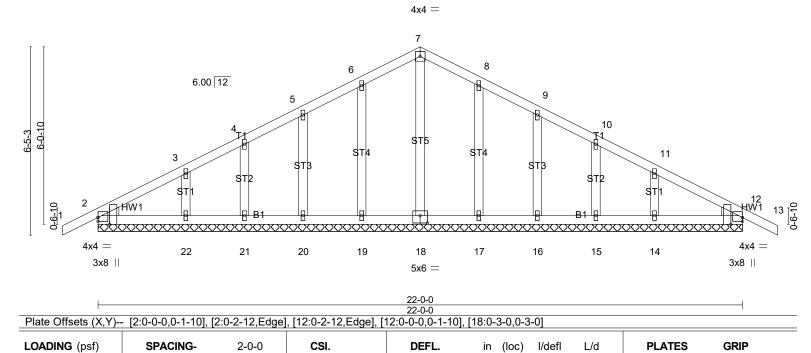
Job	Truss	Truss Type	Qty	Ply	Freedom Const/Wellons/Winston	
27449	G1	Common Supported Gable	1	1		
					Job Reference (optional)	
C&R Building Supply, Au	utryville NC		8.430 s Jar	n 20 202	1 MiTek Industries, Inc. Mon Jul 10 16:26:33 2023 Page 1	
		I	D:oOrFoot170	C2KlbuW9	3NW5By3q3T-7DGtUWTQfZi8Cf?G9KPtyU_9ke9A8r921YhqzkyzQk	4
լ -1-2-8 լ	1 <sup>-</sup>	1-0-0			22-0-0 23-2-8	
1-2-8	1	1-0-0			11-0-0 1-2-8	

Scale = 1:39.3



**LUMBER-**

TCLL

TCDL

BCLL

**BCDL** 

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

20.0

10.0

10.0

0.0

OTHERS 2x4 SP No.3

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

TOP CHORD

BOT CHORD

Vert(LL)

Vert(CT)

Horz(CT)

**BRACING-**

-0.00

-0.00

0.00

13

12

12

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

MT20

Weight: 119 lb

244/190

FT = 20%

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

120

120

n/a

n/r

n/r

n/a

**REACTIONS.** All bearings 22-0-0.

(lb) - Max Horz 2=117(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16,

1.15

1.15

YES

15, 14, 12

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 22,

17, 16, 15, 14, 12

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

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

TC

BC

WB

Matrix-S

0.10

0.06

0.06

- 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 1.5x4 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

27449	G2	Common Structural Gab	le 1	1	Job Reference (optic	onal)	
C&R Building Supply	-	2.22		KlbuW93NV	1 MiTek Industries, In V5By3q3T-bPpFhsU2Qso	c. Mon Jul 10 16:26:34 202 q?qpaSj1x6ViWJw2VatH?BGCQ	
	<del>-1-2-8</del>  -2-8	6-0-0 6-0-0		1.	2-0-0 6-0-0	13-2-8	
			4x4 =			Sca	le = 1:30.9
6-4-10	10.000 xxxxxx	3 T1 ST2 ST1 ST2	ST3	ST2	T1 7 ST1	8 9 11-0	
	16 	15 14	13 12-0-0 12-0-0	12	11	10	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	Plate Grip DOL 1 Lumber DOL 1	0-0 <b>CSI.</b> 15 TC 0.13 15 BC 0.05 ES WB 0.09 114 Matrix-R	<b>DEFL.</b> Vert(LL) -0. Vert(CT) -0. Horz(CT) 0.		n/r 120 n/r 120	PLATES GRIP MT20 244/19 Weight: 73 lb FT	0 = 20%
LUMBER- TOP CHORD 2x4 S	SP No.2		BRACING- TOP CHORD	Struc	tural wood sheathing	g directly applied or 6-0-0 o	c purlins,

Ply

Qty

BOT CHORD 2x4 SP No.2

2x4 SP No.3 WFBS OTHERS 2x4 SP No.3

**BOT CHORD** 

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

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

Freedom Const/Wellons/Winston

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 12-0-0.

(lb) - Max Horz 16=-170(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11 Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12,

Truss Type

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

Job

Truss

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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 with a clearance greater than 6-0-0 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) 16, 10 14, 15, 12, 11.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job Truss Truss Type Qty Ply Freedom Const/Wellons/Winston 27449 G3 **GABLE** 1 1 Job Reference (optional) C&R Building Supply, Autryville NC 8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Jul 10 16:26:35 2023 Page 1 ID:oOrFoot17C2KlbuW93NW5By3q3T-3bNevCVgBAysSz9eHlSL1v3W2Sr8cjWKVsAx2dyzQk2 21-6-0 43-0-0

Scale = 1:73.0

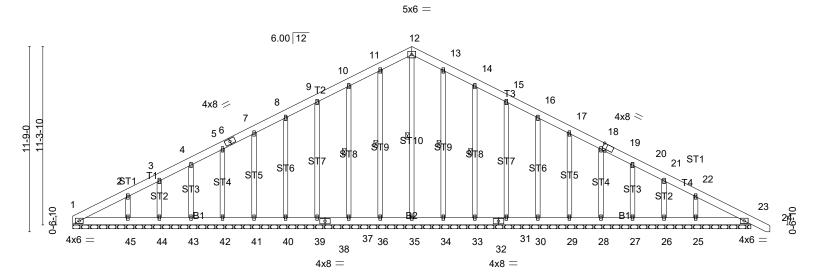


Plate Offsets (X,Y)-- [19:0-2-14,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** in (loc) TCLL 20.0 Plate Grip DOL 1.15 TC 0.04 23 120 Vert(LL) 0.00 n/r MT20 244/190 TCDL 10.0 Lumber DOL 1.15 ВС 0.03 Vert(CT) 0.00 24 n/r 120 0.0 Rep Stress Incr WB Horz(CT) 23 BCLL YES 0.14 0.01 n/a n/a Code IRC2018/TPI2014 **BCDL** 10.0 Matrix-S Weight: 377 lb FT = 20%

43-0-0

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.3 OTHERS

**BRACING-**

TOP CHORD **BOT CHORD** WEBS

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

12-35, 11-36, 10-37, 13-34, 14-33 1 Row at midpt

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 43-0-0.

(lb) - Max Horz 1=-247(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 1, 23, 37, 39, 40, 41, 42, 43, 44, 45, 33, 31, 30, 29, 28, 27, 26, 25

21-6-0

Max Grav All reactions 250 lb or less at joint(s) 1, 23, 35, 36, 37, 39,

40, 41, 42, 43, 44, 34, 33, 31, 30, 29, 28, 27, 26 except 45=286(LC

13), 25=267(LC 14)

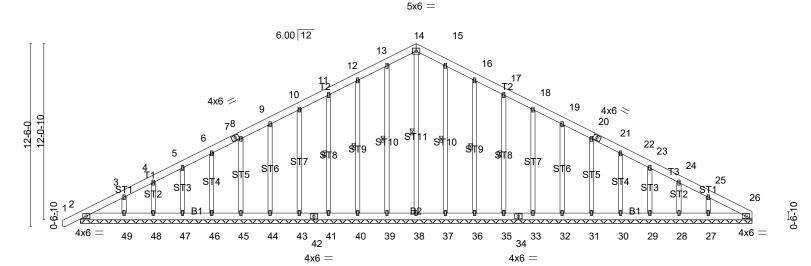
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=43ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 23, 37, 39, 40, 41, 42, 43, 44, 45, 33, 31, 30, 29, 28, 27, 26, 25.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job Truss Truss Type Qty Ply Freedom Const/Wellons/Winston 27449 G4 **GABLE** 1 1 Job Reference (optional) 8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Jul 10 16:26:37 2023 Page 1 C&R Building Supply, Autryville NC ID:oOrFoot17C2KlbuW93NW5By3q3T-? VOKuWxjnDZhGJ1OAUp7K8siFWj4e9dyAf26VyzQk0 23-0-0

Scale = 1:78.9



5-1-12 5-1-12				36-10-4 31-8-8					40-10-4 46-0-0 4-0-0 5-1-12			
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.Ó	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	ìí	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	26	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-S	, ,					Weight: 416 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1

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

B2: 2x6 SP 2400F 2.0E

OTHERS 2x4 SP No.3

BRACING-

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

1 Row at midpt 14-38, 13-39, 12-40, 11-41, 15-37,

16-36, 17-35

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 46-0-0.

(lb) - Max Horz 2=267(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 2, 40, 41, 43, 44, 45, 46,

47, 48, 49, 36, 35, 33, 32, 31, 30, 29, 28, 27

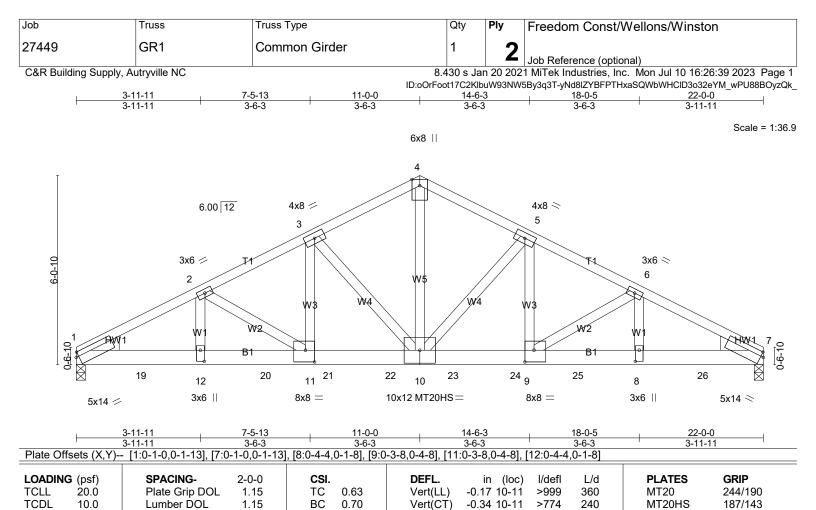
Max Grav All reactions 250 lb or less at joint(s) 2, 26, 38, 39, 40, 41,

43, 44, 45, 46, 47, 48, 49, 37, 36, 35, 33, 32, 31, 30, 29, 28, 27

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=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 40, 41, 43, 44, 45, 46, 47, 48, 49, 36, 35, 33, 32, 31, 30, 29, 28, 27.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.10

0.13 10-11

n/a

>999

n/a

240

Weight: 284 lb

Structural wood sheathing directly applied or 3-8-4 oc purlins.

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

FT = 20%

LUMBER-

BCLL

**BCDL** 

TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x6 SP 2400F 2.0E 2x4 SP No.3 \*Except\* WEBS

0.0

10.0

W5: 2x4 SP 2400F 2.0E

WEDGE

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

(lb/size) 1=8802/0-3-8 (req. 0-3-10), 7=8874/0-3-8 (req. 0-3-11) REACTIONS.

Max Horz 1=-106(LC 25)

Max Uplift1=-821(LC 8), 7=-828(LC 8)

Rep Stress Incr

Code IRC2018/TPI2014

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

TOP CHORD 1-2=-16069/1516, 2-3=-13696/1323, 3-4=-10653/1068, 4-5=-10653/1068,

NO

WB

Matrix-MS

0.87

5-6=-13729/1326, 6-7=-16120/1521

**BOT CHORD** 1-19=-1312/14281, 12-19=-1312/14281, 12-20=-1312/14281,

11-20=-1312/14281, 11-21=-1091/12239, 21-22=-1091/12239, 10-22=-1091/12239, 10-23=-1094/12269, 23-24=-1094/12269,

9-24=-1094/12269, 9-25=-1316/14327, 8-25=-1316/14327, 8-26=-1316/14327,

7-26=-1316/14327

**WEBS** 4-10=-884/9242, 5-10=-4142/429, 5-9=-366/4218, 6-9=-2430/261,

6-8=-183/2272, 3-10=-4097/424, 3-11=-361/4170, 2-11=-2412/259,

2-12=-181/2255

#### 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 0-7-0 oc.

Bottom chords connected as follows: 2x6 - 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=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const/Wellons/Winston
27449	GR1	Common Girder	1	2	Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Jul 10 16:26:39 2023 Page 2 ID:oOrFoot17C2KlbuW93NW5By3q3T-yNd8lZYBFPTHxaSQWbWHClD3o32eYM wPU88BOyzQk

#### **NOTES-**

5) All plates are MT20 plates unless otherwise indicated.

- 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 with a clearance greater than 6-0-0 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=821, 7=828.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1592 lb down and 159 lb up at 2-0-12, 1592 lb down and 159 lb up at 4-0-12, 1592 lb down and 159 lb up at 4-0-12, 1592 lb down and 159 lb up at 10-0-12, 1592 lb down and 159 lb up at 12-0-12, 1592 lb down and 159 lb up at 12-0-12, 1592 lb down and 159 lb up at 12-0-12, and 1592 lb down and 159 lb up at 18-0-12, and 1592 lb down and 159 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

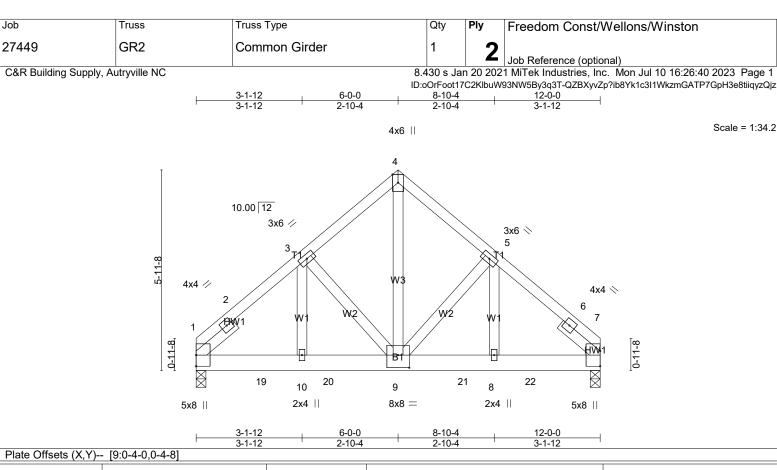
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 13-16=-20

Concentrated Loads (lb)

Vert: 8=-1592(F) 12=-1592(F) 19=-1592(F) 20=-1592(F) 21=-1592(F) 22=-1592(F) 23=-1592(F) 24=-1592(F) 25=-1592(F) 26=-1592(F)



LOADIN TCLL	<b>G</b> (psf) 20.0		0-0 .15	CSI. TC	0.47	<b>DEFL.</b> Vert(LL)	in -0.04	(loc) 8-9	l/defl >999	L/d 360	PLATES MT20	<b>GRIP</b> 244/190
TCDL	10.0	Lumber DOL 1	.15	BC	0.62	Vert(CT)	-0.08	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	014	Matri	x-MS	Wind(LL)	0.03	8-9	>999	240	Weight: 168 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

Structural wood sheathing directly applied or 5-2-8 oc purlins.

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

#### LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.1 2x4 SP No.3 WEBS

**SLIDER** Left 2x4 SP No.3 -È 1-6-0, Right 2x4 SP No.3 -È 1-6-0

(lb/size) 1=4151/0-3-8 (min. 0-2-7), 7=4091/0-3-8 (min. 0-2-7) REACTIONS.

Max Horz 1=120(LC 26)

Max Uplift1=-347(LC 8), 7=-342(LC 8)

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

1-2=-2858/223, 2-3=-4601/416, 3-4=-3546/367, 4-5=-3546/367, TOP CHORD

5-6=-4603/416. 6-7=-2830/221

**BOT CHORD** 1-19=-265/3417, 10-19=-265/3417, 10-20=-265/3417, 9-20=-265/3417,

9-21=-262/3416, 8-21=-262/3416, 8-22=-262/3416, 7-22=-262/3416

**WEBS** 4-9=-402/4204, 5-9=-1049/153, 5-8=-113/1463, 3-9=-1050/153,

3-10=-111/1457

# 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.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 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=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed: 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 1=347, 7=342.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const/Wellons/Winston
27449	GR2	Common Girder	1	2	Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Jul 10 16:26:40 2023 Page 2 ID:oOrFoot17C2KlbuW93NW5By3q3T-QZBXyvZp?ib8Yk1c3I1WkzmGATP7GpH3e8tiiqyzQjz

#### **NOTES-**

8) This truss is designed in accordance with the 2018 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) 1457 lb down and 131 lb up at 1-11-4, 1457 lb down and 131 lb up at 3-11-4, 1457 lb down and 131 lb up at 5-11-4, and 1457 lb down and 131 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

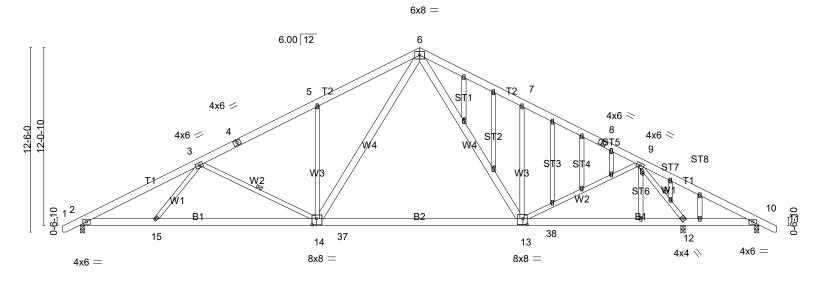
Vert: 1-4=-60, 4-7=-60, 11-15=-20

Concentrated Loads (lb)

Vert: 9=-1457(F) 19=-1457(F) 20=-1457(F) 21=-1457(F) 22=-1457(F)

Job	Truss	Truss Type		Qty	Ply	Freedom Const/We	ellons/Winston	
27449	SG1	GABLE		1	1			
						Job Reference (optional	)	
C&R Building Su	ipply, Autryville NC		8.430 s Ja	n 20 202	1 MiTek Industries, Inc. I	Mon Jul 10 16:26:41	2023 Page 1	
				ID:oOrFoot1	7C2KlbuW	93NW5By3q3T-ulkv9FZRm0	j?Aucod?ZlHAJUrsk9?K	3DtodFFHyzQjy
-1-2-8	8-2-11	15-7-5	23-0-0	30-4-1	1	37-9-5	46-0-0	47-2-8
1-2-8	8-2-11	7-4-11	7-4-11	7-4-1	1	7-4-11	8-2-11	1-2-8

Scale = 1:78.1



	J-1-	12 10	J- I I-U			13-10-9			10-11-0	0-1-12 3-	·U-U
Plate Offsets (X,Y) [9:0-1-5,0-0-0], [13:0-3-8,0-4-12],			], [14:0-3-8	3,0-5-0], [2	27:0-2-0,0-0-12],						
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.44 13-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.64 13-14	>771	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.06 12	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-AS	Wind(LL)	0.07 13-14	>999	240	Weight: 398 lb	FT = 20%

LUMBER-

**WEBS** 

TOP CHORD 2x6 SP No.1

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

B2: 2x6 SP 2400F 2.0E

2x4 SP No.3 \*Except\*

W4: 2x6 SP No.1

2x4 SP No.3 **OTHERS** 

**BRACING-**

WEBS

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied.

Rigid ceiling directly applied.

1 Row at midpt 3-14, 9-12

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in

accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1674/0-3-8 (min. 0-2-1), 12=2150/0-3-8 (min. 0-2-9), 10=-13/0-3-8 (min. 0-1-8)

Max Horz 2=270(LC 7)

Max Uplift2=-164(LC 8), 12=-146(LC 8), 10=-127(LC 19) Max Grav 2=1724(LC 13), 12=2185(LC 14), 10=76(LC 20)

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

TOP CHORD 2-3=-3154/221, 3-4=-2518/211, 4-5=-2427/250, 5-6=-2553/377, 6-7=-2063/346, 7-8=-1939/219, 8-9=-2035/180, 9-10=-60/698

**BOT CHORD** 2-15=-95/2942, 14-15=-156/2871, 14-37=0/1555, 37-38=0/1555, 13-38=0/1555,

12-13=-43/948, 10-12=-522/122

**WEBS** 5-14=-478/198, 7-13=-465/197, 3-14=-656/179, 6-14=-139/1479,

6-13=-85/672, 9-13=0/961, 9-12=-2468/277, 3-15=0/386

## NOTES-

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

- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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.
- This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=164, 12=146, 10=127.

Continuéd on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const/Wellons/Winston
27449	SG1	GABLE	1	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Jul 10 16:26:41 2023 Page 2 ID:oOrFoot17C2KlbuW93NW5By3q3T-ulkv9FZRm0j?Aucod?ZlHAJUrsk9?K3DtodFFHyzQjy

#### **NOTES-**

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Job	Truss	Truss Type			Qty	Ply	Freedom Const/V	/ellons/Winston	
27449	T1	FAN			10	1			
							Job Reference (option	ıal)	
C&R Building Supply, Autryville NC 8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Jul 10 16:26:42 2023 Page 1									
_				ID:o	OrFoot17C	2KlbuW93	3NW5By3q3T-MylHNba3XI	Krso1B_Bj4_qOrd1G58	SkmeM6SMpnjyzQjx
1	7-8-11	14-7-5	21-6-0	1	28-4-1	1 ,	35-3-5	43-0-0	44-2-8
ſ	7-8-11	6-10-11	6-10-11		6-10-1	1	6-10-11	7-8-11	1-2-8
									Scale = 1:75.6
				5x6 =					

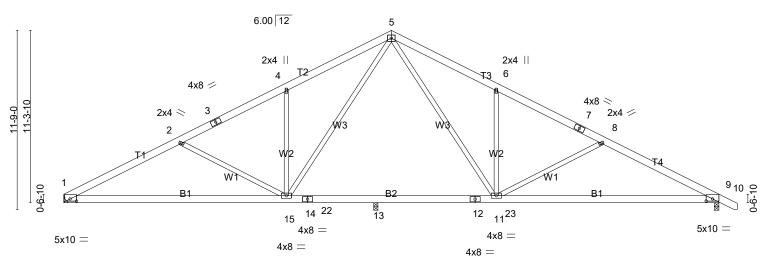


Plate Offsets (X,Y)-	- [1:0-5-0,0-1-12], [9:0-5-0,0-1-12]	0-0-11	0-0-11		14-7-0
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.38 BC 0.63 WB 0.69	DEFL. in (loc) Vert(LL) -0.24 15-18 Vert(CT) -0.54 15-18 Horz(CT) 0.08 9		PLATES         GRIP           MT20         244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL) 0.12 15-18	>999 240	Weight: 297 lb FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WEBS 2x4 SP No.3 BRACING-

8-0-11

TOP CHORD BOT CHORD Structural wood sheathing directly applied.

Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

43-0-0

**REACTIONS.** (lb/size) 1=1612/Mechanical, 9=1689/0-3-8 (min. 0-2-0), 13=205/0-3-8 (min. 0-1-8)

Max Horz 1=-246(LC 6)

Max Uplift1=-139(LC 8), 9=-177(LC 8)

Max Grav 1=1612(LC 1), 9=1689(LC 1), 13=468(LC 12)

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

TOP CHORD 1-2=-2915/342, 2-3=-2423/254, 3-4=-2318/279, 4-5=-2408/401,

5-6=-2433/397, 6-7=-2343/275, 7-8=-2447/246, 8-9=-2933/336

1-15=-197/2624, 15-22=0/1556, 14-22=0/1556, 13-14=0/1556, 12-13=0/1556,

12-23=0/1556, 11-23=0/1556, 9-11=-190/2592

WEBS 4-15=-408/190, 6-11=-410/191, 2-15=-578/175, 5-15=-135/1050,

5-11=-129/1147, 8-11=-565/171

# NOTES-

**BOT CHORD** 

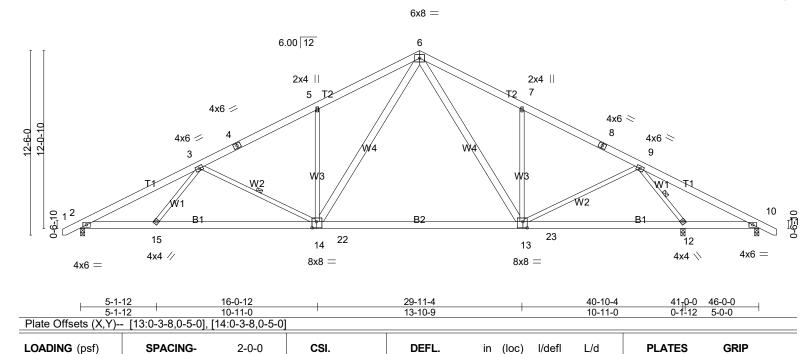
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=43ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 1=139, 9=177.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Job	Truss	Truss Type		Qty	Ply	Freedom Const/We	ellons/Winston		
27449	T2	FAN		5	1				
						Job Reference (optional	)		
C&R Building Supply, Au	utryville NC		8.4	130 s Jar	1 20 202°	l MiTek Industries, Inc. I	Mon Jul 10 16:26:43 20:	23 Page 1	
			ID:oO	rFoot17C2	2KlbuW93	NW5By3q3T-q8sfaxbildzjPB	mBIQbDMbOpLgPdTEZWK	.66MJ9yzQjw	
-1-2-8 8-	2-11 15	5-7-5 23-	0-0	30-4-1	1	37-9-5	46-0-0	47-2-8	
1-2-8 8-	2-11 7-	4-11 7-4	-11	7-4-11		7-4-11	8-2-11	1-2-8	

Scale = 1:78.1

244/190

FT = 20%



LUMBER-

TCLL

TCDL

BCLL

**BCDL** 

TOP CHORD 2x6 SP No.1

20.0

10.0

10.0

0.0

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

B2: 2x6 SP 2400F 2.0E

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

**WEBS** 2x4 SP No.3 \*Except\*

W4: 2x6 SP No.1

**BRACING-**

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

WEBS

TOP CHORD **BOT CHORD** 

-0.44 13-14

-0.64 13-14

0.07 13-14

12

0.06

Structural wood sheathing directly applied.

360

240

n/a

240

Rigid ceiling directly applied.

>999

>771

>999

n/a

1 Row at midpt 3-14, 9-12

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

MT20

Weight: 358 lb

REACTIONS. (lb/size) 2=1674/0-3-8 (min. 0-2-1), 12=2150/0-3-8 (min. 0-2-9), 10=-13/0-3-8 (min. 0-1-8)

TC

ВС

WB

Matrix-AS

0.28

0.69

0.58

Max Horz 2=270(LC 7)

Max Uplift2=-164(LC 8), 12=-146(LC 8), 10=-127(LC 19) Max Grav 2=1724(LC 13), 12=2185(LC 14), 10=76(LC 20)

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

TOP CHORD 2-3=-3154/221, 3-4=-2518/211, 4-5=-2427/250, 5-6=-2553/377,

6-7=-2063/346, 7-8=-1939/219, 8-9=-2035/180, 9-10=-60/698

1.15

1.15

YES

**BOT CHORD** 2-15=-95/2942, 14-15=-156/2871, 14-22=0/1555, 22-23=0/1555, 13-23=0/1555,

12-13=-43/948, 10-12=-522/122

**WEBS** 5-14=-478/198, 7-13=-465/197, 3-14=-656/179, 6-14=-139/1479,

6-13=-85/672, 9-13=0/961, 9-12=-2468/277, 3-15=0/386

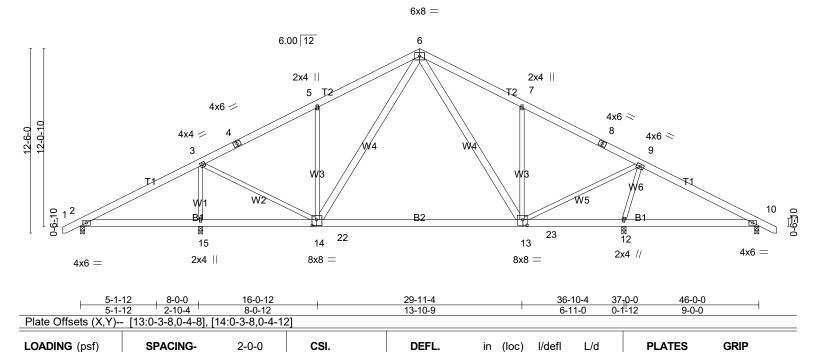
# NOTES-

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

- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 100 lb uplift at joint(s) except (jt=lb) 2=164, 12=146, 10=127.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Job	Truss	Truss Type	Truss Type			Freedom Const/We	ellons/Winston	
27449	Т3	FAN		2	1			
						Job Reference (optional	)	
C&R Building Supply, A	utryville NC			8.430 s Ja	n 20 202	1 MiTek Industries, Inc. I	Mon Jul 10 16:26:44 2	2023 Page 1
				ID:oOrFoot1	7C2KlbuW	93NW5By3q3T-IKQ1oHcK3x	5a1LLNI86Svpx?Y4mdC	iEfZmrvrcyzQjv
<sub>-1</sub> 1-2-8 8-	-2-11	15-7-5	23-0-0	30-4-1	11	37-9-5	46-0-0	47-2-8
1-2-8 8-	-2-11	7-4-11	7-4-11	7-4-1	1	7-4-11	8-2-11	1-2-8

Scale = 1:78.1



LUMBER-

TCLL

TCDL

BCLL

**BCDL** 

TOP CHORD 2x6 SP No.1

20.0

10.0

10.0

0.0

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

B2: 2x6 SP 2400F 2.0E

WEBS 2x4 SP No.3 \*Except\*

W4: 2x6 SP No.1

BRACING-

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

TOP CHORD BOT CHORD

-0.37 13-14

-0.56 13-14

0.03 13-14

10

0.01

Structural wood sheathing directly applied.

360

240

n/a

240

Rigid ceiling directly applied.

>922

>611

>999

n/a

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

MT20

Weight: 355 lb

244/190

FT = 20%

**REACTIONS.** All bearings 0-3-8.

(lb) - Max Horz 2=270(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 2, 10 except 12=-119(LC 8),

TC

ВС

WB

Matrix-AS

0.25

0.58

0.55

15=-123(LC 8)

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Grav All reactions 250 lb or less at joint(s) except 2=389(LC 19),

12=1491(LC 14), 10=511(LC 14), 15=1639(LC 13)

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

3-4=-1257/107, 4-5=-1157/145, 5-6=-1239/271, 6-7=-1256/269,

1.15

1.15

YES

7-8=-1134/141, 8-9=-1233/102, 9-10=-438/62

BOT CHORD 14-22=0/893, 22-23=0/893, 13-23=0/893, 10-12=0/352

WEBS 5-14=-448/195, 7-13=-455/199, 3-14=0/1072, 6-14=-66/492, 6-13=-62/467,

9-13=-8/1191, 9-12=-1460/192, 3-15=-1526/187

#### NOTES-

TOP CHORD

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

- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 100 lb uplift at joint(s) 2, 10 except (it=lb) 12=119, 15=123.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const/Wellons/Winston
27449	Т3	FAN	2	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Jul 10 16:26:44 2023 Page 2 ID:oOrFoot17C2KlbuW93NW5By3q3T-IKQ1oHcK3x5a1LLNI86Svpx?Y4mdCiEfZmrvrcyzQjv

Job	Truss	Truss Type		Qty	Ply	Freedom Const/We	ellons/Winston	
27449	T4	FAN		1	1			
						Job Reference (optional	)	
C&R Building Supply, A	utryville NC		8.	430 s Jar	n 20 202	1 MiTek Industries, Inc. 1	Mon Jul 10 16:26:45 2023 I	Page 1
			ID:oOr	Foot17C2h	(lbuW93N	W5By3q3T-mX_Q?ddyqFDR	fVwZsrdhR0TAFU6sx9VpoQbT	O2yzQju
-1-2-8 8-	2-11   1	5-7-5	23-0-0	30-4-1	1	37-9-5	46-0-0	
1-2-8 8-	.2-11 7-	4-11	7-4-11	7-4-1		7-4-11	8-2-11	

Scale = 1:78.1

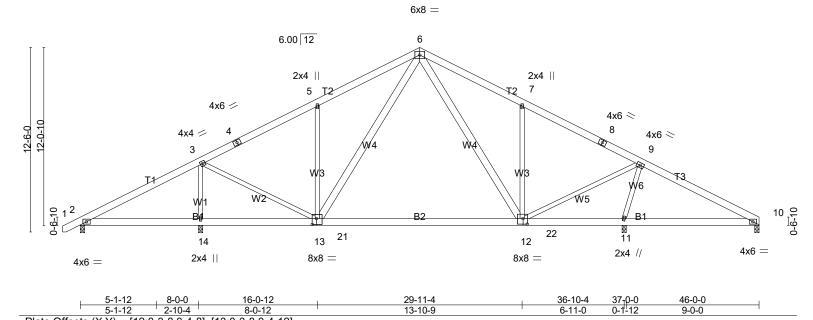


Plate Offsets (X,Y)-- [12:0-3-8,0-4-8], [13:0-3-8,0-4-12]

LOADING (psf TCLL 20.0 TCDL 10.0 BCLL 0.0	Plate Lumb	CING- e Grip DOL ber DOL Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.25 0.58 0.55	DEFL. Vert(LL) Vert(CT) Horz(CT)	(loc) 12-13 12-13 10	l/defl >922 >611 n/a	L/d 360 240 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL 10.0		e IRC2018/TF		Matri		Wind(LL)	12-13	>999	240	Weight: 352 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SP No.1

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

B2: 2x6 SP 2400F 2.0E

WEBS 2x4 SP No.3 \*Except\*

W4: 2x6 SP No.1

### BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied.

Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

## **REACTIONS.** All bearings 0-3-8.

(lb) - Max Horz 2=255(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 2, 10 except 11=-127(LC 8),

14=-128(LC 8)

Max Grav All reactions 250 lb or less at joint(s) except 2=389(LC 19),

11=1485(LC 14), 10=444(LC 14), 14=1625(LC 13)

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

TOP CHORD 3-4=-1250/101, 4-5=-1150/139, 5-6=-1233/264, 6-7=-1246/262,

7-8=-1127/135, 8-9=-1226/96, 9-10=-436/52

BOT CHORD 13-21=0/882, 21-22=0/882, 12-22=0/882, 10-11=0/349

WEBS 5-13=-448/195, 7-12=-454/199, 3-13=0/1065, 6-13=-63/487, 6-12=-58/460,

9-12=-12/1183, 9-11=-1451/198, 3-14=-1512/193

# NOTES-

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

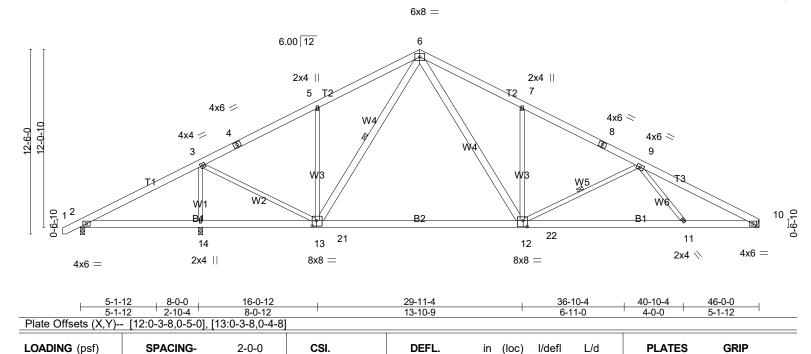
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=37ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 100 lb uplift at joint(s) 2, 10 except (jt=lb) 11=127, 14=128.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const/Wellons/Winston
27449	T4	FAN	1	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Jul 10 16:26:45 2023 Page 2 ID:oOrFoot17C2KlbuW93NW5By3q3T-mX\_Q?ddyqFDRfVwZsrdhR0TAFU6sx9VpoQbTO2yzQju

Job	Truss	Truss Type	Truss Type			Freedom Const/We	Freedom Const/Wellons/Winston		
27449	T5	FAN		5	1				
						Job Reference (optional	)		
C&R Building Supp	oly, Autryville NC	·		8.430 s Jai	n 20 202	1 MiTek Industries, Inc. I	Mon Jul 10 16:26:46 2023 F	age 1	
				ID:oOrFoot17C	2KlbuW9	3NW5By3q3T-FjYoDzdabYLI	GfVmQZ8w_E0KStRkga_y04K0	wUyzQjt	
<sub>-</sub> 1-2-8	8-2-11	15-7-5	23-0-0	30-4-1	1	37-9-5	46-0-0		
1-2-8	8-2-11	7-4-11	7-4-11	7-4-1	1	7-4-11	8-2-11		

Scale = 1:78.1



LUMBER-

TCLL

TCDL

**BCLL** 

**BCDL** 

TOP CHORD 2x6 SP No.1

20.0

10.0

10.0

0.0

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

B2: 2x6 SP 2400F 2.0E

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

WEBS 2x4 SP No.3 \*Except\*

W4: 2x6 SP No.1

BRACING-

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

WEBS

TOP CHORD BOT CHORD

) Rig

-0.41 12-13

-0.61 12-13

10

12

0.04

0.06

Structural wood sheathing directly applied.

360

240

n/a

240

Rigid ceiling directly applied.

>999

>742

>999

n/a

1 Row at midpt 6-13, 9-12

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

MT20

Weight: 353 lb

244/190

FT = 20%

**REACTIONS.** (lb/size) 2=221/0-3-8 (min. 0-1-8), 10=1477/Mechanical, 14=2048/0-3-8 (min. 0-2-9)

Max Horz 2=267(LC 7)

Max Uplift2=-38(LC 8), 10=-111(LC 8), 14=-173(LC 8) Max Grav 2=290(LC 19), 10=1543(LC 14), 14=2146(LC 13)

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

TOP CHORD 2-3=-44/408, 3-4=-1500/125, 4-5=-1398/163, 5-6=-1458/289, 6-7=-2288/345,

1.15

1.15

YES

7-8=-2162/218, 8-9=-2254/179, 9-10=-2910/200

BOT CHORD 2-14=-321/86, 13-14=-321/86, 13-21=0/1243, 21-22=0/1243, 12-22=0/1243,

11-12=-159/2446, 10-11=-101/2525

WEBS 5-13=-445/194, 7-12=-477/198, 3-13=-33/1616, 6-13=-215/259, 6-12=-137/1482, 9-12=-665/185, 3-14=-2023/239, 9-11=0/387

# NOTES-

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

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

TC

ВС

WB

Matrix-AS

0.29

0.67

0.66

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

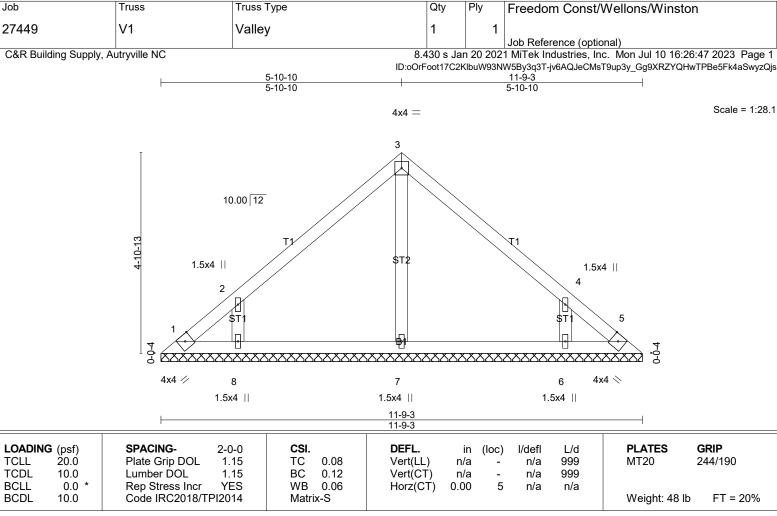
4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

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) 2 except (it=lb) 10=111, 14=173.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const/Wellons/Winston		
27449	T5	FAN	5	1			
					Job Reference (optional)		

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Jul 10 16:26:46 2023 Page 2 ID:oOrFoot17C2KlbuW93NW5By3q3T-FjYoDzdabYLlGfVmQZ8w\_E0KStRkga\_y04K0wUyzQjt



LUMBER-

FORCES.

TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP No.2

**OTHERS** 2x4 SP No.3 **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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 11-9-3.

Max Horz 1=-109(LC 6) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-104(LC 8),

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

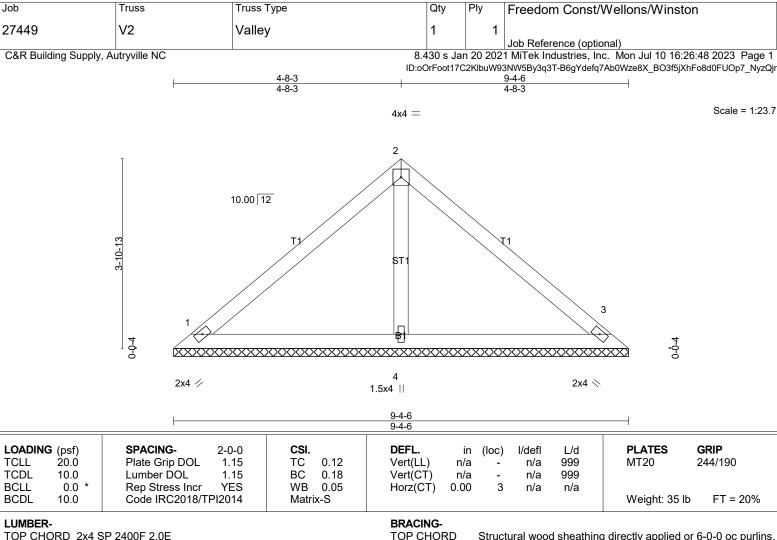
6=-104(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=320(LC 13), 6=319(LC 14)

2-8=-258/146, 4-6=-258/146 **WEBS** 

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

- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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=104, 6=104.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP No.2

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=189/9-4-6 (min. 0-1-8), 3=189/9-4-6 (min. 0-1-8), 4=307/9-4-6 (min.  $\overline{0-1-8}$ )

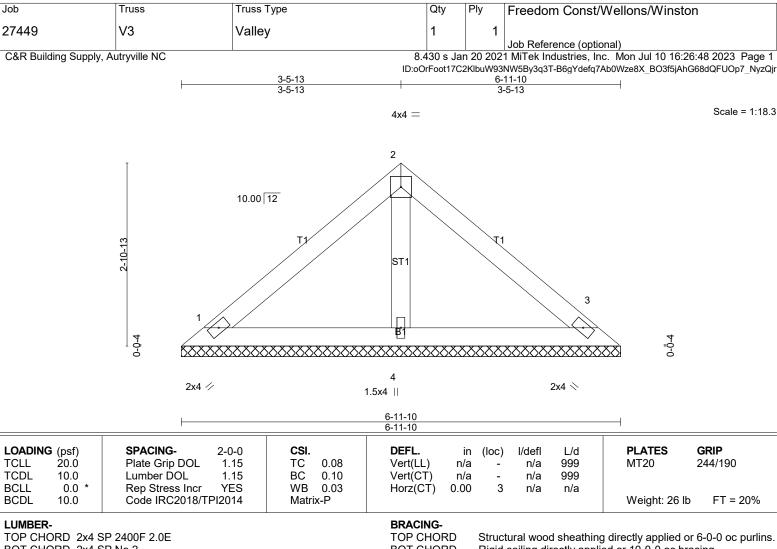
Max Horz 1=85(LC 7)

Max Uplift1=-33(LC 8), 3=-33(LC 8)

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=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed: MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



TOP CHORD 2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP No.2 **OTHERS** 2x4 SP No.3 **BOT CHORD** 

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=146/6-11-10 (min. 0-1-8), 3=146/6-11-10 (min. 0-1-8), 4=201/6-11-10 (min. 0-1-8)

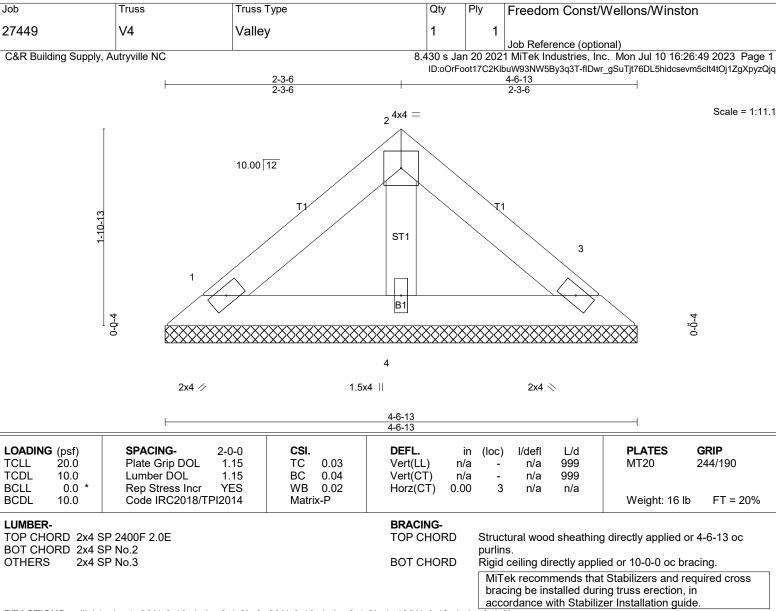
Max Horz 1=61(LC 7)

Max Uplift1=-32(LC 8), 3=-32(LC 8)

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=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed: MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



**REACTIONS.** (lb/size) 1=89/4-6-13 (min. 0-1-8), 3=89/4-6-13 (min. 0-1-8), 4=123/4-6-13 (min. 0-1-8)

Max Horz 1=-37(LC 6)

Max Uplift1=-19(LC 8), 3=-19(LC 8)

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=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

27449		V5	Valley		1	Job Reference (option	nal)			
C&R Buil	ding Supply, A	-	.8		8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Jul 10 16:26:50 2023 Page 1 ID:oOrFoot17C2KlbuW93NW5By3q3T-7UnJ2Kg5fnrjlGoXfODs84B33VwecWKYxhlE3FyzQjp					
ŀ	9-1-8 9-1-8				18-3-0 9-1-8					
				4x4 =			Scale = 1:29.6			
4-6-12	1	6.00 12 1.5	x4    71    5T1	\$T2		1.5x4    4 11 \$T1	\$ *\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
	4x4 <table-cell-columns></table-cell-columns>		9 8	7		6	4x4 ≈			
		•	.5x4    3x6 =	1.5x4		1.5x4				
0-0 0-8	)-8 )-8			18-3-0 18-2-8						
LOADING TCLL TCDL BCLL	20.0 10.0 0.0 *	Plate Grip DOL Lumber DOL Rep Stress Incr	.15 BC 0 ES WB 0	DEFL. 12 Vert(LL) 16 Vert(CT) 07 Horz(CT)	in (loc) n/a - n/a - 0.00 5	n/a 999 n/a 999	<b>PLATES GRIP</b> MT20 244/190			
BCDL	10.0	Code IRC2018/TPI2	014 Matrix-S	5			Weight: 67 lb FT = 20%			

Qty

#### LUMBER-

Job

Truss

Truss Type

TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3

#### 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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Freedom Const/Wellons/Winston

**REACTIONS.** All bearings 18-2-0.

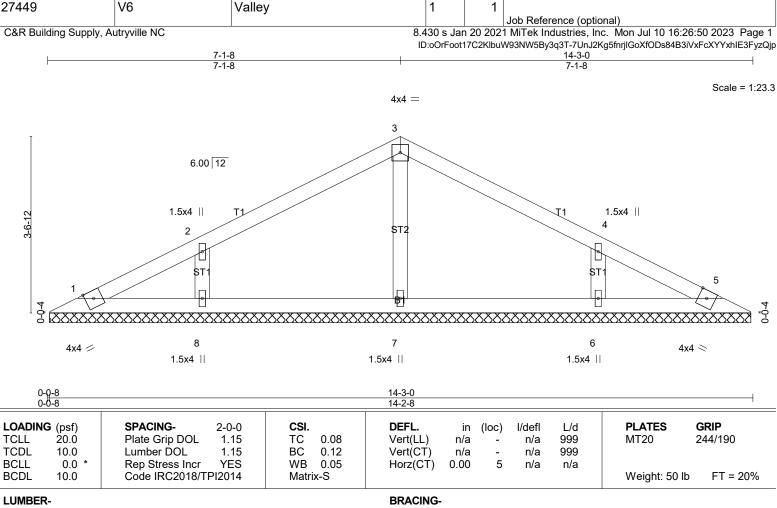
(lb) - Max Horz 1=82(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 9, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except
9=411(LC 19), 6=411(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 2-9=-307/125, 4-6=-307/125

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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, 9, 6
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Qty

Ply

Freedom Const/Wellons/Winston

TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP No.2

OTHERS 2x4 SP No.3

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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 14-2-0.

(lb) - Max Horz 1=63(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 8, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=280(LC 1),

Truss Type

8=312(LC 19), 6=312(LC 20)

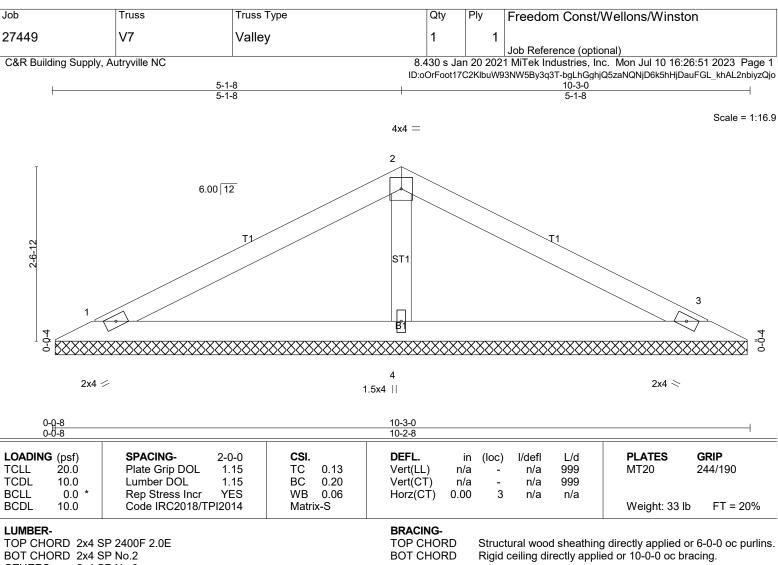
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

# NOTES-

Job

Truss

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 8, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



OTHERS 2x4 SP No.3

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS.

(lb/size) 1=167/10-2-0 (min. 0-1-8), 3=167/10-2-0 (min. 0-1-8), 4=385/10-2-0 (min. 0-1-8)

Max Horz 1=43(LC 7)

Max Uplift1=-25(LC 8), 3=-25(LC 8), 4=-6(LC 8) Max Grav 1=168(LC 19), 3=168(LC 20), 4=385(LC 1)

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

WEBS 2-4=-258/61

# NOTES-

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

- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Freedom Const	/Wellons/Winston
27449	V8	Valley	1	1		
C&P Building 9	Supply, Autryville NC		8 430 e 1	an 20 202	Job Reference (opti	onal) nc. Mon Jul 10 16:26:52 2023 Page 1
Cart ballaling c	supply, Authyville NO				3NW5By3q3T-3tv3T0iLB0	D6R_ayvmpFKDVGQelea4RRqP?nK78yzQjn
		3-1-8 3-1-8	+		6-3-0 3-1-8	
						Caala - 4:44 C
			4x4 =			Scale = 1:11.6
			2			
Ī		6.00 12				
		Ţ1		`	<b>1</b> 1	
1-6-12			ST1			
Ť						3
	1					
			B1			
0-0-4		****		****	****	
Ó			***********		************	××××××××××××××××××××××××××××××××××××××
			4			
	2x4 🖊	1.5	5x4		2x4 <	
	2,4 >	1.3	0.74		2,4 <	
	0- <u>0-8</u> 0-0-8		6-3-0			
			6-2-8			
LOADING (ps: TCLL 20.	SPACING- Plate Grip DOL	2-0-0 <b>CSI.</b> 1.15 TC 0.05	<b>DEFL</b> . Vert(LL)	in (loc) n/a -		PLATES GRIP MT20 244/190
TCDL 10.		1.15 BC 0.06		n/a -		W1120 244/190
	Rep Stress Incr		Horz(CT) 0	.00 3	3 n/a n/a	Weight 10 lb
BCDL 10.	Code IRC2018/	TPI2014 Matrix-P				Weight: 19 lb FT = 20%
LUMBER-	2x4 SP 2400F 2.0E		BRACING- TOP CHORD	Ctm	otural wood abaathin	a directly applied or 6.0.0 as number
BOT CHORD			Rigio	d ceiling directly appl	ig directly applied or 6-0-0 oc purlins. lied or 10-0-0 oc bracing.	
OTHERS	2x4 SP No.3		BOT CHORD	MiT	Tek recommends that	at Stabilizers and required cross
				bra	icing be installed dur	ring truss erection in

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 1=103/6-2-0 (min. 0-1-8), 3=103/6-2-0 (min. 0-1-8), 4=194/6-2-0 (min. 0-1-8)

Max Horz 1=24(LC 7)

Max Uplift1=-18(LC 8), 3=-18(LC 8)

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=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.