



City of Portland, Oregon - Bureau of Development Services

1900 SW Fourth Avenue • Portland, Oregon 97201 | 503-823-7300 | www.portlandoregon.gov/bds



Deferred Submittal Requirements and Application

Minimum Submittal Requirements (check all boxes and sign below):

For a full list of deferred submittal guidelines, please visit: www.portlandoregon.gov/bds/article/754963

- ☒ A copy of this application
- ☒ Plans stamped and signed by a Design Engineer or Architect registered in Oregon. One PDF copy of plans for electronic submittals or three copies for paper submittals.
- ☒ Calculations and product information. One PDF copy for electronic submittals or two copies for paper submittals.
- ☒ Prior to submitting the deferred submittal, the Engineer of Record and/or Architect of Record responsible for the building shall review the deferred submittal plans and supporting materials and add a notation indicating that the deferred submittal documents have been reviewed and found to be in general conformance with the design of the building. The notation shall be made on the deferred submittal drawings. Review stamps on letters of transmission are not acceptable.
Exception: the notation is not required on deferred submittals for fire sprinklers or roof trusses in residential construction when an Engineer or Architect of Record is not involved with the design of the building.
- ☒ Plan views and elevations identifying the location(s) as approved by the Engineer and/or Architect of Record must be submitted as appropriate but are required when the deferred submittal items include exterior elements.

I certify this deferred submittal application meets the minimum submittal requirements as outlined above.

Applicant Signature: Sergey Marandyuk **Date:** 12/02/20

Applicant Submittal Information:

Applicant name: Sergey Marandyuk
Address: 8101 NE Glisan St
City: Portland State: OR Zip Code: 97213
Phone: 971-322-3318 Email: sergey@modernnw.com
Value of deferred submittal: \$ 5000 Issued main building permit #: 18-209873-RS
Job Site Address: 7125 SW 45th Ave
Description/Scope of work: Trusses
Contractor Name: Modern NW CCB: 198585

Engineer/Architect of Record for the building information (Not required for roof trusses in residential construction when an Engineer or Architect of Record is not involved with the design of the building)

Name: Sherman Engineering Phone: (503) 230-8876

Design Engineer for the deferred items

Name: MiTek USA, Inc Phone: 951-245-9525

Fees

An invoice with permit fees will be sent to the applicant once minimum submittal requirements have been verified. Deferred submittal (DFS) fees are collected in addition to the standard building review fee paid on the main building permit. DFS fees cover the cost of the additional processing and review time associated with the design build element. The DFS fee for processing and reviewing deferred plan submittals is 10 percent of the building permit fee calculated using the value of the deferred portion of the project with a minimum fee of \$195 for 1 & 2 family dwelling projects or \$510 for commercial and all other projects.

The Bureau of Development Services (BDS) fee schedule is also available on the BDS web site at www.portlandoregon.gov/bds/article/102792

Helpful Information

Bureau of Development Services
1900 SW 4th Avenue, Portland, OR 97201

Submit your plans to:

Development Services Center (DSC), First Floor,
For Hours Call 503-823-7310 | Select option 1
or visit www.portlandoregon.gov/bds

Important Telephone Numbers

BDS main number	503-823-7300
DSC automated information line	503-823-7310
Building code information	503-823-1456
BDS 24 hour inspection request line	503-823-7000
Residential information for one and two family dwellings	503-823-7388
City of Portland TTY	503-823-6868

Information is subject to change.

Life Safety Checksheet Response

Permit #: 18-209873-DFS-01-RS

Date: 06/06/21

Customer name and phone number: Sergey Marandyuk (971) 322-3318

Note: In the spaces below, please provide specific information concerning the changes that you have made in response to the checklist. Note the checklist item number, your response or a description of the revision, and the location of the change on the plans (i.e. page number and/or detail number). Use as many lines as needed. *If the item is not in response to a checklist, write “**Applicant**” in the column labeled “Checksheet item number.”*

[illegible]

Plan Bin Location: SINGLE PDF

**CITY OF PORTLAND, OREGON – BUREAU OF DEVELOPMENT SERVICES**1900 SW Fourth Avenue, Suite 5000 • Portland, Oregon 97201 • www.portlandonline.com/bds**LIFE SAFETY CHECKSHEET**

Review Date: February 12, 2021

Application #: **18-209873-DFS-01-RS**IVR #: **4643584**

To:	APPLICANT	SERGEY MARANDYUK MODERN NW INC 8101 NE GLISAN ST PORTLAND, OR 97213	Work: (971) 322-3318 Home: Email: SERGEY@MODERNNW.COM
From:	BDS RESIDENTIAL PLANS EXAMINER	DAVID WOOD	Phone: (503) 865-6545 Email: David.Wood@portlandoregon.gov
cc:	OWNER	TAYLOR CASSIE L TAYLOR & RICHARD TAYLOR 4508 SW NEVADA ST PORTLAND, OR 97219	

PROJECT INFORMATION

Street Address:	7125 SW 45TH AVE	
Description of Work:	SINGLE PDF- DFS FOR TRUSSES	
The following assumptions were made when reviewing your project:		
Building Area	Stories	Sprinklers
3,054 SF	2	

PLAN REVIEW

Based on the plans submitted, the items listed below appear to be missing or not in conformance with the Oregon Residential Specialty Code and/or other City requirements.			
Item #	Location on plans	Code Section	Clarification / Correction Required
1	Truss Layout	R301.1, R106.1.1	The truss layout submitted does not match the approved Roof Plan as shown on approved plan page S3. Please correlate truss designs to approved Roof Plan (or submit a Revision, with supporting calculations, to revise roof framing design).

End of Checksheet

Please update all sets of submitted drawings by either replacing the original sheets with new sheets, or editing the originally submitted sheets. You can review "How to Update Your Plans in Response to a Checksheet" at <http://www.portlandoregon.gov/bds/article/93028> Visit the BDS website for more helpful information and a current listing of services available in the Development Services Center.

Please complete the attached Checksheet Response Form and include it with your re-submittal

If you have specific questions concerning this Checksheet, please call me at the phone number listed above. To check the status of your project, go to <http://www.portlandonline.com/bds/index.cfm?c=34194>. Or, you may request the status to be faxed to you by calling 503-823-7000 and selecting option 4.

You may receive separate Checksheets from other City agencies that will require separate responses.

RECEIVED
06/06/2021

RECHECK FEE: Please note that plan review fees for Life Safety, Structural, Site Development and Planning and Zoning will cover the initial review and up to two checksheets and the reviews of the applicant's responses to those checksheets. All additional checksheets and reviews of applicant responses will be charged an additional fee per checksheet.

Appeals: Pursuant to City Code Chapters 24.10, 25.07, 26.03, 27.02, and 28.03, you may appeal any code provision cited in this Checksheet to the BDS Administrative Board of Appeal within 180 calendar days of the review date. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to www.portlandoregon.gov/bds/appeals, call (503) 823-7300 or come in to the Development Services Center. Permit application expiration will not be extended pending resolution of any administrative appeal.

Structural Checksheet Response

Permit #: 18-209873-DFS-01-RS

Date: 06/06/21

Customer name and phone number: Sergey Marandyuk (971) 322-3318

Note: Please number each change in the ‘#’ column. Use as many lines as necessary to describe your changes. Indicate which reviewer’s checksheet you are responding to and the item your change addresses. If the item is not in response to a checksheet, write **customer** in the last column.

[illegible]

(for office use only)



STRUCTURAL CHECKSHEET

Application # : **18-209873-DFS-01-RS**
 Review Date : **February 12, 2021**

Residential 1 & 2 Family Permit

To:	APPLICANT SERGEY MARANDYUK MODERN NW INC 8101 NE GLISAN ST PORTLAND, OR 97213	Work: : e-Mail:	971 322-3318 SERGEY@MODERNNW.COM	
From:	BDS Structural Engineer	Ronald Tiland	Phone: Email:	503-865-6550 Ronald.Tiland@portlandoregon.gov
cc:	OWNER TAYLOR CASSIE L TAYLOR & RICHARD TAYLOR 4508 SW NEVADA ST PORTLAND, OR 97219			

PROJECT INFORMATION	
Street Address:	7125 SW 45TH AVE
Description of Work:	SINGLE PDF- DFS FOR TRUSSES

Based on the plans and specifications submitted, the following items appear to be missing or not in conformance with the Oregon Structural Specialty Code and / or other city, state, or federal requirements.			
Item #	Location on plans	Code Section	Clarification / Correction Required
1.	General	OSSC 107.2.1, ORSC R106.1.1	When responding to check sheet items, please cloud the revisions and/or additional information on the drawings submitted and itemize the changes on the Structural Checksheet Response page provided to expedite the review process.
2.	General	OSSC 1604.4, ORSC R301.1	The truss calculation layout plan does not match the truss layout indicated in the Roof Framing Plan on sheet S3. Please clarify/revise.

RECEIVED
06/06/2021

STRUCTURAL CHECKSHEET

Application # 18-209873-DFS-01-RS

Review Date: February 12, 2021

INSTRUCTIONS

To respond to this checksheet please visit here (<https://www.portland.gov/bds/permit-review-process>) and view the section on Checksheet response - submitting corrections. Visit the BDS website here (<https://www.portland.gov/bds/development-services-center>) for more helpful information and a current listing of services available in the Development Services Center.

Please complete the attached Checksheet Response Form and include it with your re-submittal.

If you have specific questions concerning this Checksheet, please call me at the phone number listed above.

To check the status of you project, go to (<https://www.portlandmaps.com/advanced/?action=permits>). Or, you , may request the status to be faxed to you by calling 503.823.7000 and selecting option 4. Please have your IVR and fax numbers available.

You may receive separate Checksheets from other City agencies that will require separate responses.

RECHECK FEE: Please note that plan review fees for Life Safety, Structural, Site Development and Planning and Zoning will cover the initial review and up to two checksheets and the reviews of the applicant's responses to those checksheets. All additional checksheets and reviews of applicant responses will be charged an additional fee per checksheet.

Appeals: Pursuant to City Code Chapters 24.10, 25.07, 26.03, 27.02, and 28.03, you may appeal any code provision cited in this Checksheet to the BDS Administrative Board of Appeal within 180 calendar days of the review date. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to www.portlandoregon.gov/bds/appeals, call (503) 823-7300 or come in to the Development Services Center. Permit application expiration will not be extended pending resolution of any administrative appeal.

18 209873 DFS 01 RS

SHOP DRAWING / SUBMITTAL REVIEW

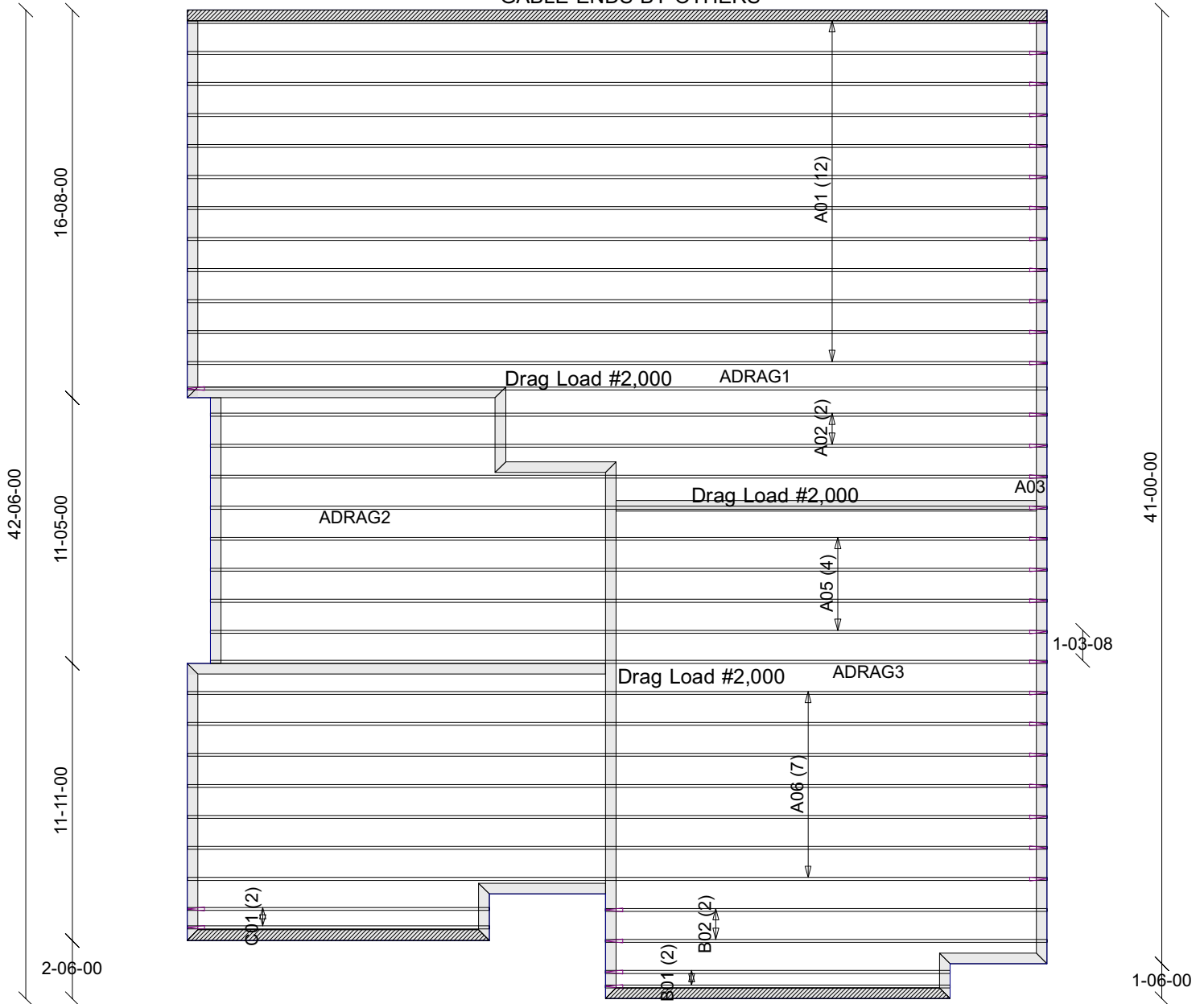
☒ REVIEWED ☐ REVIEWED WITH CHANGES NOTED
☐ REVISE AND RESUBMIT ☐ REJECTED

SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOBSITE FOR TOLERANCE, CLEARANCE, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION. COORDINATION OF HIS WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS.

By: *AW* DATE: 1-18-21

37-00-00

GABLE ENDS BY OTHERS



GABLE ENDS BY OTHERS

13-00-00

5-00-00

14-10-00

4-02-00

TOTAL TRUSSES: 140

SF ROOF AREA: 1505



(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: MODERN NORTHWEST INC

JOB NAME: Nevada

PLAN: City of Portland

JOB NUMBER: 205950

SALESMAN: JUSTIN PIERCE

Project #: 18-209873-DFS-01-RS

PITCH: 1 & 2/12

OVERHANGS: N/A

LOADING: 25-10-10

WIND SPEED: 140

BUILDING EXP: B



18 209873 DFS 01 RS

MiTek USA, Inc.

250 Klug Circle
Corona, CA 92880
951-245-9525

Re: 205950-A

Nevade

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: K8855517 thru K8855527

My license renewal date for the state of Oregon is December 31, 2021.



SHOP DRAWING / SUBMITTAL REVIEW	
☒ REVIEWED	☐ REVIEWED WITH CHANGES NOTED
☐ REVISE AND RESUBMIT	☐ REJECTED
SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOBSITE FOR TOLERANCE, CLEARANCE, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION. COORDINATION OF HIS WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS.	
By:	DATE: 1-18-21

January 11, 2021

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.

City of Portland

Reviewed for code compliance

Date: 07/12/21

Project #: 18-209873-DFS-01-RS

Job	Truss	Truss Type	Qty	Ply	Nevade	K8855517
205950-A	A01	Roof Special	12	1		

Trus-Way, Vancouver, WA - 98661,

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Jan 11 12:38:25 2021 Page 1

ID:EWdm3aFHLhxQYH81yFRhbeysQhy-du3Z?SGj3MnH?ijFE_HHYaMOinO6qVV7zE7QVhzwQfS

3-3-15	9-4-12	15-5-9	21-6-7	27-7-3	33-8-0	37-0-0
3-3-15	6-0-13	6-0-13	6-0-13	6-0-13	6-0-13	3-3-15

Scale = 1:62.0

1.00 | 12

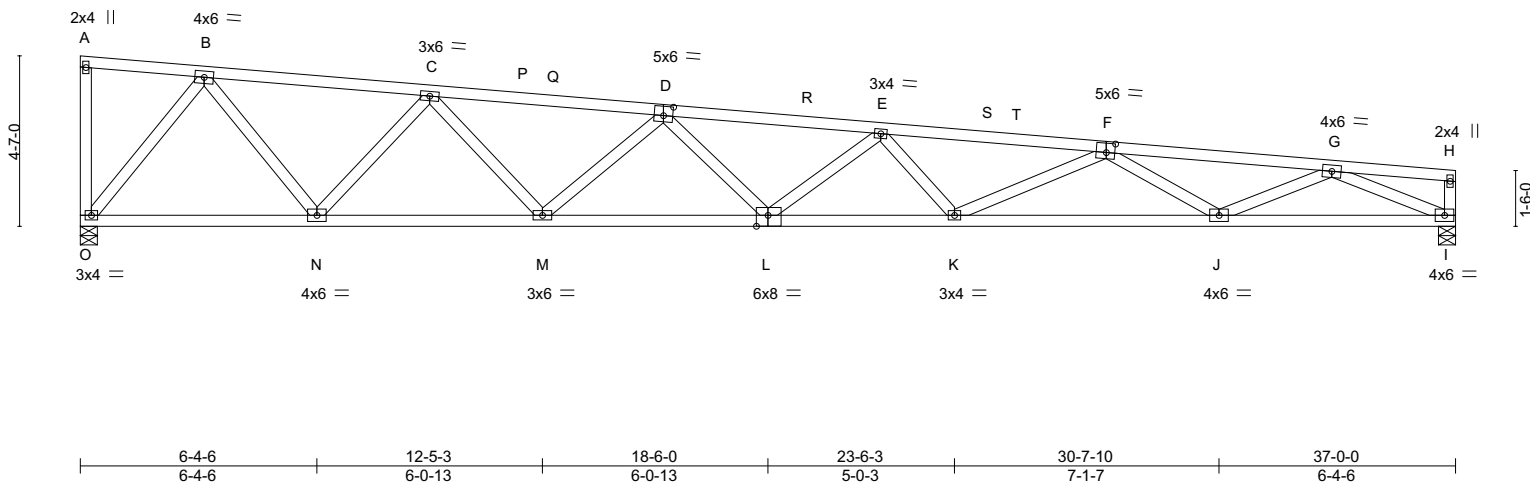


Plate Offsets (X,Y)-- [D:0-3-0,0-3-0], [F:0-2-12,0-3-0], [L:0-3-12,0-3-8]															
LOADING (psf)		SPACING-		1-4-0		CSI.		DEFL.		in (loc) I/defl L/d		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL		1.00		TC	0.42	Vert(LL)	-0.36	K-L	>999	240	MT20	220/195	
Snow (Pf/Pg)	20.8/30.0	Lumber DOL		1.00		BC	0.69	Vert(CT)	-0.90	K-L	>487	180			
TCDL	10.0	Rep Stress Incr		YES		WB	0.71	Horz(CT)	0.19	I	n/a	n/a			
BCLL	0.0 *	Code IRC2015/TPI2014				Matrix-MS		Wind(LL)	0.23	K-L	>999	360	Weight: 175 lb	FT = 20%	
BCDL	10.0														

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-0-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-5-3 oc bracing.

REACTIONS.

(size) O=0-5-8, I=0-5-8
Max Horz O=-126(LC 10)
Max Uplift O=-161(LC 14), I=-159(LC 14)
Max Grav O=1204(LC 19), I=1101(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1642/455, C-D=-2951/801, D-E=-3819/1054, E-F=-4069/1137, F-G=-3246/892
BOT CHORD N-O=-176/891, M-N=-583/2381, L-M=-916/3526, K-L=-1100/4058, J-K=-1097/3868, I-J=-631/2182
WEBS B-O=-1422/399, B-N=-281/1211, C-N=-1161/363, C-M=-188/833, D-M=-812/283, D-L=-85/459, E-L=-417/163, F-J=-782/303, G-J=-236/1175, G-I=-2344/707

NOTES-

- Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=37ft; eave=5ft; 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
- TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.00 Plate DOL=1.00); Pg=30.0 psf (ground snow); Pf=20.8 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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.
- A plate rating reduction of 20% has been applied for the green lumber members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) O=161, I=159.



RENEWAL DATE: 12-31-2021
January 11, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED DESIGN REFERENCE PAGE NUMBER FOR PROPER USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown and is for 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 during the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203, Dallas, TX 75243.

ANSI/TPI1 Quality Criteria, DSB-89 and BCS E Building Component

Project #: 18-209873-DFS-01-RS

MiTek
250 Klug Circle
Corona, CA 92880

Job	Truss	Truss Type	Qty	Ply	Nevade	K8855518
205950-A	A02	Roof Special	2	1	Job Reference (optional)	

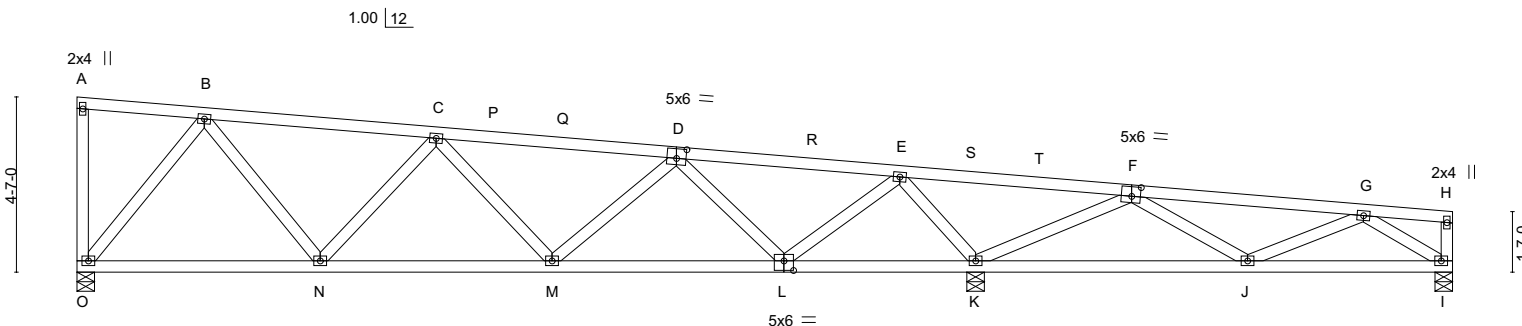
Trus-Way, Vancouver, WA - 98661,

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Jan 11 12:38:26 2021 Page 1

ID:EWdm3aFHLxQYH81yFRhbySQhy-54dxDoHLqgv8d0IRnhoW4nvaWBr_Z1pGCutz17zwQfR

3-3-15	7-4-9	9-4-12	21-6-7	27-7-3	33-8-0	36-0-0
3-3-15	4-0-9	2-0-4	12-1-10	6-0-13	6-0-13	2-3-15

Scale = 1:60.3



6-4-6	7-4-9	12-5-3	18-6-0	23-6-3	24-6-13	30-7-10	36-0-0
6-4-6	1-0-3	5-0-10	6-0-13	5-0-3	1-0-10	6-0-13	5-4-6

Plate Offsets (X,Y)-- [D:0-3-0,0-3-0], [F:0-2-12,0-3-0], [L:0-3-0,0-3-0]

LOADING (psf)	SPACING-	1-4-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.00	TC 0.35	Vert(LL)	-0.04	M	>999	MT20	220/195
Snow (Pf/Pg) 20.8/30.0	Lumber DOL	1.00	BC 0.20	Vert(CT)	-0.11	L-M	>999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.02	K	n/a		
BCLL 0.0 *	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.02	M	>999		
BCDL 10.0								Weight: 171 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 DF No.1&Btr G
BOT CHORD 2x4 DF No.1&Btr G
WEBS 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. (size) O=0-5-8, K=0-5-8, I=0-5-8
Max Horz O=-126(LC 10)
Max Uplift O=-120(LC 10), K=-189(LC 14), I=-48(LC 11)
Max Grav O=704(LC 19), K=1346(LC 19), I=206(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-815/229, C-D=-1067/284, D-E=-495/140, E-F=-236/921
BOT CHORD N-O=-68/495, M-N=-224/1068, L-M=-205/935, I-J=-96/262
WEBS B-O=-787/225, B-N=-86/502, C-N=-413/158, D-L=-659/206, E-L=-168/856, E-K=-1169/365, F-K=-836/305, F-J=0/321, G-I=-311/130

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; 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
 - 2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load; Lumber DOL=1.00 Plate DOL=1.00); Pg=30.0 psf (ground snow); Pf=20.8 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) All plates are 3x4 MT20 unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) I except (it=lb) O=120, K=189.



RENEWAL DATE: 12-31-2021
January 11, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED INFORMATION BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown and is for 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 during the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203, Orem, UT 84057.

ANSI/TPI1 Quality Criteria, DSB-89 and BCS E Building Component

MiTek
250 Klug Circle
Corona, CA 92880

Project #: 18-209873-DFS-01-RS

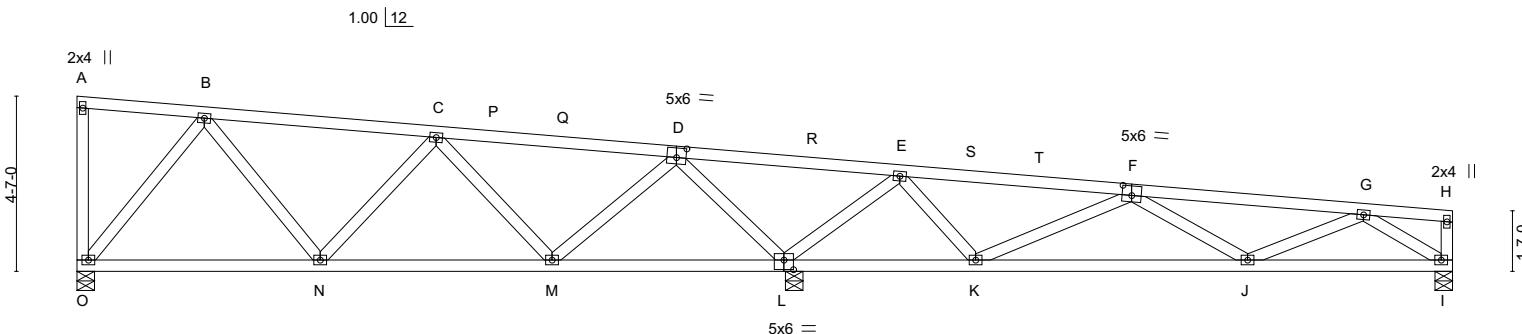
Job	Truss	Truss Type	Qty	Ply	Nevade	K8855519
205950-A	A03	Roof Special	1	1		

Trus-Way, Vancouver, WA - 98661,

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Jan 11 12:38:27 2021 Page 1
ID:EWdm3aFHLhxQYH81yFRhbeySQhy-aGBJQ8Izbz1?FAtdLPJld?RiXaCYIVFPQYcXZZzwQfQ

3-3-15	7-4-9	9-4-12	21-6-7	27-7-3	33-8-0	36-0-0
3-3-15	4-0-9	2-0-4	12-1-10	6-0-13	6-0-13	2-3-15

Scale = 1:60.3



6-4-6	12-5-3	18-6-0	19-0-0	23-6-3	30-7-10	36-0-0
6-4-6	6-0-13	6-0-13	0-6-0	4-6-3	7-1-7	5-4-6

Plate Offsets (X,Y)-- [D:0-3-0,0-3-0], [F:0-3-0,0-3-0], [L:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL 1.00	TC 0.33	Vert(LL) -0.03	J-K	>999	240	MT20	220/195
Snow (Pf/Pg) 20.8/30.0	Lumber DOL 1.00	BC 0.18	Vert(CT) -0.11	J-K	>999	180		
TCDL 10.0	Rep Stress Incr YES	WB 0.37	Horz(CT) 0.02	I	n/a	n/a		
BCLL 0.0 *	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.02	J-K	>999	360		
BCDL 10.0							Weight: 171 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 DF No.1&Btr G
BOT CHORD 2x4 DF No.1&Btr G
WEBS 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. (size) O=0-5-8, L=0-5-8, I=0-5-8
Max Horz O=-126(LC 10)
Max Uplift O=-102(LC 10), L=-189(LC 14), I=-72(LC 11)
Max Grav O=511(LC 19), L=1355(LC 19), I=393(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-495/143, C-D=-335/87, D-E=-208/828, F-G=-695/179
BOT CHORD N-O=-27/342, M-N=-87/557, J-K=-196/655, I-J=-163/536
WEBS B-O=-542/159, C-M=-364/139, D-M=-81/522, D-L=-1071/316, E-L=-852/284, E-K=-69/437, F-K=-599/238, G-I=-637/222

NOTES-

- 1) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; 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
- 2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load; Lumber DOL=1.00 Plate DOL=1.00); Pg=30.0 psf (ground snow); Pf=20.8 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) All plates are 3x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) I except (it=lb) O=102, L=189.



RENEWAL DATE: 12-31-2021
January 11, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED ~~ITEMS~~ **REFERENCE PAGE 11-12** ~~ITEMS~~ **FOR YOUR USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown and is for 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 during the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCS E** **Building Component**

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203, Orem, UT 84057-1601

MiTek
250 Klug Circle
Corona, CA 92880

Project #: 18-209873-DFS-01-RS

Job	Truss	Truss Type	Qty	Ply	Nevade	K8855520
205950-A	A05	Roof Special	4	1		

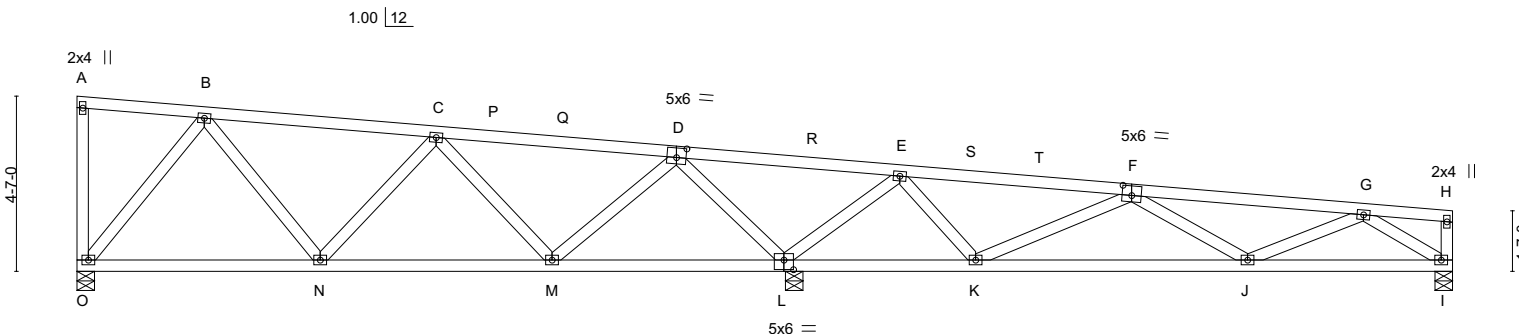
Trus-Way, Vancouver, WA - 98661,

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Jan 11 12:38:28 2021 Page 1

ID:EWdm3aFHLhxQYH81yFRhbeySQhy-2TlieUlcMH9stKSqv6q_9C_wH_Yn1yVZfCM460zwQfP

3-3-15	7-4-9	9-4-12	21-6-7	27-7-3	33-8-0	36-0-0
3-3-15	4-0-9	2-0-4	12-1-10	6-0-13	6-0-13	2-3-15

Scale = 1:60.3



6-4-6	12-5-3	18-6-0	19-0-0	23-6-3	30-7-10	36-0-0
6-4-6	6-0-13	6-0-13	0-6-0	4-6-3	7-1-7	5-4-6

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.00	TC	0.33	Vert(LL)	-0.03 J-K >999	240	MT20	220/195	
Snow (Pf/Pg)	20.8/30.0	Lumber DOL	1.00	BC	0.18	Vert(CT)	-0.11 J-K >999	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.02 I n/a	n/a			
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.02 J-K >999	360			
BCDL	10.0								Weight: 171 lb	FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 DF No.1&Btr G	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 DF No.1&Btr G	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 DF Stud/Std G		

REACTIONS.	
(size)	O=0-5-8, L=0-5-8, I=0-5-8
Max Horz	O=-126(LC 10)
Max Uplift	O=-102(LC 10), L=-189(LC 14), I=-72(LC 11)
Max Grav	O=511(LC 19), L=1355(LC 19), I=393(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	B-C=-495/143, C-D=-335/87, D-E=-208/828, F-G=-695/179
BOT CHORD	N-O=-27/342, M-N=-87/557, J-K=-196/655, I-J=-163/536
WEBS	B-O=-542/159, C-M=-364/139, D-M=-81/522, D-L=-1071/316, E-L=-852/284, E-K=-69/437, F-K=-599/238, G-I=-637/222

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; 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
 - 2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load; Lumber DOL=1.00 Plate DOL=1.00); Pg=30.0 psf (ground snow); Pf=20.8 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) All plates are 3x4 MT20 unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) I except (it=lb) O=102, L=189.



RENEWAL DATE: 12-31-2021
January 11, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED INFORMATION BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown and is for 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 during the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203, Dallas, TX 75243.

ANSI/TPI1 Quality Criteria, DSB-89 and BCS E Building Component

MiTek

250 Klug Circle
Corona, CA 92880

Project #: 18-209873-DFS-01-RS

Job	Truss	Truss Type	Qty	Ply	Nevade	K8855521
205950-A	A06	Roof Special	7	1		

Truss-Way, Vancouver, WA - 98661,

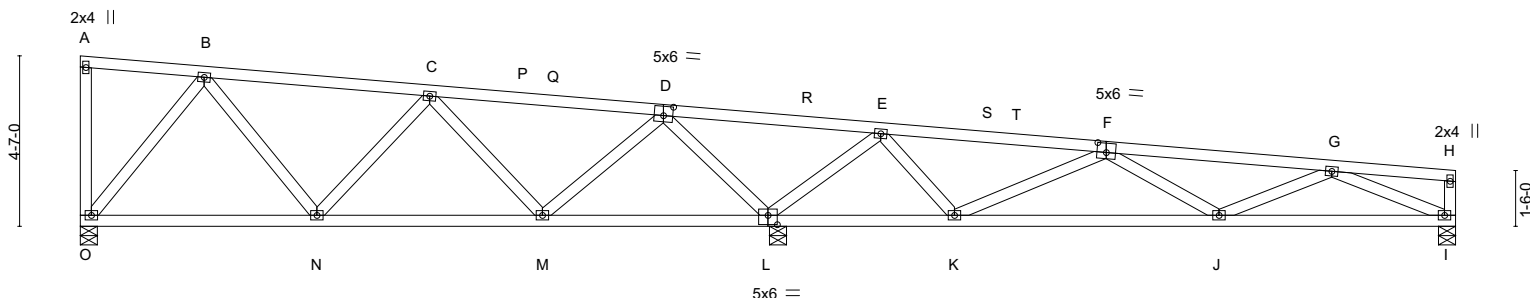
8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Jan 11 12:38:29 2021 Page 1

ID:EWdm3aFHLhxQYH81yFRhbeySQhy-WfJ4rpJE7bljUU10TqLDiQX5nOymOYius5eeSzwQfO

3-3-15	7-6-15	9-4-12	21-6-7	27-7-3	33-8-0	37-0-0
3-3-15	4-2-15	1-9-14	12-1-10	6-0-13	6-0-13	3-3-15

Scale = 1:62.0

1.00 | 12



6-4-6	12-5-3	18-6-0	19-0-0	23-6-3	30-7-10	37-0-0
6-4-6	6-0-13	6-0-13	0-6-0	4-6-3	7-1-7	6-4-6

Plate Offsets (X,Y)-- [D:0-3-0,0-3-0], [F:0-3-0,0-3-0], [L:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	1-4-0	TC 0.35	in (loc) l/defl L/d	MT20	220/195
Snow (Pf/Pg) 20.8/30.0	Plate Grip DOL 1.00	BC 0.18	Vert(LL) -0.03 J-K >999 240		
TCDL 10.0	Lumber DOL 1.00	WB 0.39	Vert(CT) -0.12 J-K >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.02 I n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014		Wind(LL) 0.02 J-K >999 360		
				Weight: 175 lb	FT = 20%

LUMBER-

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

(size) O=0-5-8, L=0-5-8, I=0-5-8
Max Horz O=-126(LC 10)
Max Uplift O=-99(LC 10), L=-197(LC 14), I=-73(LC 11)
Max Grav O=498(LC 19), L=1411(LC 19), I=413(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-473/135, C-D=-283/69, D-E=-240/936, F-G=-799/204
BOT CHORD N-O=-23/332, M-N=-74/522, K-L=-254/82, J-K=-203/687, I-J=-222/726
WEBS B-O=-526/153, C-M=-389/147, D-M=-90/550, D-L=-1107/326, E-L=-898/299, E-K=-83/482, F-K=-682/260, G-I=-770/265

NOTES-

- 1) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=37ft; eave=5ft; 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
- 2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load; Lumber DOL=1.00 Plate DOL=1.00); Pg=30.0 psf (ground snow); Pf=20.8 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) All plates are 3x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O, I except (jt=lb) L=197.



RENEWAL DATE: 12-31-2021
January 11, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED INFORMATION BEFORE USE.

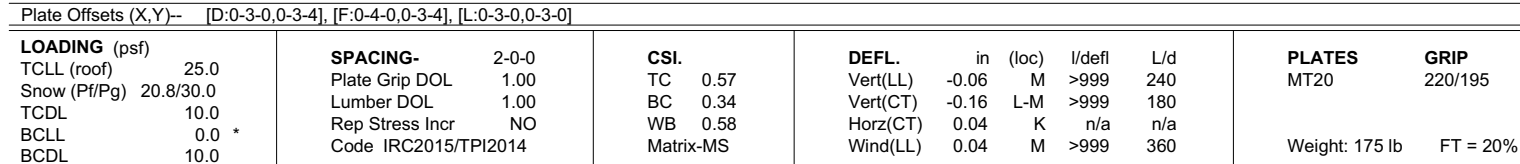
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown and is for individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building 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 during the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203, Dallas, TX 75243.

ANSI/TPI1 Quality Criteria, DSB-89 and BCS E Building Component

Project #: 18-209873-DFS-01-RS

MiTek
250 Klug Circle
Corona, CA 92880

Trus-Way, Vancouver, WA - 98661, 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Jan 11 12:38:30 2021 Page 1
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3-3-15 5-6-0 9-4-12 21-6-7 27-7-3 31-6-0 33-6-0 37-0-0
3-3-15 2-2-0 3-10-13 12-1-10 6-0-13 3-10-13 2-2-0 3-3-15
Scale = 1:62.0



REACTIONS. All bearings 13-8-9 except (jt=length) O=0-5-8.
 (lb) - Max Horz O=-189(LC 37)
 Max Uplift All uplift 100 lb or less at joint(s) except O=-310(LC 36), K=-438(LC 45), J=-117(LC 39), I=-133(LC 39)
 Max Grav All reactions 250 lb or less at joint(s) except O=1071(LC 19), K=1893(LC 19), K=1627(LC 1), J=375(LC 2)

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

TOP CHORD	B-C=-1267/461, C-D=-1649/558, D-E=-891/376, E-F=-358/1286, F-G=-271/387
BOT CHORD	N-O=-267/806, M-N=-474/1637, L-M=-449/1467, K-L=-276/204, J-K=-557/275, I-J=-302/304
WEBS	B-O=-1199/405, B-N=-250/811, C-N=-681/374, C-M=-208/293, D-M=-218/410, D-L=-1025/466, E-L=-432/1330, E-K=-1743/618, F-J=-132/331, G-J=-572/366, F-K=-910/377, G-I=-299/329

- NOTES-**

 - 1) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TC DL=4.2psf; BC DL=6.0psf; h=25ft; B=45ft; L=37ft; eave=5ft; 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
 - 2) T CLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.00 Plate DOL=1.00); Pg=30.0 psf (ground snow); Pf=20.8 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) All plates are 3x4 MT20 unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 310 lb uplift at joint O, 438 lb uplift at joint K, 117 lb uplift at joint J and 133 lb uplift at joint I.
 - 9) This truss has been designed for a total drag load of 2000 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 37-0-0 for 54.1 plf.



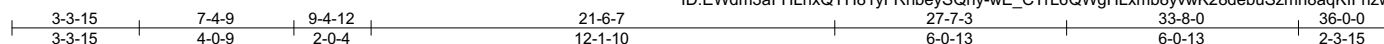
RENEWAL DATE: 12-31-2021
January 11, 2021

Job	Truss	Truss Type	Qty	Ply	Nevade	K8855523
205950-A	ADRAG2	Roof Special	1	1	Job Reference (optional)	

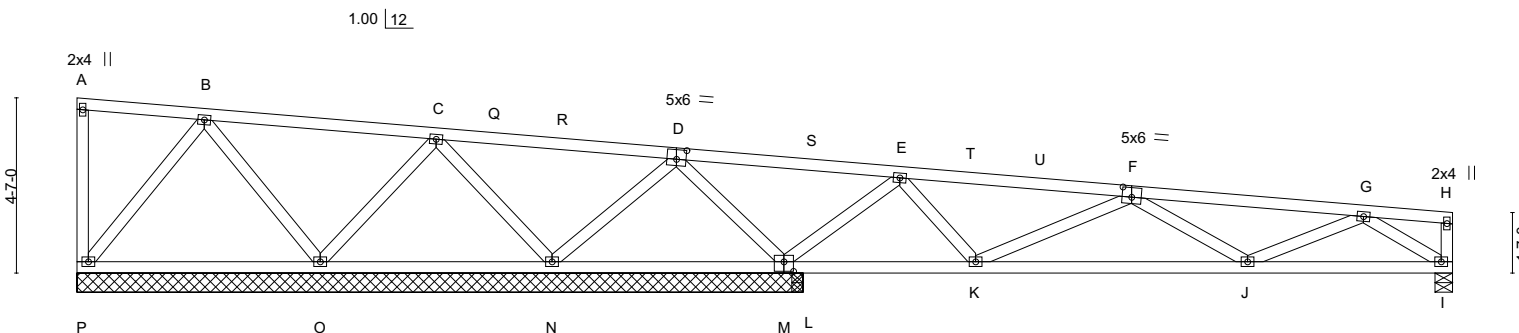
Trus-Way, Vancouver, WA - 98661,

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Jan 11 12:38:32 2021 Page 1

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Scale = 1:60.3



6-4-6	12-5-3	18-6-0	19-0-0	23-6-3	30-7-10	36-0-0
6-4-6	6-0-13	6-0-13	0-6-0	4-6-3	7-1-7	5-4-6

Plate Offsets (X,Y)-- [D:0-3-0,0-3-0], [F:0-3-0,0-3-0], [M:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	1-4-0	TC 0.31	in (loc) l/defl L/d	MT20	220/195
Snow (Pf/Pg) 20.8/30.0	Plate Grip DOL 1.00	BC 0.20	Vert(LL) -0.03 J-K >999 240		
TCDL 10.0	Lumber DOL 1.00	WB 0.29	Vert(CT) -0.12 J-K >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.01 I n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014		Wind(LL) 0.02 J-K >999 360	Weight: 171 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 DF No.1&Btr G
BOT CHORD 2x4 DF No.1&Btr G
WEBS 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, Except: 9-10-8 oc bracing: J-K 10-0-0 oc bracing: I-J.

REACTIONS. All bearings 19-0-0 except (jt=length) I=0-5-8, L=0-3-8.
(lb) - Max Horz P=-126(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) O, N, L except P=-258(LC 36), M=-245(LC 39), I=-215(LC 39)
Max Grav All reactions 250 lb or less at joint(s) L except P=294(LC 35), M=996(LC 2), O=412(LC 19), N=275(LC 19), I=442(LC 58)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD C-D=-220/279, D-E=-323/695, E-F=-450/333, F-G=-865/403
BOT CHORD M-N=-368/239, J-K=-463/831, I-J=-313/614
WEBS B-P=-284/335, B-O=-406/333, C-O=-316/335, C-N=-471/365, D-N=-269/370, D-M=-707/427, E-M=-831/276, E-K=-129/426, F-K=-574/348, F-J=-163/268, G-J=-207/382, G-I=-721/407

- NOTES-**
- Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCCL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; 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
 - TCCL: ASCE 7-10; Pr=25.0 psf (roof live load; Lumber DOL=1.00 Plate DOL=1.00); Pg=30.0 psf (ground snow); Pf=20.8 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - All plates are 3x4 MT20 unless otherwise indicated.
 - 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.
 - A plate rating reduction of 20% has been applied for the green lumber members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O, N, L except (jt=lb) P=258, M=245, I=215.
 - This truss has been designed for a total drag load of 2000 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 36-0-0 for 55.6 plf.



RENEWAL DATE: 12-31-2021
January 11, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED ITEM REFERENCE PAGE 11-15. DO NOT REUSE FOR OTHER PROJECTS.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown and is for 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 during the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203, Dallas, TX 75244.

ANSI/TPI1 Quality Criteria, DSB-89 and BCS E Building Component

MiTek
250 Klug Circle
Corona, CA 92880

Project #: 18-209873-DFS-01-RS

Job	Truss	Truss Type	Qty	Ply	Nevade	K8855524
205950-A	ADRAG3	Roof Special	1	1		

Trus-Way, Vancouver, WA - 98661,

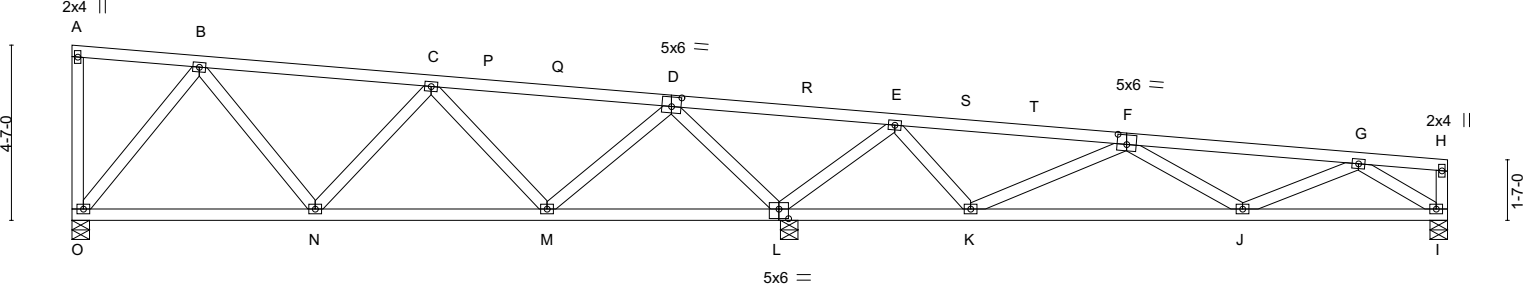
8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Jan 11 12:38:35 2021 Page 1

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Scale = 1:60.3

1.00 12



6-4-6	12-5-3	18-6-0	19-0-0	23-6-3	30-7-10	36-0-0
6-4-6	6-0-13	6-0-13	0-6-0	4-6-3	7-1-7	5-4-6

Plate Offsets (X,Y)-- [D:0-3-0,0-3-0], [F:0-3-0,0-3-0], [L:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	1-4-0	TC 0.33	in (loc) l/defl L/d	MT20	220/195
Snow (Pf/Pg) 20.8/30.0	Plate Grip DOL 1.00	BC 0.18	Vert(LL) -0.03 J-K >999 240		
TCDL 10.0	Lumber DOL 1.00	WB 0.39	Vert(CT) -0.11 J-K >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.02 I n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014		Wind(LL) 0.02 J-K >999 360		
				Weight: 171 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 DF No.1&Btr G	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 DF No.1&Btr G	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 DF Stud/Std G	

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

Max Horz O=-126(LC 10)

Max Uplift O=-266(LC 36), L=-379(LC 45), I=-212(LC 39)

Max Grav O=554(LC 35), L=1355(LC 19), I=419(LC 58)

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

TOP CHORD B-C=-600/318, C-D=-460/296, D-E=-346/880, E-F=-367/302, F-G=-798/393

BOT CHORD N-O=-219/446, M-N=-295/650, L-M=-274/217, K-L=-285/195, J-K=-451/737, I-J=-309/581

WEBS B-O=-609/346, B-N=-250/374, C-N=-277/337, C-M=-518/373, D-M=-342/694, D-L=-1167/528, E-L=-852/284, E-K=-130/439, F-K=-599/344, F-J=-150/265, G-J=-202/358, G-I=-682/401

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; 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
 - 2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.00 Plate DOL=1.00); Pg=30.0 psf (ground snow); Pf=20.8 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) All plates are 3x4 MT20 unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) O=266, L=379, I=212.
 - 9) This truss has been designed for a total drag load of 2000 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 36-0-0 for 55.6 plf.



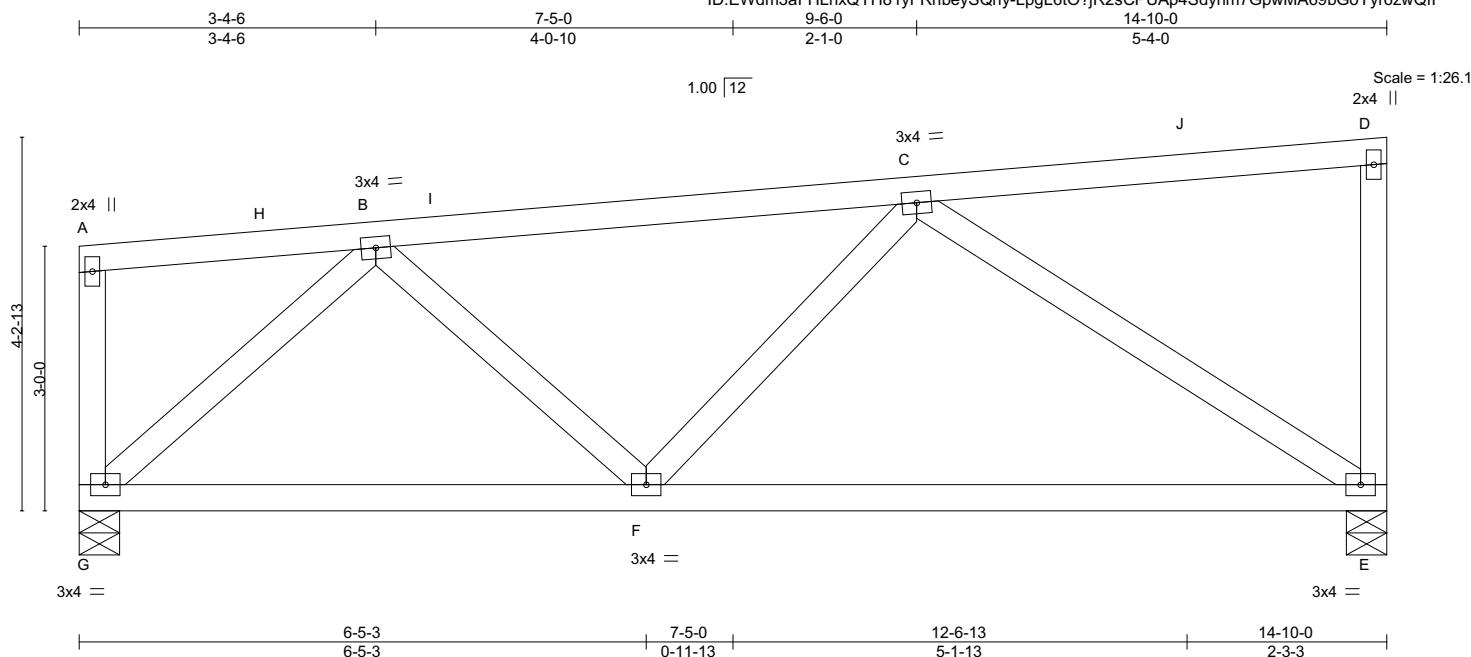
RENEWAL DATE: 12-31-2021
January 11,2021

Job	Truss	Truss Type	Qty	Ply	Nevade	K8855525
205950-A	B01	Monopitch	2	1	Job Reference (optional)	

Truss-Way, Vancouver, WA - 98661,

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Jan 11 12:38:35 2021 Page 1

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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.00	TC	0.28	Vert(LL)	-0.06 E-F >999 240	MT20		220/195	
Snow (Pf/Pg)	20.8/30.0	Lumber DOL	1.00	BC	0.25	Vert(CT)	-0.20 E-F >888 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.01 E n/a n/a				
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.01 F >999 360				
BCDL	10.0							Weight: 75 lb		FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS.

(size) E=0-5-8, G=0-5-8
Max Horz G=115(LC 11)
Max Uplift E=-129(LC 11), G=-114(LC 10)
Max Grav E=448(LC 18), G=436(LC 2)

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

TOP CHORD B-C=-494/168
BOT CHORD F-G=-185/396, E-F=-180/457
WEBS B-G=-531/188, C-E=-532/209

NOTES-

- 1) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; 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(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
- 2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.00 Plate DOL=1.00); Pg=30.0 psf (ground snow); Pf=20.8 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
- 6) A plate rating reduction of 20% has been applied for the green lumber members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=ib) E=129, G=114.



RENEWAL DATE: 12-31-2021
January 11, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED WITH THIS DESIGN. DESIGNER IS NOT RESPONSIBLE FOR THE USE OF THIS DESIGN.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown and is for 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. This design is not to be used for the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203, Dallas, TX 75244.

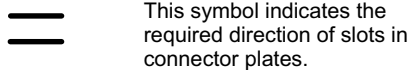
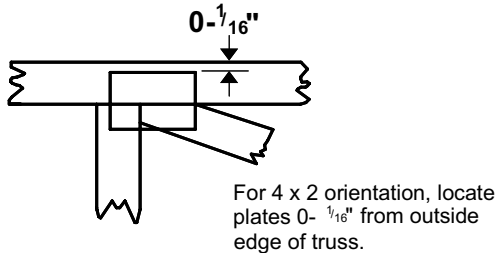
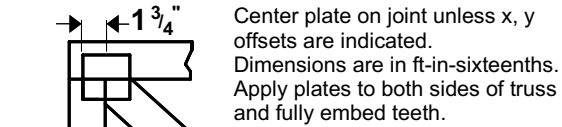
ANSI/TPI1 Quality Criteria, DSB-89 and BCS E Building Component

Project #: 18-209873-DFS-01-RS

MiTek
250 Klug Circle
Corona, CA 92880

Symbols

PLATE LOCATION AND ORIENTATION



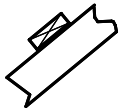
* Plate location details available in MiTek 20/20 software or upon request.

PLATE SIZE

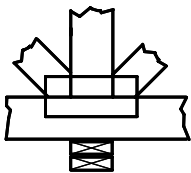
4 x 4

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

LATERAL BRACING LOCATION



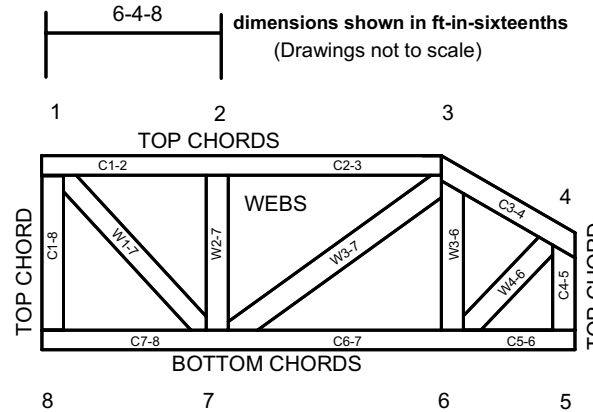
BEARING



Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

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

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. 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.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. 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.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. 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.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. 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.

City of Portland
Reviewed for code compliance

Date: 07/12/21

Project #: 18-209873-DFS-01-RS