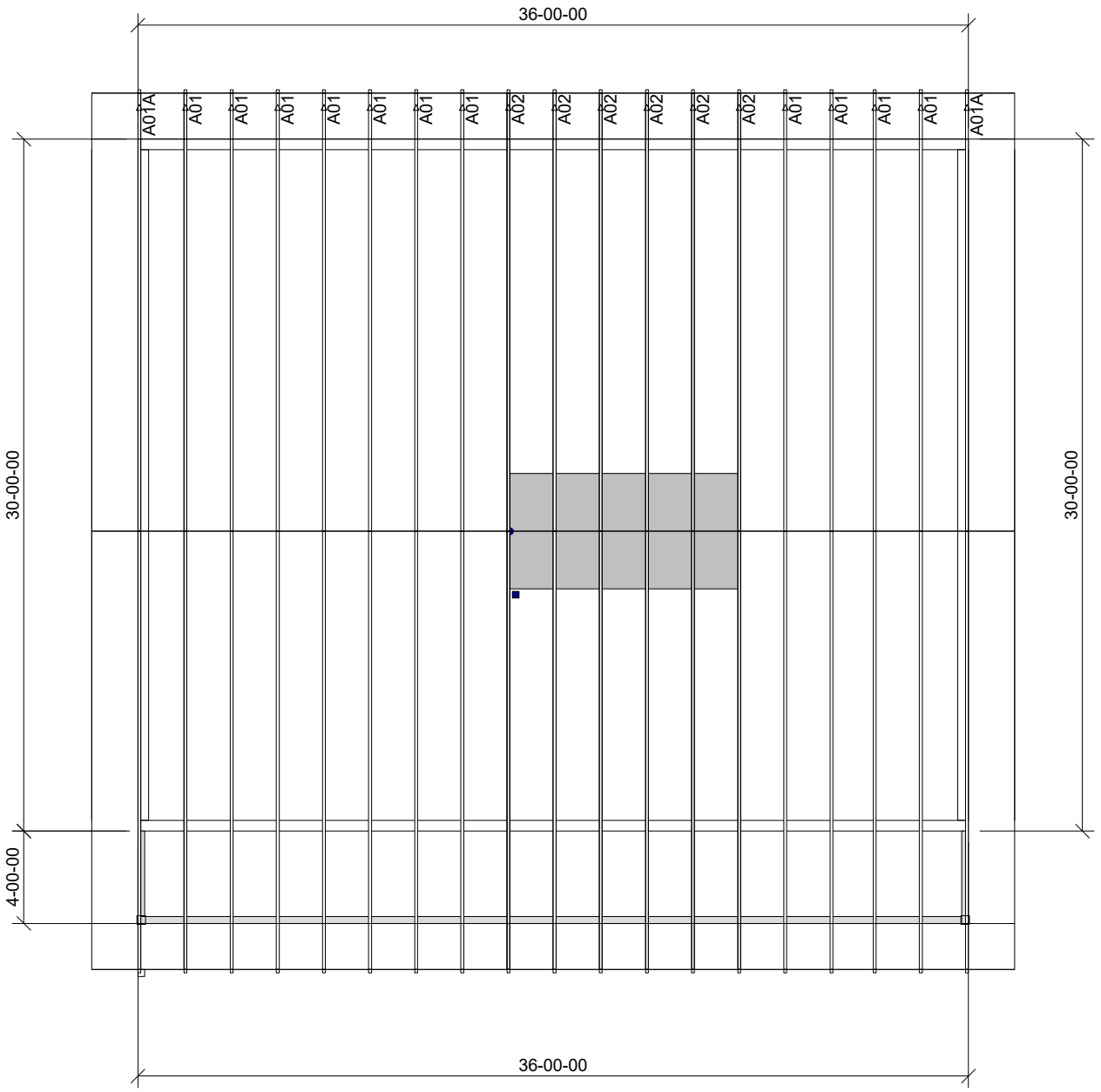
Reviewed for
Design Criteria Only

2BD No Garage

Job Notes:
Pitch = 4/12
Top Chord = 2 x 6
Overhang = 24"
Roof Loaded for = Shingle
Exterior Wall Size = 2 x 6
Vents Included = Yes
Truss to Truss Hangers Included = No

1X



◁ Indicates left end of truss | Drawing is not to scale u.n.o. | Dashed walls indicate a non-bearing wall

BALLARD TRUSS

Client: Yavapai County
Job Name: 2 Bed No Garage
Job #: **25-2996**
Location: ,

By signing below, I agree that I have reviewed this layout and the attached truss drawings and found them to be in conformance to my needs for this project, even if it they have deviated from the plans.

Signed:_____

Date:_____

Disclaimer: This Truss Placement Diagram was not created by an engineer, but rather by the Ballard Truss Staff and is purely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the Truss Design Drawings which may be sealed by the Truss Designer.

MiTek®

MiTek, Inc.
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571

Re: 25-2996
HMO 2 Bed No Garage

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Ballard Truss LLC (Mesa, AZ).

Pages or sheets covered by this seal: R91514882 thru R91514884

My license renewal date for the state of Arizona is December 31, 2027.

Arizona COA: 11906-0

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

REVIEWED FOR DESIGN CRITERIA ONLY

SEE ATTACHED COVER SHEET FOR ALL STAMPS. IT IS THE RESPONSIBILITY OF THE OWNER/APPLICANT TO REVIEW AND ACKNOWLEDGE APPLICABLE STAMPS.

December 4,2025

Winn, 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.

Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed No Garage	Reviewed for Design Criteria Only	R91514882
25-2996	A01	Common	11	1	Job Reference (optional)		

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

Run: 25.30 E Nov 4 2025 Print: 25.3.0 E Nov 4 2025 MiTek Industries, Inc. Thu Dec 04 09:38:10 Page: 1
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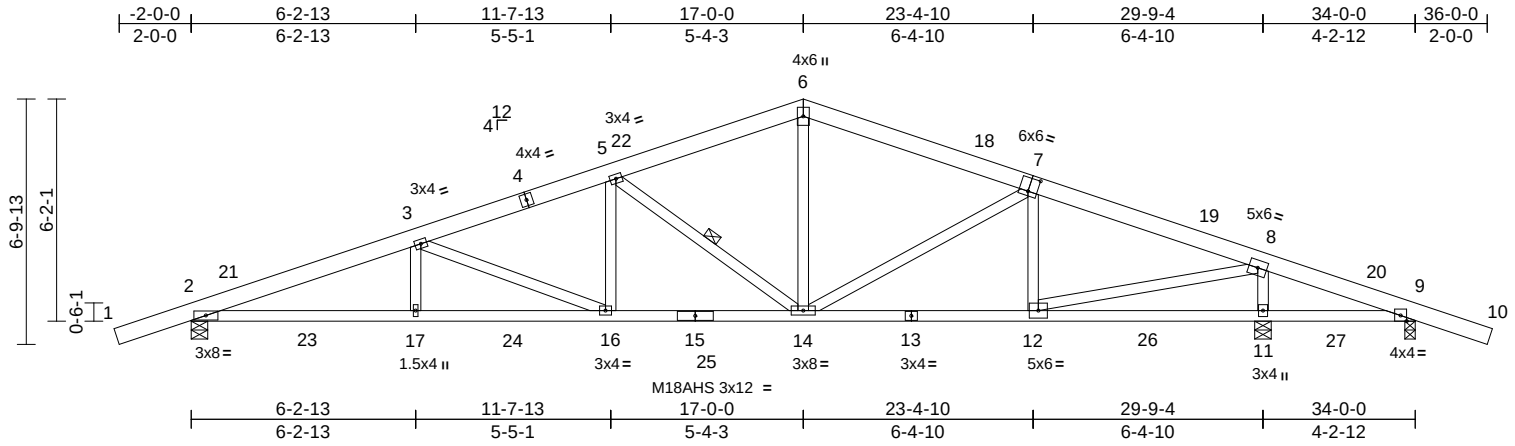

Scale = 1:64

Plate Offsets (X, Y): [7:0-3-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.16	16-17	>999	240	MT20	203/168
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.29	12-14	>999	180	M18AHS	142/136
TCDL	15.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	-0.08	2	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 185 lb	FT = 10%

LUMBER

TOP CHORD	2x6 SP 2400F 2.0E
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud *Except* 7-14,8-12:2x4 SPF 1650F 1.5E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-1-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 5-14

REACTIONS (lb/size) 2=1733/0-5-8, 9=184/0-3-8, 11=2036/0-5-8
Max Horiz 9=-112 (LC 15)
Max Uplift 2=-480 (LC 10), 9=-105 (LC 11), 11=-474 (LC 11)
Max Grav 2=1883 (LC 21), 9=389 (LC 20), 11=2154 (LC 22)

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

TOP CHORD 6-18=-2025/566, 7-18=-2056/547, 7-19=-2169/493, 8-19=-2304/473, 8-20=-108/571, 9-20=-123/511, 2-21=-4075/835, 3-21=-3991/858, 3-4=-3294/716, 4-5=-3101/735, 5-22=-2159/550, 6-22=-2138/568

BOT CHORD 2-23=-703/3748, 17-23=-703/3748, 17-24=-703/3748, 16-24=-703/3748, 15-16=-526/3043, 15-25=-526/3043, 14-25=-526/3043, 13-14=-344/2066, 12-13=-344/2066, 12-26=-486/148, 11-26=-486/148, 11-27=-486/148, 9-27=-486/148

WEBS 6-14=-147/871, 8-11=-2045/538, 7-12=-436/183, 7-14=-303/217, 8-12=-426/2401, 5-14=-1402/370, 3-17=-37/315, 3-16=-761/245, 5-16=-35/463

NOTES

1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-14 to 1-3-15, Zone1 1-3-15 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 36-0-14 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 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 480 lb uplift at joint 2, 474 lb uplift at joint 11 and 105 lb uplift at joint 9.
10) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 4,2025

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Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed No Garage	Reviewed for Design Criteria Only	
25-2996	A01A	Common Supported Gable	2	1	Job Reference (optional)		R91514883

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

Run: 25.30 E Nov 4 2025 Print: 25.3.0 E Nov 4 2025 MiTek Industries, Inc. Thu Dec 04 09:38:11
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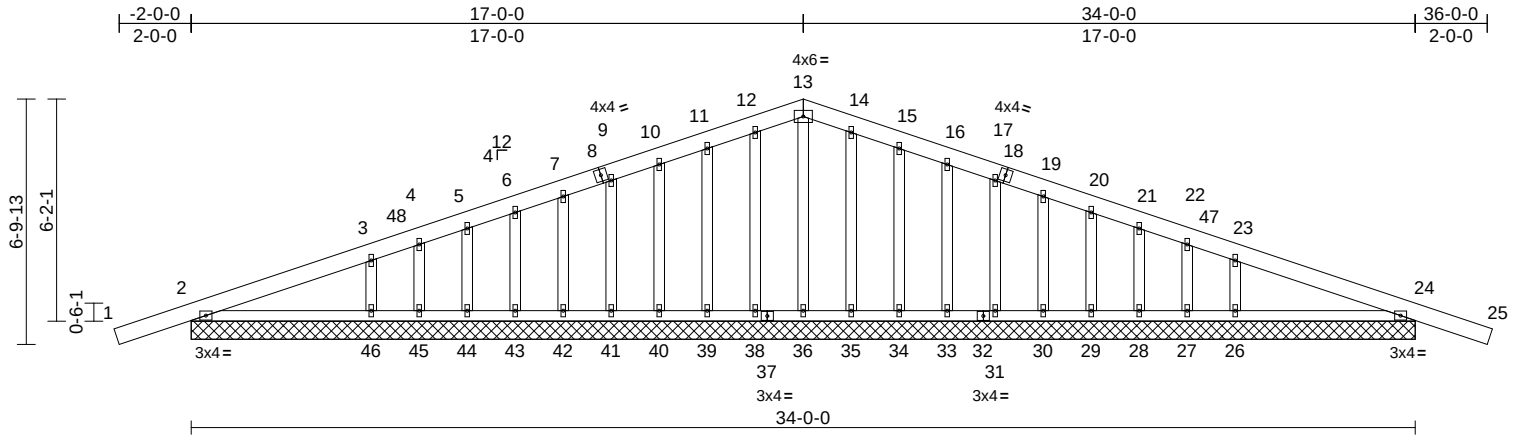

Scale = 1:64

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	15.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	24	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 219 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

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

REACTIONS All bearings 34-0-0.
(lb) - Max Horiz 2=-112 (LC 15)
Max Uplift All uplift 100 (lb) or less at joint(s) 27, 28, 29, 30, 31, 33, 34, 35, 38, 39, 40, 41, 42, 43, 44, 45 except 2=-151 (LC 10), 24=-171 (LC 11), 26=-151 (LC 15), 46=-152 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 27, 28, 29, 30, 31, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45 except 2=480 (LC 20), 24=480 (LC 20), 26=467 (LC 22), 46=467 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 13-14=-139/378, 14-15=-132/358, 15-16=-119/321, 16-17=-105/283, 9-10=-105/283, 10-11=-119/321, 11-12=-132/358, 12-13=-139/378
WEBS 23-26=-370/308, 3-46=-370/308

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 35, 34, 33, 31, 30, 29, 28, 27, 38, 39, 40, 41, 42, 43, 44, 45 except (jt=lb) 2=150, 26=150, 46=152, 24=171.
13) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 4,2025

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Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed No Garage	Reviewed for Design Criteria Only	R91514884
25-2996	A02	Common	6	1	Job Reference (optional)		

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

Run: 25.30 E Nov 4 2025 Print: 25.3.0 E Nov 4 2025 MiTek Industries, Inc. Thu Dec 04 09:38:11 Page: 1
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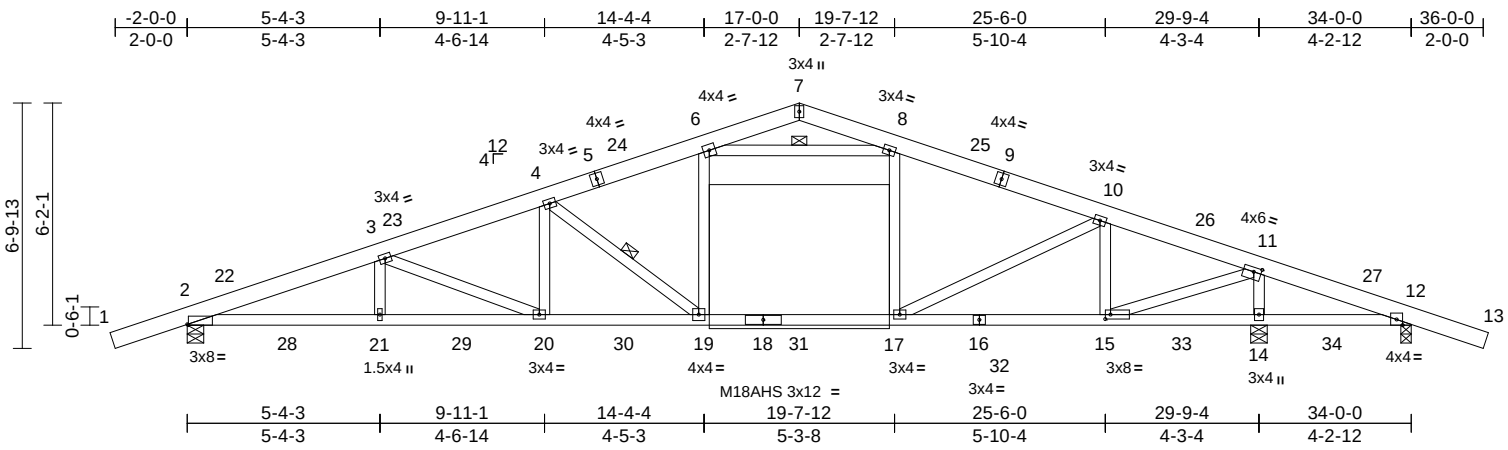

Scale = 1:64

Plate Offsets (X, Y): [2:0-0-6,Edge], [11:0-2-8,0-1-8], [15:0-1-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.41	17-19	>864	240	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.62	17-19	>572	180	M18AHS	142/136
TCDL	15.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.13	12	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 190 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E *Except* 16-18:2x4 SPF 2100F 1.8E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud *Except* 15-11:2x4 SPF 1650F 1.5E

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-19, 6-8

REACTIONS (lb/size) 2=1833/0-5-8, 12=268/0-3-8, 14=2056/0-5-8
Max Horiz 2=-112 (LC 15)
Max Uplift 2=-402 (LC 10), 12=-175 (LC 34), 14=-377 (LC 15)
Max Grav 2=2036 (LC 21), 12=411 (LC 20), 14=2566 (LC 22)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-22=-4331/581, 3-22=-4239/598, 3-23=-4090/546, 4-23=-3934/561, 4-5=-3014/382, 5-24=-2941/389, 6-24=-2886/395, 6-7=-712/60, 7-8=-918/116, 8-25=-2712/390, 9-25=-2734/381, 9-10=-2783/370, 10-26=-2061/362, 11-26=-2126/353, 11-27=-528/1319, 12-27=-588/1209
BOT CHORD 2-28=-582/3974, 21-28=-582/3974, 21-29=-582/3974, 20-29=-582/3974, 20-30=-472/3880, 19-30=-472/3880, 18-19=-164/2663, 18-31=-164/2663, 17-31=-164/2663, 16-17=-181/1959, 16-32=-181/1959, 15-32=-181/1959, 15-33=-1175/528, 14-33=-1175/528, 14-34=-1175/528, 12-34=-1175/528
WEBS 6-19=-182/1108, 8-17=-155/278, 11-14=-2469/421, 10-15=-1002/199, 4-19=-1645/399, 11-15=-425/3261, 10-17=0/828, 6-8=-2069/372, 3-21=0/268, 3-20=-347/122, 4-20=-4/352

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-14 to 1-3-15, Zone1 1-3-15 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 36-0-14 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 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) 150.0lb AC unit load placed on the top chord, 15-0-0 from left end, supported at two points, 5-0-0 apart.
6) Uninhabitable Mechanical zone exists .
7) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
8) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 175 lb uplift at joint 12, 377 lb uplift at joint 14 and 402 lb uplift at joint 2.
12) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard
1) Dead + 0.7 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-6=-86, 6-7=-96, 7-8=-96, 8-13=-86, 2-12=-20
Concentrated Loads (lb)
Vert: 6=-75, 8=-75

EXPIRES: December 31, 2027
December 4,2025

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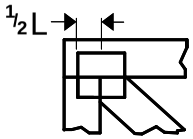
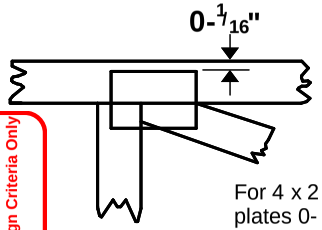
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

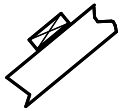
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

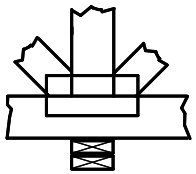
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

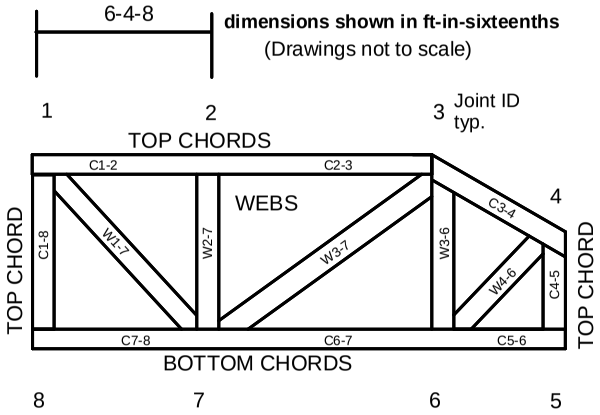


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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.

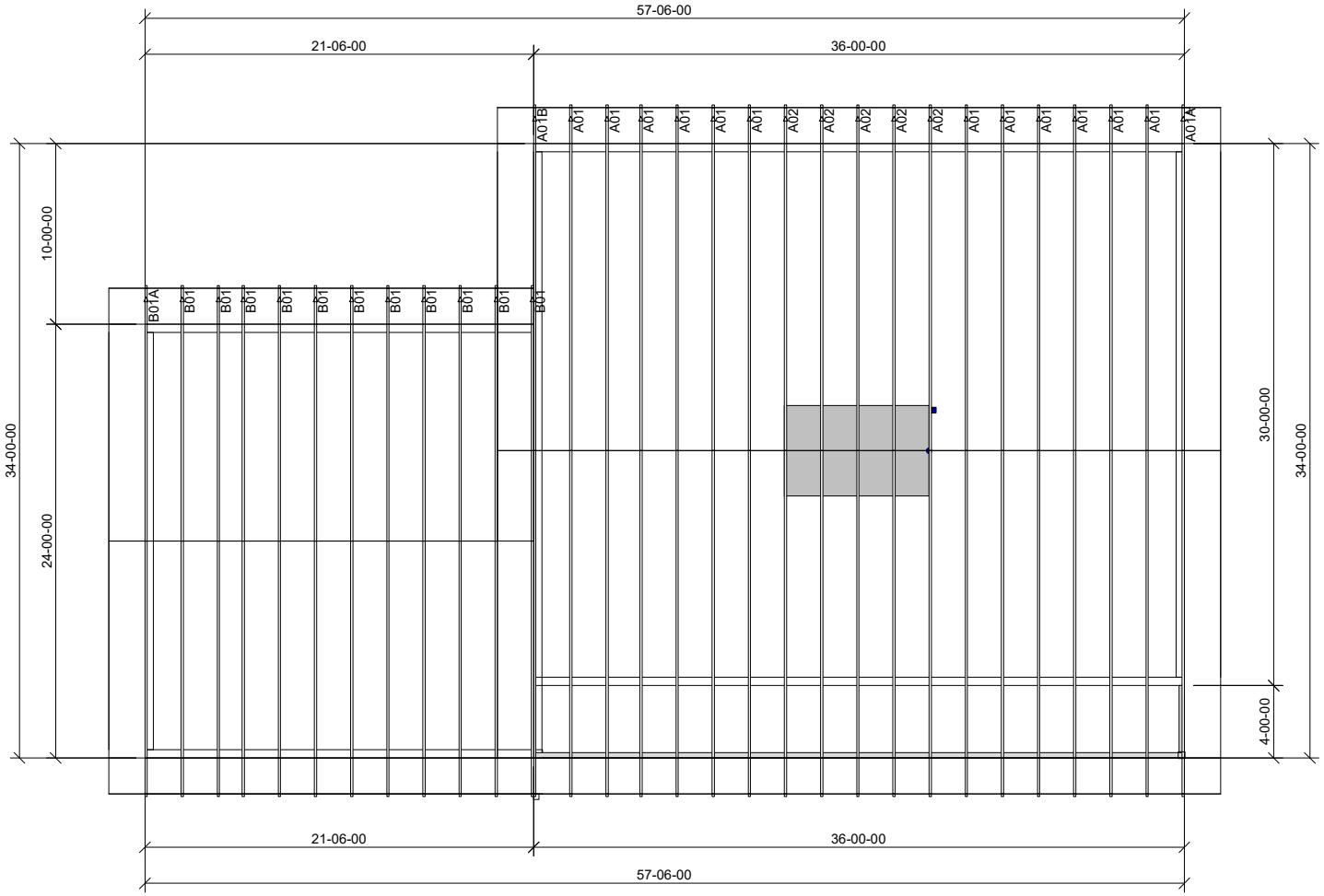
MiTek®

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.

Reviewed for Design Criteria Only



Job Notes:
Pitch = 4/12
Top Chord = 2 x 6
Overhang = 24"
Roof Loaded for = Shingle
Exterior Wall Size = 2 x 6
Vents Included = Yes
Truss to Truss Hangers Included = No

2BD With Garage

◁ Indicates left end of truss | Drawing is not to scale u.n.o. | Dashed walls indicate a non-bearing wall

BALLARD TRUSS

Client: Yavapai County
Job Name: 2 Bed W/Garage
Job #: **25-3001**
Location: ,

By signing below, I agree that I have reviewed this layout and the attached truss drawings and found them to be in conformance to my needs for this project, even if it they have deviated from the plans.

Signed:_____

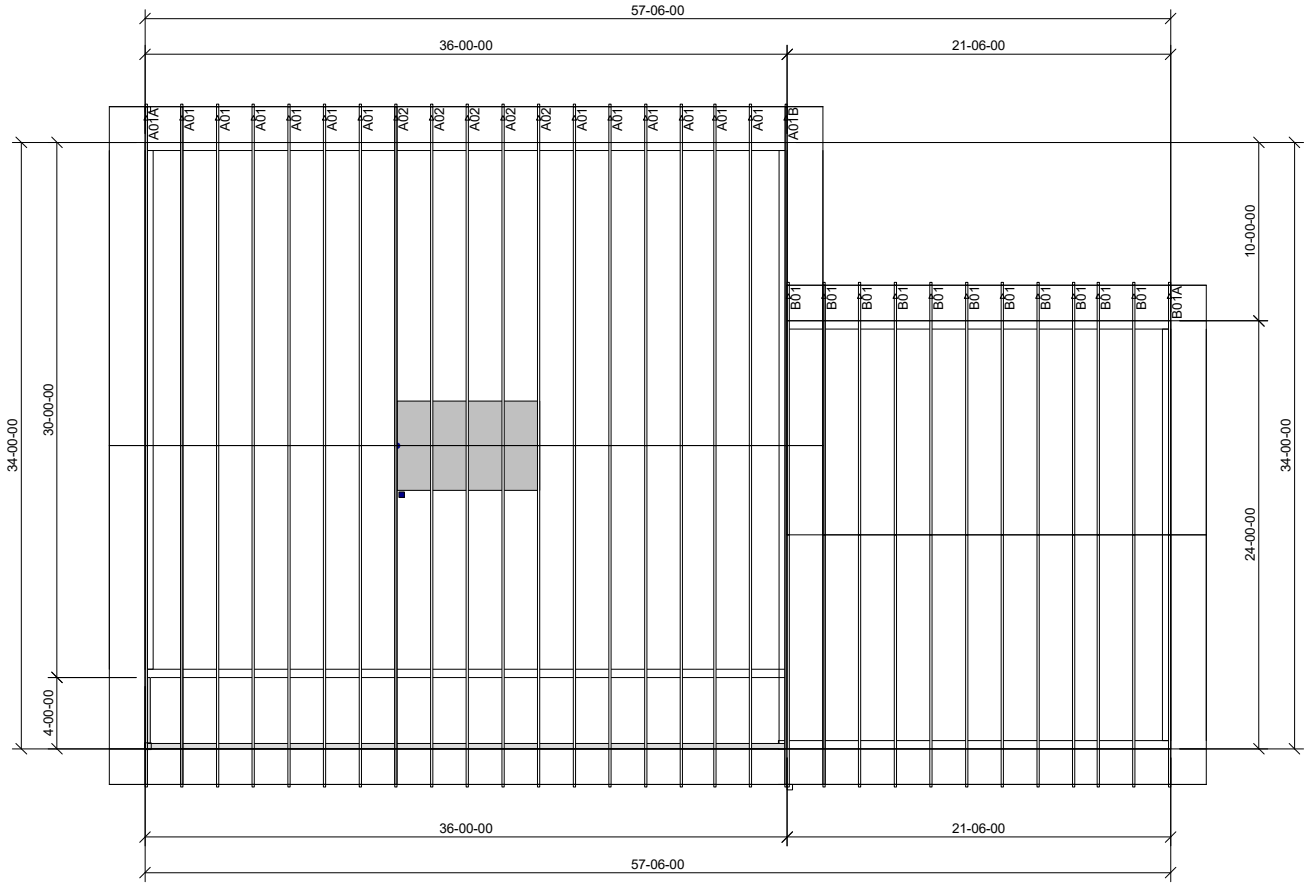
Date:_____

Disclaimer: This Truss Placement Diagram was not created by an engineer, but rather by the Ballard Truss Staff and is purely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the Truss Design Drawings which may be sealed by the Truss Designer.

Reviewed for
Design Criteria Only

Job Notes:
Pitch = 4/12
Top Chord = 2 x 6
Overhang = 24"
Roof Loaded for = Shingle
Exterior Wall Size = 2 x 6
Vents Included = Yes
Truss to Truss Hangers Included = No

2BD With Garage



◁ Indicates left end of truss | Drawing is not to scale u.n.o. | Dashed walls indicate a non-bearing wall

BALLARD TRUSS

Client: Yavapai County
Job Name: 2 Bed W/Garage
Job #: **25-3001**
Location: ,

By signing below, I agree that I have reviewed this layout and the attached truss drawings and found them to be in conformance to my needs for this project, even if it they have deviated from the plans.

Signed:_____

Date:_____

Disclaimer: This Truss Placement Diagram was not created by an engineer, but rather by the Ballard Truss Staff and is purely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the Truss Design Drawings which may be sealed by the Truss Designer.

MiTek, Inc.
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571

Re: 25-3001
HMO 2 Bed W/Garage

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Ballard Truss LLC (Mesa, AZ).

Pages or sheets covered by this seal: R91514908 thru R91514913

My license renewal date for the state of Arizona is December 31, 2027.

Arizona COA: 11906-0

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

REVIEWED FOR DESIGN CRITERIA ONLY

SEE ATTACHED COVER SHEET FOR ALL STAMPS. IT IS THE RESPONSIBILITY OF THE OWNER/APPLICANT TO REVIEW AND ACKNOWLEDGE APPLICABLE STAMPS.

December 4,2025

Winn, 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.

Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed W/Garage	Reviewed for Design Criteria Only	R91514908
25-3001	A01	Common	12	1	Job Reference (optional)		

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

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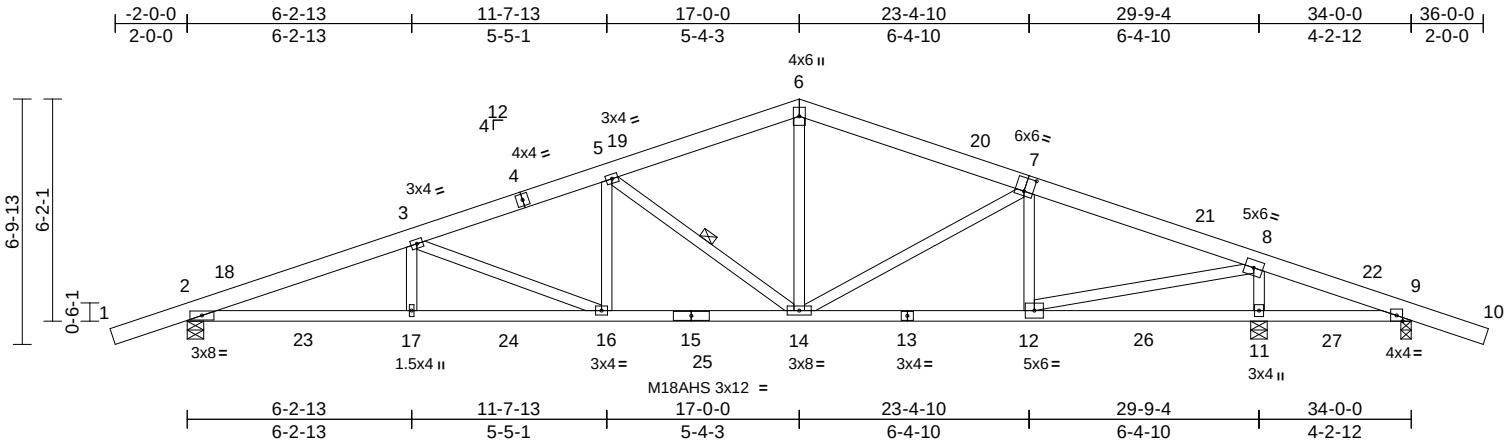

Scale = 1:64

Plate Offsets (X, Y): [7:0-3-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.16	16-17	>999	240	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.29	12-14	>999	180	M18AHS	142/136
TCDL	15.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.09	11	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 186 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud *Except* 8-12:2x4 SPF 1650F 1.5E

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 5-14

REACTIONS (lb/size) 2=1733/0-5-8, 9=184/0-3-8, 11=2036/0-5-8
Max Horiz 2=-112 (LC 19)
Max Uplift 2=-476 (LC 10), 9=-130 (LC 11), 11=-444 (LC 11)
Max Grav 2=1884 (LC 21), 9=389 (LC 20), 11=2157 (LC 22)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-18=-4076/823, 3-18=-3992/846, 3-4=-3295/705, 4-5=-3102/724, 5-19=-2160/549, 6-19=-2139/567, 6-20=-2025/568, 7-20=-2057/550, 7-21=-2166/498, 8-21=-2301/478, 8-22=-90/566, 9-22=-106/506
BOT CHORD 2-23=-798/3749, 17-23=-798/3749, 17-24=-798/3749, 16-24=-798/3749, 15-16=-580/3044, 15-25=-580/3044, 14-25=-580/3044, 13-14=-318/2064, 12-13=-318/2064, 12-26=-482/125, 11-26=-482/125, 11-27=-482/125, 9-27=-482/125
WEBS 6-14=-140/871, 8-11=-2048/509, 3-16=-760/243, 5-16=-35/463, 5-14=-1402/371, 7-12=-438/183, 7-14=-301/216, 8-12=-424/2405, 3-17=-37/315

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-14 to 1-3-15, Zone1 1-3-15 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 36-0-14 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 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 476 lb uplift at joint 2, 444 lb uplift at joint 11 and 130 lb uplift at joint 9.
10) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 4,2025

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400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed W/Garage	Reviewed for Design Criteria Only	R91514909
25-3001	A01A	Common Supported Gable	1	1	Job Reference (optional)		

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

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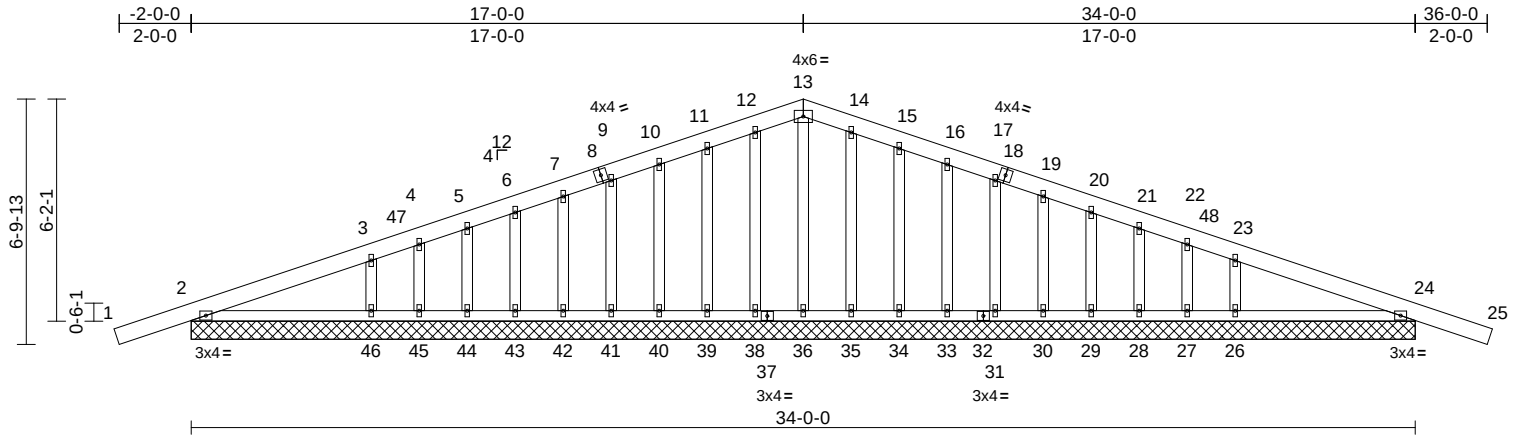

Scale = 1:64

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	15.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	24	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 219 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

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

REACTIONS All bearings 34-0-0.
(lb) - Max Horiz 2=-112 (LC 15)
Max Uplift All uplift 100 (lb) or less at joint(s) 27, 28, 29, 30, 31, 33, 34, 35, 38, 39, 40, 41, 42, 43, 44, 45 except 2=-151 (LC 10), 24=-171 (LC 11), 26=-151 (LC 15), 46=-152 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 27, 28, 29, 30, 31, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45 except 2=480 (LC 20), 24=480 (LC 20), 26=467 (LC 22), 46=467 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-105/283, 10-11=-119/321, 11-12=-132/358, 12-13=-139/378, 13-14=-139/378, 14-15=-132/358, 15-16=-119/321, 16-17=-105/283
WEBS 3-46=-370/308, 23-26=-370/308

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 38, 39, 40, 41, 42, 43, 44, 45, 35, 34, 33, 31, 30, 29, 28, 27 except (jt=lb) 2=150, 46=152, 26=150, 24=171.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 24.
14) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 4,2025

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed W/Garage	Reviewed for Design Criteria Only	R91514910
25-3001	A01B	Common Supported Gable	1	1	Job Reference (optional)		

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

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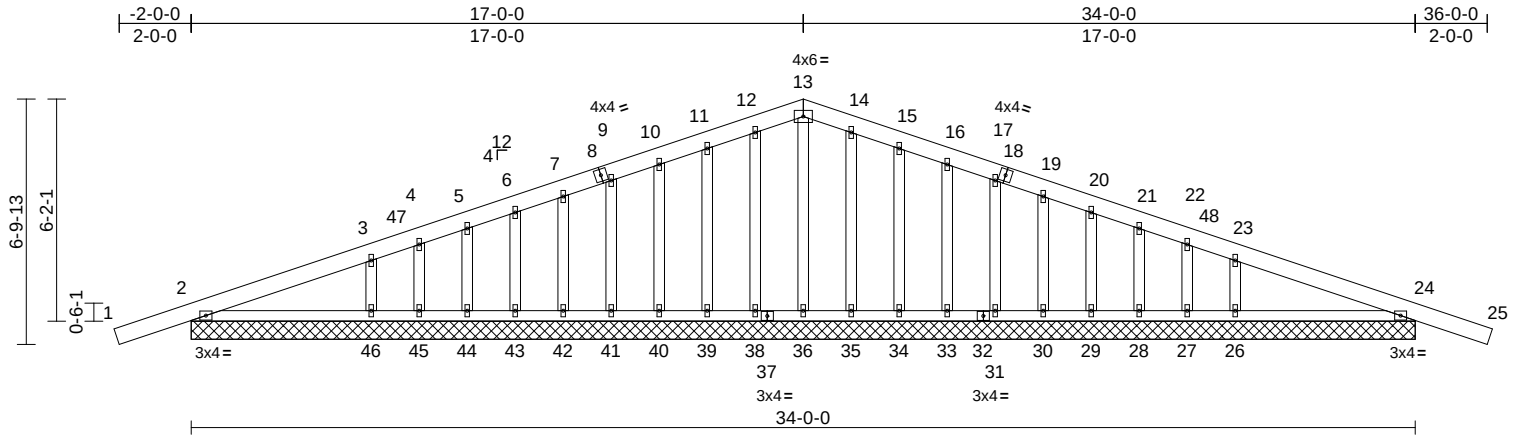

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	15.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	24	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 219 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

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

REACTIONS All bearings 34-0-0.
(lb) - Max Horiz 2=-112 (LC 15)
Max Uplift All uplift 100 (lb) or less at joint(s) 27, 28, 29, 30, 31, 33, 34, 35, 38, 39, 40, 41, 42, 43, 44, 45 except 2=-151 (LC 10), 24=-171 (LC 11), 26=-151 (LC 15), 46=-152 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 27, 28, 29, 30, 31, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45 except 2=480 (LC 20), 24=480 (LC 20), 26=467 (LC 22), 46=467 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-105/283, 10-11=-119/321, 11-12=-132/358, 12-13=-139/378, 13-14=-139/378, 14-15=-132/358, 15-16=-119/321, 16-17=-105/283
WEBS 3-46=-370/308, 23-26=-370/308

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 38, 39, 40, 41, 42, 43, 44, 45, 35, 34, 33, 31, 30, 29, 28, 27 except (jt=lb) 2=150, 46=152, 26=150, 24=171.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 24.
14) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 4,2025

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed W/Garage	Reviewed for Design Criteria Only	R91514911
25-3001	A02	Common	5	1	Job Reference (optional)		

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

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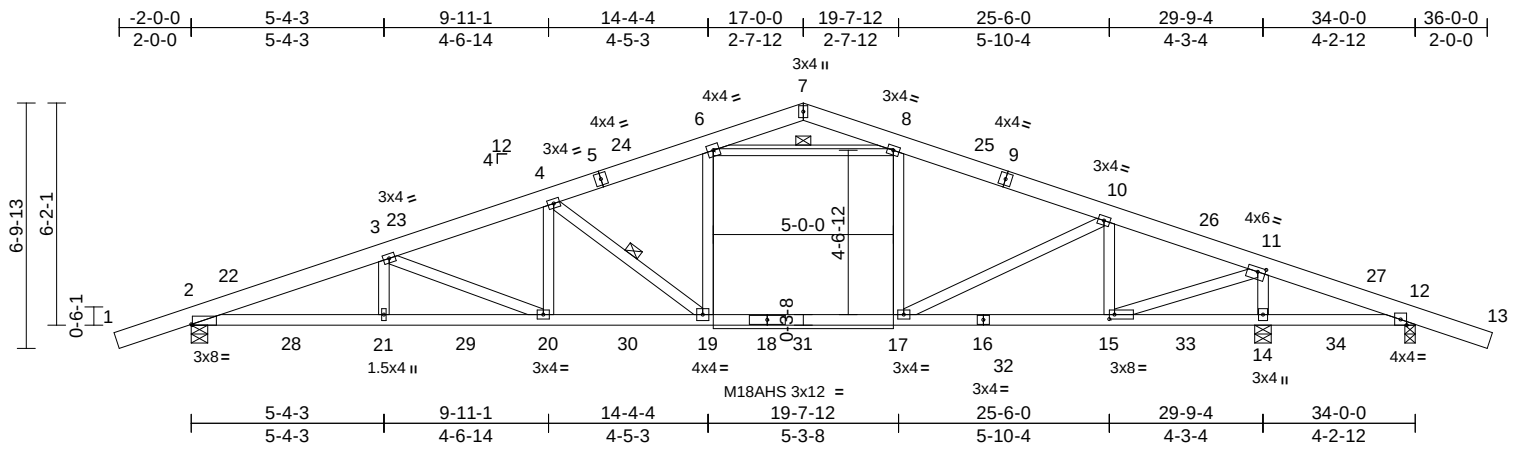

Scale = 1:64

Plate Offsets (X, Y): [2:0-0-6,Edge], [11:0-2-8,0-1-8], [15:0-1-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.41	17-19	>864	240	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.62	17-19	>572	180	M18AHS	142/136
TCDL	15.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.13	12	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 190 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E *Except* 18-16:2x4 SPF 2100F 1.8E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud *Except* 15-11:2x4 SPF 1650F 1.5E

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-19, 6-8

REACTIONS (lb/size) 2=1833/0-5-8, 12=268/0-3-8, 14=2056/0-5-8
Max Horiz 2=-112 (LC 19)
Max Uplift 2=-402 (LC 10), 12=-175 (LC 34), 14=-377 (LC 15)
Max Grav 2=2036 (LC 21), 12=411 (LC 20), 14=2566 (LC 22)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-22=-4331/581, 3-22=-4239/598, 3-23=-4090/546, 4-23=-3934/561, 4-5=-3014/382, 5-24=-2941/389, 6-24=-2886/395, 6-7=-712/60, 7-8=-918/116, 8-25=-2712/390, 9-25=-2734/381, 9-10=-2783/370, 10-26=-2061/362, 11-26=-2126/353, 11-27=-528/1319, 12-27=-588/1209
BOT CHORD 2-28=-582/3974, 21-28=-582/3974, 21-29=-582/3974, 20-29=-582/3974, 20-30=-472/3880, 19-30=-472/3880, 18-19=-164/2663, 18-31=-164/2663, 17-31=-164/2663, 16-17=-181/1959, 16-32=-181/1959, 15-32=-181/1959, 15-33=-1175/528, 14-33=-1175/528, 14-34=-1175/528, 12-34=-1175/528
WEBS 6-19=-182/1108, 8-17=-155/278, 10-17=0/828, 10-15=-1002/199, 11-15=-425/3261, 11-14=-2469/421, 4-19=-1645/399, 6-8=-2069/372, 3-21=0/268, 3-20=-347/122, 4-20=-4/352

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-14 to 1-3-15, Zone1 1-3-15 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 36-0-14 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 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) 150.0lb AC unit load placed on the top chord, 15-0-0 from left end, supported at two points, 5-0-0 apart.
6) Uninhabitable Mechanical zone exists .
7) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
8) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 402 lb uplift at joint 2, 377 lb uplift at joint 14 and 175 lb uplift at joint 12.
12) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard
1) Dead + 0.7 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-6=-86, 6-7=-96, 7-8=-96, 8-13=-86, 2-12=-20
Concentrated Loads (lb)
Vert: 6=-75, 8=-75

EXPIRES: December 31, 2027
December 4,2025

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400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed W/Garage	Reviewed for Design Criteria Only	R91514912
25-3001	B01	Common	11	1	Job Reference (optional)		

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

Run: 25.30 E Nov 4 2025 Print: 25.3.0 E Nov 4 2025 MiTek Industries, Inc. Thu Dec 04 09:40:47 Page: 1
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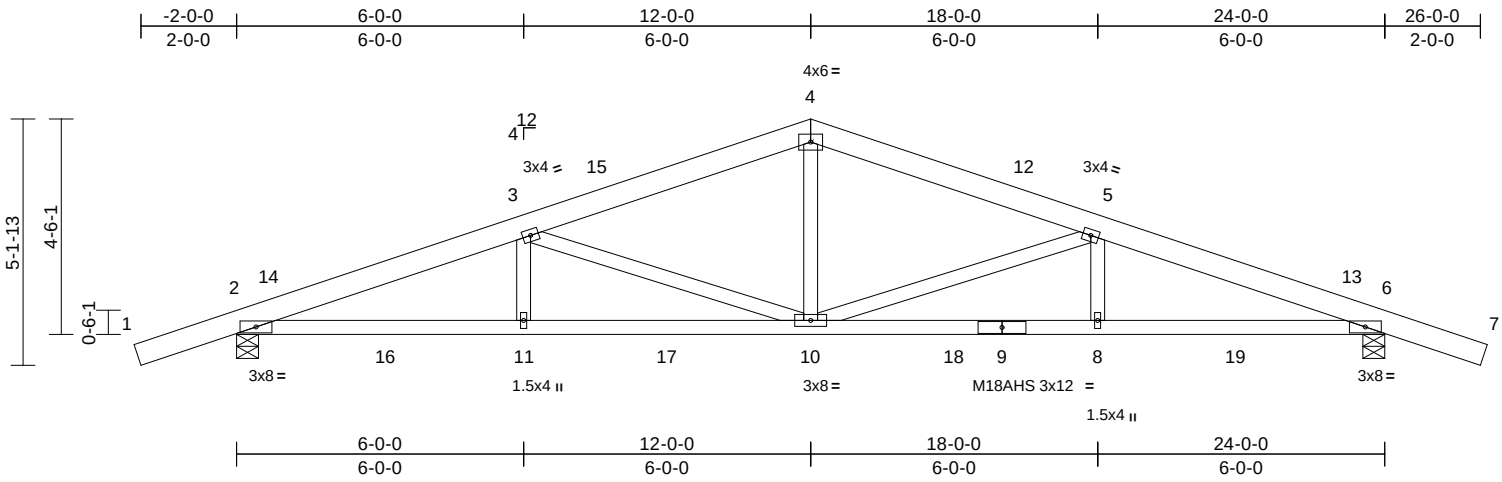

Scale = 1:48.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.13	8-10	>999	240	MT20	203/168
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.26	8-10	>999	180	M18AHS	142/136
TCDL	15.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	-0.08	2	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 123 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=1446/0-5-8, 6=1446/0-5-8
Max Horiz 6=-83 (LC 15)
Max Uplift 2=-398 (LC 10), 6=-398 (LC 11)
Max Grav 2=1652 (LC 21), 6=1652 (LC 22)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-12=-1908/504, 5-12=-2028/487, 5-13=-3120/637, 6-13=-3235/616, 2-14=-3204/620, 3-14=-3092/642, 3-15=-2028/487, 4-15=-1908/503
BOT CHORD 2-16=-531/2903, 11-16=-531/2903, 11-17=-531/2903, 10-17=-531/2903, 10-18=-553/2930, 9-18=-553/2930, 8-9=-553/2930, 8-19=-553/2930, 6-19=-553/2930
WEBS 3-11=0/294, 3-10=-1159/306, 4-10=-78/664, 5-10=-1187/299, 5-8=0/389

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-14 to 0-11-2, Zone1 0-11-2 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 26-0-14 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 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 398 lb uplift at joint 2 and 398 lb uplift at joint 6.
10) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 4,2025

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Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed W/Garage	Reviewed for Design Criteria Only	R91514913
25-3001	B01A	Common Supported Gable	1	1	Job Reference (optional)		

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

Run: 25.30 E Nov 4 2025 Print: 25.3.0 E Nov 4 2025 MiTek Industries, Inc. Thu Dec 04 09:40:48
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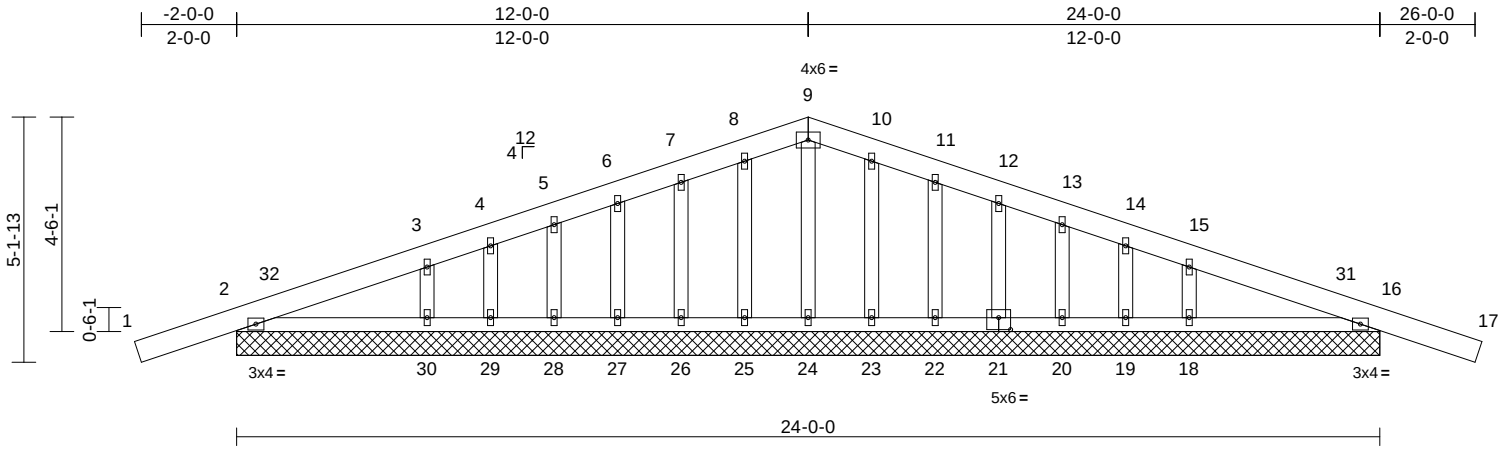

Scale = 1:48.4

Plate Offsets (X, Y): [21:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	203/168
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	15.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	16	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 138 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

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

REACTIONS All bearings 24-0-0.
(lb) - Max Horiz 2=-83 (LC 15)
Max Uplift All uplift 100 (lb) or less at joint(s) 19, 20, 21, 22, 23, 25, 26, 27, 28, 29 except 2=-155 (LC 10), 16=-171 (LC 11), 18=-105 (LC 15), 30=-107 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 except 2=480 (LC 20), 16=480 (LC 20), 18=463 (LC 22), 30=463 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-103/276, 10-11=-94/251, 7-8=-94/251, 8-9=-103/276
WEBS 15-18=-391/219, 3-30=-391/219

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 23, 22, 21, 20, 19, 25, 26, 27, 28, 29 except (jt=lb) 2=154, 18=105, 30=106, 16=170.
13) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 4,2025

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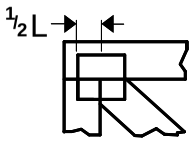
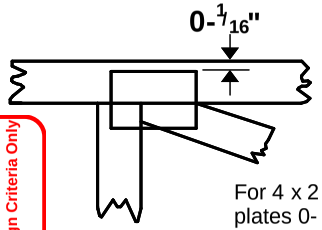
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

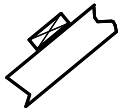
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

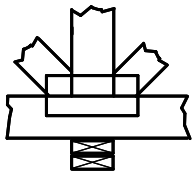
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

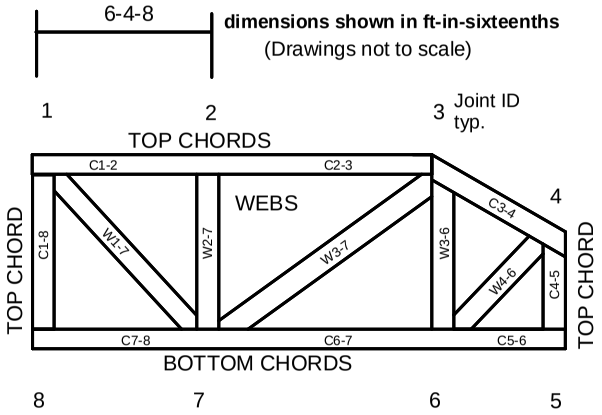


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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.

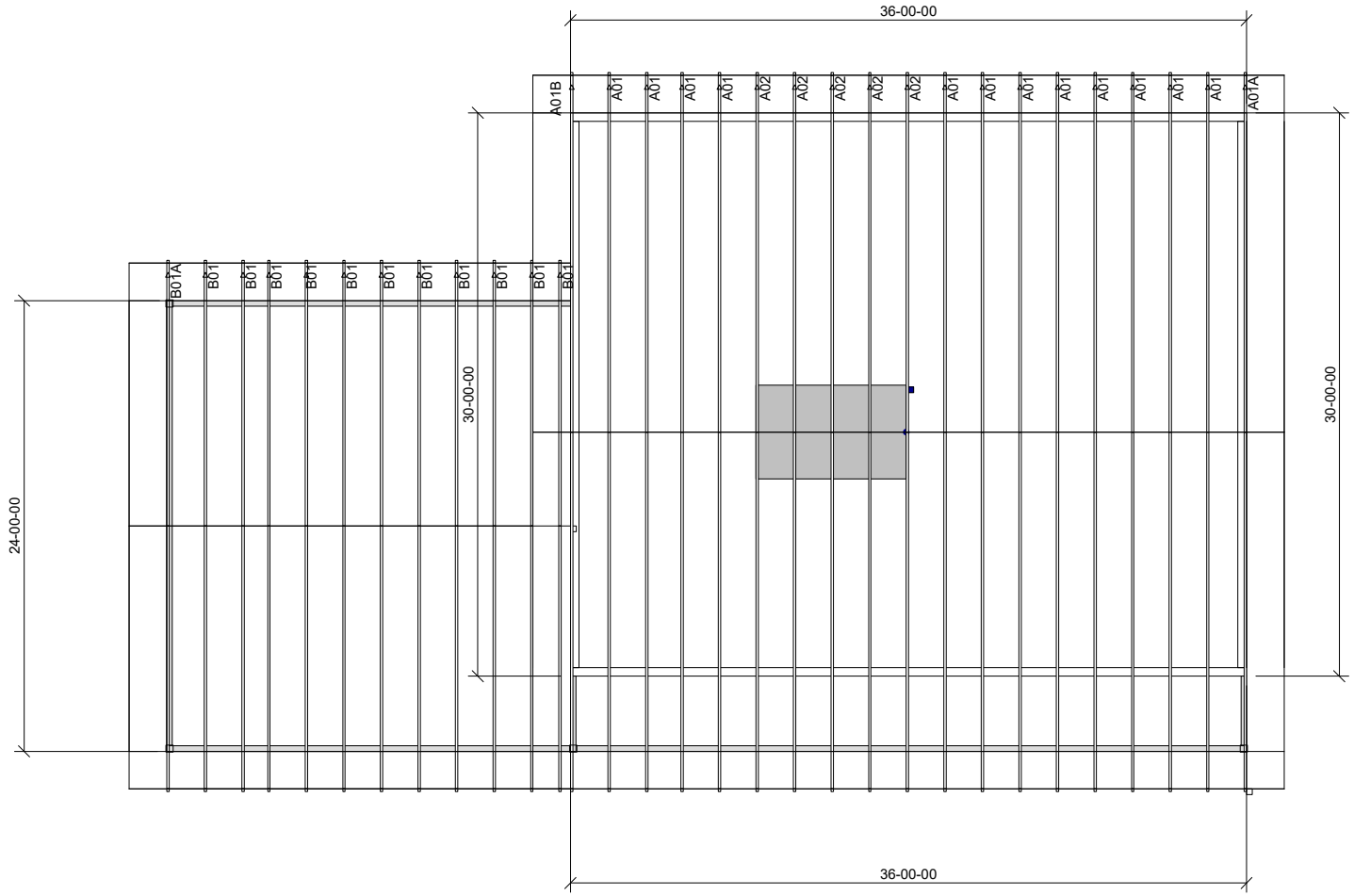
MiTek®

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.

Reviewed for
Design Criteria Only



Job Notes:
Pitch = 4/12
Top Chord = 2 x 6
Overhang = 24"
Roof Loaded for = Shingle
Exterior Wall Size = 2 x 6
Vents Included = Yes
Truss to Truss Hangers Included = No

2BD With Carport

◁ Indicates left end of truss | Drawing is not to scale u.n.o. | Dashed walls indicate a non-bearing wall

BALLARD TRUSS

Client: Truss Bid For Mayer
Job Name: 2 Bed W/Carport
Job #: **25-3002**
Location: ,

By signing below, I agree that I have reviewed this layout and the attached truss drawings and found them to be in conformance to my needs for this project, even if it they have deviated from the plans.

Signed:_____

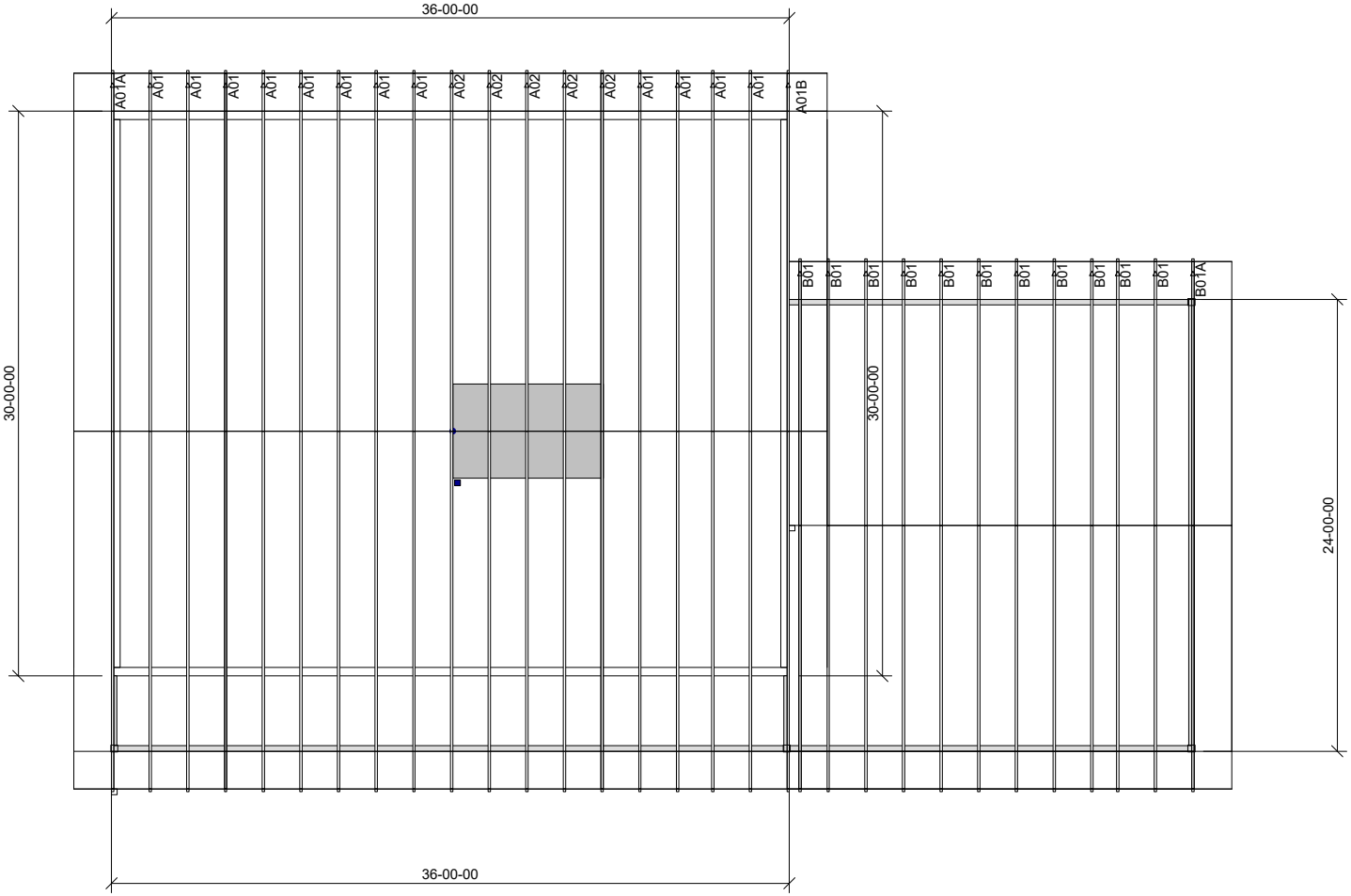
Date:_____

Disclaimer: This Truss Placement Diagram was not created by an engineer, but rather by the Ballard Truss Staff and is purely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the Truss Design Drawings which may be sealed by the Truss Designer.

Reviewed for
Design Criteria Only

Job Notes:
Pitch = 4/12
Top Chord = 2 x 6
Overhang = 24"
Roof Loaded for = Shingle
Exterior Wall Size = 2 x 6
Vents Included = Yes
Truss to Truss Hangers Included = No

2BD With Carport



◁ Indicates left end of truss | Drawing is not to scale u.n.o. | Dashed walls indicate a non-bearing wall

BALLARD TRUSS

Client: Truss Bid For Mayer
Job Name: 2 Bed W/Carport
Job #: **25-3002**
Location: ,

By signing below, I agree that I have reviewed this layout and the attached truss drawings and found them to be in conformance to my needs for this project, even if it they have deviated from the plans.

Signed:_____

Date:_____

Disclaimer: This Truss Placement Diagram was not created by an engineer, but rather by the Ballard Truss Staff and is purely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the Truss Design Drawings which may be sealed by the Truss Designer.

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MiTek, Inc.
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571

Re: 25-3002

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Ballard Truss LLC (Mesa, AZ).

Pages or sheets covered by this seal: R91568275 thru R91568280

My license renewal date for the state of Arizona is December 31, 2027.

Arizona COA: 11906-0

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

REVIEWED FOR DESIGN CRITERIA ONLY

SEE ATTACHED COVER SHEET FOR ALL STAMPS. IT IS THE RESPONSIBILITY OF THE OWNER/APPLICANT TO REVIEW AND ACKNOWLEDGE APPLICABLE STAMPS.

December 5,2025

Winn, 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.

Job	Truss	Truss Type	Qty	Ply		
25-3002	A01	Common	12	1	Job Reference (optional)	R91568275

Reviewed for Design Criteria Only

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

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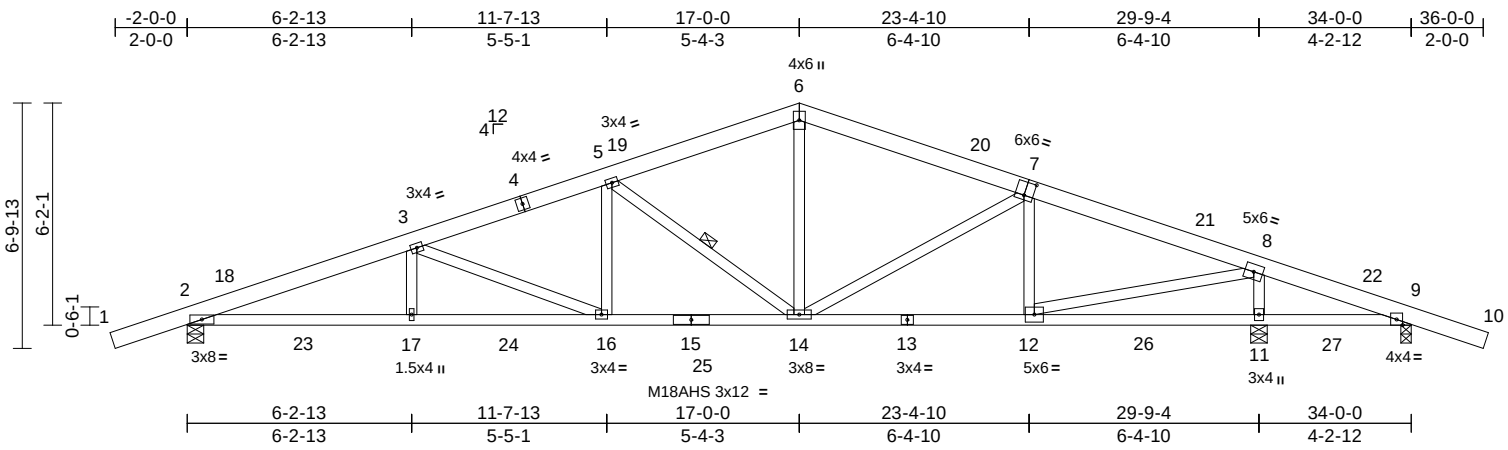

Scale = 1:64

Plate Offsets (X, Y): [7:0-3-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.16	16-17	>999	240	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.29	12-14	>999	180	M18AHS	142/136
TCDL	15.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.09	11	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 185 lb	FT = 10%

LUMBER

TOP CHORD	2x6 SP 2400F 2.0E
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud *Except* 7-14,8-12:2x4 SPF 1650F 1.5E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-1-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 5-14

REACTIONS (lb/size) 2=1733/0-5-8, 9=184/0-3-8, 11=2036/0-5-8
Max Horiz 2=-112 (LC 15)
Max Uplift 2=-476 (LC 10), 9=-131 (LC 11), 11=-443 (LC 11)
Max Grav 2=1883 (LC 21), 9=389 (LC 20), 11=2154 (LC 22)

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

TOP CHORD 2-18=-4075/823, 3-18=-3991/845, 3-4=-3294/705, 4-5=-3101/724, 5-19=-2159/549, 6-19=-2138/567, 6-20=-2025/568, 7-20=-2056/550, 7-21=-2169/498, 8-21=-2304/479, 8-22=-91/571, 9-22=-106/511

BOT CHORD 2-23=-798/3748, 17-23=-798/3748, 17-24=-798/3748, 16-24=-798/3748, 15-16=-579/3043, 15-25=-579/3043, 14-25=-579/3043, 13-14=-318/2066, 12-13=-318/2066, 12-26=-486/124, 11-26=-486/124, 11-27=-486/124, 9-27=-486/124

WEBS 6-14=-140/871, 5-14=-1402/371, 8-11=-2045/508, 7-12=-436/183, 7-14=-303/217, 8-12=-423/2401, 3-17=-37/315, 3-16=-761/243, 5-16=-34/463

NOTES

1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-14 to 1-3-15, Zone1 1-3-15 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 36-0-14 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 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 476 lb uplift at joint 2, 443 lb uplift at joint 11 and 131 lb uplift at joint 9.
10) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 5,2025

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply		
25-3002	A01A	Common Supported Gable	1	1	Job Reference (optional)	R91568276

Reviewed for Design Criteria Only

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

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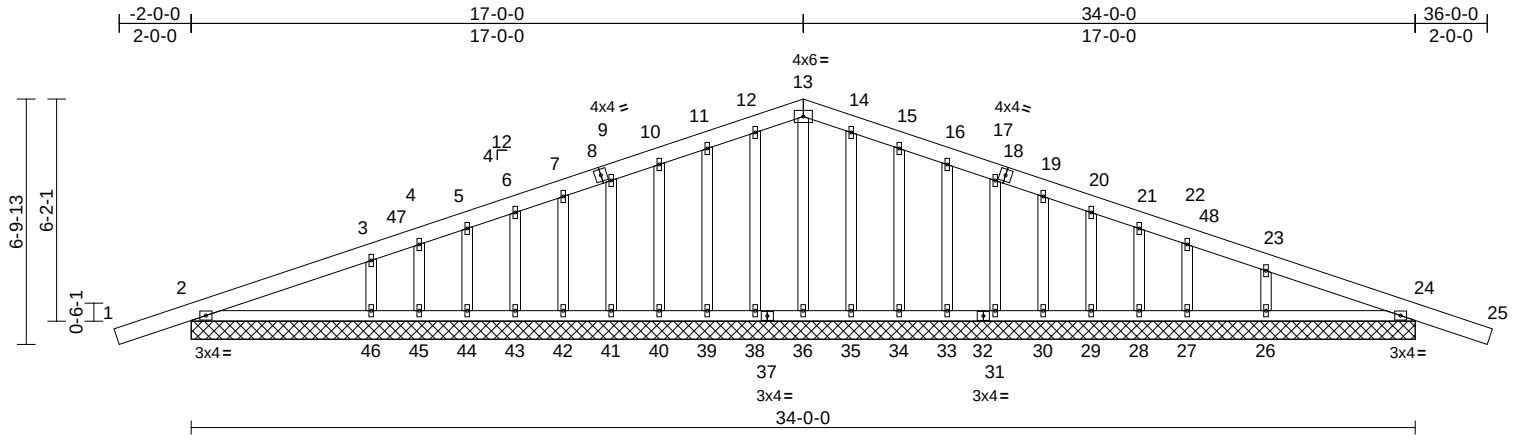

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	15.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	24	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 219 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

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

REACTIONS All bearings 34-0-0.
(lb) - Max Horiz 2=-112 (LC 15)
Max Uplift All uplift 100 (lb) or less at joint(s) 27, 28, 29, 30, 31, 33, 34, 35, 38, 39, 40, 41, 42, 43, 44, 45 except 2=-151 (LC 10), 24=-164 (LC 11), 26=-121 (LC 15), 46=-152 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 27, 28, 29, 30, 31, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45 except 2=480 (LC 20), 24=478 (LC 20), 26=357 (LC 22), 46=467 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-105/283, 10-11=-119/321, 11-12=-132/358, 12-13=-138/378, 13-14=-138/378, 14-15=-132/358, 15-16=-119/321, 16-17=-105/283
WEBS 23-26=-287/248, 3-46=-370/308

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 38, 39, 40, 41, 42, 43, 44, 45, 35, 34, 33, 31, 30, 29, 28, 27 except (jt=lb) 2=150, 26=121, 46=152, 24=163.
13) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

Registered Professional Engineer (Civil)
CERTIFICATE NO.
54161
DAVID
WINN
Date Signed
ARIZONA U.S.A.

EXPIRES: December 31, 2027
December 5,2025

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply		
25-3002	A01B	Common Supported Gable	1	1	Job Reference (optional)	R91568277

Reviewed for Design Criteria Only

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

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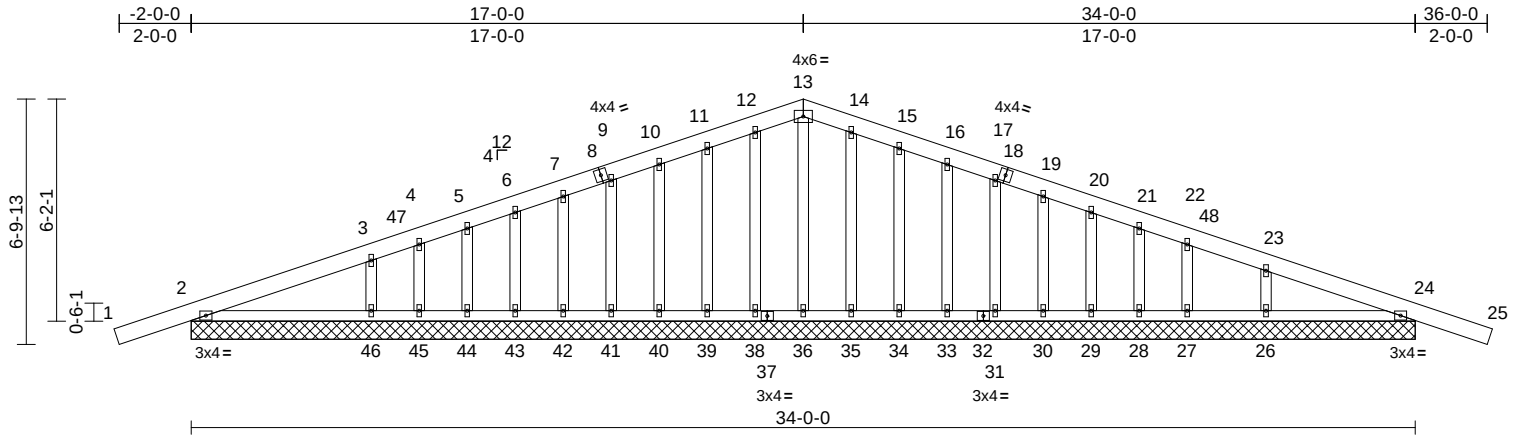

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	15.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	24	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 219 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

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

REACTIONS All bearings 34-0-0.
(lb) - Max Horiz 2=-112 (LC 15)
Max Uplift All uplift 100 (lb) or less at joint(s) 27, 28, 29, 30, 31, 33, 34, 35, 38, 39, 40, 41, 42, 43, 44, 45 except 2=-151 (LC 10), 24=-164 (LC 11), 26=-121 (LC 15), 46=-152 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 27, 28, 29, 30, 31, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45 except 2=480 (LC 20), 24=478 (LC 20), 26=357 (LC 22), 46=467 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-105/283, 10-11=-119/321, 11-12=-132/358, 12-13=-138/378, 13-14=-138/378, 14-15=-132/358, 15-16=-119/321, 16-17=-105/283
WEBS 23-26=-287/248, 3-46=-370/308

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 38, 39, 40, 41, 42, 43, 44, 45, 35, 34, 33, 31, 30, 29, 28, 27 except (jt=lb) 2=150, 26=121, 46=152, 24=163.
13) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 5,2025

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400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply		
25-3002	A02	Common	5	1	Job Reference (optional)	R91568278

Reviewed for Design Criteria Only

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

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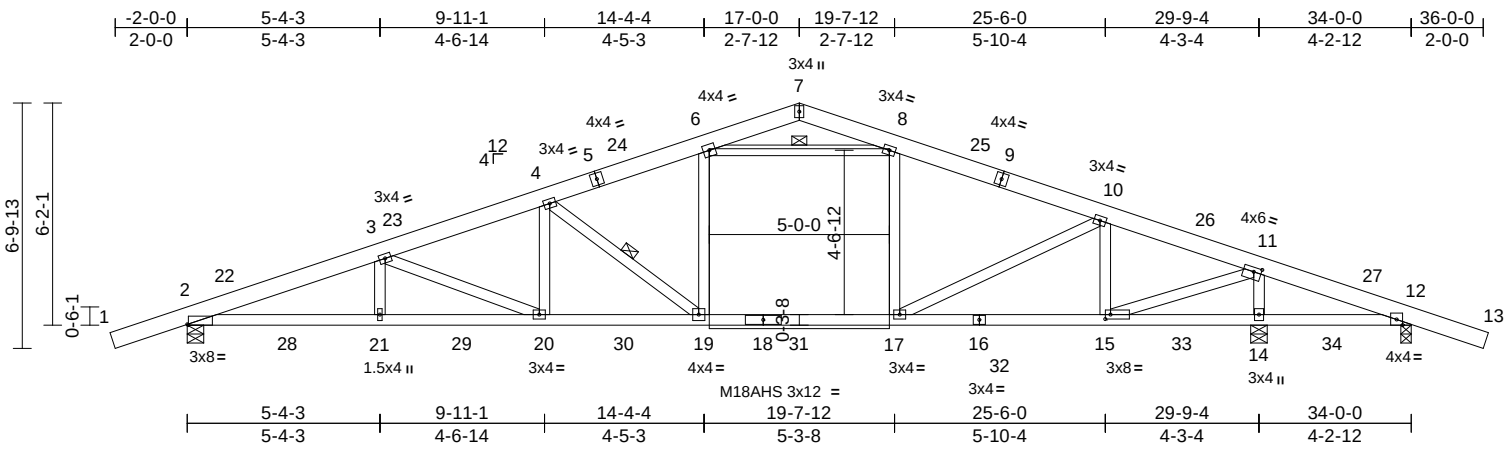

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Plate Offsets (X, Y): [2:0-0-6,Edge], [11:0-2-8,0-1-8], [15:0-1-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.41	17-19	>864	240	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.62	17-19	>572	180	M18AHS	142/136
TCDL	15.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.13	12	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 190 lb	FT = 10%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E *Except* 18-16:2x4 SPF 2100F 1.8E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud *Except* 11-15:2x4 SPF 1650F 1.5E

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-19, 6-8

REACTIONS (lb/size) 2=1833/0-5-8, 12=268/0-3-8, 14=2056/0-5-8
Max Horiz 2=-112 (LC 19)
Max Uplift 2=-402 (LC 10), 12=-175 (LC 34), 14=-377 (LC 15)
Max Grav 2=2036 (LC 21), 12=411 (LC 20), 14=2566 (LC 22)

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

TOP CHORD 2-22=-4331/581, 3-22=-4239/598, 3-23=-4090/546, 4-23=-3934/561, 4-5=-3014/382, 5-24=-2941/389, 6-24=-2886/395, 6-7=-712/60, 7-8=-918/116, 8-25=-2712/390, 9-25=-2734/381, 9-10=-2783/370, 10-26=-2061/362, 11-26=-2126/353, 11-27=-528/1319, 12-27=-588/1209

BOT CHORD 2-28=-582/3974, 21-28=-582/3974, 21-29=-582/3974, 20-29=-582/3974, 20-30=-472/3880, 19-30=-472/3880, 18-19=-164/2663, 18-31=-164/2663, 17-31=-164/2663, 16-17=-181/1959, 16-32=-181/1959, 15-32=-181/1959, 15-33=-1174/528, 14-33=-1174/528, 14-34=-1174/528, 12-34=-1174/528

WEBS 6-19=-182/1108, 8-17=-155/278, 10-17=0/828, 10-15=-1002/199, 11-15=-425/3261, 11-14=-2469/421, 4-19=-1645/399, 6-8=-2069/372, 3-21=0/268, 3-20=-347/122, 4-20=-4/352

NOTES

1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-14 to 1-3-15, Zone1 1-3-15 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 36-0-14 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 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) 150.0lb AC unit load placed on the top chord, 15-0-0 from left end, supported at two points, 5-0-0 apart.
6) Uninhabitable Mechanical zone exists .
7) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
8) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 402 lb uplift at joint 2, 377 lb uplift at joint 14 and 175 lb uplift at joint 12.
12) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

1) Dead + 0.7 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-6=-86, 6-7=-96, 7-8=-96, 8-13=-86, 2-12=-20
Concentrated Loads (lb)
Vert: 6=-75, 8=-75

EXPIRES: December 31, 2027
December 5,2025

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400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply		
25-3002	B01	Common	11	1	Job Reference (optional)	R91568279

Reviewed for Design Criteria Only

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

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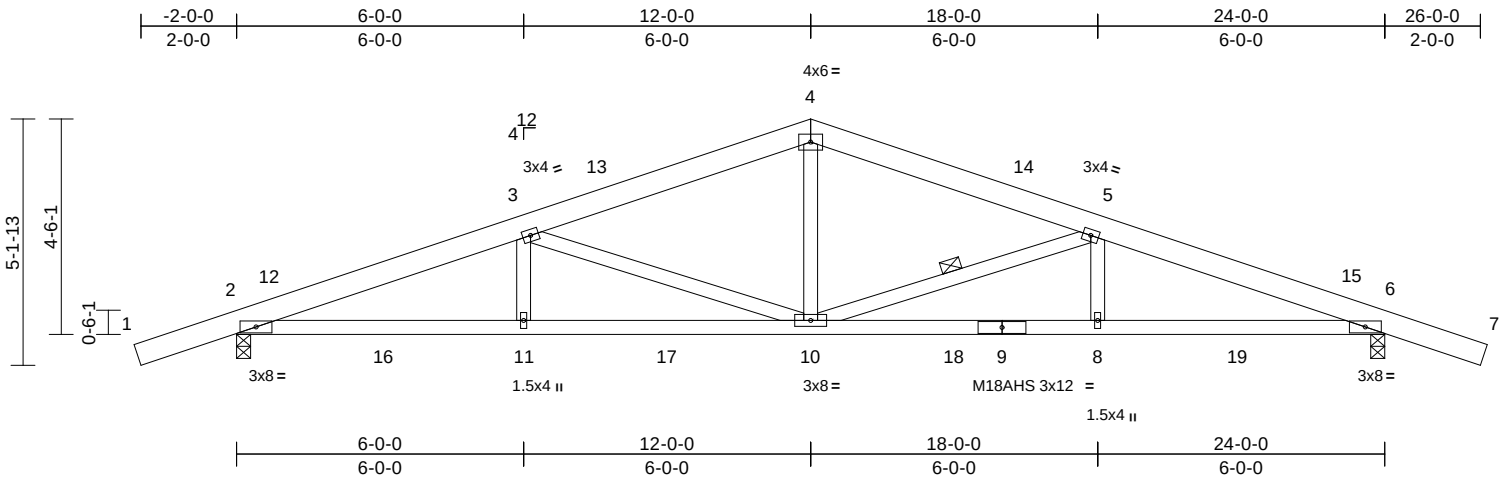

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.13	8-10	>999	240	MT20	203/168
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.27	8-10	>999	180	M18AHS	142/136
TCDL	15.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.08	6	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 123 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-10

REACTIONS (lb/size) 2=1447/0-3-8, 6=1447/0-3-8
Max Horiz 2=83 (LC 18)
Max Uplift 2=-396 (LC 10), 6=-396 (LC 11)
Max Grav 2=1652 (LC 21), 6=1652 (LC 22)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-12=-3264/635, 3-12=-3153/656, 3-13=-2058/496, 4-13=-1937/512, 4-14=-1937/512, 5-14=-2058/496, 5-15=-3182/651, 6-15=-3295/629
BOT CHORD 2-16=-570/2965, 11-16=-570/2965, 11-17=-570/2965, 10-17=-570/2965, 10-18=-541/2992, 9-18=-541/2992, 8-9=-541/2992, 8-19=-541/2992, 6-19=-541/2992
WEBS 3-11=0/295, 3-10=-1197/311, 4-10=-84/683, 5-10=-1224/309, 5-8=0/389

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-14 to 0-11-2, Zone1 0-11-2 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 26-0-14 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 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 396 lb uplift at joint 2 and 396 lb uplift at joint 6.
10) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 5,2025

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply		
25-3002	B01A	Common Supported Gable	1	1	Job Reference (optional)	R91568280

Reviewed for Design Criteria Only

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

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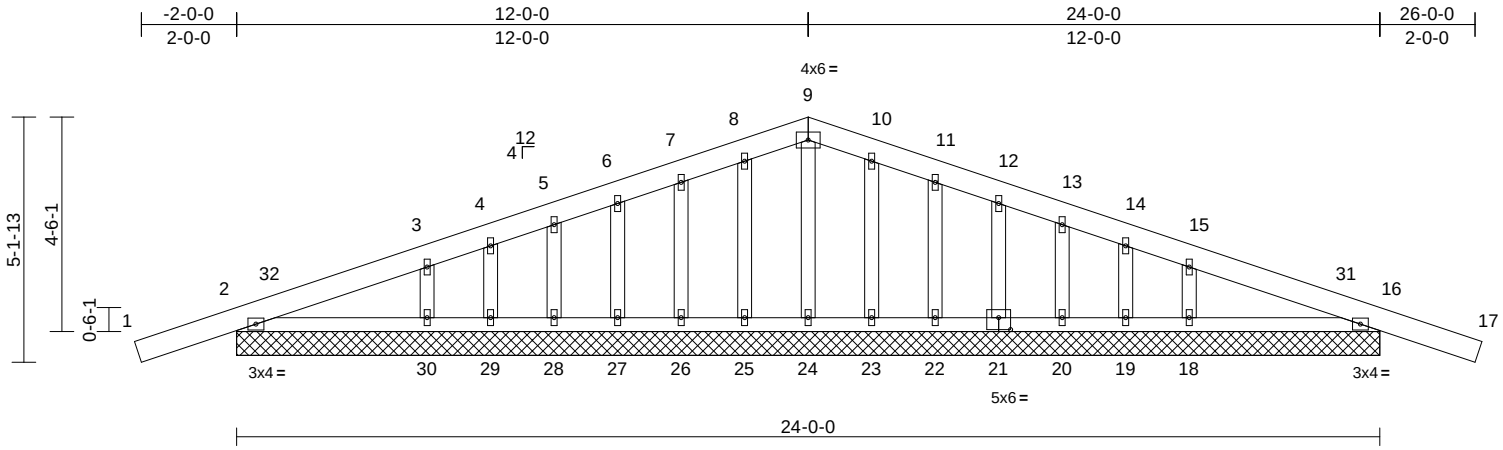

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Plate Offsets (X, Y): [21:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	203/168
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	15.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	16	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 138 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

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

REACTIONS All bearings 24-0-0.
(lb) - Max Horiz 2=-83 (LC 15)
Max Uplift All uplift 100 (lb) or less at joint(s) 19, 20, 21, 22, 23, 25, 26, 27, 28, 29 except 2=-155 (LC 10), 16=-171 (LC 11), 18=-105 (LC 15), 30=-107 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 except 2=480 (LC 20), 16=480 (LC 20), 18=463 (LC 22), 30=463 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-103/276, 10-11=-94/251, 7-8=-94/251, 8-9=-103/276
WEBS 15-18=-391/219, 3-30=-391/219

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 23, 22, 21, 20, 19, 25, 26, 27, 28, 29 except (jt=lb) 2=154, 18=105, 30=106, 16=170.
13) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 5,2025

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Roseville, CA 95661
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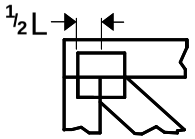
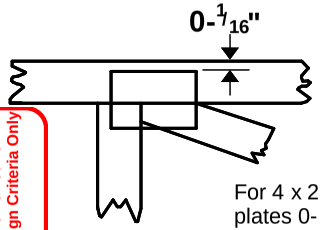
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

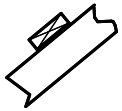
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

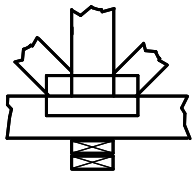
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

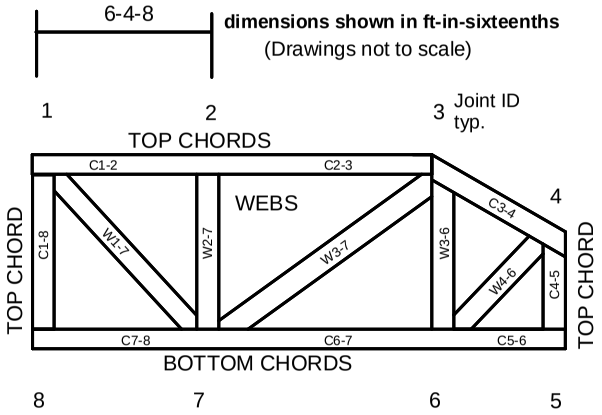


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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.

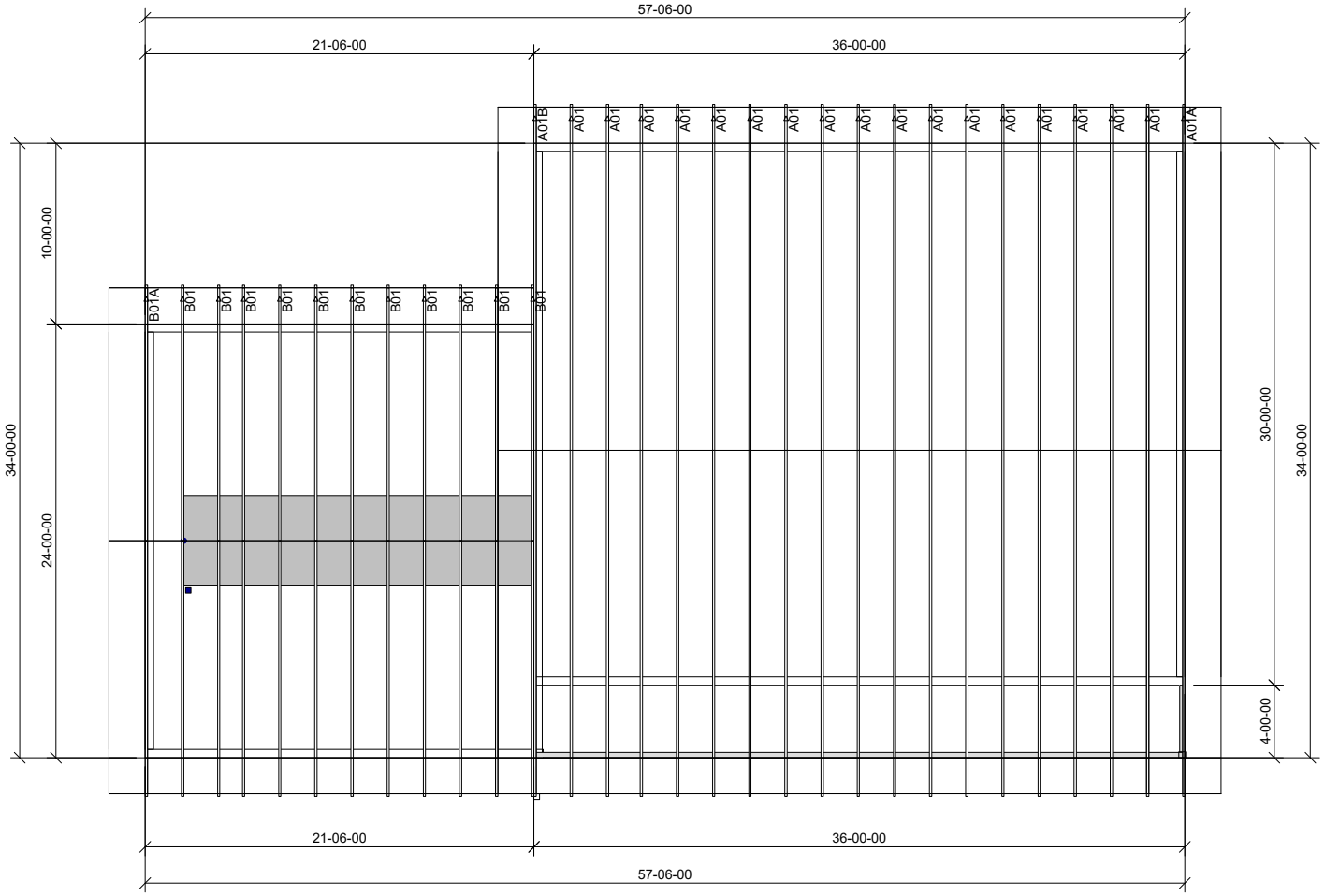
MiTek®

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.

Reviewed for
Design Criteria Only



Job Notes:
Pitch = 4/12
Top Chord = 2 x 6
Overhang = 24"
Roof Loaded for = Shingle
Exterior Wall Size = 2 x 6
Vents Included = Yes
Truss to Truss Hangers Included = No

2BD With Garage A/C

◁ Indicates left end of truss | Drawing is not to scale u.n.o. | Dashed walls indicate a non-bearing wall

BALLARD TRUSS

Client: Yavapai County
Job Name: 2 Bed W/Garage A/C Options
Job #: **25-5132**
Location: ,

By signing below, I agree that I have reviewed this layout and the attached truss drawings and found them to be in conformance to my needs for this project, even if it they have deviated from the plans.

Signed:_____

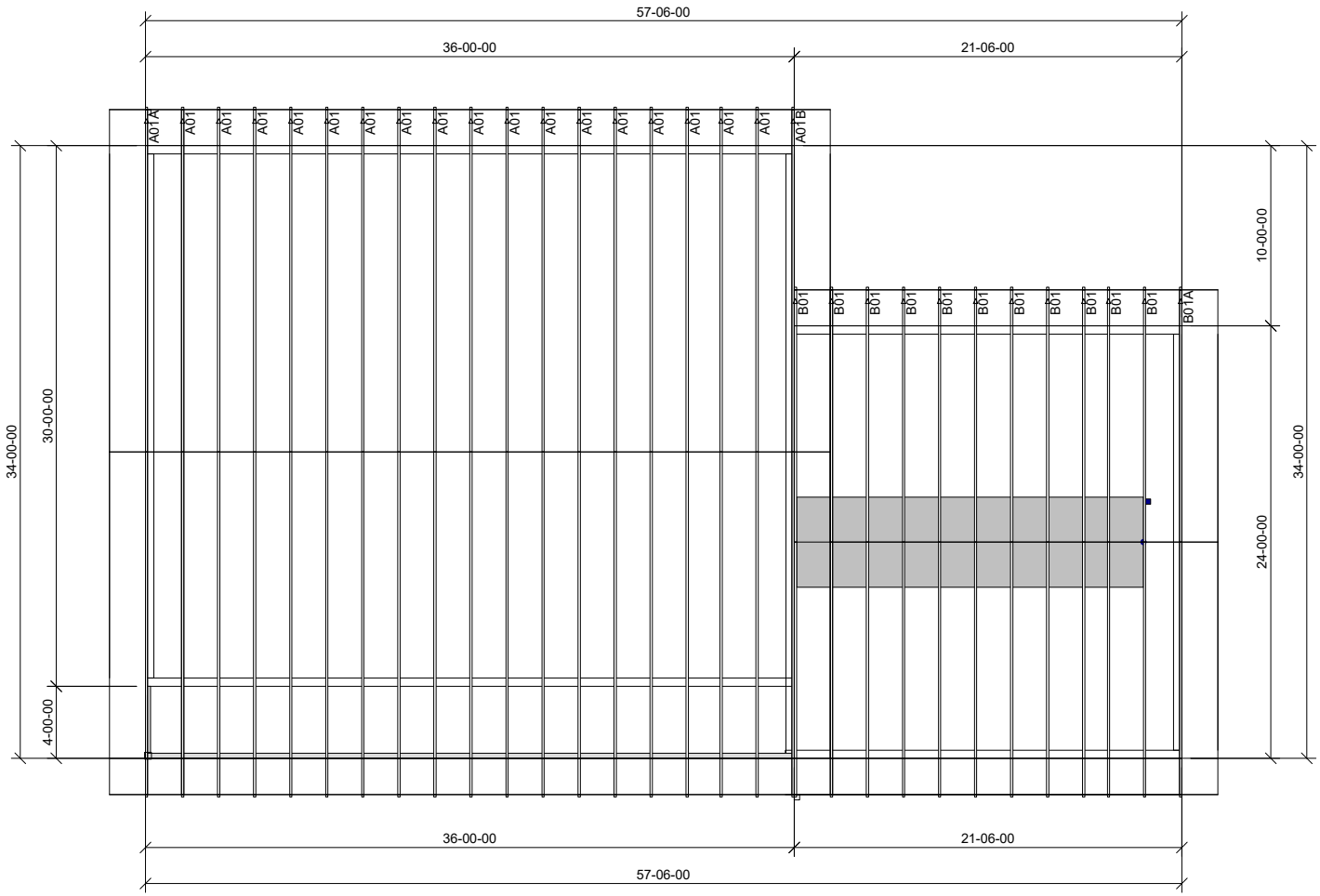
Date:_____

Disclaimer: This Truss Placement Diagram was not created by an engineer, but rather by the Ballard Truss Staff and is purely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the Truss Design Drawings which may be sealed by the Truss Designer.

Reviewed for
Design Criteria Only

Job Notes:
Pitch = 4/12
Top Chord = 2 x 6
Overhang = 24"
Roof Loaded for = Shingle
Exterior Wall Size = 2 x 6
Vents Included = Yes
Truss to Truss Hangers Included = No

2BD With Garage A/C



◁ Indicates left end of truss | Drawing is not to scale u.n.o. | Dashed walls indicate a non-bearing wall

BALLARD TRUSS

Client: Yavapai County
Job Name: 2 Bed W/Garage A/C Options
Job #: **25-5132**
Location: ,

By signing below, I agree that I have reviewed this layout and the attached truss drawings and found them to be in conformance to my needs for this project, even if it they have deviated from the plans.

Signed:_____

Date:_____

Disclaimer: This Truss Placement Diagram was not created by an engineer, but rather by the Ballard Truss Staff and is purely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the Truss Design Drawings which may be sealed by the Truss Designer.

MiTek®

MiTek, Inc.
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571

Re: 25-5132
HMO 2 Bed W/Garage A/C Option

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Ballard Truss LLC (Mesa, AZ).

Pages or sheets covered by this seal: R91514954 thru R91514958

My license renewal date for the state of Arizona is December 31, 2027.

Arizona COA: 11906-0

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

REVIEWED FOR DESIGN CRITERIA ONLY

SEE ATTACHED COVER SHEET FOR ALL STAMPS. IT IS THE RESPONSIBILITY OF THE OWNER/APPLICANT TO REVIEW AND ACKNOWLEDGE APPLICABLE STAMPS.

December 4,2025

Winn, David

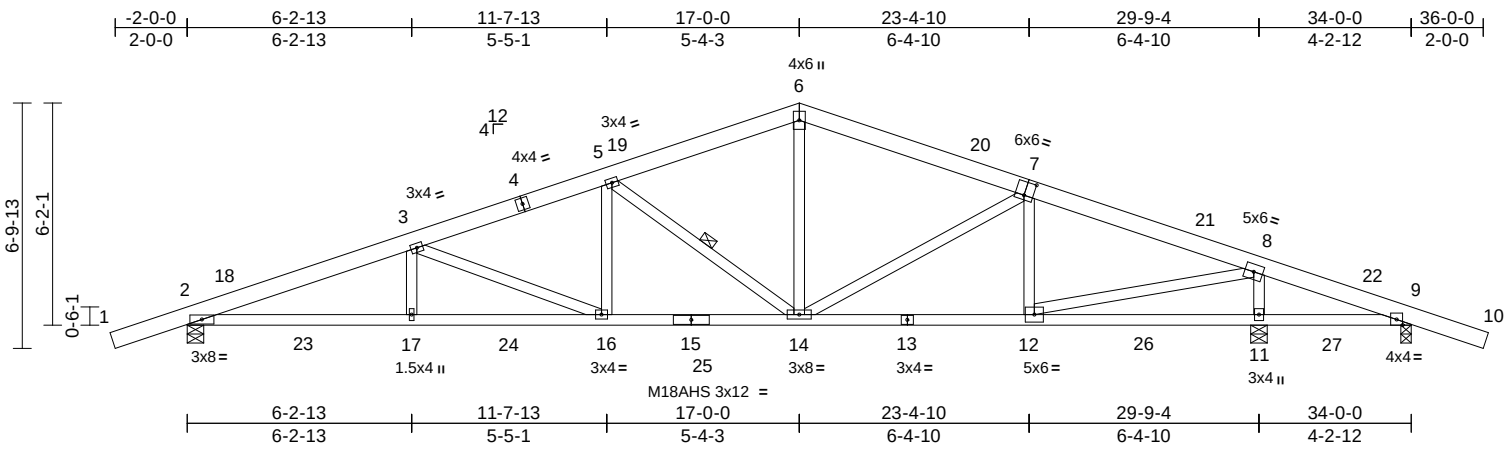
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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.

Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed W/Garage A/C Option
25-5132	A01	Common	17	1	R91514954 Job Reference (optional)

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

Run: 25.30 E Nov 4 2025 Print: 25.3.0 E Nov 4 2025 MiTek Industries, Inc. Thu Dec 04 09:47:14
ID:?fMAOOrkh8KOPvwaQUKzYrzJV4G-2yuPn5kUsyFEwllZjeT6XB7E2jg28oxJjvZahvyCM5R

Reviewed for Design Criteria Only



Scale = 1:64

Plate Offsets (X, Y): [7:0-3-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.16	16-17	>999	240	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.29	12-14	>999	180	M18AHS	142/136
TCDL	15.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.09	11	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 185 lb	FT = 10%

LUMBER

TOP CHORD	2x6 SP 2400F 2.0E
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud *Except* 7-14,8-12:2x4 SPF 1650F 1.5E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-1-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 5-14

REACTIONS (lb/size) 2=1733/0-5-8, 9=184/0-3-8, 11=2036/0-5-8
Max Horiz 2=-112 (LC 19)
Max Uplift 2=-476 (LC 10), 9=-131 (LC 11), 11=-443 (LC 11)
Max Grav 2=1883 (LC 21), 9=389 (LC 20), 11=2154 (LC 22)

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

TOP CHORD	2-18=-4075/823, 3-18=-3991/845, 3-4=-3294/705, 4-5=-3101/724, 5-19=-2159/549, 6-19=-2138/567, 6-20=-2025/568, 7-20=-2056/550, 7-21=-2169/498, 8-21=-2304/479, 8-22=-91/571, 9-22=-106/511
BOT CHORD	2-23=-798/3748, 17-23=-798/3748, 17-24=-798/3748, 16-24=-798/3748, 15-16=-579/3043, 15-25=-579/3043, 14-25=-579/3043, 13-14=-318/2066, 12-13=-318/2066, 12-26=-486/124, 11-26=-486/124, 11-27=-486/124, 9-27=-486/124
WEBS	6-14=-140/871, 8-11=-2045/508, 3-16=-761/243, 5-16=-34/463, 5-14=-1402/371, 7-12=-436/183, 7-14=-303/217, 8-12=-423/2401, 3-17=-37/315

NOTES

1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-14 to 1-3-15, Zone1 1-3-15 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 36-0-14 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 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 476 lb uplift at joint 2, 443 lb uplift at joint 11 and 131 lb uplift at joint 9.
10) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 4,2025

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Roseville, CA 95661
916.755.3571 / MiTek-US.com

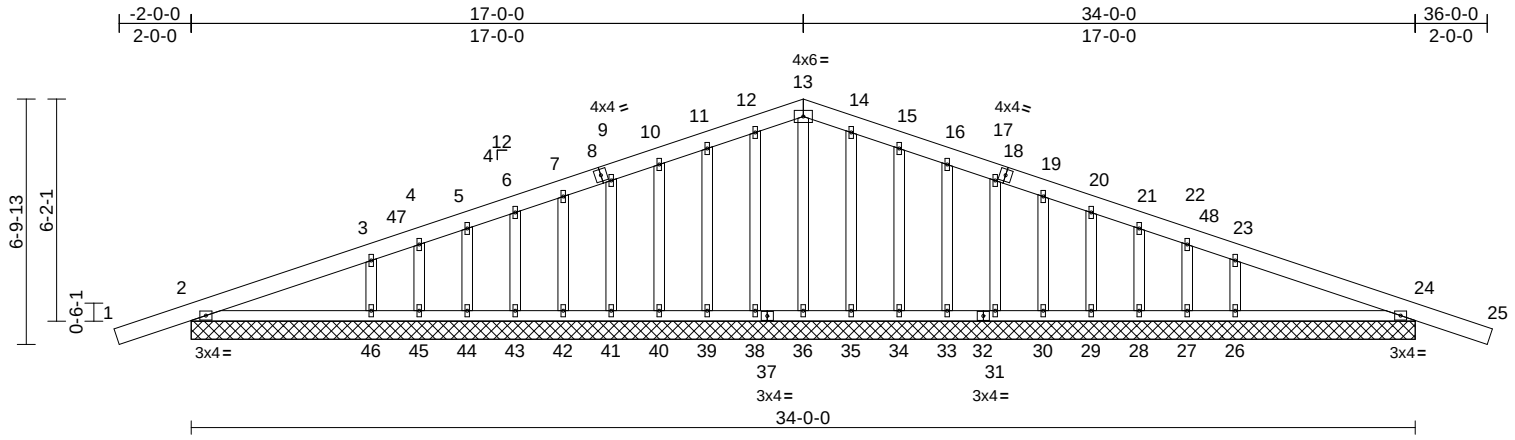
Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed W/Garage A/C Option
25-5132	A01A	Common Supported Gable	1	1	R91514955
					Job Reference (optional)

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

Run: 25.30 E Nov 4 2025 Print: 25.3.0 E Nov 4 2025 MiTek Industries, Inc. Thu Dec 04 09:47:15

ID:TrwYbjsNSSSF03Vm_CrC42zJV4F-2yuPn5kUsyFEwllZjeT6XB7HJjte8vmJjvZahvyCM5R

Reviewed for Design Criteria Only



Scale = 1:64

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	15.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	24	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 219 lb	FT = 10%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E

BOT CHORD 2x4 SPF 1650F 1.5E

OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING

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

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

REACTIONS All bearings 34-0-0.

(lb) - Max Horiz 2=-112 (LC 15)

Max Uplift All uplift 100 (lb) or less at joint(s) 27, 28, 29, 30, 31, 33, 34, 35, 38, 39, 40, 41, 42, 43, 44, 45 except 2=-151 (LC 10), 24=-171 (LC 11), 26=-151 (LC 15), 46=-152 (LC 14)

Max Grav All reactions 250 (lb) or less at joint (s) 27, 28, 29, 30, 31, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45 except 2=480 (LC 20), 24=480 (LC 20), 26=467 (LC 22), 46=467 (LC 21)

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

TOP CHORD 9-10=-105/283, 10-11=-119/321, 11-12=-132/358, 12-13=-139/378, 13-14=-139/378, 14-15=-132/358, 15-16=-119/321, 16-17=-105/283

WEBS 3-46=-370/308, 23-26=-370/308

NOTES

1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 38, 39, 40, 41, 42, 43, 44, 45, 35, 34, 33, 31, 30, 29, 28, 27 except (jt=lb) 2=150, 46=152, 26=150, 24=171.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
14) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027

December 4,2025

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400 Sunrise Ave., Suite 270

Roseville, CA 95661

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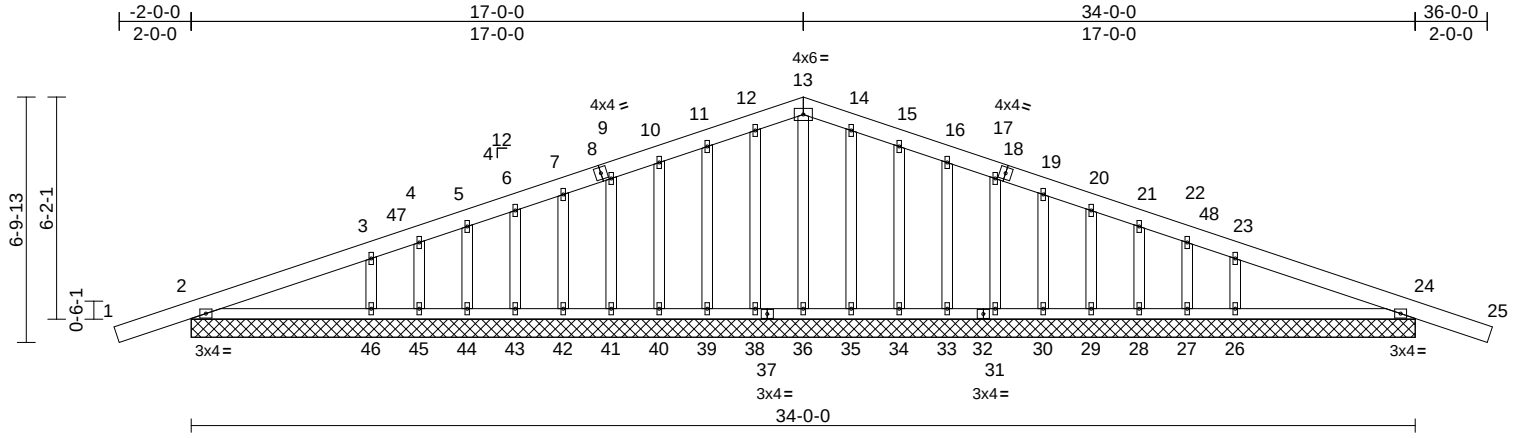
Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed W/Garage A/C Option
25-5132	A01B	Common Supported Gable	1	1	R91514956
					Job Reference (optional)

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

Run: 25.30 E Nov 4 2025 Print: 25.3.0 E Nov 4 2025 MiTek Industries, Inc. Thu Dec 04 09:47:15
ID:TrwYbjsNSSSF03Vm_CrC42zJV4F-W9So_Rl6dGN5YvJIHL_L3OgS27DttM0TyZI8DLyCM5Q

Reviewed for Design Criteria Only



Scale = 1:64

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	15.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	24	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 219 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

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

REACTIONS All bearings 34-0-0.
(lb) - Max Horiz 2=-112 (LC 15)
Max Uplift All uplift 100 (lb) or less at joint(s) 27, 28, 29, 30, 31, 33, 34, 35, 38, 39, 40, 41, 42, 43, 44, 45 except 2=-151 (LC 10), 24=-171 (LC 11), 26=-151 (LC 15), 46=-152 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 27, 28, 29, 30, 31, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45 except 2=480 (LC 20), 24=480 (LC 20), 26=467 (LC 22), 46=467 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-105/283, 10-11=-119/321, 11-12=-132/358, 12-13=-139/378, 13-14=-139/378, 14-15=-132/358, 15-16=-119/321, 16-17=-105/283
WEBS 3-46=-370/308, 23-26=-370/308

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 38, 39, 40, 41, 42, 43, 44, 45, 35, 34, 33, 31, 30, 29, 28, 27 except (jt=lb) 2=150, 46=152, 26=150, 24=171.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
14) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 4,2025

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Roseville, CA 95661
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Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed W/Garage A/C Option
25-5132	B01	Common	11	1	R91514957
					Job Reference (optional)

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

Run: 25.30 E Nov 4 2025 Print: 25.3.0 E Nov 4 2025 MiTek Industries, Inc. Thu Dec 04 09:47:15
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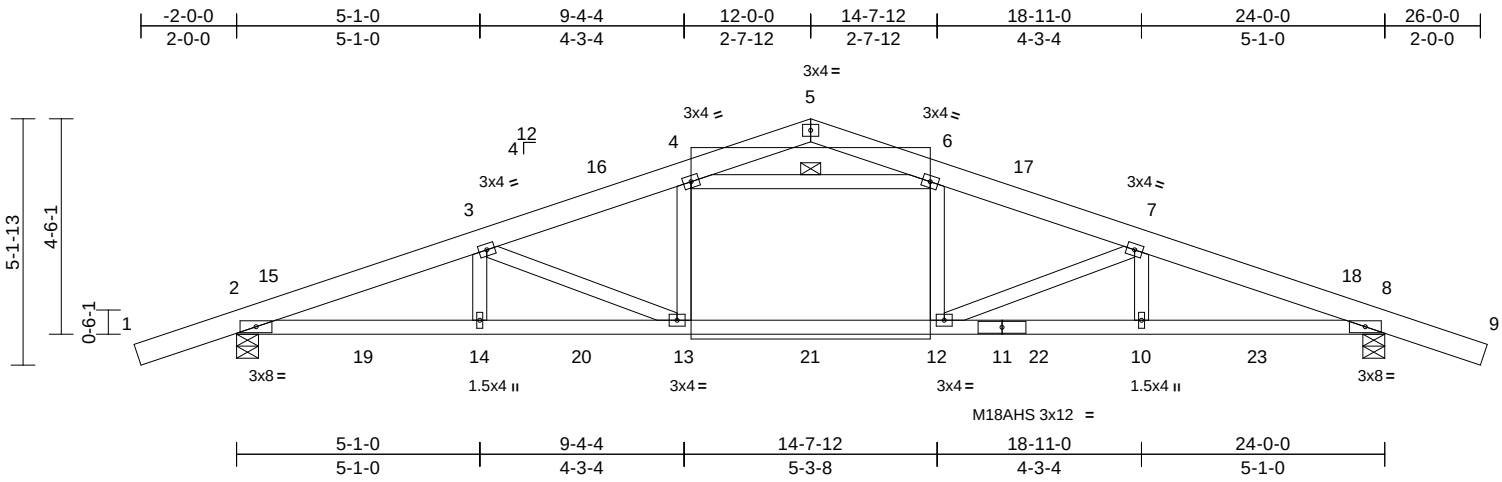
Reviewed for Design Criteria Only



Scale = 1:48.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.27	10-12	>999	240	MT20	266/220
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.39	10-12	>722	180	M18AHS	142/136
TCDL	15.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.10	8	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 127 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 12-13.
WEBS 1 Row at midpt 4-6

REACTIONS (lb/size) 2=1547/0-5-8, 8=1547/0-5-8
Max Horiz 2=83 (LC 18)
Max Uplift 2=-297 (LC 10), 8=-297 (LC 11)
Max Grav 2=1753 (LC 21), 8=1753 (LC 22)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-15=-3539/338, 3-15=-3435/357, 3-16=-2636/251, 4-16=-2513/261, 4-5=-698/124, 5-6=-693/123, 6-17=-2531/259, 7-17=-2656/249, 7-18=-3455/358, 8-18=-3560/340
BOT CHORD 2-19=-312/3219, 14-19=-312/3219, 14-20=-312/3219, 13-20=-312/3219, 13-21=-96/2402, 12-21=-96/2402, 11-12=-270/3237, 11-22=-270/3237, 10-22=-270/3237, 10-23=-270/3237, 8-23=-270/3237
WEBS 4-13=-38/442, 6-12=-40/523, 4-6=-1787/200, 7-10=0/259, 7-12=-908/270, 3-14=0/270, 3-13=-906/268

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-14 to 0-11-2, Zone1 0-11-2 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 26-0-14 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 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) 150.0lb AC unit load placed on the top chord, 10-0-0 from left end, supported at two points, 5-0-0 apart.
6) Uninhabitable Mechanical zone exists .
7) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
8) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 297 lb uplift at joint 2 and 297 lb uplift at joint 8.
12) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard
1) Dead + 0.7 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-86, 4-5=-96, 5-6=-96, 6-9=-86, 2-8=-20
Concentrated Loads (lb)
Vert: 4=-75, 6=-75

EXPIRES: December 31, 2027
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Job	Truss	Truss Type	Qty	Ply	HMO 2 Bed W/Garage A/C Option
25-5132	B01A	Common Supported Gable	1	1	R91514958 Job Reference (optional)

Ballard Truss LLC (Mesa, AZ), Mesa, AZ - 85210,

Run: 25.30 E Nov 4 2025 Print: 25.3.0 E Nov 4 2025 MiTek Industries, Inc. Thu Dec 04 09:47:15
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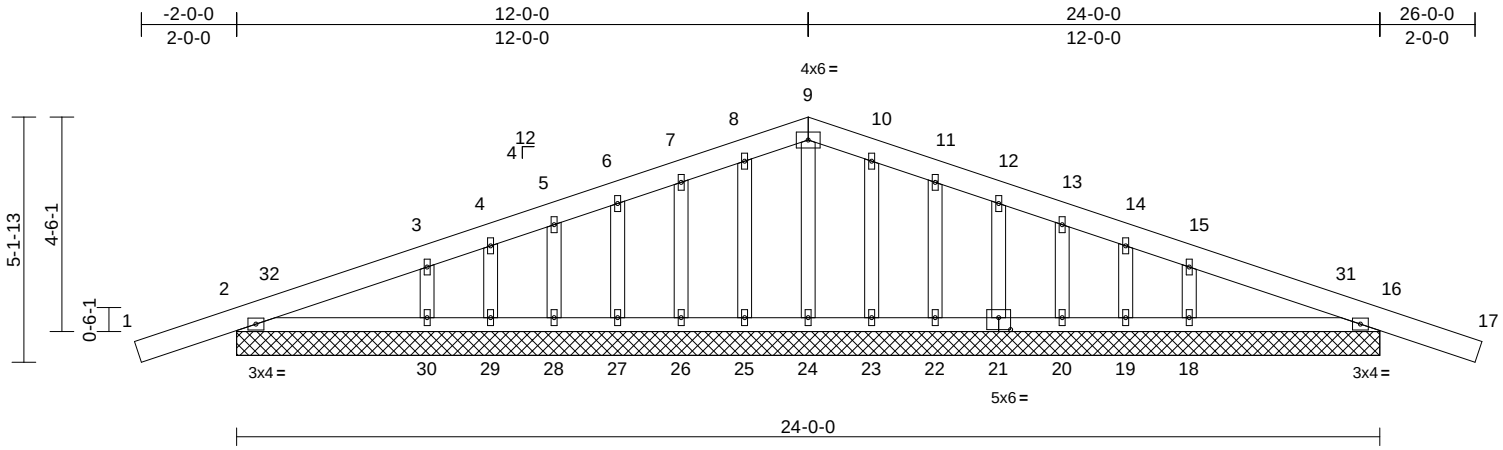
Reviewed for Design Criteria Only



Scale = 1:48.4

Plate Offsets (X, Y): [21:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	203/168
(Roof Snow = 40.0)		Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	15.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	16	n/a	n/a		
BCLL	0.0*	Code	IRC2024/TPI2022	Matrix-SH								
BCDL	10.0										Weight: 138 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

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

REACTIONS All bearings 24-0-0.
(lb) - Max Horiz 2=-83 (LC 15)
Max Uplift All uplift 100 (lb) or less at joint(s) 19, 20, 21, 22, 23, 25, 26, 27, 28, 29 except 2=-155 (LC 10), 16=-171 (LC 11), 18=-105 (LC 15), 30=-107 (LC 14)
Max Grav All reactions 250 (lb) or less at joint (s) 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 except 2=480 (LC 20), 16=480 (LC 20), 18=463 (LC 22), 30=463 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-103/276, 10-11=-94/251, 7-8=-94/251, 8-9=-103/276
WEBS 15-18=-391/219, 3-30=-391/219

NOTES
1) Wind: ASCE 7-22; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Partially Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-22; Pf=40.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.20; W2=0.55
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 23, 22, 21, 20, 19, 25, 26, 27, 28, 29 except (jt=lb) 2=154, 18=105, 30=106, 16=170.
13) Install all permanent bracing per project-specific bracing requirements, designed by others, or per industry standard details.

LOAD CASE(S) Standard

EXPIRES: December 31, 2027
December 4,2025

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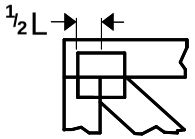
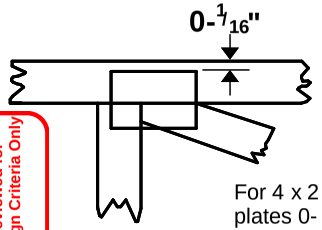
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

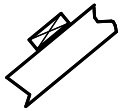
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

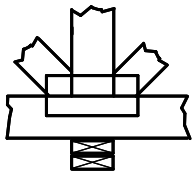
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

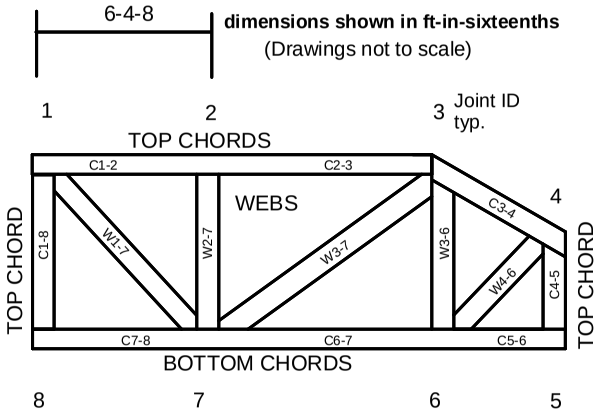


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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.

MiTek®

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.