

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 **WEBS** 2x4 SPF No.2 OTHERS 2x4 SPF No 2

**BRACING-**

TOP CHORD

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

**BOT CHORD** WFBS

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

2x4 SPF No.2 - 11-27, 10-29, 9-30, 12-26, T-Brace: 13-25 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3")

nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

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

REACTIONS. All bearings 29-0-0.

(lb) - Max Horz 36=533(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 34 except 36=-269(LC 5), 21=-249(LC

6), 29=-133(LC 7), 30=-180(LC 7), 31=-171(LC 7), 32=-144(LC 8), 33=-112(LC

7), 35=-325(LC 6), 26=-129(LC 8), 25=-181(LC 8), 24=-173(LC 8), 23=-117(LC

8), 22=-342(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 32, 24, 23, 22 except 36=399(LC 13), 21=295(LC 5), 27=726(LC 8), 29=365(LC 2), 30=271(LC 2), 31=268(LC 14), 33=365(LC 13), 34=334(LC 13), 35=317(LC 13), 26=389(LC 3), 25=324(LC 3)

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

TOP CHORD

2-36=-210/466, 3-4=-422/289, 4-5=-290/243, 5-6=-270/267, 6-7=-220/274, 7-8=-208/345, 8-9=-110/393, 9-10=-108/505, 10-37=-127/568, 11-37=-8/578,

11-12=-129/560, 12-13=-108/447, 13-38=0/335, 14-38=-60/324, 16-17=-306/265,

17-18=-317/254, 19-21=-123/387

35-36=-153/291, 34-35=-153/291, 33-34=-153/291, 32-33=-153/291, 31-32=-153/289,

30-31=-153/289, 29-30=-153/289, 28-29=-153/289, 27-28=-153/289, 26-27=-153/289,

25-26=-153/289, 24-25=-153/289, 23-24=-153/289, 22-23=-153/289, 21-22=-153/289 11-27=-701/0, 10-29=-325/157, 6-33=-325/131, 5-34=-293/80, 4-35=-280/263

**WEBS** 

3-36=-689/430, 12-26=-349/152, 13-25=-284/206, 16-22=-162/302, 18-21=-471/308

## NOTES-

**BOT CHORD** 

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) \*\* TCLL: ASCE 7-05; Pg=60.0 psf (ground snow); Ps= varies (min. roof snow=35.6 psf) see load cases; Category II; Exp C; Partially Exp.; Ct=1.1
- 4) Roof design snow load has been reduced to account for slope.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 46.2 psf on overhangs Continue on many teventh other live loads.

	Job	Truss	Truss Type	Qty	Ply	LAVENDIER
ı	B167215	T01GE	GABLE	1	1	Job Reference (optional)

8.000 s Jan 15 2016 MiTek Industries, Inc. Thu Dec 08 15:14:01 2016 Page 2
ID:2l2aNXhs\_pYzwSD577x2MWyBIJR-ee\_xwxL9ZJwQqhmziVuMky5t8LR7oyYwUPp6PRyB?Zq

- 7) All plates are 1.5x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 10) First truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

  12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 34 except (jt=lb) 36=269, 21=249, 29=133, 30=180, 31=171, 32=144, 33=112, 35=325, 26=129, 25=181, 24=173, 23=117, 22=342.
- 32=144, 33=112, 33=325, 20=129, 25=161, 24=175, 23=117, 22=342.

  13) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

  14) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

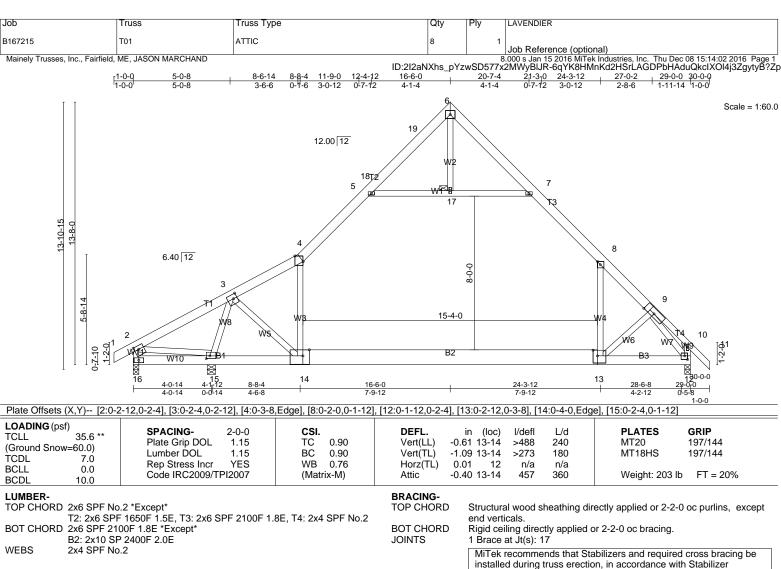
  15) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

# LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-106, 2-7=-106, 7-11=-85, 11-19=-85, 19-20=-85, 21-36=-20



**WEBS** 

installed during truss erection, in accordance with Stabilizer Installation guide

**REACTIONS.** (lb/size) 15=2676/0-5-4 (min. 0-4-8), 12=1567/0-3-8 (min. 0-2-4), 16=-285/0-3-8 (min. 0-1-8)

Max Horz 16=524(LC 7)

Max Uplift15=-258(LC 8), 12=-193(LC 9), 16=-1175(LC 13)

Max Grav15=3534(LC 3), 12=1761(LC 4), 16=23(LC 7)

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

2-3=-98/2206, 3-4=-1143/221, 4-5=-1157/339, 5-18=-476/82, 18-19=-404/83,

6-19=-342/103, 6-7=-393/155, 7-8=-1220/306, 8-9=-1677/147, 2-16=0/1260,

15-16=-512/464, 14-15=-974/127, 13-14=-12/924, 12-13=0/1007

**BOT CHORD WEBS** 3-15=-3523/184, 3-14=0/2231, 4-14=-609/240, 5-17=-888/383, 7-17=-888/383,

8-13=0/956, 2-15=-1839/197, 9-12=-1793/11

NOTES-

- 1) Wind: ASCÉ 7-05; 100mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

  2) \*\* TCLL: ASCE 7-05; Pg=60.0 psf (ground snow); Ps= varies (min. roof snow=35.6 psf) see load cases; Category II; Exp C; Partially Exp.;
- Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 46.2 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Ceiling dead load (7.0 psf) on member(s), 4-5, 7-8, 5-17, 7-17; Wall dead load (5.0psf) on member(s), 4-14, 8-13 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (7.0 psf) applied only to room. 13-14
- 11) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=258, 12=193, 16=1175.
- 13) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) "Fix heels only" Member end fixity model was used in the analysis and design of this truss.
- 15) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at Continue to an ingresor Building designer must provide for uplift reactions indicated.

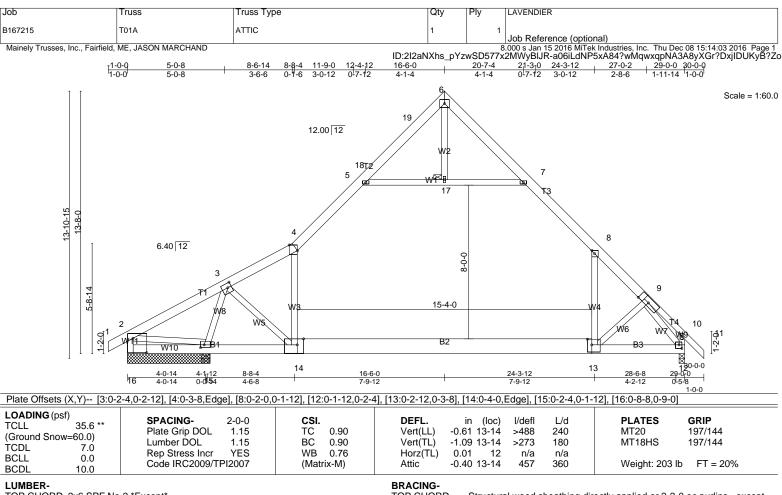
Job	Truss	Truss Type	Qty	Ply	LAVENDIER
B167215	T01	ATTIC	8	1	Job Reference (optional)

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**NOTES-** (17)

16) Attic room checked for L/360 deflection. 17) 15'-4" X 8'-0" 40 PSF ROOM, 2X10 B.C.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-106, 2-4=-106, 4-5=-99, 5-6=-85, 6-7=-85, 7-8=-99, 8-10=-85, 10-11=-85, 14-16=-20, 13-14=-34, 12-13=-20, 5-7=-14
Drag: 4-14=-10, 8-13=-10



TOP CHORD 2x6 SPF No.2 \*Except\*

T2: 2x6 SPF 1650F 1.5E, T3: 2x6 SPF 2100F 1.8E, T4: 2x4 SPF No.2

BOT CHORD 2x6 SPF 2100F 1.8E \*Except\*

B2: 2x10 SP 2400F 2.0E

**WEBS** 2x4 SPF No.2 TOP CHORD

JOINTS

Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.

**BOT CHORD** 

Rigid ceiling directly applied or 2-2-0 oc bracing.

1 Brace at Jt(s): 17

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

REACTIONS. All bearings 4-3-8 except (jt=length) 12=0-3-8.

(lb) - Max Horz 16=524(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) except 16=-1175(LC 13), 15=-258(LC 8), 12=-193(LC 9) Max Grav All reactions 250 lb or less at joint(s) 16 except 15=3534(LC 3), 15=2676(LC 1), 12=1761(LC 4)

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

TOP CHORD 2-3=-98/2206, 3-4=-1143/221, 4-5=-1157/339, 5-18=-476/82, 18-19=-404/83,

6-19=-342/103, 6-7=-393/155, 7-8=-1220/306, 8-9=-1677/147, 2-16=0/1260,

15-16=-512/464, 14-15=-974/127, 13-14=-12/924, 12-13=0/1007

BOT CHORD **WEBS** 3-15=-3523/184, 3-14=0/2231, 4-14=-609/240, 5-17=-888/383, 7-17=-888/383,

8-13=0/956, 2-15=-1839/197, 9-12=-1793/11

NOTES-

- 1) Wind: ASCÉ 7-05; 100mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

  2) \*\* TCLL: ASCE 7-05; Pg=60.0 psf (ground snow); Ps= varies (min. roof snow=35.6 psf) see load cases; Category II; Exp C; Partially Exp.;
- Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 46.2 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Ceiling dead load (7.0 psf) on member(s), 4-5, 7-8, 5-17, 7-17; Wall dead load (5.0psf) on member(s), 4-14, 8-13 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (7.0 psf) applied only to room. 13-14
- 11) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1175 lb uplift at joint 16, 258 lb uplift at joint 15 and 193 lb uplift at joint 12.
- 13) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) "Fix heels only" Member end fixity model was used in the analysis and design of this truss.
- 15) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at Continue to an ingresor Building designer must provide for uplift reactions indicated.

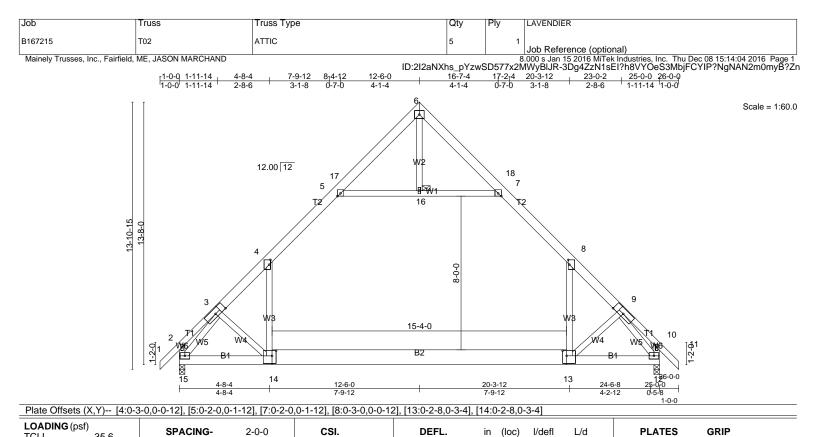
Job	Truss	Truss Type	Qty	Ply	LAVENDIER
B167215	T01A	ATTIC	1	1	Job Reference (optional)

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## **NOTES-** (17)

16) Attic room checked for L/360 deflection. 17) 15'-4" X 8'-0" 40 PSF ROOM, 2X10 B.C.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-106, 2-4=-106, 4-5=-99, 5-6=-85, 6-7=-85, 7-8=-99, 8-10=-85, 10-11=-85, 14-16=-20, 13-14=-34, 12-13=-20, 5-7=-14
Drag: 4-14=-10, 8-13=-10



TCDL

**BCLL** 

BCDL

(Ground Snow=60.0)

TOP CHORD 2x6 SPF 2100F 1.8E \*Except\* T1: 2x4 SPF No.2

BOT CHORD 2x6 SPF No.2 \*Except\* B2: 2x10 SP 2400F 2.0E

7.0

0.0

10.0

**WEBS** 2x4 SPF No.2

Attic **BRACING-**

Vert(LL)

Vert(TL)

Horz(TL)

TOP CHORD

Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.

MT20

Weight: 182 lb

197/144

FT = 20%

**BOT CHORD** Rigid ceiling directly applied or 2-2-0 oc bracing.

1 Brace at Jt(s): 16 JOINTS

-0.61 13-14

-1.08 13-14

-0.41 13-14

12

0.02

>484

>274

n/a

454

240

180

n/a

360

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

**REACTIONS.** (lb/size) 15=1666/0-3-8 (min. 0-2-15), 12=1666/0-3-8 (min. 0-2-15)

Plate Grip DOL

Rep Stress Incr

Code IRC2009/TPI2007

Lumber DOL

Max Horz 15=-530(LC 6)

Max Uplift15=-171(LC 8), 12=-171(LC 9) Max Grav15=1886(LC 2), 12=1886(LC 2)

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

TOP CHORD 3-4=-2071/185, 4-5=-1297/322, 5-17=-417/112, 6-17=-347/133, 6-18=-347/133,

7-18=-417/112, 7-8=-1297/322, 8-9=-2071/185, 2-15=-173/291, 10-12=-173/290

1.15

1.15

YES

**BOT CHORD** 14-15=-169/1232, 13-14=-26/1197, 12-13=-17/1232

WEBS 5-16=-1229/343, 7-16=-1229/343, 8-13=0/1181, 4-14=0/1181, 3-15=-2194/52,

NOTES-(14)

1) Wind: ASCÉ 7-05; 100mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

TC

ВС

WB

(Matrix-M)

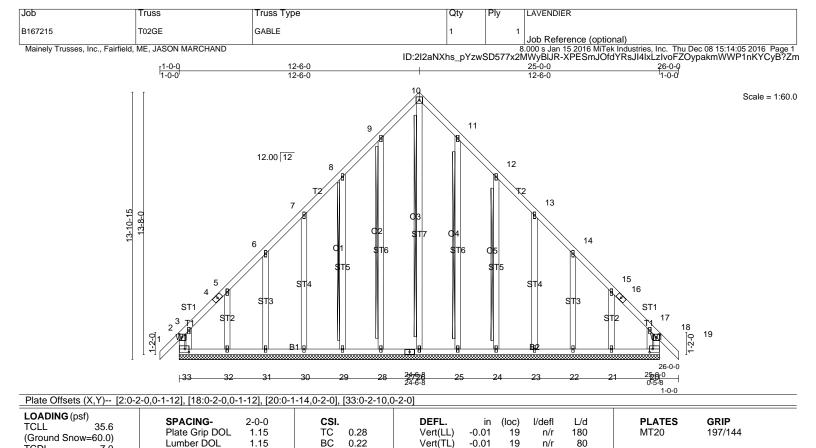
0.88

0.92

0.41

- 2) TCLL: ASCE 7-05; Pg=60.0 psf (ground snow); Ps=35.6 psf (roof snow); Category II; Exp C; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 46.2 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Ceiling dead load (7.0 psf) on member(s). 4-5, 7-8, 5-16, 7-16; Wall dead load (5.0psf) on member(s).8-13, 4-14 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (7.0 psf) applied only to room. 13-14
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 171 lb uplift at joint 15 and 171 lb uplift at joint
- 11) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) "Fix heels only" Member end fixity model was used in the analysis and design of this truss.
- 13) Attic room checked for L/360 deflection.
  14) 15'-4" X 8'-0" 40 PSF ROOM, 2X10 B.C.

LOAD CASE(S) Standard



TCDL

**BCLL** 

BCDI

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 **WEBS** 2x4 SPF No.2 **OTHERS** 2x4 SPF No 2

7.0

0.0

10.0

Wind(LL) **BRACING-**

Horz(TL)

0.01

-0.00 18-19

20

T-Brace:

n/a

n/a

120

TOP CHORD

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

Weight: 173 lb

FT = 20%

**BOT CHORD** WFBS

Rigid ceiling directly applied or 6-0-0 oc bracing. 2x4 SPF No.2 - 10-26, 9-28, 8-29, 11-25,

12-24 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3")

nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

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

REACTIONS. All bearings 25-0-0.

(lb) - Max Horz 33=-539(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) except 33=-367(LC 5), 20=-307(LC 6), 28=-130(LC 7), 29=-180(LC 7), 30=-174(LC 7), 31=-113(LC 7), 32=-371(LC 6), 25=-129(LC 8), 24=-181(LC 8), 23=-173(LC 8), 22=-117(LC 8), 21=-342(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 30, 31, 23, 22, 21 except

YES

WB

(Matrix)

0.70

33=424(LC 6), 20=364(LC 5), 26=727(LC 8), 28=365(LC 2), 29=272(LC 2), 32=269(LC 5), 25=365(LC 3), 24=272(LC 3)

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

Rep Stress Incr

Code IRC2009/TPI2007

2-33=-165/400, 3-4=-450/375, 4-5=-439/385, 5-6=-228/280, 6-7=-164/294, 7-8=-60/393, TOP CHORD

8-9=-99/506, 9-10=-118/579, 10-11=-118/560, 11-12=-99/483, 12-13=-55/370,

13-14=-112/271, 15-16=-377/324, 16-17=-388/313, 18-20=-134/387

**BOT CHORD** 32-33=-188/316, 31-32=-188/316, 30-31=-188/316, 29-30=-188/316, 28-29=-188/316,

27-28=-188/316, 26-27=-188/316, 25-26=-188/316, 24-25=-188/316, 23-24=-188/316, 22-23=-188/316, 21-22=-188/316, 20-21=-188/316

10-26=-702/0, 9-28=-325/154, 5-32=-166/310, 3-33=-640/462, 11-25=-325/152,

15-21=-162/301, 17-20=-562/383

**WEBS** 

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-05; Pg=60.0 psf (ground snow); Ps=35.6 psf (roof snow); Category II; Exp C; Partially Exp.; Ct=1.1
- 4) Roof design snow load has been reduced to account for slope.
- 5) Unbalanced snow loads have been considered for this design
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 46.2 psf on overhangs non-concurrent with other live loads.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- ூற்ரிர்ப்பை doobnepfaully gheathed from one face or securely braced against lateral movement (i.e. diagonal web).

Job	Truss	Truss Type	Qty	Ply	LAVENDIER
B167215	T02GE	GABLE	1	1	Job Reference (optional)

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- 10) Gable studs spaced at 2-0-0 oc.
  11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 367 lb uplift at joint 33, 307 lb uplift at joint 20, 130 lb uplift at joint 28, 180 lb uplift at joint 29, 174 lb uplift at joint 30, 113 lb uplift at joint 31, 371 lb uplift at joint 32, 129 lb uplift at joint 25, 181 lb uplift at joint 24, 173 lb uplift at joint 23, 117 lb uplift at joint 22 and 342 lb uplift at joint 21.
- 13) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

  14) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

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

LOAD CASE(S) Standard