



### ROOF & FLOOR TRUSSES & BEAMS

Relly Road Industrial Park  
Fayetteville, N.C. 28309  
Phone: (910) 864-8787  
Fax: (910) 864-4444

#### LOAD CHART FOR JACK STUDS

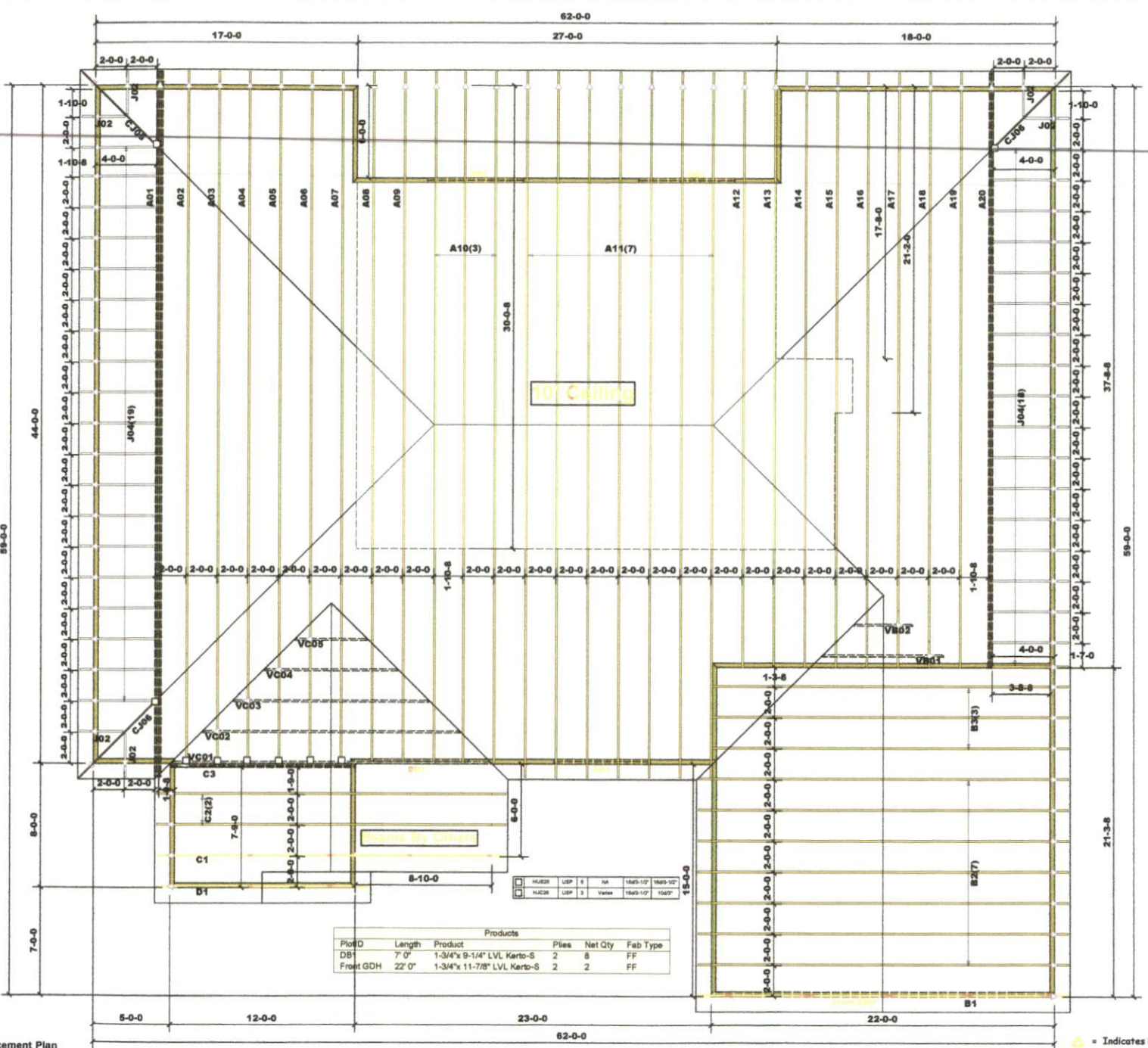
BASED ON TABLE 808.1.1.1 (1)

NUMBER OF JACK STUDS REQUIRED @ 8' END OF HEADERS

TRUSS HEIGHT (APPROX.)	TRUSS SPACING (ON CENTER)	TRUSS WEIGHT (LBS/FT)	TRUSS WEIGHT (LBS/FT)	TRUSS WEIGHT (LBS/FT)	TRUSS WEIGHT (LBS/FT)
1700	1	2550	1	2400	1
3400	2	5100	2	4800	2
5100	3	7650	3	7200	3
6800	4	10200	4	9600	4
8500	5	12750	5	12000	5
10200	6	15300	6	14400	6
11900	7	17850	7	16800	7
13600	8				
15300	9				

BUILDER	Cash	West End / Harnett
JOB NAME	Maria Garcia Residence	162 Windfall Way
PLAN	Brunswick A Classic Small FP	Brunswick Roof
SEAL DATE	N/A	08/09/22
QUOTE #	B0920-4432	Drawn by Marshall Naylor
JOB #	J0822-4079	Sales Rep Marshall Naylor

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.**  
These trusses are designed as individual building components to be incorporated into the building design at the discretion of the building designer. Each individual design shown for each truss design is based on the plan provided. The building designer is responsible for verifying and determining the location of the roof and floor system and for the overall structure. The design of the truss system and the location of the trusses, walls, and columns is the responsibility of the building designer. For general guidelines regarding trussing, consult BC-B1 and BC-B2 provided with the truss delivery package or online at [shelbytruss.com](http://shelbytruss.com)



ProdID	Length	Product	Pieces	Net Qty	Fab Type
DB1	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	8	FF
Front GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF

Product	USP #	NA	1849-112	1849-107
HUES1	USP 1	NA	1849-112	1849-107
HUES2	USP 2	View	1849-112	1849-107

Truss Placement Plan  
SCALE: 1/4"=1'

▲ = Indicates Left End of Truss  
(Reference Engineered Truss Drawing)  
Do NOT Erect Truss Backwards

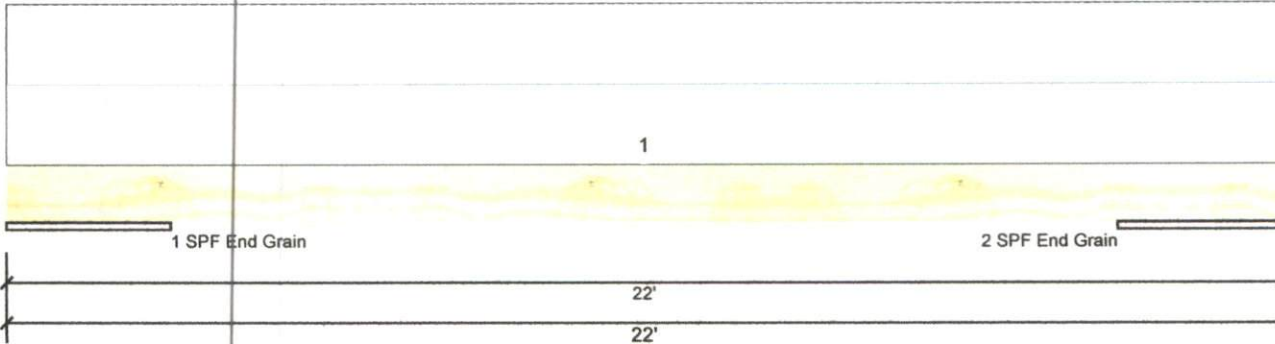


Client: Maria Garcia  
 Project:  
 Address:

Date: 8/12/2022  
 Input by: Marshall Naylor  
 Job Name: Maria Garcia Residence  
 Project #:

**GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

**Reactions UNPATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	762	660	0	0
2	Vertical	0	762	660	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	34.000"	Vert	1%	762 / 660	1422	L	D+S
2 - SPF End Grain	34.000"	Vert	1%	762 / 660	1422	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4376 ft-lb	11'	22897 ft-lb	0.191 (19%)	D+S	L
Unbraced	4376 ft-lb	11'	6056 ft-lb	0.723 (72%)	D+S	L
Shear	937 lb	3'9 7/8"	10197 lb	0.092 (9%)	D+S	L
LL Defl inch	0.107 (L/1845)	11' 1/16"	0.411 (L/480)	0.260 (26%)	S	L
TL Defl inch	0.231 (L/857)	11' 1/16"	0.549 (L/360)	0.420 (42%)	D+S	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at end bearings.
- 6 Bottom must be laterally braced at end bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	60 PLF	0 PLF	60 PLF	0 PLF	0 PLF	Gable
	Self Weight				9 PLF					

**Notes**

Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer info**

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS

This design is valid until 11/3/2024





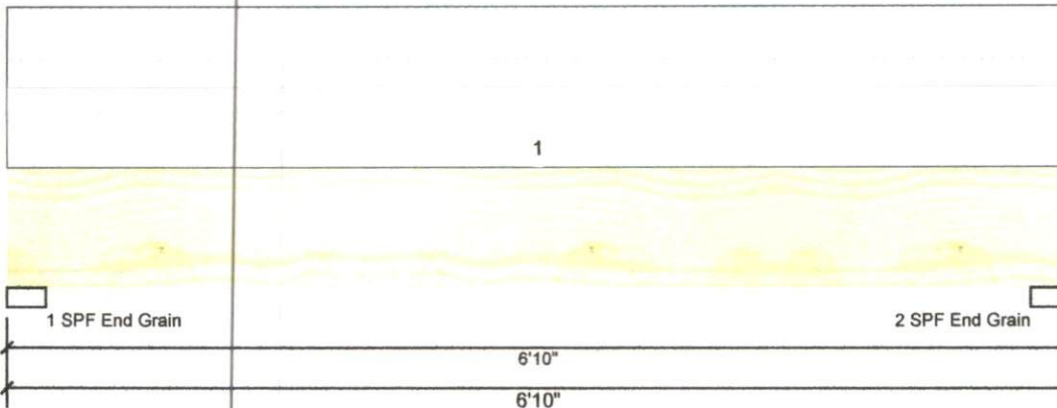


Client: Maria Garcia  
 Project:  
 Address:

Date: 8/12/2022  
 Input by: Marshall Naylor  
 Job Name: Maria Garcia Residence  
 Project #:

**DB1 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: Level



**Member Information**

Type: Girder  
 Plies: 2  
 Moisture Condition: Dry  
 Deflection LL: 480  
 Deflection TL: 360  
 Importance: Normal - II  
 Temperature: Temp <= 100°F

Application: Floor  
 Design Method: ASD  
 Building Code: IBC/IRC 2015  
 Load Sharing: No  
 Deck: Not Checked

**Reactions UNPATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1835	1811	0	0
2	Vertical	0	1835	1811	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	41%	1835 / 1811	3646	L	D+S
2 - SPF End Grain	3.000"	Vert	41%	1835 / 1811	3646	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5564 ft-lb	3'5"	14423 ft-lb	0.386 (39%)	D+S	L
Unbraced	5564 ft-lb	3'5"	10130 ft-lb	0.549 (55%)	D+S	L
Shear	2562 lb	1' 1/4"	7943 lb	0.323 (32%)	D+S	L
LL Defl inch	0.055 (L/1415)	3'5"	0.161 (L/480)	0.339 (34%)	S	L
TL Defl inch	0.110 (L/703)	3'5"	0.215 (L/360)	0.512 (51%)	D+S	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
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- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at end bearings.
- 6 Bottom must be laterally braced at end bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	530 PLF	0 PLF	530 PLF	0 PLF	0 PLF	A-Trusses
	Self Weight				7 PLF					

**Notes**

Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

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**Handling & Installation**

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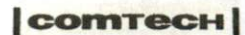
6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info**

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
 www.metsawood.com/us

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
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 28314  
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This design is valid until 11/3/2024



**comtech**  
**ROOF & FLOOR**  
**TRUSSES & BEAMS**

Relly Road Industrial Park  
 Fayetteville, N.C. 28309  
 Phone: (910) 864-8787  
 Fax: (910) 864-4444

**Steel Nail Nbs**

16d	1000
18d	1000
20d	1000
22d	1000
24d	1000
26d	1000
28d	1000
30d	1000
32d	1000
34d	1000
36d	1000
38d	1000
40d	1000
42d	1000
44d	1000
46d	1000
48d	1000
50d	1000
52d	1000
54d	1000
56d	1000
58d	1000
60d	1000
62d	1000
64d	1000
66d	1000
68d	1000
70d	1000
72d	1000
74d	1000
76d	1000
78d	1000
80d	1000
82d	1000
84d	1000
86d	1000
88d	1000
90d	1000
92d	1000
94d	1000
96d	1000
98d	1000
100d	1000

**LOAD CHART FOR JACK STUDS**

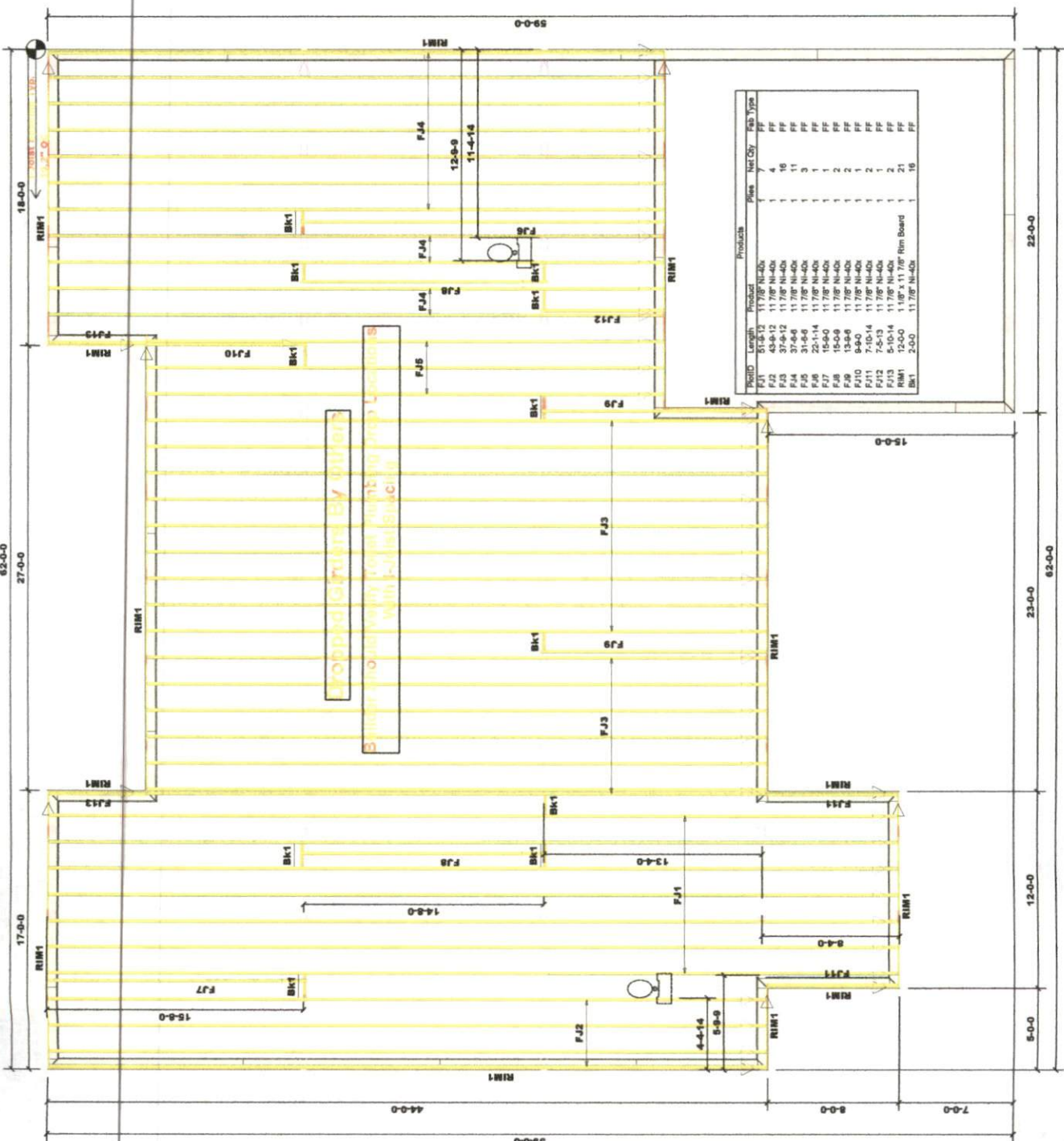
MAXIMUM UNIFORM LOADS (PSF) AT END OF JACK STUDS

SPACING	12" O.C.	16" O.C.	20" O.C.	24" O.C.	30" O.C.
1700	1	2500	1	3400	1
1800	1	2300	1	3100	1
1900	1	2100	1	2800	1
2000	1	1900	1	2500	1
2100	1	1700	1	2200	1
2200	1	1500	1	1900	1
2300	1	1300	1	1600	1
2400	1	1100	1	1300	1
2500	1	900	1	1000	1
2600	1	700	1	700	1
2700	1	500	1	400	1
2800	1	300	1	100	1
2900	1	100	1	0	1
3000	1	0	1	0	1

COUNTY	Hameth
ADDRESS	89 Benjamin Ln.
MODEL	Brunswick Crawl
DATE REV.	//
DRAWN BY	Marshall Naylor
SALESMAN	Marshall Naylor

BUILDER	Cash
JOB NAME	Maria Garcia Residence
PLAN	Brunswick Crawl
SEAL DATE	N/A
QUOTE #	Quote #
JOB #	J0822-4104

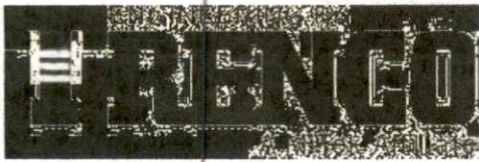
THIS IS A THEFT PREVENTION MARKING ONLY. These trusses are designed and fabricated under the supervision of the manufacturer. The manufacturer is not responsible for the use of these trusses in any application other than that for which they were designed. The manufacturer is not responsible for the use of these trusses in any application other than that for which they were designed. The manufacturer is not responsible for the use of these trusses in any application other than that for which they were designed.



PartID	Length	Product	Products	Pieces	Net Qty	Part Type
FJ1	31'-6-12	11 7/8" N-40x		1	4	FF
FJ2	37'-6-12	11 7/8" N-40x		1	16	FF
FJ3	37'-6-12	11 7/8" N-40x		1	11	FF
FJ4	31'-6-6	11 7/8" N-40x		1	3	FF
FJ5	31'-6-6	11 7/8" N-40x		1	1	FF
FJ6	22'-11-4	11 7/8" N-40x		1	1	FF
FJ7	15'-6-0	11 7/8" N-40x		1	2	FF
FJ8	15'-6-0	11 7/8" N-40x		1	2	FF
FJ9	13'-4-0	11 7/8" N-40x		1	2	FF
FJ10	9'-4-0	11 7/8" N-40x		1	1	FF
FJ11	7'-10-14	11 7/8" N-40x		1	2	FF
FJ12	7'-5-13	11 7/8" N-40x		1	1	FF
FJ13	5'-10-14	11 7/8" N-40x		1	2	FF
BK1	15'-0-0	11 7/8" N-40x	Rim Board	1	2	FF
BK2	2'-0-0	11 7/8" N-40x		1	16	FF

Truss Placement Plan  
 SCALE: 1/8"=1'





RE: J0822-4079  
Maria Garcia Residence

**Trenco**  
818 Soundside Rd  
Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0822-4079  
Lot/Block: Model:  
Address: Subdivision:  
City: State:

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

Design Code: C2015/TPI2014 Design Program: Tek 20/20 8.4  
Wind Code: CE 7-10 Wind Speed: 0 mph  
Roof Load: 0 psf Floor Load: A psf

This package includes 37 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	153614031	A01	8/12/2022	21	153614051	B1	8/12/2022
2	153614032	A02	8/12/2022	22	153614052	B2	8/12/2022
3	153614033	A03	8/12/2022	23	153614053	B3	8/12/2022
4	153614034	A04	8/12/2022	24	153614054	C1	8/12/2022
5	153614035	A05	8/12/2022	25	153614055	C2	8/12/2022
6	153614036	A06	8/12/2022	26	153614056	C3	8/12/2022
7	153614037	A07	8/12/2022	27	153614057	CJ06	8/12/2022
8	153614038	A08	8/12/2022	28	153614058	D1	8/12/2022
9	153614039	A09	8/12/2022	29	153614059	J02	8/12/2022
10	153614040	A10	8/12/2022	30	153614060	J04	8/12/2022
11	153614041	A11	8/12/2022	31	153614061	VB01	8/12/2022
12	153614042	A12	8/12/2022	32	153614062	VB02	8/12/2022
13	153614043	A13	8/12/2022	33	153614063	VC01	8/12/2022
14	153614044	A14	8/12/2022	34	153614064	VC02	8/12/2022
15	153614045	A15	8/12/2022	35	153614065	VC03	8/12/2022
16	153614046	A16	8/12/2022	36	153614066	VC04	8/12/2022
17	153614047	A17	8/12/2022	37	153614067	VC05	8/12/2022
18	153614048	A18	8/12/2022				
19	153614049	A19	8/12/2022				
20	153614050	A20	8/12/2022				

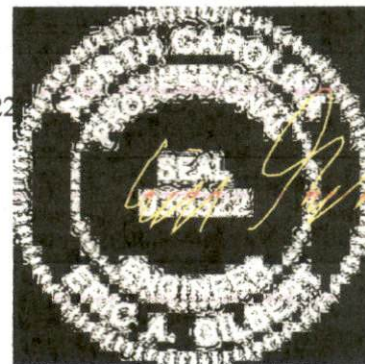
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2022

North Carolina COA: C-0844

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



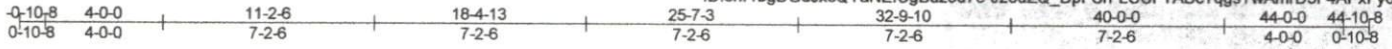
August 12, 2022

Job J0822-4079	Truss A01	Truss Type HIP GIRDER	Qty 1	Ply 3	Maria Garcia Residence Job Reference (optional)	I53614031
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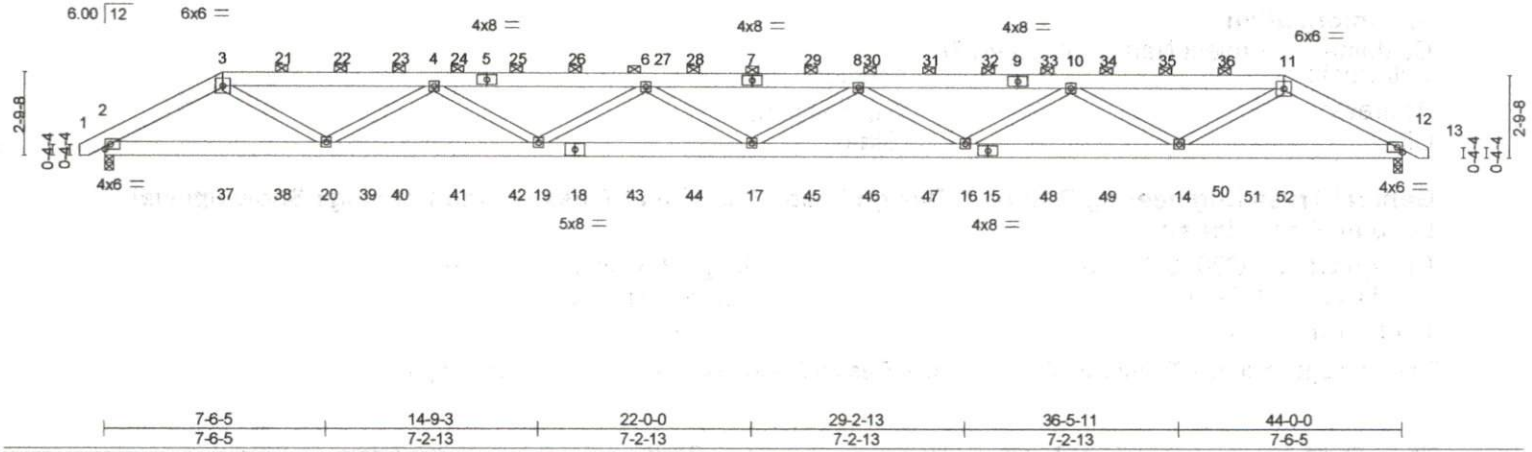
Comtech, Inc. Fayetteville, NC - 28314.

8.430 s Jan 6 2022 MITek Industries, Inc. Thu Aug 11 10:23:37 2022 Page 1

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Scale = 1:78.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	Vert(LL) -0.27	17	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.26	Vert(CT) -0.54	17	>978	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.27	Horz(CT) 0.09	12	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Wind(LL) 0.27	17	>999	240		
	Code IRC2015/TPI2014						Weight: 820 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-11.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 12=0-3-8  
 Max Horz 2=31(LC 7)  
 Max Uplift 2=484(LC 5), 12=483(LC 4)  
 Max Grav 2=2603(LC 1), 12=2600(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4538/953, 3-4=-6649/1287, 4-6=-10331/2039, 6-8=-11599/2284, 8-10=-10331/2039, 10-11=-6648/1286, 11-12=-4535/951  
 BOT CHORD 2-20=-815/3878, 19-20=-1880/8994, 17-19=-2357/11428, 16-17=-2349/11429, 14-16=-1856/8993, 12-14=-783/3875  
 WEBS 3-20=-543/3326, 4-20=-2793/746, 4-19=-169/1607, 6-19=-1311/417, 6-17=0/393, 8-17=0/393, 8-16=-1312/418, 10-16=-169/1608, 10-14=-2793/746, 11-14=-544/3328

- NOTES-**
- 3-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: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs 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 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf, BCDL=6.0psf; 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 4x4 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 484 lb uplift at joint 2 and 483 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.



August 12, 2022



Job	Truss	Truss Type	Qty	Ply	Maria Garcia Residence	153614031
J0822-4079	A01	HIP GIRDER	1	3	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:23:38 2022 Page 2  
 ID:0nr1bgDGdJxcQYaNEfCgBuz9d7e-nFM?nm?raZaitVmOoBhQ8gNlbsGPVITCUkwzThyoyA3

**NOTES-**

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 67 lb down and 73 lb up at 4-0-0, 48 lb down and 73 lb up at 5-11-4, 48 lb down and 73 lb up at 7-11-4, 48 lb down and 73 lb up at 9-11-4, 48 lb down and 73 lb up at 11-11-4, 48 lb down and 73 lb up at 13-11-4, 48 lb down and 73 lb up at 15-11-4, 48 lb down and 73 lb up at 17-11-4, 48 lb down and 73 lb up at 19-11-4, 48 lb down and 73 lb up at 21-11-4, 48 lb down and 73 lb up at 23-11-4, 48 lb down and 73 lb up at 25-11-4, 48 lb down and 73 lb up at 27-11-4, 48 lb down and 73 lb up at 29-11-4, 48 lb down and 73 lb up at 31-11-4, 48 lb down and 73 lb up at 33-11-4, 48 lb down and 73 lb up at 35-11-4, and 48 lb down and 73 lb up at 37-11-4, and 67 lb down and 73 lb up at 40-0-0 on top chord, and 194 lb down and 62 lb up at 4-0-0, 36 lb down at 5-11-4, 36 lb down at 7-11-4, 36 lb down at 9-11-4, 36 lb down at 11-11-4, 36 lb down at 13-11-4, 36 lb down at 15-11-4, 36 lb down at 17-11-4, 36 lb down at 19-11-4, 36 lb down at 21-11-4, 36 lb down at 23-11-4, 36 lb down at 25-11-4, 36 lb down at 27-11-4, 36 lb down at 29-11-4, 36 lb down at 31-11-4, 36 lb down at 33-11-4, 36 lb down at 35-11-4, and 36 lb down at 37-11-4, and 194 lb down and 62 lb up at 39-11-4 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 (plf)

Vert: 1-3=-60, 3-11=-60, 11-13=-60, 2-12=-20

Concentrated Loads (lb)

Vert: 3=48(F) 7=48(F) 11=48(F) 18=18(F) 17=18(F) 15=18(F) 21=48(F) 22=48(F) 23=48(F) 24=48(F) 25=48(F) 26=48(F) 27=48(F) 28=48(F) 29=48(F) 30=48(F) 31=48(F) 32=48(F) 33=48(F) 34=48(F) 35=48(F) 36=48(F) 37=194(F) 38=18(F) 39=18(F) 40=18(F) 41=18(F) 42=18(F) 43=18(F) 44=18(F) 45=18(F) 46=18(F) 47=18(F) 48=18(F) 49=18(F) 50=18(F) 51=18(F) 52=194(F)

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/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932





Job J0822-4079	Truss A03	Truss Type HIP	Qty 1	Ply 1	María Garcia Residence Job Reference (optional)	153614033
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:23:40 2022 Page 1

ID:0nr1bgDGdJxcQYaNefCgBuz9d7e-kdUmCS066AqQ6pwnwcjuE5S4igtCz7ZVx2P3YayoyA1



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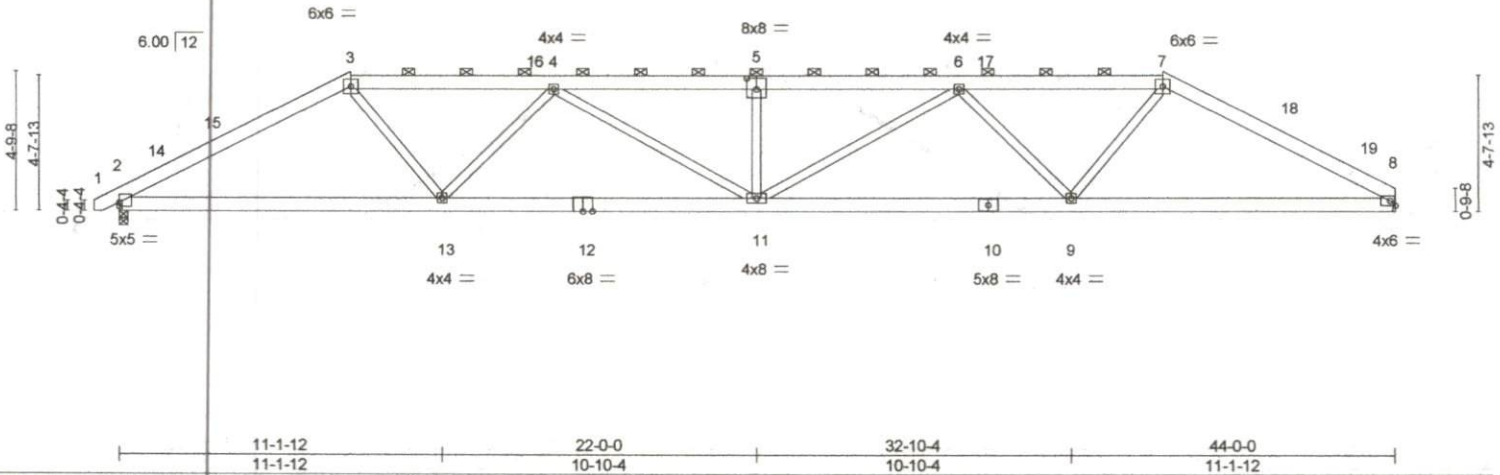


Plate Offsets (X,Y) - [2:0-0-0,0-1-11], [3:0-0-0,0-0-0], [5:0-4-0,0-4-8], [7:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.47	Vert(LL) -0.25	11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.62	Vert(CT) -0.51	9-11	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.62	Horz(CT) 0.14	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.19	11	>999	240	Weight: 272 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 3-9-14 oc purlins, except 2-0-0 oc purlins (3-5-14 max.); 3-7.  
BOT CHORD Rigid ceiling directly applied or 8-3-4 oc bracing.

**REACTIONS.**

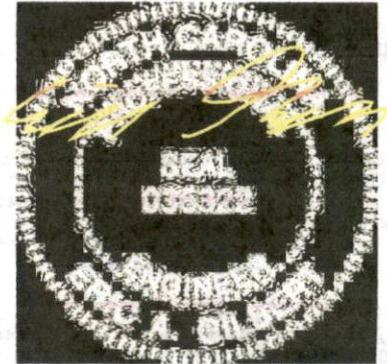
(size) B=Mechanical, 2=0-3-8  
Max Horz 2=56(LC 9)  
Max Uplift B=104(LC 8), 2=109(LC 9)  
Max Grav B=1751(LC 1), 2=1804(LC 1)

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

TOP CHORD 2-3=-312/778, 3-4=-3429/854, 4-5=-4639/1133, 5-6=-4639/1133, 6-7=-3450/854, 7-8=-3143/787  
BOT CHORD 2-13=-580/2673, 11-13=-883/4130, 9-11=-899/4143, 8-9=-571/2700  
WEBS 3-13=-165/1308, 4-13=-1098/357, 4-11=-71/643, 5-11=-407/195, 6-11=-66/629, 6-9=-1088/349, 7-9=-155/1302

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 3-8-3, Interior(1) 3-8-3 to 8-0-0, Exterior(2) 8-0-0 to 14-2-11, Interior(1) 14-2-11 to 36-0-0, Exterior(2) 36-0-0 to 42-2-11, Interior(1) 42-2-11 to 43-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 8 and 109 lb uplift at joint 2.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 12, 2022

WARNING: This design is valid only when used in accordance with the applicable code and referenced design criteria. READ THE INSTRUCTIONS CAREFULLY BEFORE USE.

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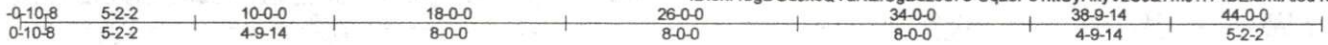
818 Soundside Road  
Edenton, NC 27932

Job J0822-4079	Truss A04	Truss Type HIP	Qty 1	Ply 1	Maria Garcia Residence Job Reference (optional)	I53614034
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Comtech, Inc. Fayetteville, NC - 28314.

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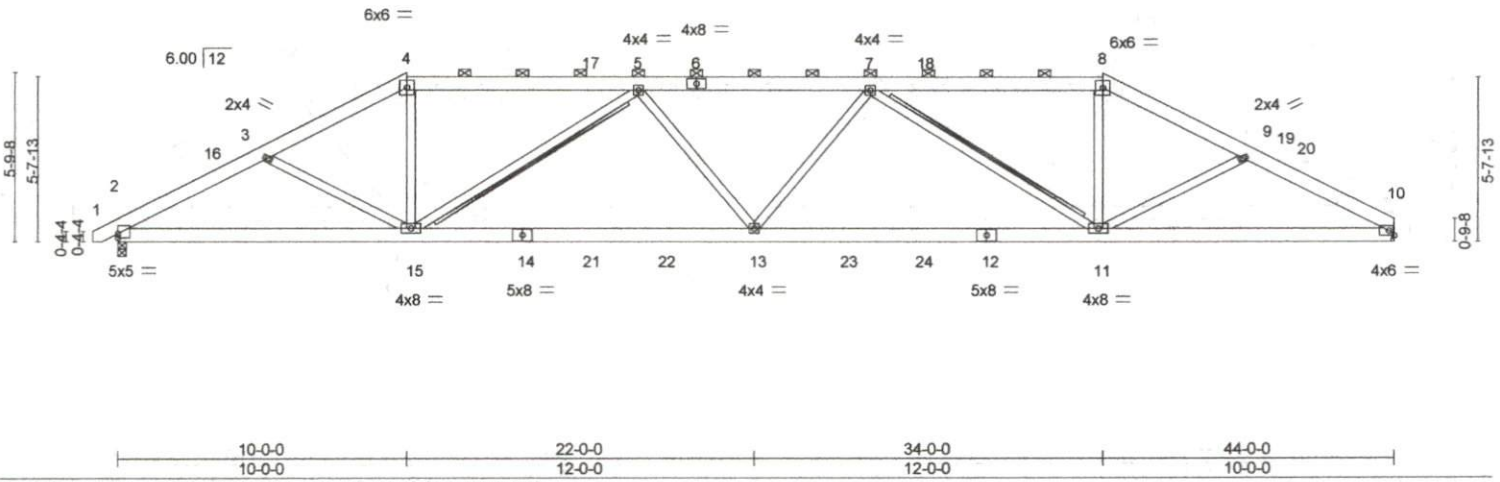


Plate Offsets (X,Y) [2:0-0-0,0-1-11], [4:0-0-0,0-0-0], [8:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.70	Vert(LL) -0.22 11-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.62	Vert(CT) -0.45 11-13 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.13 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.14 13 >999 240	Weight: 290 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 4-3-2 oc purlins, except 2-0-0 oc purlins (3-11-3 max.): 4-8.  
 Rigid ceiling directly applied or 8-11-5 oc bracing.  
 T-Brace: 2x4 SPF No.2 - 5-15, 7-11  
 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) 10=Mechanical, 2=0-3-8  
 Max Horz 2=69(LC 9)  
 Max Uplift 10=79(LC 8), 2=84(LC 9)  
 Max Grav 10=1751(LC 1), 2=1804(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3123/835, 3-4=-2963/751, 4-5=-2636/730, 5-7=-3695/932, 7-8=-2654/729,  
 8-9=-2983/750, 9-10=-3162/841  
 BOT CHORD 2-15=-670/2657, 13-15=-757/3602, 11-13=-764/3608, 10-11=-669/2704  
 WEBS 4-15=-123/920, 5-15=-1242/351, 5-13=0/303, 7-13=0/296, 7-11=-1230/345,  
 8-11=-133/929

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 3-8-3, Interior(1) 3-8-3 to 10-0-0, Exterior(2) 10-0-0 to 16-2-11, Interior(1) 16-2-11 to 34-0-0, Exterior(2) 34-0-0 to 40-2-11, Interior(1) 40-2-11 to 43-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 3-6-0 tall by 2-0-0 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 79 lb uplift at joint 10 and 84 lb uplift at joint 2.
  - 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.



August 12, 2022

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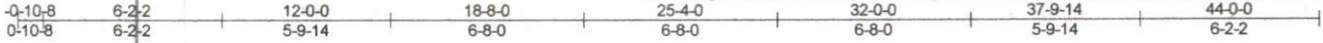


Job J0822-4079	Truss A05	Truss Type HIP	Qty 1	Ply 1	Maria Garcia Residence Job Reference (optional)	153614035
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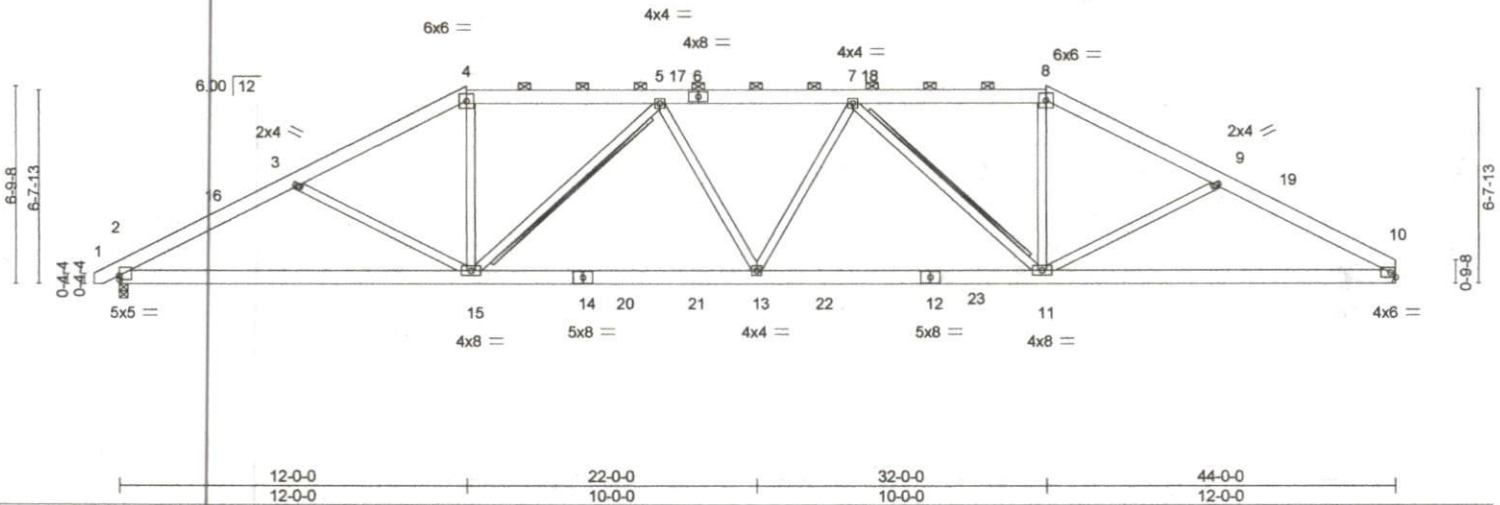


Plate Offsets (X, Y) - [2:0-0-0,0-1-11], [4:0-0-0,0-0-0], [8:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.24	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.58	Vert(LL) -0.19 11-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.40	Vert(CT) -0.35 10-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.11 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.11 13 >999 240	Weight: 297 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 4-2-3 oc purlins, except 2-0-0 oc purlins (4-3-14 max.): 4-8.  
BOT CHORD Rigid ceiling directly applied or 9-5-7 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 5-15, 7-11  
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) 10=Mechanical, 2=0-3-8  
Max Horz 2=82(LC 9)  
Max Uplift 10=53(LC 8), 2=57(LC 9)  
Max Grav 10=1751(LC 1), 2=1804(LC 1)

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

TOP CHORD 2-3=3115/839, 3-4=2838/730, 4-5=2495/717, 5-7=3187/841, 7-8=2508/715, 8-9=2852/729, 9-10=3146/845  
BOT CHORD 2-15=666/2667, 13-15=604/3081, 11-13=607/3085, 10-11=667/2704  
WEBS 4-15=130/927, 5-15=890/261, 5-13=0/278, 7-13=0/270, 7-11=880/257, 8-11=139/933, 9-11=257/258

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 3-8-3, Interior(1) 3-8-3 to 12-0-0, Exterior(2) 12-0-0 to 18-2-11, Interior(1) 18-2-11 to 32-0-0, Exterior(2) 32-0-0 to 38-0-15, Interior(1) 38-0-15 to 43-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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 3-6-0 tall by 2-0-0 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 53 lb uplift at joint 10 and 57 lb uplift at joint 2.
- 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.



August 12, 2022

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Job	Truss	Truss Type	Qty	Ply	Maria Garcia Residence	153614037
J0822-4079	A07	HIP	1	1		

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:23:44 2022 Page 1  
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 0-10-8 8-2-2 16-0-0 28-0-0 35-9-14 44-0-0  
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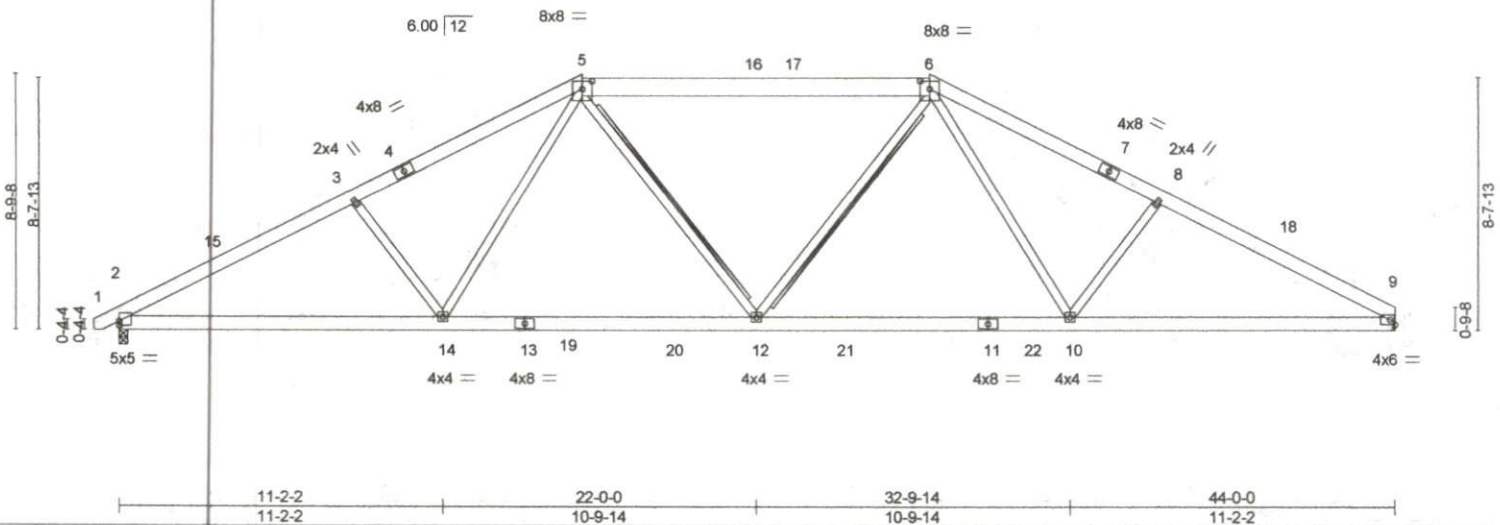


Plate Offsets (X, Y) - [2:0-0-0,0-1-11], [5:0-4-0,0-3-4], [6:0-4-0,0-3-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.56	Vert(LL)	-0.23 10-12	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.66	Vert(CT)	-0.36 10-12	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Horz(CT)	0.10 9	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.08 12	>999	240		
	Code IRC2015/TPI2014						Weight: 297 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 5-6: 2x8 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-10-9 oc purlins, except 2-0-0 oc purlins (4-8-11 max.): 5-6.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS T-Brace: 2x4 SPF No.2 - 5-12, 6-12 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=0-3-8, 9=Mechanical  
 Max Horz 2=108(LC 9)  
 Max Uplift 2=84(LC 12), 9=73(LC 13)  
 Max Grav 2=1826(LC 2), 9=1781(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=3256/776, 3-5=3053/777, 5-6=2521/666, 6-8=3070/777, 8-9=3277/778  
 BOT CHORD 2-14=597/2798, 12-14=392/2340, 10-12=380/2345, 9-10=593/2825  
 WEBS 3-14=332/270, 5-14=93/681, 5-12=17/419, 6-12=25/411, 6-10=97/700,  
 8-10=351/278

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-0-0, Exterior(2) 16-0-0 to 22-2-11, Interior(1) 22-2-11 to 28-0-0, Exterior(2) 28-0-0 to 34-2-11, Interior(1) 34-2-11 to 43-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 3-6-0 tall by 2-0-0 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 84 lb uplift at joint 2 and 73 lb uplift at joint 9.
  - 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.



August 12, 2022

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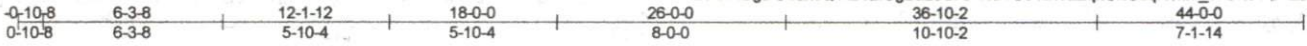


Job	Truss	Truss Type	Qty	Ply	Maria Garcia Residence	I53614038
J0822-4079	A08	HIP	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:23:46 2022 Page 1

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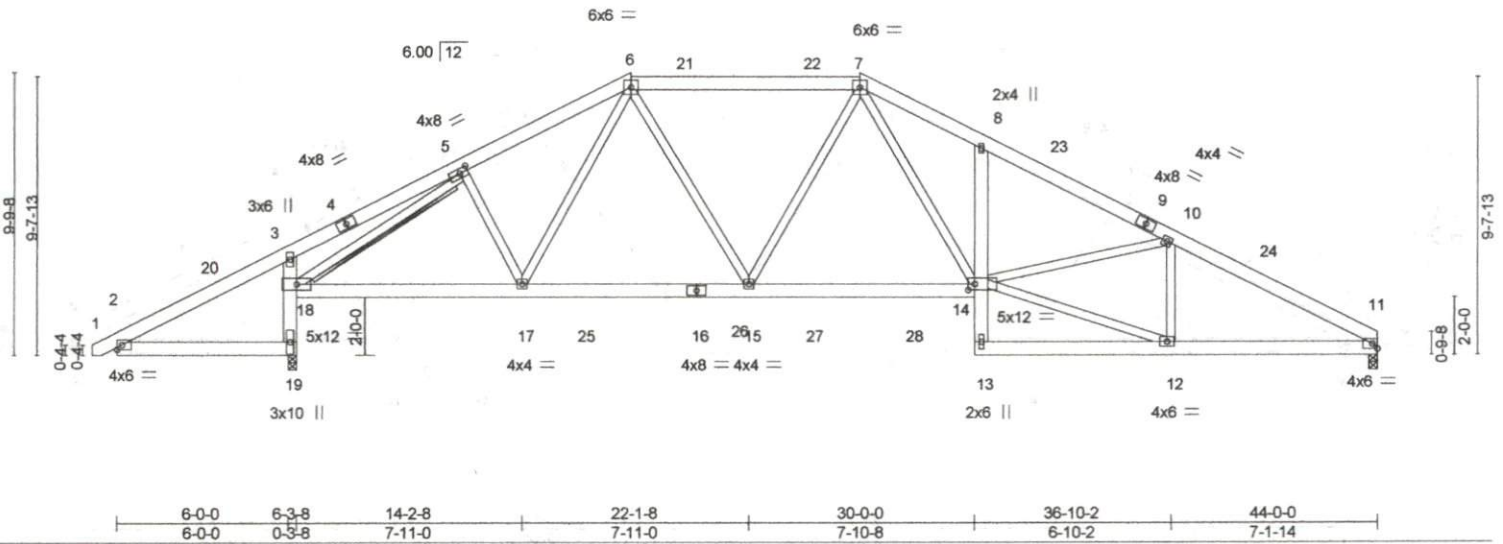


Plate Offsets (X,Y)-- [5:0-3-8,0-2-0], [14:0-2-12,0-2-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.42	Vert(LL) -0.14	14-15	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.53	Vert(CT) -0.27	14-15	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.81	Horz(CT) 0.07	11	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.08	14-15	>999	240	Weight: 329 lb	FT = 20%
	Code IRC2015/TPI2014							

**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 4-7-4 oc purlins, except 2-0-0 oc purlins (5-3-8 max.): 6-7.  
 Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 6-0-0 oc bracing: 2-19  
 4-7-3 oc bracing: 18-19.  
 T-Brace: 2x4 SPF No.2 - 5-18  
 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) 19=0-3-8, 11=0-3-8  
 Max Horz 19=121(LC 9)  
 Max Uplift 19=111(LC 12), 11=87(LC 13)  
 Max Grav 19=2086(LC 1), 11=1465(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=450/577, 3-5=984/907, 5-6=1836/420, 6-7=1889/492, 7-8=2791/732,  
 8-10=2824/616, 10-11=2601/560  
 BOT CHORD 2-19=391/433, 18-19=2042/739, 3-18=405/178, 17-18=83/1550, 15-17=111/1631,  
 14-15=168/1925, 8-14=252/227, 11-12=383/2217  
 WEBS 5-18=2665/1224, 5-17=69/306, 6-15=100/566, 7-15=262/198, 7-14=313/1122,  
 12-14=375/2178, 10-14=20/341, 10-12=490/200

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 3-8-3, Interior(1) 3-8-3 to 18-0-0, Exterior(2) 18-0-0 to 24-2-11, Interior(1) 24-2-11 to 26-0-0, Exterior(2) 26-0-0 to 32-2-11, Interior(1) 32-2-11 to 43-10-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 19 and 87 lb uplift at joint 11.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



August 12, 2022

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818 Soundside Road  
 Edenton, NC 27932





Job J0822-4079	Truss A10	Truss Type ROOF SPECIAL	Qty 3	Ply 1	Maria Garcia Residence Job Reference (optional)	I53614040
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Comtech, Inc. Fayetteville, NC - 28314.

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:23:48 2022 Page 1  
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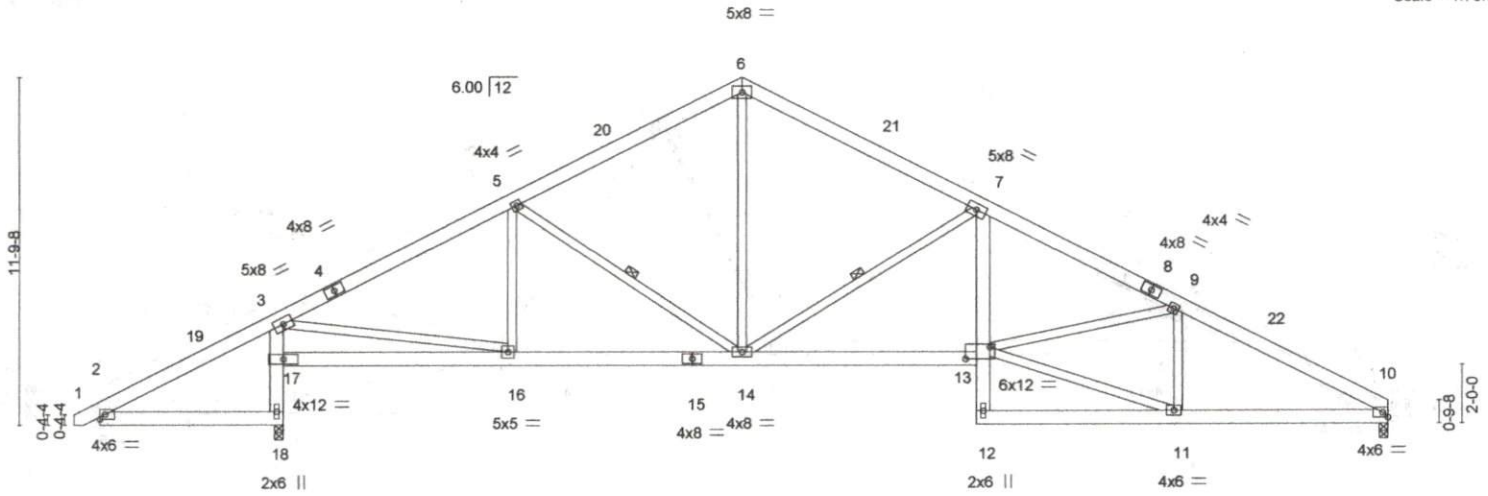


Plate Offsets (X,Y)-	[13:0-10:0,0-4-12]
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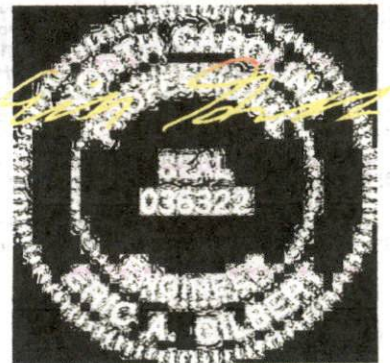
LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.41	Vert(LL) -0.12	13-14	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.53	Vert(CT) -0.26	13-14	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.70	Horz(CT) 0.04	10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.09	13	>999	240		
	Code IRC2015/TPI2014						Weight: 328 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-6-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 4-7-3 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-14, 7-14

**REACTIONS.** (size) 18=0-3-8, 10=0-3-8  
 Max Horz 18=148(LC 9)  
 Max Uplift 18=134(LC 12), 10=103(LC 13)  
 Max Grav 18=2086(LC 1), 10=1465(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=227/576, 3-5=-1889/387, 5-6=-1705/440, 6-7=-1712/461, 7-9=-2961/609, 9-10=-2596/535  
 BOT CHORD 2-18=-391/251, 17-18=-2042/531, 3-17=-1932/562, 16-17=-778/587, 14-16=-128/1580, 13-14=-302/2623, 7-13=-65/864, 10-11=-360/2210  
 WEBS 3-16=-615/2354, 5-16=-273/218, 5-14=-270/162, 6-14=-151/964, 7-14=-1409/356, 11-13=-352/2201, 9-13=0/369, 9-11=-577/203

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 22-0-0, Exterior(2) 22-0-0 to 26-4-13, Interior(1) 26-4-13 to 43-10-4 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 134 lb uplift at joint 18 and 103 lb uplift at joint 10.



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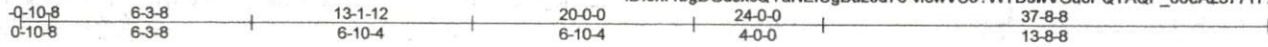


Job J0822-4079	Truss A12	Truss Type HIP	Qty 1	Ply 1	Maria Garcia Residence Job Reference (optional)	153614042
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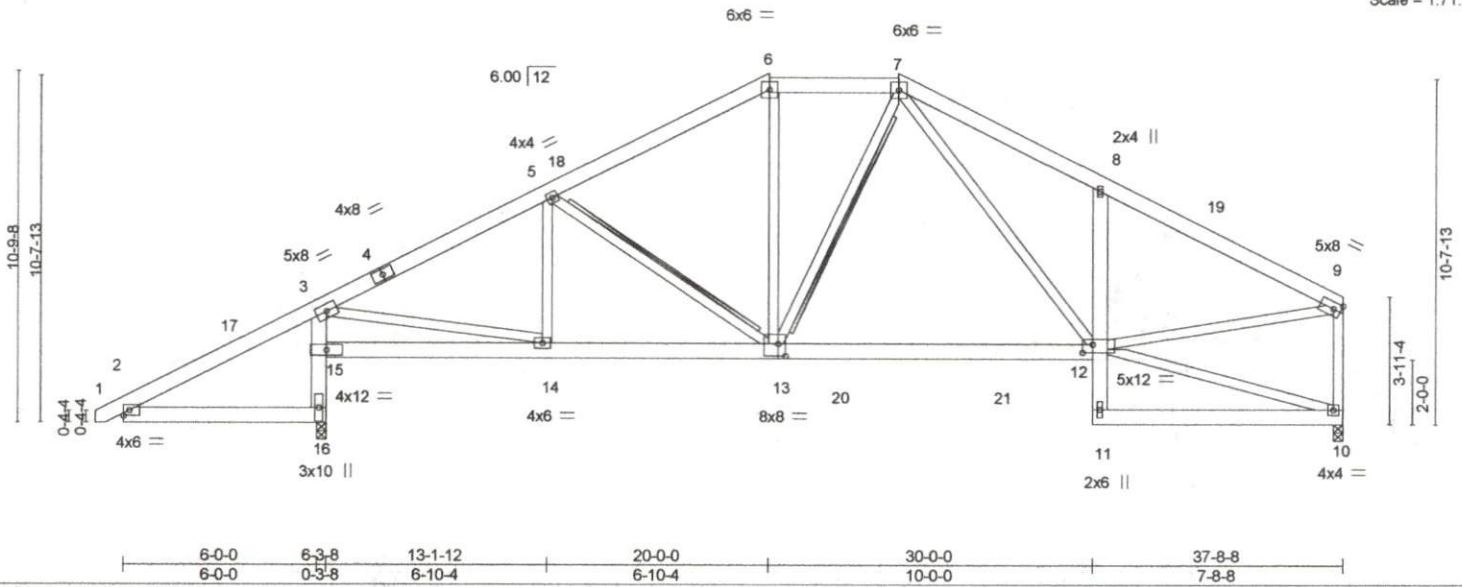


Plate Offsets (X, Y) - [6:0-0-0,0-0-0], [12:0-3-12,0-3-0], [13:0-2-12,0-4-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.40	Vert(LL)	-0.15 12-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.25 12-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.76	Horz(CT)	-0.07 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.04 13-14	>999	240	Weight: 305 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 5-11-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.); 6-7. Rigid ceiling directly applied or 4-10-7 oc bracing.  
 BOT CHORD T-Brace: 2x4 SPF No.2 - 5-13, 7-13  
 WEBS 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) 16=0-3-8, 10=0-3-8  
 Max Horz 16=197(LC 12)  
 Max Uplift 16=122(LC 12), 10=62(LC 13)  
 Max Grav 16=1843(LC 1), 10=1205(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=458/580, 3-5=1426/296, 5-6=1354/393, 6-7=1154/417, 7-8=1632/551, 8-9=1607/402, 9-10=1133/339  
 BOT CHORD 2-16=396/446, 15-16=1799/668, 3-15=1694/686, 14-15=835/842, 13-14=203/1228, 12-13=144/1113, 8-12=460/328  
 WEBS 3-14=872/2035, 5-14=306/271, 6-13=0/320, 7-12=216/512, 9-12=256/1375

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2)-0-8-10 to 3-8-3, Interior(1) 3-8-3 to 20-0-0, Exterior(2) 20-0-0 to 30-2-12, Interior(1) 30-2-12 to 37-6-12 zone; cantilever left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 3-6-0 tall by 2-0-0 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 122 lb uplift at joint 16 and 62 lb uplift at joint 10.
  - 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.



August 12, 2022

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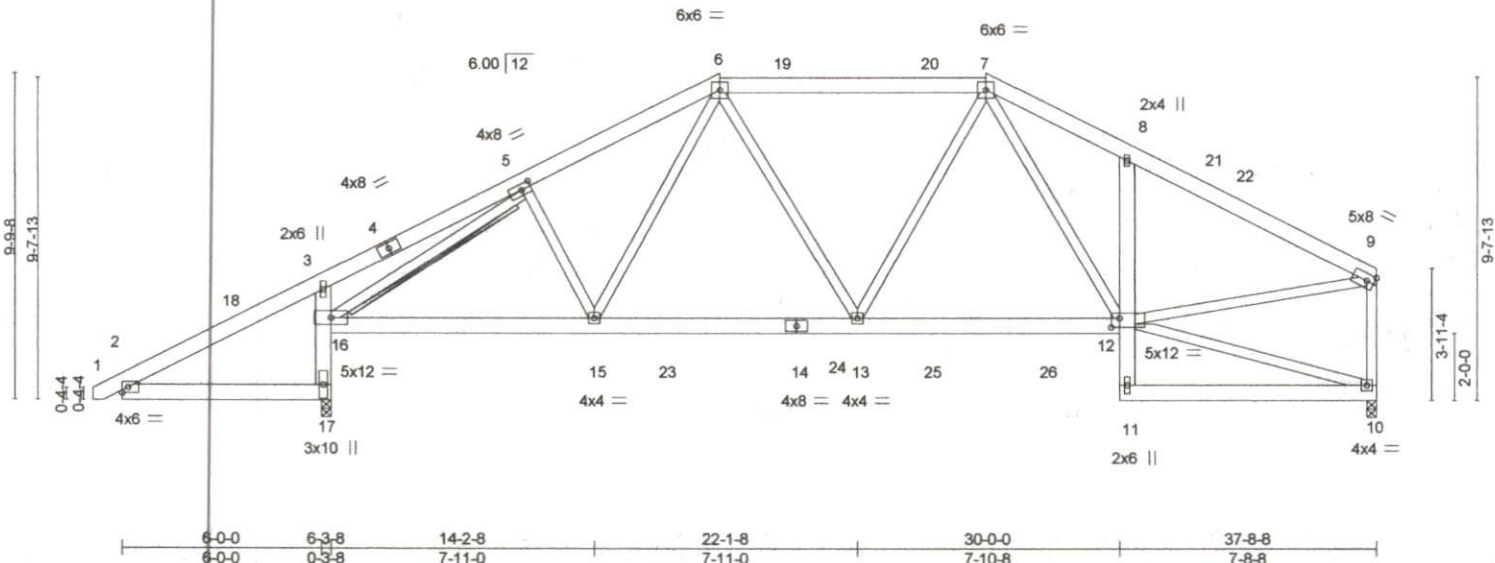


Plate Offsets (X, Y) -- [5:0-3-8,0-2-0], [12:0-3-0,0-3-4]

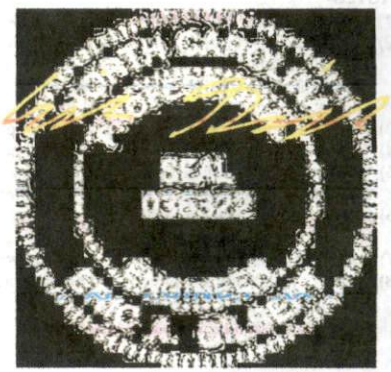
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.41	Vert(LL)	-0.08 13-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.53	Vert(CT)	-0.14 12-13	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.70	Horz(CT)	0.07 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.04 13-15	>999	240	Weight: 300 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No. 1	TOP CHORD Structural wood sheathing directly applied or 5-9-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD 2x6 SP No. 1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17
WEBS 2x4 SP No. 2	WEBS T-Brace: 2x4 SPF No.2 - 5-16 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) 17=0-3-8, 10=0-3-8  
 Max Horz 17=185(LC 12)  
 Max Uplift 17=-111(LC 12), 10=-52(LC 13)  
 Max Grav 17=1843(LC 1), 10=1213(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=457/578, 3-5=826/936, 5-6=1441/393, 6-7=1357/416, 7-8=1598/527, 8-9=1630/416, 9-10=1145/351  
 BOT CHORD 2-17=393/444, 16-17=1800/678, 3-16=368/215, 15-16=208/1217, 13-15=198/1238, 12-13=199/1269, 8-12=354/284  
 WEBS 5-16=2303/1026, 6-13=34/294, 7-13=6/258, 7-12=160/310, 9-12=267/1393

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 3-8-3, Interior(1) 3-8-3 to 18-0-0, Exterior(2) 18-0-0 to 24-2-11, Interior(1) 24-2-11 to 26-0-0, Exterior(2) 26-0-0 to 32-2-11, Interior(1) 32-2-11 to 37-6-12 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 3-6-0 tall by 2-0-0 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 111 lb uplift at joint 17 and 52 lb uplift at joint 10.
  - 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.



August 12, 2022



Job	Truss	Truss Type	Qty	Ply	Maria Garcia Residence	I53614044
J0822-4079	A14	HIP	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MITek Industries, Inc. Thu Aug 11 10:23:53 2022 Page 1

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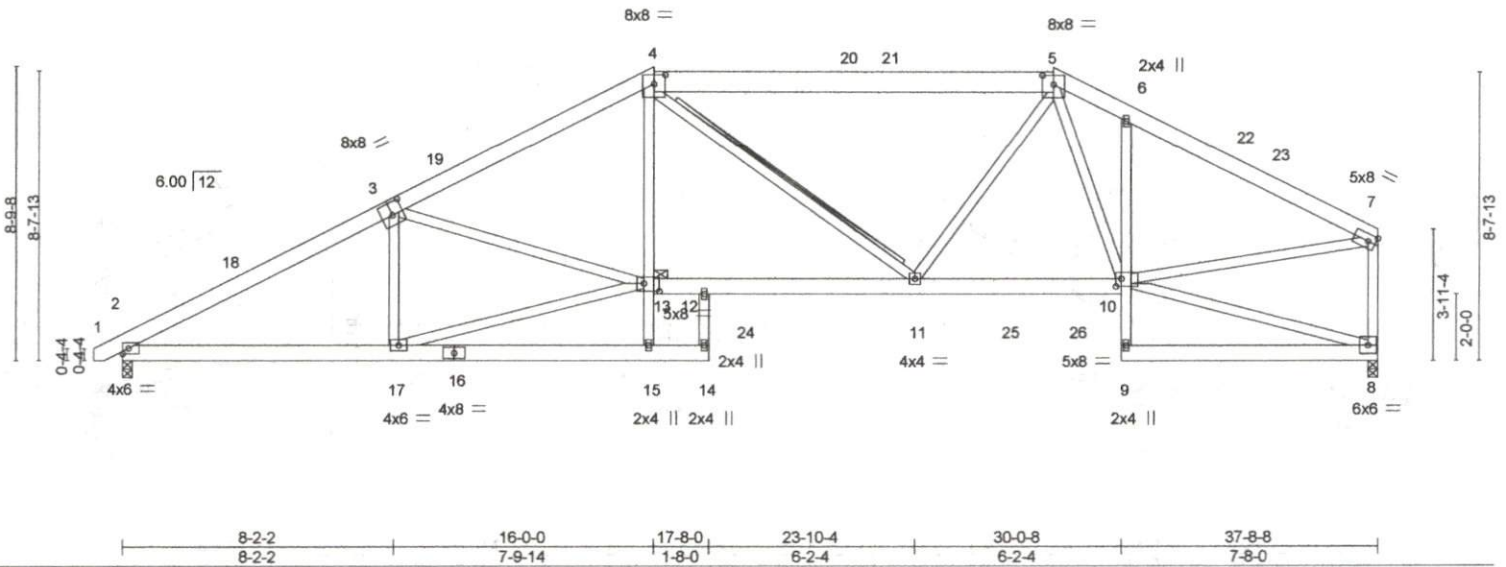


Plate Offsets (X, Y) - [3:0-4-0,0-4-8], [4:0-4-0,0-3-4], [5:0-4-0,0-3-4], [10:0-2-0,0-2-12], [13:0-5-8,0-2-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.52	Vert(LL)	-0.12 11-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.23 11-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.65	Horz(CT)	0.11 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.08 12	>999	240	Weight: 312 lb	FT = 20%

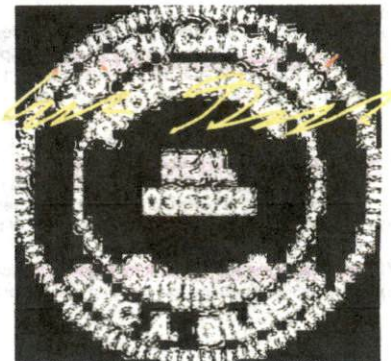
**LUMBER-**  
 TOP CHORD 2x6 SP No.1 \*Except\*  
 4-5: 2x8 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\*  
 12-14,6-9: 2x4 SP No.2  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-5-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-5 max.): 4-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 12-14.  
 WEBS T-Brace: 2x4 SPF No.2 - 4-11  
 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.  
 JOINTS 1 Brace at Jt(s): 13

**REACTIONS.** (size) 8=0-3-8, 2=0-3-8  
 Max Horz 2=172(LC 12)  
 Max Uplift 8=31(LC 13), 2=84(LC 12)  
 Max Grav 8=1496(LC 1), 2=1549(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2657/636, 3-4=-2650/723, 4-5=-2063/606, 5-6=-1905/657, 6-7=-2031/563, 7-8=-1422/445  
 BOT CHORD 2-17=-609/2243, 12-13=-493/2268, 11-12=-523/2306, 10-11=-391/1765  
 WEBS 3-17=-378/244, 13-15=0/293, 4-13=-70/831, 4-11=-379/156, 5-11=-18/579, 5-10=-312/139, 7-10=-407/1744, 3-13=-105/283, 13-17=-593/2215

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-0-0, Exterior(2) 16-0-0 to 22-2-11, Interior(1) 22-2-11 to 28-0-0, Exterior(2) 28-0-0 to 34-2-11, Interior(1) 34-2-11 to 37-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 8 and 84 lb uplift at joint 2.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



August 12, 2022

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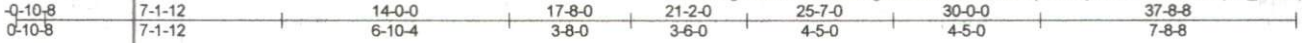
818 Soundside Road  
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Job J0822-4079	Truss A15	Truss Type HIP	Qty 1	Ply 1	Maria Garcia Residence	153614045
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:23:54 2022 Page 1  
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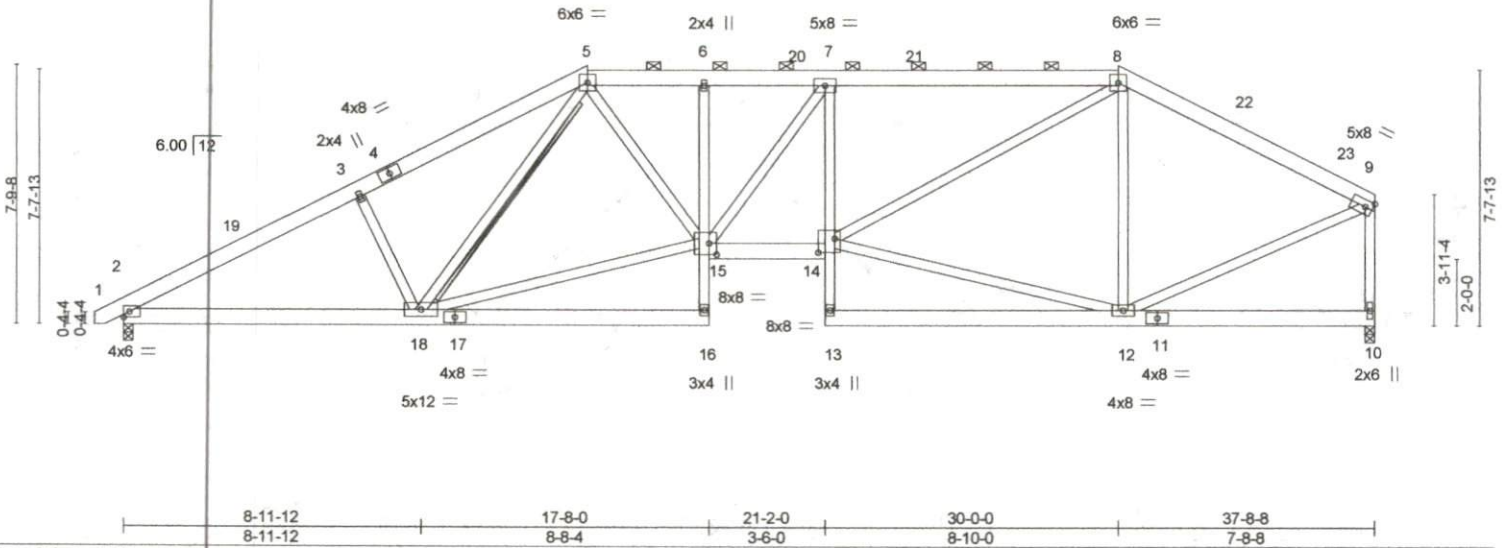


Plate Offsets (X, Y) - [14:0-6-0,0-5-0], [15:0-2-12,0-4-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.42	Vert(LL)	-0.13 14-15	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(CT)	-0.26 14-15	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.81	Horz(CT)	0.13 10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.10 14-15	>999	240		
	Code IRC2015/TPI2014						Weight: 307 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\*  
 6-16,7-13: 2x4 SP No.2  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-7-6 oc purlins, except end verticals, and 2-0-0 oc purlins (4-1-14 max.): 5-8. Rigid ceiling directly applied or 9-7-1 oc bracing.  
 BOT CHORD T-Brace: 2x4 SPF No.2 - 5-18  
 WEBS 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) 10=0-3-8, 2=0-3-8  
 Max Horz 2=161(LC 12)  
 Max Uplift 10=37(LC 8), 2=72(LC 12)  
 Max Grav 10=1496(LC 1), 2=1549(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=2643/661, 3-5=2483/710, 5-6=2651/790, 6-7=2658/790, 7-8=2832/852, 8-9=1524/426, 9-10=1435/433  
 BOT CHORD 2-18=640/2258, 14-15=684/2840, 7-14=298/176  
 WEBS 3-18=297/256, 15-18=545/2100, 5-15=190/950, 7-15=383/101, 12-14=290/1271, 8-14=461/1779, 8-12=727/318, 9-12=288/1386

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-0-0, Exterior(2) 14-0-0 to 20-2-11, Interior(1) 20-2-11 to 30-0-0, Exterior(2) 30-0-0 to 36-2-11, Interior(1) 36-2-11 to 37-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 10 and 72 lb uplift at joint 2.
  - 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.



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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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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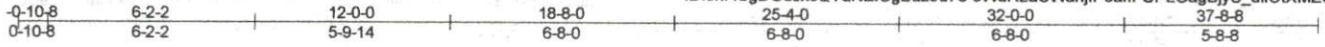


Job J0822-4079	Truss A16	Truss Type HIP	Qty 1	Ply 1	Maria Garcia Residence	I53614046
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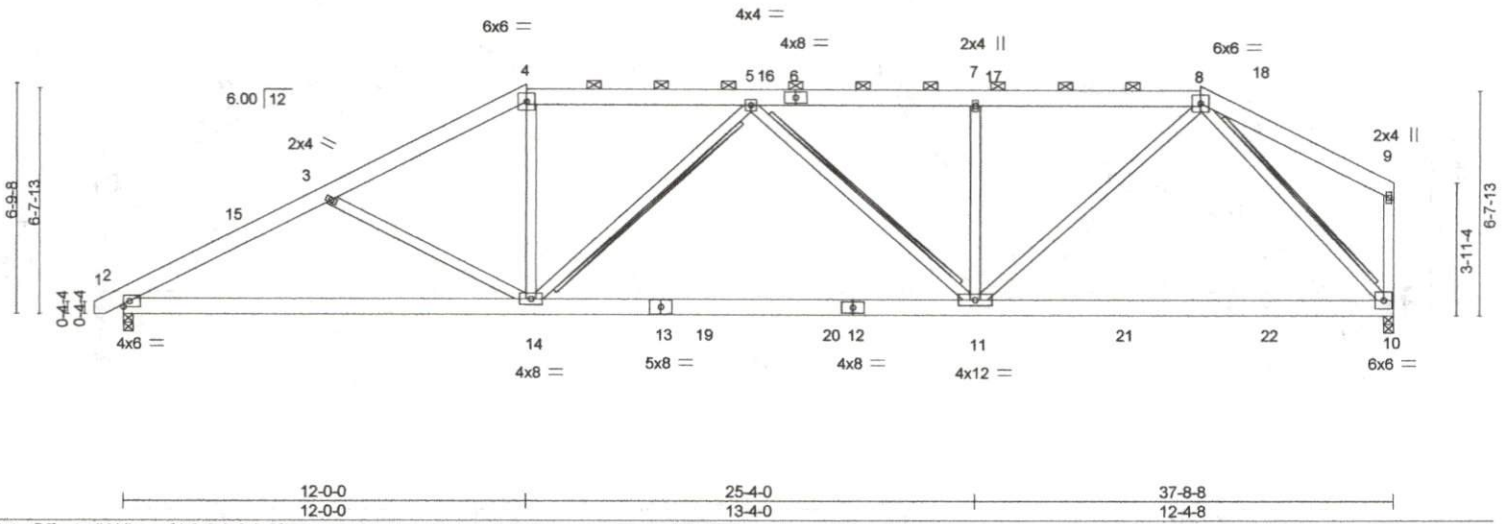


Plate Offsets (X,Y) - [4:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.39	Vert(LL)	-0.26 11-14	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.76	Vert(CT)	-0.42 11-14	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.65	Horz(CT)	0.06 10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.07 11-14	>999	240		
	Code IRC2015/TPI2014						Weight: 266 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 4-7-13 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-14 max.): 4-8. Rigid ceiling directly applied or 9-3-13 oc bracing.  
BOT CHORD T-Brace: 2x4 SPF No.2 - 5-14, 5-11, 8-10  
WEBS 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=0-3-8, 10=0-3-8  
Max Horz 2=149(LC 12)  
Max Uplift 2=58(LC 12), 10=69(LC 8)  
Max Grav 2=1549(LC 1), 10=1575(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2608/717, 3-4=-2330/602, 4-5=-2048/600, 5-7=-2199/594, 7-8=-2200/596  
BOT CHORD 2-14=695/2226, 11-14=-570/2316, 10-11=-300/1155  
WEBS 3-14=264/257, 4-14=64/713, 5-14=-474/178, 5-11=-296/158, 7-11=-438/225, 8-11=-226/1458, 8-10=-1651/452

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 12-0-0, Exterior(2) 12-0-0 to 18-2-11, Interior(1) 18-2-11 to 32-0-0, Exterior(2) 32-0-0 to 37-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 2 and 69 lb uplift at joint 10.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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Job J0822-4079	Truss A17	Truss Type HIP	Qty 1	Ply 1	Maria Garcia Residence Job Reference (optional)	153614047
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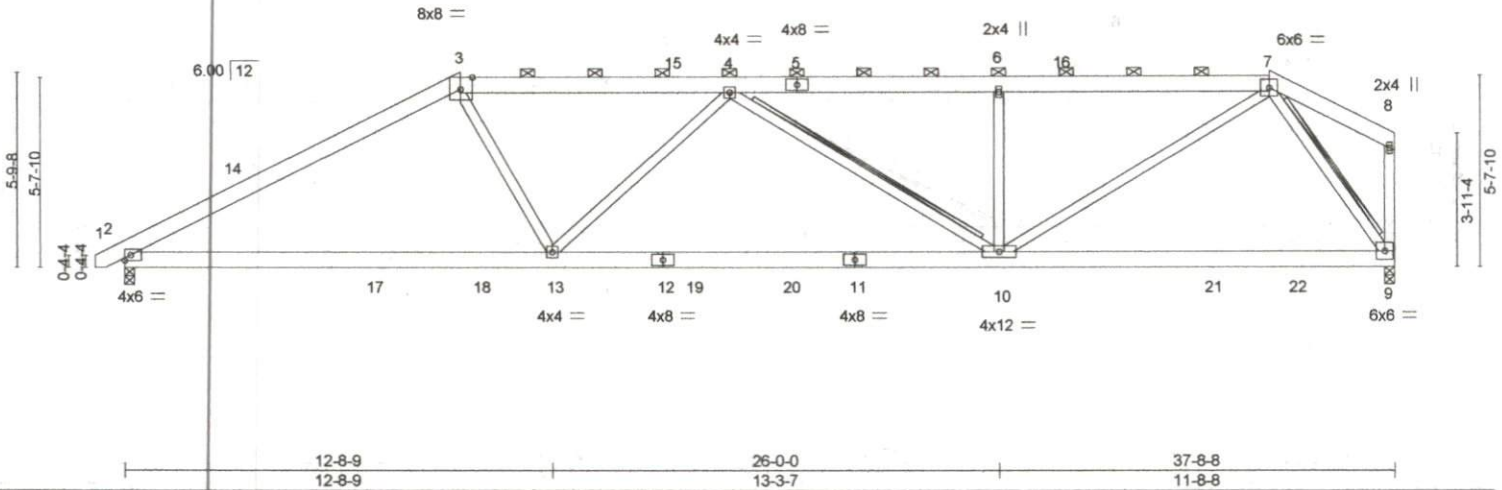


Plate Offsets (X,Y) - [3:0-4-4, Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.70	Vert(LL)	-0.18	2-13	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.73	Vert(CT)	-0.38	2-13	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.56	Horz(CT)	0.07	9	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.10	2-13	>999		
	Code IRC2015/TPI2014						Weight: 249 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 3-6-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-0 max.): 3-7. Rigid ceiling directly applied or 9-3-15 oc bracing.  
 BOT CHORD T-Brace: 2x4 SPF No.2 - 4-10, 7-9  
 WEBS 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=0-3-8, 9=0-3-8  
 Max Horz 2=137(LC 12)  
 Max Uplift 2=77(LC 9), 9=100(LC 8)  
 Max Grav 2=1549(LC 1), 9=1506(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=2540/629, 3-4=2536/649, 4-6=2430/641, 6-7=2431/643  
 BOT CHORD 2-13=571/2169, 10-13=691/2749, 9-10=261/915  
 WEBS 3-13=0/844, 4-13=528/213, 4-10=389/186, 6-10=530/273, 7-10=352/1846, 7-9=1578/474

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-6-10 to 3-8-3, Interior(1) 3-8-3 to 10-0-0, Exterior(2) 10-0-0 to 16-2-11, Interior(1) 16-2-11 to 34-0-0, Exterior(2) 34-0-0 to 37-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 3-6-0 tall by 2-0-0 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 77 lb uplift at joint 2 and 100 lb uplift at joint 9.
  - 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.



August 12, 2022

**WARNING - Safety Information:** 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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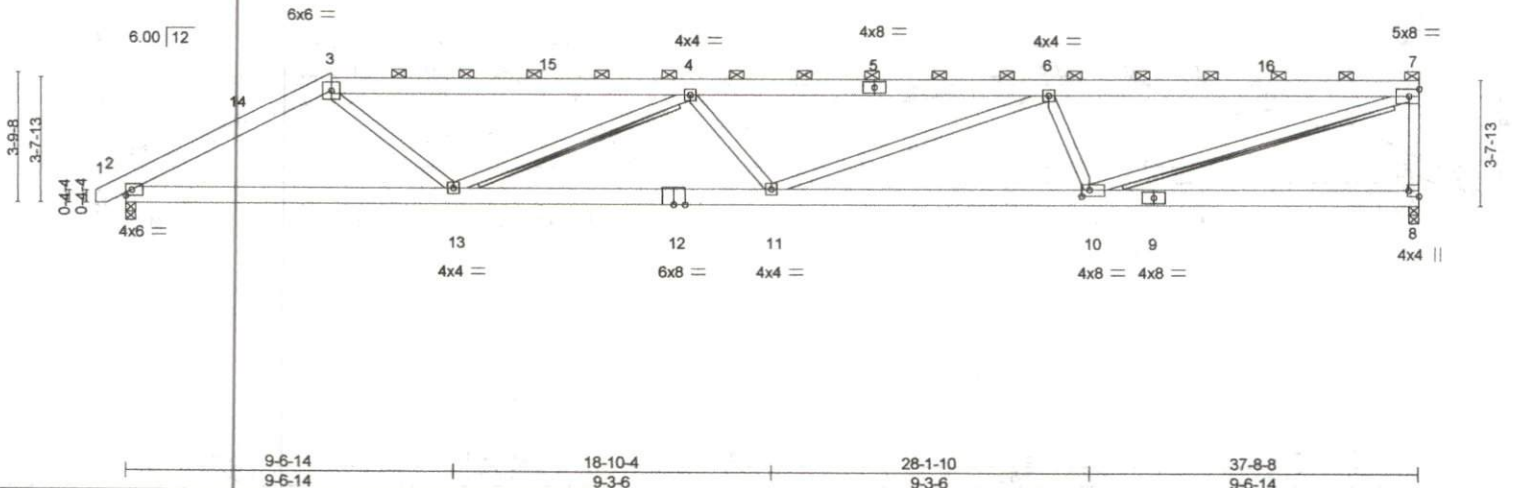


Plate Offsets (X,Y) - [3:0-0-0,0-0-0], [8:Edge,0-3-8], [10:0-2-12,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL)	-0.27 10-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.60	Vert(CT)	-0.55 10-11	>812	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.85	Horz(CT)	0.09 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.22 10-11	>999	240	Weight: 239 lb	FT = 20%

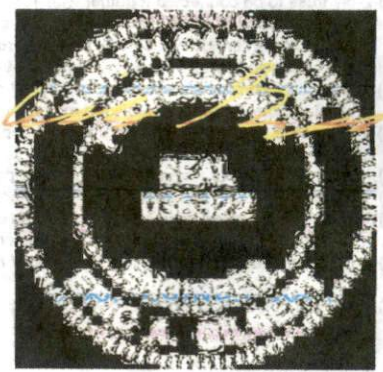
**LUMBER-**  
 TOP CHORD 2x6 SP No. 1  
 BOT CHORD 2x6 SP No. 1  
 WEBS 2x4 SP No. 2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-7-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-2 max.): 3-7.  
 Rigid ceiling directly applied or 7-6-8 oc bracing.  
 T-Brace: 2x4 SPF No.2 - 4-13, 7-10  
 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) 8=0-3-8, 2=0-3-8  
 Max Horz 2=106(LC 12)  
 Max Uplift 8=160(LC 9), 2=113(LC 9)  
 Max Grav 8=1496(LC 1), 2=1549(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=2685/672, 3-4=3183/711, 4-6=4389/977, 6-7=3381/726, 7-8=1399/393  
 BOT CHORD 2-13=642/2305, 11-13=1092/4452, 10-11=863/3728  
 WEBS 3-13=90/1208, 4-13=1453/422, 6-11=129/710, 6-10=994/393, 7-10=740/3478

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=30mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8, 10 to 3-8-3, Interior(1) 3-8-3 to 6-0-0, Exterior(2) 6-0-0 to 12-2-11, Interior(1) 12-2-11 to 37-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 160 lb uplift at joint 8 and 113 lb uplift at joint 2.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



August 12, 2022



Job J0822-4079	Truss A20	Truss Type Half Hip Girder	Qty 1	Ply 2	Maria Garcia Residence 153614050
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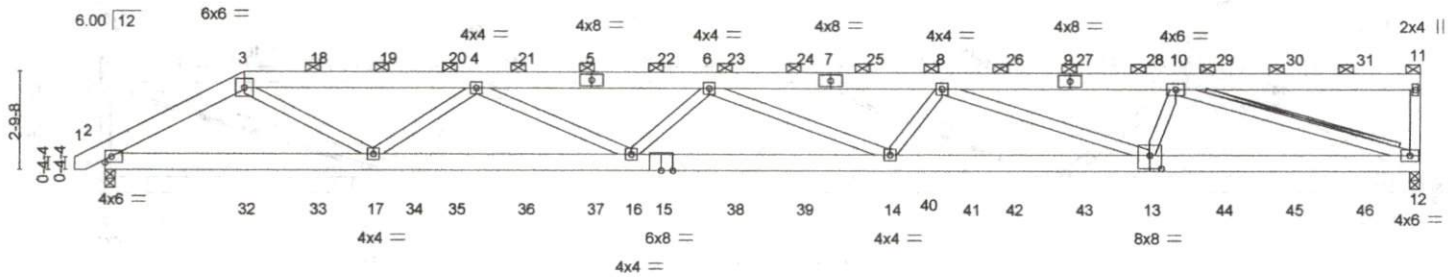


Plate Offsets (X,Y)-	[13:0-4-0,0-4-8]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	Vert(LL)	-0.25 14-16	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(CT)	-0.50 14-16	>898	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.78	Horz(CT)	0.09 12	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Wind(LL)	0.25 14-16	>999	240	Weight: 480 lb	FT = 20%
	Code IRC2015/TPI2014							

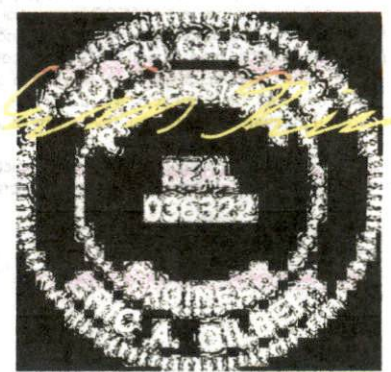
**LUMBER-**  
 TOP CHORD 2x6 SP 2400F 2.0E  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEBS 2x4 SP No.2

**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.): 3-11. Rigid ceiling directly applied or 10-0-0 oc bracing.  
 BOT CHORD T-Brace: 2x4 SPF No.2 - 10-12  
 WEBS 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) 12=0-3-8, 2=0-3-8  
 Max Horz 2=77(LC 23)  
 Max Uplift 12=425(LC 5), 2=409(LC 5)  
 Max Grav 12=2109(LC 1), 2=2231(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3805/804, 3-4=-5608/1082, 4-6=-8144/1606, 6-8=-8145/1613, 8-10=-5502/1086, 11-12=-269/112  
 BOT CHORD 2-17=-712/3247, 16-17=-1508/7057, 14-16=-1785/8513, 13-14=-1641/7898, 12-13=-1066/5141  
 WEBS 3-17=-442/2783, 4-17=-1844/550, 4-16=-116/1227, 6-16=-536/263, 6-14=-404/188, 8-14=0/575, 8-13=-2574/597, 10-13=-67/1191, 10-12=-5304/1103

- 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, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs 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.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf, BCDL=6.0psf, 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.
  - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 425 lb uplift at joint 12 and 409 lb uplift at joint 2.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Continued on page 2

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Job J0822-4079	Truss A20	Truss Type Half Hip Girder	Qty 1	Ply 2	Maria Garcia Residence Job Reference (optional)	153614050
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:02 2022 Page 2  
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**NOTES-**

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 48 lb down and 73 lb up at 4-0-0, 48 lb down and 73 lb up at 6-0-12, 48 lb down and 73 lb up at 8-0-12, 48 lb down and 73 lb up at 10-0-12, 48 lb down and 73 lb up at 12-0-12, 48 lb down and 73 lb up at 14-0-12, 48 lb down and 73 lb up at 16-0-12, 48 lb down and 73 lb up at 18-0-12, 48 lb down and 73 lb up at 20-0-12, 48 lb down and 73 lb up at 22-0-12, 48 lb down and 73 lb up at 24-0-12, 48 lb down and 73 lb up at 26-0-12, 48 lb down and 73 lb up at 28-0-12, 48 lb down and 73 lb up at 30-0-12, 48 lb down and 73 lb up at 32-0-12, and 48 lb down and 73 lb up at 34-0-12, and 48 lb down and 73 lb up at 36-0-12 on top chord, and 194 lb down and 62 lb up at 4-0-0, 36 lb down at 6-0-12, 36 lb down at 8-0-12, 36 lb down at 10-0-12, 36 lb down at 12-0-12, 36 lb down at 14-0-12, 36 lb down at 16-0-12, 36 lb down at 18-0-12, 36 lb down at 20-0-12, 36 lb down at 22-0-12, 36 lb down at 24-0-12, 36 lb down at 26-0-12, 36 lb down at 28-0-12, 36 lb down at 30-0-12, 36 lb down at 32-0-12, and 36 lb down at 34-0-12, and 36 lb down at 36-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S) Standard**

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

Uniform Loads (plf)

Vert: 1-3=60, 3-11=60, 2-12=20

Concentrated Loads (lb)

Vert: 3=48(B) 5=48(B) 15=-18(B) 8=48(B) 13=-18(B) 18=48(B) 19=-48(B) 20=-48(B) 21=48(B) 22=-48(B) 23=-48(B) 24=48(B) 25=-48(B) 26=48(B) 27=-48(B) 28=48(B) 29=-48(B) 30=48(B) 31=-48(B) 32=-194(B) 33=-18(B) 34=-18(B) 35=-18(B) 36=-18(B) 37=-18(B) 38=-18(B) 39=-18(B) 40=-18(B) 41=-18(B) 42=-18(B) 43=-18(B) 44=-18(B) 45=-18(B) 46=-18(B)



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818 Soundside Road  
Edenton, NC 27932

Job J0822-4079	Truss B1	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Maria Garcia Residence Job Reference (optional)	I53614051
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Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:03 2022 Page 1  
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 22-10-8  
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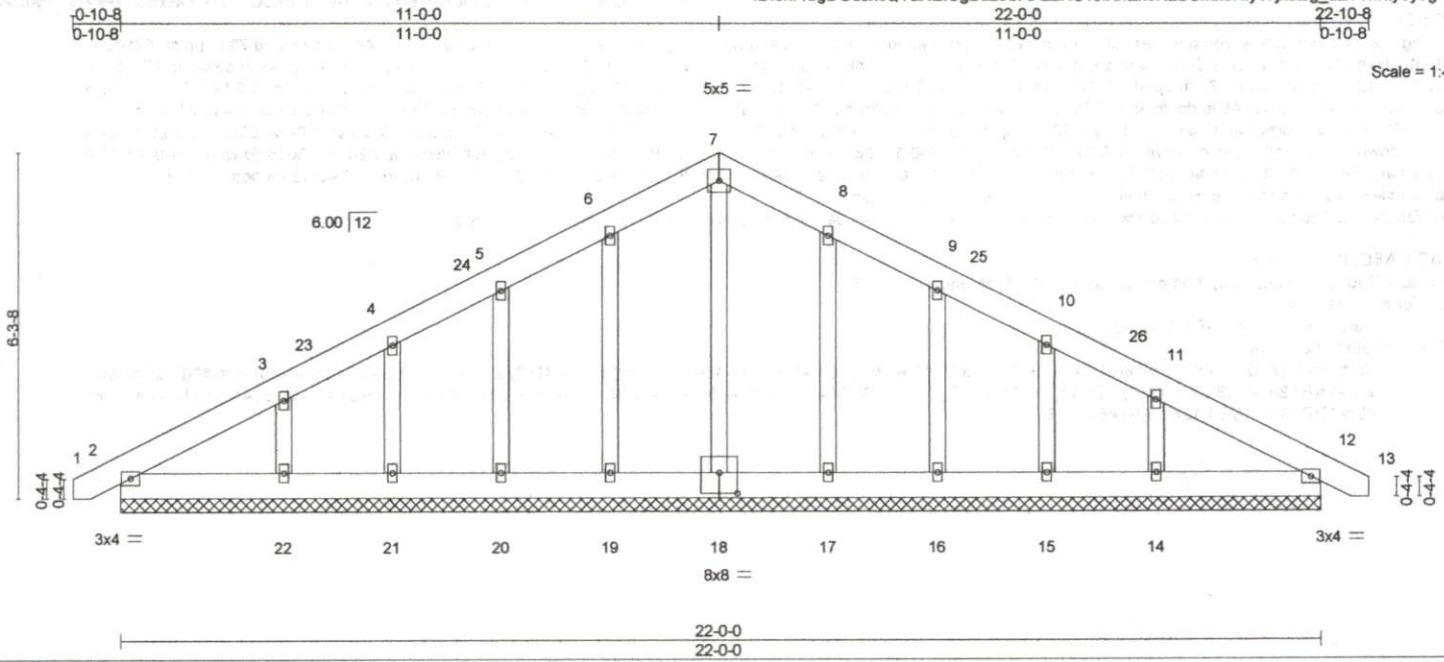


Plate Offsets (X,Y)- [18'-0-4-0-0-4-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	0.00	12	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	12	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 157 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2

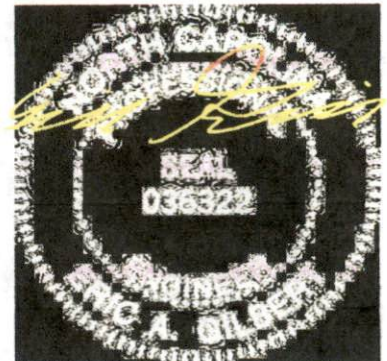
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

**REACTIONS.** All bearings 22-0-0.  
 (lb) - Max Horz 2=119(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 17, 16, 15, 12 except 22=118(LC 12),  
 14=114(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 22, 17, 16, 15, 14, 12

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-8-10 to 3-8-3, Exterior(2) 3-8-3 to 11-0-0, Corner(3) 11-0-0 to 15-4-13, Exterior(2) 15-4-13 to 22-8-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2'-0-0 oc.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 17, 16, 15, 12 except (jt=lb) 22=118, 14=114.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 12.



August 12, 2022

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818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Maria Garcia Residence	153614052
J0822-4079	B2	COMMON	7	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:04 2022 Page 1

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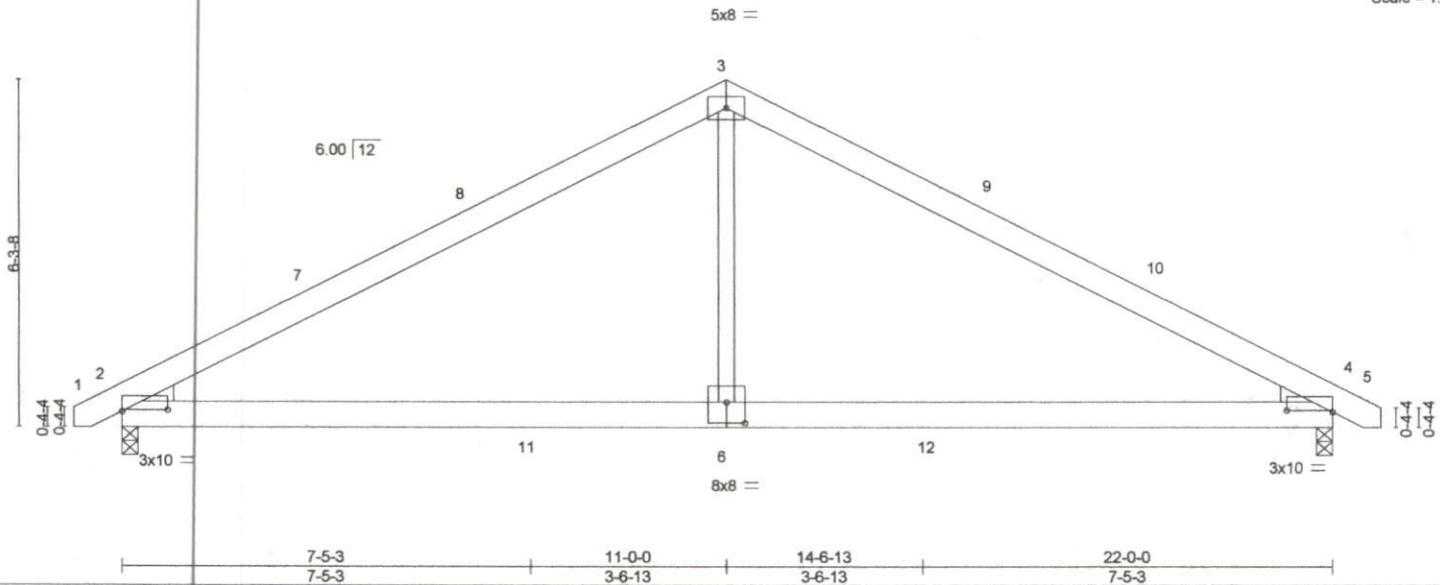


Plate Offsets (X, Y) - [2:0-10-0,0-0-5], [4:0-10-0,0-0-5], [6:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.63	Vert(LL)	-0.09	4-6	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.52	Vert(CT)	-0.18	4-6	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.15	Horz(CT)	0.02	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.06	2-6	>999		
	Code IRC2015/TPI2014						Weight: 124 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.3, Right: 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-5-5 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=76(LC 11)  
 Max Uplift 2=64(LC 12), 4=64(LC 13)  
 Max Grav 2=967(LC 2), 4=967(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1389/292, 3-4=-1389/292  
 BOT CHORD 2-6=-96/1124, 4-6=-96/1124  
 WEBS 3-6=0/684

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-8-10 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 2, 4.



August 12, 2022

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818 Soundside Road  
 Edenton, NC 27932

Job J0822-4079	Truss B3	Truss Type COMMON	Qty 3	Ply 1	Maria Garcia Residence Job Reference (optional)	153614053
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:05 2022 Page 1

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5x8 =

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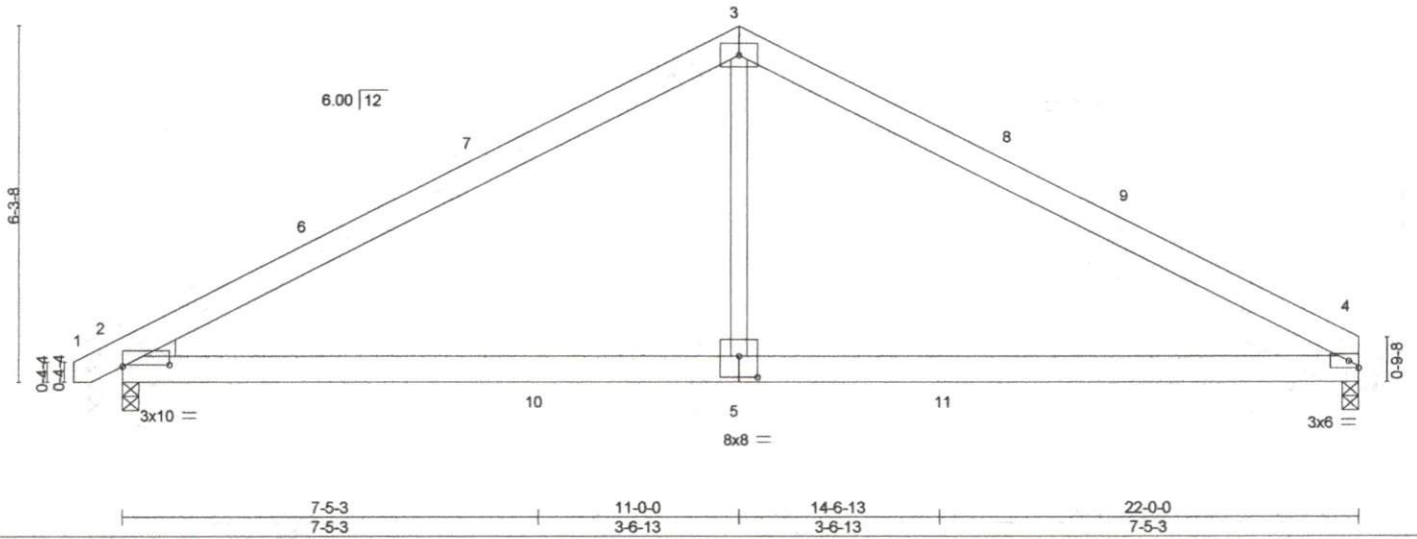


Plate Offsets (X,Y)- [2:0-10-0,0-0-5], [5:0-4-0,0-4-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.08	2-5	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.18	2-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.02	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.06	2-5	>999		
								Weight: 121 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.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=0-3-8, 2=0-3-8  
Max Horz 2=76(LC 11)  
Max Uplift 4=51(LC 13), 2=64(LC 12)  
Max Grav 4=923(LC 2), 2=968(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1390/291, 3-4=-1388/296  
BOT CHORD 2-5=-103/1125, 4-5=-103/1125  
WEBS 3-5=0/684

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 21-10-4 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4, 2.



August 12, 2022

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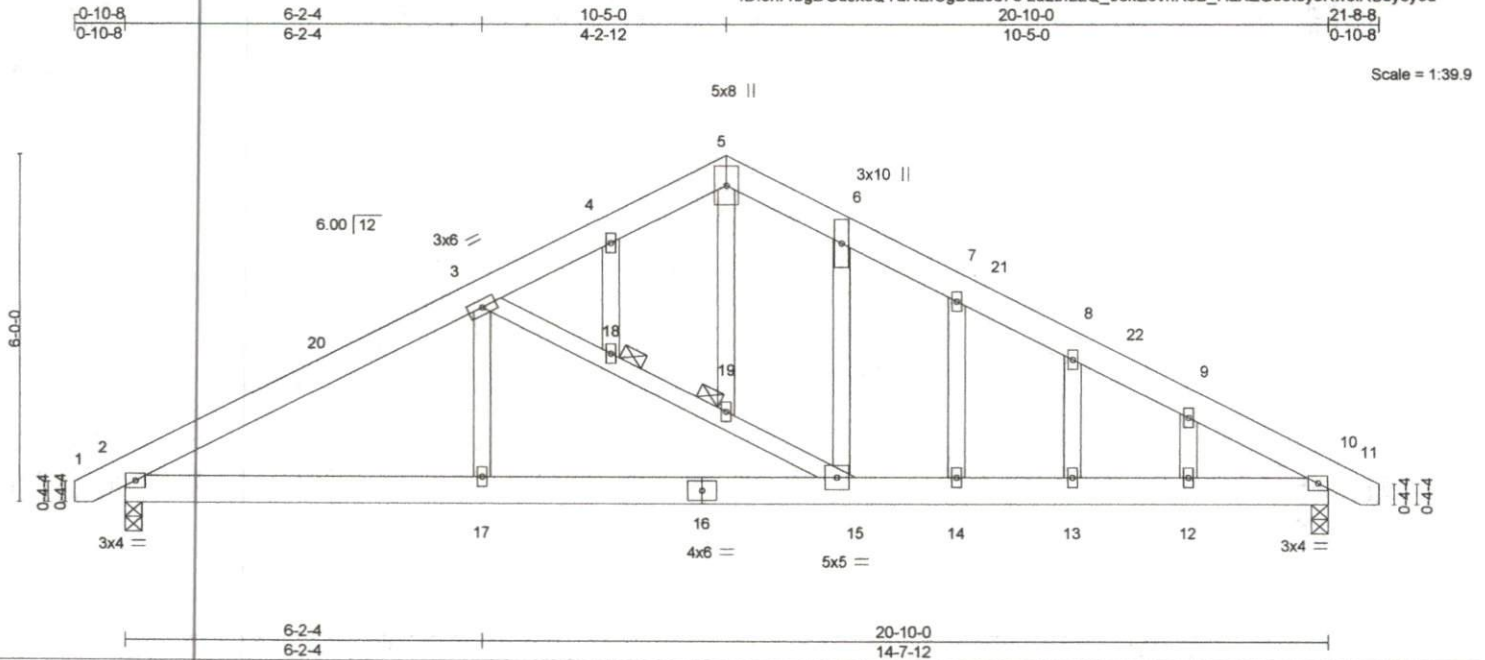
818 Soundside Road  
Edenton, NC 27932



Job J0822-4079	Truss C1	Truss Type KINGPOST	Qty 1	Ply 1	Maria Garcia Residence	153614054
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MITek Industries, Inc. Thu Aug 11 10:24:06 2022 Page 1  
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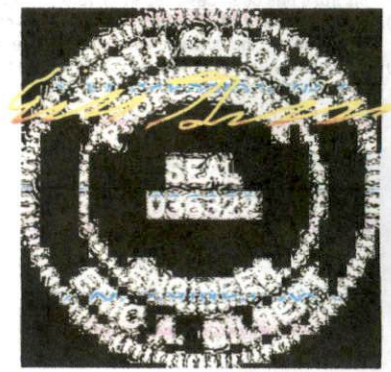
<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.33	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.39	Vert(LL) -0.09 13-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.36	Vert(CT) -0.17 13-14 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.12 13-14 >999 240	Weight: 148 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 18, 19

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=113(LC 13)  
 Max Uplift 2=192(LC 12), 10=192(LC 13)  
 Max Grav 2=873(LC 1), 10=873(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1262/285, 3-4=-941/317, 4-5=-897/335, 5-6=-777/297, 6-7=-1072/327,  
 7-8=-972/260, 8-9=-1036/238, 9-10=-1120/195  
 BOT CHORD 2-17=-221/1011, 15-17=-218/1014, 14-15=-106/878, 13-14=-106/878, 12-13=-106/878,  
 10-12=-106/878  
 WEBS 3-18=-313/162, 18-19=-330/168, 15-19=-298/159, 6-15=-85/509, 7-14=-357/158

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-8-10 to 3-8-3, Interior(1) 3-8-3 to 10-5-0, Exterior(2) 10-5-0 to 14-9-13, Interior(1) 14-9-13 to 21-6-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=192, 10=192.

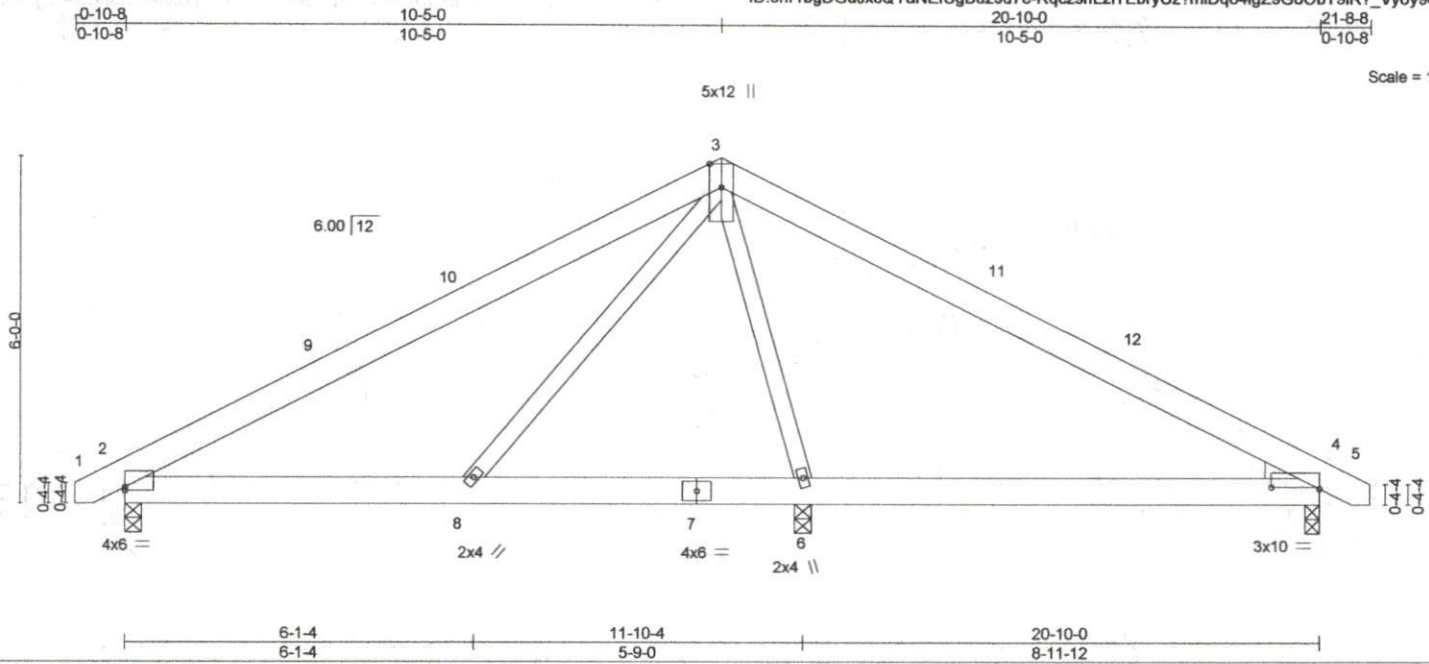


August 12, 2022

Job J0822-4079	Truss C2	Truss Type COMMON	Qty 2	Ply 1	Job Reference (optional) Maria Garcia Residence	153614055
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:07 2022 Page 1  
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Scale = 1:40.2

Plate Offsets (X,Y) - [2:0-0-0,0-0-11], [4:0-10-0,0-0-5]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.48	Vert(LL)	0.11	4-6	>919	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.32	Vert(CT)	-0.09	4-6	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.34	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 127 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 WEDGE  
 Right: 2x4 SP No.3

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

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8, 4=0-3-0  
 Max Horz 2=-72(LC 10)  
 Max Uplift 2=-66(LC 12), 6=-14(LC 9), 4=-116(LC 8)  
 Max Grav 2=520(LC 1), 6=829(LC 1), 4=405(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-511/106  
 BOT CHORD 2-8=0/325  
 WEBS 3-8=0/299, 3-6=-634/162

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 10-5-0, Exterior(2) 10-5-0 to 14-9-13, Interior(1) 14-9-13 to 21-6-10 zone; porch 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'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 4=116.



August 12, 2022

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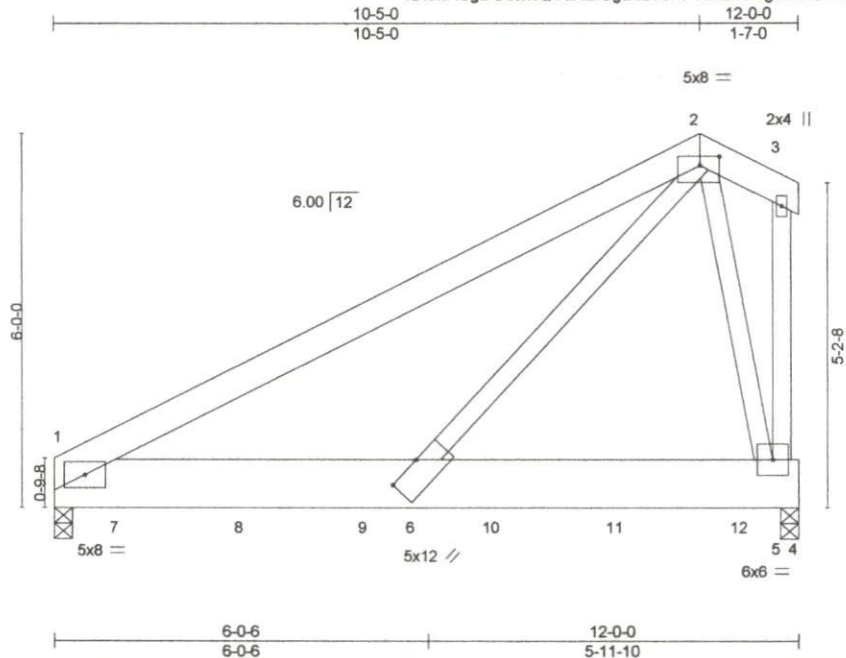
Job	Truss	Truss Type	Qty	Ply	Project Name	Job Reference (optional)
J0822-4079	C3	Common Girder	1	2	Maria Garcia Residence	

153614056

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:08 2022 Page 1

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Scale = 1:37.2

Plate Offsets (X, Y) - [2:0-3-12, 0-1-12], [6:0-6-10, 0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.57	Vert(LL) -0.06	5-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.84	Vert(CT) -0.12	5-6	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.94	Horz(CT) 0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	1-6	>999	240		
							Weight: 205 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No. 1	TOP CHORD Structural wood sheathing directly applied or 5-8-1 oc purlins, except end verticals.
BOT CHORD 2x10 SP No. 1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No. 2	

**REACTIONS.** (size) 1=0-3-8, 5=0-3-8  
 Max Horz 1=161(LC 8)  
 Max Uplift 1=329(LC 8), 5=318(LC 8)  
 Max Grav 1=5545(LC 1), 5=5775(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=668/279  
 BOT CHORD 1-6=296/5829, 5-6=87/852  
 WEBS 2-6=322/7658, 2-5=3364/356

- 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, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-3-0 oc.  
 Webs 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 7-10; Vult=30mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=329, 5=318.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1732 lb down and 147 lb up at 1-0-12, 1731 lb down and 124 lb up at 3-0-12, 1731 lb down and 99 lb up at 5-0-12, 1731 lb down and 73 lb up at 7-0-12, and 1731 lb down and 79 lb up at 9-0-12, and 1762 lb down and 92 lb up at 11-0-12 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 (plf)  
 Vert: 1-2=60, 2-3=60, 1-4=20



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Continued on page 2

WARNING: Verify design parameters and notes on this and include them in your purchase order. Do not use this design 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

Job J0822-4079	Truss C3	Truss Type Common Girder	Qty 1	Ply 2	Maria Garcia Residence Job Reference (optional)	I53614056
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Comtech, Inc. Fayetteville, NC - 28314.

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:08 2022 Page 2  
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**LOAD CASE(S)** Standard  
Concentrated Loads (lb)

Vert: 7--1732(B) 8--1731(B) 9--1731(B) 10--1731(B) 11--1731(B) 12--1732(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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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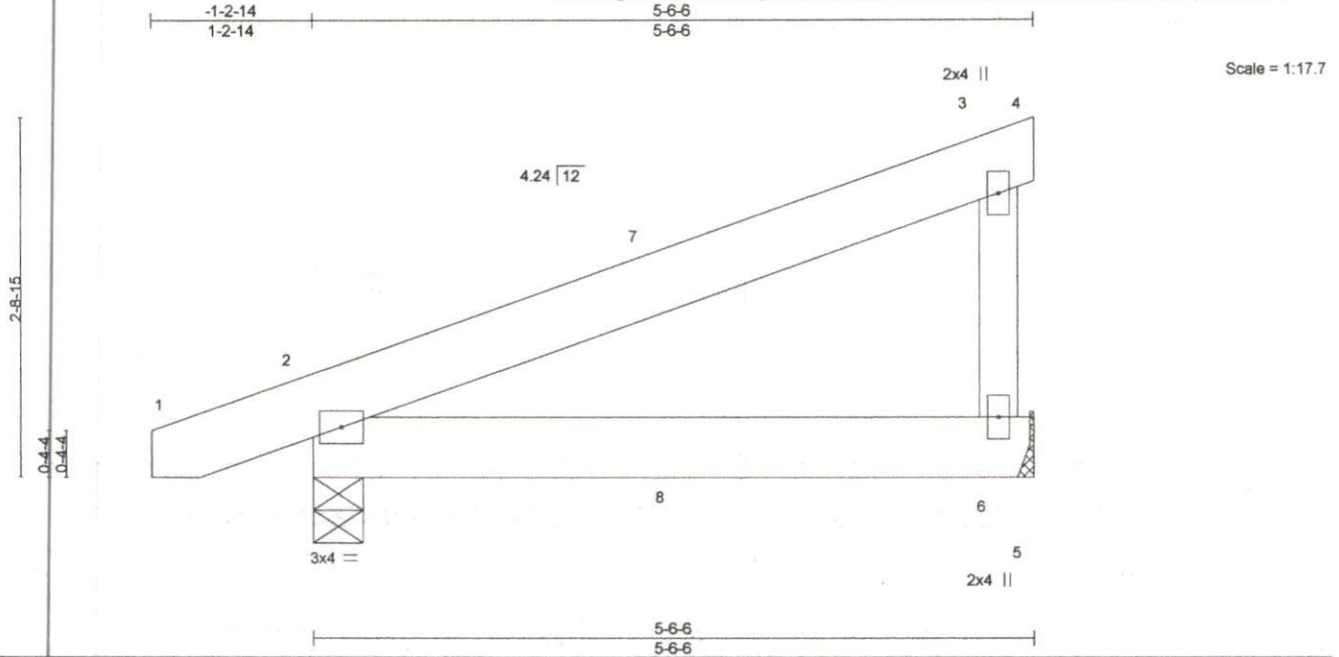


Job	Truss	Truss Type	Qty	Ply	Maria Garcia Residence	153614057
J0822-4079	CJ06	DIAGONAL HIP GIRDER	3	1	Job Reference (optional)	

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) -0.01 2-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.02 2-6 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-P	Horz(CT) 0.00 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.00 2 **** 240	Weight: 33 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No. 1	TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins, except end verticals.
BOT CHORD 2x6 SP No. 1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No. 2	

**REACTIONS.** (size) 6=Mechanical, 2=0-4-9  
 Max Horz 2=76(LC 4)  
 Max Uplift 6=37(LC 8), 2=56(LC 4)  
 Max Grav 6=205(LC 1), 2=286(LC 1)

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

- NOTES-**
- Wind: ASCE 7-10; Vult=30mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 19 lb down and 30 lb up at 2-9-8, and 19 lb down and 30 lb up at 2-9-8 on top chord, and 2 lb down at 2-9-8, and 2 lb down at 2-9-8 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).

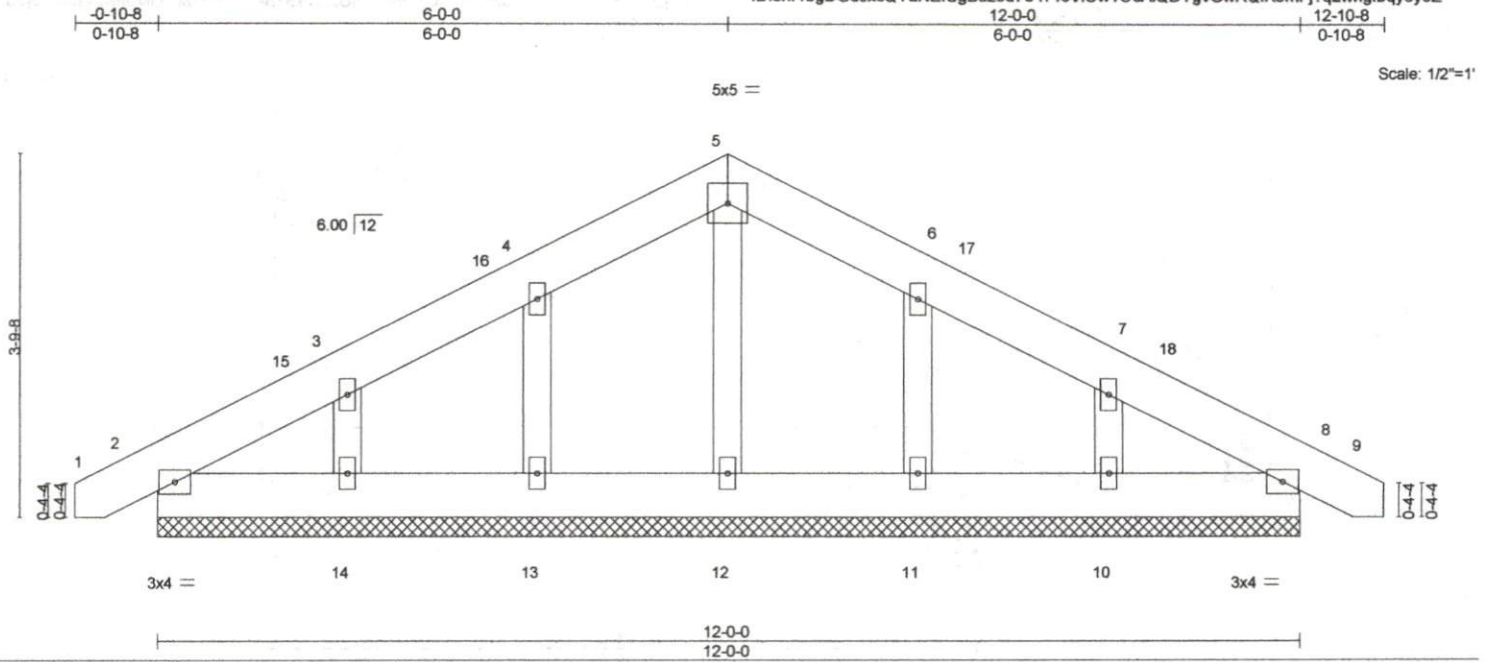
**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-20, 2-5=-20



Job J0822-4079	Truss D1	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Maria Garcia Residence Job Reference (optional)	153614058
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:10 2022 Page 1  
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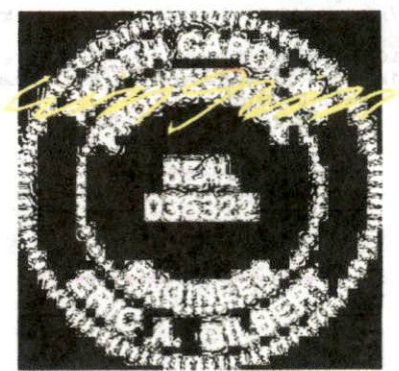
<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.03	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.01	Vert(LL) 0.00 8 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Vert(CT) 0.00 8 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 77 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 12-0-0.  
 (lb) - Max Horz 2=-68(LC 17)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

**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 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-10 to 3-8-3, Exterior(2) 3-8-3 to 6-0-0, Corner(3) 6-0-0 to 10-4-13, Exterior(2) 10-4-13 to 12-8-10 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.

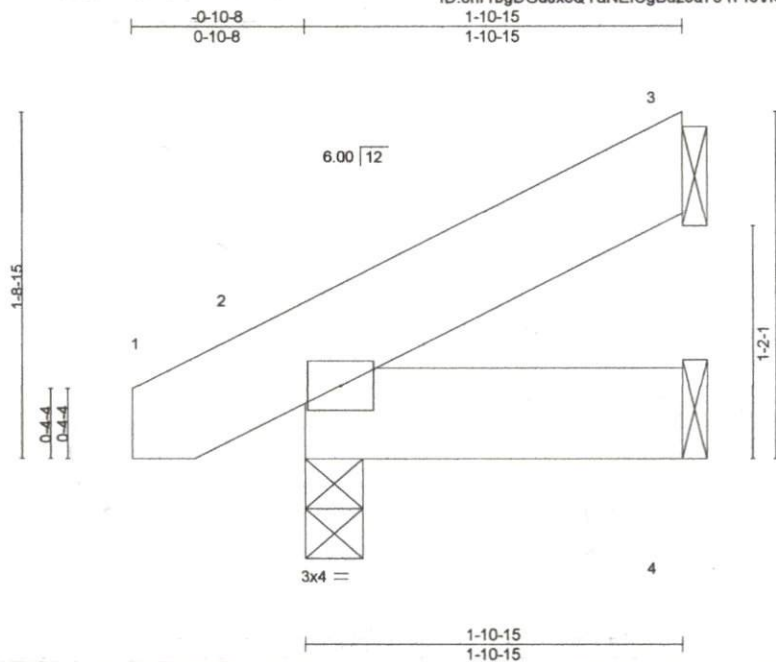




Job	Truss	Truss Type	Qty	Ply	Maria Garcia Residence	153614059
J0822-4079	J02	JACK-OPEN	6	1	Job Reference (optional)	

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:10 2022 Page 1  
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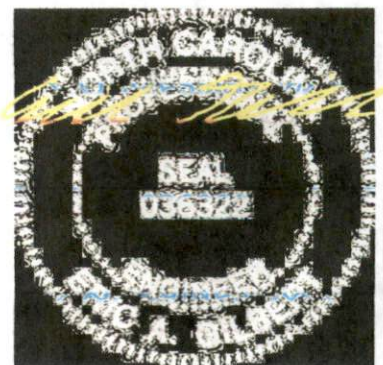
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.02	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.01	Vert(LL) -0.00 2 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 2 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) -0.00 3 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.00 2 **** 240	Weight: 12 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No. 1	TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins.
BOT CHORD 2x6 SP No. 1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=42(LC 12)  
 Max Uplift 3=31(LC 12), 2=-7(LC 12)  
 Max Grav 3=47(LC 1), 2=128(LC 1), 4=37(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 2.



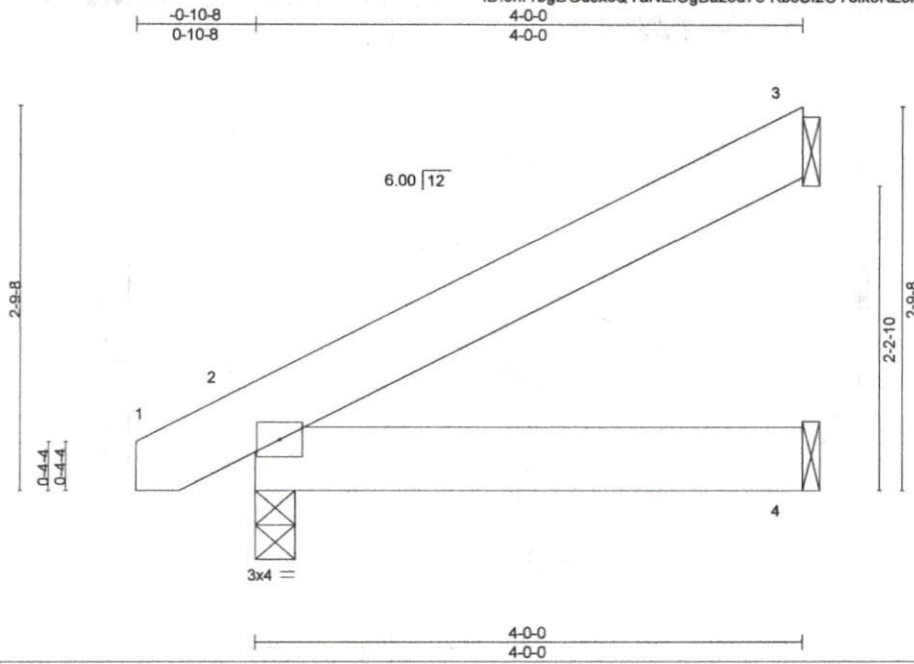
August 12, 2022

Job J0822-4079	Truss J04	Truss Type Jack-Open	Qty 37	Ply 1	Maria Garcia Residence 153614060
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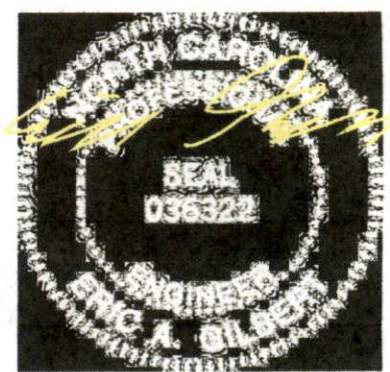
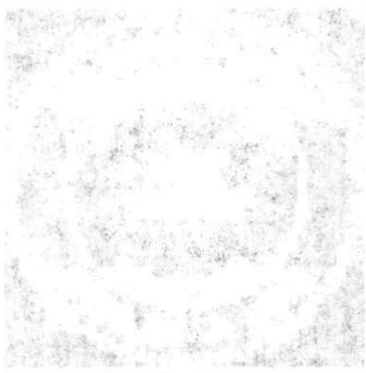
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.08	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) -0.00 2-4 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.01 2-4 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) -0.00 3 n/a n/a	Weight: 22 lb	FT = 20%
	Code IRC2015/TPI2014		Wind(LL) 0.00 2 **** 240		

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=75(LC 12)  
 Max Uplift 3=60(LC 12), 2=7(LC 12)  
 Max Grav 3=108(LC 1), 2=209(LC 1), 4=76(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 2.



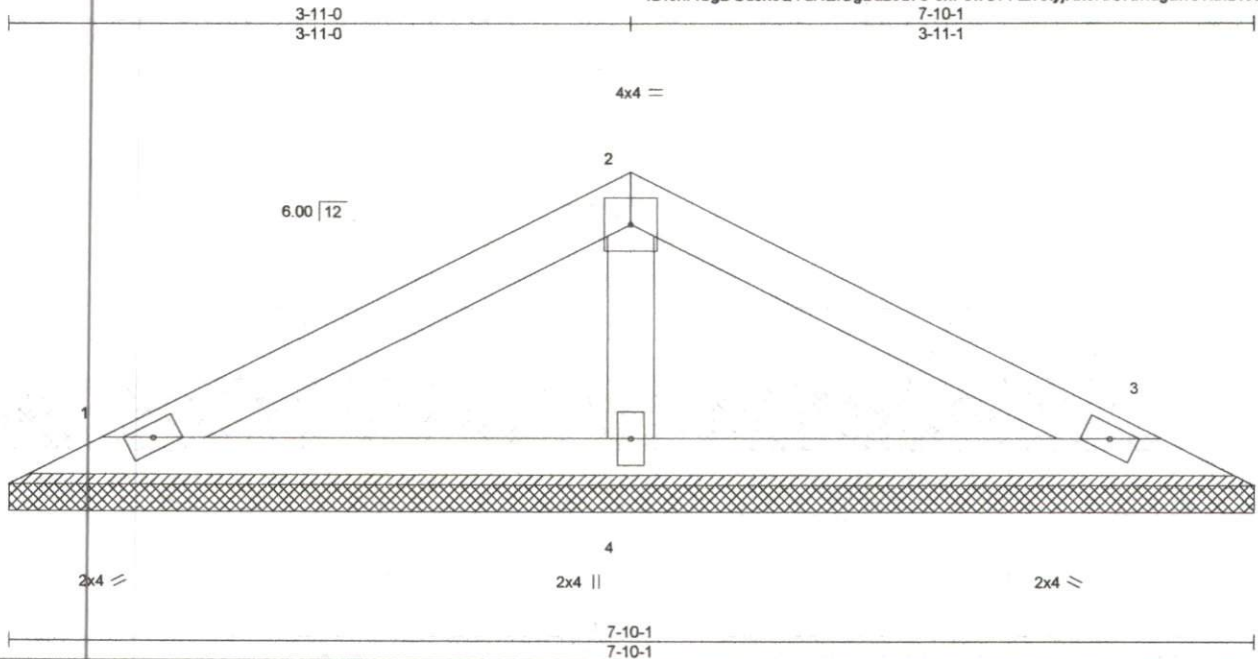
August 12, 2022



Job	Truss	Truss Type	Qty	Ply	Maria Garcia Residence	153614061
J0822-4079	VB01	VALLEY	1	1	Job Reference (optional)	

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:12 2022 Page 1  
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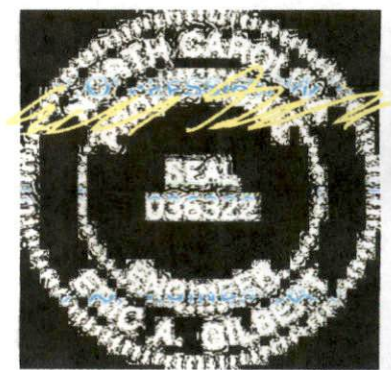
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 25 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No. 1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No. 1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No. 2	

**REACTIONS.** (size) 1=7-10-1, 3=7-10-1, 4=7-10-1  
 Max Horz =21(LC 9)  
 Max Uplift =-21(LC 12), 3=-25(LC 13)  
 Max Grav =134(LC 1), 3=134(LC 1), 4=260(LC 1)

**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 7-10; Vult=30mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



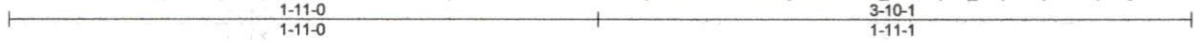
August 12, 2022

Job J0822-4079	Truss VB02	Truss Type VALLEY	Qty 1	Ply 1	Maria Garcia Residence 153614062
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8.430 s Jan 6 2022 MITek Industries, Inc. Thu Aug 11 10:24:13 2022 Page 1

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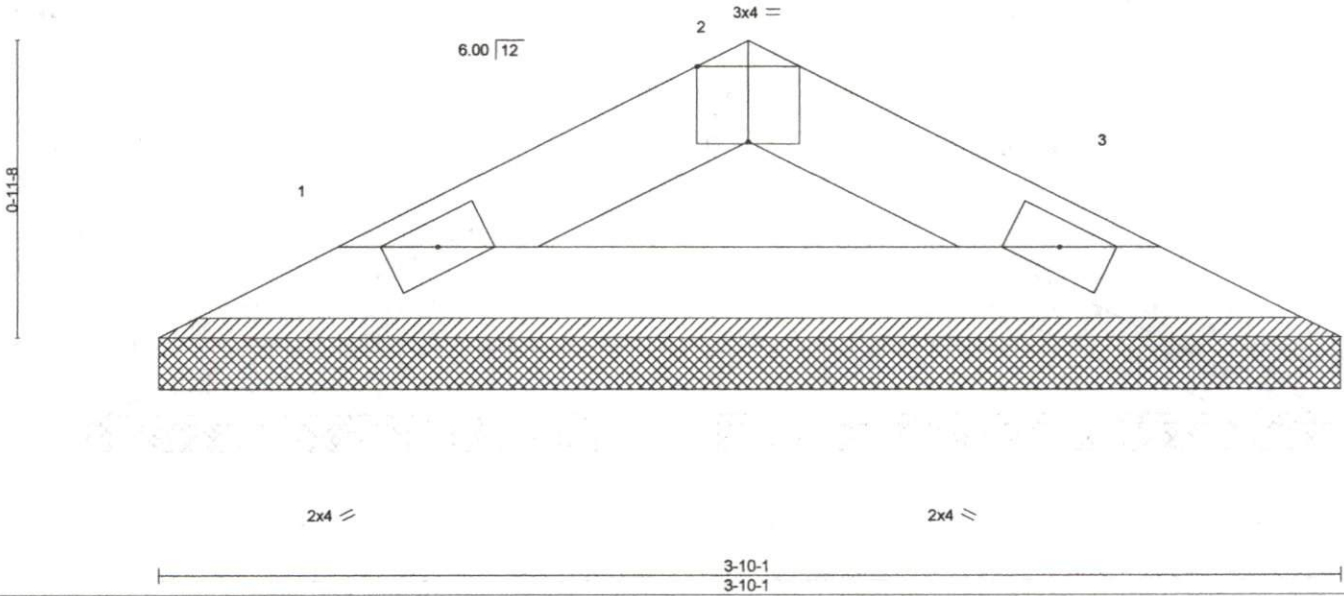


Plate Offsets (X,Y)- [2:0-2-0,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 10 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1

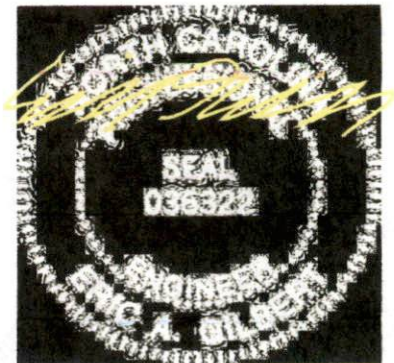
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-10-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-10-1, 3=3-10-1  
Max Horz 1=-8(LC 8)  
Max Uplift 1=-6(LC 12), 3=-6(LC 13)  
Max Grav 1=104(LC 1), 3=104(LC 1)

**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 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



August 12, 2022

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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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Job J0822-4079	Truss VC01	Truss Type VALLEY	Qty 1	Ply 1	Maria Garcia Residence	153614063
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:14 2022 Page 1

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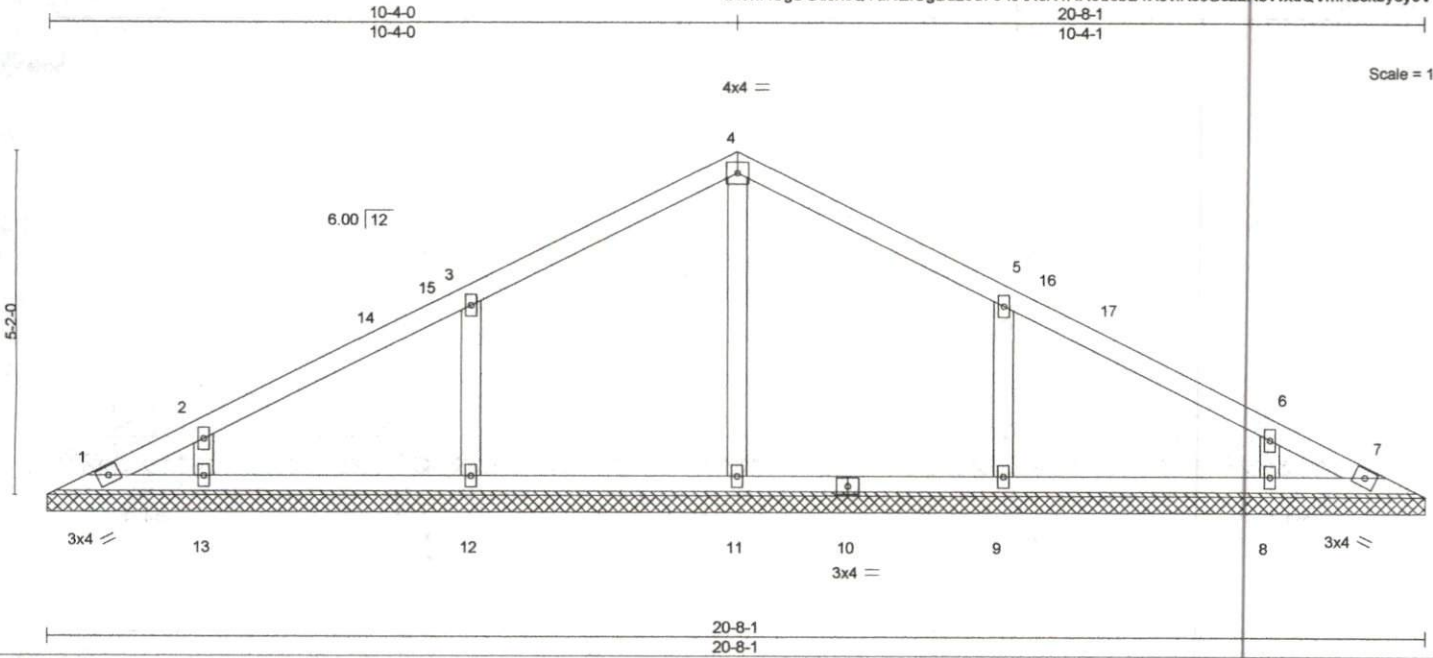


Plate Offsets (X,Y) - [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 80 lb	FT = 20%
	Code IRC2015/TPI2014							

**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.** All bearings 20-8-1.  
 (lb) - Max Horz 1=63(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 13, 9, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=268(LC 1), 12=351(LC 23), 13=263(LC 1), 9=351(LC 24), 8=263(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-12=268/202, 5-9=268/201

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-7 to 5-0-3, Interior(1) 5-0-3 to 10-4-0, Exterior(2) 10-4-0 to 14-8-13, Interior(1) 14-8-13 to 20-0-10 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 13, 9, 8.



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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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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4x4 =

Scale = 1:30.0

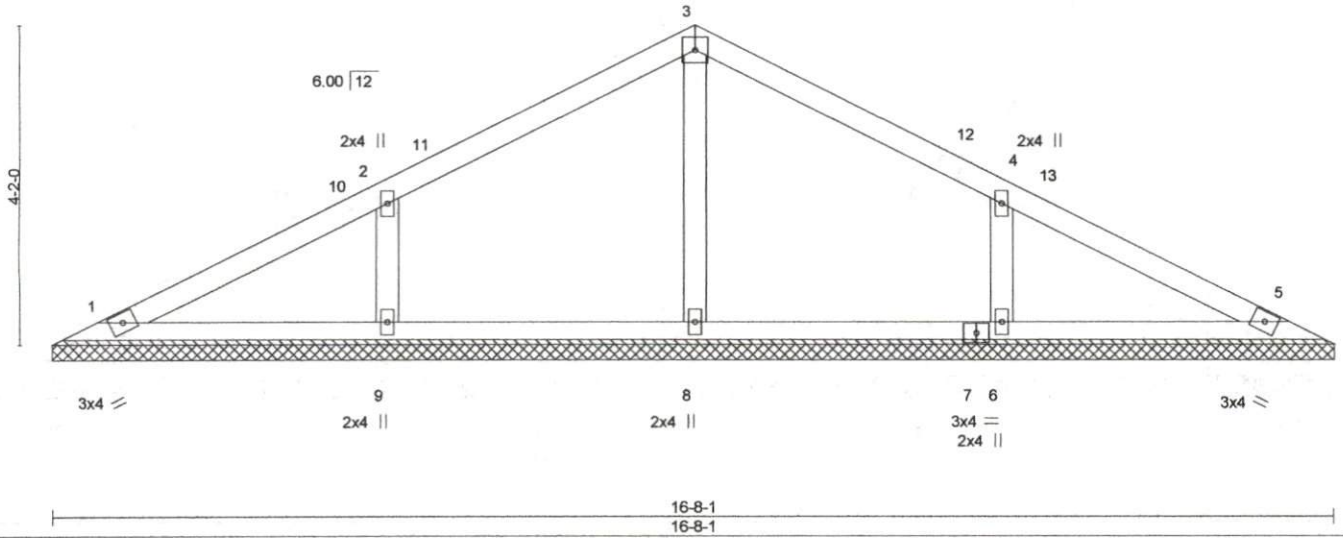


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 61 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 purtins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 16-8-1.  
 (lb) - Max Horz 1=50(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 9, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=262(LC 1), 9=367(LC 23), 6=367(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-9=-275/205, 4-6=-275/205

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-7 to 5-0-3, Interior(1) 5-0-3 to 8-4-0, Exterior(2) 8-4-0 to 12-8-13, Interior(1) 12-8-13 to 16-0-10 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 9, 6.



August 12, 2022

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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

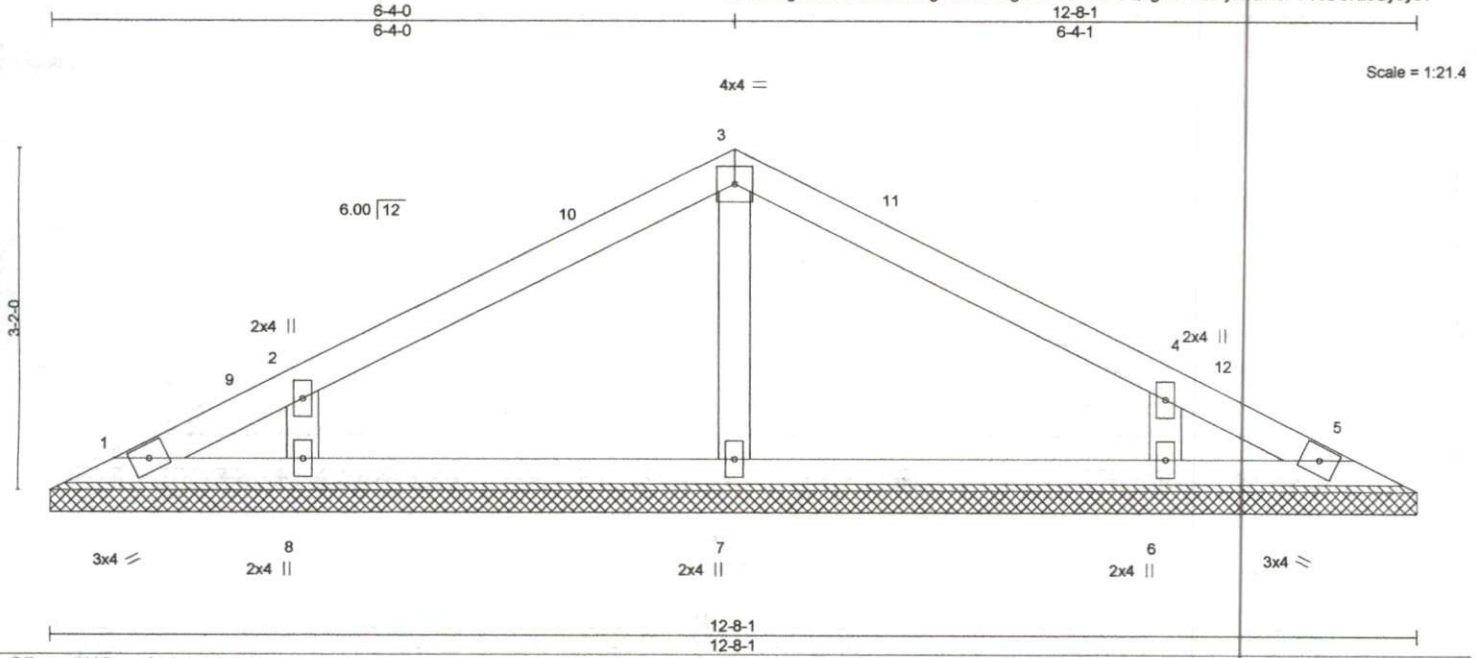


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Job J0822-4079	Truss VC03	Truss Type VALLEY	Qty 1	Ply 1	Maria Garcia Residence	153614065
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LOADING (psf)		SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	n/a	-	n/a		
BCLL	0.0 *	Rep Stress Incr	YES	WB	Horz(CT)	0.00	5	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 44 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 12-8-1.  
 (lb) - Max Horz 1=37(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=286(LC 1), 8=296(LC 23), 6=296(LC 24)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-7 to 5-0-3, Interior(1) 5-0-3 to 6-4-0, Exterior(2) 6-4-0 to 10-8-13, Interior(1) 10-8-13 to 12-0-10 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.



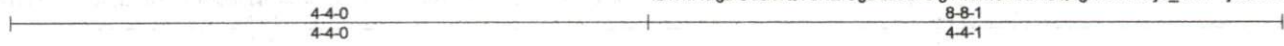
August 12, 2022

Job	Truss	Truss Type	Qty	Ply	Project Name	Job Reference (optional)
J0822-4079	VC04	VALLEY	1	1	Maria Garcia Residence	

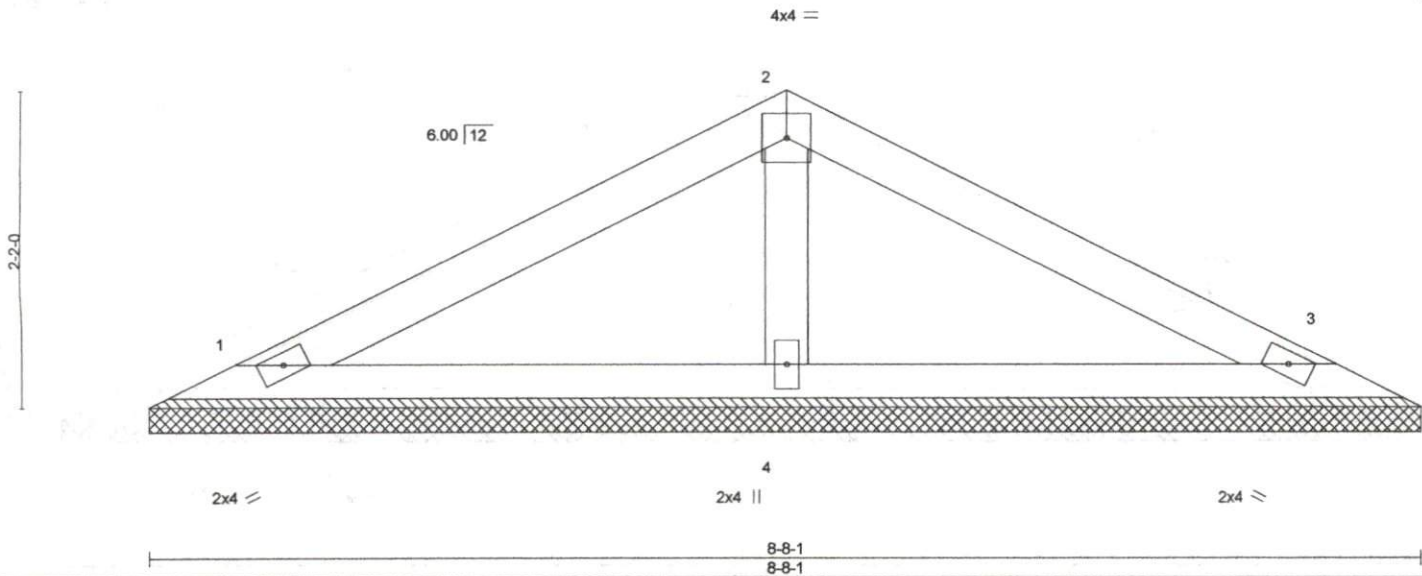
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Scale = 1:15.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.19	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 28 lb	FT = 20%
	Code IRC2015/TPI2014							

**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=8-8-1, 3=8-8-1, 4=8-8-1  
 Max Horz 1=24(LC 9)  
 Max Uplift 1=24(LC 12), 3=28(LC 13)  
 Max Grav 1=151(LC 1), 3=151(LC 1), 4=292(LC 1)

**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 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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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 ANSITPH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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Job J0822-4079	Truss VC05	Truss Type VALLEY	Qty 1	Ply 1	Maria Garcia Residence	153614067
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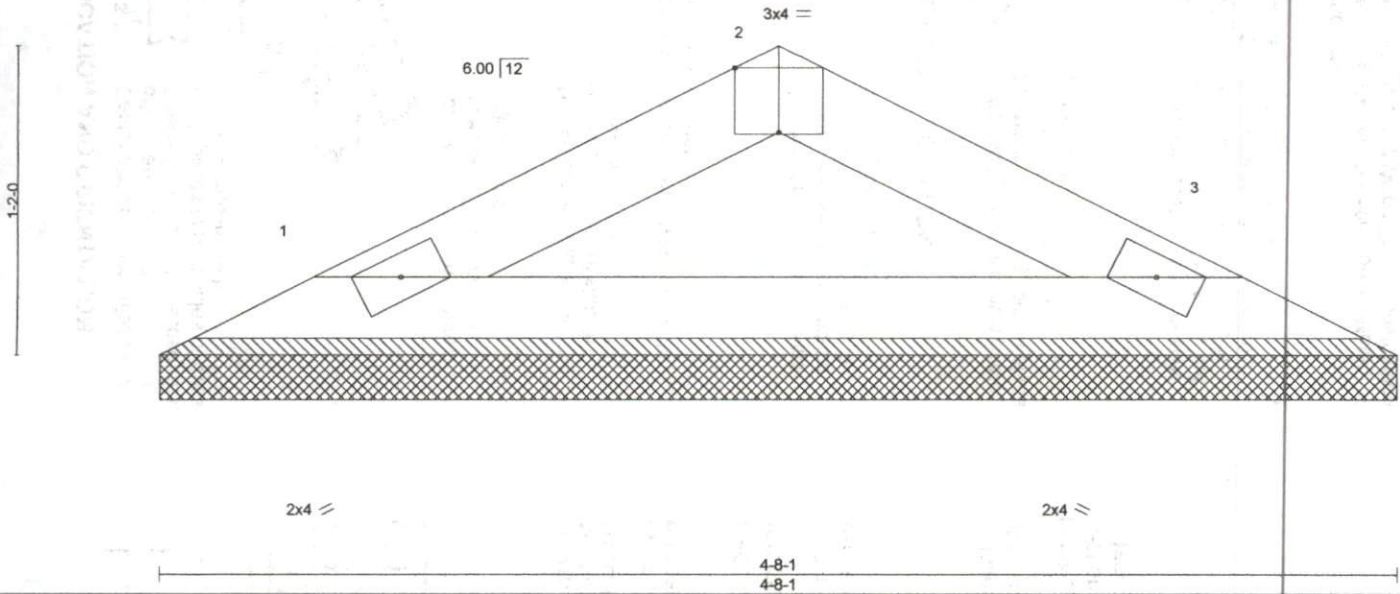
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Aug 11 10:24:17 2022 Page 1

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2-4-0 2-4-0 4-8-1 4-8-1 2-4-1

Scale = 1:8.7



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999	Weight: 13 lb FT = 20%		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P									

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-8-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-8-1, 3=4-8-1  
Max Horz 1=11(LC 11)  
Max Uplift 1=8(LC 12), 3=8(LC 13)  
Max Grav 1=137(LC 1), 3=137(LC 1)

**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 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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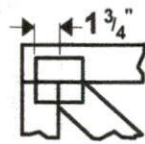
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



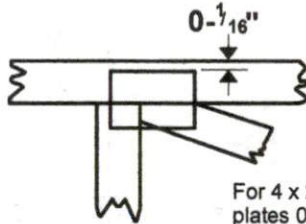
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# Symbols

## PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.



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

\* Plate location details available in MiTek 20/20 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

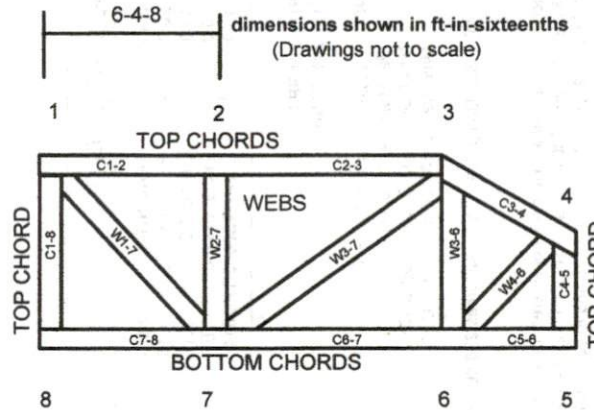


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

- ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
 DSB-89: Design Standard for Bracing.  
 BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & 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

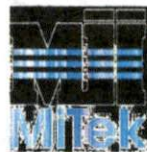
ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
 ER-3907, ESR-2362, ESR-1397, ESR-3282

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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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020



# 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.