

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 150\_1910\_B\_Vo  
KB Home 150.1910.B Volume with gable

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: I44316318 thru I44316332

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

North Carolina COA: C-0844



January 12, 2021

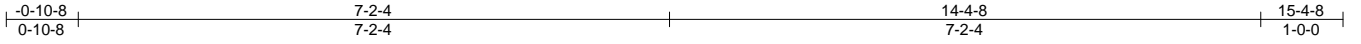
Johnson, Andrew

**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.

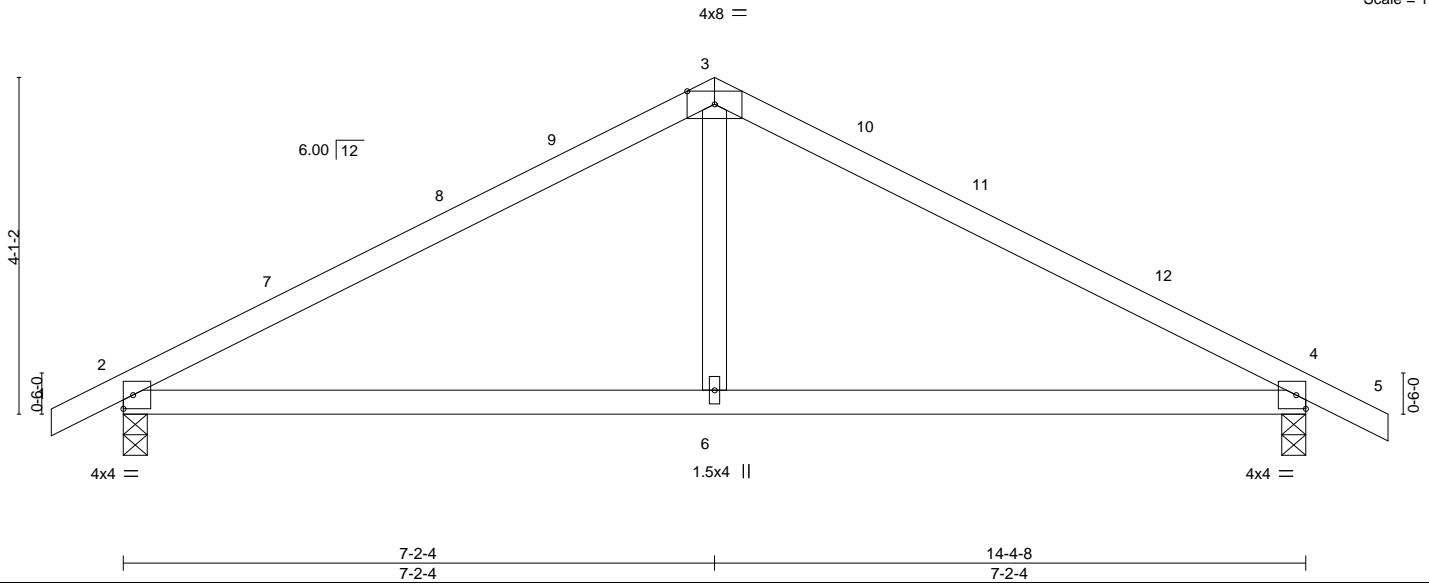
Job 150_1910_B_VO	Truss A1	Truss Type Common	Qty 1	Ply 1	KB Home 150.1910.B Volume with gable	144316318
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:13 2021 Page 1  
ID:VMD62rz1yiHD\_OqRtbnrFztQ8K-WAKVDKSGMSgNfJvc1MdWwZDK9d4ON2JGLqEdJuzw8wK



Scale = 1:28.0



<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 0.79	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.56	Vert(LL) -0.06 2-6 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.13	Vert(CT) -0.13 2-6 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 54 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 4-0-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
Max Horz 2=-59(LC 17)  
Max Uplift 2=-48(LC 16), 4=-50(LC 17)  
Max Grav 2=624(LC 2), 4=633(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-780/83, 3-4=-780/81  
BOT CHORD 2-6=0/602, 4-6=0/602  
WEBS 3-6=0/343

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 7-2-4, Exterior(2) 7-2-4 to 10-2-4, Interior(1) 10-2-4 to 15-4-8 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=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.
  - 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 H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.



January 12, 2021

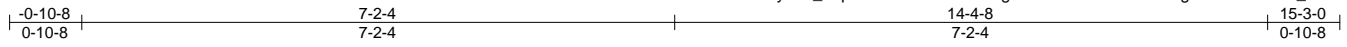
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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_B_VO	Truss AE	Truss Type Common Supported Gable	Qty 1	Ply 1	KB Home 150.1910.B Volume with gable	144316319
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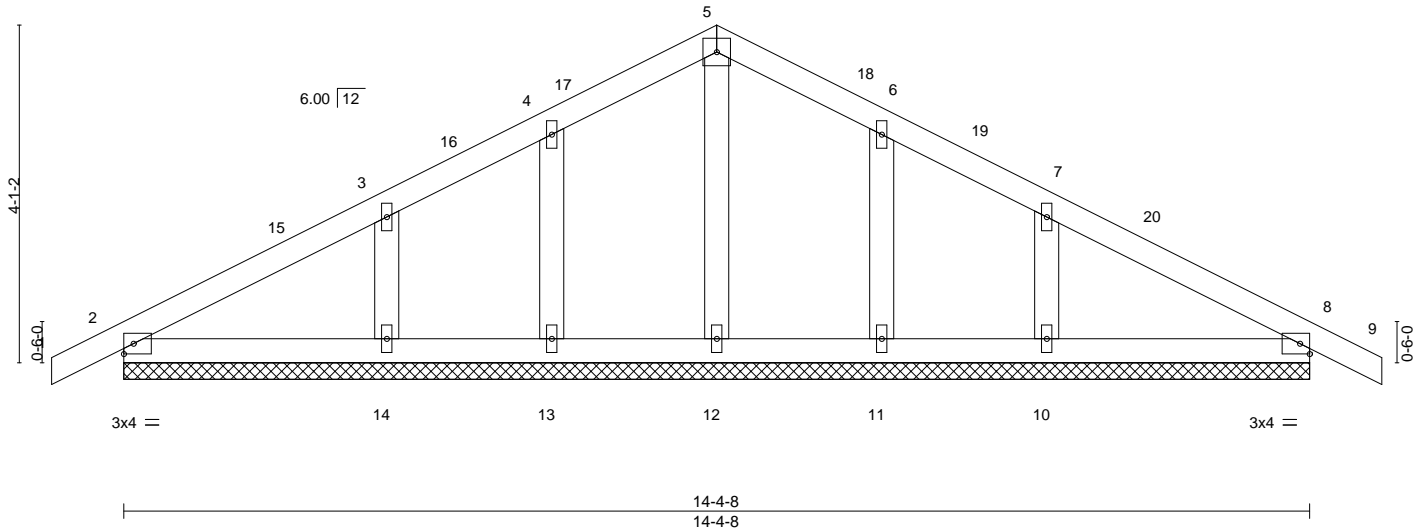
84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:14 2021 Page 1  
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4x4 =

Scale = 1:27.9



<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	0.11	Vert(LL)	0.00	9	n/r	120	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	9	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-S							Weight: 66 lb	FT = 20%
BCDL	10.0											

**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

**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=57(LC 16)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 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=120mph Vasd=95mph; TCCL=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
  - 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.
  - 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.



January 12, 2021

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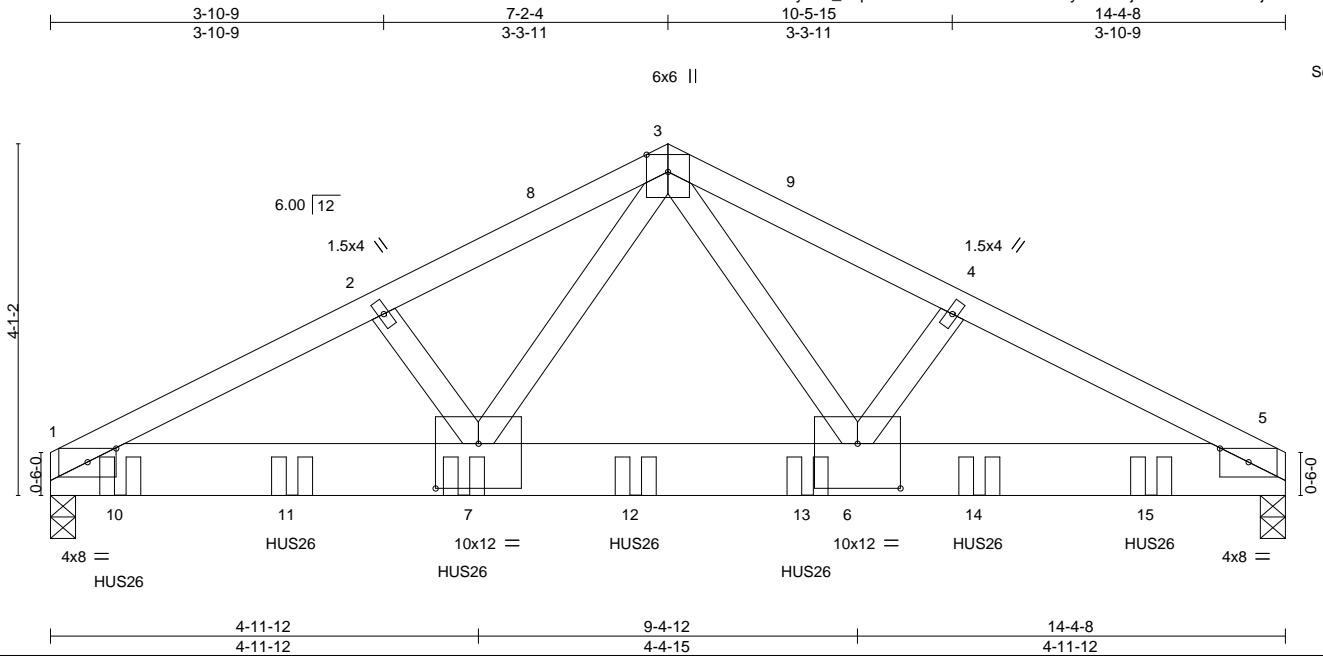


818 Soundside Road  
Edenton, NC 27932

Job 150_1910_B_VO	Truss AG	Truss Type COMMON GIRDER	Qty 1	Ply 2	KB Home 150.1910.B Volume with gable I44316320
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:16 2021 Page 1  
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Scale = 1:26.8

Plate Offsets (X,Y)-- [1:0-4-0,0-1-15], [5:0-4-0,0-1-15], [6:0-6-0,0-6-4], [7:0-6-0,0-6-4]

<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 0.71	Vert(LL) -0.11	6-7	>999	240	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.63	Vert(CT) -0.22	6-7	>757	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.66	Horz(CT) 0.04	5	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-S						
BCDL 10.0	Code IRC2015/TPI2014						Weight: 171 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x8 SP DSS  
WEBS 2x4 SP No.2 or 2x4 SPF No.2 \*Except\*  
4-6,2-7: 2x4 SP No.3

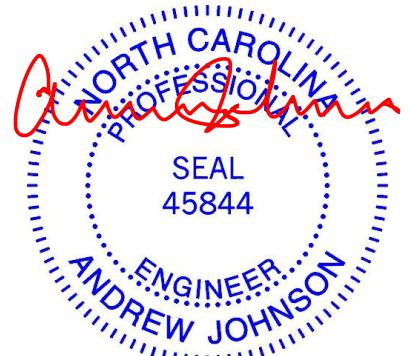
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-1-2 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=(0-3-8 + TBE4 Simpson Strong-Tie) (req. 0-5-14), 5=(0-3-8 + TBE4 Simpson Strong-Tie) (req. 0-5-6)  
Max Horz 1=52(LC 41)  
Max Uplift 1=377(LC 12), 5=346(LC 13)  
Max Grav 1=7514(LC 2), 5=6853(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-10719/551, 2-3=-10627/562, 3-4=-10657/565, 4-5=-10750/553  
BOT CHORD 1-7=-500/9434, 6-7=-303/6702, 5-6=-450/9461  
WEBS 3-6=-290/5420, 3-7=-287/5367

- 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 0-7-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-2-0 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=120mph Vasd=95mph; 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
  - 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.
  - TBE4 Simpson Strong-Tie 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.
  - Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-9-12 from the left end to 12-9-12 to connect truss(es) to back face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard



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Continued on page 2

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818 Soundside Road  
Edenton, NC 27932

Job 150_1910_B_VO	Truss AG	Truss Type COMMON GIRDER	Qty 1	Ply <b>2</b>	KB Home 150.1910.B Volume with gable I44316320 Job Reference (optional)
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:16 2021 Page 2  
ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-xlQesLU8fN2yWmEBjUBDXCrscr53aHji1oTlwDzw8wH

**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: 7=-1770(B) 10=-1773(B) 11=-1770(B) 12=-1770(B) 13=-1770(B) 14=-1770(B) 15=-1770(B)

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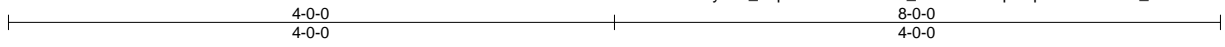


818 Soundside Road  
Edenton, NC 27932

Job 150_1910_B_VO	Truss PB1	Truss Type Piggyback	Qty 25	Ply 1	KB Home 150.1910.B Volume with gable 144316321
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:17 2021 Page 1  
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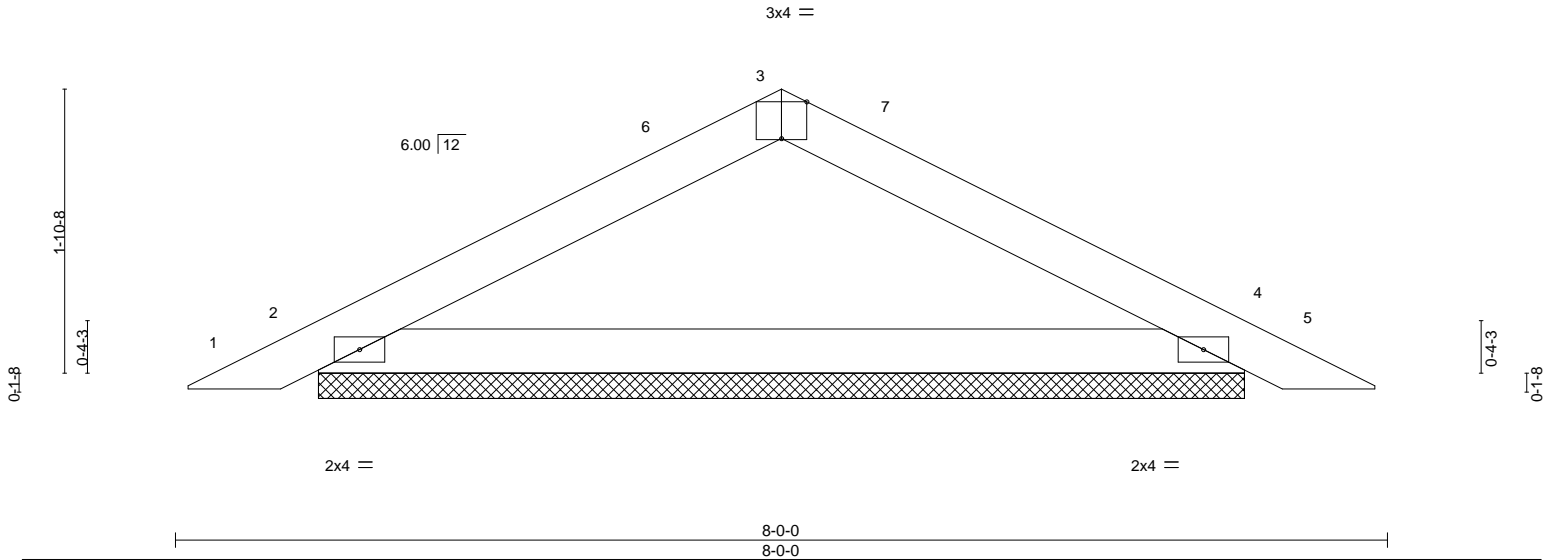


Plate Offsets (X,Y)-- [3:0-2-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.49	Vert(LL) 0.00 5 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) 0.01 5 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 22 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 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=6-1-6, 4=6-1-6  
Max Horz 2=26(LC 16)  
Max Uplift 2=-23(LC 16), 4=-23(LC 17)  
Max Grav 2=278(LC 2), 4=278(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=120mph Vasd=95mph; 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 3-4-11, Interior(1) 3-4-11 to 4-0-0, Exterior(2) 4-0-0 to 7-0-11, Interior(1) 7-0-11 to 7-7-5 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.



January 12, 2021

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

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

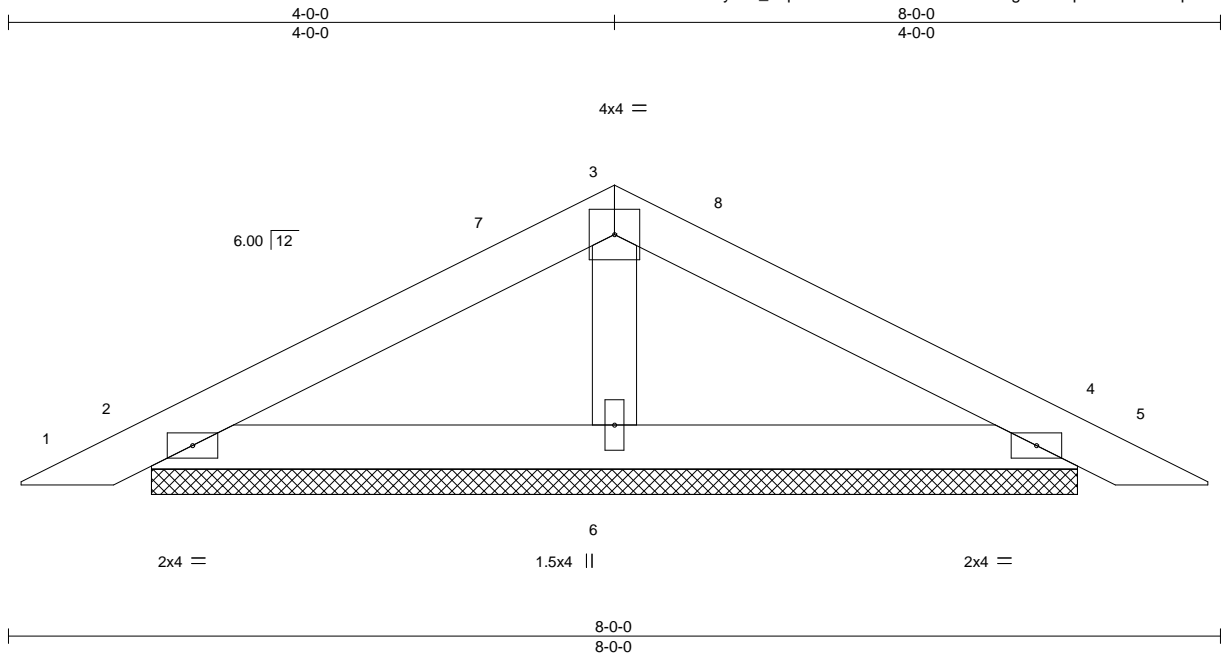


818 Soundside Road  
Edenton, NC 27932

Job 150_1910_B_VO	Truss PBE	Truss Type Piggyback	Qty 2	Ply 1	KB Home 150.1910.B Volume with gable Job Reference (optional)	144316322
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:18 2021 Page 1  
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Scale = 1:15.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.16	Vert(LL)	0.00	5	n/r	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	0.01	5	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	4	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2015/TPI2014						Weight: 24 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

**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) 2=6-1-6, 4=6-1-6, 6=6-1-6  
Max Horz 2=26(LC 16)  
Max Uplift 2=-30(LC 16), 4=-35(LC 17)  
Max Grav 2=160(LC 2), 4=160(LC 2), 6=235(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=120mph Vasd=95mph; 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 3-4-11, Interior(1) 3-4-11 to 4-0-0, Exterior(2) 4-0-0 to 7-0-11, Interior(1) 7-0-11 to 7-7-5 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.



January 12, 2021

**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_B_VO	Truss T1E	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	KB Home 150.1910.B Volume with gable	144316323
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:21 2021 Page 1

ID:VMD62rz1yIHd\_OqRtbnrIFzQ8K-HiDXv3YHUwgEdY68V2mOEFYrFsv4FgPRB4A2cRzw8wC

-0'-10'-8 20'-0'-0 27'-4'-0 28'-0'-0 48'-0'-0 48'-10'-8  
0'-10'-8 20'-0'-0 7'-4'-0 0'-8'-0 20'-0'-0 0'-10'-8

Scale = 1:86.8

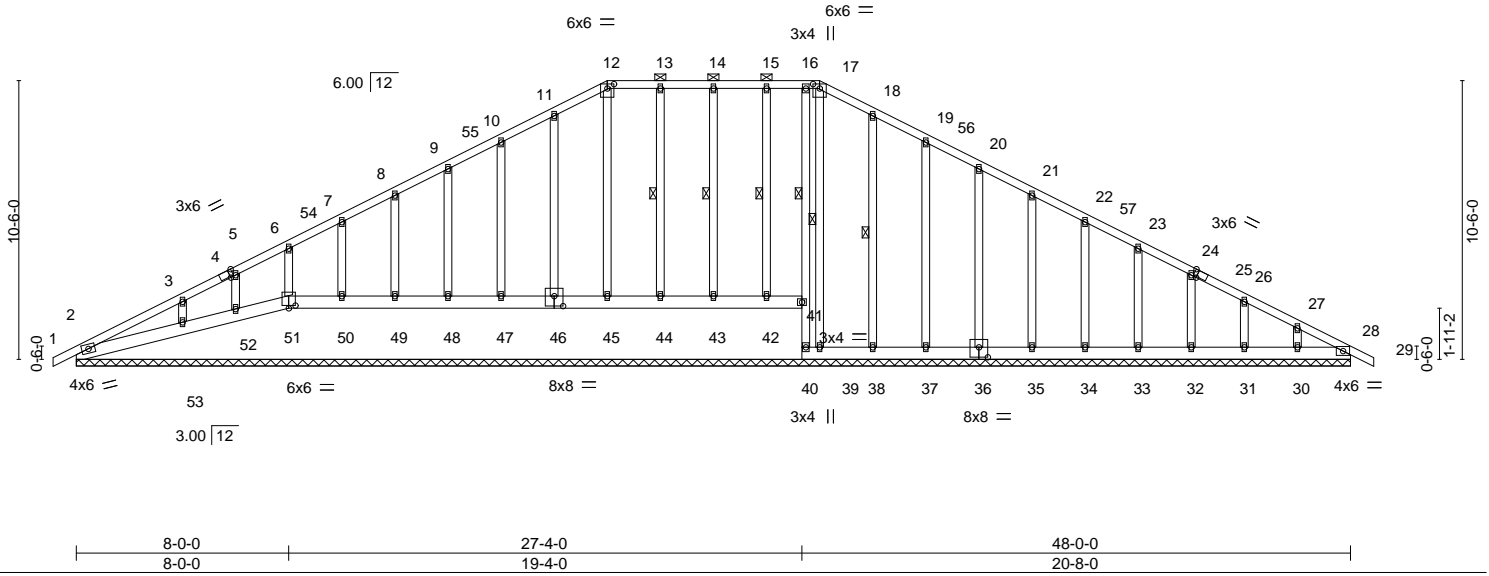


Plate Offsets (X,Y)--	[4:0-1-9,Edge], [12:0-3-0,0-2-0], [17:0-3-0,0-2-0], [25:0-1-9,Edge], [36:0-4-0,0-4-8], [46:0-4-0,0-4-8], [51:0-3-0,0-1-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) -0.00	28	n/r	120	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Lumber DOL 1.15	BC 0.19	Vert(CT) -0.00	28	n/r	120		
TCDL 10.0	Rep Stress Incr YES	WB 0.19	Horz(CT) 0.02	28	n/a	n/a		
BCLL 0.0 *	Code IRC2015/TPI2014	Matrix-S						
BCDL 10.0							Weight: 377 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, except
BOT CHORD 2x6 SP No.2 *Except* 16-40: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 52-53.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 16-41 17-39, 15-42, 14-43, 13-44, 18-38

**REACTIONS.** All bearings 48-0-0.  
 (lb) - Max Horz 2=149(LC 21)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 51, 40, 39, 42, 43, 44, 46, 47, 48, 49, 50, 52, 53, 38, 37, 36, 35, 34, 33, 32, 31, 30, 41, 28  
 Max Grav All reactions 250 lb or less at joint(s) 2, 51, 40, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 52, 38, 37, 36, 35, 34, 33, 32, 31, 30, 41, 28 except 53=315(LC 54)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 8-9=86/274, 9-10=100/315, 10-11=114/357, 11-12=129/396, 12-13=113/372,  
 13-14=113/372, 14-15=113/372, 15-16=113/372, 16-17=114/374, 17-18=129/400,  
 18-19=115/363, 19-20=100/320, 20-21=86/280

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 4-0-0, Exterior(2) 4-0-0 to 20-0-0, Corner(3) 20-0-0 to 24-9-10, Exterior(2) 24-9-10 to 28-0-0, Corner(3) 28-0-0 to 32-9-10, Exterior(2) 32-9-10 to 48-10-8 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=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 2x4 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.
  - Bearing at joint(s) 41 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify continuity of sheathing surface.



**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/TPI 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_B_VO	Truss T1E	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	KB Home 150.1910.B Volume with gable I44316323 Job Reference (optional)
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:22 2021 Page 2  
ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-mvrv6PZvFDo5EhhL3lldnT50?FFJ\_7fbQkwc8tzw8wB

**NOTES-**

- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 51, 40, 52, 53.
- 15) N/A
- 16) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 51, 42, 43, 44, 45, 46, 47, 48, 49, 50, 52, 53.
- 17) 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.**

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818 Soundside Road  
Edenton, NC 27932



Job 150_1910_B_VO	Truss T4	Truss Type PIGGYBACK BASE	Qty 7	Ply 1	KB Home 150.1910.B Volume with gable I44316324 Job Reference (optional)
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:23 2021 Page 2  
ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-E5LHKlaX?XwysrGXdTpsKgd\_HfS3jUlkeOf9gJzw8wA

**NOTES-**

13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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818 Soundside Road  
Edenton, NC 27932

Job 150_1910_B_VO	Truss T4A	Truss Type ROOF TRUSS	Qty 3	Ply 1	KB Home 150.1910.B Volume with gable	144316325
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:25 2021 Page 1  
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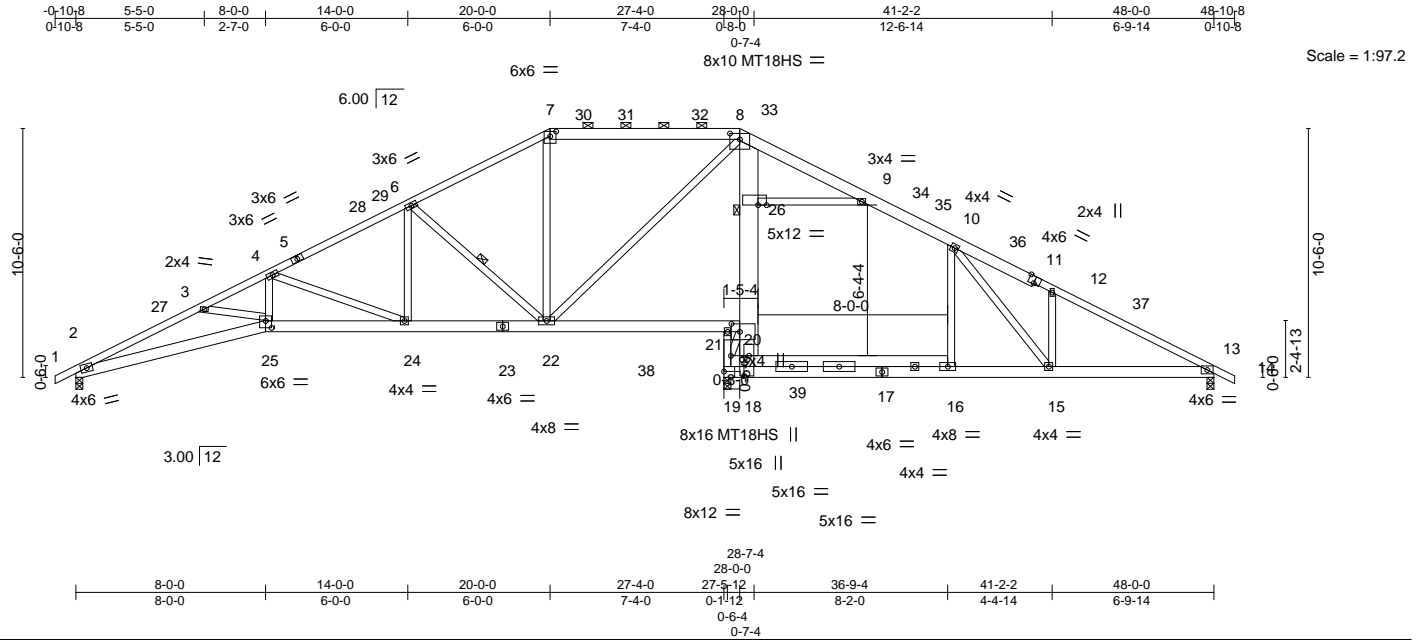


Plate Offsets (X,Y)-- [7:0-3-0,0-2-7], [8:0-5-0,0-3-0], [11:0-3-0,Edge], [18:0-10-4,0-2-8], [20:0-4-4,0-4-0], [25:0-3-0,0-3-8], [26:0-4-4,0-0-0]

<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 0.93	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) -0.25 15-16 >966 240	MT18HS	244/190
TCDL 10.0	Lumber DOL 1.15	WB 0.95	Vert(CT) -0.45 15-16 >538 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.06 19 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014		Attic 0.12 16-18 868 360	Weight: 367 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 7-8,8-11: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD 2x6 SP No.2 *Except* 19-21: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 5-7-13 oc bracing.
WEBS 2x4 SP No.3 *Except* 8-18: 2x10 SP DSS	WEBS 1 Row at midpt 6-22
	JOINTS 1 Brace at Jt(s): 26

**REACTIONS.** (size) 2=0-3-8, 19=(0-3-8 + H10A Simpson Strong-Tie) (req. 0-4-3), 13=0-3-8  
Max Horz 2=148(LC 16)  
Max Uplift 2=84(LC 16), 13=124(LC 17)  
Max Grav 2=965(LC 55), 19=2672(LC 3), 13=769(LC 58)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2687/334, 3-4=-2425/257, 4-6=-1169/177, 6-7=-402/173, 7-8=-300/194,  
8-9=-93/1885, 9-10=-279/388, 10-12=-1294/312, 12-13=-1231/210  
BOT CHORD 2-25=-396/2383, 24-25=-248/2091, 22-24=-59/983, 21-22=-772/187, 20-21=-811/191,  
19-21=-889/0, 18-19=-98/1665, 16-18=-223/404, 15-16=-223/380, 13-15=-102/1026  
WEBS 4-25=-43/745, 4-24=-1187/202, 6-24=-8/582, 6-22=-997/194, 7-22=-294/78,  
10-15=-202/1102, 12-15=-531/182, 18-20=-127/2037, 20-26=-2102/212, 8-26=-2146/241,  
9-26=-1699/269, 19-20=-3434/190, 8-22=-127/1351

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-11-2, Interior(1) 3-11-2 to 20-0-0, Exterior(2) 20-0-0 to 26-9-7, Interior(1) 26-9-7 to 28-0-0, Exterior(2) 28-0-0 to 34-9-7, Interior(1) 34-9-7 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.
  - 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.
  - Ceiling dead load (5.0 psf) on member(s). 9-10, 9-26
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 16-18



Continued on page 2

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

Job 150_1910_B_VO	Truss T4A	Truss Type ROOF TRUSS	Qty 3	Ply 1	KB Home 150.1910.B Volume with gable I44316325 Job Reference (optional)
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:25 2021 Page 2  
ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-AUT2IQbnX8Bg59QwktrKP5jLxT62BIY16i8GICzw8w8

**NOTES-**

- 12) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 13) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19. This connection is for uplift only and does not consider lateral forces.
- 14) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 16) 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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818 Soundside Road  
Edenton, NC 27932

Job 150_1910_B_VO	Truss T5A	Truss Type ROOF TRUSS	Qty 3	Ply 1	KB Home 150.1910.B Volume with gable	144316326
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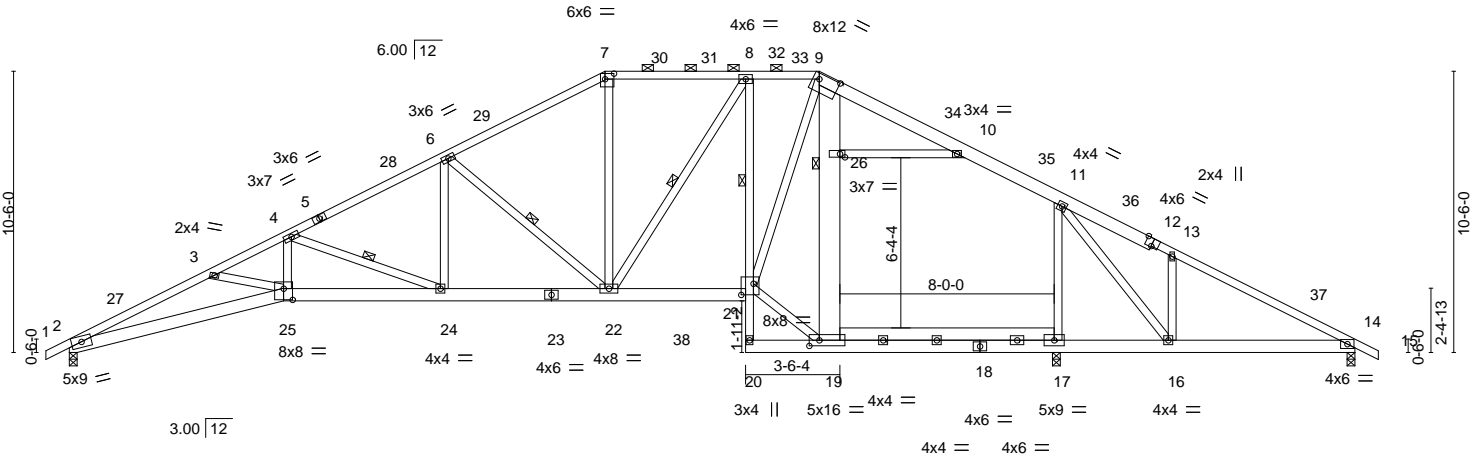
84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:27 2021 Page 1

ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-6sboA6d23mROLTalsitoUWohNGm3fdgKZOdNp4zw8w6

0-10-8 5-5-0 8-0-0 14-0-0 20-0-0 25-3-0 28-0-0 34-7-1 36-10-4 40-6-0 41-2-2 48-0-0 48-10-8  
 0-10-8 5-5-0 2-7-0 6-0-0 6-0-0 5-3-0 2-9-0 6-7-1 2-3-3 3-7-12 0-8-2 6-9-14 0-10-8

Scale = 1:86.0



8-0-0 14-0-0 20-0-0 25-3-0 28-0-0 36-10-4 41-2-2 43-0-0 48-0-0  
 8-0-0 6-0-0 6-0-0 5-3-0 2-9-0 8-10-4 4-3-14 1-9-14 5-0-0

Plate Offsets (X,Y)-- [7:0-4-0,0-2-8], [9:0-9-4,0-2-8], [12:0-3-0,Edge], [19:0-4-8,0-2-8], [21:0-5-8,0-5-0], [25:0-4-0,0-5-0], [26:0-2-4,0-1-8]

<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	0.93	Vert(LL)	-0.34	24-25	>999	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.69	24-25	>636		
TCDL	10.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.35	14	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-S		Attic	-0.12	17-19	844	Weight: 383 lb	FT = 20%
BCDL	10.0								360		

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 \*Except\*  
 9-12: 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2 \*Except\*  
 2-25,14-18: 2x6 SP DSS, 8-20: 2x4 SP No.3  
 WEBS 2x4 SP No.3 \*Except\*  
 9-19: 2x10 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 1-6-15 oc purlins, except  
 2-0-0 oc purlins (3-5-2 max.): 7-9.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 2-2-0 oc bracing: 24-25.  
 WEBS 1 Row at midpt 8-21  
 1 Row at midpt 4-24, 6-22, 8-22  
 JOINTS 1 Brace at Jt(s): 26

**REACTIONS.** (size) 2=0-3-8, 17=0-3-8, 14=0-3-8  
 Max Horz 2=149(LC 16)  
 Max Uplift 2=90(LC 16), 17=94(LC 17)  
 Max Grav 2=1721(LC 2), 17=1399(LC 46), 14=1099(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5542/355, 3-4=-5401/279, 4-6=-3422/180, 6-7=-2482/189, 7-8=-2167/204,  
 8-9=-2224/182, 9-10=-1922/123, 10-11=-1963/139, 11-13=-1652/106, 13-14=-1788/36  
 BOT CHORD 2-25=-416/4961, 24-25=-267/4728, 22-24=-73/2999, 21-22=0/2239, 8-21=-344/131,  
 17-19=0/1607, 16-17=0/1607, 14-16=0/1510  
 WEBS 4-25=-50/1308, 4-24=-1852/208, 6-24=-3/809, 6-22=-1240/194, 7-22=0/807,  
 8-22=-296/183, 19-21=0/2032, 9-21=0/1780, 19-26=-1298/19, 9-26=-1265/42,  
 11-17=-711/201, 11-16=-346/113

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 20-0-0, Exterior(2) 20-0-0 to 24-2-15, Interior(1) 24-2-15 to 28-0-0, Exterior(2) 28-0-0 to 32-2-15, Interior(1) 32-2-15 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.
  - Ceiling dead load (5.0 psf) on member(s). 10-11, 10-26
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 17-19



January 12, 2021

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/TPI 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_B_VO	Truss T5A	Truss Type ROOF TRUSS	Qty 3	Ply 1	KB Home 150.1910.B Volume with gable I44316326 Job Reference (optional)
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:27 2021 Page 2  
ID:VMD62rz1yiHD\_OqRtbnrlFztQ8K-6sboA6d23mROLTalsUWohNGm3fdgKZ0dNp4zw8w6

**NOTES-**

- 11) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 17. This connection is for uplift only and does not consider lateral forces.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 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.**

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_B_VO	Truss T6	Truss Type PIGGYBACK BASE	Qty 5	Ply 1	KB Home 150.1910.B Volume with gable	144316327
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:29 2021 Page 1

ID:VMD62rz1yIHd\_OqRtbnrIFztQ8K-2FiYaoelbNh6amkhzjwGZxt4a4W279Ld1K6Uuzzw8w4

-0-10-8	6-9-14	13-4-15	20-0-0	28-0-0	34-7-1	40-0-0	42-4-4	48-0-0	48-10-8
0-10-8	6-9-14	6-7-1	6-7-1	8-0-0	6-7-1	5-4-15	2-4-4	5-7-12	0-10-8

Scale = 1:83.2

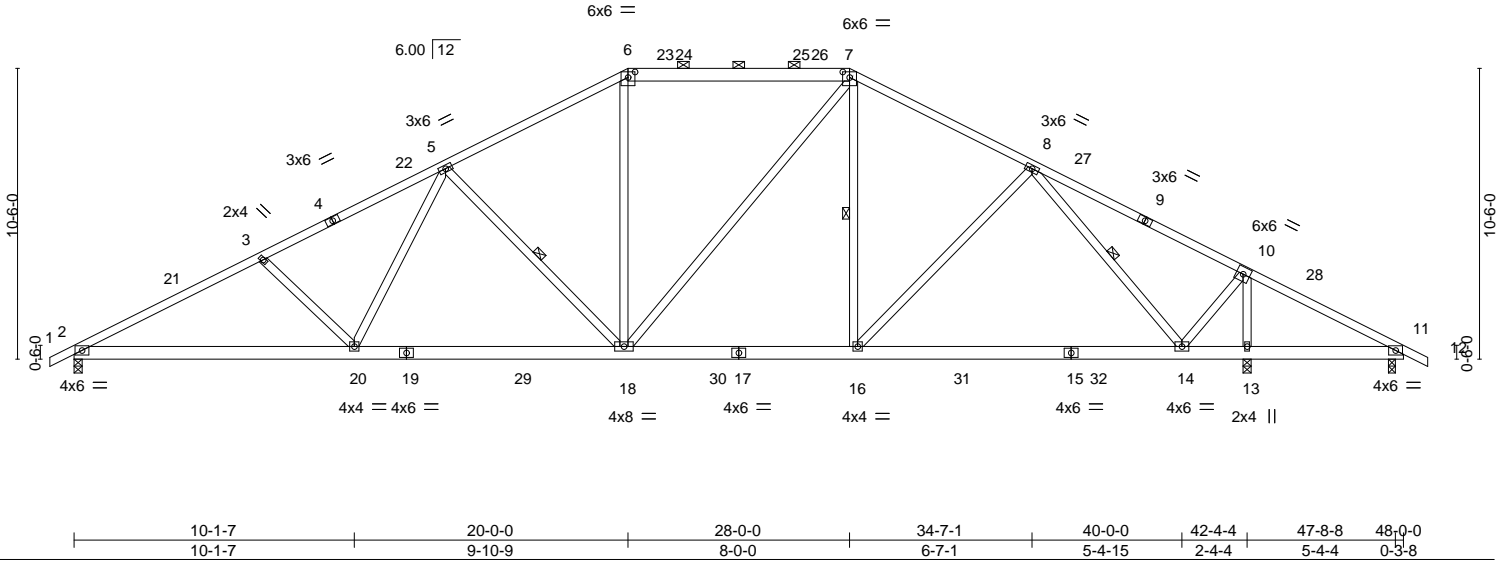


Plate Offsets (X,Y)--	[6:0-3-0,0-2-7], [7:0-3-0,0-2-7]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.76	Vert(LL) -0.18	18-20	>999	240	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.69	Vert(CT) -0.34	18-20	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.77	Horz(CT) 0.08	13	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2015/TPI2014						Weight: 314 lb	FT = 20%

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

**REACTIONS.** (size) 2=0-3-8, 11=0-3-0, 13=(0-3-8 + H10A Simpson Strong-Tie) (req. 0-3-12)  
 Max Horz 2=148(LC 16)  
 Max Uplift 2=-102(LC 16), 11=-251(LC 56), 13=-75(LC 17)  
 Max Grav 2=1695(LC 2), 11=26(LC 16), 13=2410(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3041/239, 3-5=-2781/240, 5-6=-2011/274, 6-7=-1726/287, 7-8=-1801/251,  
 8-10=-606/82, 10-11=-66/867  
 BOT CHORD 2-20=-226/2615, 18-20=-98/2186, 16-18=0/1538, 14-16=-36/1354, 13-14=-697/99,  
 11-13=-697/99  
 WEBS 3-20=-325/180, 5-20=-3/566, 5-18=-769/194, 6-18=0/547, 7-18=-102/464, 7-16=-56/292,  
 8-16=0/400, 10-13=-2397/146, 8-14=-1468/189, 10-14=-8/1851

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-11-2, Interior(1) 3-11-2 to 20-0-0, Exterior(2) 20-0-0 to 26-9-7, Interior(1) 26-9-7 to 28-0-0, Exterior(2) 28-0-0 to 34-7-1, Interior(1) 34-7-1 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.
  - H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. 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.

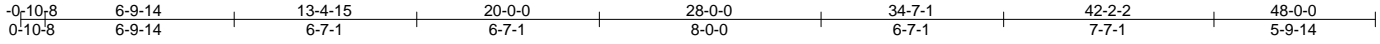


Job 150_1910_B_VO	Truss T7	Truss Type Piggyback Base	Qty 7	Ply 1	KB Home 150.1910.B Volume with gable	144316328
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:31 2021 Page 1

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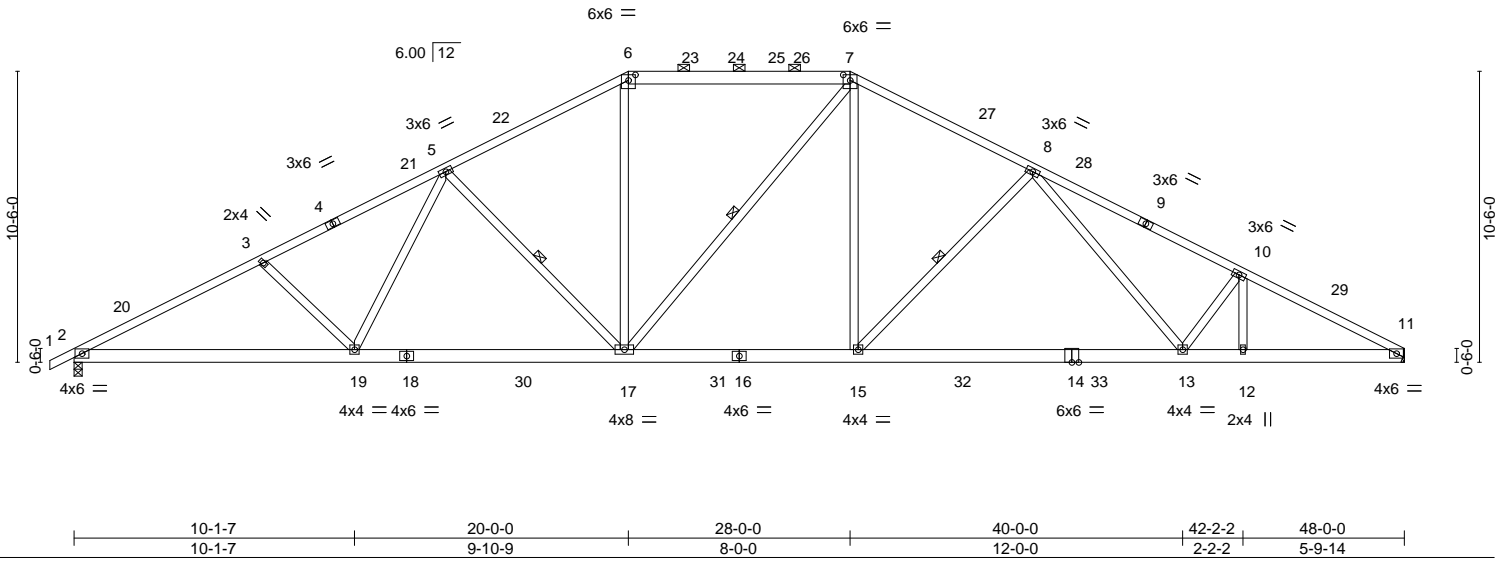


Plate Offsets (X,Y)-- [6:0-3-0,0-2-7], [7:0-3-0,0-2-7]

<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 0.81	Vert(LL) -0.29	13-15	>999	240	MT20	197/144
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.88	Vert(CT) -0.58	13-15	>992	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.37	Horz(CT) 0.14	11	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2015/TPI2014						Weight: 312 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 *Except* 6-7: 2x6 SP No.2, 1-4: 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-11-2 max.): 6-7.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 7-17: 2x4 SP No.2 or 2x4 SPF No.2	WEBS 1 Row at midpt 5-17, 7-17, 8-15

**REACTIONS.** (size) 2=0-3-8, 11=Mechanical  
 Max Horz 2=153(LC 16)  
 Max Uplift 2=-99(LC 16), 11=-83(LC 17)  
 Max Grav 2=1974(LC 2), 11=1911(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3633/230, 3-5=-3385/231, 5-6=-2632/270, 6-7=-2278/282, 7-8=-2681/267,  
 8-10=-3645/246, 10-11=-3739/231  
 BOT CHORD 2-19=-224/3139, 17-19=-97/2733, 15-17=0/2318, 13-15=-90/2769, 12-13=-143/3255,  
 11-12=-143/3255  
 WEBS 3-19=-314/180, 5-19=-3/555, 5-17=-757/195, 6-17=0/814, 7-15=-34/896, 8-15=-748/219,  
 8-13=-24/679, 10-13=-289/193

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vas=95mph; 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 20-0-0, Exterior(2) 20-0-0 to 24-2-15, Interior(1) 24-2-15 to 28-0-0, Exterior(2) 28-0-0 to 32-2-15, Interior(1) 32-2-15 to 47-11-4 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) 11.
  - One H2.5A Simpson Strong-Tie 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.



January 12, 2021

**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

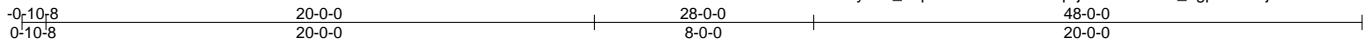


818 Soundside Road  
 Edenton, NC 27932

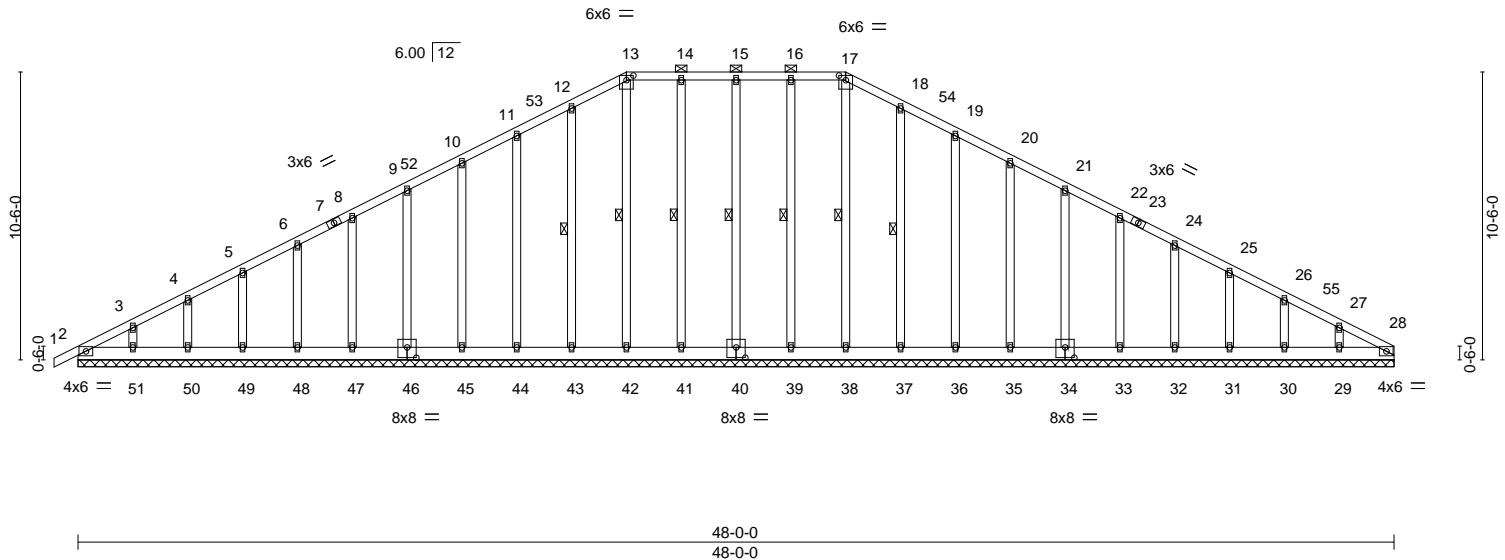
Job 150_1910_B_VO	Truss T7E	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	KB Home 150.1910.B Volume with gable	144316329
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:35 2021 Page 1  
ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-tP4qrrj3BDRFlhBrK\_1gpC7FvXjuX?iVPGZo5dzw8w\_



Scale = 1:84.0



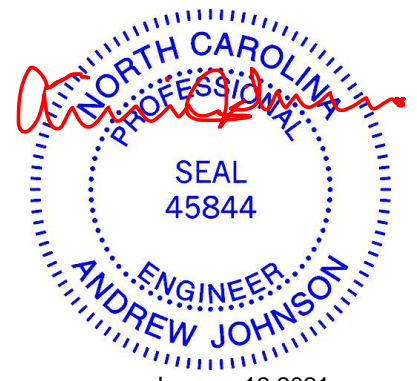
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.06	in (loc)	l/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.03	Vert(LL)	-0.00	1	n/r	120	
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Vert(CT)	-0.00	1	n/r	120	
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S		Horz(CT)	0.01	28	n/a	n/a	
BCDL	10.0									Weight: 393 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
BOT CHORD	2x6 SP No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 13-17.
OTHERS	2x4 SP No.3	WEBS	Rigid ceiling directly applied or 10-0-0 oc bracing.
			1 Row at midpt 17-38, 16-39, 15-40, 14-41, 13-42, 12-43, 18-37

**REACTIONS.** All bearings 48-0-0.  
 (lb) - Max Horz 2=153(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 50, 51, 37, 36, 35, 34, 33, 32, 31, 30, 29  
 Max Grav All reactions 250 lb or less at joint(s) 2, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 12-13=-94/254, 17-18=-94/256

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 20-0-0, Corner(3) 20-0-0 to 23-0-0, Exterior(2) 23-0-0 to 28-0-0, Corner(3) 28-0-0 to 31-0-0, Exterior(2) 31-0-0 to 48-0-0 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=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 2x4 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.
  - N/A



14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

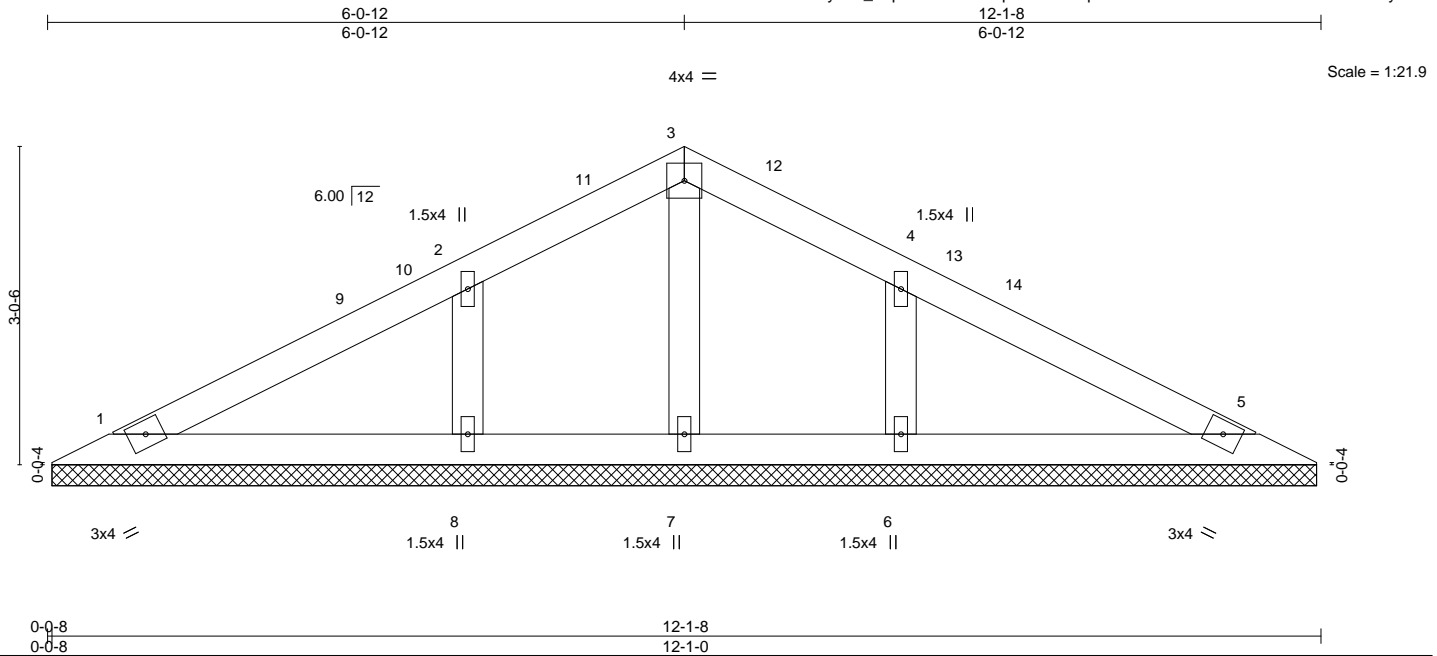
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job 150_1910_B_VO	Truss V1	Truss Type Valley	Qty 1	Ply 1	KB Home 150.1910.B Volume with gable Job Reference (optional)	144316330
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:37 2021 Page 1  
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.14	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.08	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-S	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 44 lb	FT = 20%

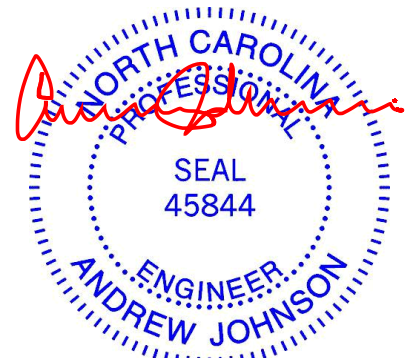
**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 OTHERS 2x4 SP No.3

**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 12-0-8.  
 (lb) - Max Horz 1=39(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=285(LC 2), 8=285(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=120mph Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-0-12, Exterior(2) 6-0-12 to 9-0-12, Interior(1) 9-0-12 to 11-5-15 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.
  - 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.



January 12, 2021

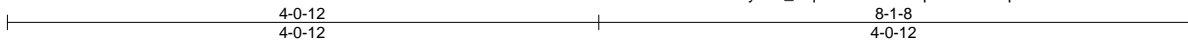
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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

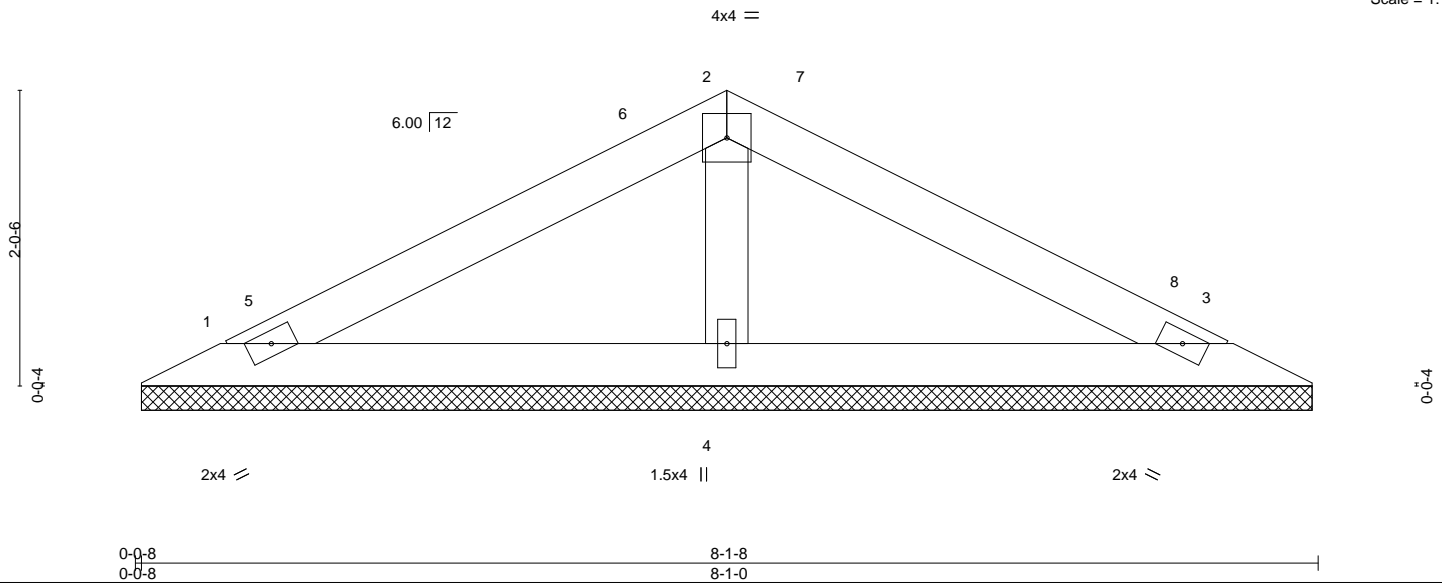
Job 150_1910_B_VO	Truss V2	Truss Type Valley	Qty 1	Ply 1	KB Home 150.1910.B Volume with gable Job Reference (optional)	144316331
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84 Components (Dunn), Dunn, NC - 28334,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 08:49:37 2021 Page 1  
ID:VMD62rz1yiHD\_OqRtbnrIFztQ8K-pnBaGXlJiqhzY?LDRP38udDXfILd?xiotZ2v9Vzw8vy



Scale = 1:15.8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.37	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.20	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: 26 lb	FT = 20%

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

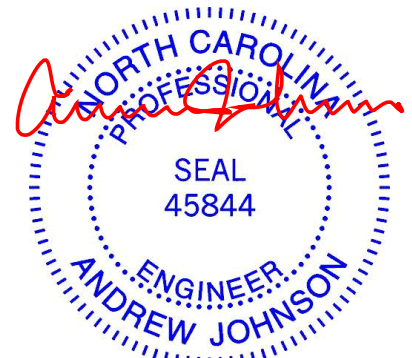
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=8-0-8, 3=8-0-8, 4=8-0-8  
Max Horz 1=25(LC 20)  
Max Uplift 1=-22(LC 16), 3=-26(LC 17)  
Max Grav 1=139(LC 2), 3=139(LC 2), 4=272(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=120mph Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-0-12, Exterior(2) 4-0-12 to 7-0-12, Interior(1) 7-0-12 to 7-5-15 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.
- 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.



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**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



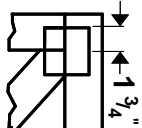
818 Soundside Road  
Edenton, NC 27932



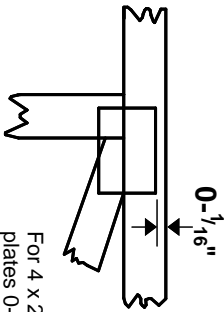


# Symbols

## 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

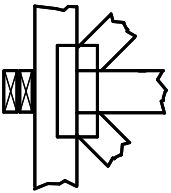
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



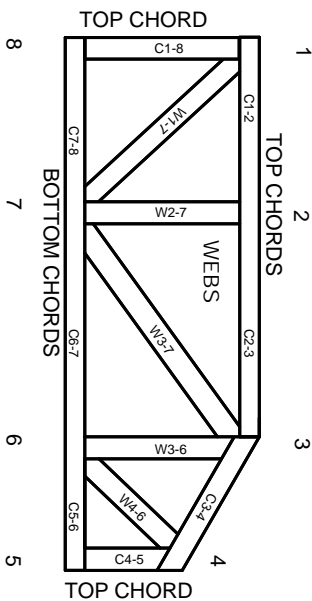
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### 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 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 Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.