

City of Portland Reviewed for code compliance 29-00-00 Date: 12/22/23 8-00-00 Project #: 22-150746-DFS-01-RS 21-00-00 **HAND FRAME** 1' - 0" OA HEEL HAND FRAME A05 (4) A04 A03 A01 **HAND FRAME RECEIVED** By BDS at 7:08 am, Dec 12, 2023 TOTAL TRUSSES: 140 SF ROOF AREA: 1465.13 CUSTOMER: PARR CASH PITCH: 10/12 2' - 0" JOB NAME: JOE Ward **OVERHANGS:** (360)750-1470 Vancouver (503)285-2615 Portland (360)750-1493 Fax 1-877-TRUSWAY Toll Free Ward ADU LOADING: 25-7-10 PLAN:



3901 NE 68th Street Vancouver, WA 98661

JOB NUMBER: 23003712

SALESMAN NATHAN VANATTA

WIND SPEED: 140 BUILDING EXP: B

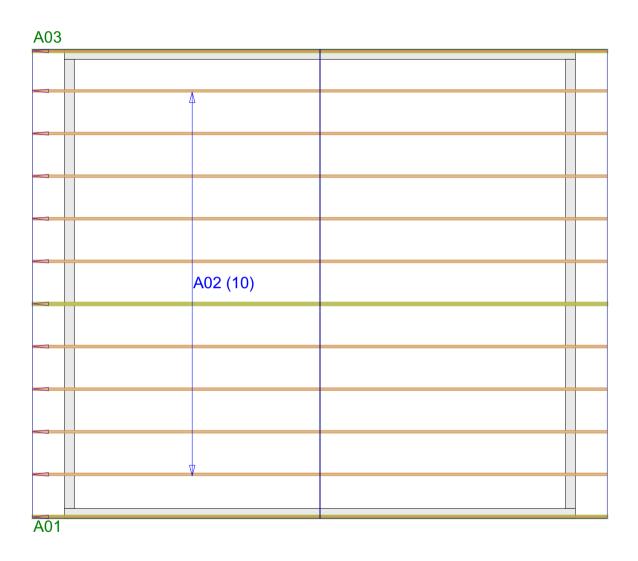
City of Portland

Reviewed for code compliance

Date: 12/22/23

Project #: 22-150746-DFS-01-RS

24-00-00



24-00-00

RECEIVED

By BDS at 7:08 am, Dec 12, 2023

TOTAL TRUSSES: 140

SF ROOF AREA: 773.21



22-00-00

(360)750-1470 Vancouver (503)285-2615 Portland (360)750-1493 Fax 1-877-TRUSWAY Toll Free 3901 NE 68th Street Vancouver, WA 98661 CUSTOMER: PARR CASH
JOB NAME: JOE Ward
PLAN: Ward Garage
JOB NUMBER: 23003875
SALESMAN NATHAN VANATTA

PITCH: 10/12
OVERHANGS: 1' - 6"
LOADING: 25-7-10
WIND SPEED: 100
BUILDING EXP: B

22-150746/51/56-REV-01-RS



City of Portland

Reviewed for code compliance

Date: 12/22/23

Project #: 22-150746-DFS-01-RS

MiTek USA, Inc.

MiTek USA, Inc. 400 Sunrise Avenue, Suite 270 Roseville, CA 95661 Telephone 916-755-3571

Re: 23003712-A JOE Ward

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Trus-way Inc.

Pages or sheets covered by this seal: R75533653 thru R75533658

My license renewal date for the state of Oregon is December 31, 2023.



April 3,2023

Baxter, David

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.

.lob Truss Truss Type Qtv Plv JOF Ward 23003712-A A01 GABLE Job Reference (optional) Trus-Way, Vancouver, WA - 98661,

10-0-0

10-0-0

City of Portland

Reviewed for code compliance

Date: 12/22/23

8.630 s Nov 19 2022 MiTek Industries, In c. PMojencAppr 232-1125:0274463D2F052-301P7al6je 1 ID:4f0cPNoIFtIXzPWb4hwTL6zUQzu-4rrCVWXj5yuGUbRC3pEg1ST5qG_vK1AnKgr1pczUQmY 20-0-0 22-0-0

2-0-0

10-0-0 4x6 =

Scale = 1:61.0

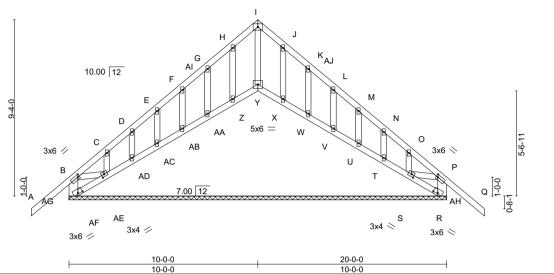


Plate Offsets (X,Y)-- [B:0-1-0,0-1-8], [P:0-1-0,0-1-8], [R:0-3-0,0-0-12], [S:0-1-12,0-1-8], [AE:0-1-12,0-1-8], [AF:0-3-0,0-0-12]

| LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.8/30.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 | CSI. TC 0.37 | DEFL. in (loc) l/defl L/d Vert(LL) -0.03 Q n/r 120 | PLATES GRIP MT20 220/195 |
|---|--|--------------------------------|--|--|
| TCDL 7.0 BCLL 0.0 * BCDL 10.0 | Lumber DOL 1.15 Rep Stress Incr YES Code IBC2018/TPI2014 | BC 0.02 WB 0.08 Matrix-S | Vert(CT) -0.06 Q n/r 90 Horz(CT) 0.00 AH n/a n/a | Weight: 122 lb FT = 20% |

LUMBER-TOP CHORD 2x4 DF No.1&Btr G

-2-0-0 2-0-0

BOT CHORD 2x4 DF No.1&Btr G **WEBS**

2x6 DF SS G *Except* B-AE,P-S: 2x4 DF Stud/Std G

OTHERS 2x4 DF Stud/Std G

BRACING-TOP CHORD

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

except end verticals

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

REACTIONS. All bearings 20-0-0.

Max Horz AF=-175(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) Y, Z, AA, AB, AC, AD, AE, X, W, V, U, T, S except AF=-105(LC 8),

AH=-101(LC 12)

Max Grav All reactions 250 lb or less at joint(s) Z, AA, AB, AC, AD, AE, X, W, V, U, T, S except AF=376(LC 16),

Y=309(LC 12), AH=376(LC 16)

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

TOP CHORD R-AH=-376/119

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0 , Interior(1) 13-0-0 to 22-0-0 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Plates checked for a plus or minus 5 degree rotation about its center.
- 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.
- 12) * 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) A plate rating reduction of 20% has been applied for the green lumber members.
- 14) Bearing at joint(s) AF, AG, AH considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) Y, Z, AA, AB, AC



RENEWAL DATE: 12-31-2023 April 3,2023

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



| Job | Truss | Truss Type | Qty | Ply | JOE Ward |
|--------------|----------------------|------------|-----|-----------|-----------------------|
| 23003712-A | A01 | GABLE | 1 | 1 | |
| | | | | | Job Reference (option |
| Trus-Way, Va | ncouver, WA - 98661, | | 8. | 630 s Nov | 19 2022 MiTek Industr |

onal) 8.630 s Nov 19 2022 MiTek Industries, II

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City of Portland Reviewed for code compliance

Date: 12/22/23

c. PMojecApr 23-112:0274463D2703-3) 1Page 2 3pEg1ST5qG vK1AnKgr1pczUQmY

NOTES-

- 16) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) Y, Z, AA, AB, AC, AD, AE, X, W, V, U, T, S.
- 17) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

MiTek[®]

.lob Truss Truss Type Qty Plv JOF Ward 23003712-A 9 A02 Scissor Job Reference (optional) Trus-Way, Vancouver, WA - 98661, 8.630 s Nov 19 2022 MiTek Industries, In

City of Portland

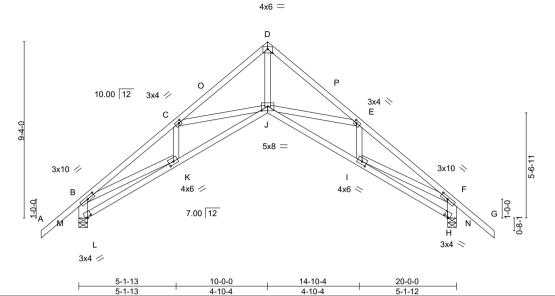
Reviewed for code compliance

Date: 12/22/23

c. PMmpecAppr 232-1125/22744465D21052-301P1al6je 1

ID:4f0cPNoIFtIXzPWb4hwTL6zUQzu-0EyywCZzdZ8 jvb AEG86tYRK3cVoni4ozK8uVzUQmW -2-0-0 10-0-0 14-10-4 20-0-0 22-0-0 5-1-13 2-0-0 5-1-13 4-10-4 4-10-3 5-1-12 2-0-0

Scale = 1:61.0



[B:0-4-12,0-1-8], [C:0-1-8,0-1-8], [D:0-3-0,Edge], [E:0-1-8,0-1-8], [F:0-4-12,0-1-8], [H:0-2-13,0-0-13], [I:0-3-0,0-1-12], [J:0-4-0,0-2-12], [K:0-3-0,0-1-12], Plate Offsets (X,Y)--[L:0-2-13,0-0-13]

| LOADING (psf |) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (100) | l/defl | L/d | PLATES | GRIP |
|----------------|-----------|-----------------|--------|--------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof) | 25.0 | SPACING- | 2-0-0 | COI. | | DEFL. | in | (loc) | i/deli | L/u | PLATES | GKIP |
| (/ | | Plate Grip DOL | 1.15 | TC | 0.37 | Vert(LL) | -0.10 | J. | >999 | 240 | MT20 | 220/195 |
| Snow (Pf/Pg) 2 | 20.8/30.0 | | | _ | | - ' ' | | | | | 20 | 220/100 |
| | 7.0 | Lumber DOL | 1.15 | BC | 0.27 | Vert(CT) | -0.25 | J-K | >935 | 180 | | |
| TCDL | 7.0 | Rep Stress Incr | YES | WB | 0.72 | Horz(CT) | 0.32 | N | n/a | n/a | | |
| BCLL | 0.0 * | | | | | . (. , | | IN | | | | |
| | | Code IBC2018/TF | PI2014 | l Matr | x-MS | Wind(LL) | -0.02 | J | >999 | 360 | Weight: 116 lb | FT = 20% |
| BCDL | 10.0 | | | | | (/ | | | | | 110.9 | |

LUMBER-BRACING-

TOP CHORD 2x4 DF No.1&Btr G TOP CHORD Structural wood sheathing directly applied or 4-8-7 oc purlins, **BOT CHORD** 2x4 DF No.1&Btr G except end verticals.

2x4 DF Stud/Std G *Except* **WEBS** BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. B-M,F-N: 2x6 DF SS G

REACTIONS. (size) M=0-5-8, N=0-5-8 Max Horz M=-175(LC 10)

Max Uplift M=-53(LC 12), N=-53(LC 12) Max Grav M=963(LC 2), N=963(LC 2)

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

TOP CHORD B-C=-1889/0, C-D=-1608/0, D-E=-1608/0, E-F=-1889/0, L-M=-963/72, B-L=-945/30,

H-N=-963/70, F-H=-945/36

BOT CHORD K-L=-191/287, J-K=0/1634, I-J=0/1596

WEBS D-J=0/1627, E-J=-294/159, C-J=-294/154, B-K=0/1393, F-I=0/1393

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0 , Interior(1) 13-0-0 to 22-0-0 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) A plate rating reduction of 20% has been applied for the green lumber members.
- 9) Bearing at joint(s) M, N 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 capable of withstanding 100 lb uplift at joint(s) M, N.
- 11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



RENEWAL DATE: 12-31-2023 April 3,2023





.lob Truss Truss Type Qty Plv JOF Ward 23003712-A SCISSORS A03 Job Reference (optional) Trus-Way, Vancouver, WA - 98661, 8.630 s Nov 19 2022 MiTek Industries, In City of Portland

Reviewed for code compliance

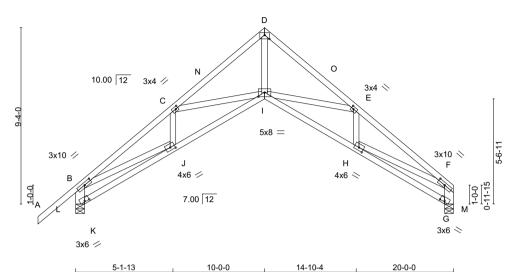
Date: 12/22/23

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ID:4f0cPNoIFtIXzPWb4hwTL6zUQzu-VQWK8YZcOtHrL2 10-0-0 14-10-4 20-0-0 5-1-13 5-1-13 4-10-4 4-10-3 5-1-12

4x6 =

Scale = 1:61.0



4-10-4 5-1-12 [B:0-4-12,0-1-8], [C:0-1-8,0-1-8], [D:0-3-0,Edge], [E:0-1-8,0-1-8], [F:0-4-12,0-1-8], [G:0-3-0,0-0-12], [H:0-3-0,0-1-12], [I:0-4-0,0-2-12], [J:0-3-0,0-1-12], [J:0-3-0,0-1-Plate Offsets (X,Y)--[K:0-3-0,0-0-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DE | EFL. | in | (100) | l/defl | L/d | PLATES | GRIP |
|----------------|----------|-----------------|-------|--------|------|------|---------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof) | 25.0 | SPACING- | 2-0-0 | COI. | | 00 | EFL. | in | (loc) | i/deli | L/U | PLATES | GKIP |
| . (, | | Plate Grip DOL | 1.15 | TC | 0.37 | Ve | ert(LL) | -0.10 | - 1 | >999 | 240 | MT20 | 220/195 |
| Snow (Pf/Pg) 2 | 0.8/30.0 | | | _ | | 1 | , , | | | | | 141120 | 220/100 |
| | 7.0 | Lumber DOL | 1.15 | BC | 0.28 | Ve | ert(CT) | -0.26 | H-I | >918 | 180 | | |
| TCDL | 7.0 | Rep Stress Incr | YES | WB | 0.74 | | orz(CT) | 0.32 | М | n/a | n/a | | |
| BCLL | 0.0 * | | | | | | , | | IVI | | | | |
| | | Code IBC2018/TF | 인2014 | l Matr | x-MS | l Wi | ind(LL) | 0.03 | - 1 | >999 | 360 | Weight: 112 lb | FT = 20% |
| BCDL | 10.0 | | | | | 1 | (/ | | | | | g | |

4-10-4

LUMBER-BRACING-

TOP CHORD 2x4 DF No.1&Btr G TOP CHORD Structural wood sheathing directly applied or 4-7-3 oc purlins, **BOT CHORD** 2x4 DF No.1&Btr G except end verticals. 2x4 DF Stud/Std G *Except* **WEBS** BOT CHORD

5-1-13

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: J-K.

REACTIONS. (size) L=0-5-8, M=0-5-8

Max Horz L=166(LC 11) Max Uplift L=-56(LC 12)

B-L,F-M: 2x6 DF SS G

Max Grav L=971(LC 2), M=812(LC 2)

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

B-C=-1913/0, C-D=-1638/0, D-E=-1641/0, E-F=-1958/0, K-L=-971/75, B-K=-954/69, TOP CHORD

G-M=-812/10, F-G=-839/35

BOT CHORD J-K=-190/263, I-J=0/1618, H-I=0/1670

WEBS D-I=0/1671, E-I=-335/150, C-I=-293/128, B-J=0/1412, F-H=0/1378

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0 , Interior(1) 13-0-0 to 19-9-3 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) A plate rating reduction of 20% has been applied for the green lumber members.
- 9) Bearing at joint(s) L, M 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 capable of withstanding 100 lb uplift at joint(s) L.
- 11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI



RENEWAL DATE: 12-31-2023 April 3,2023





.lob Truss Truss Type Qty Plv JOE Ward 23003712-A A04 Scissor Job Reference (optional) Trus-Way, Vancouver, WA - 98661, 8.630 s Nov 19 2022 MiTek Industries, In **City of Portland**

Reviewed for code compliance

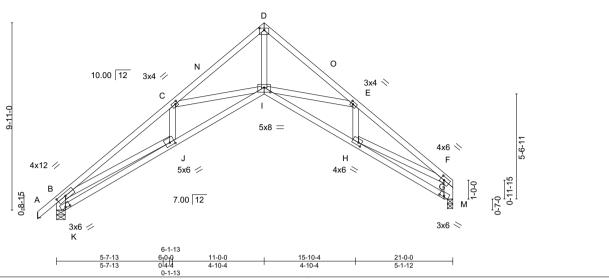
Date: 12/22/23

c. PMojencAppr 232-1125:02744468D2F052-301P7al6je 1

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4x6 =

Scale = 1:61.0



[B:0-5-12,0-1-14], [C:0-1-8,0-1-8], [D:0-3-0,0-1-4], [E:0-1-8,0-1-8], [F:0-2-4,0-2-0], [G:0-3-0,0-0-12], [H:0-2-0,0-1-12], [I:0-4-0,0-3-0], [J:0-3-0,0-2-0], [J:0-3-0,0-2-0], [J:0-3-0,0-1-12], [J:0-3-0,0-1-12Plate Offsets (X,Y)--

| LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.8/30.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 | CSI. TC 0.55 | DEFL. in (loc) I/defl L/d Vert(LL) -0.14 I-J >999 240 | PLATES GRIP MT20 220/195 |
|---|--|---------------------------------|--|--|
| TCDL 7.0 BCLL 0.0 * BCDL 10.0 | Lumber DOL 1.15 Rep Stress Incr YES Code IBC2018/TPI2014 | BC 0.31 WB 0.85 Matrix-MS | Vert(CT) -0.33 I-J >740 180 Horz(CT) 0.42 M n/a n/a Wind(LL) 0.04 I-J >999 360 | Weight: 115 lb FT = 20% |

TOP CHORD

BOT CHORD

LUMBER-BRACING-

2x4 DF No.1&Btr G **BOT CHORD** 2x4 DF No.1&Btr G

WEBS 2x4 DF Stud/Std G *Except*

F-M,B-L: 2x6 DF SS G

REACTIONS. (size) L=0-5-8, M=0-3-8 Max Horz L=158(LC 11)

Max Uplift L=-31(LC 12), M=-2(LC 12) Max Grav L=944(LC 2), M=860(LC 2)

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

B-C=-2375/0, C-D=-1822/0, D-E=-1815/0, E-F=-2098/0, G-M=-860/14, F-G=-889/38 TOP CHORD

BOT CHORD I-J=0/2033, H-I=0/1793

WEBS E-I=-321/148, D-I=0/1911, C-I=-499/148, F-H=0/1489, K-L=-944/46, B-K=-889/90,

B-J=0/1921

TOP CHORD

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 14-0-0 , Interior(1) 14-0-0 to 20-9-3 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) A plate rating reduction of 20% has been applied for the green lumber members.
- 9) Bearing at joint(s) L, M 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 capable of withstanding 100 lb uplift at joint(s) L, M.
- 11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-6-1 oc purlins,

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

except end verticals.

RENEWAL DATE: 12-31-2023 April 3,2023





.lob Truss Truss Type Qty Plv JOE Ward 23003712-A A05 Scissor Job Reference (optional) Trus-Way, Vancouver, WA - 98661,

City of Portland

Reviewed for code compliance

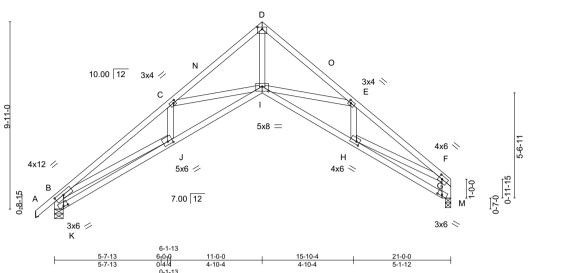
Date: 12/22/23

8.630 s Nov 19 2022 MiTek Industries, I. c. PludecApr 23-112/244490202-31Page 1 WvQP4L4Hjj4UhzlkZffjblL1GzUQmS

ID:4f0cPNoIFtIXzPWb4hwTL6zUQzu-v?CTmacUhofP0 15-10-4 4-10-3 5-7-13 6-1-13 1-0-0

4x6 =

Scale = 1:61.0



[B:0-5-12,0-1-14], [C:0-1-8,0-1-8], [D:0-3-0,0-1-4], [E:0-1-8,0-1-8], [F:0-2-4,0-2-0], [G:0-3-0,0-0-12], [H:0-2-0,0-1-12], [I:0-4-0,0-3-0], [J:0-3-0,0-2-0], [J:0-3-0,0-2-0], [J:0-3-0,0-1-12], [J:0-3-0,0-1-12Plate Offsets (X,Y)--

| LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.8/30.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 | CSI. TC 0.55 | DEFL. in (loc) I/defl L/d Vert(LL) -0.14 I-J >999 240 | PLATES GRIP MT20 220/195 |
|---|--|---------------------------------|--|--|
| TCDL 7.0 BCLL 0.0 * BCDL 10.0 | Lumber DOL 1.15 Rep Stress Incr YES Code IBC2018/TPI2014 | BC 0.31 WB 0.85 Matrix-MS | Vert(CT) -0.33 I-J >740 180 Horz(CT) 0.42 M n/a n/a Wind(LL) 0.04 I-J >999 360 | Weight: 115 lb FT = 20% |

LUMBER-BRACING-

TOP CHORD 2x4 DF No.1&Btr G **BOT CHORD** 2x4 DF No.1&Btr G

WEBS 2x4 DF Stud/Std G *Except*

F-M,B-L: 2x6 DF SS G

TOP CHORD Structural wood sheathing directly applied or 3-6-1 oc purlins,

except end verticals.

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

REACTIONS. (size) L=0-5-8, M=0-3-8

Max Horz L=158(LC 11)

Max Uplift L=-31(LC 12), M=-2(LC 12) Max Grav L=944(LC 2), M=860(LC 2)

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

B-C=-2375/0, C-D=-1822/0, D-E=-1815/0, E-F=-2098/0, G-M=-860/14, F-G=-889/38 TOP CHORD

BOT CHORD I-J=0/2033, H-I=0/1793

WEBS E-I=-321/148, D-I=0/1911, C-I=-499/148, F-H=0/1489, K-L=-944/46, B-K=-889/90,

B-J=0/1921

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 14-0-0 , Interior(1) 14-0-0 to 20-9-3 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) A plate rating reduction of 20% has been applied for the green lumber members.
- 9) Bearing at joint(s) L, M 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 capable of withstanding 100 lb uplift at joint(s) L, M.
- 11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



RENEWAL DATE: 12-31-2023 April 3,2023





.lob Truss Truss Type Qtv Plv JOF Ward 23003712-A A06 GABLE Job Reference (optional) Trus-Way, Vancouver, WA - 98661, 8.630 s Nov 19 2022 MiTek Industries, In

City of Portland

Reviewed for code compliance

Date: 12/22/23

c. PMminercAptr 232-1125:127445-1D21032-301P1al6je 1 (VNYM8oXuUjnCgsyAvnS68zUQmQ

ID:4f0cPNoIFtIXzPWb4hwTL6zUQzu-rOKDBFdkDPv7Rq2o 1-0-0 5-7-13 6-1-13

Scale = 1:62.7

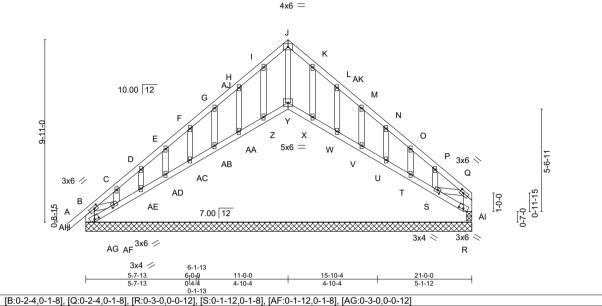


Plate Offsets (X,Y)--LOADING (psf) SPACING-CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 25.0 Plate Grip DOL 1.15 0.11 Vert(LL) -0.00 Ś >999 240 MT20 220/195 TC Snow (Pf/Pg) 20.8/30.0 Lumber DOL 0.02 Vert(CT) s 1.15 BC -0.00 >999 180 TCDI 7.0 Rep Stress Incr YES WB 0.04 Horz(CT) -0.00 ΑI n/a n/a **BCLL** 0.0 Code IBC2018/TPI2014 Matrix-S Wind(LL) 0.00 >999 Weight: 120 lb FT = 20% AG 360 BCDL 10.0

LUMBER-BRACING-

TOP CHORD 2x4 DF No.1&Btr G BOT CHORD 2x4 DF No.1&Btr G

2x4 DF Stud/Std G *Except* **WEBS**

Q-AI,B-AH: 2x6 DF SS G **OTHERS** 2x4 DF Stud/Std G

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing

REACTIONS. All bearings 21-0-0 except (jt=length) AI=0-3-8, AI=0-3-8.

(lb) -Max Horz AH=158(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) Y, AH, Z, AA, AB, AC, AD, AE, AF, X, W, V, U, T, S

Max Grav All reactions 250 lb or less at joint(s) Y, AH, Z, AA, AB, AC, AD, AE, AF, X, W, V, U, T, S, AI, AI

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

NOTES-

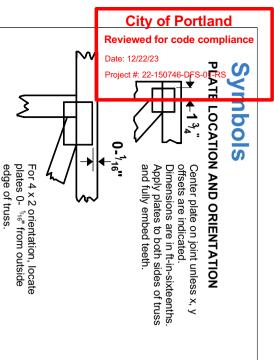
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 14-0-0 , Interior(1) 14-0-0 to 20-9-3 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) 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Plates checked for a plus or minus 5 degree rotation about its center.
- 8) Gable studs spaced at 1-4-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * 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.
- 11) A plate rating reduction of 20% has been applied for the green lumber members.
- 12) Bearing at joint(s) AH, AI considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) Y, AH, Z, AA, AB AC, AD, AE, AF, X, W, V, U, T, S.
- 14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI



RENEWAL DATE: 12-31-2023 April 3,2023







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

connector plates

This symbol indicates the required direction of slots in

PLATE SIZE

4 × 4

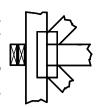
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



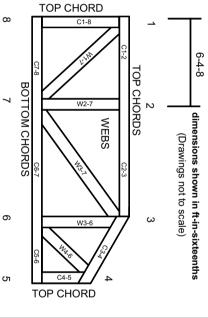
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

Industry Standards:

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

ANSI/TPI1: DSB-89:

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-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

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Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- 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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- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- 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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Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber

9

- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 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 specified.
- 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.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 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.

22-150746/51/56-REV-01-RS



City of Portland

Reviewed for code compliance

Date: 12/22/23

Project #: 22-150746-DFS-01-RS

MiTek USA, Inc.

MiTek USA, Inc. 400 Sunrise Avenue, Suite 270 Roseville, CA 95661 Telephone 916-755-3571

Re: 23003875-A JOE Ward

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Trus-way Inc.

Pages or sheets covered by this seal: R75519070 thru R75519072

My license renewal date for the state of Oregon is December 31, 2023.



April 3,2023

Baxter, David

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.

JOE Ward Job Truss Truss Type Qty Ply 23003875-A A01 Common Supported Gable Job Reference (optional) Trus-Way, Vancouver, WA - 98661,

12-0-0

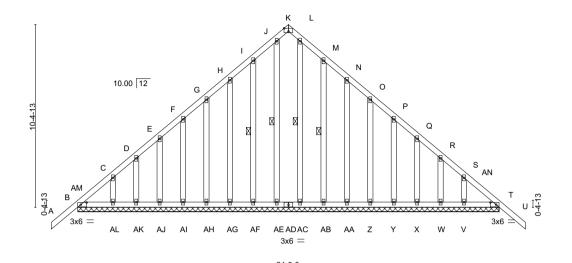
City of Portland Reviewed for code conspliante

Date: 12/22/23

8.630 s Nov 19 2022 MiTek Industries, I c. Fri Mar 31216:43:04 2023 Page 1 ID:0uLds_CKae8f44MI5DmyGSyYoG8-ILI7sCNpaJuLxRI FmN9dmhjujs_Icv@FB2vGzVMGL

12-0-0

Scale = 1:65.6



3x6 =

Plate Offsets (X,Y)-- [B:0-3-15,0-1-8], [K:0-3-0,Edge], [T:0-3-15,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defl L/d **PLATES** GRIP (loc) TCLL (roof) 25.0 Plate Grip DOL 1.15 TC 0.16 Vert(LL) -0.01 120 220/195 U n/r MT20 Snow (Pf/Pg) 20.8/30.0 Lumber DOL 1.15 0.06 Vert(CT) -0.01 U n/r 90 TCDI 7 0 Rep Stress Incr YES WB 0.08 Horz(CT) 0.00 n/a n/a BCLL 0.0 Code IBC2018/TPI2014 Matrix-S Weight: 201 lb FT = 20% BCDL 10.0

24-0-0

LUMBER-

TOP CHORD 2x4 DF No.1&Btr G 2x4 DF No 1&Btr G BOT CHORD 2x4 DF Stud/Std G OTHERS

BRACING-

TOP CHORD BOT CHORD WFBS

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

1 Row at midnt J-AE, I-AF, L-AC, M-AB

REACTIONS. All bearings 24-0-0

Max Horz B=-141(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) K, B, AF, AG, AH, AI, AJ, AK, AL, AB, AA, Z, Y, X, W, V, T All reactions 250 lb or less at joint(s) K, B, AE, AF, AG, AH, AI, AJ, AK, AL, AC, AB, AA, Z, Y, X, W, Max Grav

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=100mph (3-second gust) Vasd=79mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 9-0-0, Corner(3R) 9-0-0 to 15-0-0, Exterior(2N) 15-0-0 to 22-6-0, Corner(3E) 22-6-0 to 25-6-0 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Plates checked for a plus or minus 5 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 1-4-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * 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.
- 12) A plate rating reduction of 20% has been applied for the green lumber members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) K, B, AF, AG, AH AI, AJ, AK, AL, AB, AA, Z, Y, X, W, V, T.
- 14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI



RENEWAL DATE: 12-31-2023 April 3,2023





JOE Ward Job Truss Truss Type Qty Ρlν 23003875-A A02 Common 10 Job Reference (optional) Trus-Wav. Vancouver, WA - 98661, 8.630 s Nov 19 2022 MiTek Industries City of Portland

Reviewed for code compliance

Date: 12/22/23

noprejej (Mar 2/1-1604/4) (06) 2023 1 Page 1 RQNBPdiBn1zWR8DT1jljg8_9zVMGJ 25-6-0

ID:0uLds_CKae8f44MI5DmyGSyYoG8-EkQtHuP46x83A 12-0-0 _ 17-9-15 24-0-0 5-9-15

> 4x6 = Scale = 1:65.5

> > Structural wood sheathing directly applied or 5-4-12 oc purlins.

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

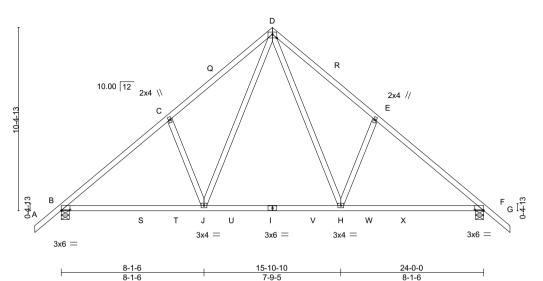


Plate Offsets (X,Y)-- [B:0-6-0,0-0-7], [D:0-3-0,Edge], [F:0-6-0,0-0-7]

| COADING (psf) CUL (roof) 25.0 SPACING- 2-0-0 | CSI. TC 0.31 BC 0.47 WB 0.30 Matrix-MS | DEFL. in (loc) l/defl L/d Vert(LL) -0.10 J-M >999 240 Vert(CT) -0.27 J-M >999 180 Horz(CT) 0.03 F n/a n/a Wind(LL) 0.02 J-M >999 360 | PLATES GRIP MT20 220/195 Weight: 126 lb FT = 20% |
|--|--|--|---|
|--|--|--|---|

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x4 DF No.1&Btr G **BOT CHORD** 2x4 DF No.1&Btr G **WEBS** 2x4 DF Stud/Std G

(size) B=0-5-8, F=0-5-8

Max Grav B=1198(LC 22), F=1198(LC 23)

Max Horz B=-141(LC 10)

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

TOP CHORD B-C=-1378/0, C-D=-1307/62, D-E=-1307/62, E-F=-1378/0

BOT CHORD B-J=0/1103, H-J=0/721, F-H=0/1036 **WEBS** D-H=0/720, E-H=-355/103, D-J=0/720, C-J=-355/103

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=100mph (3-second gust) Vasd=79mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 9-0-0, Exterior(2R) 9-0-0 to 15-0-0 , Interior(1) 15-0-0 to 22-6-0, Exterior(2E) 22-6-0 to 25-6-0 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 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 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.
- 8) A plate rating reduction of 20% has been applied for the green lumber members.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



RENEWAL DATE: 12-31-2023 April 3,2023





JOE Ward Job Truss Truss Type Qty Ply 23003875-A A03 Common Supported Gable 1 Job Reference (optional) 8.630 s Nov 19 2022 MiTek Industries, Trus-Way, Vancouver, WA - 98661,

City of Portland

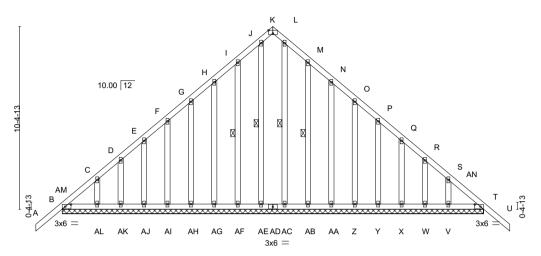
Reviewed for code comustiasnoe

Date: 12/22/23

nc, Fri Mar 31 16:43:08 2023 | Rage 1 oUcS5ncsOuKDwhQx0l19F22zVMGH 25-6-0

ID:0uLds_CKae8f44Ml5DmyGSyYoG8-B6XeiaQKeYOnQ2t 12-0-0 24-0-0 12-0-0 12-0-0

> Scale = 1:65.6 3x6 =



24-0-0 [B·0-3-15 0-1-8] [K·0-3-0 Edge] [T·0-3-15 0-1-8]

| Plate Olisets (X,Y) [B:0-3-15,0-1-6], [R:0-3-0,Euge], [1:0-3-15,0-1-6] | | | | | | | | |
|---|---|---------------------------------------|--|--|--|--|--|--|
| LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.8/30.0 TCDL 7.0 BCLL 0.0 * BCDL 10.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IBC2018/TPI2014 | CSI. TC 0.16 BC 0.06 WB 0.08 Matrix-S | DEFL. in (loc) l/defl L/d Vert(LL) -0.01 U n/r 120 Vert(CT) -0.01 U n/r 90 Horz(CT) 0.00 T n/a n/a | PLATES GRIP MT20 220/195 Weight: 201 lb FT = 20% | | | | |

TOP CHORD 2x4 DF No 1&Btr G

BOT CHORD 2x4 DF No.1&Btr G 2x4 DF Stud/Std G OTHERS

BRACING-TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. J-AE, I-AF, L-AC, M-AB WFBS 1 Row at midnt

REACTIONS. All bearings 24-0-0

(lb) - Max Horz B=-141(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) K, B, AF, AG, AH, AI, AJ, AK, AL, AB, AA, Z, Y, X, W, V, T All reactions 250 lb or less at joint(s) K, B, AE, AF, AG, AH, AI, AJ, AK, AL, AC, AB, AA, Z, Y, X, W, Max Grav

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

LUMBER-

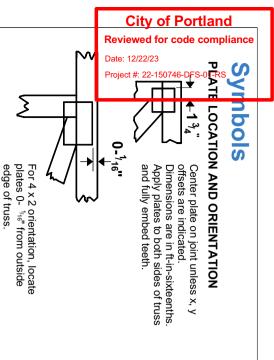
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=100mph (3-second gust) Vasd=79mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 9-0-0, Corner(3R) 9-0-0 to 15-0-0, Exterior(2N) 15-0-0 to 22-6-0, Corner(3E) 22-6-0 to 25-6-0 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Plates checked for a plus or minus 5 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * 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.
- 12) A plate rating reduction of 20% has been applied for the green lumber members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) K, B, AF, AG, AH AI, AJ, AK, AL, AB, AA, Z, Y, X, W, V, T.
- 14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI



RENEWAL DATE: 12-31-2023 April 3,2023







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

connector plates

This symbol indicates the required direction of slots in

PLATE SIZE

4 × 4

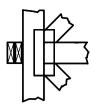
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



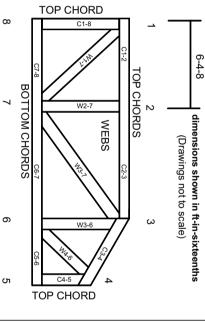
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

Industry Standards:

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

ANSI/TPI1: DSB-89:

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-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

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Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- 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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- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- 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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Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber

9

- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 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 specified.
- 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.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 20. 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.

22-150746/51/56-REV-01-RS



City of Portland

Reviewed for code compliance

Date: 12/22/23

Project #: 22-150746-DFS-01-RS

MiTek USA, Inc.

MiTek USA, Inc. 400 Sunrise Avenue, Suite 270 Roseville, CA 95661 Telephone 916-755-3571

Re: 23003711-A JOE Ward

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Trus-way Inc.

Pages or sheets covered by this seal: R75531279 thru R75531284

My license renewal date for the state of Oregon is December 31, 2023.



April 3,2023

Baxter, David

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.

.lob Truss Truss Type Qty Plv IOF Ward 23003711-A A01 GABLE Job Reference (optional) Trus-Way, Vancouver, WA - 98661, 8.630 s Nov 19 2022 MiTek Industries, I

10-0-0

4-10-4

5-1-13

5-1-13

City of Portland

Reviewed for code compliance

Date: 12/22/23

0-5-10 2-0-0

c. PMojecA#r 232-115:339457D202-301Pa@e 1 ID:g0H_ty3B8ot6Fc0tH_MQ9jzUS9j-ts5TJCM_hUM4nx8FU_KuK1D4hWGZ?EEQhnBuYIzURQW 20-0₁0 2-0-0

Weight: 122 lb

FT = 20%

4x6 =

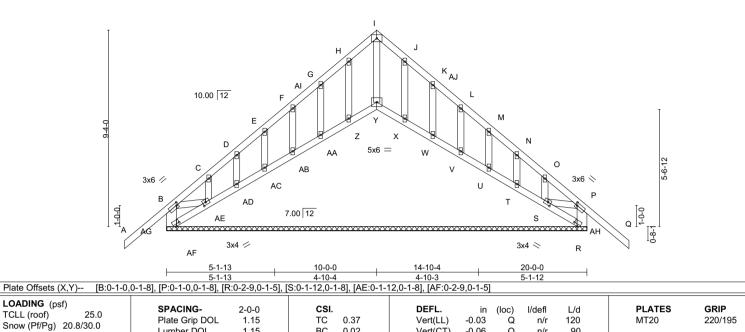
14-10-4

4-10-3

19-6-6

4-8-2

Scale = 1:54.8



10.0 LUMBER-

Lumber DOL

Rep Stress Incr

Code IBC2018/TPI2014

-2-0-0 2-0-0

TOP CHORD 2x4 DF No.1&Btr G BOT CHORD 2x4 DF No.1&Btr G

WEBS 2x4 DF Stud/Std G *Except* B-AG,P-AH: 2x6 DF SS G

7.0

0.0

OTHERS 2x4 DF Stud/Std G BRACING-

Vert(CT)

Horz(CT)

0.02

0.08

BC

WB

Matrix-S

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

n/r

n/a

90

n/a

except end verticals

-0.06

0.00

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing

Q

AΗ

REACTIONS. All bearings 20-0-0.

(lb) - Max Horz AF=-144(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) AF, Y, AH, AA, AB, AC, AD, AE, W, V, U, T, S

1.15

YES

All reactions 250 lb or less at joint(s) Z, AA, AB, AC, AD, AE, X, W, V, U, T, S except AF=376(LC 16), Max Grav Y=259(LC 12), AH=376(LC 16)

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

TOP CHORD R-AH=-376/90

NOTES-

LOADING (psf)

TCLL (roof)

TCDI

BCLL

BCDL

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=100mph (3-second gust) Vasd=79mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0 Interior(1) 13-0-0 to 22-0-0 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Plates checked for a plus or minus 5 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 1-4-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * 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.
- 12) A plate rating reduction of 20% has been applied for the green lumber members.
- 13) Bearing at joint(s) AF, AG, AH considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) AF, Y, AH, AA, AB, AC, AD, AE, W, V, U, T, S.
- 15) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) Y, Z, AA, AB, AC, AD, AE, X, W, V, U, T,



RENEWAL DATE: 12-31-2023 April 3,2023



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-47.3 (ev. 5/19/20/20 BEPURE USE.)

Design valid for use only with MITER® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



400 Sunrise Avenue, Suite 270 Roseville, CA 95661

| Job | Truss | Truss Type | Qty | Ply | JOE Ward |
|------------|-------|------------|-----|-----|-----------------------|
| 23003711-A | A01 | GABLE | 1 | 1 | Job Reference (option |

ional) 8.630 s Nov 19 2022 MiTek Industries, In Reviewed for code compliance

Date: 12/22/23

City of Portland

c. **PlwtopscAp**ir **23-115(39457D202-3) 1Pag**e 2 KuK1D4hWGZ?EEQhnBuYlzURQW ID:g0H ty3B8ot6Fc0tH MQ9jzUS9j-ts5TJCM hUM4nx8FU

Trus-Way, Vancouver, WA - 98661,

NOTES-

16) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

MiTek*

.lob Truss Truss Type Qty Plv JOE Ward 23003711-A 12 A02 Scissor Job Reference (optional) Trus-Way, Vancouver, WA - 98661, 8.630 s Nov 19 2022 MiTek Industries, Inc. PMoecApr 23-115:394580202-30 1Plage 1

City of Portland

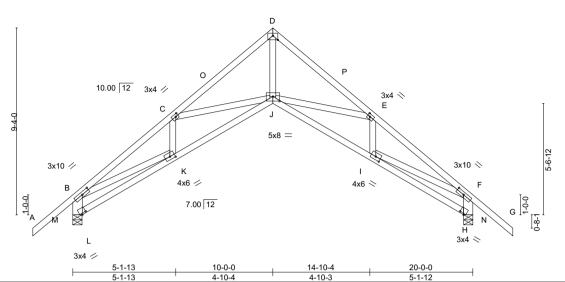
Reviewed for code compliance

Date: 12/22/23

ID:g0H_ty3B8ot6Fc0tH_MQ9jzUS9j-M2frXYMcSnUxO5iS1or7sEmFQwXpkXZawRxR4kzURQV 20-0₇0 22-0-0 0-5-10 2-0-0 5-1-13 10-0-0 14-10-4 19-6-6 2-0-0 5-1-13 4-10-4 4-10-3 4-8-2

Scale = 1:57.6

4x6 =



[B:0-4-12,0-1-8], [C:0-1-8,0-1-8], [D:0-3-0,Edge], [E:0-1-8,0-1-8], [F:0-4-12,0-1-8], [H:0-2-13,0-0-13], [I:0-3-0,0-1-12], [J:0-4-0,0-2-12], [K:0-3-0,0-1-12], Plate Offsets (X,Y)--[L:0-2-13,0-0-13]

| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) I/defl | L/d PLATES GRIP |
|------------------------|----------------------|-----------|-------------------------|-----------------------------|
| TCLL (roof) 25.0 | | | (/ | |
| Snow (Pf/Pg) 20.8/30.0 | Plate Grip DOL 1.15 | TC 0.37 | Vert(LL) -0.10 J >999 | 240 MT20 220/195 |
| | Lumber DOL 1.15 | BC 0.27 | Vert(CT) -0.25 J-K >931 | 180 |
| TCDL 7.0 | Rep Stress Incr YES | WB 0.72 | \ | |
| BCLL 0.0 * | | | | n/a |
| BCDI 10.0 | Code IBC2018/TPI2014 | Matrix-MS | Wind(LL) -0.02 J >999 | 360 Weight: 116 lb FT = 20% |

LUMBER-BRACING-

TOP CHORD 2x4 DF No.1&Btr G TOP CHORD Structural wood sheathing directly applied or 4-8-12 oc purlins, **BOT CHORD** 2x4 DF No.1&Btr G except end verticals.

2x4 DF Stud/Std G *Except* **WEBS** BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) M=0-5-8, N=0-5-8 Max Horz M=144(LC 11)

B-M,F-N: 2x6 DF SS G

Max Uplift M=-6(LC 12), N=-6(LC 12) Max Grav M=963(LC 2), N=963(LC 2)

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

B-C=-1880/0, C-D=-1614/0, D-E=-1614/0, E-F=-1880/0, L-M=-963/22, B-L=-939/0, TOP CHORD

H-N=-963/20, F-H=-939/0

BOT CHORD J-K=0/1593, I-J=0/1593

WEBS D-J=0/1620, E-J=-293/126, C-J=-293/122, B-K=0/1402, F-I=0/1402

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=100mph (3-second gust) Vasd=79mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0 , Interior(1) 13-0-0 to 22-0-0 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) A plate rating reduction of 20% has been applied for the green lumber members.
- 9) Bearing at joint(s) M, N 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 capable of withstanding 100 lb uplift at joint(s) M, N.
- 11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI



RENEWAL DATE: 12-31-2023 April 3,2023





.lob Truss Truss Type Qty Plv JOF Ward 23003711-A SCISSORS 5 A03 Job Reference (optional) Trus-Way, Vancouver, WA - 98661.

City of Portland

Reviewed for code compliance

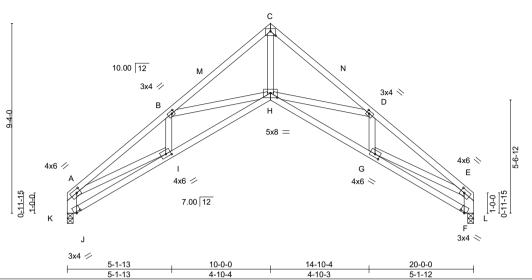
Date: 12/22/23

8.630 s Nov 19 2022 MiTek Industries, III<mark>c. PMojecApr 23-115647046902702-3 1Pag</mark>e 1 ID:g0H ty3B8ot6Fc0tH MQ9jzUS9j-IRnbyEOs PkfeQsq9DtbyfrdBkD2CRSsNIQY9dzURQT

5-1-13 10-0-0 14-10-4 19-6-6 20-0-0 0-5-10 5-1-13 4-10-4 4-10-3 4-8-2

4x6 =

Scale = 1:56.7



[A:0-2-4,0-2-0], [B:0-1-8,0-1-8], [C:0-3-0,Edge], [D:0-1-8,0-1-8], [E:0-2-4,0-2-0], [F:0-2-13,0-0-13], [G:0-3-0,0-1-12], [H:0-4-0,0-2-12], [I:0-3-0,0-1-12], Plate Offsets (X,Y)--[J:0-2-13,0-0-13]

| LOADING (psf TCLL (roof) Snow (Pf/Pg) | 25.0 | SPACING- Plate Grip DOL | 2-0-0 1.15 | CSI. | 0.22 | DEFL. Vert(LL) | in -0.10 | (loc) H | l/defl >999 | L/d 240 | PLATES MT20 | GRIP 220/195 |
|---|---------------|-------------------------------|---------------|----------|--------------|----------------------|---------------|------------|----------------|------------|----------------|---------------------|
| TCDL | 7.0 | Lumber DOL Rep Stress Incr | 1.15 YES | BC WB | 0.29 0.75 | Vert(CT) Horz(CT) | -0.26 0.33 | H-I I | >901 n/a | 180 n/a | | |
| BCLL BCDL | 0.0 * 10.0 | Code IBC2018/TP | | | x-MS | Wind(LL) | 0.03 | H | >999 | 360 | Weight: 109 lb | FT = 20% |

BOT CHORD

LUMBER-**BRACING-**TOP CHORD TOP CHORD

2x4 DF No.1&Btr G **BOT CHORD** 2x4 DF No.1&Btr G

WEBS 2x4 DF Stud/Std G *Except*

A-K,E-L: 2x6 DF SS G

REACTIONS. (size) K=0-3-8, L=0-3-8 Max Horz K=-121(LC 10)

Max Grav K=820(LC 2), L=820(LC 2)

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

A-B=-1974/0, B-C=-1676/0, C-D=-1676/0, D-E=-1974/0, J-K=-820/0, A-J=-844/0, TOP CHORD

F-L=-820/0, E-F=-844/0

BOT CHORD I-J=-112/270, H-I=0/1689, G-H=0/1689

WEBS C-H=0/1706, D-H=-334/115, B-H=-334/111, A-I=0/1401, E-G=0/1401

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=100mph (3-second gust) Vasd=79mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-2-13 to 3-2-13, Interior(1) 3-2-13 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0, Interior(1) 13-0-0 to 19-9-3 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Plates checked for a plus or minus 5 degree rotation about its center.
- 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) A plate rating reduction of 20% has been applied for the green lumber members.
- 8) Bearing at joint(s) K, L considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 4-7-6 oc purlins,

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

except end verticals.

RENEWAL DATE: 12-31-2023 April 3,2023





.lob Truss Truss Type Qty Plv JOF Ward 23003711-A SCISSORS 5 A04 Job Reference (optional) Trus-Way, Vancouver, WA - 98661, 8.630 s Nov 19 2022 MiTek Industries, In **City of Portland**

Reviewed for code compliance

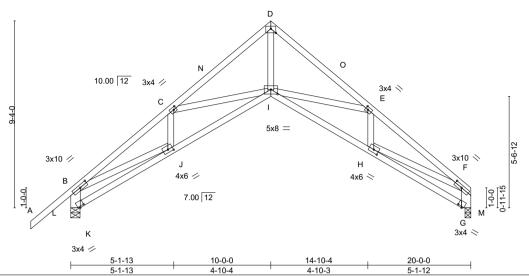
Date: 12/22/23

c. PMojencA#r 232-1115:04104064102403-3011P1a@e 1 wOqUtOmg7ZKxu?0cO95h3zURQS

ID:g0H ty3B8ot6Fc0tH MQ9jzUS9j-mdL 9aPUkitWFYR -2-0-0 2-0-0 5-1-13 10-0-0 14-10-4 19-6-6 5-1-13 4-10-4 4-10-3 4-8-2

4x6 =

Scale = 1:57.6



[B:0-4-12,0-1-8], [C:0-1-8,0-1-8], [D:0-3-0,Edge], [E:0-1-8,0-1-8], [F:0-4-12,0-1-8], [G:0-2-13,0-0-13], [H:0-3-0,0-1-12], [I:0-4-0,0-2-12], [J:0-3-0,0-1-12], Plate Offsets (X,Y)--[K:0-2-13,0-0-13]

| LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.8/30.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 | CSI. TC 0.37 | DEFL. in (loc) I/defl L/d Vert(LL) -0.10 I >999 240 | PLATES GRIP MT20 220/195 |
|---|--|---------------------------------|--|--|
| TCDL 7.0 BCLL 0.0 * BCDL 10.0 | Lumber DOL 1.15 Rep Stress Incr YES Code IBC2018/TPI2014 | BC 0.28 WB 0.73 Matrix-MS | Vert(CT) -0.26 H-I >915 180 Horz(CT) 0.32 M n/a n/a Wind(LL) 0.02 I >999 360 | Weight: 112 lb FT = 20% |

LUMBER-BRACING-

TOP CHORD 2x4 DF No.1&Btr G TOP CHORD Structural wood sheathing directly applied or 4-7-12 oc purlins, **BOT CHORD** 2x4 DF No.1&Btr G except end verticals. WEBS

2x4 DF Stud/Std G *Except* BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

B-L,F-M: 2x6 DF SS G 6-0-0 oc bracing: J-K.

(size) L=0-5-8, M=0-3-8

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

B-C=-1903/0, C-D=-1644/0, D-E=-1646/0, E-F=-1950/0, K-L=-971/24, B-K=-947/19, TOP CHORD

G-M=-812/0, F-G=-836/0 I-J=0/1614, H-I=0/1668

Max Horz L=138(LC 11) Max Uplift L=-8(LC 12)

WEBS D-I=0/1663, E-I=-335/117, C-I=-292/100, B-J=0/1421, F-H=0/1382

BOT CHORD

REACTIONS.

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

Max Grav L=971(LC 2), M=812(LC 2)

- 2) Wind: ASCE 7-16; Vult=100mph (3-second gust) Vasd=79mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0 , Interior(1) 13-0-0 to 19-9-3 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) A plate rating reduction of 20% has been applied for the green lumber members.
- 9) Bearing at joint(s) L, M 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 capable of withstanding 100 lb uplift at joint(s) L.
- 11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI



RENEWAL DATE: 12-31-2023 April 3,2023





.lob Truss Truss Type Qty Plv JOE Ward 23003711-A 2 A05 Scissor Job Reference (optional) Trus-Way, Vancouver, WA - 98661,

10-0-0

4-10-4

5-1-13

5-1-13

2-0-0

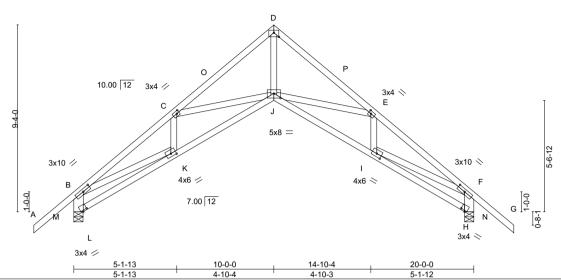
City of Portland

Reviewed for code compliance

Date: 12/22/23

4x6 =

Scale = 1:57.6



[B:0-4-12,0-1-8], [C:0-1-8,0-1-8], [D:0-3-0,Edge], [E:0-1-8,0-1-8], [F:0-4-12,0-1-8], [H:0-2-13,0-0-13], [I:0-3-0,0-1-12], [J:0-4-0,0-2-12], [K:0-3-0,0-1-12], Plate Offsets (X,Y)--[L:0-2-13,0-0-13]

| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in | (loc) | I/defl | L/d | PLATES | GRIP |
|------------------------|----------------------|-----------|----------------|-------|--------|-----|----------------|----------|
| TCLL (roof) 25.0 | | | | (100) | | | | |
| Snow (Pf/Pg) 20.8/30.0 | Plate Grip DOL 1.15 | TC 0.37 | Vert(LL) -0.10 | J | >999 | 240 | MT20 | 220/195 |
| | Lumber DOL 1.15 | BC 0.27 | Vert(CT) -0.25 | J-K | >931 | 180 | | |
| TCDL 7.0 | Rep Stress Incr YES | WB 0.72 | Horz(CT) 0.32 | N | n/a | n/a | | |
| BCLL 0.0 | | _ | . (. , | IN. | | | | |
| BCDL 10.0 | Code IBC2018/TPI2014 | Matrix-MS | Wind(LL) -0.02 | J | >999 | 360 | Weight: 116 lb | FT = 20% |
| DODL 10.0 | 1 | | | | | | | |

LUMBER-BRACING-

TOP CHORD 2x4 DF No.1&Btr G TOP CHORD Structural wood sheathing directly applied or 4-8-12 oc purlins, **BOT CHORD** 2x4 DF No.1&Btr G except end verticals. **WEBS**

2x4 DF Stud/Std G *Except* BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. B-M,F-N: 2x6 DF SS G

REACTIONS. (size) M=0-5-8, N=0-5-8 Max Horz M=144(LC 11)

Max Uplift M=-6(LC 12), N=-6(LC 12) Max Grav M=963(LC 2), N=963(LC 2)

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

B-C=-1880/0, C-D=-1614/0, D-E=-1614/0, E-F=-1880/0, L-M=-963/22, B-L=-939/0, TOP CHORD

H-N=-963/20, F-H=-939/0

BOT CHORD J-K=0/1593, I-J=0/1593

WEBS D-J=0/1620, E-J=-293/126, C-J=-293/122, B-K=0/1402, F-I=0/1402

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=100mph (3-second gust) Vasd=79mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0 , Interior(1) 13-0-0 to 22-0-0 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) A plate rating reduction of 20% has been applied for the green lumber members.
- 9) Bearing at joint(s) M, N 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 capable of withstanding 100 lb uplift at joint(s) M, N.
- 11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



RENEWAL DATE: 12-31-2023 April 3,2023





.lob Truss Truss Type Qty Plv JOF Ward 23003711-A GABLE A06 Job Reference (optional) Trus-Way, Vancouver, WA - 98661, 8.630 s Nov 19 2022 MiTek Industries, In

10-0-0

4-10-4

5-1-13

5-1-13

City of Portland

Reviewed for code compliance

Date: 12/22/23

c. PMmpecA#r 232-1115/917040/5021702-3011Pal6je 1

0-5-10 2-0-0 4-10-3 4-8-2

Scale = 1:54.8 4x6 =

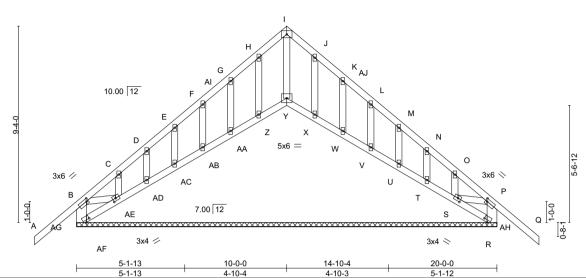


Plate Offsets (X,Y)-- [B:0-1-0,0-1-8], [P:0-1-0,0-1-8], [R:0-2-9,0-1-5], [S:0-1-12,0-1-8], [AE:0-1-12,0-1-8], [AF:0-2-9,0-1-5]

| LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.8/30.0 TCDL 7.0 BCLL 0.0 * | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES | CSI. TC 0.37 BC 0.02 WB 0.08 | DEFL. in (loc) l/defl L/d Vert(LL) -0.03 Q n/r 120 Vert(CT) -0.06 Q n/r 90 Horz(CT) 0.00 AH n/a n/a | PLATES GRIP MT20 220/195 |
|---|--|---------------------------------------|---|--|
| BCDL 10.0 | Code IBC2018/TPI2014 | Matrix-S | | Weight: 122 lb FT = 20% |

LUMBER-TOP CHORD 2x4 DF No.1&Btr G

-2-0-0 2-0-0

BOT CHORD 2x4 DF No.1&Btr G

2x4 DF Stud/Std G *Except* **WEBS**

B-AG,P-AH: 2x6 DF SS G **OTHERS** 2x4 DF Stud/Std G

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals

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

REACTIONS. All bearings 20-0-0.

(lb) - Max Horz AF=-144(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) AF, Y, AH, AA, AB, AC, AD, AE, W, V, U, T, S

All reactions 250 lb or less at joint(s) Z, AA, AB, AC, AD, AE, X, W, V, U, T, S except AF=376(LC 16), Max Grav Y=259(LC 12), AH=376(LC 16)

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

TOP CHORD R-AH=-376/90

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=100mph (3-second gust) Vasd=79mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0 Interior(1) 13-0-0 to 22-0-0 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 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=30.0 psf; Pf=20.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.8 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Plates checked for a plus or minus 5 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 1-4-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * 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.
- 12) A plate rating reduction of 20% has been applied for the green lumber members.
- 13) Bearing at joint(s) AF, AG, AH considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) AF, Y, AH, AA, AB, AC, AD, AE, W, V, U, T, S.
- 15) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) Y, Z, AA, AB, AC, AD, AE, X, W, V, U, T,



RENEWAL DATE: 12-31-2023 April 3,2023



| Job | Truss | Truss Type | Qty | Ply | JOE Ward |
|---|-------|------------|-----|-----|-----------------------|
| 23003711-A | A06 | GABLE | 1 | 1 | |
| | | | | | Job Reference (option |
| Trus-Way, Vancouver, WA - 98661, 8.630 s Nov 19 2022 MiTek In | | | | | 19 2022 MiTek Indus |

ional)

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City of Portland

Reviewed for code compliance

Date: 12/22/23

8.630 s Nov 19 2022 MiTek Industries, II c. PMmecA**‡r 23-11:401:465.202:31 Pa**§e 2 38ot6Fc0tH_MQ9jzUS9j-fOaU?yS?oxNxk NoymTmfjYRfl_QtsCcX07JqqzURQO

NOTES-

16) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

City of Portland Reviewed for code compliance Date: 12/22/23 Project #: 22-150746-DFS-0 ffsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth. For 4 × 2 orientation, locate plates 0- *ve* from outside

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

connector plates

This symbol indicates the required direction of slots in edge of truss.

PLATE SIZE

4 × 4

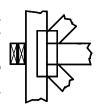
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



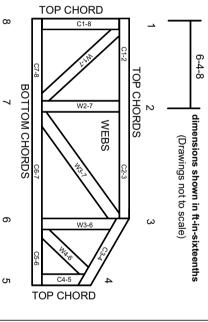
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

Industry Standards:

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

ANSI/TPI1: DSB-89:

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-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

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Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- 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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- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- 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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Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

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- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 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 specified.
- 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.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 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.