



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

RE: 3154702 - WCH - WRIGHTS RES.

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Site Information:

Customer Info: WADE CUSTOM HOMES Project Name: Wright Res. Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: 319 SW Healan Ct., N/A
City: Columbia City 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 3 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	T29264088	T01G	11/22/22
2	T29264089	T03G	11/22/22
3	T29264090	T04G	11/22/22

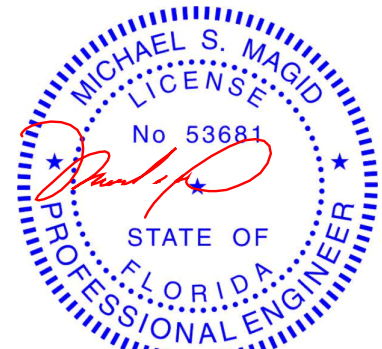


The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Lake City, FL.

Truss Design Engineer's Name: Magid, Michael

My license renewal date for the state of Florida is February 28, 2023.

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.



Michael S. Magid PE No.53681
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 22,2022

Magid, Michael

1 of 1

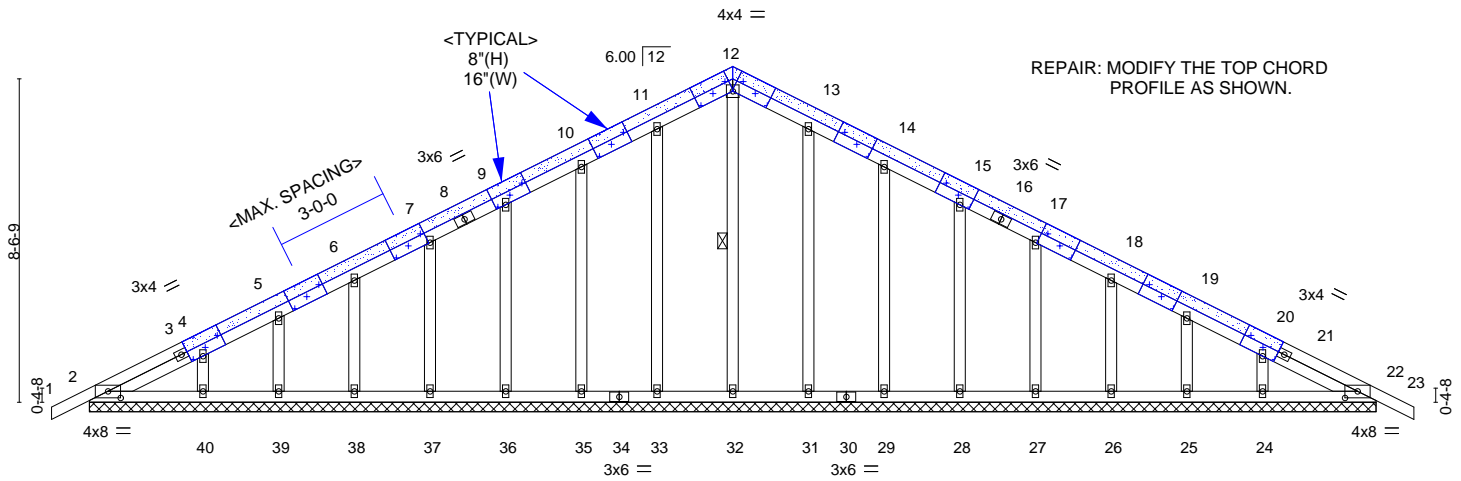
Job	Truss	Truss Type	Qty	Ply	WCH - WRIGHTS RES.	Units: 1.0	T29264088
3154702	T01G	Common Supported Gable	2	1		Eng: JE	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Tue Nov 22 11:12:20 2022 Page 1
ID:xlVXulCmNkmDs6DSptupvzKdT2-arQ62HkJCMBMkvkJETJKvRsYKtfsCumSGsUfyGeq9

1-0-0 1-0-0 17-0-0 17-0-0 34-0-0 35-0-0 1-0-0 1-0-0

Scale = 1:60.9



INSTALL 2 X 4 SPF/DF/SP NO.2 CUT TO FIT TIGHT.

ATTACH 1/2\" PLYWOOD OR OSB GUSSET (15/32\" RATED SHEATHING 32/16 EXP 1) TO ONE FACE OF TRUSS WITH CONSTRUCTION QUALITY ADHESIVE AND (0.113\" X 2\") NAILS PER THE FOLLOWING NAIL SCHEDULE:
2 X 4'S - 3 ROWS: EACH ROW SPACED @ 3\" O.C. INTO EACH COVERED TRUSS MEMBER. USE 2\" MEMBER END DISTANCE.

Plate Offsets (X,Y)-- [2:0-4-0,0-2-1], [22:0-4-0,0-2-1]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.09	Vert(LL)	-0.00	22	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.06	Vert(CT)	0.00	22	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.01	22	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S							
									Weight: 212 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.
WEBS 1 Row at midpt 12-32

REACTIONS.

All bearings 34-0-0.
(lb) - Max Horz 2=186(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 33, 35, 36, 37, 38, 39, 40, 31, 29, 28, 27, 26, 25, 22 except 24=104(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 32, 33, 35, 36, 37, 38, 39, 40, 31, 29, 28, 27, 26, 25, 24, 22

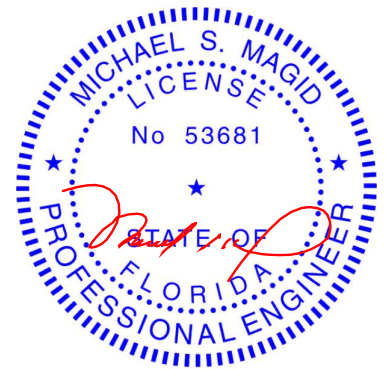
FORCES.

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

TOP CHORD 10-11=-96/276, 11-12=-117/334, 12-13=-117/334, 13-14=-96/276

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 2-4-13, Exterior(2N) 2-4-13 to 17-0-0, Corner(3R) 17-0-0 to 20-4-13, Exterior(2N) 20-4-13 to 35-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 33, 35, 36, 37, 38, 39, 40, 31, 29, 28, 27, 26, 25, 22 except (jt=lb) 24=104.



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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 22,2022

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WCH - WRIGHTS RES.	Units: 1.0	T29264089
3154702	T03G	GABLE	1	1		Eng: JE	

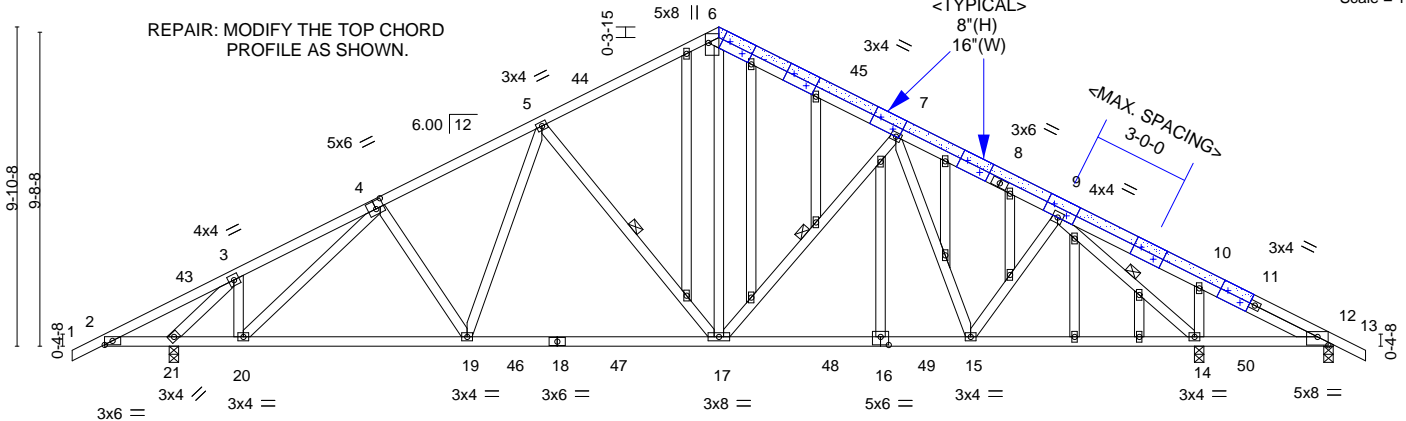
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Tue Nov 22 11:12:23 2022 Page 1

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1-0-0 4-1-12 8-6-5 13-6-5 19-0-0 24-5-11 29-5-11 33-10-4 38-0-0 39-0-0
1-0-0 4-1-12 4-4-9 5-0-0 5-5-11 5-5-11 5-0-0 4-4-9 4-1-12 1-0-0

Scale = 1:71.3



INSTALL 2 X 4 SPF/DF/SP NO.2 CUT TO FIT TIGHT.



ATTACH 1/2" PLYWOOD OR OSB GUSSET (15/32" RATED SHEATHING 32/16 EXP 1) TO ONE FACE OF TRUSS WITH CONSTRUCTION QUALITY ADHESIVE AND (0.113" X 2") NAILS PER THE FOLLOWING NAIL SCHEDULE:
2 X 4'S - 3 ROWS: EACH ROW SPACED @ 3" O.C. INTO EACH COVERED TRUSS MEMBER. USE 2" MEMBER END DISTANCE.

2-1-12 2-0-0 4-1-12 11-2-9 19-0-0 26-9-7 33-8-8 33-10-4 38-0-0
2-0-0 2-0-0 2-0-0 7-0-13 7-9-7 7-9-7 6-11-1 0-1-12 4-1-12
0-1-12

Plate Offsets (X,Y)-- [4:0-3-0,0-3-0], [6:0-3-6,Edge], [12:0-4-0,0-3-1], [16:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.32	Vert(LL)	-0.15 17-19	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.73	Vert(CT)	-0.25 17-19	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.51	Horz(CT)	0.07 14	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS						
							Weight: 278 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 4-4-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-17, 9-14, 5-17

REACTIONS.

(size) 12=0-3-8, 21=0-3-8, 14=0-3-8
Max Horz 21=-214(LC 17)
Max Uplift 12=-79(LC 10), 21=-558(LC 12), 14=-577(LC 13)
Max Grav 12=97(LC 24), 21=1488(LC 2), 14=1660(LC 2)

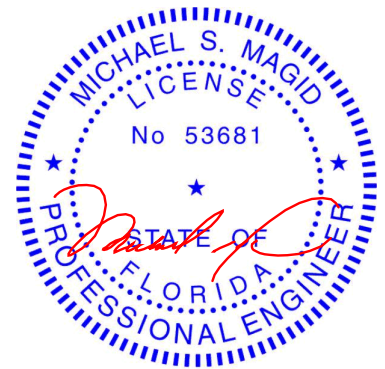
THIS REPAIR IS APPLICABLE TO DRAWING NUMBER(S):
T29264089-(T03G) AND T29264090-(T04G)
FOR ALL LUMBER, PLATES, ETC. NOT SHOWN,
REFER TO THE ABOVE DRAWING NUMBER(S).

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

TOP CHORD 2-3=-357/293, 3-4=-1315/525, 4-5=-1701/635, 5-6=-1257/554, 6-7=-1295/568,
7-9=-1457/543, 9-10=-83/368, 10-12=-162/367
BOT CHORD 2-21=-223/405, 20-21=-502/1223, 19-20=-588/1532, 17-19=-447/1395, 15-17=-283/1263,
14-15=-239/1074, 12-14=-292/199
WEBS 6-17=-310/891, 7-17=-325/306, 9-15=-37/362, 9-14=-1850/577, 5-17=-491/366,
5-19=-115/360, 4-20=-497/252, 3-20=-104/497, 3-21=-1887/768

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 18-10-1, Exterior(2R) 18-10-1 to 22-7-10, Interior(1) 22-7-10 to 39-0-0 zone; cantilever left exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 21=558, 14=577.



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Date:

November 22, 2022

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Builders FirstSource (Lake City, FL) Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Tue Nov 22 11:12:25 2022 Page 1
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 1-0-0 6-6-0 11-6-0 17-0-0 19-0-0 24-4-0 28-8-0 33-8-8 38-0-0 39-0-0
 1-0-0 6-6-0 5-0-0 5-6-0 2-0-0 5-4-0 4-4-0 5-0-8 4-3-8 1-0-0

[illegible]

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-8-5 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 8-13
OTHERS	2x4 SP No.3		

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

TOP CHORD 2-3=3852/1620, 3-4=3540/1443, 4-5=2365/856, 5-6=1671/671, 6-7=1786/671,
7-8=1472/588, 8-9=637/1844, 9-10=686/1802

BOT CHORD 2-17=1584/3498, 16-17=1150/2902, 15-16=600/2113, 14-15=337/1537,
13-14=225/871, 11-13=1583/660

WEBS 3-17=298/315, 4-17=230/612, 4-16=782/549, 5-16=546/1508, 5-15=1517/691,
6-15=546/1349, 7-15=132/285, 7-14=516/245, 8-14=166/647, 8-13=3230/1038

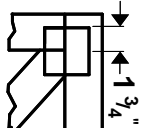
November 22, 2022

WARNING - verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH/473 Rev. 3/19/2020 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

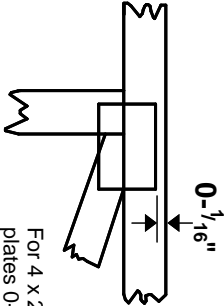
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

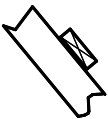
* Plate location details available in **MiTek 20/20** software or upon request.

PLATE SIZE

4 X 4

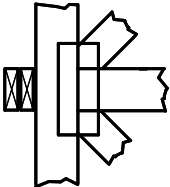
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)

