

General Notes

Trusses are not marked in any way to identify the frequency or location of temporary lateral restraint and diagonal bracing. Follow the recommendations for handling, installing and temporary restraining and bracing of trusses. Refer to **BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses***** for more detailed information.

Truss Design Drawings may specify locations of permanent lateral restraint or reinforcement for individual truss members. Refer to the **BCSI-B3***** for more information. All other permanent bracing design is the responsibility of the building designer.

! DANGER The consequences of improper handling, erecting, installing, restraining and bracing can result in a collapse of the structure, or worse, serious personal injury or death.

! PELIGRO! El resultado de un manejo, levantamiento, instalación, restricción y arrioste incorrecto puede ser la caída de la estructura o aún peor, heridos o muertos.

! CAUTION Exercise care when removing banding and handling trusses to avoid damaging trusses and prevent injury. Wear personal protective equipment for the eyes, feet, hands and head when working with trusses.

! CAUTELA! Utilice cautela al quitar las ataduras o los pedazos de metal de sujetar para evitar daño a los trusses y prevenir la herida personal. Lleve el equipo protector personal para ojos, pies, manos y cabeza cuando trabaja con trusses.

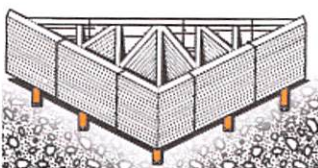
Handling — Manejo

NOTICE Avoid lateral bending.

Evite la flexión lateral.

NOTICE The contractor is responsible for properly receiving, unloading and storing the trusses at the jobsite. Unload trusses to smooth surface to prevent damage.

El contratista tiene la responsabilidad de recibir, descargar y almacenar adecuadamente los trusses en la obra. Descargue los trusses en la tierra lisa para prevenir el daño.



Trusses may be unloaded directly on the ground at the time of delivery or stored temporarily in contact with the ground after delivery. If trusses are to be stored for more than one week, place blocking of sufficient height beneath the stack of trusses at 8' (2.4 m) to 10' (3 m) on-center (o.c.).

Los trusses pueden ser descargados directamente en el suelo en aquel momento de entrega o almacenados temporalmente en contacto con el suelo después de entrega. Si los trusses estarán guardados para más de una semana, ponga bloqueando de altura suficiente detrás de la pila de los trusses a 8 hasta 10 pies en centro (o.c.).

If trusses are to be stored for more than one week, cover bundles to protect from the environment.

Para trusses guardados por más de una semana, cubra los paquetes para protegerlos del ambiente.

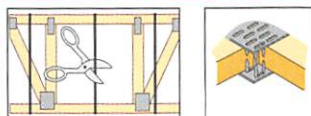
Refer to **BCSI***** for more detailed information pertaining to handling and jobsite storage of trusses.

Vea el folleto **BCSI***** para información más detallada sobre el manejo y almacenamiento de los trusses en área de trabajo.

Notas Generales

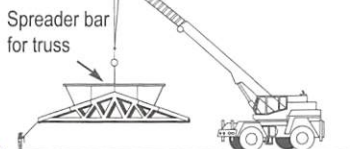
Los trusses no están marcados de ningún modo que identifique la frecuencia o localización de restricción lateral y arrioste diagonal temporales. Use las recomendaciones de manejo, instalación, restricción y arrioste temporal de los trusses. Vea el folleto **BCSI - Guía de Buena Práctica para el Manejo, Instalación, Restricción y Arrioste de los Trusses de Madera Conectados con Placas de Metal***** para información más detallada.

Los dibujos de diseño de los trusses pueden especificar las localizaciones de restricción lateral permanente o refuerzo en los miembros individuales del truss. Vea la hoja resumen **BCSI-B3***** para más información. El resto de los diseños de arriostres permanentes son la responsabilidad del diseñador del edificio.



! CAUTION Use special care in windy weather or near power lines and airports.

! CAUTELA! Utilice cuidado especial en días ventosos o cerca de cables eléctricos o de aeropuertos.



Use proper rigging and hoisting equipment.

Use equipo apropiado para levantar e improvisar.



DO NOT store unbraced bundles upright.

NO almacene verticalmente los trusses sueltos.



DO NOT store on uneven ground.

NO almacene en tierra desigual.

Hoisting and Placement of Truss Bundles
Recomendaciones Para Levantar Paquetes de Trusses

! DON'T overload the crane.

NO sobrecargue la grúa.

! NEVER use banding to lift a bundle.

NUNCA use las ataduras para levantar un paquete.

A single lift point may be used for bundles of top chord pitch trusses up to 45' (13.7 m) and parallel chord trusses up to 30' (9.1 m). Use at least two lift points for bundles of top chord pitch trusses up to 60' (18.3 m) and parallel chord trusses up to 45' (13.7 m). Use at least three lift points for bundles of top chord pitch trusses >60' (18.3 m) and parallel chord trusses >45' (13.7 m).

Puede usar un solo lugar de levantar para paquetes de trusses de la cuerda superior hasta 45' y trusses de cuerdas paralelas de 30' o menos.

Use por lo menos dos puntos de levantar con grupos de trusses de cuerda superior inclinada hasta 60' y trusses de cuerdas paralelas hasta 45'. Use por lo menos dos puntos de levantar con grupos de trusses de cuerda superior inclinada mas de 60' y trusses de cuerdas paralelas mas de 45'.



! WARNING Do not overload supporting structure with truss bundle.

! ADVERTENCIA! No sobrecargue la estructura apoyada con el paquete de trusses.

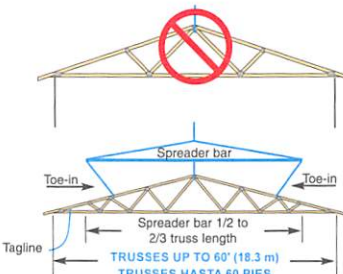
Place truss bundles in stable position.

Puse paquetes de trusses en una posición estable.

Mechanical Hoisting Recommendations for Single Trusses
Recomendaciones Para Levantar Trusses Individuales

NOTICE Using a single pick-point at the peak can damage the truss.

El uso de un solo lugar en el pico para levantar puede hacer daño al truss.



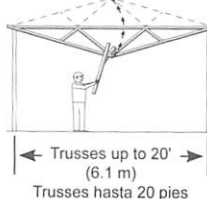
Hold each truss in position with the erection equipment until top chord temporary lateral restraint is installed and the truss is fastened to the bearing points.

Sostenga cada truss en posición con equipo de grúa hasta que la restricción lateral temporal de la cuerda superior esté instalado y el truss está asegurado en los soportes.

Installation of Single Trusses by Hand
Recomendaciones de Levantamiento de Trusses Individuales Por La Mano

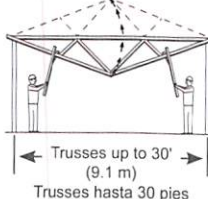
Trusses 20' (6.1 m) or less, support near peak.

Soporte cerca al pico los trusses de 20 pies o menos.



Trusses 30' (9.1 m) or less, support at quarter points.

Soporte de los cuartos de tramo los trusses de 30 pies o menos.

Temporary Restraint & Bracing
Restricción y Arrioste Temporal

NOTICE Refer to **BCSI-B2***** for more information.

Vea el resumen **BCSI-B2***** para más información.

Locate ground braces directly in line with all rows of top chord temporary lateral restraint (see table in the next column).

Coloque los arriostres de tierra para el primer truss directamente en línea con cada una de las filas de restricción lateral temporal de la cuerda superior (vea la tabla en la próxima columna).

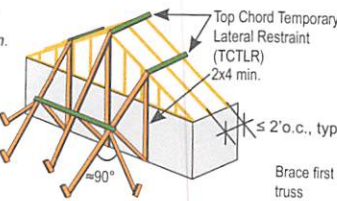
DO NOT walk on unbraced trusses.

NO camine en trusses sueltos.



DO NOT stand on truss overhangs until Structural Sheathing has been applied to the truss and overhangs.

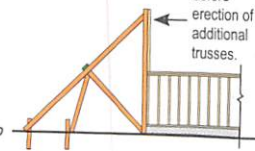
NO se pare en voladizos cerchas hasta Revestimiento estructural ha sido aplicado a la armadura y voladizos.



Top Chord Temporary Lateral Restraint (TCLR) 2x4 min.

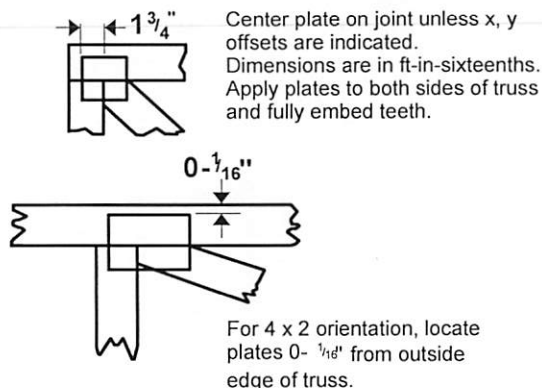
≤ 2' o.c., typ.

Brace first truss securely before erection of additional trusses.



Symbols

PLATE LOCATION AND ORIENTATION



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

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

PLATE SIZE

4 x 4

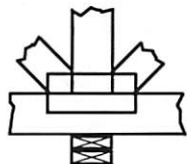
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

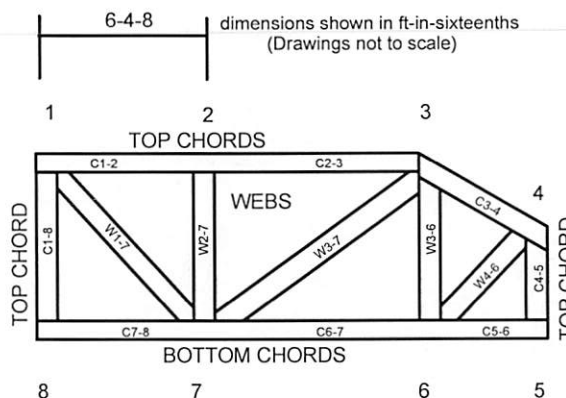


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR-1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

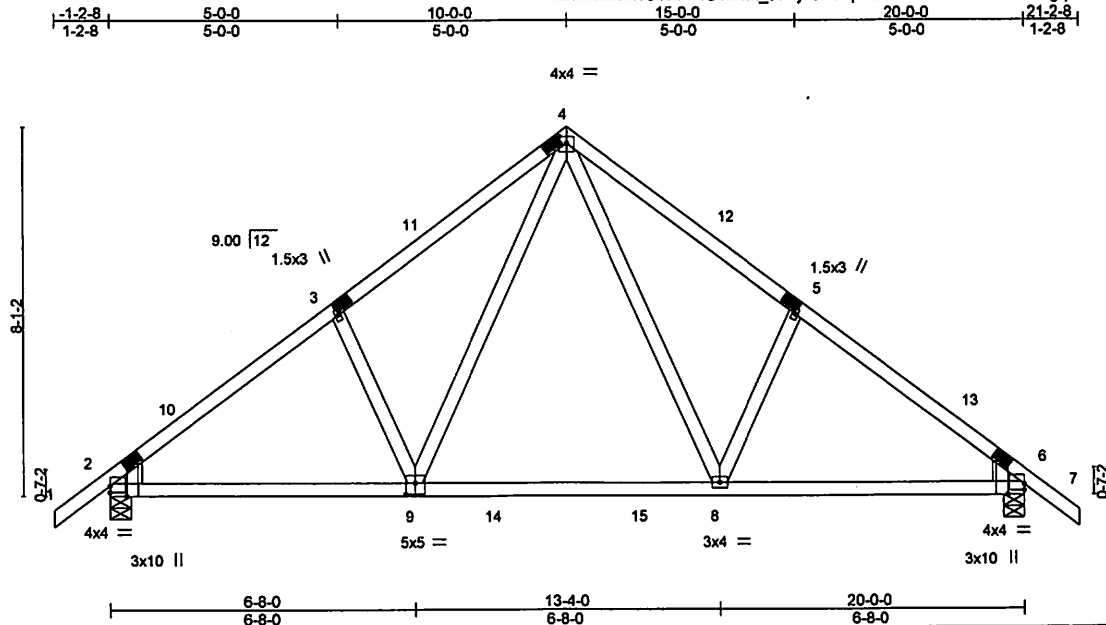
1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed 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.

Job 17-1029	Truss R1	Truss Type Common	Qty 14	Ply 1	Mtn Realty-7 Rosecrest	E10902500
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Andrews Truss, Andrews, NC

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ID:IN6lw3HvUYmNHGoMwk_J7KykJK5-qWe77uIM?vHhFV5SOTk6vgqwbF3LquMucAlZqiP7_



Scale = 1:48.5

Plate Offsets (X,Y)-- [2:0-2-12,Edge], [2:0-0-0,0-1-10], [4:0-2-0,0-1-12], [6:0-2-12,Edge], [6:0-0-0,0-1-10], [9:0-2-8,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 30.0	Plate Grip DOL	1.15	TC 0.39	Ver(LL)	-0.09	8-9	>999	360	MT20	244/190
Snow (Pf/Pg) 23.1/30.0	Lumber DOL	1.15	BC 0.44	Ver(TL)	-0.15	8-9	>999	240		
TCDL 7.0	Rep Stress Incr	YES	WB 0.11	Horz(TL)	0.03	6	n/a	n/a		
BCLL 0.0	Code IRC2012/TPI2007		Matrix-S	Wind(LL)	-0.02	6-8	>999	240		
BCDL 10.0									Weight: 111 lb	FT = 20%

LUMBER-

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

Left: 2x6 SP No.1, Right: 2x6 SP No.1

BRACING-

TOP CHORD
Installation
Permanent
BOT CHORD

1 Stabilizer(s) at 9-4-8 (max) oc.
Structural wood sheathing directly applied or 5-1-4 oc purlins.
Rigid ceiling directly applied or 10-0-0 oc bracing.

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

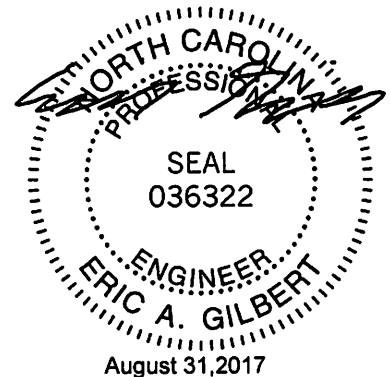
REACTIONS. (lb/size) 2=870/0-5-8, 6=870/0-5-8
Max Horz 2=134(LC 12)
Max Uplift 2=58(LC 14), 6=58(LC 14)
Max Grav 2=1025(LC 2), 6=1025(LC 2)

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

TOP CHORD 2-3=1204/79, 3-4=1047/136, 4-5=1047/136, 5-6=1204/79
BOT CHORD 2-9=0/865, 8-9=0/582, 6-8=0/846
WEBS 4-8=44/466, 5-8=287/132, 4-9=44/466, 3-9=287/132

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional) and C-C Exterior(2) -1-2-8 to 1-9-8, Interior(1) 1-9-8 to 10-0-0, Exterior(2) 10-0-0 to 13-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- For Stabilizer bracing, see MITek Stabilizer Installation Guide. Cross brace at: TC: Inst. 20-0-0.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.

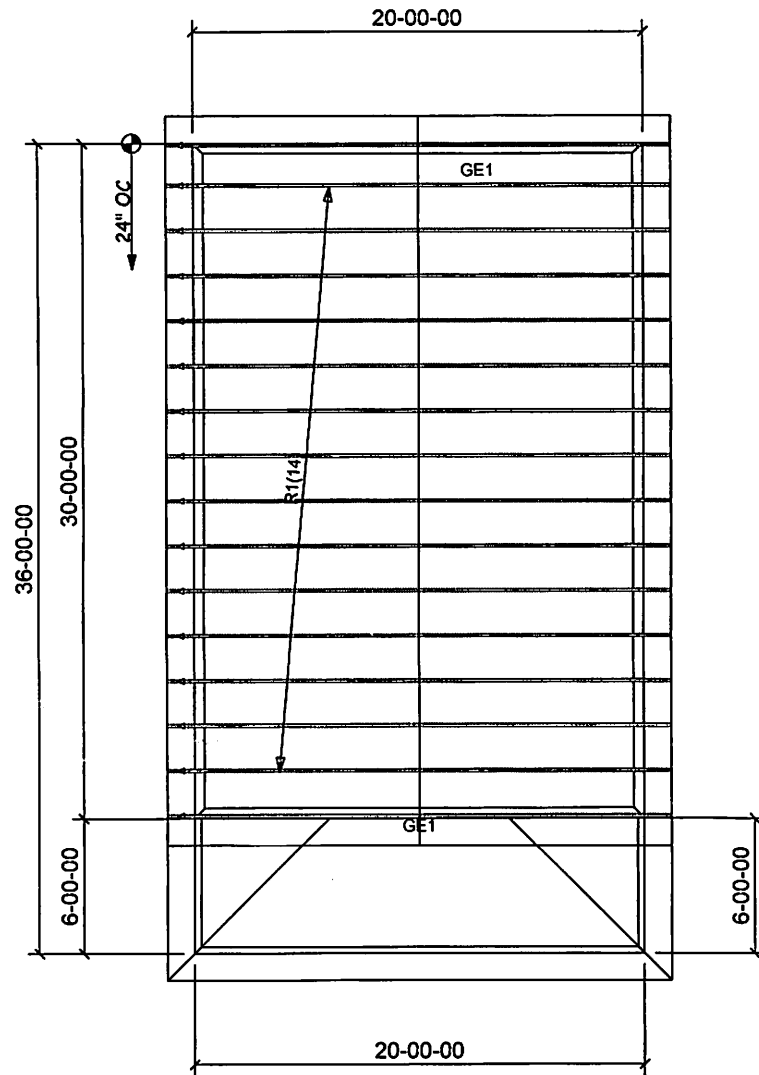
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A MITek Affiliate

818 Soundside Road
Edenton, NC 27932

ROOF TRUSS LAYOUT

17-1029

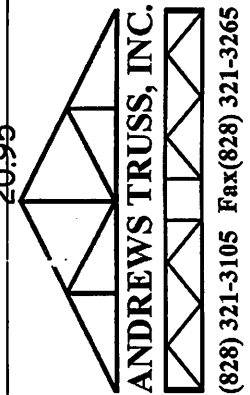


NOTES:

1. DO NOT CUT ANY TRUSS!!
This is an engineered component. Alterations of ANY type WILL void the warranty of this product.
2. Customers to verify ALL dimensions, wall heights, stair, chimney, and garage door opennings.
3. Dimensions are in feet-inches-sixteenths.
4. All walls shown on diagram are load bearing Unless Noted Otherwise.(UNO)
5. All dimesions are from face of stud to face of stud U.N.O.
6. Truss spacing is 24" on center U.N.O.
7. Customer to insure that all electrical, plumbing, and HVAC runs are clear of truss webs and/or chords.
8. THA29 hanger is recommended for all truss to truss connections U.N.O.
9. 14-1/2" TAIL overhangs U.N.O.
10. 9/12 roof pitches.

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult "Bracing of Wood Trusses" available from the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53179.

FLOOR AREA: 1200 ROOF AREA: 1078.67 RIDGE LINE: 32.42 VALLEY LINES: 0 HIP LINES: 20.95



SHOP DRAWING APPROVAL
THIS LAYOUT IS THE SOLE SOURCE FOR FABRICATION OF TRUSSES AND VOIDS ALL PREVIOUS ARCHITECTURAL OR OTHER TRUSS LAYOUTS. REVIEW AND APPROVAL OF THIS LAYOUT MUST BE RECEIVED BEFORE ANY TRUSSES WILL BE BUILT. VERIFY ALL CONDITIONS TO INSURE AGAINST CHANGES THAT WILL RESULT IN EXTRA CHARGES TO YOU.

REVIEWED BY: _____ APPROVED BY: _____
DATE: _____

Client:	84 Lumber	Subdivision:	
Job Name:	Mtn Ready-7 Rosecrest	Sales Rep:	PN
Model:		Designer:	bw
Lot #:		Date:	08/28/17
Order #:	17-1029F2		