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

RE: 3212507 - MIKE TODD CONST. - BOYD RES.

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Site Information:
Customer Info: MIKE TODD CONST. Project Name: Boyd Res. Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: TBD HWY 47 South, N/A
City: Columbia Cty State: FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.
Name: License #:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):
Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.5
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 12 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T28088544	T01	6/24/22
2	T28088545	T01G	6/24/22
3	T28088546	T02	6/24/22
4	T28088547	T03	6/24/22
5	T28088548	T04	6/24/22
6	T28088549	T05	6/24/22
7	T28088550	T05G	6/24/22
8	T28088551	T06	6/24/22
9	T28088552	T07G	6/24/22
10	T28088553	T08	6/24/22
11	T28088554	T08G	6/24/22
12	T28088555	T09	6/24/22

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Lake City, FL.

Truss Design Engineer's Name: Velez, Joaquin
My license renewal date for the state of Florida is February 28, 2023.

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 24,2022

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

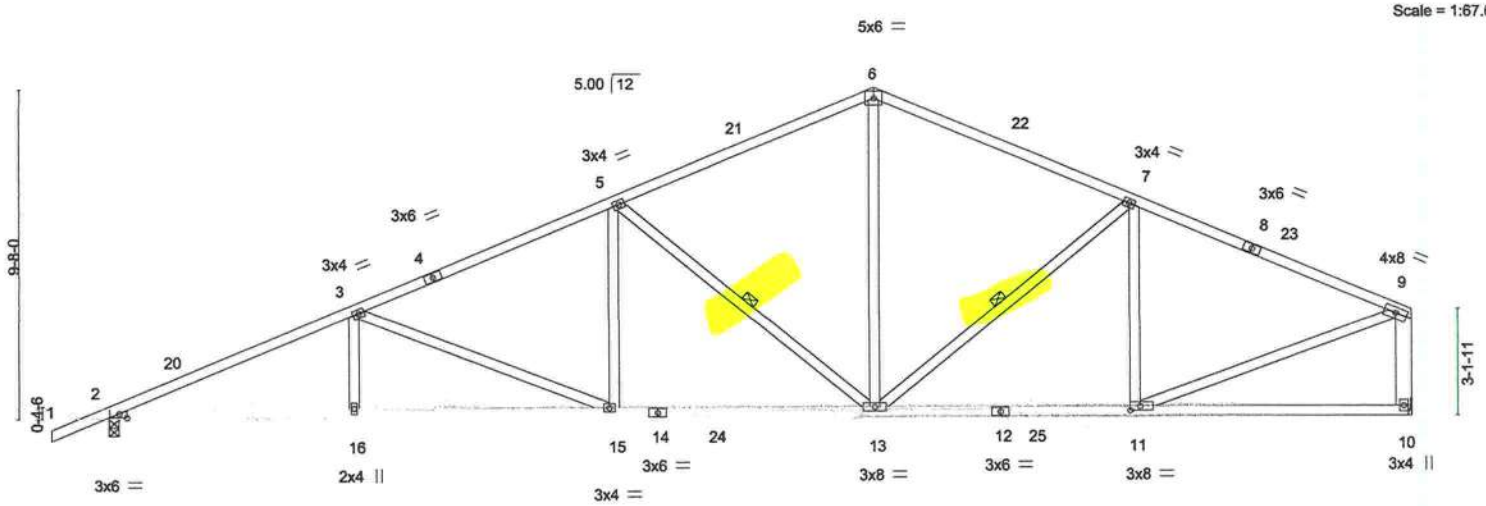
Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.	T28088544
3212507	T01	Common	16	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:41 2022 Page 1

ID:2jmv4WygRhB5xAfKERQk28z3SFU-PHtN4D3xLubhBWbrgXvQyjXqjrscwZ3CzL5O0Ez3QDi

-1-8-0	7-1-12	14-8-14	22-4-0	29-11-2	38-0-0
1-8-0	7-1-12	7-7-2	7-7-2	7-7-2	8-0-14

Scale = 1:67.6



7-1-12	14-8-14	22-4-0	29-11-2	38-0-0
7-1-12	7-7-2	7-7-2	7-7-2	8-0-14

Plate Offsets (X,Y)-- [2:0-2-12,0-1-8], [11:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.67	Vert(LL)	-0.24	13-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.98	Vert(CT)	-0.42	15-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.12	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 214 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except*
	9-10: 2x6 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-8-13 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 5-13, 7-13

REACTIONS. (size) 2=0-3-8, 10=Mechanical
Max Horz 2=215(LC 12)
Max Uplift 2=-348(LC 12), 10=-266(LC 13)
Max Grav 2=1603(LC 2), 10=1542(LC 2)

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

TOP CHORD	2-3=-3316/653, 3-5=-2563/511, 5-6=-1739/400, 6-7=-1740/406, 7-9=-1829/356, 9-10=-1418/306
BOT CHORD	2-16=-735/3015, 15-16=-735/3015, 13-15=-500/2309, 11-13=-270/1633
WEBS	3-16=0/296, 3-15=-763/253, 5-15=-46/590, 5-13=-1001/327, 6-13=-154/985, 7-11=-362/145, 9-11=-269/1665

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 2-1-10, Interior(1) 2-1-10 to 22-4-0, Exterior(2R) 22-4-0 to 26-1-10, Interior(1) 26-1-10 to 37-9-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 20.0psf 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) 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) except (jt=lb) 2=348, 10=266.

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 24,2022

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.
3212507	T01G	GABLE	2	1	T28088545

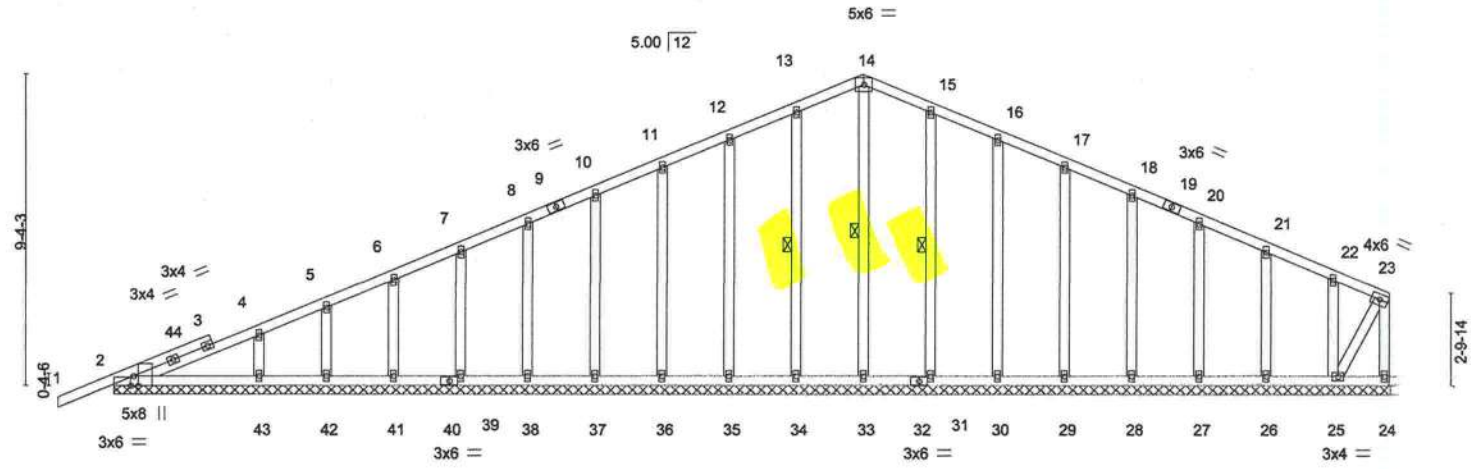
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Job Reference (optional)

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:43 2022 Page 1
ID:2jmv4WygRhB5xAfKERQk28z3SFU-Lg?7Vv4BtWrPRqfDoyyu18clGfmXOh?VQfaV46z3QDg

-1-8-0 / 1-8-0 — 22-4-0 / 22-4-0 — 38-0-0 / 15-8-0

Scale = 1:69.1



38-0-0 / 38-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.12	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	24	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 264 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 14-33, 13-34, 15-31

REACTIONS. All bearings 38-0-0.
(lb) - Max Horz 2=204(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 35, 36, 37, 38, 39, 41, 42, 43, 31, 30, 29, 28, 27, 26 except 25=-155(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 24, 2, 33, 34, 35, 36, 37, 38, 39, 41, 42, 31, 30, 29, 28, 27, 26, 25 except 43=271(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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-8-0 to 2-1-10, Exterior(2N) 2-1-10 to 22-4-0, Corner(3R) 22-4-0 to 26-4-0, Exterior(2N) 26-4-0 to 37-10-4 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 34, 35, 36, 37, 38, 39, 41, 42, 43, 31, 30, 29, 28, 27, 26 except (jt=lb) 25=155.

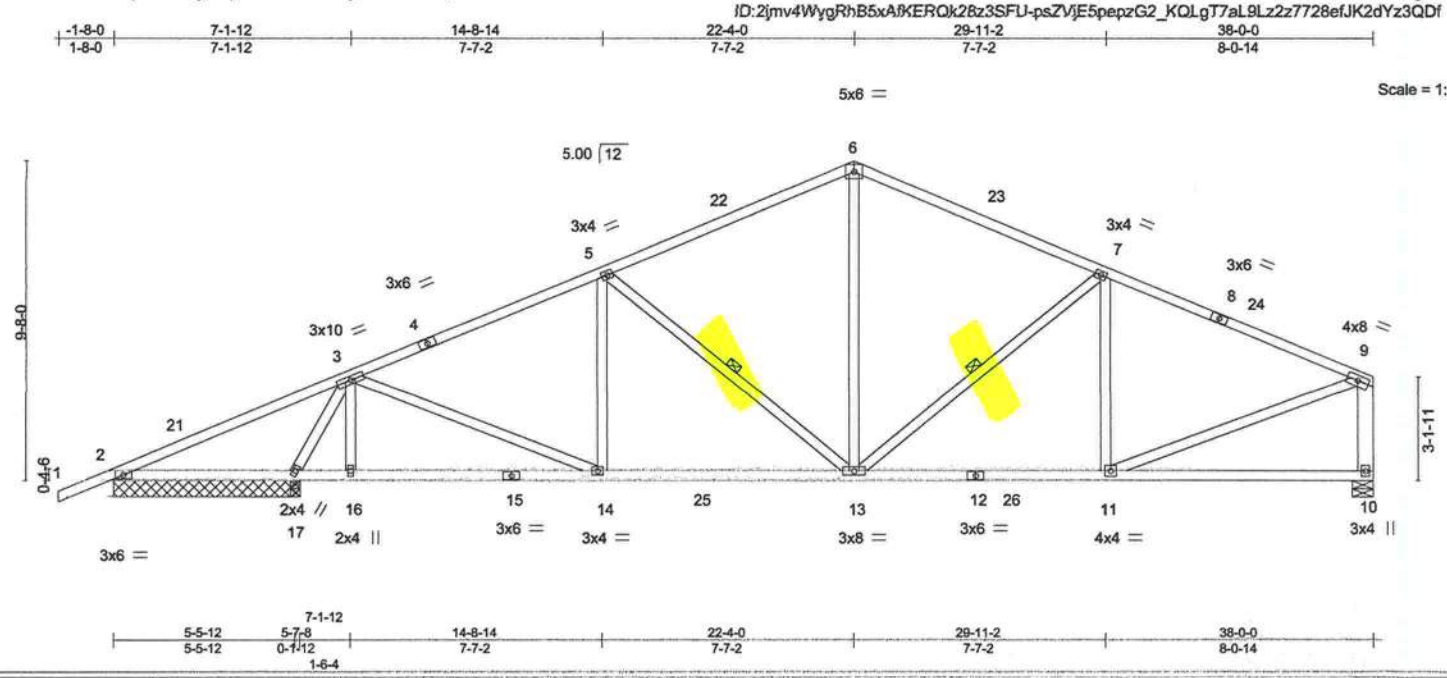
Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.
3212507	T02	Common	1	1	T28088546
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:44 2022 Page 1
ID:2jmv4WygRhB5xAfKERQk28z3SFU-psZVjE5pepzG2_KQLgT7aL9Lz2z7728efJK2dYz3QDf



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.67	Vert(LL)	-0.11	13-14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.20	13-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 219 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
9-10: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17.
WEBS 1 Row at midpt 5-13, 7-13

REACTIONS. All bearings 5-7-8 except (jt=length) 10=0-7-8.
(lb) - Max Horz 2=215(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2 except 17=-393(LC 12), 10=-239(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 2 except 17=1787(LC 2), 17=1615(LC 1), 10=1287(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-201/578, 3-5=-1538/303, 5-6=-1282/321, 6-7=-1284/325, 7-9=-1480/294, 9-10=-1163/261
BOT CHORD 2-17=-473/103, 16-17=-171/447, 14-16=-171/447, 13-14=-292/1361, 11-13=-213/1311
WEBS 3-17=-1843/409, 3-14=-146/984, 5-13=-377/177, 6-13=-85/633, 7-13=-318/173, 7-11=-253/124, 9-11=-210/1323

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 2-1-10, Interior(1) 2-1-10 to 22-4-0, Exterior(2R) 22-4-0 to 26-1-10, Interior(1) 26-1-10 to 37-9-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 20.0psf 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) 2, 2 except (jt=lb) 17=393, 10=239.

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.	T28088547
3212507	T03	Common	6	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:46 2022 Page 1
ID:2jmv4WygRhB5xAfKERQk28z3SFU-IFhG8w73ARD_IHToT4VbfmEhGsgMbtax7dp9hRz3QDd

-1-8-0	7-1-12	14-8-14	22-4-0	29-11-2	37-6-4	44-8-0	46-4-0
1-8-0	7-1-12	7-7-2	7-7-2	7-7-2	7-7-2	7-1-12	1-8-0

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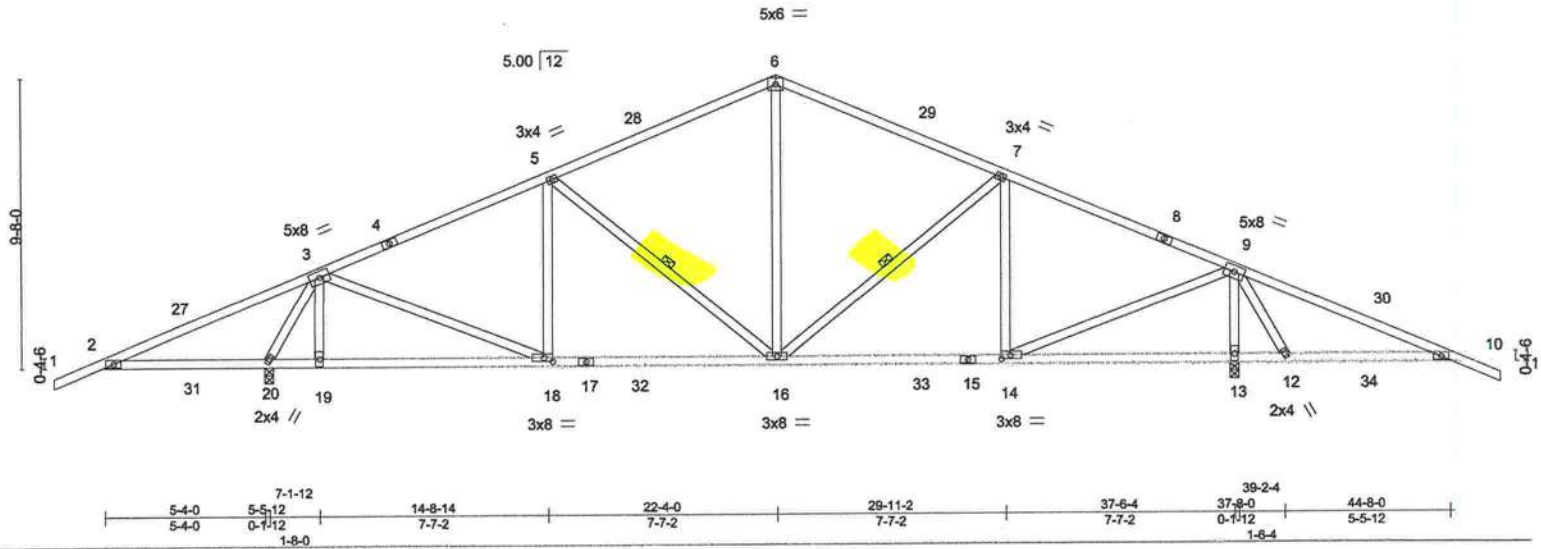

5-4-0	7-1-12	14-8-14	22-4-0	29-11-2	37-6-4	39-2-4	44-8-0
5-4-0	5-5-12	7-7-2	7-7-2	7-7-2	7-7-2	37-8-0	5-5-12
	0-1-12					0-1-12	
	1-8-0					1-6-4	

Plate Offsets (X,Y)— [14:0-3-8,0-1-8], [18:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.69	Vert(LL)	-0.11	14-16	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.63	Vert(CT)	-0.19	14-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 244 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-16, 5-16

REACTIONS. (size) 13=0-3-8, 20=0-3-8
Max Horz 20=-149(LC 13)
Max Uplift 13=-433(LC 13), 20=-400(LC 12)
Max Grav 13=1984(LC 2), 20=1779(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-649/795, 3-5=-1342/270, 5-6=-1084/250, 6-7=-1084/270, 7-9=-1069/200, 9-10=-654/811
BOT CHORD 2-20=-662/671, 19-20=-84/424, 18-19=-84/424, 16-18=-211/1180, 14-16=-74/927, 13-14=-739/832, 12-13=-739/832, 10-12=-675/675
WEBS 6-16=-64/479, 7-14=-459/291, 9-14=-653/1784, 9-13=-1800/893, 9-12=-314/159, 5-16=-350/174, 3-18=-341/973, 3-20=-1829/478

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 2-9-10, Interior(1) 2-9-10 to 22-4-0, Exterior(2R) 22-4-0 to 26-9-10, Interior(1) 26-9-10 to 46-4-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) All plates are 3x6 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=433, 20=400.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.	T28088548
3212507	T04	Roof Special	9	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:47 2022 Page 1
ID:2jmv4WygRhB5xAfKERQk28z3SFU-DRFeLG8ixkLrvR2_1o0qB_nrCGxaKlg4LHYjDtz3QDc

-1-8-0	5-7-8	11-6-6	17-5-5	22-4-0	23-1-8	29-11-2	37-6-4	44-8-0	46-4-0
1-8-0	5-7-8	5-10-14	5-10-14	4-10-11	0-9-8	6-9-10	7-7-2	7-1-12	1-8-0

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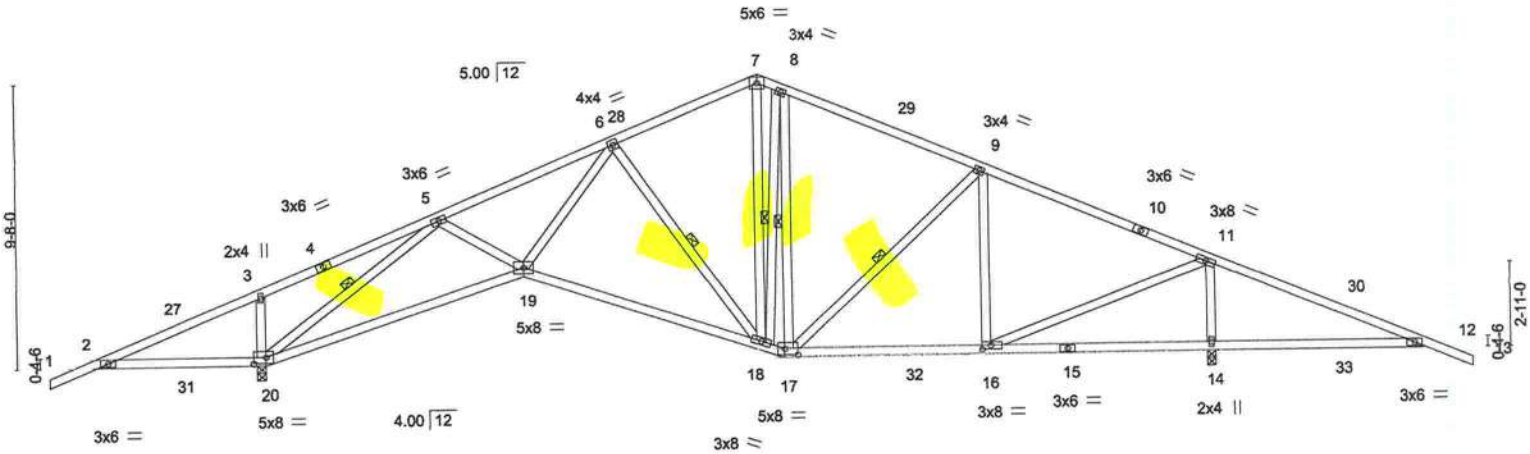

5-4-0	5-7-8	14-4-8	22-4-0	23-1-8	29-11-2	37-6-4	37-8-0	44-8-0
5-4-0	0-3-8	8-9-0	7-11-8	0-9-8	6-9-10	7-7-2	0-1-12	7-0-0

Plate Offsets (X,Y)— [16:0-3-8,0-1-8], [17:0-5-4,0-2-8], [20:0-5-0,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.74	Vert(LL)	-0.24	19-20	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.88	Vert(CT)	-0.49	19-20	>773	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.15	14	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 261 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-20, 6-18, 8-18, 8-17, 9-17

REACTIONS. (size) 20=0-3-8, 14=0-3-8
Max Horz 20=-149(LC 17)
Max Uplift 20=-403(LC 12), 14=-432(LC 13)
Max Grav 20=1761(LC 2), 14=1953(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-684/714, 3-5=-612/729, 5-6=-2183/442, 6-7=-1029/258, 7-8=-1020/284, 8-9=-1036/263, 9-11=-1020/195, 11-12=-769/855
BOT CHORD 2-20=-598/689, 19-20=-356/1599, 18-19=-242/1488, 17-18=-69/998, 16-17=-69/879, 14-16=-712/775, 12-14=-712/775
WEBS 3-20=-342/188, 5-20=-2632/569, 5-19=-24/641, 6-19=-171/1075, 6-18=-815/267, 7-18=-226/719, 8-18=-119/270, 8-17=-353/22, 9-16=-451/294, 11-16=-576/1701, 11-14=-1653/655

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 2-9-10, Interior(1) 2-9-10 to 22-4-0, Exterior(2R) 22-4-0 to 26-9-10, Interior(1) 26-9-10 to 46-4-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 20.0psf 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) except (jt=lb) 20=403, 14=432.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 24,2022

MiTek
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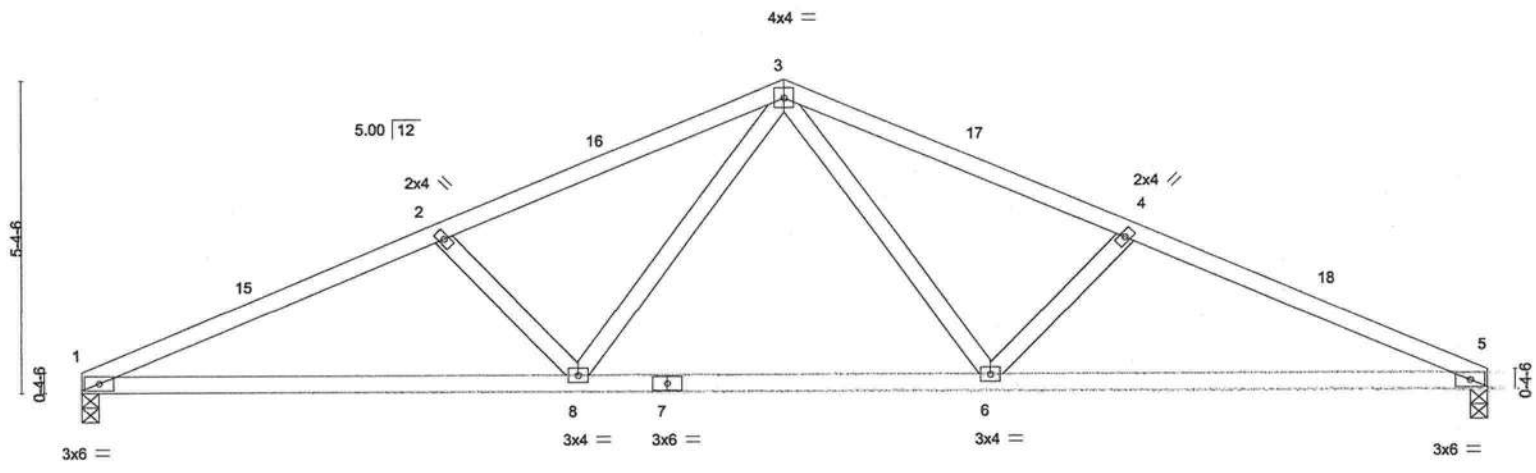
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.	T28088549
3212507	T05	Common	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:48 2022 Page 1
ID:2jmv4WygRhB5xAfKERQk28z3SFU-hep0Zc8Ki2TiXbdBaVX3kBJ54gKu3wpEaxlGmKz3QDb

6-2-3	12-0-0	17-9-13	24-0-0
6-2-3	5-9-13	5-9-13	6-2-3

Scale = 1:39.6



8-5-13	15-6-3	24-0-0
8-5-13	7-0-7	8-5-13

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.41	Vert(LL)	-0.12	8-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.69	Vert(CT)	-0.27	8-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 102 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-6-11 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=74(LC 12)
Max Uplift 1=-188(LC 12), 5=-188(LC 13)
Max Grav 1=888(LC 1), 5=888(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1771/443, 2-3=-1544/404, 3-4=-1544/404, 4-5=-1771/443
BOT CHORD 1-8=-374/1607, 6-8=-188/1065, 5-6=-361/1607
WEBS 3-6=-133/533, 4-6=-372/204, 3-8=-133/533, 2-8=-372/204

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 12-0-0, Exterior(2R) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 24-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=188, 5=188.

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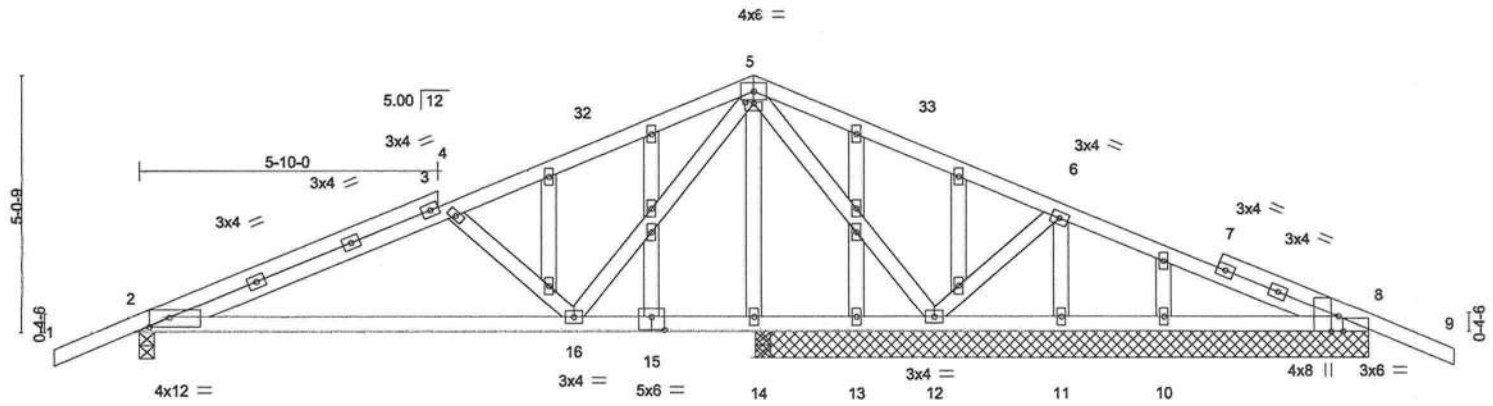
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.	T28088550
3212507	T05G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:49 2022 Page 1
ID:2jmv4WygRhB5xAfKERQk28z3SFU-AqMOmy9yTMbZ9lCN8D2lHPsFw3kzoIONpb1plmz3QDa

-1-8-0 | 6-2-3 | 12-0-0 | 17-9-13 | 24-0-0 | 25-8-8
1-8-0 | 6-2-3 | 5-9-13 | 5-9-13 | 6-2-3 | 1-8-0

Scale = 1:45.3



8-5-13 | 12-4-0 | 15-6-3 | 24-0-0
8-5-13 | 3-10-3 | 3-2-3 | 8-5-13

Plate Offsets (X,Y)-- [2:0-4-12,0-2-3], [5:0-2-0,0-0-4], [8:0-3-8,Edge], [8:0-1-1,Edge], [15:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.47	Vert(LL)	-0.08	16-28	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.44	Vert(CT)	-0.16	16-28	>894	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 147 lb	FT = 20%

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

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

REACTIONS. All bearings 11-11-8 except (jt=length) 2=0-3-8, 14=0-3-8, 14=0-3-8.
(lb) - Max Horz 2=80(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 8, 10 except 2=-162(LC 12), 12=-229(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 13, 11, 10, 14, 14, 8 except 2=591(LC 23), 8=260(LC 24), 12=948(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-803/229, 4-5=-544/170, 5-6=-66/441
BOT CHORD 2-16=-226/741
WEBS 5-12=-818/217, 6-12=-357/205, 5-16=-128/508, 4-16=-418/212

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-2, Interior(1) 1-4-2 to 12-0-0, Exterior(2R) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 25-8-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 2x4 MT20 unless otherwise indicated.
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 20.0psf 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) 8, 10, 8 except (jt=lb) 2=162, 12=229.

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Date:

June 24,2022

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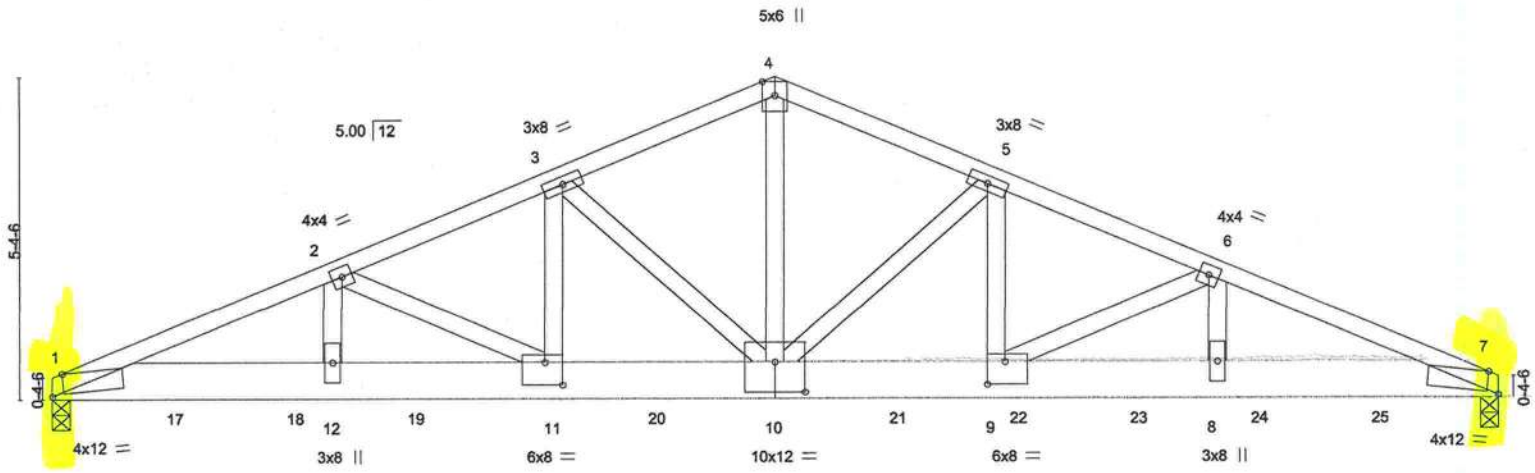
Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.	T28088551
3212507	T06	Common Girder	1	3	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:51 2022 Page 1
ID:2jmv4WygRhB5xAfKERQk28z3SFU-6DU9BeBC?zsGO2MmGe5mMqxVttPdG8AgGuWwMez3QDY

4-7-14	8-3-15	12-0-0	15-8-1	19-4-2	24-0-0
4-7-14	3-8-1	3-8-1	3-8-1	3-8-1	4-7-14

Scale = 1:38.5



4-7-14	8-3-15	12-0-0	15-8-1	19-4-2	24-0-0
4-7-14	3-8-1	3-8-1	3-8-1	3-8-1	4-7-14

Plate Offsets (X,Y)— [1:0-2-6,Edge], [7:0-2-6,Edge], [9:0-3-8,0-4-8], [10:0-6-0,0-6-0], [11:0-3-8,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.89	Vert(LL)	-0.25	10-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.43	10-11	>665	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 471 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
4-10: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8 (req. 0-3-9), 7=0-3-8 (req. 0-3-10)
Max Horz 1=73(LC 27)
Max Uplift 1=-1673(LC 8), 7=-1693(LC 9)
Max Grav 1=9074(LC 2), 7=9189(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-20065/3684, 2-3=-16826/3089, 3-4=-13086/2414, 4-5=-13086/2414, 5-6=-16823/3087, 6-7=-20190/3706
BOT CHORD 1-12=-3428/18490, 11-12=-3428/18490, 10-11=-2830/15519, 9-10=-2756/15516, 8-9=-3375/18606, 7-8=-3375/18606
WEBS 4-10=-1777/9838, 5-10=-4691/932, 5-9=-791/4446, 6-9=-3467/693, 6-8=-467/2752, 3-10=-4695/933, 3-11=-792/4450, 2-11=-3334/669, 2-12=-447/2643

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) WARNING: Required bearing size at joint(s) 1, 7 greater than input bearing size.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1673, 7=1693.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1522 lb down and 286 lb up at 2-0-12, 1522 lb down and 286 lb up at 4-0-12, 1522 lb down and 286 lb up at 6-0-12, 1522 lb down and 286 lb up at 8-0-12, 1522 lb down and 286 lb up at 10-0-12, 1522 lb down and 286 lb up at 12-0-12, 1522 lb down and 286 lb up at 14-0-12, 1522 lb down and 286 lb up at 16-0-12, 1522 lb down and 286 lb up at 18-0-12, and 1522 lb down and 286 lb up at 20-0-12, and 1522 lb down

Continued on page 2

10) The design/selection of such connection device(s) is the responsibility of others.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

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Chesterfield, MO 63017

LOAD CASE(S) Standard

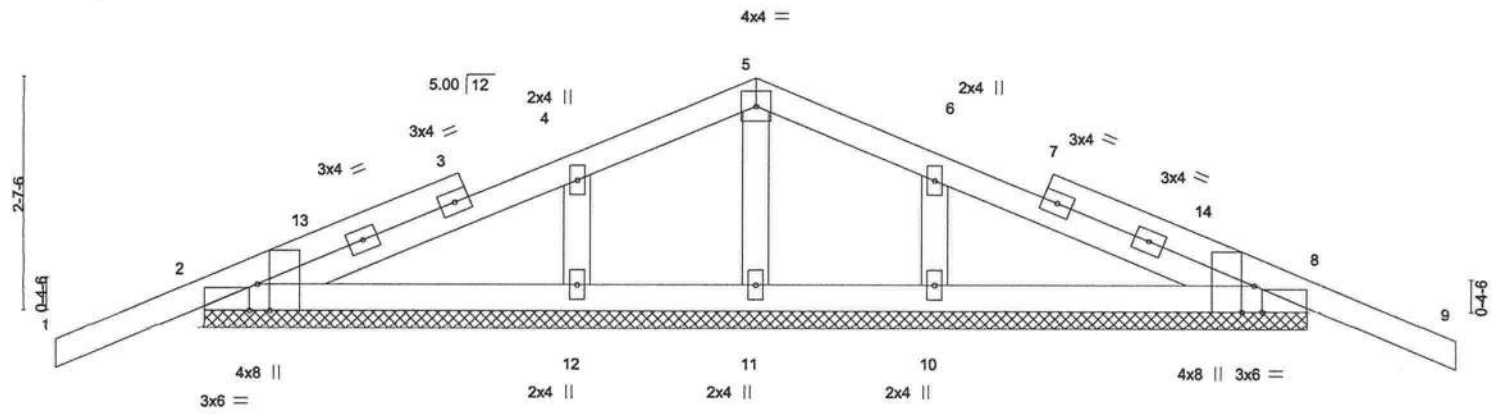
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-7=-54, 1-7=-20
   Concentrated Loads (lb)
   Vert: 10=-1376(B) 11=-1376(B) 17=-1376(B) 18=-1376(B) 19=-1376(B) 20=-1376(B) 21=-1376(B) 22=-1376(B) 23=-1376(B) 24=-1376(B) 25=-1376(B)

Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.
3212507	T07G	Common Supported Gable	1	1	T28088552
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:52 2022 Page 1
ID:2jmv4WygRhB5xAfKERQk28z3SFU-aP2XOzBqmH_70CxypLc?u1Ur?Hrn?mBpVYGUv5z3QDX

-1-8-0 / 1-8-0 | 6-2-0 / 6-2-0 | 12-4-0 / 6-2-0 | 14-0-0 / 1-8-0

Scale = 1:25.9



12-4-0 / 12-4-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	-0.01	9	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	-0.01	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 58 lb	FT = 20%

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

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

REACTIONS. All bearings 12-4-0.
(lb) - Max Horz 2=44(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 11, 12, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 11 except 12=266(LC 23), 10=266(LC 24)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-8-0 to 1-4-0, Exterior(2N) 1-4-0 to 6-2-0, Corner(3R) 6-2-0 to 9-2-0, Exterior(2N) 9-2-0 to 14-0-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 20.0psf 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, 8, 11, 12, 10.

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Date:

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.	T28088553
3212507	T08	Common	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:53 2022 Page 1
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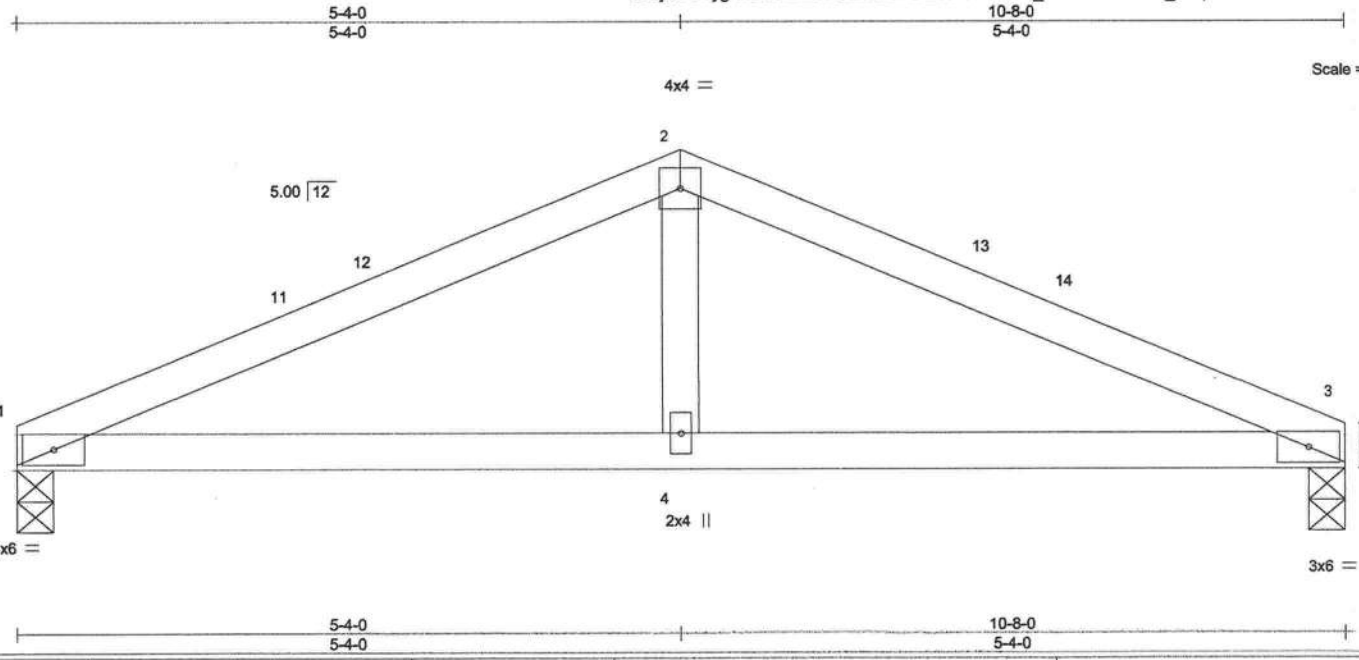

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.29	Vert(LL)	-0.03	4-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.32	Vert(CT)	-0.06	4-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 36 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=-33(LC 13)
Max Uplift 1=-83(LC 12), 3=-83(LC 13)
Max Grav 1=395(LC 1), 3=395(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-629/294, 2-3=-629/294
BOT CHORD 1-4=-208/539, 3-4=-208/539

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-4-0, Exterior(2R) 5-4-0 to 8-4-0, Interior(1) 8-4-0 to 10-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 20.0psf 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.

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Date:

June 24,2022

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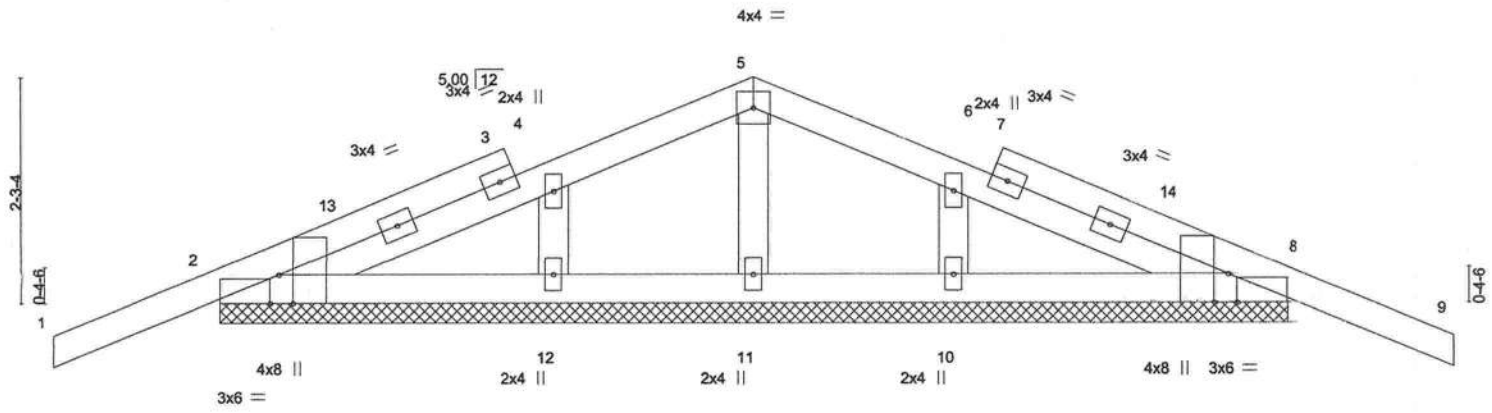
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.	T28088554
3212507	T08G	Common Supported Gable	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:54 2022 Page 1
ID:2jmv4WygRhB5xAfKERQk28z3SFU-WoAHpfD5HuErFW4LxmeT_SZBU4WvTgp6yslazzz3QDV

-1-8-0 | 5-4-0 | 10-8-0 | 12-4-0
1-8-0 | 5-4-0 | 5-4-0 | 1-8-0

Scale = 1:23.2



10-8-0
10-8-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	-0.01	9	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.01	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 51 lb	FT = 20%

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

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

REACTIONS. All bearings 10-8-0.
(lb) - Max Horz 2=39(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 11, 12, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 11, 12, 10

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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-8-0 to 1-4-0, Exterior(2N) 1-4-0 to 5-4-0, Corner(3R) 5-4-0 to 8-4-0, Exterior(2N) 8-4-0 to 12-4-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 20.0psf 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, 8, 11, 12, 10.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 8.

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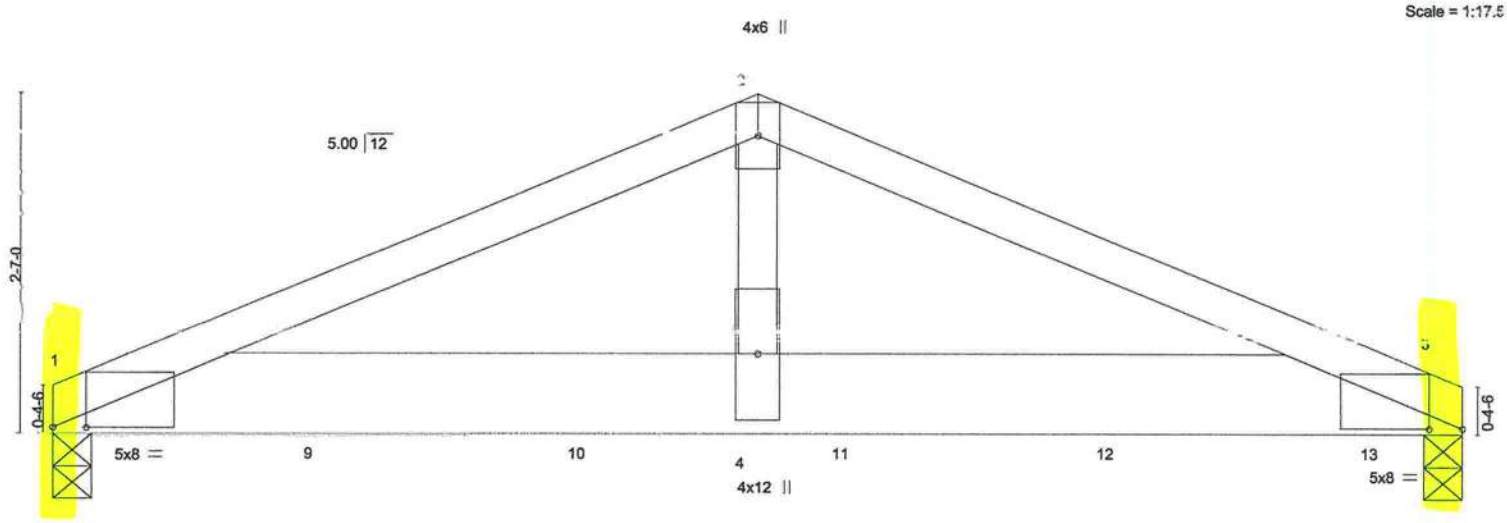
Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.
3212507	T09	Common Girder	1	2	T28088555

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:55 2022 Page 1
ID:2jmv4WygRhB5xAfKERQk28z3SFU-__kf1?Ej2CMitgfXVT9iWg6HFUn_CwvGBWU8VQz3QDU

5-4-0 | 10-8-0
5-4-0 | 5-4-0

Scale = 1:17.5



5-4-0 | 10-8-0
5-4-0 | 5-4-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.41	Vert(LL)	-0.06	4-8	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.40	Vert(CT)	-0.11	4-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 106 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=-32(LC 32)
Max Uplift 1=-666(LC 8), 3=-856(LC 9)
Max Grav 1=3603(LC 2), 3=4678(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6375/1168, 2-3=-6373/1168
BOT CHORD 1-4=-1049/5872, 3-4=-1049/5872
WEBS 2-4=-808/4642

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 0-8-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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) except (jt=lb) 1=666, 3=856.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1522 lb down and 286 lb up at 2-0-12, 1522 lb down and 286 lb up at 4-0-12, 1522 lb down and 286 lb up at 6-0-12, and 1522 lb down and 286 lb up at 8-0-12, and 1528 lb down and 281 lb up at 10-0-12 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=1.25, Plate Increase=1.25

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June 24,2022

Continued on page 2

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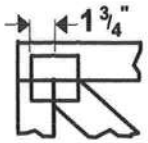
Job	Truss	Truss Type	Qty	Ply	MIKE TODD CONST. - BOYD RES.	
						28088555
12507	T09	Common Girder	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 23 11:06:55 2022 Page 2
ID:2imv4WygRhB5xAfKERQk28z3SFU-__kf1?Ej2CMitgfXVT9iWg6HFUn_CwvGBWU8VQz3QDU

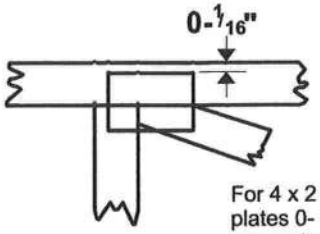
LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-54, 1-3=-20
Concentrated Loads (lb)
Vert: 9=-1376(F) 10=-1376(F) 11=-1376(F) 12=-1376(F) 13=-1381(F)

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

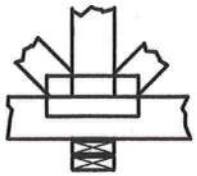
4 x 4

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

LATERAL BRACING LOCATION

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

BEARING

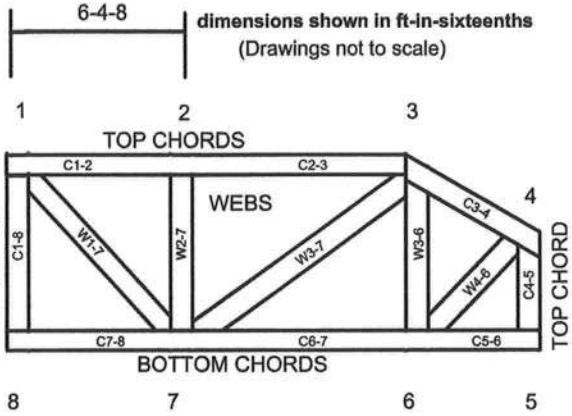


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek®

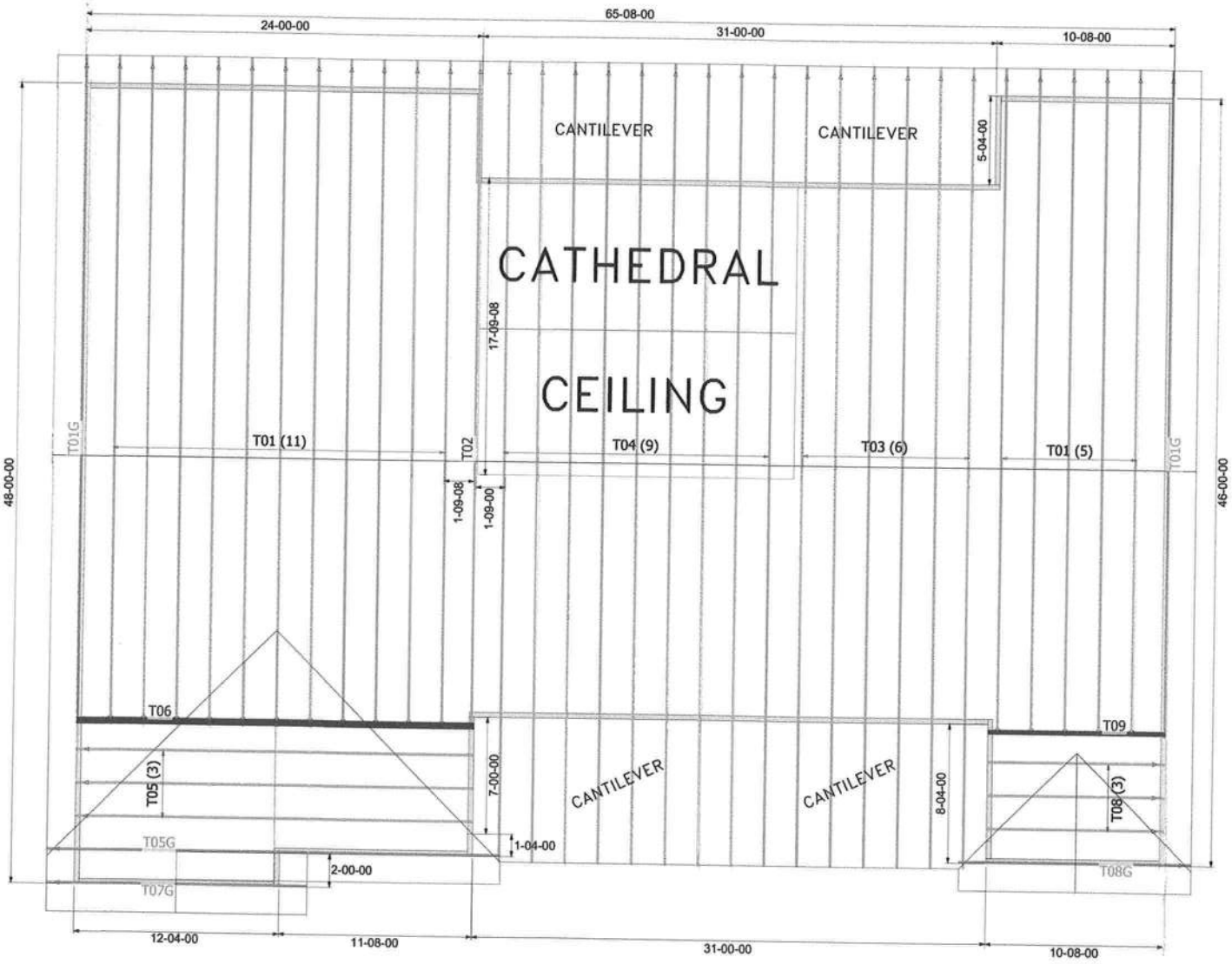
MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

5/12 PITCH – 20" O/H



MITEK PLATE APPROVAL #'S 2197.2–2197.4, BOISE EWP PRODUCT #'S LVL FL1644–R2, BCI JOISTS FL1392–R2

THE ARROW HEAD AT THE END OF THE TRUSS ON THE TRUSS PLACEMENT PLAN (LAYOUT) CORRESPONDS WITH THE LEFT SIDE OF THE INDIVIDUAL TRUSS DRAWING. USE THIS AS AN ORIENTATION GUIDE WHEN SETTING THE TRUSSES ON THE STRUCTURE.

General Notes:

- Per ANSI/TPI 1-2002 all "Truss to Wall" connecti are the responsibility of the Building Designer, not the Truss Manufacturer.
- Use Manufacturer's specifications for all hanger connections unless noted otherwise.
- Trusses are to be 24" o.c. U.N.O.
- All hangers are to be Simpson or equivalent U.S. Use 10d x 1 1/2" Nails in hanger connections to single girder trusses.
- Trusses are not designed to support brick U.N.O.
- Dimensions are Feet-Inches-Sixteenths

Notes:

No back charges will be accepted by Builders FirstSource unless approved in writing first. 850-835-4941

ACQ lumber is corrisive to truss plates. Any ACQ lum that comes in contact with truss plates (i.e. scabbed on tails) must have an approved barrier applied first.

Refer to BCSI-B1 Summary Sheet-Guide for handling, Installing and Bracing of Metal Plate Connected Wood Truss prior to and during truss installation.

It is the responsibility of the Contractor to ensure of th proper orientation of the truss placement plans as to t construction documents and field conditions of the structure orientation. If a reversed or flipped layout is required, it will be supplied at no extra cost by Builder FirstSource.

It is the responsibility of the Contractor to make sure t placement of trusses are adjusted for plumbing drops, lights, ect..., so the trusses do not interfere with these type of items.

All common framed roof or floor systems must be designed as to NOT impose any loads on the floor truss below. The floor trusses have not been designed to car any additional loads from above.

This truss placement plan was not created by an engineer, but rather by the Builders FirstSource staff a is solely to be used as an installation guide and does no require a seal. Complete truss engineering and analysis can be found on the truss design drawings which may b sealed by the truss design engineer.

Gable end trusses require continuous bottom chord bearing. Refer to local codes for wall framing requirements.

Although all attempts have been made to do so, trusses may not be designed symmetrically. Please refer to the individual truss drawings and truss placement plans fo proper orientation and placement.

Builders FirstSource

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FAX: 386-755-7973

Jacksonville
PHONE: 904-772-6100
FAX: 904-772-1973

Tallahassee
PHONE: 850-576-5177

Builder: MIKE TODD CONST.

Legal Address: Boyd Res.

Model: Custom

Date:	Drawn By:	Original Ref #:
6-23-22	KLH	3212507
Floor 1 Job#:	Floor 2 Job#:	Roof Job #:
N/A	N/A	3212507