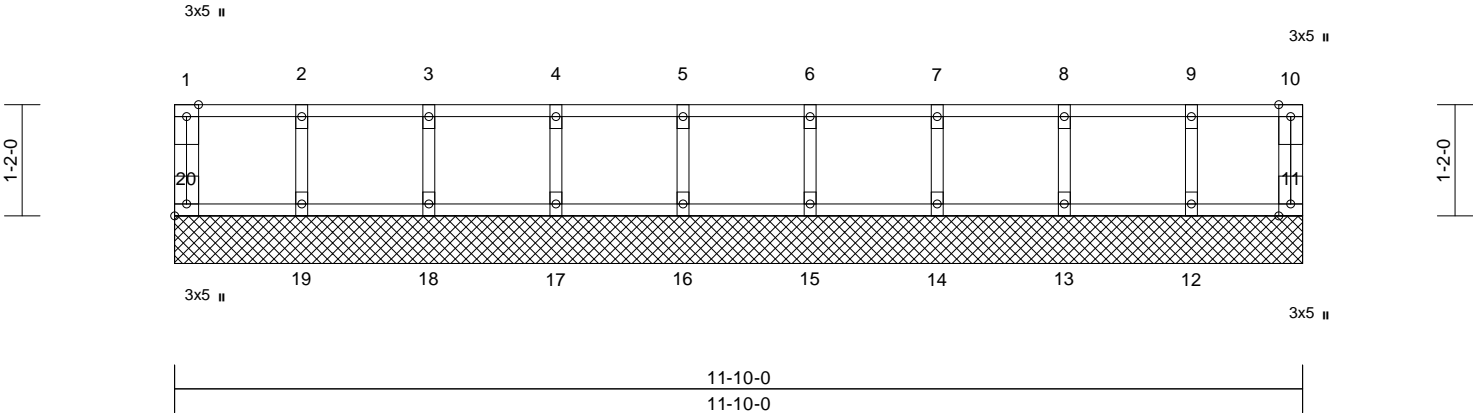
I70832485

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Jan 16 14:01:25

Page: 1

ID:XpNTr7qvYYGNCvyhVhWDMtzHz?9-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:24.2

Plate Offsets (X, Y): [20:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 52 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 11=11-10-0, 12=11-10-0,
13=11-10-0, 14=11-10-0,
15=11-10-0, 16=11-10-0,
17=11-10-0, 18=11-10-0,
19=11-10-0, 20=11-10-0

Max Grav 11=53 (LC 1), 12=132 (LC 1),
13=150 (LC 1), 14=146 (LC 1),
15=147 (LC 1), 16=147 (LC 1),
17=147 (LC 1), 18=147 (LC 1),
19=145 (LC 1), 20=61 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-20=-56/0, 10-11=-47/0, 1-2=-9/0, 2-3=-9/0,
3-4=-9/0, 4-5=-9/0, 5-6=-9/0, 6-7=-9/0,
7-8=-9/0, 8-9=-9/0, 9-10=-9/0

BOT CHORD 19-20=0/9, 18-19=0/9, 17-18=0/9, 16-17=0/9,
15-16=0/9, 14-15=0/9, 13-14=0/9, 12-13=0/9,
11-12=0/9

WEBS 2-19=-131/0, 3-18=-134/0, 4-17=-133/0,
5-16=-133/0, 6-15=-134/0, 7-14=-133/0,
8-13=-136/0, 9-12=-121/0

NOTES

- All plates are 1.5x3 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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 is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



January 17,2025

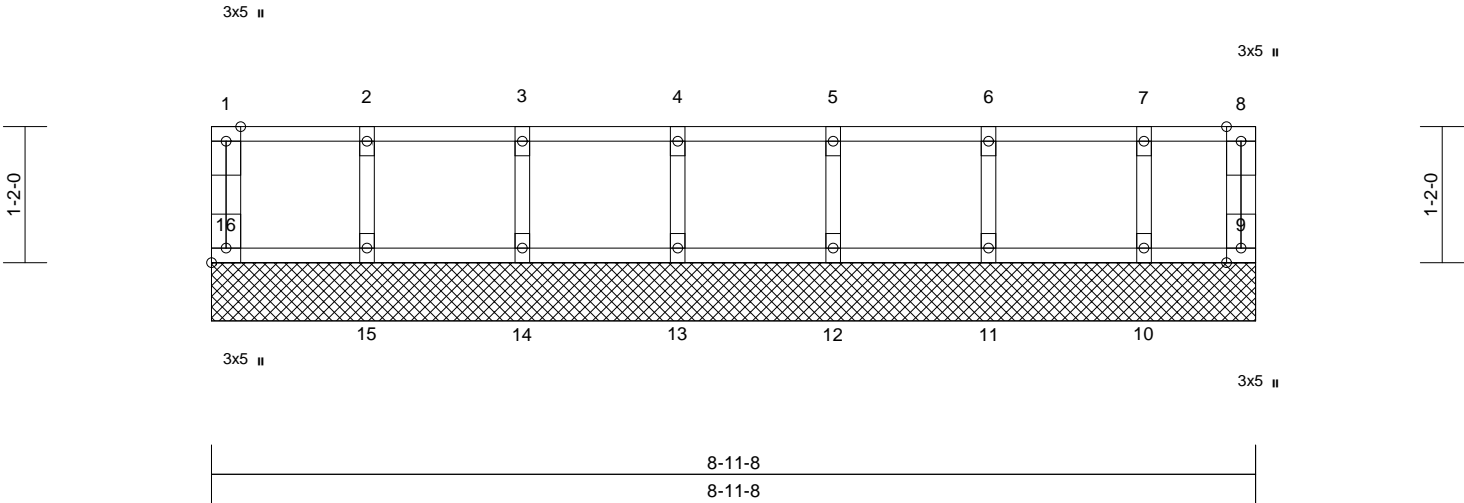
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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/TPI1 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.sbcacompnents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	2nd Floor-Forsyth 3 GRH 10x10 CP	170832486
25010102-B	F208	Floor Supported Gable	1	1	Job Reference (optional)	



Scale = 1:19.8

Plate Offsets (X, Y): [16:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	9	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 40 lb	FT = 20%F, 11%E

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

6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

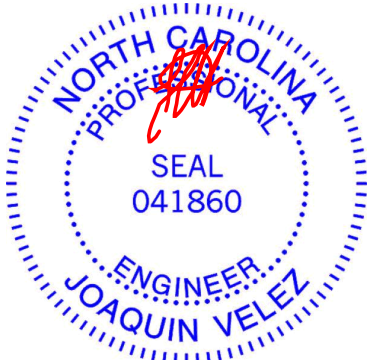
LOAD CASE(S) Standard

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

REACTIONS (size) 9=8-11-8, 10=8-11-8, 11=8-11-8, 12=8-11-8, 13=8-11-8, 14=8-11-8, 15=8-11-8, 16=8-11-8
Max Grav 9=41 (LC 1), 10=120 (LC 1), 11=152 (LC 1), 12=145 (LC 1), 13=147 (LC 1), 14=147 (LC 1), 15=147 (LC 1), 16=60 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-55/0, 8-9=-34/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0, 6-7=-7/0, 7-8=-7/0
BOT CHORD 15-16=0/7, 14-15=0/7, 13-14=0/7, 12-13=0/7, 11-12=0/7, 10-11=0/7, 9-10=0/7
WEBS 2-15=-132/0, 3-14=-134/0, 4-13=-134/0, 5-12=-132/0, 6-11=-138/0, 7-10=-112/0

NOTES
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 17, 2025

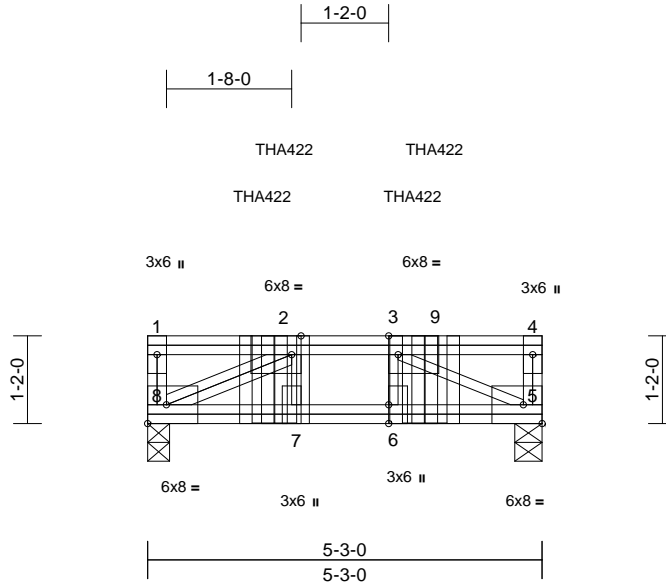
Job	Truss	Truss Type	Qty	Ply	2nd Floor-Forsyth 3 GRH 10x10 CP
25010102-B	F1001	Floor Girder	1	1	Job Reference (optional)
					I70832487

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Jan 16 14:01:25

Page: 1

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Scale = 1:30.7

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [6:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.68	Vert(LL)	-0.03	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.04	5-6	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.01	5	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 45 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

BRACING

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

REACTIONS (size) 5=0-4-6, 8=0-3-8
Max Grav 5=1692 (LC 1), 8=1646 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-8=-174/11, 4-5=-298/0, 1-2=0/0,
2-3=-2819/0, 3-4=0/0
BOT CHORD 7-8=0/2808, 6-7=0/2819, 5-6=0/2819
WEBS 3-5=-3144/0, 2-8=-3197/0, 2-7=-307/259,
3-6=-271/294

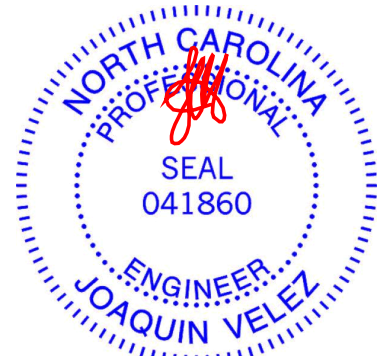
NOTES

- Unbalanced floor live loads have been considered for this design.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-6-8 from the left end to 3-6-8 to connect truss(es) to front face of top chord.
- Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-10-0 from the left end to 3-10-0 to connect truss(es) to back face of top chord.
- Fill all nail holes where hanger is in contact with lumber.

- 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

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 3=-774 (F), 2=-1394 (F=-774, B=-620), 9=-620 (B)



January 17, 2025

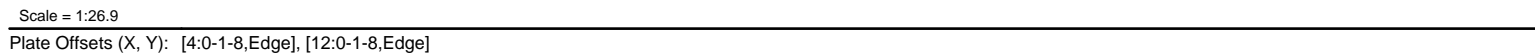
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Jan 16 14:01:25 Page: 1
ID:3dp5enpHnF8WalVxz? DazHz?A-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4zJC?f



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

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

FORCES (lb) - Maximum Compression/Maximum Tension

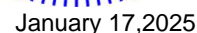
TOP CHORD 1-15=-71/0, 9-10=-73/0, 1-2=-4/0,
2-3=-1795/0, 3-4=-1795/0, 4-5=-2224/0,
5-6=-2224/0, 6-7=-1803/0, 7-8=-1803/0,
8-9=0/0

BOT CHORD 14-15=0/1082, 13-14=0/2224, 12-13=0/2224,
11-12=0/2175, 10-11=0/1086

WEBS 8-10=-1257/0, 2-15=-1247/0, 8-11=0/837,
2-14=0/832, 7-11=-164/0, 3-14=-195/18,
6-11=-434/0, 4-14=-620/0, 6-12=-139/305,
4-13=-41/99, 5-12=-136/32

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION. Do not erect truss backwards.

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.

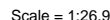
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-1473 Rev. 1/2/2023 BEFORE USE.

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Edenton, NC 27932

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Jan 16 14:01:25 Page: 1
ID:3dp5enpHnF8WalNVxz? DazHz?A-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.43	Vert(LL)	-0.13	11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.19	11-12	>860	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.04	10	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 71 lb	FT = 20%F, 11%E

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

Max Grav 10=736 (LC 1), 15=729 (LC 1)

(Ib) - Maximum Compression/Maximum Tension

TOP CHORD 1-15=-71/0, 9-10=-73/0, 1-2=-4/0,
2-3=-1846/0, 3-4=-1846/0, 4-5=-2320/0,
5-6=-2320/0, 6-7=-1857/0, 7-8=-1857/0,
8-9=0/0

BOT CHORD 14-15=0/1109, 13-14=0/2320, 12-13=0/2320,
11-12=0/2259, 10-11=0/1115

WEBS 8-10=-1290/0, 2-15=-1278/0, 8-11=0/867,
2-14=0/860, 7-11=-159/0, 3-14=-193/24,
6-11=-469/0, 4-14=-668/0, 6-12=-140/324,
4-13=-38/113, 5-12=-124/14

- 1) Unbalanced floor live loads have been considered for this design.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION. Do not erect truss backwards.

January 17, 2025



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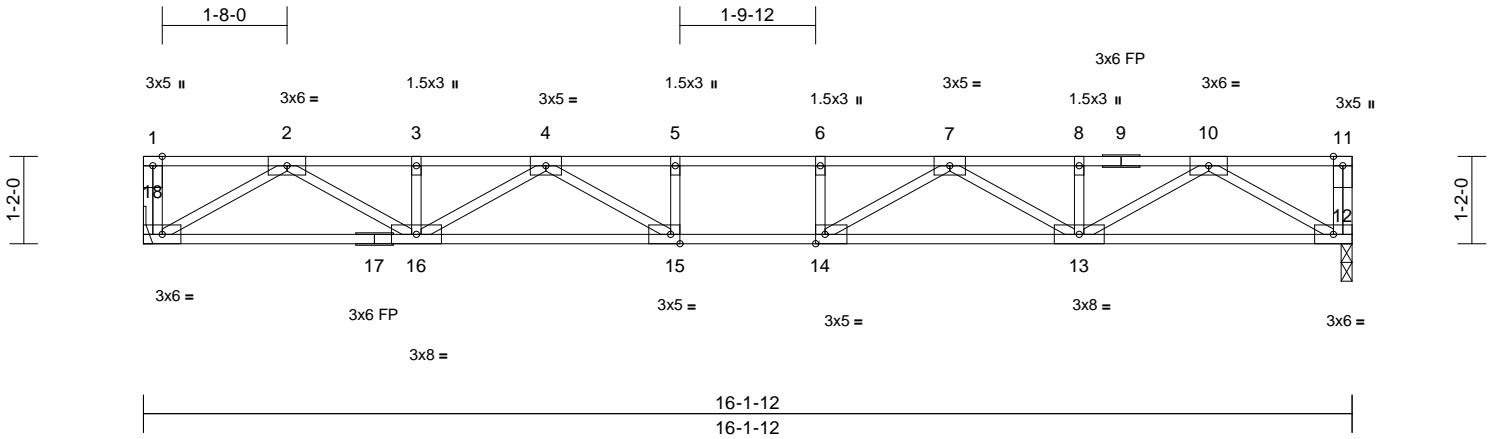
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	2nd Floor-Forsyth 3 GRH 10x10 CP
25010102-B	F207	Floor	2	1	Job Reference (optional)
					I70832490

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Jan 16 14:01:25
ID:XpNTr7qvYYGNCvyhVhWdmtzHz?9-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:30.8

Plate Offsets (X, Y): [14:0-1-8,Edge], [15:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.63	Vert(LL)	-0.22	14-15	>856	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.95	Vert(CT)	-0.31	14-15	>625	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.06	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 82 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or
6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc
bracing.

REACTIONS (size) 12=0-1-12, 18= Mechanical
Max Grav 12=874 (LC 1), 18=874 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-18=-74/0, 11-12=-74/0, 1-2=0/0,
2-3=-2322/0, 3-4=-2322/0, 4-5=-3302/0,
5-6=-3302/0, 6-7=-3302/0, 7-8=-2322/0,
8-10=-2322/0, 10-11=0/0

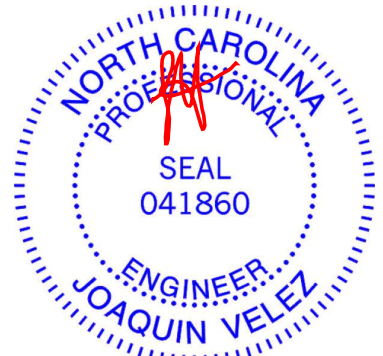
BOT CHORD 16-18=0/1350, 15-16=0/2954, 14-15=0/3302,
13-14=0/2954, 12-13=0/1350

WEBS 10-12=-1562/0, 2-18=-1562/0, 10-13=0/1135,
2-16=0/1135, 8-13=-165/0, 3-16=-165/0,
7-13=-738/0, 4-16=-738/0, 7-14=0/664,
4-15=0/664, 6-14=-252/0, 5-15=-252/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 12.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



January 17, 2025

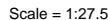
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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/TPI1 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)

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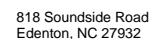
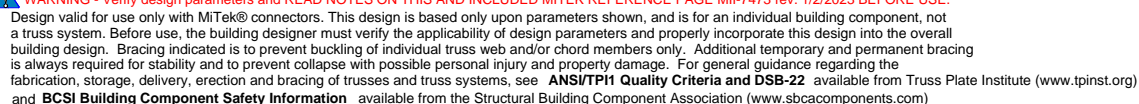
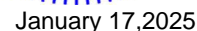
818 Soundside Road
Edenton, NC 27932

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Jan 16 14:01:25 Page: 1
ID: XpNTr7qvYYGNCvvhVhWdmtzHz?9-RfC?PsB70Hg3NSaPqnL8w3uITXbGKWkRCD0i7J4zJC?f

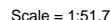


Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	0.00	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.09	Vert(CT)	0.00	7	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 24 lb	FT = 20%F, 11%E

LOAD CASE(S) Standard



Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Jan 16 14:01:25 Page: 1
ID:3dp5enpHnF8wAlVnxz? DazHz?A-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.89	Vert(LL)	-0.18	22-23	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.89	Vert(CT)	-0.25	22-23	>790	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04	21	n/a	n/a		
BCDL	5.0	Code	IRC2018/TP12014	Matrix-MSH							Weight: 152 lb	FT = 20%F, 11%E

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x5 MT20 unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 21.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION. Do not erect truss backwards.

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD

1-33=-73/0, 20-21=-66/0, 1-2=-4/0,
2-3=-1486/0, 3-4=-1486/0, 4-5=-1683/216,
5-6=-1683/216, 6-7=-811/888, 7-8=-811/888,
8-9=0/2536, 9-10=0/2536, 10-12=-888/449,
12-13=-888/449, 13-14=-2306/0,
14-15=-2306/0, 15-16=-2534/0,
16-17=-2534/0, 17-18=-1908/0,
18-19=-1908/0, 19-20=0/0

BOT CHORD

32-33=0/919, 31-32=-216/1683,
30-31=-216/1683, 29-30=-540/1398,
28-29=-1350/0, 26-28=-983/0,
25-26=-130/1752, 24-25=0/2534,
23-24=0/2534, 22-23=0/2389, 21-22=0/1086
9-28=-205/0, 8-28=-1612/0, 2-33=1058/0,
8-29=0/1260, 2-32=-13/662, 7-29=-187/0,
3-32=-244/0, 6-29=-867/0, 4-32=-228/323,
6-30=0/730, 4-31=-142/0, 5-30=-270/0,
10-28=-1854/0, 10-26=0/1488, 12-26=-172/0
13-26=-1095/0, 13-25=0/728,
14-25=-141/123, 19-21=-1285/0,
19-22=0/960, 18-22=-160/0, 17-22=-562/0,
17-23=-224/284, 16-23=-107/36,
15-25=-719/0, 15-24=-24/201

WEBS



January 17, 2025



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-7473 (rev. 1/2/2023) BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



* 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

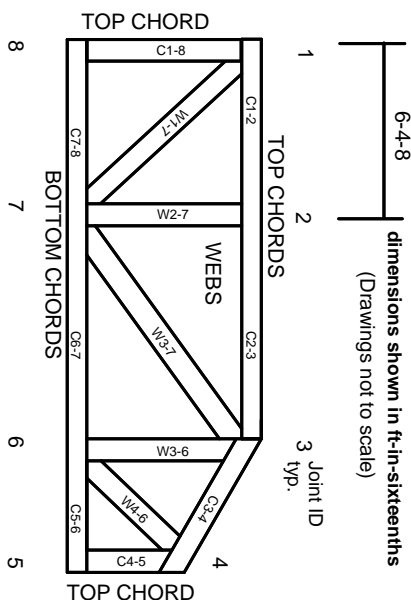


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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 1 section 6.3. These truss designs rely on lumber values established by others.

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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.

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