

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 24818-24818A
KB Home 238.2338.B

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: I43618186 thru I43618199

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

North Carolina COA: C-0844



November 13, 2020

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 24818-24818A	Truss A	Truss Type ROOF TRUSS	Qty 3	Ply 1	KB Home 238.2338.B	143618186
---------------------	------------	--------------------------	----------	----------	--------------------	-----------

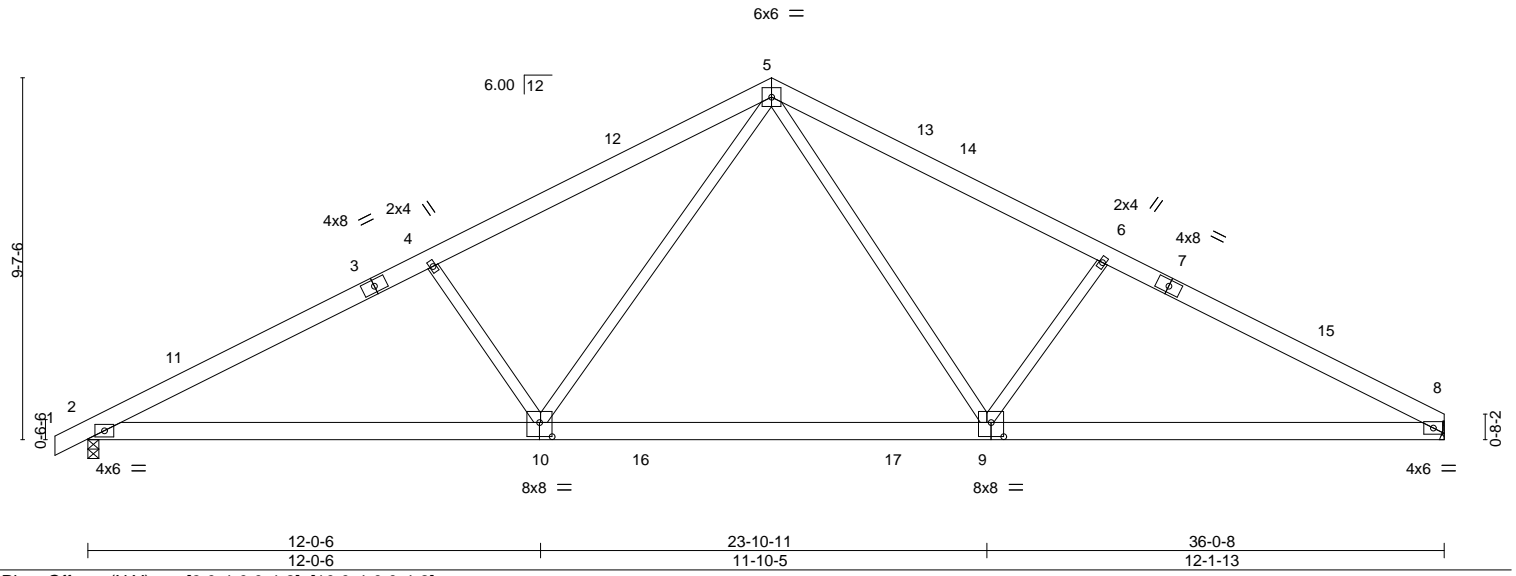
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:18 2020 Page 1

ID:byj??x6A9z5_viqm_kAqhrzC2Gy_1i?knsL5Hv9?vJKD9yHGbs5TFNL?sSiFMbugGyJfXx



Scale = 1:61.2



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	2-0-0	2-0-0	TC	0.48	in	(loc)	l/defl	L/d	MT20	244/190		
Snow (Pf/Pg)	11.6/15.0	Plate Grip DOL	1.15	BC	0.75	Vert(LL)	-0.28	9-10	>999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.37	Vert(CT)	-0.40	9-10	>999	180			
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-S		Horz(CT)	0.07	8	n/a	n/a			
BCDL	10.0	Code IRC2015/TPI2014											
											Weight: 228 lb	FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-11-6 oc purlins.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS. (size) 2=0-3-8, 8=Mechanical
 Max Horz 2=129(LC 16)
 Max Uplift 2=-53(LC 16), 8=-37(LC 17)
 Max Grav 2=1495(LC 2), 8=1432(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-2527/102, 4-5=-2249/131, 5-6=-2193/140, 6-8=-2481/115
 BOT CHORD 2-10=-123/2180, 9-10=0/1419, 8-9=-11/2128
 WEBS 4-10=-546/235, 5-10=-62/898, 5-9=-53/861, 6-9=-524/237

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-8-12, Interior(1) 2-8-12 to 18-2-0, Exterior(2) 18-2-0 to 21-9-4, Interior(1) 21-9-4 to 35-11-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-10; Pr=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, 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) 8.
- 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.
- ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



November 13, 2020

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

Job	Truss	Truss Type	Qty	Ply	KB Home 238.2338.B	143618187
24818-24818A	A1	ROOF TRUSS	6	1		

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

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:20 2020 Page 1

ID:byj?x6A9z5_viqm_kAqhrzC2Gy-xPqI9Subdu9tECTjKa_lMcyPm314Tmf?ig4?k9yJfXv



Scale = 1:72.2

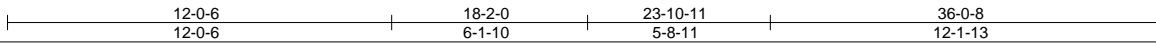
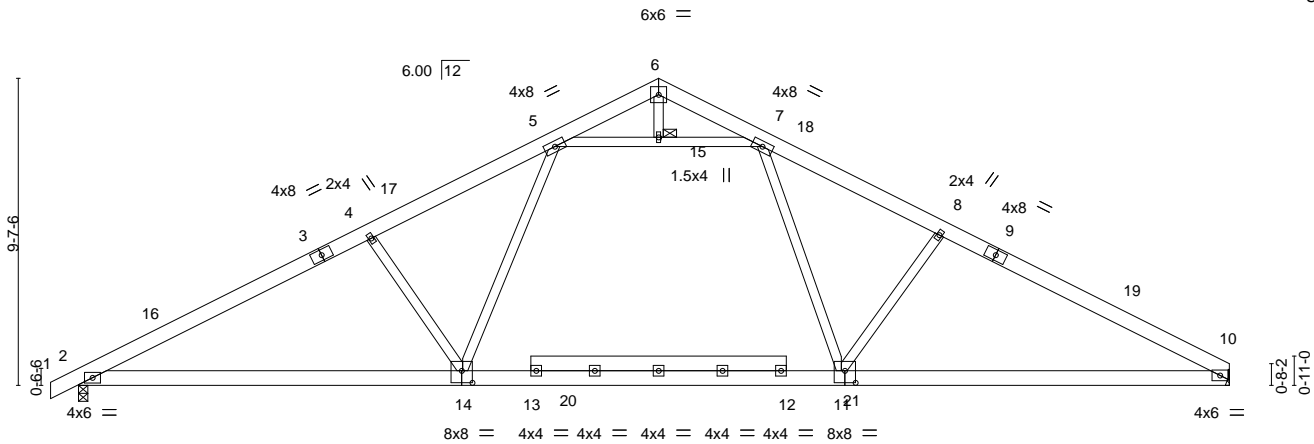


Plate Offsets (X,Y)-- [11:0-4-0,0-4-8], [14:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.63	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.80	Vert(LL) -0.25 2-14 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.33	Vert(CT) -0.43 10-11 >994 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.07 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 250 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	JOINTS 1 Brace at Jt(s): 15

REACTIONS. (size) 2=0-3-8, 10=Mechanical
 Max Horz 2=129(LC 20)
 Max Uplift 2=-53(LC 16), 10=-37(LC 17)
 Max Grav 2=1495(LC 2), 10=1432(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-2502/93, 4-5=-2262/109, 5-6=-350/78, 6-7=-351/82, 7-8=-2210/124, 8-10=-2459/112
 BOT CHORD 2-14=-110/2152, 11-14=0/1684, 10-11=-7/2103
 WEBS 4-14=-551/234, 5-14=-37/787, 7-11=-32/763, 8-11=-534/236, 5-15=-1436/94, 7-15=-1436/94

- 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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-8-12, Interior(1) 2-8-12 to 18-2-0, Exterior(2) 18-2-0 to 21-6-4, Interior(1) 21-6-4 to 35-11-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-10; Pr=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, 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) 10.
 - 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.
 - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



November 13, 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



Job	Truss	Truss Type	Qty	Ply	KB Home 238.2338.B	143618188
24818-24818A	A2	Common	9	1		

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

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:22 2020 Page 1

ID:byj??x6A9z5_viqm_kAqhrzC2Gy-toxWa8vr8VPbUWd5S?0DR11nStkCvgSIA_Z6p2yJfXt

0-10-8	9-2-0	18-2-0	27-2-0	36-4-0	37-2-8
0-10-8	9-2-0	9-0-0	9-0-0	9-2-0	0-10-8

Scale = 1:61.8

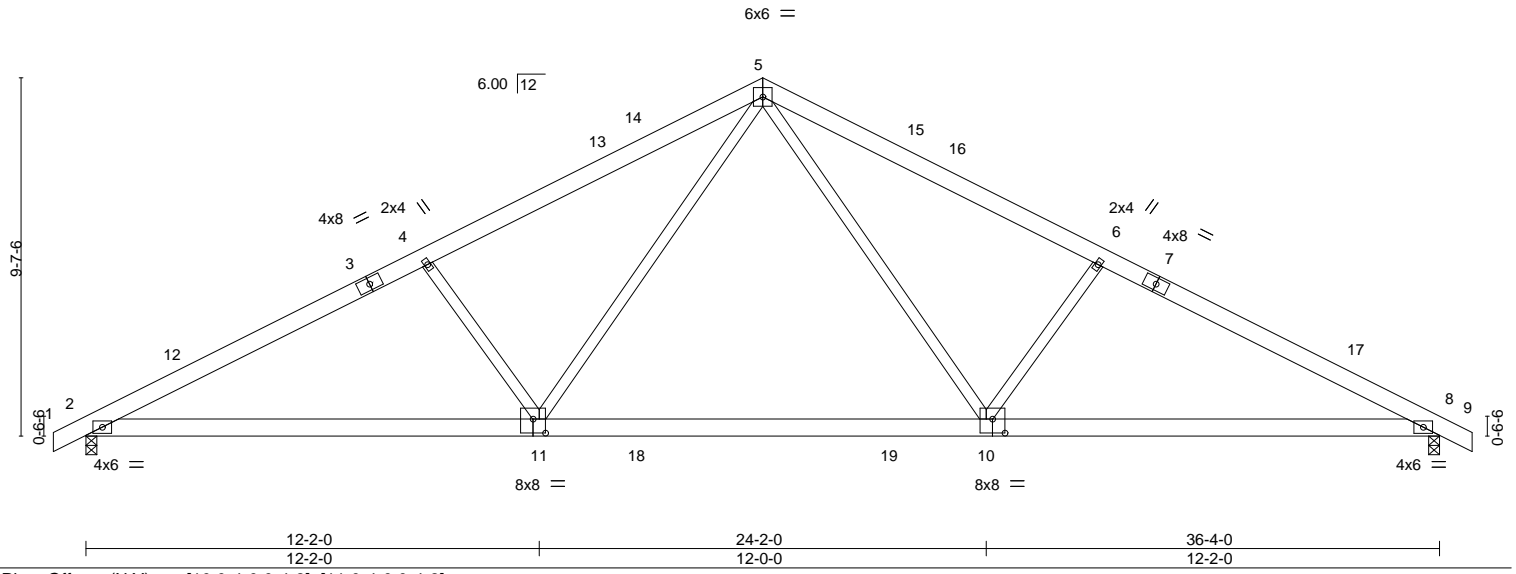


Plate Offsets (X,Y)--	[10:0-4-0,0-4-8], [11:0-4-0,0-4-8]
-----------------------	------------------------------------

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.49	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.76	Vert(LL) -0.29 10-11 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.37	Vert(CT) -0.42 10-11 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.07 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 232 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-14 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=124(LC 16)
 Max Uplift 2=-53(LC 16), 8=-53(LC 17)
 Max Grav 2=1503(LC 2), 8=1503(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-2541/102, 4-5=-2252/128, 5-6=-2252/128, 6-8=-2541/102
 BOT CHORD 2-11=-118/2194, 10-11=0/1433, 8-10=-1/2194
 WEBS 5-10=-55/895, 6-10=-548/236, 5-11=-55/895, 4-11=-548/236

- 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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-9-2, Interior(1) 2-9-2 to 18-2-0, Exterior(2) 18-2-0 to 21-9-10, Interior(1) 21-9-10 to 37-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-10; Pr=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, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie 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.



Job 24818-24818A	Truss A2E	Truss Type Common Supported Gable	Qty 2	Ply 1	KB Home 238.2338.B	143618189
---------------------	--------------	--------------------------------------	----------	----------	--------------------	-----------

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

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:26 2020 Page 1

ID:byj??x6A9z5_viqm_kAqhrzC2Gy-IZB1QWYMcKv0y7wshq59btCa2UHQtYlu4cXJypJfXp

-0-10-8 18-2-0 36-4-0 37-2-8
0-10-8 18-2-0 18-2-0 0-10-8

Scale = 1:69.1

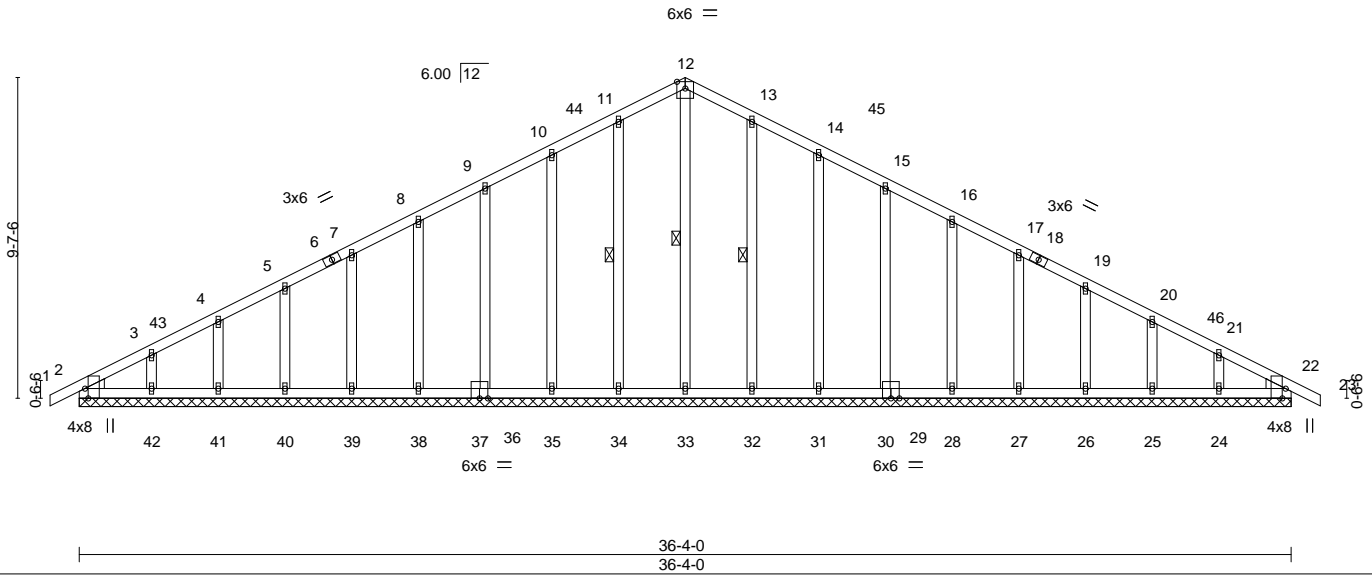


Plate Offsets (X, Y)--	[2:0-3-8, Edge], [22:0-3-8, Edge]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/def L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) -0.00 22 n/r 120	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00 22 n/r 120		
TCDL 10.0	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.01 22 n/a n/a		
BCLL 0.0 *	Code IRC2015/TPI2014	Matrix-S		Weight: 242 lb	FT = 20%
BCDL 10.0					

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	WEBS 1 Row at midpt 12-33, 11-34, 13-32
WEDGE	
Left: 2x4 SP No.3, Right: 2x4 SP No.3	

REACTIONS. All bearings 36-4-0.
 (lb) - Max Horz 2=124(LC 20)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 35, 36, 38, 39, 40, 41, 42, 32, 31, 30, 28, 27, 26, 25, 24
 Max Grav All reactions 250 lb or less at joint(s) 2, 33, 34, 35, 36, 38, 39, 40, 41, 42, 32, 31, 30, 28, 27, 26, 25, 24, 22

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

NOTES-

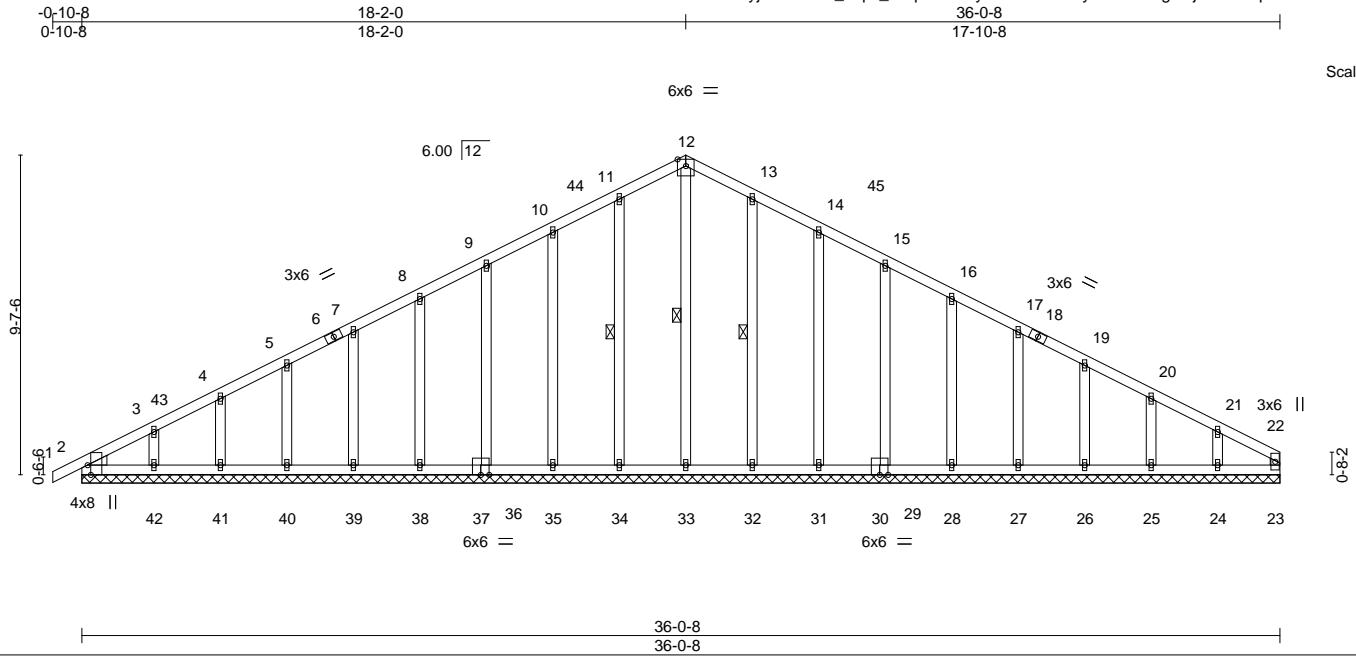
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-9-2, Exterior(2) 2-9-2 to 18-2-0, Corner(3) 18-2-0 to 21-9-10, Exterior(2) 21-9-10 to 37-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- 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
- 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.



Job 24818-24818A	Truss AE	Truss Type Common Supported Gable	Qty 2	Ply 1	KB Home 238.2338.B	143618190
---------------------	-------------	--------------------------------------	----------	----------	--------------------	-----------

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

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:30 2020 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-eKQXGt?sGyPSRIEewg95IjME?5e2pMIT?EVX5ayJfXI



Scale = 1:69.3

Plate Offsets (X,Y)-- [2:0-3-8,Edge]	36-0-8	36-0-8			
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) -0.00 1 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.12	Vert(CT) 0.00 1 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 23 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 239 lb	FT = 20%

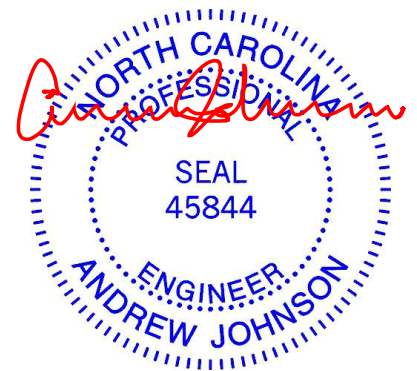
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 12-33, 11-34, 13-32
OTHERS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

REACTIONS. All bearings 36-0-8.
 (lb) - Max Horz 2=128(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 35, 36, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25, 24
 Max Grav All reactions 250 lb or less at joint(s) 23, 2, 33, 34, 35, 36, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 11-12=-96/254

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-8-12, Exterior(2) 2-8-12 to 18-2-0, Corner(3) 18-2-0 to 21-9-4, Exterior(2) 21-9-4 to 35-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



November 13, 2020

Job 24818-24818A	Truss BE	Truss Type Common Supported Gable	Qty 1	Ply 1	KB Home 238.2338.B	143618191
---------------------	-------------	--------------------------------------	----------	----------	--------------------	-----------

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

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:32 2020 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-ajYlgZ17oafAg2N015CZr8SbjvKsHGAmTY_e9SyJfXj

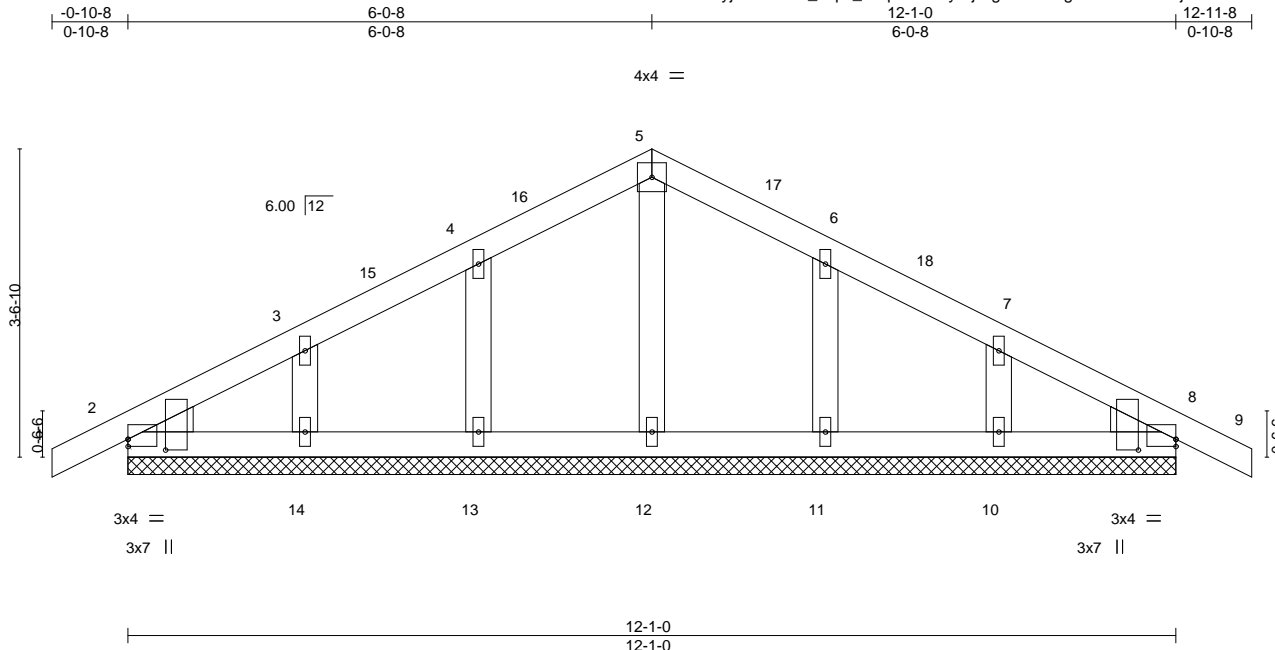


Plate Offsets (X,Y)--	[2:0-0-0,0-1-0], [2:0-1-8,0-5-3], [8:0-0-0,0-1-0], [8:0-1-8,0-5-3]
-----------------------	--

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
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 0.03	Vert(LL) -0.00 8 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Vert(CT) -0.00 8 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 56 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	
WEDGE	
Left: 2x4 SP No.3 , Right: 2x4 SP No.3	

REACTIONS. All bearings 12-1-0.
 (lb) - Max Horz 2=45(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-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCCL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-0-8, Exterior(2) 2-0-8 to 6-0-8, Corner(3) 6-0-8 to 9-0-8, Exterior(2) 9-0-8 to 12-11-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) 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.
 - 4) 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
 - 5) Unbalanced snow loads have been considered for this design.
 - 6) 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.
 - 7) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 8) Gable requires continuous bottom chord bearing.
 - 9) Gable studs spaced at 2-0-0 oc.
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 12) n/a
 - 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 8.



Job 24818-24818A	Truss CE	Truss Type Common Structural Gable	Qty 1	Ply 1	KB Home 238.2338.B	143618192
---------------------	-------------	---------------------------------------	----------	----------	--------------------	-----------

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

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:35 2020 Page 1

ID:byj??x6A9z5_viqm_kAqhrzC2Gy-?IEQJb3?5V2IXW6biDIGSn41w6FSUVOC9WCImnyJfXg

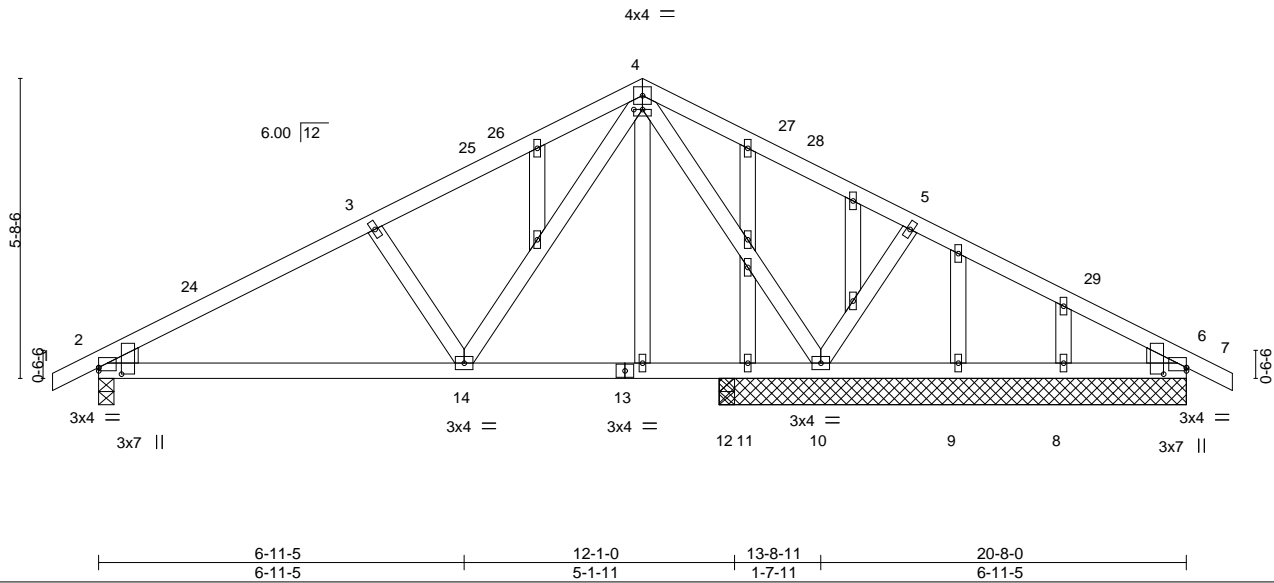


Plate Offsets (X,Y)--	[2:0-1-8,0-5-3], [2:0-0-0,0-0-12], [4:0-2-0,0-0-0], [6:Edge,0-0-12], [6:0-1-8,0-5-3]
-----------------------	--

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.37	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.42	Vert(LL) -0.06 2-14 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.52	Vert(CT) -0.13 2-14 >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: 122 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 6-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3, Right: 2x4 SP No.3	

REACTIONS. All bearings 8-10-8 except (jt=length) 2=0-3-8, 12=0-3-8.
 (lb) - Max Horz 2=-73(LC 21)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 6 except 11=-140(LC 7)
 Max Grav All reactions 250 lb or less at joint(s) 6, 9, 8, 12 except 2=549(LC 2), 10=864(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-673/59, 3-4=-519/76, 4-5=0/268
 BOT CHORD 2-14=-66/548
 WEBS 4-10=-644/56, 5-10=-315/136, 4-14=-39/453, 3-14=-293/132

- 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=30ft; 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 10-4-0, Exterior(2) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 21-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 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.



Job 24818-24818A	Truss CG	Truss Type COMMON GIRDER	Qty 1	Ply 3	KB Home 238.2338.B	143618193
---------------------	-------------	-----------------------------	----------	----------	--------------------	-----------

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

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:38 2020 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-PtvZxc5uNQqJQzrAOMJz4PhYIJGjhq7frURyN6yJfXd

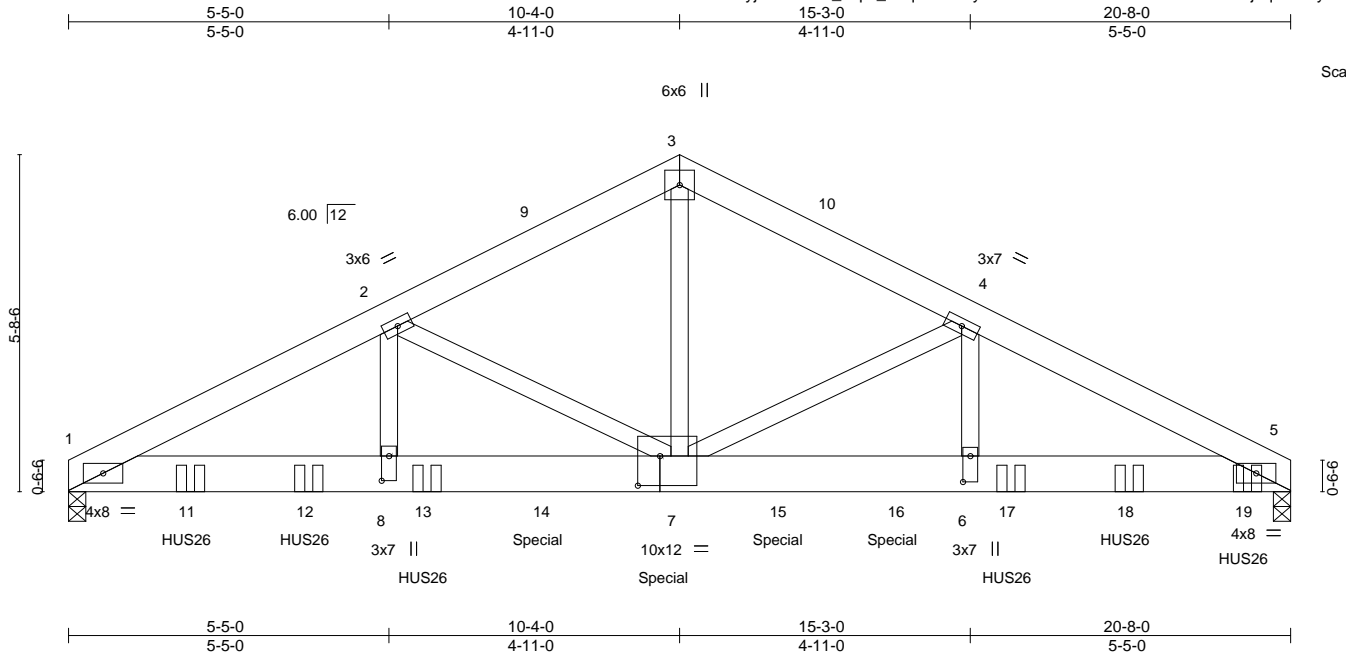


Plate Offsets (X,Y)-- [6:0-5-4,0-1-8], [7:0-4-8,0-6-0], [8:0-5-0,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.34	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.45	Vert(LL) -0.09 6-7 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.65	Vert(CT) -0.18 6-7 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.05 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 442 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP DSS
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 6-0-0 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. 0-3-14), 5=(0-3-8 + TBE4 Simpson Strong-Tie) (req. 0-4-7)
Max Horz 1=67(LC 41)
Max Uplift 1=252(LC 12), 5=299(LC 13)
Max Grav 1=7381(LC 2), 5=8448(LC 2)

PLY-TO-PLY CONNECTION REQUIRES THAT AN APPROVED FACE MOUNT HANGER (SPECIFIED BY OTHERS) IS REQUIRED FOR LOADS REPORTED IN NOTES. FACE MOUNT HANGER SHALL BE ATTACHED WITH A MINIMUM OF 0.148"x 3" NAILS PER HANGER MANUFACTURER SPECIFICATIONS.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-13256/453, 2-3=-9354/347, 3-4=-9354/347, 4-5=-13533/466
BOT CHORD 1-8=-421/11759, 7-8=-421/11759, 6-7=-365/12009, 5-6=-365/12009
WEBS 3-7=-240/7891, 4-7=-4186/228, 4-6=-70/3723, 2-7=-3901/215, 2-8=-59/3465

- NOTES-**
- 1) n/a
 - 2) 3-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 - 4 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - 3) 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.
 - 4) Unbalanced roof live loads have been considered for this design.
 - 5) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 6) 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
 - 7) Unbalanced snow loads have been considered for this design.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * 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.
 - 10) 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.
 - 11) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 9-10-8 oc max. starting at 2-0-12 from the centerline to 12-4 to connect truss(es) to back face of bottom chord.



November 13, 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 ANS/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 24818-24818A	Truss CG	Truss Type COMMON GIRDER	Qty 1	Ply 3	KB Home 238.2338.B Job Reference (optional)	I43618193
---------------------	-------------	-----------------------------	----------	-----------------	--	-----------

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

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:38 2020 Page 2
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-PtvZxc5uNQqJOzrAOMJz4PhYIJGjhq7frURyN6yJfXd

NOTES-

- 12) Fill all nail holes where hanger is in contact with lumber.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1412 lb down and 57 lb up at 8-0-12, 1412 lb down and 57 lb up at 10-0-12, and 1412 lb down and 57 lb up at 12-0-12, and 1412 lb down and 57 lb up at 14-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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=-1110(B) 11=-1110(B) 12=-1110(B) 13=-1110(B) 14=-1110(B) 15=-1110(B) 16=-1110(B) 17=-1110(B) 18=-1110(B) 19=-1165(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/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



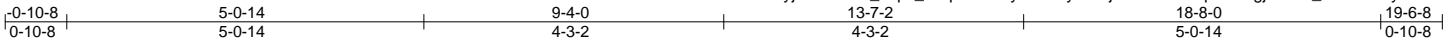
818 Soundside Road
Edenton, NC 27932

Job 24818-24818A	Truss D1	Truss Type Common	Qty 2	Ply 1	KB Home 238.2338.B	143618194
---------------------	-------------	----------------------	----------	----------	--------------------	-----------

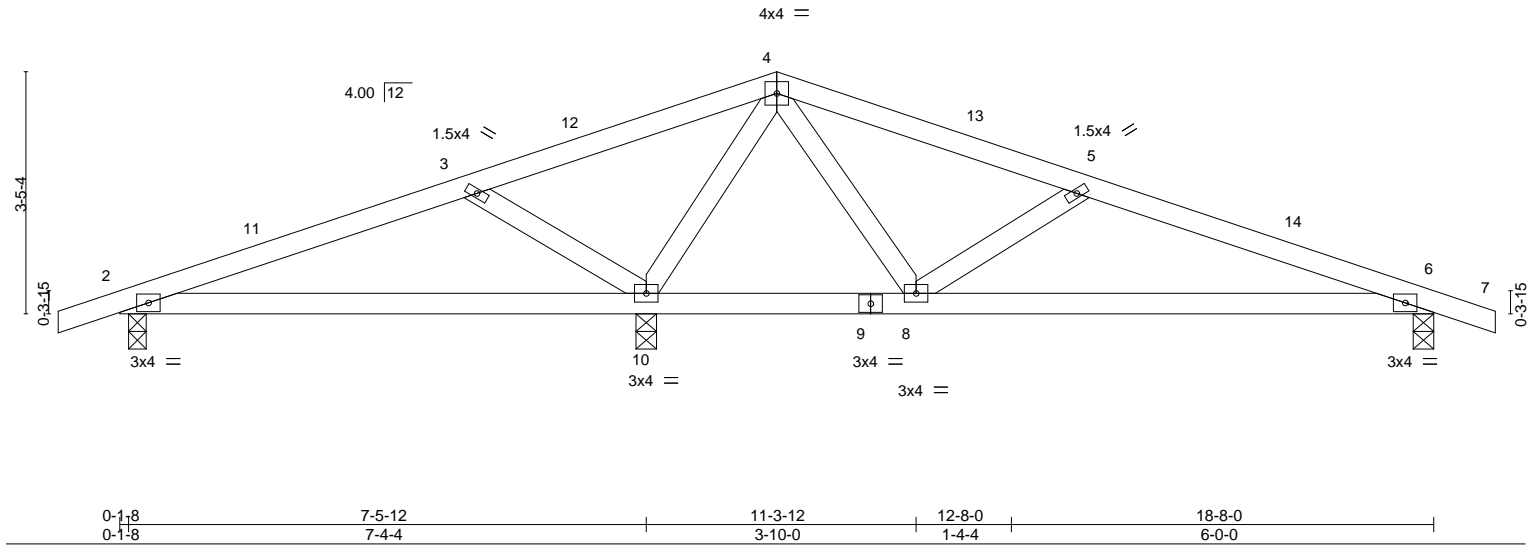
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:39 2020 Page 1

ID:bjy??x6A9z5_viqm_kAqhrzC2Gy-t3Tx9y6W8jYA07QMx3qCddEigjYQO_o48AVvYyJfXc



Scale = 1:32.7



0-1-8 0-1-8	7-5-12 7-4-4	11-3-12 3-10-0	12-8-0 1-4-4	18-8-0 6-0-0
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES
TCLL (roof) 20.0	2-0-0	TC 0.39	in (loc) l/defl L/d	MT20 197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.48	Vert(LL) -0.08 2-10 >999 240	
TCDL 10.0	Lumber DOL 1.15	WB 0.22	Vert(CT) -0.17 6-8 >764 180	
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 6 n/a n/a	Weight: 79 lb FT = 20%
BCDL 10.0	Code IRC2015/TP12014			

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 6-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 10=0-3-8, 6=0-3-8, 2=0-3-0
 Max Horz 2=44(LC 16)
 Max Uplift 10=-30(LC 12), 6=-58(LC 13), 2=-44(LC 12)
 Max Grav 10=959(LC 2), 6=427(LC 35), 2=263(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-4=-28/445, 4-5=-274/35, 5-6=-586/93
 BOT CHORD 6-8=-47/525
 WEBS 3-10=-402/129, 4-10=-714/58, 4-8=-5/386, 5-8=-378/125

- 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=30ft; 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 9-4-0, Exterior(2) 9-4-0 to 12-4-0, Interior(1) 12-4-0 to 19-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-10; Pr=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) 10, 6, and 2. This connection is for uplift only and does not consider lateral forces.

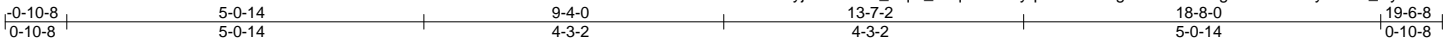


Job	Truss	Truss Type	Qty	Ply	KB Home 238.2338.B	143618195
24818-24818A	DE	Common Structural Gable	1	1		

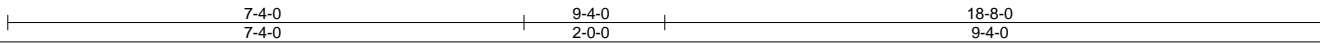
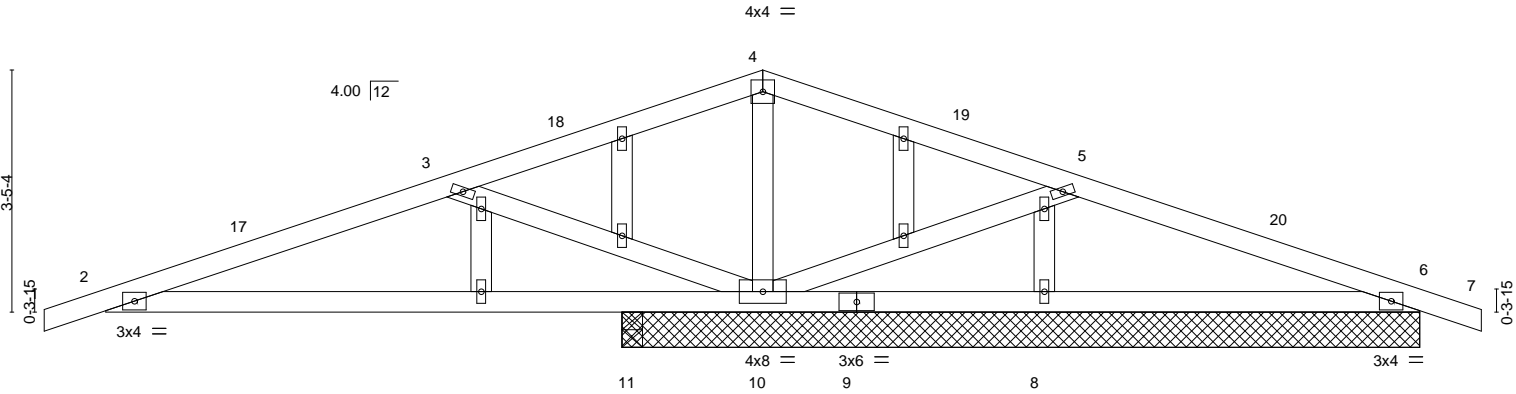
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:41 2020 Page 1

ID:byj??x6A9z5_viqm_kAqhrzC2Gy-pSbhZe8mgLouFRZl3Usgj2J?uXH3uly5XRfc_RyJfXa



Scale = 1:32.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.60	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.48	Vert(LL) -0.02 6-8 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.26	Vert(CT) -0.04 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: 86 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 7-9-1 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 5-10-10 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 11-4-0 except (jt=length) 11=0-3-8.
 (lb) - Max Horz 10=44(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 11 except 10=-297(LC 12), 6=-234(LC 34)
 Max Grav All reactions 250 lb or less at joint(s) 8, 6 except 10=1290(LC 2), 11=336(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-466/756, 3-4=-568/1246, 4-5=-575/1244, 5-6=-484/1049
 BOT CHORD 2-11=-662/468, 10-11=-662/468, 8-10=-973/472, 6-8=-973/472
 WEBS 4-10=-984/411, 5-10=-508/167, 3-10=-524/181

- 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=30ft; 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 9-4-0, Exterior(2) 9-4-0 to 12-4-0, Interior(1) 12-4-0 to 19-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 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.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10. This connection is for uplift only and does not consider lateral forces.
 - One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 11. This connection is for uplift only and does not consider lateral forces.

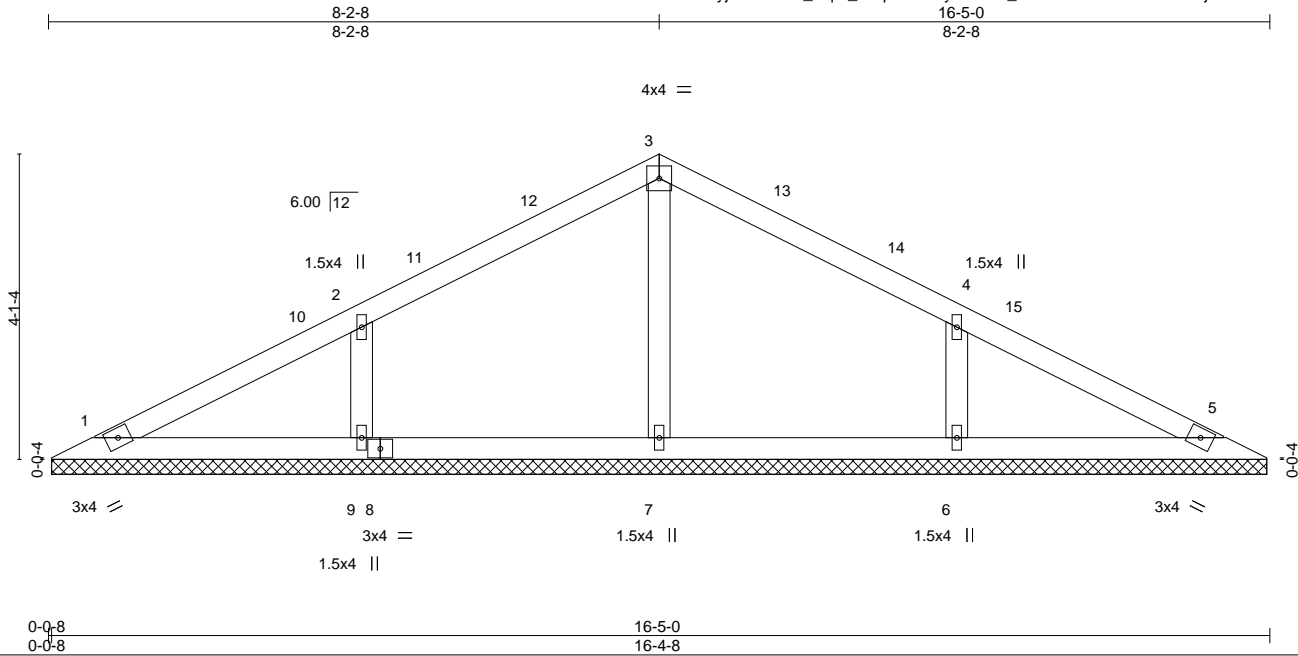


November 13, 2020

Job 24818-24818A	Truss V1	Truss Type Valley	Qty 1	Ply 1	KB Home 238.2338.B	143618196
---------------------	-------------	----------------------	----------	----------	--------------------	-----------

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

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:42 2020 Page 1
 ID:byj??x6A9z5_viqm_kAqhrzC2Gy-He94n_9ORewltb8xdCNvFFsGfxjvdoEEem5P9WtyJfXZ



Scale = 1:31.0

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	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: 59 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. All bearings 16-4-0.
 (lb) - Max Horz 1=50(LC 20)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=266(LC 2), 9=359(LC 33), 6=359(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-270/114, 4-6=-270/114

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; 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 8-2-8, Exterior(2) 8-2-8 to 11-2-8, Interior(1) 11-2-8 to 15-9-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-10; Pr=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.
 - One MTS12 Simpson Strong-Tie 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.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 6. This connection is for uplift only and does not consider lateral forces.

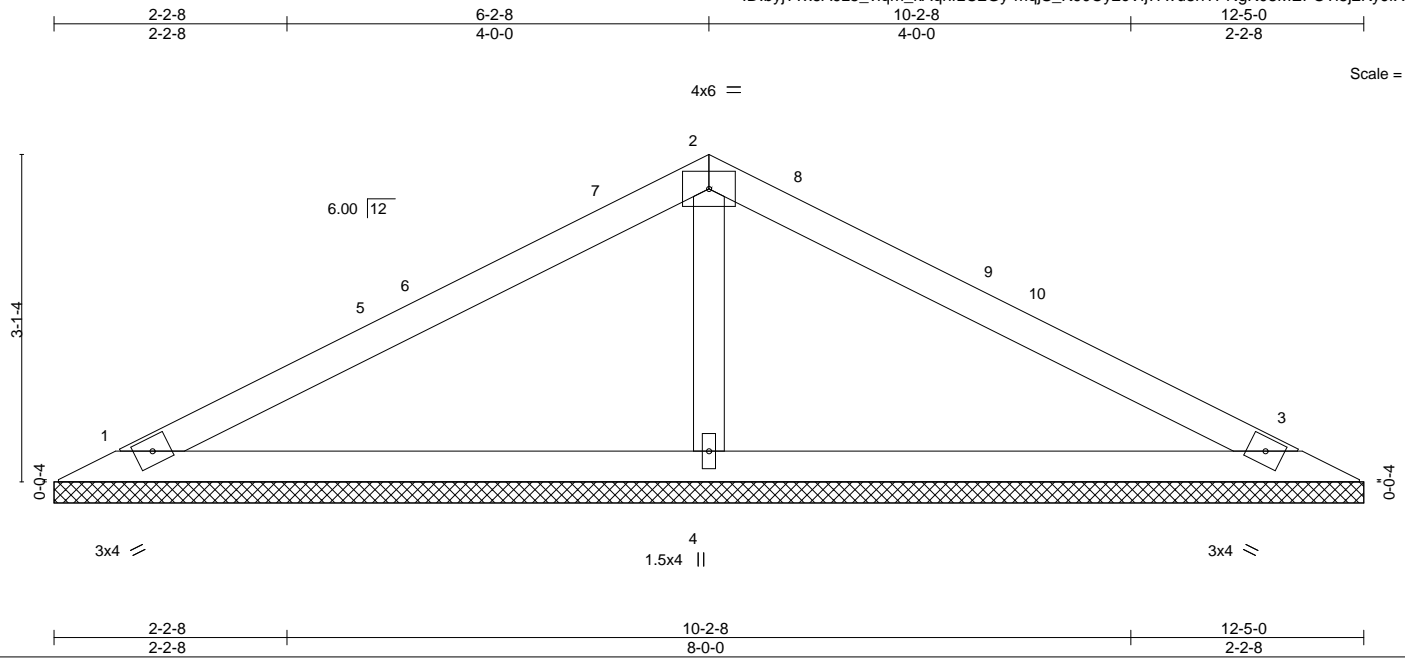


November 13, 2020

Job 24818-24818A	Truss V2	Truss Type GABLE	Qty 1	Ply 1	KB Home 238.2338.B	I43618197
---------------------	-------------	---------------------	----------	----------	--------------------	-----------

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

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:43 2020 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-mqjS_K90Cy2cVlj7Avu8nTPNgK08MEFO?I8j2KyJfXY



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.45	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.31	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a	Weight: 41 lb	FT = 20%
BCDL 10.0	Code IRC2015/TP12014				

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) 1=12-5-0, 3=12-5-0, 4=12-5-0
 Max Horz 1=37(LC 16)
 Max Uplift 1=-20(LC 16), 3=-27(LC 17)
 Max Grav 1=206(LC 33), 3=206(LC 34), 4=486(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-322/85

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=30ft; 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 6-2-8, Exterior(2) 6-2-8 to 9-2-8, Interior(1) 9-2-8 to 11-9-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=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.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

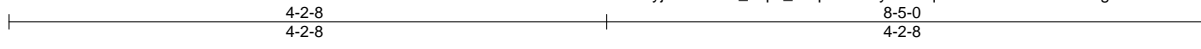


Job 24818-24818A	Truss V3	Truss Type Valley	Qty 1	Ply 1	KB Home 238.2338.B	I43618198
---------------------	-------------	----------------------	----------	----------	--------------------	-----------

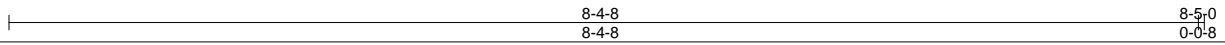
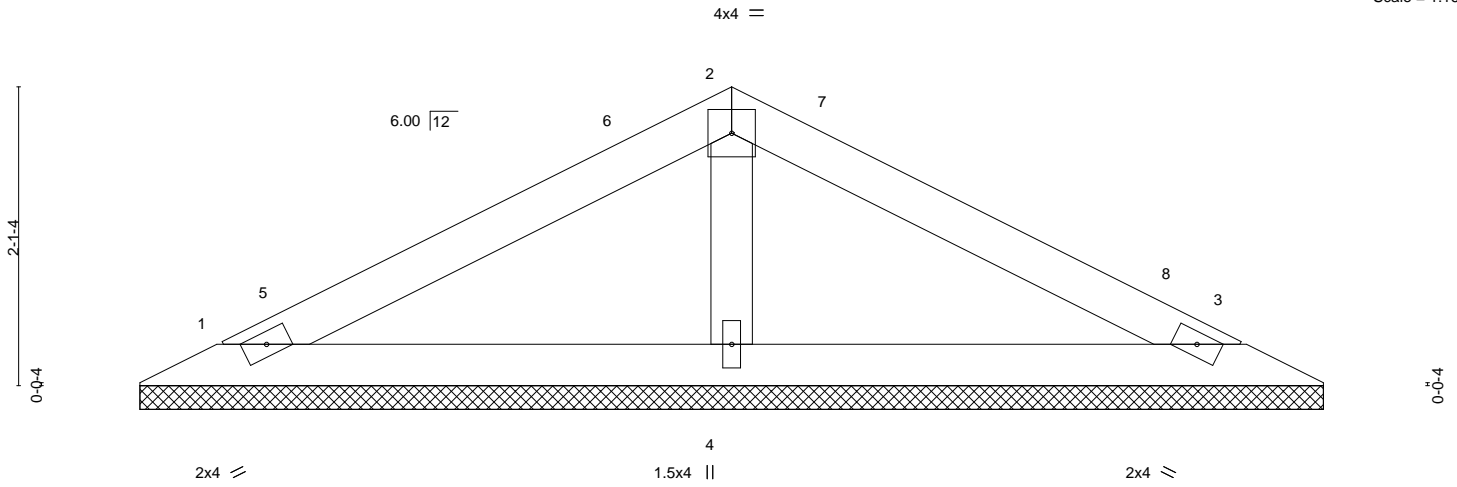
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:44 2020 Page 1

ID:byj??x6A9z5_viqm_kAqhrzC2Gy-E1GqCfAezGAT6vIKkcPNKgxY8kNn5i4XDPuGamyJfXX



Scale = 1:16.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
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: 27 lb	FT = 20%

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

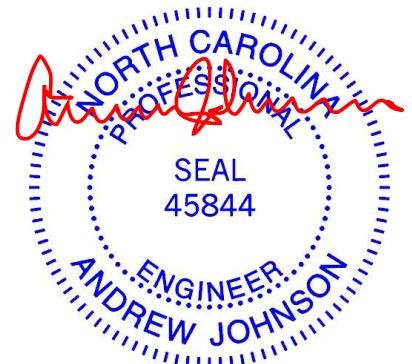
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=8-4-0, 3=8-4-0, 4=8-4-0
Max Horz 1=-23(LC 17)
Max Uplift 1=-17(LC 16), 3=-22(LC 17)
Max Grav 1=144(LC 2), 3=144(LC 2), 4=284(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=30ft; 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 4-2-8, Exterior(2) 4-2-8 to 7-2-8, Interior(1) 7-2-8 to 7-9-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=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.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.



November 13, 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 238.2338.B	143618199
24818-24818A	V4	Valley	1	1		

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

8.420 s Oct 9 2020 MiTek Industries, Inc. Fri Nov 13 07:56:45 2020 Page 1
 ID:byj??x6A9z5_viqm_kAqhrzC2Gy-iDqCP?BHkZIKk2tWIKxcsuUo88jDq9xhS3dq7CjJfXW

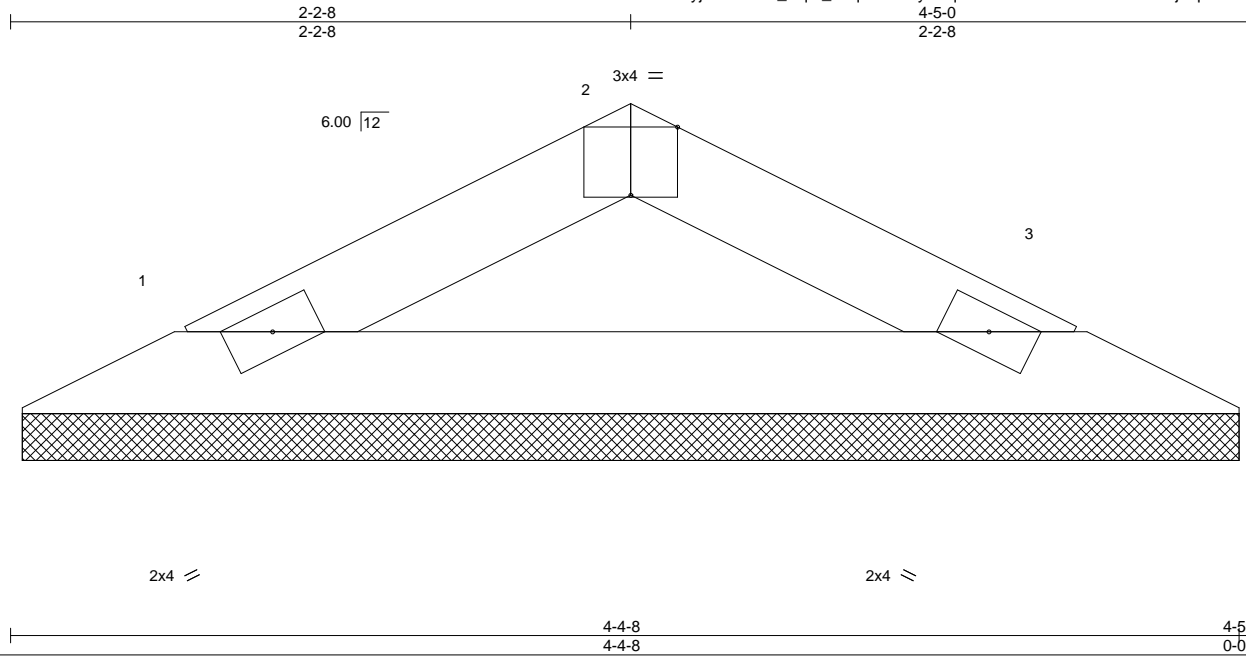


Plate Offsets (X,Y)-- [2:0-2-0,Edge]		4-4-8		4-5-0	
		4-4-8		0-0-8	

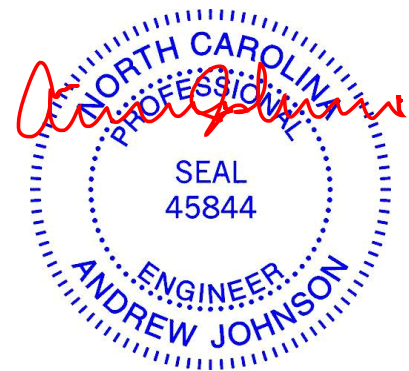
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P						Weight: 12 lb	FT = 20%
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.3	TOP CHORD	Structural wood sheathing directly applied or 4-5-0 oc purlins.
BOT CHORD	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-4-0, 3=4-4-0
 Max Horz 1=10(LC 20)
 Max Uplift 1=-3(LC 16), 3=-3(LC 17)
 Max Grav 1=126(LC 2), 3=126(LC 2)

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

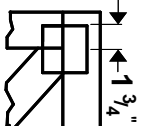
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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) Unbalanced snow loads have been considered for this design.
 - 5) Gable requires continuous bottom chord bearing.
 - 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) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.



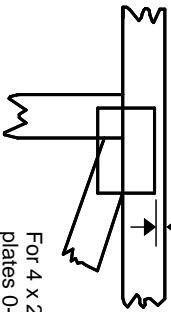
November 13, 2020

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.

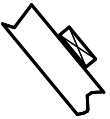
* Plate location details available in **MITek 20/20 software or upon request.**

PLATE SIZE

4 X 4

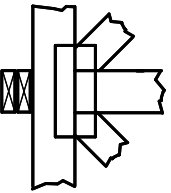
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



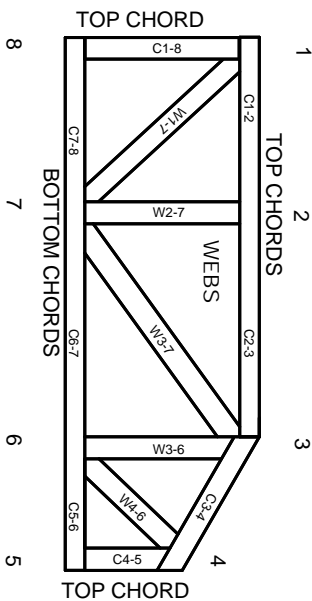
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: 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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

© 2012 MITteK® All Rights Reserved



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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.