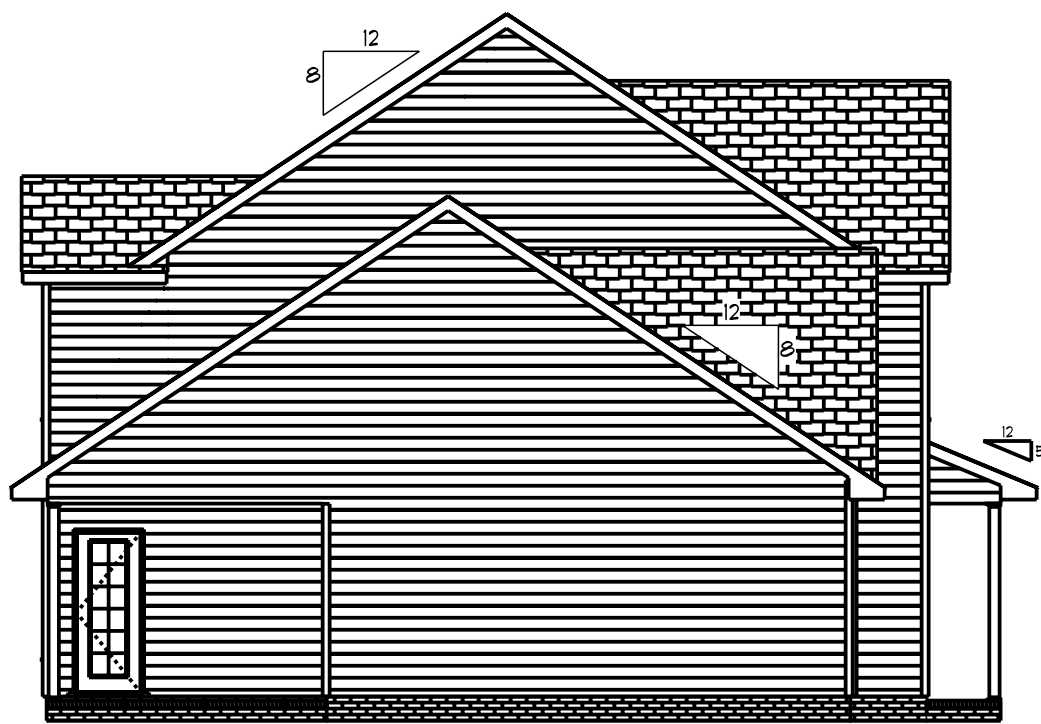
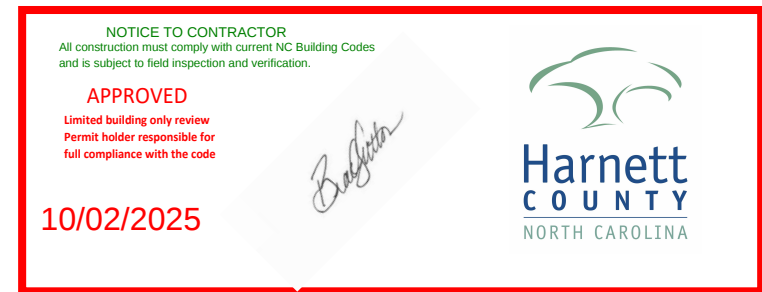




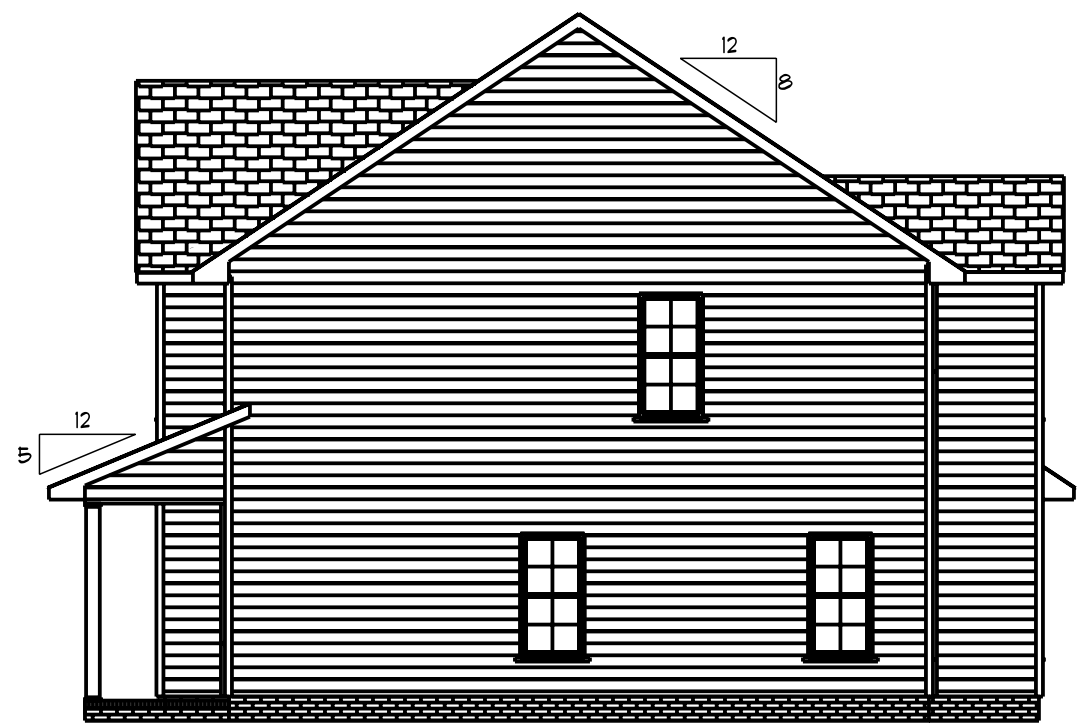
Front Elevation
Scale: 1/4" = 1'0"



Left Elevation
Scale: 1/8" = 1'0"



Rear Elevation
Scale: 1/8" = 1'0"



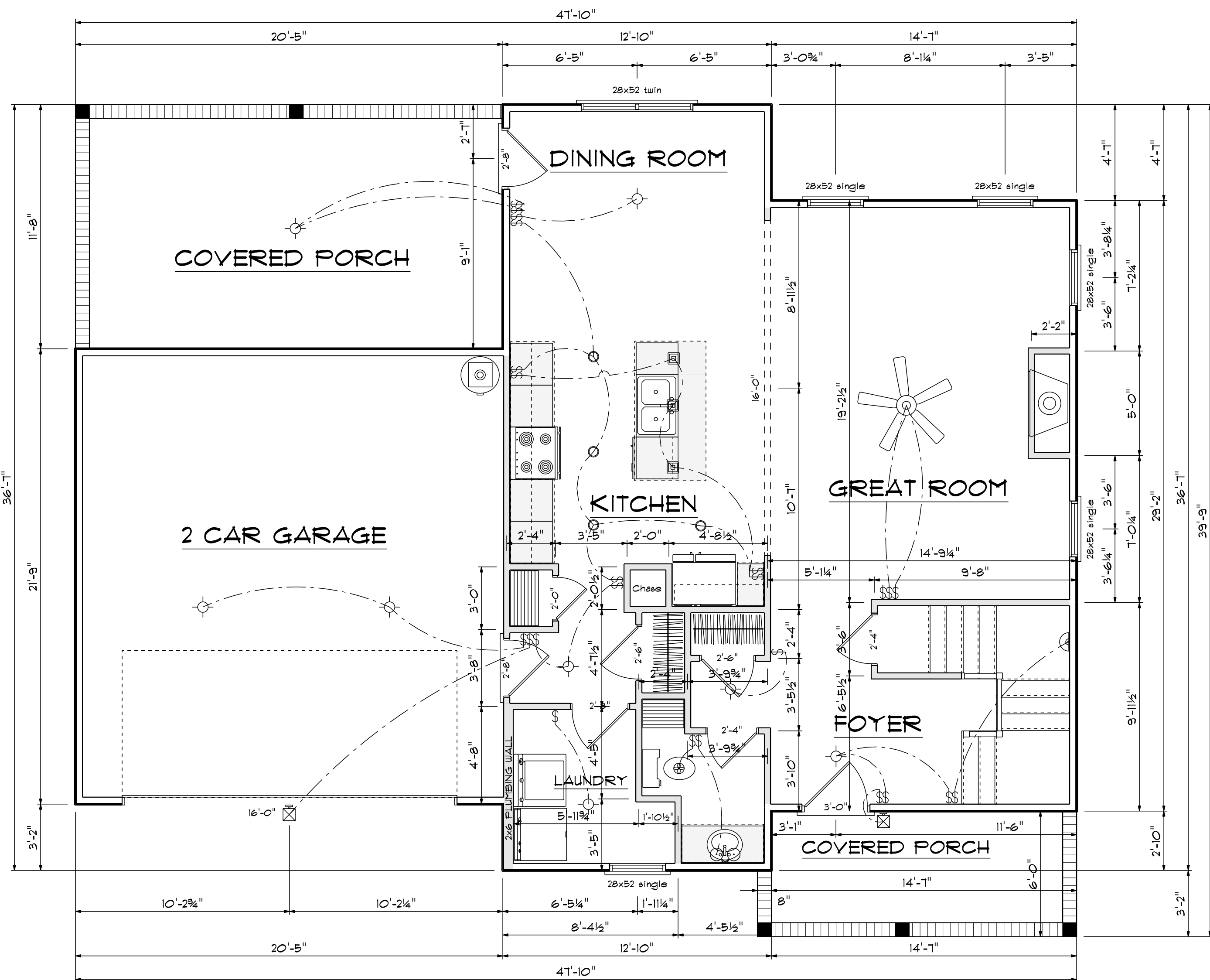
Right Elevation
Scale: 1/8" = 1'0"

The Almirante

SCALE: 1/4"
DRAWN BY
APPROVED

DATE: 1/15/2022
REVISED
DRAWING#

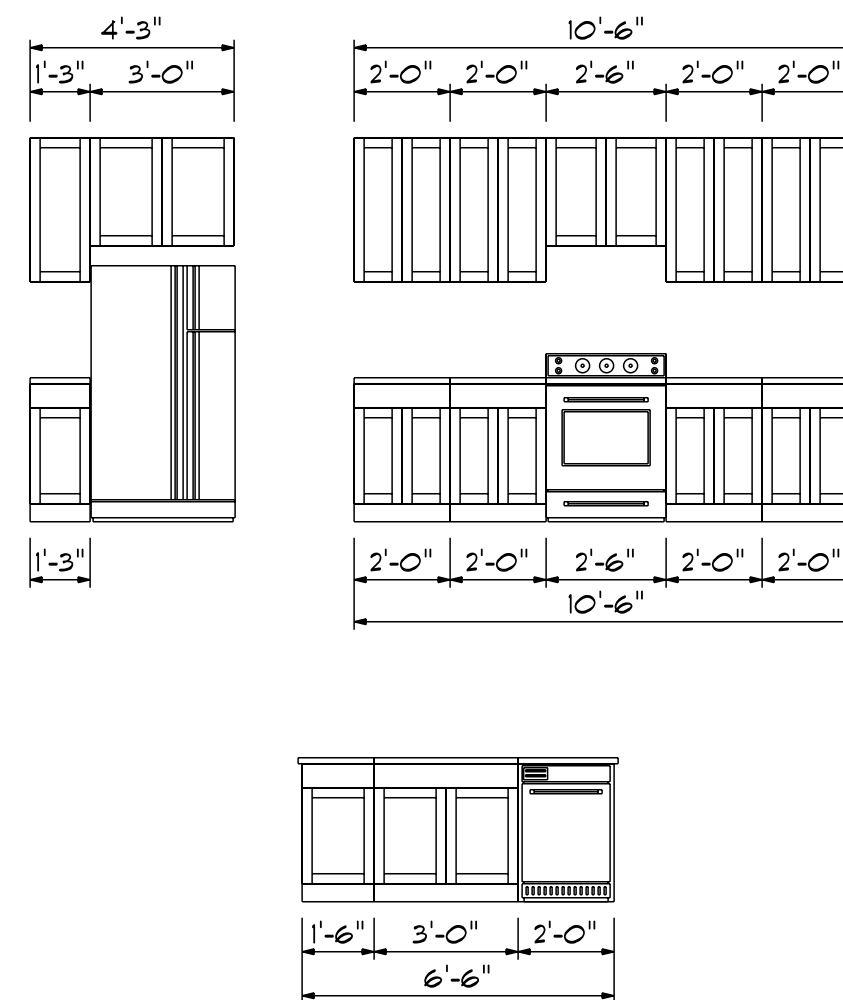
Base Design
2121 Chimney Pt.
Linden, N.C. 28356
910-263-0405



First Floor Plan

Scale: 1/4" = 1'-0"

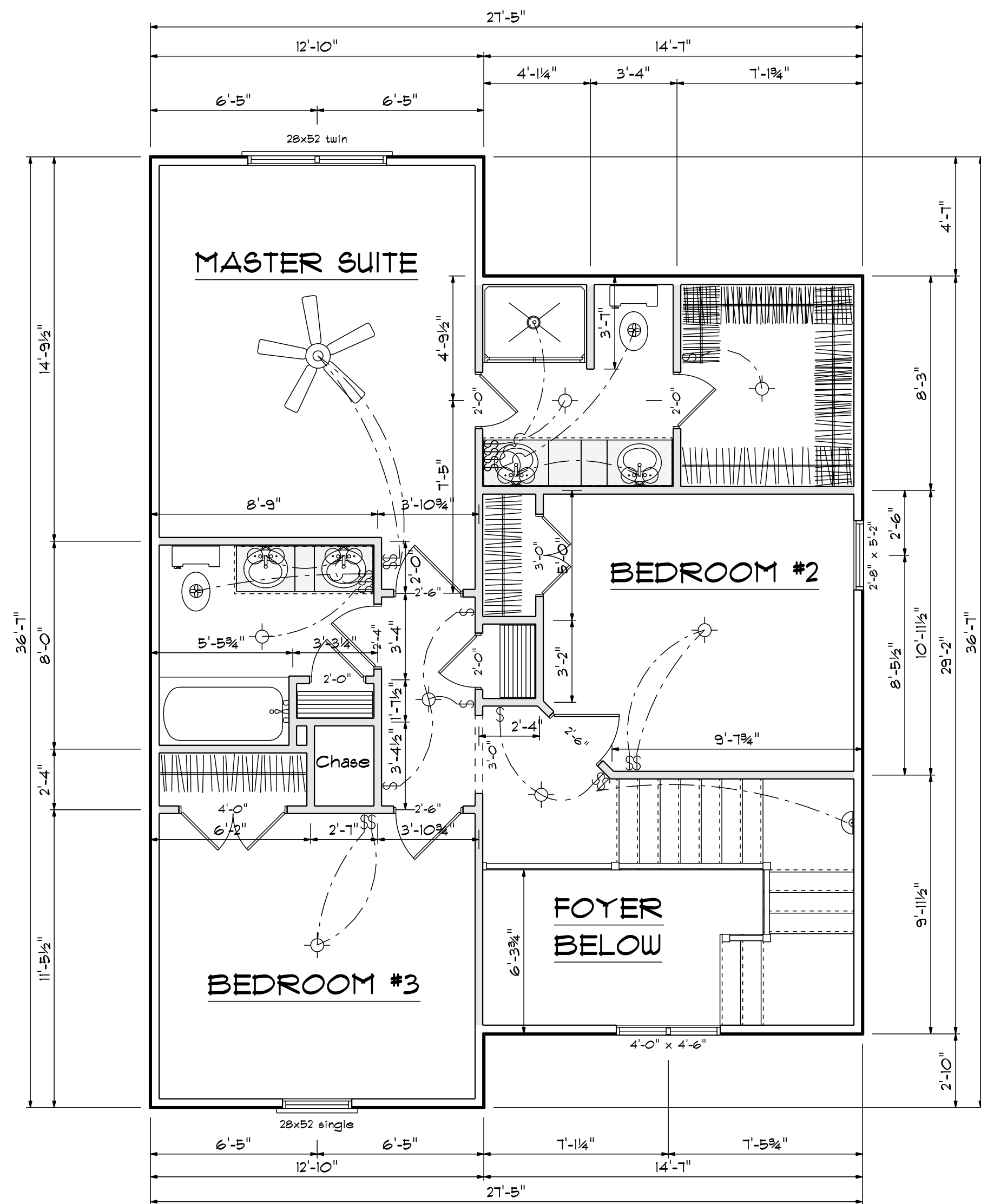
Kitchen Cabinets



FIRST FLOOR OPENING SCHEDULE				
PRODUCT CODE	SIZE	HINGE	REVERSED	COUNT
36X80 COLONIAL A 1	3'-0"	L	NO	1
32X80 FRENCH A 1	2'-8"	L	NO	1
7' x 16' GARAGE DOOR	16'-0"	U	NO	1
2-0 Door Unit	2'-0"	R	NO	1
2-4 Door Unit	2'-4"	R	NO	1
2-4 Door Unit	2'-4"	L	NO	1
2-6 Door Unit	2'-6"	R	NO	2
2-8 Door Unit	2'-8"	L	NO	1
2-8 Door Unit	2'-8"	R	NO	1
28x52 single	2'-8" x 5'-2"	N	NA	5
28x52 twin	5'-4" x 5'-2"	NN	NA	1

Areas

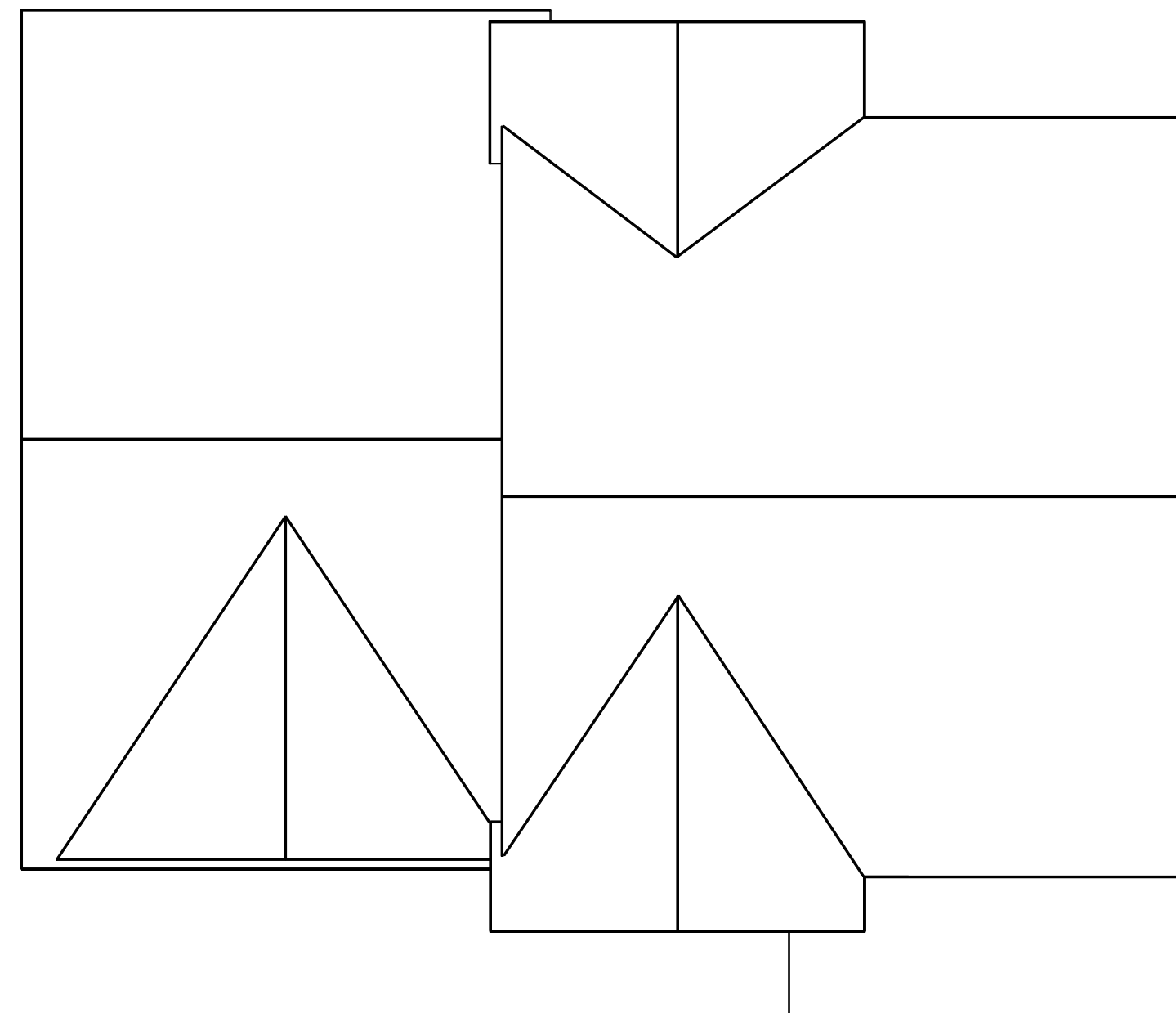
First Floor	899
Second Floor	774
=====	
Total Heated	1673
Garage	447
Front Porch	89
Rear Porch	237



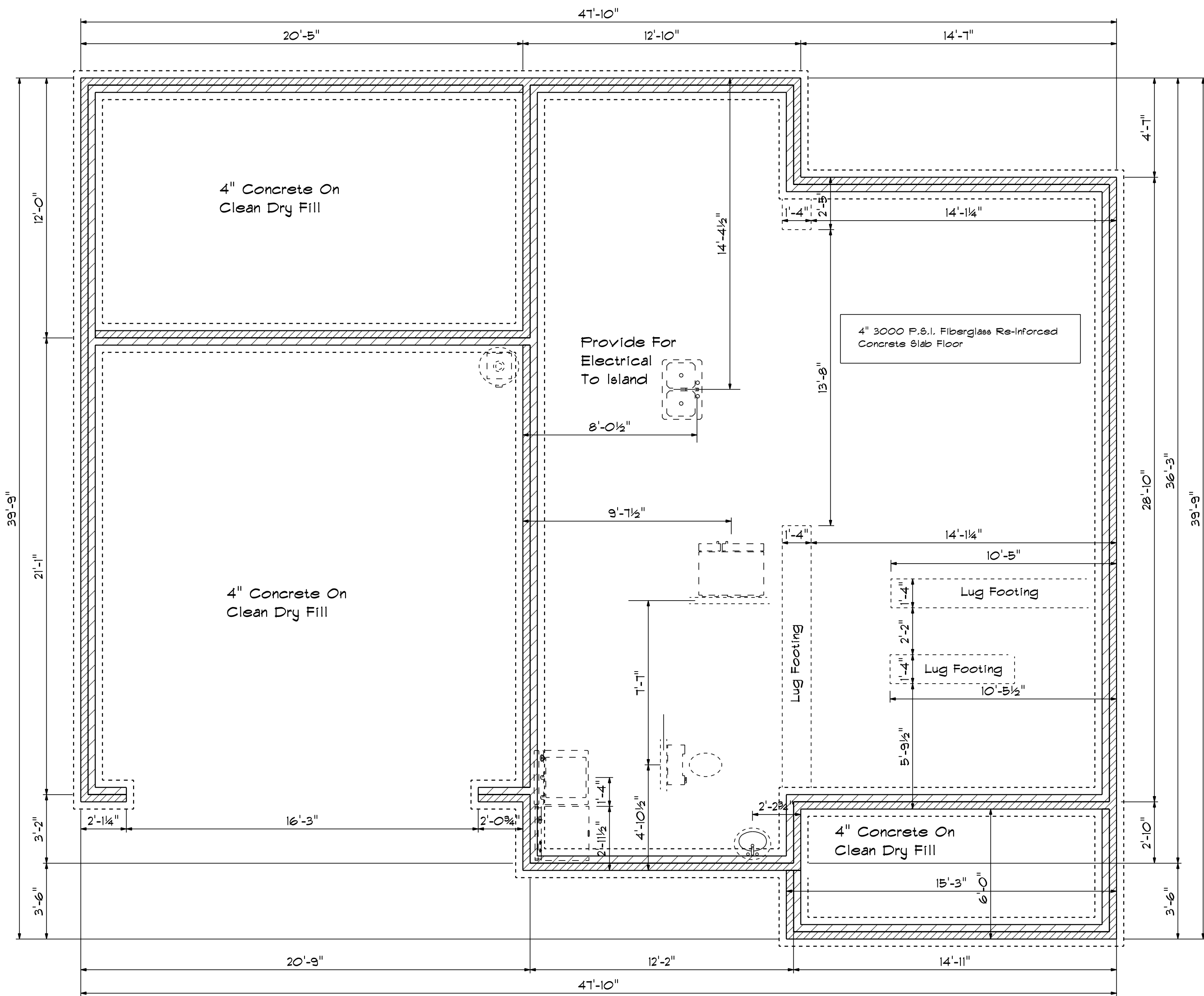
Second Floor Plan

Scale: 1/4" = 1'-0"

SECOND FLOOR OPENING SCHEDULE				
PRODUCT CODE	SIZE	HINGE	REVERSED	COUNT
2-0 Door Unit	2'-0"	R	NO	3
2-0 Door Unit	2'-0"	L	NO	1
2-4 Door Unit	2'-4"	L	NO	1
2-6 Door Unit	2'-6"	R	NO	1
2-6 Door Unit	2'-6"	L	NO	2
3-0 Doublehung Door Unit	3'-0"	LR	NO	1
4-0 Doublehung Door Unit	4'-0"	LR	NO	1
20x46 twin	4'-0" x 4'-6"	NN	NA	1
28x52 single	2'-8" x 5'-2"	N	NA	2
28x52 twin	5'-4" x 5'-2"	NN	NA	1

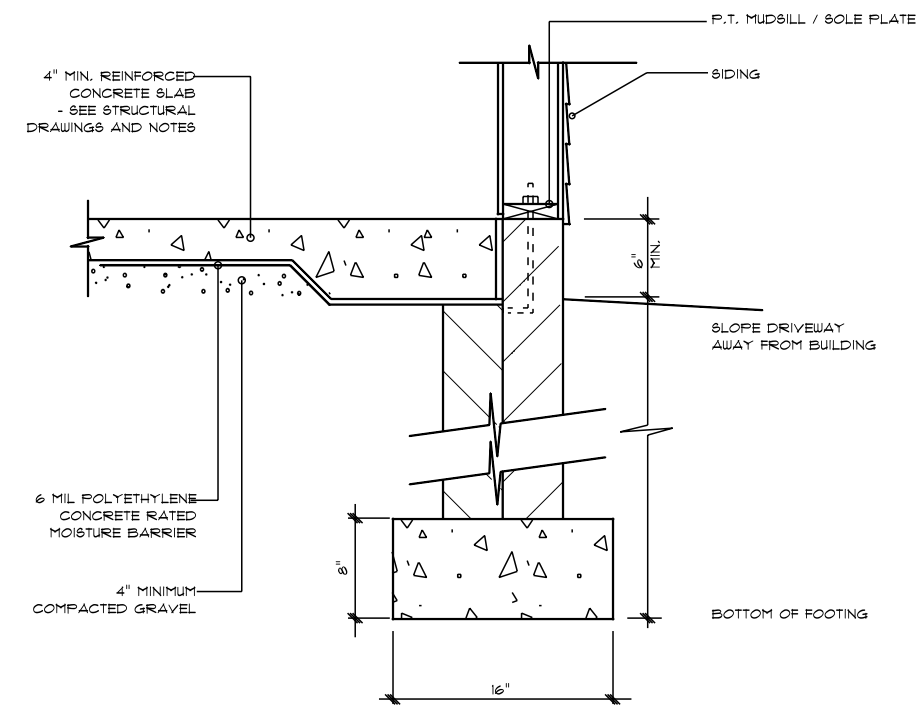


Roof Layout

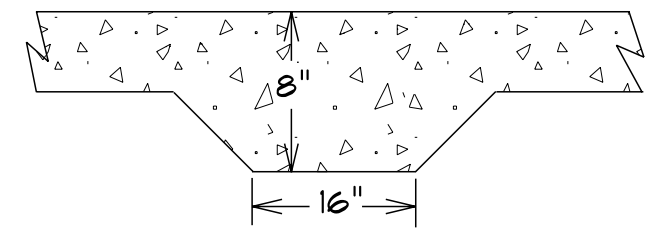


Foundation Plan

Scale: 1/4" = 1'-0"



STEM WALL FOOTING DETAIL



LUG FOOTING DETAIL

The Almirante

SCALE: 1/4"
DRAWN BY
APPROVED

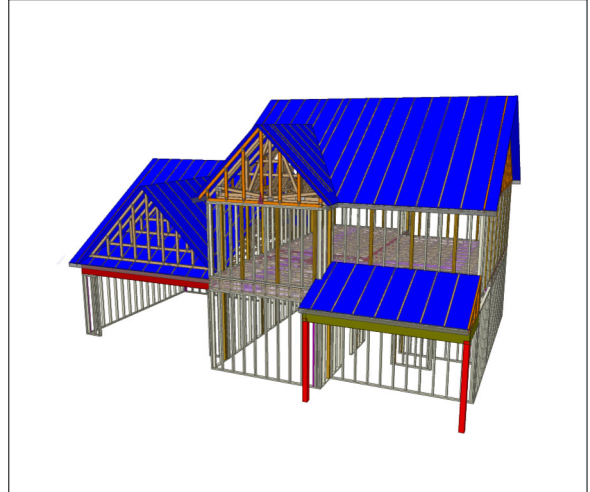
DATE: 1/15/2022
REVISED
DRAWING#

Base Design
2121 Chimney Pt.
Linden, N.C. 28356
910-263-0405



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

Phone #:919-775-1450



Builder: New Castle Contractors

Model: 298 Dove - Almirante

THE PLACEMENT PLAN NOTES:

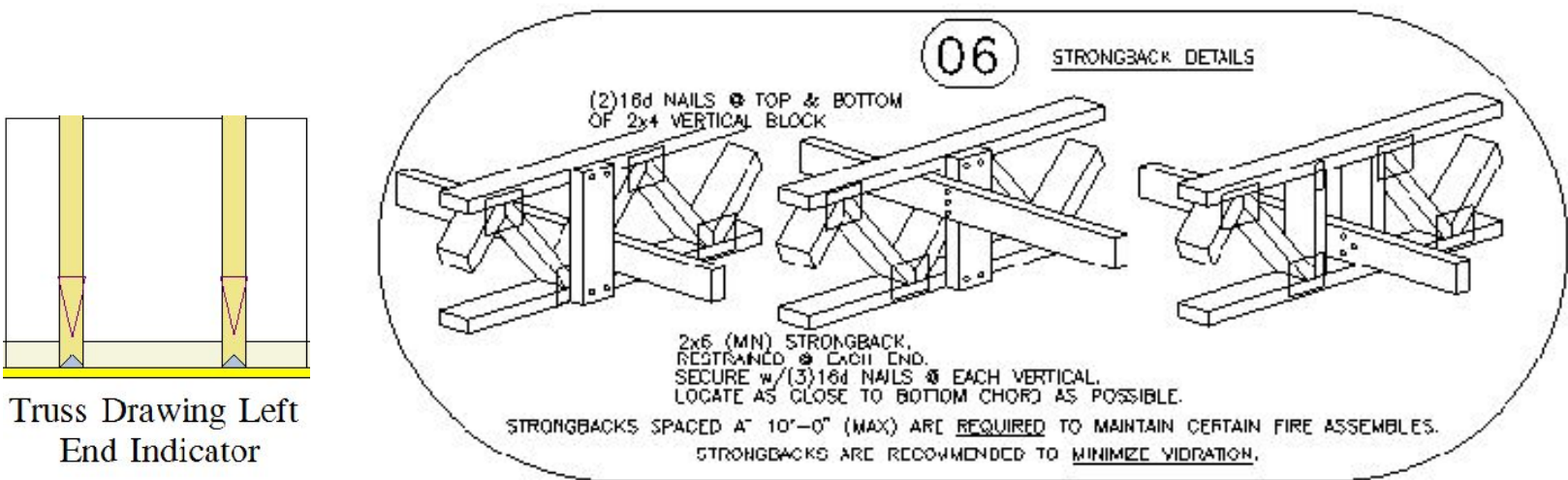
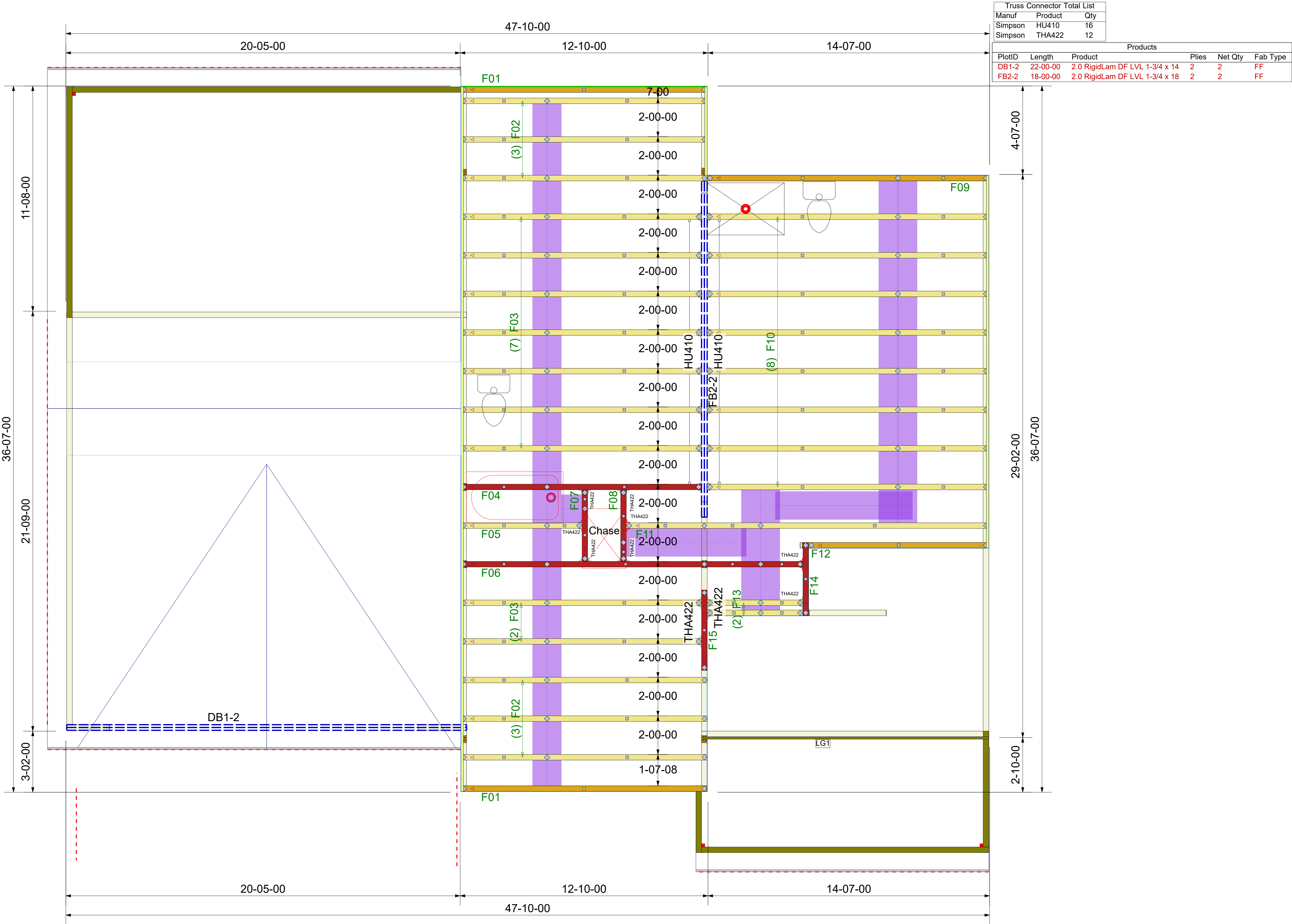
1. The Placement Plan is a diagram for truss installation. It is not an engineered drawing and has not been reviewed by an engineer. The Owner/Building Designer is responsible for obtaining an engineer's review if one is required by the local jurisdiction.
2. The responsibilities of the Owner, Contractor, 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.

** 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. **

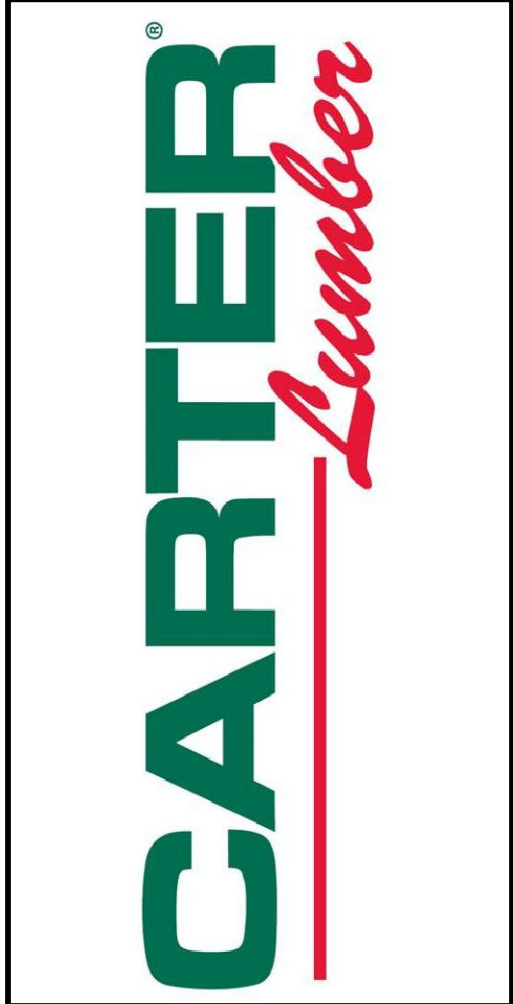


** TRIANGULAR SYMBOL NEAR END OF TRUSS INDICATES LEFT END OF TRUSS AS SHOWN ON INDIVIDUAL TRUSS DRAWINGS. ** PLUMBING DROPS NOTED ARE IN THE APPROXIMATE LOCATIONS PER PLAN. BUILDER TO VERIFY LOCATIONS BEFORE SETTING TRUSSES. ** REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS. **

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

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 Contractors
298 Dove-2nd Floor-Almirante
FLOOR PLACEMENT PLAN

Scale:	NTS
Date:	4/8/2025
Designer:	Nate Donaldson
Project Number:	25040007-B
Sheet Number:	1/1

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: 25040007-B
298 Dove-2nd Floor-Almirante

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: I72616495 thru I72616509

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

North Carolina COA: C-0844



April 10, 2025

Gilbert, Eric

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.

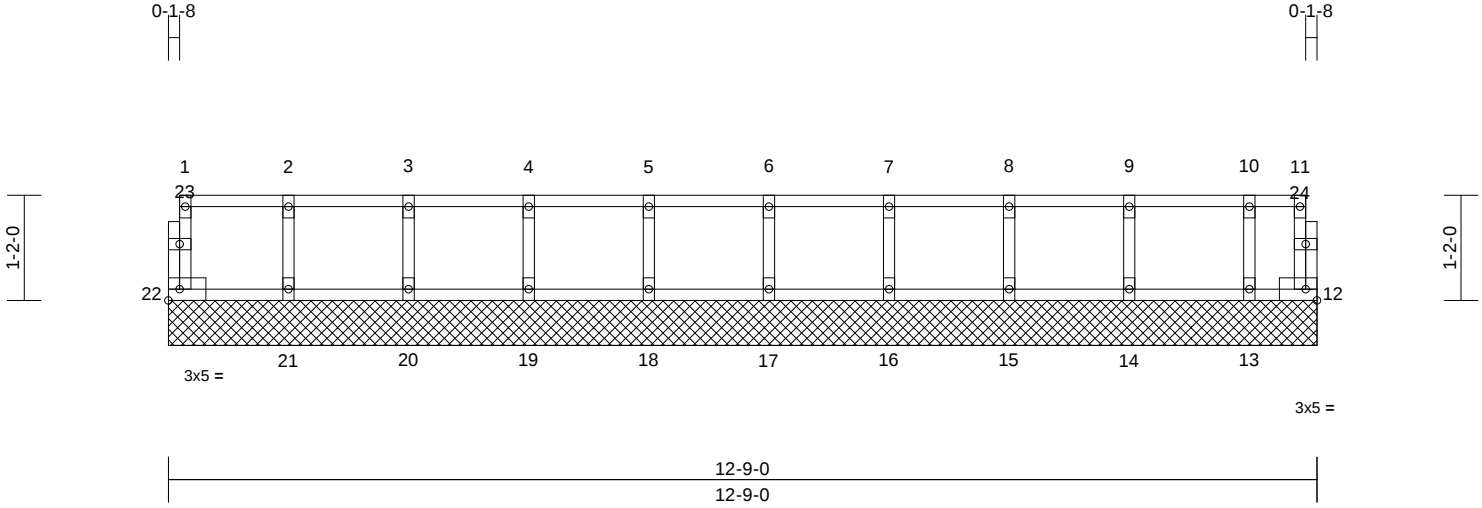
Job	Truss	Truss Type	Qty	Ply	298 Dove-2nd Floor-Almirante	172616495
25040007-B	F01	Floor Supported Gable	2	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:38

Page: 1

ID:eJfgp8ia5qMPds_pM7_iORzHCPg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	12	n/a		
BCDL	5.0	Code	IRC2021/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)

- 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

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.

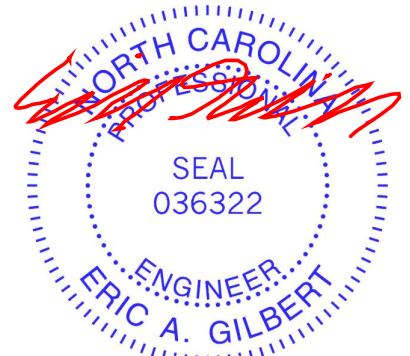
REACTIONS (size) 12=12-9-0, 13=12-9-0, 14=12-9-0, 15=12-9-0, 16=12-9-0, 17=12-9-0, 18=12-9-0, 19=12-9-0, 20=12-9-0, 21=12-9-0, 22=12-9-0
 Max Grav 12=22 (LC 1), 13=109 (LC 1), 14=153 (LC 1), 15=145 (LC 1), 16=147 (LC 1), 17=147 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=148 (LC 1), 22=52 (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

- 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.



April 10, 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

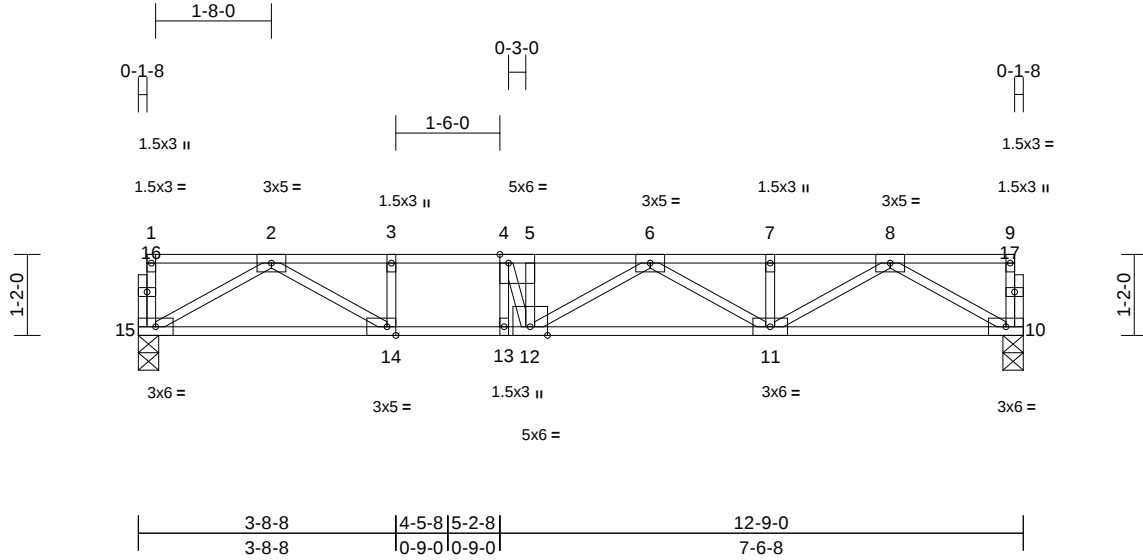
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-2nd Floor-Almirante	
25040007-B	F02	Floor	6	1	Job Reference (optional)	I72616496

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:39
ID:U_17exo_9UVEKCchpfUKKWzGJJi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWwRCDof7J4zJC?f

Page: 1



Scale = 1:33.2

Plate Offsets (X, Y): [4:0-1-8,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	0.71	Vert(LL)	-0.13	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.86	Vert(CT)	-0.18	12-13	>852	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 66 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
6-0-0 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=-81/0, 9-10=-70/0, 1-2=-5/0,
2-3=-1809/0, 3-4=-1809/0, 4-5=-2051/0,
5-6=-2051/0, 6-7=-1692/0, 7-8=-1692/0,
8-9=-4/0

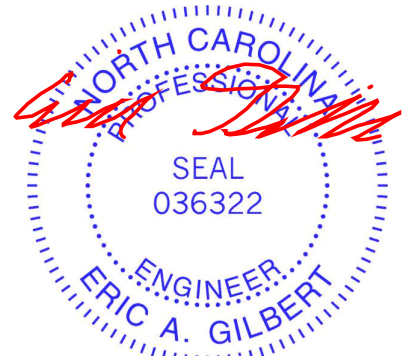
BOT CHORD 14-15=0/1035, 13-14=0/1809, 12-13=0/1809,
11-12=0/2021, 10-11=0/1029

WEBS 3-14=-325/0, 4-13=-472/0, 8-10=-1185/0,
8-11=0/774, 7-11=-164/0, 6-11=-384/0,
6-12=-40/180, 5-12=-433/0, 4-12=0/884,
2-15=-1191/0, 2-14=0/904

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) 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



April 10, 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

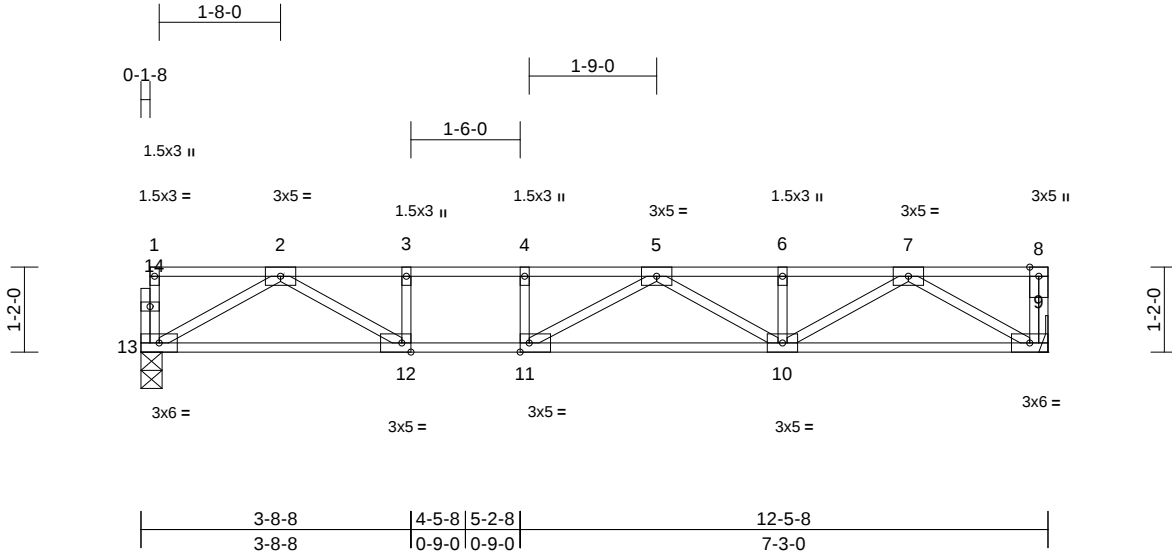
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-2nd Floor-Almirante	172616497
25040007-B	F03	Floor	9	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:39
ID:QSFbKtFug_JJzy8vMkAHZGJlc-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrcDoi7J4zJC?r

Page: 1



Scale = 1:31.6

Plate Offsets (X, Y): [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	0.84	Vert(LL)	-0.19	10-11	>768	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.98	Vert(CT)	-0.26	10-11	>563	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 63 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, 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

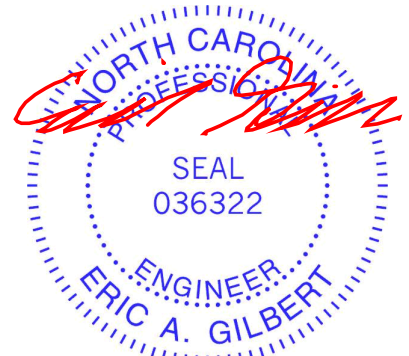
BOT CHORD 12-13=0/1004, 11-12=0/1785, 10-11=0/1944,
9-10=0/1012

WEBS 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, 2-13=-1155/0, 2-12=0/918

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 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.

LOAD CASE(S) Standard



April 10, 2025

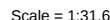
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:39 Page: 1
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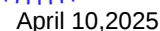


Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.89	Vert(LL)	-0.28	10-11	>524	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.36	10-11	>405	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 63 lb	FT = 20%F, 11%E

TOP CHORD	2x4 SP 2400F 2.0E(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=969 (LC 4), 13=841 (LC 1)	
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-13=-98/0, 8-9=-74/0, 1-2=-6/0, 2-3=-2519/0, 3-4=-2519/0, 4-5=-2519/0, 5-6=-2673/0, 6-7=-2673/0, 7-8=0/0
BOT CHORD	12-13=0/1310, 11-12=0/2519, 10-11=0/3192, 9-10=0/1531
WEBS	3-12=-567/0, 4-11=-56/187, 2-13=-1508/0, 2-12=0/1601, 7-9=-1771/0, 7-10=0/1334, 6-10=-271/0, 5-10=-609/0, 5-11=-822/83

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=-165 (F)

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-00 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.
- 5) Use Simpson Strong-Tie TH4A22 (Single Chord Girder) 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.
- 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).



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 Components Association (www.sbcacomponents.com)

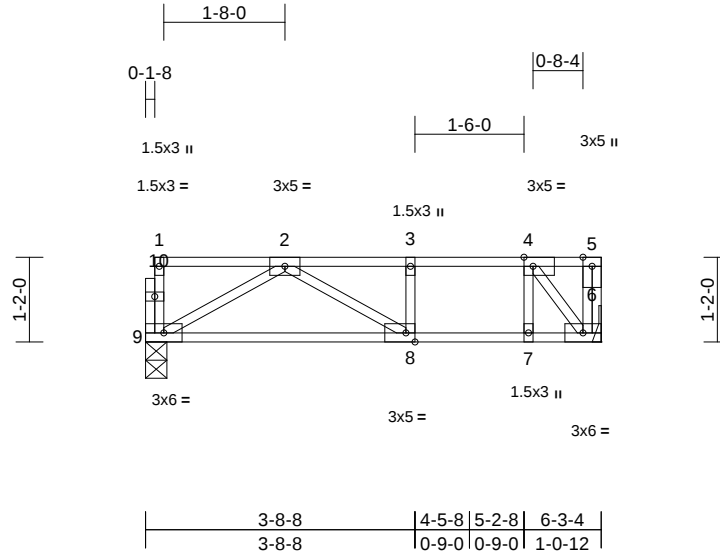
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-2nd Floor-Almirante
25040007-B	F05	Floor	1	1	Job Reference (optional)
					I72616499

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:39
ID:12otELGJLs4RAPdiCndx3KzGJGX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?i

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	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.54	Vert(CT)	-0.10	8-9	>739	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/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

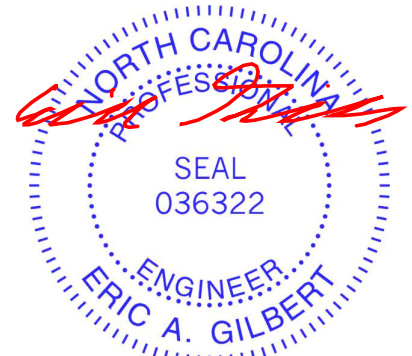
BOT CHORD 8-9=0/414, 7-8=0/393, 6-7=0/393

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

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 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.

LOAD CASE(S) Standard



April 10, 2025

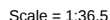
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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)

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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:39 Page: 1
ID:9hUYT9rwtwzCTGdHkmSPdzGJ1A-RfC?PsB70Hq3NSaPanL8w3uTXhGKWrCDoi7J4zJC?i



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	0.85	Vert(LL)	-0.28	18-19	>528	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.36	18-19	>413	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.03	17	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 90 lb	FT = 20%F, 11%E

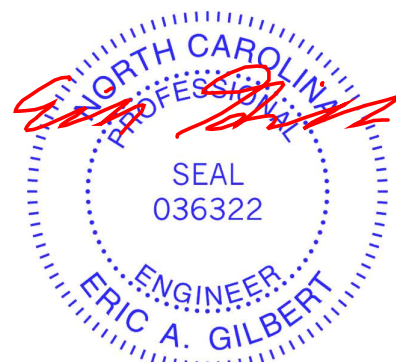
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 132 lb uplift at joint 14.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10'-0" o.c. and fastened to each truss with 3-10d (0.131" x 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.
- 8) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent spaced at 2'-0" o.c. max. starting at 6'-5" from the left end to 8'-5" to connect truss(es) to back face of top chord.
- 9) Fill all nail holes where hanger is in contact with lumber.
- 10) 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: 14-23=-10, 1-13=-100
Concentrated Loads (lb)
Vert: 25=-238 (B), 26=-173 (B)

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 1.5x3 MT20 unless otherwise indicated.
- 4) Refer to girders(s) for truss to truss connections.



April 10, 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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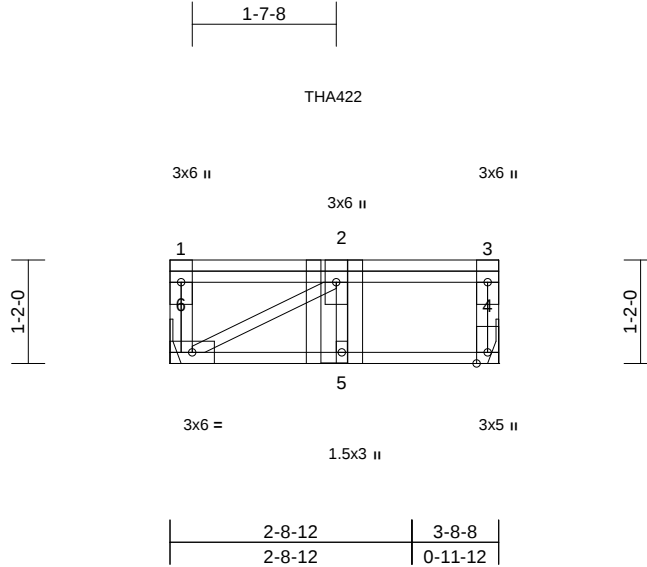
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-2nd Floor-Almirante	I72616501
25040007-B	F07	Floor Girder	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:40
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Page: 1



Scale = 1:26

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	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.55	Vert(CT)	-0.10	5-6	>406	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2021/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

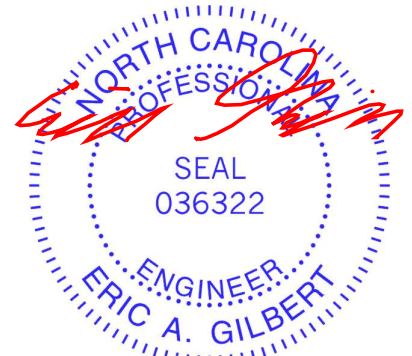
TOP CHORD 1-6=-286/0, 3-4=-298/0, 1-2=0/0, 2-3=0/0
BOT CHORD 5-6=0/0, 4-5=0/0
WEBS 2-5=-73/0, 2-6=0/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) 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 at 1-10-4 from the left end to connect truss(es) to back face of top chord.
- 5) Fill all nail holes where hanger is in contact with lumber.
- 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
Concentrated Loads (lb)
Vert: 2=-231 (B)



April 10, 2025

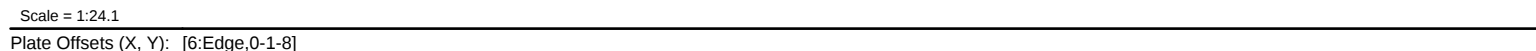
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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)

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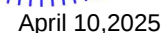


LUMBER	
TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 3-8-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS	(size) 4= Mechanical, 6= Mechanical
	Max Grav 4=265 (LC 4), 6=273 (LC 4)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-6=-231/0, 3-4=-226/0, 1-2=0/0, 2-3=0/0
BOT CHORD	5-6=0/0, 4-5=0/0
WEBS	2-5=-47/21, 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) 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 157 lb down and 236 lb up at 1-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - 5) 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
Concentrated Loads (lb)
Vert: 2=-77 (F)



 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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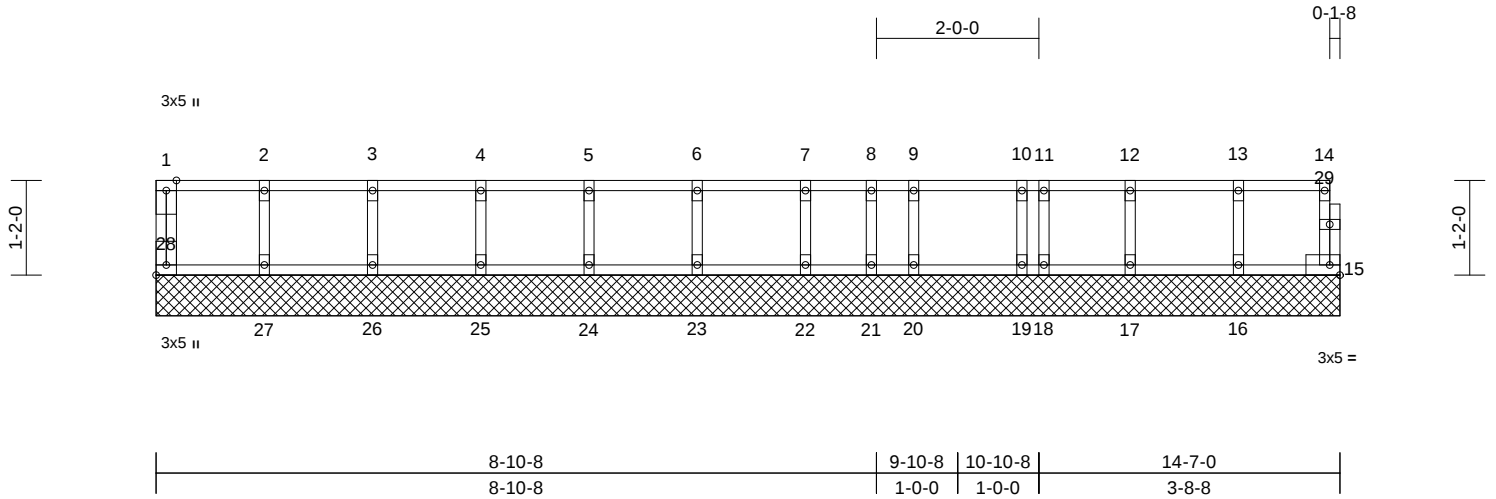
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-2nd Floor-Almirante	172616503
25040007-B	F09	Floor Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:40
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Page: 1



Scale = 1:28.4									
Plate Offsets (X, Y): [28: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	15	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR					
						PLATES	GRIP		
						MT20	244/190		
						Weight: 65 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) 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, 25=14-7-0, 26=14-7-0, 27=14-7-0, 28=14-7-0
Max Grav 15=51 (LC 1), 16=140 (LC 1), 17=140 (LC 1), 18=38 (LC 1), 19=116 (LC 1), 20=124 (LC 1), 21=37 (LC 1), 22=129 (LC 1), 23=151 (LC 1), 24=146 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=144 (LC 1), 28=61 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-28=-56/0, 14-15=-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, 12-13=-9/0, 13-14=-9/0
BOT CHORD 27-28=0/9, 26-27=0/9, 25-26=0/9, 24-25=0/9, 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
WEBS 8-21=-34/0, 11-18=-36/0, 2-27=-131/0, 3-26=-134/0, 4-25=-133/0, 5-24=-132/0, 6-23=-137/0, 7-22=-117/0, 9-20=-113/0, 10-19=-105/0, 12-17=-127/0, 13-16=-128/0

NOTES
1) 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.
- 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



April 10,2025

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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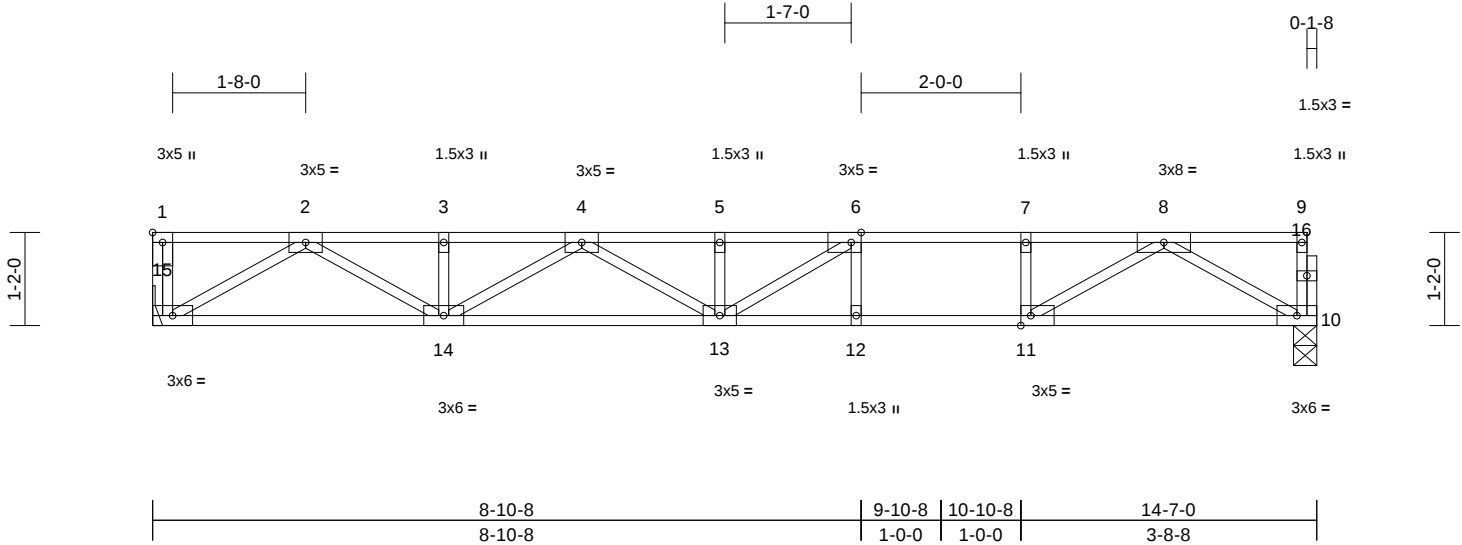
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-2nd Floor-Almirante	I72616504
25040007-B	F10	Floor	8	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:40
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Page: 1



Scale = 1:28.9

Plate Offsets (X, Y): [1:Edge,0-1-8], [6:0-1-8,Edge], [11:0-1-8,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)	-0.28	12-13	>616	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.38	12-13	>457	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 74 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(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
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= Mechanical
Max Grav 10=782 (LC 1), 15=788 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-15=-73/0, 9-10=-93/0, 1-2=0/0,
2-3=-2026/0, 3-4=-2026/0, 4-5=-2784/0,
5-6=-2784/0, 6-7=-2300/0, 7-8=-2300/0,
8-9=-6/0

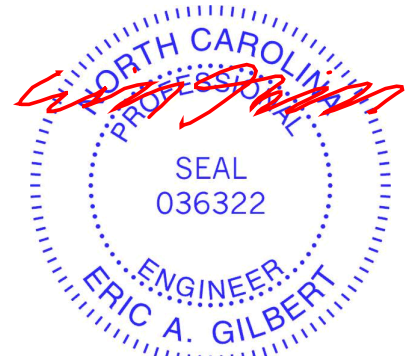
BOT CHORD 14-15=0/1200, 13-14=0/2527, 12-13=0/2300,
11-12=0/2300, 10-11=0/1221

WEBS 6-12=-275/0, 7-11=-446/0, 2-15=-1388/0,
2-14=0/965, 3-14=-171/0, 4-14=-584/0,
4-13=0/300, 5-13=-316/0, 6-13=-53/690,
8-10=-1406/0, 8-11=0/1260

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 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.

LOAD CASE(S) Standard



April 10,2025

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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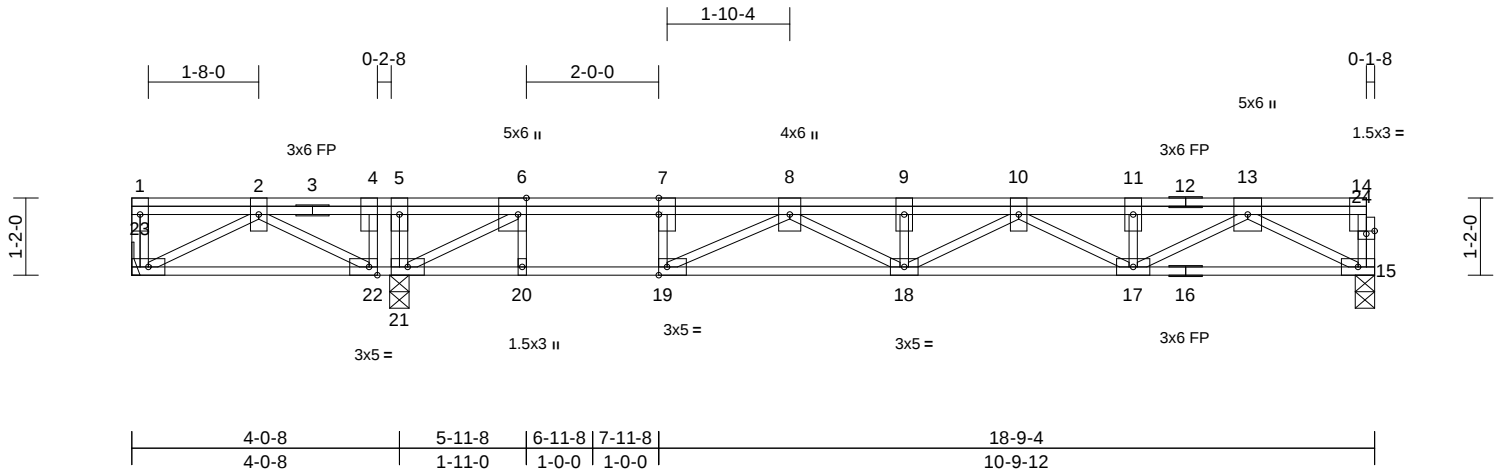
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-2nd Floor-Almirante	I72616505
25040007-B	F11	Floor	1	1	Job Reference (optional)	

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu Apr 10 17:24:36
ID:M5_nOtPLfENKwcfj3SIRkfzGjDm-6lXpJe88ap35wZ?iVCb4G_t27wSM_oZV42X?R8zSDGR

Page: 1



Scale = 1:34.8

Plate Offsets (X, Y): [6:0-3-0,Edge], [7:0-3-0,Edge], [19:0-1-8,Edge], [22:0-1-8,Edge], [24:0-1-8,0-0-8]

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	0.49	Vert(LL)	-0.20	18-19	>856	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.46	Vert(CT)	-0.29	18-19	>609	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.03	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 121 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

- 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

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:
6-0-0 oc bracing: 22-23,21-22.

REACTIONS (lb/size) 15=740/0-3-8, 21=1287/0-3-8, 23=4/ Mechanical
Max Uplift 23=-153 (LC 4)
Max Grav 15=740 (LC 1), 21=1287 (LC 1), 23=160 (LC 3)

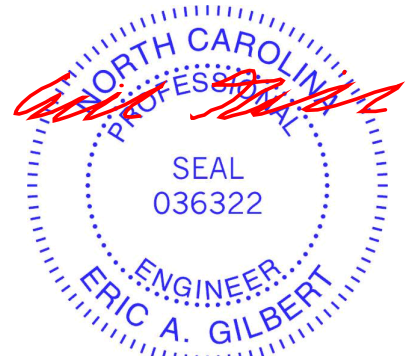
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=0/825, 3-4=0/825, 4-5=0/825, 5-6=0/825, 6-7=-1199/0, 7-8=-1199/0, 8-9=-2592/0, 9-10=-2592/0, 10-11=-2000/0, 11-12=-2000/0, 12-13=-2000/0

BOT CHORD 22-23=-314/138, 21-22=-825/0, 20-21=0/1199, 19-20=0/1199, 18-19=0/2442, 17-18=0/2439, 16-17=0/1175, 15-16=0/1175
WEBS 13-15=-1333/0, 13-17=0/948, 10-17=-505/0, 8-19=-1411/0, 2-23=-157/357, 2-22=-747/0, 4-22=0/350, 6-21=-2287/0, 5-21=-314/0, 7-19=0/567

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x6 MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 153 lb uplift at joint 23.



April 10,2025

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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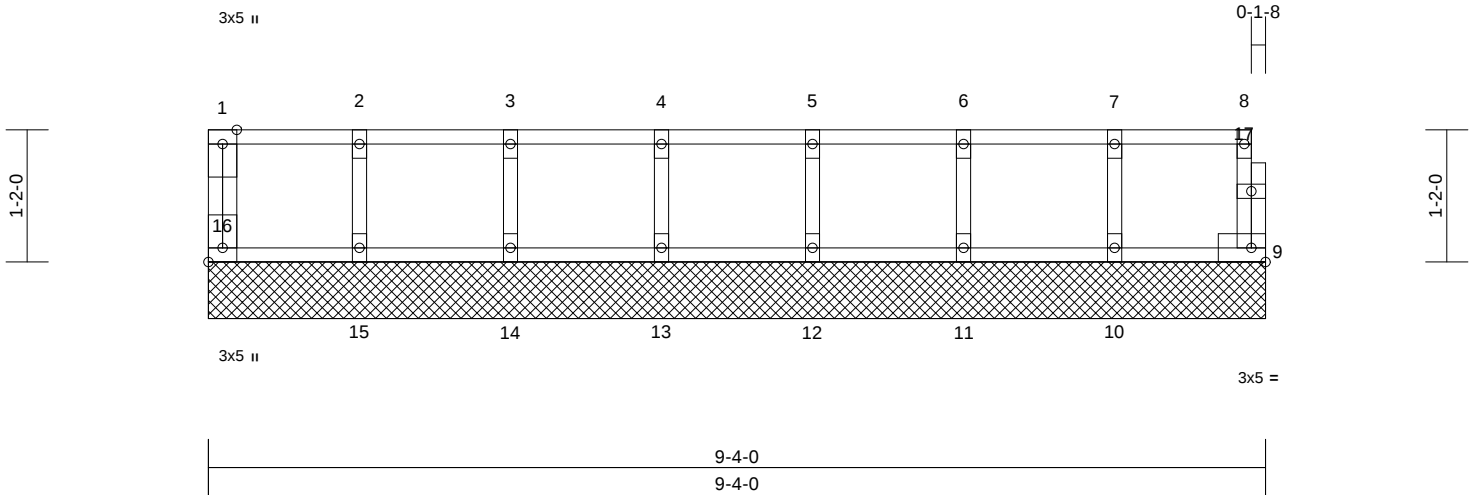
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-2nd Floor-Almirante	I72616506
25040007-B	F12	Floor Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:40
ID:?OgRucTj9yZ1cXbmIfcd0UzGlv1-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?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	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	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/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)

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.

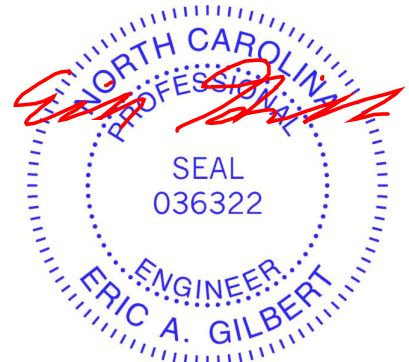
REACTIONS (size) 9=9-4-0, 10=9-4-0, 11=9-4-0,
12=9-4-0, 13=9-4-0, 14=9-4-0,
15=9-4-0, 16=9-4-0
Max Grav 9=57 (LC 1), 10=142 (LC 1),
11=148 (LC 1), 12=146 (LC 1),
13=146 (LC 1), 14=148 (LC 1),
15=142 (LC 1), 16=63 (LC 1)

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.
- 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.



April 10, 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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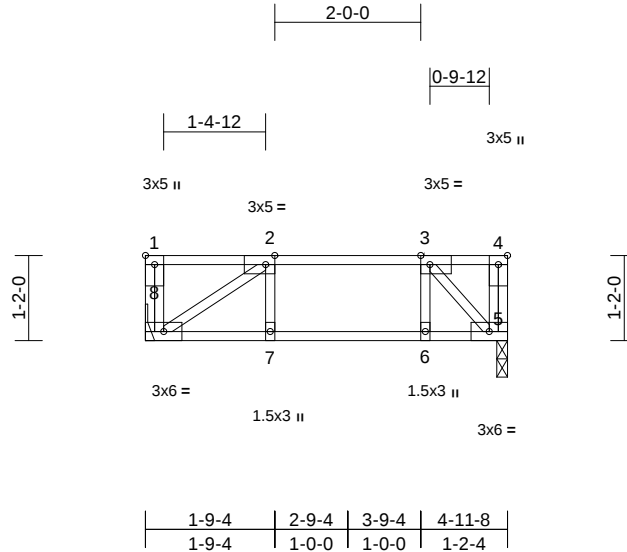
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-2nd Floor-Almirante	I72616507
25040007-B	F13	Floor	2	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:40
ID:4CuOi_ix9GDrLgle9PRy4xzGJ_P-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:31.6

Plate Offsets (X, Y): [1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,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	0.29	Vert(LL)	-0.02	7-8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.25	Vert(CT)	-0.02	7-8	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							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)

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 Grav 5=259 (LC 1), 8=259 (LC 1)

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

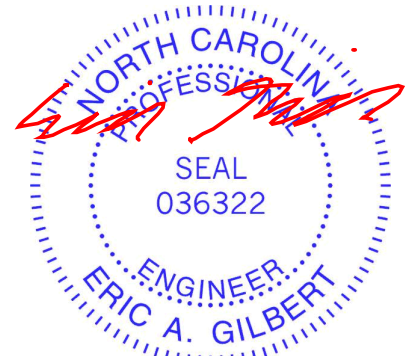
BOT CHORD 7-8=0/264, 6-7=0/264, 5-6=0/264

WEBS 2-7=-17/15, 3-6=0/66, 2-8=-315/0, 3-5=-381/0

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) 5.
- 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.

LOAD CASE(S) Standard



April 10, 2025

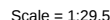
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:40 Page: 1
ID:Y14vIOLuvh3efutABT 7Z4zGlz3-RfC?PsB70Hg3NSqPqnL8w3ulTXbGKWKCDoi7J4zJC?i



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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.21	Vert(CT)	-0.03	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MP							Weight: 27 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)

- 1) 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=-93 (B)

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 Gray 4=290 (LC 1), 5=372 (LC 1)

	(b) maximum Compression/maximum Tension
TOP CHORD	1-5=-187/0, 3-4=-94/11, 1-2=-12/0, 2-3=0/0
BOT CHORD	4-5=0/318
WEBS	2-5=-349/0, 2-4=-365/0

- 1) Unbalanced floor live loads have been considered for this design.
- 2) 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.
- 3) CAUTION, Do not erect truss backwards.
- 4) 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.
- 5) Fill all nail holes where hanger is in contact with lumber.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 93 lb down and 227 lb up at 2-8-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the TRUSS are noted as front (F) or back (B).

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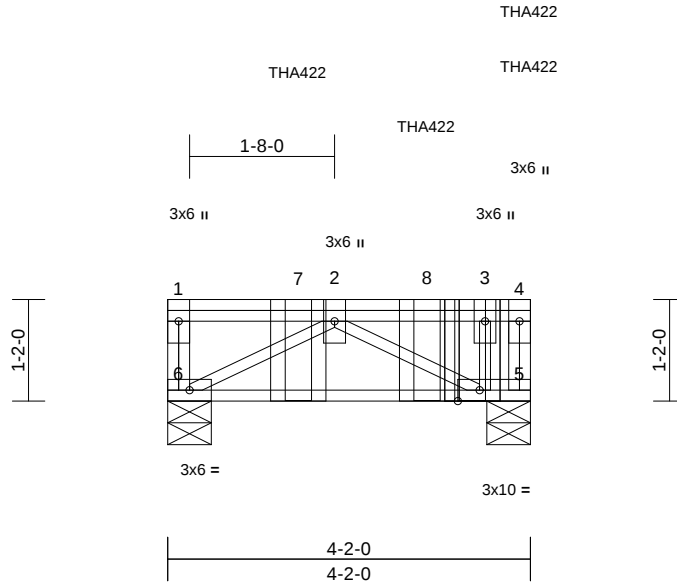
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-2nd Floor-Almirante	I72616509
25040007-B	F15	Floor Girder	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:49:40
ID:p?s0279IM10FESNfm63uazGivT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:26.5

Plate Offsets (X, Y): [5:0-3-0,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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.42	Vert(CT)	-0.04	5-6	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.01	5	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MP							Weight: 30 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: 3=-776 (F=-182, B=-594), 7=-571 (B), 8=-159 (F)

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, 6=0-6-0
Max Grav 5=1230 (LC 1), 6=708 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-6=-168/0, 4-5=0/15, 1-2=0/0, 2-3=-391/0, 3-4=0/0

BOT CHORD 5-6=0/952

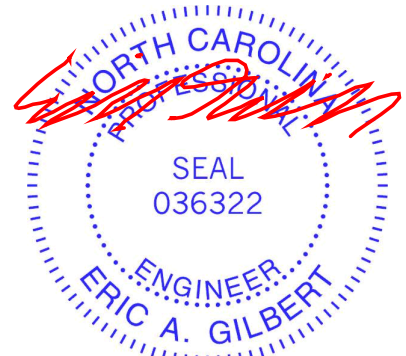
WEBS 2-6=-1085/0, 2-5=-618/0, 3-5=-1042/0

NOTES

- 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.
- 2) 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.
- 3) 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.
- 4) Fill all nail holes where hanger is in contact with lumber.
- 5) 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: 5-6=-10, 1-4=-100



April 10, 2025

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

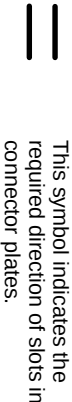
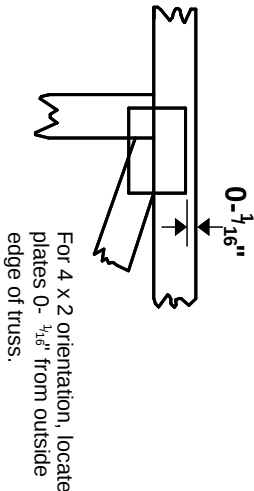
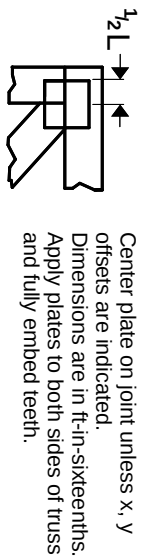
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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

Symbols

PLATE LOCATION AND ORIENTATION



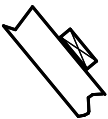
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

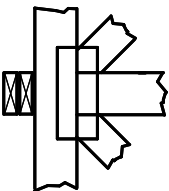
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

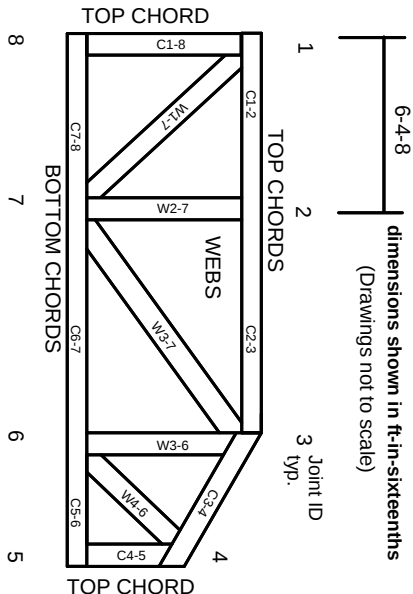


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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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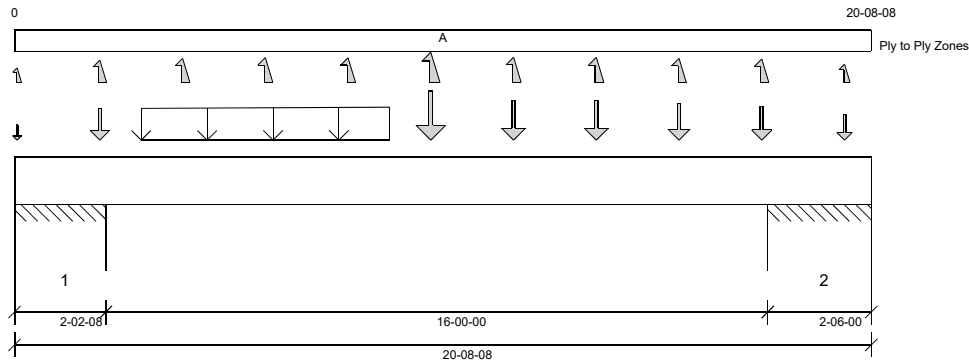
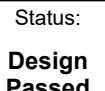


MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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



- CAUTION: The maximum net analysis reaction exceeds the user-defined maximum uplift value at one or more supports.
- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Customer:
Street 1:
City:
Customer Ph...

Job Name: **B**
Level: **1st FLOOR**
Label: **DB1-2 - i79**
Type: **Beam**

2 Ply Member
2.0 RigidLam DF LVL 1-3/4
x 14

Status:
Design
Passed

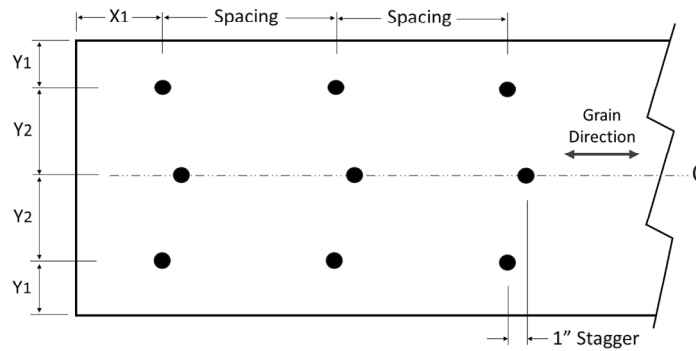
DESIGN NOTES

- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 0.99
- Beam Stability Factor used in the calculation for Allowable Max Neg Moment (CL) = 0.47

PLY TO PLY CONNECTION

- Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 63. Row = 3, Spacing = 12"
12d (0.148"x3.25") nails properties: D = 0.148" , L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25" , Y1 = 0.75" , Y2 = 1.5"
Install fasteners from one face.
X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.

FASTENER INSTALLATION – 3 ROWS (FROM ONE FACE)





Customer:
Street 1:
City:
Customer Ph...

Job Name: **B**
Level: **1st FLOOR**
Label: **FB2-2 - i78**
Type: **Beam**

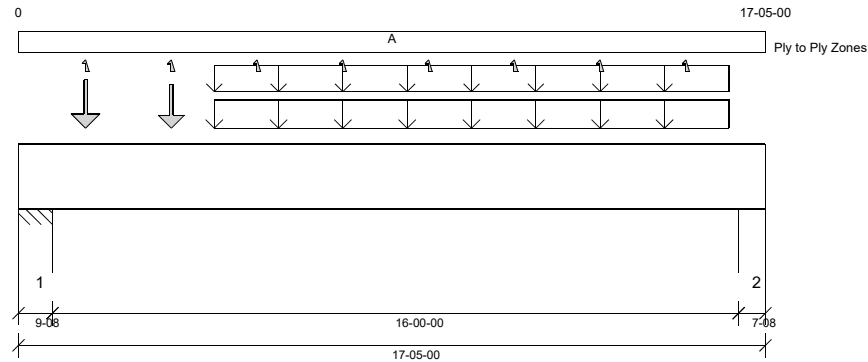
2 Ply Member
2.0 RigidLam DF LVL 1-3/4
x 18

Status:
Design
Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version
8.7.3.303.Update13.26

Report Version: 2023.09.18 04/08/2025 14:20



DESIGN INFORMATION a

Building Code: IRC 2021
Design Methodology: ASD
Risk Category: II (General Construction)
Residential
Service Condition: Dry
System Spacing: -
LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 0' Bottom: 1'- 8 1/2"

Bearing Stress of Support Material:

- 1323 psi Wall @ 0'- 8 1/2"
- 725 psi Wall @ 16'- 10 1/2"

ANALYSIS RESULTS

Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Max Pos. Moment:	9'- 6 3/4"	D + L	1.00	25538 lb ft	46413 lb ft	Passed - 55%
Max Shear:	15'- 3 1/2"	D + L	1.00	6029 lb	12180 lb	Passed - 50%
Live Load (LL) Pos. Defl.:	8'- 9 7/16"	L		0.252"	L/360	Passed - L/761
Total Load (TL) Pos. Defl.:	8'- 9 7/16"	D + L		0.354"	L/240	Passed - L/543

SUPPORT AND REACTION INFORMATION

ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result
1	9-08	D + L	1.00	6607 lb		24937 lb	43990 lb	Passed - 26%
2	7-08	D + L	1.00	6094 lb		19687 lb	19031 lb	Passed - 32%

LOADING

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
Self Weight	0'	17'- 5"	Self Weight	Top	17 lb/ft	-	-	-	-
Uniform	4'- 6 3/4"	16'- 6 3/4"	Smoothed Load	Front	111 lb/ft	299 lb/ft	-	-	-
Uniform	4'- 6 3/4"	16'- 6 3/4"	Smoothed Load	Back	95 lb/ft	255 lb/ft	0 lb/ft	0 lb/ft	0 lb/ft
Point	1'- 6 3/4"	1'- 6 3/4"	-	Front	485 lb	1267/-2 lb	1 lb	1 lb	0/-2 lb
Point	3'- 6 3/4"	3'- 6 3/4"	-	Front	410 lb	1105 lb	0 lb	1 lb	0/-2 lb
Point	5'- 6 3/4"	5'- 6 3/4"	-	Front	-	-	-	-	-2 lb
Point	7'- 6 3/4"	7'- 6 3/4"	-	Front	-	-	-	-	-2 lb
Point	9'- 6 3/4"	9'- 6 3/4"	-	Front	-	-	-	-	-2 lb
Point	11'- 6 3/4"	11'- 6 3/4"	-	Front	-	-	-	-	-2 lb
Point	13'- 6 3/4"	13'- 6 3/4"	-	Front	-	-	-	-	-2 lb
Point	15'- 6 3/4"	15'- 6 3/4"	-	Front	-	-	-	-	-2 lb

UNFACTORED REACTIONS

ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
1	0'	0'- 9 1/2"	E24(i72)	1907 lb	4700/-2 lb	2 lb	3 lb	2 lb/ -8 lb
2	16'- 9 1/2"	17'- 5"	E25(i73)	1754 lb	4340 lb	2 lb	3 lb	2 lb/ -8 lb

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 1.00

PLY TO PLY CONNECTION

- Zone A: Factored load = 468 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 54. Row = 3, Spacing = 12"
12d (0.148"x3.25") nails properties: D = 0.148" , L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25" , Y1 = 0.75", Y2 = 1.5"
Install fasteners from one face.
X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.



Customer:
Street 1:
City:
Customer Ph...

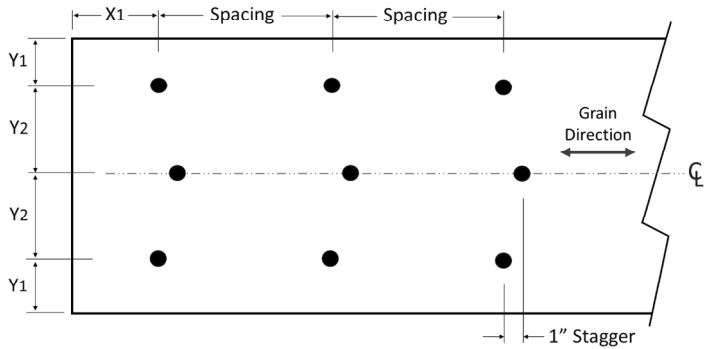
Job Name: **B**
Level: **1st FLOOR**
Label: **FB2-2 - i78**
Type: **Beam**

2 Ply Member
2.0 RigidLam DF LVL 1-3/4
x 18

Status:
Design
Passed

PLY TO PLY CONNECTION

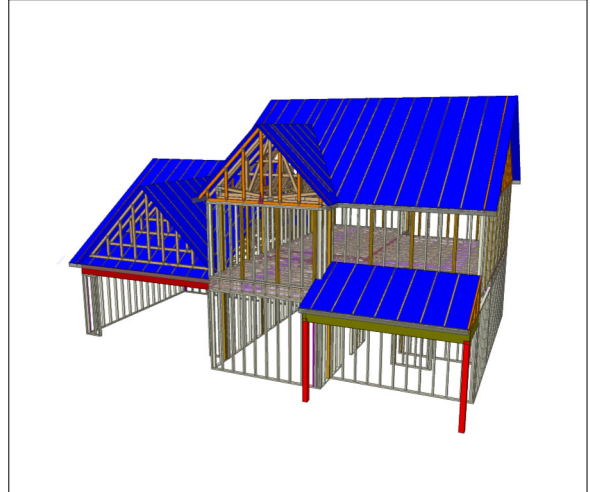
FASTENER INSTALLATION – 3 ROWS (FROM ONE FACE)





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

Phone #:919-775-1450



Builder: New Castle Contractors

Model: 298 Dove - Almirante

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: _____

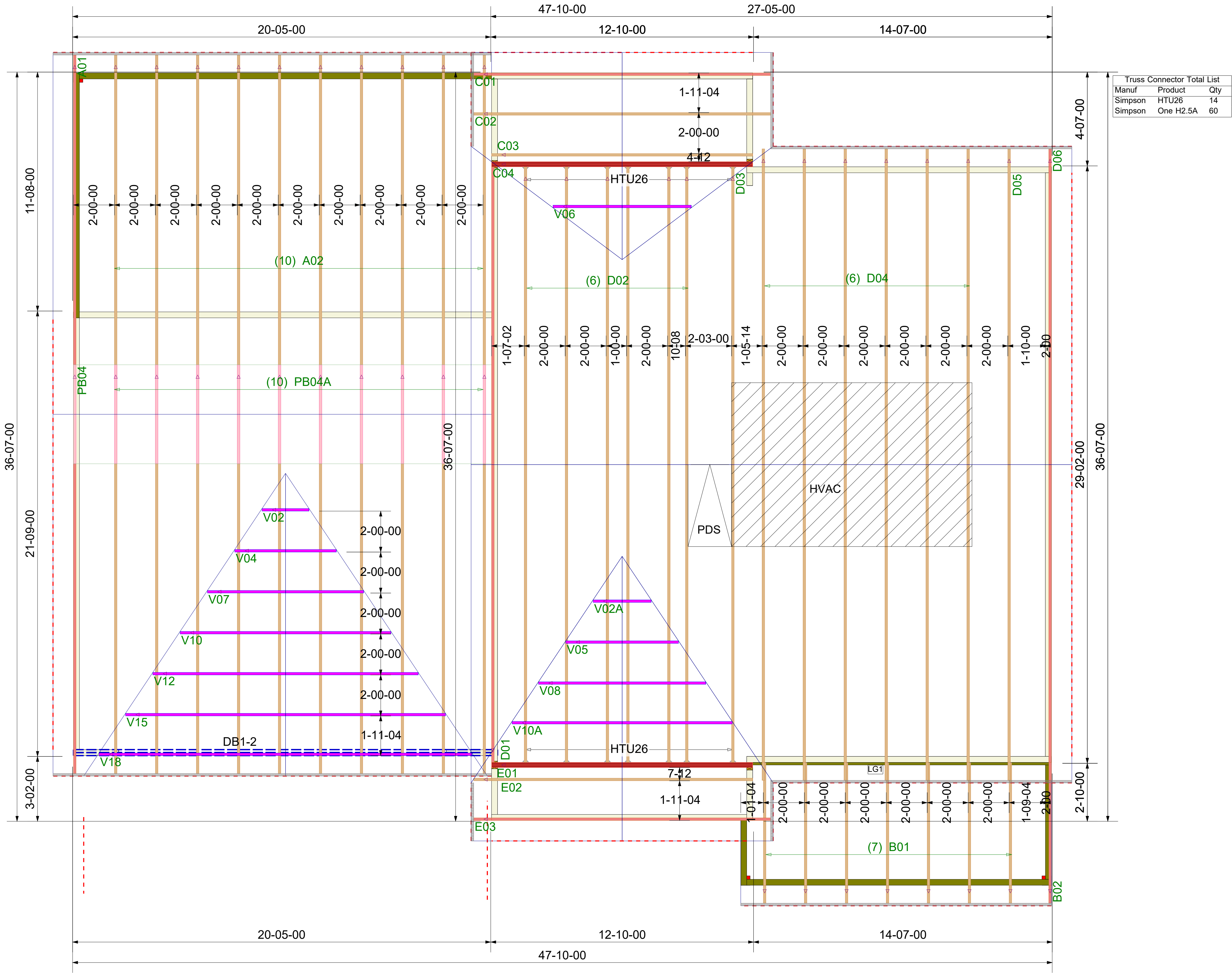
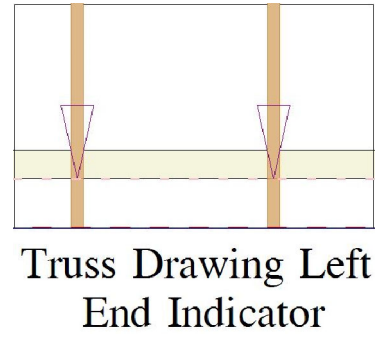
Date: _____

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 BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS.

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS. ** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT. ** TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE.



Truss Connector Total List		
Manuf	Product	Qty
Simpson	HTU26	14
Simpson	One H2.5A	60

** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS. ** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH. ** ALL UPLIFT CONNECTORS SHOWN WITHIN THESE DOCUMENTS ARE RECOMMENDATIONS ONLY. PER ANSII/TPI 1, ALL UPLIFT CONNECTORS ARE THE RESPONSIBILITY OF THE BLDG DESIGNER AND/OR CONTRACTOR.

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



New Castle Contractors	298 Dove - Almirante	ROOF PLACEMENT PLAN
------------------------	----------------------	---------------------

Scale:	NTS
Date:	4/8/2025
Designer:	Nate Donaldson
Project Number:	25040007-B
Sheet Number:	1/1

** 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.

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: 25040007-A
298 Dove-Roof-Almirante

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: I72617022 thru I72617052

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

North Carolina COA: C-0844



April 10, 2025

Gilbert, Eric

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.

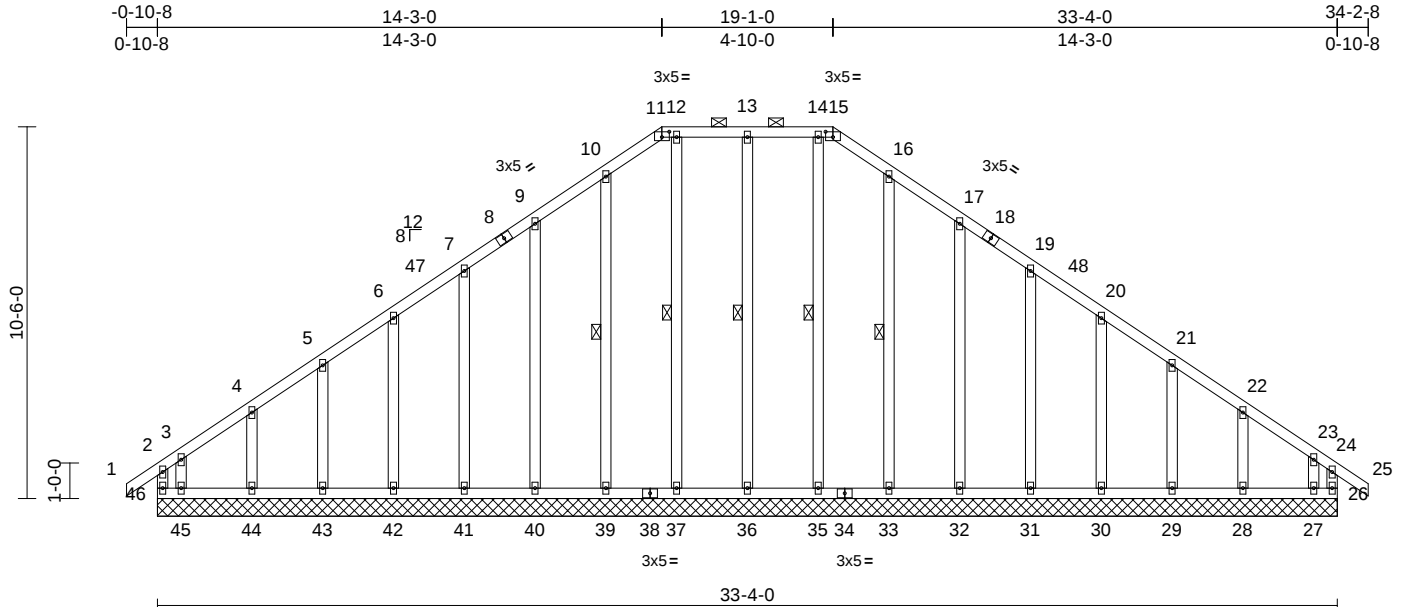
Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617022
25040007-A	A01	Piggyback Base Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:47

Page: 1

ID:mfGPxtzAlp6JfgV?soo5frzHsGN-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwRCDoi7J4zJC?r



Scale = 1:65.1

Plate Offsets (X, Y): [11:0-2-8,0-1-13], [15:0-2-8,0-1-13]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.01	26	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR							
BCDL	10.0										
										Weight: 259 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-15.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 13-36, 12-37, 10-39, 14-35, 16-33

REACTIONS (size)

26=33-4-0, 27=33-4-0, 28=33-4-0, 29=33-4-0, 30=33-4-0, 31=33-4-0, 32=33-4-0, 33=33-4-0, 35=33-4-0, 36=33-4-0, 37=33-4-0, 39=33-4-0, 40=33-4-0, 41=33-4-0, 42=33-4-0, 43=33-4-0, 44=33-4-0, 45=33-4-0, 46=33-4-0
Max Horiz 46=-256 (LC 12)
Max Uplift 26=-165 (LC 13), 27=-237 (LC 15), 28=-53 (LC 15), 29=-57 (LC 15), 30=-56 (LC 15), 31=-55 (LC 15), 32=-66 (LC 15), 33=-27 (LC 15), 36=-40 (LC 10), 39=-31 (LC 14), 40=-64 (LC 14), 41=-55 (LC 14), 42=-56 (LC 14), 43=-57 (LC 14), 44=-52 (LC 14), 45=-281 (LC 14), 46=-283 (LC 12)

FORCES

TOP CHORD

BOT CHORD

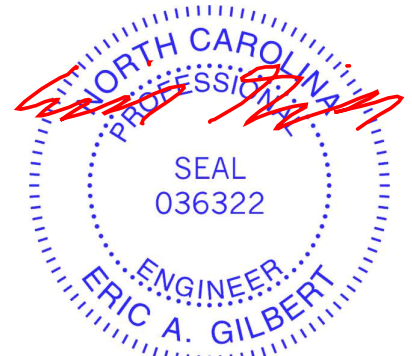
Max Grav 26=254 (LC 15), 27=224 (LC 13), 28=167 (LC 53), 29=163 (LC 26), 30=188 (LC 53), 31=221 (LC 41), 32=219 (LC 41), 33=218 (LC 41), 35=208 (LC 22), 36=232 (LC 40), 37=208 (LC 21), 39=218 (LC 41), 40=219 (LC 41), 41=221 (LC 41), 42=187 (LC 51), 43=163 (LC 25), 44=165 (LC 51), 45=309 (LC 12), 46=353 (LC 11)
(lb) - Maximum Compression/Maximum Tension
2-46=-217/164, 1-2=0/33, 2-3=-247/220, 3-4=-162/159, 4-5=-141/137, 5-6=-125/133, 6-7=-119/155, 7-9=-108/186, 9-10=-134/244, 10-11=-150/277, 11-12=-129/253, 12-13=-129/253, 13-14=-129/253, 14-15=-129/253, 15-16=-150/277, 16-17=-134/244, 17-19=-108/185, 19-20=-84/133, 20-21=-70/90, 21-22=-84/77, 22-23=-111/96, 23-24=-195/135, 24-25=0/33, 24-26=-158/93
45-46=-107/134, 44-45=-107/134, 43-44=-107/134, 42-43=-107/134, 41-42=-107/134, 40-41=-107/134, 39-40=-107/134, 37-39=-107/134, 36-37=-107/134, 35-36=-107/134, 33-35=-107/134, 32-33=-107/134, 31-32=-107/134, 30-31=-107/134, 29-30=-107/134, 28-29=-107/134, 27-28=-107/134, 26-27=-107/134

WEBS

13-36=-193/68, 12-37=-169/28, 10-39=-179/54, 9-40=-191/88, 7-41=-188/78, 6-42=-163/80, 5-43=-138/79, 4-44=-144/82, 3-45=-149/164, 14-35=-169/6, 16-33=-179/50, 17-32=-191/89, 19-31=-188/78, 20-30=-163/80, 21-29=-138/79, 22-28=-144/82, 23-27=-110/144

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-8-0, Exterior(2N) 2-8-0 to 10-8-0, Corner(3R) 10-8-0 to 22-8-0, Exterior(2N) 22-8-0 to 30-8-0, Corner(3E) 30-8-0 to 34-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



April 10, 2025

Continued on page 2

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

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante
25040007-A	A01	Piggyback Base Supported Gable	1	1	172617022
			Job Reference (optional)		

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 283 lb uplift at joint 46, 165 lb uplift at joint 26, 40 lb uplift at joint 36, 31 lb uplift at joint 39, 64 lb uplift at joint 40, 55 lb uplift at joint 41, 56 lb uplift at joint 42, 57 lb uplift at joint 43, 52 lb uplift at joint 44, 281 lb uplift at joint 45, 27 lb uplift at joint 33, 66 lb uplift at joint 32, 55 lb uplift at joint 31, 56 lb uplift at joint 30, 57 lb uplift at joint 29, 53 lb uplift at joint 28 and 237 lb uplift at joint 27.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

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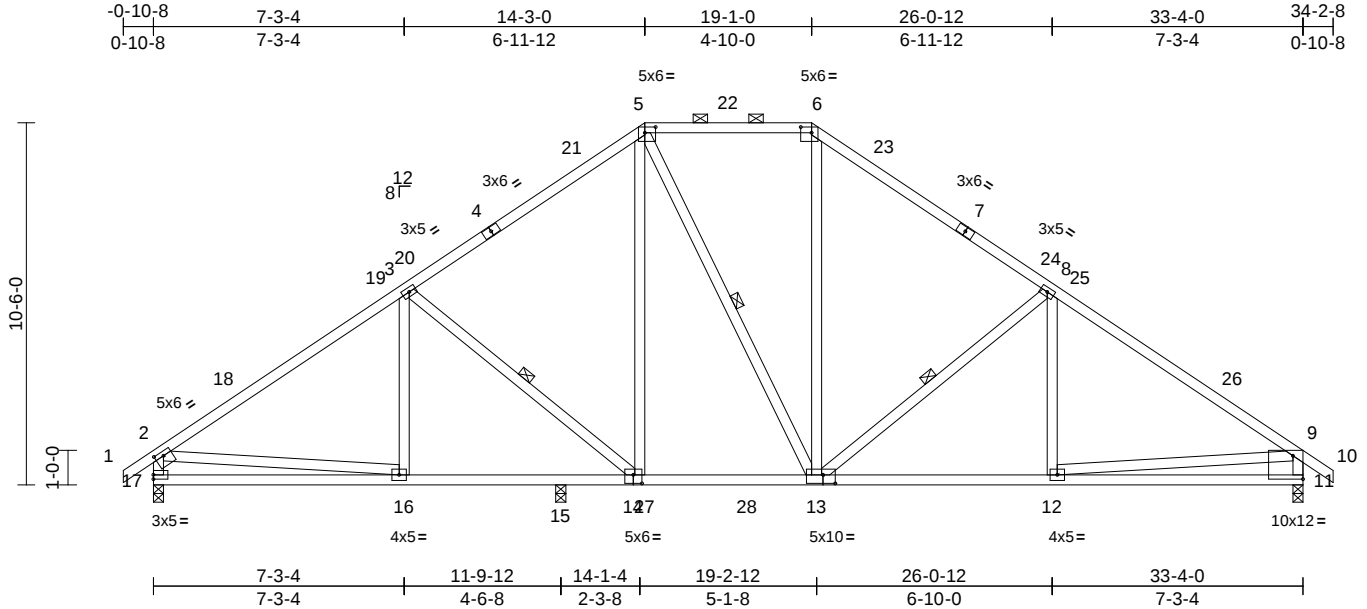
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617023
25040007-A	A02	Piggyback Base	10	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:49
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Page: 1



Scale = 1:66.8

Plate Offsets (X, Y): [2:0-3-0,0-1-8], [5:0-3-12,0-2-0], [6:0-3-12,0-2-0], [11:Edge,0-8-2], [13:0-4-4,0-3-0], [14:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.12	13-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.21	16-17	>663	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.05	11	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 220 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-5,6-7:2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 13-5:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-11-4 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 3-14, 5-13, 8-13
REACTIONS (size) 11=0-3-8, 15=0-3-8, 17=0-3-8
Max Horiz 17=-264 (LC 12)
Max Uplift 11=-145 (LC 15), 17=-140 (LC 14)
Max Grav 11=1523 (LC 53), 15=303 (LC 51), 17=1431 (LC 51)

FORCES

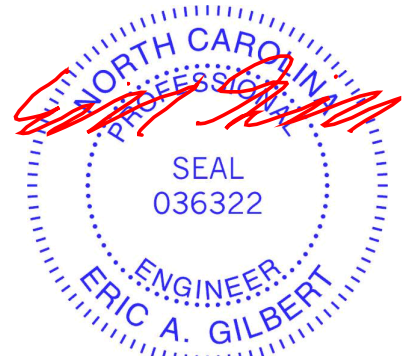
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-2002/179, 3-5=-1632/218, 5-6=-1314/238, 6-8=-1724/218, 8-9=-2168/187, 9-10=0/34, 2-17=-1426/178, 9-11=-1538/182
BOT CHORD 16-17=-261/589, 15-16=-172/1589, 12-15=-172/1727, 11-12=-124/421
WEBS 3-16=-66/157, 3-14=-572/207, 5-14=-65/335, 5-13=-97/300, 6-13=-48/510, 8-13=-640/207, 8-12=0/215, 2-16=-1/1163, 9-12=0/1341

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-5-8, Interior (1) 2-5-8 to 9-6-7, Exterior(2R) 9-6-7 to 23-9-9, Interior (1) 23-9-9 to 30-10-8, Exterior(2E) 30-10-8 to 34-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17 and 11. This connection is for uplift only and does not consider lateral forces.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



April 10,2025

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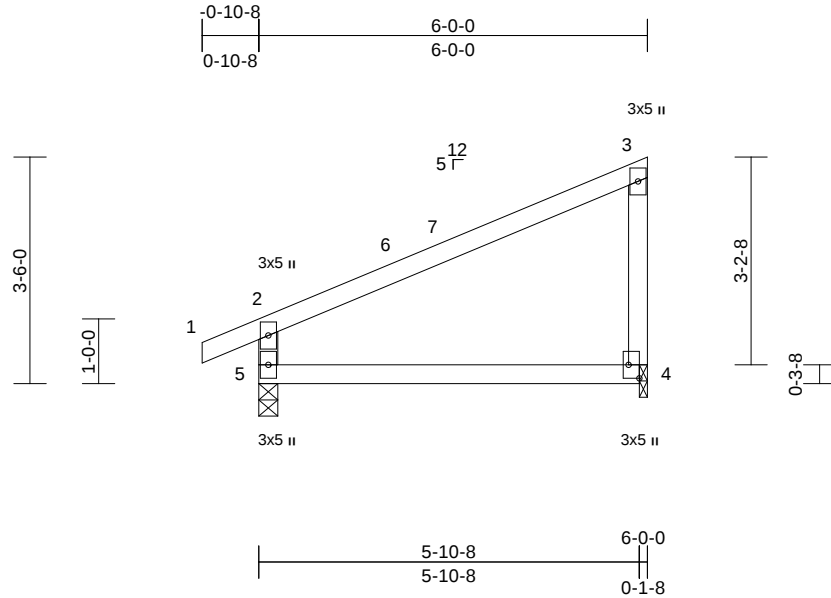
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617024
25040007-A	B01	Monopitch	7	1	Job Reference (optional)	

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

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Page: 1



Scale = 1:35.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.04	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.08	4-5	>826	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 25 lb	FT = 20%

LUMBER

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

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) 4=0-1-8, 5=0-3-8
Max Horiz 5=127 (LC 11)
Max Uplift 4=-49 (LC 14), 5=-43 (LC 14)
Max Grav 4=315 (LC 21), 5=388 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/24, 2-3=-171/53, 3-4=-237/136,
2-5=-352/203
BOT CHORD 4-5=-34/91

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-10-4, Exterior(2E) 2-10-4 to 5-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 4. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



April 10,2025

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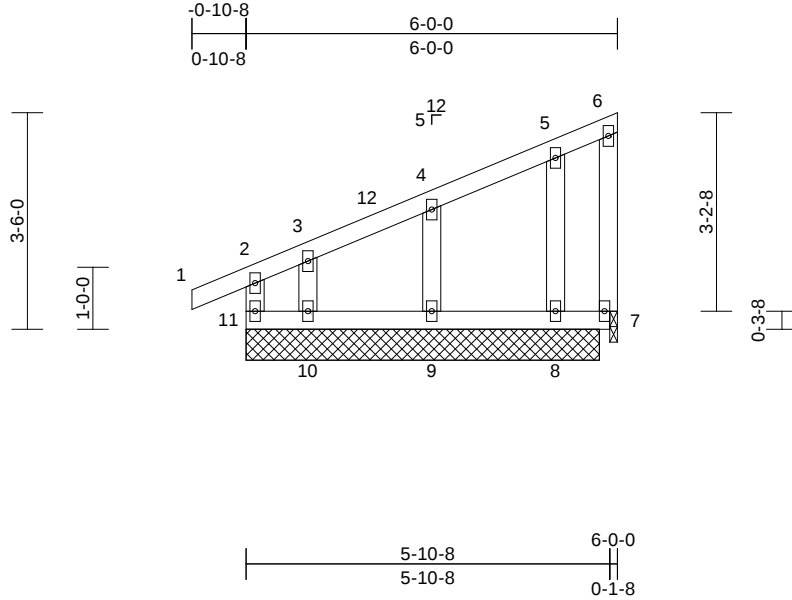
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617025
25040007-A	B02	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:49
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Page: 1



Scale = 1:37.2

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.00	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.00	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 33 lb	FT = 20%

LUMBER

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

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)	7=5-8-8, 8=5-8-8, 9=5-8-8, 10=5-8-8, 11=5-8-8
	Max Horiz	11=124 (LC 13)
	Max Uplift	7=-20 (LC 13), 8=-24 (LC 14), 9=-36 (LC 14), 10=-98 (LC 11)
	Max Grav	7=19 (LC 21), 8=173 (LC 21), 9=237 (LC 21), 10=136 (LC 21), 11=147 (LC 26)

FORCES

(lb) - Maximum Compression/Maximum Tension

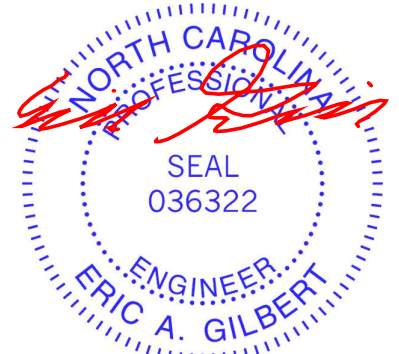
TOP CHORD	2-11=-112/99, 1-2=0/23, 2-3=-138/145, 3-4=-71/105, 4-5=-59/82, 5-6=-42/61, 6-7=-18/19
BOT CHORD	10-11=-41/67, 9-10=-41/67, 8-9=-41/67, 7-8=-41/67
WEBS	4-9=-195/181, 3-10=-142/164, 5-8=-141/106

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 2-10-4, Corner(3E) 2-10-4 to 5-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

LOAD CASE(S) Standard



April 10, 2025

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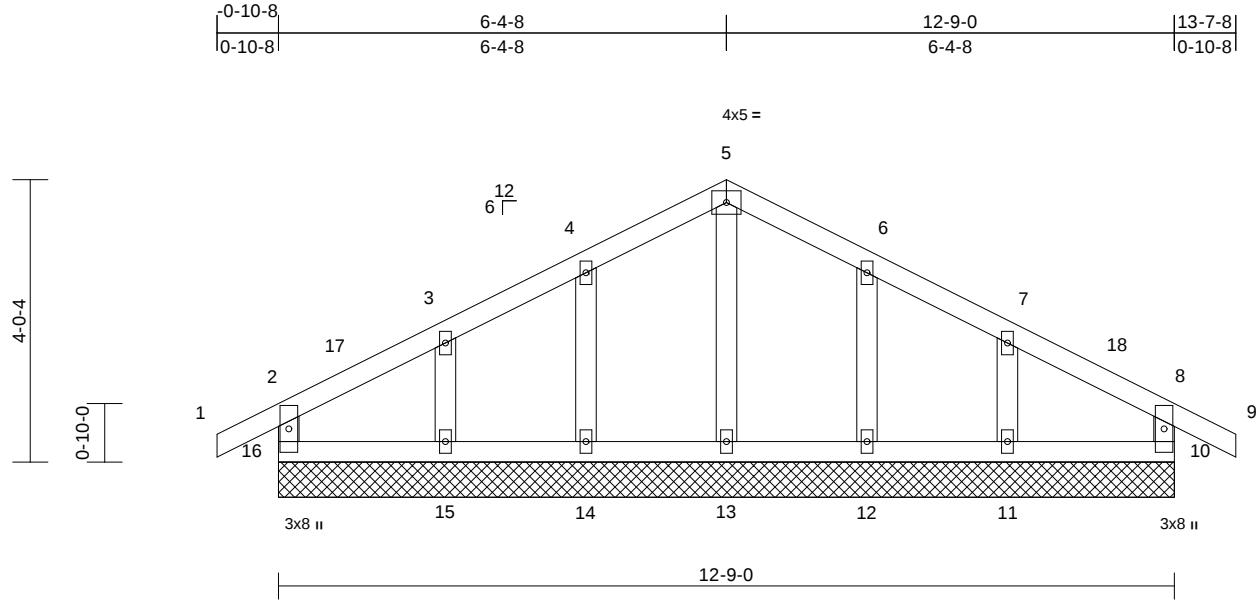
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	172617026
25040007-A	C01	Common Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:49
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Page: 1



Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	10	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR							
BCDL	10.0										
										Weight: 61 lb	FT = 20%

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

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)
10=12-9-0, 11=12-9-0, 12=12-9-0, 13=12-9-0, 14=12-9-0, 15=12-9-0, 16=12-9-0
Max Horiz 16=-60 (LC 12)
Max Uplift 10=-23 (LC 15), 11=-56 (LC 15), 12=-41 (LC 15), 14=-41 (LC 14), 15=-59 (LC 14), 16=-24 (LC 15)
Max Grav 10=161 (LC 22), 11=233 (LC 22), 12=235 (LC 22), 13=144 (LC 22), 14=235 (LC 21), 15=233 (LC 21), 16=161 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-16=-142/124, 1-2=0/27, 2-3=-47/47, 3-4=-50/108, 4-5=-65/167, 5-6=-65/167, 6-7=-50/108, 7-8=-44/42, 8-9=0/27, 8-10=-142/120
BOT CHORD 15-16=-19/58, 14-15=-19/58, 13-14=-19/58, 12-13=-19/58, 11-12=-19/58, 10-11=-19/58
WEBS 5-13=-104/0, 4-14=-198/110, 3-15=-188/120, 6-12=-198/109, 7-11=-188/125

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-4-8, Exterior(2N) 2-4-8 to 3-4-8, Corner(3R) 3-4-8 to 9-4-8, Exterior(2N) 9-4-8 to 10-4-8, Corner(3E) 10-4-8 to 13-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C- C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 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 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 16, 23 lb uplift at joint 10, 41 lb uplift at joint 14, 59 lb uplift at joint 15, 41 lb uplift at joint 12 and 56 lb uplift at joint 11.

LOAD CASE(S) Standard



April 10, 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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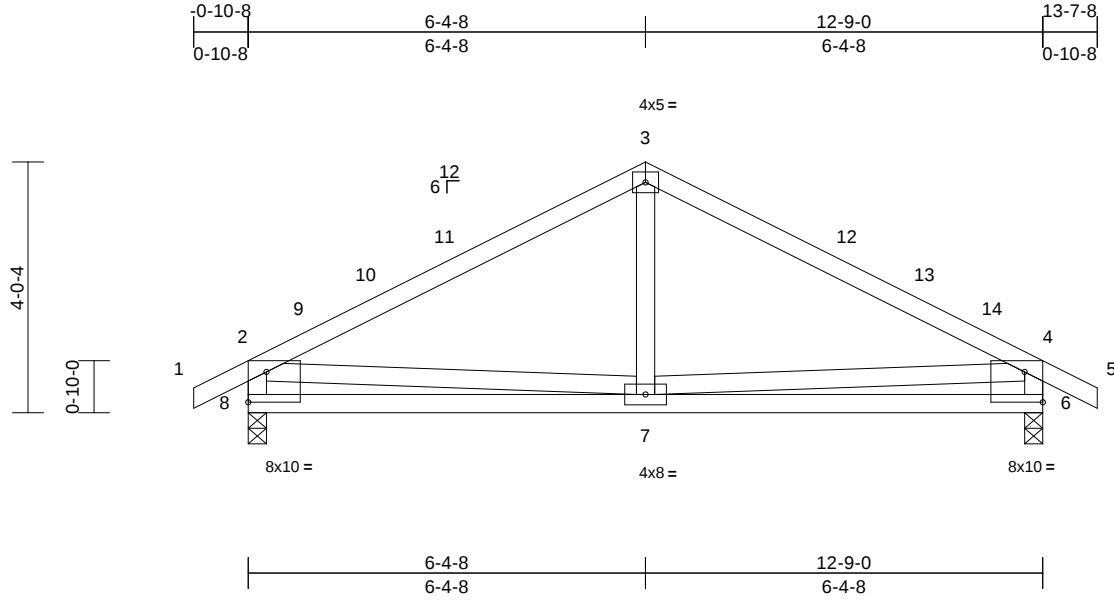
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	172617027
25040007-A	C02	Common	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:49
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Page: 1



Scale = 1:37

Plate Offsets (X, Y): [6:Edge,0-5-13], [8:Edge,0-5-13]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.03	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.06	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 67 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 8-2,6-4:2x4 SP No.2

BRACING

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

REACTIONS (size) 6=0-3-8, 8=0-3-8
Max Horiz 8=-62 (LC 12)
Max Uplift 6=-66 (LC 15), 8=-66 (LC 14)
Max Grav 6=652 (LC 22), 8=652 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-672/207, 3-4=-672/207, 4-5=0/27, 2-8=-598/249, 4-6=-598/247
BOT CHORD 7-8=-173/545, 6-7=-165/545
WEBS 3-7=0/250, 2-7=-65/296, 4-7=-65/296

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-4-8, Exterior(2R) 3-4-8 to 9-4-8, Interior (1) 9-4-8 to 10-7-8, Exterior(2E) 10-7-8 to 13-7-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-0" tall by 2'-0" wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



April 10, 2025

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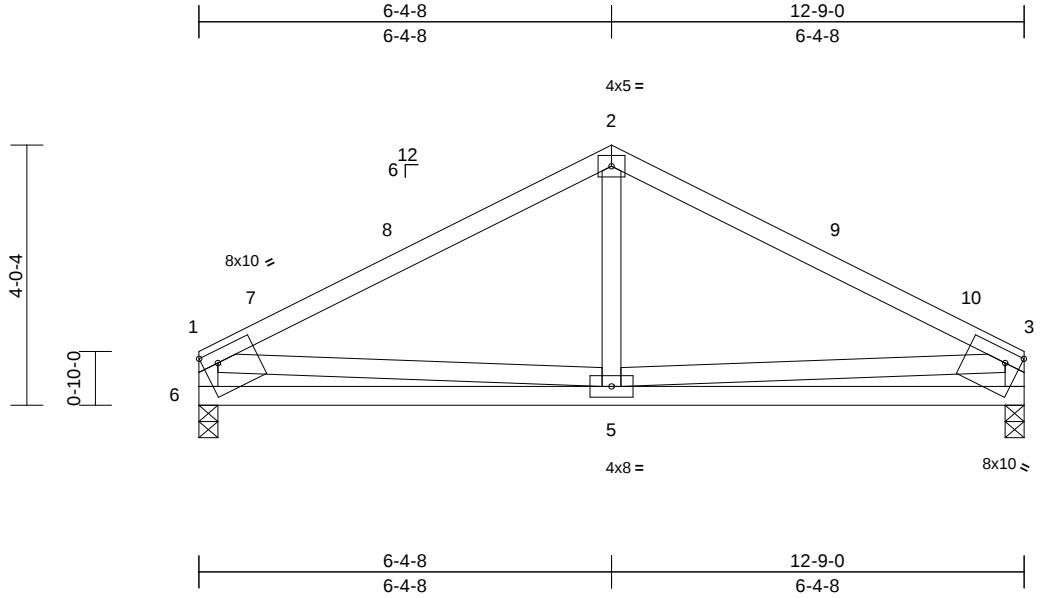
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	172617028
25040007-A	C03	Common	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:49
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Page: 1



Scale = 1:35.6

Plate Offsets (X, Y): [1:Edge,0-2-4], [4:Edge,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.03	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.07	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 64 lb	FT = 20%

LUMBER

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

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) 4=0-3-8, 6=0-3-8
Max Horiz 6=-57 (LC 10)
Max Uplift 4=-46 (LC 15), 6=-46 (LC 14)
Max Grav 4=590 (LC 21), 6=590 (LC 20)

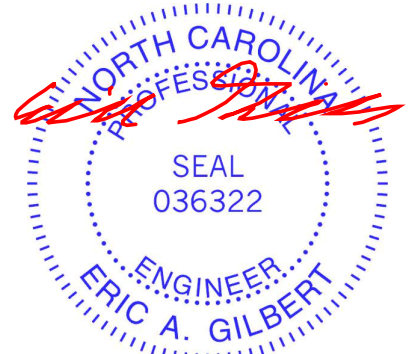
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-675/220, 2-3=-675/220, 1-6=-534/203, 3-4=-534/201
BOT CHORD 5-6=-114/381, 4-5=-122/381
WEBS 2-5=0/243, 1-5=0/350, 3-5=-1/350

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Exterior(2R) 3-1-12 to 9-7-4, Exterior(2E) 9-7-4 to 12-7-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 4. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



April 10, 2025

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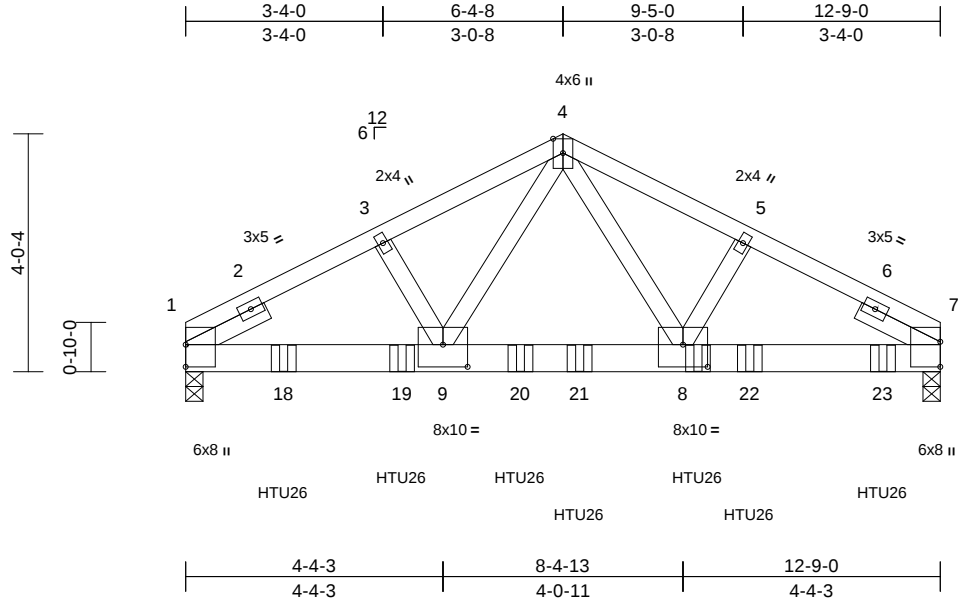
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	172617029
25040007-A	C04	Common Girder	1	2	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:49
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Page: 1



Scale = 1:38.9

Plate Offsets (X, Y): [8:0-5-0,0-4-8], [9:0-5-0,0-4-8]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.09	8-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.16	8-9	>969	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.02	7	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 146 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

BRACING

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

REACTIONS

(size) 1=0-3-8, 7=0-3-8
Max Horiz 1=-49 (LC 38)
Max Uplift 1=-390 (LC 12), 7=-435 (LC 13)
Max Grav 1=4689 (LC 21), 7=5207 (LC 22)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-6832/583, 3-4=-6790/597, 4-5=-7089/623, 5-7=-7130/608
BOT CHORD 1-9=-523/6004, 8-9=-357/4606, 7-8=-496/6242
WEBS 4-8=-322/3643, 5-8=-44/313, 4-9=-276/3094, 3-9=-43/304

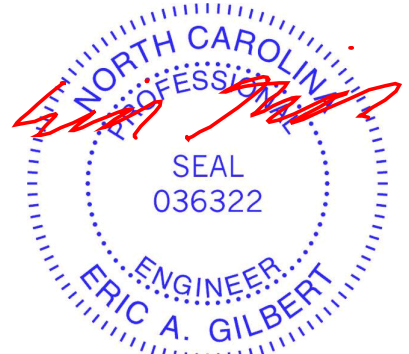
NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 7. This connection is for uplift only and does not consider lateral forces.
- Use Simpson Strong-Tie HTU26 (10-16d Girder, 14-10dx1 1/2 Truss) or equivalent spaced at 2-3-0 oc max. starting at 1-7-14 from the left end to 11-9-6 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-58, 4-7=-58, 10-14=-19
Concentrated Loads (lb)
Vert: 8=-1106 (F), 18=-1106 (F), 19=-1106 (F), 20=-1106 (F), 21=-1106 (F), 22=-1106 (F), 23=-1106 (F)



April 10, 2025

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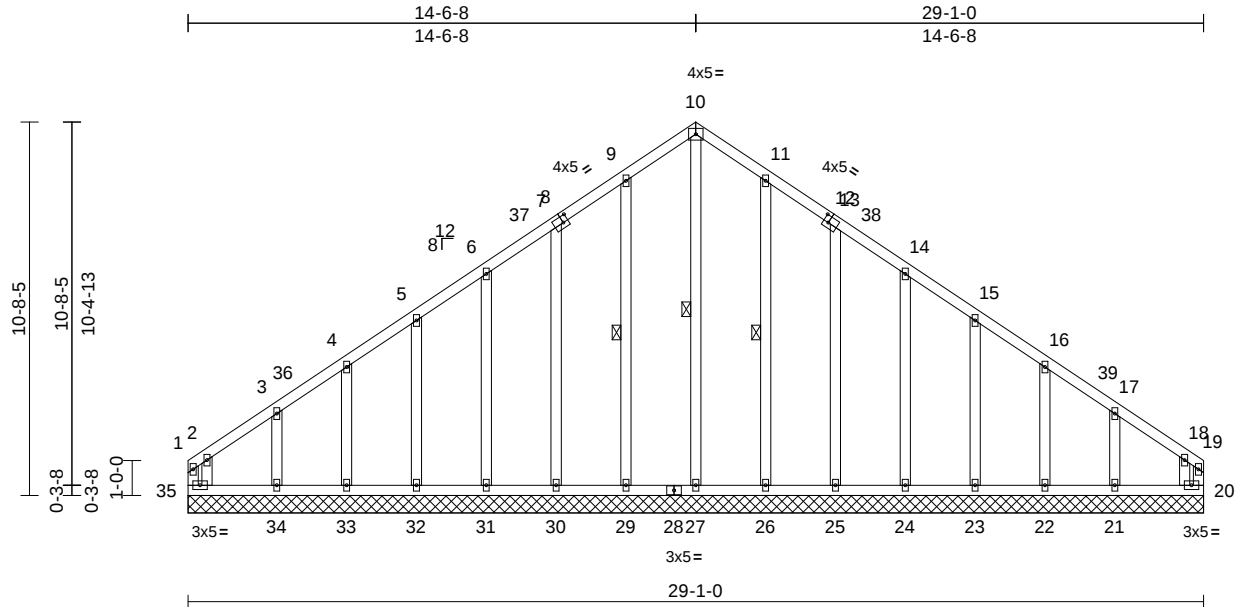
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	172617030
25040007-A	D01	Common Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:49
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Page: 1



Scale = 1:66

Plate Offsets (X, Y): [7:0-1-12,0-2-4], [12:0-1-12,0-2-4]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horiz(TL)	0.01	20	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR							
BCDL	10.0										
Weight: 213 lb FT = 20%											

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3 *Except* 27-10:2x4 SP No.2

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.

WEBS	1 Row at midpt	10-27, 9-29, 11-26
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REACTIONS	(size)	20=29-1-0, 21=29-1-0, 22=29-1-0, 23=29-1-0, 24=29-1-0, 25=29-1-0, 26=29-1-0, 27=29-1-0, 29=29-1-0, 30=29-1-0, 31=29-1-0, 32=29-1-0, 33=29-1-0, 34=29-1-0, 35=29-1-0
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Max Horiz 35=244 (LC 10)

Max Uplift 20=51 (LC 11), 21=131 (LC 15), 22=34 (LC 15), 23=62 (LC 15), 24=54 (LC 15), 25=62 (LC 15), 26=46 (LC 15), 29=47 (LC 14), 30=62 (LC 14), 31=54 (LC 14), 32=62 (LC 14), 33=30 (LC 14), 34=142 (LC 14), 35=94 (LC 10)

Max Grav 20=159 (LC 24), 21=234 (LC 30), 22=148 (LC 1), 23=168 (LC 25), 24=162 (LC 25), 25=216 (LC 21), 26=249 (LC 21), 27=256 (LC 15), 29=249 (LC 20), 30=216 (LC 20), 31=162 (LC 29), 32=170 (LC 24), 33=148 (LC 1), 34=251 (LC 29), 35=191 (LC 25)

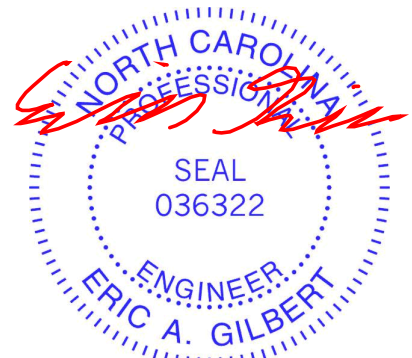
FORCES	(lb) - Maximum Compression/Maximum Tension
--------	--

TOP CHORD	1-35=-113/109, 1-2=-27/14, 2-3=-192/164, 3-4=-147/123, 4-5=-146/135, 5-6=-133/168, 6-7=-139/200, 7-9=-164/255, 9-10=-191/302, 10-11=-191/302, 11-13=-164/255, 13-14=-139/199, 14-15=-116/146, 15-16=-110/111, 16-17=-118/79, 17-18=-141/110, 18-19=-24/24, 19-20=-88/84
BOT CHORD	34-35=-96/124, 33-34=-96/124, 32-33=-96/124, 31-32=-96/124, 30-31=-96/124, 29-30=-96/124, 27-29=-96/124, 26-27=-96/124, 25-26=-96/124, 24-25=-96/124, 23-24=-96/124, 22-23=-96/124, 21-22=-96/124, 20-21=-96/124
WEBS	10-27=-273/119, 9-29=-210/71, 7-30=-177/85, 6-31=-138/78, 5-32=-141/84, 4-33=-129/64, 3-34=-183/145, 2-35=-252/202, 11-26=-210/69, 13-25=-177/85, 14-24=-138/78, 15-23=-141/83, 16-22=-131/62, 17-21=-171/137, 18-20=-184/134

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 11-6-8, Corner(3R) 11-6-8 to 17-6-8, Exterior (2N) 17-6-8 to 25-11-4, Corner(3E) 25-11-4 to 28-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 2x4 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 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



April 10, 2025

Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/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	298 Dove-Roof-Almirante
25040007-A	D01	Common Supported Gable	1	1	I72617030
					Job Reference (optional)

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 35, 51 lb uplift at joint 20, 47 lb uplift at joint 29, 62 lb uplift at joint 30, 54 lb uplift at joint 31, 62 lb uplift at joint 32, 30 lb uplift at joint 33, 142 lb uplift at joint 34, 46 lb uplift at joint 26, 62 lb uplift at joint 25, 54 lb uplift at joint 24, 62 lb uplift at joint 23, 34 lb uplift at joint 22 and 131 lb uplift at joint 21.

LOAD CASE(S) Standard

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

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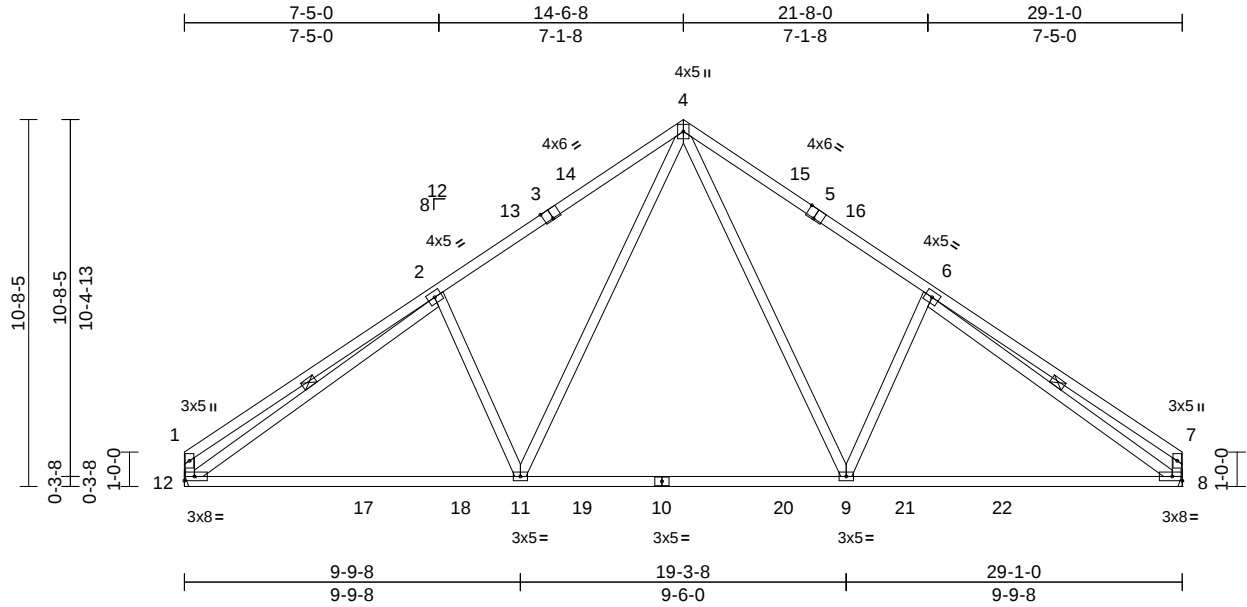
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	172617031
25040007-A	D02	Common	6	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:50
ID:bukNTBsaKYQpX29DCL7RfRzHsFD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:67.2

Plate Offsets (X, Y): [3:0-3-0,Edge], [5:0-3-0,Edge]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.21	8-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.38	8-9	>898	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 174 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 9-4,11-4:2x4 SP No.2

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.
WEBS 1 Row at midpt 2-12, 6-8

REACTIONS

(size) 8= Mechanical, 12= Mechanical
Max Horiz 12=244 (LC 11)
Max Uplift 8=-93 (LC 15), 12=-93 (LC 14)
Max Grav 8=1314 (LC 25), 12=1314 (LC 24)

FORCES

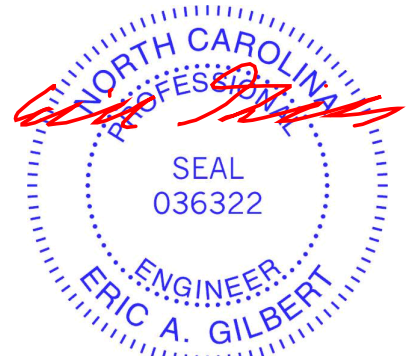
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-636/144, 2-4=-1830/250, 4-6=-1829/251, 6-7=-618/144, 1-12=-505/138, 7-8=-495/138
BOT CHORD 11-12=-168/1494, 9-11=0/996, 8-9=-44/1492
WEBS 4-9=-148/824, 6-9=-380/277, 4-11=-148/826, 2-11=-380/277, 2-12=-1330/77, 6-8=-1348/63

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 11-6-8, Exterior(2R) 11-6-8 to 17-6-8, Interior (1) 17-6-8 to 25-11-4, Exterior(2E) 25-11-4 to 28-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 12 and 93 lb uplift at joint 8.

LOAD CASE(S) Standard



April 10, 2025

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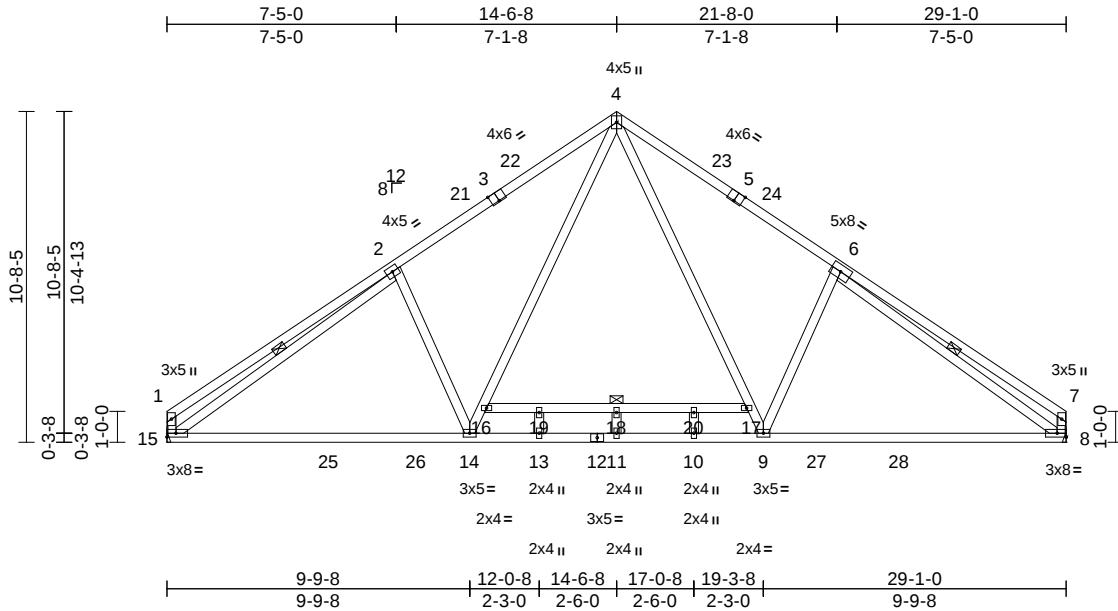
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617032
25040007-A	D03	Common	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:50
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Page: 1



Scale = 1:74.5

Plate Offsets (X, Y): [3:0-3-0,Edge], [5:0-3-0,Edge]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.28	8-9	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.49	8-9	>708	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.05	8	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 189 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except* 12-8:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 9-4,14-4:2x4 SP No.2

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:
1-4-12 oc bracing: 8-9.
WEBS 1 Row at midpt 2-15, 16-17, 6-8

REACTIONS (size) 8= Mechanical, 15= Mechanical
Max Horiz 15=-244 (LC 10)
Max Uplift 8=-93 (LC 15), 15=-93 (LC 14)
Max Grav 8=1269 (LC 25), 15=1271 (LC 29)

FORCES

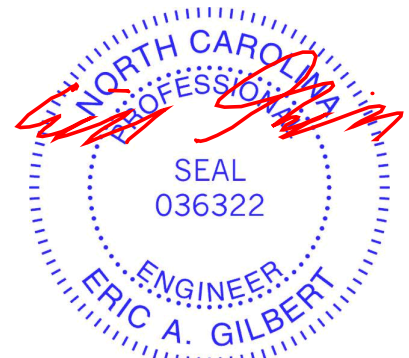
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-649/144, 2-4=-1753/250, 4-6=-1751/251, 6-7=-627/143, 1-15=-512/138, 7-8=-500/137
BOT CHORD 14-15=-168/1432, 13-14=0/974, 11-13=0/974, 10-11=0/974, 9-10=0/974, 8-9=-44/1430
WEBS 4-17=-149/777, 9-17=-141/786, 6-9=-379/277, 14-16=-142/789, 4-16=-148/781, 2-14=-380/277, 2-15=-1238/76, 16-19=-26/7, 18-19=-26/7, 18-20=-26/7, 17-20=-26/7, 6-8=-1258/65, 11-18=0/103, 13-19=-80/0, 10-20=-81/0

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 11-6-8, Exterior(2R) 11-6-8 to 17-6-8, Interior (1) 17-6-8 to 25-11-4, Exterior(2E) 25-11-4 to 28-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 15 and 93 lb uplift at joint 8.

LOAD CASE(S) Standard



April 10, 2025

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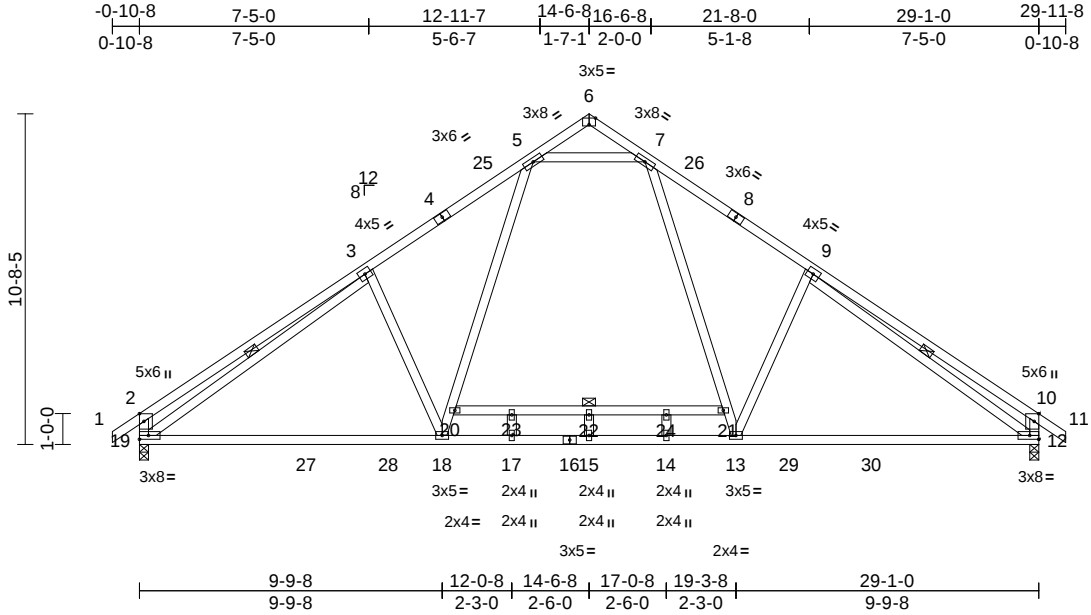
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617033
25040007-A	D04	Common	6	1	Job Reference (optional)	

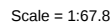
Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1



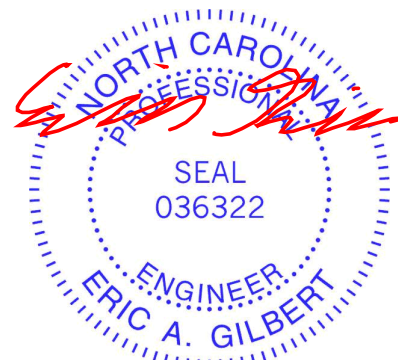
Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:50 Page: 1
ID:cxjo3tT3kIDL2yu9B0wUnazHs6h-RfC?PsB70Hq3NSqPanL8w3uITxbGKWCrDoi7J4zJC?f

[illegible]

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 11-6-8, Exterior(2R) 11-6-8 to 17-6-8, Interior (1) 17-6-8 to 26-11-8, Exterior(2E) 26-11-8 to 29-11-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 10. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



April 10, 2025



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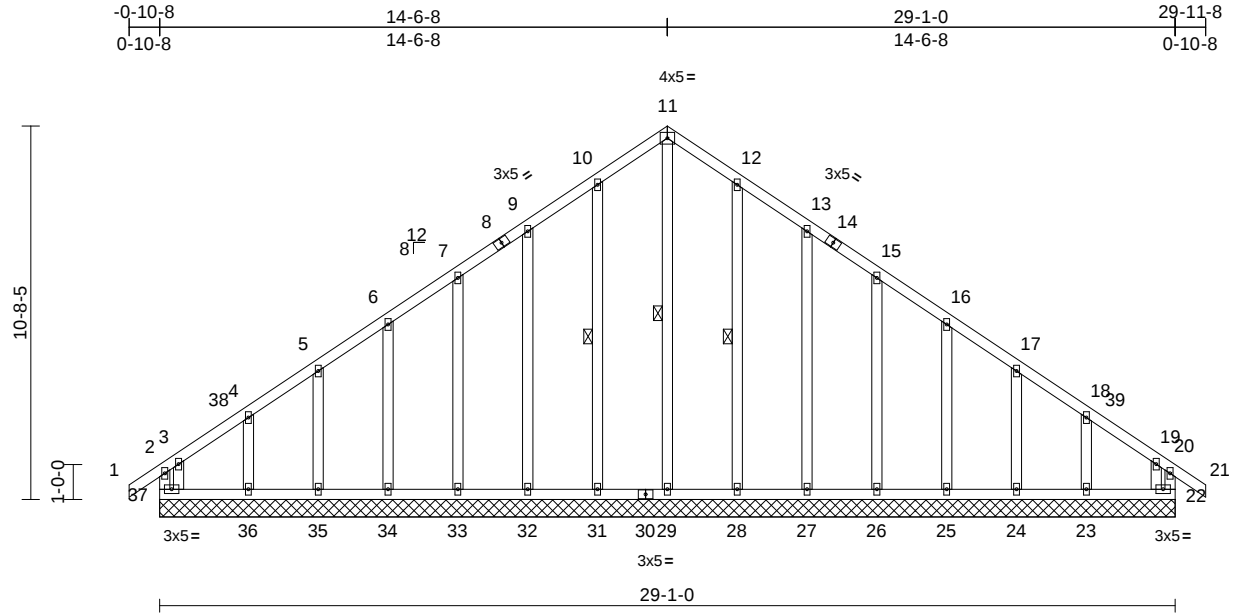
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	172617035
25040007-A	D06	Common Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:50
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Page: 1



Scale = 1:66

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	22	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR							
BCDL	10.0										
Weight: 216 lb FT = 20%											

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3 *Except* 29-11:2x4 SP No.2

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)
22=29-1-0, 23=29-1-0, 24=29-1-0,
25=29-1-0, 26=29-1-0, 27=29-1-0,
28=29-1-0, 29=29-1-0, 31=29-1-0,
32=29-1-0, 33=29-1-0, 34=29-1-0,
35=29-1-0, 36=29-1-0, 37=29-1-0

Max Horiz 37=260 (LC 13)
Max Uplift 22=50 (LC 11), 23=128 (LC 15),
24=35 (LC 15), 25=61 (LC 15),
26=54 (LC 15), 27=62 (LC 15),
28=46 (LC 15), 31=47 (LC 14),
32=62 (LC 14), 33=54 (LC 14),
34=62 (LC 14), 35=31 (LC 14),
36=140 (LC 14), 37=93 (LC 10)
Max Grav 22=193 (LC 25), 23=223 (LC 26),
24=151 (LC 22), 25=168 (LC 31),
26=162 (LC 31), 27=219 (LC 22),
28=249 (LC 22), 29=261 (LC 15),
31=249 (LC 21), 32=219 (LC 21),
33=162 (LC 25), 34=169 (LC 25),
35=151 (LC 21), 36=240 (LC 25),
37=227 (LC 31)

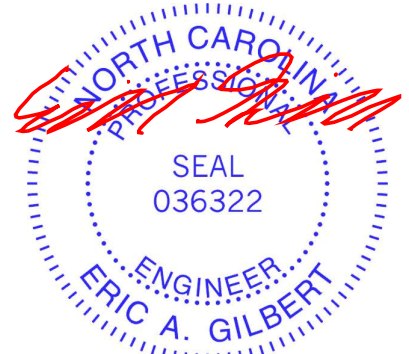
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-37=-161/133, 1-2=0/33, 2-3=-27/29,
3-4=-188/171, 4-5=-142/128, 5-6=-135/141,
6-7=-117/173, 7-9=-124/205, 9-10=-157/259,
10-11=-184/306, 11-12=-184/306,
12-13=-157/259, 13-15=-124/202,
15-16=-99/150, 16-17=-92/114,
17-18=-94/82, 18-19=-133/113,
19-20=-27/62, 20-21=0/33, 20-22=-141/152
BOT CHORD 36-37=-105/131, 35-36=-105/131,
34-35=-105/131, 33-34=-105/131,
32-33=-105/131, 31-32=-105/131,
29-31=-105/131, 28-29=-105/131,
27-28=-105/131, 26-27=-105/131,
25-26=-105/131, 24-25=-105/131,
23-24=-105/131, 22-23=-105/131
WEBS 11-29=-276/111, 10-31=-210/71,
9-32=-181/85, 7-33=-138/78, 6-34=-141/84,
5-35=-131/66, 4-36=-174/143,
3-37=-255/212, 12-28=-210/69,
13-27=-181/85, 15-26=-138/78,
16-25=-140/83, 17-24=-133/63,
18-23=-162/135, 19-22=-188/141

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 11-6-8, Corner(3R) 11-6-8 to 17-6-8, Exterior(2N) 17-6-8 to 26-11-8, Corner(3E) 26-11-8 to 29-11-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 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 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



April 10, 2025

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante
25040007-A	D06	Common Supported Gable	1	1	I72617035
					Job Reference (optional)

13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 37, 50 lb uplift at joint 22, 47 lb uplift at joint 31, 62 lb uplift at joint 32, 54 lb uplift at joint 33, 62 lb uplift at joint 34, 31 lb uplift at joint 35, 140 lb uplift at joint 36, 46 lb uplift at joint 28, 62 lb uplift at joint 27, 54 lb uplift at joint 26, 61 lb uplift at joint 25, 35 lb uplift at joint 24 and 128 lb uplift at joint 23.

LOAD CASE(S) Standard

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

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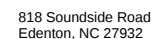
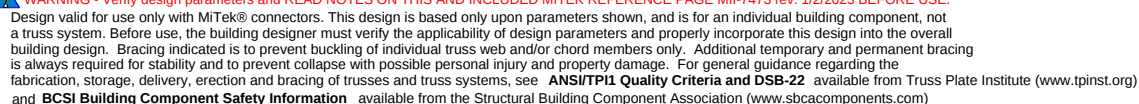


818 Soundside Road
Edenton, NC 27932

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:50 Page: 1
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April 10, 2025



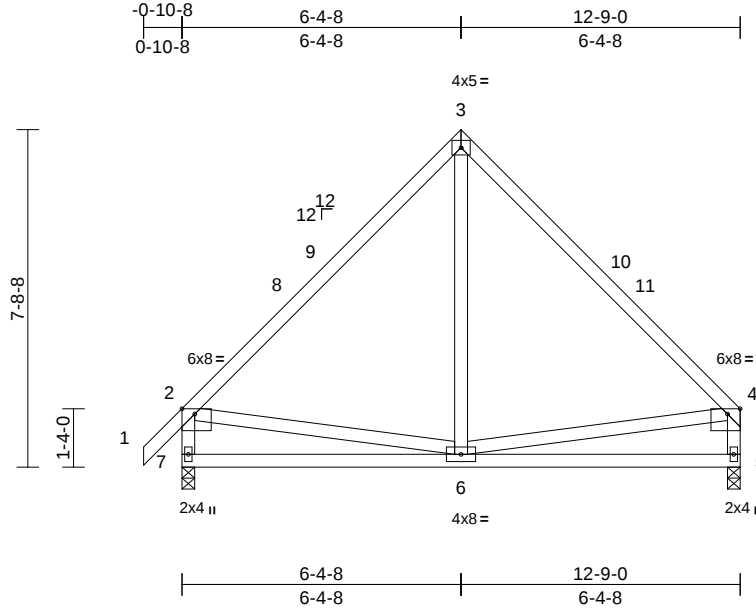
Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	
25040007-A	E02	Common	1	1	Job Reference (optional)	I72617037

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:51

Page: 1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.03	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.06	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 79 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except* 7-2,5-4:2x4 SP No.2

BRACING

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

REACTIONS

(size) 5=0-3-8, 7=0-3-8
 Max Horiz 7=201 (LC 11)
 Max Uplift 5=-38 (LC 14), 7=-41 (LC 14)
 Max Grav 5=577 (LC 22), 7=642 (LC 21)

FORCES

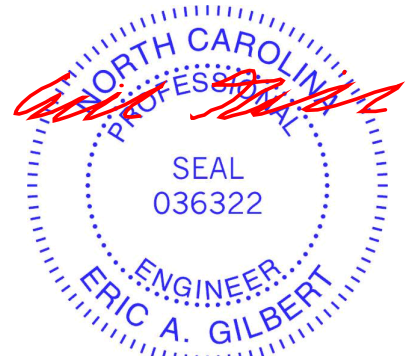
(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/43, 2-3=-555/151, 3-4=-543/140,
 2-7=-586/181, 4-5=-521/133
 BOT CHORD 6-7=-264/345, 5-6=-105/196
 WEBS 3-6=0/250, 2-6=-133/282, 4-6=-81/199

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-4-8, Exterior(2R) 3-4-8 to 9-7-4, Exterior(2E) 9-7-4 to 12-7-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



April 10,2025

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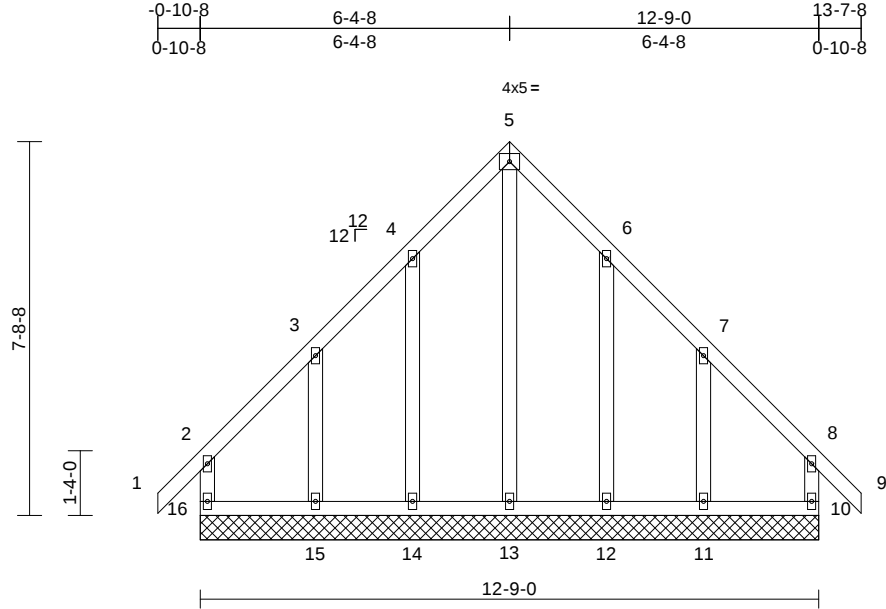
Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617038
25040007-A	E03	Common Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:51

Page: 1

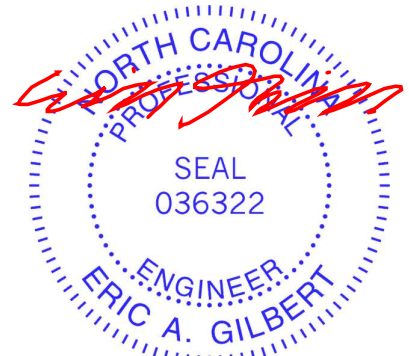
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Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.00	10	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR							
BCDL	10.0										
										Weight: 88 lb	FT = 20%

LUMBER			2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-4-8, Exterior(2N) 2-4-8 to 3-4-8, Corner(3R) 3-4-8 to 9-4-8, Exterior(2N) 9-4-8 to 10-4-8, Corner(3E) 10-4-8 to 13-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C- C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60			LOAD CASE(S) Standard		
TOP CHORD	2x4 SP No.2		3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.					
BOT CHORD	2x4 SP No.2		4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10					
WEBS	2x4 SP No.3		5) Unbalanced snow loads have been considered for this design.					
OTHERS	2x4 SP No.3		6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.					
BRACING			7) All plates are 2x4 MT20 unless otherwise indicated.					
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.		8) Gable requires continuous bottom chord bearing.					
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.		9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).					
REACTIONS (size)			10) Gable studs spaced at 2-0-0 oc.					
	10=12-9-0, 11=12-9-0, 12=12-9-0, 13=12-9-0, 14=12-9-0, 15=12-9-0, 16=12-9-0		11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.					
Max Horiz	16=-202 (LC 12)		12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.					
Max Uplift	10=-86 (LC 11), 11=-159 (LC 15), 12=-76 (LC 15), 14=-75 (LC 14), 15=-161 (LC 14), 16=-96 (LC 10)		13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 16, 86 lb uplift at joint 10, 75 lb uplift at joint 14, 161 lb uplift at joint 15, 76 lb uplift at joint 12 and 159 lb uplift at joint 11.					
Max Grav	10=195 (LC 30), 11=238 (LC 31), 12=272 (LC 22), 13=274 (LC 15), 14=272 (LC 21), 15=242 (LC 30), 16=203 (LC 31)							
FORCES (lb) - Maximum Compression/Maximum Tension								
TOP CHORD	2-16=-162/190, 1-2=0/42, 2-3=-133/132, 3-4=-106/280, 4-5=-162/396, 5-6=-163/396, 6-7=-104/282, 7-8=-122/121, 8-9=0/42, 8-10=-155/179							
BOT CHORD	15-16=-98/107, 14-15=-98/107, 13-14=-98/107, 12-13=-98/107, 11-12=-98/107, 10-11=-98/107							
WEBS	5-13=-471/126, 4-14=-235/141, 3-15=-190/200, 6-12=-235/137, 7-11=-179/215							
NOTES								
1) Unbalanced roof live loads have been considered for this design.								



April 10, 2025

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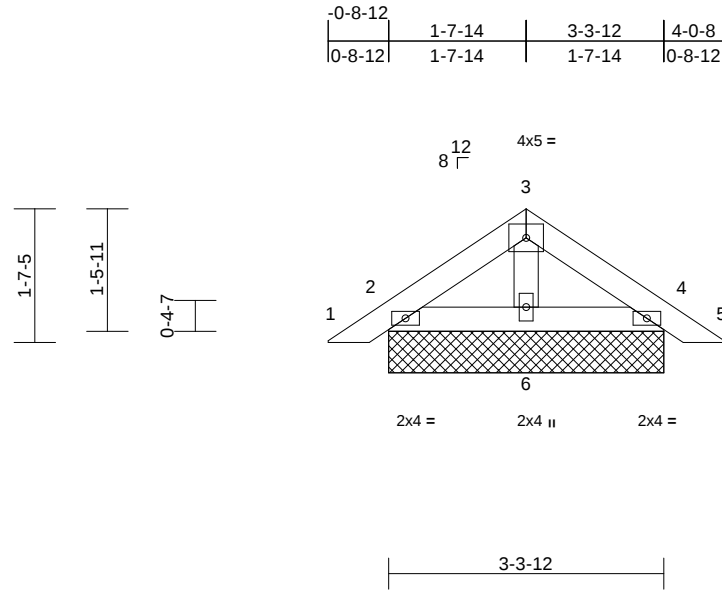
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617039
25040007-A	PB04	Piggyback	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:51
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Page: 1



Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							Weight: 15 lb	FT = 20%
BCDL	10.0											

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=3-3-12, 4=3-3-12, 6=3-3-12
Max Horiz 2=32 (LC 13)
Max Uplift 2=-20 (LC 14), 4=-25 (LC 15), 6=-1 (LC 14)
Max Grav 2=135 (LC 21), 4=135 (LC 22), 6=115 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/23, 2-3=-42/40, 3-4=-42/40, 4-5=0/23
BOT CHORD 2-6=-5/34, 4-6=-5/34
WEBS 3-6=-57/9

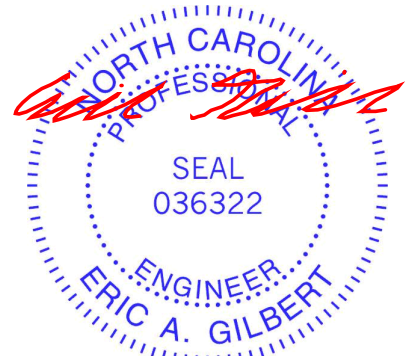
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- N/A

- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



April 10, 2025

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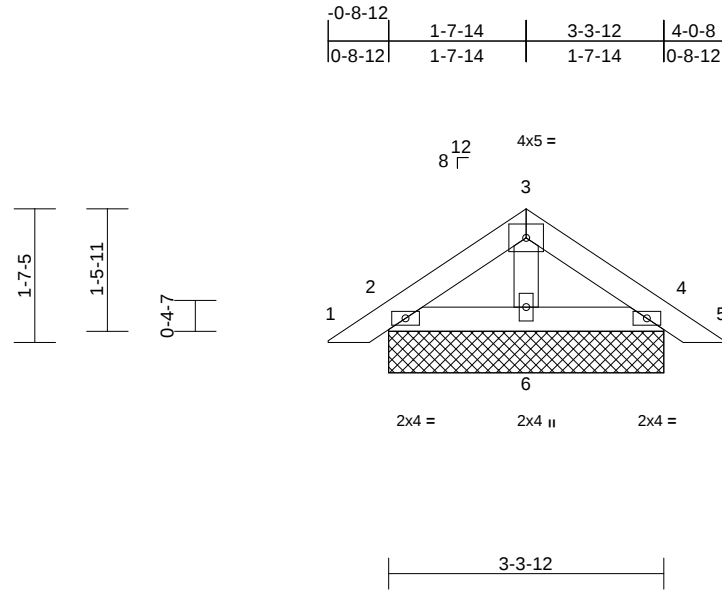
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617040
25040007-A	PB04A	Piggyback	10	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:51
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Page: 1



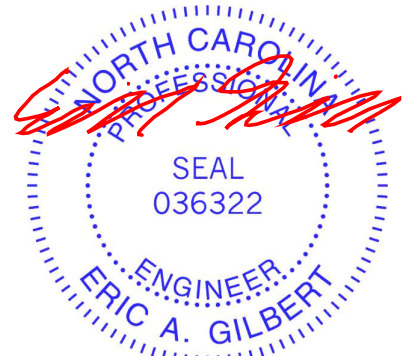
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							Weight: 15 lb	FT = 20%
BCDL	10.0											

LUMBER		
TOP CHORD	2x4	SP No.2
BOT CHORD	2x4	SP No.2
OTHERS	2x4	SP No.3
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 4-10-0 oc purlins.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
REACTIONS		
(size)	2=3-3-12, 4=3-3-12, 6=3-3-12	
Max Horiz	2=33 (LC 13)	
Max Uplift	2=-21 (LC 14), 4=-25 (LC 15), 6=-1 (LC 14)	
Max Grav	2=139 (LC 21), 4=139 (LC 22), 6=119 (LC 1)	
FORCES		
(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-2=0/23, 2-3=-43/41, 3-4=-43/41, 4-5=0/23	
BOT CHORD	2-6=-5/35, 4-6=-5/35	
WEBS	3-6=-59/9	

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 4-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) N/A
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



April 10, 2025

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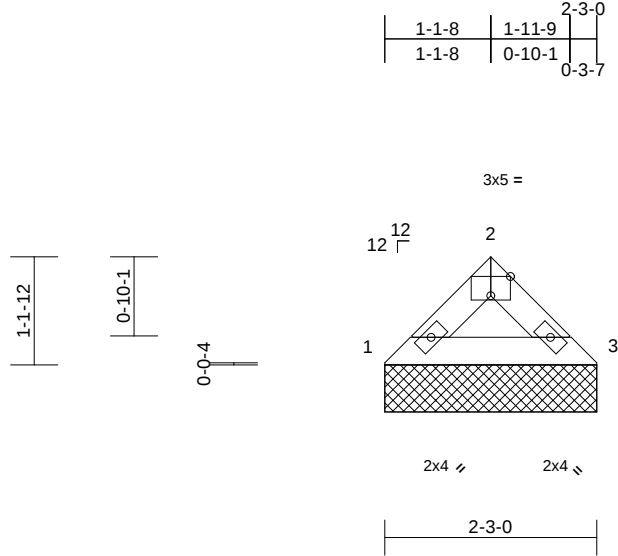
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617041
25040007-A	V02	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu Apr 10 17:12:58
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Page: 1



Scale = 1:24.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 7 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-3-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(lb/size) 1=90/2-3-0, 3=90/2-3-0
Max Horiz 1=-22 (LC 10)
Max Uplift 1=-7 (LC 14), 3=-7 (LC 15)
Max Grav 1=102 (LC 20), 3=102 (LC 21)

FORCES

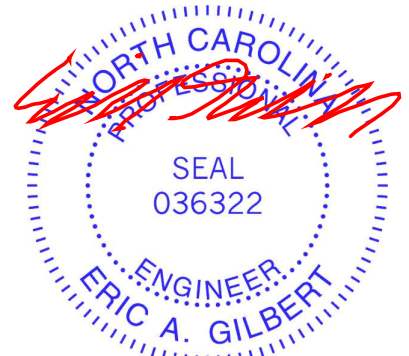
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 1 and 7 lb uplift at joint 3.

LOAD CASE(S) Standard



April 10, 2025

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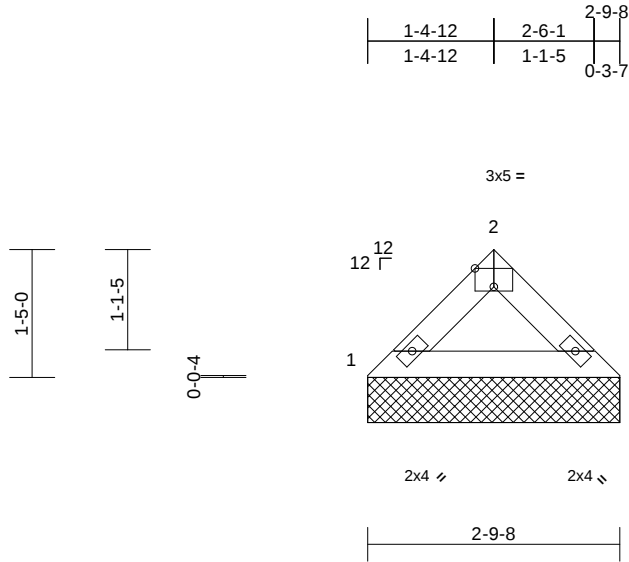
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617042
25040007-A	V02A	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:51
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Page: 1



Scale = 1:25.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 9 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-9-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-9-8, 3=2-9-8
Max Horiz 1=-28 (LC 12)
Max Uplift 1=-8 (LC 14), 3=-8 (LC 15)
Max Grav 1=130 (LC 20), 3=130 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

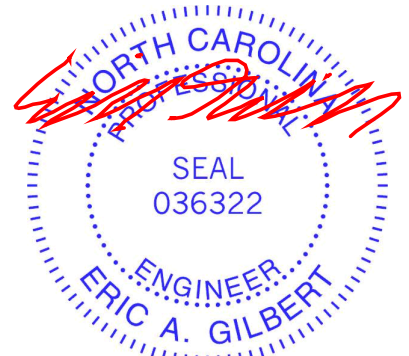
TOP CHORD 1-2=-151/70, 2-3=-151/70
BOT CHORD 1-3=-34/100

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.

- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1 and 8 lb uplift at joint 3.

LOAD CASE(S) Standard



April 10, 2025

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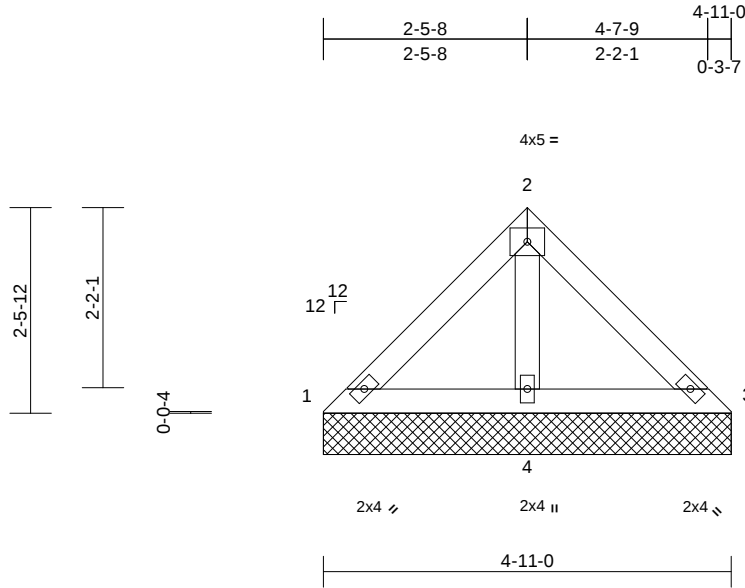
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617043
25040007-A	V04	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:51
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Page: 1



Scale = 1:27.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 19 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size) 1=4-11-0, 3=4-11-0, 4=4-11-0
Max Horiz 1=-53 (LC 10)
Max Uplift 4=-45 (LC 14)
Max Grav 1=94 (LC 20), 3=94 (LC 21), 4=303 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

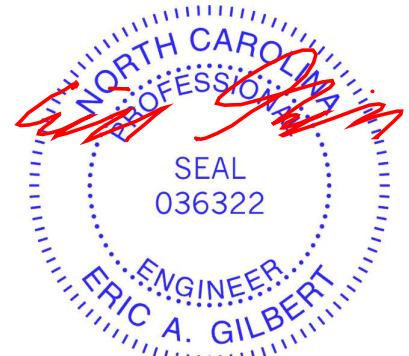
TOP CHORD 1-2=-80/103, 2-3=-80/103
BOT CHORD 1-4=-83/107, 3-4=-83/107
WEBS 2-4=-216/114

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 4.

LOAD CASE(S) Standard



April 10, 2025

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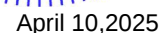
818 Soundside Road
Edenton, NC 27932

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:51 Page: 1
ID:fvcd2VrKoxA5Ik?r4w4za0zHsFF-RfC?PsB70Ha3NSqPanL8w3ulTXbGKWCrD0i7J4zJC?i



NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

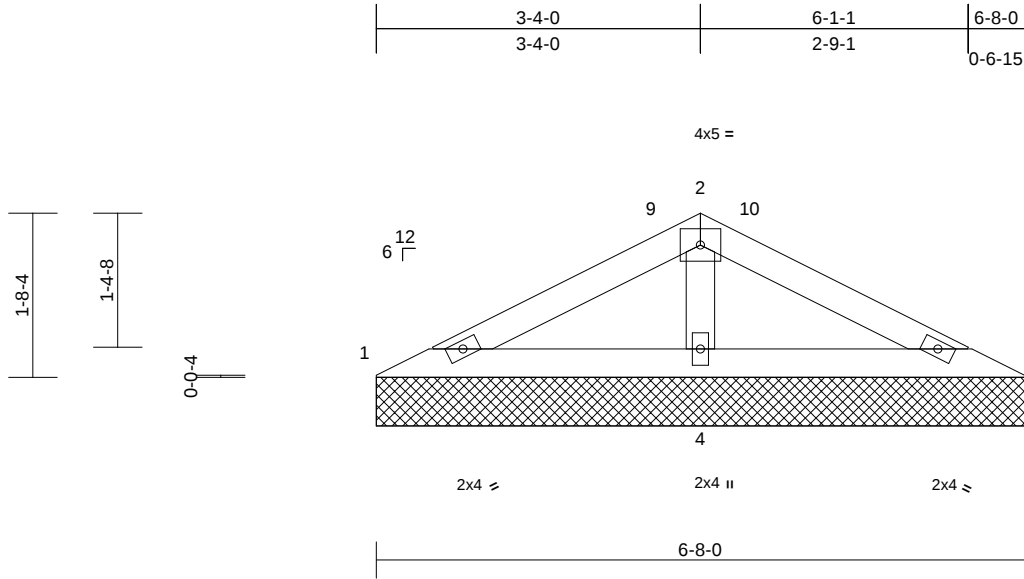


Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617045
25040007-A	V06	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:51
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Page: 1



Scale = 1:23.7

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 21 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-8-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size) 1=6-8-0, 3=6-8-0, 4=6-8-0
Max Horiz 1=23 (LC 14)
Max Uplift 1=-10 (LC 14), 3=-15 (LC 15), 4=-31 (LC 14)
Max Grav 1=103 (LC 20), 3=103 (LC 21), 4=407 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension

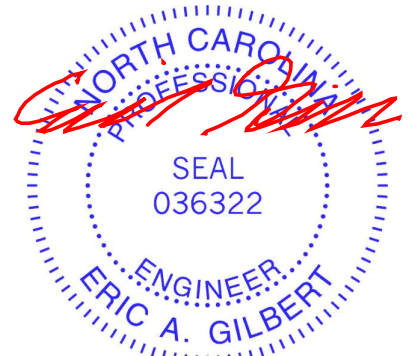
TOP CHORD 1-2=-116/191, 2-3=-116/191
BOT CHORD 1-4=-167/116, 3-4=-167/116
WEBS 2-4=-292/157

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Exterior(2R) 3-0-8 to 3-8-8, Exterior(2E) 3-8-8 to 6-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1, 15 lb uplift at joint 3 and 31 lb uplift at joint 4.

LOAD CASE(S) Standard



April 10,2025

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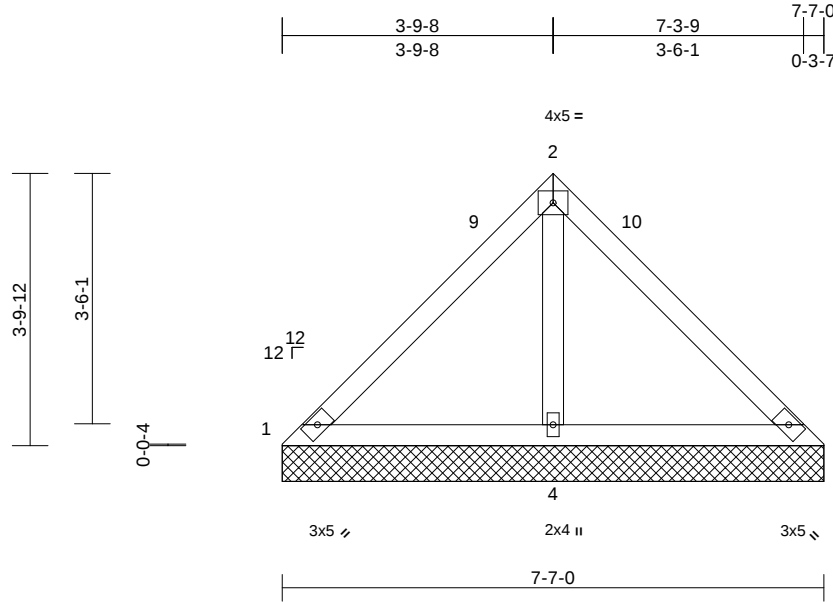
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617046
25040007-A	V07	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:51
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Page: 1



Scale = 1:32.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 31 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 7-7-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	1=7-7-0, 3=7-7-0, 4=7-7-0
Max Horiz	1=-85 (LC 12)
Max Uplift	1=-21 (LC 21), 3=-21 (LC 20), 4=-108 (LC 14)
Max Grav	1=88 (LC 20), 3=88 (LC 21), 4=570 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

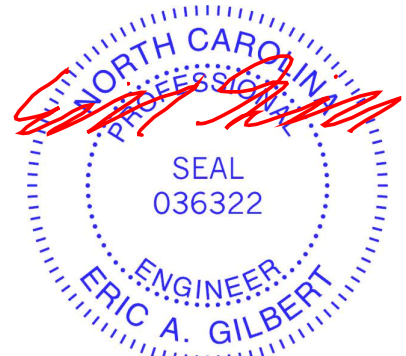
TOP CHORD	1-2=-113/237, 2-3=-113/237
BOT CHORD	1-4=-180/184, 3-4=-180/184
WEBS	2-4=-463/255

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 4-7-4, Exterior(2E) 4-7-4 to 7-7-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1, 21 lb uplift at joint 3 and 108 lb uplift at joint 4.

LOAD CASE(S) Standard



April 10, 2025

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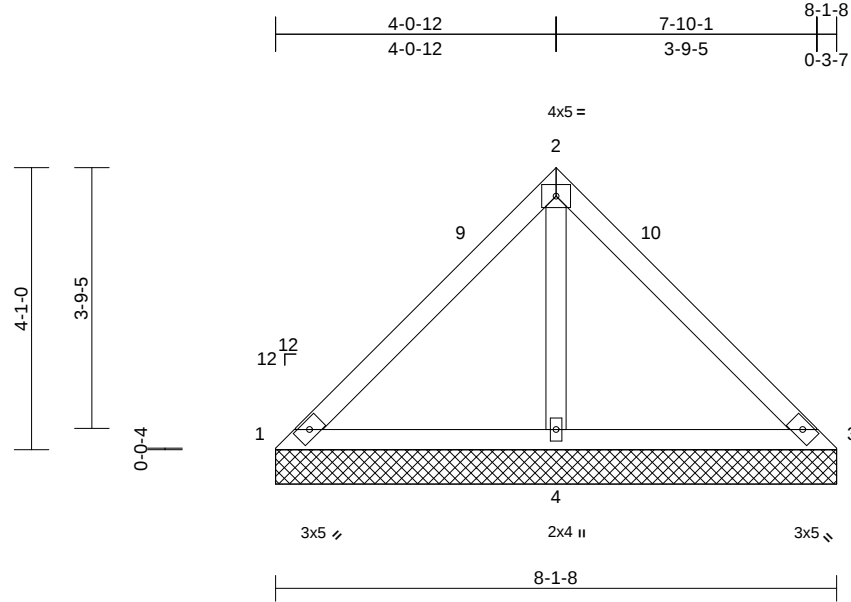
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617047
25040007-A	V08	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:51
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Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	4	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0									Weight: 33 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 8-1-8 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	1=8-1-8, 3=8-1-8, 4=8-1-8
Max Horiz	1=91 (LC 11)
Max Uplift	1=-34 (LC 21), 3=-34 (LC 20), 4=-125 (LC 14)
Max Grav	1=87 (LC 20), 3=87 (LC 21), 4=637 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-132/272, 2-3=-132/272
BOT CHORD	1-4=-204/201, 3-4=-204/201
WEBS	2-4=-521/287

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 5-1-12, Exterior(2E) 5-1-12 to 8-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 1, 34 lb uplift at joint 3 and 125 lb uplift at joint 4.

LOAD CASE(S) Standard



April 10, 2025

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/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

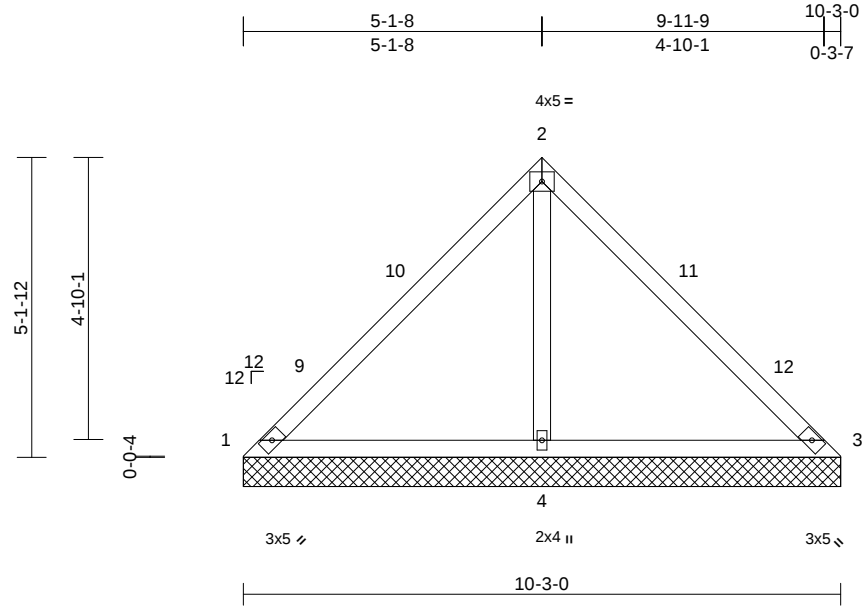
Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617048
25040007-A	V10	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:52

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.49	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horiz(TL)	0.01	4	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 42 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=10-3-0, 3=10-3-0, 4=10-3-0
Max Horiz	1=-116 (LC 10)
Max Uplift	1=-54 (LC 21), 3=-54 (LC 20), 4=-163 (LC 14)
Max Grav	1=88 (LC 20), 3=88 (LC 21), 4=832 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension	
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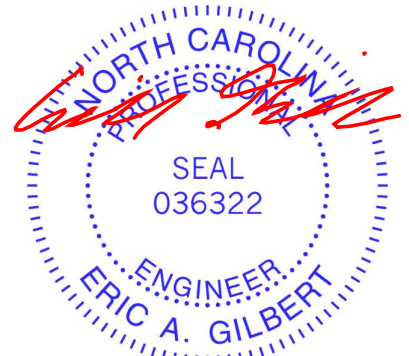
TOP CHORD	1-2=-170/394, 2-3=-170/394
BOT CHORD	1-4=-246/216, 3-4=-246/216
WEBS	2-4=-709/356

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 7-3-4, Exterior(2E) 7-3-4 to 10-3-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 1, 54 lb uplift at joint 3 and 163 lb uplift at joint 4.

LOAD CASE(S) Standard



April 10, 2025

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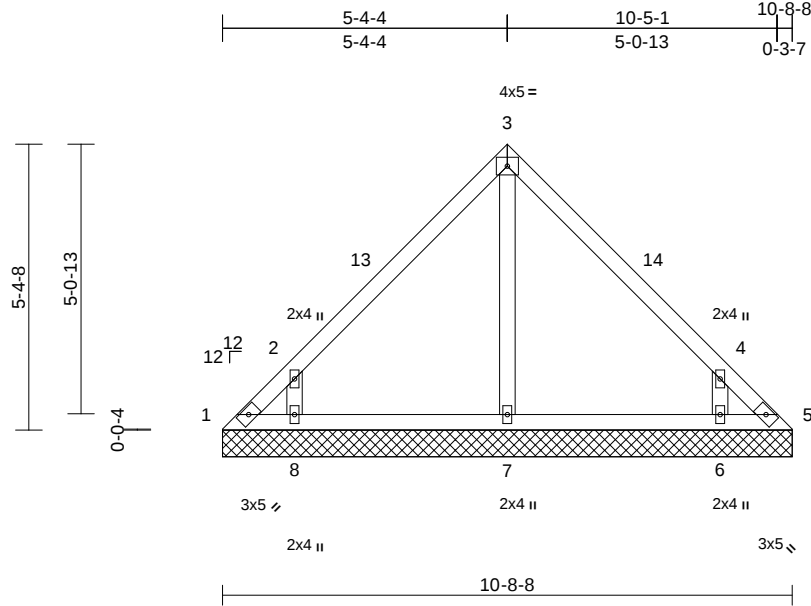
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617049
25040007-A	V10A	Valley	1	1	Job Reference (optional)	

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

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Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 47 lb FT = 20%											

LUMBER

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

BRACING

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

REACTIONS	(size)	1=10-8-8, 5=10-8-8, 6=10-8-8, 7=10-8-8, 8=10-8-8
	Max Horiz	1=-118 (LC 10)
	Max Uplift	1=-73 (LC 12), 5=-43 (LC 13), 6=-165 (LC 15), 8=-171 (LC 14)
	Max Grav	1=102 (LC 14), 5=82 (LC 15), 6=461 (LC 21), 7=225 (LC 20), 8=461 (LC 20)

FORCES

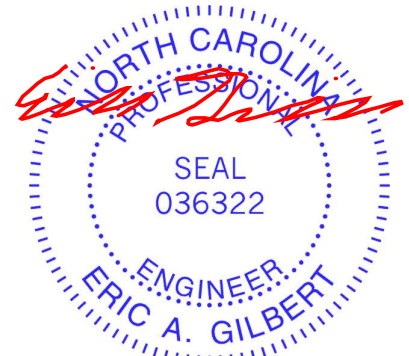
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-183/130, 2-3=-252/122, 3-4=-252/122, 4-5=-161/98
BOT CHORD	1-8=-50/87, 7-8=-33/83, 6-7=-33/83, 5-6=-57/92
WEBS	3-7=-139/0, 2-8=-483/333, 4-6=-483/333

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 7-8-12, Exterior(2E) 7-8-12 to 10-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 1, 43 lb uplift at joint 5, 171 lb uplift at joint 8 and 165 lb uplift at joint 6.

LOAD CASE(S) Standard



April 10,2025

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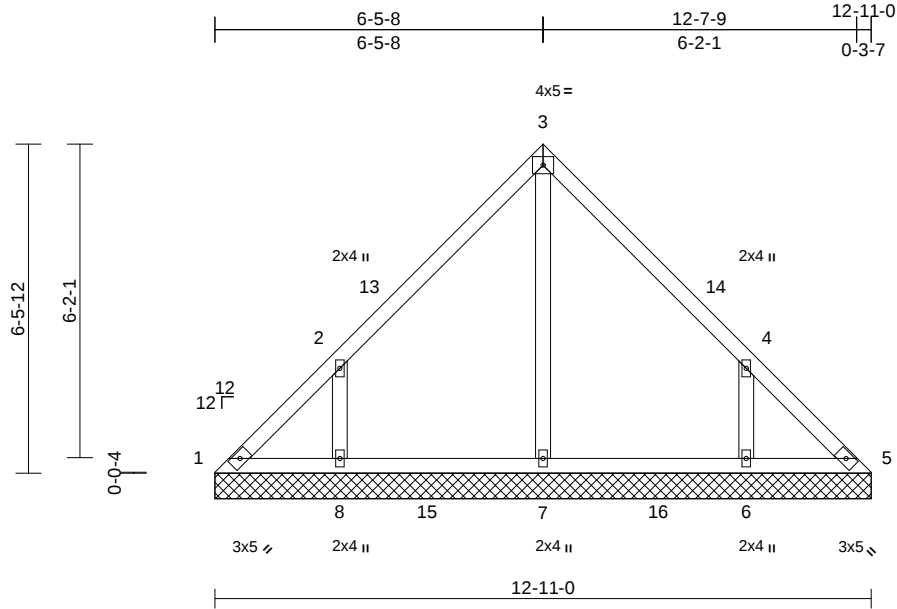
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	172617050
25040007-A	V12	Valley	1	1	Job Reference (optional)	

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

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	5	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 59 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size)	1=12-11-0, 5=12-11-0, 6=12-11-0, 7=12-11-0, 8=12-11-0
Max Horiz	1=-147 (LC 12)
Max Uplift	1=-43 (LC 10), 5=-9 (LC 11), 6=-179 (LC 15), 8=-184 (LC 14)
Max Grav	1=130 (LC 25), 5=104 (LC 29), 6=448 (LC 21), 7=352 (LC 24), 8=448 (LC 20)

FORCES

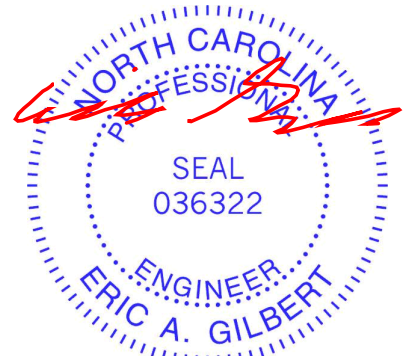
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-151/131, 2-3=-239/135, 3-4=-239/135, 4-5=-129/89
BOT CHORD	1-8=-53/110, 7-8=-53/110, 6-7=-53/110, 5-6=-53/110
WEBS	3-7=-173/0, 2-8=-392/250, 4-6=-392/250

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 3-5-12, Exterior(2R) 3-5-12 to 9-5-12, Interior (1) 9-5-12 to 9-11-4, Exterior(2E) 9-11-4 to 12-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 1, 9 lb uplift at joint 5, 184 lb uplift at joint 8 and 179 lb uplift at joint 6.

LOAD CASE(S) Standard



April 10, 2025

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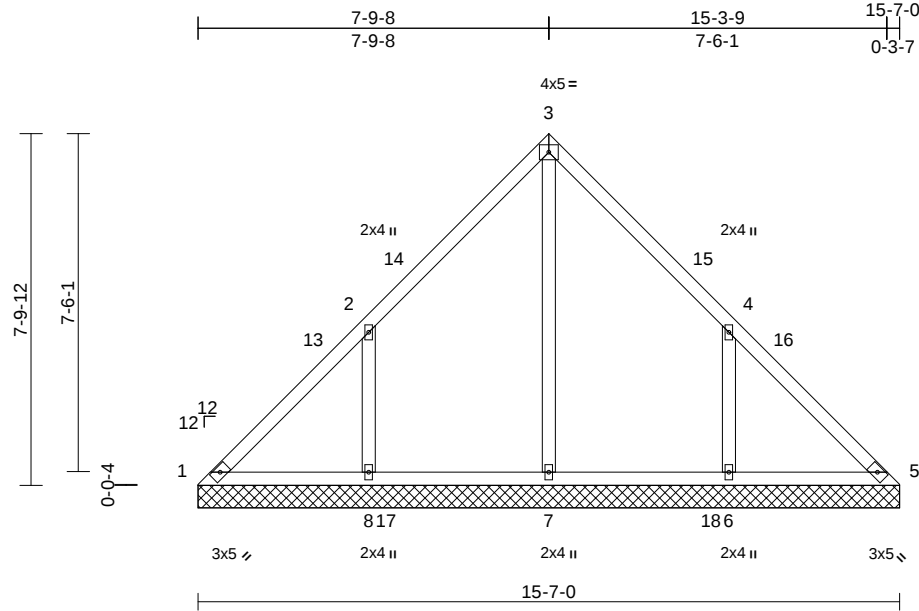
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	I72617051
25040007-A	V15	Valley	1	1	Job Reference (optional)	

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

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horiz(TL)	0.00	5	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 75 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size)	1=15-7-0, 5=15-7-0, 6=15-7-0, 7=15-7-0, 8=15-7-0
Max Horiz	1=-179 (LC 12)
Max Uplift	1=-38 (LC 10), 6=-213 (LC 15), 8=-217 (LC 14)
Max Grav	1=151 (LC 25), 5=124 (LC 27), 6=498 (LC 6), 7=437 (LC 24), 8=498 (LC 5)

FORCES

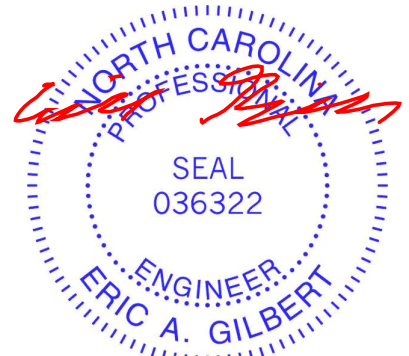
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-174/200, 2-3=-186/150, 3-4=-186/125, 4-5=-152/160
BOT CHORD	1-8=-96/154, 7-8=-96/154, 6-7=-96/154, 5-6=-96/154
WEBS	3-7=-244/0, 2-8=-392/252, 4-6=-392/250

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 4-9-12, Exterior(2R) 4-9-12 to 10-9-12, Interior (1) 10-9-12 to 12-7-4, Exterior(2E) 12-7-4 to 15-7-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 1, 217 lb uplift at joint 8 and 213 lb uplift at joint 6.

LOAD CASE(S) Standard



April 10, 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

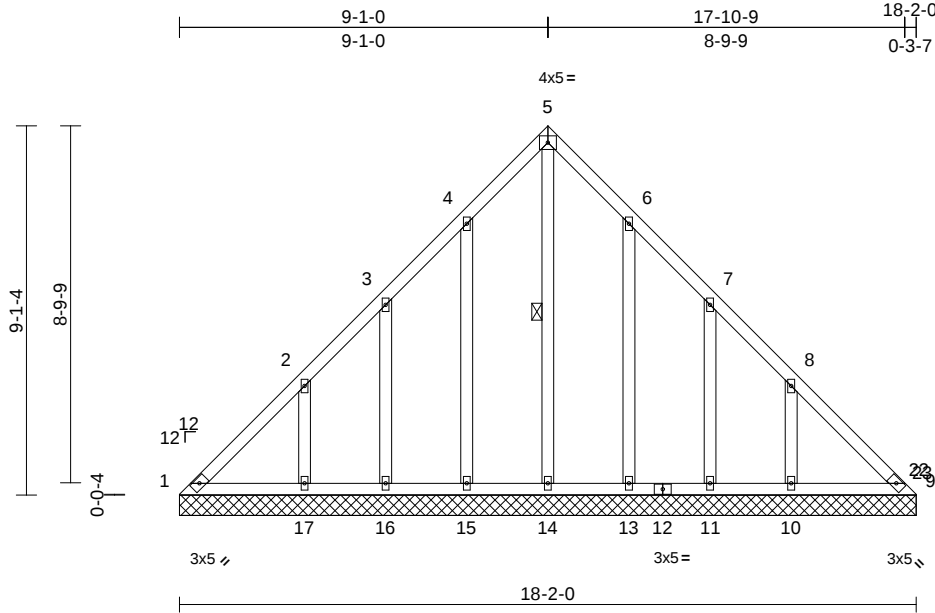
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	298 Dove-Roof-Almirante	172617052
25040007-A	V18	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 08 13:53:52
ID:Pz_xS_6hwVcc5WPJZJ?v8NzHsGB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:56.8

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horiz(TL)	0.01	9	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
										Weight: 117 lb	FT = 20%

LUMBER		
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x4 SP No.2	
OTHERS	2x4 SP No.3	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.	
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	
WEBS	1 Row at midpt	5-14
REACTIONS	(size)	1=18-2-0, 9=18-2-0, 10=18-2-0, 11=18-2-0, 13=18-2-0, 14=18-2-0, 15=18-2-0, 16=18-2-0, 17=18-2-0
	Max Horiz	1=202 (LC 11)
	Max Uplift	1=-49 (LC 12), 9=-14 (LC 13), 10=-111 (LC 15), 11=-94 (LC 15), 13=-94 (LC 15), 15=-97 (LC 14), 16=-90 (LC 14), 17=-119 (LC 14)
	Max Grav	1=149 (LC 26), 9=117 (LC 27), 10=257 (LC 25), 11=170 (LC 21), 13=282 (LC 21), 14=209 (LC 27), 15=282 (LC 20), 16=169 (LC 20), 17=267 (LC 24)
FORCES		
	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-229/185, 2-3=-122/128, 3-4=-81/105, 4-5=-87/178, 5-6=-87/178, 6-7=-68/83, 7-8=-77/79, 8-9=-195/135	
BOT CHORD	1-17=-98/197, 16-17=-98/197, 15-16=-98/197, 14-15=-98/197, 13-14=-98/197, 11-13=-98/197, 10-11=-98/197, 9-10=-98/197	
WEBS	5-14=-184/33, 4-15=-238/130, 3-16=-149/128, 2-17=-202/173, 6-13=-238/130, 7-11=-149/128, 8-10=-201/172	

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-4 to 3-1-4, Exterior(2N) 3-1-4 to 6-1-4, Corner(3R) 6-1-4 to 12-1-4, Exterior(2N) 12-1-4 to 14-10-4, Corner(3E) 14-10-4 to 17-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 1, 14 lb uplift at joint 9, 97 lb uplift at joint 15, 90 lb uplift at joint 16, 119 lb uplift at joint 17, 94 lb uplift at joint 13, 94 lb uplift at joint 11 and 111 lb uplift at joint 10.

LOAD CASE(S) Standard



April 10, 2025

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

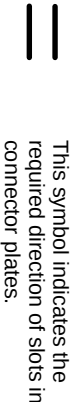
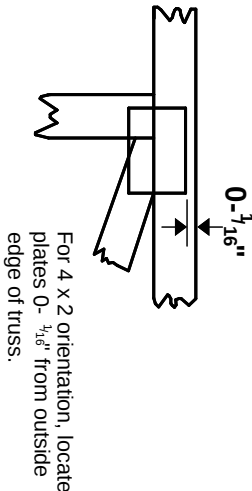
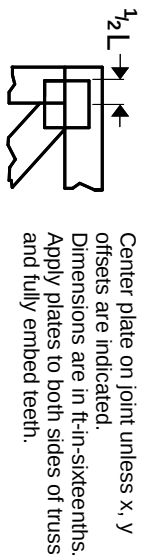
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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)

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818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



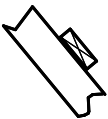
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

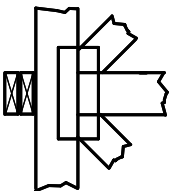
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

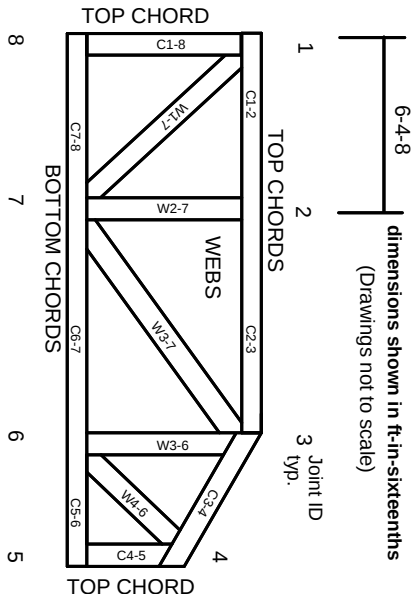
BEARING



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/TPI 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/TPI 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 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: MIL-7473 rev. 1/2/2023



Customer:
Street 1:
City:
Customer Ph...

Job Name: **B**
Level: **1st FLOOR**
Label: **FB1-2 - i64**
Type: **Beam**

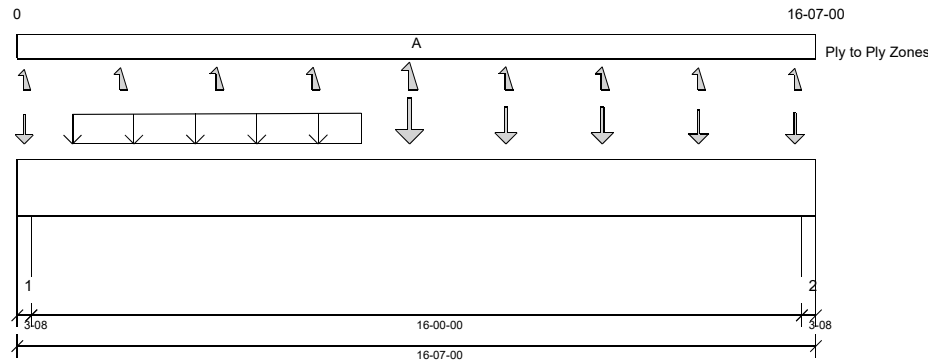
2 Ply Member
2.0 RigidLam DF LVL 1-3/4
x 14

Status:
Design
Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version
8.7.3.303.Update9.26

Report Version: 2021.03.26 06/13/2024 14:48



DESIGN INFORMATION

Building Code: IRC 2018
Design Methodology: ASD
Risk Category: II (General Construction)
Residential
Service Condition: Dry
LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 1'- 10 1/2" Bottom: 16'- 7"

Bearing Stress of Support Material:

- 1323 psi Wall @ 0'- 2 1/2"
- 1323 psi Wall @ 16'- 4 1/2"

ANALYSIS RESULTS

Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Max Pos. Moment:	8'- 1 3/4"	D + Lr	1.15	26863 lb ft	33318 lb ft	Passed - 81%
Max Neg. Moment:	8'- 1 3/4"	0.6D + 0.6W	1.60	6180 lb ft	27051 lb ft	Passed - 23%
Max Shear:	1'- 5 1/2"	D + Lr	1.15	5569 lb	10894 lb	Passed - 51%
Live Load (LL) Pos. Defl.:	8'- 3 9/16"	Lr		0.435"	L/360	Passed - L/441
Total Load (TL) Pos. Defl.:	8'- 3 9/16"	D + Lr		0.766"	L/240	Passed - L/250

SUPPORT AND REACTION INFORMATION

ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result
1	3-08	D + Lr	1.15	6687 lb		9188 lb	16207 lb	Passed - 73%
1	3-08	0.6D + 0.6W	1.60		-1513 lb	-	-	
2	3-08	D + Lr	1.15	6587 lb		9188 lb	16207 lb	Passed - 72%
2	3-08	0.6D + 0.6W	1.60		-1489 lb	-	-	

LOADING

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
Self Weight	0'	16'- 7"	Self Weight	Top	13 lb/ft	-	-	-	-
Tapered	1'- 1 3/4"	7'- 1 3/4"	Smoothed Load	Top	310 lb/ft	-	252 lb/ft	379 To 432 lb/ft	116 To 130 lb/ft
Point	0'- 1 3/4"	0'- 1 3/4"	A02(c09)	Top	510 lb	-	388 lb	589/-29 lb	178/-820 lb
Point	2'- 1 3/4"	2'- 1 3/4"	A02(c01)	Top	-	-	-	-20 lb	-986 lb
Point	4'- 1 3/4"	4'- 1 3/4"	A02(c05)	Top	-	-	-	-17 lb	-1055 lb
Point	6'- 1 3/4"	6'- 1 3/4"	A02(c04)	Top	-	-	-	-19 lb	-1032 lb
Point	8'- 1 3/4"	8'- 1 3/4"	A02(c03)	Top	827 lb	-	725 lb	1226/-14 lb	375/-1505 lb
Point	10'- 1 3/4"	10'- 1 3/4"	A02(c07)	Top	657 lb	-	544 lb	880/-14 lb	268/-1080 lb
Point	12'- 1 3/4"	12'- 1 3/4"	A02(c02)	Top	644 lb	-	531 lb	871/-15 lb	260/-1070 lb
Point	14'- 1 3/4"	14'- 1 3/4"	A02(c10)	Top	598 lb	-	481 lb	762/-14 lb	232/-983 lb
Point	16'- 1 3/4"	16'- 1 3/4"	A02(c06)	Top	540 lb	-	419 lb	659/-47 lb	197/-902 lb

UNFACTORED REACTIONS

ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
1	0'	0'- 3 1/2"	E22(i63)	2955 lb	-	2319 lb	3725/-90 lb	254 lb/-5475 lb
2	16'- 3 1/2"	16'- 7"	E11(i7)	2899 lb	-	2284 lb	3696/-99 lb	254 lb/-5475 lb

DESIGN NOTES

- CAUTION: The maximum net analysis reaction exceeds the user-defined maximum uplift value at one or more supports.
- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 0.99

PLY TO PLY CONNECTION

- Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 51. Row = 3, Spacing = 12"
12d (0.148"x3.25") nails properties: D = 0.148" , L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25" , Y1 = 0.75" , Y2 = 1.5"
Install fasteners from one face.
X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.



Customer:
Street 1:
City:
Customer Ph...

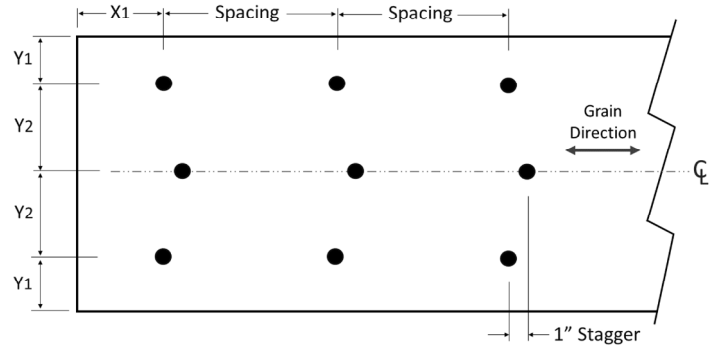
Job Name: **B**
Level: **1st FLOOR**
Label: **FB1-2 - i64**
Type: **Beam**

2 Ply Member
2.0 RigidLam DF LVL 1-3/4
x 14

Status:
Design
Passed

PLY TO PLY CONNECTION

FASTENER INSTALLATION – 3 ROWS (FROM ONE FACE)





Customer:
Street 1:
City:
Customer Ph...

Job Name: **B**
Level: **1st FLOOR**
Label: **FB2-2 - i74**
Type: **Beam**

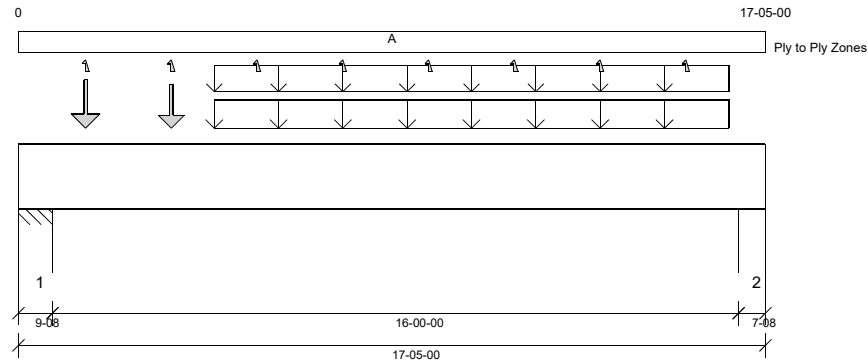
2 Ply Member
2.0 RigidLam DF LVL 1-3/4
x 18

Status:
Design
Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version
8.7.3.303.Update9.26

Report Version: 2021.03.26 06/13/2024 14:48



DESIGN INFORMATION

Building Code: IRC 2018
Design Methodology: ASD
Risk Category: II (General Construction)
Residential
Service Condition: Dry
LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 0' Bottom: 1'- 8 1/2"

Bearing Stress of Support Material:

- 1323 psi Wall @ 0'- 8 1/2"
- 725 psi Wall @ 16'- 10 1/2"

ANALYSIS RESULTS

Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Max Pos. Moment:	9'- 6 3/4"	D + L	1.00	25538 lb ft	46413 lb ft	Passed - 55%
Max Shear:	15'- 3 1/2"	D + L	1.00	6029 lb	12180 lb	Passed - 50%
Live Load (LL) Pos. Defl.:	8'- 9 7/16"	L		0.252"	L/360	Passed - L/761
Total Load (TL) Pos. Defl.:	8'- 9 7/16"	D + L		0.354"	L/240	Passed - L/543

SUPPORT AND REACTION INFORMATION

ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result
1	9-08	D + L	1.00	6607 lb		24937 lb	43990 lb	Passed - 26%
2	7-08	D + L	1.00	6094 lb		19687 lb	19031 lb	Passed - 32%

LOADING

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
Self Weight	0'	17'- 5"	Self Weight	Top	17 lb/ft	-	-	-	-
Uniform	4'- 6 3/4"	16'- 6 3/4"	Smoothed Load	Front	111 lb/ft	299 lb/ft	-	-	-
Uniform	4'- 6 3/4"	16'- 6 3/4"	Smoothed Load	Back	95 lb/ft	255 lb/ft	0 lb/ft	0 lb/ft	0 lb/ft
Point	1'- 6 3/4"	1'- 6 3/4"	-	Front	485 lb	1267/-2 lb	1 lb	1 lb	0/-2 lb
Point	3'- 6 3/4"	3'- 6 3/4"	-	Front	410 lb	1105 lb	0 lb	1 lb	0/-2 lb
Point	5'- 6 3/4"	5'- 6 3/4"	-	Front	-	-	-	-	-2 lb
Point	7'- 6 3/4"	7'- 6 3/4"	-	Front	-	-	-	-	-2 lb
Point	9'- 6 3/4"	9'- 6 3/4"	-	Front	-	-	-	-	-2 lb
Point	11'- 6 3/4"	11'- 6 3/4"	-	Front	-	-	-	-	-2 lb
Point	13'- 6 3/4"	13'- 6 3/4"	-	Front	-	-	-	-	-2 lb
Point	15'- 6 3/4"	15'- 6 3/4"	-	Front	-	-	-	-	-2 lb

UNFACTORED REACTIONS

ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
1	0'	0'- 9 1/2"	E24(i72)	1907 lb	4700/-2 lb	2 lb	3 lb	2 lb/ -8 lb
2	16'- 9 1/2"	17'- 5"	E25(i73)	1754 lb	4340 lb	2 lb	3 lb	2 lb/ -8 lb

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 1.00

PLY TO PLY CONNECTION

- Zone A: Factored load = 468 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 54. Row = 3, Spacing = 12"
12d (0.148"x3.25") nails properties: D = 0.148" , L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25" , Y1 = 0.75" , Y2 = 1.5"
Install fasteners from one face.
X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.



Customer:
Street 1:
City:
Customer Ph...

Job Name: **B**
Level: **1st FLOOR**
Label: **FB2-2 - i74**
Type: **Beam**

2 Ply Member
2.0 RigidLam DF LVL 1-3/4
x 18

Status:
Design
Passed

PLY TO PLY CONNECTION

FASTENER INSTALLATION – 3 ROWS (FROM ONE FACE)

