

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 150\_1910\_C  
KB Home 150.1910.C

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I42923816 thru I42923850

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844



September 23, 2020

Sevier, Scott

**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.

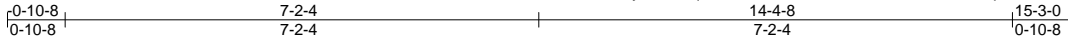
Job 150_1910_C	Truss A1	Truss Type Common	Qty 1	Ply 1	KB Home 150.1910.C	I42923816
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84 Components (Dunn),

Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:15:59 2020 Page 1

ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-E4NGnuDFURlxvmC7GqBv6N?3GAAd1643oDVNrgUyap?k



4x6 =

Scale = 1:35.0

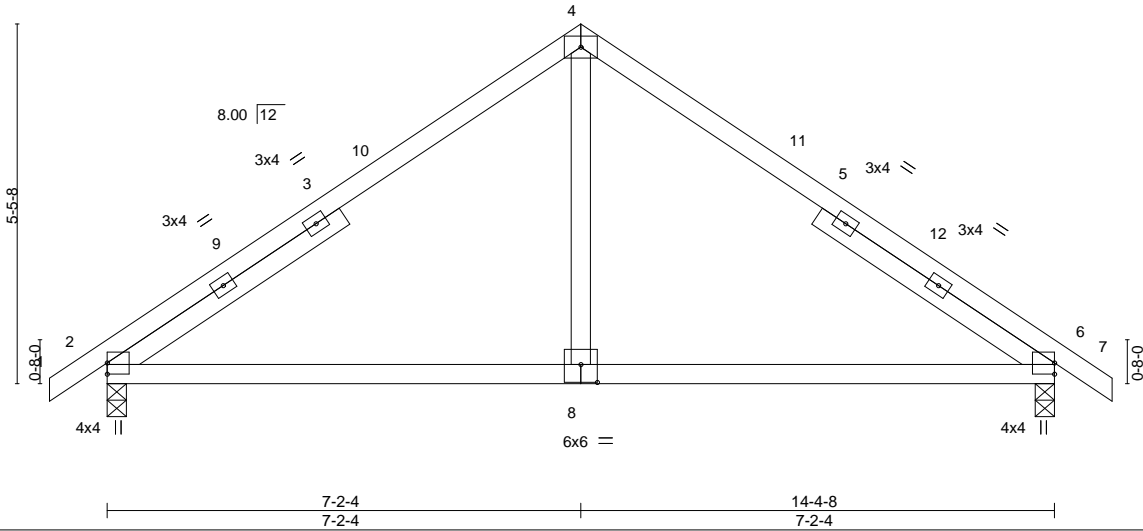


Plate Offsets (X,Y)-- [8:0-3-0,0-3-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.78	in (loc) l/def L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.53	Vert(LL) -0.05 6-8 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.13	Vert(CT) -0.11 6-8 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 71 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -t 4-2-15, Right 2x4 SP No.3 -t 4-2-15

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=104(LC 13)  
 Max Uplift 2=-22(LC 14), 6=-22(LC 15)  
 Max Grav 2=628(LC 2), 6=627(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-682/50, 4-6=-682/50  
 BOT CHORD 2-8=0/454, 6-8=0/454  
 WEBS 4-8=0/336

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-2-4, Exterior(2) 7-2-4 to 10-2-4, Interior(1) 10-2-4 to 15-3-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.



September 23, 2020

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	I42923817
150_1910_C	A2	Common	3	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:00 2020 Page 1  
 ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-jGxe\_EEtFIQoXwnKpYj8fbYEUazDrWlyS97OCwyap?j

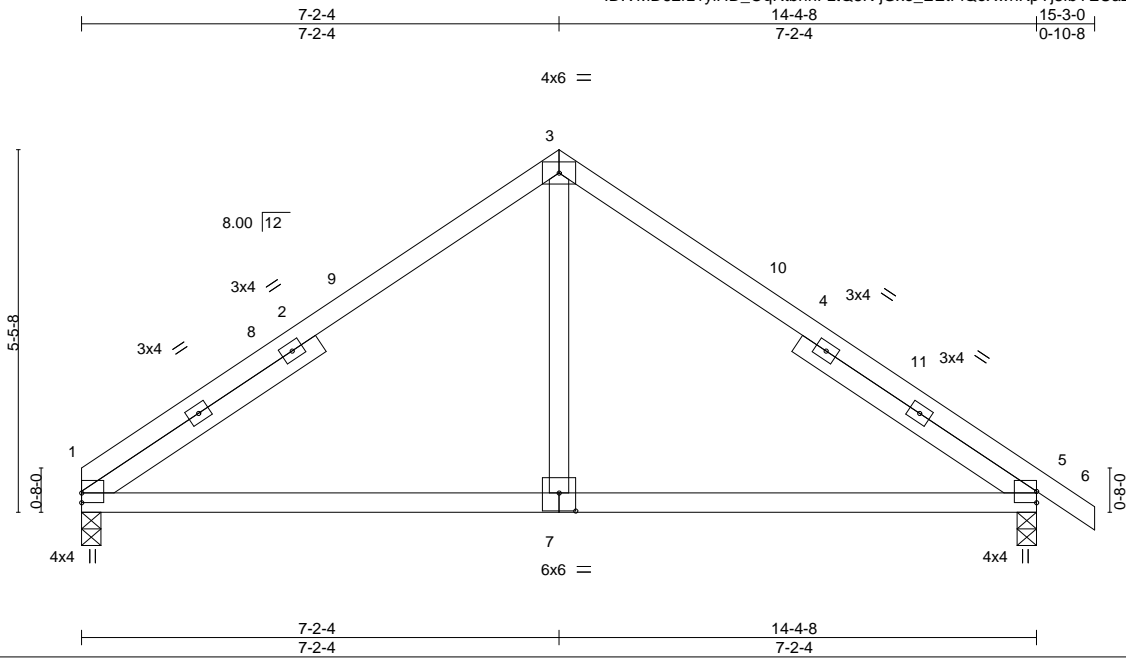


Plate Offsets (X,Y)-- [7:0-3-0,0-3-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.82	in (loc) l/def L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.53	Vert(LL) -0.06 1-7 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.13	Vert(CT) -0.12 1-7 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 69 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -t 4-2-15, Right 2x4 SP No.3 -t 4-2-15

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-7-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=0-3-8, 5=0-3-8  
 Max Horz 1=-102(LC 10)  
 Max Uplift 1=-9(LC 14), 5=-22(LC 15)  
 Max Grav 1=573(LC 2), 5=629(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-658/51, 3-5=-659/50  
 BOT CHORD 1-7=0/457, 5-7=0/457  
 WEBS 3-7=0/337

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-2-4, Exterior(2) 7-2-4 to 10-2-4, Interior(1) 10-2-4 to 15-3-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.



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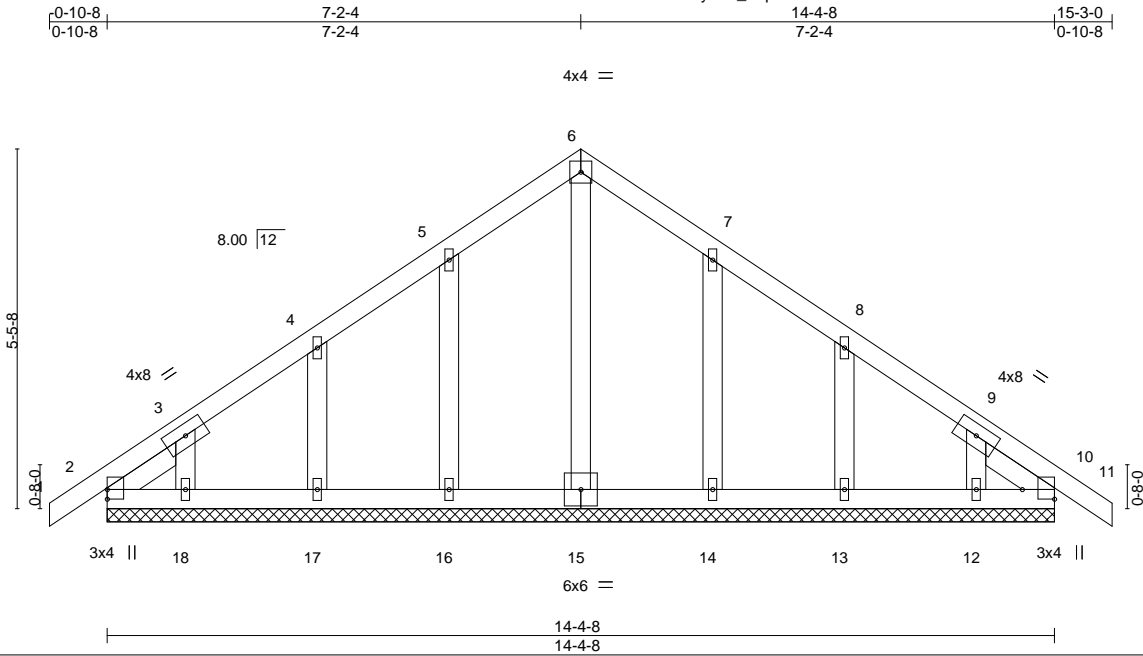


818 Soundside Road  
 Edenton, NC 27932

Job 150_1910_C	Truss AE	Truss Type Common Supported Gable	Qty 1	Ply 1	KB Home 150.1910.C	I42923818
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:01 2020 Page 1  
ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-BSV0BaFV02Yf94LWNFNENBo4bCzRla?n5hpsxINyap?i



Scale = 1:35.0

Plate Offsets (X,Y)-- [10:Edge,0-5-14]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.05	in (loc) l/def L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 10 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.00 11 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 82 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
OTHERS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 -t 1-3-3, Right 2x4 SP No.3 -t 1-3-3

**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 14-4-8.  
(lb) - Max Horz 2=-104(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 17, 18, 14, 13, 12, 10  
Max Grav All reactions 250 lb or less at joint(s) 2, 15, 16, 17, 18, 14, 13, 12, 10

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 7-2-4, Corner(3) 7-2-4 to 10-2-4, Exterior(2) 10-2-4 to 15-3-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- 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.



September 23, 2020

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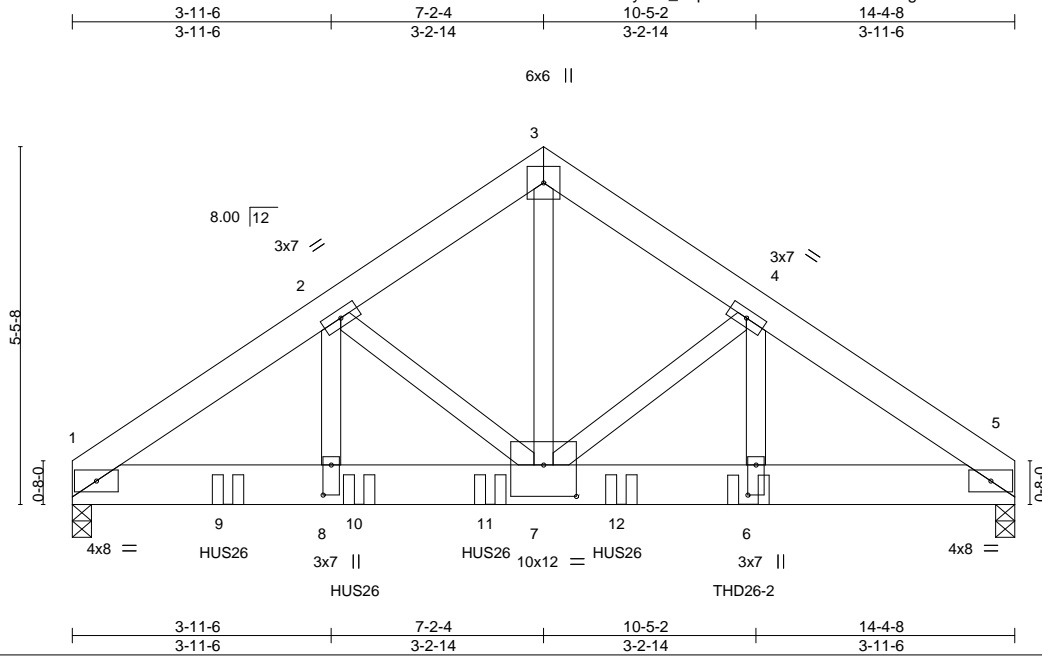
818 Soundside Road  
Edenton, NC 27932

Job 150_1910_C	Truss AG	Truss Type COMMON GIRDER	Qty 1	Ply 2	KB Home 150.1910.C	142923819
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:02 2020 Page 1

ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-ff3OPwG7nMgWmEwixzckOdhRNZCJHWFwTcVHpyap?h



Scale = 1:35.1

Plate Offsets (X,Y)-- [6:0-5-8,0-1-8], [7:0-6-0,0-5-12], [8:0-5-8,0-1-8]

<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.05	6-7	>999	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.10	6-7	>999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.03	5	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-S							
BCDL	10.0									Weight: 220 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x8 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
3-7: 2x4 SP No.2 or 2x4 SPF No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-4-9 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

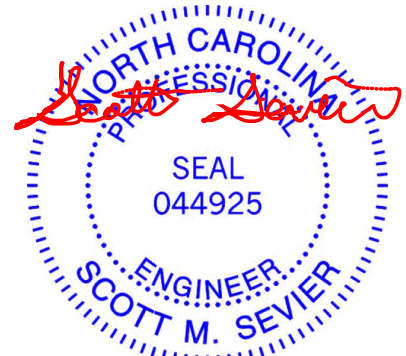
**REACTIONS.** (size) 1=0-3-8 (req. 0-5-8), 5=0-3-8 (req. 0-3-12)  
Max Horz 1=94(LC 30)  
Max Uplift 5=418(LC 11)  
Max Grav 1=7044(LC 2), 5=4787(LC 2)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-7882/0, 2-3=-5695/322, 3-4=-5691/319, 4-5=-7710/673  
BOT CHORD 1-8=0/6352, 7-8=0/6352, 6-7=-506/6196, 5-6=-506/6196  
WEBS 3-7=-297/5885, 4-7=-1900/477, 4-6=-465/2472, 2-7=-2105/0, 2-8=0/2673

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-10; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow); Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 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.
- WARNING: Required bearing size at joint(s) 1, 5 greater than input bearing size.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- Use USP HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-4-8 from the left end to 8-4-8 to connect truss(es) to back face of bottom chord.
- Use USP THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 10-3-12 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1664 lb down at 0-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



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Continued on page 2

**LOAD CASE(S)** Standard

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818 Soundside Road  
Edenton, NC 27932

Job 150_1910_C	Truss AG	Truss Type COMMON GIRDER	Qty 1	Ply <b>2</b>	KB Home 150.1910.C Job Reference (optional)	I42923819
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:02 2020 Page 2  
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**LOAD CASE(S)** Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-43, 3-5=-43, 1-5=-20

Concentrated Loads (lb)

Vert: 1=-1619(B) 6=-2171(B) 9=-1544(B) 10=-1541(B) 11=-1608(B) 12=-1657(B)

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818 Soundside Road  
Edenton, NC 27932

Job 150_1910_C	Truss B1	Truss Type Common	Qty 2	Ply 1	KB Home 150.1910.C	I42923820
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84 Components (Dunn),

Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:03 2020 Page 1

ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-7rcmcGGIYgoNONVvVgGrHDAI6n2d2n9O87L2pFyap?g



Scale = 1:62.4

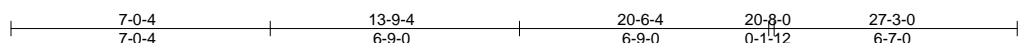
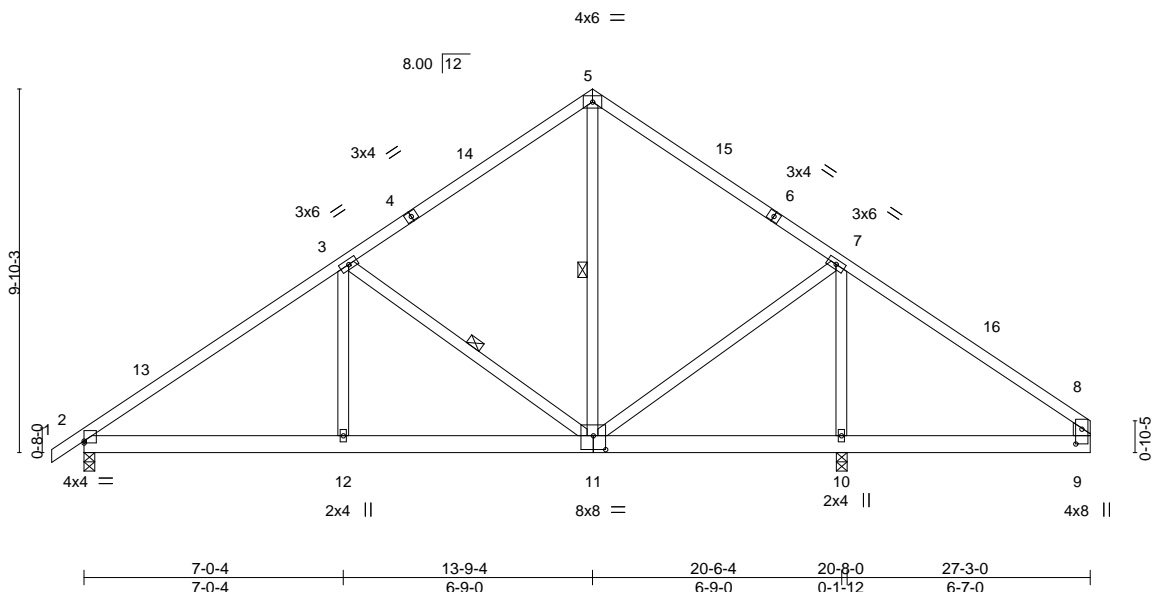


Plate Offsets (X,Y)--	[2:0-0-0,0-0-10], [9:0-4-13,0-2-0], [11:0-4-0,0-4-8]
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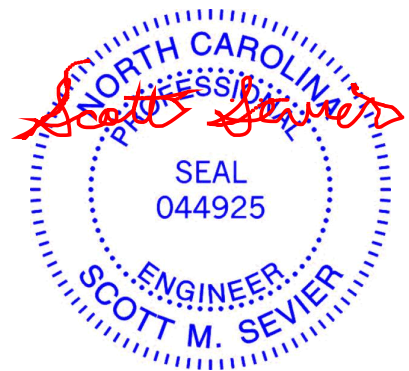
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.29	Vert(LL) -0.02 2-12 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.57	Vert(CT) -0.06 2-12 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 166 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-6-2 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 8-9: 2x6 SP No.2	WEBS 1 Row at midpt 3-11, 5-11

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=186(LC 11)  
 Max Uplift 2=-42(LC 14), 10=-23(LC 15)  
 Max Grav 2=794(LC 2), 10=1417(LC 2)

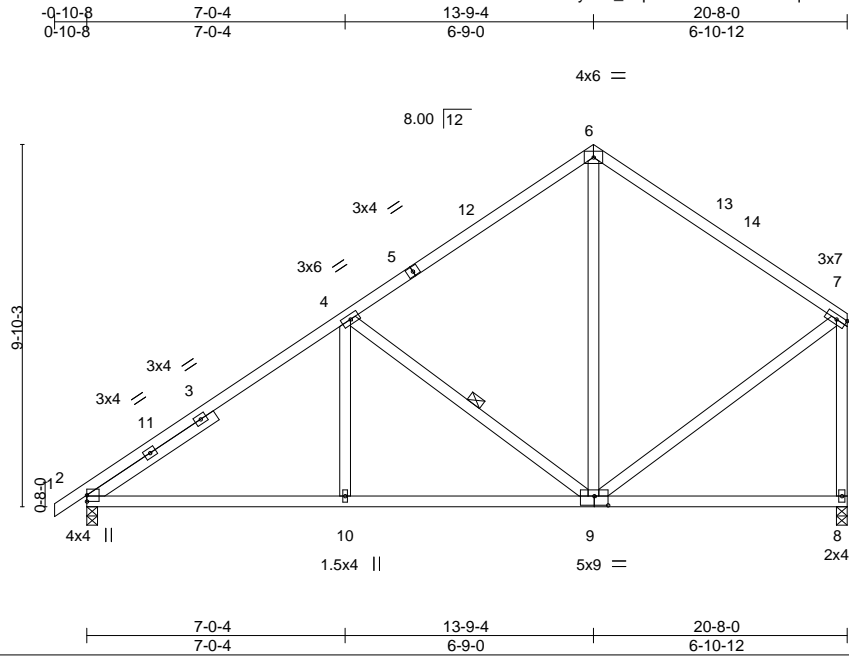
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-984/57, 3-5=-464/109, 5-7=-466/121, 7-8=-23/420  
 BOT CHORD 2-12=-90/766, 11-12=-90/766  
 WEBS 3-12=0/315, 3-11=-550/150, 7-11=0/650, 7-10=-1197/96

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-9-4, Exterior(2) 13-9-4 to 16-9-4, Interior(1) 16-9-4 to 27-0-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 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.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.



Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923821
150_1910_C	B2	Common	3	1		

84 Components (Dunn), Dunn, NC - 28334, 8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:04 2020 Page 1  
 ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-b1A9qcHOJzwEOX452Nn4pRiw1BLvnJ7XNm5bLhyap?f



Scale = 1:62.6

Plate Offsets (X,Y)-- [9-0-4-8-0-3-0]

<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.06	2-10	>999	240
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.13	2-10	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	8	n/a	n/a
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-S						
BCDL	10.0								Weight: 128 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 4-8-2 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 4-9
SLIDER	Left 2x4 SP No.3 -t 4-1-12		

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=217(LC 14)  
 Max Uplift 2=-23(LC 14), 8=-30(LC 14)  
 Max Grav 2=874(LC 2), 8=820(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1087/26, 4-6=-616/85, 6-7=-604/88, 7-8=-759/68  
 BOT CHORD 2-10=-140/828, 9-10=-140/828  
 WEBS 4-10=0/289, 4-9=-528/151, 6-9=0/286, 7-9=-21/482

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-9-4, Exterior(2) 13-9-4 to 16-9-4, Interior(1) 16-9-4 to 20-6-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.

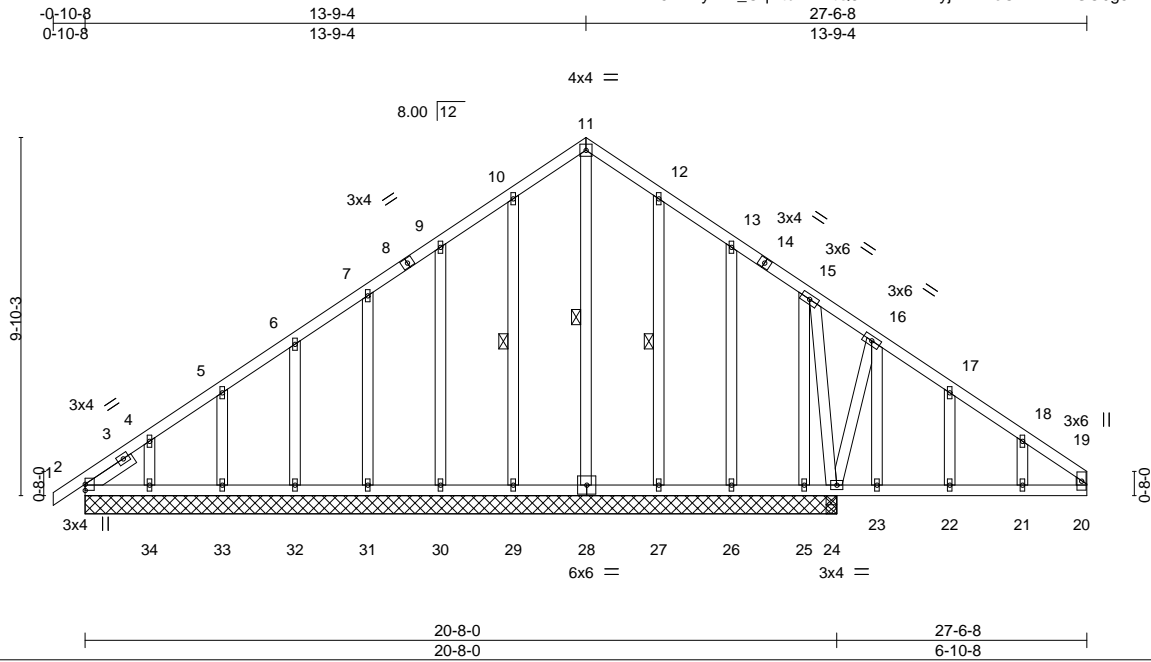


September 23, 2020



Job 150_1910_C	Truss BE	Truss Type Common Supported Gable	Qty 1	Ply 1	KB Home 150.1910.C Job Reference (optional)	I42923822
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8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 13:42:45 2020 Page 1  
ID:VMD62rz1yiHD\_OqRtbnrIFzTQ8K-RxK7TDyJFN4ZeOAKzPhVGO0g5TAGqEvedoilp5yakDO



Scale = 1:63.3

<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.00	26	>999	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.00	26	>999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	-0.01	24	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S							
BCDL	10.0									Weight: 205 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 - 1-6-5

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 11-28, 10-29, 12-27

**REACTIONS.** All bearings 20-8-0.  
(lb) - Max Horz 2=186(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 29, 30, 31, 32, 33, 34, 27, 26, 24 except 2=228(LC 31), 25=270(LC 2)  
Max Grav All reactions 250 lb or less at joint(s) 2, 29, 30, 31, 32, 33, 34, 27, 26 except 28=544(LC 2), 24=743(LC 2), 24=583(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=163/486, 3-4=151/497, 4-5=97/446, 5-6=50/435, 6-7=1/422, 7-8=0/381, 8-9=0/411, 9-10=0/417, 10-11=0/395, 11-12=0/397, 12-13=0/420, 13-14=0/416, 14-15=0/381, 15-16=0/422, 16-17=0/362, 17-18=13/315, 18-19=48/276  
BOT CHORD 2-34=332/100, 33-34=332/100, 32-33=332/100, 31-32=332/100, 30-31=332/100, 29-30=332/100, 28-29=332/100, 27-28=333/100, 26-27=333/100, 25-26=333/100, 24-25=336/99  
WEBS 11-28=503/0, 15-25=0/250, 16-23=54/269, 15-24=334/0, 16-24=490/138

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 13-9-4, Corner(3) 13-9-4 to 16-9-4, Exterior(2) 16-9-4 to 27-4-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24.
  - N/A



September 23, 2020

Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job 150_1910_C	Truss BE	Truss Type Common Supported Gable	Qty 1	Ply 1	KB Home 150.1910.C Job Reference (optional)	I42923822
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8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 13:42:45 2020 Page 2  
 ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-RxK7TDyjFN4ZeOAzPhVGO0g5TAGqEvedoilp5yakDO

**NOTES-**  
 13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

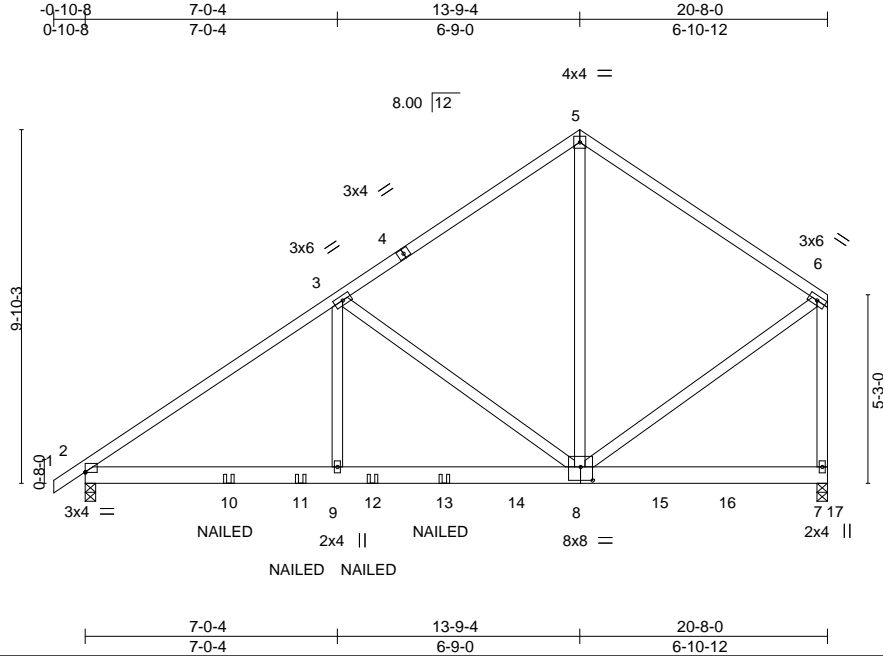
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

Job 150_1910_C	Truss BG	Truss Type Common Girder	Qty 1	Ply 2	KB Home 150.1910.C Job Reference (optional)	I42923823
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8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 13:43:32 2020 Page 1  
ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-Z\_guLIWCApp?uncGmEn1XglTi?PE0LUOYQcaHytyakCf



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [2:Edge,0-0-2], [8:0-4-0,0-4-8]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.43	Vert(LL) 0.05	7-8	>999	240		MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.27	Vert(CT) 0.05	7-8	>999	180			
TCDL 10.0	Lumber DOL 1.15	WB 0.25	Horz(CT) 0.01	7	n/a	n/a			
BCLL 0.0 *	Rep Stress Incr NO	Matrix-S							
BCDL 10.0	Code IRC2015/TPI2014							Weight: 276 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>	
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3		

**REACTIONS.** (lb/size) 2=594/0-3-8, 7=1002/0-3-8  
 Max Horz 2=217(LC 43)  
 Max Uplift 2=-351(LC 10), 7=-643(LC 35)  
 Max Grav 2=822(LC 53), 7=1155(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1035/594, 3-4=-733/342, 4-5=-611/410, 5-6=-721/485, 6-7=-885/350  
 BOT CHORD 2-10=-542/853, 10-11=-542/853, 9-11=-542/853, 9-12=-542/853, 12-13=-542/853,  
 13-14=-542/853, 8-14=-542/853  
 WEBS 3-9=-377/164, 3-8=-485/393, 5-8=-687/336, 6-8=-400/589

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 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.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=351, 7=643.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 52 lb down and 278 lb up at 12-0-0, 112 lb down and 287 lb up at 14-0-0, 139 lb down and 261 lb up at 16-0-0, and 139 lb down and 261 lb up at 17-10-8, and 146 lb down and 255 lb up at 20-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of



September 23, 2020

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job 150_1910_C	Truss BG	Truss Type Common Girder	Qty 1	Ply 2	KB Home 150.1910.C Job Reference (optional)	I42923823
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8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 13:43:32 2020 Page 2  
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**LOAD CASE(S)** Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-43, 5-6=-43, 2-7=-20

Concentrated Loads (lb)

Vert: 8=-112(B) 10=111(B) 11=84(B) 12=85(B) 13=-19(B) 14=-34(B) 15=-125(B) 16=-125(B) 17=-131(B)

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



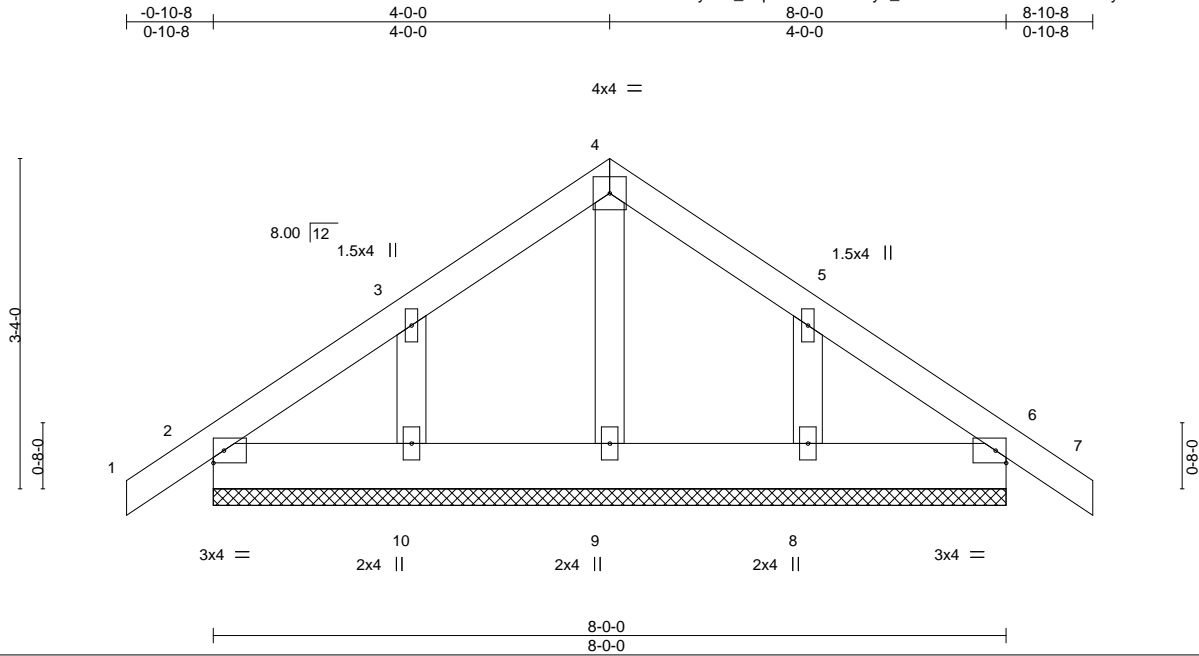
818 Soundside Road  
 Edenton, NC 27932

Job 150_1910_C	Truss CE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	KB Home 150.1910.C Job Reference (optional)	I42923824
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:09 2020 Page 1

ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-y?\_2tJLW7WZW6Jz2rxNFWUQyAC9MSd6HX2oM1vyap?a



Scale = 1:23.2

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.05	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) -0.00 6 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Vert(CT) -0.00 7 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 6 n/a n/a		
BCDL 10.0	Code IRC2015/TP12014			Weight: 44 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 8-0-0.  
 (lb) - Max Horz 2=63(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

**NOTES-**

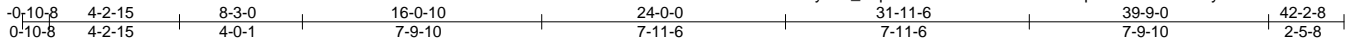
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-0-0, Exterior(2) 2-0-0 to 4-0-0, Corner(3) 4-0-0 to 7-0-0, Exterior(2) 7-0-0 to 8-10-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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/TP1.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- 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.
- N/A
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



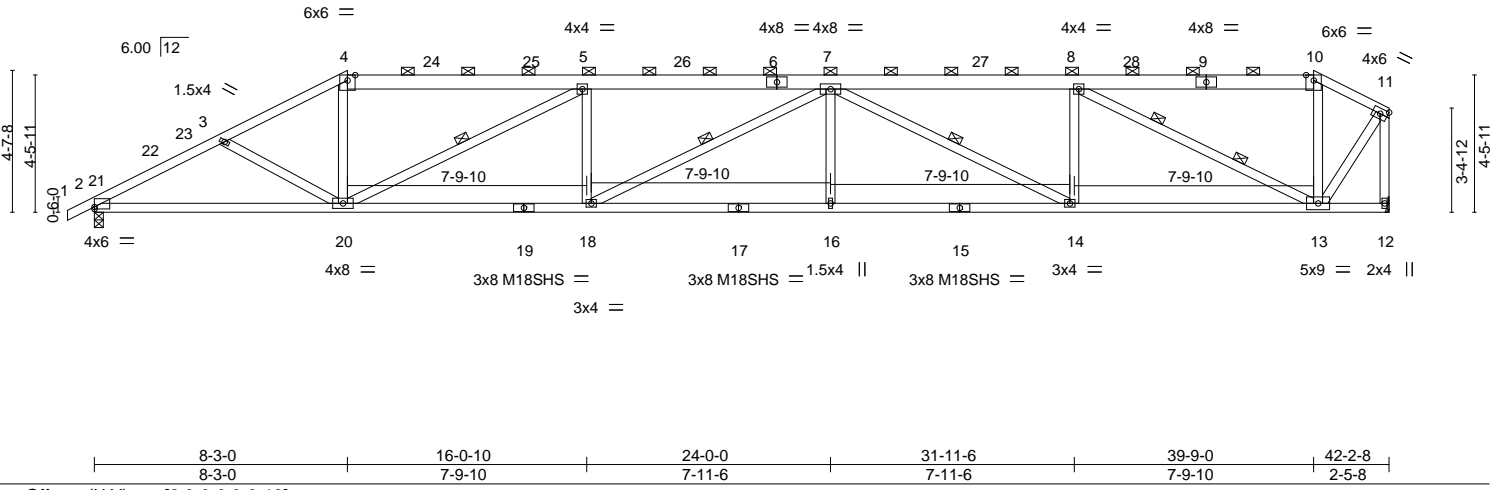
Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923825
150_1910_C	H1	Hip	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:10 2020 Page 1  
ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-QBYQ4fM8uphNkSXFFPeuU3iy?xbJABsKQliYwZLyp?Z



Scale = 1:75.1



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.56	in (loc) l/defl L/d	MT20 197/144	
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.81	Vert(LL) -0.34 16-18 >999 240	M18SHS 244/190	
TCDL 10.0	Lumber DOL 1.15	WB 0.92	Vert(CT) -0.73 16-18 >689 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.21 12 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 251 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 1-4,10-11: 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-14 max.): 4-10.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 12-13.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-20, 7-18, 7-14 2 Rows at 1/3 pts 8-13

**REACTIONS.** (size) 2=0-3-8, 12=Mechanical  
Max Horz 2=116(LC 16)  
Max Uplift 2=43(LC 13), 12=88(LC 12)  
Max Grav 2=1739(LC 2), 12=1677(LC 38)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3090/201, 3-4=-2985/162, 4-5=-2623/169, 5-7=-4150/287, 7-8=-3307/235,  
8-10=-896/70, 10-11=-977/57, 11-12=-1693/83  
BOT CHORD 2-20=-231/2652, 18-20=-281/4150, 16-18=-297/4275, 14-16=-297/4275, 13-14=-229/3307  
WEBS 4-20=0/953, 5-20=-1794/186, 5-18=0/373, 7-16=0/317, 7-14=-1169/77, 8-14=0/728,  
8-13=-2713/210, 11-13=-71/1586

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-4-2, Interior(1) 3-4-2 to 8-3-0, Exterior(2) 8-3-0 to 14-2-10, Interior(1) 14-2-10 to 39-9-0, Exterior(2) 39-9-0 to 42-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

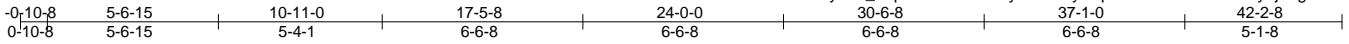


September 23, 2020

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	I42923826
150_1910_C	H2	Hip	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:14 2020 Page 1  
 ID:VMD62rz1yiHD\_OgRtbnrIFztQ8K-lynxw0Pfy2BpC4r0eUzQDY7aLDfy7j0gKW7i6yap?V



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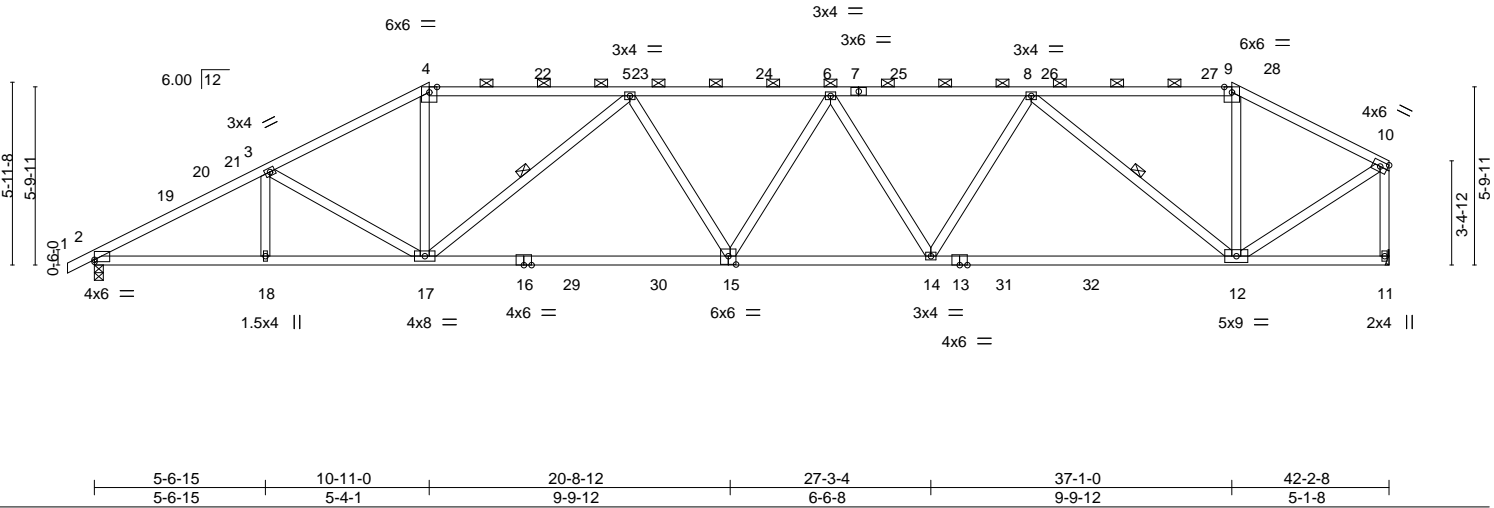


Plate Offsets (X, Y)--	[2:0-0,0-0-13], [15:0-3-0,0-3-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.98	in (loc) l/def L/d	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.95	Vert(LL) -0.34 15-17 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.71	Vert(CT) -0.74 15-17 >681 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.15 11 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 232 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-9.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 15-17.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-17, 8-12

**REACTIONS.** (size) 2=0-3-8, 11=Mechanical  
 Max Horz 2=134(LC 16)  
 Max Uplift 2=-12(LC 13), 11=45(LC 12)  
 Max Grav 2=1739(LC 2), 11=1676(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3153/181, 3-4=-2797/179, 4-5=-2427/189, 5-6=-3260/193, 6-8=-3007/182, 8-9=-1362/125, 9-10=-1551/108, 10-11=-1654/116  
 BOT CHORD 2-18=-197/2703, 17-18=-197/2703, 15-17=-188/3190, 14-15=-182/3235, 12-14=-158/2683  
 WEBS 3-17=-454/125, 4-17=0/894, 5-17=-1061/156, 5-15=0/251, 6-14=-501/81, 8-14=0/690, 8-12=-1716/163, 9-12=0/400, 10-12=-44/1627

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-4-2, Interior(1) 3-4-2 to 10-11-0, Exterior(2) 10-11-0 to 16-10-10, Interior(1) 16-10-10 to 37-1-0, Exterior(2) 37-1-0 to 42-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 23, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923827
150_1910_C	H3	Hip	1	1		

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:16 2020 Page 1

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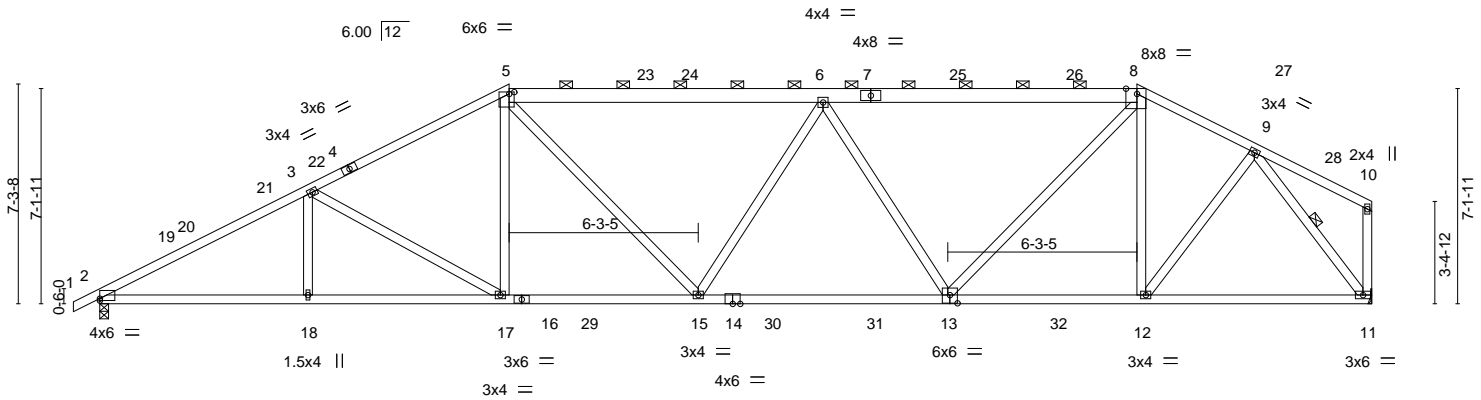


Plate Offsets (X,Y)--	[2:0-0-0,0-0-13], [5:0-2-0,0-0-12], [8:0-4-6,Edge], [13:0-3-0,0-3-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.97	Vert(LL) -0.23	13-15	>999	240	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Lumber DOL 1.15		BC 0.91	Vert(CT) -0.46	13-15	>999	180		
TCDL 10.0	Rep Stress Incr YES		WB 1.00	Horz(CT) 0.14	11	n/a	n/a		
BCLL 0.0 *	Code IRC2015/TPI2014		Matrix-S						
BCDL 10.0								Weight: 256 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 5-7,7-8: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 5-8.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 13-14,14-16: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 9-11

**REACTIONS.** (size) 2=0-3-8, 11=Mechanical  
 Max Horz 2=150(LC 16)  
 Max Uplift 2=9(LC 16)  
 Max Grav 2=1739(LC 2), 11=1676(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3139/167, 3-5=-2604/195, 5-6=-2598/195, 6-8=-2344/175, 8-9=-1751/156  
 BOT CHORD 2-18=-174/2688, 17-18=-174/2688, 15-17=-103/2251, 13-15=-134/2772, 12-13=-48/1569,  
 11-12=-67/1133  
 WEBS 3-18=0/294, 3-17=-637/128, 5-17=0/441, 5-15=-62/607, 6-15=-344/164, 6-13=-824/150,  
 8-13=-55/1148, 8-12=-494/103, 9-12=-19/797, 9-11=-1850/122

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-4-2, Interior(1) 3-4-2 to 13-7-0, Exterior(2) 13-7-0 to 19-6-10, Interior(1) 19-6-10 to 34-5-0, Exterior(2) 34-5-0 to 40-4-10, Interior(1) 40-4-10 to 42-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 23,2020

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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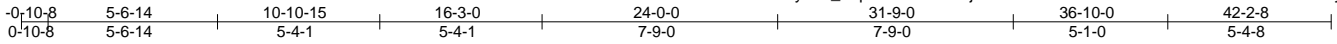


Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923828
150_1910_C	H4	Hip	1	1		

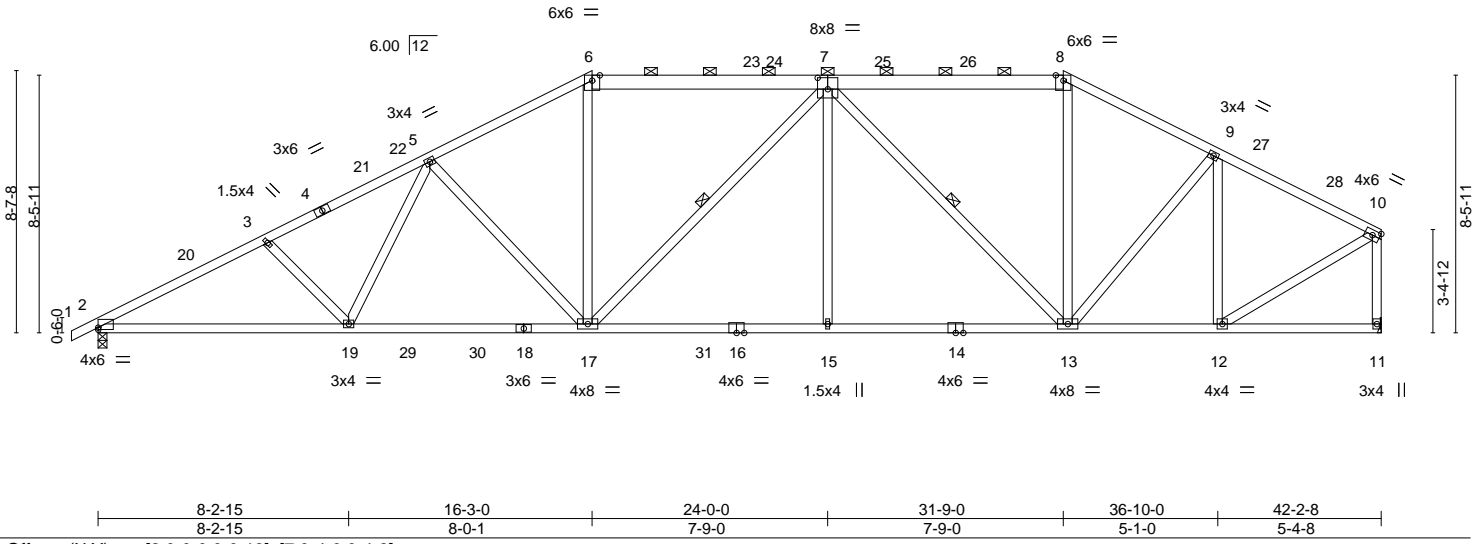
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:17 2020 Page 1

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Scale = 1:75.8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.62	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.98	Vert(LL) -0.21 17-19 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.68	Vert(CT) -0.39 17-19 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.13 11 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 270 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 6-7,7-8: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-7-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-6 max.): 6-8.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 7-17, 7-13

**REACTIONS.** (size) 2=0-3-8, 11=Mechanical  
 Max Horz 2=168(LC 16)  
 Max Uplift 2=-29(LC 16)  
 Max Grav 2=1739(LC 2), 11=1676(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3107/157, 3-5=-2915/165, 5-6=-2363/203, 6-7=-2066/211, 7-8=-1604/180,  
 8-9=-1849/178, 9-10=-1582/120, 10-11=-1623/126  
 BOT CHORD 2-19=-172/2679, 17-19=-138/2391, 15-17=-75/2248, 13-15=-61/1360  
 WEBS 5-19=0/407, 5-17=-601/133, 6-17=0/730, 7-17=-429/105, 7-15=0/430, 7-13=-983/75,  
 8-13=0/509, 9-13=-33/512, 9-12=-714/97, 10-12=-71/1557

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-4-2, Interior(1) 3-4-2 to 16-3-0, Exterior(2) 16-3-0 to 22-2-10, Interior(1) 22-2-10 to 31-9-0, Exterior(2) 31-9-0 to 37-8-10, Interior(1) 37-8-10 to 42-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



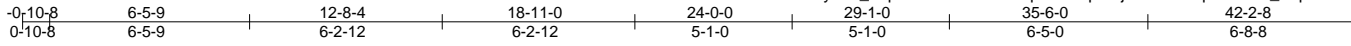
September 23, 2020

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923829
150_1910_C	H5	Hip	1	1	Job Reference (optional)	

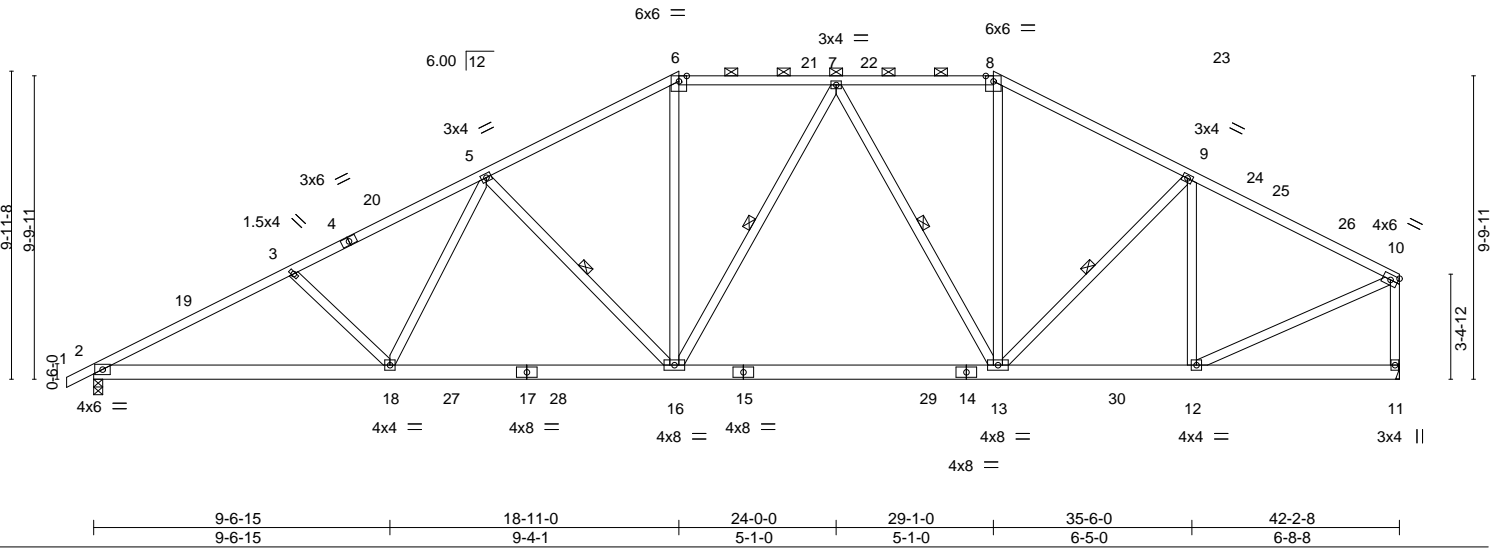
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:19 2020 Page 1

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Scale = 1:74.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.72	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.71	Vert(LL) -0.20 13-16 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.67	Vert(CT) -0.38 13-16 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.08 11 n/a n/a		
BCDL 10.0	Code IRC2015/TP12014			Weight: 292 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-6-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-10 max.): 6-8.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midt 5-16, 7-16, 7-13, 9-13

**REACTIONS.** (size) 2=0-3-8, 11=Mechanical  
 Max Horz 2=185(LC 16)  
 Max Uplift 2=46(LC 16)  
 Max Grav 2=1739(LC 2), 11=1676(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3143/154, 3-5=-2883/160, 5-6=-2204/201, 6-7=-1903/213, 7-8=-1639/194, 8-9=-1913/188, 9-10=-1758/129, 10-11=-1607/126  
 BOT CHORD 2-18=-185/2707, 16-18=-121/2314, 13-16=-54/1856, 12-13=-59/1514  
 WEBS 3-18=-294/151, 5-18=0/501, 5-16=-721/160, 6-16=0/701, 7-13=-575/87, 8-13=-4/569, 9-13=-29/316, 9-12=-577/101, 10-12=-61/1630

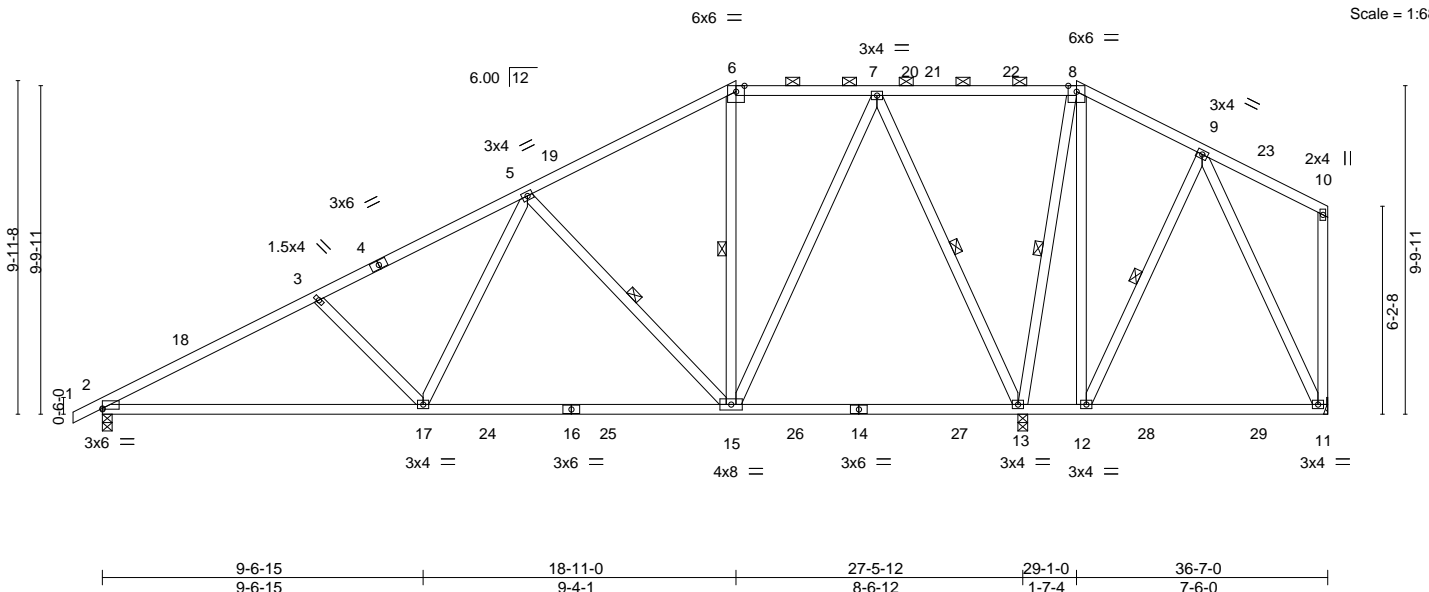
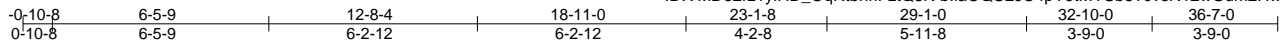
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-4-2, Interior(1) 3-4-2 to 18-11-0, Exterior(2) 18-11-0 to 24-10-10, Interior(1) 24-10-10 to 29-1-0, Exterior(2) 29-1-0 to 35-0-10, Interior(1) 35-0-10 to 42-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Refer to girder(s) for truss to truss connections.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 23, 2020

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923830
150_1910_C	H6	Hip	1	1		

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 ID:VMD62rz1yiHD\_OqRtbnrFztQ8K-bliaOQU2JC4pY9tMYsb3?0vsN12wGum2Hwi?SCyap?0



<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.20 2-17	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.44 2-17	>752	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.03 13	n/a	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-S						Weight: 250 lb	FT = 20%
BCDL	10.0										

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-9-5 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 5-15, 6-15, 7-13, 8-13, 9-12

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8, 11=Mechanical  
 Max Horz 2=234(LC 16)  
 Max Uplift 2=-35(LC 16), 13=-52(LC 16), 11=-267(LC 54)  
 Max Grav 2=1005(LC 2), 13=2078(LC 3), 11=132(LC 43)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1550/58, 3-5=-1298/49, 5-6=-551/86, 6-7=-428/110, 7-8=0/430, 8-9=-17/352  
 BOT CHORD 2-17=-213/1313, 15-17=-110/895, 12-13=-305/54  
 WEBS 3-17=-330/154, 5-17=0/539, 5-15=-758/158, 7-13=-1200/124, 8-13=-833/79,  
 8-12=-24/464, 9-12=-429/91, 9-11=-52/409, 7-15=-63/906

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-9-6, Interior(1) 2-9-6 to 18-11-0, Exterior(2) 18-11-0 to 24-1-1, Interior(1) 24-1-1 to 29-1-0, Exterior(2) 29-1-0 to 34-3-1, Interior(1) 34-3-1 to 36-5-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 11=267.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923831
150_1910_C	H7	Hip	1	1		

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ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-3VGymVg3VCgAISY696IYES1cRQr?K\_BWasy\_fyap?N



Scale = 1:65.4

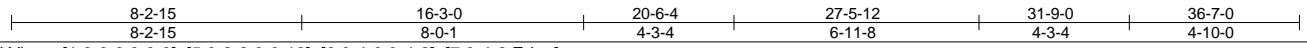
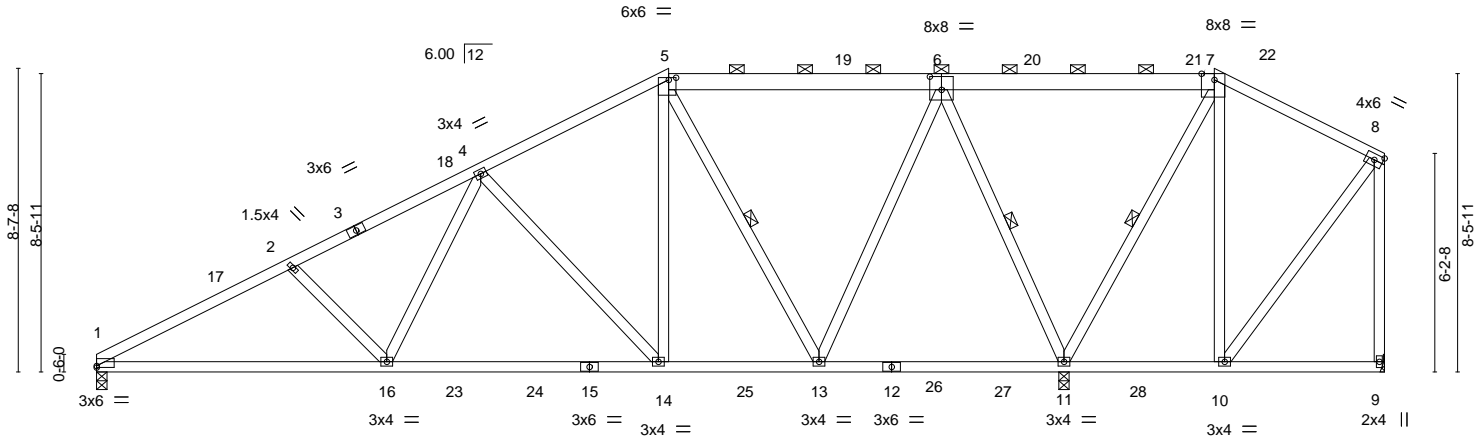


Plate Offsets (X, Y)-- [1:0-0-0,0-0-9], [5:0-2-8,0-0-12], [6:0-4-0,0-4-8], [7:0-4-6,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.58	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.76	Vert(LL) -0.12 14-16 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.75	Vert(CT) -0.26 1-16 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 11 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 246 lb	FT = 20%

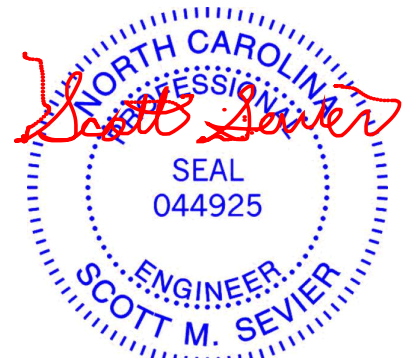
**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 \*Except\*  
6-7,5-6: 2x6 SP No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 5-13, 6-11, 7-11

**REACTIONS.** (size) 1=0-3-9, 11=0-3-8, 9=Mechanical  
Max Horz 1=210(LC 16)  
Max Uplift 1=17(LC 16), 11=43(LC 13), 9=258(LC 53)  
Max Grav 1=937(LC 53), 11=2118(LC 3), 9=64(LC 16)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1589/50, 2-4=-1378/43, 4-5=-741/81, 5-6=-334/64, 6-7=-12/553, 7-8=-26/265, 8-9=-40/300  
BOT CHORD 1-16=-199/1352, 14-16=-108/985, 13-14=-32/603  
WEBS 2-16=-271/136, 4-16=0/465, 4-14=-663/130, 5-14=-26/629, 5-13=-697/87, 6-13=-12/837, 6-11=-1348/149, 7-11=-829/94, 7-10=0/349, 8-10=-310/54

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-13 to 3-9-11, Interior(1) 3-9-11 to 16-3-0, Exterior(2) 16-3-0 to 21-5-1, Interior(1) 21-5-1 to 31-9-0, Exterior(2) 31-9-0 to 36-5-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 9=258.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 23, 2020

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923832
150_1910_C	H8	Hip	1	1	Job Reference (optional)	

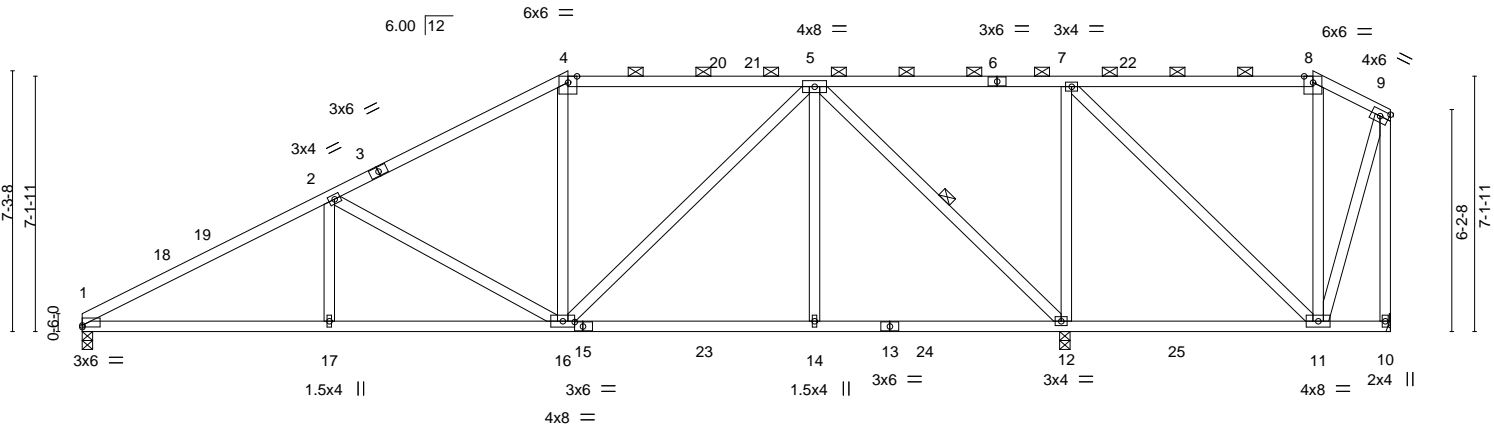
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:26 2020 Page 1

ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-yGVTR7YB7ki6ewmKL?AEi4dfV2qGx68nRCQm7Qyap?J



Scale: 3/16"=1'



6-10-15	13-7-0	20-5-12	27-5-12	34-5-0	36-7-0
6-10-15	6-8-1	6-10-12	7-0-0	6-11-4	2-2-0

Plate Offsets (X,Y)-- [1:0-0-0,0-0-9], [15:0-2-12,0-1-8]		<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>				<b>PLATES</b>		<b>GRIP</b>	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.84	Vert(LL)	in (loc)	l/defl	L/d	MT20	197/144	Weight: 226 lb FT = 20%			
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.07	1-17	>999						
TCDL	10.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	-0.17	1-17	>999						
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S											
BCDL	10.0														

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-2-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-11 max.): 4-8.
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 5-12

**REACTIONS.** (size) 1=0-3-8, 12=0-3-8, 10=Mechanical  
Max Horz 1=193(LC 16)  
Max Uplift 1=16(LC 16), 12=76(LC 13), 10=116(LC 55)  
Max Grav 1=966(LC 53), 12=2034(LC 43), 10=60(LC 54)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1640/58, 2-4=-1066/83, 4-5=-867/110, 5-7=0/465  
BOT CHORD 1-17=-154/1390, 16-17=-154/1390, 14-16=-50/573, 12-14=-50/573, 11-12=-465/22  
WEBS 2-17=0/291, 2-16=-723/132, 5-16=-68/597, 5-14=0/345, 5-12=-1367/80, 7-11=-31/640, 8-11=-310/89, 7-12=-951/139

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-9-10, Interior(1) 3-9-10 to 13-7-0, Exterior(2) 13-7-0 to 18-9-1, Interior(1) 18-9-1 to 34-5-0, Exterior(2) 34-5-0 to 36-5-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=116.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 12. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 23,2020

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923833
150_1910_C	H9	Half Hip	1	1	Job Reference (optional)	

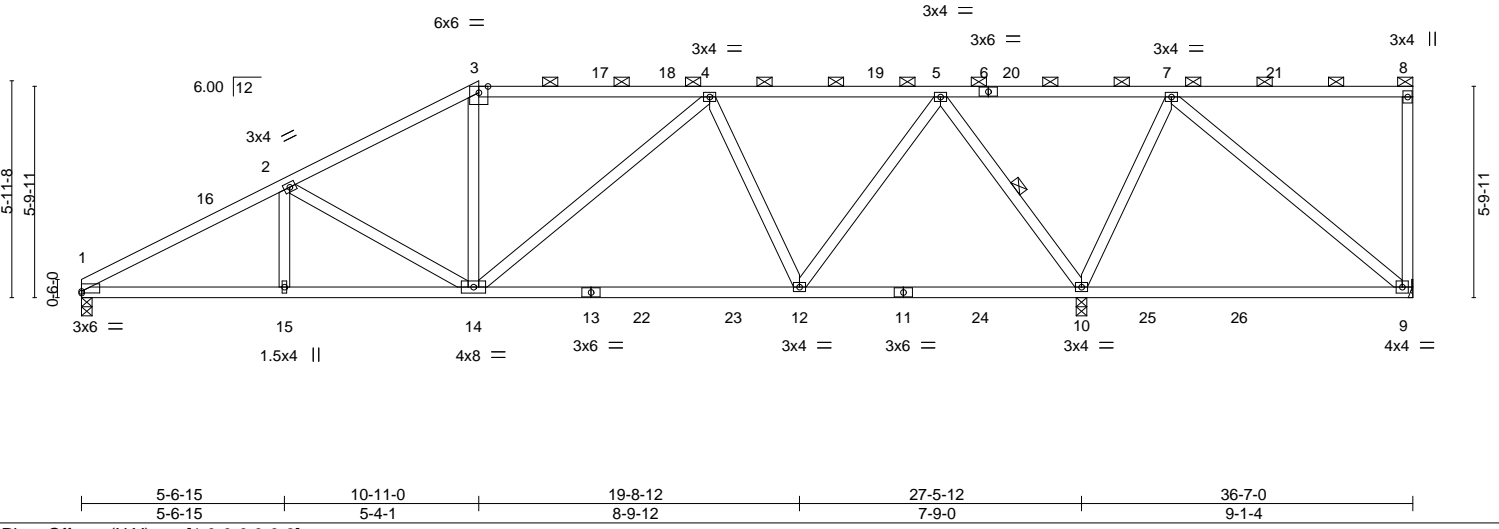
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:29 2020 Page 1

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Scale = 1:63.3



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.84	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.65	Vert(LL) -0.17 9-10 >620 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.67	Vert(CT) -0.34 9-10 >313 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 200 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-7 max.): 3-8.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-10

**REACTIONS.** (size) 1=0-3-8, 9=Mechanical, 10=0-3-8  
 Max Horz 1=168(LC 16)  
 Max Uplift 1=-5(LC 16), 9=-175(LC 35), 10=-120(LC 13)  
 Max Grav 1=937(LC 35), 9=24(LC 16), 10=2133(LC 34)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1621/69, 2-3=-1207/73, 3-4=-1013/95, 4-5=-585/30, 5-7=-62/768  
 BOT CHORD 1-15=-172/1377, 14-15=-172/1377, 12-14=-73/853, 9-10=-413/11  
 WEBS 2-14=-542/117, 3-14=0/282, 4-14=-42/389, 4-12=-657/126, 5-12=-19/933,  
 5-10=-1364/132, 7-10=-928/132, 7-9=-11/568

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-9-10, Interior(1) 3-9-10 to 10-11-0, Exterior(2) 10-11-0 to 16-1-1, Interior(1) 16-1-1 to 36-5-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=175, 10=120.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

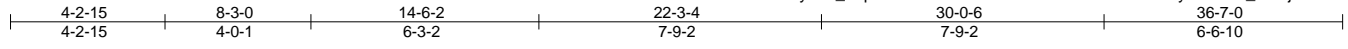


Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923834
150_1910_C	H10	Half Hip	1	1	Job Reference (optional)	

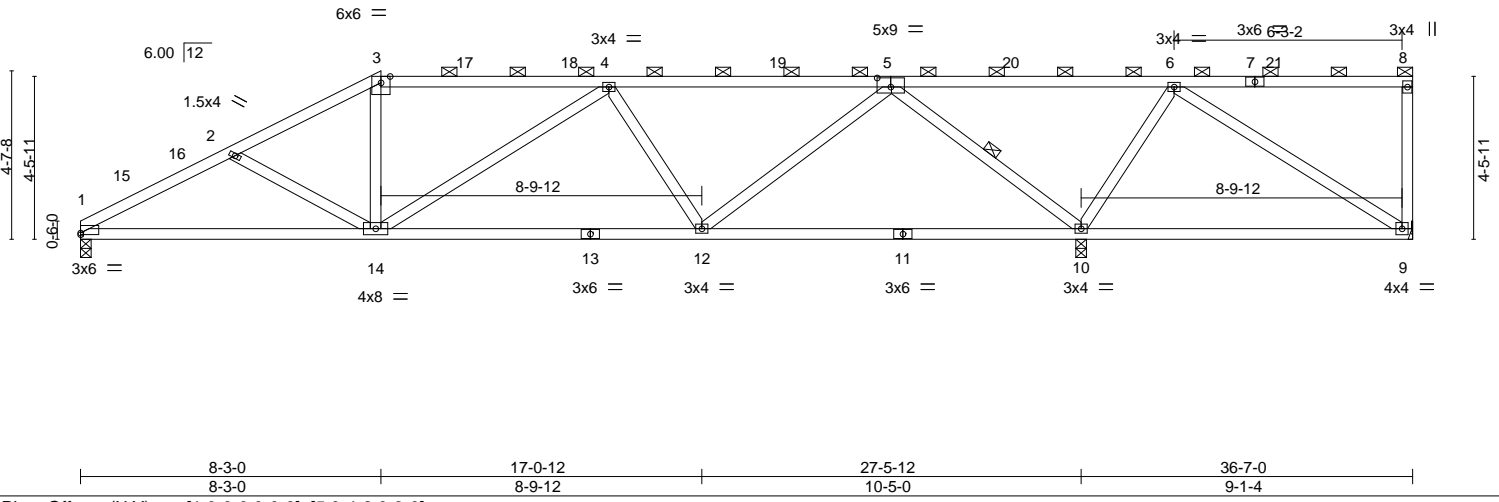
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:12 2020 Page 1

ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-MafAVLNPQRx5zmdhdW3wy871EhP\_JfsEjD011dEyap?X



Scale = 1:63.3



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	2-0-0	2-0-0	TC	0.99	in	(loc)	l/defl	L/d	MT20	197/144		
Snow (Pf/Pg)	16.5/15.0	Plate Grip DOL	1.15	BC	0.83	Vert(LL)	-0.18	10-12	>999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.51	Vert(CT)	-0.38	10-12	>862	180			
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-S		Horz(CT)	0.04	10	n/a	n/a			
BCDL	10.0	Code IRC2015/TPI2014										Weight: 184 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-4-2 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-8.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10.  
 WEBS 1 Row at midpt 5-10

**REACTIONS.** (size) 1=0-3-8, 9=Mechanical, 10=0-3-8  
 Max Horz 1=127(LC 16)  
 Max Uplift 9=129(LC 35), 10=142(LC 13)  
 Max Grav 1=935(LC 2), 9=10(LC 16), 10=2145(LC 34)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1609/119, 2-3=-1408/76, 3-4=-1208/92, 4-5=-1079/43, 5-6=-94/1013  
 BOT CHORD 1-14=-192/1371, 12-14=-104/1348, 10-12=-68/330, 9-10=-517/15  
 WEBS 2-14=-288/127, 3-14=0/377, 4-12=-518/127, 5-12=0/1012, 5-10=-1701/202, 6-10=-1040/168, 6-9=-14/645

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-1-0, Interior(1) 4-1-0 to 8-3-0, Exterior(2) 8-3-0 to 13-5-1, Interior(1) 13-5-1 to 36-5-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=129, 10=142.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



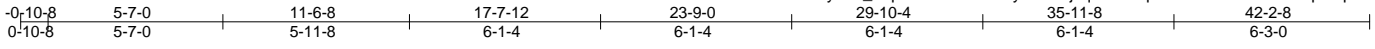
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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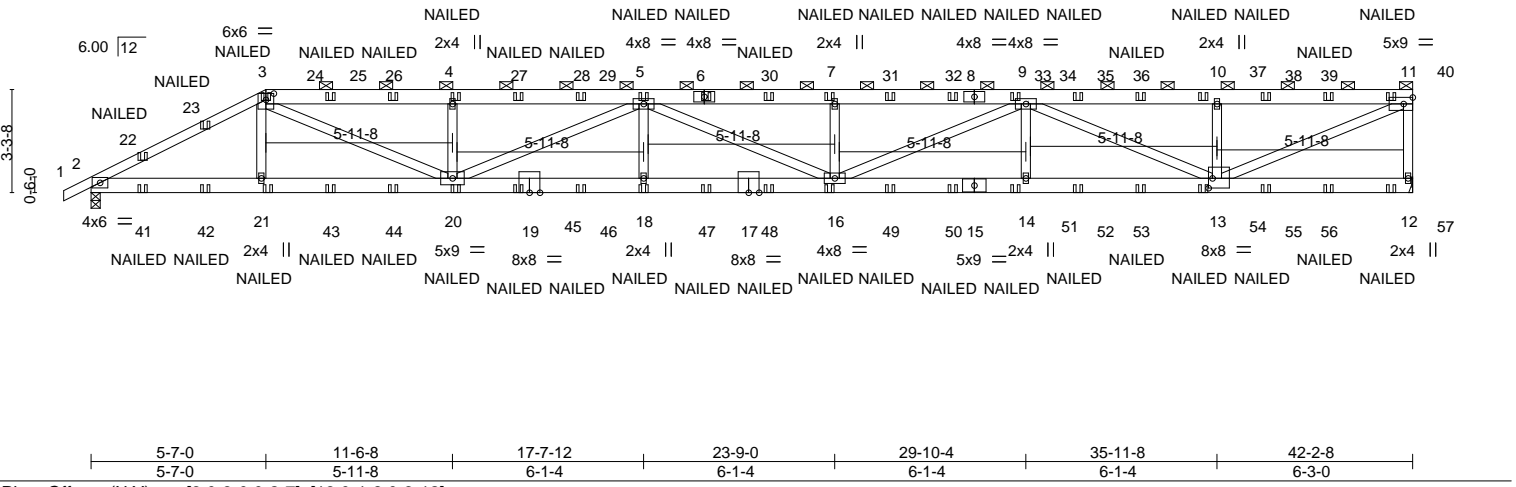
Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923835
150_1910_C	HG1	Half Hip Girder	1	2	Job Reference (optional)	

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ID:VMD62rz1yiHD\_OqRtbnrIFzQ8K-YyMmNvjzq1T7K3q09xQWH0C9uhYFDVprfNpVdcyap?5



Scale = 1:73.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.40	Vert(LL) 0.38	16-18	>999	240	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Lumber DOL 1.15		BC 0.87	Vert(CT) -0.74	16-18	>681	180		
TCDL 10.0	Rep Stress Incr NO		WB 0.60	Horz(CT) 0.13	12	n/a	n/a		
BCLL 0.0 *	Code IRC2015/TPI2014		Matrix-S						
BCDL 10.0								Weight: 552 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 1-3: 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-5-7 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-12 max.): 3-11.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 3-20,5-20,5-16,9-16,9-13,11-13: 2x4 SP No.2 or 2x4 SPF No.2	

**REACTIONS.** (size) 12=Mechanical, 2=0-3-8  
 Max Horz 2=95(LC 53)  
 Max Uplift 12=-534(LC 9), 2=-426(LC 9)  
 Max Grav 12=2437(LC 2), 2=2457(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4667/909, 3-4=-7088/1518, 4-5=-7087/1517, 5-7=-8787/1905, 7-9=-8787/1905,  
 9-10=-4505/980, 10-11=-4505/980, 11-12=-2325/576  
 BOT CHORD 2-21=-819/4050, 20-21=-823/4036, 18-20=-1875/8685, 16-18=-1875/8685,  
 14-16=-1609/7391, 13-14=-1609/7391  
 WEBS 3-21=0/390, 3-20=-782/3418, 4-20=-573/286, 5-20=-1775/399, 5-18=0/353,  
 7-16=-519/264, 9-16=-327/1539, 9-14=0/350, 9-13=-3182/693, 10-13=-551/284,  
 11-13=-1064/4892

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - 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.
- Continued on page (2) for truss to truss connections.



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Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	I42923835
150_1910_C	HG1	Half Hip Girder	1	2	Job Reference (optional)	

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 ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-YyMmNvjzq1T7K3q09xQWH0C9uhYFDVprfNpVdcyap?5

**NOTES-**

- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=534.
- 13) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

**LOAD CASE(S)** Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-43, 3-11=-53, 2-12=-20

Concentrated Loads (lb)

Vert: 3=-31(B) 6=-26(B) 21=-19(B) 20=-19(B) 4=-26(B) 5=-26(B) 18=-19(B) 7=-26(B) 16=-19(B) 22=-38(B) 23=-1(B) 25=-26(B) 26=-26(B) 27=-26(B) 28=-26(B) 30=-26(B) 31=-26(B) 32=-26(B) 33=-26(B) 35=-26(B) 36=-26(B) 37=-26(B) 38=-26(B) 39=-26(B) 40=-38(B) 41=-29(B) 42=-72(B) 43=-19(B) 44=-19(B) 45=-19(B) 46=-19(B) 47=-19(B) 48=-19(B) 49=-19(B) 50=-19(B) 51=-19(B) 52=-19(B) 53=-19(B) 54=-19(B) 55=-19(B) 56=-19(B) 57=-23(B)

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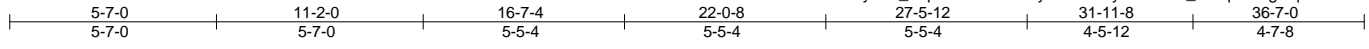


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Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923836
150_1910_C	HG10	HALF HIP GIRDER	1	1		

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Scale = 1:62.2

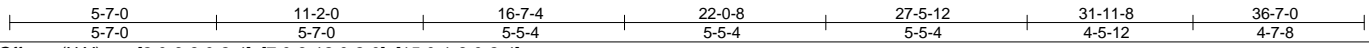
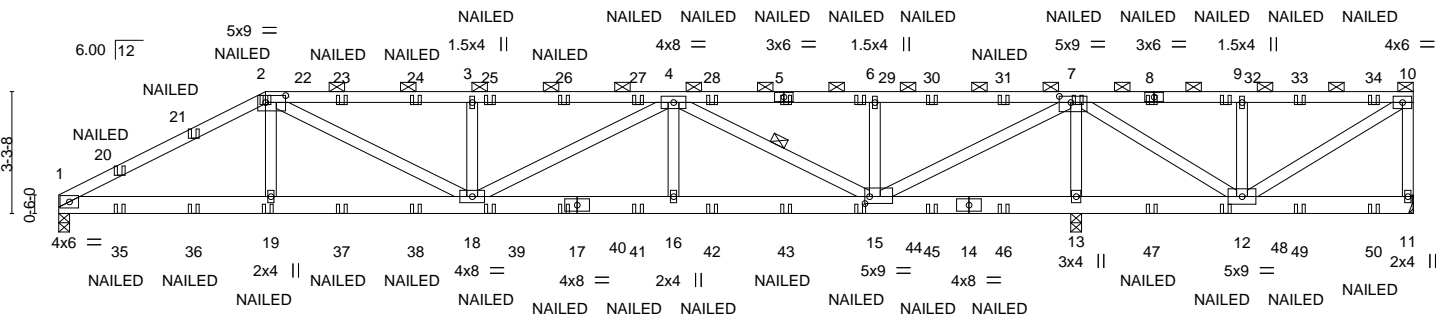


Plate Offsets (X, Y)-- [2:0-6-8,0-2-4], [7:0-3-12,0-2-0], [15:0-1-8,0-2-4]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.86	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.57	Vert(LL) 0.15 16-18 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.74	Vert(CT) -0.29 16-18 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.04 13 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 216 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-10-9 oc purlins, except end verticals, and 2-0-0 oc purlins (2-7-15 max.): 2-10.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 4-11-12 oc bracing: 13-15; 4-11-8 oc bracing: 12-13.
WEBS 2x4 SP No.3 *Except* 2-18,4-18,4-15,7-15: 2x4 SP No.2 or 2x4 SPF No.2	WEBS 1 Row at midpt 4-15

**REACTIONS.** (size) 1=0-3-8, 11=Mechanical, 13=0-3-8 (req. 0-4-11)  
 Max Horz 1=88(LC 12)  
 Max Uplift 1=-193(LC 9), 11=-180(LC 2), 13=-658(LC 9)  
 Max Grav 1=1329(LC 2), 11=32(LC 9), 13=2993(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-2359/419, 2-3=-2741/580, 3-4=-2741/580, 4-6=-690/157, 6-7=-690/157, 7-9=-129/630, 9-10=-129/630, 10-11=-4/261  
 BOT CHORD 1-19=-389/2006, 18-19=-385/2019, 16-18=-500/2319, 15-16=-500/2319, 13-15=-1982/414, 12-13=-1982/414  
 WEBS 2-19=0/389, 2-18=-235/828, 3-18=-496/253, 4-18=-91/514, 4-16=0/338, 4-15=-1849/389, 6-15=-464/238, 7-15=-648/3032, 7-13=-2754/706, 7-12=-340/1614, 9-12=-391/201, 10-12=-778/164

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - 3) Unbalanced snow loads have been considered for this design.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) WARNING: Required bearing size at joint(s) 13 greater than input bearing size.
  - 8) Refer to girder(s) for truss to truss connections.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=180, 13=658.
  - 10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



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Continued on page 2

**LOAD CASE(S)** Standard

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Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	I42923836
150_1910_C	HG10	HALF HIP GIRDER	1	1	Job Reference (optional)	

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8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:44 2020 Page 2  
 ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-QkbGDHmTuGzZph8nOnVSRsMkeJ\_v9HZQa?njmNyap?1

**LOAD CASE(S)** Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-43, 2-10=-53, 1-11=-20

Concentrated Loads (lb)

Vert: 2=-31(F) 5=-26(F) 19=-19(F) 7=-26(F) 8=-26(F) 20=-38(F) 21=-1(F) 23=-26(F) 24=-26(F) 25=-26(F) 26=-26(F) 27=-26(F) 28=-26(F) 29=-26(F) 30=-26(F)  
 31=-26(F) 32=-26(F) 33=-26(F) 34=-28(F) 35=-29(F) 36=-72(F) 37=-19(F) 38=-19(F) 39=-19(F) 40=-19(F) 41=-19(F) 42=-19(F) 43=-19(F) 44=-19(F) 45=-19(F)  
 46=-19(F) 47=-19(F) 48=-19(F) 49=-19(F) 50=-20(F)

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Job 150_1910_C	Truss J1	Truss Type Jack-Open	Qty 35	Ply 1	KB Home 150.1910.C	I42923837
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8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:44 2020 Page 1

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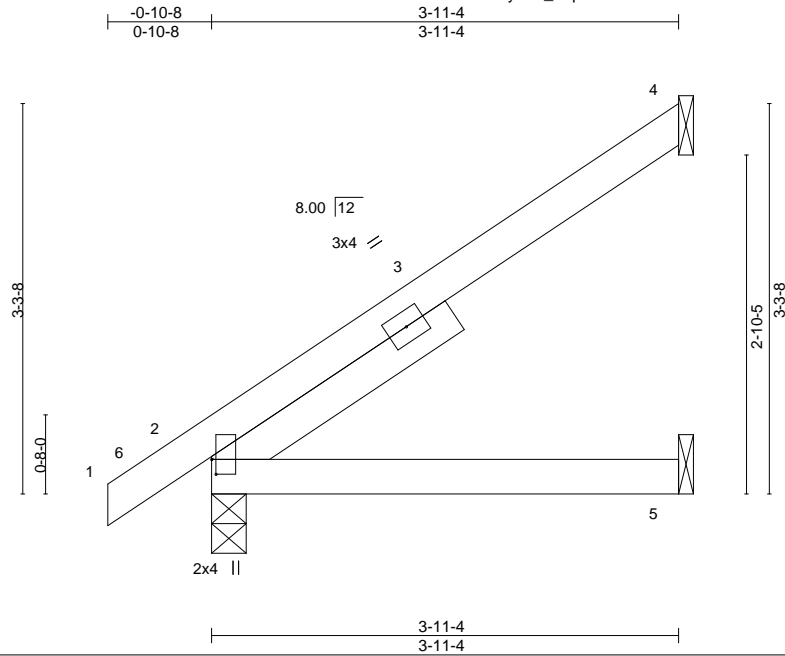


Plate Offsets (X,Y)-- [2:0-1-8,0-0-7]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.26	in (loc) l/def L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) -0.01 2-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.03 2-5 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 18 lb	FT = 20%

**LUMBER-**

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
SLIDER	Left 2x4 SP No.3 -t 2-4-9

**BRACING-**

TOP CHORD	Structural wood sheathing directly applied or 3-11-4 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
 Max Horz 2=95(LC 14)  
 Max Uplift 4=67(LC 14)  
 Max Grav 4=116(LC 26), 2=213(LC 2), 5=78(LC 5)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- 8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



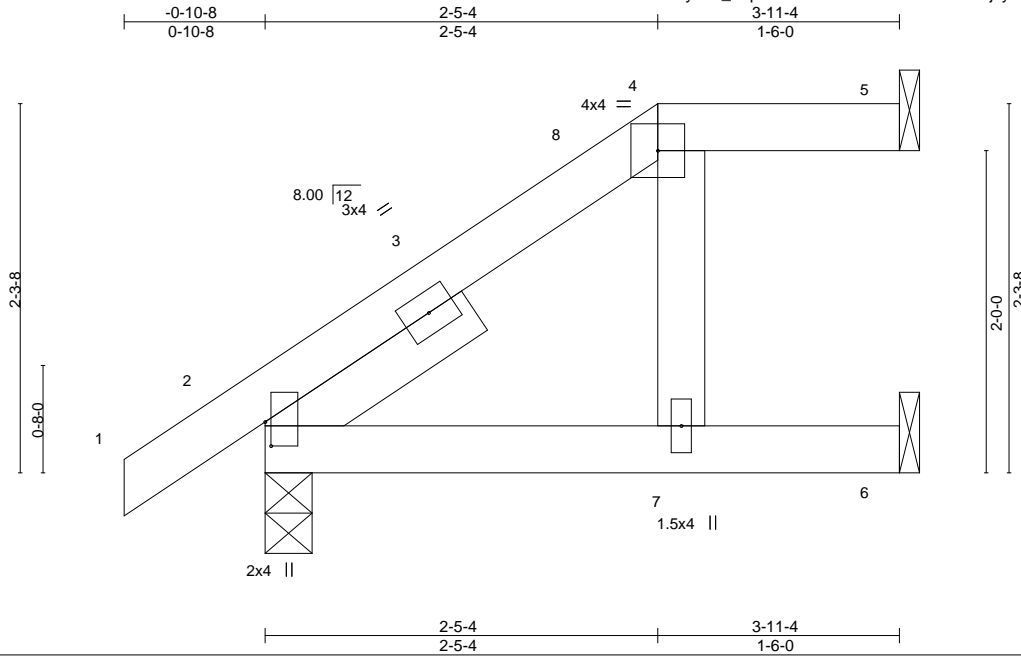
818 Soundside Road  
Edenton, NC 27932

Job 150_1910_C	Truss J2	Truss Type Jack-Open	Qty 2	Ply 1	KB Home 150.1910.C	142923838
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84 Components (Dunn),

Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:45 2020 Page 1  
ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-uw9fQdn5fa5PQrjzyV0h\_4v5UiOTuv6aofWGlpyap?0



Scale = 1:14.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.02 2-7	>999	240	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.04 2-7	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.03 5	n/a	n/a		
BCLL 0.0 *	Code IRC2015/TPI2014		Matrix-P					Weight: 19 lb	FT = 20%
BCDL 10.0									

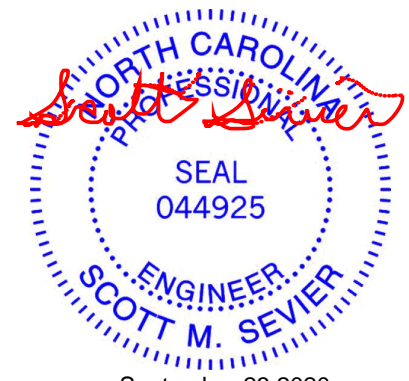
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	2-0-0 oc purlins: 4-5.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
SLIDER Left 2x4 SP No.3 -t 1-5-12	

**REACTIONS.** (size) 5=Mechanical, 2=0-3-8, 6=Mechanical  
 Max Horz 2=66(LC 14)  
 Max Uplift 5=-13(LC 10), 2=-7(LC 14), 6=-7(LC 14)  
 Max Grav 5=43(LC 2), 2=213(LC 2), 6=106(LC 2)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-5-4, Exterior(2) 2-5-4 to 3-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
- 10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923839
150_1910_C	J3	Jack-Open Girder	2	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:46 2020 Page 1

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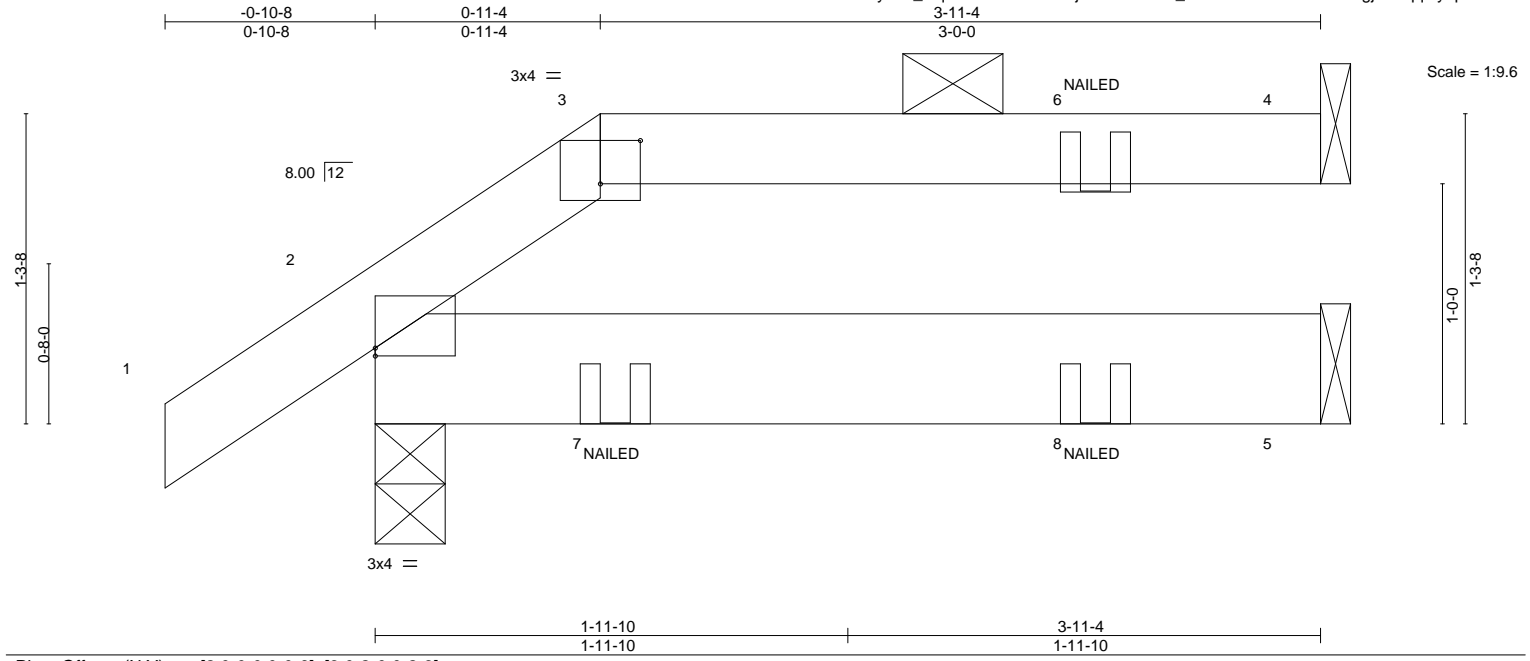


Plate Offsets (X,Y)--	[2:0-0,0-0-6], [3:0-2,0-0-2-3]
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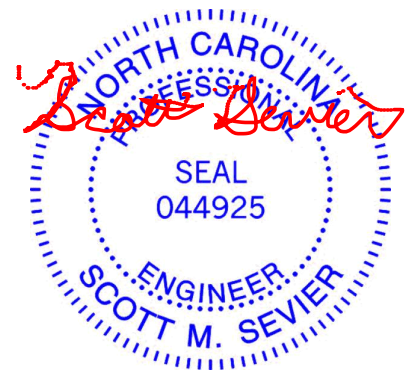
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.08	Vert(LL) -0.00 2-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.01 2-5 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-P	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 17 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
 Max Horz 2=36(LC 35)  
 Max Uplift 4=-30(LC 7), 2=-15(LC 10)  
 Max Grav 4=92(LC 2), 2=219(LC 2), 5=76(LC 5)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 19 lb up at 0-11-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



**LOAD CASE(S)** Standard  
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-43, 3-4=-53, 2-5=-20

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

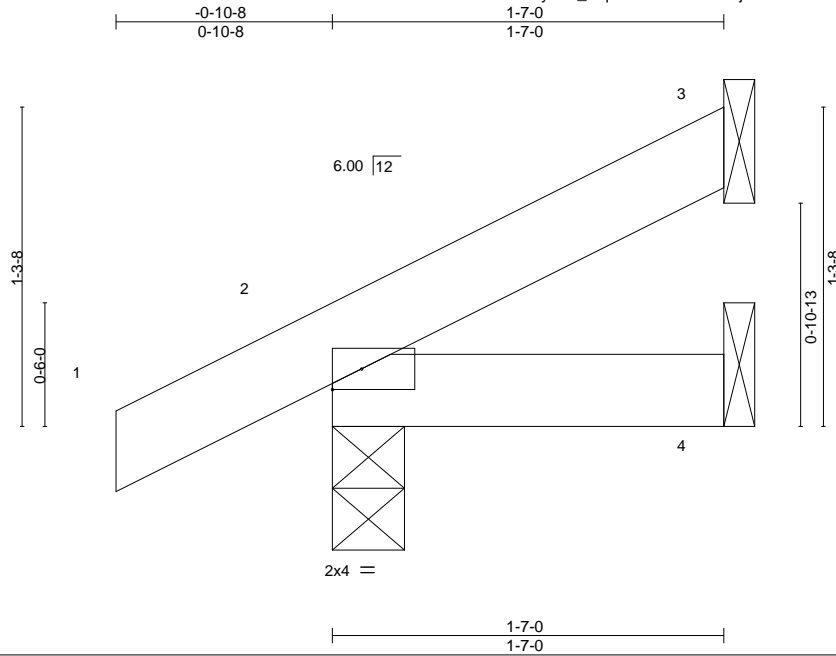
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job 150_1910_C	Truss JA	Truss Type Jack-Open	Qty 3	Ply 1	KB Home 150.1910.C Job Reference (optional)	I42923840
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:46 2020 Page 1

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Scale = 1:9.3

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.05	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) -0.00 2 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 2 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) -0.00 3 n/a n/a		
BCDL 10.0	Code IRC2015/TP12014			Weight: 7 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-7-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=36(LC 16)  
 Max Uplift 3=-19(LC 16), 2=-12(LC 16)  
 Max Grav 3=30(LC 2), 2=132(LC 2), 4=31(LC 7)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



September 23,2020

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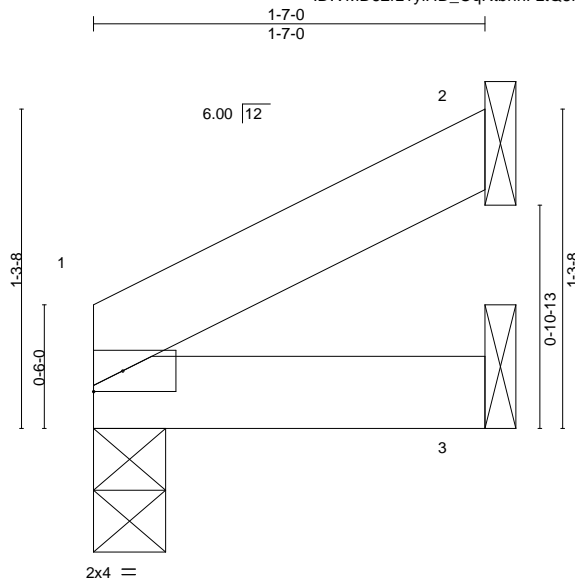
818 Soundside Road  
 Edenton, NC 27932

Job 150_1910_C	Truss JB	Truss Type Jack-Open	Qty 1	Ply 1	KB Home 150.1910.C Job Reference (optional)	I42923841
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:47 2020 Page 1

ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-qJHPrJpMBBL7g8sM4v293V\_SmW77MpwGz?NNiyap?\_



Scale = 1:9.3

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.04	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) -0.00 1 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 1 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) -0.00 2 n/a n/a		
BCDL 10.0	Code IRC2015/TP12014			Weight: 5 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-7-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=0-3-8, 2=Mechanical, 3=Mechanical  
Max Horz 1=30(LC 16)  
Max Uplift 2=-23(LC 16)  
Max Grav 1=62(LC 2), 2=46(LC 2), 3=31(LC 7)

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

**NOTES-**

- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.



September 23, 2020

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

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818 Soundside Road  
Edenton, NC 27932

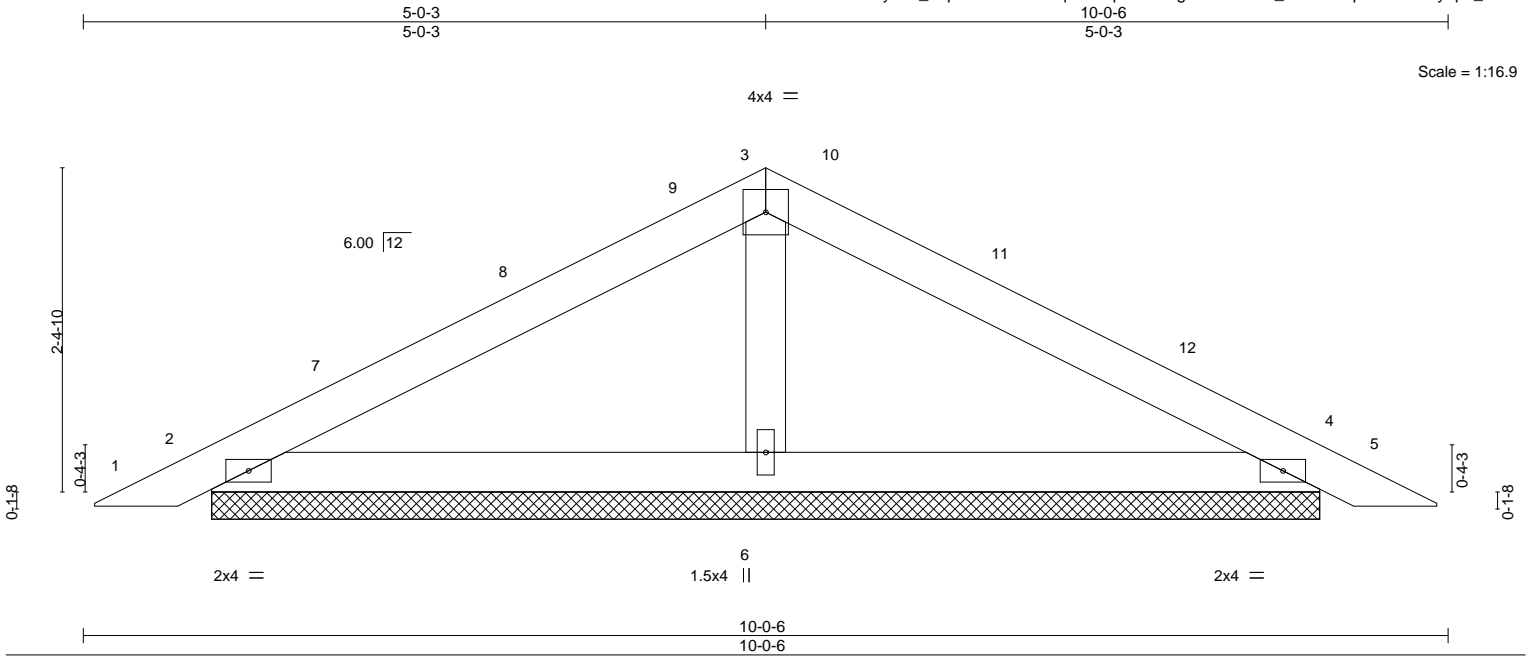


Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	I42923842
150_1910_C	PB1	Piggyback	8	1		

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:47 2020 Page 1

ID:VMD62rz1yIHd\_OqRtbnrIFztQ8K-qJHPrJpMBBL7g8sM4v293V\_OcW5vMpDtGz?NNiyap?\_



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	2-0-0		TC	0.31	in	(loc)	l/defl	L/d	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.17	Vert(LL)	0.01	5	n/r		
TCDL	10.0	Lumber DOL	1.15	WB	0.05	Vert(CT)	0.02	5	n/r		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-P		Horz(CT)	0.00	4	n/a		
BCDL	10.0	Code IRC2015/TP12014								Weight: 31 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.3		

**REACTIONS.** (size) 2=8-1-12, 4=8-1-12, 6=8-1-12  
 Max Horz 2=-30(LC 17)  
 Max Uplift 2=-29(LC 16), 4=-35(LC 17)  
 Max Grav 2=201(LC 2), 4=201(LC 2), 6=317(LC 2)

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

**NOTES-**

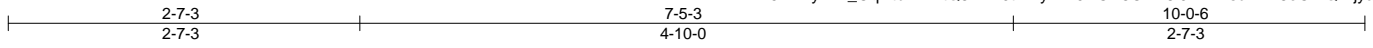
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-11 to 3-4-11, Interior(1) 3-4-11 to 5-0-3, Exterior(2) 5-0-3 to 8-0-3, Interior(1) 8-0-3 to 9-7-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- 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.
- N/A
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 23, 2020

Job 150_1910_C	Truss PB2	Truss Type Piggyback	Qty 2	Ply 1	KB Home 150.1910.C	I42923843
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8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 13:46:53 2020 Page 1  
 ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-AfJtW1yHrZJNOV8OVV8fJhI7rRsdXRN8eOmQWjyak9W



Scale = 1:17.0

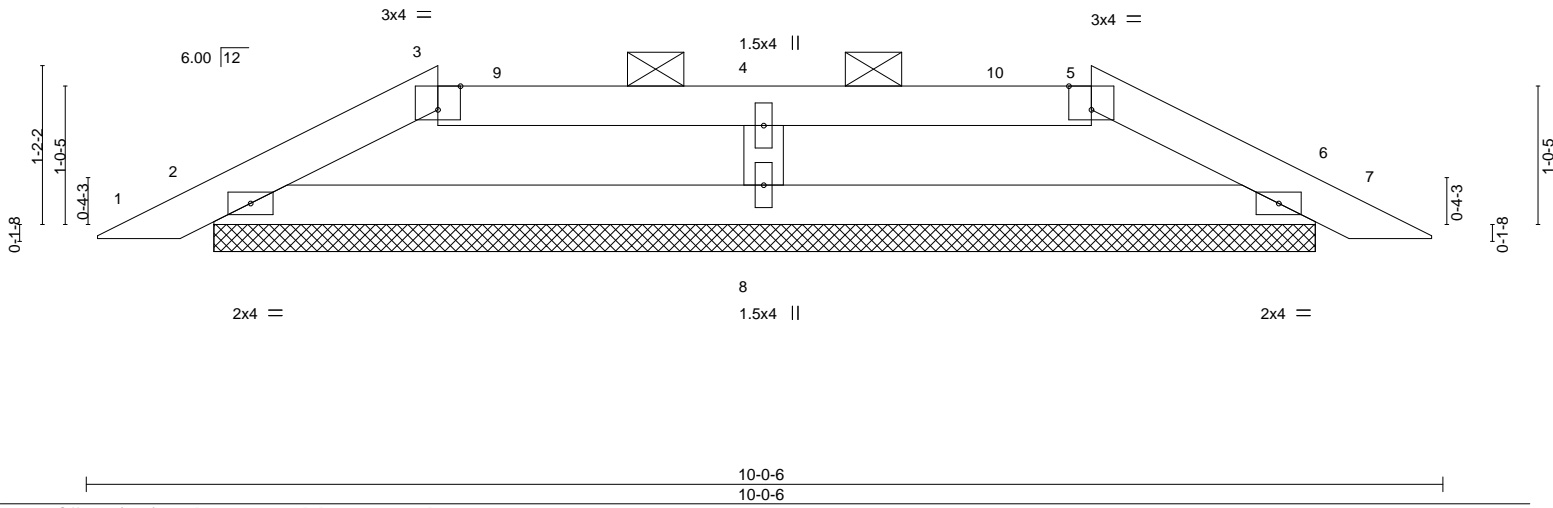


Plate Offsets (X,Y)-- [3:0-2-0,Edge], [5:0-2-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.14	Vert(LL)	0.00	7	n/r	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	0.00	7	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	6	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2015/TPI2014						Weight: 28 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=168/8-1-12, 6=168/8-1-12, 8=274/8-1-12  
 Max Horz 2=-13(LC 17)  
 Max Uplift 2=-18(LC 16), 6=-18(LC 17), 8=-2(LC 13)  
 Max Grav 2=215(LC 39), 6=216(LC 39), 8=342(LC 38)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-11 to 6-10-2, Interior(1) 6-10-2 to 7-5-3, Exterior(2) 7-5-3 to 9-7-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - Gable requires continuous bottom chord bearing.
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 23, 2020

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

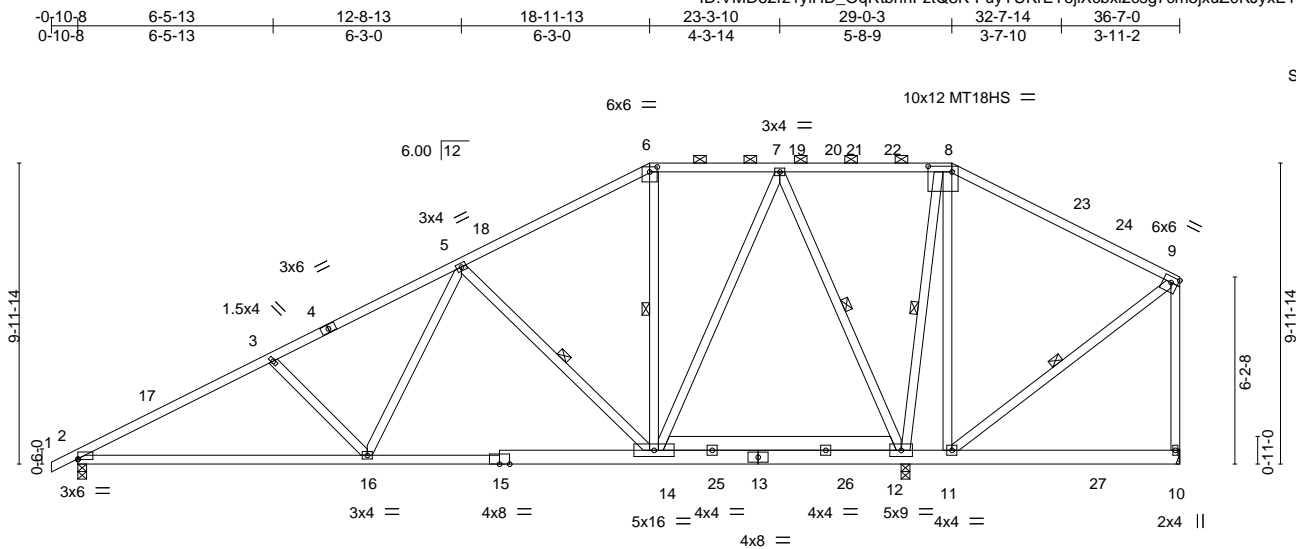
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job 150_1910_C	Truss T1	Truss Type ROOF TRUSS	Qty 3	Ply 1	KB Home 150.1910.C	142923844
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84 Components (Dunn), Dunn, NC - 28334, 8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:50 2020 Page 1  
 ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-FuyYUKrET6jiXcbxl2csg7cm5jxuZ0KJyxE1y1yap\_x



Scale = 1:76.5

9-7-5	18-11-13	19-3-10	27-5-12	29-0-3	36-7-0
9-7-5	9-4-8	0-3-14	8-2-2	1-6-7	7-6-13

Plate Offsets (X, Y)-- [2:0-0,0-0-0-5], [6:0-3-0,0-2-0], [8:0-9-8,0-2-4], [9:Edge,0-2-4]

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.80	in	(loc)	l/defl	L/d	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.92	Vert(LL)	-0.21	2-16	>999	240	
TCDL	10.0	Rep Stress Incr	YES	WB	0.66	Vert(CT)	-0.46	2-16	>710	180	
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-S		Horz(CT)	0.03	12	n/a	n/a	
BCDL	10.0										
											Weight: 276 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 8-9: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-9-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD 2x6 SP No.2 *Except* 2-15: 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-14, 6-14, 7-12, 8-12, 9-11

**REACTIONS.** (size) 2=0-3-8, 12=0-3-8, 10=Mechanical  
 Max Horz 2=236(LC 16)  
 Max Uplift 2=-25(LC 16), 12=-88(LC 16), 10=-241(LC 55)  
 Max Grav 2=988(LC 55), 12=2049(LC 2), 10=159(LC 38)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1510/37, 3-5=-1256/28, 5-6=-456/55, 6-7=-317/79, 7-8=-16/421, 8-9=-68/424, 9-10=-70/313  
 BOT CHORD 2-16=-197/1278, 14-16=-94/862, 11-12=-277/72  
 WEBS 3-16=-335/155, 5-16=0/530, 5-14=-772/161, 7-14=-59/882, 7-12=-1168/110, 8-12=-775/73, 8-11=0/323, 9-11=-381/97

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-9-6, Interior(1) 2-9-6 to 18-11-13, Exterior(2) 18-11-13 to 24-1-14, Interior(1) 24-1-14 to 29-0-3, Exterior(2) 29-0-3 to 34-2-5, Interior(1) 34-2-5 to 36-5-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=241.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
- On Grand page 2 representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 23, 2020

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p><b>ENGINEERING BY</b>  <b>TRENCO</b>          A MiTek Affiliate</p> <p>818 Soundside Road          Edenton, NC 27932</p>
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Job 150_1910_C	Truss T1	Truss Type ROOF TRUSS	Qty 3	Ply 1	KB Home 150.1910.C I42923844 Job Reference (optional)
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:50 2020 Page 2  
ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-FuyYUKrET6jiXcxl2csg7cm5jxuZ0KJyxE1y1yap\_x

**NOTES-**

14) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

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

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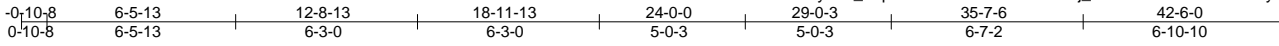
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150_1910_C	T2A	ROOF TRUSS	3	1		

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:52 2020 Page 1

ID:VMD62rz1yIHQ\_OqRtbnrIFztQ8K-BG4lv0sU?j\_QmvJstKrmYh6aXiB1ywcPEj81vyap\_v

Job Reference (optional)



Scale = 1:79.2

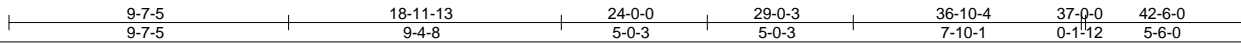
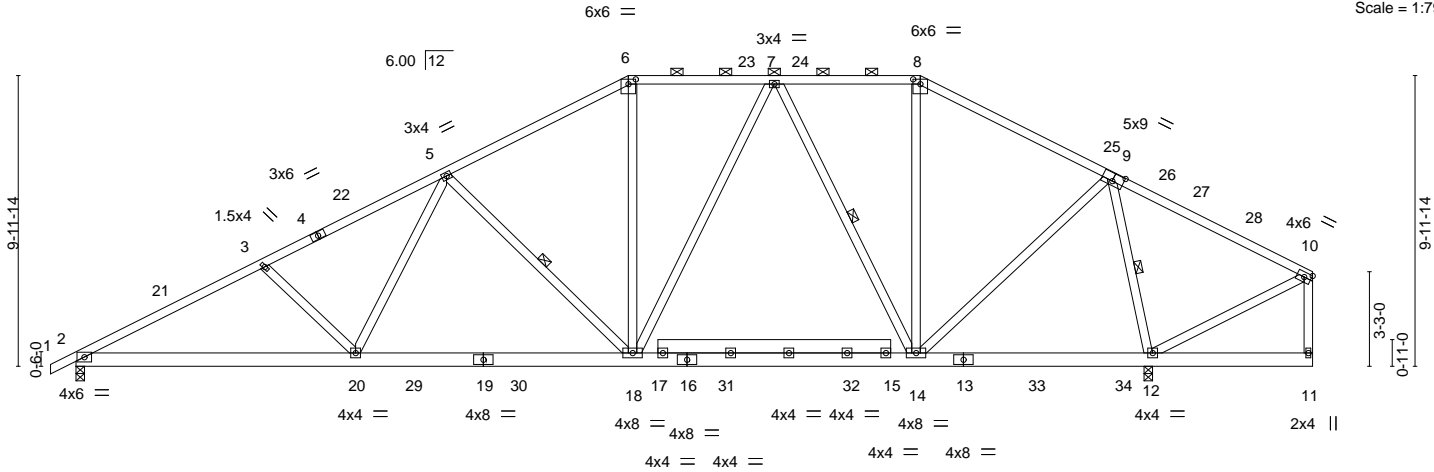


Plate Offsets (X,Y)-- [6:0-3-0,0-2-0], [8:0-3-0,0-2-0], [9:0-4-8,0-3-4]

<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	-0.14	18-20	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.61	-0.25	18-20	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	0.05	12	n/a	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-S							
BCDL	10.0									Weight: 312 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-11-11 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-6 max.): 6-8.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-18, 7-14, 9-12

**REACTIONS.** (size) 2=0-3-8, 12=0-3-8  
 Max Horz 2=184(LC 16)  
 Max Uplift 2=-56(LC 16)  
 Max Grav 2=1500(LC 2), 12=1938(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2638/124, 3-5=-2374/130, 5-6=-1632/175, 6-7=-1396/190, 7-8=-914/170, 8-9=-1105/151, 9-10=-21/304  
 BOT CHORD 2-20=-202/2261, 18-20=-102/1840, 14-18=-13/1221  
 WEBS 3-20=-305/151, 5-20=0/536, 5-18=-764/157, 6-18=0/438, 7-18=-35/496, 7-14=-739/93, 8-14=0/264, 9-14=0/1011, 9-12=-1695/164

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-10-8 to 3-4-8, Interior(1) 3-4-8 to 18-11-13, Exterior(2) 18-11-13 to 24-11-15, Interior(1) 24-11-15 to 29-0-3, Exterior(2) 29-0-3 to 35-0-5, Interior(1) 35-0-5 to 42-4-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



September 23, 2020

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

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818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923846
150_1910_C	T3A	ROOF TRUSS	2	1		

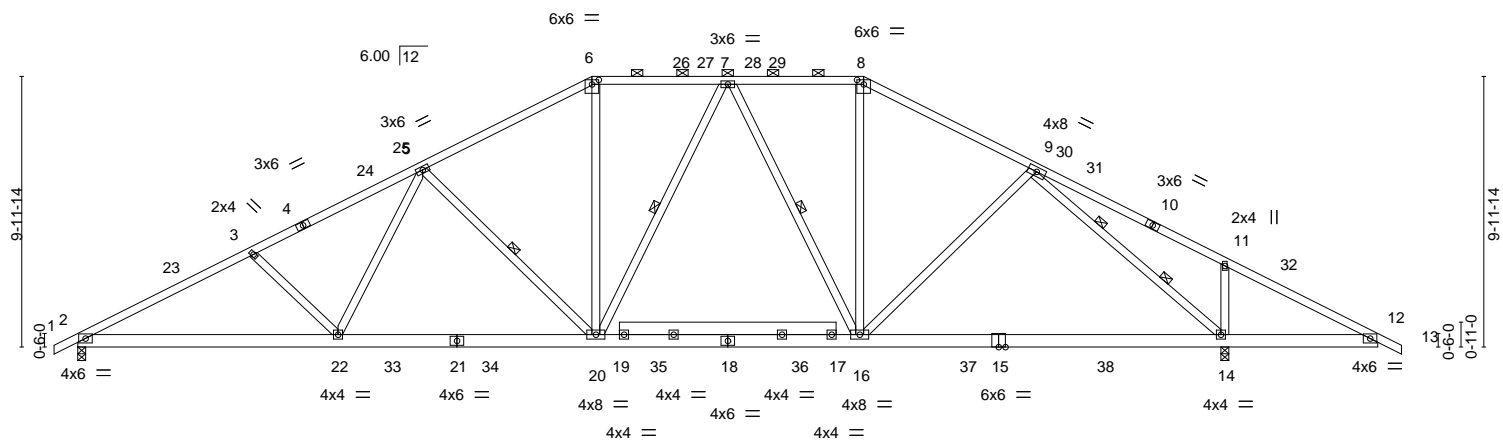
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:53 2020 Page 1

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Scale = 1:85.1



9-7-5	18-11-13	24-0-0	29-0-3	35-3-3	42-4-4	42-6-0	48-0-0
9-7-5	9-4-8	5-0-3	5-0-3	6-3-0	7-1-1	0-1-12	5-6-0

<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.22	14-16	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.42	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.08	14	n/a	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-S								
BCDL	10.0										Weight: 331 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD	TOP CHORD
BOT CHORD	BOT CHORD
WEBS	WEBS

**REACTIONS.** (size) 2=0-3-8, 14=0-3-8  
 Max Horz 2=130(LC 16)  
 Max Uplift 2=-50(LC 16), 14=-40(LC 17)  
 Max Grav 2=1713(LC 2), 14=2230(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3091/154, 3-5=-2852/155, 5-6=-2120/200, 6-7=-1836/207, 7-8=-1615/202, 8-9=-1877/188, 9-11=-83/492, 11-12=-176/489  
 BOT CHORD 2-22=-134/2661, 20-22=-34/2274, 16-20=0/1791, 14-16=-24/1396, 12-14=-356/206  
 WEBS 3-22=-295/152, 5-22=0/533, 5-20=-758/157, 6-20=-4/654, 8-16=0/559, 9-16=0/395, 11-14=-408/172, 7-16=-531/106, 9-14=-2291/192

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 18-11-13, Exterior(2) 18-11-13 to 25-9-4, Interior(1) 25-9-4 to 29-0-3, Exterior(2) 29-0-3 to 35-9-11, Interior(1) 35-9-11 to 48-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



September 23, 2020

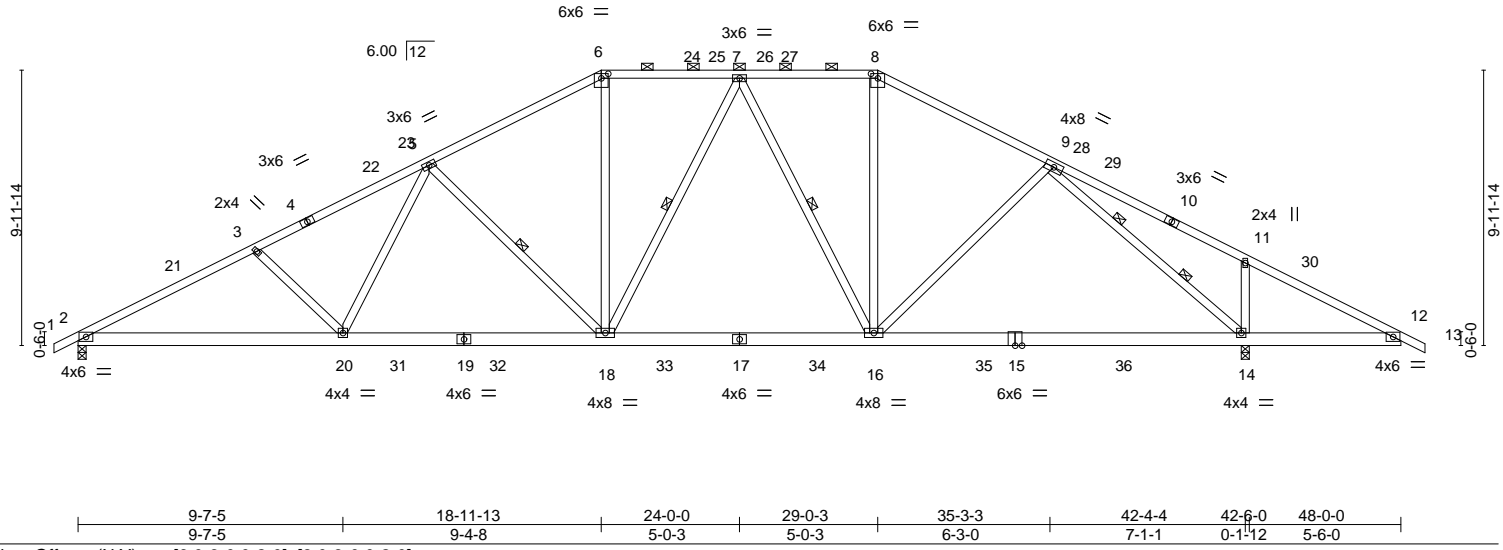
Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.C	142923847
150_1910_C	T4	ROOF TRUSS	2	1		

84 Components (Dunn), Dunn, NC - 28334, 8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:55 2020 Page 1

ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-brmRX2vNleM?dNUuYbC1NBJe1khYEDY26CxaeEyap\_s

0-10-8	6-5-13	12-8-13	18-11-13	24-0-0	29-0-3	35-3-3	41-6-3	42-4-4	48-0-0	48-10-8
0-10-8	6-5-13	6-3-0	6-3-0	5-0-3	5-0-3	6-3-0	6-3-0	0-10-1	5-7-12	0-10-8

Scale = 1:83.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.73	Vert(LL) -0.22	14-16	>999	240	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Lumber DOL 1.15		BC 0.76	Vert(CT) -0.43	14-16	>999	180		
TCDL 10.0	Rep Stress Incr YES		WB 0.86	Horz(CT) 0.09	14	n/a	n/a		
BCLL 0.0 *	Code IRC2015/TPI2014		Matrix-S						
BCDL 10.0								Weight: 312 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-7-6 oc purlins, except 2-0-0 oc purlins (4-1-7 max.): 6-8.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 12-14.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-18, 7-18, 7-16 2 Rows at 1/3 pts 9-14

**REACTIONS.** (size) 2=0-3-8, 14=0-3-8  
 Max Horz 2=130(LC 16)  
 Max Uplift 2=-50(LC 16), 14=-40(LC 17)  
 Max Grav 2=1713(LC 2), 14=2230(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3090/154, 3-5=-2859/155, 5-6=-2134/199, 6-7=-1848/207, 7-8=-1623/203, 8-9=-1886/189, 9-11=-84/491, 11-12=-177/489  
 BOT CHORD 2-20=-135/2660, 18-20=-34/2283, 16-18=0/1801, 14-16=-25/1402, 12-14=-355/207  
 WEBS 3-20=-295/152, 5-20=0/529, 5-18=-757/157, 6-18=-4/660, 7-16=-534/104, 8-16=0/563, 9-16=0/397, 9-14=-2290/195, 11-14=-408/172

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 18-11-13, Exterior(2) 18-11-13 to 25-9-4, Interior(1) 25-9-4 to 29-0-3, Exterior(2) 29-0-3 to 35-9-11, Interior(1) 35-9-11 to 48-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



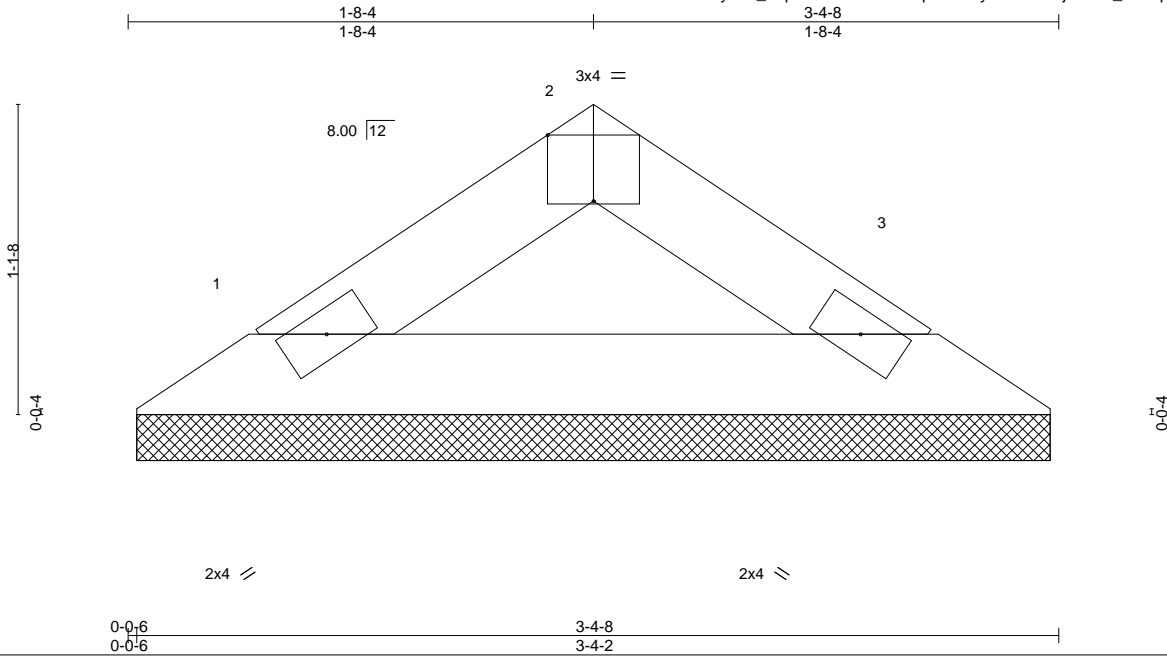
September 23, 2020

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 150_1910_C	Truss V1	Truss Type Valley	Qty 1	Ply 1	KB Home 150.1910.C	I42923848
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:56 2020 Page 1  
ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-41JpkOv?3yUsFX355ljGwOs\_V8Bqzt9BKshMAhyap\_r



Scale = 1:8.4

Plate Offsets (X,Y)-- [2:0-2-0,Edge]	0-0-6 0-0-6	3-4-8 3-4-2			
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) n/a - n/a 999	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Lumber DOL 1.15	BC 0.11	Vert(CT) n/a - n/a 999		
TCDL 10.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3 n/a n/a		
BCLL 0.0 *	Code IRC2015/TPI2014	Matrix-P		Weight: 9 lb	FT = 20%
BCDL 10.0					

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.3	TOP CHORD Structural wood sheathing directly applied or 3-4-8 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-3-12, 3=3-3-12  
 Max Horz 1=-16(LC 12)  
 Max Uplift 1=-2(LC 14), 3=-2(LC 15)  
 Max Grav 1=96(LC 2), 3=96(LC 2)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



September 23, 2020

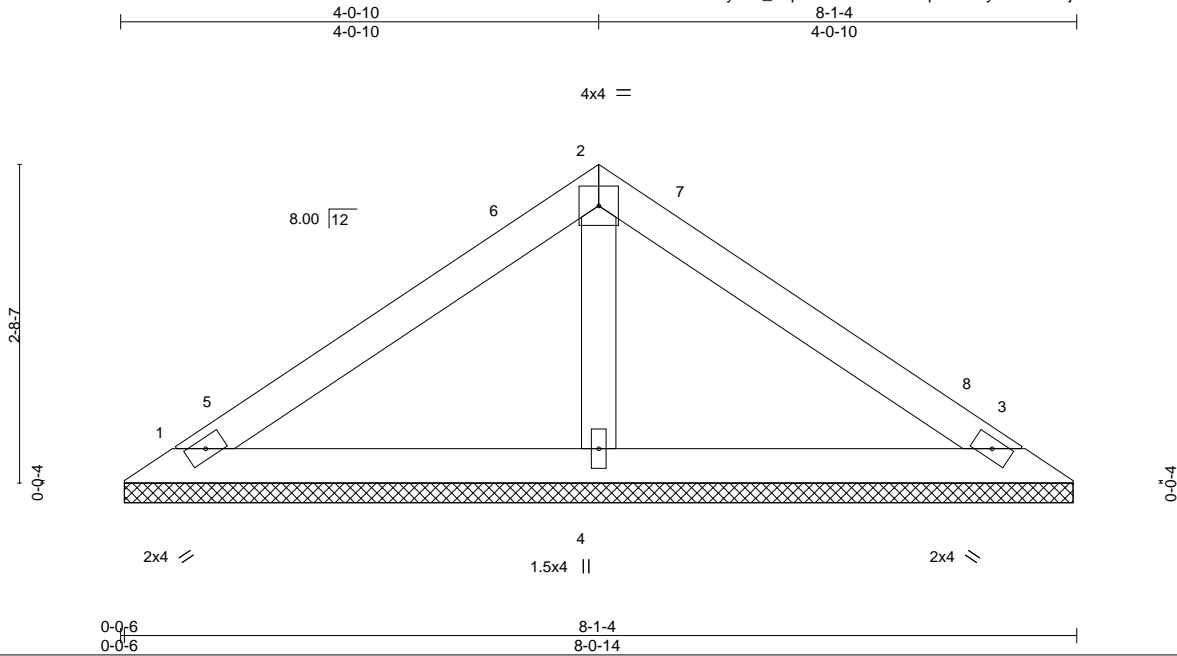


Job 150_1910_C	Truss V2	Truss Type Valley	Qty 1	Ply 1	KB Home 150.1910.C Job Reference (optional)	I42923849
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:56 2020 Page 1

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Scale = 1:19.5

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.41	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.22	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 28 lb	FT = 20%

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

**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.** (size) 1=8-0-8, 3=8-0-8, 4=8-0-8  
 Max Horz 1=-46(LC 10)  
 Max Uplift 1=-18(LC 14), 3=-24(LC 15)  
 Max Grav 1=153(LC 2), 3=153(LC 2), 4=265(LC 2)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-0-10, Exterior(2) 4-0-10 to 7-0-10, Interior(1) 7-0-10 to 7-7-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



September 23,2020

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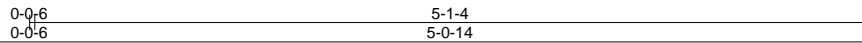
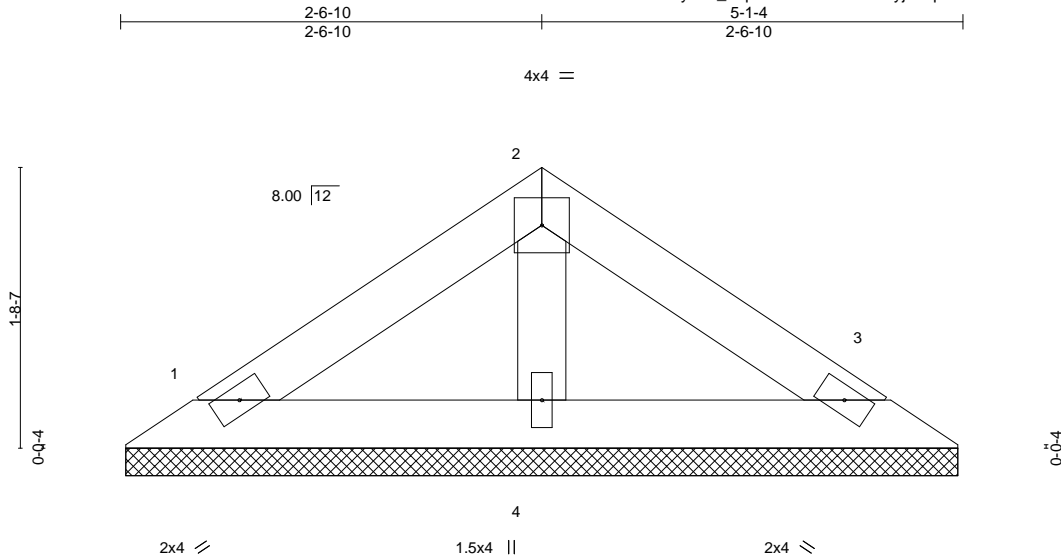


818 Soundside Road  
 Edenton, NC 27932

Job 150_1910_C	Truss V3	Truss Type Valley	Qty 1	Ply 1	KB Home 150.1910.C Job Reference (optional)	I42923850
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 23 08:16:57 2020 Page 1  
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<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.07	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 17 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-0-8, 3=5-0-8, 4=5-0-8  
Max Horz 1=-27(LC 10)  
Max Uplift 1=-10(LC 14), 3=-14(LC 15)  
Max Grav 1=89(LC 2), 3=89(LC 2), 4=154(LC 2)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Gable requires continuous bottom chord bearing.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



September 23, 2020

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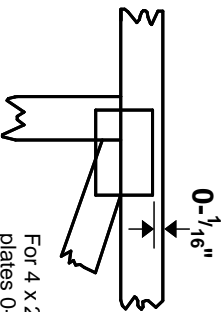
818 Soundside Road  
Edenton, NC 27932

# 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 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



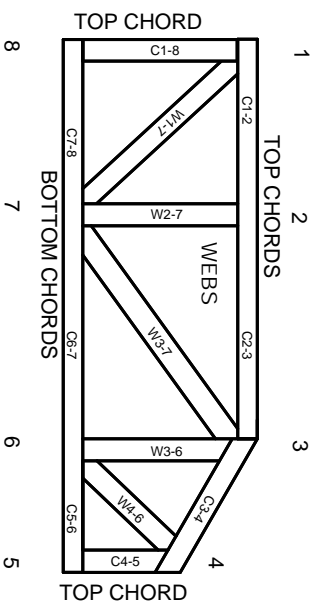
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate  
BCSI: Connected Wood Trusses.

# Numbering System

6-4-8  
dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T or 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.