ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 243_2939_B
KB Home 243.2939.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: I44459039 thru I44459066

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

North Carolina COA: C-0844

January 21,2021

Sevier, Scott

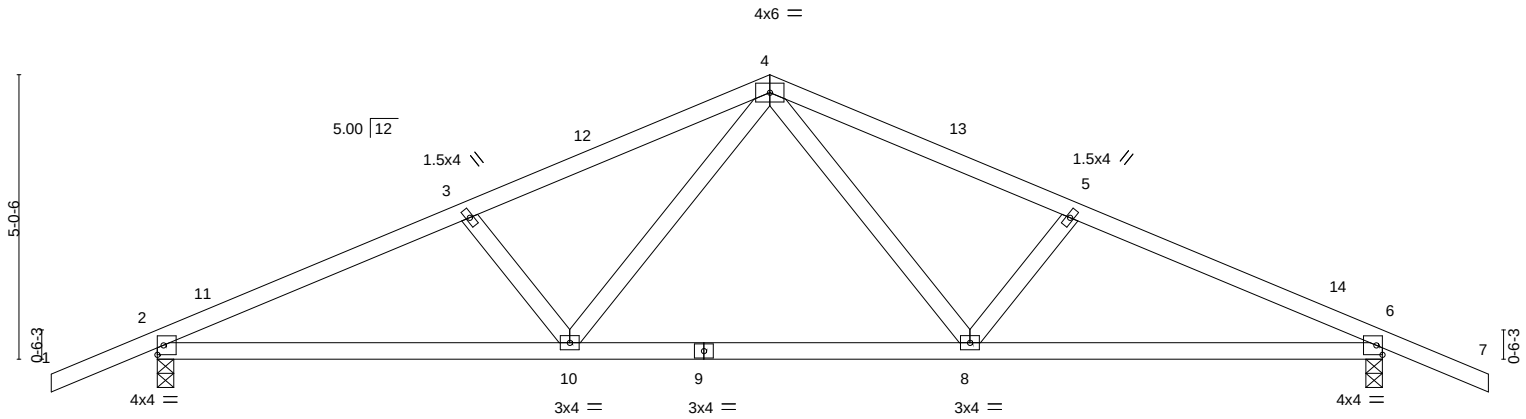
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	A1	Common	4	1	I44459039
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:34:13 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-2ppdq8szj0dRSWU82VycRjssffr0GyNqhKOlQlztS?8

-1-10-8	5-6-5	10-10-0	16-1-11	21-8-0	23-6-8
1-10-8	5-6-5	5-3-11	5-3-11	5-6-5	1-10-8

Scale = 1:40.7



7-3-9	14-4-7	21-8-0
7-3-9	7-0-15	7-3-9

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	0.36	Vert(LL)	-0.08	6-8	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.18	6-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.04	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 99 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 4-5-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-75(LC 17)
Max Uplift 2=-84(LC 16), 6=-84(LC 17)
Max Grav 2=976(LC 2), 6=976(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1579/99, 3-4=-1386/98, 4-5=-1386/98, 5-6=-1579/100
BOT CHORD 2-10=-97/1373, 8-10=0/949, 6-8=-33/1373
WEBS 4-8=-32/465, 5-8=-279/144, 4-10=-32/465, 3-10=-279/144

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 10-10-0, Exterior(2) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 23-6-8 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
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) 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.
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 H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.

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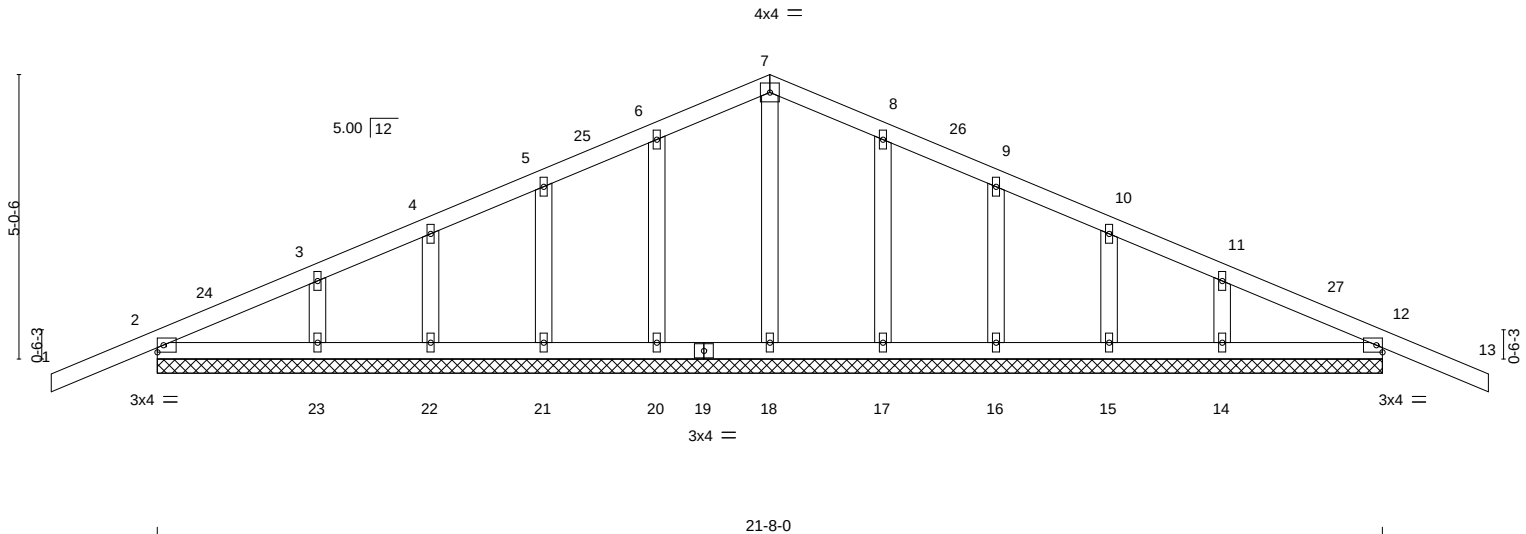
Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	AE	Common Supported Gable	1	1	I44459040
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:34:21 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-pMIfVty_qUeIPk5gWB5UmPBGSuiG8de?WZKAiIztS?0

-1-10-8 1-10-8 | 10-10-0 10-10-0 | 21-8-0 10-10-0 | 23-6-8 1-10-8

Scale = 1:40.7



21-8-0
21-8-0

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	0.24	Vert(LL)	-0.02	13	n/r	120	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.03	13	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 109 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 21-8-0.
(lb) - Max Horz 2=-75(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 23, 17, 16, 15, 14, 12
Max Grav All reactions 250 lb or less at joint(s) 18, 20, 21, 22, 23, 17, 16, 15, 14 except 2=257(LC 2), 12=257(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=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-10-8 to 1-1-8, Exterior(2) 1-1-8 to 10-10-0, Corner(3) 10-10-0 to 13-10-0, Exterior(2) 13-10-0 to 23-6-8 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
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.

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Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	B	Common	1	1	I44459041

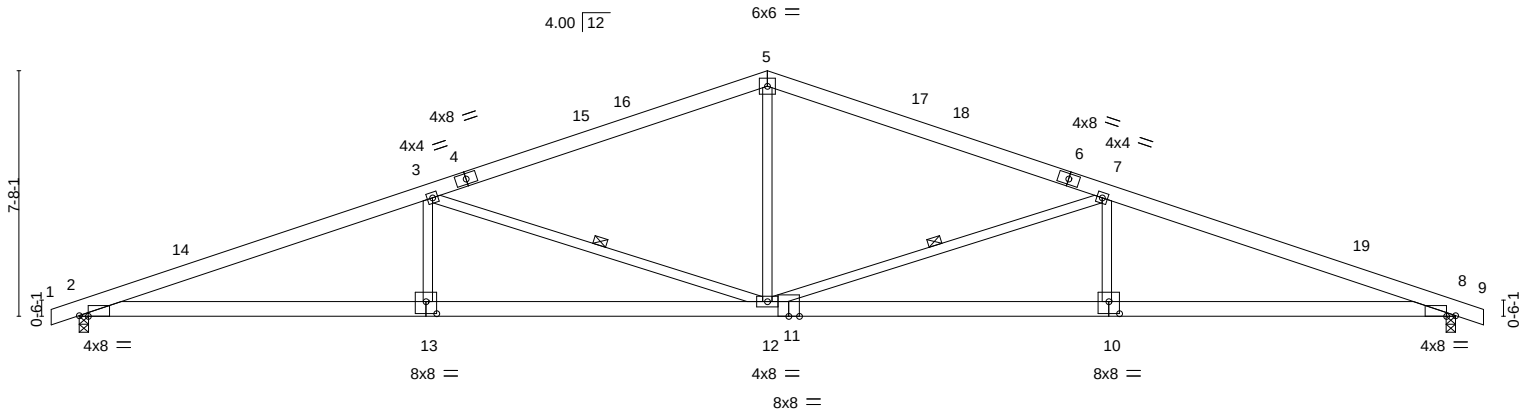
Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:34:23 2021 Page 1

ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-lkQPwZzFM5u0e2F3ec8yrqHS8h9AbJ5I_tpHnAztS?_

-0-10-8	10-10-11	21-6-0	32-1-5	43-0-0	43-10-8
0-10-8	10-10-11	10-7-5	10-7-5	10-10-11	0-10-8

Scale = 1:72.0



10-10-11	21-6-0	32-1-5	43-0-0
10-10-11	10-7-5	10-7-5	10-10-11

Plate Offsets (X,Y)-- [2:0-3-6,Edge], [8:0-3-6,Edge], [10:0-4-0,0-4-8], [13:0-4-0,0-4-8]

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	0.87	Vert(LL)	-0.26	12-13	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.57	12-13	>904	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.18	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 263 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 7-12, 3-12

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=106(LC 20)
Max Uplift 2=-161(LC 12), 8=-161(LC 13)
Max Grav 2=1770(LC 2), 8=1770(LC 2)

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

TOP CHORD	2-3=-4272/307, 3-5=-2850/205, 5-7=-2850/205, 7-8=-4272/308
BOT CHORD	2-13=-286/3959, 12-13=-288/3955, 10-12=-207/3955, 8-10=-204/3959
WEBS	5-12=0/1159, 7-12=-1473/262, 7-10=0/455, 3-12=-1473/261, 3-13=0/455

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-5-2, Interior(1) 3-5-2 to 21-6-0, Exterior(2) 21-6-0 to 25-9-10, Interior(1) 25-9-10 to 43-10-8 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) 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) 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.
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 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.

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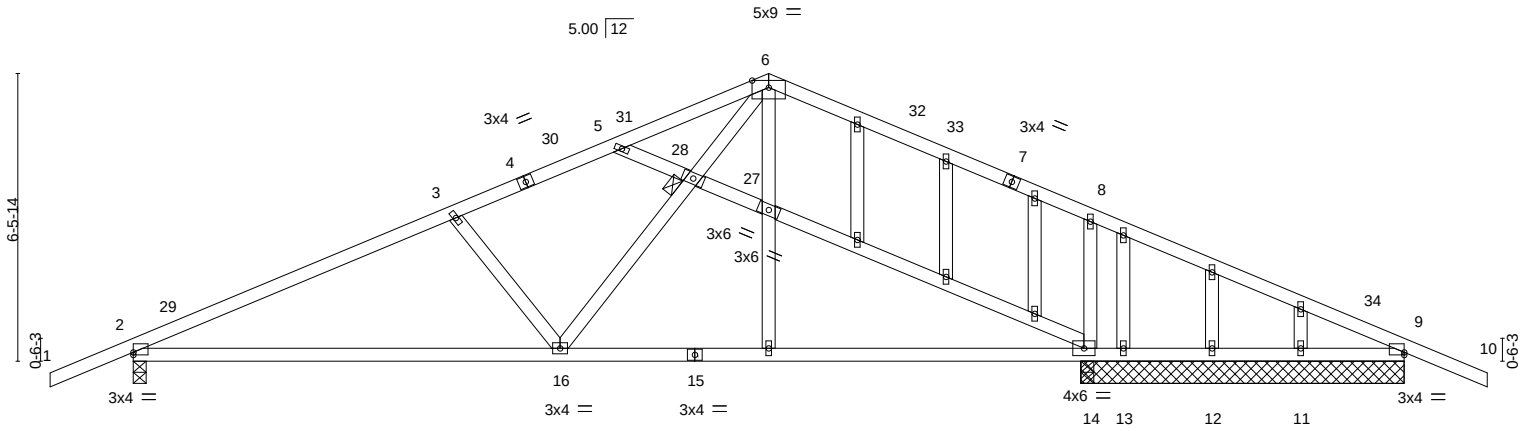
Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	GE	Common Structural Gable	1	1	I44459042
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:34:30 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-25L2Oy3ejFm1_7HPYambdJ3h4Wa6kVsKbT?9WGztS_t

-1-10-8	7-3-5	14-4-0	21-4-11	28-8-0	30-6-8
1-10-8	7-3-5	7-0-11	7-0-11	7-3-5	1-10-8

Scale = 1:52.0



9-7-9	19-0-7	21-8-0	28-8-0
9-7-9	9-4-15	2-7-9	7-0-0

Plate Offsets (X,Y)-- [2:0-0-0,0-0-11], [9:0-0-0,0-0-11]

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	0.70	Vert(LL)	-0.27	14-16	>953	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.56	14-16	>462	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.05	9	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 161 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-7-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 28

REACTIONS. All bearings 7-3-8 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=-96(LC 21)
Max Uplift All uplift 100 lb or less at joint(s) 11, 9 except 2=-115(LC 16), 13=-722(LC 7)
Max Grav All reactions 250 lb or less at joint(s) 12, 11 except 2=1091(LC 2), 9=688(LC 2), 14=1134(LC 7), 14=830(LC 1)

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

TOP CHORD	2-3=-1786/165, 3-5=-1522/137, 5-6=-1398/136, 6-8=-1076/156, 8-9=-1071/93
BOT CHORD	2-16=-163/1554, 14-16=-32/906, 13-14=-32/906, 12-13=-32/906, 11-12=-32/906, 9-11=-32/906
WEBS	16-28=-20/702, 6-28=-13/699, 3-16=-385/185, 8-14=-465/216

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 14-4-0, Exterior(2) 14-4-0 to 17-4-0, Interior(1) 17-4-0 to 30-6-8 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
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 studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	GG	COMMON GIRDER	1	2	I44459043
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:34:41 2021 Page 1
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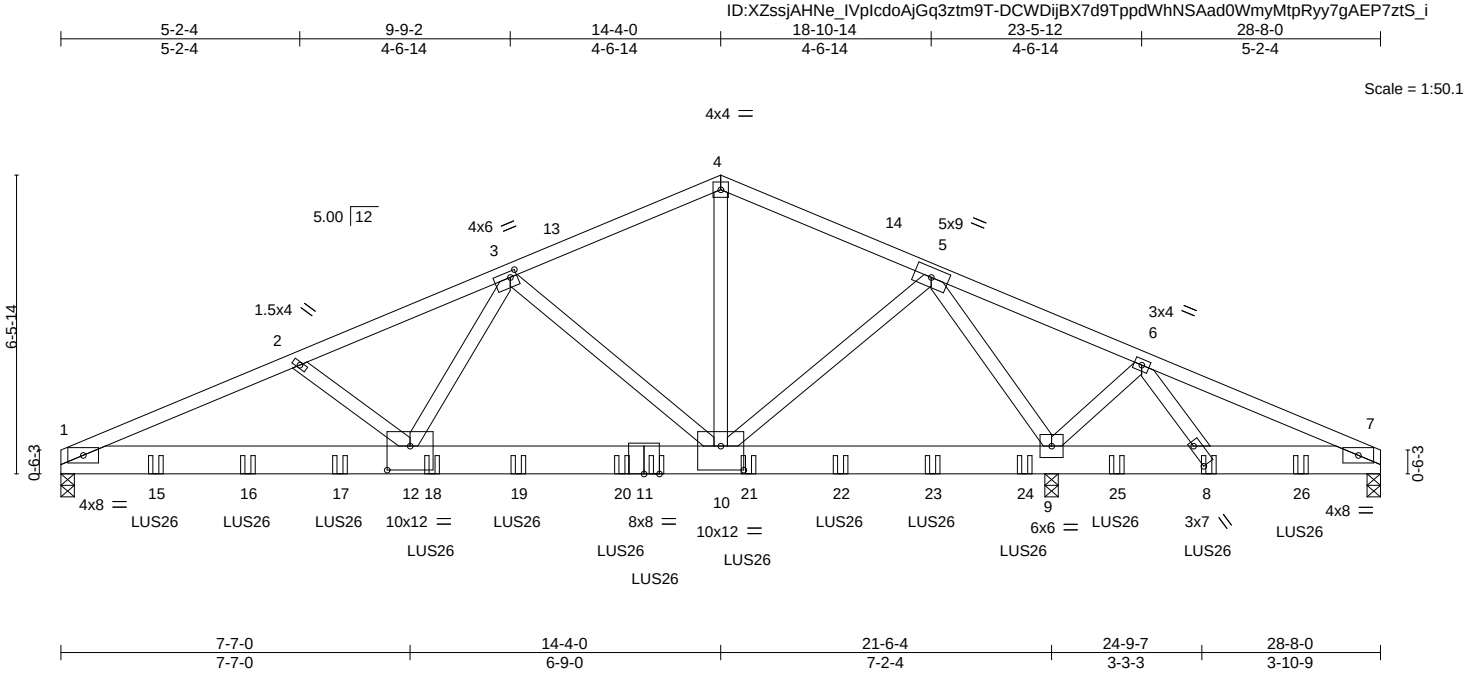

Plate Offsets (X,Y)-- [3:0-1-12,0-1-8], [8:0-5-13,0-1-0], [10:0-6-0,0-6-4], [12:0-6-0,0-6-4]

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	0.92	Vert(LL)	-0.15	1-12	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.29	1-12	>899	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.98	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 370 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.3 *Except*
3-12: 2x4 SP No.2 or 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 1=(0-3-8 + TBE4 Simpson Strong-Tie) (req. 0-4-6), 7=0-3-8, 9=0-3-8 (req. 0-8-1)
Max Horz 1=-86(LC 38)
Max Uplift 1=-259(LC 12), 7=-301(LC 31), 9=-581(LC 13)
Max Grav 1=5547(LC 3), 7=55(LC 27), 9=10259(LC 2)

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-10214/523, 2-3=-10111/488, 3-4=-4457/283, 4-5=-4457/295, 5-6=-173/3542, 6-7=-116/1941
BOT CHORD 1-12=-520/9319, 10-12=-349/6919, 9-10=-8/782, 8-9=-2529/150, 7-8=-1750/115
WEBS 3-12=-158/5090, 3-10=-3838/245, 4-10=-157/3177, 5-10=-215/4497, 5-9=-7418/407, 6-9=-1229/172, 6-8=-64/1481

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=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
5) 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
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) WARNING: Required bearing size at joint(s) 9 greater than input bearing size.
10) TBE4 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.

Continued on page 2

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NOTES-

11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
12) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
13) Use Simpson Strong-Tie LUS26 (4-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-3-0 oc max. starting at 2-0-12 from the left end to 12-2-4 to connect truss(es) to back face of bottom chord.
14) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 12-11-4 from the left end to 26-11-4 to connect truss(es) to back face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

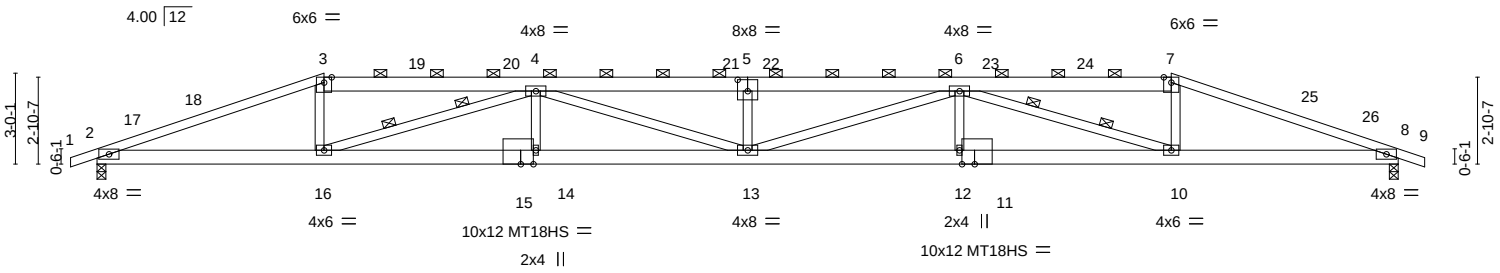
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-43, 4-7=-43, 1-7=-20
   Concentrated Loads (lb)
   Vert: 11=-722(B) 8=-722(B) 15=-762(B) 16=-762(B) 17=-762(B) 18=-762(B) 19=-762(B) 20=-762(B) 21=-722(B) 22=-722(B) 23=-722(B) 24=-722(B) 25=-722(B) 26=-722(B)

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	H2	Hip	1	1	I44459044
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:00 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-As9OhCQSeSYmbkaAItIdrdJmzcuFm3glU8GkaXztS_P

-0-10-8	7-6-0	14-6-0	21-6-0	28-6-0	35-6-0	43-0-0	43-10-8
0-10-8	7-6-0	7-0-0	7-0-0	7-0-0	7-0-0	7-6-0	0-10-8

Scale = 1:76.1



7-6-0	14-6-0	21-6-0	26-2-0	28-6-0	35-6-0	43-0-0
7-6-0	7-0-0	7-0-0	4-8-0	2-4-0	7-0-0	7-6-0

Plate Offsets (X,Y)-- [5:0-4-0,0-4-8], [11:0-5-0,0-0-0], [15:0-5-0,0-0-0]

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	0.92	Vert(LL)	-0.73	13	>704	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-1.41	13	>364	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.20	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S							Weight: 250 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP DSS *Except* 3-5,5-7: 2x6 SP No.2
BOT CHORD	2x6 SP DSS
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-1-15 max.): 3-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2 Rows at 1/3 pts 4-16, 6-10

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-38(LC 21)
Max Uplift 2=-216(LC 12), 8=-216(LC 13)
Max Grav 2=1770(LC 2), 8=1770(LC 2)

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

TOP CHORD	2-3=-4529/476, 3-4=-4155/474, 4-5=-7831/811, 5-6=-7831/811, 6-7=-4155/475, 7-8=-4529/476
BOT CHORD	2-16=-417/4214, 14-16=-694/7029, 13-14=-694/7029, 12-13=-663/7029, 10-12=-663/7029, 8-10=-386/4214
WEBS	3-16=-27/1167, 4-16=-3080/349, 4-13=-104/877, 6-13=-105/877, 6-10=-3080/348, 7-10=-27/1167, 5-13=-424/141, 4-14=0/272, 6-12=0/272

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-5-2, Interior(1) 3-5-2 to 7-6-0, Exterior(2) 7-6-0 to 13-7-0, Interior(1) 13-7-0 to 35-6-0 , Exterior(2) 35-6-0 to 41-7-0, Interior(1) 41-7-0 to 43-10-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) 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.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
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) 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.
11) 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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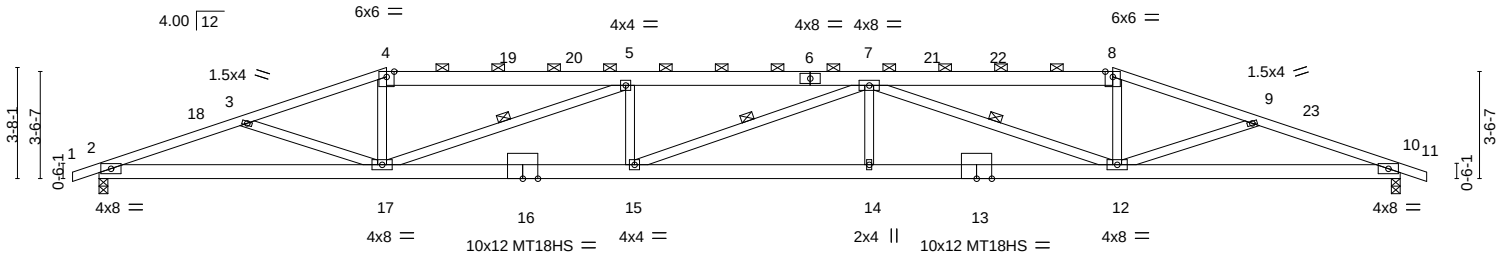
Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	H3	Hip	1	1	I44459045
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:02 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-6FH96uSiA4oUq2kZQIK5w2O8ZQc4Ex92ySlreQztS_N

-0-10-8	4-10-11	9-6-0	17-6-9	25-5-7	33-6-0	38-1-5	43-0-0	43-10-8
0-10-8	4-10-11	4-7-5	8-0-9	7-10-13	8-0-9	4-7-5	4-10-11	0-10-8

Scale = 1:76.1



9-6-0	17-6-9	25-5-7	33-6-0	43-0-0
9-6-0	8-0-9	7-10-13	8-0-9	9-6-0

LOADING (psf)

TCLL (roof)	20.0
Snow (Pf/Pg)	16.5/15.0
TCDL	10.0
BCLL	0.0 *
BCDL	10.0

SPACING-	2-0-0
Plate Grip DOL	1.15
Lumber DOL	1.15
Rep Stress Incr	YES
Code	IRC2015/TPI2014

CSI.	
TC	0.72
BC	0.43
WB	0.92
Matrix-S	

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	-0.48	14-15	>999	240
Vert(CT)	-0.96	14-15	>535	180
Horz(CT)	0.16	10	n/a	n/a

PLATES	**GRIP**
MT20	197/144
MT18HS	244/190

Weight: 257 lb FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 4-6,6-8: 2x6 SP No.2
BOT CHORD	2x6 SP DSS
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-3-10 oc purlins, except 2-0-0 oc purlins (2-7-14 max.): 4-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-17, 7-15, 7-12

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=48(LC 20)
Max Uplift 2=-212(LC 12), 10=-212(LC 13)
Max Grav 2=1770(LC 2), 10=1770(LC 2)

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

TOP CHORD	2-3=-4340/517, 3-4=-4206/433, 4-5=-3938/429, 5-7=-5894/631, 7-8=-3936/428, 8-9=-4204/433, 9-10=-4339/518
BOT CHORD	2-17=-478/4024, 15-17=-560/5894, 14-15=-533/5907, 12-14=-533/5907, 10-12=-440/4023
WEBS	3-17=-241/255, 4-17=-6/918, 5-17=-2214/284, 5-15=0/305, 7-14=0/308, 7-12=-2229/286, 8-12=-6/919, 9-12=-242/254

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-5-2, Interior(1) 3-5-2 to 9-6-0, Exterior(2) 9-6-0 to 15-7-0, Interior(1) 15-7-0 to 33-6-0 , Exterior(2) 33-6-0 to 39-7-0, Interior(1) 39-7-0 to 43-10-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) 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.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
11) 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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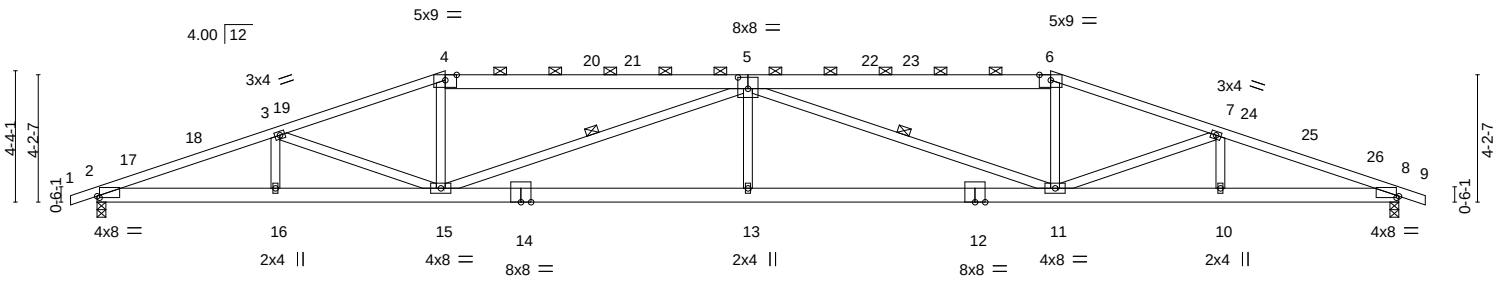
Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	H4	Hip	1	1	I44459046
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:06 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-_0WfxGVDEIJwJf1Kf7P15uZnI1qLAl5dt3j3nBztS_J

-0-10-8	5-10-11	11-6-0	18-2-0	21-6-0	24-10-0	31-6-0	37-1-5	43-0-0	43-10-8
0-10-8	5-10-11	5-7-5	6-8-0	3-4-0	3-4-0	6-8-0	5-7-5	5-10-11	0-10-8

Scale = 1:76.1



5-10-11	11-6-0	21-6-0	31-6-0	37-1-5	43-0-0
5-10-11	5-7-5	10-0-0	10-0-0	5-7-5	5-10-11

Plate Offsets (X,Y)-- [2:0-0-15,0-0-9], [5:0-4-0,0-4-8], [8:0-0-15,0-0-9]

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	0.93	Vert(LL)	-0.44	13	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.87	13-15	>586	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.20	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 254 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 4-5,5-6: 2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 5-15, 5-11

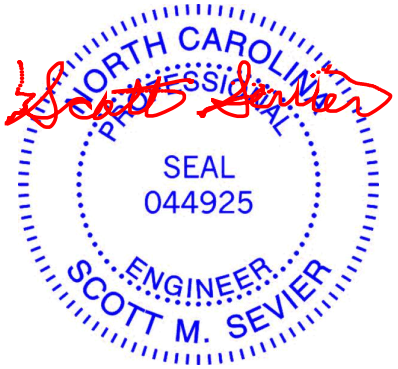
REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=57(LC 20)
Max Uplift 2=-206(LC 12), 8=-206(LC 13)
Max Grav 2=1770(LC 2), 8=1770(LC 2)

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

TOP CHORD	2-3=-4367/449, 3-4=-4007/416, 4-5=-3748/415, 5-6=-3748/414, 6-7=-4007/415, 7-8=-4367/450
BOT CHORD	2-16=-414/4051, 15-16=-414/4051, 13-15=-442/5030, 11-13=-442/5030, 10-11=-370/4051, 8-10=-370/4051
WEBS	3-15=-485/150, 4-15=0/800, 5-15=-1544/224, 5-13=0/412, 5-11=-1544/224, 6-11=0/800, 7-11=-485/151

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-5-2, Interior(1) 3-5-2 to 11-6-0, Exterior(2) 11-6-0 to 17-7-0, Interior(1) 17-7-0 to 31-6-0, Exterior(2) 31-6-0 to 37-7-0, Interior(1) 37-7-0 to 43-10-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) 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.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) 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.
10) 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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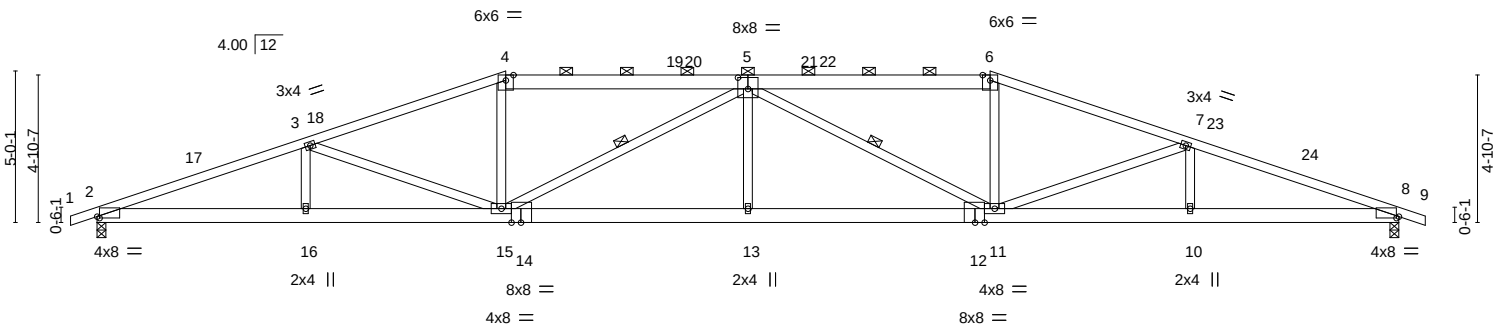
Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	H5	Hip	1	1	I44459047
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:07 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-SC429cVr?cRnwpcWDrwGd65_PRCAvGHn5jTcJdztS_I

-0-10-8	6-10-11	13-6-0	21-6-0	29-6-0	36-1-5	43-0-0	43-10-8
0-10-8	6-10-11	6-7-5	8-0-0	8-0-0	6-7-5	6-10-11	0-10-8

Scale = 1:76.1



6-10-11	13-6-0	21-6-0	29-6-0	36-1-5	43-0-0
6-10-11	6-7-5	8-0-0	8-0-0	6-7-5	6-10-11

Plate Offsets (X,Y)-- [2:0-0-15,0-0-9], [5:0-4-0,0-4-8], [8:0-0-15,0-0-9], [12:0-3-12,0-0-0], [14:0-3-12,0-0-0]

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	0.78	Vert(LL)	-0.34	13	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.69	13	>740	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.18	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 253 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1 *Except* 4-5,5-6: 2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-6-2 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-15, 5-11

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=67(LC 16)
Max Uplift 2=-199(LC 12), 8=-199(LC 13)
Max Grav 2=1770(LC 2), 8=1770(LC 2)

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

TOP CHORD	2-3=-4381/430, 3-4=-3764/383, 4-5=-3505/386, 5-6=-3505/386, 6-7=-3764/383, 7-8=-4381/430
BOT CHORD	2-16=-397/4063, 15-16=-397/4063, 13-15=-327/4211, 11-13=-327/4211, 10-11=-346/4063, 8-10=-346/4063
WEBS	3-15=-742/159, 4-15=0/766, 5-15=-988/154, 5-13=0/324, 5-11=-988/153, 6-11=0/766, 7-11=-742/160

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-5-2, Interior(1) 3-5-2 to 13-6-0, Exterior(2) 13-6-0 to 19-7-0, Interior(1) 19-7-0 to 29-6-0, Exterior(2) 29-6-0 to 35-7-0, Interior(1) 35-7-0 to 43-10-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) 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.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 21,2021

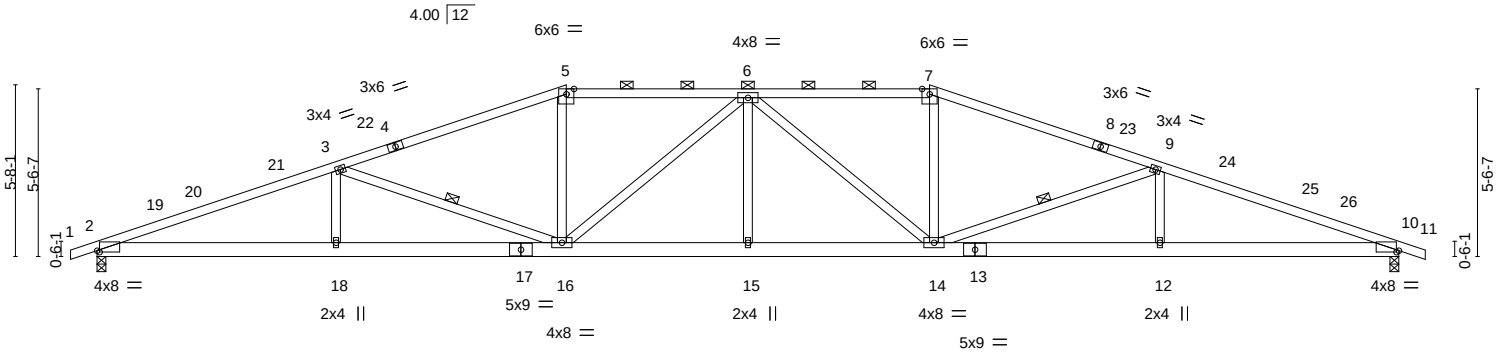
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	H6	Hip	1	1	I44459048
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:10 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-tnmAndYjIXpLnGL5uzT_FkjVneDQ6c6DohhGwyztS_F

-0-10-8	5-6-3	7-10-11	15-6-0	21-6-0	27-6-0	35-1-5	43-0-0	43-10-8
0-10-8	5-6-3	2-4-8	7-7-5	6-0-0	6-0-0	7-7-5	7-10-11	0-10-8

Scale = 1:76.1



7-10-11	15-6-0	21-6-0	27-6-0	35-1-5	43-0-0
7-10-11	7-7-5	6-0-0	6-0-0	7-7-5	7-10-11

Plate Offsets (X,Y)-- [2:0-0-15,0-0-9], [10:0-0-15,0-0-9]

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	0.77	Vert(LL)	-0.30	15	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.61	15	>844	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.17	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 244 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP DSS *Except*
	5-7: 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-6-11 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-16, 9-14

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=-77(LC 21)
Max Uplift 2=-191(LC 12), 10=-191(LC 13)
Max Grav 2=1770(LC 2), 10=1770(LC 2)

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

TOP CHORD	2-3=-4358/405, 3-5=-3505/341, 5-6=-3239/348, 6-7=-3239/348, 7-9=-3505/341, 9-10=-4358/406
BOT CHORD	2-18=-375/4039, 16-18=-375/4039, 15-16=-233/3565, 14-15=-233/3565, 12-14=-317/4039, 10-12=-317/4039
WEBS	3-18=0/322, 3-16=-980/181, 5-16=0/722, 6-16=-607/108, 6-14=-607/108, 7-14=0/722, 9-14=-980/182, 9-12=0/322

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-5-2, Interior(1) 3-5-2 to 15-6-0, Exterior(2) 15-6-0 to 21-6-0, Interior(1) 21-6-0 to 27-6-0, Exterior(2) 27-6-0 to 33-7-0, Interior(1) 33-7-0 to 43-10-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) 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.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 21,2021

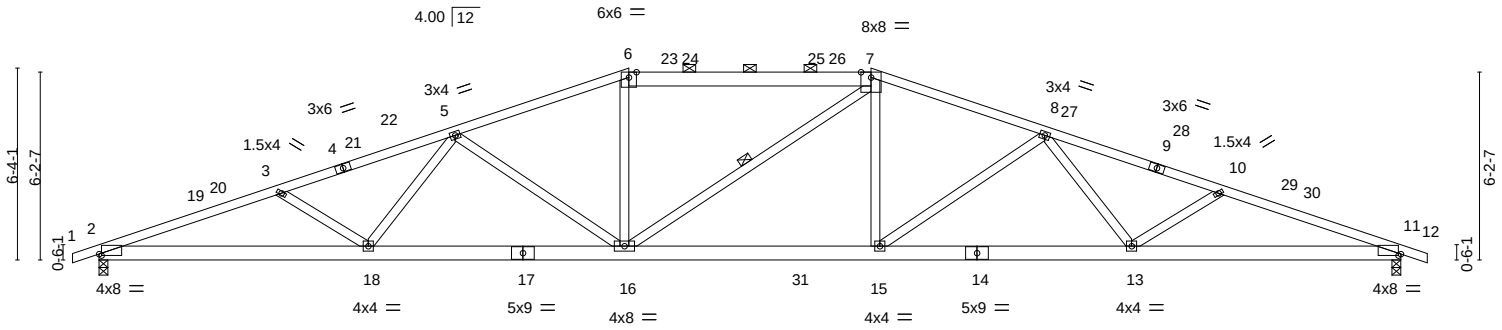
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	H7	Hip	1	1	I44459049
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:13 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-HMRJQfacaSBwek3gZ61htNL1HrEHJ_OfUfwwXHztS_C

-0-10-8	6-0-5	11-9-2	17-6-0	25-6-0	31-2-14	36-11-11	43-0-0	43-10-8
0-10-8	6-0-5	5-8-14	5-8-14	8-0-0	5-8-14	5-8-14	6-0-5	0-10-8

Scale = 1:76.1



8-10-11	17-6-0	25-6-0	34-1-5	43-0-0
8-10-11	8-7-5	8-0-0	8-7-5	8-10-11

Plate Offsets (X,Y)-- [2:0-0-15,0-0-9], [11:0-0-15,0-0-9]

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	0.76	Vert(LL)	-0.31	15	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.64	15-16	>806	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.16	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 252 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-3-1 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 7-16

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=86(LC 20)
Max Uplift 2=-182(LC 12), 11=-182(LC 13)
Max Grav 2=1770(LC 2), 11=1770(LC 2)

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

TOP CHORD	2-3=-4358/414, 3-5=-4078/344, 5-6=-3257/316, 6-7=-3041/325, 7-8=-3256/316, 8-10=-4079/344, 10-11=-4358/414
BOT CHORD	2-18=-402/4043, 16-18=-290/3584, 15-16=-150/3039, 13-15=-237/3584, 11-13=-337/4044
WEBS	3-18=-295/163, 5-18=0/473, 5-16=-756/161, 6-16=0/620, 7-16=-248/251, 7-15=0/619, 8-15=-757/161, 8-13=0/475, 10-13=-295/164

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-5-2, Interior(1) 3-5-2 to 17-6-0, Exterior(2) 17-6-0 to 23-7-0, Interior(1) 23-7-0 to 25-6-0, Exterior(2) 25-6-0 to 31-7-0, Interior(1) 31-7-0 to 43-10-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) 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.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 21,2021

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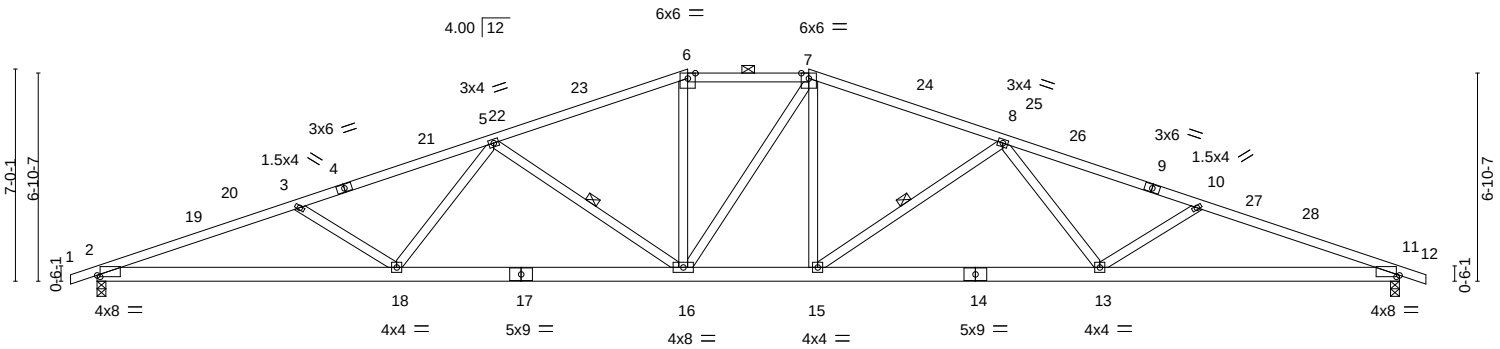
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	H8	Hip	1	1	I44459050
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:16 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-ix7R2hcUtNZVVBoFEEaOV?zV43GQWR66Ad8b8cztS_9

-0-10-8	6-8-5	13-1-2	19-6-0	23-6-0	29-10-14	36-3-11	43-0-0	43-10-8
0-10-8	6-8-5	6-4-14	6-4-14	4-0-0	6-4-14	6-4-14	6-8-5	0-10-8

Scale = 1:76.1



9-10-11	19-6-0	23-6-0	33-1-5	43-0-0
9-10-11	9-7-5	4-0-0	9-7-5	9-10-11

Plate Offsets (X,Y)-- [2:0-1-3,0-0-9], [11:0-1-3,0-0-9]

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	0.91	Vert(LL)	-0.33	13-15	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.67	13-15	>760	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.16	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 249 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-3-13 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 5-16, 8-15

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=96(LC 16)
Max Uplift 2=-172(LC 12), 11=-172(LC 13)
Max Grav 2=1770(LC 2), 11=1770(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4364/385, 3-5=-4079/305, 5-6=-3024/281, 6-7=-2787/292, 7-8=-3022/281, 8-10=-4080/305, 10-11=-4365/385
BOT CHORD 2-18=-378/4067, 16-18=-252/3533, 15-16=-98/2785, 13-15=-196/3533, 11-13=-305/4068
WEBS 3-18=-357/182, 5-18=0/575, 5-16=-900/180, 6-16=-3/662, 7-15=-28/660, 8-15=-902/180, 8-13=0/577, 10-13=-356/182

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-5-2, Interior(1) 3-5-2 to 19-6-0, Exterior(2) 19-6-0 to 29-7-0, Interior(1) 29-7-0 to 43-10-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) 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.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 21,2021

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	HG1	Hip Girder	1	2	I44459051
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:30 2021 Page 1
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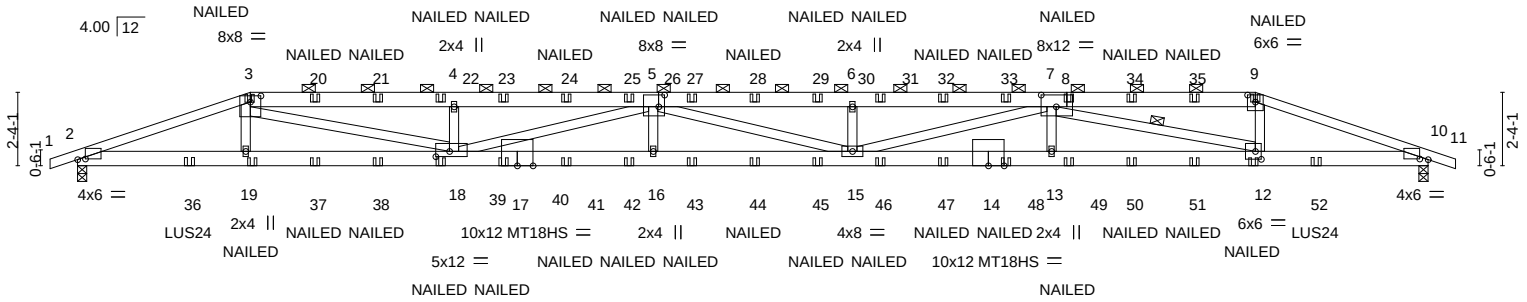
-0-10-8	5-6-0	11-11-14	18-3-15	24-8-1	31-0-2	37-6-0	43-0-0	43-10-8
0-10-8	5-6-0	6-5-14	6-4-2	6-4-2	6-4-2	6-5-14	5-6-0	0-10-8

Scale = 1:73.4



5-6-0	11-11-14	18-3-15	24-8-1	31-0-2	37-6-0	43-0-0
5-6-0	6-5-14	6-4-2	6-4-2	6-4-2	6-5-14	5-6-0

Plate Offsets (X,Y)-- [2:0-2-15,0-0-4], [3:0-4-0,0-2-6], [5:0-2-4,0-4-8], [7:0-5-12,0-4-8], [9:0-3-0,0-2-11], [10:0-3-3,0-0-4], [12:0-2-4,0-3-0], [18:0-5-4,0-2-0]

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	0.92	Vert(LL)	-0.95	15-16	>540	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-1.91	15-16	>268	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.20	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S							Weight: 511 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SP No.2 *Except* 1-3,9-11: 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x6 SP DSS
WEBS	2x4 SP No.3 *Except* 3-18,7-12: 2x4 SP No.2 or 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-9-9 oc purlins, except 2-0-0 oc purlins (2-6-7 max.): 3-9.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 7-12

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=30(LC 58)
Max Uplift 2=-477(LC 8), 10=-478(LC 9)
Max Grav 2=3057(LC 2), 10=3063(LC 2)

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

TOP CHORD	2-3=-8068/1190, 3-4=-13766/2102, 4-5=-13762/2100, 5-6=-16759/2545, 6-7=-16759/2545, 7-9=-7469/1137, 9-10=-8165/1202
BOT CHORD	2-19=-1092/7528, 18-19=-1096/7499, 16-18=-2536/16973, 15-16=-2536/16973, 13-15=-2063/13942, 12-13=-2063/13942, 10-12=-1082/7637
WEBS	3-19=0/562, 3-18=-1029/6600, 4-18=-808/315, 5-18=-3376/521, 5-16=0/508, 5-15=-260/49, 6-15=-611/263, 7-15=-450/2970, 7-13=0/480, 7-12=-6794/1064, 9-12=-207/2237

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=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
5) 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 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
6) Unbalanced snow loads have been considered for this design.
7) 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.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.
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.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

January 21,2021

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

NOTES-

12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 35-10-8 oc max. starting at 3-6-12 from the left end to 39-5-4 to connect truss(es) to back face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.
16) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-43, 3-9=-53, 9-11=-43, 2-10=-20
   Concentrated Loads (lb)
   Vert: 3=-67(B) 9=-67(B) 19=-33(B) 12=-33(B) 8=-62(B) 20=-62(B) 21=-62(B) 22=-62(B) 23=-62(B) 24=-62(B) 25=-62(B) 27=-62(B) 28=-62(B) 29=-62(B) 31=-62(B) 32=-62(B) 33=-62(B) 34=-62(B) 35=-62(B) 36=-195(B) 37=-33(B) 38=-33(B) 39=-33(B) 40=-33(B) 41=-33(B) 42=-33(B) 43=-33(B) 44=-33(B) 45=-33(B) 46=-33(B) 47=-33(B) 48=-33(B) 49=-33(B) 50=-33(B) 51=-33(B) 52=-195(B)

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	J1	Jack-Open	17	1	I44459052
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:32 2021 Page 1
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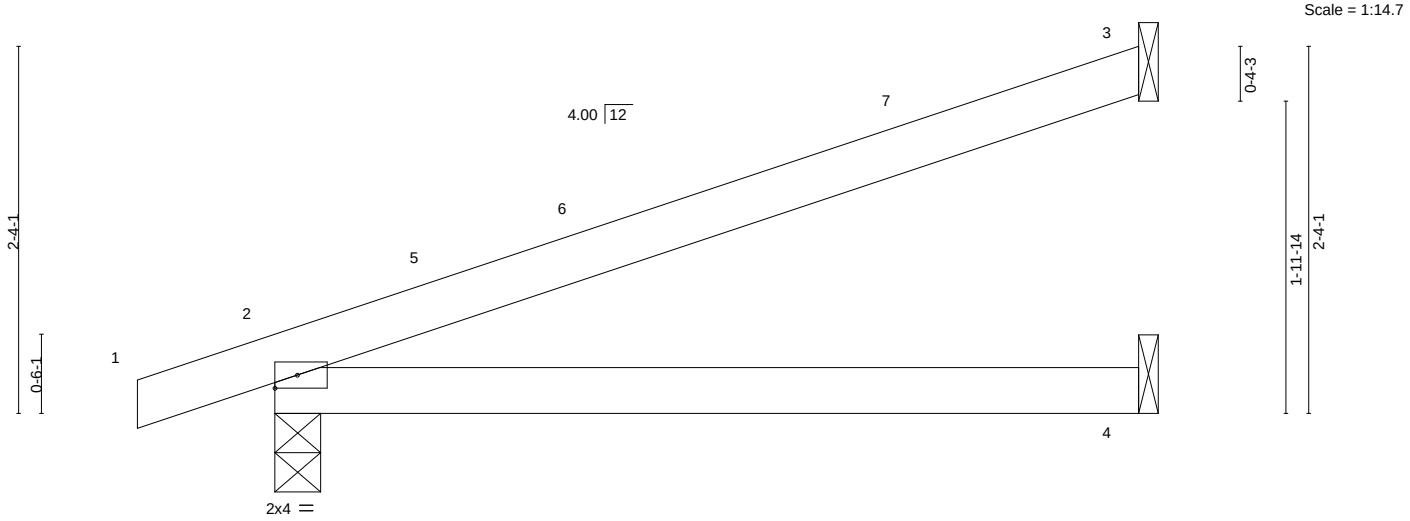
Scale = 1:14.7



5-6-0 / 5-6-0

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	0.51	Vert(LL)	-0.05	2-4	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.09	2-4	>675	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P							Weight: 18 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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=70(LC 12)
Max Uplift 3=-66(LC 16), 2=-47(LC 12)
Max Grav 3=153(LC 2), 2=279(LC 2), 4=106(LC 7)

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

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 5-5-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
9) One 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.

January 21,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	J2	Jack-Open	2	1	I44459053
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:33 2021 Page 1
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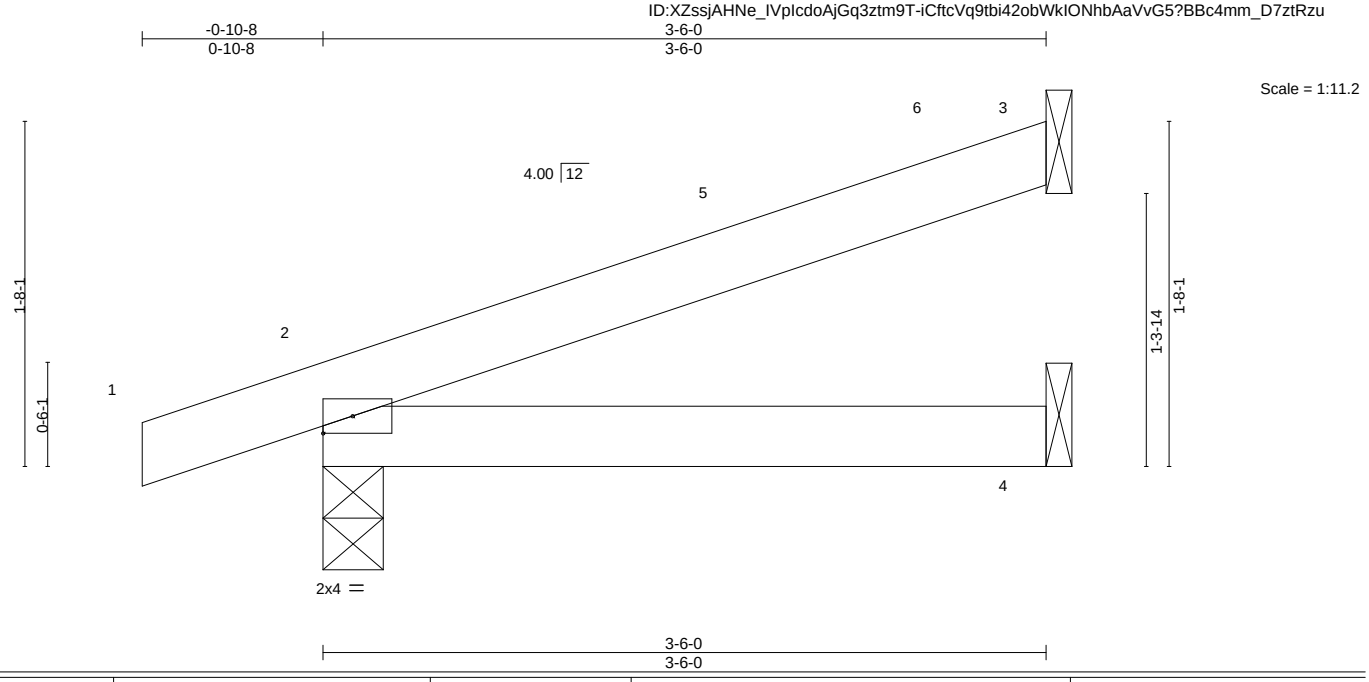

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.01	2-4	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 12 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 3-6-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=48(LC 12)
Max Uplift 3=-41(LC 16), 2=-43(LC 12)
Max Grav 3=89(LC 2), 2=202(LC 2), 4=66(LC 7)

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

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-5-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
9) One 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.

January 21,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	J3	Half Hip	2	1	I44459054
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:35 2021 Page 1
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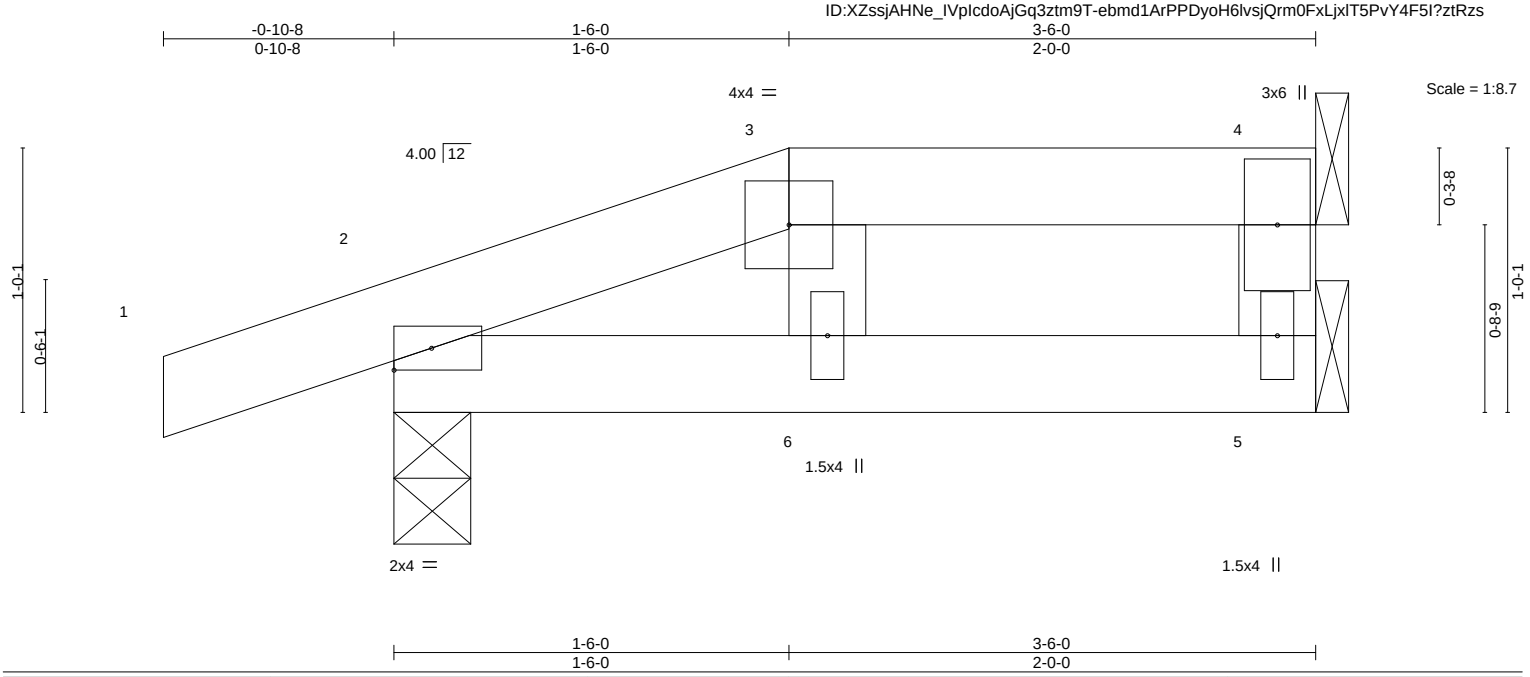

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.01	6	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P							Weight: 13 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
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=27(LC 13)
Max Uplift 2=-51(LC 12), 4=-19(LC 13)
Max Grav 5=74(LC 7), 2=203(LC 36), 4=65(LC 35)

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

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=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
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

January 21,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	JG	Half Hip Girder	2	1	I44459055
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:43 2021 Page 1
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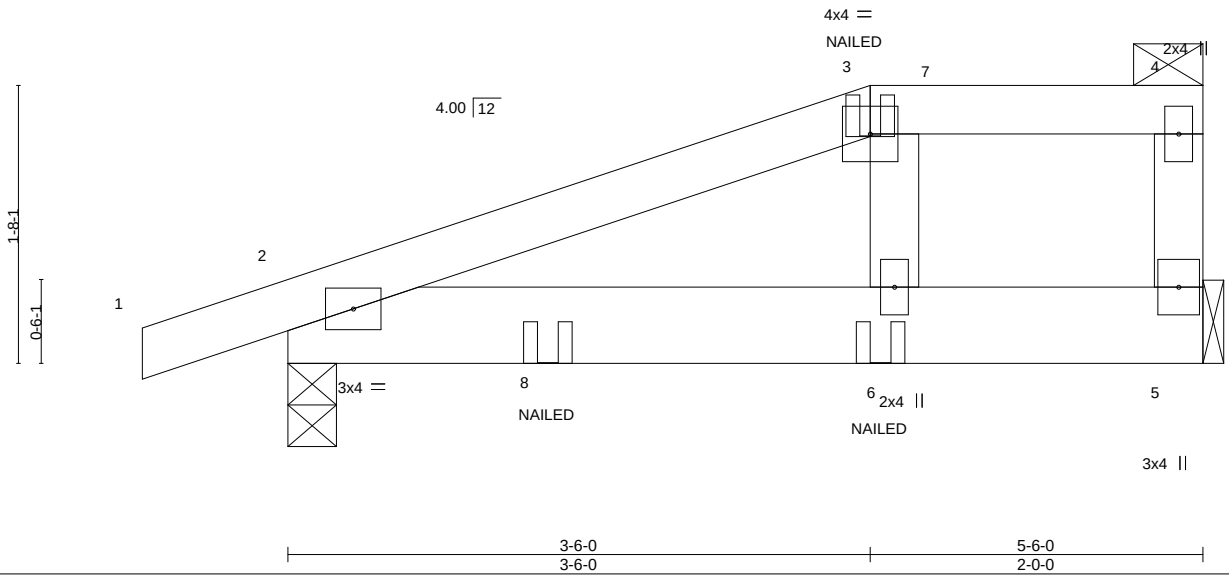
-0-10-8 3-6-0 5-6-0
0-10-8 3-6-0 2-0-0

Scale = 1:13.8



3-6-0 5-6-0
3-6-0 2-0-0

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	0.37	Vert(LL)	-0.01	2-6	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.03	2-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 26 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 2=0-3-8
Max Horz 2=50(LC 9)
Max Uplift 5=-26(LC 8), 2=-51(LC 8)
Max Grav 5=242(LC 2), 2=339(LC 32)

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

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=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
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 2. This connection is for uplift only and does not consider lateral forces.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-43, 3-4=-53, 2-5=-20
Concentrated Loads (lb)
Vert: 3=-16(F) 6=-13(F) 8=-43(F)

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

January 21,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	P	Common	4	1	I44459056
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:46 2021 Page 1
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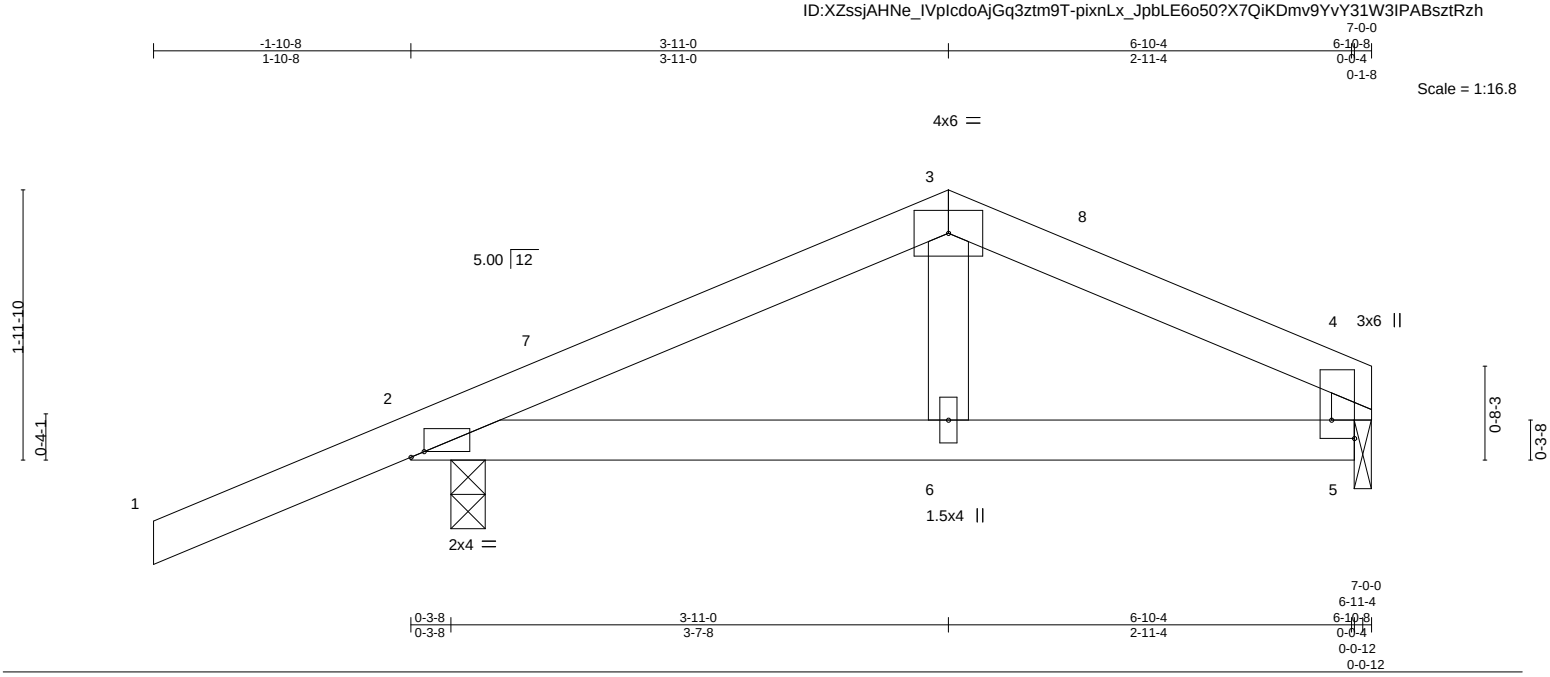

Plate Offsets (X,Y)-- [2:0-1-2,Edge], [4:Edge,0-2-0]

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	0.37	Vert(LL)	-0.12	6	>692	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.25	2-6	>317	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 27 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-0, 5=0-1-8
Max Horz 2=53(LC 16)
Max Uplift 2=-56(LC 16), 5=-11(LC 17)
Max Grav 2=407(LC 2), 5=251(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=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 3-11-0, Exterior(2) 3-11-0 to 6-10-4 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) 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.
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) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
9) 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.
10) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.

January 21,2021

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	PE	Common Supported Gable	1	1	I44459057
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:48 2021 Page 1
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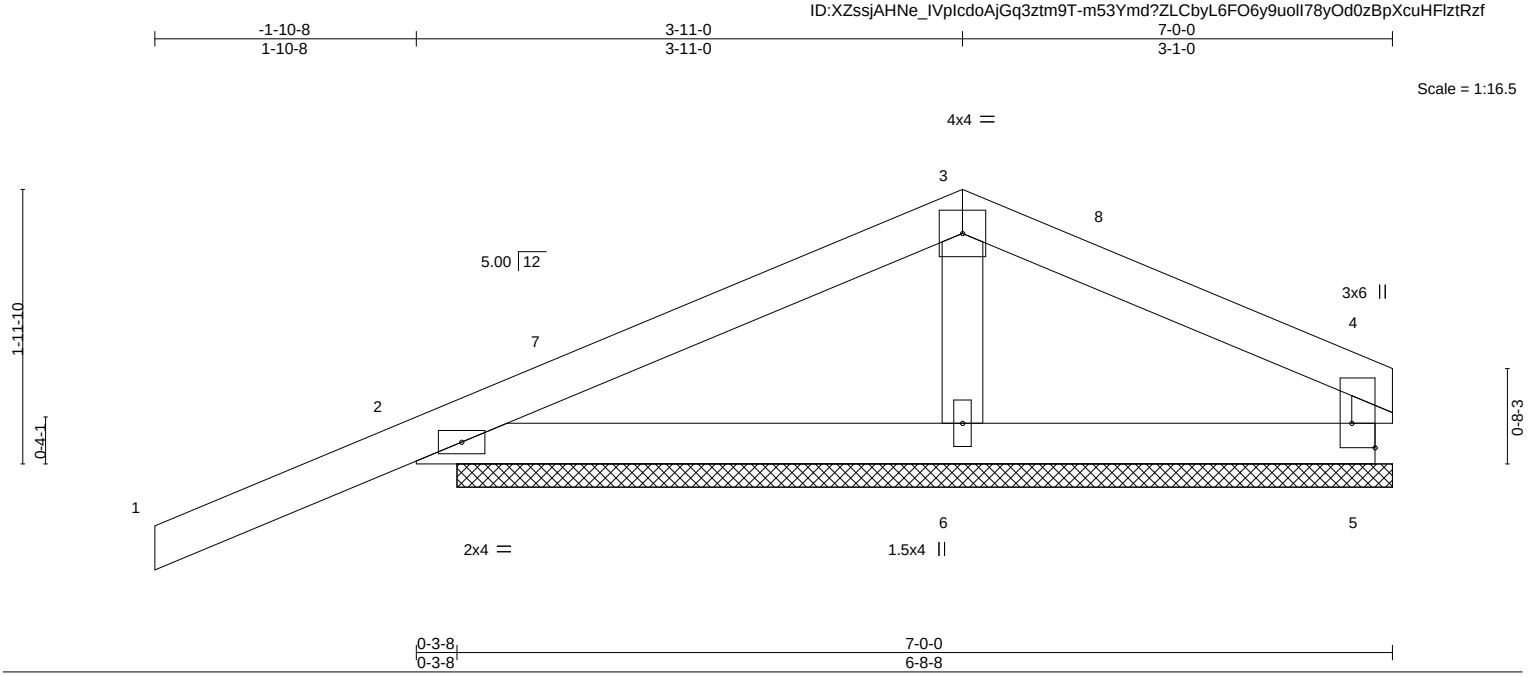

Plate Offsets (X,Y)-- [4:Edge,0-2-0]

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	0.26	Vert(LL)	0.00	1	n/r	120	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 27 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=6-8-8, 2=6-8-8, 6=6-8-8
Max Horz 2=46(LC 20)
Max Uplift 5=-27(LC 17), 2=-64(LC 12)
Max Grav 5=107(LC 2), 2=288(LC 2), 6=266(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=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-10-8 to 1-1-8, Exterior(2) 1-1-8 to 3-11-0, Corner(3) 3-11-0 to 6-10-4 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) Gable studs spaced at 2-0-0 oc.
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) n/a
11) Non Standard bearing condition. Review required.

January 21,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	T1	Common	8	1	I44459058
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:50 2021 Page 1
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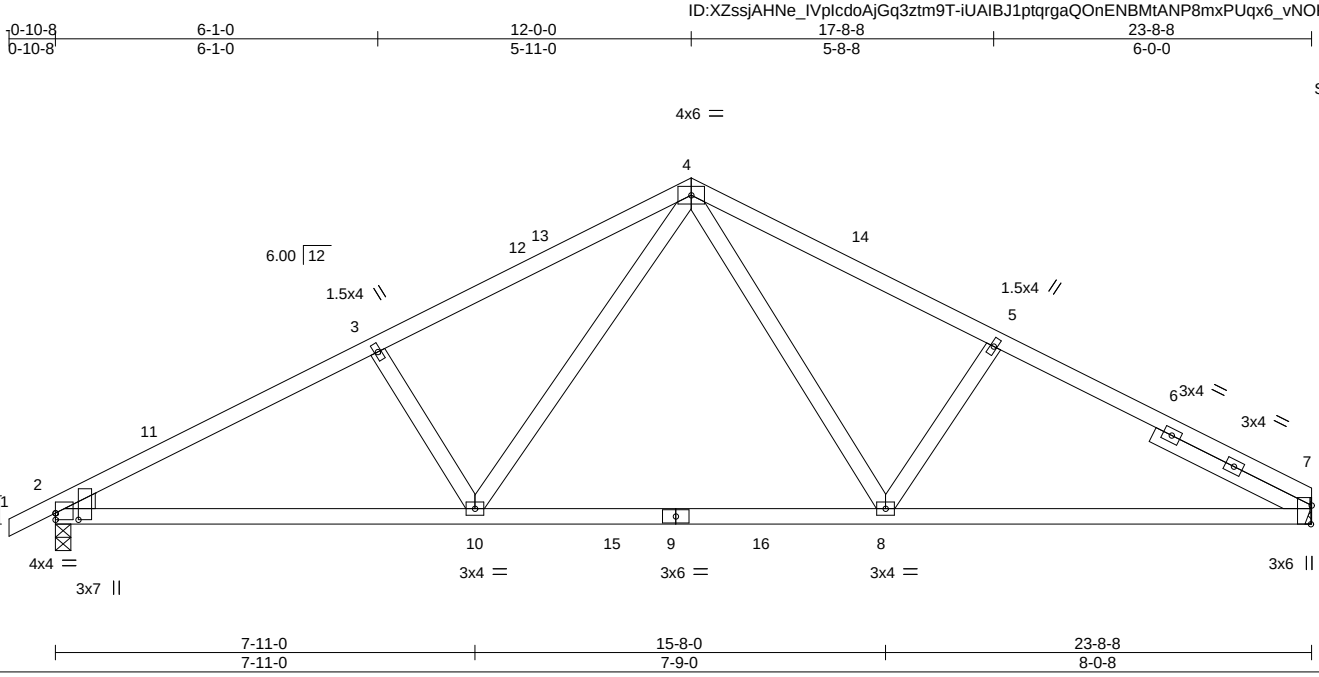


Plate Offsets (X,Y)-- [2:0-1-8,0-5-3], [2:0-0-0,0-1-8], [7:0-4-4,Edge]

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	0.49	Vert(LL)	-0.14	8-10	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.23	2-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.05	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 114 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
WEDGE
Left: 2x4 SP No.3
SLIDER Right 2x4 SP No.3 -t 3-3-11

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=95(LC 16)
Max Uplift 7=-51(LC 17), 2=-69(LC 16)
Max Grav 7=941(LC 2), 2=1005(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1579/113, 3-4=-1411/138, 4-5=-1347/145, 5-7=-1529/126
BOT CHORD 2-10=-117/1336, 8-10=0/899, 7-8=-36/1282
WEBS 3-10=-320/173, 4-10=-65/534, 4-8=-54/485, 5-8=-300/172

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 12-0-0, Exterior(2) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 23-8-8 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) 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) 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.
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, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
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.

January 21,2021

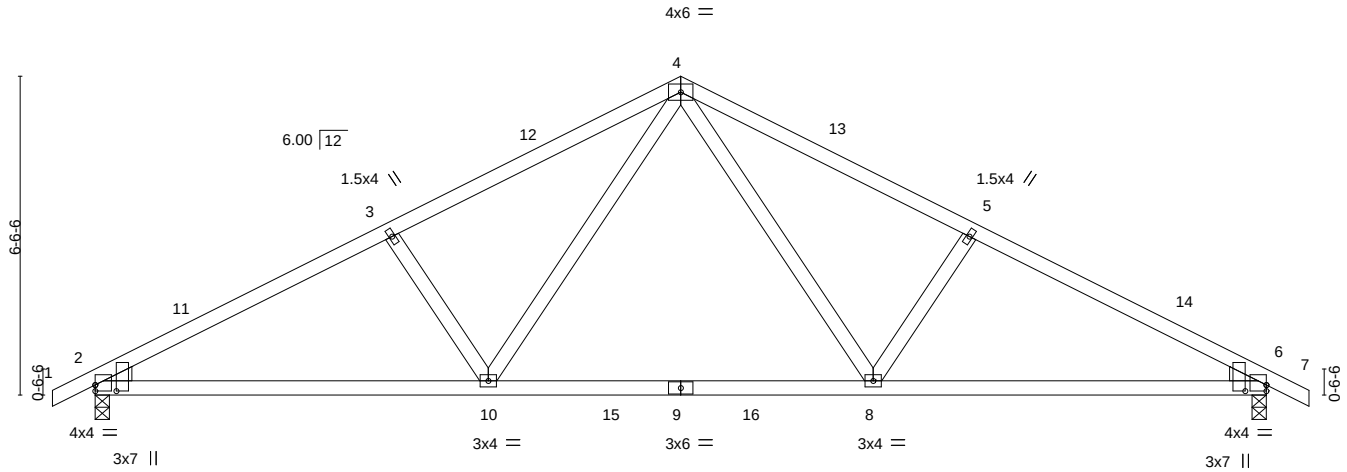
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	T2	Common	7	1	I44459059
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:51 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-AgkgOe2Re7zXCZzzo4jbPOwasAGLDHEFDZ7xs4ztRzc

-0-10-8 6-1-0 12-0-0 17-11-0 24-0-0 24-10-8
0-10-8 6-1-0 5-11-0 5-11-0 6-1-0 0-10-8

Scale = 1:47.2



8-0-11 15-11-5 24-0-0
8-0-11 7-10-10 8-0-11

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.15	8-10	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.25	6-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.05	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 112 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
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-92(LC 17)
Max Uplift 2=-69(LC 16), 6=-69(LC 17)
Max Grav 2=1010(LC 2), 6=1010(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1586/112, 3-4=-1408/134, 4-5=-1408/134, 5-6=-1586/112
BOT CHORD 2-10=-114/1343, 8-10=0/906, 6-8=-36/1343
WEBS 4-8=-59/528, 5-8=-323/174, 4-10=-59/528, 3-10=-323/174

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 12-0-0, Exterior(2) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 24-10-8 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) 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) 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.
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, with BCDL = 10.0psf.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.

January 21,2021

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	T3E	Common Supported Gable	1	1	I44459060
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:53 2021 Page 1
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0-10-8 12-0-0 24-0-0 24-10-8
0-10-8 12-0-0 12-0-0 0-10-8

Scale = 1:44.6

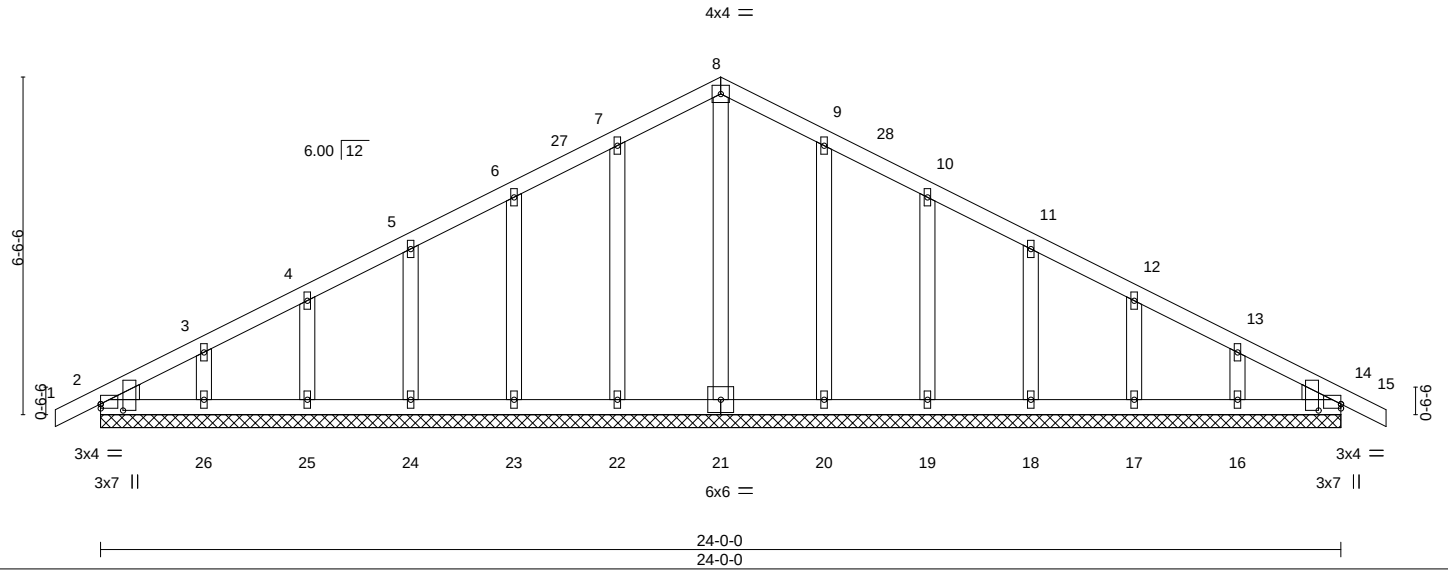


Plate Offsets (X,Y)-- [2:0-0-0,0-1-0], [2:0-1-8,0-5-3], [14:0-0-0,0-1-0], [14:0-1-8,0-5-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	14	n/r	120	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	14	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 134 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
WEDGE
Left: 2x4 SP No.3 , Right: 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 24-0-0.
(lb) - Max Horz 2=-92(LC 21)
Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 21, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14

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=120mph Vasd=95mph; TCDL=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 2-0-0, Exterior(2) 2-0-0 to 12-0-0, Corner(3) 12-0-0 to 15-0-0, Exterior(2) 15-0-0 to 24-10-8 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.

January 21,2021

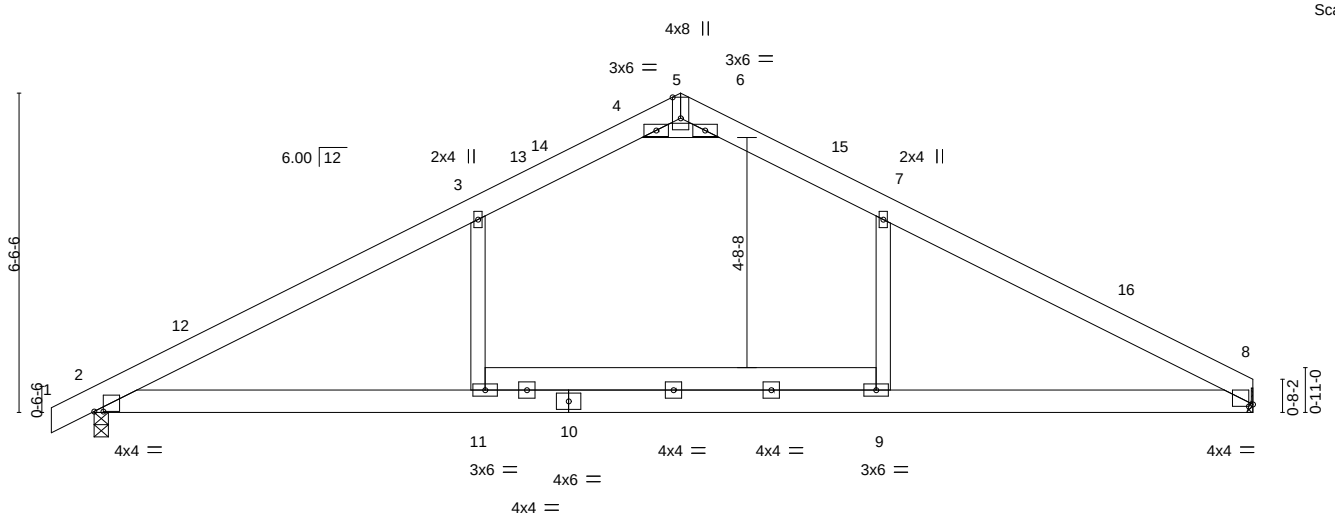
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	TA	ROOF TRUSS	6	1	I44459061
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:55 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-2R_BE05yhMUzhBHl1wnXaE4EEng390Cr8B59?rztRzY

-0-10-8	5-6-0	8-0-0	12-0-0	16-0-0	18-6-0	23-8-8
0-10-8	5-6-0	2-6-0	4-0-0	4-0-0	2-6-0	5-2-8

Scale = 1:47.1



8-0-0	16-0-0	16-1-0	23-8-8
8-0-0	8-0-0	0-1-0	7-7-8

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

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	0.59	Vert(LL)	-0.23	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.38	9-11	>747	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.03	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S		Attic	-0.10	9-11	955	360	Weight: 152 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SP DSS
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

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

REACTIONS. (size) 8=Mechanical, 2=0-3-8
Max Horz 2=97(LC 20)
Max Uplift 8=-26(LC 17), 2=-45(LC 16)
Max Grav 8=1114(LC 3), 2=1162(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1794/32, 3-4=-1424/101, 4-5=-106/1932, 5-6=-93/1927, 6-7=-1429/109, 7-8=-1800/38
BOT CHORD 2-11=0/1470, 9-11=0/1470, 8-9=0/1470
WEBS 3-11=0/516, 7-9=0/523, 4-6=-3630/229

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 12-0-0, Exterior(2) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 23-7-12 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
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) 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.
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) Ceiling dead load (5.0 psf) on member(s). 3-4, 6-7, 4-6
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 9-11
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8.
12) 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.
13) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

January 21,2021

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	TE	Common Supported Gable	1	1	I44459062
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:57 2021 Page 1
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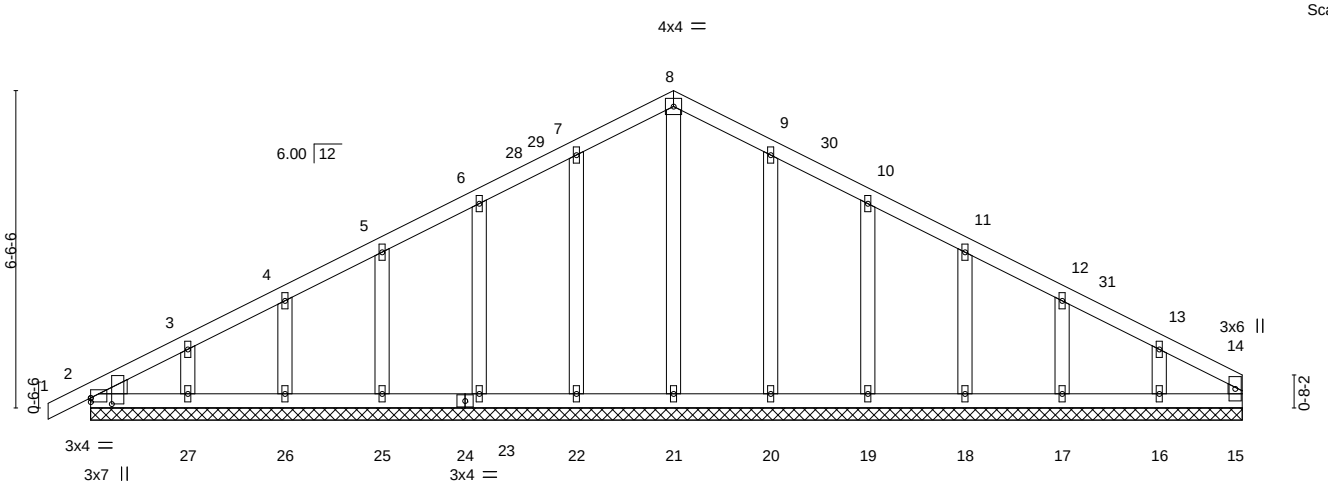
-0-10-8 12-0-0 23-8-8
0-10-8 12-0-0 11-8-8

Scale = 1:47.4



23-8-8
23-8-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	15	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 131 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

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

REACTIONS. All bearings 23-8-8.
(lb) - Max Horz 2=96(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 23, 25, 26, 27, 20, 19, 18, 17, 16
Max Grav All reactions 250 lb or less at joint(s) 15, 2, 21, 22, 23, 25, 26, 27, 20, 19, 18, 17, 16

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=120mph Vasd=95mph; TCDL=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 2-0-0, Exterior(2) 2-0-0 to 12-0-0, Corner(3) 12-0-0 to 15-0-0, Exterior(2) 15-0-0 to 23-6-12 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
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.

January 21,2021

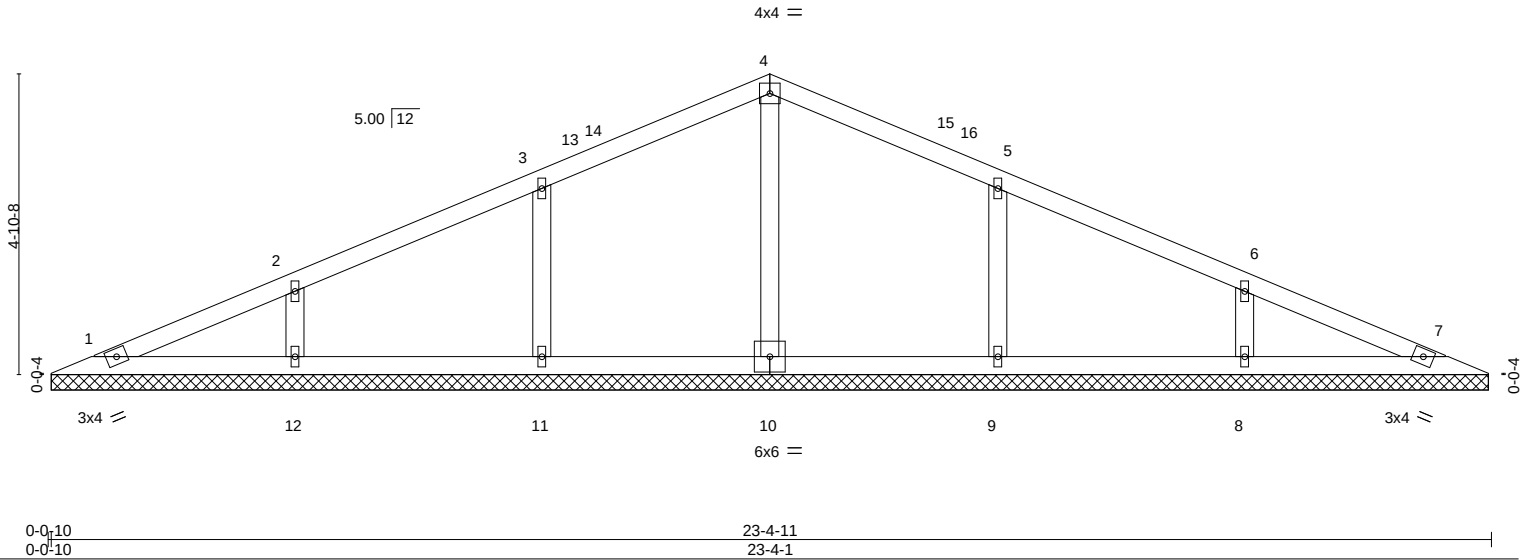
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	V1	Valley	1	1	I44459063
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:35:59 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-xCDi3O8Slb_OAoaWGmsTk4F1iO8T5wPR3p3M8cztRzU

11-8-5 | 23-4-11
11-8-5 | 11-8-5

Scale = 1:37.3



0-0-10 | 23-4-11
0-0-10 | 23-4-1

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	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 88 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 23-3-8.
(lb) - Max Horz 1=65(LC 20)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 9, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=255(LC 2), 8=322(LC 2), 9=327(LC 34), 12=322(LC 2), 11=327(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-9=-250/111, 3-11=-250/111

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-9-1 to 4-0-0, Interior(1) 4-0-0 to 11-8-5, Exterior(2) 11-8-5 to 14-8-5, Interior(1) 14-8-5 to 22-7-10 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) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

January 21,2021

ENGINEERING BY TRENCO
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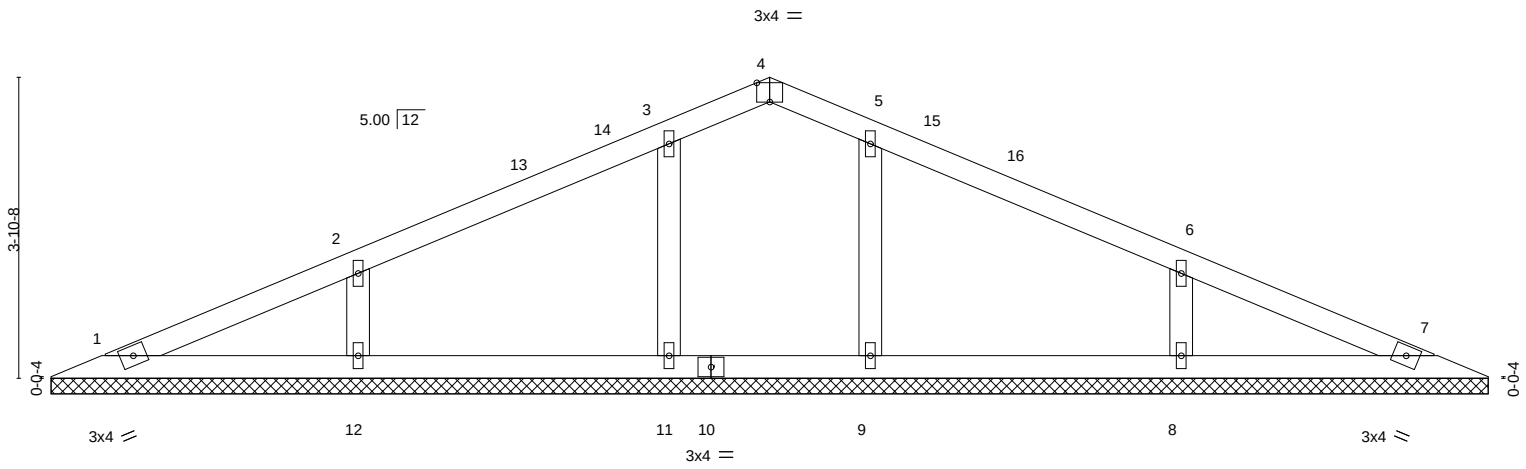
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	V2	Valley	1	1	I44459064
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:36:00 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-PPn4Hj85Wu6Fny9ipTNiHHoCIoUcqO5aHTowg2ztRzT

9-3-9 / 9-3-9 | 18-7-1 / 9-3-9

Scale = 1:29.6



0-0-10 / 0-0-10 | 18-7-1 / 18-6-8

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

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 67 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 6-0-0 oc bracing.

REACTIONS. All bearings 18-5-14.
(lb) - Max Horz 1=51(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 8=335(LC 2), 9=261(LC 34), 12=335(LC 2), 11=261(LC 33)

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=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-9-1 to 4-0-0, Interior(1) 4-0-0 to 9-3-9, Exterior(2) 9-3-9 to 12-3-9, Interior(1) 12-3-9 to 17-10-1 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) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

January 21,2021

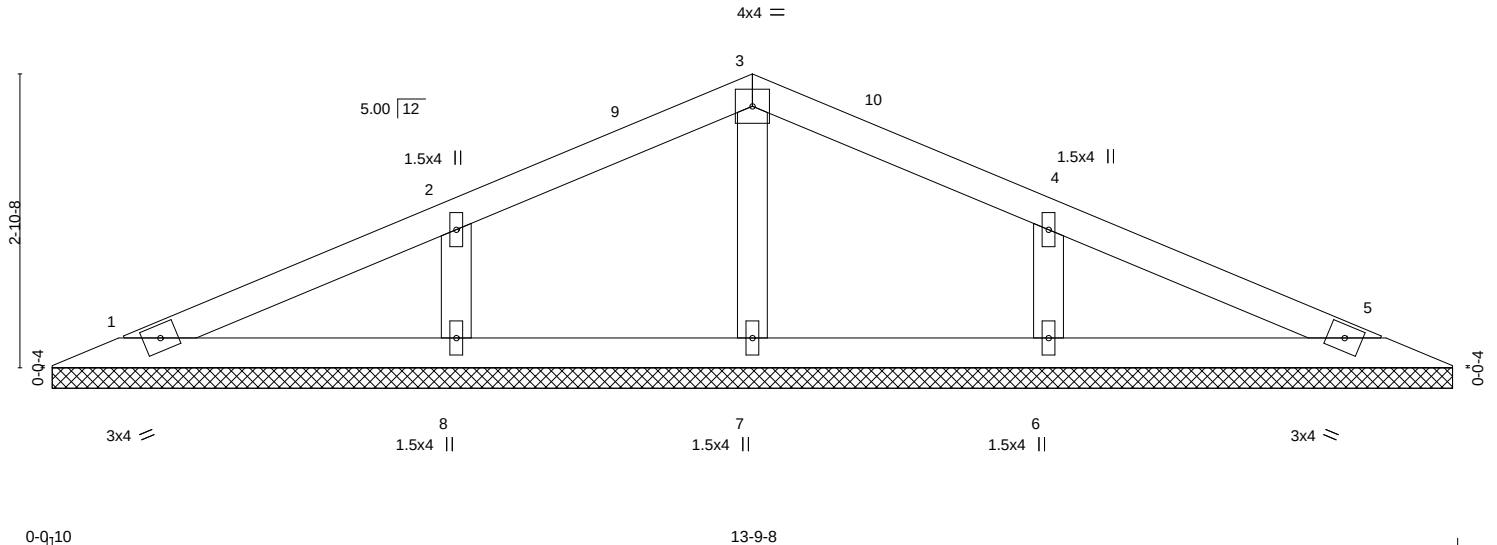
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	V3	Valley	1	1	I44459065
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:36:02 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-LnvqiPAL2WMz1GJ5xuPAMitYcbAYIIhtlnH0lxztRzR

6-10-12 13-9-8
6-10-12 6-10-12

Scale = 1:22.5



0-0-10 13-9-8
0-0-10 13-8-14

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 47 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 13-8-5.
(lb) - Max Horz 1=37(LC 20)
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=297(LC 34), 8=297(LC 33)

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=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-9-1 to 4-0-0, Interior(1) 4-0-0 to 6-10-12, Exterior(2) 6-10-12 to 9-9-8, Interior(1) 9-9-8 to 13-0-7 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
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.

January 21,2021

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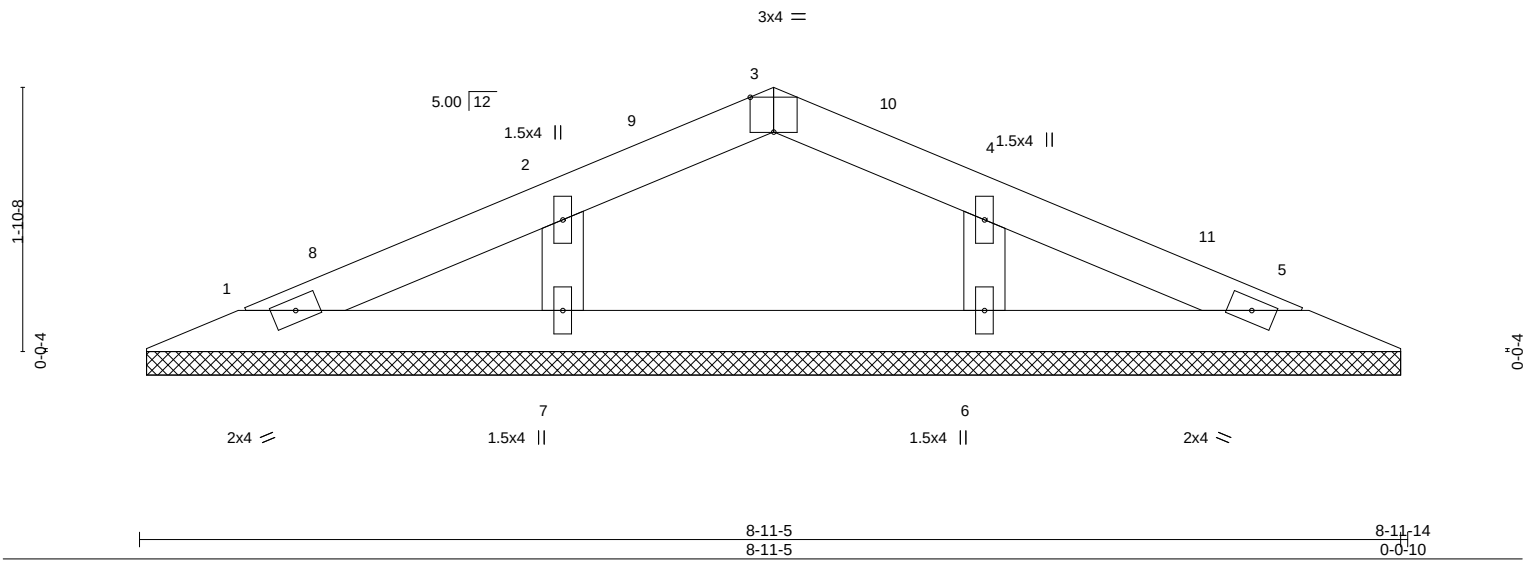
Job	Truss	Truss Type	Qty	Ply	KB Home 243.2939.B
243_2939_B	V4	Valley	1	1	I44459066
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 20 13:36:05 2021 Page 1
ID:XZssjAHNe_IVpIcdoAjGq3ztm9T-mMazKRCDLRkYuj2gc1zt_LV3ApBzVffJRlWhMGztRzO

4-5-15 (4-5-15) | 8-11-14 (4-5-15)

Scale = 1:16.3



8-11-5 (8-11-5) | 8-11-14 (0-0-10)

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

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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 27 lb	FT = 20%

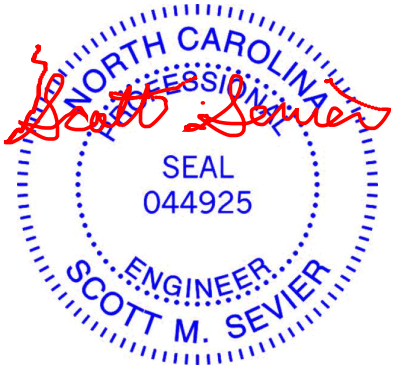
LUMBER-
TOP CHORD 2x4 SP No.3
BOT CHORD 2x4 SP No.3
OTHERS 2x4 SP No.3

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. All bearings 8-10-11.
(lb) - Max Horz 1=22(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6, 7
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6, 7

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=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 4-5-15, Exterior(2) 4-5-15 to 7-5-15, Interior(1) 7-5-15 to 8-2-13 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.



January 21,2021

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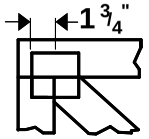
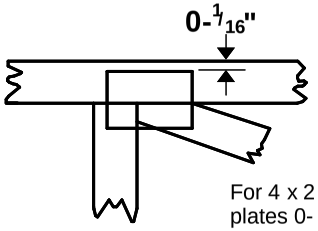
Edenton, NC 27932

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.

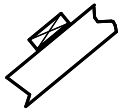
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

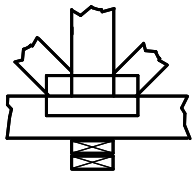
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

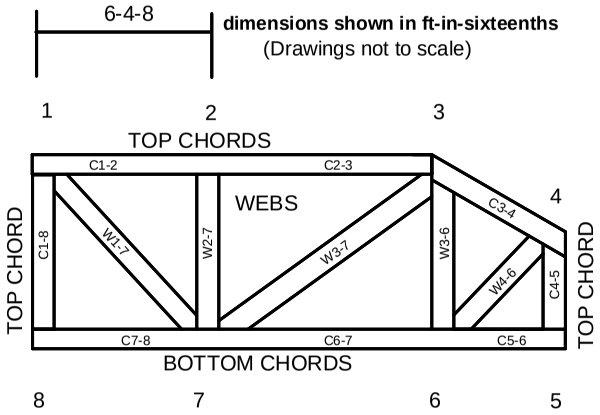


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, 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.

MiTek Engineering Reference Sheet: MII-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/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.