



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

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attacher Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

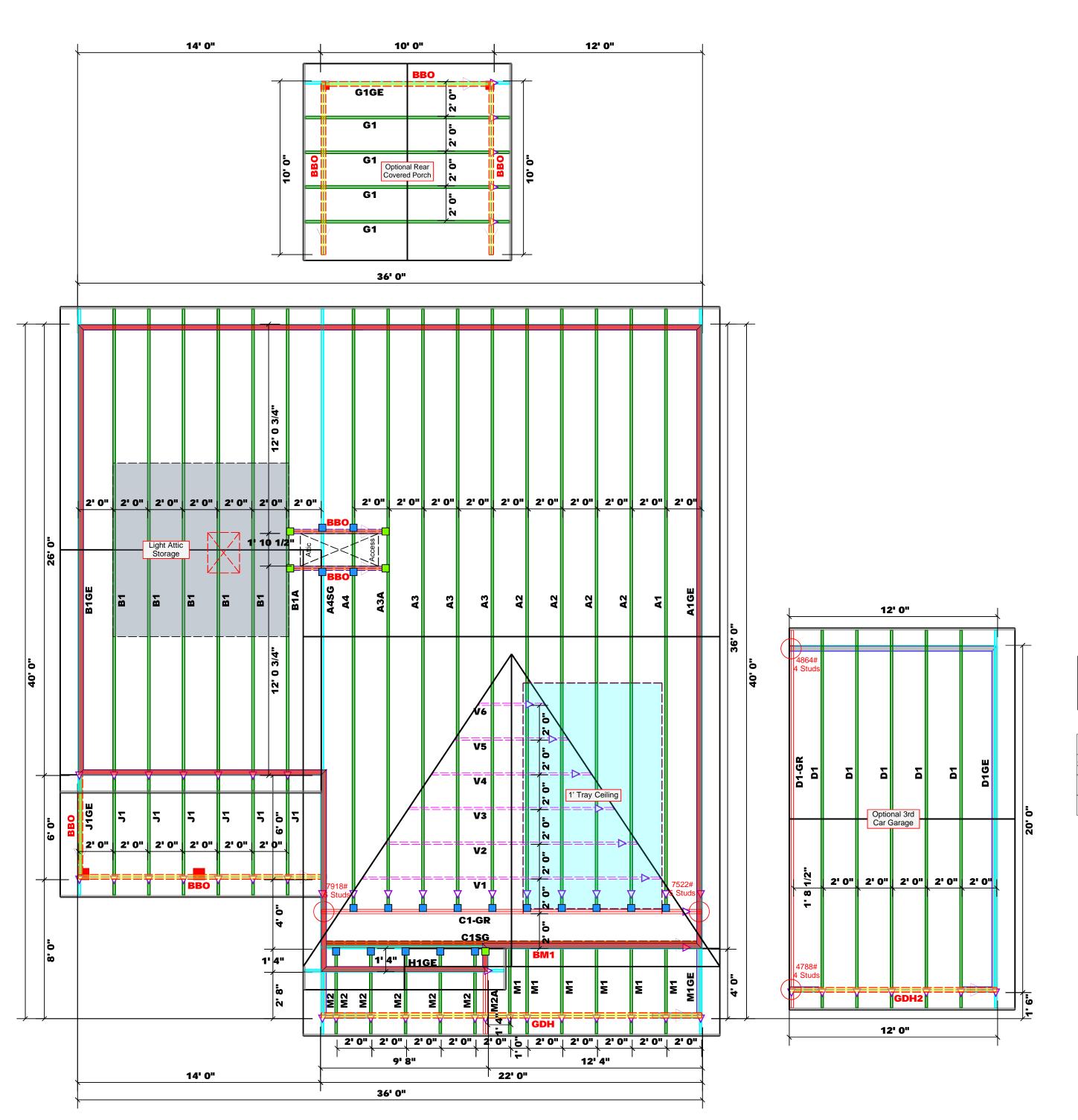
# David Landry

# **David Landry**

LO.	LOAD CHART FOR JACK STUDS											
(BASED ON TABLES ROULE(L) & (b))												
NUMBER OF JACK STUDS REQUIRED & EA END OF HEADER/GEDDER												
6×6 R6ACH (0N (0P 10)	REQ10 STUDS FOR (2) PLY HEADER		END REACTION (UP TD)	REQ15 STUDS FOR (3) ALY MEABER	END REACTION (UP 10)	REQ10 STUDS FOR (#) PLY HEADER						
1700	1		2550	1	3400	1						
3400	2		5100	2	6800	2						
5100	3		7650	3	10200	3						
6800	4		10200	4	13600	4						
8500	5		12750	5	17000	5						
10200	6		15300	6								
11900	7											
13600	8											
15300	9											

11900 13600 15300	7 8 9				
CITY / CO. Angier / Harnett	Wendywood Lane	Roof	01/31/22	David Landry	Lenny Norris
CITY / CO.	ADDRESS	MODEL	DATE REV. 01/31/22	DRAWN BY David Landry	SALES REP. Lenny Norris
Weaver Development Co. Inc.	Lot 7 Mitchell Manor II	Brinkley "C" / 3GLF, CP	N/A		J0122-0372
BUILDER	JOB NAME	PLAN	SEAL DATE	QUOTE #	# <b>90</b> f

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com





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		N TABLES			
NUA	MBER C	STUDS R HEADER/G		ED & EA END OF	
EXB REACTION (0P 10)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (UP TD)	REQ16 STUDS FOR (3) ALY READER	END REACTION (JP TO)	REQ15 STUDS FOR
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

/ Harnett

CITY

පි

Wendywood

01/31/22

DATE REV.

Roof

MODEL

5

"B" / 3GLF,

**Brinkley** 

' Mitchell Mar

NAME

BUILDER

David Lan

DRAWN BY SALES REP.

J0122-0372

# All Walls Shown Are Considered Load Bearing

Dimension Notes

1. All exterior wall to wall dimensions are to

face of sheathing unless noted otherwise

2. All interior wall dimensions are to face of

frame wall unless noted otherwise

3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

Roof Area = 2211.85 sq.ft.
Ridge Line = 83.75 ft.
Hip Line = 0 ft.
Horiz. OH = 189.58 ft.
Raked OH = 233.07 ft.
Decking = 76 sheets

Hatch Legend

Padded HVAC

Tray Ceiling

2nd Floor Walls

	Conne	Nail Information				
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HUS26	USP	19	NA	16d/3-1/2"	16d/3-1/2"
	THD26-2	USP	5	NA	16d/3-1/2"	10d/3"

		Products		
PlotID	Length	Product	Plies	Net Qty
BM1	22' 0"	1-3/4"x 16" LVL Kerto-S	3	3
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	3	3
BM3	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2
GDH2	12' 0"	2x12 SPF No.2	2	2

Truss Placement Plan
Scale: 1/4"=1"

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.

These trusses are designed as individual building components to be incorporated into the building design at the specification of the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

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



Trenco 818 Soundside Rd Edenton, NC 27932

Re: **J0122-0372** 

Lot 7 Mitchell Manor II

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

Pages or sheets covered by this seal: I49971056 thru I49971085

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

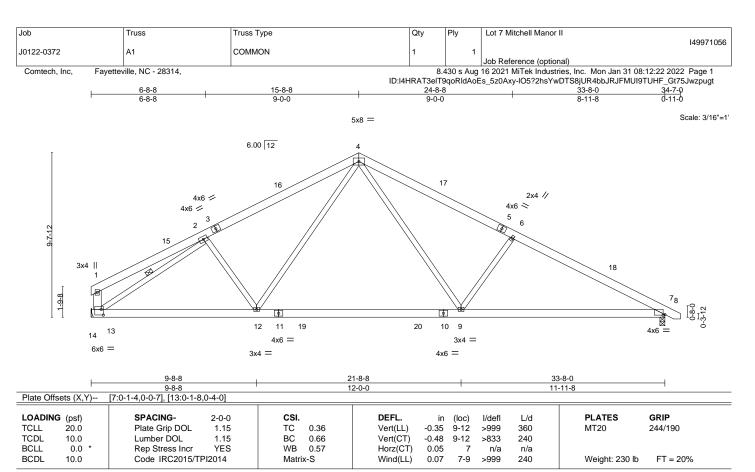
North Carolina COA: C-0844



January 31,2022

Gilbert, Eric

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



**BRACING-**

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

2x4 SP No.2 \*Except\* WFBS

1-13: 2x6 SP No.1

REACTIONS. (size) 13=Mechanical, 7=0-3-8

Max Horz 13=-193(LC 13)

Max Uplift 13=-222(LC 12), 7=-263(LC 13) Max Grav 13=1333(LC 1), 7=1379(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-300/179, 2-4=-1841/805, 4-6=-2084/871, 6-7=-2336/875, 1-13=-254/214 TOP CHORD

BOT CHORD 12-13=-482/1658, 9-12=-230/1276, 7-9=-635/1990

2-12=-242/311, 4-12=-140/593, 4-9=-273/970, 6-9=-522/454, 2-13=-1806/660 WEBS

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

- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 15-8-8, Exterior(2) 15-8-8 to 20-1-5, Interior(1) 20-1-5 to 34-4-10 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, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 222 lb uplift at joint 13 and 263 lb uplift at joint 7.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 4-9-10 oc purlins,

2-13

Rigid ceiling directly applied or 9-9-4 oc bracing.

except end verticals

1 Row at midpt

January 31,2022

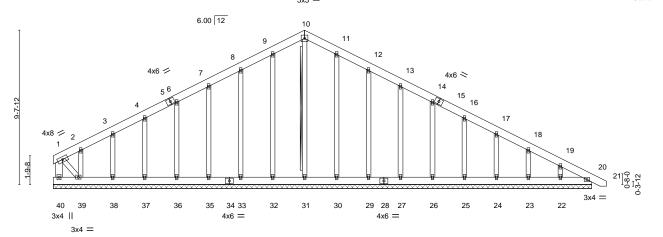


Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
J0122-0372	A1GE	COMMON SUPPORTED GAB		1	I49971057
30122-0372	AIGE	COMMON GOLL CIVIED GAB	'		Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:24 2022 Page 1 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-hnDITMtoRrjAN0epB0dnWkKne5?qyHVHkBcCNpzpugr 33-8-0 34-7-0

5x5 = Scale = 1:67.8



	'			33-8-0	l
LOADIN	\(\(\text{i}\)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) 0.00 20 n/r 120	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00 20 n/r 120	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01 20 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 288 lb FT = 20%

33-8-0

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WEBS 2x6 SP No.1 \*Except\*

1-39: 2x4 SP No.2

OTHERS 2x4 SP No.2

BRACING-

TOP CHORD

BOT CHORD

WEBS

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

T-Brace: 2x4 SPF No.2 - 10-31

Factor (2X) T and I braces to parrow edge of year

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.

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Brace must cover 90% of web length.

except end verticals.

**REACTIONS.** All bearings 33-8-0.

lb) - Max Horz 40=-309(LC 13

Max Uplift All uplift 100 lb or less at joint(s) 32, 30, 20 except 40=-119(LC 17),

33=-119(LC 12), 35=-108(LC 12), 36=-107(LC 12), 37=-108(LC 12), 38=-110(LC 12), 39=-341(LC 12), 29=-122(LC 13), 27=-108(LC 13), 26=-107(LC 13),

25=-108(LC 13), 24=-108(LC 13), 23=-107(LC 13), 22=-134(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 31, 32, 33, 35, 36, 37, 38, 39,

30, 29, 27, 26, 25, 24, 23, 22, 20 except 40=328(LC 12)

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

TOP CHORD 1-40=-306/120, 7-8=-109/273, 8-9=-138/357, 9-10=-158/412, 10-11=-158/412,

11-12=-138/357, 12-13=-109/273, 19-20=-254/80

BOT CHORD 39-40=-159/298, 38-39=-73/258, 37-38=-73/258, 36-37=-73/258, 35-36=-73/258,

33-35=-73/258, 32-33=-73/258, 31-32=-73/258, 30-31=-73/258, 29-30=-73/258,

 $27 - 29 = -73/258,\ 26 - 27 = -73/258,\ 25 - 26 = -73/258,\ 24 - 25 = -73/258,\ 23 - 24 = -73/258,$ 

22-23=-73/258, 20-22=-73/258

WEBS 1-39=-102/304

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone 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
- 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) 32, 30, 20 except (jt=lb) 40=119, 33=119, 35=108, 36=107, 37=108, 38=110, 39=341, 29=122, 27=108, 26=107, 25=108, 24=108, 23=107, 22=134.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

January 31,2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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



318 Soundside Road

Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	7
10400 0070	4405	COMMON CURRORTER CAR			149971057	
J0122-0372	A1GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:24 2022 Page 2 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-hnDITMtoRrjAN0epB0dnWkKne5?qyHVHkBcCNpzpugr

#### NOTES-

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

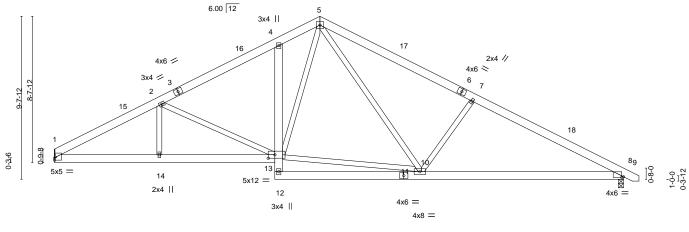
Job	Truss	Truss Type			Qty	Ply	Lot 7 Mitchell Manor II	
								149971058
J0122-0372	A2	Roof Special			4	1		
							Job Reference (optional)	
Comtech, Inc,	Fayetteville, NC - 28314,		8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:25 2022 Page					
			ID:I4HRAT3eIT9qoRIdAoEs 5z0Axy-9zn7hiuQC8r1?AD0lj803yttjVEehevQv					nevQyrLmvFzpugq
	6-2-8	13-0-8	15-8-8		24-8-8		33-8-0	34-7-0
	6-2-8		2-8-0	9-0-0			8-11-8	0-11-0

5x5 =

Scale: 3/16"=1"

Structural wood sheathing directly applied or 4-9-10 oc purlins.

Rigid ceiling directly applied or 9-7-15 oc bracing.



	0-2-0	0-10	-0		0-0-0					-11-0	
Plate Offsets (X,Y) [1:0-0-0,0-1-11], [8:0-1-4,0-0-7], [13:0-4-12,0-2-8]											
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.14	8-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.31	8-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.06	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TF	PI2014	Matrix-	S	Wind(LL)	0.07	8-10	>999	240	Weight: 250 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 WFBS

REACTIONS. (size) 1=Mechanical, 8=0-3-8

Max Horz 1=-180(LC 13)

Max Uplift 1=-232(LC 12), 8=-271(LC 13) Max Grav 1=1338(LC 1), 8=1391(LC 1)

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

TOP CHORD  $1\hbox{-}2\hbox{--}2401/917, 2\hbox{-}4\hbox{--}1846/799, 4\hbox{-}5\hbox{--}1715/885, 5\hbox{-}7\hbox{--}1992/885, 7\hbox{-}8\hbox{--}2282/897}$ 1-14=-633/2050, 13-14=-633/2050, 4-13=-270/273, 10-12=-64/251, 8-10=-652/1953 2-14=0/303, 2-13=-561/329, 10-13=-188/1073, 5-13=-355/764, 5-10=-253/676, BOT CHORD WEBS

7-10=-522/457

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
  2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 15-8-8, Exterior(2) 15-8-8 to 20-1-5, Interior(1) 20-1-5 to 34-4-10 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=232, 8=271.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

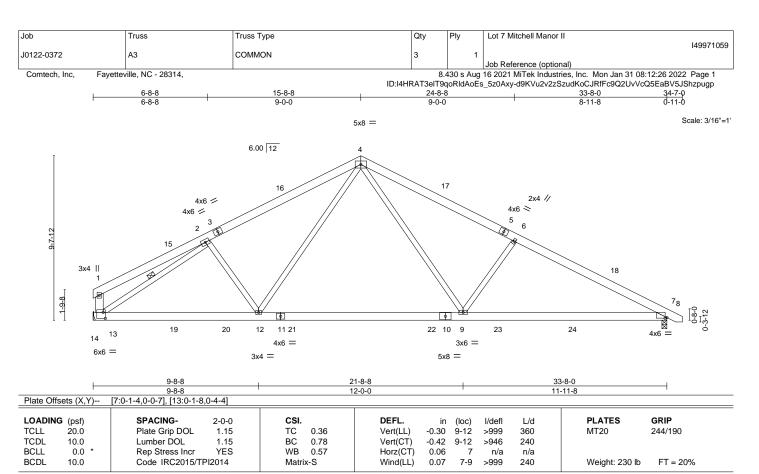


January 31,2022

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**BRACING-**

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

2x4 SP No.2 \*Except\* WFBS

1-13: 2x6 SP No.1

REACTIONS. (size) 13=Mechanical, 7=0-3-8

Max Horz 13=-193(LC 13)

Max Uplift 13=-222(LC 12), 7=-263(LC 13) Max Grav 13=1525(LC 2), 7=1551(LC 2)

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

 $1\hbox{-}2\hbox{--}323/179, 2\hbox{-}4\hbox{--}2090/805, 4\hbox{-}6\hbox{--}2413/871, 6\hbox{-}7\hbox{--}2646/875, 1\hbox{-}13\hbox{--}255/214}$ TOP CHORD

BOT CHORD 12-13=-482/1866, 9-12=-230/1449, 7-9=-635/2287

2-12=-242/311, 4-12=-140/683, 4-9=-273/1190, 6-9=-522/454, 2-13=-1940/660 WEBS

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

- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 15-8-8, Exterior(2) 15-8-8 to 20-1-5, Interior(1) 20-1-5 to 34-4-10 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 2-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=222, 7=263.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 4-5-3 oc purlins,

Rigid ceiling directly applied or 9-9-4 oc bracing.

except end verticals.

1 Row at midpt

January 31,2022



Job Truss Truss Type Qty Ply Lot 7 Mitchell Manor II 149971060 J0122-0372 COMMON АЗА Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:27 2022 Page 1 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-6Muu6Owgkm5IEUNOt8AV8Ny96Jok9VOjQ9qs\_8zpugo 6-8-8 6-8-8 15-8-8 9-0-0 9-0-0 Scale: 3/16"=1' 5x8 || 6.00 12 3x4 ≥ 4x6 / 4x6 > 4x8 / 5 3 6 2 19 1-9-8 11 20 21 13 12 22 23 10 24 25 4x8 9 15 4x6 = 8x8 = 2x4 | 6x8 = 3x4 = 6x6 = 9-8-8 24-8-8 33-8-0 5-3-0 8-11-8 [7:0-1-0,0-1-13], [11:0-4-0,0-4-12], [14:0-2-4,0-4-4] Plate Offsets (X,Y)--LOADING (psf) SPACING-DEFL **PLATES** GRIP 2-0-0 CSI (loc) I/defl L/d **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.56 Vert(LL) -0.19 11-13 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 ВС 0.97 Vert(CT) -0.32 11-13 >999 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.77 Horz(CT) 0.09 n/a n/a

Wind(LL)

**BRACING-**

TOP CHORD

BOT CHORD

WEBS

0.21 9-11 >999

except end verticals.

1 Row at midpt

240

Rigid ceiling directly applied or 5-9-3 oc bracing.

Structural wood sheathing directly applied or 3-4-9 oc purlins,

4-13, 4-11, 2-14

LUMBER-

BCDL

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

10.0

2x4 SP No.2 \*Except\* WFBS 1-14: 2x6 SP No.1

REACTIONS. (size) 14=Mechanical, 7=0-3-8

Max Horz 14=-193(LC 13)

Max Uplift 14=-373(LC 12), 7=-491(LC 13) Max Grav 14=2046(LC 19), 7=2357(LC 20)

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

Code IRC2015/TPI2014

TOP CHORD 1-2=-435/227, 2-4=-2926/1389, 4-6=-3695/1822, 6-7=-4439/2001, 1-14=-315/241

BOT CHORD 13-14=-948/2587, 11-13=-817/2396, 9-11=-1625/3860, 7-9=-1625/3860

2-13=-67/282, 4-13=-80/441, 4-11=-1088/2378, 6-11=-890/520, 2-14=-2661/1191, WEBS

6-9=-78/489

## NOTES-

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

2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; DCDL=6.0psf; and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 15-8-8, Exterior(2) 15-8-8 to 20-1-5, Interior(1) 20-1-5 to 34-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

- 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 2-6-0 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=373, 7=491,
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 985 lb down and 552 lb up at 19-7-12, and 575 lb down and 322 lb up at 21-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others
- 9) 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: 1-4=-60, 4-8=-60, 7-15=-20



Weight: 237 lb

FT = 20%

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neters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designs. 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 

\*\*ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
J0122-0372	A3A	COMMON	1	1	149971060
30122-0372	ASA	COMMON	l'		Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:27 2022 Page 2 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-6Muu6Owgkm5IEUNOt8AV8Ny96Jok9VOjQ9qs\_8zpugo

LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 11=-985(F) 24=-575(F)



Job		Truss	Truss Type		Qty	Ply	Lot 7 Mitchell M	Manor II		
J0122-0372		A4	GABLE		1	1				149971061
30122-0372		A4	GABLE		i	'	Job Reference	(optional)		
Comtech, Inc,	Fayettev	ville, NC - 28314,					16 2021 MiTek I	ndustries, In		08:12:28 2022 Page 1
		0.0.0	45.0.0	ID:l4 , 19-6-0						GauwEtfpaQWazpugn
	-	6-8-8 6-8-8	15-8-8 9-0-0	3-9-8	21-		24-8-8 26-8-8 2-10-0 2-0-0	3	33-8-0 6-11-8	34-7-0 0-11-0
			5x	<sub>(5</sub> =						Scale: 3/16"=1'
			6.00 12	4						
Ī					2x4	11				
			//17	$M \sim M$	. 5	11				
			22 // //		2	3	x6 ≈			
		4x6 :	, // //	//		<u></u>				
		4x4 🖊			20		4x6 ×			
2		2 3		//	04		9	2x4 //		
9-7-12		21		/8	2x4 =	-		8		
ob .		21///		//				, °		
3x4	П			//		<u> ا</u>	//	/ <sup>®</sup> //	24	
UA4	1/			//		2-8-0			24	
1				//	\					
1-9-8	1			\	(VI		//			<sup>9</sup> 10 _
+			<u> </u>		<del>                                      </del>	1				0-3-12
		25	26 16 15 27	28	14 13		44 29	9 30		3x10 =
1	18 <sup>17</sup>		4x6 =		3x6 =	12	11 23			3X1U —
	5x8 =		3x4 =			3x6	=			
			SA.							

Plate Offsets	(X,Y) [	[9:0-6-6,0-1-8], [17:0-3-8,	0-2-12]										
LOADING (ps	sf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20	.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.17 1	4-16	>999	360	MT20	244/190	
TCDL 10	.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.34	9-11	>397	240			
BCLL 0	.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.02	11	n/a	n/a			
BCDL 10	.0	Code IRC2015/TF	PI2014	Matri	x-S	Wind(LL)	0.02	9-11	>999	240	Weight: 246 lb	FT = 20%	

9-9-8

LUMBER-

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

2x4 SP No.2 \*Except\* WFBS

1-17: 2x6 SP No.1

**BRACING-**

21-10-8

2-4-8

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

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

1 Row at midpt 4-14

REACTIONS. All bearings Mechanical except (jt=length) 9=0-3-8.

(lb) - Max Horz 17=-193(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) 14 except 17=-182(LC 12), 9=-196(LC 13), 11=-245(LC 13)

Max Grav All reactions 250 lb or less at joint(s) except 17=828(LC 2), 9=504(LC 24), 11=551(LC 1), 14=1061(LC

19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  $2\text{-}4\text{--}908/575,\ 4\text{-}5\text{--}224/500,\ 5\text{-}6\text{--}193/438,\ 6\text{-}8\text{--}168/348,\ 8\text{-}9\text{--}435/462}$ TOP CHORD

BOT CHORD 16-17=-303/936, 14-16=-24/294, 9-11=-256/337

2-16=-354/361, 4-16=-191/874, 2-17=-850/476, 4-14=-819/68, 8-11=-421/319 **WEBS** 

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; DCDL=6.0psf; and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 15-8-8, Exterior(2) 15-8-8 to 20-1-5, Interior(1) 20-1-5 to 34-4-10 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 2-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 17=182. 9=196. 11=245.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job	Truss	Truss Type	Qty	Plv	Lot 7 Mitchell Manor II
		,,	,	,	149971062
J0122-0372	A4SG	GABLE	1	1	
					Job Reference (optional)
Comtech, Inc, Fayettev	rille, NC - 28314,		8.	430 s Aug	16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:30 2022 Page 1
•		ID:I4HRA	AT3elT9qc	RIdAoEs_	5z0Axy-Wxa0kQyZ1hUK5x5zYHkCm?alpWxGM_K9673WbSzpugl

15-8-8 9-0-0

19-6-0

21-10-8

21-10-8

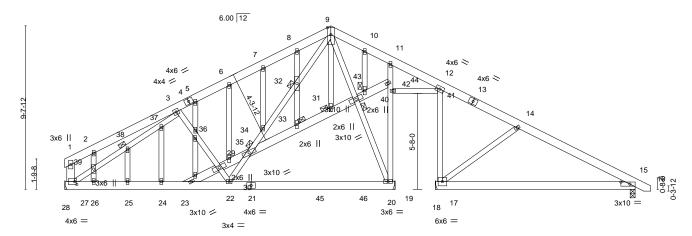
except end verticals

Scale: 3/16"=1' 5x12 ||

33-8-0

Structural wood sheathing directly applied or 6-0-0 oc purlins,

26-8-8 4-10-0



"	9-8-8	9-9-8	2-4-8	11-9-8	'
Plate Offsets (X,Y)	[15:0-6-6,0-1-8], [27:0-1-8,0-2-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl	L/d <b>PLATES</b>	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) -0.17 15-17 >813	360 MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.34 15-17 >397	240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.24	Horz(CT) 0.02 17 n/a	n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03 15-17 >999	240 Weight: 322 I	b FT = 20%

19-6-0

LUMBER-**BRACING-**TOP CHORD

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

2x4 SP No 2 \*Except\* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WFBS

1-27,23-29,29-30,30-43,43-44: 2x6 SP No.1 1 Row at midpt WEBS 9-20

**OTHERS** JOINTS 1 Brace at Jt(s): 30, 31, 32, 33, 38, 40 2x4 SP No.2

REACTIONS. All bearings Mechanical except (jt=length) 15=0-3-8.

9-8-8

(lb) -Max Horz 27=-307(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) except 27=-345(LC 12), 15=-348(LC 13), 17=-387(LC 13),

20=-181(LC 12)

Max Grav All reactions 250 lb or less at joint(s) except 27=767(LC 1), 15=507(LC 1), 17=585(LC 1), 20=827(LC

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

1-2=-386/256, 2-3=-376/362, 3-5=-810/737, 5-6=-771/742, 6-7=-791/836, 7-8=-777/895, TOP CHORD

8-9=-805/959, 9-10=-292/607, 10-11=-307/588, 11-12=-240/505, 12-14=-172/412, 14-15=-442/581, 1-27=-295/181

BOT CHORD 26-27=-425/712, 25-26=-425/712, 24-25=-425/712, 23-24=-425/712, 22-23=-242/463,

22-29=-154/289, 22-30=-127/467, 30-34=-414/598, 32-34=-501/656, 9-32=-534/709,

27-39=-521/364, 38-39=-519/353, 37-38=-524/364, 3-37=-604/418, 23-29=-205/333,  $29 - 35 = -184/323,\ 30 - 35 = -263/392,\ 20 - 42 = -278/170,\ 42 - 44 = -278/170,\ 9 - 43 = -528/190,$ 

20-43=-510/147, 14-17=-421/452

#### NOTES-

**WEBS** 

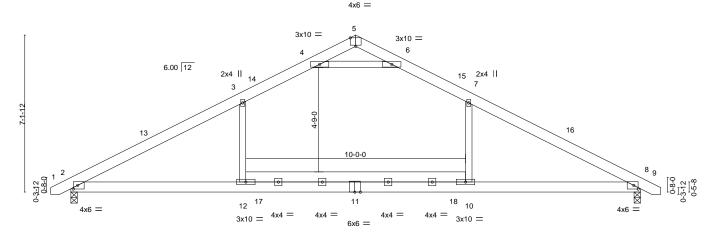
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 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 studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 345 lb uplift at joint 27, 348 lb uplift at joint 15, 387 lb uplift at joint 17 and 181 lb uplift at joint 20.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

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Job	Truss	Truss Type			Qty	Ply	Lot 7 Mitchell Manor II	
	_							149971063
J0122-0372	B1	COMMON			5	1		
							Job Reference (optional)	
Comtech, Inc, Fayette	ville, NC - 28314,				8.4	430 s Aug	16 2021 MiTek Industries, Inc. Mon Jan 31 08:12	:31 2022 Page 1
•				ID:14	HRAT3el	T9qoRldA	oEs_5z0Axy78OxlzBo_cBj5gA6_FRID7mbwlF5	L_JLno47vzpugk
- <sub>0</sub> -11-Q	7-11-8	1	12-11-8		17-11-8		25-11-0	26-10-Q
0-11-d	7-11-8	ı	5-0-0		5-0-0		7-11-8	b-11-0

Scale = 1:49.3



		7-11-8		10-0-0	-	7-11-8	
Plate Offs	sets (X,Y)	[2:0-2-6,0-2-0], [5:0-3-0,Edge], [8:0-2-6	5,0-2-0]				
LOADING	(1 - /	SPACING- 2-0-0	CSI.	DEFL. in (loc)	I/defl L/d	PLATES	GRIP
TCLL TCDL	20.0 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.85 BC 0.43	,	>999 360 >663 240	MT20	244/190
BCLL BCDL	0.0 * 10.0	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.60 Matrix-S	Horz(CT) 0.04 8 Wind(LL) 0.23 2-12	n/a n/a >999 240	Weight: 174 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

17-11-8

LUMBER-

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8

Max Horz 2=119(LC 11) Max Uplift 2=-203(LC 12), 8=-203(LC 13) Max Grav 2=1140(LC 2), 8=1140(LC 2)

7-11-8

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

TOP CHORD 2-3=-1772/588, 3-4=-1401/651, 4-5=-286/978, 5-6=-286/978, 6-7=-1401/651,

7-8=-1772/588

BOT CHORD 2-12=-347/1438, 10-12=-350/1438, 8-10=-347/1438 **WEBS** 3-12=0/497, 7-10=0/497, 4-6=-2532/1014

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
  2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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 12-11-8, Exterior(2) 12-11-8 to 17-4-5, Interior(1) 17-4-5 to 26-7-10 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, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 203 lb uplift at joint 2 and 203 lb uplift at joint 8.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



25-11-0

Structural wood sheathing directly applied or 4-4-14 oc purlins.

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

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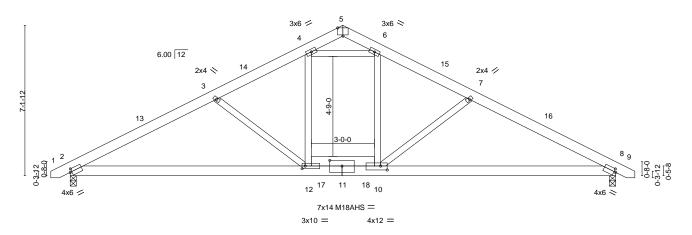
Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
				149971064
B1A	COMMON	1	1	
				Job Reference (optional)
ville, NC - 28314,		8.	430 s Aug	16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:32 2022 Page 1
	IC	:I4HRAT3	elT9qoRld/	AoEs_5z0Axy-SJin95zpZlk1LFFMfhmgrQf4bKb9qq2SZRYdfLzpugj
=		B1A COMMON  sville, NC - 28314,	B1A COMMON 1  sville, NC - 28314, 8.	B1A COMMON 1 1 1 2 1 2 2 2 3 1 4 3 2 3 3 5 Aug

11-5-8

4-6-0

12-11-8 | 14-5-8 18-11-8 26-10-0 0-11-0 1-6-0 1-6-0 4-6-0 6-11-8

Scale = 1:51.5 4x6 =



	11-5-8	1	14-5-8	25-11-0	
	11-5-8		3-0-0	11-5-8	
Plate Offsets (X,Y)	[2:0-1-0,0-1-12], [5:0-3-0,Edge], [8:0-1-	0,0-1-12], [10:0-3-12,0-2-	-4], [11:0-7-0,0-3-4],	, [12:0-1-12,0-1-8]	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.32	Vert(LL)	-0.11 2-12 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.64	Vert(CT)	-0.25 2-12 >999 240	M18AHS 186/179
BCLL 0.0 *	Rep Stress Incr NO	WB 0.48	Horz(CT)	0.06 8 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.13 2-12 >999 240	Weight: 177 lb FT = 20%

LUMBER-**BRACING-**

TOP CHORD TOP CHORD 2x6 SP No.1 Structural wood sheathing directly applied or 4-0-0 oc purlins. BOT CHORD 2x6 SP No.1 BOT CHORD Rigid ceiling directly applied or 6-9-10 oc bracing. 2x4 SP No 2

REACTIONS. (size) 2=0-3-8, 8=0-3-8

Max Horz 2=119(LC 11) Max Uplift 2=-396(LC 12), 8=-388(LC 13) Max Grav 2=1874(LC 1), 8=1840(LC 1)

6-11-8

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

TOP CHORD 2-3=-3348/1644, 3-4=-3043/1545, 4-5=-292/154, 5-6=-354/189, 6-7=-3015/1532,

7-8=-3289/1611

BOT CHORD 2-12=-1309/2894, 10-12=-1071/2627, 8-10=-1284/2836

 $4\text{-}12\text{-}-594/1233, \, 6\text{-}10\text{-}-482/1041, \, 4\text{-}6\text{-}-2325/1271, \, 3\text{-}12\text{-}-377/306, \, 7\text{-}10\text{-}-304/265}$ **WEBS** 

#### NOTES-

WFBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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 12-11-8, Exterior(2) 12-11-8 to 17-4-5, Interior(1) 17-4-5 to 26-7-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates 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, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 396 lb uplift at joint 2 and 388 lb uplift at ioint 8.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 985 lb down and 552 lb up at 11-10-12, and 575 lb down and 322 lb up at 14-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-5=-60, 5-9=-60, 2-8=-20



January 31,2022



neters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designs. 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 

\*\*ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	٦
J0122-0372	B1A	COMMON	1	1	149971064	
JU122-U372	ын	COMMON	1	'	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

B.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:32 2022 Page 2 ID:I4HRAT3eIT9qoRldAoEs\_520Axy-SJin95zpZlk1LFFMfhmgrQf4bKb9qq2SZRYdfLzpugj

LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 17=-985(B) 18=-575(B)



Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II			
J0122-0372	B1GE	COMMON SUPPORTED GAB	1	1	1499	71065		
					Job Reference (optional)			
Comtech, Inc, Fayette	ville, NC - 28314,		8.4	430 s Aug	16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:33 2022 Page	e 1		
		ID:I4HRA	ID:I4HRAT3elT9qoRldAoEs_5z0Axy-wWG9MR_RKcsuyPqYDPHvOeCJek4yZNLco5HBCnzpugi					

Scale = 1:48.5

27-9-0

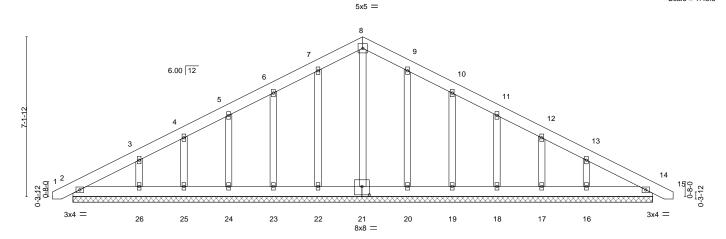


Plate Offsets (X,Y)	[21:0-4-0,0-4-8]		5-11-0	0-11-0	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) 0.00 14	n/r 120	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00 14	n/r 120	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Horz(CT) 0.00 14	n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			Weight: 191 lb FT = 20%

26-10-0

LUMBER-TOP CHORD 2x6 SP N

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

-0-11-0

-0-11-0 0-11-0

OTHERS 2x4 SP No.1

BRACING-TOP CHORD

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 25-11-0.

(lb) - Max Horz 2=184(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 25, 20, 17, 14 except 23=-115(LC 12), 24=-110(LC 12),

26=-171(LC 12), 19=-118(LC 13), 18=-109(LC 13), 16=-167(LC 13)

13-10-8 12-11-8

Max Grav All reactions 250 lb or less at joint(s) 2, 21, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14

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

TOP CHORD 7-8=-120/304, 8-9=-120/303

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOI = 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, 22, 25, 20, 17, 14 except (jt=lb) 23=115, 24=110, 26=171, 19=118, 18=109, 16=167.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



January 31,2022

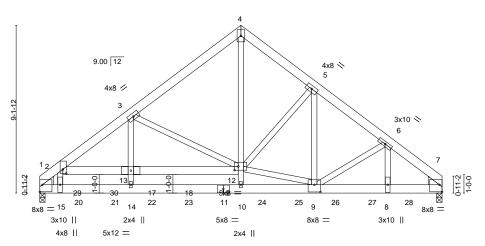


Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
J0122-0372	C1-GR	Roof Special Girder	1	_	149971066
			•	2	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Mitek



Scale = 1:59.1 5x8 ||



1-1-5 1-1-5 4-11-8 10-11-8 14-11-8 18-11-8 21-11-0 3-10-3 6-0-0 4-0-0 4-0-0 2-11-8

Plate Offsets (X,Y)-- [1:Edge,0-4-10], [2:0-2-10,0-2-4], [7:Edge,0-4-10], [9:0-4-0,0-4-12], [12:0-2-8,0-2-8]

LOADING TCLL	<b>G</b> (psf) 20.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.86	DEFL. Vert(LL)	in -0.15	(loc)	l/defl >999	L/d 360	PLATES MT20	<b>GRIP</b> 244/190
TCDL	10.0	Lumber DOL	1.15	ВС	0.73	Vert(CT)	-0.31		>843	240	WIT 20	244/190
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2015/TPI2	NO 2014	WB Matri	0.91 x-S	Horz(CT) Wind(LL)	0.05 0.15	7 12-13	n/a >999	n/a 240	Weight: 402 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Sheathed or 4-11-9 oc purlins.

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

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP 2400F 2.0E **WEBS** 2x4 SP No.2 WEDGE

Left: 2x6 SP No.1, Right: 2x6 SP No.1

REACTIONS. (size) 1=0-3-8, 7=0-3-8

Max Horz 1=-275(LC 23) Max Uplift 1=-1263(LC 8), 7=-1390(LC 9) Max Grav 1=7583(LC 1), 7=7705(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-10129/1691, 2-3=-9954/1689, 3-4=-6372/1197, 4-5=-6163/1169, 5-6=-8950/1599,

6-7=-10911/1947

BOT CHORD 13-17=-199/1348, 17-18=-199/1348, 18-19=-199/1348, 12-19=-199/1348,

1-15=-1112/6124, 15-20=-1112/6124, 20-21=-1112/6124, 14-21=-1112/6124, 14-22=-1192/6650, 22-23=-1192/6650, 11-23=-1192/6650, 10-11=-1192/6650, 10-24=-1203/6789, 24-25=-1203/6789, 9-25=-1203/6789, 9-26=-1363/7919, 26-27=-1363/7919, 8-27=-1363/7919, 8-28=-1363/7919, 7-28=-1363/7919,

2-29=-263/1793, 29-30=-265/1789, 13-30=-266/1789

 $13 - 14 = -158/1269, \ 3 - 13 = -496/3482, \ 3 - 12 = -3357/714, \ 5 - 9 = -681/4032, \ 10 - 12 = -123/1345, \ 1$ WEBS

 $4\text{-}12\text{=-}1276/7071,\ 9\text{-}12\text{=-}232/708,\ 5\text{-}12\text{=-}3363/728,\ 2\text{-}15\text{=-}386/1995,\ 6\text{-}9\text{=-}955/322,}$ 

6-8=-446/2474

### NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) 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.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1263 lb uplift at joint 1 and 1390 lb uplift at joint 7.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

January 31,2022



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSUTPH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
J0122-0372	C1-GR	Roof Special Girder	1		149971066
00122 0072	or an	Troof openial Girder	'	2	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Mitek

B.430 s Dec 2 2021 MiTek Industries, Inc. Mon Jan 31 08:55:28 2022 Page 2 ID:I4HRAT3eIT9qoRldAoEs\_520Axy-OOLgqhQmv01IWpsApKDzvvM9?kIKOm2dwDYx41zpu2T

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1313 lb down and 242 lb up at 2-0-12, 1318 lb down and 252 lb up at 4-0-12, 1318 lb down and 252 lb up at 6-0-12, 1318 lb down and 252 lb up at 6-0-12, 1318 lb down and 252 lb up at 10-0-12, 1505 lb down and 242 lb up at 12-0-12, 1505 lb down and 242 lb up at 14-0-12, 1505 lb down and 242 lb up at 16-0-12, and 2002 lb down and 393 lb up at 18-0-12, and 808 lb down and 202 lb up at 20-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 12-30=-20, 1-7=-20, 2-30=-20

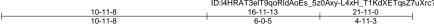
Concentrated Loads (lb)

Vert: 17=-1318(B) 18=-1318(B) 19=-1318(B) 20=-1313(B) 21=-1318(B) 24=-1313(B) 25=-1313(B) 25=-1313(B) 25=-1313(B) 27=-1934(B) 28=-739(B)

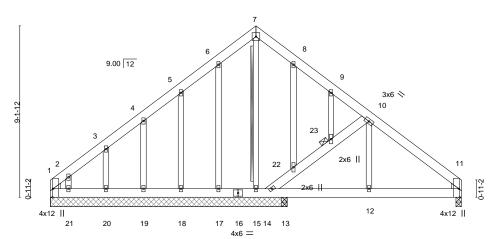
Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
J0122-0372	C1SG	GABLE	1	1	149971067
30122-0372	0100	OABLE	'		Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:36 2022 Page 1 ID:I4HRAT3EIT9QORIdAoEs\_520Axy-L4xH\_T1KdXETqsZ7uXrc?GqoPx4Cmkg2U3Wro6zpugf



5x5 = Scale = 1:57.8



			 			_
Plate Offsets (X,Y) [1:0-5-8,Edge], [1	1:0-5-8,Edge]					
		12-7-8	4-4-5	4-11-3	'	
		12-7-0	 10-11-13	21-11-0		

LOADING	(psf)	SPACING- 2-0-	csi.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.1	TC 0.14	Vert(LL)	-0.00 11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.1	BC 0.12	Vert(CT)	-0.01 11-12	>999	240		
BCLL	0.0 *	Rep Stress Incr YE	WB 0.12	Horz(CT)	0.00 11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.01 11-12	>999	240	Weight: 191 lb	FT = 20%

**JOINTS** 

 LUMBER BRACING 

 TOP CHORD
 2x6 SP No.1
 TOP CHOR

 BOT CHORD
 2x6 SP No.1
 BOT CHOR

 WFRS
 2x6 SP No.1 \*Fxcent\*
 \*Fxcent\*

2x6 SP No.1 \*Except\*

10-12: 2x4 SP No.2 WEBS
2x4 SP No.2

WEDGE Left: 2x4 SP No.2 , Right: 2x4 SP No.2 TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.

BOT CHORD

Rigid ceiling directly applied or 6-0-0 oc bracing, Except:

10-0-0 oc bracing: 13-14,12-13,11-12.

WEBS

T-Brace:

2x4 SPF No.2 - 7-15

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.

1 Brace at Jt(s): 23

**REACTIONS.** All bearings 12-7-8 except (jt=length) 11=0-3-8, 13=0-3-8.

(lb) - Max Horz 1=-344(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) except 1=-222(LC 10), 11=-139(LC 13), 14=-335(LC 13), 17=-108(LC 12), 18=-159(LC 12), 19=-144(LC 12), 20=-157(LC 12), 20=-157

12), 21=-257(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 17, 18, 19, 20, 21, 13 except 1=369(LC 12), 11=390(LC 1), 14=281(LC 20), 15=257(LC 1)

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

TOP CHORD 1-2=-492/348, 2-3=-311/231, 10-11=-423/170

BOT CHORD 1-21=-247/331, 20-21=-247/331, 19-20=-247/331, 18-19=-247/331, 17-18=-247/331,

15-17=-247/331, 14-15=-247/331, 13-14=-12/279, 12-13=-12/279, 11-12=-12/279

WEBS 14-22=-618/439, 22-23=-539/373, 10-23=-542/374, 2-21=-236/254

#### NOTES-

**OTHERS** 

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone 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
- 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 studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 222 lb uplift at joint 1, 139 lb uplift at joint 11, 335 lb uplift at joint 14, 108 lb uplift at joint 17, 159 lb uplift at joint 18, 144 lb uplift at joint 19, 157 lb uplift at joint 20 and 257 lb uplift at joint 21.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



January 31,2022

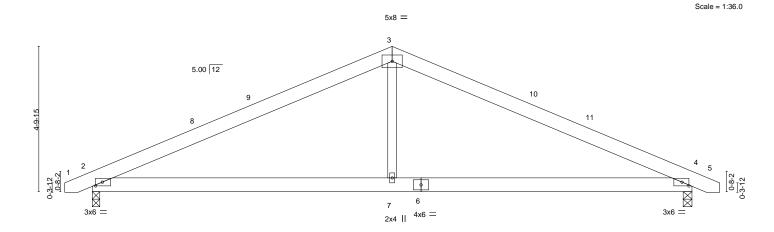
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Jo	b		Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	
								149971068
J0	122-0372		D1	COMMON	5	1		
							Job Reference (optional)	
	Comtech, Inc,	Fayettev	ville, NC - 28314,			3.430 s Aug	16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:3	37 2022 Page 1
				ll l	D:I4HRAT3eIT9q	RIdAoEs_	5z0Axy-pHVgCp1yOqMKR08JSFMrYUNuULMUVBI	BBjjFOLYzpuge
	-0-11-0		9-1	1-8			19-11-0	20-10-0
	0-11-0		9-1	1-8			9-11-8	0-11-0



	3 11 0					0 11 0		I
	9-11-8					9-11-8		
Plate Offsets (X,Y)-	- [2:0-2-12,0-1-8], [4:0-2-12,0-1-8]							
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 0.50	Vert(LL) -0.0	05 2-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.	13 2-7	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.0	02 4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.0	05 2-7	>999	240	Weight: 108 lb	FT = 20%
							_	

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No 2 WFBS

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

Max Horz 2=-71(LC 17)

Max Uplift 4=-163(LC 13), 2=-162(LC 12) Max Grav 4=836(LC 1), 2=835(LC 1)

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

TOP CHORD 2-3=-1239/498, 3-4=-1240/498 BOT CHORD 2-7=-293/1030, 4-7=-293/1030

WEBS 3-7=0/477

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 9-11-8, Exterior(2) 9-11-8 to 14-4-5, Interior(1) 14-4-5 to 20-7-6 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.

9-11-8

- 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 163 lb uplift at joint 4 and 162 lb uplift at
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



19-11-0

Structural wood sheathing directly applied or 5-10-8 oc purlins.

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

January 31,2022



Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor I	II	
J0122-0372	D1-GR	Common Girder	1	_			149971069
					Job Reference (option	nal)	
Comtech, Inc,	Fayetteville, NC - 28314,		8.	430 s Aug	16 2021 MiTek Industri	ies, Inc. Mon Jan 31 08:1	2:40 2022 Page 1
			ID:I4HRAT3	elT9qoRldA	AoEs_5z0Axy-DsBoqq4	lqglkvIUsu7NvYA6?SrYLy	riNaePhU2xtzpugb
-0-11-0	3-11-8	9-11-8	1	15-11-8	3	19-11-0	20-10-0
0-11-0	3-11-8	6-0-0	1	6-0-0		3-11-8	0-11-0

5x5 ||

Scale = 1:36.0

2.2 8.2 7 2.7 2 2.7	5.00 12 3x6 = 3	112		4		13	3x6 = 5	6 7 \[ \frac{7}{20.5} \]
77.7 1	11 <sup>14</sup> 4x12	15	16	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	18	19	8 <sup>20</sup> 4x12	4x12

		0 11 0		0 11 0		10 11	0		10 11 0	
		3-11-8		6-0-0		6-0-	0		3-11-8	
Plate Offse	ets (X,Y)	[2:0-0-13,0-2-0], [6:0-0-1	3,0-2-0], [10:0	-5-0,0-6-4]						
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	-0.11 10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.21 10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.71	Horz(CT	0.05 6	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matrix-S	Wind(LL)	0.17 10-11	>999	240	Weight: 287 lb	FT = 20%

**BRACING-**TOP CHORD

**BOT CHORD** 

15-11-8

LUMBER-

REACTIONS.

TOP CHORD 2x6 SP No.1 BOT CHORD 2x8 SP 2400F 2.0E WFBS

2x4 SP No 2

(size) 2=0-3-0, 6=0-3-8

3-11-8

Max Horz 2=71(LC 16)

Max Uplift 2=-1117(LC 12), 6=-1143(LC 13) Max Grav 2=4774(LC 1), 6=4878(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-10630/5726, 3-4=-8175/4476, 4-5=-8176/4476, 5-6=-10617/5719 BOT CHORD 2-11=-5109/9566, 10-11=-5109/9566, 8-10=-5111/9550, 6-8=-5111/9550

4-10=-3078/5748, 5-10=-2162/1217, 5-8=-890/1816, 3-10=-2178/1226, 3-11=-890/1816 WEBS

### NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
  - Top chords connected as follows: 2x6 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) 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.

9-11-8

- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-11-8, Interior(1) 3-11-8 to 9-11-8, Exterior(2) 9-11-8 to 14-4-5, Interior(1) 14-4-5 to 20-7-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1117, 6=1143.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1185 lb down and 664 lb up at 4-3-4, 1185 lb down and 664 lb up at 6-3-4, 1185 lb down and 664 lb up at 8-3-4, 1185 lb down and 664 lb up at 10-3-4, 1185 lb down and 664 lb up at 12-3-4, and 1028 lb down and 576 lb up at 14-3-4, and 1028 lb down and 576 lb up at 16-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



19-11-0

Structural wood sheathing directly applied or 4-11-11 oc purlins.

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

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ameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designs. 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 

\*\*ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
J0122-0372	D1-GR	Common Girder	1		149971069
00.22 00.2	3. 6.1	Common Chack		2	Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:40 2022 Page 2 ID:I4HRAT3eIT9qoRldAoEs\_520Axy-DsBoqq4qglkvlUsu7NvYA6?SrYLyiNaePhU2xtzpugb

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

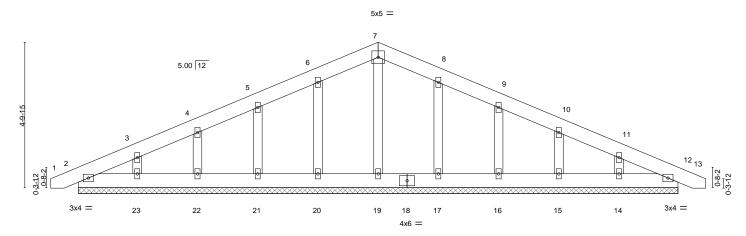
Vert: 1-4=-60, 4-7=-60, 2-6=-20

Concentrated Loads (lb)

 $Vert:\ 14 = -1185(F)\ 15 = -1185(F)\ 16 = -1185(F)\ 17 = -1185(F)\ 18 = -1185(F)\ 19 = -1028(F)\ 20 = -1028(F)$ 

Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	
						I49971070
J0122-0372	D1GE	GABLE	1	1		
					Job Reference (optional)	
Comtech, Inc, Fayette	ville, NC - 28314,		8.4	430 s Aug	16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:38 202	2 Page 1
			ID:I4HRAT3el	T9qoRldAd	Es_5z0Axy-HT32P92a88UB3AiW0yt45hvAdlnMEfeLyN?	yt?zpugd
-0-11-0	9-1	1-8			19-11-0	20-10-0
0-11-0	9-1	1-8			9-11-8	0-11-0

Scale = 1:36.0



						19-11-0						
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	0.03	Vert(LL)	0.00	12	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	0.00	12	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S	, ,					Weight: 130 lb	FT = 20%

10-11-0

LUMBER-

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

**BRACING-**

TOP CHORD **BOT CHORD** 

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS.

All bearings 19-11-0. Max Horz 2=-120(LC 13) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 12, 2, 20, 22, 17, 15 except 21=-102(LC 12), 23=-116(LC 12),

16=-103(LC 13), 14=-112(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 12, 2, 19, 20, 21, 22, 23, 17, 16, 15, 14

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=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone 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
- 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) 12, 2, 20, 22, 17, 15 except (jt=lb) 21=102, 23=116, 16=103, 14=112.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II		
						149971071	
J0122-0372	G1	COMMON	4	1			
					Job Reference (optional)		
Comtech, Inc, Fayette	/ille, NC - 28314,		8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:41 2022 Page 1				
		II	ID:I4HRAT3eIT9qoRldAoEs 5z0Axy-h2kA2A4SR3smwdR5h4QniKXdoyqOR?0neLDcUKzpuqa				
-0-11-0	1	4-11-8			9-11-0	10-10-0	
0-11-0	ı	4-11-8			4-11-8	0-11-0	

Scale = 1:21.5

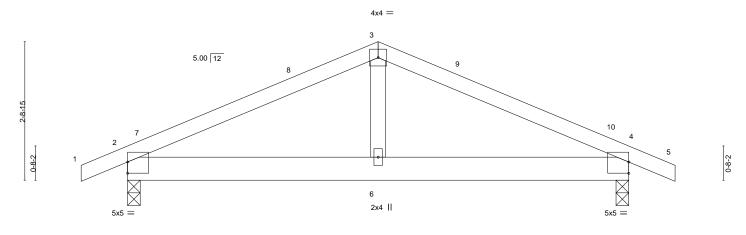


Plate Offsets (X,Y)	[2:0-0-0,0-2-11], [4:Edge,0-2-11]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) 0.03 2-6 >999 240	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.57	Vert(CT) -0.01 4-6 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) -0.00 4 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 45 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

4-11-8

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 9-2-9 oc bracing.

LUMBER-

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

WEBS 2x4 SP No.2

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

Max Horz 2=-39(LC 17) Max Uplift 2=-225(LC 8), 4=-225(LC 9) Max Grav 2=449(LC 1), 4=449(LC 1)

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

TOP CHORD 2-3=-554/872, 3-4=-554/872 BOT CHORD 2-6=-667/437, 4-6=-667/437

WEBS 3-6=-461/239

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 4-11-8, Exterior(2) 4-11-8 to 9-4-5, Interior(1) 9-4-5 to 10-10-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) except (jt=lb) 2=225, 4=225.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

4-11-8

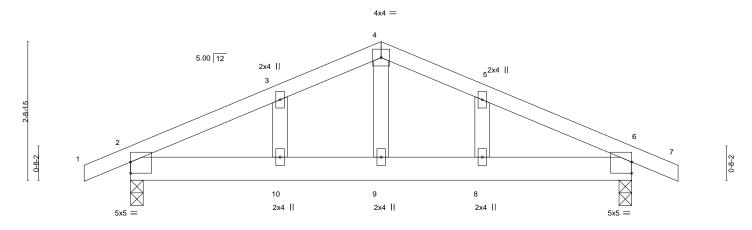


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Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	
						149971072
J0122-0372	G1GE	GABLE	1	1		
					Job Reference (optional)	
Comtech, Inc, Fayette		8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:41 2022 Page 1				
			ID:I4HRAT3eIT9	qoRldAoE	s_5z0Axy-h2kA2A4SR3smwdR5h4QniKXe	lyidR?wneLDcUKzpuga
-0-11-0	1	4-11-8			9-11-0	10-10-0
0-11-0	1	4-11-8			4-11-8	0-11-0

Scale = 1:21.5



			4-11-0		1			9-11-	U		
			4-11-8		1			4-11-	8	1	
Plate Offset	ts (X,Y)	[2:0-0-0,0-2-11], [6:Edge,0-2-11	]								
LOADING	(psf)	SPACING- 2-0-0	) CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	5 TC	0.23	Vert(LL)	-0.01	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	5 BC	0.42	Vert(CT)	-0.02	8	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	S WB	0.06	Horz(CT)	-0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matr	rix-S	Wind(LL)	0.02	8	>999	240	Weight: 49 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

0\_11\_0

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 9-1-14 oc bracing.

LUMBER-

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

2x4 SP No.2 **OTHERS** 

REACTIONS. (size) 2=0-3-0. 6=0-3-0 Max Horz 2=-66(LC 13)

Max Uplift 2=-297(LC 8), 6=-297(LC 9) Max Grav 2=449(LC 1), 6=449(LC 1)

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

2-3=-541/873, 3-4=-494/920, 4-5=-494/920, 5-6=-541/873 TOP CHORD BOT CHORD 2-10=-688/437, 9-10=-688/437, 8-9=-688/437, 6-8=-688/437

**WEBS** 4-9=-534/232

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

/<sub>-11-Ω</sub>

- 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) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=297, 6=297.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job Truss Truss Type Qty Ply Lot 7 Mitchell Manor II 149971073 J0122-0372 H1GE COMMON SUPPORTED GAB Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:42 2022 Page 1 ID:I4HRAT3eIT9qoRIdAoEs\_5z0Axy-9EIZFW54CN\_dYn0HFoy0FX4sTM82ASRwt?z90mzpugZ 11-5-0 <del>-0-11-0</del> <del>+</del> <del>0-11-0</del> <del>+</del> 10-6-0 5-8-8 Scale = 1:29.8 4x4 =9.00 12 2x4 II 5 2x4 || 67 0-4-4 4x12 || 4x12 || 2x4 || 2x4 || 2x4 || 11-5-0 0-11-0 10-6-0 0-11-0 Plate Offsets (X,Y)-- [2:0-5-8,Edge], [6:0-5-8,Edge] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 I/defl L/d (loc) **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) 0.00 6 n/r 120 MT20 244/190

Vert(CT)

Horz(CT)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.00

0.00

6

6 n/a

n/r

120

n/a

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

Weight: 69 lb

FT = 20%

BCDL 10.0

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

10.0

0.0

OTHERS 2x4 SP No 2 WEDGE

TCDL

**BCLL** 

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. All bearings 9-7-0.

(lb) -Max Horz 2=166(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-229(LC 12), 8=-223(LC 13) Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=283(LC 19), 8=277(LC 20)

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

**WEBS** 3-10=-279/241, 5-8=-280/237

### NOTES-

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

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip

ВС

WB 0.04

Matrix-S

0.03

- 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.15

YES

- 7) \* 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=229, 8=223.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	
J0122-0372	14	MONOPITCH	6	_	149971074	
JU122-U372	JI	MONOPIICH	6	'	Job Reference (optional)	
Comtech, Inc, Fayettey	/ille, NC - 28314,		8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:43 2022 Page 1			
•		IC	D:I4HRAT3	BelT9aoRlo	IAoEs 5z0Axy-eRsxSs6jzg6U9xbTpVTFoldvimSzvvL45fijYCzpugY	

1-11-1	3x6 =	4 3x4	
	ł		

Plate Off	tsets (X,Y)	[2:0-2-14,0-0-6]		
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) 0.04 2-4 >999 240 MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) -0.03 2-4 >999 240
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 n/a n/a
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P	Weight: 27 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x6 SP No.1

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

Max Horz 2=75(LC 8)

Max Uplift 2=-188(LC 8), 4=-143(LC 8) Max Grav 2=294(LC 1), 4=220(LC 1)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 5-9-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=188, 4=143.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

January 31,2022



Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	
				,		149971075
J0122-0372	J1GE	GABLE	1	1		
					Job Reference (optional)	
Comtech Inc	Favetteville NC - 28314		8	430 s Aug	16 2021 MiTek Industries Inc. Mon Jan 31 08	:12:44 2022 Page 1

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Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

Scale = 1:13.4

1-11-11	3x6 =	3.00   12   2x4     3   3   4     5   5   5   5   5   5   5   5	3x4 = 2x4    5	16.3 0.5.8 1-11-11

Plate Offsets (X,	Y)	[2:0-2-14,0-0-6], [6:Edge,	0-2-0]									
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	0.19	Vert(LL)	0.04	` <i>8</i>	>999	240	MT20	244/190
TCDL 10.0		Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	8	>999	240		
BCLL 0.0	*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0		Code IRC2015/TF	PI2014	Matri	(-S	, ,					Weight: 29 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

2x6 SP No.1 WFBS

2x4 SP No.2 OTHERS

REACTIONS. (size) 2=0-3-0, 6=0-1-8

Max Horz 2=106(LC 8)

0-11-0

Max Uplift 2=-259(LC 8), 6=-199(LC 8) Max Grav 2=294(LC 1), 6=220(LC 1)

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

BOT CHORD 2-8=-275/133, 7-8=-275/133, 6-7=-275/133

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable studs spaced at 2-0-0 oc.
- 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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=259, 6=199,
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 31,2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 being 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, crection and bracing of trusses and truss systems, see

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



Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II		
							149971076
J0122-0372	M1	MONOPITCH	6	1	leb Defenses (entire el		
Occupation to the Control of the Con				0.400 - 4	Job Reference (optional		0.40.45.0000 D 4
Comtech, Inc, Fa	yetteville, NC - 28314,		ID:MUDAT		16 2021 MiTek Industries DEs_5z0Axy-ap_htY7zVII		
	-0-11-0		4-0-0	ei i sqoriaA	UES_3ZUAXY-ap_III17ZVII	VIDE FISWW VJIAIJ4Z7	qivpqivzyCpu5zpugvv
	0-11-0		4-0-0				
							Scale = 1:14.3
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					3x4		
		5.00 1	2	_			
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		3x4 =					
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LOADING (psf)	SPACING- 2-0-	CSI.	DEFL.	in (loc)	I/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.1		Vert(LL) -0.		>999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.1		Vert(CT) -0.		>999 240		
BCLL 0.0 *	Rep Stress Incr YES		Horz(CT) 0.		n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.	00 2	**** 240	Weight: 20 lb	FT = 20%

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins,

except end verticals.

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

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

Max Horz 2=84(LC 12)

Max Uplift 2=-48(LC 8), 4=-52(LC 12) Max Grav 2=218(LC 1), 4=136(LC 1)

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

### NOTES-

- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 31,2022





Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
J0122-0372	M1GE	GABLE	1	1	149971077
00122 0072	IMTOL	O' I DE L	ľ	,	Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

0-11-0

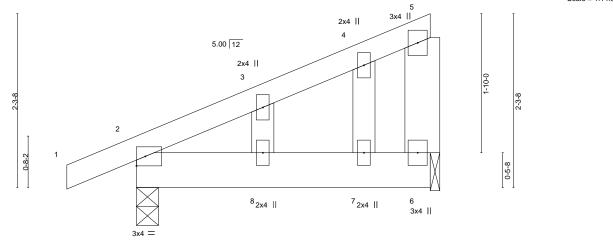
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:45 2022 Page 1  $ID:I4HRAT3eIT9qoRIdA\overset{\circ}{o}Es\_5z0Axy-ap\_htY7zVIMBPFIswwVjtAiMLZ9YNpSNZyCpd5zpugW$ 4-0-0 4-0-0

Structural wood sheathing directly applied or 4-0-0 oc purlins,

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

except end verticals.

Scale = 1:14.3



LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) 0	0.00	>999 240	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0	0.00	>999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.02	Horz(CT) -0	0.00 6	n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	, ,			Weight: 23 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

2x6 SP No.1 \*Except\* **WEBS** 3-8: 2x4 SP No.2

OTHERS 2x4 SP No.2

REACTIONS.

(size) 2=0-3-8, 6=0-1-8

Max Horz 2=121(LC 12)

Max Uplift 2=-90(LC 12), 6=-93(LC 12) Max Grav 2=218(LC 1), 6=136(LC 1)

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

- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable studs spaced at 2-0-0 oc.
- 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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
  8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 31,2022

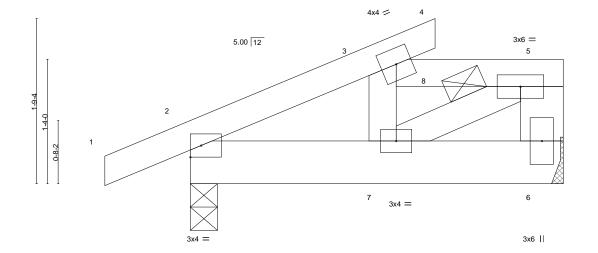


Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
J0122-0372	M2	  HALF HIP	6	1	I49971078
30122-0372	IVIZ	ITALI TIIF		'	Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:46 2022 Page 1

0-11-0

Scale = 1:11.6



	l l	2-7-8		1-4-8	
LOADING (psf)	SPACING- 2-0-0		DEFL. in (loc)	I/defl L/d	PLATES GRIP
TCLL 20.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15		Vert(LL) -0.00 7 Vert(CT) -0.00 7	>999 360 >999 240	MT20 244/190
BCLL 0.0 * BCDL 10.0	Rep Stress Incr NO Code IRC2015/TPI2014		Horz(CT) -0.00 6 Wind(LL) 0.01 7	n/a n/a >999 240	Weight: 23 lb FT = 20%

2-7-8

LUMBER-

TOP CHORD 2x4 SP No.1 2x6 SP No.1 BOT CHORD 2x4 SP No.2 \*Except\* WFBS

5-6: 2x6 SP No 1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins,

except end verticals, and 2-0-0 oc purlins: 3-5.

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

REACTIONS. (size) 6=Mechanical, 2=0-3-8

Max Horz 2=59(LC 12)

Max Uplift 6=-112(LC 9), 2=-93(LC 8) Max Grav 6=546(LC 22), 2=387(LC 1)

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

TOP CHORD 2-3=-470/402, 3-5=-366/461, 5-6=-489/492

BOT CHORD 2-7=-492/386

**WEBS** 3-7=-245/382, 5-7=-528/420

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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
- 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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 6=112.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.

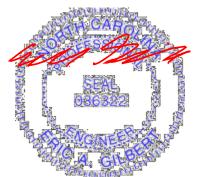
#### LOAD CASE(S) Standard

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

Vert: 1-3=-60, 3-4=-60, 3-8=-40, 5-8=-80, 2-6=-20

Concentrated Loads (lb)

Vert: 8=-500



January 31,2022

meters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designs. 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 

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Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
10400 0070	MO	LIALELUD			149971078
J0122-0372	M2	HALF HIP	ь	'	Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:46 2022 Page 2 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-20Y35u8bGbV20PK2Ue0yPNFRBzT96FUWncxN9XzpugV

#### Comtech, Inc. Fayetteville, NC - 28314, LOAD CASE(S) Standard 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-50, 3-4=-50, 3-8=-100, 5-8=-130, 2-6=-20 Concentrated Loads (lb) Vert: 8=-438 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf) Vert: 1-3=-20, 3-4=-20, 3-5=-40, 2-6=-40 Concentrated Loads (lb) Vert: 8=-375 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=98, 2-3=82, 3-4=207, 3-5=67, 2-6=-12 Horz: 1-2=-110, 2-3=-94, 3-4=-219 Concentrated Loads (lb) Vert: 8=467 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=73, 2-3=82, 3-4=73, 3-5=67, 2-6=-12 Horz: 1-2=-85, 2-3=-94, 3-4=-85 Concentrated Loads (lb) Vert: 8=467 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=5, 2-3=-54, 3-4=30, 3-5=-64, 2-6=-20 Horz: 1-2=-25, 2-3=34, 3-4=-50 Concentrated Loads (lb) Vert: 8=-462 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-45, 2-3=-54, 3-4=-45, 3-5=-64, 2-6=-20 Horz: 1-2=25, 2-3=34, 3-4=25 Concentrated Loads (lb) Vert: 8=-462 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=40, 2-3=20, 3-4=11, 3-5=11, 2-6=-12 Horz: 1-2=-52, 2-3=-32, 3-4=-23 Concentrated Loads (lb) Vert: 8=121 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=11, 2-3=20, 3-4=41, 3-5=11, 2-6=-12 Horz: 1-2=-23, 2-3=-32, 3-4=-53 Concentrated Loads (lb) Vert: 8=121 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=3, 2-3=-6, 3-4=3, 3-5=-15, 2-6=-20 Horz: 1-2=-23, 2-3=-14, 3-4=-23 Concentrated Loads (lb) Vert: 8=-306 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=3, 2-3=-6, 3-4=3, 3-5=-15, 2-6=-20 Horz: 1-2=-23, 2-3=-14, 3-4=-23 Concentrated Loads (lb) Vert: 8=-306 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=22, 2-3=31, 3-4=22, 3-5=-5, 2-6=-12 Horz: 1-2=-34, 2-3=-43, 3-4=-34 Concentrated Loads (lb) Vert: 8=121 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=6, 2-3=15, 3-4=6, 3-5=-5, 2-6=-12 Horz: 1-2=-18, 2-3=-27, 3-4=-18 Concentrated Loads (lb) Vert: 8=21 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=22, 2-3=31, 3-4=22, 3-5=-5, 2-6=-12

Concentrated Loads (lb) Vert: 8=121

Horz: 1-2=-34, 2-3=-43, 3-4=-34

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Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
		l	_		149971078
J0122-0372	M2	HALF HIP	6	1	
					LJob Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:46 2022 Page 3  $ID:I4HRAT3elT9qoRldAoEs\_{5}z0Axy-20Y35u8bGbV20PK2Ue0yPNFRBzT96FUWncxN9XzpugValue0yPNFRBzT96FUWncxN9ZypUWncxN9XzpugValue0yPNFRBzT96FUWncxN9XzpugValue0yPNFRBzT96FUWncxN9XzpugValue0yPNFRBzT96FUWncxN9XzpugValue0yPNFRBzT96FUWncxN9XzpugValue0yPNFRBzT96FUWncxN9XzpugValue0yPNFRBzT96FUWncxN9ZypUWncxN9ZypUWncxN9ZypUWncxN9ZypUWncxN9ZypUWncxN9ZypUWncxN9ZypUWncxN9ZypUWncxN9ZypUWncxN9ZypUWncxN9ZypUWncxN9ZypUWncxN9ZypUWncxN9ZypUWnc$ 

#### LOAD CASE(S) Standard 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=6, 2-3=15, 3-4=6, 3-5=-5, 2-6=-12 Horz: 1-2=-18, 2-3=-27, 3-4=-18 Concentrated Loads (lb) Vert: 8=21 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert; 1-2=14, 2-3=5, 3-4=14, 3-5=-31, 2-6=-20 Horz: 1-2=-34, 2-3=-25, 3-4=-34 Concentrated Loads (lb) Vert: 8=-306 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-2, 2-3=-11, 3-4=-2, 3-5=-31, 2-6=-20 Horz: 1-2=-18, 2-3=-9, 3-4=-18 Concentrated Loads (lb) Vert: 8=-306 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90 Uniform Loads (plf) Vert: 1-3=-20, 3-4=-20, 3-5=-120, 2-6=-20 Concentrated Loads (lb) Vert: 8=-250 19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-33, 2-3=-40, 3-4=-33, 3-8=-81, 5-8=-111, 2-6=-20 Horz: 1-2=-17, 2-3=-10, 3-4=-17 Concentrated Loads (lb) Vert: 8=-480 20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-33, 2-3=-39, 3-4=-33, 3-8=-81, 5-8=-111, 2-6=-20 Horz: 1-2=-17, 2-3=-11, 3-4=-17 Concentrated Loads (lb) Vert: 8=-480 21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-24, 2-3=-31, 3-4=-24, 3-8=-93, 5-8=-123, 2-6=-20 Horz: 1-2=-26, 2-3=-19, 3-4=-26 Concentrated Loads (lb) Vert: 8=-480 22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-36, 2-3=-43, 3-4=-36, 3-8=-93, 5-8=-123, 2-6=-20 Horz: 1-2=-14, 2-3=-7, 3-4=-14 Concentrated Loads (lb) Vert: 8=-480 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-60, 3-4=-60, 3-8=-40, 5-8=-80, 2-6=-20 Concentrated Loads (lb) Vert: 8=-500

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-3=-20, 3-4=-20, 3-8=-40, 5-8=-80, 2-6=-20

Concentrated Loads (lb)

Vert: 8=-500

25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-3=-50, 3-4=-50, 3-8=-100, 5-8=-130, 2-6=-20 Concentrated Loads (lb)

Vert: 8=-438

26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-3=-20, 3-4=-20, 3-8=-100, 5-8=-130, 2-6=-20 Concentrated Loads (lb)

Vert: 8=-438



neters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Job Truss Truss Type Qty Ply Lot 7 Mitchell Manor II 149971079 J0122-0372 M2A HALF HIP Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:47 2022 Page 1  $ID:I4HRAT3eIT9qoRIdAo\v{E}s\_5z0Axy-WC6SIE9D1vdveYuE2LXBybnemNrJrjMf0GhwhzzpugUarden for the following properties of the properties of the$ -0-11-0 0-11-0 Scale = 1:11.6 4x4 = 3x6 = 5.00 12 5 4 0-8-2 6 3x4 = 3x4 || LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defl L/d Plate Grip DOL Vert(LL) 244/190 **TCLL** 20.0 1.15 TC 0.26 -0.00 >999 360 MT20

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

**BOT CHORD** 

-0.00

0.00

>999

>999

n/a

240

n/a

240

except end verticals, and 2-0-0 oc purlins: 3-5.

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

Structural wood sheathing directly applied or 4-0-0 oc purlins,

Weight: 45 lb

FT = 20%

LUMBER-

TCDL

**BCLL** 

**BCDL** 

2x4 SP No.1 2x6 SP No.1 TOP CHORD BOT CHORD 2x4 SP No.2 \*Except\* **WEBS** 

5-6: 2x6 SP No 1

REACTIONS.

10.0

0.0

(size) 6=Mechanical, 2=0-3-8 Max Horz 2=59(LC 8)

Max Uplift 2=-40(LC 4)

Max Grav 6=708(LC 18), 2=439(LC 1)

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

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

TOP CHORD 2-3=-565/0, 3-5=-445/17, 5-6=-641/0

BOT CHORD 2-7=-20/471

**WEBS** 3-7=-308/37, 5-7=-19/511

### NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

1.15

NO

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.

2) 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.

вс

WB

Matrix-P

0.09

0.06

- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



January 31,2022

neters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designs. 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 

\*\*ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:47 2022 Page 2 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-WC6SIE9D1vdveYuE2LXBybnemNrJrjMf0GhwhzzpugU

#### Comtech, Inc. Fayetteville, NC - 28314, 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=-60, 3-8=-160, 5-8=-200, 2-6=-20 Concentrated Loads (lb) Vert: 8=-500 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-50, 3-4=-50, 3-8=-220, 5-8=-250, 2-6=-20 Concentrated Loads (lb) Vert: 8=-438 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf) Vert: 1-3=-20, 3-4=-20, 3-5=-160, 2-6=-40 Concentrated Loads (lb) Vert: 8=-375 4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=40, 2-3=20, 3-4=11, 3-5=-109, 2-6=-12 Horz: 1-2=-52, 2-3=-32, 3-4=-23 Concentrated Loads (lb) Vert: 8=121 5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=11, 2-3=20, 3-4=41, 3-5=-109, 2-6=-12 Horz: 1-2=-23, 2-3=-32, 3-4=-53 Concentrated Loads (lb) Vert: 8=121 6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert; 1-2=3, 2-3=-6, 3-4=3, 3-5=-135, 2-6=-20 Horz: 1-2=-23, 2-3=-14, 3-4=-23 Concentrated Loads (lb) Vert: 8=-306 7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=3, 2-3=-6, 3-4=3, 3-5=-135, 2-6=-20 Horz: 1-2=-23, 2-3=-14, 3-4=-23 Concentrated Loads (lb) Vert: 8=-306 8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert; 1-2=22, 2-3=31, 3-4=22, 3-5=-125, 2-6=-12 Horz: 1-2=-34, 2-3=-43, 3-4=-34 Concentrated Loads (lb) Vert: 8=121 9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=6, 2-3=15, 3-4=6, 3-5=-125, 2-6=-12 Horz: 1-2=-18, 2-3=-27, 3-4=-18 Concentrated Loads (lb) Vert: 8=21 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=22, 2-3=31, 3-4=22, 3-5=-125, 2-6=-12 Horz: 1-2=-34, 2-3=-43, 3-4=-34 Concentrated Loads (lb) Vert: 8=121 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=6, 2-3=15, 3-4=6, 3-5=-125, 2-6=-12 Horz: 1-2=-18, 2-3=-27, 3-4=-18 Concentrated Loads (lb) Vert: 8=21 12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=14, 2-3=5, 3-4=14, 3-5=-151, 2-6=-20

13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

#### Continued on page 3

Concentrated Loads (lb) Vert: 8=-306

Concentrated Loads (lb) Vert: 8=-306

Uniform Loads (plf)

Horz: 1-2=-34, 2-3=-25, 3-4=-34

Horz: 1-2=-18, 2-3=-9, 3-4=-18

Vert: 1-2=-2, 2-3=-11, 3-4=-2, 3-5=-151, 2-6=-20





Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
J0122-0372	M2A	HALF HIP	1		I49971079
00.22 00.2				2	Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:47 2022 Page 3  $ID:I4HRAT3eIT9qoRIdAo\overset{\circ}{E}s\_5z0Axy-WC6SIE9D1vdveYuE2LXBybnemNrJrjMf0GhwhzzpugU$ 

### LOAD CASE(S) Standard

14) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90

Uniform Loads (plf)

Vert: 1-3=-20, 3-4=-20, 3-5=-240, 2-6=-20

Concentrated Loads (lb)

Vert: 8=-250

15) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-33, 2-3=-40, 3-4=-33, 3-8=-201, 5-8=-231, 2-6=-20

Horz: 1-2=-17, 2-3=-10, 3-4=-17

Concentrated Loads (lb)

Vert: 8=-480

16) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-33, 2-3=-39, 3-4=-33, 3-8=-201, 5-8=-231, 2-6=-20

Horz: 1-2=-17, 2-3=-11, 3-4=-17

Concentrated Loads (lb)

Vert: 8=-480

17) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-24, 2-3=-31, 3-4=-24, 3-8=-213, 5-8=-243, 2-6=-20

Horz: 1-2=-26, 2-3=-19, 3-4=-26

Concentrated Loads (lb)

Vert: 8=-480

18) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-36, 2-3=-43, 3-4=-36, 3-8=-213, 5-8=-243, 2-6=-20

Horz: 1-2=-14, 2-3=-7, 3-4=-14

Concentrated Loads (lb) Vert: 8=-480

19) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-60, 3-8=-160, 5-8=-200, 2-6=-20

Concentrated Loads (lb)

Vert: 8=-500

20) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 3-4=-20, 3-8=-160, 5-8=-200, 2-6=-20

Concentrated Loads (lb)

Vert: 8=-500

21) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert; 1-3=-50, 3-4=-50, 3-8=-220, 5-8=-250, 2-6=-20

Concentrated Loads (lb) Vert: 8=-438

22) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 3-4=-20, 3-8=-220, 5-8=-250, 2-6=-20

Concentrated Loads (lb)

Vert: 8=-438

Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor	·	
							149971080
J0122-0372	V1	VALLEY	1		1		
					Job Reference (optio		
Comtech, Inc,	Fayetteville, NC - 28314,		ID LAUDATO IT		ug 16 2021 MiTek Indust		
		9.7.0	ID:I4HRAT3eIT	9qoRidAoE	s_5z0AxyOgqWaAroDl	lmGi i Rb23QVoKqRn	9Ea92pFwQ1DQzpug1
	<del>                                     </del>	8-7-0 8-7-0			17-2-0 8-7-0		
		070			0 7 0		
			4x4 =				Scale = 1:41.8
	_		3				
		9.00 12	//    `				
		/	/				
		2x4	´		2x4		
		2 //			4		
	2-4	10 🗖			11		
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	] <del>\( \frac{\pi}{2} \)</del>	***************		***	***************************************	* *	
	3x4 🖊	9 12	8 7	13	6	3x4 ❖	
		2x4	3x4 =		2x4		
		224 11	2x4		2.4 11		
			244 11				
	1		17-1-8			17-2-0	
			17-1-8			17-2-0 0-0-8	
Plate Offsets (X,Y)-	- [4:0-0-0,0-0-0]						
LOADING (pof)	SDACING.	200 CSI	DEEL	in (loo)	1/doft 1/d	DIATES	CDID

LOADIN	G (psf)	SPACING-	2-0-0	CSI.	
TCLL	20.0	Plate Grip DOL	1.15	TC 0.20	
TCDL	10.0	Lumber DOL	1.15	BC 0.17	
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.10	
BCDL	10.0	Code IRC2015/TF	PI2014	Matrix-S	

DEFL. in I/defl L/d (loc) Vert(LL) n/a n/a 999 Vert(CT) n/a 999 n/a Horz(CT) 0.00 n/a

**PLATES GRIP** 244/190 MT20

Weight: 73 lb FT = 20%

LUMBER-

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

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

REACTIONS. All bearings 17-1-0.

(lb) - Max Horz 1=195(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-218(LC 12), 6=-218(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=418(LC 19), 9=496(LC 19), 6=496(LC 20)

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

WEBS 2-9=-455/344, 4-6=-455/345

- 1) Unbalanced roof live loads have been considered for this design.
- 1) Unioda ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-7-0, Interior(1) 4-7-0 to 8-7-0, Exterior(2) 8-7-0 to 12-11-13, Interior(1) 12-11-13 to 16-8-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 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 100 lb uplift at joint(s) 1 except (jt=lb) 9=218, 6=218.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 31,2022





Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	
J0122-0372	V2	VALLEY	1	1		149971081
30122-0372	VZ	VALLET	ľ	'	Job Reference (optional)	
Comtech, Inc,	Fayetteville, NC - 28314,	·		8.430 s Aug	g 16 2021 MiTek Industries, Inc. Mon Jan 3	31 08:12:49 2022 Page 1
		7-3-0	ID:I4HRAT3	elT9qoRldAd	DEs_5z0Axy-SbDCjvBTZWtdts2d9maf10t0 14-6-0	_AWoJcfyUaA1mszpugS
		7-3-0			7-3-0	
						Scale = 1:34.6
			4x4 =			Scale = 1.34.0
			3			
		9.00 12				
		· /	//    \	11		
		10				
	4	2x4			2x4	
	5-5-4	2 //			4	
		9			12	
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	မှ			******		
	_					
	3x4 🕢	8	7		6 3x4 ≫	
		2x4	2x4		2x4	
			14-5-8		14-6-0	
			14-5-8		14-6-0 0-0-8	
Plate Offsets (X,Y	<u>/) [4:0-0-0,0-0-0]</u>					

LOADING ( 0	CDACING 0.00	001	DEEL : 4000 1/14	DI ATEC ODID
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL) n/a - n/a 999	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) n/a - n/a 999	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00 5 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 60 lb FT = 20%

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 14-5-0.

(lb) - Max Horz 1=163(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-184(LC 12), 6=-184(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=375(LC 19), 6=375(LC 20)

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

WEBS 2-8=-388/310, 4-6=-388/310

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 7-3-0, Exterior(2) 7-3-0 to 11-7-13, Interior(1) 11-7-13 to 14-0-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 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) 1 except (jt=lb) 8=184, 6=184.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 31,2022



Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	
10400 0070	1/0	VALLEY				149971082
J0122-0372	V3	VALLEY	1		1 Job Reference (optional)	
Comtech, Inc,	Fayetteville, NC - 28314,			9 420 0 0	ug 16 2021 MiTek Industries, Inc. Mon Jar	21 09:12:E0 2022 Boxo 1
Connecti, inc,	rayetteville, NC - 20314,		ID:I4HRAT3		ug 16 2021 Mirrek industries, inc. Morr Jar AoEs_5z0Axy-wnnawFB6Kq?UV0dpjT5ua	
		5-11-0	ID.IFIIICATO	ioi i aqoixia	11-10-0	Di Boasaz-Boizvanzpugit
		5-11-0	1		5-11-0	
			4x4 =			Scale = 1:27.5
			3			
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		8	7		6 214 5	
	3x4 //				3X4 💉	
		2x4	2x4		2x4	
			11-9-8		11-1 0-0	0-0
			11-9-8		0-0	-8

						11-9-0					0-0-0	
Plate Offset	ts (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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 46 lb	FT = 20%

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

OTHERS 2x4 SP No.1

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 11-9-0.

(lb) - Max Horz 1=-131(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-172(LC 12), 6=-171(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=253(LC 1), 8=343(LC 19), 6=342(LC 20)

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

WEBS 2-8=-372/316, 4-6=-372/316

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 5-11-0, Exterior(2) 5-11-0 to 10-3-13, Interior(1) 10-3-13 to 11-4-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 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) 1, 5 except (jt=lb) 8=172, 6=171.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 31,2022



Job	Т	Truss	Truss Type		Qty	Ply	Lot 7 Mitchell Manor	
J0122-0372	,	V4	VALLEY		1	1		149971083
JU122-0372	`	V4	VALLEY		1	'	Job Reference (option	nal)
Comtech, Inc,	Favettevil	lle, NC - 28314,			8.4	130 s Aug		ies, Inc. Mon Jan 31 08:12:51 2022 Page 1
Comicon, mo,	. ayottovii	,		ID:14H				587L7AC0HBc76RyMo_CbnXIFxuf8qlzpugQ
			4-7-0 4-7-0			<u> </u>	9-2-0	
		ı	4-7-0	'			4-7-0	ı
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				9-1-8				9-2-0 0-0-8
				9-1-8				ი-შ-8
LOADING ()		004000		555		4	1/1.0	DI ATEO ODID
LOADING (psf)		SPACING- 2-0-0		DEFL.	in		I/defl L/d	PLATES GRIP
TCLL 20.0 TCDL 10.0		Plate Grip DOL 1.15 Lumber DOL 1.15		Vert(LL) Vert(CT)	n/a		n/a 999 n/a 999	MT20 244/190
BCLL 0.0		Rep Stress Incr YES		vert(C1) Horz(CT			n/a 999 n/a n/a	
BCDL 10.0		Code IRC2015/TPI2014	Matrix-S	HOIZ(CT	, 0.00	3	ııd II/d	Weight: 33 lb FT = 20%
		0000 11(02013/11/12014	Width-5					Weight. 55 ib 11 – 2076

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

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

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

**REACTIONS.** (size) 1=9-1-0, 3=9-1-0, 4=9-1-0

Max Horz 1=99(LC 11)

Max Uplift 1=-3(LC 11), 3=-52(LC 13), 4=-24(LC 12) Max Grav 1=171(LC 1), 3=172(LC 20), 4=321(LC 1)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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
- 3) Gable requires continuous bottom chord bearing.
- 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) 1, 3, 4.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 31,2022



Job	Truss	Truss	Туре		Qty	Ply	Lot 7 Mitchell Man	or II	
J0122-0372	V5	VALL	FY		1	1			149971084
			L1		•		Job Reference (opt		
Comtech, Inc, Fa	yetteville, NC - 28314,	,		10.14104				stries, Inc. Mon Jan 31	
		1	3-3-0	ID:I4HKA	3ei i 9qoi		520AXY-19VKLXDIMIR 5-6-0	FCkKnCqu7MfeUXTOZ	uw_JPAYONNBZpugP
			3-3-0	1		3	3-3-0		
				4x4 =					Scale = 1:17.4
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	4-6					\			
	25								
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								3	
		1	, 						
	9-0-0				,,,,,,,			9	
	5							3	
				4					
		3x4 //	2	2x4			3x4 ≫		
		H		6-5-8 6-5-8				6-6-0 0-0-8	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip D	OL 1.15	TC 0.13	Vert(LL)	n/a		n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL		BC 0.06	Vert(CT)	n/a		n/a 999		
BCLL 0.0 * BCDL 10.0	Rep Stress I Code IRC20		WB 0.02 Matrix-P	Horz(CT	0.00	3	n/a n/a	Weight: 23 lb	FT = 20%

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

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

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

**REACTIONS.** (size) 1=6-5-0, 3=6-5-0, 4=6-5-0

Max Horz 1=-67(LC 8)

Max Uplift 1=-37(LC 12), 3=-44(LC 13)

Max Grav 1=126(LC 1), 3=126(LC 1), 4=197(LC 1)

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=150mph Vasd=119mph; 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
- 3) Gable requires continuous bottom chord bearing.
- 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) 1, 3.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 31,2022





818 Soundside Road

Job Truss Truss Type Qty Ply Lot 7 Mitchell Manor II 149971085 J0122-0372 V6 VALLEY Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jan 31 08:12:52 2022 Page 1 1-11-0 Scale = 1:9.9 4x4 = 2 9.00 12 3 9-0-0 9-0-0 3x4 // 2x4 || 3x4 💸 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES GRIP** in (loc) I/defl 20.0 Plate Grip DOL TC Vert(LL) 244/190 **TCLL** 1.15 0.03 n/a 999 MT20 n/a **TCDL** 10.0 Lumber DOL 1.15 вс 0.02 Vert(CT) n/a n/a 999 WB **BCLL** 0.0 Rep Stress Incr YES 0.01 Horz(CT) 0.00 3 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-P Weight: 12 lb FT = 20% LUMBER-BRACING-

TOP CHORD

**BOT CHORD** 

2x4 SP No.2 REACTIONS. (size) 1=3-9-0, 3=3-9-0, 4=3-9-0

2x4 SP No.1 2x4 SP No.1

Max Horz 1=-35(LC 8)

Max Uplift 1=-20(LC 12), 3=-23(LC 13)

Max Grav 1=66(LC 1), 3=66(LC 1), 4=104(LC 1)

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

### NOTES-

TOP CHORD

**BOT CHORD** 

**OTHERS** 

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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
- 3) Gable requires continuous bottom chord bearing.
- 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) 1, 3.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-10-0 oc purlins.

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

January 31,2022



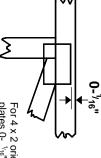


## Symbols

# PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss

ω

O

S

required direction of slots in This symbol indicates the

connector plates

\* Plate location details available in MiTek 20/20 software or upon request

### PLATE SIZE



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

## LATERAL BRACING LOCATION



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

### BEARING



number where bearings occur.

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

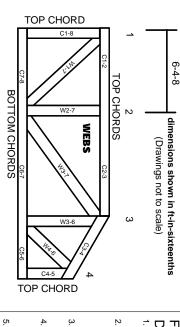
### Industry Standards:

ANSI/TPI1: National Design Specification for Metal

DSB-89:

Installing & Bracing of Metal Plate Connected Wood Trusses. Plate Connected Wood Truss Construction. Guide to Good Practice for Handling, Building Component Safety Information Design Standard for Bracing

# **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

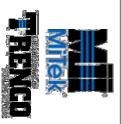
ICC-ES Reports:

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

truss unless otherwise shown. Trusses are designed for wind loads in the plane of the

section 6.3 These truss designs rely on lumber values established by others. Lumber design values are in accordance with ANSI/TPI 1

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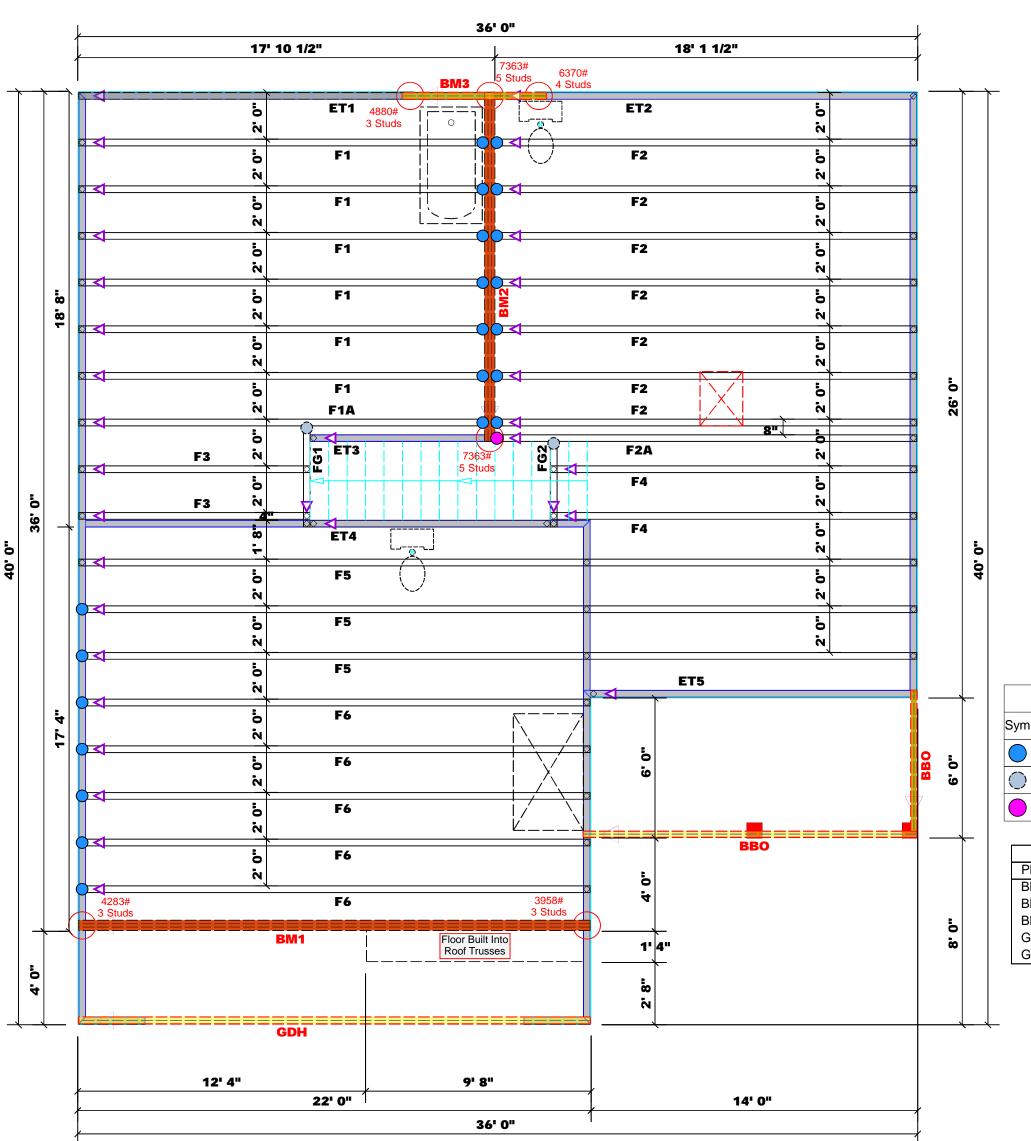


MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# **General Safety Notes**

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection. esponsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 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
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 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.



Dimension Notes

1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise

2. All interior wall dimensions are to face of frame wall unless noted otherwise

3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

### All Walls Shown Are Considered Load Bearing

Plumbing Drop Notes

1. Plumbing drop locations shown are NOT exact.
2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
3. Adjust spacing as needed not to exceed 24"oc.

	Conne	ctor Info	ion	Nail Information			
Sym	Product	Manuf	Qty	Supported Member	Header	Truss	
	HUS410	USP	21	NA	16d/3-1/2"	16d/3-1/2"	
$\bigcirc$	MSH422	USP	2	Varies	10d/3"	10d/3"	
	HD410IF	USP	1	NA	16d/3-1/2"	10d/3"	

		Products		
PlotID	Length	Product	Plies	Net Qty
BM1	22' 0"	1-3/4"x 16" LVL Kerto-S	3	3
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	3	3
BM3	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2
GDH2	12' 0"	2x12 SPF No.2	2	2

Truss Placement Plan
Scale: 1/4"=1"

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

### ROOF & FLOOR TRUSSES & BEAMS

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

deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all

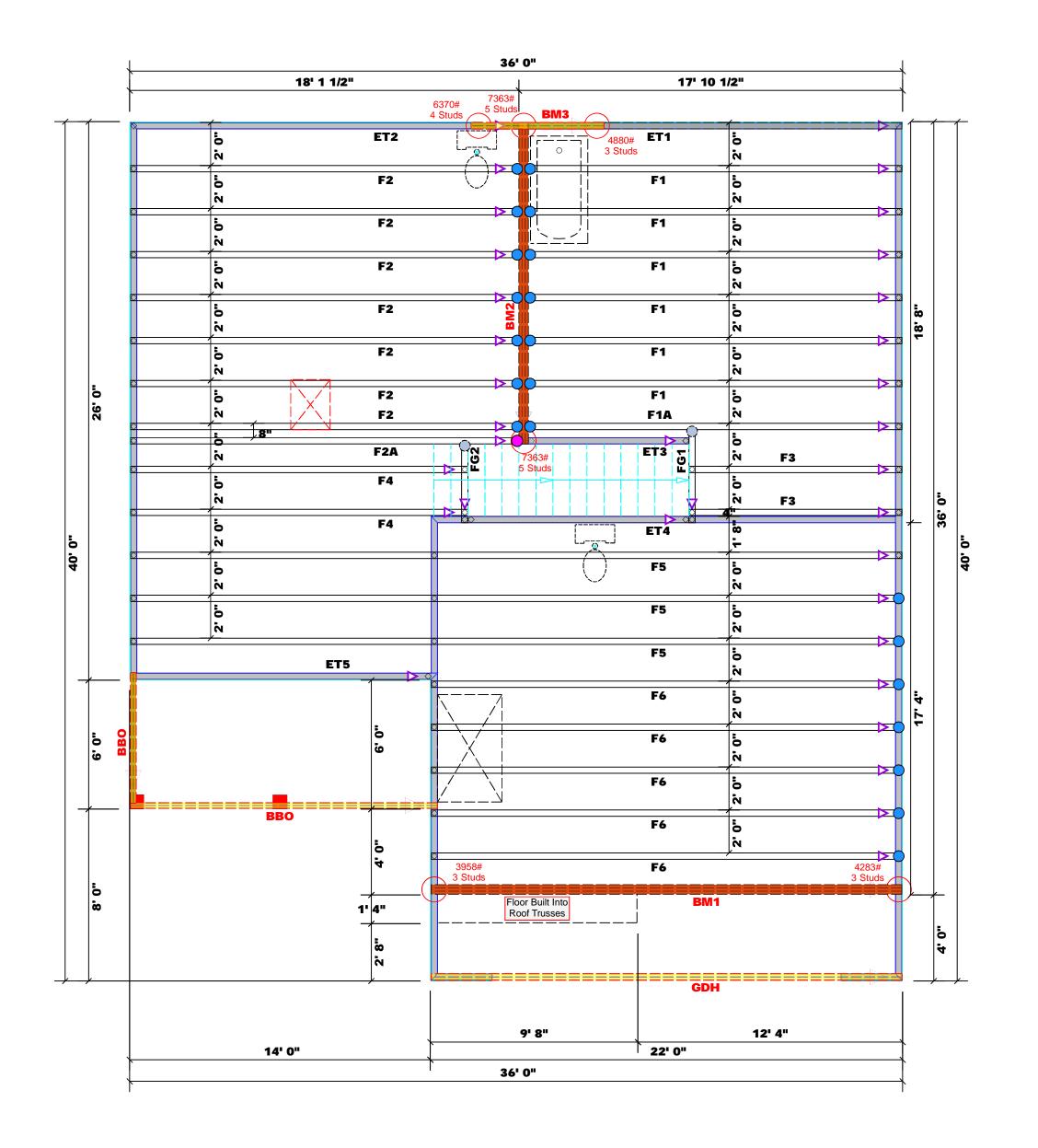
### David Landry

### **David Landry**

LO	AD (	CHA	4F	T FC	)[	₹J/	1CK	STL	D	s
	(8	ASEC	0	N TABLE	3	R502.9	t(t) & (	b))		
Nur	WBER C	)F DA		STUBS (EADER)			ED & E	A END	Of	
EXB REACTION (0P 10)	REQ'D STUDG FOR (2) PLY HEADER			END REACTION (UF TO)		REQ'D STUDS FOR (3) ALY HEADER		END REACTION	660	REQ15 STUDS FOR (4) PLY HEADER
1700	1			2550		1		340	00	1
3400	2			5100		2		680	Ю	2
5100	3			7650	•	3		1020	00	3
6800	4			10200	)	4		1360	00	4
8500	5			12750	)	5		1700	00	5
10200	6			15300	)	6				
11900	7									
13600	8									
15300	9									

BUILDER	Weaver Development Co. Inc.	CITY / CO.	CITY / CO. Angier / Harnett	8500 10200 11900 13600 15300
JOB NAME	JOB NAME Lot 7 Mitchell Manor II	ADDRESS	Wendywood Lane	8
PLAN	Brinkley "B" / 3GLF, CP	MODEL	Floor	1275 1530
SEAL DATE N/A	N/A	DATE REV. 01/31/22	01/31/22	
QUOTE #		DRAWN BY	David Landry	170
JOB #	J0122-0373	SALES REP.	SALES REP. Lenny Norris	00 5

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com



Dimension Notes All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
 All interior wall dimensions are to face of frame wall unless noted otherwise
 All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

### All Walls Shown Are Considered Load Bearing

Plumbing Drop Notes 1. Plumbing drop locations shown are NOT exact. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
 Adjust spacing as needed not to exceed 24"oc.

	Conne	Nail Info	ormation			
Sym	n Product Manuf Qty		Supported Member	Header	Truss	
	HUS410	USP	21	NA	16d/3-1/2"	16d/3-1/2"
0	MSH422	USP	2	Varies	10d/3"	10d/3"
	HD410IF	HD410IF USP 1		NA	16d/3-1/2"	10d/3"

			Products		
Р	PlotID	Length	Product	Plies	Net Qty
В	3M1	22' 0"	1-3/4"x 16" LVL Kerto-S	3	3
В	3M2	15' 0"	1-3/4"x 16" LVL Kerto-S	3	3
В	BM3	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
G	BDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2
G	BDH2	12' 0"	2x12 SPF No.2	2	2

Truss Placement Plan

### соттесн **ROOF & FLOOR TRUSSES & BEAMS**

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

### **David Landry**

### **David Landry**

LOAD CHART FOR JACK STUDS										
(BASED ON TABLES ROCES(I) & (b))										
NUMBER OF JACK STUDS REQUIRED 8 EA END OF HEADES/GERDER										
END REACHION (UP 10)	REQ'D STUDG FOR (Z) PLY HEADER		SND REACTION (UP TD)	REQID STUDS FOR (3) ALY READER		END REACTION (UP TO)	REQUESTUBS FOR (4) PLY HEADER			
1700	1		2550	1		3400	1			
3400	2		5100	2		6800	2			
5100	3		7650	3		10200	3			
6800	4		10200	4		13600	4			
8500	5		12750	5		17000	5			
10200	6		15300	6						
11900	7									

DER	Weaver Development Co. Inc.	CITY / CO.	CITY / CO. Angier / Harnett	13600 15300
NAME	NAME Lot 7 Mitchell Manor II	ADDRESS	Wendywood Lane	8
	Brinkley "B" / 3GLF, CP	MODEL	Floor	
DATE N/A	N/A	DATE REV.	01/31/22	
TE#		DRAWN BY	DRAWN BY David Landry	
#	J0122-0373	SALES REP.	SALES REP. Lenny Norris	

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.

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



Client: Weaver Development Co. Inc.

Address: Wendywood Lane

Angier, NC 27501

1/31/2022 Date:

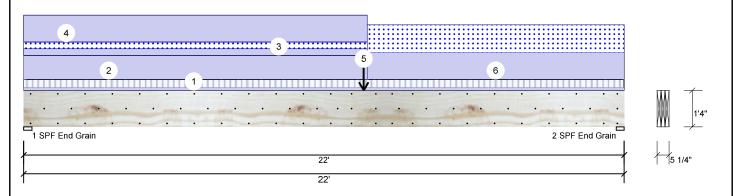
Input by: David Landry Job Name: Lot 7 Mitchell Manor II Page 1 of 11

Project #: J0122-0373

### 1.750" X 16.000" **Kerto-S LVL** 3-Ply - PASSED BM1

Project:





Member Info	rmation		
Type:	Girder	Application:	Floor
Plies:	3	Design Method:	ASD
Moisture Condition	on: Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	Yes
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactio	ns UNPAT	TERNED IL	(Uplift)		
Brg	Live	Dead	Snow	Wind	Const
1	440	3406	729	0	0
1 2	440	2616	1342	0	0

### Bearings Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 3.625" 26% 3406 / 877 4283 L D+0.75(L+S) End Grain 2 - SPF 3.500" 25% 2616 / 1342 3958 L D+S End Grain

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	23283 ft-lb	11'3 7/8"	62010 ft-lb	0.375 (38%)	D+0.75(L+S)	L
Unbraced	23283 ft-lb	11'3 7/8"	23318 ft-lb	0.999 (100%)	D+0.75(L+S)	L
Shear	4012 lb	1'6 3/4"	20608 lb	0.195 (19%)	D+0.75(L+S)	L
LL Defl inch	0.150 (L/1723)	11'6 1/16"	0.539 (L/480)	0.280 (28%)	0.75(L+S)	L
TL Defl inch	0.566 (L/457)	11'	0.718 (L/360)	0.790 (79%)	D+0.75(L+S)	L

### **Design Notes**

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Concentrated load fastener specification is in addition to hanger fasteners if a hanger is present.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 7'7 1/2" o.c.
- 7 Lateral slenderness ratio based on single ply width.

ı	. Lateral eleman	illoco latto bacca cil c	angle ply mann								
	ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
	1	Tie-In	0-0-0 to 22-0-0	1-0-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor
	2	Part. Uniform	0-0-0 to 12-7-0		Тор	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
	3	Part. Uniform	0-0-0 to 12-7-0		Near Face	34 PLF	0 PLF	34 PLF	0 PLF	0 PLF	M1
	4	Part. Uniform	0-0-0 to 12-7-0		Тор	135 PLF	0 PLF	0 PLF	0 PLF	0 PLF	C1GE
	5	Point	12-5-8		Near Face	354 lb	0 lb	354 lb	0 lb	0 lb	M2A
ı											

Continued on page 2...

Calculated Structured 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

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

### chemicals Handling & Installation

- Handling & Installation

  1. IVL beams must not be cut or drilled

  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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

For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

Manufacturer Info Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633





isDesign

Client: Weaver Development Co. Inc.

Address: Wendywood Lane

Angier, NC 27501

1/31/2022 Date:

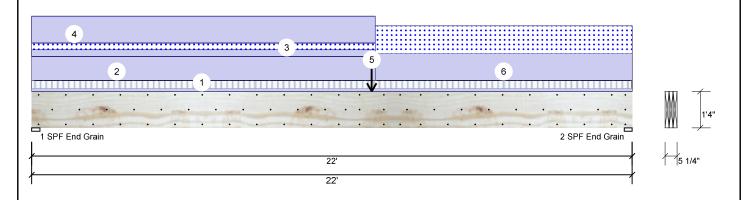
Input by: David Landry Job Name: Lot 7 Mitchell Manor II Page 2 of 11

J0122-0373 Project #:

**Kerto-S LVL** 1.750" X 16.000" 3-Ply - PASSED BM1

Project:

Level: Level



..Continued from page 1

ID Load Type Location Trib Width Side Dead 0.9 Live 1 Snow 1.15 Wind 1.6 Const. 1.25 Comments 137 PLF 0 PLF 137 PLF 0 PLF 0 PLF M2 6 Part. Uniform 12-7-0 to 22-0-0 Near Face Self Weight 19 PLF

Calculated Structured 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

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

chemicals

Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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

For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info





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Client: Weaver Development Co. Inc.

Address: Wendywood Lane

Angier, NC 27501

1/31/2022 Date:

Input by: David Landry Job Name: Lot 7 Mitchell Manor II

Level: Level

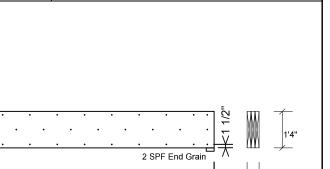
Project #: J0122-0373

**Kerto-S LVL** BM<sub>1</sub>

1.750" X 16.000"

Project:

3-Ply - PASSED



Page 3 of 11

### **Multi-Ply Analysis**

1 1 SPF End Grain

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. except for regions covered by concentrated load fastening. Nail from both sides. Maximum end distance not to exceed 6"

22' 22'

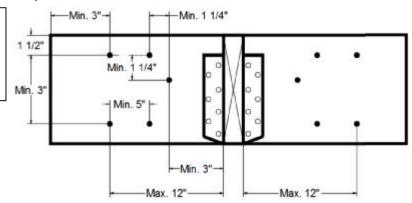
Capacity	64.7 %	
Load	182.7 PLF	
Yield Limit per Foot	282.4 PLF	
Yield Limit per Fastener	94.1 lb.	
Yield Mode	IV	
Edge Distance	1 1/2"	
Min. End Distance	3"	
Load Combination	D+S	
Duration Factor	1 15	

### **Concentrated Load**

Fasten at concentrated side load at 12-5-8 with a minimum of (6) – 10d Box nails (.128x3") in the pattern shown. Repeat fasteners on both sides.

pattern snown, repeat	lasteriers on both sides.
Capacity Load	83.6 %
Load	472.0lb.
Total Yield Limit	564.7 lb.
Cg	0.9998
Yield Limit per Fastener	94.1 lb.
Yield Mode	IV
Load Combination	D+S
Duration Factor	1 15

### Min/Max fastener distances for Concentrated Side Loads



Calculated Structured 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

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

### chemicals

### Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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

For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info







Client: Weaver Development Co. Inc.

Address: Wendywood Lane

Angier, NC 27501

1/31/2022 Date:

Input by: David Landry Job Name: Lot 7 Mitchell Manor II Page 4 of 11

J0122-0373 Project #:

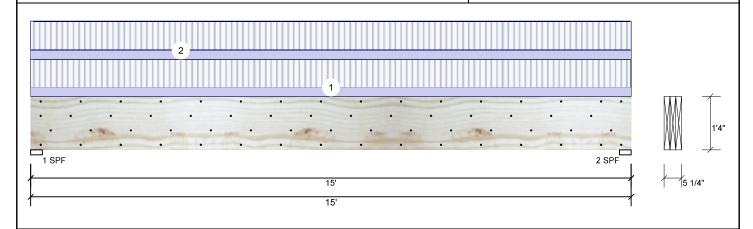
Level: Level

### **Kerto-S LVL** BM<sub>2</sub>

1.750" X 16.000"

Project:

3-Ply - PASSED



Member Infor	mation			Reactio	ns UNPAT	TERNED II	ວ (Uplift)			
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	1	∕Vind	Const
Plies:	3	Design Method:	ASD	1	5415	1948	0		0	0
Moisture Condition	n: Dry	Building Code:	IBC/IRC 2015	2	5415	1948	0		0	0
Deflection LL:	480	Load Sharing:	Yes							
Deflection TL:	360	Deck:	Not Checked							
Importance:	Normal	Ceiling:	Gypsum 1/2"							
Temperature:	Temp <= 100°F									
				Bearing	js					
				Bearing	Length	Cap. Rea	ct D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	3.500"	94% 194	48 / 5415	7363	L	D+L
				2 - SPF	3.500"	94% 194	48 / 5415	7363	L	D+L

### **Analysis Results**

ſ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	26022 ft-lb	7'6"	53922 ft-lb	0.483 (48%)	D+L	L
	Unbraced	26022 ft-lb	7'6"	26044 ft-lb	0.999 (100%)	D+L	L
	Shear	7123 lb	1'6 5/8"	17920 lb	0.397 (40%)	D+L	L
	LL Defl inch	0.230 (L/759)	7'6 1/16"	0.364 (L/480)	0.630 (63%)	L	L
l	TL Defl inch	0.313 (L/559)	7'6 1/16"	0.485 (L/360)	0.640 (64%)	D+L	L

### **Design Notes**

- 1 Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top must be laterally braced at a maximum of 6'8 5/8" o.c.
- 5 Lateral slenderness ratio based on single ply width.

I	ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
I	1	Uniform			Far Face	118 PLF	354 PLF	0 PLF	0 PLF	0 PLF	F1	
I	2	Uniform			Near Face	123 PLF	368 PLF	0 PLF	0 PLF	0 PLF	F2	
I		Self Weight				19 PLF						

Calculated Structured 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

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

### chemicals Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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

This design is valid until 4/24/2023

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Manufacturer Info





isDesign

Client: Weaver Development Co. Inc.

Address: Wendywood Lane

Angier, NC 27501

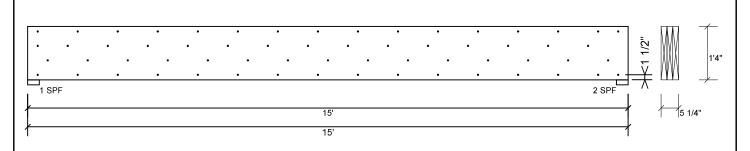
1/31/2022 Date:

Input by: David Landry Job Name: Lot 7 Mitchell Manor II Page 5 of 11

J0122-0373 Project #: Level: Level

**Kerto-S LVL** 1.750" X 16.000" 3-Ply - PASSED BM<sub>2</sub>

Project:



### **Multi-Ply Analysis**

Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c.. Nail from both sides. Maximum end distance not to exceed

Capacity 100.0 % Load 327.3 PLF Yield Limit per Foot 327.4 PLF Yield Limit per Fastener 81.9 lb. Yield Mode IV Edge Distance 1 1/2" 3" Min. End Distance Load Combination D+L Duration Factor 1.00

Calculated Structured 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

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

chemicals

### Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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

This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info







Client: Weaver Development Co. Inc.

Project:

Address: Wendywood Lane

Angier, NC 27501

1/31/2022 Date:

Input by: David Landry Job Name: Lot 7 Mitchell Manor II

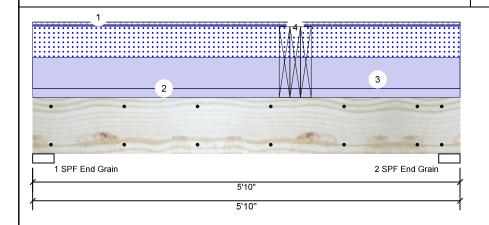
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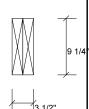
**Kerto-S LVL BM3** 

1.750" X 9.250"

2-Ply - PASSED

Level: Level





Page 6 of 11

Member Information
--------------------

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

Floor Application: Design Method: ASD **Building Code:** IBC/IRC 2015

Load Sharing: Deck: Not Checked

Ceiling:

Gypsum 1/2"

Reactions	UNPATTERNED	lb	(Uplift)
-----------	-------------	----	----------

Brg	Live	Dead	Snow	Wind	Const
1	2153	2357	1210	0	0
2	3496	2840	1210	0	0

### Bearings

Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	46%	2357 / 2522	4880	L	D+0.75(L+S)
2 - SPF End Grain	3.500"	60%	2840 / 3530	6370	L	D+0.75(L+S)

### **Analysis Results**

•						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	11308 ft-lb	3'7"	12542 ft-lb	0.902 (90%)	D+L	L
Unbraced	11308 ft-lb	3'7"	11327 ft-lb	0.998 (100%)	D+L	L
Shear	5739 lb	4'10"	6907 lb	0.831 (83%)	D+L	L
LL Defl inch	0.084 (L/764)	3'4 7/8"	0.134 (L/480)	0.630 (63%)	L	L
TL Defl inch	0.143 (L/451)	3'3 5/8"	0.179 (L/360)	0.800 (80%)	D+L	L

### **Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 4'3" o.c.
- 6 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	Tie-In	0-0-0 to 5-10-0	1-0-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor	
2	Uniform			Тор	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall	
3	Uniform			Тор	415 PLF	0 PLF	415 PLF	0 PLF	0 PLF	A3	
4	Point	3-7-0		Тор	1948 lb	5415 lb	0 lb	0 lb	0 lb	BM2 Brg 2	
	Self Weight				7 PLF						

Calculated Structured 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

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

### chemicals Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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

This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851

Manufacturer Info

(800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633





isDesign

Client: Weaver Development Co. Inc.

Address: Wendywood Lane

Angier, NC 27501

Date: 1/31/2022

Input by: David Landry Job Name: Lot 7 Mitchell Manor II

J0122-0373 Project #:

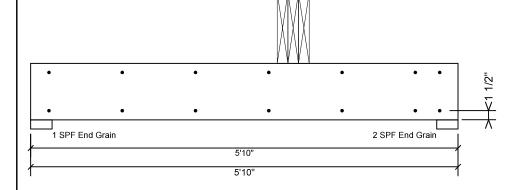
**Kerto-S LVL BM3** 

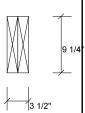
1.750" X 9.250"

Project:

2-Ply - PASSED

Level: Level





Page 7 of 11

### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Calculated Structured 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

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

### chemicals

### Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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

This design is valid until 4/24/2023

Metsä Wood

301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info







Client: Weaver Development Co. Inc.

Project:

Address: Wendywood Lane

Angier, NC 27501

1/31/2022 Date:

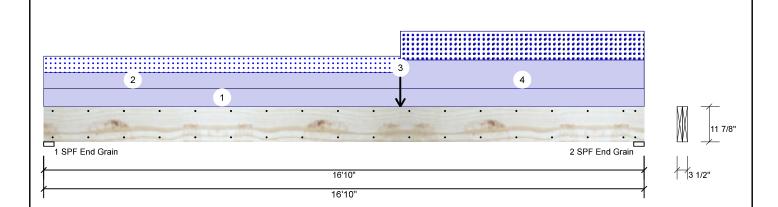
Input by: David Landry Job Name: Lot 7 Mitchell Manor II Page 8 of 11

J0122-0373 Project #:

Level: Level

**Kerto-S LVL** 1.750" X 11.875" **GDH** 

2-Ply - PASSED



	Member Inform	nation		
I	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	Ceiling:	Gypsum 1/2"
	Temperature:	Temp <= 100°F		

Reactio	ns UNPAT	TERNED IL	(Uplift)		
Brg	Live	Dead	Snow	Wind	Const
1	0	1190	608	0	0
2	0	1408	825	0	0

1	Analysis Re	sults		-			
	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	8610 ft-lb	10'	22897 ft-lb	0.376 (38%)	D+S	L
	Unbraced	8610 ft-lb	10'	8629 ft-lb	0.998 (100%)	D+S	L
	Shear	1912 lb	15'7 3/8"	10197 lb	0.188 (19%)	D+S	L
	LL Defl inch	0.158 (L/1246)	8'8 13/16"	0.409 (L/480)	0.390 (39%)	S	L
ı	TL Defl inch	0.436 (L/450)	8'7 3/4"	0.546 (L/360)	0.800 (80%)	D+S	L

Bearings	;					
Bearing	Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	17%	1190 / 608	1798	L	D+S
2 - SPF End Grain	3.500"	21%	1408 / 825	2233	L	D+S

### **Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 11' 3/4" o.c.
- 6 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			Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Part. Uniform	0-0-0 to 10-0-0		Тор	55 PLF	0 PLF	55 PLF	0 PLF	0 PLF	M1
3	Point	10-0-0		Тор	220 lb	0 lb	220 lb	0 lb	0 lb	M2A
4	Part. Uniform	10-0-0 to 16-10-0		Тор	97 PLF	0 PLF	97 PLF	0 PLF	0 PLF	M2
	Self Weight				9 PLF					

Calculated Structured 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

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

### chemicals Handling & Installation

- Handling & Installation

  1. IVL beams must not be cut or drilled

  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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

This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info





isDesign

Client: Weaver Development Co. Inc.

Address: Wendywood Lane

Angier, NC 27501

1/31/2022 Date:

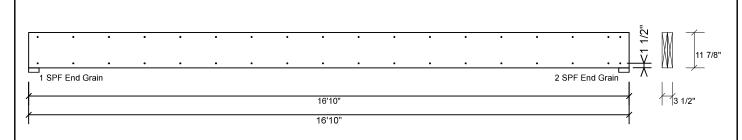
Input by: David Landry Job Name: Lot 7 Mitchell Manor II Page 9 of 11

J0122-0373 Project #:

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

Project:

Level: Level



### **Multi-Ply Analysis**

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity 0.0 % 0.0 PLF Load Yield Limit per Foot 163.7 PLF Yield Limit per Fastener 81.9 lb. Yield Mode IV Edge Distance 1 1/2" Min. End Distance 3" Load Combination Duration Factor 1.00

Calculated Structured 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

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

### chemicals

### Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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

This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info







**Member Information** 

S-P-F #2

GDH2

Client: Weaver Development Co. Inc.

Project: Address:

Wendywood Lane Angier, NC 27501

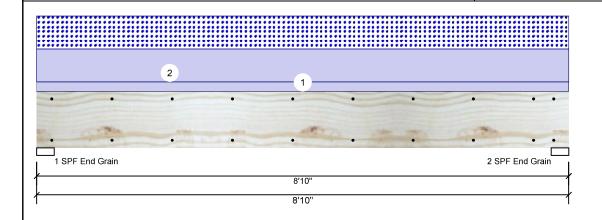
Date: 1/31/2022 Input by:

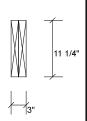
David Landry Job Name: Lot 7 Mitchell Manor II

2-Ply - PASSED 2.000" X 12.000"

J0122-0373 Project #: Level: Level

**Reactions UNPATTERNED Ib (Uplift)** 





Page 10 of 11

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	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Brg	Live	Dead	Snow	Wind	Const
1	0	1188	923	0	0
2	0	1188	923	0	0

ļ	Analysis Results													
	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case							
	Moment	4191 ft-lb	4'5"	5306 ft-lb	0.790 (79%)	D+S	L							
	Unbraced	4191 ft-lb	4'5"	4197 ft-lb	0.999 (100%)	D+S	L							
	Shear	1554 lb	7'8"	3493 lb	0.445 (44%)	D+S	L							
	LL Defl inch	0.046 (L/2165)	4'5 1/16"	0.209 (L/480)	0.220 (22%)	S	L							
	TI Deflinch	0 106 (1/947)	4'5 1/16"	0.279 (1/360)	0.380 (38%)	D+S	1							

Beari	ings	3					
Bear	ing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - S End Graii		3.500"	47%	1188 / 923	2111	L	D+S
2 - S End Graii		3.500"	47%	1188 / 923	2111	L	D+S

### **Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 7'6" o.c.
- 6 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			Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Тор	209 PLF	0 PLF	209 PLF	0 PLF	0 PLF	D1

This design is valid until 4/24/2023

Manufacturer Info Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA соттесн



Client: Weaver Development Co. Inc.

Prinklov

Address: Wendywood Lane Angier, NC 27501 Job Name: Lot 7 Mitchell Manor II

Date: 1/31/2022 Input by: David Landry

Project #: J0122-0373

GDH2 S-P-F #2

2.000" X 12.000"

Project:

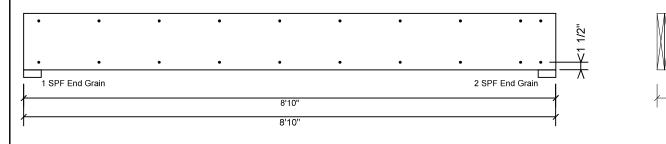
2-Ply - PASSED

This design is valid until 4/24/2023

Level: Level

Page 11 of 11

11 1/4"





Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

0.0 % Capacity 0.0 PLF Load Yield Limit per Foot 157.4 PLF Yield Limit per Fastener 78.7 lb. Yield Mode IV Edge Distance 1 1/2" Min. End Distance 3" Load Combination Duration Factor 1.00

Manufacturer Info

Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28514
910-864-TRUS



RE: J0122-0373

Lot 7 Mitchell Manor II

Trenco 818 Soundside Rd Edenton, NC 27932

**Site Information:** 

Customer: Weaver Development Co. Inc. FLot/Block: 7

nc. Project Name: J0122-0373 Model: Brinkley

Address: Wendywood Lane

Subdivision: Mitchell Manor II

City: Angier State: NC

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4

Wind Code: N/A Wind Speed: N/A mph Roof Load: N/A psf Floor Load: 55.0 psf

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

No.	Seal#	Truss Name	Date
1	E16477192	ET1	12/9/2021
2	E16477193	ET2	12/9/2021
3	E16477194	ET3	12/9/2021
4	E16477195	ET4	12/9/2021
5	E16477196	ET5	12/9/2021
6	E16477197	F1	12/9/2021
7	E16477198	F1A	12/9/2021
8	E16477199	F2	12/9/2021
9	E16477200	F2A	12/9/2021
10	E16477201	F3	12/9/2021
11	E16477202	F4	12/9/2021
12	E16477203	F5	12/9/2021
13	E16477204	F6	12/9/2021
14	E16477205	FG1	12/9/2021
15	E16477206	FG2	12/9/2021

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.



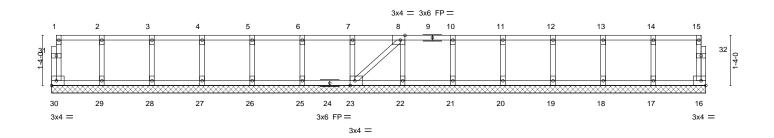
December 09, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
J0122-0373	ET4	GABLE	1	,	E16477192
30122-0373	E	GABLE		'	Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:42 2021 Page 1 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-ZRjZ6pQzCiaelCDjECeqYz9QWFyQVdMB9M5PdKyAmHN

0-11-8

Scale = 1:28.8



1-4-0	2-8-0   4-0-0 1-4-0   1-4-0	5-4-0 1-4-0	6-8-0 8-0-0 1-4-0 1-4-0		0-8-0 12-0-0 -4-0 1-4-0	13-4-0	14-8-0 1-4-0 1-4-0	17-4-12 1-4-12
Plate Offsets (X,Y)	[8:0-1-8,Edge], [23:0-1-8	3,Edge]						
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/T	2-0-0 1.00 1.00 YES PI2014	CSI. TC 0.06 BC 0.01 WB 0.03 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) l/del n/a - n/a n/a - n/a 0.00 16 n/a	a 999 a 999	PLATES MT20 Weight: 79 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E

 LUMBER BRACING 

 TOP CHORD
 2x4 SP No.1(flat)
 TOP CHORD
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

 BOT CHORD
 2x4 SP No.3(flat)
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

 OTHERS
 2x4 SP No.3(flat)
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 17-4-12.

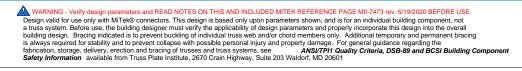
(lb) - Max Grav All reactions 250 lb or less at joint(s) 30, 16, 29, 28, 27, 26, 25, 23, 22, 21, 20, 19, 18, 17

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

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



December 9,2021





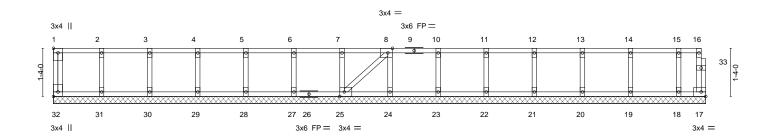
818 Soundside Road

Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
10400 0070	FT2	CARLE		,	E16477193
J0122-0373	E12	GABLE	1	1	Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:43 2021 Page 1 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-1dHxK9Rbz0iVwMovow935AibGeHgE4cLO0ry9myAmHM

0-1-8

Scale = 1:30.1



1-4-0	2-8-0   4-0-0 1-4-0   1-4-0	5-4-0 1-4-0	6-8-0   8-0-0   1-4-0   1-4-0	9-4-0 1-4-0 1-4-0	12-0-0 1-4-0	13-4-0	14-8-0   16-0-0 1-4-0   1-4-0	17-4-0 1-4-0 1-9-0
Plate Offsets (X,Y)	[1:Edge,0-1-8], [8:0-1-8	Edge], [25:0-1	-8,Edge], [32:Edge,0-1-8	8]				
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/1	2-0-0 1.00 1.00 YES PI2014	CSI. TC 0.06 BC 0.01 WB 0.03 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) n/a - n/a - 0.00 17	l/defl L/d n/a 999 n/a 999 n/a n/a	PLATES MT20 Weight: 83 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E

 LUMBER BRACING 

 TOP CHORD
 2x4 SP No.1(flat)
 TOP CHORD
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

 BOT CHORD
 2x4 SP No.3(flat)
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

 OTHERS
 2x4 SP No.3(flat)
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 18-1-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 28, 27, 25, 24, 23, 22, 21, 20, 19, 18

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

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 8) CAUTION, Do not erect truss backwards.



December 9,2021



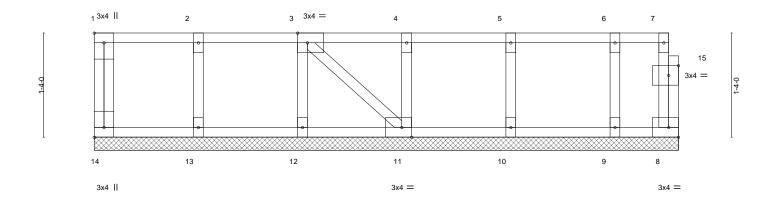


Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
10400 0070	ET2	CARLE		,	E16477194
J0122-0373	E13	GABLE	]1	1	Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:44 2021 Page 1  $ID:I4HRAT3eIT9qoRIdAoEs\_5z0Axy-VqqJXVRDjJqMYWN5LdgIeOFm?2dvzXsUdgaVhDyAmHL\\$ 

0<u>-1-</u>8

Scale = 1:13.9



	<u></u>	1-4-0 1-4-0	2-8-0 1-4-0			0-0 4-0		-4-0 -4-0	+			-5-12 -9-12
Plate Offse	ets (X,Y)	[1:Edge,0-1-8], [3:0-1-	8,Edge], [11:0-1-	8,Edge], [1	4:Edge,0-1-8	], [15:0-1-8,0-1-8	8]					
LOADING TCLL TCDL BCLL	(psf) 40.0 10.0 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	1.00	CSI TC BC WB	0.06 0.01	DEFL. Vert(LL Vert(CT Horz(C	) n/a	(loc) - - 8	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL	5.0	Code IRC2015	/TPI2014	Mat	rix-P						Weight: 39 lb	FT = 20%F, 11%E

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

2x4 SP No.3(flat) 2x4 SP No.3(flat) OTHERS

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

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

REACTIONS. All bearings 7-5-12.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 14, 8, 13, 12, 11, 10, 9

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

### NOTES-

LUMBER-

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 8) CAUTION, Do not erect truss backwards.



December 9,2021



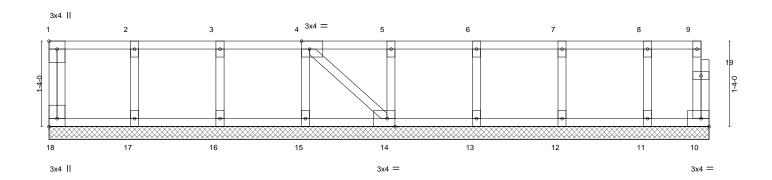


Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
J0122-0373	ET4	GABLE	1	,	E16477195
30122-0373	E14	GABLE	'	'	Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:44 2021 Page 1 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-VqqJXVRDjJqMYWN5LdgleOFm?2dvzXsUdgaVhDyAmHL

0<sub>1</sub>1<sub>2</sub>8

Scale = 1:16.9



1-4-0 1-4-0	2-8-0 1-4-0	4-0-0 1-4-0	5-4-0 1-4-0	6-8-0 1-4-0			3-0-0  -4-0	9-4-0 1-4-0	10-3-8
Plate Offsets (X,Y)	[1:Edge,0-1-8], [4:0-1-8,Edg	je], [14:0-1-8,Edge], [18	3:Edge,0-1-8]						
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	Plate Grip DOL Lumber DOL	2-0-0 CSI 1.00 TC 1.00 BC YES WB 014 Mat	0.06 0.01 0.03 rix-S	DEFL.         i           Vert(LL)         n/           Vert(CT)         n/           Horz(CT)         0.00	a -	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 50 lb	<b>GRIP</b> 244/190  FT = 20%F, 11%E

 LUMBER BRACING 

 TOP CHORD
 2x4 SP No.1(flat)
 TOP CHORD

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

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

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

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

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

**REACTIONS.** All bearings 10-3-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 18, 10, 17, 16, 15, 14, 13, 12, 11

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

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 8) CAUTION, Do not erect truss backwards.



December 9,2021

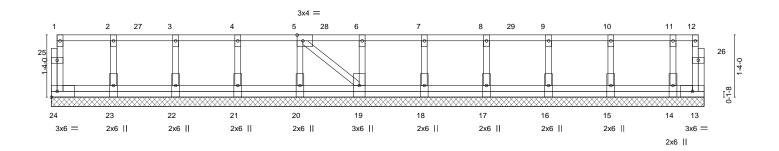


Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
10422 0272	ETE	CARLE	,	,	E16477196
J0122-0373	E15	GABLE	1	1	Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:45 2021 Page 1 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-z0OhkrSrUdyD9gylvLBXAbnwsSzCi\_rdrJK3EfyAmHK

0118

0<sub>1</sub>1<sub>7</sub>8 Scale = 1:23.3



1-4-0	ı 2-8-0 ı	4-0-0	5-4-0	1	6-8-0	8-0-0	9-4-0	0	10-8-0	1	12-0-0	13-4-	0   14-0-0
1-4-0	1-4-0	1-4-0	1-4-0	-	1-4-0	1-4-0	1-4-0	0	1-4-0	-	1-4-0	1-4-	0-8-0
Plate Offsets (X,Y)	[5:0-1-8,Edge]												
LOADING (psf)	SPACING-	2-0-0	,	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLA	TES	GRIP
TCLL 40.0	Plate Grip D	OL 1.00	)	TC	0.12	Vert(LL)	n/a	` -	n/a	999	MT2	0	244/190
TCDL 10.0	Lumber DOL	_ 1.00	)	BC	0.00	Vert(CT)	n/a	-	n/a	999			
BCLL 0.0	Rep Stress I	ncr YES	;	WB	0.05	Horz(CT)	0.00	13	n/a	n/a			
BCDL 5.0	Code IRC20	015/TPI2014		Matrix	k-S						Wei	ght: 84 lb	FT = 20%F, 11%E

 LUMBER BRACING 

 TOP CHORD
 2x4 SP No.1(flat)
 TOP CHORD

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

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

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

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** All bearings 14-0-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

### NOTES-

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 13-24=-10, 1-12=-100

Concentrated Loads (lb)

Vert: 4=-91 7=-91 10=-91 27=-91 28=-91 29=-91



December 9,2021



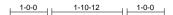


818 Soundside Road

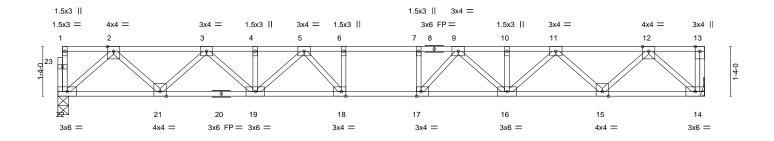
Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	٦
					E16477197	
J0122-0373	F1	Floor	6	1		
					Job Reference (optional)	

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:46 2021 Page 1 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-RCy4yATTFx44nqXUT2imjoK?ts9hRKkn4z3cm5yAmHJ

0-1-8 H <del>1-3-0</del>



Scale = 1:29.2



<b>—</b>				17-4-12 17-4-12				———
Plate Offs	sets (X,Y)	[17:0-1-8,Edge], [18:0-1-8,Edge]						
LOADING	. ,	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/de		PLATES	GRIP
TCLL TCDL	40.0 10.0	Plate Grip DOL 1.00 Lumber DOL 1.00	TC 0.48 BC 0.69	Vert(LL) Vert(CT)	-0.19 17-18 >99 -0.26 17-18 >77		MT20	244/190
BCLL BCDL	0.0 5.0	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.46 Matrix-S	Horz(CT)	0.06 14 n	′a n/a	Weight: 93 lb	FT = 20%F, 11%E

 LUMBER BRACING 

 TOP CHORD
 2x4 SP No.1(flat)
 TOP CHORD

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

exc BOT CHORD Rig

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

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

REACTIONS. (size) 22=0-3-8.14=Mechanical

Max Grav 22=937(LC 1), 14=943(LC 1)

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

TOP CHORD 2-3=-1705/0, 3-4=-2823/0, 4-5=-2823/0, 5-6=-3312/0, 6-7=-3312/0, 7-9=-3312/0,

 $9\hbox{-}10\hbox{=-}2823/0,\,10\hbox{-}11\hbox{=-}2823/0,\,11\hbox{-}12\hbox{=-}1705/0$ 

BOT CHORD 21-22=0/1015, 19-21=0/2365, 18-19=0/3144, 17-18=0/3312, 16-17=0/3144, 15-16=0/2365,

14-15=0/1016

2-22=-1349/0, 2-21=0/960, 3-21=-918/0, 3-19=0/622, 5-19=-436/0, 12-14=-1352/0,

 $12 - 15 = 0/959,\ 11 - 15 = -918/0,\ 11 - 16 = 0/623,\ 9 - 16 = -436/0,\ 9 - 17 = -86/552,\ 7 - 17 = -313/5,$ 

5-18=-86/552, 6-18=-313/5

### NOTES-

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



December 9,2021





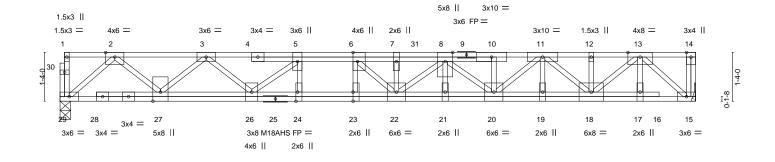
818 Soundside Road

Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II
					E16477198
J0122-0373	F1A	Floor	1	1	
					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:47 2021 Page 1 ID:I4HRAT3eIT9qoRIdAoEs\_5z0Axy-vOWS9WU60ECxPz6g1IE?F0t7fGU4AkFwJdpAlYyAmHI



Scale = 1:29.7



-			17-4-12 17-4-12	<del></del>
Plate Offsets (X,Y)	[6:0-3-0,Edge], [23:0-3-0,Edge], [24:0-3	3-0,Edge]		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.67	Vert(LL) -0.20 22-23 >999 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.74	Vert(CT) -0.28 22-23 >739 360	M18AHS 186/179
BCLL 0.0	Rep Stress Incr NO	WB 0.69	Horz(CT) 0.05 15 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 128 lb FT = 20%F, 11%E

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) **BOT CHORD** 2x4 SP No.1(flat) **WEBS** 2x4 SP No.3(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

REACTIONS. (size) 29=0-3-8, 15=Mechanical

Max Grav 29=1112(LC 1), 15=1169(LC 1)

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

2-3=-2171/0, 3-5=-3758/0, 5-6=-4691/0, 6-7=-5203/0, 7-8=-5203/0, 8-10=-4093/0, TOP CHORD

10-11=-4088/0, 11-12=-2410/0, 12-13=-2410/0

**BOT CHORD** 27-29=0/1244, 26-27=0/3037, 24-26=0/4691, 23-24=0/4691, 22-23=0/4691, 21-22=0/4965, 20-21=0/4965, 19-20=0/3348, 18-19=0/3348, 17-18=0/1304, 15-17=0/1304

2-29=-1654/0, 2-27=0/1258, 3-27=-1174/0, 3-26=0/970, 5-26=-1275/0, 5-24=0/452,

 $13-15 = -1725/0,\ 13-18 = 0/1458,\ 11-18 = -1237/0,\ 11-20 = 0/976,\ 8-20 = -1130/0,\ 8-22 = 0/394,$ 

7-22=-541/0, 6-22=0/978, 6-23=-458/0

### NOTES-

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION. Do not erect truss backwards.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 481 lb down at 9-9-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 15-29=-10, 1-14=-100 Concentrated Loads (lb) Vert: 31=-401(F)



December 9,2021

ameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designs. 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 experts.

\*\*Starty Information\*\*

\*\*Ansity Prevent\*\*

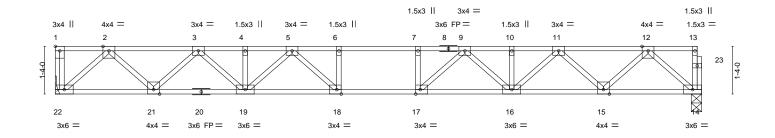


Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	
J0122-0373	F2	Floor	7	1	E16477199	'
00122 0010	12	11001	l'		Job Reference (optional)	

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:48 2021 Page 1 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-Ob4qNsVknYKo07htaTIEoDPJ7fpwvEp4XHYjq\_yAmHH

1-3-0

Scale = 1:30.3



<u> </u>			18-1-0 18-1-0				
Plate Offsets (X,Y)	[1:Edge,0-1-8], [17:0-1-8,Edge], [18:0-1	I-8,Edge]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.56	Vert(LL)	-0.22 17-18 >956	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.77	Vert(CT)	-0.31 17-18 >695	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.48	Horz(CT)	0.06 14 n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S				Weight: 96 lb	FT = 20%F, 11%E

LUMBER- BRACING-

TOP CHORD 2x4 SP No.1(flat)

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

WEBS 2x4 SP No.3(flat) BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 22=Mechanical, 14=0-3-8

Max Grav 22=981(LC 1), 14=975(LC 1)

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

TOP CHORD 2-3=-1787/0, 3-4=-2985/0, 4-5=-2985/0, 5-6=-3581/0, 6-7=-3581/0, 7-9=-3581/0,

 $9\hbox{-}10\hbox{=-}2985/0,\,10\hbox{-}11\hbox{=-}2985/0,\,11\hbox{-}12\hbox{=-}1787/0$ 

BOT CHORD 21-22=0/1058, 19-21=0/2486, 18-19=0/3347, 17-18=0/3581, 16-17=0/3347, 15-16=0/2486,

14-15=0/1058

2-22=-1409/0, 2-21=0/1013, 3-21=-972/0, 3-19=0/678, 5-19=-492/0, 5-18=-55/627,

 $6\textbf{-}18\textbf{=-}316/0,\ 12\textbf{-}14\textbf{=-}1406/0,\ 12\textbf{-}15\textbf{=0}/1014,\ 11\textbf{-}15\textbf{=-}973/0,\ 11\textbf{-}16\textbf{=0}/678,\ 9\textbf{-}16\textbf{=-}492/0,$ 

9-17=-55/627, 7-17=-316/0

### NOTES-

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



December 9,2021





Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	٦
					E16477200	ן נ
J0122-0373	F2A	Floor	1	1		
					Job Reference (optional)	

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1-3-0

Scale = 1:30.1

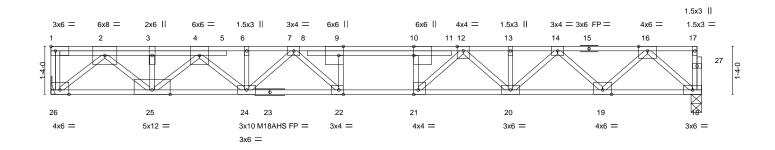


Plate Offsets (X,Y)-- [9:0-3-0,Edge], [10:0-3-0,Edge], [21:0-1-8,Edge], [22:0-1-8,Edge] **PLATES** SPACING-2-0-0 CSI. DEFL. **GRIP** LOADING (psf) (loc) I/defl L/d in Plate Grip DOL 244/190 **TCLL** 40.0 1.00 TC 0.53 Vert(LL) -0.2522 >845 480 MT20 ВС TCDL Lumber DOL 1.00 0.94 Vert(CT) -0.35 22 >610 M18AHS 186/179 10.0 360 **BCLL** 0.0 Rep Stress Incr NO WB 0.92 Horz(CT) 0.08 18 n/a n/a BCDL Code IRC2015/TPI2014 Weight: 109 lb FT = 20%F, 11%E

LUMBER- BRACING-

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

TOP CHORD Structural wood sheathing directly applied or 5-10-1 oc purlins, except end verticals.

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

REACTIONS. (size) 26=Mechanical, 18=0-3-8

Max Grav 26=1498(LC 1), 18=1066(LC 1)

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

TOP CHORD 2-3=-3150/0, 3-4=-3150/0, 4-6=-3973/0, 6-7=-3970/0, 7-9=-4445/0, 9-10=-4442/0,

10-12=-4454/0, 12-13=-3379/0, 13-14=-3379/0, 14-16=-1986/0

BOT CHORD 25-26=0/1698, 24-25=0/3684, 22-24=0/4215, 21-22=0/4442, 20-21=0/3824, 19-20=0/2777,

18-19=0/1162

WEBS 2-26=-2210/0, 2-25=0/1927, 3-25=-776/0, 4-25=-709/0, 4-24=0/380, 16-18=-1545/0,

 $16 - 19 = 0/1145,\ 14 - 19 = -1101/0,\ 14 - 20 = 0/818,\ 12 - 20 = -605/0,\ 12 - 21 = 0/1075,\ 10 - 21 = -658/0,$ 

7-24=-333/0, 7-22=-126/529, 9-22=-328/61

### NOTES-

- Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 689 lb down at 2-6-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

 Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 18-26=-10, 1-17=-100
Concentrated Loads (lb)
Vert: 3=-609(F)



December 9,2021

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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 propriy damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

\*\*ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	٦
10400 0070	F0	El		١.,	E16477201	
J0122-0373	F3	Floor	2	1	Job Reference (optional)	

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Structural wood sheathing directly applied or 6-0-0 oc purlins,

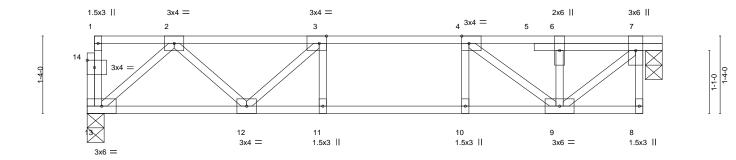
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





Scale = 1:18.7



	-			9-7-0 9-7-0					0-11-0 0-4-0
Plate Offs	sets (X,Y)	[3:0-1-8,Edge], [4:0-1-8,Edge], [14:0-1		0-4-0					
LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL 1.00	TC 0.35	Vert(LL) -0.		>999	480	MT20	244/190
TCDL	10.0	Lumber DOL 1.00	BC 0.47	Vert(CT) -0.		>999	360		
BCLL BCDL	0.0 5.0	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.31 Matrix-S	Horz(CT) 0.	02 7	n/a	n/a	Weight: 54 lb	FT = 20%F, 11%E

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SP No.3(flat)

**REACTIONS.** (size) 13=0-3-8, 7=0-3-8 Max Grav 13=511(LC 1), 7=517(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-781/0, 3-4=-965/0, 4-6=-499/0, 6-7=-499/0 BOT CHORD 12-13=0/541, 11-12=0/965, 10-11=0/965, 9-10=0/965 WEBS 7-9=0/649, 2-13=-718/0, 2-12=0/334, 3-12=-307/0, 4-9=-640/0

### NOTES-

- Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 6) CAUTION, Do not erect truss backwards



December 9,2021



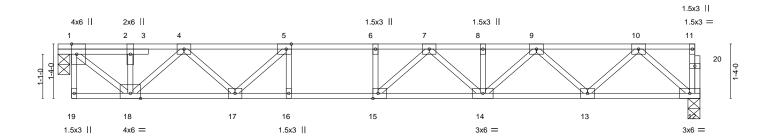


818 Soundside Road

Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	٦
			_		E16477202	:
J0122-0373	F4	Floor	2	1		
					Job Reference (optional)	

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Q-4-Q			15-8-8	l I
ó-4-ó			15-4-8	1
Plate Offsets (X,Y)	[1:0-3-0,Edge], [5:0-1-8,Edge], [15:0-1-	8,Edge]		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.66	Vert(LL) -0.21 14-15 >856 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.94	Vert(CT) -0.28 14-15 >640 360	
BCLL 0.0	Rep Stress Incr YES	WB 0.56	Horz(CT) 0.02 12 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 84 lb FT = 20%F, 11%E

LUMBER- BRACING-

TOP CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

WEBS 2x4 SP No.3(flat) BOT CHORD cycle and sheathing directly applied or 6-0-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 15-16.

**REACTIONS.** (size) 12=0-3-8, 1=0-3-8

Max Grav 12=829(LC 1), 1=835(LC 1)

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

TOP CHORD 1-2=-900/0, 2-4=-903/0, 4-5=-1988/0, 5-6=-2524/0, 6-7=-2524/0, 7-8=-2371/0,

8-9=-2371/0, 9-10=-1469/0

BOT CHORD 17-18=0/1531, 16-17=0/2524, 15-16=0/2524, 14-15=0/2568, 13-14=0/2027, 12-13=0/891 WEBS 1-18=0/1772, 4-18=-857/0, 4-17=0/636, 5-17=-794/0, 10-12=-1184/0, 10-13=0/804,

9-13=-776/0, 9-14=0/468, 7-14=-279/0, 7-15=-258/302

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 7) CAUTION, Do not erect truss backwards.



December 9,2021

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Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	٦
			_		E16477203	.
J0122-0373	F5	Floor	3	1	11.57	
					Job Reference (optional)	- 1

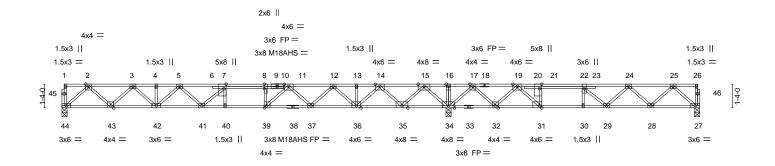
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:51 2021 Page 1  $ID:I4HRAT3eIT9qoRIdAoEs\_5z0Axy-oAmz?uXc4TiMtbPRGblxQs1lutqE6XTWEFnNRJyAmHE$ 

0-1-8 HI-3-0

2-1-12

2-3-4

0-1-8 Scale = 1:61.1



L	21-5-4								35-11-0				
	21-9-4								14-1-12				
Plate Off	Plate Offsets (X,Y) [7:0-3-0,Edge], [8:0-3-0,0-0-0], [21:0-3-0,Edge], [31:0-1-8,Edge], [39:0-1-8,Edge]												
				T									
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (lo	oc) I/def	L/d	PLATES	GRIP		
TCLL	40.0	Plate Grip DOL	1.00	TC	0.85	Vert(LL)	-0.32 39-	40 >803	480	MT20	244/190		
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.44 39-	40 >596	360	M18AHS	186/179		
BCLL	0.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.07	34 n/a	n/a				
BCDL	5.0	Code IRC2015/TPI2	2014	Matrix	-S	, ,				Weight: 195 lb	FT = 20%F, 11%E		

LUMBER-

WEBS

TOP CHORD 2x4 SP No.1(flat) **BOT CHORD** 

2x4 SP No.1(flat) 2x4 SP No.3(flat)

**BRACING-**TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 5-7-6 oc purlins,

25 11 0

except end verticals. Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 44=0-3-8, 34=0-3-8, 27=0-3-8

Max Uplift 27=-31(LC 3)

Max Grav 44=1028(LC 3), 34=2416(LC 1), 27=654(LC 4)

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

TOP CHORD 2-3=-1903/0, 3-4=-3213/0, 4-5=-3213/0, 5-7=-3892/0, 7-8=-4134/0, 8-11=-4134/0,

11-12=-3071/0, 12-13=-1761/0, 13-14=-1761/0, 14-15=0/653, 15-16=0/3181,

16-17=0/3181, 17-19=-271/1913, 19-21=-1588/905, 21-22=-1572/905, 22-24=-1570/502,

21 0 4

24-25=-1099/141

**BOT CHORD**  $43 - 44 = 0/1119,\ 42 - 43 = 0/2658,\ 41 - 42 = 0/3642,\ 40 - 41 = 0/4134,\ 39 - 40 = 0/4134,\ 37 - 39 = 0/3568,$ 

36-37=0/2554, 35-36=-198/873, 34-35=-1705/0, 32-34=-2289/0, 31-32=-1519/881,

30-31=-905/1572, 29-30=-905/1572, 28-29=-233/1489, 27-28=-69/685

2-44=-1487/0, 2-43=0/1091, 3-43=-1050/0, 3-42=0/755, 15-34=-1965/0, 15-35=0/1563,

14-35=-1537/0, 14-36=0/1242, 12-36=-1112/0, 12-37=0/751, 11-37=-728/0, 5-42=-583/0, 5-41=0/446, 7-41=-489/83, 11-39=0/1122, 8-39=-665/0, 17-34=-1477/0, 17-32=0/1061, 19-32=-1107/0, 19-31=0/1493, 25-27=-909/93, 25-28=-99/575, 24-28=-543/128,

24-29=-368/110, 22-29=-6/544, 21-31=-845/0

### NOTES-

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x4 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 27.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 8) CAUTION, Do not erect truss backwards.



December 9,2021

ameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MTek® 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 designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Lot 7 Mitchell Manor II	٦
					E16477204	
J0122-0373	F6	Floor	5	1		
					Job Reference (optional)	J

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:52 2021 Page 1 ID:I4HRAT3eIT9qoRldAoEs\_5z0Axy-GMJLCEYErnqDVI\_epJpAy3a25HDSr?JfSvWxzlyAmHD

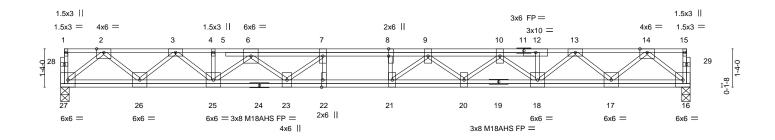
21 11 0

Structural wood sheathing directly applied or 6-0-0 oc purlins,

0-1-8 H 1-3-0

2-2-0

0-1-8 Scale = 1:37.8



1	7-10-8		1	14-0-0			- 1	21-11-0				
Į.		7-10-8		ı		6-2-0		1			7-10-8	
Plate Offse	ets (X,Y)	[8:0-3-0,0-0-0], [22:0-3-0,	Edge]									
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.33	21	>797	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.60	Vert(CT)	-0.45	21	>579	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.06	16	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matri	x-S	, ,					Weight: 158 lb	FT = 20%F, 11%E
BCDL	5.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 158 lb	FT = 20%F, 11%E

**BRACING-**

TOP CHORD

1100

LUMBER-

7 10 0

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

except end verticals.

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

**REACTIONS.** (size) 27=0-3-8, 16=0-3-8

Max Grav 27=1185(LC 1), 16=1185(LC 1)

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

TOP CHORD 2-3=-2352/0, 3-4=-4056/0, 4-6=-4064/0, 6-7=-5383/0, 7-8=-5847/0, 8-9=-5847/0,

 $9\text{-}10\text{=-}5402/0,\ 10\text{-}12\text{=-}4085/0,\ 12\text{-}13\text{=-}4085/0,\ 13\text{-}14\text{=-}2350/0}$ 

BOT CHORD 26-27=0/1358, 25-26=0/3320, 23-25=0/4944, 22-23=0/5847, 21-22=0/5847, 20-21=0/5744, 18-20=0/5011, 17-18=0/3314, 16-17=0/1360

762-07-3071, 771-0-3051-7, 107-07-07-3051-7, 107-07-3051-7, 107-07-3051-7, 107-07-3051-7, 107-07

6-23=0/707, 7-23=-889/0, 9-21=-301/635, 8-21=-272/53

### NOTES-

WEBS

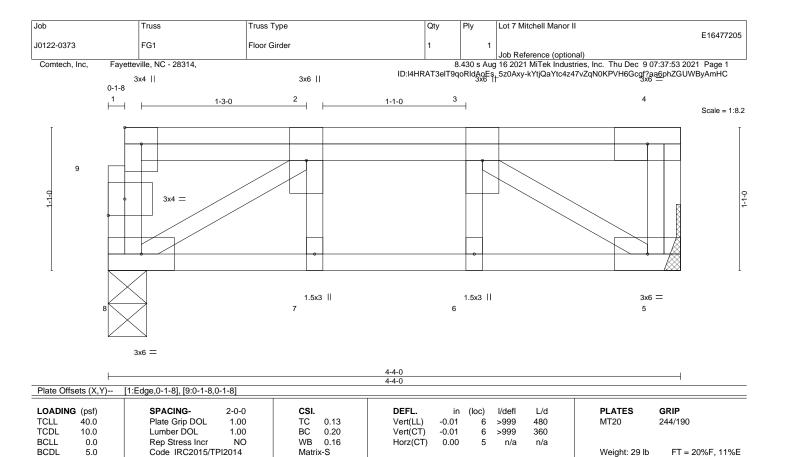
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x6 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



December 9,2021







**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

**REACTIONS.** (size) 8=0-3-8, 5=Mechanical Max Grav 8=810(LC 1), 5=501(LC 1)

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

TOP CHORD 1-8=-473/0, 2-3=-581/0 BOT CHORD 7-8=0/581, 6-7=0/581, 5-6=0/581 WEBS 3-5=-684/0, 2-8=-648/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

### LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)

Vert: 5-8=-10, 1-4=-100 Concentrated Loads (lb) Vert: 1=-452 3=-417



Structural wood sheathing directly applied or 4-4-0 oc purlins,

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

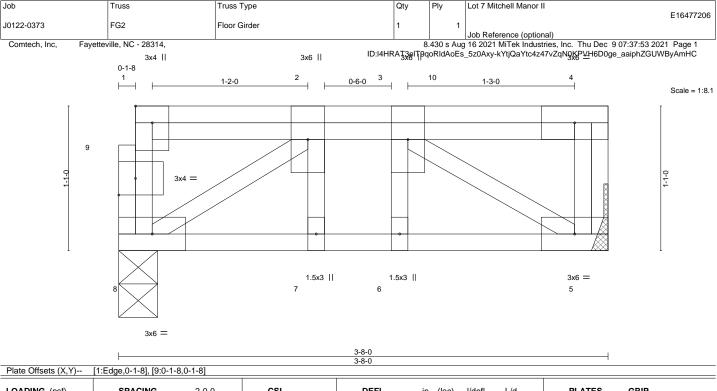
except end verticals.

December 9,2021

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Tiale Offsets (A, I)	1 late Offsets (A, 1) [1.Euge,0-1-0], [3.0-1-0,0-1-0]									
LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP						
TCLL 40.0	Plate Grip DOL 1.00	TC 0.36	Vert(LL) -0.01 6 >999 480	MT20 244/190						
TCDL 10.0	Lumber DOL 1.00	BC 0.26	Vert(CT) -0.01 5-6 >999 360							
BCLL 0.0	Rep Stress Incr NO	WB 0.19	Horz(CT) 0.00 5 n/a n/a							
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 26 lb FT = 20%F, 11%E						

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

**WEBS** 

2x4 SP No.1(flat) 2x4 SP No.1(flat) TOP CHORD **BOT CHORD** 

2x4 SP No.3(flat) REACTIONS. (size) 8=0-3-8, 5=Mechanical

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

TOP CHORD 1-8=-764/0, 4-5=-268/0, 2-3=-672/0 **BOT CHORD** 7-8=0/672, 6-7=0/672, 5-6=0/672 **WEBS** 3-5=-792/0, 2-8=-747/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.

Max Grav 8=1167(LC 1), 5=709(LC 1)

- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 5-8=-10, 1-4=-100 Concentrated Loads (lb) Vert: 1=-771 10=-735



Structural wood sheathing directly applied or 3-8-0 oc purlins,

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

except end verticals.

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available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

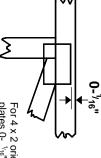


## Symbols

# PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss

ω

O

S

required direction of slots in This symbol indicates the

connector plates

\* Plate location details available in MiTek 20/20 software or upon request

### PLATE SIZE



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

## LATERAL BRACING LOCATION



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

### BEARING



number where bearings occur.

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

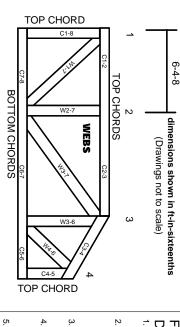
### Industry Standards:

ANSI/TPI1: National Design Specification for Metal

DSB-89:

Installing & Bracing of Metal Plate Connected Wood Trusses. Plate Connected Wood Truss Construction. Guide to Good Practice for Handling, Building Component Safety Information Design Standard for Bracing

# **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

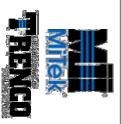
ICC-ES Reports:

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

truss unless otherwise shown. Trusses are designed for wind loads in the plane of the

section 6.3 These truss designs rely on lumber values established by others. Lumber design values are in accordance with ANSI/TPI 1

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

# **General Safety Notes**

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection. esponsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 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
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 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.