

LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (l	oc) <b>I</b> /defi	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.24 15	-16 >999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	ВС	0.32	Vert(CT)	-0.33 15	-16 >875	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.02	13 n/a	n/a		
BCDL	10.0	Code IRC2018/T	P <b>I</b> 2014	Matr	ix-AS	Wind(LL)	-0.09 16	30 >999	240	Weight: 242 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**JOINTS** 

Structural wood sheathing directly applied, except

bracing be installed during truss erection, in

accordance with Stabilizer Installation guide.

MiTek recommends that Stabilizers and required cross

2-0-0 oc purlins (6-0-0 max.): 7-8.

Rigid ceiling directly applied.

1 Brace at Jt(s): 17

LUMBER-

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

T2: 2x4 SP 2400F 2.0E

**BOT CHORD** 2x6 SP 2400F 2.0E \*Except\*

B2: 2x10 SP 2400F 2.0E

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

W2: 2x6 SP No.1, W3: 2x4 SP 2400F 2.0E

**OTHERS** 2x4 SP No.3

SLIDER Left 2x6 SP No.1 -D 1-6-0, Right 2x6 SP No.1 -D 1-6-0

REACTIONS. (lb/size) 2=1087/0-3-8 (min. 0-1-8), 13=1087/0-3-8 (min. 0-1-8)

Max Horz 2=268(LC 7)

Max Uplift2=-74(LC 8), 13=-74(LC 8) Max Grav 2=1353(LC 14), 13=1353(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-491/72, 3-4=-1534/69, 4-5=-1457/90, 5-6=-925/145, 9-10=-925/145, TOP CHORD

10-11=-1456/90, 11-12=-1533/69, 12-13=-493/73, 7-8=-91/365

**BOT CHORD** 2-16=-37/1118, 15-16=0/987, 13-15=0/947

**WEBS** 5-16=0/727, 10-15=0/727, 6-17=-1252/181, 9-17=-1252/181

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) 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) Provide adequate drainage to prevent water ponding.
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 9) Ceiling dead load (5.0 psf) on member(s). 5-6, 9-10, 6-17, 9-17 Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	G1	GABLE	1	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:19 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS00RyE18p-oHmKzby0uo0aLnJVZju36Yd7fj?Lb2mZ6ztUkyzcOKo

# NOTES-

- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 15-16
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13.
- 12) 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.
- 13) 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.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.

28547	G2	Common Supported Ga	able 1	1 Job Reference (option	onal)
C&R Building Supply		40.0.40		20 2021 MiTek Industries, Indu	c. Mon Mar 10 09:38:20 2025 Page 1 ef68Rywuh7RPIf19Q_6QuKV2iLdc2HPzcOKn
<del>-1-</del>   <del>1-</del>	2-8 2-8	10-2-12 10-2-12		20-5-8 10-2-12	21-8-0
			4x4 =		Scale = 1:41.9
7-0-2 0-10-5	2 ST1 B1	ST2 ST3 ST4	7 ST5 ST4	9 ST3 ST2	11 ST1 12 13 PO
	25 24 3x8	23 22 21 20 3x6 =	19 18	17 16	15 14 3x8
	<u> </u>		20-5-8 20-5-8		
LOADING     (psf)       TCLL     20.0       TCDL     10.0       BCLL     0.0 *       BCDL     10.0	Lumber DOL 1.	15 TC 0.13 15 BC 0.05 ES WB 0.10	DEFL. in Vert(LL) -0.0° Vert(CT) -0.0° Horz(CT) 0.00	l 13 n/r 120 l 13 n/r 120	PLATES GRIP MT20 244/190  Weight: 121 lb FT = 20%
LUMBER- TOP CHORD 2x4 S	SP No.2		BRACING- TOP CHORD	Structural wood sheathing	g directly applied or 6-0-0 oc purlins,

Qty

Ply

Job

Truss

Truss Type

TOP CHORD 2x4 SP No.2 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\Caleb Jackson

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

REACTIONS. All bearings 20-5-8.

(lb) - Max Horz 25=-123(LC 6)

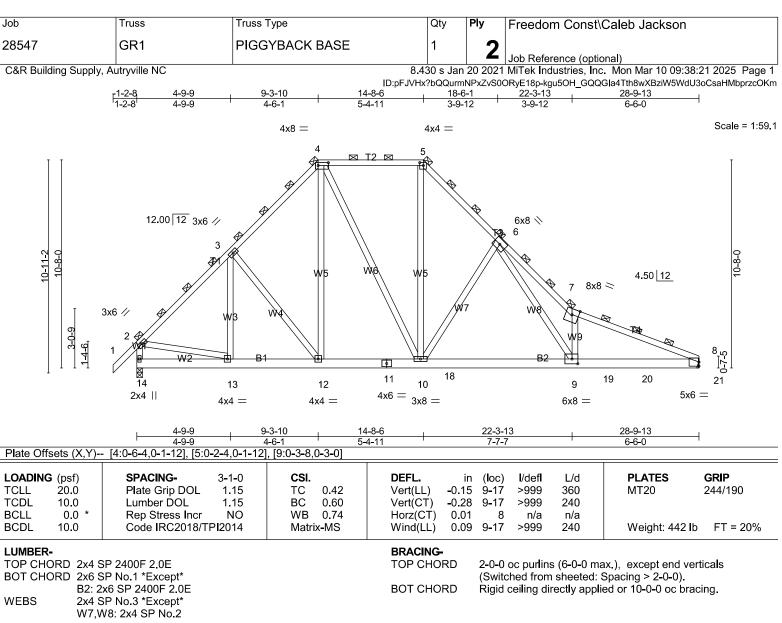
Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 20, 22, 23, 24, 18,

Max Grav All reactions 250 lb or less at joint(s) 25, 14, 19, 20, 22, 23, 24, 18, 17, 16, 15

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

#### **NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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.
- 6) 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, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14 20, 22, 23, 24, 18, 17, 16, 15.
- 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.



LUMBER-

REACTIONS. (lb/size) 8=3836/Mechanical, 14=2117/0-3-8 (min. 0-1-8)

Max Horz 14=-322(LC 6)

Max Uplift8=-169(LC 8), 14=-28(LC 8) Max Grav 8=4017(LC 2), 14=2117(LC 1)

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

TOP CHORD 2-3=-2131/53, 3-4=-1970/173, 4-5=-1572/171, 5-6=-2335/180, 6-7=-8046/354,

7-8=-5917/156, 2-14=-2031/65

**BOT CHORD** 13-14=-209/383, 12-13=0/1399, 11-12=0/1300, 11-18=0/1300, 10-18=0/1300,

9-10=0/2547, 9-19=-83/5478, 19-20=-83/5478, 20-21=-83/5478.

8-21=-83/5478

**WEBS** 3-12=-277/131, 4-12=-32/451, 4-10=-43/700, 5-10=-43/1232, 6-10=-1801/227,

6-9=-280/6070, 7-9=-3899/254, 2-13=0/1290

#### **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=120mph (3-second gust) Vasd=95mph; 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) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	GR1	PIGGYBACK BASE	1	2	Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:21 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS00RyE18p-kgu5OH GQQGla4Tth8wXBziW5WdU3oCsaHMbprzcOKm

#### **NOTES-**

- 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, with BCDL = 10.0psf.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 8=169.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 880 lb down and 87 lb up at 24-0-12, and 877 lb down and 85 lb up at 26-0-12, and 879 lb down and 83 lb up at 28-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

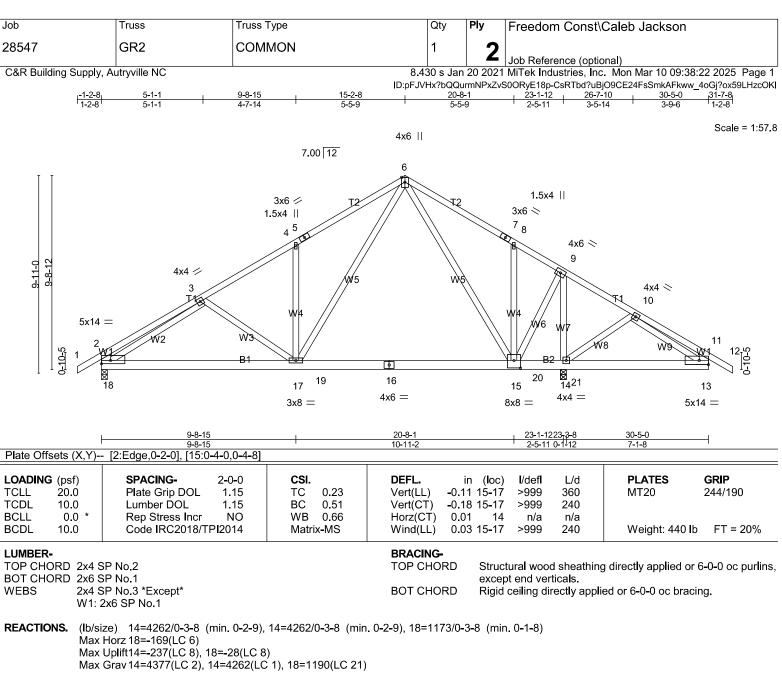
#### LOAD CASE(S) Standard

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

Vert: 1-2=-92, 2-4=-92, 4-5=-93, 5-7=-92, 7-8=-92, 14-15=-31

Concentrated Loads (lb)

Vert: 19=-765(F) 20=-762(F) 21=-764(F)



BOT CHORD 2x6 SP No.1

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

TOP CHORD 2-3=-473/16, 3-4=-1553/49, 4-5=-1574/97, 5-6=-1563/130, 6-7=-1354/178,

7-8=-1356/145, 8-9=-1354/103, 9-10=-26/614, 2-18=-444/57

**BOT CHORD** 17-18=0/1351, 17-19=0/862, 16-19=0/862, 16-20=0/862, 15-20=0/862,

15-21=-489/121, 14-21=-489/121, 13-14=-281/73

**WEBS** 4-17=-337/97. 6-17=-9/919. 6-15=-550/580. 8-15=-277/82. 9-15=-134/3201.

9-14=-3831/196, 10-14=-256/60, 3-18=-1301/34, 10-13=-38/310

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

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

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 14=237.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	GR2	COMMON	1	2	Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:22 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS00RyE18p-CsRTbd?uBj09CE24FsSmkAFkww\_4oGj?ox59LHzcOKI

# 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) 1888 lb down and 165 lb up at 20-1-8, and 1130 lb down and 108 lb up at 22-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

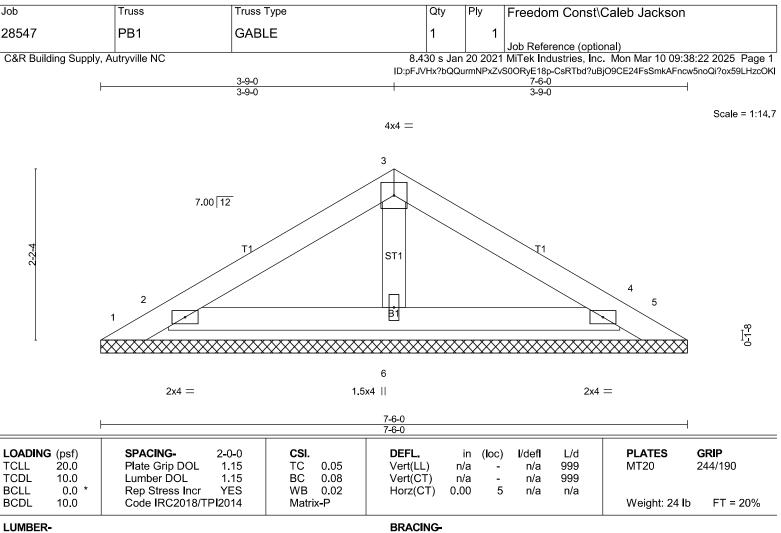
### LOAD CASE(S) Standard

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

Vert: 1-2=-60, 2-6=-60, 6-11=-60, 11-12=-60, 13-18=-20

Concentrated Loads (lb)

Vert: 20=-1744(B) 21=-1121(B)



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 7-6-0.

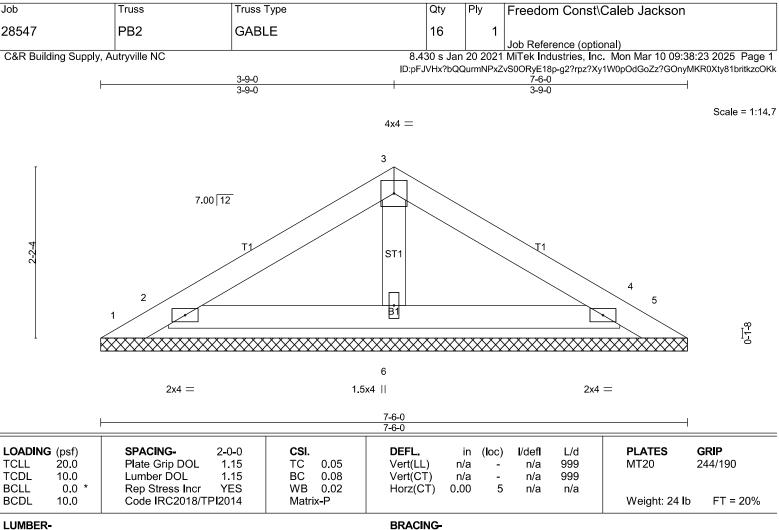
(lb) - Max Horz 1=-32(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=254(LC 1), 4=254(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=120mph (3-second gust) Vasd=95mph; 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2,
- 9) 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.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



**LUMBER-**

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 7-6-0.

(lb) - Max Horz 1=-32(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=254(LC 1), 4=254(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=120mph (3-second gust) Vasd=95mph; 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2,
- 9) 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.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

28547	РВ3	GABLE	1	1	Job Reference (optio	onal)
C&R Building Supply, A	Autryville NC	2-8-6 2-8-6			MiTek Industries, Inc.	. Mon Mar 10 09:38:24 2025 Page 1 sRYBSMHUEpbK7SjosGKMIGFaFQAzcOKj
		-00	4x4 =	200		Scale = 1:17.4
			3 ST1 B1 6 5x4	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2x4 =	8-T-0
	<u> </u>		5-4-11 5-4-11			
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	Plate Grip DOL 1 Lumber DOL 1	CO-0 CSI.  1.15 TC 0.03  1.15 BC 0.05  YES WB 0.01  Matrix-P			n/a 999 n/a 999	PLATES         GRIP           MT20         244/190           Weight: 20 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SF	2400F 2.0E		BRACING- TOP CHORD	Struc	tural wood sheathing	g directly applied or 5-4-11 oc

Qty

Ply

BOT CHORD 2x4 SP No.2

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

purlins.

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

Freedom Const\Caleb Jackson

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

REACTIONS. All bearings 5-4-11.

(lb) - Max Horz 1=46(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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

#### **NOTES-**

Job

Truss

Truss Type

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2,
- 9) 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.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

28547	PB4	GABLE		10	1	lab Dafanana (a		
C&R Building	Supply, Autryville NC		8.4	 30 s Jan	20 2021	Job Reference (o MiTek Industries,	ptional) Inc. Mon Mar 10 09:38	3:25 2025 Page 1
		0.00	ID:pF	JVHx?bQC	)urmNPxZ	vS00RyE18p-cR7bE	De1nUenj3imew_?TMptIB7	75?ncRUvKpyczcOKi
		2-8-6 2-8-6	+		5-4-11 2-8-6			
			4x4 =					Scale = 1:17.4
	2-8-5	12.00 12 T1	3 ST1		<b>4</b> 1	4 5	0-1-8	
	1						177	
		2x4 =	6 1.5x4			2x4 =		
		<u> </u>	5-4-11 5-4-11					
TCDL 10 BCLL 0	ssf) D.0 SPACING- Plate Grip DOL Lumber DOL Code IRC2018/T	YES WB	0.03 Vert(LL 0.05 Vert(CT 0.01 Horz(C	.) n/a Γ) n/a	a -	n/a 999 n/a 999	PLATES MT20 Weight: 20 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORE	D 2x4 SP 2400F 2.0E		BRACII TOP C		Struc	tural wood sheath	ning directly applied or	- 5-4-11 oc

Qty

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

purlins.

**BOT CHORD** 

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

accordance with Stabilizer Installation guide.

Freedom Const\Caleb Jackson

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

REACTIONS. All bearings 5-4-11.

(lb) - Max Horz 1=46(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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

#### **NOTES-**

Job

Truss

Truss Type

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2,
- 9) 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.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

Job	Truss	Truss	Type	Qty	Ply		Freedon	n Const\0	Caleb Jackson	
28547	PB5	GABI	_E	1		2	Job Refere	ence (ontio	nal)	
C&R Building Supp	blv. Autryville NC			8.430 s		- 1	MiTek Indu	ustries. Inc	. Mon Mar 10 09:38:	26 2025 Page 1
<b>3</b>	,,,				oQQurmN	PxZv			yvahrLrUiWiu0PT?XTR	
			2-8-6 2-8-6		5-4- 2-8	-11				
			2-0-0		2-8	<b>-</b> 0				
				4x4 =						Scale = 1:17.4
	2-8-5	12.00	12	ST1		<b>₩</b>	4	5	0-7-8	
		2x4	= 1.	6 5x4			2x4 =			
		-		5-4-11 5-4-11				—		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	3-1-0 1.15 1.15 NO	CSI. TC 0.03 BC 0.04 WB 0.01	DEFL. Vert(LL) Vert(CT) Horz(CT)	in ( n/a n/a 0.00	loc) - - 5	n/a n/a	L/d 999 999 n/a	MT20	<b>GRIP</b> 244/190
BCDL 10.0	Code IRC2018/T	P12014	Matrix-P						Weight: 41 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP No.2

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

TOP CHORD 2-0-0 oc purlins

(Switched from sheeted: Spacing > 2-0-0).

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

REACTIONS. All bearings 5-4-11.

(lb) - Max Horz 1=-71(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-150(LC 13), 5=-111(LC 14) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=349(LC 13), 4=320(LC 1)

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

#### 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: 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. Plv 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=120mph (3-second gust) Vasd=95mph; 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
- 5) 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.
- 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 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) 2, 4 except (jt=lb) 1=150, 5=111.
- 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.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	PB5	GABLE	1	2	Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:26 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS00RyE18p-5dh\_R\_2PFyvahrLrUiWiu0PT?XTRkEwbjZ3MU2zc0Kh

300	Truss	IIuss	туре	Qty	r ıy	Freedom Const	Caleb Jackson
28547	PB6	GAB	LE	1	2	Lab Bafarana (auf	N
C&R Building Suppl	y, Autryville NC				an 20 202 QQurmNPx		onal) c. Mon Mar 10 09:38:26 2025 Page 1 PFyvahrLrUiWiu0PTBXThkEzbjZ3MU2zcOKh
		<b>—</b>	2-8-6 2-8-6	<del></del>	5-4-11 2-8-6	<del></del>	
				4x4 =			Scale = 1:17.4
		12.00	<del>12</del>	3			
	2-8-5		T1//	ST1	11	4 5	
		12/	<u> </u>	· 图 ·	XXXX		1-1 8
		2x4	= 1.9	6 5x4		2x4 =	
				5-4-11 5-4-11			
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/T	2-0-0 1.15 1.15 YES PI2014	CSI. TC 0.02 BC 0.02 WB 0.01 Matrix-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in ( <b>l</b> oc n/a - n/a - ).00 :	n/a 999	PLATES GRIP MT20 244/190  Weight: 41 lb FT = 20%
LUMBER- TOP CHORD 2x4	SP 2400F 2.0E			BRACING- TOP CHORE	) Stru		g directly applied or 5-4-11 oc

BOT CHORD

Qtv

Freedom Const\Caleb Jackson

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

BOT CHORD 2x4 SP No.2

2x4 SP No.3 OTHERS

REACTIONS.

All bearings 5-4-11.

Truss

Truss Type

(lb) - Max Horz 1=46(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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

# NOTES-

Job

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: 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=120mph (3-second gust) Vasd=95mph; 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) 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.
- 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 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) 1, 5, 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.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

28547	PB7	GABLE		8	1	Job Referer	nce (ontion	nal)	
C&R Building Supply	, Autryville NC	2-8-6			20 2021	MiTek Indus	tries, Inc.	Mon Mar 10 09:38 1RI?w11P1xREyehxp\	
			4x4 =						Scale = 1:17.4
	2-8-5	12.00 12 T1	ST1		<b>T</b> 1	4	5	0-1-8	
			6	~~~~	~~~	V V V V V V	✓		
		2x4 =	1.5x4    <u>5-4-11</u> 5-4-11			2x4 =	$\dashv$		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TI	1.15 BC 0 YES WB 0	.03 Vert(LL .05 Vert(C' .01 Horz(C'	.) n/ε Γ) n/ε	a -	n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 20 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 S			BRACI TOP C		Struct	tura <b>l</b> wood s	heathing	directly applied or	5-4-11 oc

Qty

BOT CHORD 2x4 SP No.2

OTHERS 2x4 SP No.3

BOT CHORD

Freedom Const\Caleb Jackson

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 5-4-11.

(lb) - Max Horz 1=46(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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

#### **NOTES-**

Job

Truss

Truss Type

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2,
- 9) 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.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

28547	РВ8	GABLE	1	1	Job Reference (option	onal)	
C&R Building Supply	, Autryville NC				MiTek Industries, Inc	. Mon Mar 10 09:38	
		2-8-6 2-8-6	D:pFJVHx?bQC	0urmNPx∠ <u>5-4-11</u> 2-8-6	vS0ORyE18p-10pksg3fn 	ıZ9Iw9VDb6YAzRVpRL9	9nC/MtBtYTZxzcOKt
		2-8-6		2-8-6	·		
		4x4	=				Scale = 1:17.4
	2-8-5	12.00 12 T1 ST1		<b>1</b> 1	4 5	0-1-8	
		6					
		2x4 =			2x4 =		
		5-4-1 5-4-1	1 1				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	1.15 TC 0.03 Ve 1.15 BC 0.05 Ve YES WB 0.01 Ho	<b>:FL.</b> i ert(LL) n/ ert(CT) n/ orz(CT) 0.0	′a -	n/a 999 n/a 999	PLATES MT20 Weight: 20 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 \$			RACING- OP CHORD	Struc	tural wood sheathin	g directly applied or	5-4-11 oc

Qty

BOT CHORD 2x4 SP No.2

2x4 SP No.3 OTHERS

BOT CHORD

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

Freedom Const\Caleb Jackson

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

REACTIONS. All bearings 5-4-11.

(lb) - Max Horz 1=46(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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

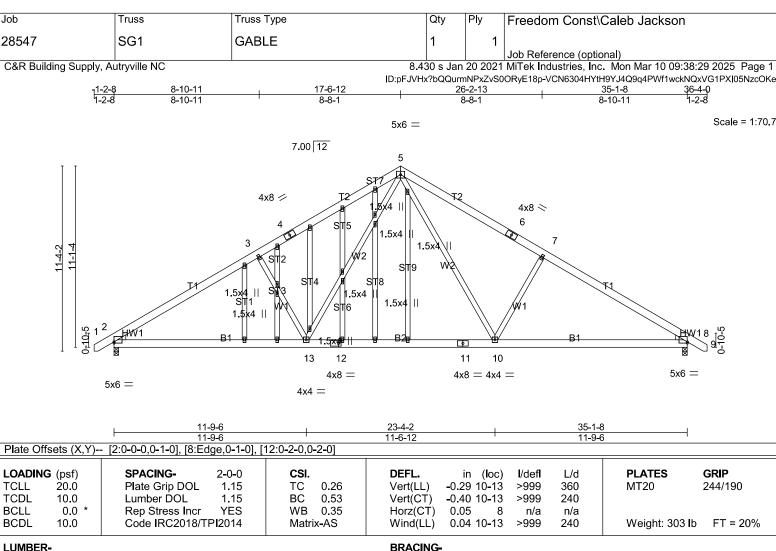
#### **NOTES-**

Job

Truss

Truss Type

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2,
- 9) 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.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



LUMBER-

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

WEDGE

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

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. (lb/size) 2=1471/0-3-8 (min. 0-1-12), 8=1471/0-3-8 (min. 0-1-12)

Max Horz 2=-174(LC 6)

Max Grav 2=1498(LC 13), 8=1498(LC 14)

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

TOP CHORD 2-3=-2243/14, 3-4=-2039/23, 4-5=-1927/71, 5-6=-1927/71, 6-7=-2040/23,

7-8=-2244/14

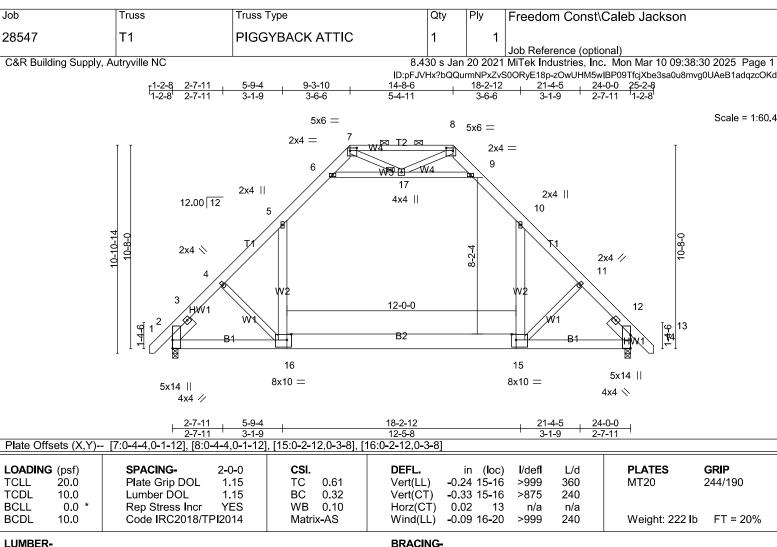
**BOT CHORD** 2-13=0/1950, 12-13=0/1309, 11-12=0/1309, 10-11=0/1309, 8-10=0/1820

**WEBS** 3-13=-479/138, 5-13=0/912, 5-10=0/912, 7-10=-479/138

#### NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; 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) 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) 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) 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.



TOP CHORD

**BOT CHORD** 

**JOINTS** 

Structural wood sheathing directly applied, except

bracing be installed during truss erection, in

accordance with Stabilizer Installation guide

MiTek recommends that Stabilizers and required cross

2-0-0 oc purlins (6-0-0 max.): 7-8.

Rigid ceiling directly applied.

1 Brace at Jt(s): 17

LUMBER-

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

T2: 2x4 SP 2400F 2.0E

2x6 SP 2400F 2.0E \*Except\* **BOT CHORD** 

B2: 2x10 SP 2400F 2.0E

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

W2: 2x6 SP No 1, W3: 2x4 SP 2400F 2.0E

SLIDER Left 2x6 SP No.1 -D 1-6-0, Right 2x6 SP No.1 -D 1-6-0

REACTIONS. (lb/size) 2=1087/0-3-8 (min. 0-1-8), 13=1087/0-3-8 (min. 0-1-8)

Max Horz 2=268(LC 7)

Max Uplift2=-74(LC 8), 13=-74(LC 8) Max Grav 2=1353(LC 14), 13=1353(LC 15)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-491/72, 3-4=-1534/69, 4-5=-1457/90, 5-6=-925/145, 9-10=-925/145,

10-11=-1456/90. 11-12=-1533/69. 12-13=-493/73. 7-8=-91/365

2-16=-37/1118, 15-16=0/987, 13-15=0/947

**WEBS** 5-16=0/727, 10-15=0/727, 6-17=-1252/181, 9-17=-1252/181

# 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=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) Provide adequate drainage to prevent water ponding.

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

5) \* This truss has been designed for a live load of 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) Ceiling dead load (5.0 psf) on member(s), 5-6, 9-10, 6-17, 9-17

7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 15-16

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13.

9) 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.

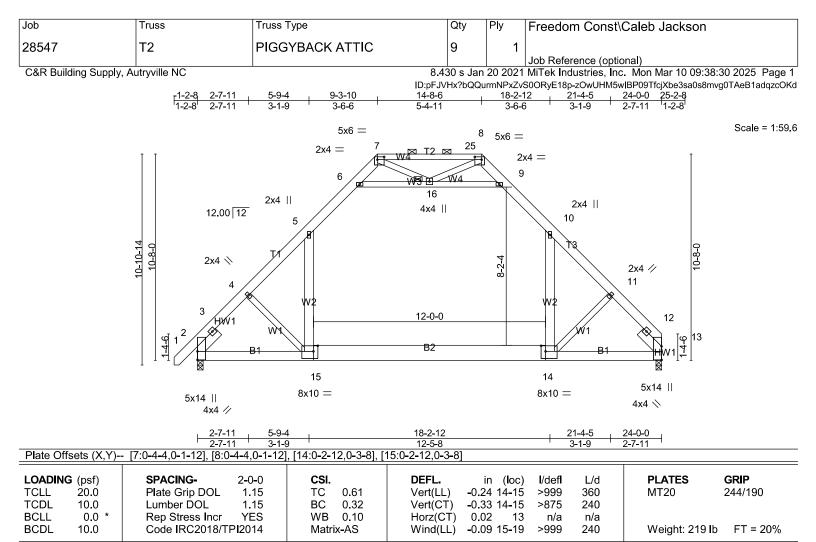
Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	T1	PIGGYBACK ATTIC	1	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:30 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS00RyE18p-zOwUHM5wIBP09TfcjXbe3sa0u8mvg0UAeB1adqzcOKd

### NOTES-

- 10) 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.



**BRACING-**

TOP CHORD

**BOT CHORD** 

**JOINTS** 

Structural wood sheathing directly applied, except

bracing be installed during truss erection, in

accordance with Stabilizer Installation guide.

MiTek recommends that Stabilizers and required cross

2-0-0 oc purlins (6-0-0 max.): 7-8.

Rigid ceiling directly applied.

1 Brace at Jt(s): 16

LUMBER-

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

T2: 2x4 SP 2400F 2.0E

**BOT CHORD** 2x6 SP 2400F 2.0E \*Except\* B2: 2x10 SP 2400F 2.0E

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

W2: 2x6 SP No 1, W3: 2x4 SP 2400F 2.0E

SLIDER Left 2x6 SP No.1 -D 1-6-0, Right 2x6 SP No.1 -D 1-6-0

REACTIONS. (lb/size) 2=1089/0-3-8 (min. 0-1-8), 13=1021/0-3-8 (min. 0-1-8)

Max Horz 2=258(LC 7)

Max Uplift2=-74(LC 8), 13=-36(LC 8) Max Grav 2=1354(LC 14), 13=1290(LC 15)

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

TOP CHORD 2-3=-490/71, 3-4=-1536/69, 4-5=-1459/90, 5-6=-927/145, 9-10=-926/145,

10-11=-1461/90, 11-12=-1538/70, 12-13=-527/65, 7-25=-90/366,

8-25=-90/366

**BOT CHORD** 2-15=-62/1106, 14-15=0/975, 13-14=-13/941

**WEBS** 5-15=0/728, 10-14=0/730, 6-16=-1257/182, 9-16=-1254/182

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) Provide adequate drainage to prevent water ponding.

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

5) \* This truss has been designed for a live load of 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) Ceiling dead load (5.0 psf) on member(s). 5-6, 9-10, 6-16, 9-16

7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-15

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13.

9) 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.

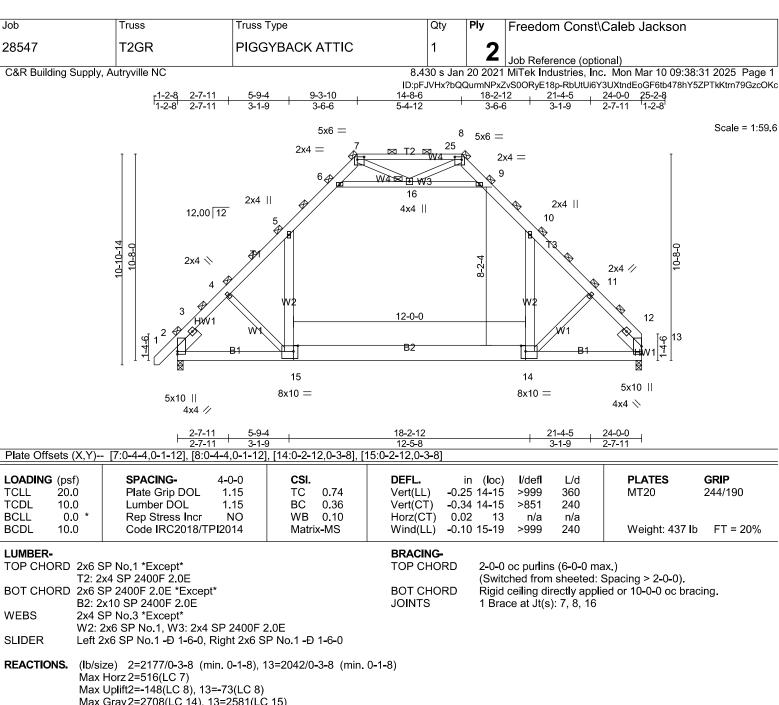
Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	T2	PIGGYBACK ATTIC	9	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:30 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS0ORyE18p-zOwUHM5wIBP09TfcjXbe3sa0s8mvg0TAeB1adqzcOKd

### NOTES-

- 10) 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.



Max Grav 2=2708(LC 14), 13=2581(LC 15)

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

TOP CHORD 2-3=-1295/109, 3-4=-3070/139, 4-5=-2915/180, 5-6=-1853/291, 6-7=-456/440,

8-9=-455/440, 9-10=-1851/291, 10-11=-2918/181, 11-12=-3073/140,

12-13=-1269/70, 7-25=-145/750, 8-25=-145/750 2-15=-121/2202, 14-15=0/1950, 13-14=-27/1884

**WEBS** 5-15=0/1449, 10-14=0/1453, 6-16=-2546/375, 9-16=-2541/375, 4-15=-399/274,

11-14=-425/277, 7-16=-77/310, 8-16=-79/309

#### NOTES-

BOT CHORD

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

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 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) Provide adequate drainage to prevent water ponding.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. Continued on page 2

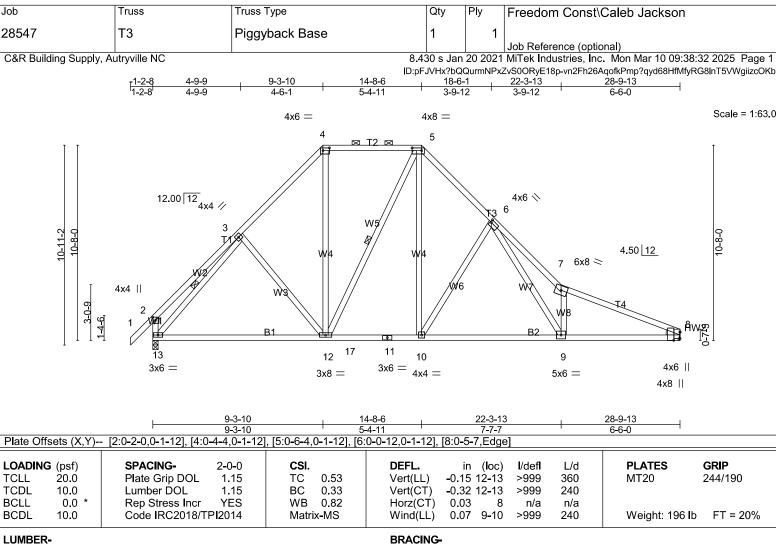
Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	T2GR	PIGGYBACK ATTIC	1	2	Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:31 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS0ORyE18p-RbUtUi6Y3UXtndEoGF6tb478hY5ZPTkKtrn79GzcOKc

### **NOTES-**

- 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) Ceiling dead load (5.0 psf) on member(s). 5-6, 9-10, 6-16, 9-16
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-15
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 2=148.

  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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.



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

WFDGF

Right: 2x4 SP No.3

TOP CHORD

**BOT CHORD** WEBS

Structural wood sheathing directly applied or 4-7-2 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5. Rigid ceiling directly applied or 10-0-0 oc bracing. 5-12, 3-13 1 Row at midpt

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

(lb/size) 13=1230/0-3-8 (min. 0-1-8), 8=1145/Mechanical REACTIONS.

Max Horz 13=-210(LC 6) Max Uplift13=-3(LC 8)

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

TOP CHORD 2-3=-318/94, 3-4=-1101/86, 4-5=-724/94, 5-6=-1221/95, 6-7=-3118/36,

7-8=-2323/0, 2-13=-375/102

**BOT CHORD** 12-13=0/854, 12-17=0/845, 11-17=0/845, 10-11=0/845, 9-10=0/1161,

8-9=0/2103

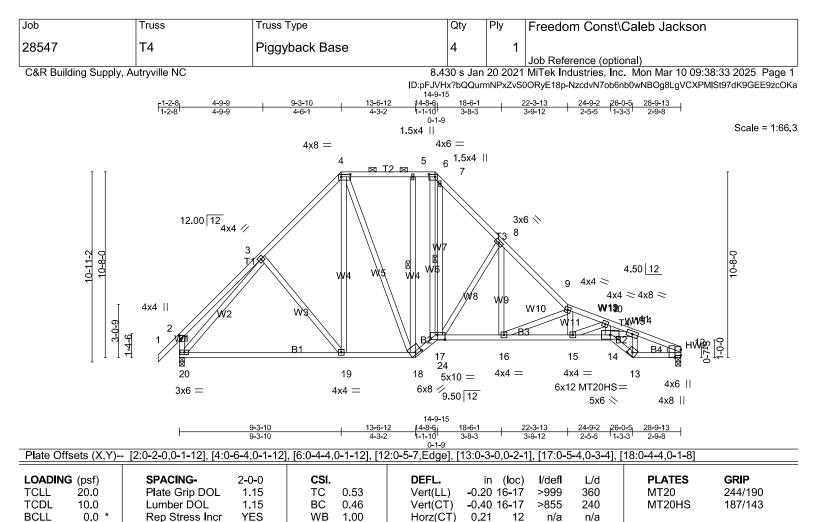
**WEBS** 4-12=0/470, 5-12=-283/33, 5-10=-15/817, 6-10=-703/100, 6-9=0/1974,

7-9=-1582/80, 3-13=-1015/0

### NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 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.
- 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) 13.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



LUMBER-

**BCDL** 

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

W14: 2x4 SP No.2

WEDGE Right: 2x4 SP No.3

10.0

**BRACING-**

Wind(LL)

TOP CHORD

0.10

16

>999

**BOT CHORD** 

**WEBS** 

Structural wood sheathing directly applied or 3-5-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.

Weight: 231 lb

FT = 20%

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

1 Row at midpt 5-18, 7-17

240

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

REACTIONS. (lb/size) 20=1230/0-3-8 (min. 0-1-8), 12=1145/0-3-8 (min. 0-1-8)

Code IRC2018/TPI2014

Max Horz 20=-210(LC 6) Max Uplift20=-3(LC 8)

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

2-3=-317/96, 3-4=-1101/85, 4-5=-839/92, 5-6=-830/93, 6-7=-1166/80, TOP CHORD

7-8=-1340/81, 8-9=-2022/0, 9-10=-3544/0, 10-11=-4873/0, 11-12=-2228/0,

Matrix-MS

2-20=-373/104

**BOT CHORD** 19-20=0/842, 19-24=0/759, 18-24=0/759, 17-18=0/908, 16-17=0/1412,

15-16=0/3274, 14-15=0/4411, 13-14=0/2331, 12-13=0/2012

**WEBS** 4-19=0/307, 4-18=-21/435, 5-18=-605/0, 8-16=0/1040, 9-16=-2047/0,

9-15=0/509, 10-15=-1182/0, 10-14=0/856, 11-14=0/2762, 11-13=-1469/0,

3-20=-995/0, 6-17=0/1123, 8-17=-1020/45

# NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates 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 with a clearance greater than 6-0-0 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) 20.

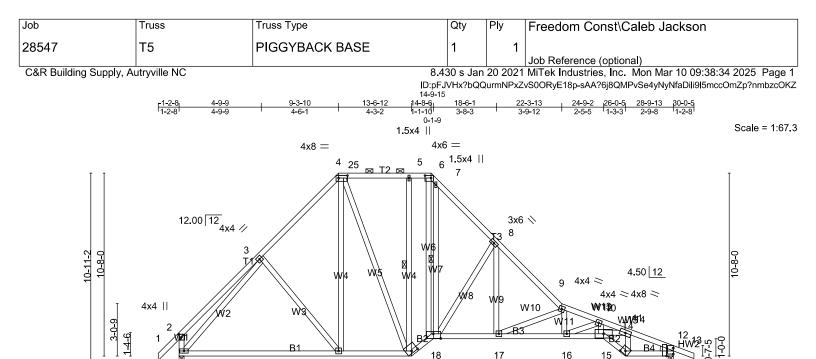
Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	T4	Piggyback Base	4	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:33 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS0ORyE18p-NzcdvN7ob6nb0wNBOg8LgVCXPMlSt97dK9GEE9zcOKa

# 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



				U- I-9					
Plate Offsets (X,Y)-	- [2:0-2-0,0-1-12], [4:0	)-6-4,0-1-12]	, [6:0 <mark>-4-4</mark> ,0-1-12], [12	2:0 <b>-</b> 5-7,Edge],	[14:0-3-0,0-2-1]	], [18:0-5	5-4,0-3-4], [	[19:0-4-4,0-1-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.53	Vert(LL)	-0.20 17-18	>999	360	l MT20	244/190

TCDL 10.0 Lumber DOL 1 15 BC 0.46 Vert(CT) -0.40 17-18 >859 240 **BCLL** 0.0 Rep Stress Incr YES WB 1.00 Horz(CT) 0.21 12 n/a n/a 0.09 **BCDL** 10.0 Code IRC2018/TPI2014 Matrix-MS Wind(LL) 17 >999 240

20

4x4 =

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

W14: 2x4 SP No.2 WEDGE

TOP CHORD 2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP 2400F 2.0E

Right: 2x4 SP No.3

LUMBER-

**WEBS** 

REACTIONS. (lb/size) 21=1229/0-3-8 (min. 0-1-8), 12=1219/0-3-8 (min. 0-1-8)

Max Horz 21=-216(LC 6)

Max Uplift21=-3(LC 8), 12=-1(LC 8)

21

3x6 =

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

TOP CHORD 2-3=-317/96, 3-4=-1099/84, 4-25=-837/91, 5-25=-837/91, 5-6=-828/92

6-7=-1162/75, 7-8=-1336/78, 8-9=-2015/0, 9-10=-3523/0, 10-11=-4827/0,

11-12=-2192/0, 2-21=-373/104

**BOT CHORD** 20-21=0/845, 20-26=0/763, 19-26=0/763, 18-19=0/911, 17-18=0/1407,

16-17=0/3255, 15-16=0/4373, 14-15=0/2290, 12-14=0/1976

**WEBS** 4-20=0/307, 4-19=-20/432, 5-19=-603/0, 8-18=-1014/39, 8-17=0/1033,

9-17=-2032/0, 9-16=0/501, 10-16=-1163/0, 10-15=0/835, 11-15=0/2754,

11-14=-1452/0, 3-21=-993/0, 6-18=0/1119

#### NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates 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 with a clearance greater than 6-0-0 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) 21, 12.
- 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. Continued on page 2

**BRACING-**

26

5x10 =6x8 /9.50 12 4x4 =

19

14-8-6<sub>1</sub> 1-1-10

TOP CHORD

**BOT CHORD** 

Structural wood sheathing directly applied or 3-6-1 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6. Rigid ceiling directly applied or 10-0-0 oc bracing.

4x6 ||

MT20HS

Weight: 233 lb

187/143

FT = 20%

3x8 ||

5-19, 7-18 1 Row at midpt

4x4 =

6x12 MT20HS=

5x6 <

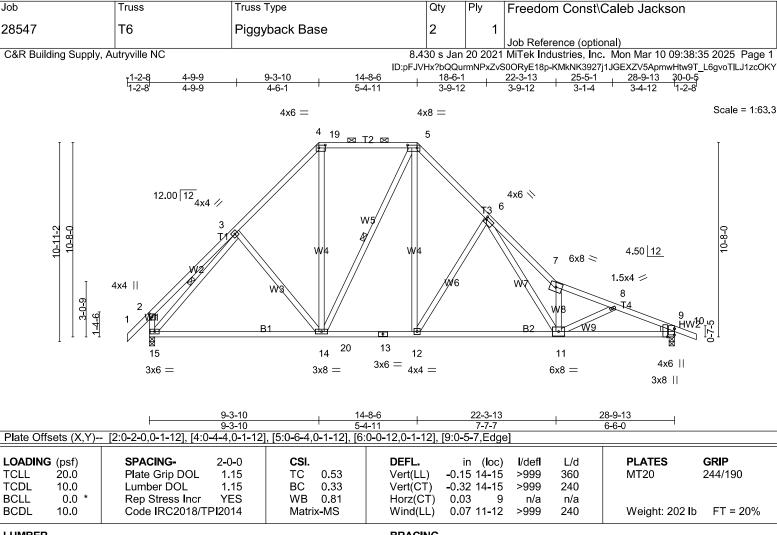
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	T5	PIGGYBACK BASE	1	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:34 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS0ORyE18p-sAA?6j8QMPvSe4yNyNfaDili9l5mccOmZp?nmbzcOKZ

# NOTES-

9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP 2400F 2.0E

**WEBS** 2x4 SP No.3 WFDGF

Right: 2x4 SP No.3

**BRACING-**

TOP CHORD

**BOT CHORD** WEBS

Structural wood sheathing directly applied or 4-7-5 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5. Rigid ceiling directly applied or 10-0-0 oc bracing.

5-14, 3-15 1 Row at midpt

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

(lb/size) 15=1229/0-3-8 (min. 0-1-8), 9=1219/0-3-8 (min. 0-1-8) REACTIONS.

Max Horz 15=-216(LC 6)

Max Uplift15=-3(LC 8), 9=-1(LC 8)

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

TOP CHORD 2-3=-317/94, 3-4=-1099/85, 4-19=-724/93, 5-19=-724/93, 5-6=-1218/94,

6-7=-3094/16, 7-8=-2249/0, 8-9=-2308/0, 2-15=-375/103

**BOT CHORD** 14-15=0/857, 14-20=0/848, 13-20=0/848, 12-13=0/848, 11-12=0/1156,

9-11=0/2087

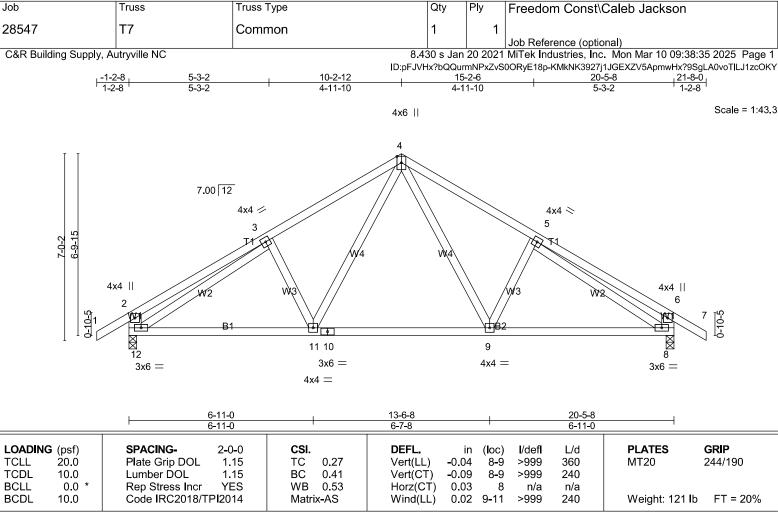
**WEBS** 4-14=0/469, 5-14=-282/34, 5-12=-15/814, 6-12=-699/98, 6-11=0/1951,

7-11=-1567/54, 3-15=-1013/0

### NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph, 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 9.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



LUMBER-

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

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

W1: 2x6 SP No.1

BRACING-

TOP CHORD

verticals.

BOT CHORD Rigid of

Rigid ceiling directly applied.

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

Structural wood sheathing directly applied, except end

REACTIONS. (lb/size) 12=886/0-3-8 (min. 0-1-8), 8=886/0-3-8 (min. 0-1-8)

Max Horz 12=-124(LC 6)

Max Uplift12=-13(LC 8), 8=-13(LC 8)

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

TOP CHORD 2-3=-345/27, 3-4=-963/46, 4-5=-963/46, 5-6=-345/27, 2-12=-375/61,

6-8=-375/61

BOT CHORD 11-12=0/846, 10-11=0/614, 9-10=0/614, 8-9=0/846 WEBS 4-9=0/356, 4-11=0/356, 3-12=-758/0, 5-8=-758/0

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8.
- 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.

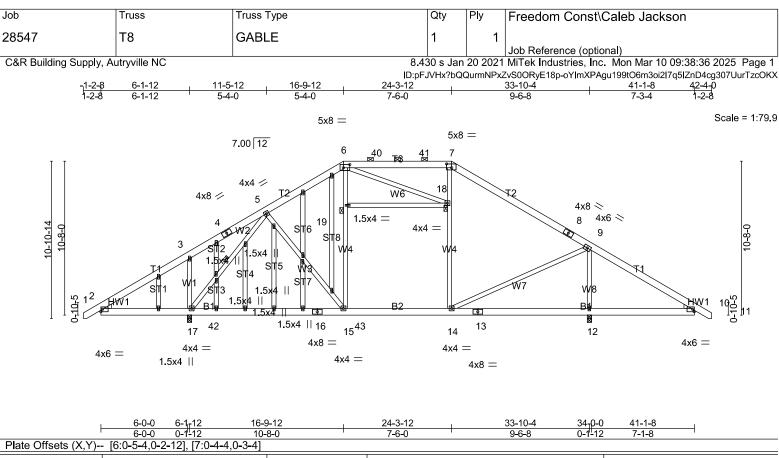


Plate Offsets ()	Y) [6:0-5-4,0-2-12], [7:0-4-4,0	3-4]		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.19	TC 0.36	Vert(LL) -0.26 15-17 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.19	BC 0.46	Vert(CT) -0.35 15-17 >938 240	
BCLL 0.0	* Rep Stress Incr YES	WB 0.63	Horz(CT) 0.01 12 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL) 0.07 15-17 >999 240	Weight: 365 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

**JOINTS** 

Structural wood sheathing directly applied, except

bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

5-17

MiTek recommends that Stabilizers and required cross

2-0-0 oc purlins (6-0-0 max.): 6-7.

Rigid ceiling directly applied.

1 Brace at Jt(s): 18, 19

1 Row at midpt

LUMBER-

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

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

REACTIONS. All bearings 0-3-8. (lb) - Max Horz 17=168(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 17

Max Grav All reactions 250 lb or less at joint(s) except 17=1800(LC 16),

17=1641(LC 1), 12=1780(LC 1), 12=1780(LC 1)

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

2-3=-142/527, 3-4=-45/338, 4-5=-25/483, 5-6=-868/49, 6-40=-628/70, 40-41=-628/70, 7-41=-628/70, 7-8=-760/42, 8-9=-882/0, 9-10=-86/629

2-17=-360/165, 17-42=0/636, 16-42=0/636, 16-43=0/636, 15-43=0/636,

14-15=0/724, 13-14=-420/101, 12-13=-420/101, 10-12=-420/101

3-17=-407/128, 5-17=-1281/39, 5-15=0/288, 15-19=-40/338, 6-19=-39/340, **WEBS** 

14-18=-258/66, 7-18=-251/70, 9-14=0/1156, 9-12=-1561/77

# NOTES-

**BOT CHORD** 

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; 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) 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) Provide adequate drainage to prevent water ponding.
- 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.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	Т8	GABLE	1	1	
					Job Reference (optional)

8,430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:36 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS0ORyE18p-oYImXPAgu199tO6m3oi2l7q5lZnD4cg307UurTzcOKX

### **NOTES-**

- 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) 17.
- 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) 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

C&R B	uilding Supply	, Autryville	NC				8.430 s			ustries, <b>I</b> nc		:38:37 2025 Page 1
	4.0.0	0.4.40	44	5.40	10 0 10			oQQurmNPxZvS(		GIr8IIAJfKH0		7Sp3wCFnERNwzcOKW
	-1-2-8 1-2-8	6-1-12 6-1-12	11-	5-12 4-0	16-9-12 5-4-0	+	24-3-12 7-6-0	+	33-10-4 9-6-8		<del>41-1-8</del> <del>7-3-4</del>	42-4-0 1-2-8
10-10-14			4x8 //	7.00 12 4x4 /	5-4-0 5x8 19	6	7-6-0	5x8 = 7	9-6-8 9-6-8	4x8 8	7-3-4 7-3-4 7-3-4 7-3-4	Scale = 1:73.6
	4x6 =	<u>1</u>	W1 B1 B3 17 28 4x4 =		16 4x8 =	15 <sup>29</sup>	B2	14 13 4x4 =			12 x4	4x6 =
		6-0-0 6-0-0	6-1 <sub>1</sub> -12 0-1-12	16-9-12 10-8-0	2	+	24-3-12 7-6-0	4x8 =	33-10-4 9-6-8	34 0-	1-0-0 41-1-8 1-12 7-1-8	<del></del>
Plate (	Offsets (X,Y)	- <u>[6:0-5-4</u>	<u>,0-2-12], [7:0</u>	-4-4,0-3-4]								
LOADI TCLL TCDL BCLL BCDL	NG (psf) 20.0 10.0 0.0 * 10.0	Plate Lum Rep	CING- e Grip DOL ber DOL Stress Incr e IRC2018/TI	2-0-0 1.15 1.15 YES PI2014	BC 0.	.36 .46 .63 .S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.26 15-17 -0.35 15-17 0.01 12 0.07 15-17	I/defI >999 >938 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 31	<b>GRIP</b> 244/190 6 lb FT = 20%
LUMBI	ER-			1			BRACING-					,

Qty

6

Ply

1

Job

28547

Truss

T9

Truss Type

Piggyback Base

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

WFDGF

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

TOP CHORD

**BOT CHORD WEBS JOINTS** 

Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 6-7.

Freedom Const\Caleb Jackson

Job Reference (optional)

Rigid ceiling directly applied. 1 Row at midpt 5-17

1 Brace at Jt(s): 18, 19

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 17=168(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 17

Max Grav All reactions 250 lb or less at joint(s) except 17=1800(LC 16),

17=1641(LC 1), 12=1780(LC 1), 12=1780(LC 1)

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

2-3=-142/527, 3-4=-45/338, 4-5=-25/483, 5-6=-868/49, 6-26=-628/70,

26-27=-628/70, 7-27=-628/70, 7-8=-760/42, 8-9=-882/0, 9-10=-86/629

2-17=-360/165, 17-28=0/636, 16-28=0/636, 16-29=0/636, 15-29=0/636, 14-15=0/724, 13-14=-420/101, 12-13=-420/101, 10-12=-420/101

**WEBS** 3-17=-407/128, 5-17=-1281/39, 5-15=0/288, 15-19=-40/338, 6-19=-39/340,

14-18=-258/66, 7-18=-251/70, 9-14=0/1156, 9-12=-1561/77

# NOTES-

**BOT CHORD** 

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17.
- 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\Caleb Jackson
28547	Т9	Piggyback Base	6	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:37 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS00RyE18p-Glr8IIAJfkH0VYhydVDHrLNG2z7Sp3wCFnERNwzcOKW

# NOTES-

- 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job Truss Type Freedom Const\Caleb Jackson Truss Qty Ply 28547 T10 8 1 Piggyback Base Job Reference (optional)

C&R Building Supply, Autryville NC

1-2-8 3-3-1 6-3-8 1-2-8 3-3-1 3-0-7

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:38 2025 Page 1 ID:pFJVHx?bQQurmNPxZvS0ORyE18p-kxPWy5BxQePt7hG8BDkWNYvTjNUXYTdMURz?vMzcOKV 35-9-11

Scale = 1:75.1

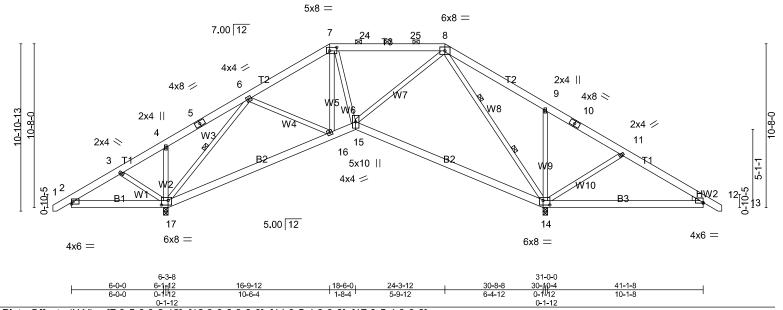


Plate Offsets (X,Y)--[7:0-5-8,0-2-12], [12:0-0-0,0-0-8], [14:0-5-4,0-3-8], [17:0-5-4,0-3-8]

LOADING TCLL	<b>G</b> (psf) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.24	<b>DEFL.</b> in ( <b>l</b> oc) Vert(LL) -0.14 14-15	I/defl L/d >999 360	<b>PLATES GRIP</b> MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) -0.29 14-15	>999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.79	Horz(CT) 0.06 14	n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL) -0.03 14-15	>999 240	Weight: 310 lb FT = 20%

LUMBER-

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

Right: 2x4 SP No.3

**BRACING-**

TOP CHORD

**BOT CHORD WEBS** 

Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 7-8.

Rigid ceiling directly applied. 1 Row at midpt 6-17 2 Rows at 1/3 pts 8-14

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 17=168(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) except 17=-102(LC 8) Max Grav All reactions 250 lb or less at joint(s) except 17=1496(LC 19), 17=1421(LC 1), 14=1999(LC 1), 14=1999(LC 1)

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

2-3=-98/380, 3-4=-115/551, 4-5=-65/424, 5-6=-50/571, 6-7=-805/0,

7-24=-661/0, 24-25=-661/0, 8-25=-661/0, 8-9=-36/934, 9-10=-56/904, 10-11=-84/764, 11-12=-85/578

2-17=-274/108, 16-17=-54/504, 15-16=0/686, 14-15=-66/282, 12-14=-403/89

**BOT CHORD** 4-17=-308/67, 6-17=-1300/0, 6-16=0/320, 8-15=0/643, 9-14=-351/110,

11-14=-366/70, 8-14=-1443/0

# NOTES-

**WEBS** 

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 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 102 lb uplift at joint 17.
- 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\Caleb Jackson
28547	T10	Piggyback Base	8	1	Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:38 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS00RyE18p-kxPWy5BxQePt7hG8BDkWNYvTjNUXYTdMURz?vMzc0KV

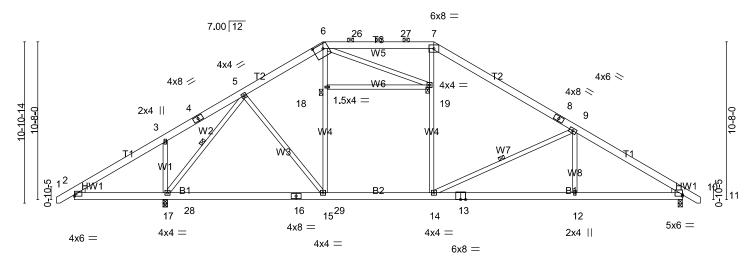
# NOTES-

- 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job Truss Type Truss Qtv Ply Freedom Const\Caleb Jackson 28547 T11 Piggyback Base 1 1 Job Reference (optional) C&R Building Supply, Autryville NC 8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:39 2025 Page 1 ID:pFJVHx?bQQurmNPxZvS0ORyE18p-C7zu9RCZByXkkrrLkwFlwmSaSmlKHxsVi5jYSozcOKU 6-1-12 11-5-12 16-9-12 24-3-12 33-10-3 41-1-8 6-1-12 5-4-0 5-4-0 7-6-0

Scale = 1:78.0

### 10x12 MT20HS //



)	41-1-0	1	JJ-1U-J		24-3-12	1	9-12	10-	0-U-U 0-1 <sub>1</sub> -12	- 1	
1	7-3-5	1	9-6-7	1	7-6-0		-8-0	10-	6-0-0 0-1 <sup>1</sup> -12		
							4]	):Edge,0-1-	)-7-12,0-3-12], [10	s (X,Y) [	Plate Offse
S GRIP	PLATES	L/d	l/defl	in ( <b>l</b> oc)	DEFL.		CSI.	2-0-0	SPACING-	osf)	LOADING
244/190	MT20	360	>999	-0.32 12-14	Vert(LL)	0.49	TC	1.15	Plate Grip DOL	0.Ó	TCLL
IS 187/143	MT20HS	240	>684	-0.61 12-14	Vert(CT)	0.69	BC	1.15	Lumber DOL	0.0	TCDL
		n/a	n/a	0.04 10	Horz(CT)	0.73	WB	YES	Rep Stress Incr	0.0 *	BCLL
t: 316 lb FT = 20%	Weight: 316	240	>999	0.17 12-14	Wind(LL)	x-AS	Matrix	P <b>I</b> 2014	Code IRC2018/TI	0.0	BCDL
244/190 HS 187/143	MT20 MT20HS	360 240 n/a	>999 >684 n/a	-0.32 12-14 -0.61 12-14 0.04 10	Vert(LL) Vert(CT) Horz(CT)	0.69 0.73	CSI. TC BC WB	2-0-0 1.15 1.15 YES	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	osf) 0.0 0.0 0.0 0.0 *	LOADING TCLL TCDL BCLL

24 2 12

LUMBER-

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

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

W4: 2x4 SP No.2

WEDGE

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

BRACING-

**JOINTS** 

TOP CHORD

Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 6-7.

**BOT CHORD** Rigid ceiling directly applied. WEBS 1 Row at midpt

5-17, 9-14

1 Brace at Jt(s): 18, 19

22 10 2

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

11 1 0

REACTIONS. (lb/size) 17=2011/0-3-8 (min. 0-2-9), 17=2011/0-3-8 (min. 0-2-9), 10=1410/0-3-8 (min. 0-1-11)

16 0 12

Max Horz 17=-168(LC 6) Max Uplift17=-91(LC 8)

600

6 1 12

Max Grav 17=2149(LC 16), 17=2011(LC 1), 10=1429(LC 14)

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

TOP CHORD 2-3=-141/569, 3-4=-45/344, 4-5=-16/473, 5-6=-1364/41, 6-26=-1273/61,

26-27=-1273/61, 7-27=-1273/61, 7-8=-1382/33, 8-9=-1517/0, 9-10=-2217/0

2-17=-386/164, 17-28=0/898, 16-28=0/898, 16-29=0/898, 15-29=0/898,

14-15=0/1216, 13-14=0/1824, 12-13=0/1824, 10-12=0/1824

**WEBS** 3-17=-479/127, 5-17=-1761/31, 5-15=0/635, 15-18=-89/302, 6-18=-93/302,

14-19=0/455, 7-19=0/405, 9-14=-830/75, 9-12=0/385

# NOTES-

**BOT CHORD** 

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; 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) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) The Fabrication Tolerance at joint 6 = 12%
- 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, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 17.

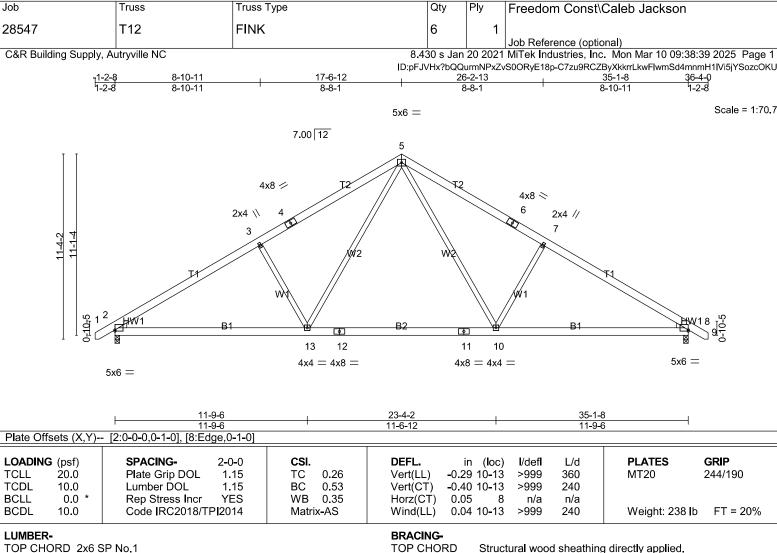
Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	T11	Piggyback Base	1	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:39 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS0ORyE18p-C7zu9RCZByXkkrrLkwFlwmSaSmlKHxsVi5jYSozcOKU

# **NOTES-**

- 9) 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.
- 10) 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

WEDGE

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

**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.** (Ib/size) 2=1471/0-3-8 (min. 0-1-12), 8=1471/0-3-8 (min. 0-1-12)

Max Horz 2=-174(LC 6)

Max Grav 2=1498(LC 13), 8=1498(LC 14)

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

TOP CHORD 2-3=-2243/14, 3-4=-2039/23, 4-5=-1927/71, 5-6=-1927/71, 6-7=-2040/23,

7-8=-2244/14

**BOT CHORD** 2-13=0/1950, 12-13=0/1309, 11-12=0/1309, 10-11=0/1309, 8-10=0/1820

**WEBS** 3-13=-479/138, 5-13=0/912, 5-10=0/912, 7-10=-479/138

### **NOTES-**

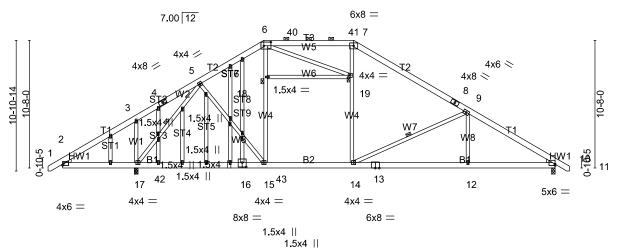
- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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) 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.
- 6) 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\Caleb Jackson
28547	T13	GABLE	1	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:40 2025 Page 1

ID:pFJVHx?bQQurmNPxZvS00RyE18p-gJXGNnDByFgbM?QXIem Tz ICA5Z006fxkS6 FzcOKT 6-1-12 11-5-12 16-9-12 24-3-12 33-10-3 41-1-8 7-6-0 5-4-0 5-4-0 9-6-7

> Scale: 1/8"=1" 7x10 MT18HS=



		6-0-0 6-0-0	6-1-12 0-1-12	16-9-12 10-8-0	+	24-3-12 7-6-0	33-10 9-6-7			-1-8 3-5	
Plate Of	fsets (X,Y)-	- [6:0-7-0,0-3-12], [10:	Edge,0-1-4	], [16:0-4-0	),0 <b>-4-</b> 8]	_					
LOADING	(1 /	SPACING-	2-0-0	CSI.		DEFL.	in ( <b>l</b> oc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.32 12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.61 12-14	>684	240	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.04 10	n/a	n/a		
BCDL	10.0	Code IRC2018/T	P <b>I</b> 2014	Matri	x-AS	Wind(LL)	0.17 12-14	>999	240	Weight: 366 I	b FT = 20%

LUMBER-

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

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

W4: 2x4 SP No.2

**OTHERS** 2x4 SP No.3

WEDGE

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

**BRACING-**

**JOINTS** 

TOP CHORD

Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 6-7.

Rigid ceiling directly applied.

**BOT CHORD** WEBS 1 Row at midpt

5-17, 9-14

1 Brace at Jt(s): 18, 19

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

REACTIONS. (lb/size) 17=2011/0-3-8 (min. 0-2-9), 17=2011/0-3-8 (min. 0-2-9), 10=1410/0-3-8 (min. 0-1-11)

Max Horz 17=-168(LC 6) Max Uplift17=-91(LC 8)

Max Grav 17=2149(LC 16), 17=2011(LC 1), 10=1429(LC 14)

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

TOP CHORD 2-3=-141/569, 3-4=-45/344, 4-5=-16/473, 5-6=-1364/41, 6-40=-1273/61,

40-41=-1273/61, 7-41=-1273/61, 7-8=-1382/33, 8-9=-1517/0, 9-10=-2217/0 2-17=-386/164, 17-42=0/898, 16-42=0/898, 16-43=0/898, 15-43=0/898,

14-15=0/1216, 13-14=0/1824, 12-13=0/1824, 10-12=0/1824

3-17=-479/127, 5-17=-1761/31, 5-15=0/635, 15-18=-89/302, 6-18=-93/302,

14-19=0/455, 7-19=0/405, 9-14=-830/75, 9-12=0/385

# NOTES-

**WEBS** 

**BOT CHORD** 

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; 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) 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) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 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.

Continued on page 2

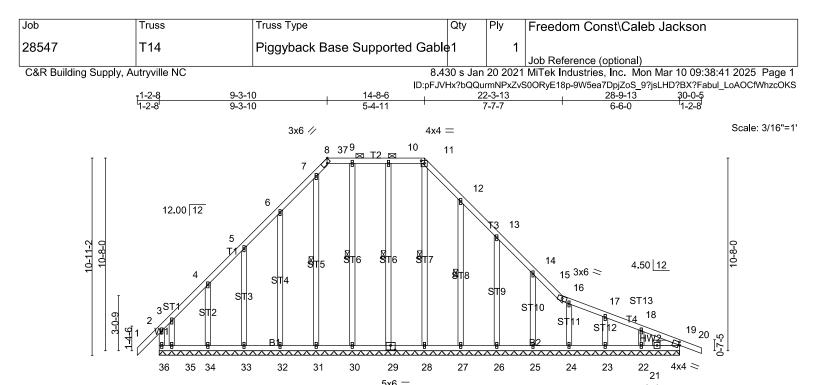
Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	T13	GABLE	1	1	
					Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:40 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS0ORyE18p-gJXGNnDByFgbM?QXIem\_Tz\_ICA5Z0O6fxkS6\_FzcOKT

# **NOTES-**

- 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, with BCDL = 10.0psf.

  10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 17.
- 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.
- 12) 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.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



28-9-13 Plate Offsets (X Y)-- [8:0-2-8 Edge] [11:0-2-4 0-1-12] [19:0-0-15 0-2-1] [29:0-3-0 0-3-0]

28

27

26

25

24

23

29

5x6 =

Flate Oil	13613 (7, 1 <i>)</i>	- [6.0 <b>-2-</b> 6,Luge], [11.0	Z=4,U=1=1Z	<u>], [18.0-0-1</u>	J,0-Z-1], [/	29.0-3-0,0-3-0]						
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.00	20	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	ВС	0.04	Vert(CT)	-0.00	20	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	19	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	<b>1</b> 2014	Matri	x <b>-</b> S	, ,					Weight: 226 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP 2400F 2.0E

**WEBS** 2x4 SP No.3

**OTHERS** 2x4 SP No.3

SLIDER Right 2x4 SP No.3 -D 1-6-0

**BRACING-**

TOP CHORD

**BOT CHORD WEBS** 

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-11. Rigid ceiling directly applied or 10-0-0 oc bracing.

4x4 ≥

4x4 =

11-28, 10-29, 9-30, 7-31, 12-27 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 28-9-13.

(lb) - Max Horz 36=-214(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 32, 33, 34, 27, 26, 25, 24, 23, 22, 19 except 36=-144(LC 6), 35=-163(LC 5)

Max Grav All reactions 250 lb or less at joint(s) 28, 29, 30, 31, 32, 33, 34, 35, 27, 26, 25, 24, 23, 22, 19 except 36=266(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.

34

33

35

36

2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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

31

32

30

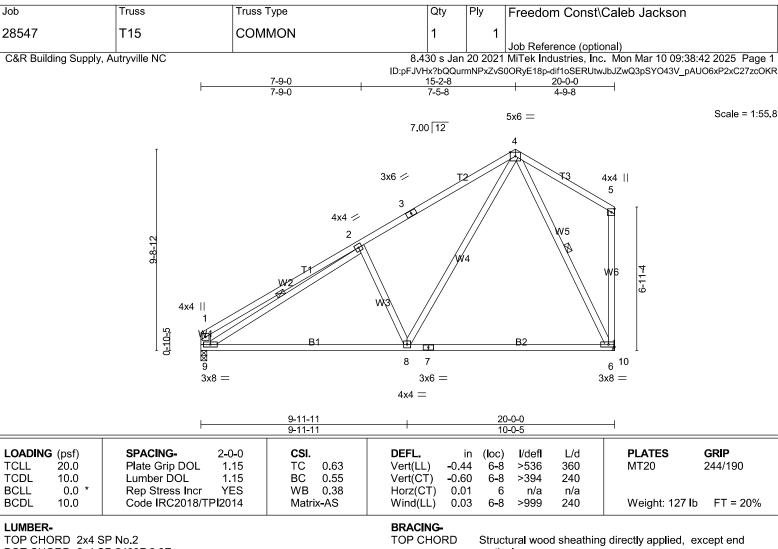
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 1.5x4 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 33 34, 27, 26, 25, 24, 23, 22, 19 except (jt=lb) 36=144, 35=163.
- 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. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Caleb Jackson
28547	T14	Piggyback Base Supported Gable	<b>1</b>	1	Job Reference (optional)

8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:42 2025 Page 2 ID:pFJVHx?bQQurmNPxZvS0ORyE18p-dif1oSERUtwJbJZwQ3pSYO4A?\_x7URbxP2xC27zcOKR

# NOTES-

12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

W6: 2x4 SP No.2, W1: 2x6 SP No.1

**BOT CHORD** 

**WEBS** 

verticals

Rigid ceiling directly applied.

1 Row at midpt 4-6, 2-9

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

REACTIONS.

(lb/size) 6=785/Mechanical, 9=785/0-3-8 (min. 0-1-8)

Max Horz 9=229(LC 7)

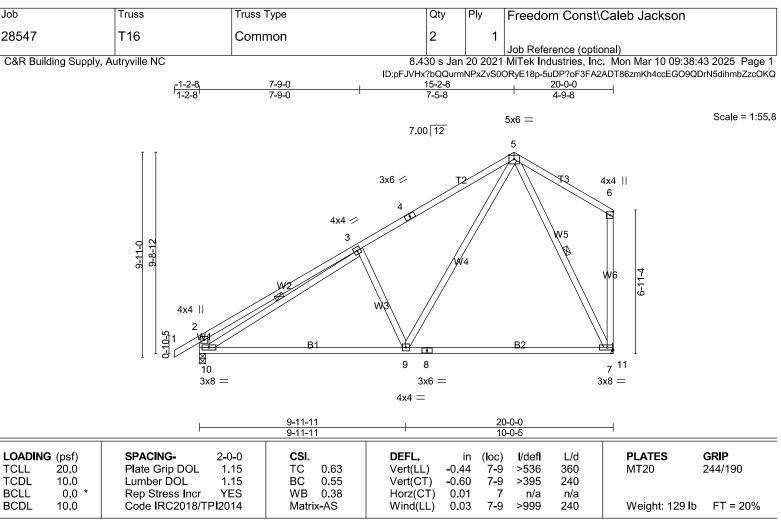
Max Grav 6=937(LC 13), 9=790(LC 13)

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

TOP CHORD 1-2=-596/53, 2-3=-926/40, 3-4=-820/81, 1-9=-451/48 8-9=-41/926, 7-8=-43/358, 7-10=-43/358, 6-10=-43/358 **BOT CHORD** 2-8=-405/130, 4-8=0/839, 4-6=-696/24, 2-9=-651/0 **WEBS** 

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) 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) 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.



**LUMBER-**

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

W6: 2x4 SP No.2, W1: 2x6 SP No.1

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

Structural wood sheathing directly applied, except end verticals

Rigid ceiling directly applied.

1 Row at midpt 5-7, 3-10

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

REACTIONS. (lb/size) 7=782/Mechanical, 10=874/0-3-8 (min. 0-1-8)

Max Horz 10=239(LC 7) Max Uplift10=-10(LC 8)

Max Grav 7=934(LC 13), 10=874(LC 1)

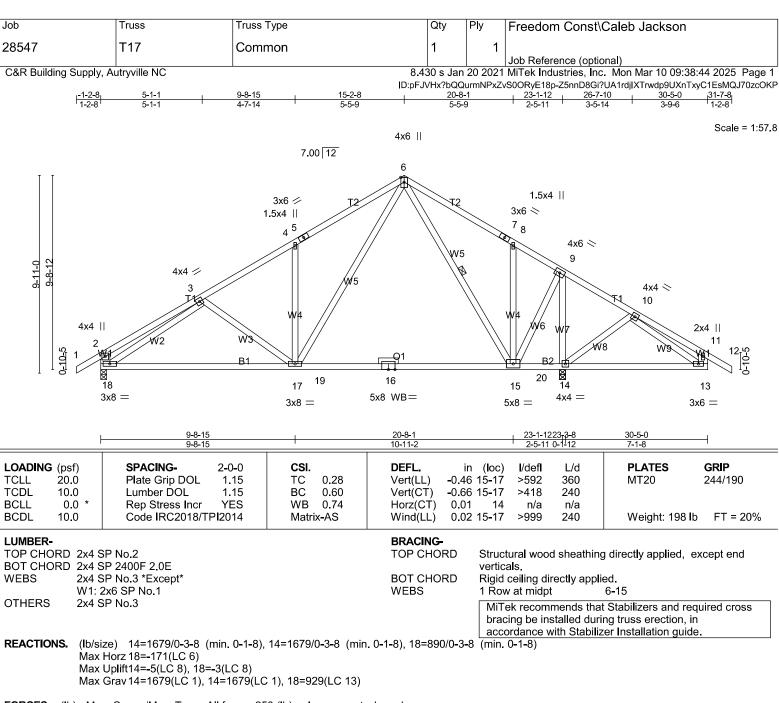
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

2-3=-604/56, 3-4=-918/37, 4-5=-813/79, 2-10=-549/83 TOP CHORD BOT CHORD 9-10=-41/916. 8-9=-43/357. 8-11=-43/357. 7-11=-43/357 **WEBS** 3-9=-394/127, 5-9=0/829, 5-7=-694/24, 3-10=-629/0

## NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) 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) 10.
- 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.



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

2-3=-397/0, 3-4=-1017/5, 4-5=-1055/52, 5-6=-1044/85, 6-7=-255/181, TOP CHORD

7-8=-266/52, 9-10=-27/661, 2-18=-401/47

**BOT CHORD** 17-18=0/1037, 17-19=0/467, 16-19=0/467, 16-20=0/467, 15-20=0/467,

14-15=-530/123, 13-14=-299/76

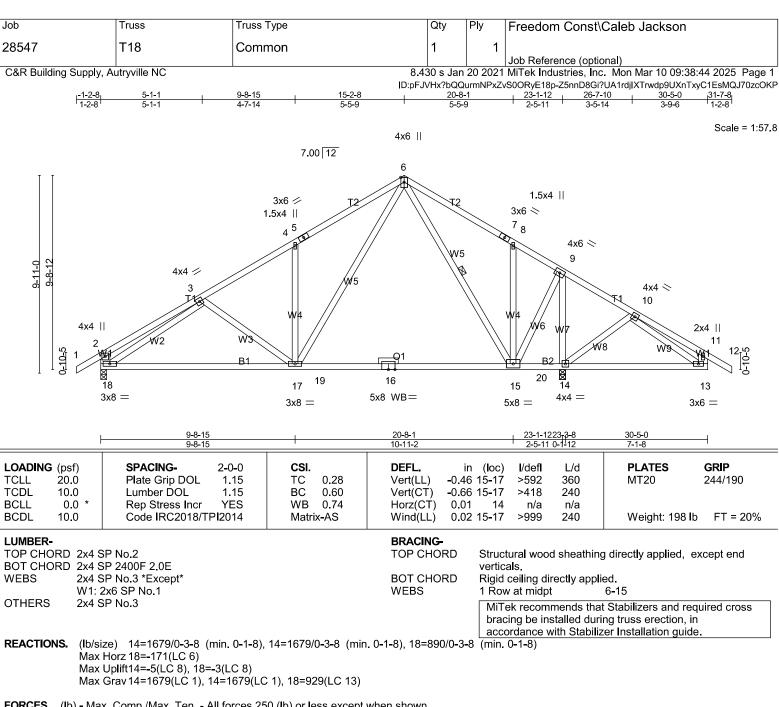
**WEBS** 4-17=-330/94, 6-17=-7/903, 6-15=-660/15, 8-15=-283/79, 9-15=0/1275,

9-14=-1593/0, 10-14=-288/58, 3-18=-879/11, 10-13=-52/428

# NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) 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) 14, 18.
- 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.



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

2-3=-397/0, 3-4=-1017/5, 4-5=-1055/52, 5-6=-1044/85, 6-7=-255/181, TOP CHORD

7-8=-266/52, 9-10=-27/661, 2-18=-401/47

**BOT CHORD** 17-18=0/1037, 17-19=0/467, 16-19=0/467, 16-20=0/467, 15-20=0/467,

14-15=-530/123, 13-14=-299/76

**WEBS** 4-17=-330/94, 6-17=-7/903, 6-15=-660/15, 8-15=-283/79, 9-15=0/1275,

9-14=-1593/0, 10-14=-288/58, 3-18=-879/11, 10-13=-52/428

# NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) 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) 14, 18.
- 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.

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C&R Building Suppl	y, Autryville NC	8-11-2 8-11-2		rmNPxZvS(	ORyE18p-1HK9QUHKmol	
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	<u> </u>		17-10-4 17-10-4			
Plate Offsets (X,Y)	[5:0-3-0,Edge]		17 10 1			
LOADING (psf)	SPACING- 2-	)-0 <b>CSI</b> .	DEFL.	in (loc	) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1	15 TC 0.07		n/a -	n/a 999	MT20 244/190
TCDL 10.0		15 BC 0.14	` ,	n/a -		
BCLL 0.0 * BCDL 10.0	Rep Stress Incr Y Code IRC2018/TPI20	ES WB 0.12 14 Matrix-S	Horz(CT) 0.	.00 9	n/a n/a	Weight: 102 lb FT = 20%
	3000 11 020 10/11 120	THOUSE OF				77 Olgin. 102 ib 1 1 - 20 /0
LUMBER- TOP CHORD 2x4	0D.N. 0		BRACING- TOP CHORD	01		directly applied or 6-0-0 oc purlir

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

**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. All bearings 17-10-4.

(lb) - Max Horz 1=-160(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 13, 15, 16, 12, 11,

Max Grav All reactions 250 lb or less at joint(s) 1, 9, 15, 16, 11, 10 except 13=326(LC 13), 12=322(LC 14)

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

# **NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) All plates are 1.5x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 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, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 13 15, 16, 12, 11, 10.
- 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.

28547 V2 Valley 1 1 1 Job Reference (optional)  8.430 s Jan 20 2021 MTek Industries, Inc. Mon Mar 10 09:38:46 2025 Page 1  10.pFJ-VHX/b0QumNPs_2500KyE 18p-VTuXqshyXSQHvmfur0iEEMMsGm0EnXlgnQBuzckN 15-64  1.5x4    1.5x4    1.5x4    1.5x4     1.5x4    1.5x4     1.5x4	Job	Truss	Truss	Туре		Qty	Ply	Freedom Cons	t\Caleb Jackson
ERR Building Supply, Autryville NC  8			Valle	<b>Э</b> У		·		Job Reference (op	tional)
12.00   12	C&R Building S	Supply, Autryville NC	•				20 2021	MiTek Industries, Ir	nc. Mon Mar 10 09:38:46 2025 Page 1
12.00   12   1.5x4     1			<u> </u>	7-9-2 7-9-2	13.51.01	ix.bada	15-6-4 7-9-2	L	
12.00   12				102	4x4 =				Scale = 1:44.6
Ax4		7	1.5x	4    T1 2    ST1	ST2		ST1	5	4-0-0
LOADING (psf)         SPACING- Plate Grip DOL 1.15 TCDL 10.0 BCLL 0.0 * BCDL 10.0         2-0-0 Plate Grip DOL 1.15 SPACING- Plate Grip DOL 1.15 BC 0.19 WB 0.14 Matrix-S         DEFL. in (loc) I/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 5 n/a n/a         PLATES GRIP MT20 244/190           WB 0.14 Weight: 74 lb         FT = 20%			4x4 //	8	7		6	4x4	
LOADING (psf)         SPACING-         2-0-0         CSI.         DEFL.         in (loc)         I/defl         L/d         PLATES         GRIP           TCLL 20.0 TCDL 10.0 TCDL 10.0 BCLL 0.0 * BCLL 0.0 * BCLL 0.0 * BCLL 0.0 * BCDL 10.0 Code IRC2018/TPI2014         BCDL 0.19 Matrix-S         Vert(LL) n/a - n/a 999 Morria - n/a 999				1.5x4			1.5x4	II	
TCLL         20.0 TCDL         Plate Grip DOL 1.15 Lumber DOL         1.15 Lumber DOL         TC 0.19 BC 0.19 Lumber DOL         Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT)         MT20 244/190 Vert(190 Novert(190 Novert		0. 0.	-0-4 -0-4						1
	TCLL 20. TCDL 10. BCLL 0.	O Plate Grip DC D Lumber DOL O * Rep Stress Ir	DL 1.15 1.15 acr YES	TC 0.19 BC 0.19 WB 0.14	Vert(LL Vert(C1	) n/ <sup>-</sup> ) n/	a - a -	n/a 999 n/a 999	MT20 244/190
		Code IRC201	8/TP <b>I</b> 2014	Matrix-S					Weight: 74 lb

TOP CHORD 2x4 SP No.2 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 15-5-12.

(lb) - Max Horz 1=-138(LC 6)

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=342(LC

13), 8=434(LC 13), 6=434(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. **WEBS** 2-8=-287/136, 4-6=-287/136

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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, with BCDL = 10.0psf.
- 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.

Job	Truss	Truss	Туре		Qty	Ply	Freedo	m Const\C	Caleb Jackson	
28547	V3	Valle	у		1	1	Job Refe	rence (optior	nal)	
C&R Building Suppl	y, Autryville NC					20 2021	MiTek Inc	lustries, Inc.	Mon Mar 10 09:38	
	ı		6-7-2	ID:pFJ\	'Hx?bQQu	13-2-4 6-7-2	500RyE18	o-VTuXaqHyX: I	5QI4wthfutOiEEscbHp	QFNXJgvQBuzcOKN
	'		6-7-2	'		6-7-2		ı		
				4x4 =						Scale = 1:38.1
	6-7-2	12.00   1 1.5x4    2	ту	ST2		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1.5x 4 ST1	5	0-0-4	
		x4 //	8	7			6	4x4 🔇		
		1.5	5x4	1.5x4		1.5	5x4			
	0-ç 0-c	)-4 )-4		13-2-4 13-2-0						
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Inc Code IRC2018	1.15 r YES	CSI. TC 0.18 BC 0.12 WB 0.11 Matrix-S	<b>DEFL.</b> Vert(LL Vert(C1 Horz(C	) n/a <sup>-</sup> ) n/a	a -	I/defI n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 61 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER-	3333 11 (32010		Madix 3	BRACII	IC-				TTOIGHT. OT ID	7 1 2070

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

2x4 SP No.3 OTHERS

BRACING TOP CHORD

**BOT CHORD** 

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

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

REACTIONS. All bearings 13-1-12.

(lb) - Max Horz 1=116(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=326(LC 13), 6=326(LC 14)

FORCES. (lb) - Max, Comp./Max, Ten. - All forces 250 (lb) or less except when shown. **WEBS** 2-8=-257/121, 4-6=-257/121

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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, 8,
- 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 F	Ply	Freedom Const\	Caleb Jackson
28547	V4	Valley	,		1	Job Reference (option	onal)
C&R Building Su	oply, Autryville NC	5-5-2			0 2021 urmNPx2	MiTek Industries, Ind ZvS0ORyE18p-zgSwrAla	b. Mon Mar 10 09:38:47 2025 Page 1 alPYci4StCcOdFRn0C?d29iAgYKfzkLzcOKM
	F	5-5-2	l		10-10- 5-5-2		
			4x4 =				Scale: 3/8"=1
	0-04	12.00   12 5x4	\$T2	XXXX	¥XXX	1.5x4    4 5	0-0-4
	4>	4 // 8 1.5x4	7 1 <b>.</b> 5x4			6 <sup>4x4</sup> ∕ 1.5x4	
	0- <u>0</u> - 0-0-	4	10-10-4 10-10-0				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL * Rep Stress Incr Code IRC2018/T	2-0-0 CSI. 1.15 TC 0.19 1.15 BC 0.12 YES WB 0.07 PI2014 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT	in n/a n/a 0.00	-	I/defl L/d n/a 999 n/a 999 n/a n/a	PLATES GRIP MT20 244/190 Weight: 47 lb FT = 20%
LUMBER-			BRACIN	3-			

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

2x4 SP No.3 OTHERS

BRACING

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

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

REACTIONS. All bearings 10-9-12.

(lb) - Max Horz 1=-94(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except

8=331(LC 13), 6=331(LC 14)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. **WEBS** 2-8=-273/130, 4-6=-273/130

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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, 8,
- 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\Caleb Jacksor	1
28547	V5	Valley	1	1	Job Reference (optional)	
C&R Building Supply,	Autryville NC				Job Reference (optional)   MiTek Industries, Inc.   Mon Mar 10 09: ZvS00RyE18p-zgSwrAlalPYci4StCcOdFRn_Q	
	$\vdash$	4-3-2 4-3-2	15.51 0 11 11.50	8-6- 4-3-		
			4x4 =			Scale = 1:26.1
	0-0-4	12.00 12 T1	ST1	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3	
	2x4	11	4 1.5x4		2x4 📏	
	0-0-4 0-0-4		8-6-4 8-6-0		<u> </u>	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	Plate Grip DOL Lumber DOL	-0-0 <b>CSI.</b> 1.15 TC 0.30 1.15 BC 0.16 (ES WB 0.05 014 Matrix-P	Vert(CT) r	in (loc n/a - n/a - 00 :	n/a 999 MT20 n/a 999	<b>GRIP</b> 244/190 b FT = 20%
LUMBER- TOP CHORD 2x4 S	SP No.2	1	BRACING- TOP CHORD	Stru	etural wood sheathing directly applied	or 6-0-0 oc purlins.

BOT CHORD 2x4 SP No.2

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

tructural 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. (lb/size) 1=189/8-5-12 (min. 0-1-8), 3=189/8-5-12 (min. 0-1-8), 4=248/8-5-12 (min. 0-1-8)

Max Horz 1=73(LC 7)

Max Uplift1=-17(LC 8), 3=-17(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=120mph (3-second gust) Vasd=95mph; 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.

28547	V6	Valley	1	1 Job Reference	(optional)				
C&R Building Supply, Autryville NC  8.430 s Jan 20 2021 MiTek Industries, Inc. Mon Mar 10 09:38:48 2025 Pa ID:pFJVHx?bQQurmNPxZvS0ORyE18p-Rs0l2WJC3jgTJE13mJvsnfKBiPz_uA7qn_OXGnz									
	H	3-1-2 3-1-2		6-2-4 3-1-2	  -				
			4x4 =		Scale = 1:19.5				
	0-0-4 3-1-2 XX	12.00   12   T1	ST1	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				
	2)	4 //	4 5×4	2x4 📏					
	0- <b>0</b> - 0-6-		6-2-4 6-2-0		-1				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	Plate Grip DOL Lumber DOL	0-0 CSI15 TC 0.14 .15 BC 0.08 'ES WB 0.02 014 Matrix-P	Vert(LL) n.	/a - n/a 999	MT20 244/190				
LUMBER- TOP CHORD 2x4 \$	SP No.2	1	BRACING- TOP CHORD	Structural wood shea	athing directly applied or 6-0-0 oc purlins.				

Qty

TOP CHORD 2x4 SP No.2 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.

Freedom Const\Caleb Jackson

REACTIONS. (lb/size) 1=132/6-1-12 (min. 0-1-8), 3=132/6-1-12 (min. 0-1-8), 4=174/6-1-12 (min. 0-1-8)

Truss Type

Max Horz 1=-51(LC 6)

Max Uplift1=-12(LC 8), 3=-12(LC 8)

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=120mph (3-second gust) Vasd=95mph; 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.

Job	Truss	Truss T	уре		Qty	Ply	Freedo	m Const\C	Caleb Jackson	
28547	V7	Valley	,		1	1			D	
C&D Building Supply	Autradila NC			9.42	O o Jon 3	20.2021	Job Refe	rence (option	nal) Mon Mor 10 00:31	8:49 2025 Page 1
C&R Building Supply, Autryville NC 8.430 s Jan 20 2 ID:pFJVHx?bQQurmNPx										
			1-11-2	,		3-10	-4			
		•	1-11-2	'		1-11	-2	"		
				<sub>2</sub> 4x4 =						Scale = 1:11.3
		12.0	0 12							
						\				
	1-11-2		T1/			11				
	7			ST1		\	3	3		
		1 /								
		·//	>/				$\sim$			
	1 40			B1					-0-0 4	
	Ō			<b>*****</b>	<b>****</b>	<b>XXX</b>	<b>****</b>		Ō	
				4						
		2x4 //	1.5x4	4		2	x4 📏			
		<b>—</b>		3-10-0 3-10-0				3-10- 0-0-4	4	
				3-10-0				0-0-4		
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in			L/d	PLATES	GRIP
TCLL 20.0 TCDL 10.0	Plate Grip DOL Lumber DOL	1.15 1.15	TC 0.04 BC 0.03	Vert(LL) Vert(CT			n/a	999 999	MT20	244/190
BCLL 0.0 *	Rep Stress Incr		WB 0.01	Horz(CT			n/a n/a	999 n/a		
BCDL 10.0	Code IRC2018/		Matrix-P	11012(01	, 0.00		11/4	11/4	Weight: 14 lb	FT = 20%
LUMBER- TOP CHORD 2x4 S	P No 2			BRACIN TOP CH		Struc	tural was	d choathing	directly applied a	r 2 10 4 oo
BOT CHORD 2x4 S	TOP CF	וטאט		Structural wood sheathing directly applied or 3-10-4 oc purlins,						
OTHERS 2x4 SP No.3					IORD	Rigid ceiling directly applied or 10-0-0 oc bracing.				
							MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in			
						brad				
			acc	accordance with Stabilizer Installation guide.						

**REACTIONS.** (Ib/size) 1=76/3-9-12 (min. 0-1-8), 3=76/3-9-12 (min. 0-1-8), 4=100/3-9-12 (min. 0-1-8)

Max Horz 1=29(LC 7)

Max Uplift1=-7(LC 8), 3=-7(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=120mph (3-second gust) Vasd=95mph; 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.