

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 24052571 BCTH-30

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by The Building Center.

Pages or sheets covered by this seal: I65584848 thru I65584859

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



May 16,2024

Gilbert, Eric

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

Job Truss Truss Type Qty Ply BCTH-30 165584848 24052571 V7 Valley Job Reference (optional) The Building Center, Gastonia, NC - 28052, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 14 19:20:00 2024 Page 1 ID:H2zpl0AR6jHNSycZatkdl9zatAq-ZP_RmTRUbREshkZF7ZlrPlsQcnMQut3yGPRtF7zGUID 1-1-8 Scale = 1:7.4 3x4 =10.00 12 3 0-0-4 7-0-1 2x4 // 2x4 💉 2-3-0 2-2-11

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.01 BC 0.02 WB 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 3	I/defI n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	, ,					Weight: 6 lb	FT = 20%

LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 2-3-0 oc purlins.

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

REACTIONS. (size) 1=2-2-6, 3=2-2-6

Max Horz 1=-11(LC 12)

Max Grav 1=58(LC 2), 3=58(LC 2)

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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.





Job Truss Truss Type Qty Ply BCTH-30 165584849 24052571 V6 Valley Job Reference (optional) The Building Center, Gastonia, NC - 28052, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 14 19:19:59 2024 Page 1 ID:H2zpl0AR6jHNSycZatkdl9zatAq-5DQ2Y7Rrq86?3a_3arEcsYKE_N_j9Qpp1liKihzGUIE 2-3-14 2-3-14 3x4 = Scale = 1:12.4 10.00 12 3 0-0-4 0-0-4 2x4 // 2x4 📏 4-7-8 4-7-13 0-0-5 4-7-8 Plate Offsets (X,Y)--[2:0-2-0,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.06 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 вс Lumber DOL 1.15 0.18 Vert(CT) n/a n/a 999 TCDL 10.0 WB 0.00 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2015/TPI2014 Matrix-P Weight: 14 lb FT = 20% BCDL 10.0

LUMBER-

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

BRACING-

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 4-7-13 oc purlins.

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

REACTIONS. (size) 1=4-7-3, 3=4-7-3

Max Horz 1=-29(LC 12)

Max Uplift 1=-1(LC 14), 3=-1(LC 14) Max Grav 1=154(LC 2), 3=154(LC 2)

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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply BCTH-30 165584850 24052571 V5 Valley Job Reference (optional) The Building Center, Gastonia, NC - 28052, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 14 19:19:59 2024 Page 1 ID:H2zpl0AR6jHNSycZatkdl9zatAq-5DQ2Y7Rrq86?3a_3arEcsYKD7N?_9QLp1liKihzGUIE 3-6-5 3-6-5 3-6-5 Scale = 1:20.4 4x4 = 2 10.00 12 0-0-4 0-0-4 4 2x4 📏 2x4 // 2x4 || 7-0-10 7-0-5 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI I/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.18 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.10 Vert(CT) n/a n/a 999 TCDL 10.0 WB 0.03 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2015/TPI2014 Matrix-P Weight: 26 lb FT = 20% BCDL 10.0

LUMBER-

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.

REACTIONS. (size) 1=7-0-0, 3=7-0-0, 4=7-0-0

Max Horz 1=47(LC 13)

Max Uplift 1=-17(LC 14), 3=-17(LC 14)

Max Grav 1=143(LC 2), 3=143(LC 2), 4=213(LC 2)

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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply BCTH-30 165584851 24052571 V4 Valley Job Reference (optional) The Building Center, Gastonia, NC - 28052, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 14 19:19:58 2024 Page 1 ID:H2zpl0AR6jHNSycZatkdl9zatAq-d1tgLnQD3q_8SQPt08jNKKn07zeLQzffp5ynAFzGUIF 4-8-11 4-8-11 Scale = 1:26.5 4x4 = 2 10.00 12 0-0-4 0-0-4 2x4 📏 2x4 / 2x4 || 9-5-2 LOADING (psf) SPACING-2-0-0 CSI DEFL. in I/defI L/d **PLATES** GRIP (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.26 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.19 Vert(CT) n/a n/a 999 TCDL 10.0 WB 0.06 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a BCLL 0.0 Code IRC2015/TPI2014 Matrix-S Weight: 36 lb FT = 20% BCDL 10.0 LUMBER-BRACING-

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

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.

REACTIONS. (size) 1=9-4-13, 3=9-4-13, 4=9-4-13

Max Horz 1=-65(LC 12)

Max Uplift 1=-15(LC 14), 3=-15(LC 14)

Max Grav 1=183(LC 2), 3=183(LC 2), 4=325(LC 2)

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.
- $2) \ Wind: ASCE 7-10; \ Vult=120mph \ Vasd=95mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat. \ II; \ Exp \ B; \ ASCE 7-10; \ Vult=120mph \ Vasd=95mph; \ TCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat. \ II; \ Exp \ B; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat. \ II; \ Exp \ B; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ BCDL=6.0psf; \ h=25ft; \ h=2$ Enclosed; MWFRS (directional) and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 4-8-11, Exterior(2) 4-8-11 to 7-8-11, Interior(1) 7-8-11 to 9-0-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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24052571 V3 Valley Job Reference (optional) The Building Center, Gastonia, NC - 28052, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 14 19:19:58 2024 Page 1 ID:H2zpl0AR6jHNSycZatkdl9zatAq-d1tgLnQD3q_8SQPt08jNKKn2LzfNQyVfp5ynAFzGUIF 5-11-2 5-11-2 11-10-3 Scale = 1:30.1 4x4 = 3 10.00 12 11 12 2x4 || 2x4 || 2 [.... 8 7 6 3x4 // 3x4 📏 2x4 || 2x4 || 11-10-3 2x4 || 11-9-14 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in I/defI L/d **PLATES** GRIP (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.19 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.12 Vert(CT) n/a n/a 999 TCDL 10.0 WB 0.07 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2015/TPI2014 Matrix-S Weight: 49 lb FT = 20% BCDL 10.0

Qty

Ply

BCTH-30

165584852

LUMBER-

Job

Truss

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.

REACTIONS. All bearings 11-9-10.

Max Horz 1=83(LC 13) (lb) -

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=301(LC 23), 6=301(LC 24)

Truss Type

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.
- $2) \ Wind: ASCE 7-10; \ Vult=120mph \ Vasd=95mph; \ TCDL=6.0psf; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat. \ II; \ Exp \ B; \ ASCE 7-10; \ Vult=120mph \ Vasd=95mph; \ TCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat. \ II; \ Exp \ B; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ L=24ft; \ eave=4ft; \ Cat. \ II; \ Exp \ B; \ BCDL=6.0psf; \ h=25ft; \ B=45ft; \ BCDL=6.0psf; \ h=25ft; \ h=2$ Enclosed; MWFRS (directional) and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 5-11-2, Exterior(2) 5-11-2 to 8-11-2, Interior(1) 8-11-2 to 11-5-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.





Job Truss Truss Type Qty Ply BCTH-30 165584853 24052571 V2 Valley Job Reference (optional) The Building Center, Gastonia, NC - 28052, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 14 19:19:57 2024 Page 1 ID:H2zpl0AR6jHNSycZatkdl9zatAq-9rJI7RPbIWsHqHqhSQC8n7FtiaJEhVpWaRDDeozGUIG 7-1-8 7-1-8 Scale = 1:37.7 4x4 = 3 10.00 12 10 2x4 || 2x4 || 2 3x4 // 3x4 📏 8 7 6 2x4 || 2x4 || 2x4 || 14-3-0 14-2-11 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP TCLL (roof) 20.0

LUMBER-

Snow (Pf/Pg)

TCDL

BCLL

BCDL

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

BRACING-

TOP CHORD BOT CHORD

Vert(LL)

Vert(CT)

Horz(CT)

n/a

n/a

0.00

Structural wood sheathing directly applied or 6-0-0 oc purlins.

999

999

n/a

MT20

Weight: 61 lb

244/190

FT = 20%

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

n/a

n/a

n/a

REACTIONS. All bearings 14-2-6.

15.4/20.0

10.0

10.0

0.0

Max Horz 1=-101(LC 12) (lb) -

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, 7 except 8=327(LC 23), 6=327(LC 24)

1.15

1.15

YES

TC

вс

WB

Matrix-S

0.18

0.12

0.10

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

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

WEBS 2-8=-255/144, 4-6=-255/144

NOTES-

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 0-4-13 to 3-1-8, Interior(1) 3-1-8 to 7-1-8, Exterior(2) 7-1-8 to 10-1-8, Interior(1) 10-1-8 to 13-10-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.





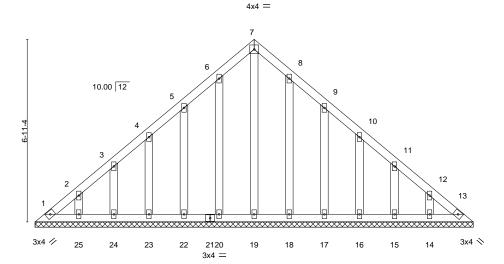
Job Truss Truss Type Qty Ply BCTH-30 165584854 24052571 V1GE Valley Job Reference (optional)

The Building Center, Gastonia, NC - 28052,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 14 19:19:57 2024 Page 1 ID:H2zpl0AR6jHNSycZatkdl9zatAq-9rJI7RPblWsHqHqhSQC8n7FvwaKmhVuWaRDDeozGUIG

8-3-14 8-3-14

Scale = 1:43.8



16-7-13 16-7-13

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.04 BC 0.02 WB 0.09	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) n/a - n/a - 0.00 13	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 110 lb	FT = 20%

LUMBER-

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.

REACTIONS. All bearings 16-7-13.

Max Horz 1=-119(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 20, 22, 23, 24, 25, 18, 17, 16, 15, 14 Max Grav All reactions 250 lb or less at joint(s) 1, 13, 19, 20, 22, 23, 24, 25, 18, 17, 16, 15, 14

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3) 0-4-13 to 3-4-13, Exterior(2) 3-4-13 to 8-3-14, Corner(3) 8-3-14 to 11-3-14, Exterior(2) 11-3-14 to 16-2-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 20, 22, 23, 24, 25, 18, 17, 16, 15, 14.



May 16,2024



Job Truss Truss Type Qty Ply BCTH-30 165584855 24052571 B2 MONOPITCH 9 Job Reference (optional) The Building Center, Gastonia, NC - 28052, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 14 19:19:56 2024 Page 1 ID:H2zpl0AR6jHNSycZatkdl9zatAq-gelww5OzXDkQC7FUujhvFvif3Awly33MLnTg6MzGUIH 4-10-8 1-0-0 4-10-8 Scale = 1:15.0 2x4 || 6 5.00 12 2-1-14 0-2-0 0-3-8 2x4 || 2x4 = LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl I/d **PLATES** GRIP TCLL (roof) 20.0

LUMBER-

REACTIONS.

Snow (Pf/Pg)

TCDL

BCLL

BCDL

WFBS

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

15.4/20.0

10.0

10.0

0.0

2x4 SP No.3

(size) 2=0-3-0, 4=0-1-8 Max Horz 2=62(LC 16) Max Uplift 2=-61(LC 16), 4=-48(LC 16)

Max Grav 2=260(LC 2), 4=176(LC 2)

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

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

NOTES-

1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 4-8-12 zone; cantilever left exposed; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

1.15

1.15

YES

TC

вс

WB

Matrix-P

0.36

0.29

0.00

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.04

-0.05

0.00

2-4

2-4

except end verticals.

3-0-0 oc bracing

>999

>999

n/a

240

180

n/a

Structural wood sheathing directly applied or 4-10-8 oc purlins,

MT20

Weight: 19 lb

244/190

FT = 20%

- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



May 16,2024



Job Truss Truss Type Qty Ply BCTH-30 165584856 24052571 B1GE MONOPITCH STRUCTURAL 2 Job Reference (optional) The Building Center, Gastonia, NC - 28052, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 14 19:19:56 2024 Page 1

ID:H2zpl0AR6jHNSycZatkdl9zatAq-gelww5OzXDkQC7FUujhvFvif3Awly33MLnTg6MzGUIH 4-10-8 1-0-0

4-10-8

2x4 | 2x4 || 10 5.00 12 2x4 || 2-1-14 0-2-0 0-3-8 2x4 || 2x4 || 2x4 || 2x4

LOADING (psf)		SPACING-	2-0-0	CSI.		DEF		in	(loc)	l/defl	L/d	DI A	TES	GRIP
TCLL (roof) 20.)	Plate Grip DOL	1.15	TC	0.36	Vert		0.04	2-4	>999	240	MT2		244/190
Snow (Pf/Pg) 15.4/20.0)			_			,					IVIIZ	.0	244/190
TCDL 10.		Lumber DOL	1.15	BC	0.29	Vert	CT)	-0.05	2-4	>999	180			
		Rep Stress Incr	YES	WB	0.00	Horz	CT)	0.00		n/a	n/a			
	0 *	Code IRC2015/TF	212014	Matri	x-P		,					Wei	aht: 23 lb	FT = 20%
BCDL 10.)	0000 11(02010/11	12011	Iviatii	A 1							1101	giit. 20 ib	11-2070

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 4-10-8 oc purlins,

2x4 SP No.2 **BOT CHORD** except end verticals. 2x4 SP No.3 **BOT CHORD** WFBS 3-0-0 oc bracing.

OTHERS 2x4 SP No.3 REACTIONS. (size) 2=0-3-0, 4=0-1-8

Max Horz 2=62(LC 16) Max Uplift 2=-61(LC 16), 4=-48(LC 16)

Max Grav 2=260(LC 2), 4=176(LC 2)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 4-8-12 zone; cantilever left exposed; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 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 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



Scale = 1:15.0

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Job Truss Truss Type Qty Ply BCTH-30 165584857 24052571 COMMON A3 Job Reference (optional) The Building Center, Gastonia, NC - 28052, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 14 19:19:55 2024 Page 1 ID:H2zpl0AR6jHNSycZatkdl9zatAq-CSBYilNLmvcZbzglL?Agii9P0mT?DPeD77k6ZwzGUII 3-10-1 8-10-4 17-0-0 23-9-13 . 30-0-15 3-10-1 5-0-3 8-1-12 6-9-13 6-3-2 Scale = 1:70.0 4x4 = 6.00 12 8-10-4 17-1-12 6x6 / 21 24 3x8 <> 19 6x6 / 8 3x6 / 3x8 =3x4 ≥ 4x5 / 4x5 ≥ 0-0-9 10 3 20 2x4 || 2x4 || 11 1-6-0 ⊠ 12 27 14 25 16 26 28 13 18 17 15 3x5 =4x5 = 3x4 =3x4 = 3x6 =3x12 =4x10 =3x8 MT20HS = 3x5 = 3x4 = 8-10-4 27-4-10 10-4-10 8-10-4 8-1-12 6-7-6 Plate Offsets (X,Y)--[15:0-1-12,0-2-0], [17:0-4-0,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES GRIP** TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.77 Vert(LL) -0.23 13-15 >999 240 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.81 Vert(CT) -0.45 17-18 >909 180 MT20HS 187/143 TCDL 10.0 WB Rep Stress Incr YES 0.91 Horz(CT) 0.08 12 n/a n/a **BCLL** 0.0 Code IRC2015/TPI2014 Matrix-S Weight: 231 lb FT = 20% BCDL 10.0 LUMBER-BRACING-TOP CHORD 2x4 SP No.1 *Except* TOP CHORD Structural wood sheathing directly applied or 2-5-6 oc purlins, 1-4.9-11: 2x4 SP No.2 except end verticals. **BOT CHORD BOT CHORD** 2x4 SP No.2 *Except* Rigid ceiling directly applied or 10-0-0 oc bracing 15-17: 2x6 SP No.1, 14-16: 2x4 SP DSS **WEBS** 1 Row at midpt 8-15, 8-19 **WEBS** JOINTS 1 Brace at Jt(s): 19 ON EESATO

2x4 SP No.3 *Except*

7-15,5-17,6-19: 2x4 SP No.2, 5-6: 2x6 SP No.1

REACTIONS. (size) 12=0-3-8, 18=0-3-8

Max Horz 18=173(LC 15)

Max Grav 12=1436(LC 29), 18=1546(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-5=-2075/0. 5-6=-1863/39. 6-7=-888/0. 7-8=-892/0. 8-10=-2010/58

BOT CHORD $17\text{-}18\text{=}0/1716,\ 15\text{-}17\text{=}0/1848,\ 13\text{-}15\text{=}0/1709,\ 12\text{-}13\text{=}\text{-}27/1564$ WEBS 15-19=0/598, 7-19=-25/554, 8-15=-265/374, 10-13=0/280, 10-12=-1982/24, 5-17=0/304,

6-19=-1294/121, 8-19=-1292/121, 3-18=-2004/0

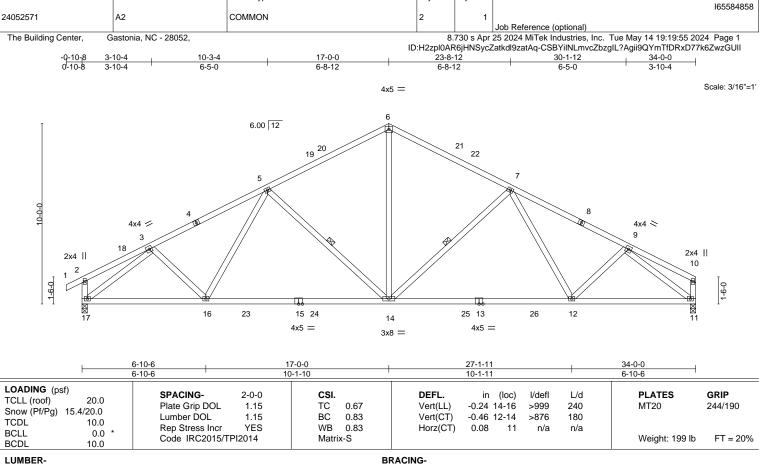
NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=34ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) -0-10-8 to 2-6-5, Interior(1) 2-6-5 to 17-0-0, Exterior(2) 17-0-0 to 20-4-13, Interior(1) 20-4-13 to 33-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 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 15.4 psf on overhangs non-concurrent with other live loads.
- 6) 150.0lb AC unit load placed on the bottom chord, 12-10-4 from left end, supported at two points, 4-0-0 apart.
- 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

May 16,2024



036322



TOP CHORD

BOT CHORD

WFBS

Qty

Ply

BCTH-30

LUMBER-

Job

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

13-15: 2x4 SP No.1

Truss

Truss Type

WFBS 2x4 SP No.3

REACTIONS. (size) 17=0-3-8, 11=0-3-8 Max Horz 17=173(LC 15)

Max Uplift 17=-35(LC 16), 11=-10(LC 16)

Max Grav 17=1411(LC 2), 11=1347(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-5=-1830/134 5-6=-1445/176 6-7=-1445/179 7-9=-1835/144

BOT CHORD 16-17=-85/1530, 14-16=-54/1601, 12-14=-47/1536, 11-12=-96/1447 WFBS 6-14=-28/900, 7-14=-496/119, 5-14=-494/119, 3-17=-1813/83, 9-11=-1825/116

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=34ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) -0-10-8 to 2-6-5, Interior(1) 2-6-5 to 17-0-0, Exterior(2) 17-0-0 to 20-4-13, Interior(1) 20-4-13 to 33-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 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 15.4 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 3x4 MT20 unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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, 11.



Structural wood sheathing directly applied or 3-10-0 oc purlins,

7-14. 5-14

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

except end verticals.

1 Row at midpt

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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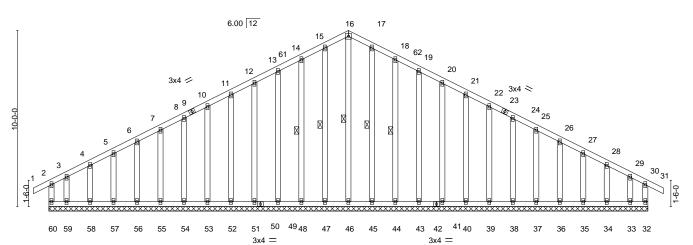


Job Truss Truss Type Qty Ply BCTH-30 165584859 24052571 A1GE COMMON SUPPORTED GAB 2 Job Reference (optional)

The Building Center, Gastonia, NC - 28052,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 14 19:19:54 2024 Page 1 ID:H2zpl0AR6jHNSycZatkdl9zatAq-kGd9VQNj?bUizp66nlfR9UdNbMluU9_4uT_Z1TzGUIJ 34-0-0 34-10₇8 0-10-8 17-0-0

Scale = 1:65.4 4x4 =



34-0-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) I/defl I/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.17 Vert(LL) -0.00 31 n/r 120 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.09 Vert(CT) -0.00 31 n/r 120 TCDL 10.0 WB Rep Stress Incr YES 0.10 Horz(CT) -0.00 32 n/a n/a **BCLL** 0.0 Code IRC2015/TPI2014 Matrix-R Weight: 310 lb FT = 20%BCDL 10.0

34-0-0

LUMBER-**BRACING-**

17-0-0

17-0-0

TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, **BOT CHORD** 2x4 SP No.2 except end verticals. 2x4 SP No.3 BOT CHORD WFBS Rigid ceiling directly applied or 6-0-0 oc bracing. OTHERS 2x4 SP No.3 WFBS 1 Row at midpt 16-46, 15-47, 14-48, 17-45, 18-44

REACTIONS. All bearings 34-0-0.

(lb) -Max Horz 60=-175(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 32, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 44, 43, 41, 40, 39, 38, 37, 36, 35, 34, 33 except 60=-135(LC 14), 59=-136(LC 15)

All reactions 250 lb or less at joint(s) 60, 32, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59, Max Grav 45, 44, 43, 41, 40, 39, 38, 37, 36, 35, 34, 33

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

TOP CHORD 12-13=-85/272, 13-14=-95/299, 14-15=-106/330, 15-16=-109/341, 16-17=-109/336,

17-18=-106/325, 18-19=-95/293, 19-20=-85/266

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=34ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3) -0-10-8 to 2-4-0, Exterior(2) 2-4-0 to 17-0-0, Corner(3) 17-0-0 to 20-4-13, Exterior(2) 20-4-13 to 34-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 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 15.4 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 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 1-4-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 44, 43, 41, 40, 39, 38, 37, 36, 35, 34, 33 except (jt=lb) 60=135, 59=136.



May 16,2024

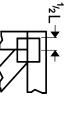
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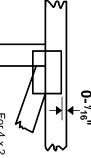


Symbols

PLATE LOCATION AND ORIENTATION



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



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

₹

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

* Plate location details available in MiTek software or upon request

PLATE SIZE

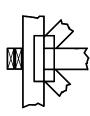
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

LATERAL BRACING LOCATION



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

BEARING



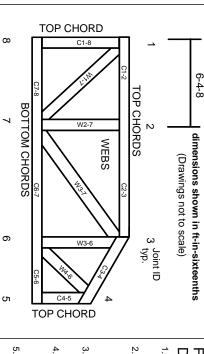
Min size shown is for crushing only number/letter where bearings occur reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

ANSI/TPI1: Industry Standards: National Design Specification for Metal

DSB-22:

Plate Connected Wood Trusses Installing, Restraining & Bracing of Metal Guide to Good Practice for Handling, Building Component Safety Information, Design Standard for Bracing. Plate Connected Wood Truss Construction.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282 ESR-4722, ESL-1388

Design General Notes

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other

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- joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.