

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0325-1580

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I73719869 thru I73719893

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

North Carolina COA: C-0844



May 23, 2025

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Gilbert, Eric

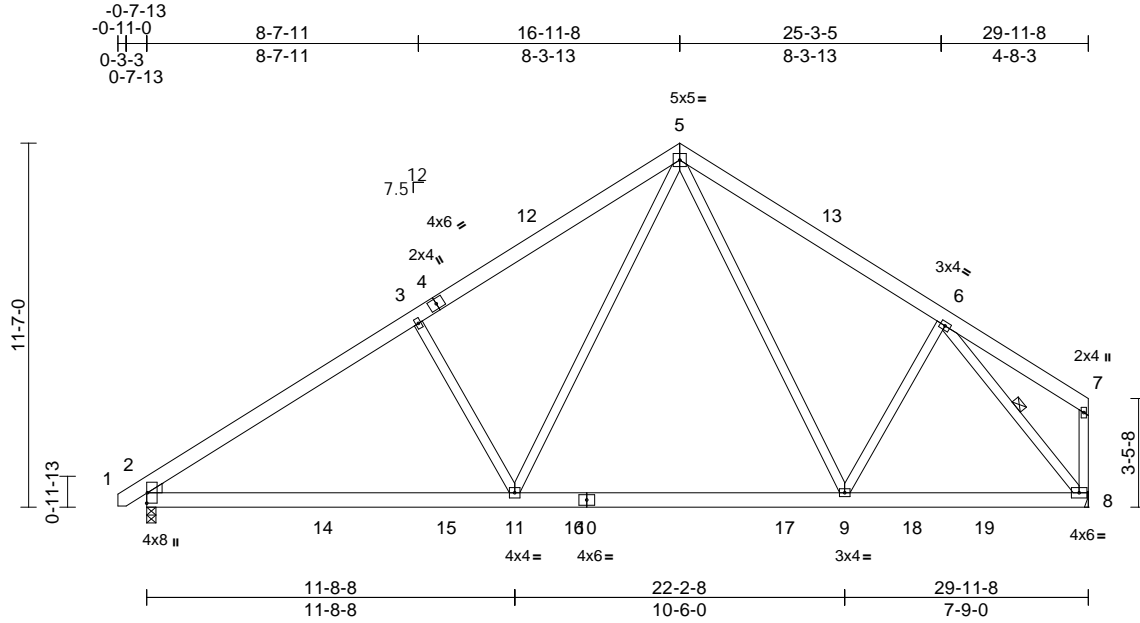
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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	Job Reference (optional)
J0325-1580	A1	COMMON	6	1	I73719869

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Fri May 23 08:27:33  
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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	0.32	Vert(LL)	-0.18	2-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.31	2-11	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.05	2-11	>999	240	Weight: 225 lb	FT = 20%

#### LUMBER

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
WEDGE	Left: 2x4 SP No.2

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-1-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 6-8

#### REACTIONS

(size)	2=0-3-8, 8= Mechanical
Max Horiz	2=262 (LC 7)
Max Uplift	2=-109 (LC 10), 8=-80 (LC 11)
Max Grav	2=1573 (LC 17), 8=1459 (LC 18)

#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/0, 2-3=-2059/396, 3-5=-1882/475, 5-6=-1457/407, 6-7=-63/92, 7-8=-87/33
BOT CHORD	2-11=-317/1790, 9-11=-94/1072, 8-9=-193/1004
WEBS	3-11=-461/308, 5-11=-174/1161, 5-9=-93/374, 6-9=-39/329, 6-8=-1624/321

#### 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-8-15 to 3-7-14, Interior (1) 3-7-14 to 12-7-3, Exterior(2R) 12-7-3 to 21-4-13, Interior (1) 21-4-13 to 25-5-3, Exterior(2E) 25-5-3 to 29-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 30.0psf 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.
- Bearings are assumed to be: , Joint 2 SP No.1 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 2 and 80 lb uplift at joint 8.

LOAD CASE(S) Standard



May 23,2025

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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.sbcacomponents.com)

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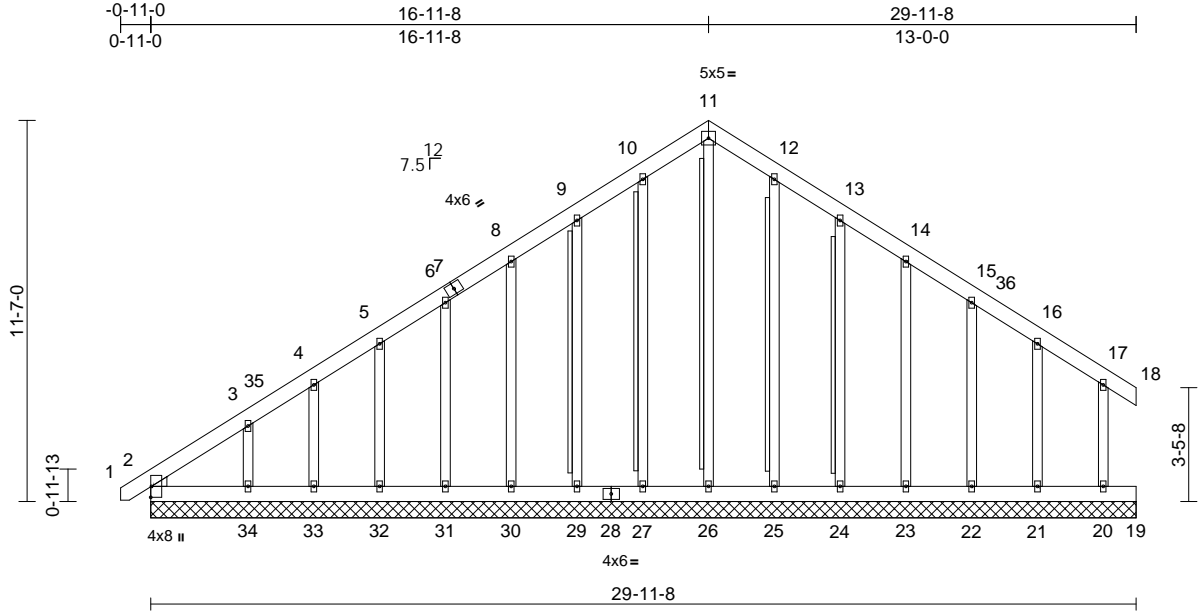
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	
J0325-1580	A1-GE	GABLE	1	1	Job Reference (optional)
					I73719870

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Fri May 23 08:27:34  
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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	0.06	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	18	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							
Weight: 288 lb FT = 20%											

#### LUMBER

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.2 \*Except\* 0-0,0-0,0-0,0-0,0-0:2x4  
SPF No.2(flat)  
WEDGE Left: 2x4 SP No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 10-27, 9-29, 11-26, 12-25, 13-24  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

**REACTIONS** (size) 2=29-11-8, 18=29-11-8, 19=29-11-8, 20=29-11-8, 21=29-11-8, 22=29-11-8, 23=29-11-8, 24=29-11-8, 25=29-11-8, 26=29-11-8, 27=29-11-8, 29=29-11-8, 30=29-11-8, 31=29-11-8, 32=29-11-8, 33=29-11-8, 34=29-11-8  
Max Horiz 2=322 (LC 7)  
Max Uplift 2=-166 (LC 6), 18=-18 (LC 11), 20=-66 (LC 11), 21=-91 (LC 11), 22=-85 (LC 11), 23=-88 (LC 11), 24=-107 (LC 11), 25=-21 (LC 11), 26=-55 (LC 9), 27=-51 (LC 10), 29=-99 (LC 10), 30=-87 (LC 10), 31=-86 (LC 10), 32=-88 (LC 10), 33=-73 (LC 10), 34=-176 (LC 10)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/0, 2-3=-381/368, 3-4=-299/294, 4-5=-276/288, 5-6=-259/284, 6-8=-240/317, 8-9=-221/357, 9-10=-204/405, 10-11=-222/411, 11-12=-222/397, 12-13=-204/361, 13-14=-161/283, 14-15=-123/213, 15-16=-86/145, 16-17=-45/73, 17-18=-9/24  
BOT CHORD 2-34=0/0, 33-34=0/0, 32-33=0/0, 31-32=0/0, 30-31=0/0, 29-30=0/0, 27-29=0/0, 26-27=0/0, 25-26=0/0, 24-25=0/0, 23-24=0/0, 22-23=0/0, 21-22=0/0, 20-21=0/0, 19-20=0/0  
WEBS 10-27=-154/71, 9-29=-133/119, 8-30=-135/107, 6-31=-135/106, 5-32=-136/107, 4-33=-123/95, 3-34=-217/190, 11-26=-307/104, 12-25=-124/41, 13-24=-142/127, 14-23=-135/108, 15-22=-134/105, 16-21=-142/111, 17-20=-106/83

#### 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-8-15 to 3-7-14, Exterior (2N) 3-7-14 to 12-7-3, Corner(3R) 12-7-3 to 21-4-13, Exterior(2N) 21-4-13 to 25-7-3, Corner(3E) 25-7-3 to 30-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf 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.
- All bearings are assumed to be SP No.1 crushing capacity of 565 psi.



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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.sbcacompnents.com)

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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	A1-GE	GABLE	1	1	I73719870

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 18, 166 lb uplift at joint 2, 51 lb uplift at joint 27, 99 lb uplift at joint 29, 87 lb uplift at joint 30, 86 lb uplift at joint 31, 88 lb uplift at joint 32, 73 lb uplift at joint 33, 176 lb uplift at joint 34, 55 lb uplift at joint 26, 21 lb uplift at joint 25, 107 lb uplift at joint 24, 88 lb uplift at joint 23, 85 lb uplift at joint 22, 91 lb uplift at joint 21 and 66 lb uplift at joint 20.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard



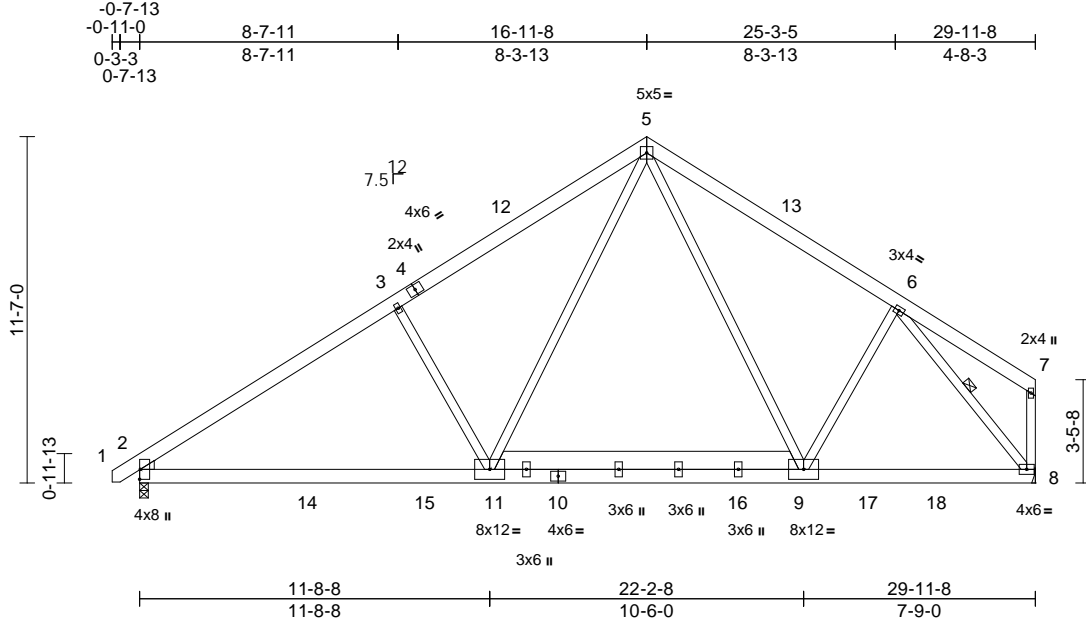
May 23,2025

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	A2	COMMON	5	1	I73719871

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



<b>Loading</b>	(psf)	<b>Spacing</b>	2'-0"	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.19	2'-11"	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.32	2'-11"	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.04	2'-11"	>999	240	Weight: 256 lb	FT = 20%

<b>LUMBER</b>	
TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 11'-9":2x8 SP No.1
WEDGE	Left: 2x4 SP No.2
<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 5'-0" oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10'-0" oc bracing.
WEBS	1 Row at midpt 6'-8"
<b>REACTIONS</b>	(size) 2=0'-3'-8, 8= Mechanical
	Max Horiz 2=262 (LC 7)
	Max Uplift 2=109 (LC 10), 8=80 (LC 11)
	Max Grav 2=1564 (LC 17), 8=1448 (LC 18)
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/0, 2-3=-2126/411, 3-5=-1930/476, 5-6=-1475/411, 6-7=-71/89, 7-8=-91/33
BOT CHORD	2-11=-330/1855, 9-11=-96/1094, 8-9=-200/1021
WEBS	3-11=-457/307, 5-11=-173/1204, 5-9=-89/368, 6-9=-38/328, 6-8=-1629/332

- 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0'-8'-15 to 3'-7'-14, Interior (1) 3'-7'-14 to 12'-7'-3, Exterior(2R) 12'-7'-3 to 21'-4'-13, Interior (1) 21'-4'-13 to 25'-5'-3, Exterior(2E) 25'-5'-3 to 29'-10'-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) \* This truss has been designed for a live load of 30.0psf 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.
  - 5) Bearings are assumed to be: , Joint 2 SP No.1 crushing capacity of 565 psi.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 2 and 80 lb uplift at joint 8.
- LOAD CASE(S)** Standard



May 23,2025

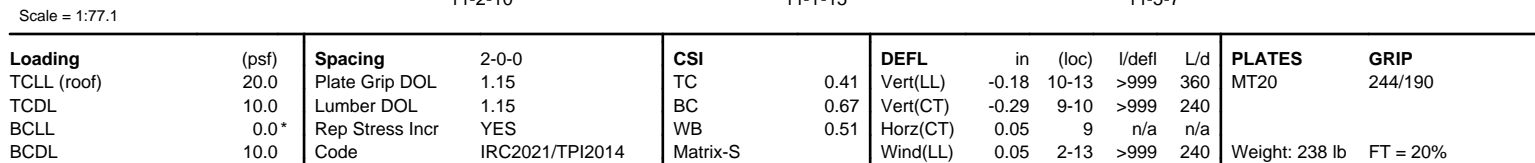
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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters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

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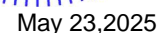
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- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) WARNING: Required bearing size at joint(s) 9 greater than input bearing size.
- 6) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 119 lb uplift at joint 2 and 106 lb uplift at joint 9.

LOAD CASE(S) Standard

- ## 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=5.0psf; h=15ft;  
 Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C  
 Exterior(2E) -0-8-14 to 3-7-15, Interior (1) 3-7-15 to  
 12-7-3, Exterior(2R) 12-7-3 to 21-4-13, Interior (1)  
 21-4-13 to 29-5-11, Exterior(2E) 29-5-11 to 33-10-8  
 zone;C-C for members and forces & MWFRS for  
 reactions shown; Lumber DOL=1.60 plate grip  
 DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom  
 chord live load nonconcurrent with any other live loads.



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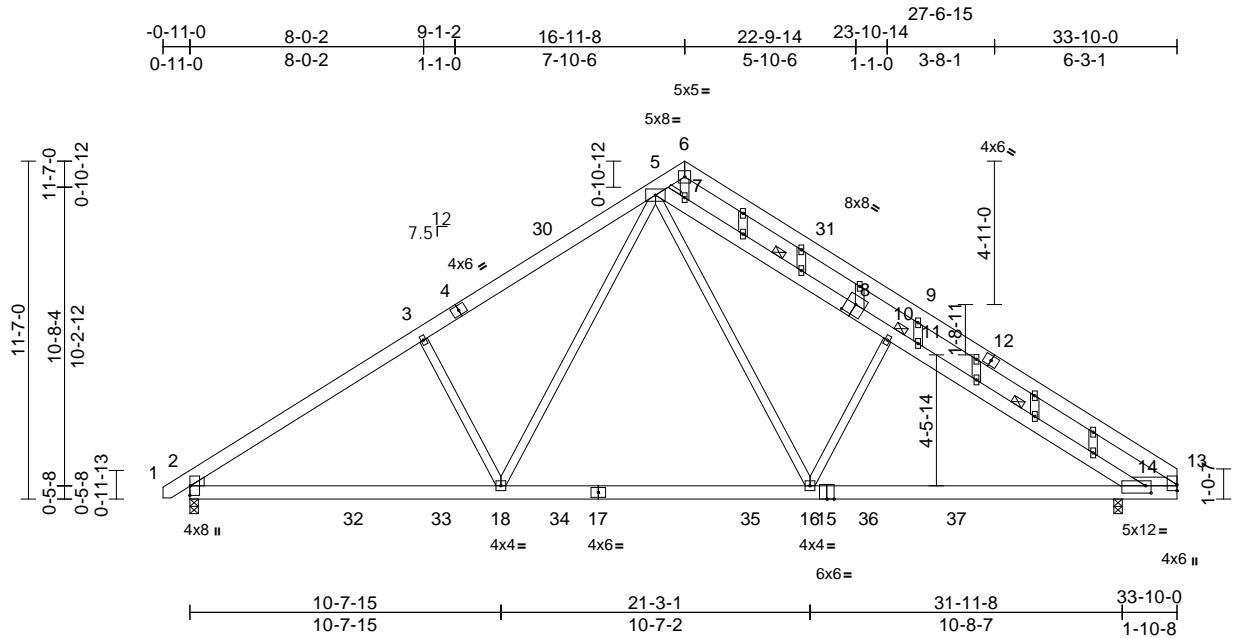


Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	A4	GABLE	1	1	I73719873

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:79

Plate Offsets (X, Y): [8:0-4-0,0-4-8], [14:0-2-4,0-3-0]

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	0.44	Vert(LL)	-0.16	16-18	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.23	16-18	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.05	14	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.06	2-18	>999	240	Weight: 285 lb	FT = 20%

#### LUMBER

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2 *Except* 0-0:2x4 SPF No.2(flat)
WEDGE	Left: 2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -- 1-6-8

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-11-1 oc purlins. Except:
1 Row at midpt	5-10, 10-14
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

JOINTS 1 Brace at Jt(s): 10

REACTIONS	(size) 2=0-3-8, 14=0-3-8
Max Horiz	2=332 (LC 7)
Max Uplift	2=312 (LC 10), 14=311 (LC 11)
Max Grav	2=1686 (LC 17), 14=1769 (LC 18)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/0, 2-3=-2298/441, 3-5=-2145/525, 5-6=-482/273, 5-7=-1588/371, 7-10=-1497/345, 10-11=-1484/331, 11-14=-1634/500, 6-9=-698/299, 9-13=-637/0
BOT CHORD	2-18=-433/2052, 16-18=-131/1373, 14-16=-246/1772, 13-14=0/454
WEBS	5-18=-274/1076, 3-18=-413/389, 5-16=-270/992, 10-16=-405/390, 9-11=-576/497, 6-7=-64/224

#### 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-14 to 3-7-15, Interior (1) 3-7-15 to 12-7-3, Exterior(2R) 12-7-3 to 21-4-13, Interior (1) 21-4-13 to 29-5-11, Exterior(2E) 29-5-11 to 33-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 30.0psf 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.
- All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 312 lb uplift at joint 2 and 311 lb uplift at joint 14.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard



May 23, 2025

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**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

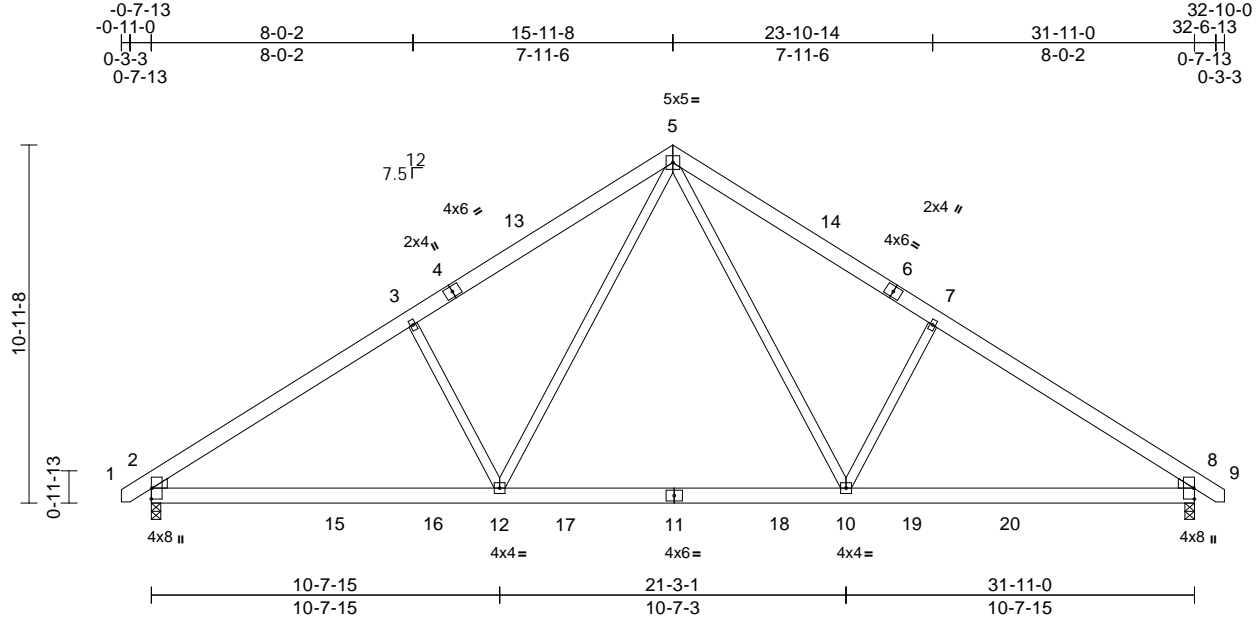
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	B1	COMMON	5	1	I73719874

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Fri May 23 08:27:35

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Scale = 1:70.5

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	0.37	Vert(LL)	-0.16	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.22	10-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.04	2-12	>999	240	Weight: 220 lb	FT = 20%

#### LUMBER

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
WEDGE Left: 2x4 SP No.2  
Right: 2x4 SP No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-12 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-3-8, 8=0-3-8  
Max Horiz 2=-251 (LC 8)  
Max Uplift 2=-112 (LC 10), 8=-112 (LC 11)  
Max Grav 2=1656 (LC 17), 8=1656 (LC 18)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/0, 2-3=-2256/437, 3-5=-2103/521, 5-7=-2103/521, 7-8=-2257/437, 8-9=0/0  
BOT CHORD 2-12=-246/1962, 10-12=-39/1301, 8-10=-246/1775  
WEBS 5-10=-169/1054, 7-10=-406/289, 5-12=-169/1054, 3-12=-406/289

#### 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-8-15 to 3-7-14, Interior (1) 3-7-14 to 11-7-3, Exterior(2R) 11-7-3 to 20-4-13, Interior (1) 20-4-13 to 28-4-2, Exterior(2E) 28-4-2 to 32-8-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 30.0psf 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.
- All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 112 lb uplift at joint 2 and 112 lb uplift at joint 8.

**LOAD CASE(S)** Standard



May 23, 2025

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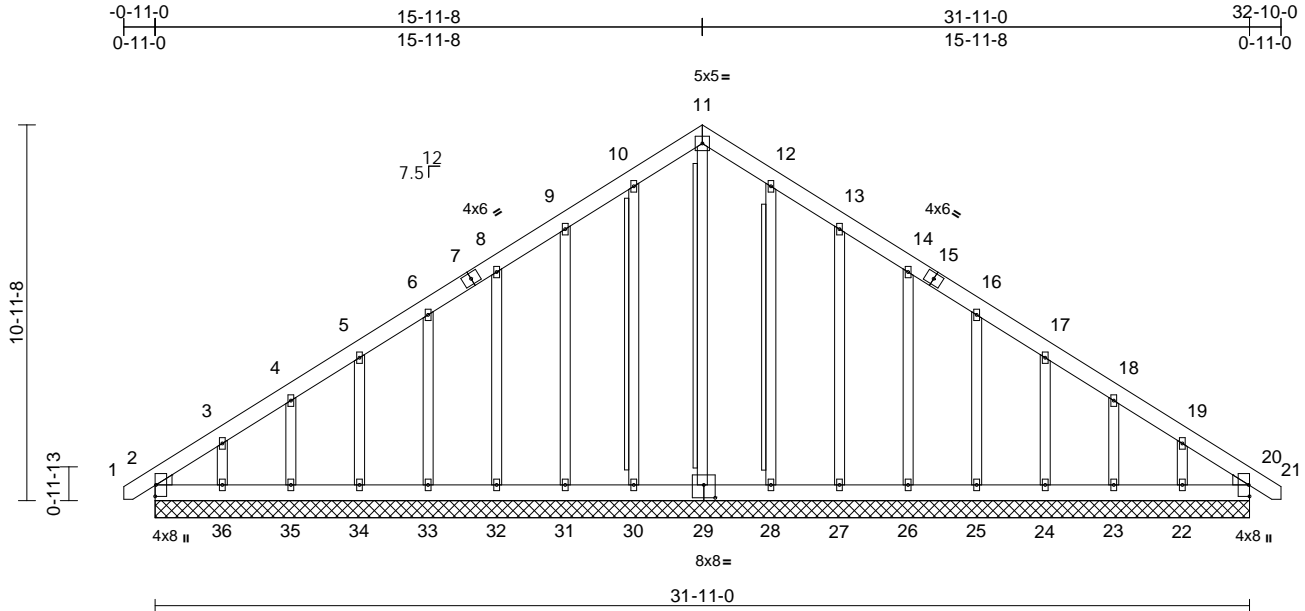


Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	B1-GE	GABLE	1	1	I73719875

Comtech, Inc, Fayetteville, NC - 28314,

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Scale = 1:67.2

Plate Offsets (X, Y): [29:0-4-0,0-4-8]

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	0.04	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	20	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							
Weight: 290 lb FT = 20%											

#### LUMBER

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.2 \*Except\* 0-0,0-0,0-0:2x4 SPF No.2(flat)  
WEDGE Left: 2x4 SP No.3  
Right: 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.  
WEBS T-Brace: 2x4 SPF No.2 - 11-29, 10-30, 12-28  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

#### REACTIONS

(size) 2=31-11-0, 20=31-11-0,  
22=31-11-0, 23=31-11-0,  
24=31-11-0, 25=31-11-0,  
26=31-11-0, 27=31-11-0,  
28=31-11-0, 29=31-11-0,  
30=31-11-0, 31=31-11-0,  
32=31-11-0, 33=31-11-0,  
34=31-11-0, 35=31-11-0,  
36=31-11-0  
Max Horiz 2=-314 (LC 8)  
Max Uplift 2=-106 (LC 6), 20=-28 (LC 7),  
22=-145 (LC 11), 23=-85 (LC 11),  
24=-86 (LC 11), 25=-86 (LC 11),  
26=-87 (LC 11), 27=-100 (LC 11),  
28=-46 (LC 11), 30=-55 (LC 10),  
31=-97 (LC 10), 32=-87 (LC 10),  
33=-86 (LC 10), 34=-86 (LC 10),  
35=-86 (LC 10), 36=-160 (LC 10)

Max Grav 2=219 (LC 18), 20=169 (LC 20),  
22=197 (LC 18), 23=174 (LC 18),  
24=175 (LC 18), 25=175 (LC 18),  
26=175 (LC 18), 27=180 (LC 18),  
28=168 (LC 18), 29=204 (LC 11),  
30=181 (LC 17), 31=176 (LC 17),  
32=175 (LC 17), 33=175 (LC 17),  
34=175 (LC 17), 35=175 (LC 17),  
36=213 (LC 17)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/0, 2-3=-346/260, 3-4=-236/202,  
4-5=-196/176, 5-6=-175/161, 6-8=-155/169,  
8-9=-138/208, 9-10=-156/252,  
10-11=-178/277, 11-12=-179/278,  
12-13=-156/234, 13-14=-114/163,  
14-16=-77/97, 16-17=-86/58, 17-18=-101/70,  
18-19=-155/95, 19-20=-265/141, 20-21=0/0  
BOT CHORD 2-36=-111/236, 35-36=-111/236,  
34-35=-111/236, 33-34=-111/236,  
32-33=-111/236, 31-32=-111/236,  
30-31=-111/236, 28-30=-111/236,  
27-28=-111/235, 26-27=-111/235,  
25-26=-111/235, 24-25=-111/235,  
23-24=-111/235, 22-23=-111/235,  
20-22=-111/235  
11-29=-184/66, 10-30=-140/76,  
9-31=-136/117, 8-32=-135/107,  
6-33=-135/106, 5-34=-135/105,  
4-35=-137/109, 3-36=-164/171,  
12-28=-128/65, 13-27=-140/120,  
14-26=-135/107, 16-25=-135/106,  
17-24=-135/106, 18-23=-136/108,  
19-22=-150/157

#### 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=5.0psf; h=15ft;  
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-8-15 to 3-7-14, Exterior (2N) 3-7-14 to 11-7-3, Corner(3R) 11-7-3 to 20-4-13, Exterior(2N) 20-4-13 to 28-4-2, Corner(3E) 28-4-2 to 32-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord 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 30.0psf 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.



May 23,2025

Continued on page 2

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	B1-GE	GABLE	1	1	I73719875

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Page: 2

- 9) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 20, 55 lb uplift at joint 30, 97 lb uplift at joint 31, 87 lb uplift at joint 32, 86 lb uplift at joint 33, 86 lb uplift at joint 34, 86 lb uplift at joint 35, 160 lb uplift at joint 36, 46 lb uplift at joint 28, 100 lb uplift at joint 27, 87 lb uplift at joint 26, 86 lb uplift at joint 25, 86 lb uplift at joint 24, 85 lb uplift at joint 23, 106 lb uplift at joint 2 and 145 lb uplift at joint 22.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard



May 23,2025

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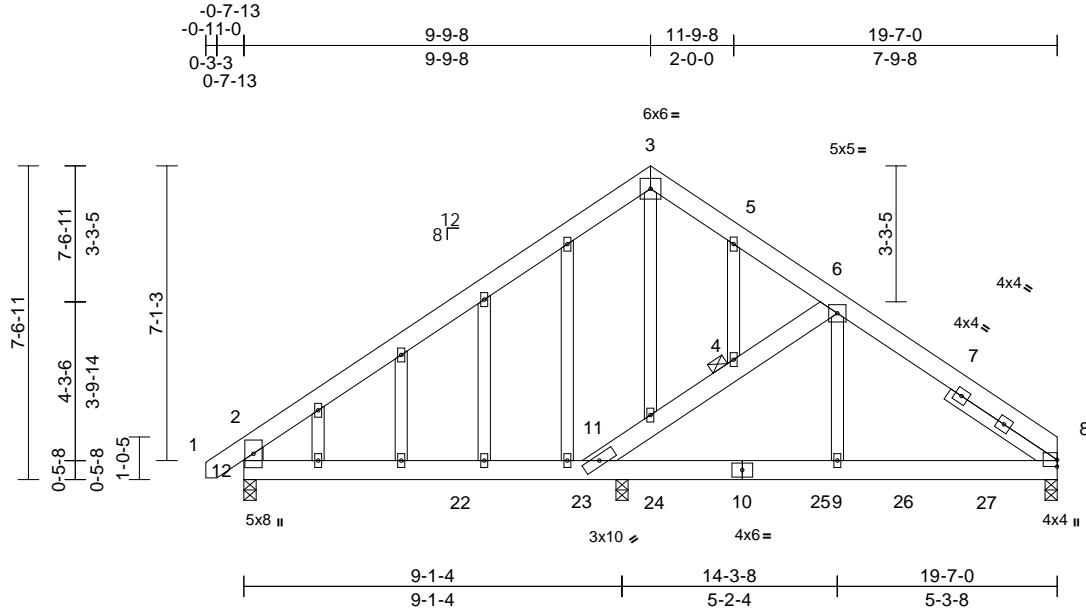
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Job	Truss	Truss Type	Qty	Ply	
J0325-1580	C1	GABLE	1	1	Job Reference (optional)
					173719876

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Scale = 1:55.5

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	0.44	Vert(LL)	-0.06	11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.10	11-12	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.04	11-12	>999	240	Weight: 164 lb	FT = 20%

#### LUMBER

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 12-2:2x6 SP No.1
OTHERS	2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -- 3-1-0

#### 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.

JOINTS 1 Brace at Jt(s): 4

REACTIONS	(size)	8=0-3-8, 11=0-3-8, 12=0-3-8
	Max Horiz	12=216 (LC 7)
	Max Uplift	8=-97 (LC 8), 12=-252 (LC 27)
	Max Grav	8=883 (LC 1), 11=990 (LC 16), 12=699 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/34, 2-3=-567/251, 3-5=-402/304, 5-6=-482/354, 6-8=-1036/187, 4-11=-685/128, 4-6=-624/131, 2-12=-580/314
BOT CHORD	11-12=-164/439, 9-11=-76/764, 8-9=-76/764
WEBS	6-9=0/477, 4-5=-117/61

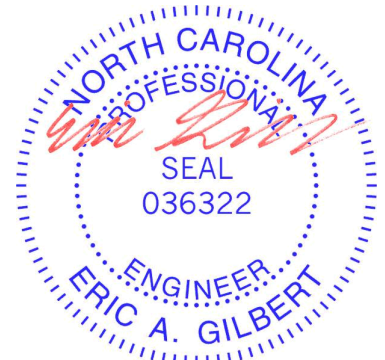
#### NOTES

- 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable 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 30.0psf 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.
- All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
- Solid blocking is required on both sides of the truss at joint(s), 11.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 8 and 252 lb uplift at joint 12.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 123 lb down at 9-11-4, 123 lb down at 11-11-4, 123 lb down at 13-11-4, and 123 lb down at 15-11-4, and 123 lb down at 17-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-2=-60, 2-3=-60, 3-6=-60, 6-8=-60, 8-12=-20  
Concentrated Loads (lb)  
Vert: 10=-123 (F), 24=-123 (F), 25=-123 (F), 26=-123 (F), 27=-123 (F)



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	
J0325-1580	D1-GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)

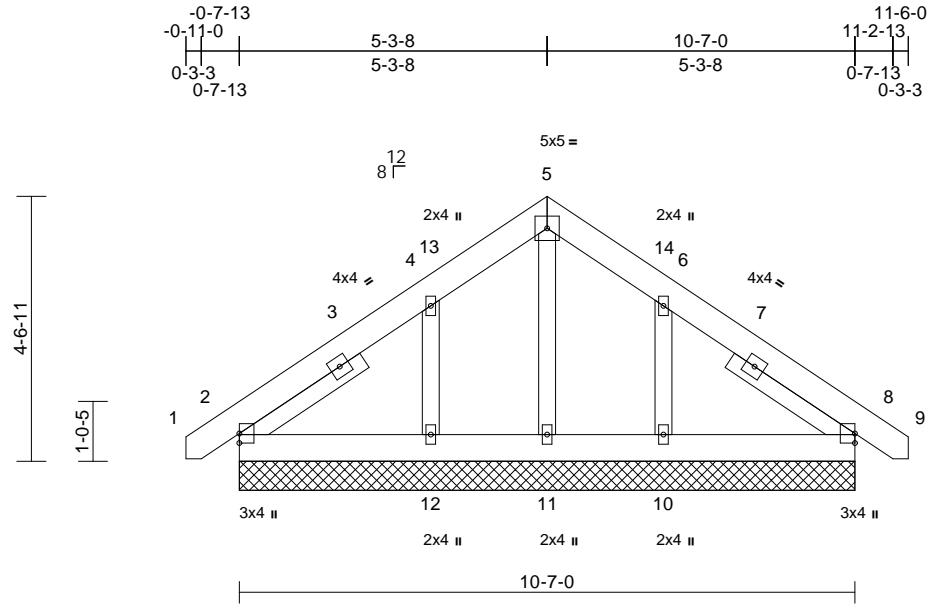
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Scale = 1:39.6

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 80 lb FT = 20%

**LUMBER**

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
OTHERS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 2-6-0, Right 2x4 SP No.2 -- 2-6-0

**BRACING**

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

<b>REACTIONS</b> (size)	2=10-7-0, 8=10-7-0, 10=10-7-0, 11=10-7-0, 12=10-7-0
Max Horiz	2=-121 (LC 8)
Max Uplift	2=-52 (LC 11), 8=-49 (LC 11), 10=-150 (LC 11), 12=-156 (LC 10)
Max Grav	2=208 (LC 1), 8=208 (LC 1), 10=277 (LC 18), 11=105 (LC 11), 12=284 (LC 17)

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

TOP CHORD	1-2=0/0, 2-4=-163/79, 4-5=-142/232, 5-6=-142/232, 6-8=-132/65, 8-9=0/0
BOT CHORD	2-12=-29/79, 11-12=-29/79, 10-11=-29/79, 8-10=-29/79
WEBS	5-11=-165/60, 4-12=-208/278, 6-10=-201/278

**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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-8-15 to 3-7-14, Corner(3R) 3-7-14 to 7-0-2, Corner(3E) 7-0-2 to 11-4-15 zone; 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.

4) Gable requires continuous bottom chord bearing.

5) Gable studs spaced at 2-0-0 oc.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 2, 49 lb uplift at joint 8, 156 lb uplift at joint 12 and 150 lb uplift at joint 10.

**LOAD CASE(S)** Standard

May 23, 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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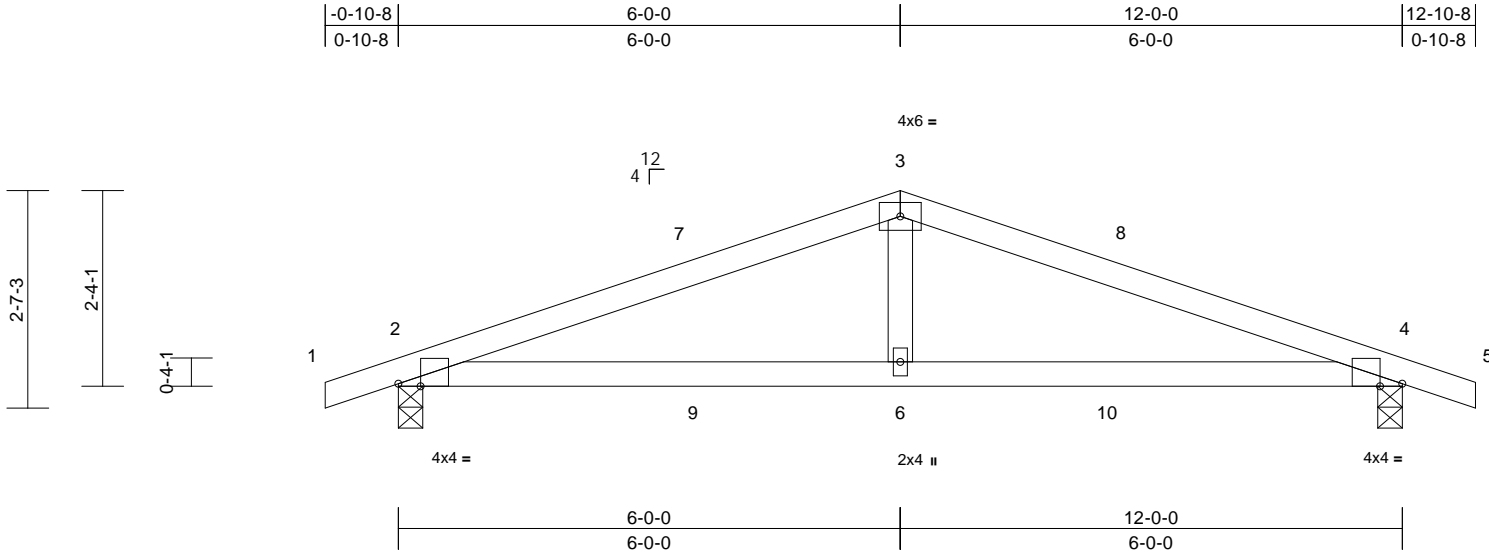
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	E1	Common	4	1	I73719878

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Fri May 23 08:27:35  
ID:RoFQORvmtbuV?DZjm98VbzzKksg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:27.5

Plate Offsets (X, Y): [2:0-3-3,Edge], [4:0-3-3,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	0.44	Vert(LL)	0.12	2-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.07	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 42 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.2

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 217 lb uplift at joint 2 and 217 lb uplift at joint 4.

**LOAD CASE(S)** Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-11-14 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 4-11-14 oc bracing.

**REACTIONS** (size) 2=0-3-8, 4=0-3-8  
Max Horiz 2=-27 (LC 11)  
Max Uplift 2=-217 (LC 6), 4=-217 (LC 7)  
Max Grav 2=530 (LC 1), 4=530 (LC 1)

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

TOP CHORD 1-2=0/15, 2-3=-859/1553, 3-4=-859/1553, 4-5=0/15

BOT CHORD 2-6=-1375/759, 4-6=-1375/759  
WEBS 3-6=-613/281

#### 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-10-8 to 3-6-5, Exterior(2R) 3-6-5 to 8-5-11, Exterior(2E) 8-5-11 to 12-10-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf 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.
- All bearings are assumed to be SP No.1 crushing capacity of 565 psi.



May 23,2025

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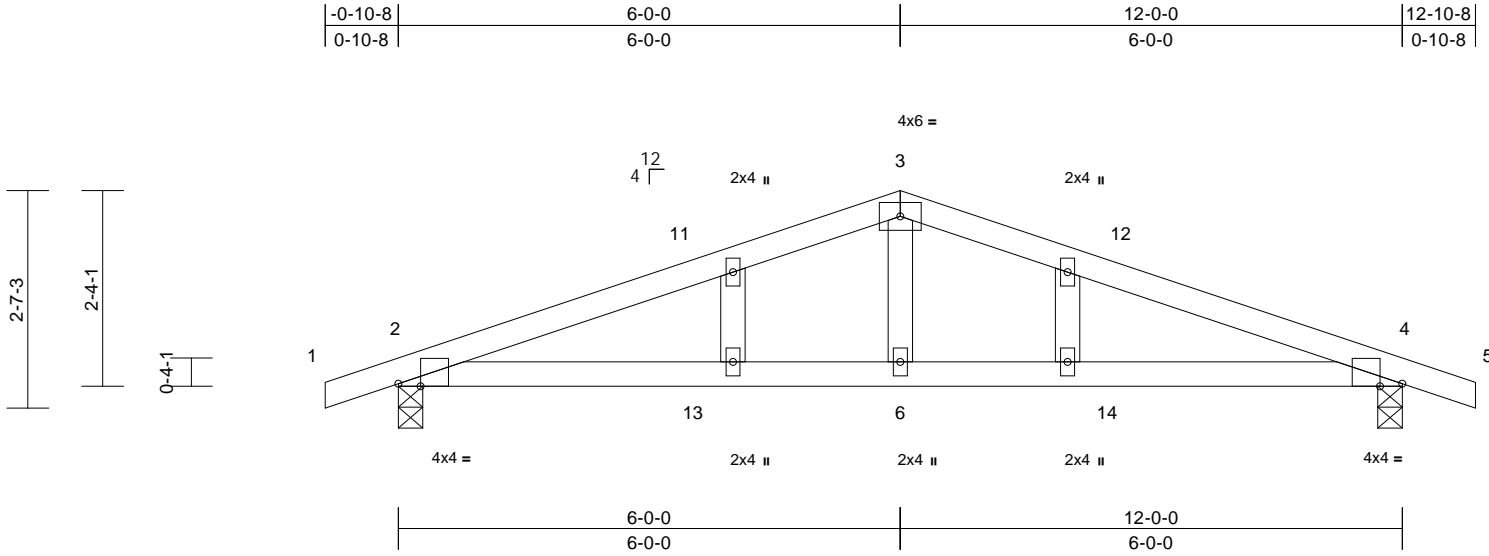


Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	E1-GE	GABLE	1	1	173719879

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Fri May 23 08:27:35  
ID:RoFQORvmtbuV?DZjm98VbzzKksg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:27.5

Plate Offsets (X, Y): [2:0-3-3,Edge], [4:0-3-3,Edge]												
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	0.12	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.07	4-6	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 46 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-11-14 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 4-11-14 oc bracing.

**REACTIONS** (size) 2=0-3-8, 4=0-3-8  
Max Horiz 2=46 (LC 10)  
Max Uplift 2=-305 (LC 6), 4=-305 (LC 7)  
Max Grav 2=530 (LC 1), 4=530 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/15, 2-3=-859/1553, 3-4=-859/1553, 4-5=0/15  
BOT CHORD 2-6=-1375/759, 4-6=-1375/759  
WEBS 3-6=-613/281

- 6) \* This truss has been designed for a live load of 30.0psf 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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 305 lb uplift at joint 2 and 305 lb uplift at joint 4.
- LOAD CASE(S)** Standard

- 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-6-5, Exterior(2R) 3-6-5 to 8-5-11, Exterior(2E) 8-5-11 to 12-10-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



May 23,2025

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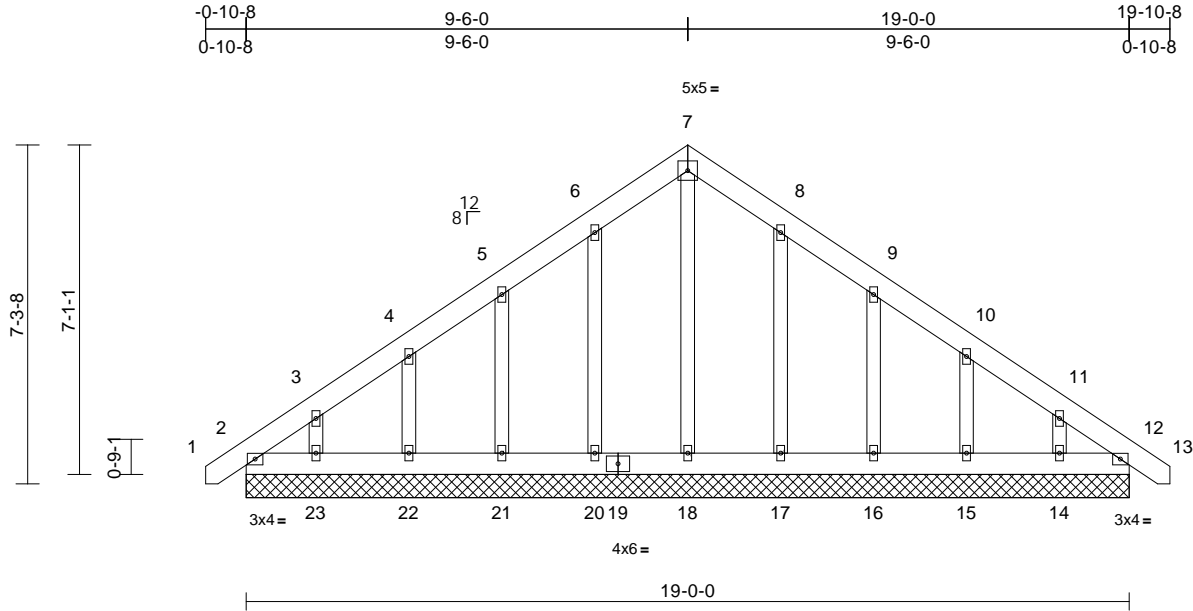


Job	Truss	Truss Type	Qty	Ply	
J0325-1580	G01	COMMON SUPPORTED GAB	1	1	Job Reference (optional)
					I73719880

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Fri May 23 08:27:35  
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Page: 1



Scale = 1:49.6

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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	12	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							
Weight: 146 lb FT = 20%											

#### LUMBER

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
OTHERS	2x4 SP No.2

#### BRACING

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

#### REACTIONS

(size)	2=19-0-0, 12=19-0-0, 14=19-0-0, 15=19-0-0, 16=19-0-0, 17=19-0-0, 18=19-0-0, 20=19-0-0, 21=19-0-0, 22=19-0-0, 23=19-0-0
Max Horiz	2=-205 (LC 8)
Max Uplift	2=-60 (LC 6), 12=-16 (LC 7), 14=-104 (LC 11), 15=-92 (LC 11), 16=-100 (LC 11), 17=-73 (LC 11), 20=-78 (LC 10), 21=-98 (LC 10), 22=-93 (LC 10), 23=-110 (LC 10)
Max Grav	2=155 (LC 18), 12=123 (LC 1), 14=162 (LC 18), 15=180 (LC 18), 16=179 (LC 18), 17=176 (LC 18), 18=157 (LC 20), 20=182 (LC 17), 21=176 (LC 17), 22=181 (LC 17), 23=168 (LC 17)

#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/14, 2-3=-207/156, 3-4=-139/121, 4-5=-123/102, 5-6=-108/140, 6-7=-118/209, 7-8=-118/209, 8-9=-83/140, 9-10=-74/56, 10-11=-92/55, 11-12=-159/85, 12-13=0/14
BOT CHORD	2-23=-71/167, 22-23=-71/167, 21-22=-71/167, 20-21=-71/167, 18-20=-71/167, 17-18=-71/167, 16-17=-71/167, 15-16=-71/167, 14-15=-71/167, 12-14=-71/167
WEBS	7-18=-126/20, 6-20=-142/99, 5-21=-137/131, 4-22=-140/138, 3-23=-129/146, 8-17=-136/98, 9-16=-139/131, 10-15=-140/138, 11-14=-124/146

#### 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-8-15 to 3-6-0, Exterior(2N) 3-6-0 to 5-1-3, Corner(3R) 5-1-3 to 13-10-13, Exterior (2N) 13-10-13 to 15-4-2, Corner(3E) 15-4-2 to 19-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord 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 30.0psf 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.
- All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 2, 78 lb uplift at joint 20, 98 lb uplift at joint 21, 93 lb uplift at joint 22, 110 lb uplift at joint 23, 73 lb uplift at joint 17, 100 lb uplift at joint 16, 92 lb uplift at joint 15, 104 lb uplift at joint 14 and 16 lb uplift at joint 12.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 12.

LOAD CASE(S) Standard



May 23, 2025

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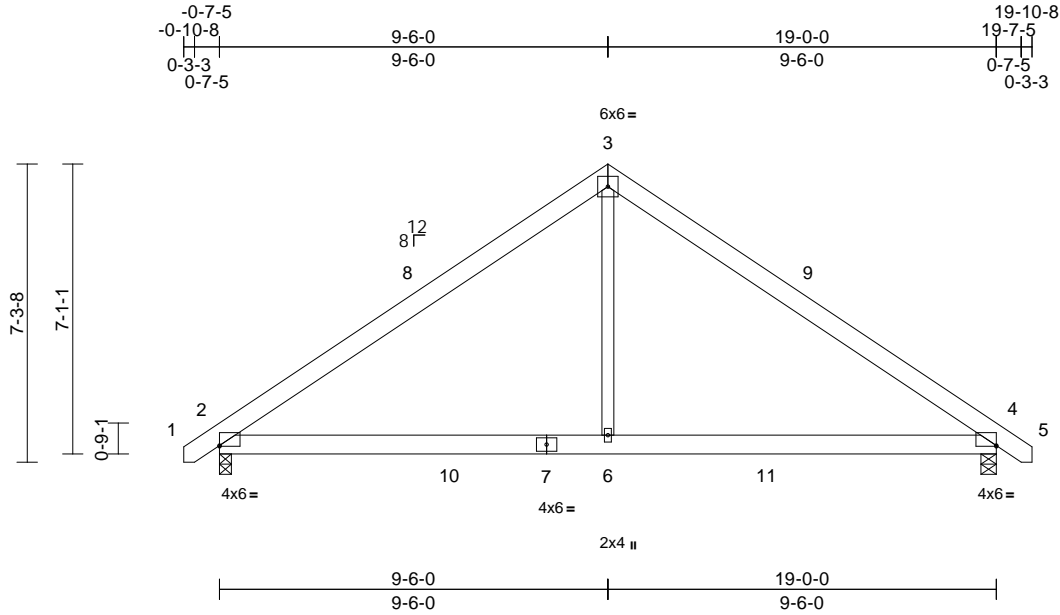
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	G02	COMMON	6	1	I73719881

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Fri May 23 08:27:35  
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Page: 1



Scale = 1:56.4

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

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	0.44	Vert(LL)	-0.08	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.13	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.04	2-6	>999	240	Weight: 113 lb	FT = 20%

#### LUMBER

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2

#### BRACING

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

**REACTIONS** (size) 2=0-3-8, 4=0-4-8  
Max Horiz 2=-164 (LC 8)  
Max Uplift 2=-70 (LC 10), 4=-70 (LC 11)  
Max Grav 2=999 (LC 17), 4=1001 (LC 18)

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

TOP CHORD 1-2=0/14, 2-3=-1144/231, 3-4=-1146/231, 4-5=0/14

BOT CHORD 2-6=-23/886, 4-6=-23/886  
WEBS 3-6=0/736

#### 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-8-15 to 3-7-14, Interior (1) 3-7-14 to 5-1-3, Exterior(2R) 5-1-3 to 13-10-13, Interior (1) 13-10-13 to 15-4-2, Exterior(2E) 15-4-2 to 19-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf 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.

- All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 2 and 70 lb uplift at joint 4.

**LOAD CASE(S)** Standard



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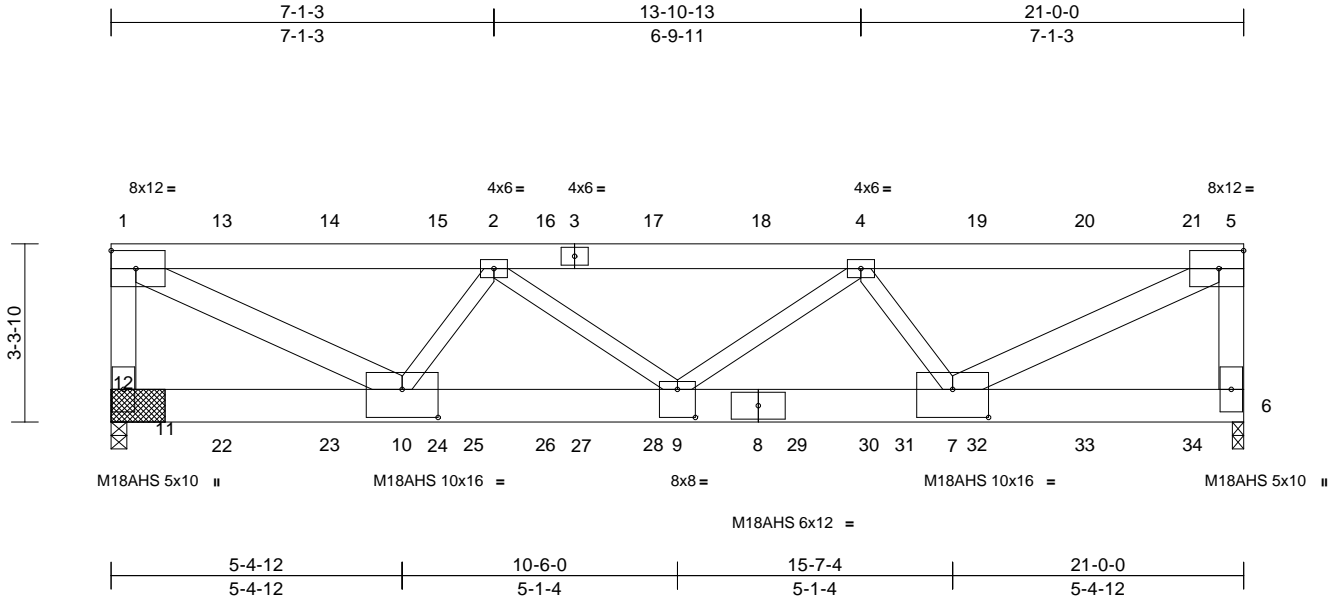
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	H01	FLAT GIRDER	1	2	I73719882

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Fri May 23 08:27:36  
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Page: 1



Scale = 1:42.7									
Plate Offsets (X, Y): [7:0-8-0,0-6-4], [9:0-4-0,0-6-4], [10:0-8-0,0-6-4]									
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.19 9-10	>999	360
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.34 9-10	>731	240
BCLL	0.0*	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.04 6	n/a	n/a
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.11 9-10	>999	240
						<b>PLATES</b>			<b>GRIP</b>
						M18AHS			186/179
						MT20			244/190
						Weight: 352 lb			FT = 20%

**LUMBER**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x8 SP 2400F 2.0E  
WEBS 2x6 SP No.1 \*Except\* 10-2,9-2,9-4,7-4:2x4 SP No.2

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

**REACTIONS** (size) 6=0-2-8, (req. 0-3-13), 12=(0-3-8 + bearing block), (req. 0-3-10)  
Max Uplift 6=846 (LC 4), 12=776 (LC 4)  
Max Grav 6=9226 (LC 15), 12=8698 (LC 15)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-12=-7392/715, 1-2=-13605/1178, 2-4=-17139/1519, 4-5=-13150/1153, 5-6=-7168/744  
BOT CHORD 10-12=-52/373, 9-10=-1423/14973, 7-9=-1410/14682, 6-7=-54/389  
WEBS 1-10=-1278/15014, 2-10=-2614/469, 2-9=-124/2793, 4-9=-141/3168, 4-7=-2927/490, 5-7=-1247/14481

- 2x8 SP 2400F 2.0E bearing block 12" long at jt. 12 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SP 2400F 2.0E.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf 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.
- WARNING: Required bearing size at joint(s) 6 greater than input bearing size.
- All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 776 lb uplift at joint 12 and 846 lb uplift at joint 6.

#### NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.  
Web connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 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.



May 23,2025

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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**TRENCO**  
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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	
J0325-1580	H01	FLAT GIRDER	1	2	I73719882
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

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12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 62 lb down at 0-2-12, 96 lb down and 49 lb up at 2-0-12, 96 lb down and 49 lb up at 4-0-12, 96 lb down and 49 lb up at 6-0-12, 96 lb down and 49 lb up at 8-0-12, 96 lb down and 49 lb up at 10-0-12, 98 lb down and 51 lb up at 12-0-12, 98 lb down and 51 lb up at 14-0-12, 98 lb down and 51 lb up at 16-0-12, and 98 lb down and 51 lb up at 18-0-12, and 95 lb down and 54 lb up at 20-0-12 on top chord, and 30 lb down at 2-0-12, 1439 lb down and 90 lb up at 2-0-12, 30 lb down at 4-0-12, 1439 lb down and 90 lb up at 4-0-12, 1439 lb down and 90 lb up at 5-4-4, 30 lb down at 6-0-12, 1439 lb down and 90 lb up at 6-8-12, 30 lb down at 8-0-12, 1439 lb down and 90 lb up at 8-8-12, 30 lb down at 10-0-12, 1439 lb down and 90 lb up at 10-8-12, 31 lb down at 12-0-12, 1428 lb down and 90 lb up at 12-8-12, 31 lb down at 14-0-12, 1428 lb down and 90 lb up at 14-8-12, 31 lb down at 16-0-12, 1428 lb down and 90 lb up at 16-0-12, 31 lb down at 18-0-12, 1428 lb down and 90 lb up at 18-0-12, and 37 lb down at 20-0-12, and 1431 lb down and 89 lb up at 20-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

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

Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-5=-60, 6-12=-20

Concentrated Loads (lb)

Vert: 1=-27 (F), 8=-16 (F), 10=-1166 (B), 9=-1166 (B), 4=-47 (F), 13=-38 (F), 14=-38 (F), 15=-38 (F), 16=-38 (F), 17=-38 (F), 18=-47 (F), 19=-47 (F), 20=-47 (F), 21=-56 (F), 22=-1181 (F=-15, B=-1166), 23=-1181 (F=-15, B=-1166), 24=-15 (F), 25=-1166 (B), 26=-15 (F), 27=-1166 (B), 28=-15 (F), 29=-1166 (B), 30=-16 (F), 31=-1166 (B), 32=-1181 (F=-16, B=-1166), 33=-1181 (F=-16, B=-1166), 34=-1187 (F=-19, B=-1169)



May 23, 2025

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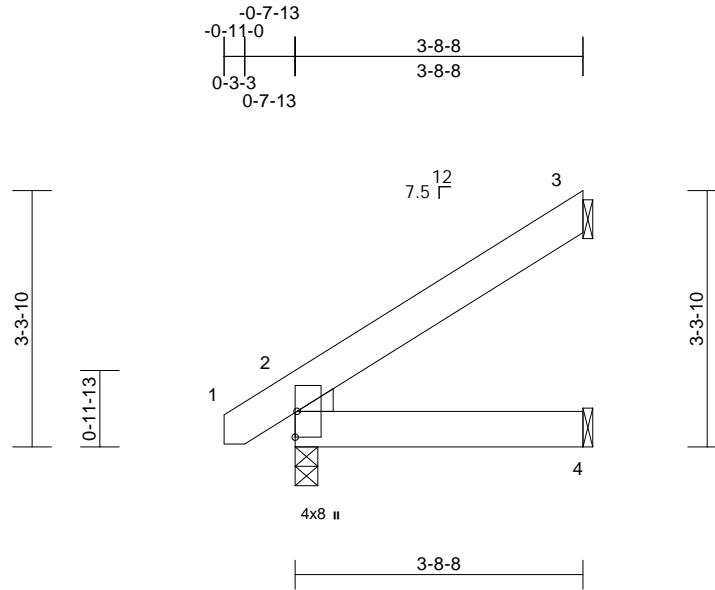
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	J01	JACK-OPEN	6	1	I73719883

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%

#### LUMBER

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEDGE Left: 2x4 SP No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-3-8, 3= Mechanical, 4= Mechanical  
Max Horiz 2=90 (LC 10)  
Max Uplift 3=70 (LC 10)  
Max Grav 2=203 (LC 1), 3=112 (LC 17), 4=70 (LC 3)

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

TOP CHORD 1-2=0/0, 2-3=-123/76  
BOT CHORD 2-4=0/0

#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft;  
Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf 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.
- 4) Bearings are assumed to be: , Joint 2 SP No.1 crushing capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 3.

**LOAD CASE(S)** Standard



May 23,2025

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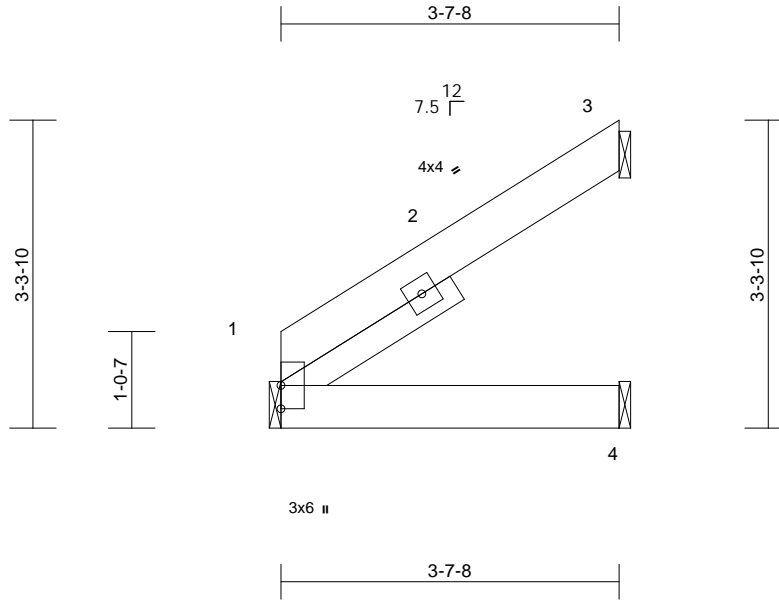
Job	Truss	Truss Type	Qty	Ply	
J0325-1580	J02	JACK-OPEN	5	1	Job Reference (optional)

I73719884

Comtech, Inc, Fayetteville, NC - 28314,

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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	0.10	Vert(LL)	0.00	1-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	1-4	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%

#### LUMBER

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
SLIDER Left 2x4 SP No.2 -- 2-1-14

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1= Mechanical, 3= Mechanical, 4= Mechanical  
Max Horiz 1=90 (LC 10)  
Max Uplift 3=-72 (LC 10)  
Max Grav 1=143 (LC 1), 3=120 (LC 17), 4=71 (LC 3)

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

TOP CHORD 1-3=-113/65  
BOT CHORD 1-4=0/0

#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft;  
Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 72 lb uplift at joint 3.

**LOAD CASE(S)** Standard



May 23,2025

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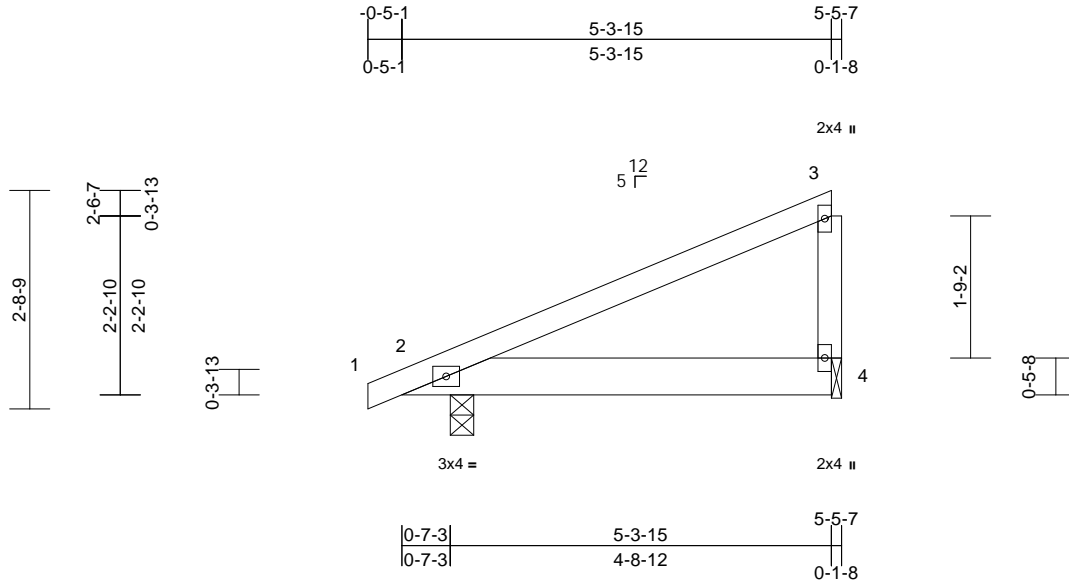
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	M1	MONOPITCH	6	1	I73719885

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Scale = 1:28.6

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	0.37	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.02	2-4	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P		Wind(LL)	0.03	2-4	>999	240	Weight: 25 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 4 and 68 lb uplift at joint 2.

**LOAD CASE(S)** Standard

#### BRACING

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

**REACTIONS** (size) 2=0-3-8, 4=0-1-8  
Max Horiz 2=76 (LC 10)  
Max Uplift 2=-68 (LC 6), 4=-71 (LC 6)  
Max Grav 2=242 (LC 1), 4=203 (LC 1)

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

TOP CHORD 1-2=0/14, 2-3=-98/51, 3-4=-151/210  
BOT CHORD 2-4=-3/3

#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft;  
Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf 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.
- 4) Bearings are assumed to be: Joint 4 SP No.2 crushing capacity of 565 psi, Joint 2 SP No.1 crushing capacity of 565 psi.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.



May 23,2025

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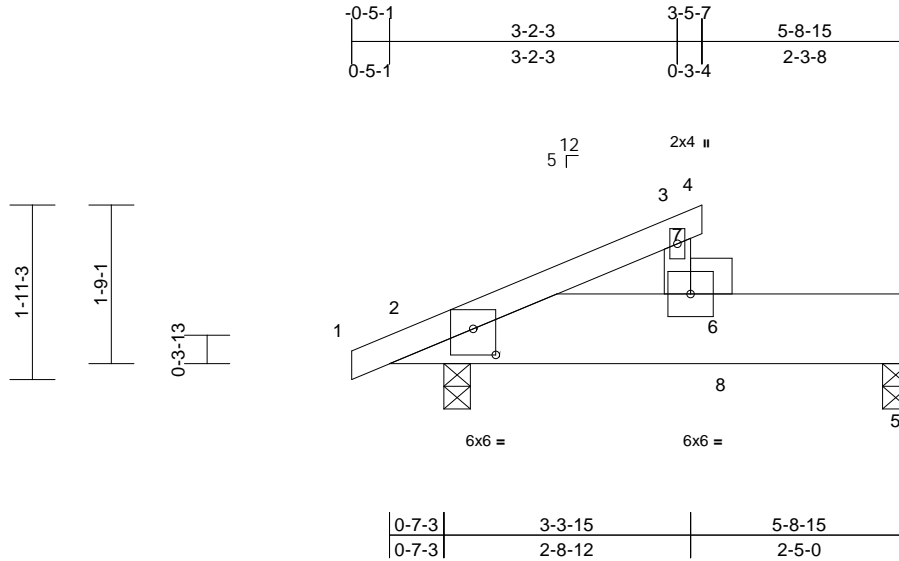
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	M2	ROOF SPECIAL	4	1	I73719886

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Page: 1



Scale = 1:25.5

Plate Offsets (X, Y): [2:0-3-0,0-3-7]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.03	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.07	2-6	>944	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P		Wind(LL)	0.06	2-6	>999	240	Weight: 31 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\* 6-7:2x6 SP No.1

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 9-0-12 oc bracing.

**REACTIONS** (size) 2=0-3-8, 5=0-3-8  
Max Horiz 2=49 (LC 10)  
Max Uplift 2=-139 (LC 10), 5=-218 (LC 10)  
Max Grav 2=1093 (LC 1), 5=1788 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/20, 2-3=-38/15, 3-4=-2/0, 3-6=-90/108  
BOT CHORD 2-6=-14/12, 5-6=0/0

#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft;  
Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C  
Exterior(2E) zone; C-C for members and forces &  
MWFRS for reactions shown; Lumber DOL=1.60 plate  
grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf  
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.
- 4) All bearings are assumed to be SP 2400F 2.0E crushing  
capacity of 805 psi.
- 5) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 218 lb uplift at  
joint 5 and 139 lb uplift at joint 2.
- 6) Load case(s) 16 has/have been modified. Building  
designer must review loads to verify that they are  
correct for the intended use of this truss.

- 7) Hanger(s) or other connection device(s) shall be  
provided sufficient to support concentrated load(s) . The  
design/selection of such connection device(s) is the  
responsibility of others.

#### LOAD CASE(S)

- Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15,  
Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-3=-60, 3-4=-20, 2-6=-20, 5-6=-130  
Concentrated Loads (lb)  
Vert: 8=-2300
  - 16) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt.  
metal=0.90  
Uniform Loads (lb/ft)  
Vert: 1-3=-20, 3-4=-20, 2-6=-20, 5-6=-75  
Concentrated Loads (lb)  
Vert: 8=-1150



May 23,2025

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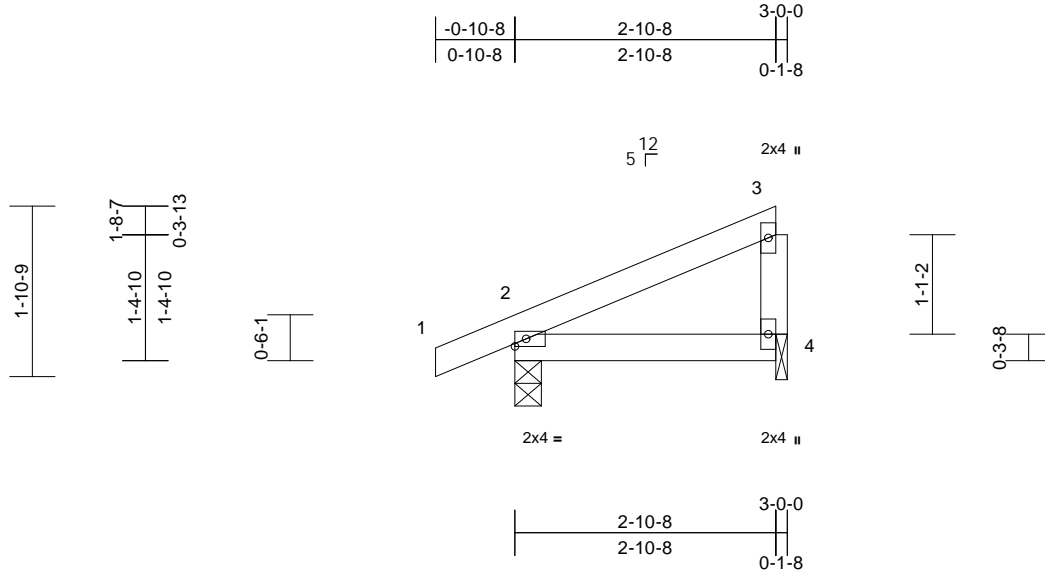
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	M3	MONOPITCH TRUSS	6	1	I73719887

Comtech, Inc, Fayetteville, NC - 28314,

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Scale = 1:25.4

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	0.08	Vert(LL)	0.00	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P		Wind(LL)	0.01	2-4	>999	240	Weight: 12 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.2

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 2 and 35 lb uplift at joint 4.

**LOAD CASE(S)** Standard

#### BRACING

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

**REACTIONS** (size) 2=0-3-8, 4=0-1-8

Max Horiz 4=49 (LC 10)  
Max Uplift 2=-58 (LC 6), 4=-35 (LC 6)  
Max Grav 2=181 (LC 1), 4=95 (LC 1)

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

TOP CHORD 3-4=-83/104, 1-2=0/10, 2-3=-60/34  
BOT CHORD 2-4=-39/125

#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft;  
Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf 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.
- 4) Bearings are assumed to be: Joint 4 SP No.2 crushing capacity of 565 psi, Joint 2 SP No.1 crushing capacity of 565 psi.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.



May 23,2025

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

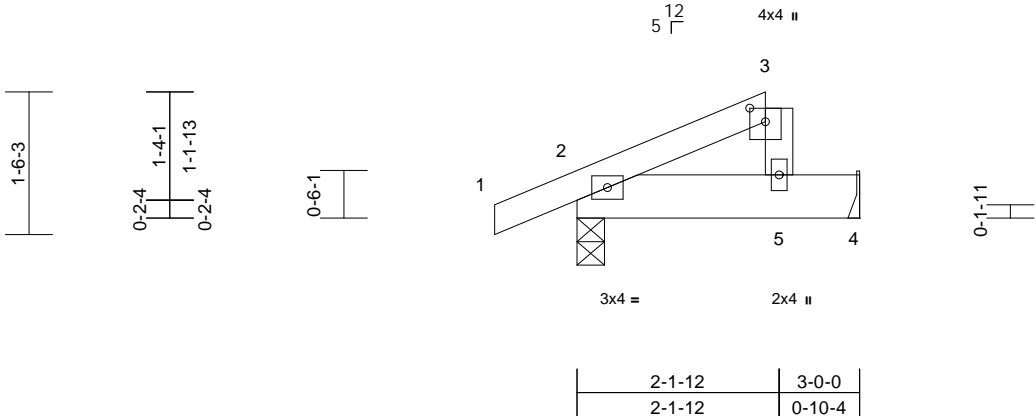
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	
J0325-1580	M4	MONOPITCH TRUSS	5	1	I73719888
Job Reference (optional)					

-0-10-8	2-0-0	3-0-0
0-10-8	2-0-0	1-0-0



Scale = 1:24.5											
Plate Offsets (X, Y): [3:0-1-12,0-2-0]											
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.01	2-5	>999	360	<b>GRIP</b>
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.01	2-5	>999	240	MT20
BCLL	0.0*	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	2	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.02	2-5	>999	240	Weight: 13 lb FT = 20%

<b>LUMBER</b>	
TOP CHORD	2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 2-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
<b>REACTIONS</b>	
(size)	2=0-3-8, 4= Mechanical
Max Horiz	4=39 (LC 10)
Max Uplift	2=-111 (LC 6), 4=-181 (LC 6)
Max Grav	2=348 (LC 1), 4=579 (LC 1)
<b>FORCES</b>	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/14, 2-3=-53/27
BOT CHORD	2-5=-27/106, 4-5=-27/106
WEBS	3-5=-66/100

- NOTES**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf 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.
  - 4) Bearings are assumed to be: , Joint 2 SP No.1 crushing capacity of 565 psi.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 4 and 111 lb uplift at joint 2.

- 7) Load case(s) 16 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.
- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-3=-60, 2-5=-20, 4-5=-130  
Concentrated Loads (lb)  
Vert: 5=-600
  - 16) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
Uniform Loads (lb/ft)  
Vert: 1-3=-20, 2-5=-20, 4-5=-75  
Concentrated Loads (lb)  
Vert: 5=-300



May 23,2025

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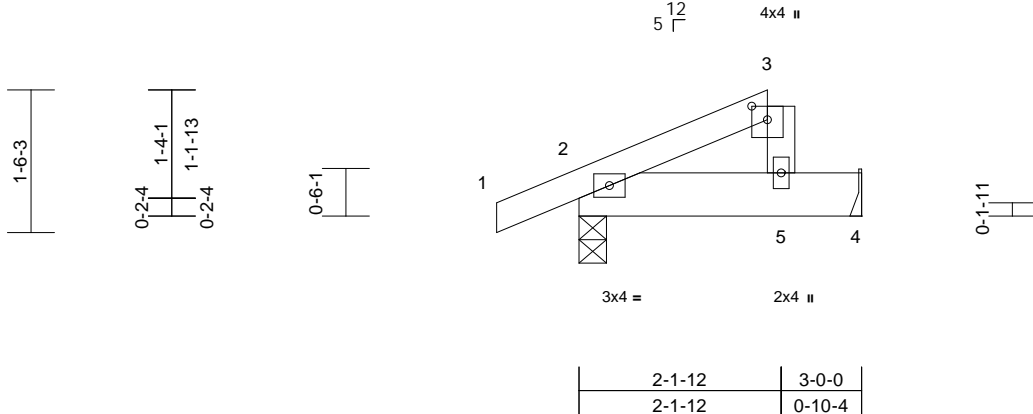
Job	Truss	Truss Type	Qty	Ply	
J0325-1580	M5	MONOPITCH TRUSS	2	1	Job Reference (optional)
					I73719889

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Fri May 23 08:27:36  
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Page: 1

-0-10-8	2-0-0	3-0-0
0-10-8	2-0-0	1-0-0



Scale = 1:24.5									
Plate Offsets (X, Y): [3:0-1-12,0-2-0]									
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.01 2-5	>999	360
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.01 2-5	>999	240
BCLL	0.0*	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00 2	n/a	n/a
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.03 2-5	>999	240
							<b>PLATES</b>	<b>GRIP</b>	
							MT20	244/190	
							Weight: 13 lb	FT = 20%	

<b>LUMBER</b>	
TOP CHORD	2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 2-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
<b>REACTIONS</b>	
(size)	2=0-3-8, 4= Mechanical
Max Horiz	4=39 (LC 10)
Max Uplift	2=-112 (LC 6), 4=-183 (LC 6)
Max Grav	2=349 (LC 1), 4=586 (LC 1)
<b>FORCES</b>	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/14, 2-3=-53/27
BOT CHORD	2-5=-27/106, 4-5=-27/106
WEBS	3-5=-66/100

- NOTES**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft;  
Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C  
Exterior(2E) zone; porch left exposed;C-C for members  
and forces & MWFRS for reactions shown; Lumber  
DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf  
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.
  - 4) Bearings are assumed to be: , Joint 2 SP No.1 crushing  
capacity of 565 psi.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 183 lb uplift at  
joint 4 and 112 lb uplift at joint 2.

- 7) Load case(s) 16 has/have been modified. Building  
designer must review loads to verify that they are  
correct for the intended use of this truss.
  - 8) Hanger(s) or other connection device(s) shall be  
provided sufficient to support concentrated load(s) . The  
design/selection of such connection device(s) is the  
responsibility of others.
- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15,  
Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-3=-60, 2-5=-20, 4-5=-140  
Concentrated Loads (lb)  
Vert: 5=-600
  - 16) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt.  
metal=0.90  
Uniform Loads (lb/ft)  
Vert: 1-3=-20, 2-5=-20, 4-5=-80  
Concentrated Loads (lb)  
Vert: 5=-300



May 23,2025

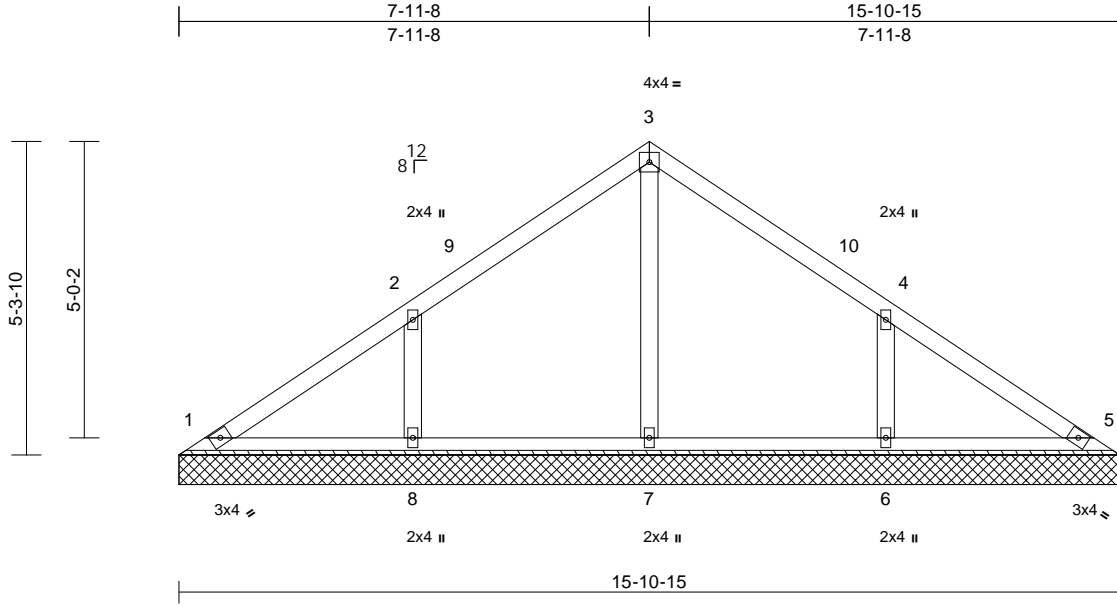


Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	VC01	Valley	1	1	I73719890

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Fri May 23 08:27:36  
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Page: 1



Scale = 1:39

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	0.15	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 64 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

#### BRACING

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

**REACTIONS** (size) 1=15-10-15, 5=15-10-15,  
6=15-10-15, 7=15-10-15,  
8=15-10-15  
Max Horiz 1=-119 (LC 8)  
Max Uplift 1=-7 (LC 6), 6=-115 (LC 11),  
8=-115 (LC 10)  
Max Grav 1=133 (LC 18), 5=125 (LC 1),  
6=378 (LC 18), 7=247 (LC 1),  
8=378 (LC 17)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-119/93, 2-3=-127/123, 3-4=-113/123,  
4-5=-88/56  
BOT CHORD 1-8=-35/66, 7-8=-35/66, 6-7=-35/66,  
5-6=-35/66  
WEBS 3-7=-171/1, 2-8=-289/207, 4-6=-289/207

#### 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=5.0psf; h=15ft;  
Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C  
Exterior(2E) 0-5-12 to 4-10-9, Exterior(2R) 4-10-9 to  
11-0-6, Exterior(2E) 11-0-6 to 15-5-3 zone;C-C for  
members and forces & MWFRS for reactions shown;  
Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 30.0psf  
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.
- All bearings are assumed to be SP No.1 crushing  
capacity of 565 psi.
- Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 7 lb uplift at joint  
1, 115 lb uplift at joint 8 and 115 lb uplift at joint 6.

**LOAD CASE(S)** Standard



May 23,2025

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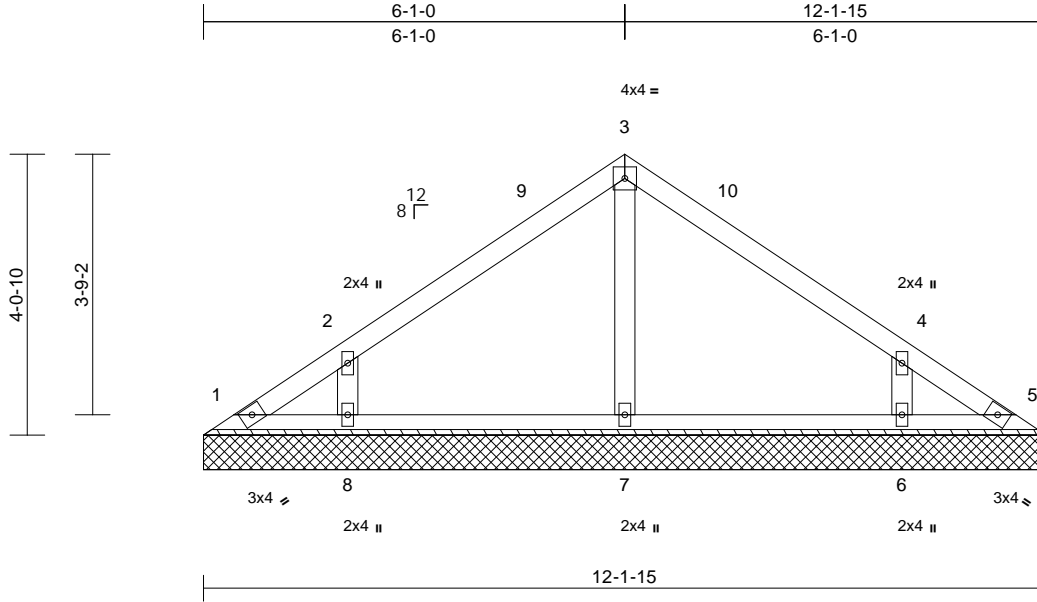


Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	VC02	Valley	1	1	I73719891

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:33.3

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 46 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
OTHERS	2x4 SP No.2

#### BRACING

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

<b>REACTIONS</b>	(size)	1=12-1-15, 5=12-1-15, 6=12-1-15, 7=12-1-15, 8=12-1-15
	Max Horiz	1=-89 (LC 8)
	Max Uplift	1=-30 (LC 8), 5=-12 (LC 9), 6=-99 (LC 11), 8=-100 (LC 10)
	Max Grav	1=55 (LC 18), 5=42 (LC 17), 6=314 (LC 18), 7=264 (LC 1), 8=314 (LC 17)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-91/78, 2-3=-122/101, 3-4=-113/101, 4-5=-62/46
BOT CHORD	1-8=-22/52, 7-8=-22/52, 6-7=-22/52, 5-6=-22/52
WEBS	3-7=-178/45, 2-8=-252/217, 4-6=-252/217

#### 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-12 to 4-10-9, Exterior(2R) 4-10-9 to 7-3-6, Exterior(2E) 7-3-6 to 11-8-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 30.0psf 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.
- All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1, 12 lb uplift at joint 5, 100 lb uplift at joint 8 and 99 lb uplift at joint 6.

**LOAD CASE(S)** Standard



May 23, 2025

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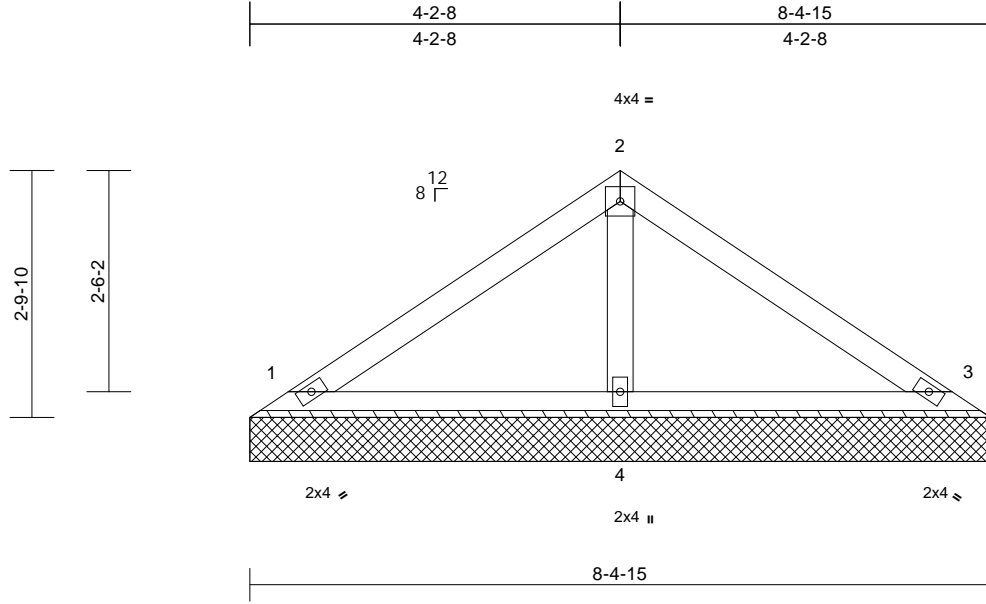
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	VC03	Valley	1	1	I73719892

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Fri May 23 08:27:37  
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Page: 1



Scale = 1:26.2

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	0.19	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P						Weight: 29 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 1 and 34 lb uplift at joint 3.

**LOAD CASE(S)** Standard

#### BRACING

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

#### REACTIONS

(size) 1=8-4-15, 3=8-4-15, 4=8-4-15  
Max Horiz 1=60 (LC 8)  
Max Uplift 1=28 (LC 10), 3=34 (LC 11)  
Max Grav 1=162 (LC 1), 3=162 (LC 1), 4=272 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-98/68, 2-3=-90/68  
BOT CHORD 1-4=-11/43, 3-4=-11/43  
WEBS 2-4=-179/115

#### 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf 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.
- All bearings are assumed to be SP No.1 crushing capacity of 565 psi.



May 23,2025

**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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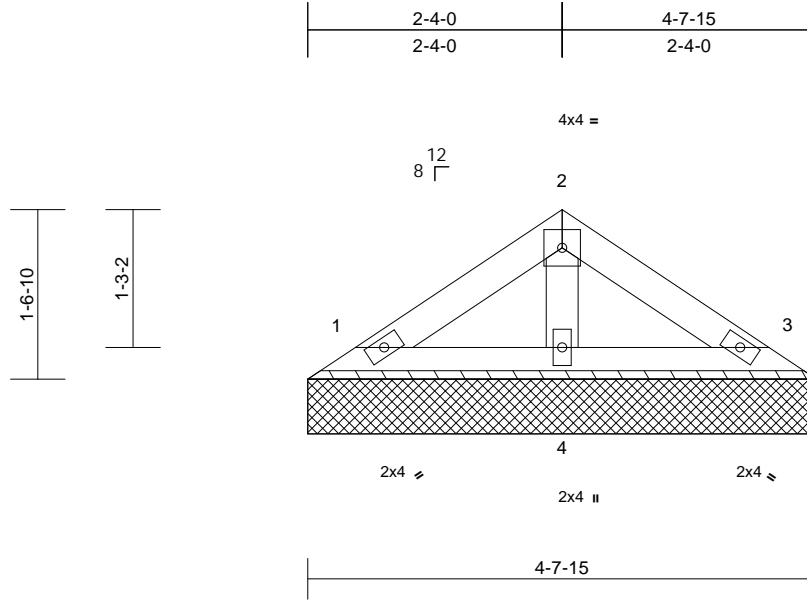
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
J0325-1580	VC04	Valley	1	1	I73719893

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 17 lb uplift at joint 3.

**LOAD CASE(S)** Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-7-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size) 1=4-7-15, 3=4-7-15, 4=4-7-15  
Max Horiz 1=30 (LC 9)  
Max Uplift 1=-14 (LC 10), 3=-17 (LC 11)  
Max Grav 1=80 (LC 1), 3=80 (LC 1), 4=135 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-49/42, 2-3=-44/42  
BOT CHORD 1-4=-5/21, 3-4=-5/21  
WEBS 2-4=-89/74

#### 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf 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.
- All bearings are assumed to be SP No.1 crushing capacity of 565 psi.



May 23,2025

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

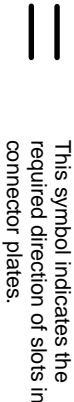
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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**TRENCO**  
A MiTek Affiliate

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Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

**4 X 4**

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

## LATERAL BRACING LOCATION



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

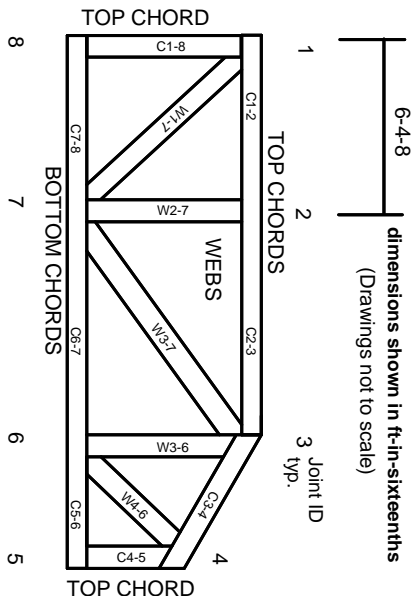
## BEARING



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

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

# Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:  
ESR-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

# Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.  
Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on lumber values established by others.

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# General Safety Notes

**Failure to Follow Could Cause Property Damage or Personal Injury**

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

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