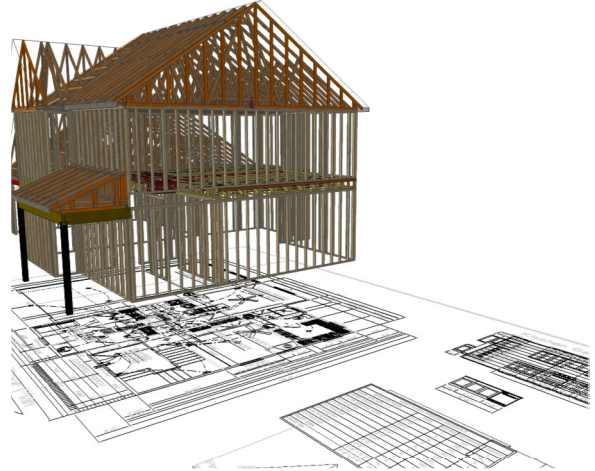




Kempsville Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450

Builder: New Castle
Contractors
Model: Hayes A Spring
Lake

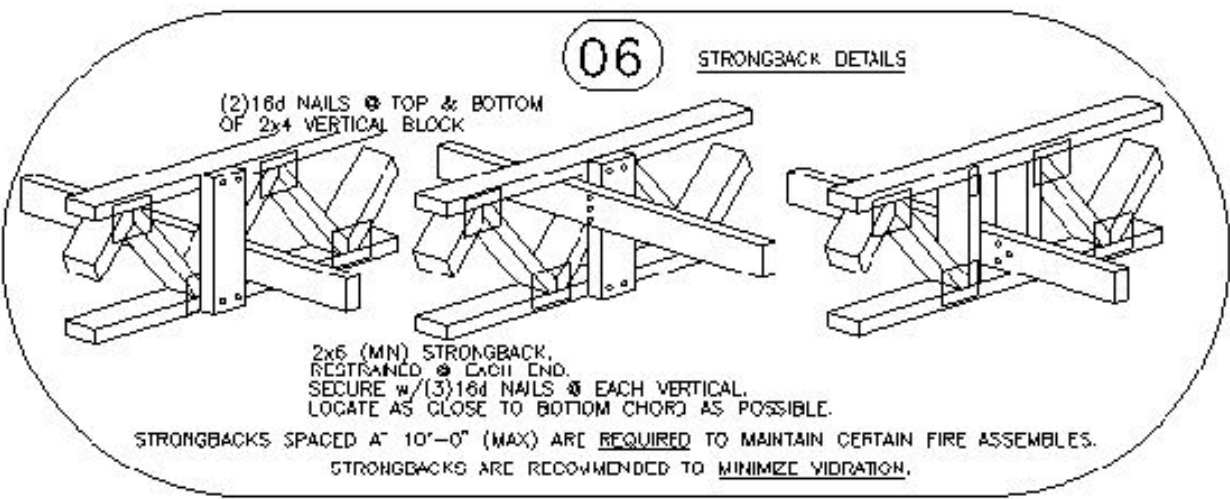
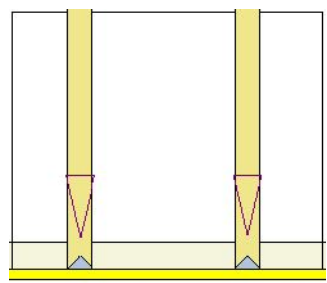
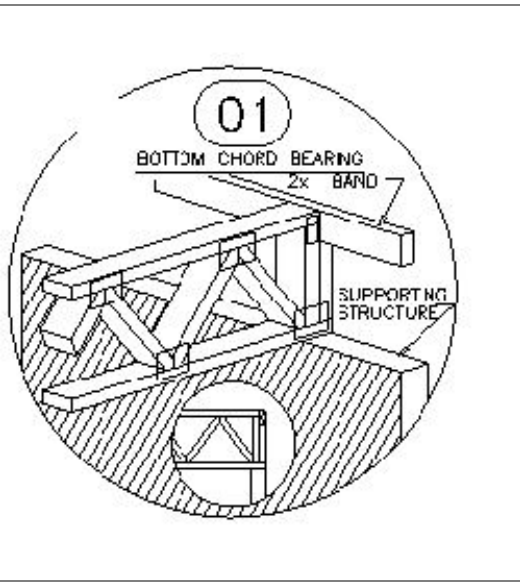
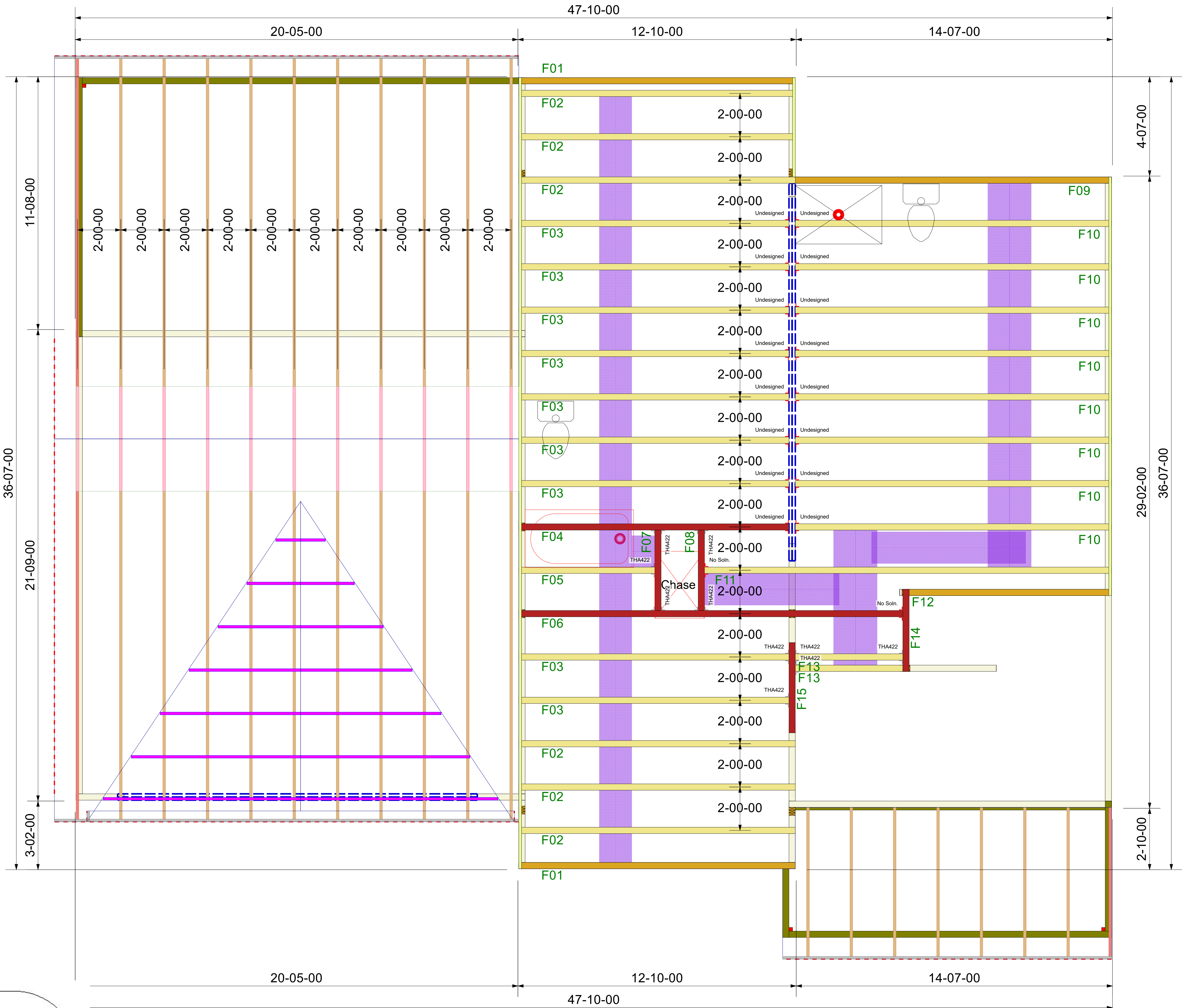
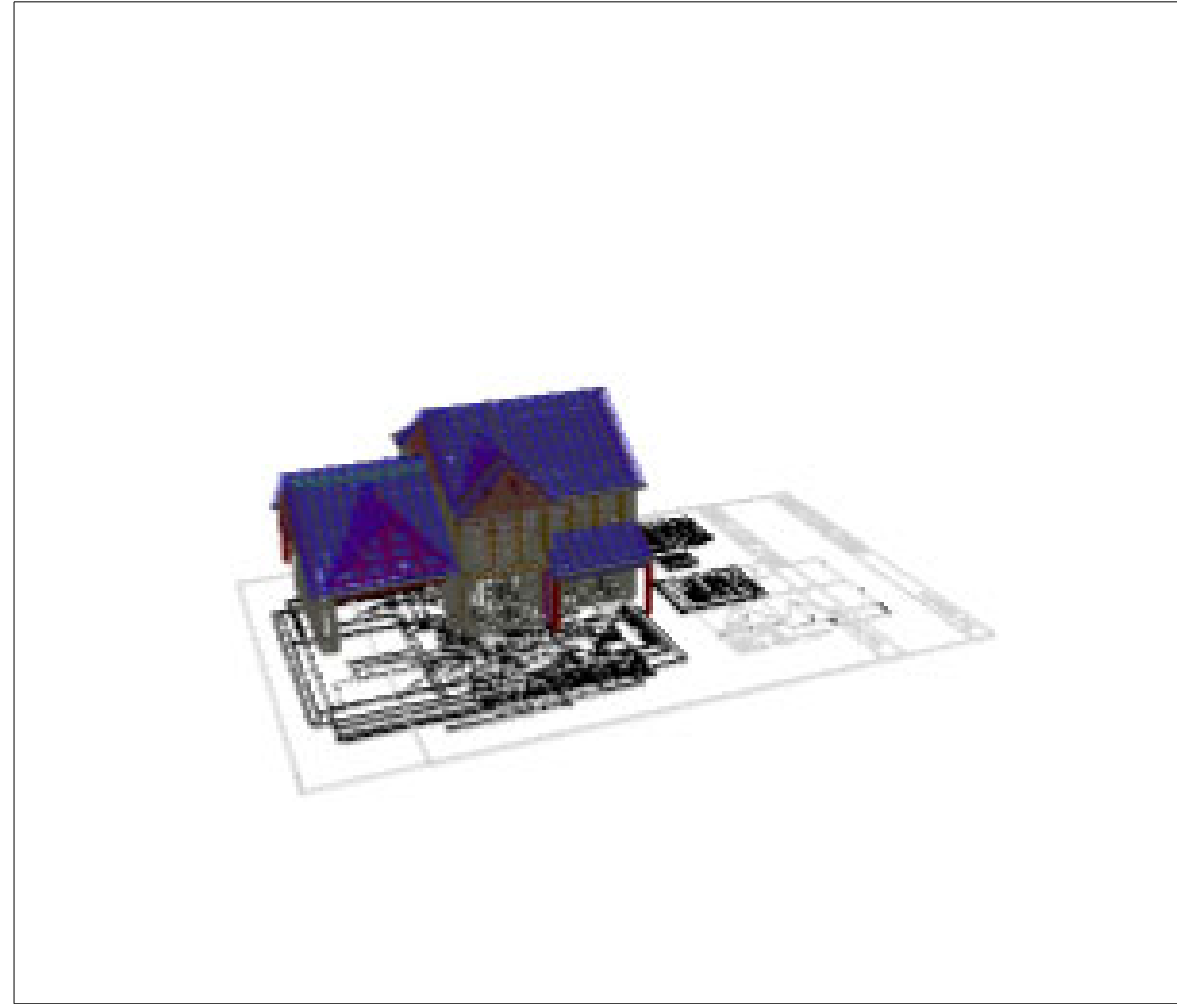


THE PLACEMENT PLAN NOTES:

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.

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.

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.

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 as individual components 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 Truss" available from the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53179.



New Castle Construction
1 Hayes-Roof-Hayes AOld Salem
COMPONENT PLAN

Scale:	NTS
Date:	6/6/2024
Designer:	NC
Project Number:	24050164-A23110107
Sheet Number:	

1/1

RE: 24050164
1 Hayes Rd A

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: New Castle Contractors Project Name: 24050164
Lot/Block: Model:
Address: 1 Hayes Rd Subdivision:
City: Spring Lake State: NC

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 15 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	I62356793	F15	12/5/2023
2	I62356794	F11	12/5/2023
3	I62356795	F05	12/5/2023
4	I62356796	F08	12/5/2023
5	I62356797	F07	12/5/2023
6	I62356798	F14	12/5/2023
7	I62356799	F06	12/5/2023
8	I62356800	F04	12/5/2023
9	I62356801	F10	12/5/2023
10	I62356802	F03	12/5/2023
11	I62356803	F02	12/5/2023
12	I62356804	F13	12/5/2023
13	I62356805	F12	12/5/2023
14	I62356806	F09	12/5/2023
15	I62356807	F01	12/5/2023

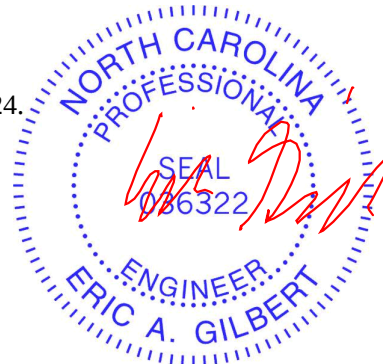
The truss drawing(s) referenced above have been prepared by
Truss Engineering Co. under my direct supervision
based on the parameters provided by Carter Components (Sanford, NC)).

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.



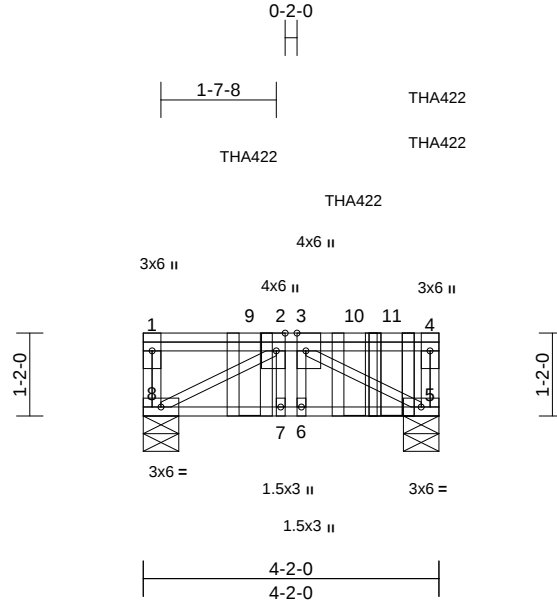
Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A	I62356793
24050164	F15	Floor Girder	1	1	Job Reference (optional)	

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:34

Page: 1

ID:p?s0279IM10FESNfm63uazGivT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:32.5

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	0.84	Vert(LL)	-0.01	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.45	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.32	Horz(CT)	0.01	5	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 31 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 4-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-6-0, 8=0-6-0
Max Grav 5=1360 (LC 4), 8=794 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-8=-161/0, 4-5=-719/0, 1-2=0/0,
2-3=-1152/0, 3-4=0/0

BOT CHORD 7-8=0/1152, 6-7=0/1152, 5-6=0/1152

WEBS 2-8=-1310/0, 3-5=-1310/0, 2-7=0/87,
3-6=-73/0

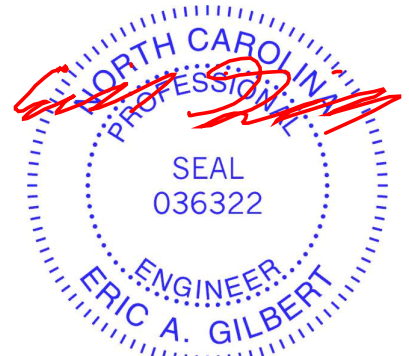
NOTES

- 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) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 0-6-4 oc max. starting at 2-11-12 from the left end to 3-6-0 to connect truss(es) to front face of top chord.
- 5) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-6-0 from the left end to 3-6-0 to connect truss(es) to back 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
Uniform Loads (lb/ft)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 9=-571 (B), 10=-159 (F), 11=-776 (F=-182, B=-594)



December 5, 2023

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

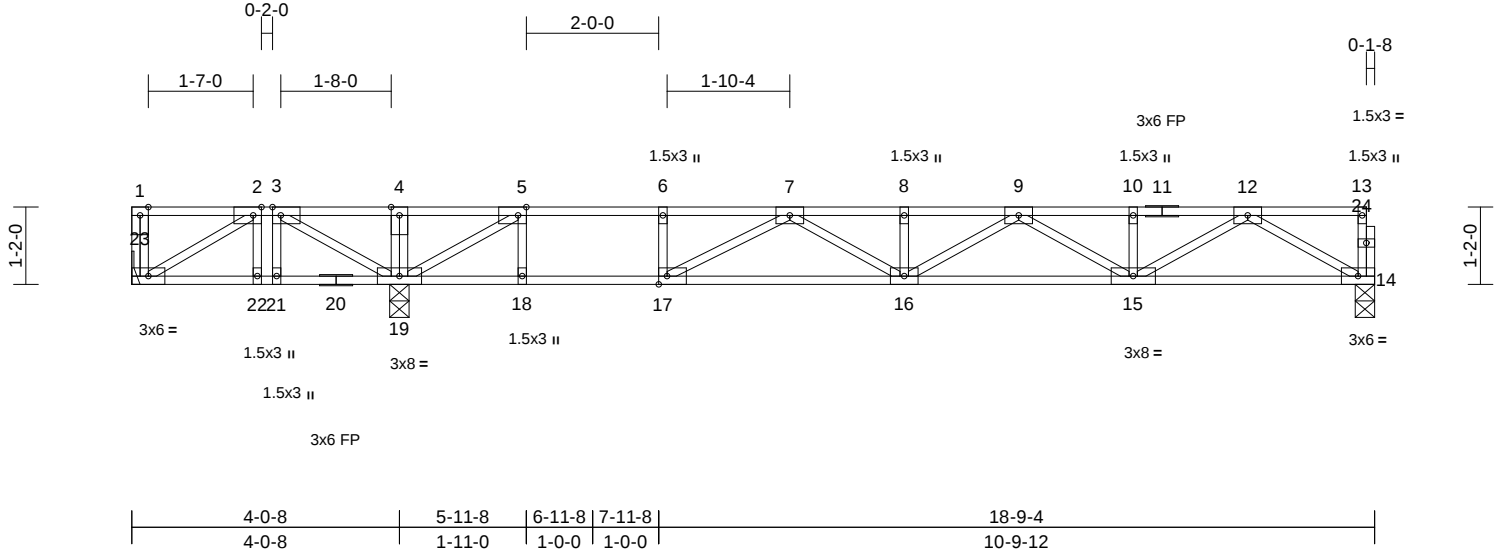
Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A
24050164	F11	Floor	1	1	Job Reference (optional)
					I62356794

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:33

Page: 1

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Scale = 1:34.8

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [5:0-1-8,Edge], [17:0-1-8,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	0.92	Vert(LL)	-0.42	16-17	>413	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.95	Vert(CT)	-0.59	16-17	>298	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.04	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 97 lb	FT = 20%F, 11%E

LUMBER	
TOP CHORD	2x4 SP 2400F 2.0E(flat) *Except* 11-13:2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat) *Except* 20-14:2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 18-19,17-18.

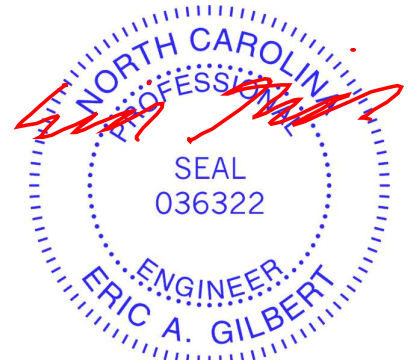
REACTIONS (size)	
14=0-3-8, 19=0-3-8, 23=	Mechanical
Max Grav	14=808 (LC 7), 19=973 (LC 1), 23=278 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-23=-72/0, 13-14=-70/0, 1-2=0/0, 2-3=-364/0, 3-4=-138/84, 4-5=-138/84, 5-6=-1925/0, 6-7=-1925/0, 7-8=-2933/0, 8-9=-2933/0, 9-10=-2106/0, 10-12=-2106/0, 12-13=-4/0
BOT CHORD	22-23=0/364, 21-22=0/364, 18-19=0/1925, 17-18=0/1925, 16-17=0/2820, 15-16=0/2681, 14-15=0/1241
WEBS	4-19=-103/123, 5-19=-2134/0, 3-19=-321/0, 2-23=-422/0, 2-22=-30/74, 3-21=-15/91, 12-14=-1430/0, 12-15=0/1010, 10-15=-160/0, 9-15=-671/0, 9-16=0/295, 8-16=-99/0, 7-16=-8/142, 7-17=-1037/0, 5-18=0/401, 6-17=0/242

- NOTES**
- Unbalanced floor live loads have been considered for this design.
 - All plates are 3x5 MT20 unless otherwise indicated.
 - Refer to girder(s) for truss to truss connections.

- 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.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



December 5,2023

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)

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Edenton, NC 27932

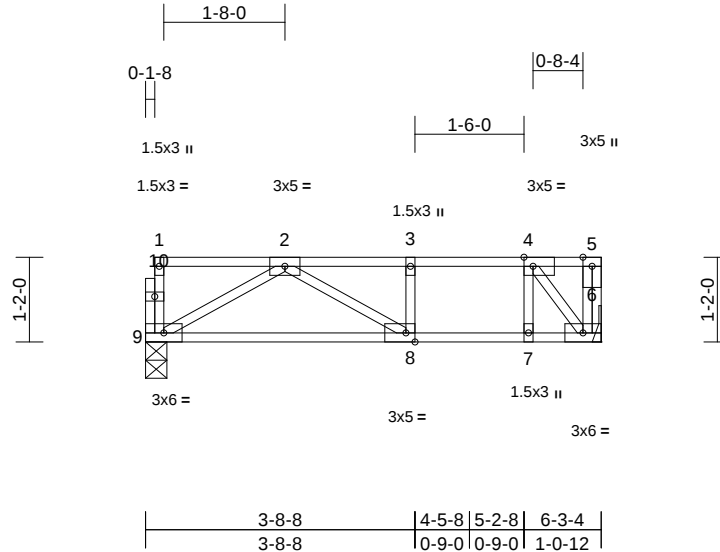
Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A
24050164	F05	Floor	1	1	Job Reference (optional)

I62356795

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:31
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Page: 1



Scale = 1:31.7

Plate Offsets (X, Y): [4:0-1-8,Edge], [8:0-1-8,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	0.58	Vert(LL)	-0.06	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.54	Vert(CT)	-0.10	8-9	>739	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 34 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) 6= Mechanical, 9=0-3-8
 Max Grav 6=331 (LC 1), 9=325 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
 Tension

TOP CHORD 1-9=-60/0, 5-6=0/101, 1-2=-4/0, 2-3=-393/0,
 3-4=-393/0, 4-5=0/0

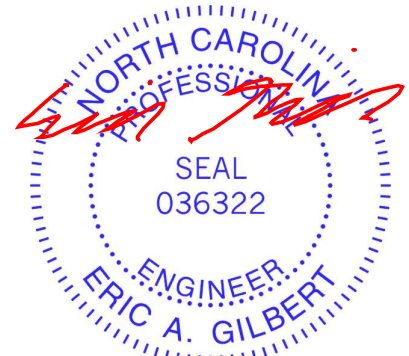
BOT CHORD 8-9=0/414, 7-8=0/393, 6-7=0/393

WEBS 3-8=-41/0, 4-7=0/156, 4-6=-611/0,
 2-9=-475/0, 2-8=-39/85

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) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



December 5, 2023

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)

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818 Soundside Road
 Edenton, NC 27932

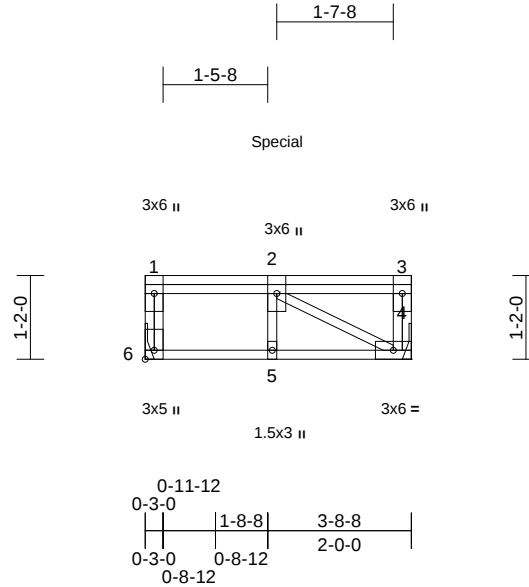
Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A
24050164	F08	Floor Girder	1	1	Job Reference (optional)

I62356796

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:32
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Page: 1



Scale = 1:32.1

Plate Offsets (X, Y): [6: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	0.71	Vert(LL)	-0.07	4-5	>586	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.50	Vert(CT)	-0.09	4-5	>450	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 25 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)

Concentrated Loads (lb)
 Vert: 2=-178 (F)

BRACING

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

REACTIONS (size) 4= Mechanical, 6= Mechanical
 Max Grav 4=313 (LC 4), 6=325 (LC 4)

FORCES (lb) - Maximum Compression/Maximum
 Tension

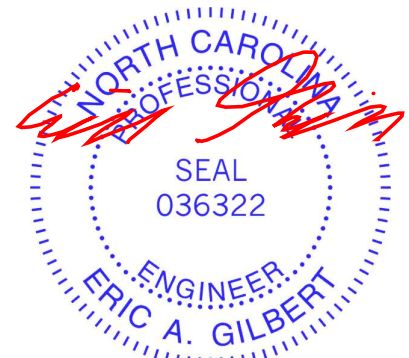
TOP CHORD 1-6=-275/0, 3-4=-265/0, 1-2=0/0, 2-3=0/0
 BOT CHORD 5-6=0/0, 4-5=0/0
 WEBS 2-5=-64/0, 2-4=0/0

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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 258 lb down at 1-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 6) 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
 Uniform Loads (lb/ft)
 Vert: 4-6=-10, 1-3=-100



December 5, 2023

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

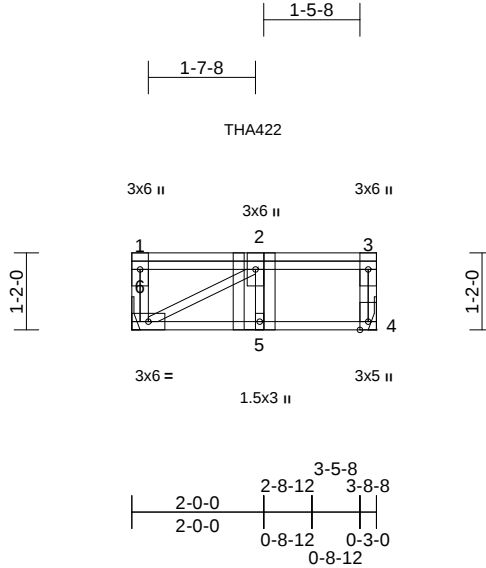
Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A
24050164	F07	Floor Girder	1	1	Job Reference (optional)

I62356797

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:31
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Page: 1



Scale = 1:34.9

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	0.80	Vert(LL)	-0.08	5-6	>539	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.55	Vert(CT)	-0.10	5-6	>406	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 25 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 3-8-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 6= Mechanical
Max Grav 4=353 (LC 3), 6=338 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-6=-286/0, 3-4=-298/0, 1-2=0/0, 2-3=0/0
BOT CHORD 5-6=0/0, 4-5=0/0
WEBS 2-6=0/0, 2-5=-73/0

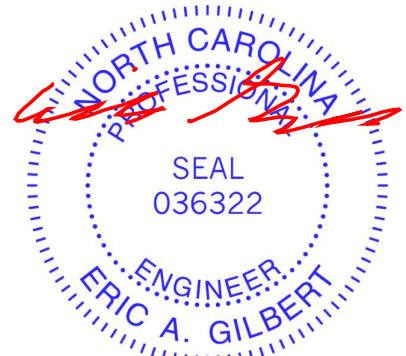
NOTES

- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- 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 1-10-4 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: 4-6=-10, 1-3=-100
Concentrated Loads (lb)

Vert: 2=-231 (B)



December 5, 2023

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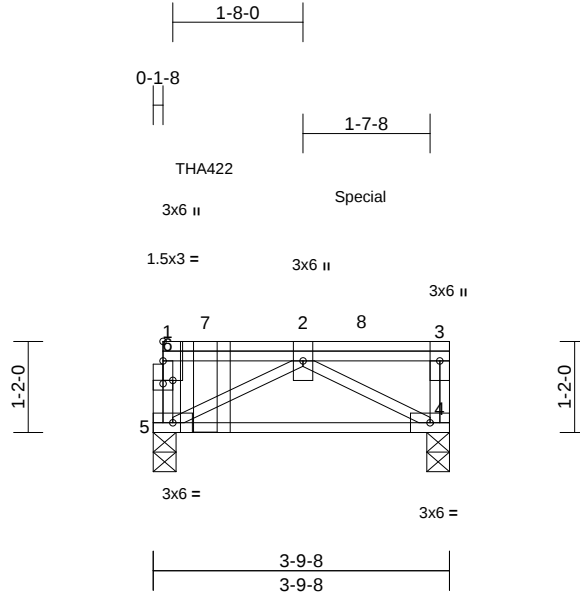
Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A
24050164	F14	Floor Girder	1	1	Job Reference (optional)

I62356798

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:33
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Page: 1



Scale = 1:29.5

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

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	0.18	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.20	Vert(CT)	-0.03	4-5	>999	240	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	4	n/a	n/a	
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 27 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 3-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 4=0-3-8, 5=0-3-8
Max Grav 4=242 (LC 1), 5=353 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-5=-192/0, 3-4=-71/0, 1-2=-12/0, 2-3=0/0
BOT CHORD 4-5=0/275
WEBS 2-5=-299/0, 2-4=-315/0

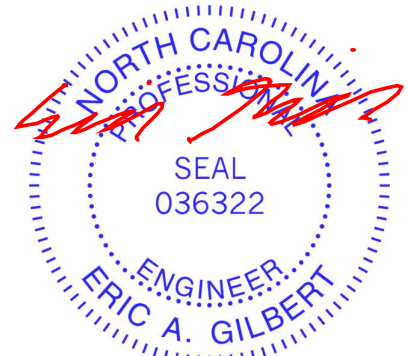
NOTES

- 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.
- CAUTION, Do not erect truss backwards.
- Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 0-8-0 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 27 lb down and 192 lb up at 2-8-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 4-5=-10, 1-3=-100
Concentrated Loads (lb)
Vert: 7=-185 (B), 8=-27 (B)



December 5, 2023

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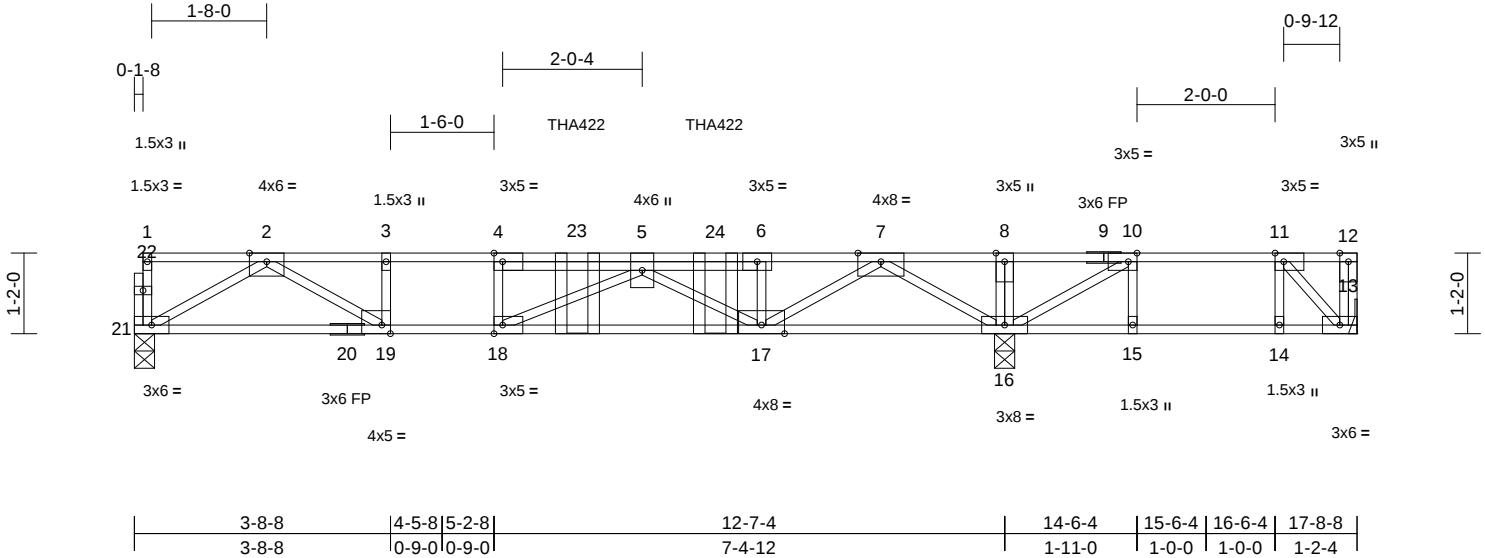
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A	162356799
24050164	F06	Floor Girder	1	1	Job Reference (optional)	

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:31
ID:9hUYT9wrtwzcTGdHkmSPdzGJ1A-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.4

Plate Offsets (X, Y): [4:0-1-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge], [18:0-1-8,Edge], [19:0-1-8,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	0.90	Vert(LL)	-0.22	17-18	>671	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.30	17-18	>508	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.03	16	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 95 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD	2x4 SP No.2(flat) *Except* 1-9:2x4 SP 2400F 2.0E(flat)
BOT CHORD	2x4 SP No.2(flat) *Except* 20-13:2x4 SP 2400F 2.0E(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 6-0-0 oc bracing.

REACTIONS	(size)	13= Mechanical, 16=0-3-8, 21=0-3-8
	Max Uplift	13=92 (LC 3)
	Max Grav	13=127 (LC 4), 16=1627 (LC 9), 21=864 (LC 10)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-21=-100/0, 12-13=-100/0, 1-2=-6/0, 2-3=-2575/0, 3-4=-2575/0, 4-5=-2590/0, 5-6=-2297/0, 6-7=-2286/0, 7-8=0/1045, 8-10=0/1045, 10-11=0/262, 11-12=0/0
BOT CHORD	19-21=0/1334, 18-19=0/2575, 17-18=0/3276, 16-17=0/876, 15-16=-262/0, 14-15=-262/0, 13-14=-262/0
WEBS	3-19=-580/0, 4-18=0/228, 8-16=-145/0, 11-13=0/378, 2-21=-1536/0, 2-19=0/1449, 7-16=-2076/0, 7-17=0/1675, 6-17=-214/0, 10-16=-995/0, 5-18=-862/0, 5-17=-1153/0, 10-15=0/182, 11-14=-202/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 13.

- 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.
- CAUTION, Do not erect truss backwards.
- Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 6-5-0 from the left end to 8-5-0 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: 13-21=-10, 1-12=-100
Concentrated Loads (lb)
Vert: 23=-238 (B), 24=-225 (B)



December 5, 2023

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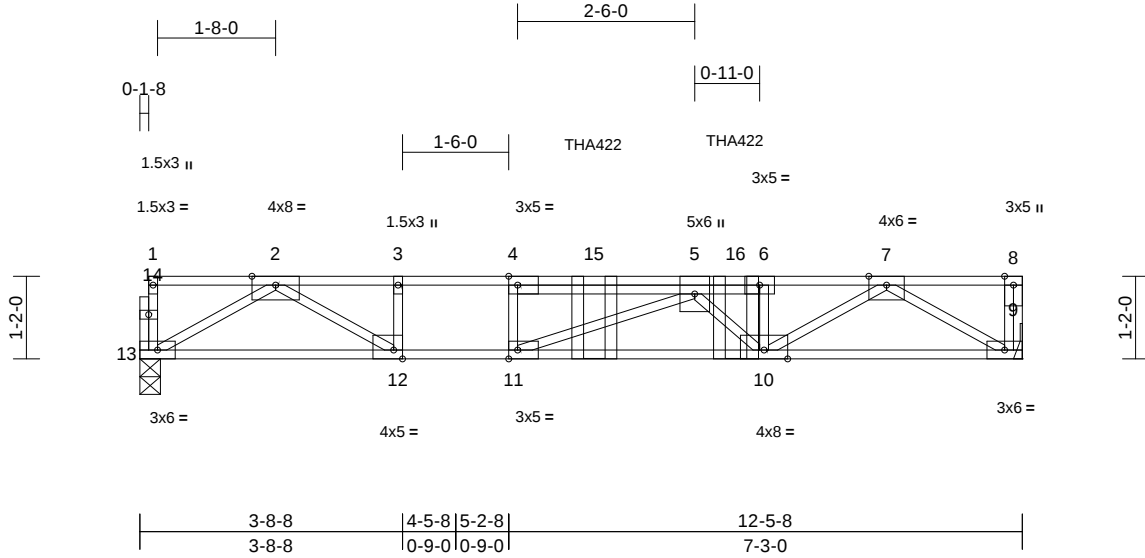
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A
24050164	F04	Floor Girder	1	1	Job Reference (optional)
					I62356800

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

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Page: 1



Scale = 1:32.5

Plate Offsets (X, Y): [4:0-1-8,Edge], [11:0-1-8,Edge], [12:0-1-8,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	0.94	Vert(LL)	-0.25	10-11	>586	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.33	10-11	>447	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.77	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 68 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E(flat) *Except* 4-6:2x4 SP No.2(flat)
BOT CHORD	2x4 SP 2400F 2.0E(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) 9= Mechanical, 13=0-3-8
	Max Grav 9=1002 (LC 4), 13=856 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
--------	--

TOP CHORD	1-13=-98/0, 8-9=-72/0, 1-2=-6/0, 2-3=-2556/0, 3-4=-2556/0, 4-5=-2566/0, 5-6=-2794/0, 6-7=-2765/0, 7-8=0/0
BOT CHORD	12-13=0/1330, 11-12=0/2556, 10-11=0/3466, 9-10=0/1585
WEBS	3-12=-604/0, 4-11=0/178, 2-13=-1532/0, 2-12=0/1613, 7-9=-1834/0, 7-10=0/1377, 6-10=0/84, 5-11=-1025/0, 5-10=-991/0

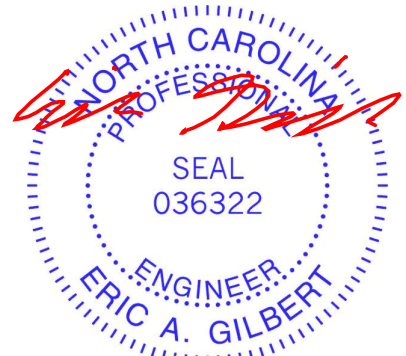
NOTES

- 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) CAUTION, Do not erect truss backwards.

- 6) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 6-5-0 from the left end to 8-5-0 to connect truss(es) to front face of top chord.
- 7) Fill all nail holes where hanger is in contact with lumber.
- 8) 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
Uniform Loads (lb/ft)
Vert: 9-13=-10, 1-8=-100
Concentrated Loads (lb)
Vert: 15=-253 (F), 16=-213 (F)



December 5, 2023

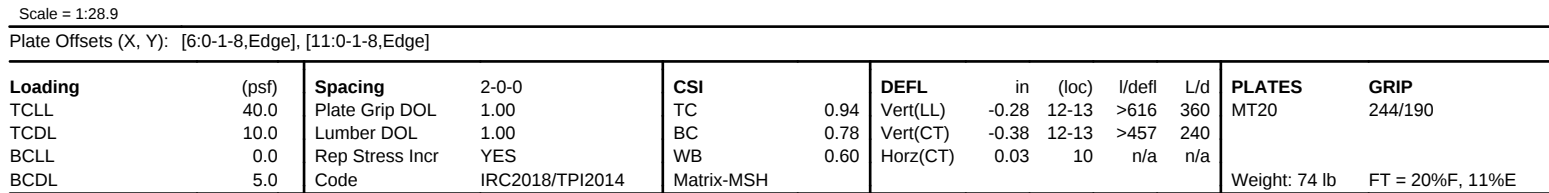
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NOTES

- 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) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

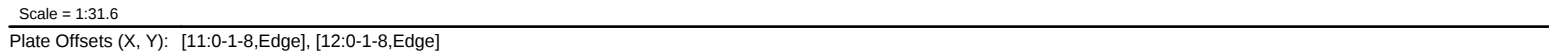
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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:30 Page: 1
ID:QSFbKtfug_JJjzy8vMkIAHZGJlc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?fi



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, Except: 2-2-0 oc bracing: 10-11.
REACTIONS	
(size)	9= Mechanical, 13=0-3-8
Max Grav	9=671 (LC 1), 13=665 (LC 1)
FORCES	
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-13=-84/0, 8-9=-72/0, 1-2=-5/0, 2-3=-1785/0, 3-4=-1785/0, 4-5=-1785/0, 5-6=-1647/0, 6-7=-1647/0, 7-8=0/0
BOT CHORD	12-13=0/1004, 11-12=0/1785, 10-11=0/1944, 9-10=0/1012
WEBS	2-13=-1155/0, 2-12=0/918, 3-12=-353/0, 4-11=-76/57, 7-9=-1171/0, 7-10=0/741, 6-10=-138/0, 5-10=-346/0, 5-11=-305/172

- 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.

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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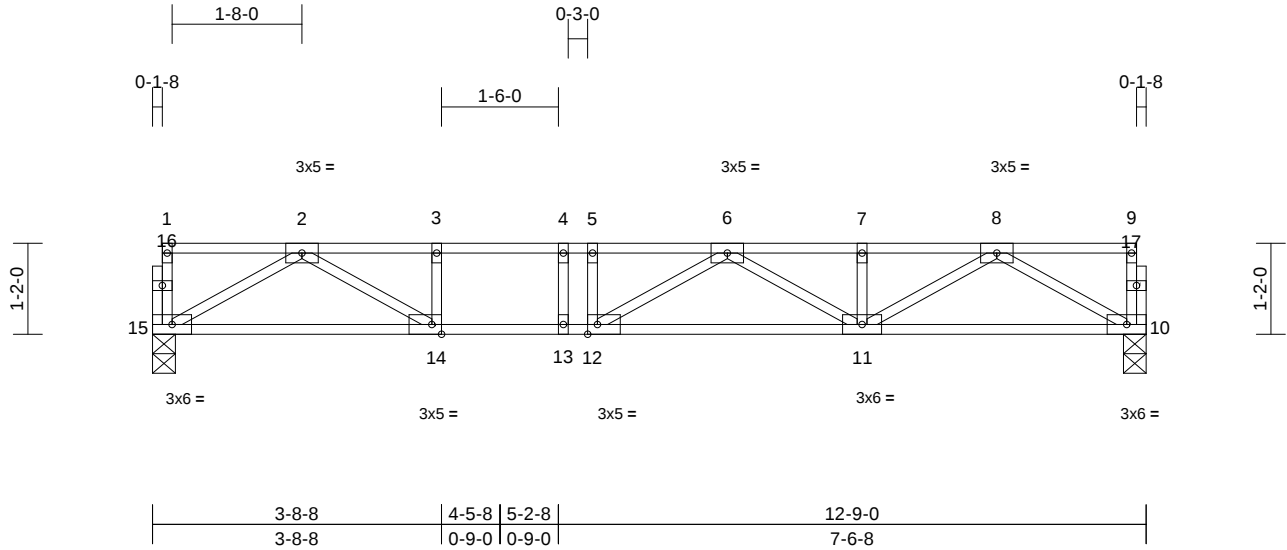
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A	I62356803
24050164	F02	Floor	6	1	Job Reference (optional)	

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:30
ID:U_17exo_9UVEKChpfUKKWzGJji-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:29.6

Plate Offsets (X, Y): [12:0-1-8,Edge], [14:0-1-8,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	0.93	Vert(LL)	-0.22	11-12	>667	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.30	11-12	>497	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 65 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 10=0-3-8, 15=0-3-8
Max Grav 10=681 (LC 1), 15=681 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-15=-86/0, 9-10=-69/0, 1-2=-5/0,
2-3=-1871/0, 3-4=-1871/0, 4-5=-1871/0,
5-6=-1871/0, 6-7=-1702/0, 7-8=-1702/0,
8-9=-4/0

BOT CHORD 14-15=0/1039, 13-14=0/1871, 12-13=0/1871,
11-12=0/2023, 10-11=0/1039

WEBS 2-15=-1196/0, 2-14=0/982, 3-14=-358/0,
4-13=-106/0, 8-10=-1197/0, 8-11=0/773,
7-11=-136/0, 6-11=-375/0, 6-12=-395/0,
5-12=0/143

NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are 1.5x3 MT20 unless otherwise indicated.
- 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



December 5,2023

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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:33 Page: 1
ID:4CuQi lx9GDrLqle9PRy4xzGJ P-RfC?PsB70Hq3NSaPanL8w3uITxBGKWRCDoi7J4zJC?f

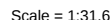


Plate Offsets (X, Y): [1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,Edge]

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 4-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-1-12, 8= Mechanical
Max Gray 5=259 (LC 1), 8=259 (LC 1)

FORCES

FORCES	(lb) - maximum Compression/maximum Tension
TOP CHORD	1-8=-71/0, 4-5=-13/41, 1-2=0/0, 2-3=-264/0, 3-4=0/0
BOT CHORD	7-8=0/264, 6-7=0/264, 5-6=0/264
WEBS	2-8=-315/0, 3-5=-381/0, 2-7=-17/15, 3-6=0/66

NOTES

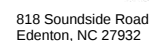
- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 4) This truss is designed in accordance with the 2018 International Residential Code 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



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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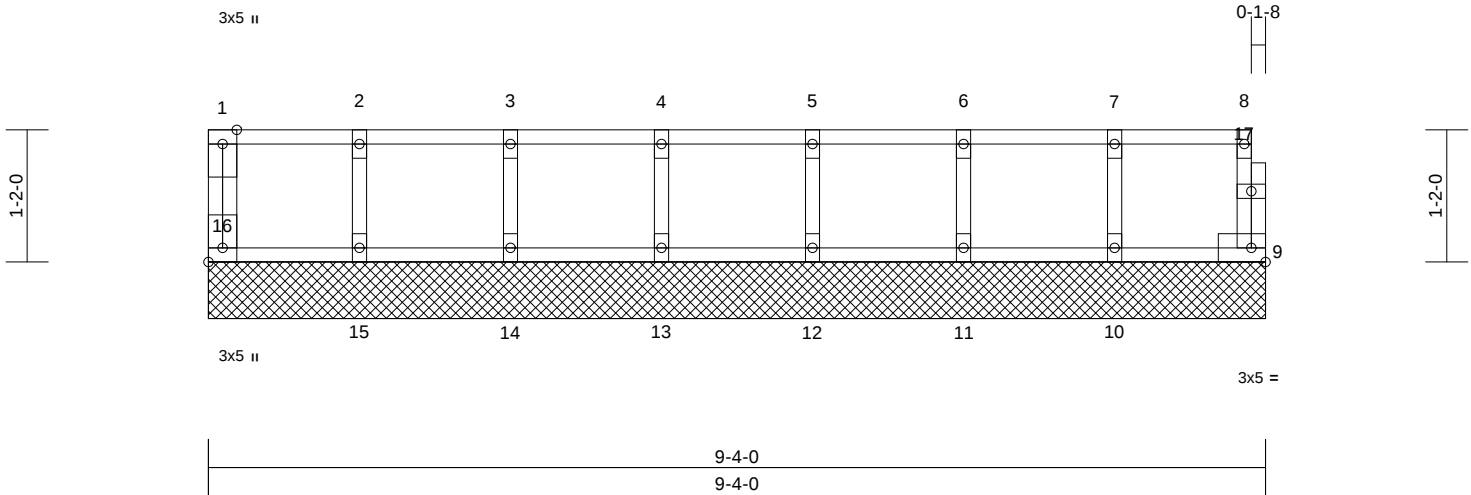


Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A	162356805
24050164	F12	Floor Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:33
ID:?OgRucTj9yZ1cXbmIfcd0UzGlv1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:20.3

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	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	9	n/a	n/a	
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							
										Weight: 41 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.
7) CAUTION, Do not erect truss backwards.

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.

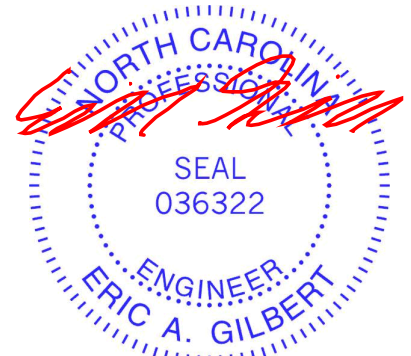
REACTIONS (size) 9=9-4-0, 10=9-4-0, 11=9-4-0, 12=9-4-0, 13=9-4-0, 14=9-4-0, 15=9-4-0, 16=9-4-0
Max Grav 9=57 (LC 1), 10=142 (LC 1), 11=148 (LC 1), 12=146 (LC 1), 13=146 (LC 1), 14=148 (LC 1), 15=142 (LC 1), 16=63 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-16=-57/0, 8-9=-51/0, 1-2=-10/0, 2-3=-10/0, 3-4=-10/0, 4-5=-10/0, 5-6=-10/0, 6-7=-10/0, 7-8=-10/0
BOT CHORD 15-16=0/10, 14-15=0/10, 13-14=0/10, 12-13=0/10, 11-12=0/10, 10-11=0/10, 9-10=0/10
WEBS 2-15=-130/0, 3-14=-134/0, 4-13=-133/0, 5-12=-133/0, 6-11=-134/0, 7-10=-130/0

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.



December 5, 2023

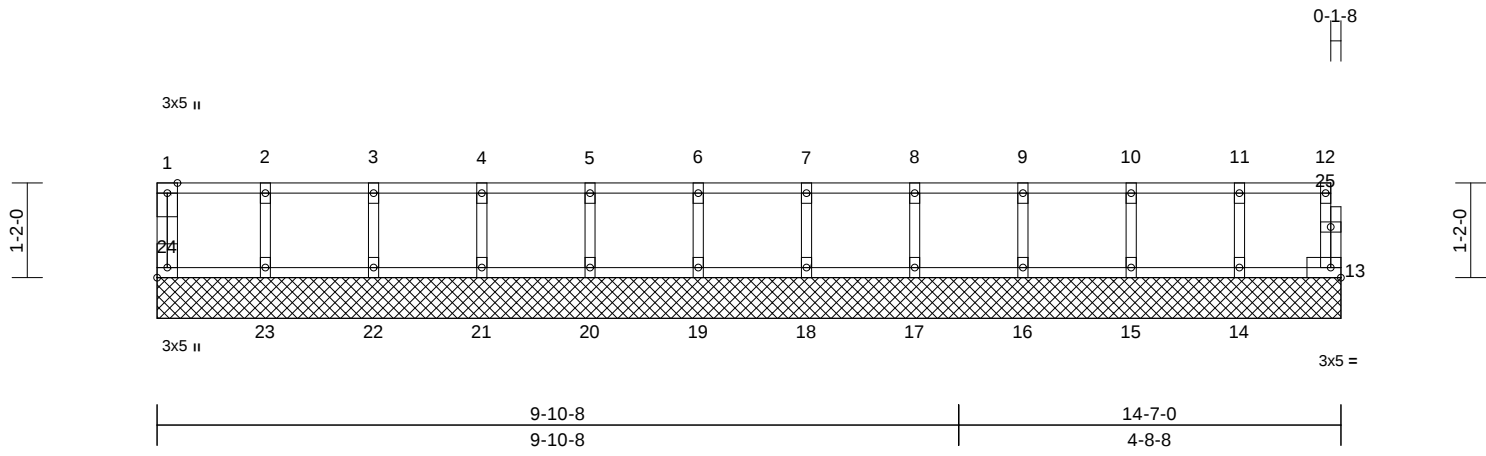
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A
24050164	F09	Floor Supported Gable	1	1	162356806
Job Reference (optional)					



Scale = 1:28.4									
Plate Offsets (X, Y): [24:Edge,0-1-8]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	13	n/a
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR					
PLATES MT20 GRIP 244/190 Weight: 62 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)

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.

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

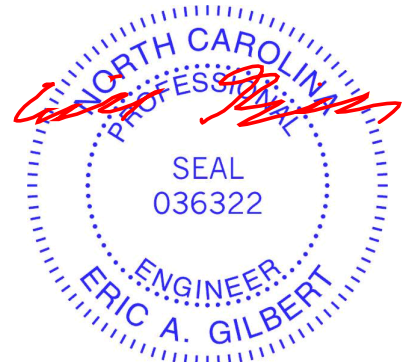
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

LOAD CASE(S) Standard

REACTIONS	(size)	13=14-7-0, 14=14-7-0, 15=14-7-0, 16=14-7-0, 17=14-7-0, 18=14-7-0, 19=14-7-0, 20=14-7-0, 21=14-7-0, 22=14-7-0, 23=14-7-0, 24=14-7-0
Max Grav		13=52 (LC 1), 14=137 (LC 1), 15=149 (LC 1), 16=146 (LC 1), 17=147 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=146 (LC 1), 22=147 (LC 1), 23=144 (LC 1), 24=62 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-24=-56/0, 12-13=-46/0, 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, 10-11=-9/0, 11-12=-9/0
BOT CHORD	23-24=0/9, 22-23=0/9, 21-22=0/9, 20-21=0/9, 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
WEBS	2-23=-131/0, 3-22=-134/0, 4-21=-133/0, 5-20=-133/0, 6-19=-133/0, 7-18=-133/0, 8-17=-133/0, 9-16=-133/0, 10-15=-135/0, 11-14=-125/0

- 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).



December 5,2023

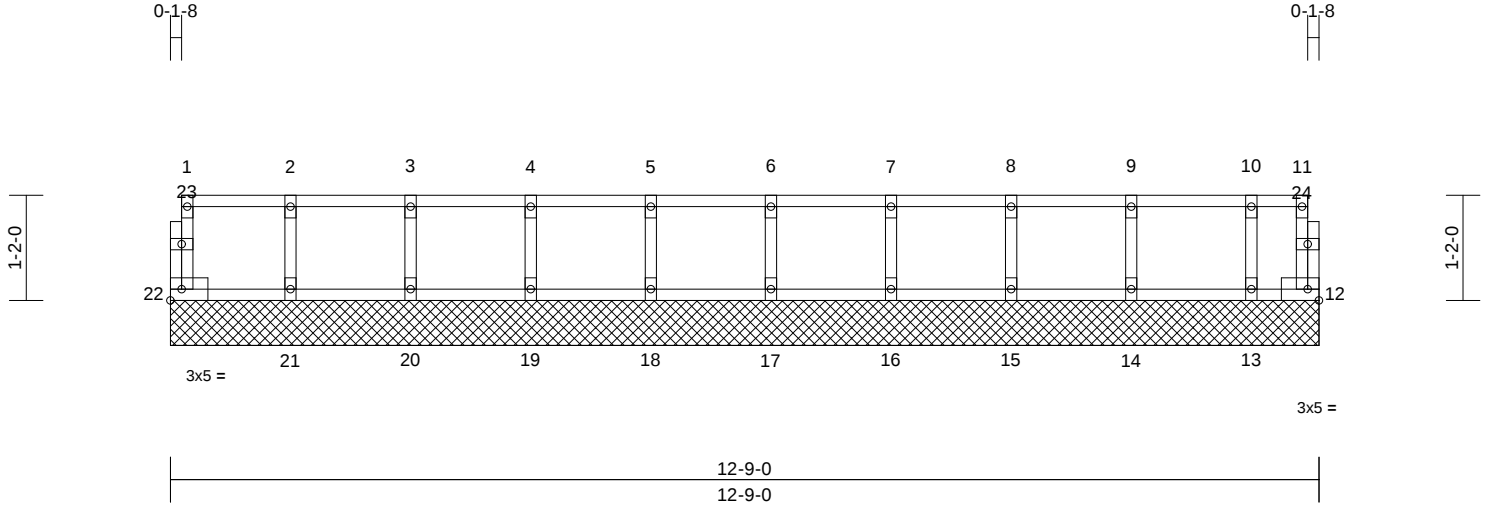
Job	Truss	Truss Type	Qty	Ply	1 Hayes Rd A
24050164	F01	Floor Supported Gable	2	1	162356807
Job Reference (optional)					

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:58:27

Page: 1

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Scale = 1:25.6

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	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 55 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) 12=12-9-0, 13=12-9-0, 14=12-9-0, 15=12-9-0, 16=12-9-0, 17=12-9-0, 18=12-9-0, 19=12-9-0, 20=12-9-0, 21=12-9-0, 22=12-9-0
 Max Grav 12=22 (LC 1), 13=109 (LC 1), 14=153 (LC 1), 15=145 (LC 1), 16=147 (LC 1), 17=147 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=148 (LC 1), 22=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-49/0, 11-12=-15/0, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0, 5-6=-6/0, 6-7=-6/0, 7-8=-6/0, 8-9=-6/0, 9-10=-6/0, 10-11=-6/0
 BOT CHORD 21-22=0/6, 20-21=0/6, 19-20=0/6, 18-19=0/6, 17-18=0/6, 16-17=0/6, 15-16=0/6, 14-15=0/6, 13-14=0/6, 12-13=0/6
 WEBS 2-21=-132/0, 3-20=-134/0, 4-19=-133/0, 5-18=-133/0, 6-17=-133/0, 7-16=-134/0, 8-15=-132/0, 9-14=-139/0, 10-13=-104/0

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.



December 5, 2023

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

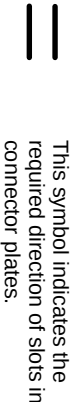
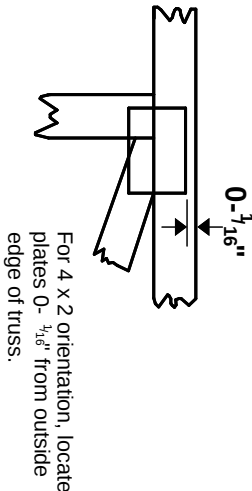
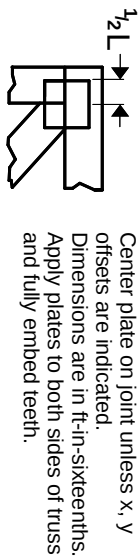
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 Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

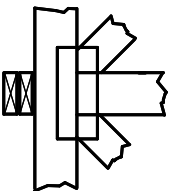
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

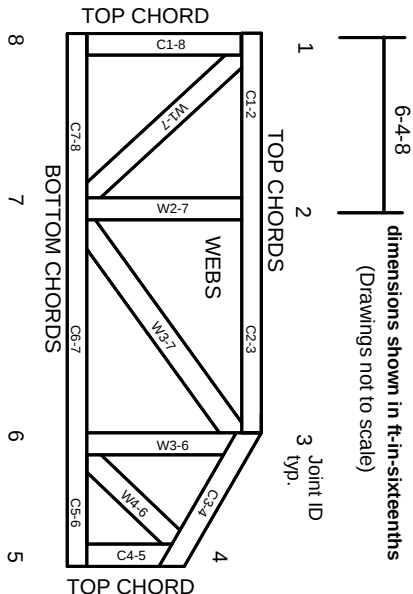


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: 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



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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TRENCO
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