ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 150_1910_D_Vo
KB Home 150.1910.D Vo2

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: I45987461 thru I45987501

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

North Carolina COA: C-0844

May 6,2021

Sevier, Scott

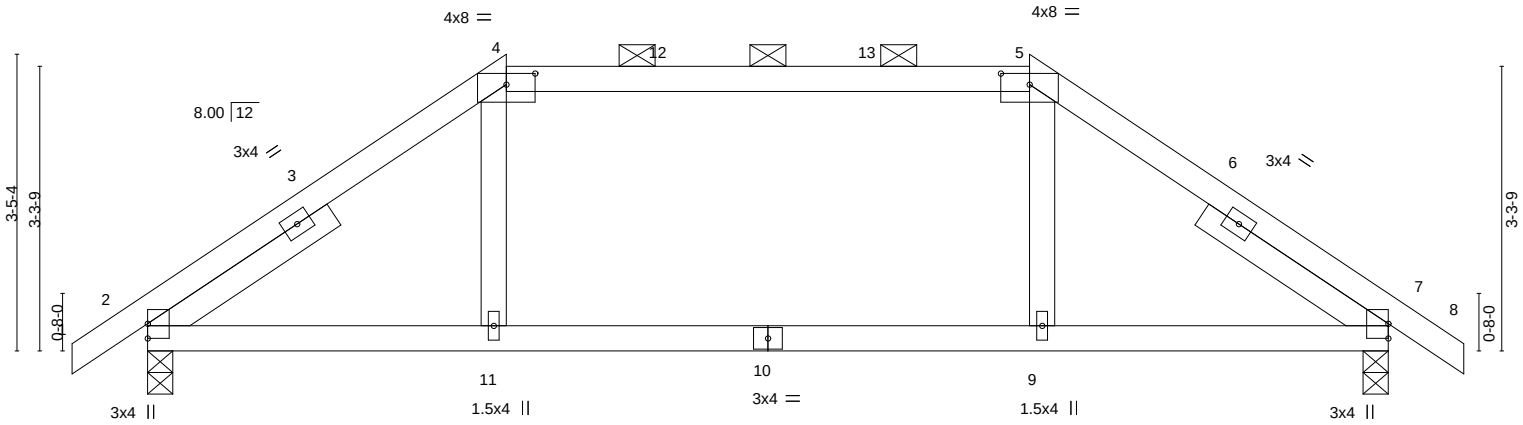
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 150.1910.D Vo2
150_1910_D_VO	A1	Hip	1	1	I45987461
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:04 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-fe40TxgTAt2tpskVuoKPkt15jXLnfQmdP5FZIHzJTub

-0-10-8 0-10-8 | 4-1-14 4-1-14 | 10-2-10 6-0-12 | 14-4-8 4-1-14 | 15-3-0 0-10-8

Scale = 1:26.7



4-1-14 4-1-14 | 10-2-10 6-0-12 | 14-4-8 4-1-14

Plate Offsets (X,Y)-- [4:0-4-0,0-1-9], [5:0-4-0,0-1-9]

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	0.62	Vert(LL)	-0.07	9	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.09	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 65 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP or SPF No.2 -t 2-6-2, Right 2x4 SP or SPF No.2 -t 2-6-2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=66(LC 13)
Max Uplift 2=-12(LC 14), 7=-12(LC 15)
Max Grav 2=628(LC 2), 7=627(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-788/64, 4-5=-587/81, 5-7=-788/64
BOT CHORD 2-11=0/593, 9-11=0/587, 7-9=0/593

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-1-14, Exterior(2R) 4-1-14 to 8-4-13, Interior(1) 8-4-13 to 10-2-10, Exterior(2R) 10-2-10 to 14-4-8, Interior(1) 14-4-8 to 15-3-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	A2	Hip	1	1	I45987462
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:05 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-7qeOgHh6wBAkR0JhSVsfG5ZJSwg7Otvmel?6qkzJTua

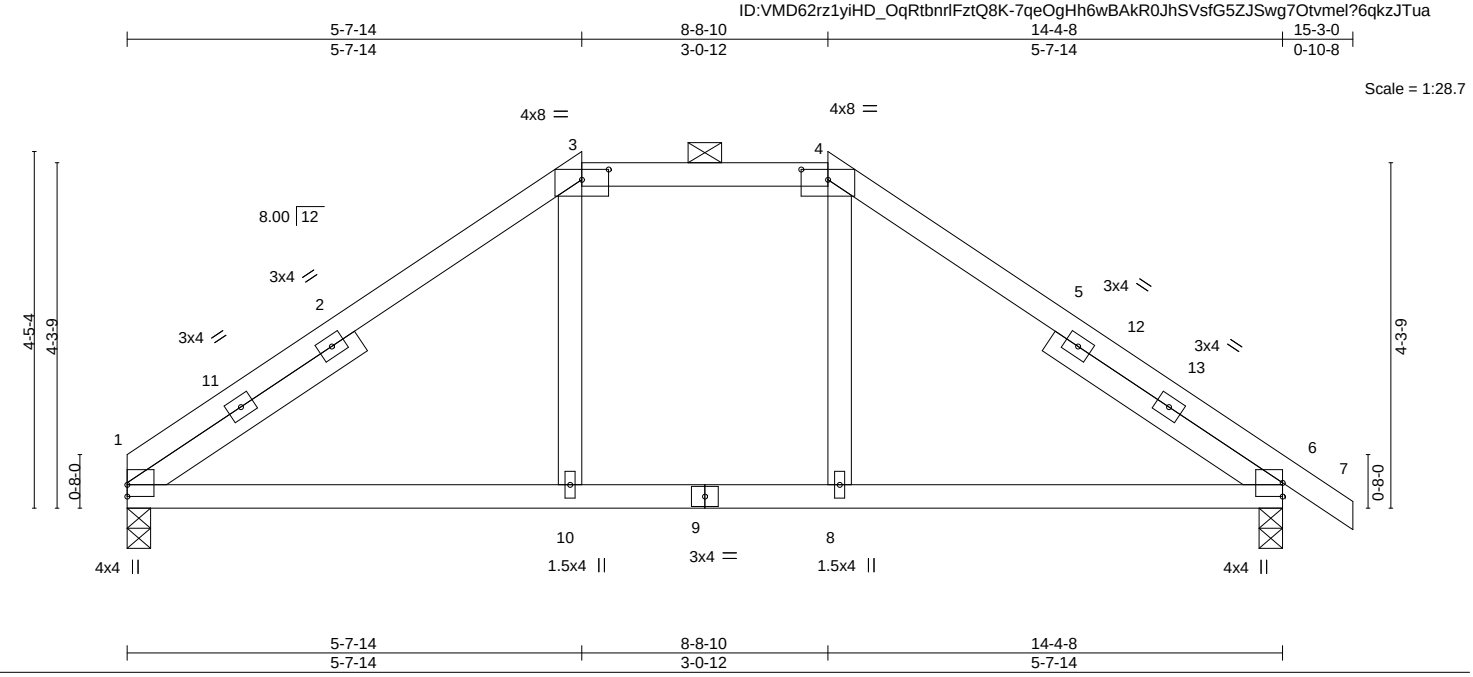


Plate Offsets (X,Y)-- [3:0-4-0,0-1-9], [4:0-4-0,0-1-9]

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	0.43	Vert(LL)	-0.07	1-10	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.10	1-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 70 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
SLIDER Left 2x4 SP or SPF No.2 -t 3-4-15, Right 2x4 SP or SPF No.2 -t 3-4-15

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

REACTIONS. (size) 1=0-3-8, 6=0-3-8
Max Horz 1=-84(LC 12)
Max Uplift 1=-9(LC 14), 6=-22(LC 15)
Max Grav 1=635(LC 3), 6=683(LC 27)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-782/67, 3-4=-577/95, 4-6=-783/76
BOT CHORD 1-10=0/584, 8-10=0/577, 6-8=0/584

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-7-14, Exterior(2E) 5-7-14 to 8-8-10, Exterior(2R) 8-8-10 to 12-11-9, Interior(1) 12-11-9 to 15-3-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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) 1 and 6. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	A3	Common	2	1	I45987463
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:06 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-b0CmudikhUIa2Auu0CNupI6O9K_O7JcwtPkgMAzJTuZ

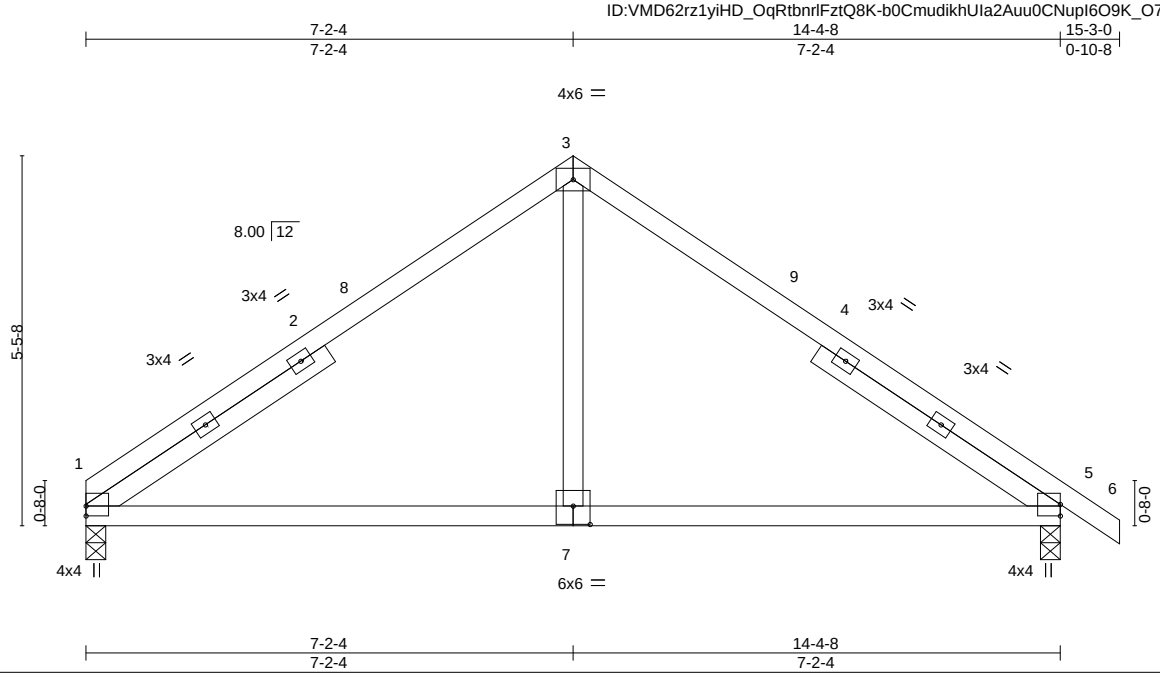


Plate Offsets (X,Y)-- [7:0-3-0,0-3-4]

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	0.82	Vert(LL)	-0.06	1-7	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.12	1-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 69 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
SLIDER Left 2x4 SP No.3 -t 4-2-15, Right 2x4 SP No.3 -t 4-2-15

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

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-106(LC 12)
Max Uplift 1=-15(LC 14), 5=-29(LC 15)
Max Grav 1=573(LC 2), 5=629(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-658/74, 3-5=-659/74
BOT CHORD 1-7=0/457, 5-7=0/457
WEBS 3-7=0/337

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-2-4, Exterior(2R) 7-2-4 to 10-2-4, Interior(1) 10-2-4 to 15-3-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	AE	GABLE	1	1	I45987464
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:07 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-3Dm85ziMSoQRgKS4awu7LWfltkSgsoT363UDuczJTuY

-0-10-8 2-7-14 11-8-10 14-4-8 15-3-0
0-10-8 2-7-14 9-0-12 2-7-14 0-10-8

Scale = 1:26.7

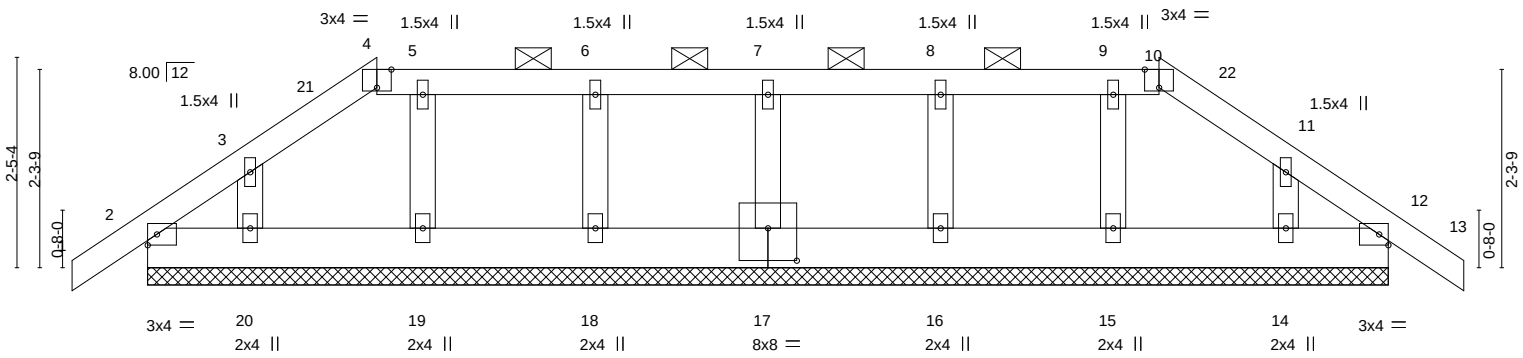


Plate Offsets (X,Y)-- [4:0-2-0,Edge], [10:0-2-0,Edge], [17:0-4-0,0-4-8]

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	0.05	Vert(LL)	-0.00	12	n/r	120	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	13	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 74 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 14-4-8.
(lb) - Max Horz 2=-46(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 12, 17, 18, 19, 20, 16, 15, 14, 2
Max Grav All reactions 250 lb or less at joint(s) 12, 17, 18, 19, 20, 16, 15, 14, 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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 2-7-14, Corner(3R) 2-7-14 to 5-7-14, Exterior(2N) 5-7-14 to 11-8-10, Corner(3R) 11-8-10 to 14-8-10, Exterior(2N) 14-8-10 to 15-3-0 zone;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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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.
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) Gable requires continuous bottom chord bearing.
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.
11) N/A
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	AG	COMMON GIRDER	1	2	I45987465
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:10 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-UoSHk_IEljp0XnBfF2Rqz8H7rxN_3z_Wo1itVxzJTuV

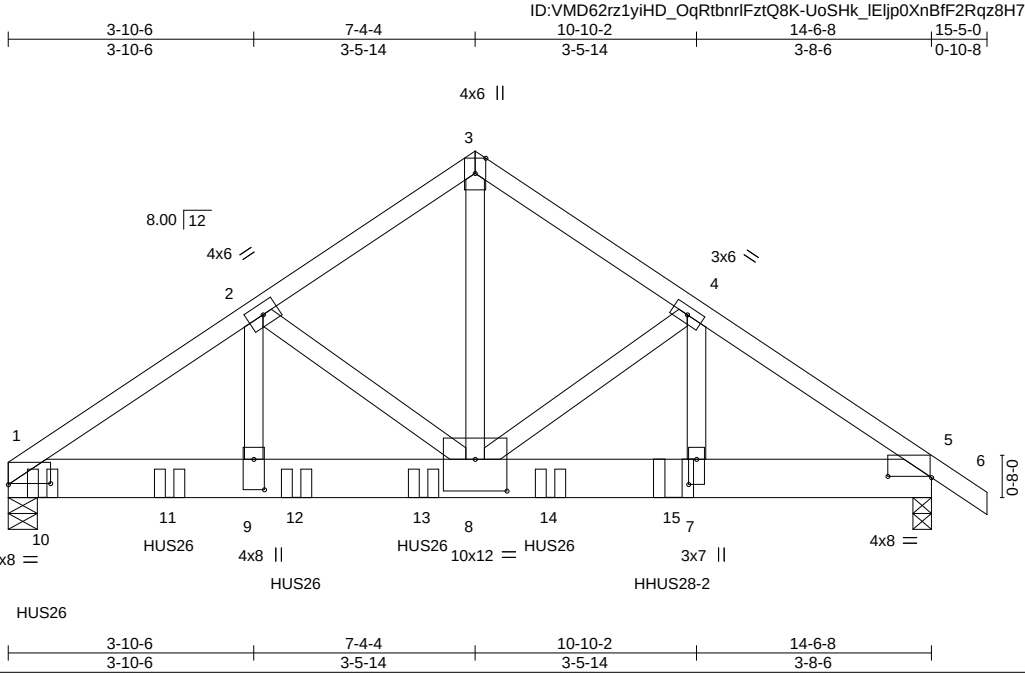


Plate Offsets (X,Y)-- [1:0-8-0,0-0-3], [5:0-8-4,0-0-4], [7:0-4-12,0-1-8], [8:0-6-0,0-6-0], [9:0-5-12,0-2-0]

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	0.52	Vert(LL)	-0.06	8-9	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.12	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.03	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 196 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*
3-8: 2x4 SP No.2 or 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=(0-5-8 + LGT2 Simpson Strong-Tie) (req. 0-5-12), 5=(0-3-8 + TBE4 Simpson Strong-Tie) (req. 0-3-12)
Max Horz 1=-105(LC 34)
Max Uplift 5=-384(LC 11)
Max Grav 1=7338(LC 3), 5=4817(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-8242/0, 2-3=-5727/320, 3-4=-5725/321, 4-5=-7524/597
BOT CHORD 1-9=0/6624, 8-9=0/6624, 7-8=-434/5968, 5-7=-434/5968
WEBS 3-8=-297/6062, 4-8=-1566/384, 4-7=-353/2083, 2-8=-2460/0, 2-9=0/3052

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 0-2-0 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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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) 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) LGT2 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.
10) TBE4 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.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-6-8 from the left end to 8-6-8 to connect truss(es) to back face of bottom chord.

Continued on page 2

May 6,2021

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

NOTES-

13) Use Simpson Strong-Tie HHUS28-2 (22-10d Girder, 4-10d Truss) or equivalent at 10-5-12 from the left end to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) LGT2 Hurricane ties must have two studs in line below the truss.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-43, 3-6=-43, 1-5=-20
   Concentrated Loads (lb)
   Vert: 10=-1618(B) 11=-1544(B) 12=-1541(B) 13=-1608(B) 14=-1657(B) 15=-2133(B)

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	B1	HIP	1	1	I45987466
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:11 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-y_?fxKlsW1xt9xmrpmy3WMpFRLhnoRrf0hSR2NzJTuU

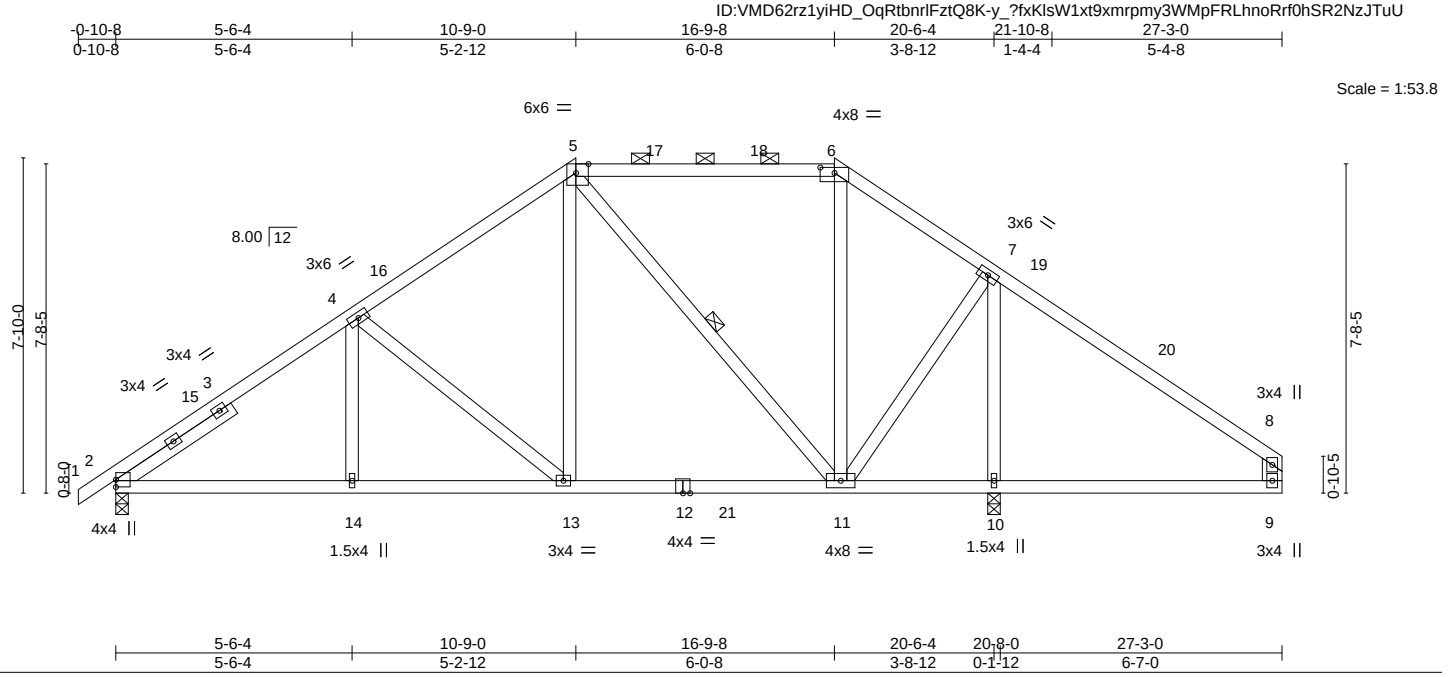


Plate Offsets (X,Y)-- [5:0-3-8,Edge], [6:0-4-0,0-1-9]

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	0.72	Vert(LL)	-0.07	11-13	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.12	11-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.02	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/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.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3 *Except*
	8-9: 2x6 SP No.2
SLIDER	Left 2x4 SP or SPF No.2 -t 3-2-15

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=151(LC 11)
Max Uplift 2=-44(LC 14), 10=-18(LC 15)
Max Grav 2=870(LC 26), 10=1538(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1101/57, 4-5=-746/85, 6-7=-299/95, 7-8=-28/467
BOT CHORD 2-14=-82/911, 13-14=-82/911, 11-13=-66/566, 10-11=-307/66, 9-10=-307/66
WEBS 4-13=-436/126, 5-13=-5/525, 5-11=-572/38, 7-11=0/769, 7-10=-1272/64

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-9-0, Exterior(2R) 10-9-0 to 14-11-15, Interior(1) 14-11-15 to 16-9-8, Exterior(2R) 16-9-8 to 21-0-7, Interior(1) 21-0-7 to 27-0-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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 10. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	B2	Hip	1	1	I45987467
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:12 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-QAZ18gmVHK3km5L2MTUI2ZMQrl3EXvRoFLB_aqzJTuT

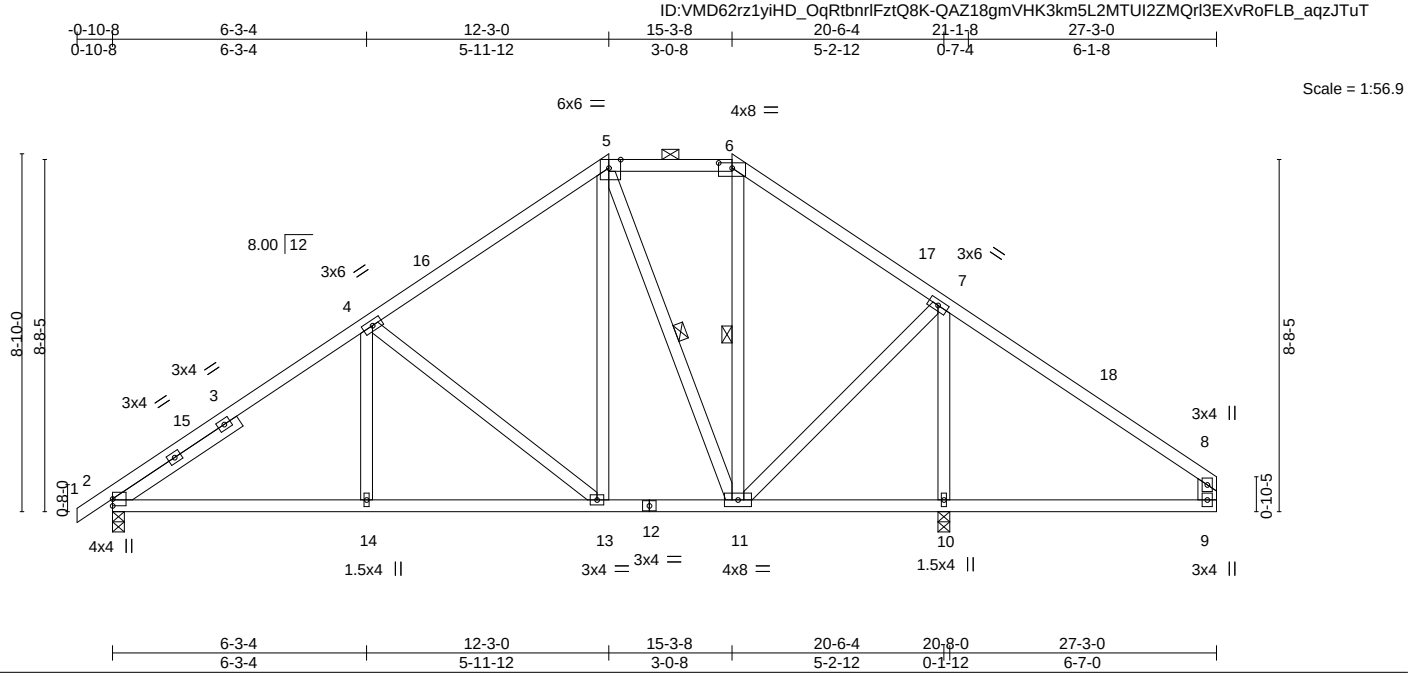


Plate Offsets (X,Y)-- [5:0-3-8,Edge], [6:0-4-0,0-1-9]

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	0.74	Vert(LL)	-0.04	2-14	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.09	2-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.02	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 168 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 *Except*
	8-9: 2x6 SP No.2
SLIDER	Left 2x4 SP or SPF No.2 -t 3-8-5

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=171(LC 11)
Max Uplift 2=-48(LC 14), 10=-29(LC 15)
Max Grav 2=807(LC 32), 10=1422(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1000/62, 4-5=-586/98, 5-6=-250/104, 6-7=-381/107, 7-8=-24/433
BOT CHORD 2-14=-91/761, 13-14=-91/761, 11-13=-44/392, 10-11=-254/65, 9-10=-254/65
WEBS 4-14=0/267, 4-13=-469/138, 5-13=-28/390, 5-11=-418/53, 7-11=0/662, 7-10=-1228/92

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-3-0, Exterior(2E) 12-3-0 to 15-3-8, Exterior(2R) 15-3-8 to 19-6-7, Interior(1) 19-6-7 to 27-0-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) 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.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	B3	Common	3	1	I45987468
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:13 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-uM7PM0n72eBbOFwEwA?Xbnvby9OmGSByU?xY6GzJTuS

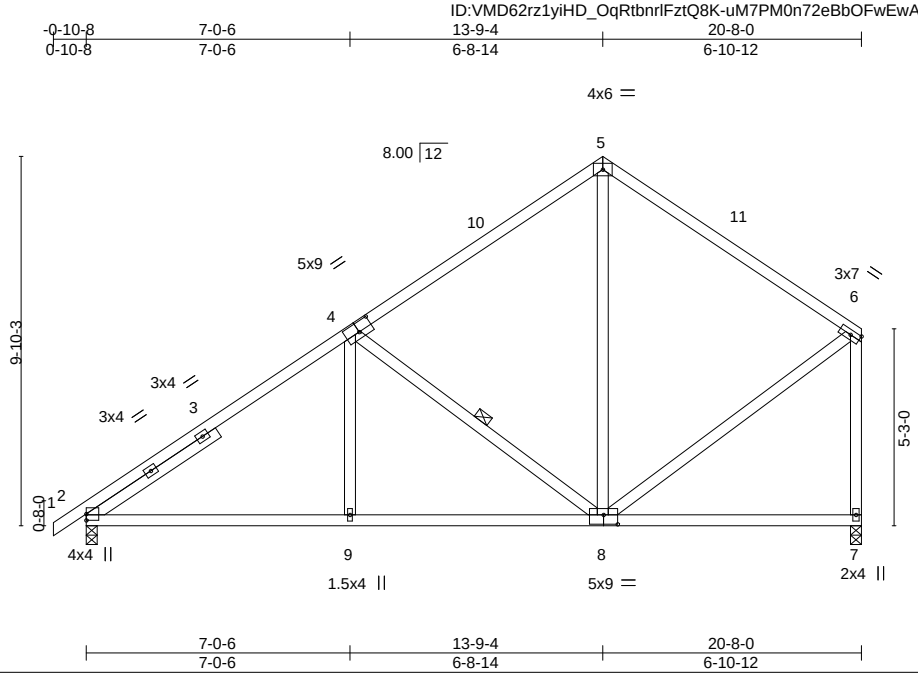


Plate Offsets (X,Y)-- [4:0-4-8,0-3-0], [8:0-4-8,0-3-0]

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	0.72	Vert(LL)	-0.06	2-9	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.13	2-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 128 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -t 4-1-13

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-7-5 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-8

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=224(LC 14)
Max Uplift 2=-32(LC 14), 7=-39(LC 14)
Max Grav 2=874(LC 2), 7=820(LC 2)

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

TOP CHORD	2-4=-1087/36, 4-5=-616/91, 5-6=-604/95, 6-7=-759/73
BOT CHORD	2-9=-152/832, 8-9=-152/832
WEBS	4-9=0/289, 4-8=-531/161, 5-8=0/286, 6-8=-27/483

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-9-4, Exterior(2R) 13-9-4 to 16-9-4, Interior(1) 16-9-4 to 20-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 6,2021

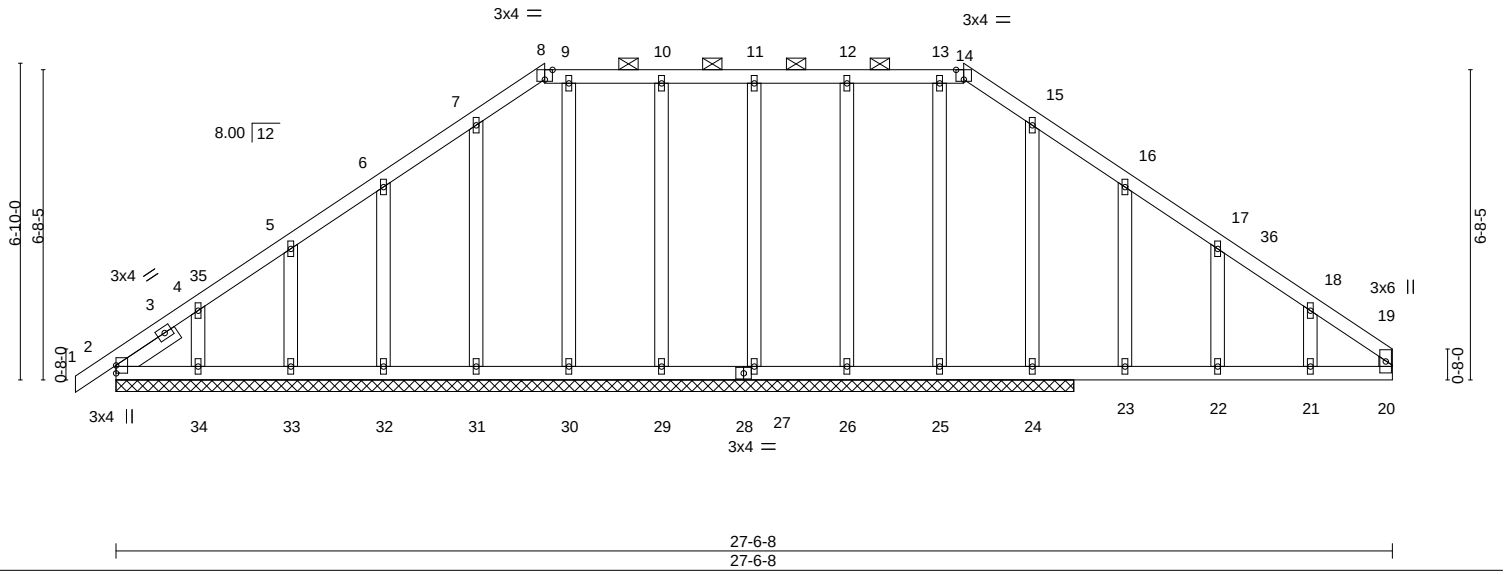
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	BE	GABLE	1	1	I45987469
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:14 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-MZhnZMolpyJS0PVQUuWm8_RmBZgI?u85jfg5eizJTuR

-0-10-8 9-3-0 18-3-8 27-6-8
0-10-8 9-3-0 9-0-8 9-3-0

Scale = 1:49.7



27-6-8
27-6-8

Plate Offsets (X,Y)-- [8:0-2-0,Edge], [14:0-2-0,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	0.75	Vert(LL)	0.00	1	n/r	120	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	-0.01	24	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 177 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 8-14.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 20-8-0.
(lb) - Max Horz 2=131(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 27, 29, 31, 32, 33, 34, 26 except 2=-226(LC 33), 25=-168(LC 27), 24=-198(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 2, 27, 29, 31, 32, 33, 34, 26, 25 except 30=333(LC 2), 24=898(LC 27)

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

TOP CHORD	2-4=-109/449, 4-5=-47/410, 5-6=0/410, 6-7=0/418, 7-8=0/361, 8-9=0/301, 9-10=0/314, 10-11=0/314, 11-12=0/314, 12-13=0/314, 13-14=0/311, 14-15=0/282, 15-16=0/492, 16-17=-3/446, 17-18=-41/404, 18-19=-78/371
BOT CHORD	2-34=-324/85, 33-34=-324/85, 32-33=-324/85, 31-32=-324/85, 30-31=-324/85, 29-30=-324/85, 27-29=-324/85, 26-27=-324/85, 25-26=-324/85, 24-25=-324/85, 23-24=-324/85, 22-23=-324/85, 21-22=-324/85, 20-21=-324/85
WEBS	9-30=-295/0, 15-24=-480/120

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 9-3-0, Corner(3R) 9-3-0 to 12-3-0, Exterior(2N) 12-3-0 to 18-3-8, Corner(3R) 18-3-8 to 21-3-8, Exterior(2N) 21-3-8 to 27-4-12 zone;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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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.
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 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.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

May 6,2021

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

NOTES-

11) N/A

12) N/A

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	BG	Common Girder	1	2	I45987470
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:17 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-n8NwCNqd6th1tsD?903Tld3LGmo9CCzXPdvlF1zJTuO

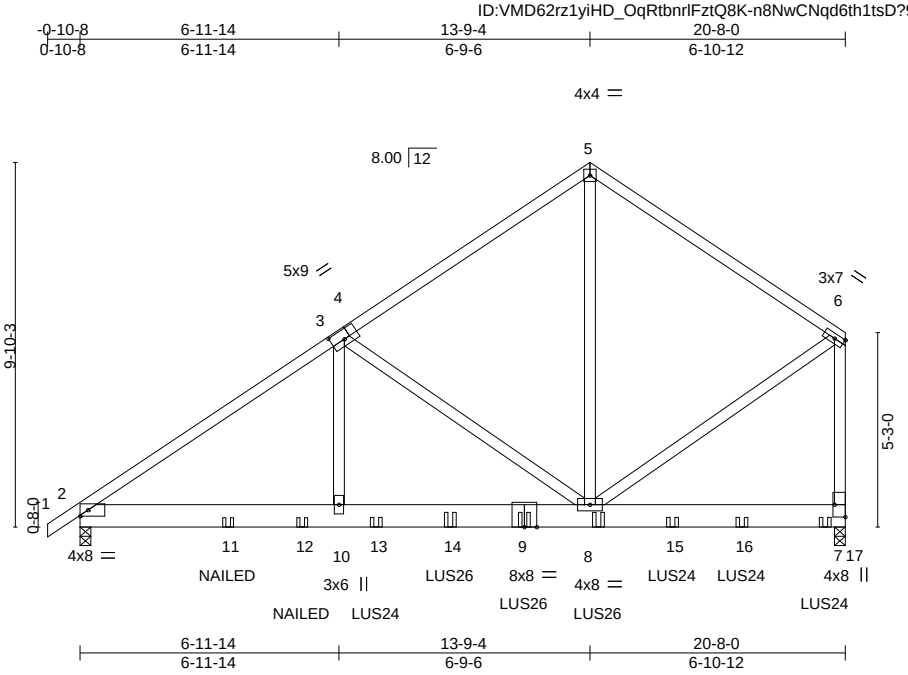


Plate Offsets (X,Y)-- [4:0-4-4,0-3-0], [7:Edge,0-3-8]

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	0.50	Vert(LL)	0.04	8-10	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	0.06	8-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.47	Horz(CT)	-0.01	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 305 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x8 SP No.2
WEBS 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 6-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=224(LC 45)
Max Uplift 2=-820(LC 38), 7=-1323(LC 37)
Max Grav 2=822(LC 55), 7=840(LC 55)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1047/1603, 3-5=-608/980, 5-6=-615/1053, 6-7=-743/940
BOT CHORD 2-10=-1275/867, 8-10=-1275/867
WEBS 3-10=-869/235, 3-8=-510/606, 5-8=-1318/379, 6-8=-990/535

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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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) 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) Two 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) LGT2 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.

Continued on page 2

May 6,2021

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

NOTES-

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 8-0-0 oc max. starting at 8-0-0 from the left end to 20-1-8 to connect truss(es) to back face of bottom chord.
13) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 10-0-0 from the left end to 14-0-0 to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
16) LGT2 Hurricane ties must have two studs in line below the truss.

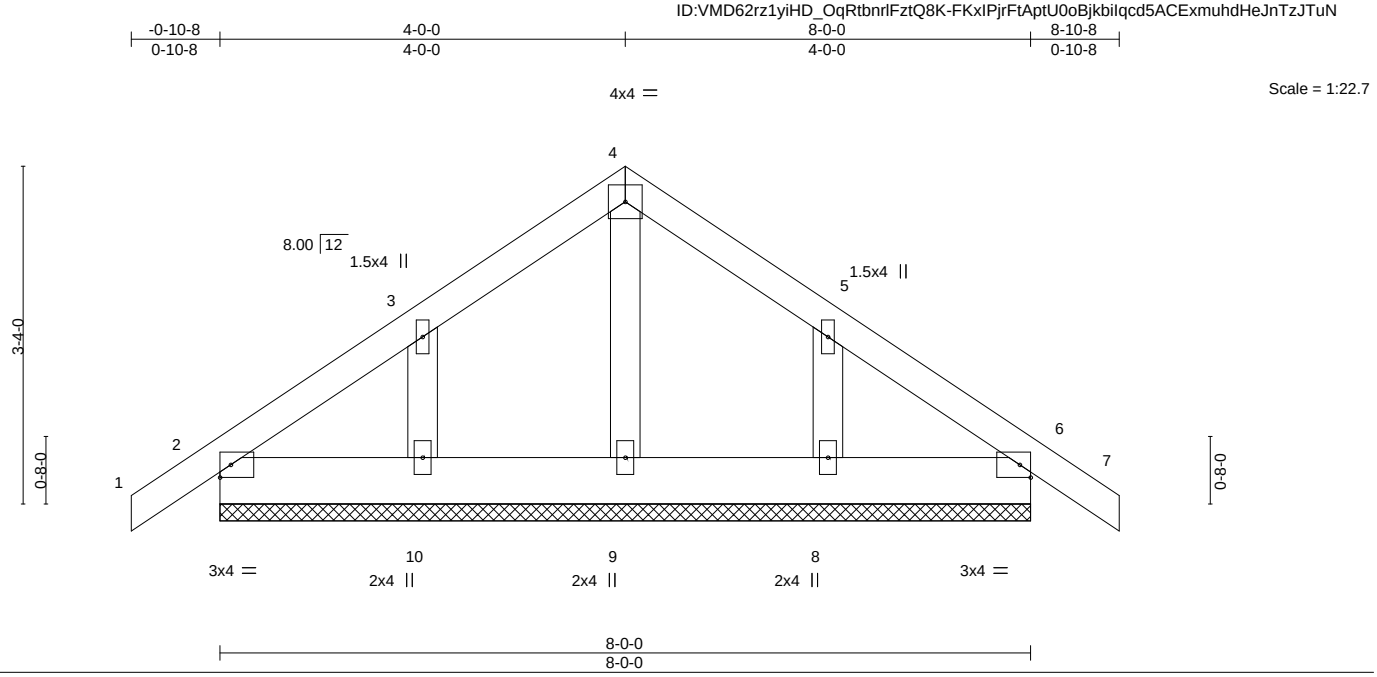
LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-43, 5-6=-43, 2-7=-20
   Concentrated Loads (lb)
   Vert: 9=224(B) 8=171(B) 11=103(B) 12=126(B) 13=160(B) 14=200(B) 15=-130(B) 16=-130(B) 17=-136(B)

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	CE	COMMON SUPPORTED GAB	1	1	I45987471
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:18 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-FKxIPjrFtAptU0oBjkbiIqcd5ACExmuhdHeJnTzJTuN



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	6	n/r	120	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	7	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 44 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x6 SP 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 8-0-0.
(lb) - Max Horz 2=65(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-0-0, Exterior(2N) 2-0-0 to 4-0-0, Corner(3R) 4-0-0 to 7-0-0, Exterior(2N) 7-0-0 to 8-10-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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) Gable requires continuous bottom chord bearing.
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) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 6,2021

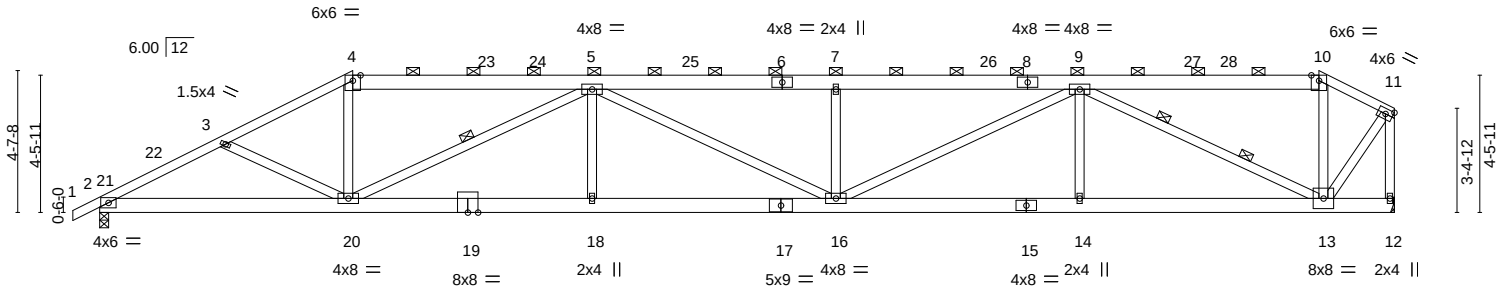
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	H1	Hip	1	1	I45987472
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:19 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-jWUgc3sudUxk6ANOHR6xr28gwaM9g?QqsxOsKwzJTuM

-0-10-8 4-1-3 8-3-0 14-6-8 16-0-10 20-10-2 24-0-0 31-11-6 39-9-0 42-2-8
0-10-8 4-1-3 4-1-13 6-3-8 1-6-2 4-9-8 3-1-14 7-11-6 7-9-10 2-5-8

Scale = 1:75.1



8-3-0 14-6-8 16-0-10 22-11-5 24-0-0 31-4-3 31-11-6 39-9-0 42-2-8
8-3-0 6-3-8 1-6-2 6-10-11 1-0-11 7-4-3 0-7-3 7-9-10 2-5-8

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	0.56	Vert(LL)	-0.30	16-18	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.61	16-18	>826	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.15	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 285 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-4,10-11: 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 3-0-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-14 max.): 4-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-20
2 Rows at 1/3 pts 9-13

REACTIONS. (size) 2=0-3-8, 12=Mechanical
Max Horz 2=119(LC 16)
Max Uplift 2=-62(LC 13), 12=-108(LC 12)
Max Grav 2=1739(LC 2), 12=1677(LC 40)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3177/185, 3-4=-3044/187, 4-5=-2673/179, 5-7=-4362/362, 7-9=-4362/362, 9-10=-921/73, 10-11=-999/69, 11-12=-1697/98
BOT CHORD 2-20=-200/2740, 18-20=-337/4225, 16-18=-337/4225, 14-16=-273/3360, 13-14=-273/3360
WEBS 4-20=0/974, 7-16=-460/146, 9-14=0/317, 9-13=-2738/245, 11-13=-92/1589, 5-18=0/306, 9-16=-92/1203, 5-20=-1815/213

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-3-0, Exterior(2R) 8-3-0 to 12-5-15, Interior(1) 12-5-15 to 39-9-0, Exterior(2E) 39-9-0 to 42-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=108.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

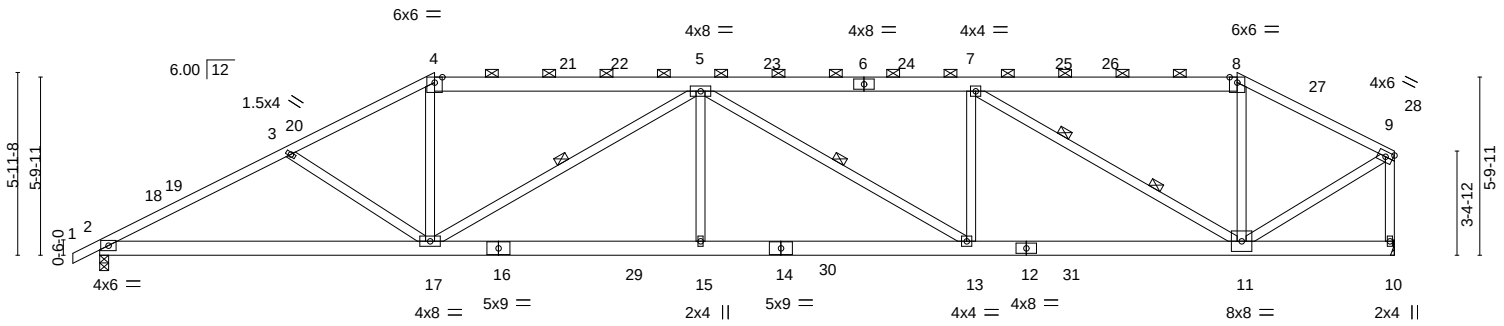
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	H2	Hip	1	1	I45987473
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:21 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-fvcR1lt895BSLUXmOs8PwTEzLN?c8v?7KFtzOozJTuK

-0-10-8 2-3-8 | 6-2-12 | 10-11-0 | 19-7-1 | 28-4-15 | 37-1-0 | 42-2-8
0-10-8 2-3-8 | 3-11-4 | 4-8-4 | 8-8-1 | 8-9-14 | 8-8-1 | 5-1-8

Scale = 1:75.1



2-3-8 | 6-2-12 | 10-11-0 | 19-7-1 | 28-4-15 | 37-1-0 | 42-2-8
2-3-8 | 3-11-4 | 4-8-4 | 8-8-1 | 8-9-14 | 8-8-1 | 5-1-8

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	0.75	Vert(LL)	-0.26	13-15	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.47	13-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.13	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 282 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-14 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-4 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 15-17.
WEBS 1 Row at midpt 5-13, 5-17
2 Rows at 1/3 pts 7-11

REACTIONS. (size) 10=Mechanical, 2=0-3-8
Max Horz 2=137(LC 16)
Max Uplift 10=-63(LC 12), 2=-30(LC 13)
Max Grav 10=1837(LC 3), 2=1880(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3344/144, 3-4=-3146/143, 4-5=-2763/140, 5-7=-3388/220, 7-8=-1526/98, 8-9=-1725/93, 9-10=-1784/80
BOT CHORD 2-17=-163/2912, 15-17=-230/3788, 13-15=-230/3788, 11-13=-201/3388
WEBS 4-17=0/1065, 5-15=0/405, 5-13=-508/33, 7-13=0/617, 7-11=-2182/172, 8-11=0/462, 9-11=-65/1805, 5-17=-1250/175, 3-17=-356/163

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-11-0, Exterior(2R) 10-11-0 to 15-1-15, Interior(1) 15-1-15 to 37-1-0, Exterior(2R) 37-1-0 to 41-3-15, Interior(1) 41-3-15 to 42-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	H3	HIP	1	1	I45987474
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:23 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-bIkBSRvOhjRAbnh9WHAt?uJKsBipcrcQnZM3ThzJTuI

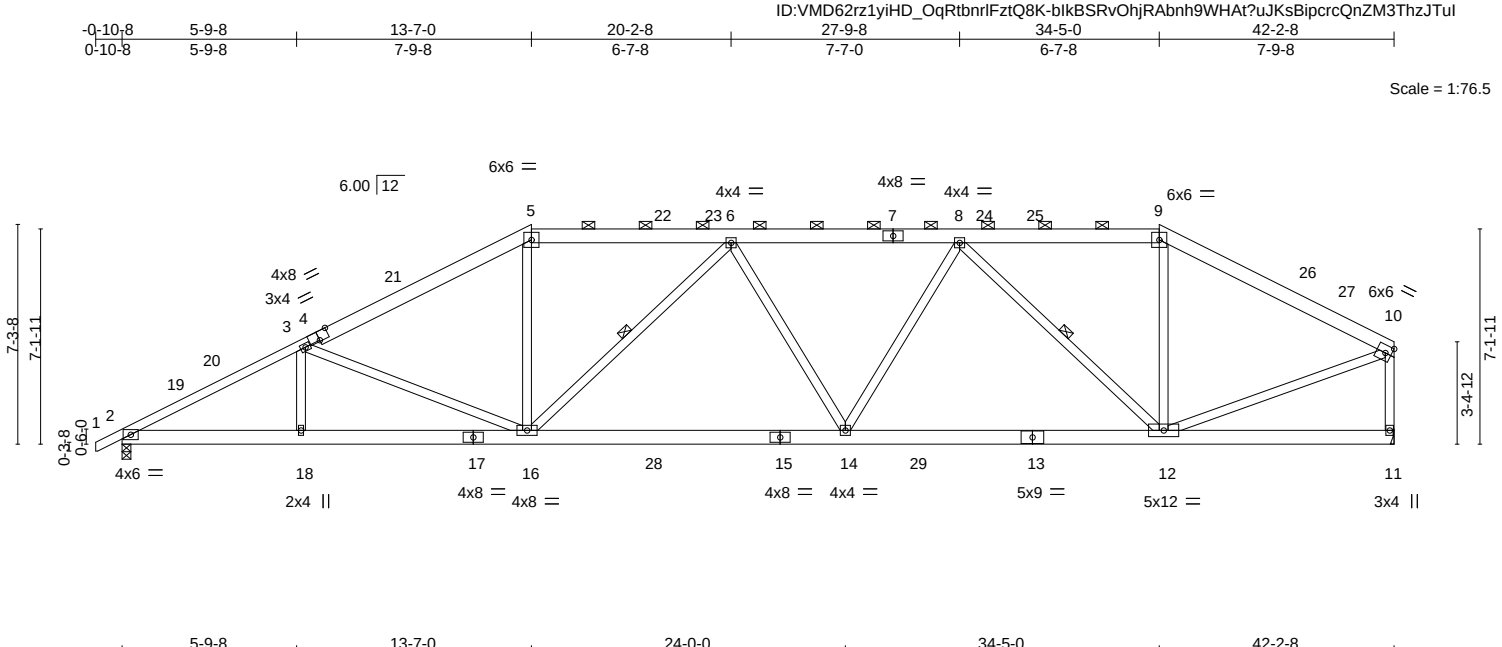


Plate Offsets (X,Y)-- [4:0-4-0,Edge]

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	0.69	Vert(LL)	-0.23	14-16	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.41	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.10	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 297 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-4: 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 2-8-7 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-3 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-16, 8-12

REACTIONS. (size) 2=0-3-8, 11=Mechanical
Max Horz 2=152(LC 16)
Max Uplift 2=-27(LC 16), 11=-17(LC 12)
Max Grav 2=1885(LC 3), 11=1850(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3499/80, 3-5=-2957/104, 5-6=-2571/128, 6-8=-3000/124, 8-9=-1774/106, 9-10=-2067/82, 10-11=-1750/83
BOT CHORD 2-18=-97/3034, 16-18=-97/3034, 14-16=-137/3002, 12-14=-119/2734
WEBS 6-16=-701/148, 8-14=0/583, 8-12=-1352/142, 9-12=0/614, 10-12=-23/1887, 5-16=0/956, 3-16=-626/148

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-1 to 2-1-15, Interior(1) 2-1-15 to 13-7-0, Exterior(2R) 13-7-0 to 17-9-15, Interior(1) 17-9-15 to 34-5-0, Exterior(2R) 34-5-0 to 38-7-15, Interior(1) 38-7-15 to 42-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	H4	Hip	1	1	I45987475
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:25 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-Ygsyt6weDKiuq5rXdiDL4JOgi_Pc4mqjEtrAXZzJTuG

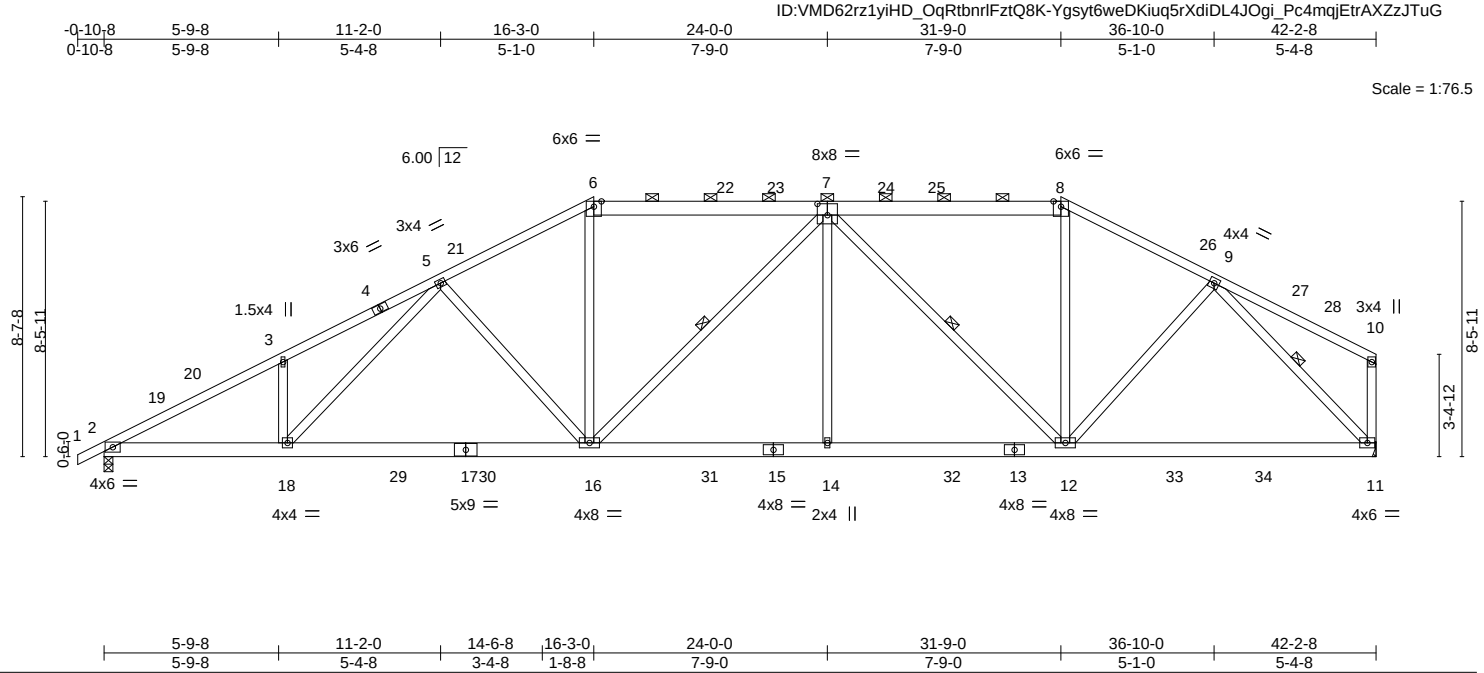


Plate Offsets (X,Y)-- [7:0-4-0,0-4-8]

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	0.60	Vert(LL)	-0.23	16-18	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.42	16-18	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.10	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 299 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 7-8,6-7: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-15 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-16, 7-12, 9-11

REACTIONS. (size) 2=0-3-8, 11=Mechanical
Max Horz 2=173(LC 16)
Max Uplift 2=-47(LC 16)
Max Grav 2=1923(LC 3), 11=1900(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3625/58, 3-5=-3568/133, 5-6=-2703/132, 6-7=-2373/141, 7-8=-1870/122, 8-9=-2141/119
BOT CHORD 2-18=-132/3141, 16-18=-82/2681, 14-16=-45/2518, 12-14=-45/2518, 11-12=-44/1505
WEBS 6-16=0/890, 7-16=-375/122, 7-14=0/372, 7-12=-983/101, 8-12=0/640, 9-12=0/660, 9-11=-2141/72, 5-16=-567/160, 3-18=-253/153, 5-18=-74/695

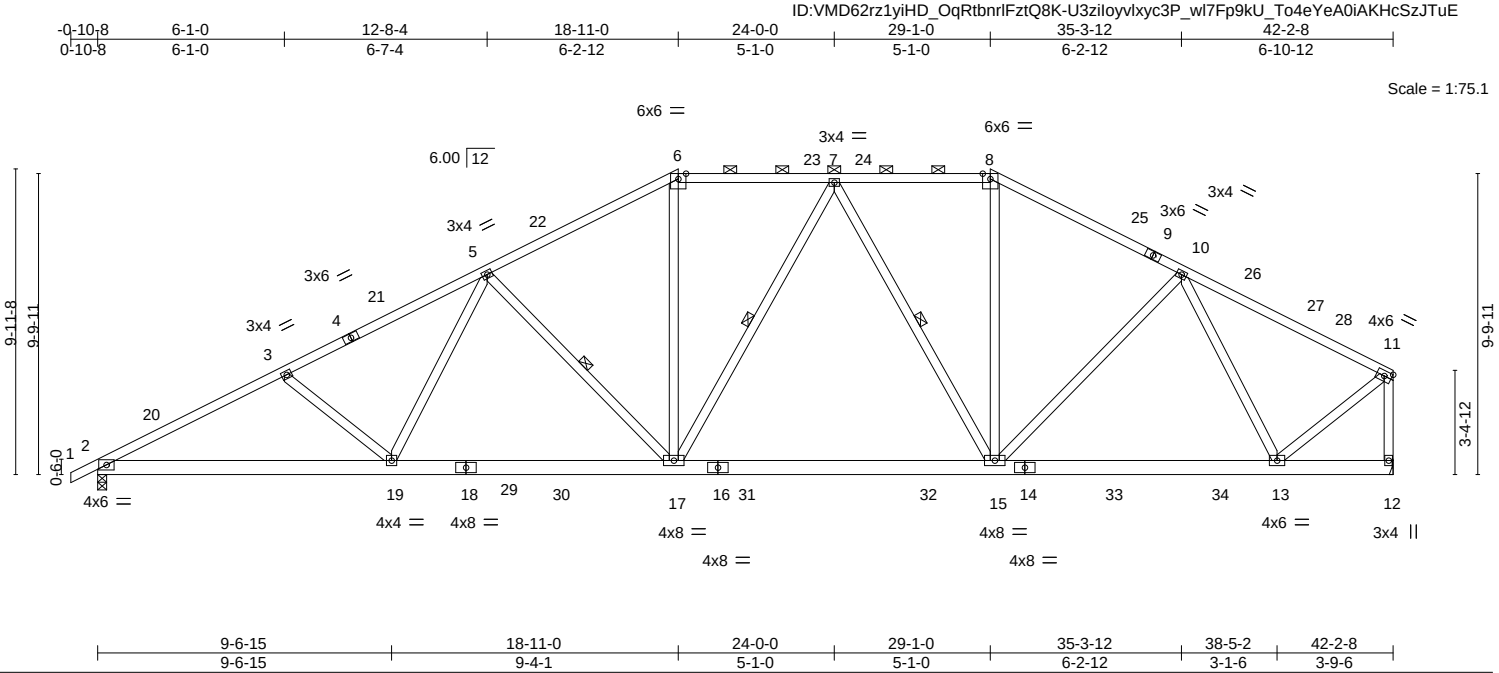
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-3-0, Exterior(2R) 16-3-0 to 20-5-15, Interior(1) 20-5-15 to 31-9-0, Exterior(2R) 31-9-0 to 35-11-15, Interior(1) 35-11-15 to 42-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) Refer to girder(s) for truss to truss connections.
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) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	H5	Hip	1	1	I45987476
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:27 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-U3ziloyvlxyc3P_wl7Fp9kU_To4eYeA0iAKHcSzJTuE



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	0.71	Vert(LL)	-0.22	15-17	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.38	15-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.09	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 290 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-5 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-12 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-17, 7-17, 7-15

REACTIONS. (size) 2=0-3-8, 12=Mechanical
Max Horz 2=192(LC 16)
Max Uplift 2=-65(LC 16), 12=-6(LC 17)
Max Grav 2=1916(LC 3), 12=1890(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3478/120, 3-5=-3256/104, 5-6=-2450/148, 6-7=-2121/158, 7-8=-1839/147, 8-10=-2136/142, 10-11=-1515/64, 11-12=-1864/54
BOT CHORD 2-19=-227/3019, 17-19=-108/2594, 15-17=-10/2067, 13-15=-36/1681
WEBS 3-19=-300/163, 5-19=0/588, 5-17=-734/172, 6-17=0/814, 7-17=-148/259, 7-15=-571/97, 8-15=0/677, 10-15=-12/378, 11-13=0/1652, 10-13=-888/88

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-11-0, Exterior(2R) 18-11-0 to 23-1-15, Interior(1) 23-1-15 to 29-1-0, Exterior(2R) 29-1-0 to 33-3-15, Interior(1) 33-3-15 to 42-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

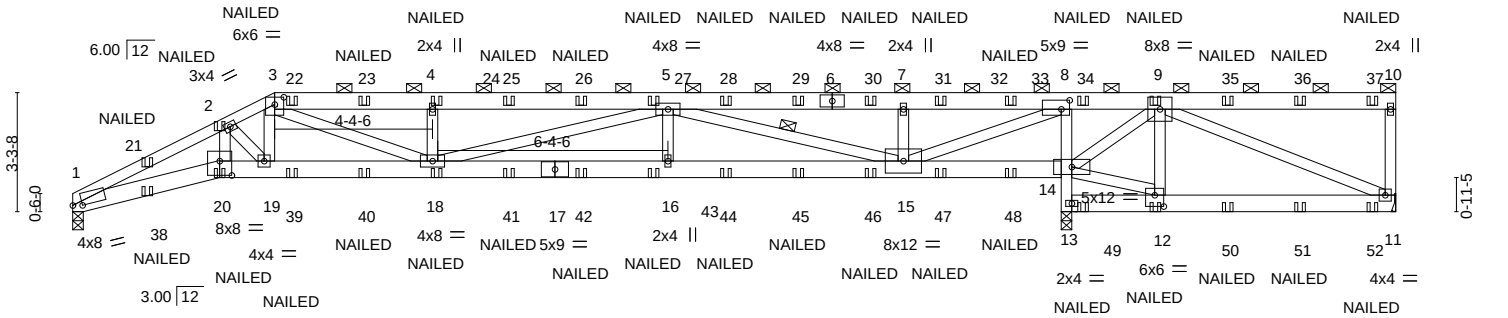
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	HG1	HALF HIP GIRDER	1	1	I45987477
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:32 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-r0nbLW01ZUauAAtuXgr_snBp?pnfDuElrS12HfzJTu9

4-0-12	5-7-0	9-11-6	16-5-8	22-11-10	27-4-0	30-0-12	36-7-0
4-0-12	1-6-4	4-4-6	6-6-2	6-6-2	4-4-6	2-8-12	6-6-4

Scale: 3/16"=1'



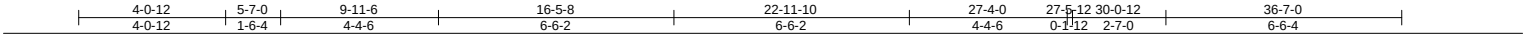


Plate Offsets (X,Y)-- [1:0-3-3,0-0-12], [3:0-3-0,0-2-7], [8:0-2-12,0-3-0], [12:0-3-0,0-3-12], [20:0-4-0,0-4-12]

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	0.86	Vert(LL)	-0.25	16-18	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.52	16-18	>632	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.14	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 240 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except*
1-3: 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x6 SP No.2 *Except*
8-13: 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3 *Except*
3-18,8-15: 2x4 SP No.2 or 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-3-9 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-7 max.): 3-10.
BOT CHORD Rigid ceiling directly applied or 2-9-13 oc bracing.
WEBS 1 Row at midpt 5-15

REACTIONS. (size) 1=0-3-8, 11=Mechanical, 13=(0-3-8 + H10A Simpson Strong-Tie) (req. 0-4-9)
Max Horz 1=90(LC 54)
Max Uplift 1=-149(LC 9), 11=-198(LC 2), 13=-530(LC 9)
Max Grav 1=1224(LC 2), 11=30(LC 9), 13=2910(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3743/557, 2-3=-3069/500, 3-4=-3738/661, 4-5=-3737/661, 5-7=-298/70, 7-8=-298/70, 8-9=-546/3047
BOT CHORD 1-20=-534/3310, 19-20=-507/3134, 18-19=-447/2711, 16-18=-584/3197, 15-16=-584/3197, 14-15=-3049/544, 13-14=-2939/533, 8-14=-1670/341, 12-13=-318/38, 11-12=-1146/201
WEBS 2-20=-47/671, 2-19=-542/124, 3-19=-73/673, 3-18=-247/1158, 4-18=-500/218, 5-18=-85/651, 5-16=0/348, 5-15=-3041/543, 7-15=-421/212, 8-15=-657/3605, 12-14=-876/173, 9-14=-2378/432, 9-12=0/585, 9-11=-225/1279

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) 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) Bearing at joint(s) 1, 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=198.
11) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.

May 6,2021

Continued on page 2

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) 1. This connection is for uplift only and does not consider lateral forces.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
16) 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

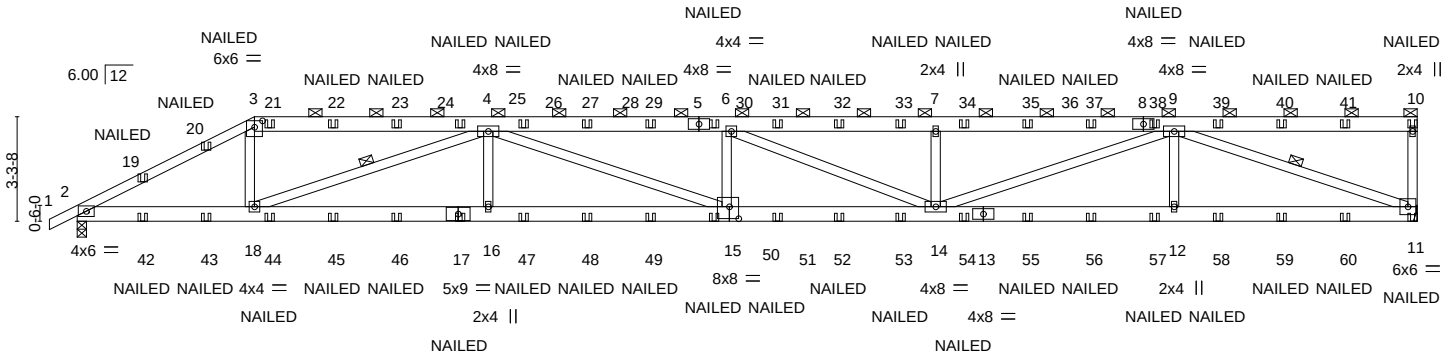
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-43, 3-10=-53, 1-20=-20, 14-20=-20, 11-13=-20
   Concentrated Loads (lb)
   Vert: 20=-25(F) 2=-20(F) 18=-19(F) 4=-16(F) 12=-19(F) 9=-16(F) 21=-55(F) 22=-19(F) 23=-16(F) 25=-16(F) 26=-16(F) 27=-16(F) 28=-16(F) 29=-16(F) 30=-16(F) 31=-16(F) 33=-16(F) 34=-16(F) 35=-16(F) 36=-16(F) 37=-29(F) 38=-25(F) 39=-19(F) 40=-19(F) 41=-19(F) 42=-19(F) 43=-19(F) 44=-19(F) 45=-19(F) 46=-19(F) 47=-19(F) 48=-19(F) 49=-19(F) 50=-19(F) 51=-19(F) 52=-24(F)

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	HG2	Half Hip Girder	1	2	I45987478
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:45 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-yW3W4yABWTD2EAMNova1uXD8?2DXmo_fr_hEDPzJTty

-0-10-8	2-3-8	5-7-0	12-11-6	14-6-8	20-5-8	27-0-8	34-6-10	42-2-8
0-10-8	2-3-8	3-3-8	7-4-6	1-7-2	5-11-0	6-7-0	7-6-2	7-7-14

Scale = 1:72.6



2-3-8	5-7-0	12-11-6	14-6-8	20-5-8	27-0-8	34-6-10	42-2-8
2-3-8	3-3-8	7-4-6	1-7-2	5-11-0	6-7-0	7-6-2	7-7-14

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

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	0.39	Vert(LL)	-0.37	15	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.74	15	>676	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.13	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 543 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-3: 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 5-7-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-12 max.): 3-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-11, 4-18

REACTIONS. (size) 11=Mechanical, 2=0-3-8
Max Horz 2=98(LC 55)
Max Uplift 11=-431(LC 9), 2=-334(LC 9)
Max Grav 11=2323(LC 2), 2=2309(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4423/704, 3-4=-3753/634, 4-6=-8437/1539, 6-7=-7755/1420, 7-9=-7755/1420, 10-11=-307/142
BOT CHORD 2-18=-641/3832, 16-18=-1303/7201, 15-16=-1303/7201, 14-15=-1533/8430, 12-14=-928/5056, 11-12=-928/5056
WEBS 3-18=-151/1568, 4-16=0/408, 6-14=-734/124, 7-14=-522/249, 9-14=-526/2885, 9-12=0/434, 9-11=-5309/974, 4-18=-3718/730, 4-15=-258/1334

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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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.
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) 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.
11) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=431.

May 6,2021

Continued on page 2

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

NOTES-

13) 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.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
16) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

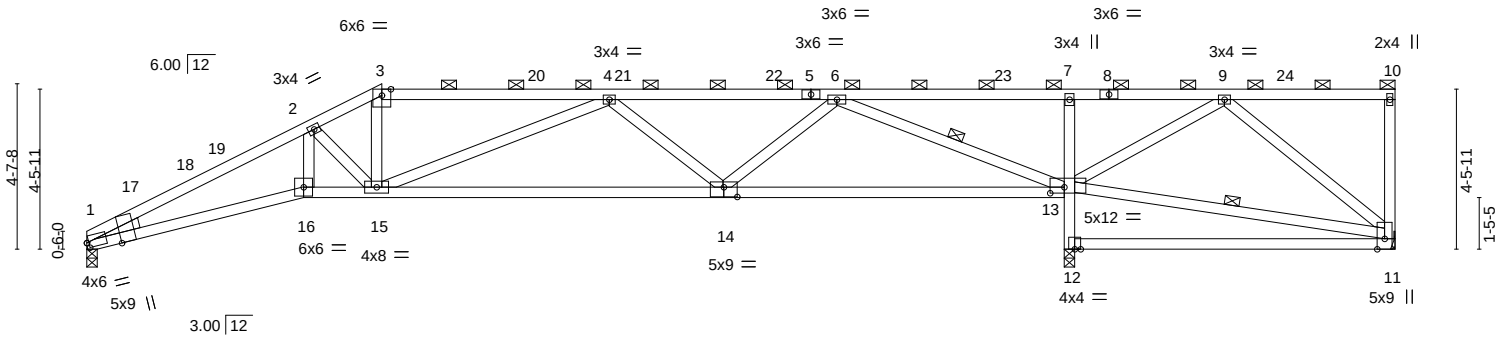
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-43, 3-10=-53, 2-11=-20
   Concentrated Loads (lb)
   Vert: 10=-39(B) 11=-28(B) 17=-19(B) 19=-44(B) 20=-38(B) 21=-18(B) 22=-16(B) 23=-16(B) 25=-16(B) 26=-16(B) 27=-16(B) 29=-16(B) 30=-16(B) 31=-16(B) 32=-16(B) 33=-16(B) 34=-16(B) 35=-16(B) 37=-16(B) 38=-16(B) 39=-16(B) 40=-16(B) 41=-16(B) 42=-28(B) 43=-21(B) 44=-19(B) 45=-19(B) 46=-19(B) 47=-19(B) 48=-19(B) 49=-19(B) 50=-19(B) 51=-19(B) 52=-19(B) 53=-19(B) 54=-19(B) 55=-19(B) 56=-19(B) 57=-19(B) 58=-19(B) 59=-19(B) 60=-19(B)

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	HV1	HALF HIP	1	1	I45987479
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:47 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-uvBGVeBS15TmTTWmwJcVzyJNjsseEhJyIIALIIzJTtw

6-0-12	8-3-0	14-7-5	20-11-11	27-4-0	31-9-12	36-7-0
6-0-12	2-2-4	6-4-5	6-4-6	6-4-5	4-5-12	4-9-4

Scale: 3/16"=1'



6-0-12	8-3-0	17-9-8	27-4-0	27-5-12	36-7-0
6-0-12	2-2-4	9-6-8	9-6-8	0-1-12	9-1-4

Plate Offsets (X,Y)-- [1:0-2-14,Edge], [1:0-0-11,0-1-12], [13:0-4-12,0-2-0], [14:0-4-8,0-3-4]

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	0.89	Vert(LL)	-0.22	11-12	>482	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.48	14-15	>687	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.13	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 195 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
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-5-15 max.): 3-10.
BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.
WEBS 1 Row at midpt 6-13, 11-13

REACTIONS. (size) 11=Mechanical, 1=0-3-8, 12=(0-3-8 + H10A Simpson Strong-Tie) (req. 0-3-9)
Max Horz 1=133(LC 16)
Max Uplift 11=-218(LC 2), 1=-1(LC 16), 12=-182(LC 13)
Max Grav 11=18(LC 16), 1=904(LC 2), 12=2258(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2682/124, 2-3=-1993/93, 3-4=-1738/88, 4-6=-1344/51, 6-7=-138/1764, 7-9=-135/1788
BOT CHORD 1-16=-182/2377, 15-16=-165/2246, 14-15=-166/1873, 13-14=-96/626, 12-13=-2167/237, 7-13=-373/107
WEBS 2-16=-25/608, 2-15=-746/163, 3-15=0/650, 4-15=-217/250, 4-14=-698/152, 6-14=0/1013, 6-13=-2550/242, 11-13=-546/0, 9-13=-1508/158, 9-11=0/773

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-3-0, Exterior(2R) 8-3-0 to 12-5-15, Interior(1) 12-5-15 to 36-5-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) 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) Bearing at joint(s) 1, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=218.
11) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.

Continued on page 2

May 6,2021

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

NOTES-

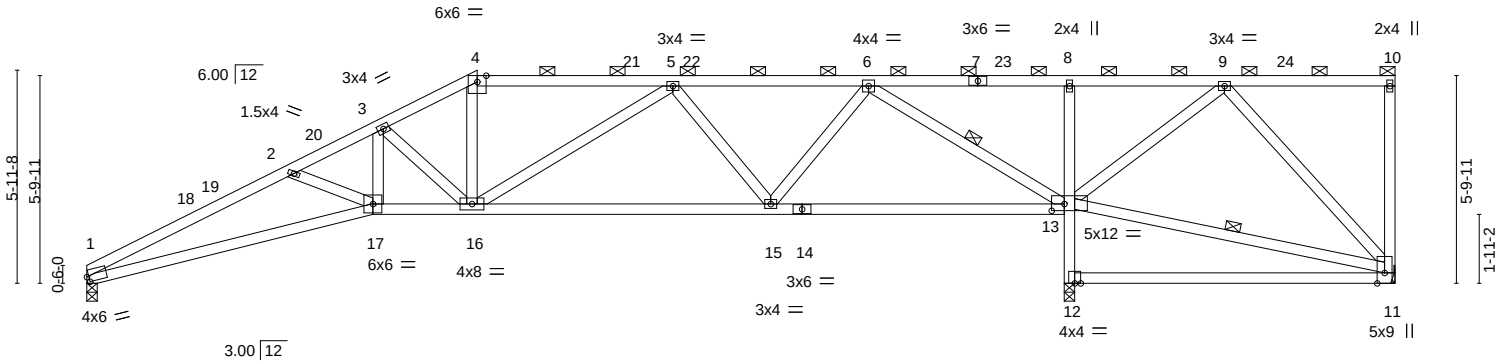
12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	HV2	HALF HIP	1	1	I45987480
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:49 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-rII0vKDiZijUing91kez2NOhrfZyia6FmcfSMAzJTtu

5-9-8	8-0-0	10-11-0	16-4-11	21-10-5	27-4-0	31-9-12	36-7-0
5-9-8	2-2-8	2-11-0	5-5-11	5-5-11	5-5-11	4-5-12	4-9-4

Scale: 3/16"=1'



8-0-0	10-11-0	19-1-8	27-4-0	27-5-12	36-7-0
8-0-0	2-11-0	8-2-8	8-2-8	0-1-12	9-1-4

Plate Offsets (X,Y)-- [1:0-0-11,0-1-12], [13:0-4-4,0-2-4]

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	0.97	Vert(LL)	-0.23	11-12	>466	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.46	11-12	>233	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.12	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 206 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, except end verticals, and 2-0-0 oc purlins (4-7-2 max.): 4-10.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-13, 11-13

REACTIONS. (size) 1=0-3-8, 11=Mechanical, 12=(0-3-8 + H10A Simpson Strong-Tie) (req. 0-3-10)
Max Horz 1=174(LC 16)
Max Uplift 1=-8(LC 16), 11=-320(LC 37), 12=-169(LC 13)
Max Grav 1=889(LC 37), 11=47(LC 16), 12=2324(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2550/158, 2-3=-2269/100, 3-4=-1551/66, 4-5=-1371/73, 5-6=-756/31, 6-8=-95/1548, 8-9=-91/1560
BOT CHORD 1-17=-273/2271, 16-17=-132/1932, 15-16=-97/1169, 12-13=-2232/225, 8-13=-338/96
WEBS 3-17=-67/757, 3-16=-799/110, 4-16=0/433, 5-16=-76/497, 5-15=-693/122, 6-15=0/921, 6-13=-1961/162, 11-13=-513/0, 9-13=-1387/126, 9-11=-6/791, 2-17=-322/147

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-11-0, Exterior(2R) 10-11-0 to 15-1-15, Interior(1) 15-1-15 to 36-5-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) 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) Bearing at joint(s) 1, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=320.
11) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.
12) One H2.5A 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.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

May 6,2021

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

NOTES-

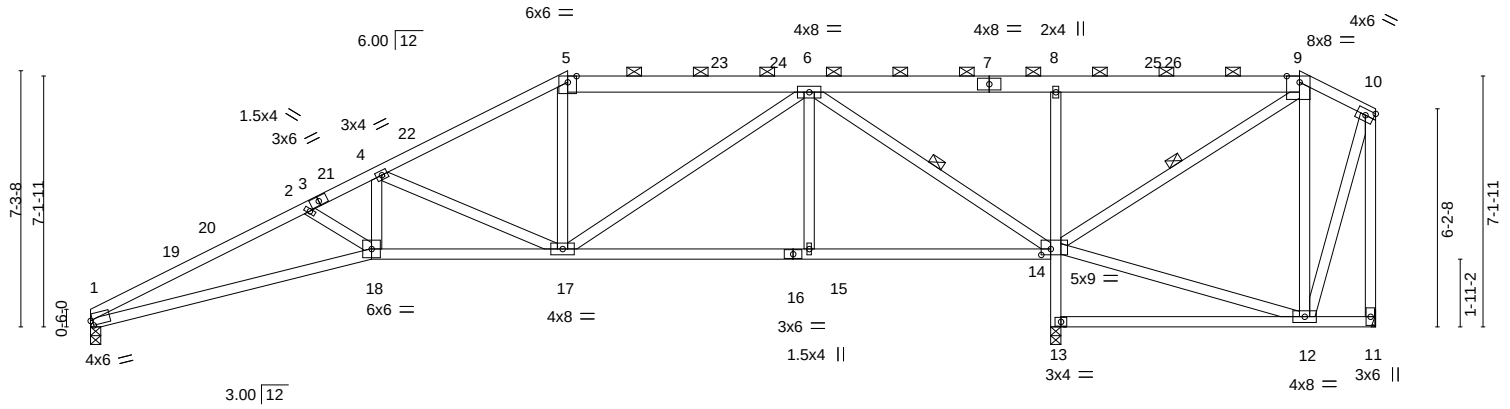
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	HV3	HIP	1	1	I45987481
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:51 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-ngQnK?Ey5JzCy5qX99gR8oT2gTE4AWoYDv8YR3zJTts

6-2-15	8-0-0	13-7-0	20-5-8	27-4-0	34-5-0	36-7-0
6-2-15	1-9-1	5-7-0	6-10-8	6-10-8	7-1-0	2-2-0

Scale = 1:65.6



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

Plate Offsets (X,Y)-- [1:0-0-11,0-1-12], [9:0-4-6,Edge], [14:0-3-4,0-2-0]

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	0.95	Vert(LL)	-0.19	1-18	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.43	1-18	>767	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.12	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 242 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 5-7,7-9: 2x6 SP No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3

BRACING-

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

REACTIONS. (size) 1=0-3-8, 11=Mechanical, 13=(0-3-8 + H10A Simpson Strong-Tie) (req. 0-3-13)
Max Horz 1=200(LC 16)
Max Uplift 1=-12(LC 16), 11=-439(LC 55), 13=-137(LC 13)
Max Grav 1=856(LC 55), 11=77(LC 16), 13=2420(LC 2)

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

TOP CHORD	1-2=-2444/184, 2-4=-2202/141, 4-5=-1082/47, 5-6=-913/66, 6-8=-77/1269, 8-9=-74/1270, 10-11=-94/406
BOT CHORD	1-18=-317/2180, 17-18=-195/1888, 15-17=-58/410, 14-15=-58/410, 13-14=-2357/176, 8-14=-575/145
WEBS	4-18=-64/785, 4-17=-1185/182, 6-17=-122/904, 6-15=0/304, 6-14=-1834/91, 9-14=-1417/77, 9-12=-8/528, 10-12=-366/92

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-7-0, Exterior(2R) 13-7-0 to 17-9-15, Interior(1) 17-9-15 to 34-5-0, Exterior(2E) 34-5-0 to 36-5-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) 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) Bearing at joint(s) 1, 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=439.
11) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.
12) One H2.5A 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

May 6,2021

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

NOTES-

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

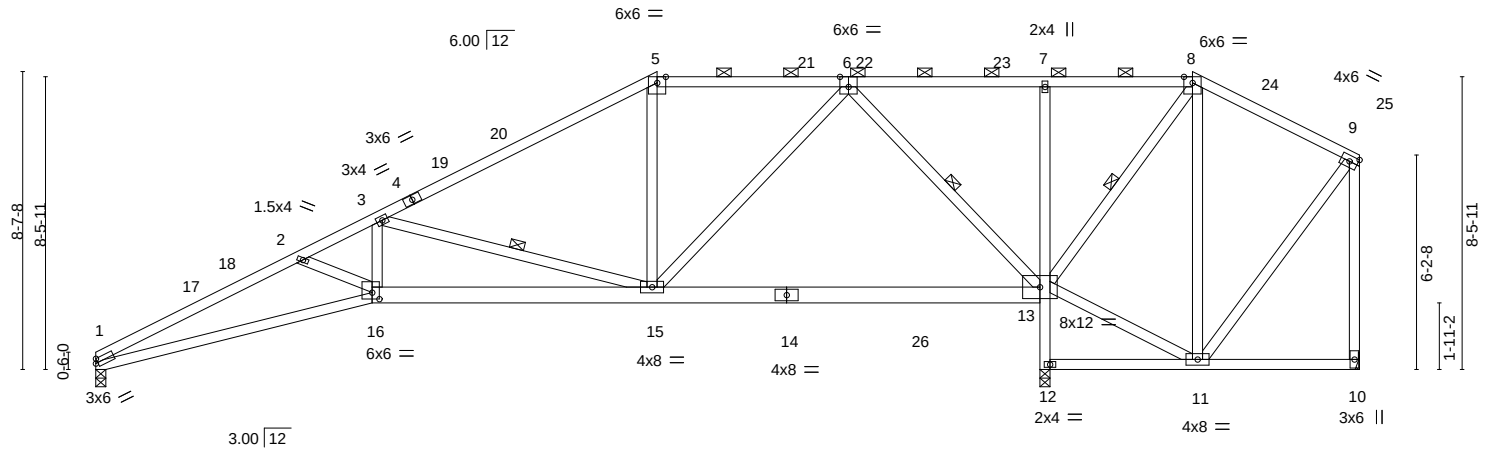
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	HV4	HIP	1	1	I45987482
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:53 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-j3YXlhGCdxDwBO_wGajvDDZNVHy7eR6rgDdfWyzJTtq

5-11-15	8-0-0	12-1-8	16-3-0	21-9-8	27-4-0	31-9-0	36-7-0
5-11-15	2-0-1	4-1-8	4-1-8	5-6-8	5-6-8	4-5-0	4-10-0

Scale = 1:66.7



8-0-0	16-3-0	21-9-8	27-4-0	27-5-12	31-9-0	36-7-0
8-0-0	8-3-0	5-6-8	5-6-8	0-1-12	4-3-4	4-10-0

Plate Offsets (X,Y)-- [6:0-3-0,Edge], [16:0-2-8,0-2-4]

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	1.00	Vert(LL)	-0.21	1-16	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.42	1-16	>773	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.11	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 241 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 *Except* 1-16: 2x4 SP No.1, 14-16,13-14: 2x6 SP No.2
WEBS	2x4 SP No.3

BRACING-

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

REACTIONS. (size) 1=0-3-8, 10=Mechanical, 12=(0-3-8 + H10A Simpson Strong-Tie) (req. 0-4-4)
Max Horz 1=218(LC 16)
Max Uplift 1=-13(LC 16), 10=-549(LC 57), 12=-86(LC 16)
Max Grav 1=902(LC 57), 10=108(LC 16), 12=2692(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2498/200, 2-3=-2375/178, 3-5=-838/23, 5-6=-666/53, 6-7=-90/1146, 7-8=-87/1159, 8-9=-57/447, 9-10=-86/614
BOT CHORD 1-16=-352/2247, 15-16=-272/2111, 13-15=-255/94, 12-13=-2631/146, 7-13=-391/104
WEBS 3-16=-26/783, 3-15=-1565/293, 6-15=-76/1200, 6-13=-1527/110, 11-13=-338/87, 8-13=-1415/116, 8-11=-50/798, 9-11=-604/100

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 16-3-0, Exterior(2R) 16-3-0 to 20-5-15, Interior(1) 20-5-15 to 31-9-0, Exterior(2R) 31-9-0 to 35-11-15, Interior(1) 35-11-15 to 36-5-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) 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, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 1, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=549.
11) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.
12) One H2.5A 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

May 6,2021

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

NOTES-

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	HV5	HIP	1	1	I45987483
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:55 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-fSgHANIT9YTdQi7IO?lNIeepE4ee6H178X6maqzJTto

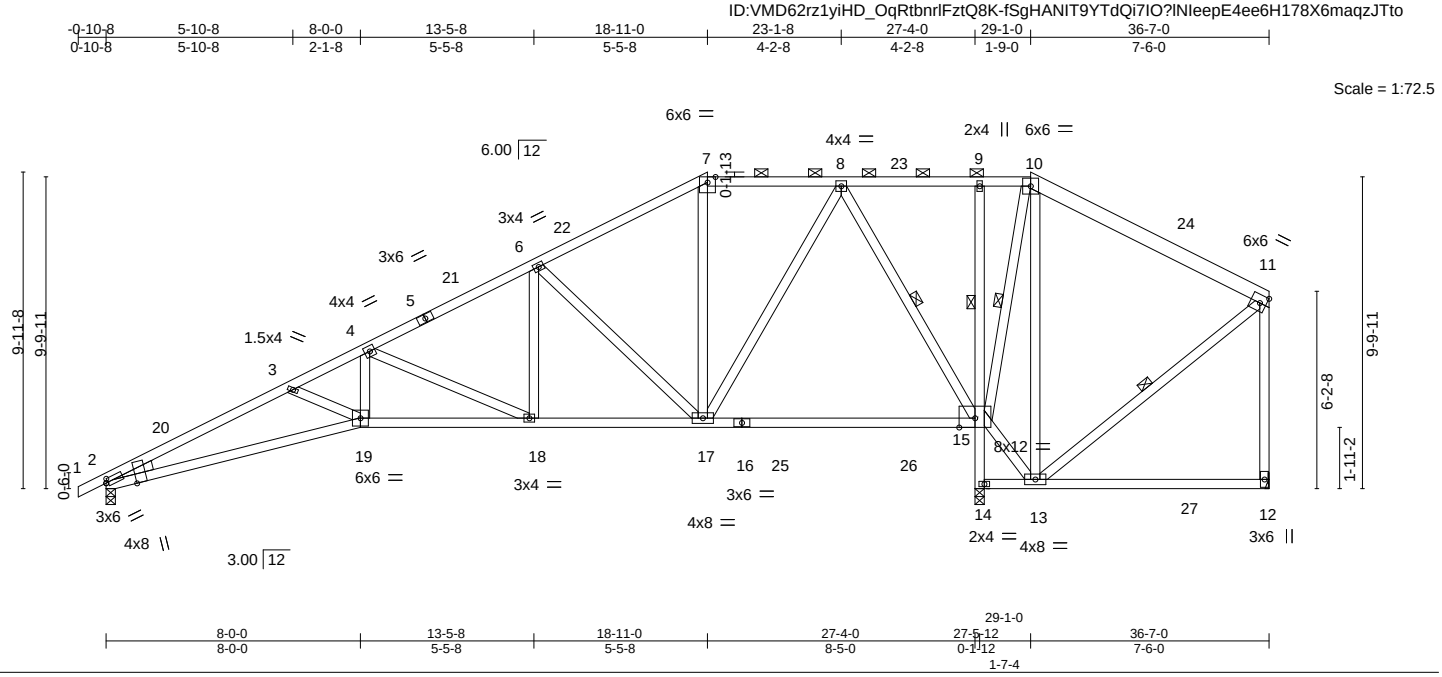


Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [2:0-2-14,Edge]

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	0.60	Vert(LL)	-0.27	15-17	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.44	15-17	>741	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.10	14	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 257 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 10-11: 2x6 SP No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 2-19: 2x4 SP No.1
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-2 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-10.
BOT CHORD Rigid ceiling directly applied or 3-1-3 oc bracing. Except:
1 Row at midpt 9-15
WEBS 1 Row at midpt 8-15, 10-15, 11-13

REACTIONS. (size) 2=0-3-8, 12=Mechanical, 14=(0-3-8 + H10A Simpson Strong-Tie) (req. 0-4-0)
Max Horz 2=241(LC 16)
Max Uplift 2=-33(LC 16), 12=-493(LC 56), 14=-125(LC 16)
Max Grav 2=988(LC 3), 12=117(LC 16), 14=2551(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2624/238, 3-4=-2423/182, 4-6=-1236/63, 6-7=-503/60, 7-8=-393/74, 8-9=-60/813, 9-10=-58/813, 10-11=-79/610, 11-12=-80/580
BOT CHORD 2-19=-404/2361, 18-19=-269/2086, 17-18=-107/1050, 14-15=-2628/95
WEBS 4-19=-67/872, 4-18=-1154/178, 6-18=-20/606, 6-17=-930/177, 8-17=-91/1122, 8-15=-1337/115, 13-15=-632/163, 10-15=-1619/157, 10-13=-91/1127, 11-13=-648/112

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-11-0, Exterior(2R) 18-11-0 to 23-1-8, Interior(1) 23-1-8 to 29-1-0, Exterior(2R) 29-1-0 to 33-3-15, Interior(1) 33-3-15 to 36-5-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) Refer to girder(s) for truss to truss connections.
10) Bearing at joint(s) 2, 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=493.

Continued on page 2

May 6,2021

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

NOTES-

12) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
13) 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.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	J1	Jack-Open	24	1	I45987484
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:56 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-8eDgNjI5wscU2siVxiGcrrB4NU82ry_HNBsJ6GzJTtn

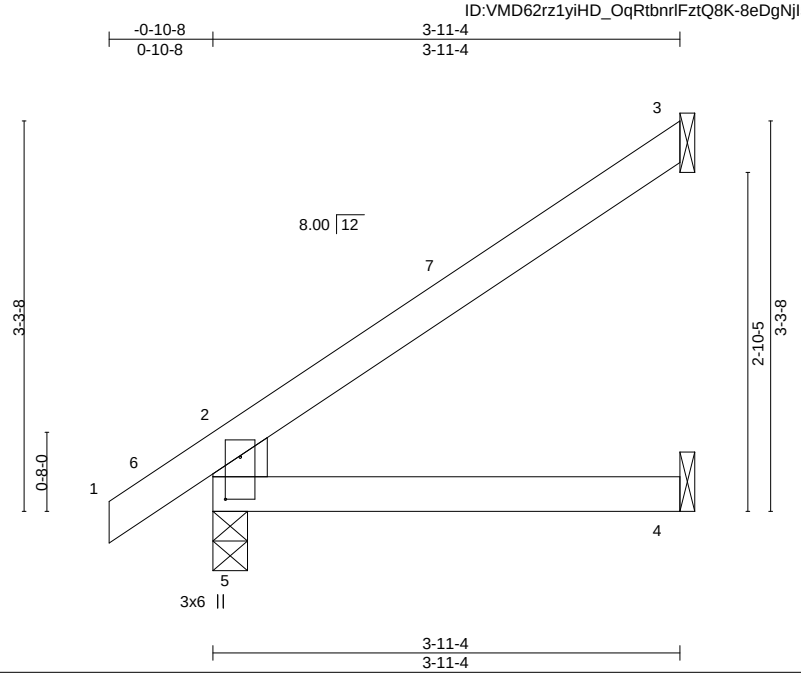


Plate Offsets (X,Y)-- [5:0-4-4,0-1-8]

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	0.19	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-R							Weight: 16 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 2x6 SP No.2

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=96(LC 14)
Max Uplift 3=-54(LC 14)
Max Grav 5=222(LC 2), 3=99(LC 26), 4=68(LC 5)

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

NOTES-
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	J2	Jack-Open	11	1	I45987485
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:57 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-cqn2b3Jjh9kLg0HhVQnrN3jF6uUHaPEQbrbtfjzJTtm

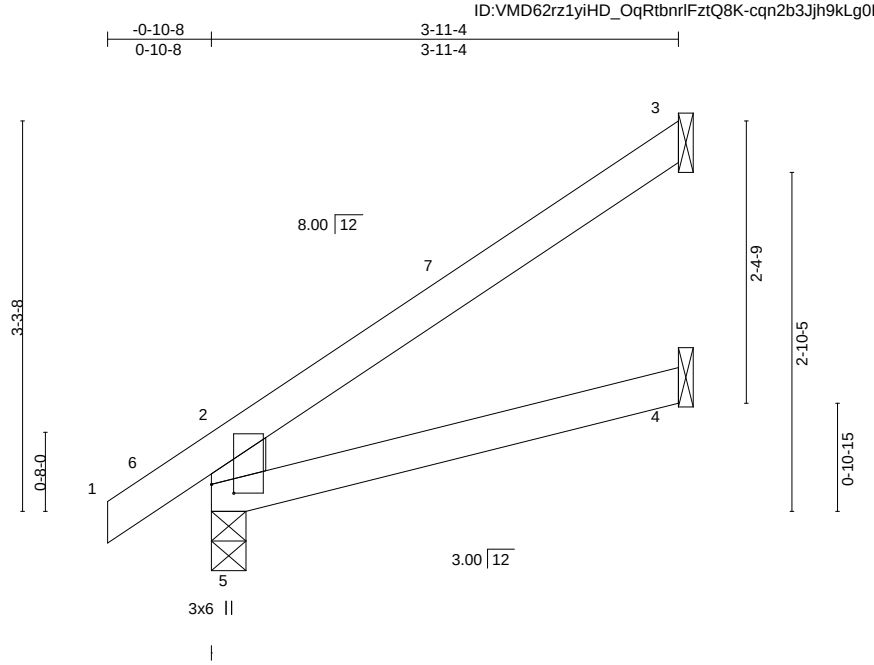


Plate Offsets (X,Y)-- [5:0-0-14,0-2-4]

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	0.19	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-R							Weight: 16 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 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=96(LC 14)
Max Uplift 3=-54(LC 14)
Max Grav 5=222(LC 2), 3=100(LC 26), 4=68(LC 5)

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

NOTES-
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	J3	Jack-Open	1	1	I45987486
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:58 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-41LQoPKLSTsCH9st37I4wGGQdIrOJsUaqVLQB9zJTtl

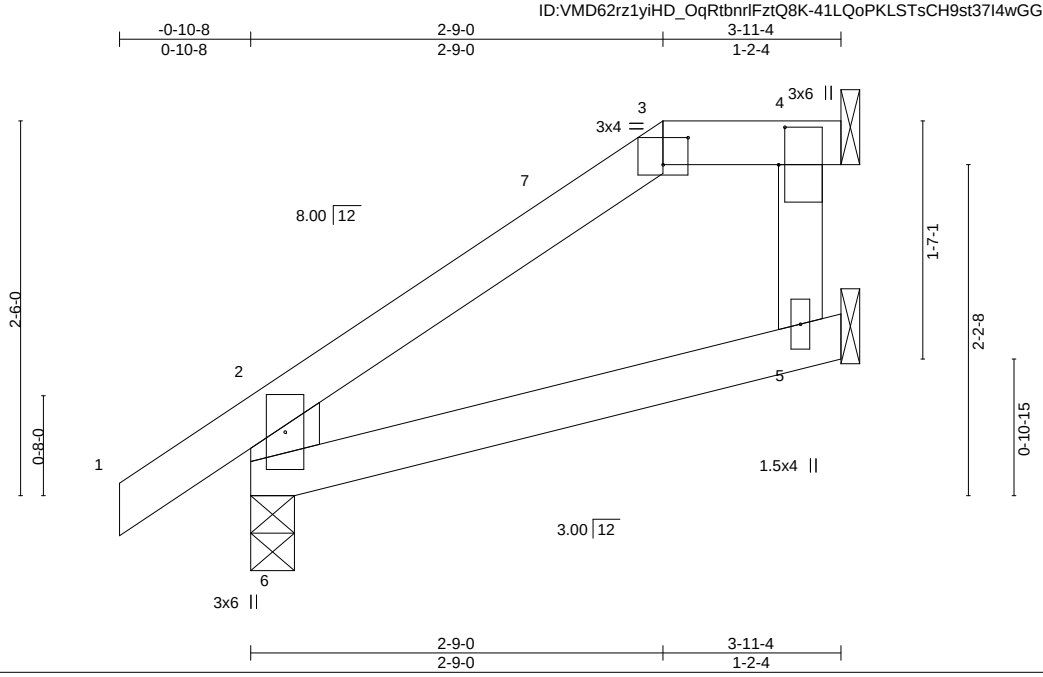


Plate Offsets (X,Y)-- [3:0-2-0,0-2-3], [4:0-3-0,0-0-8]

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	0.14	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-R							Weight: 17 lb	FT = 20%
BCDL	10.0											

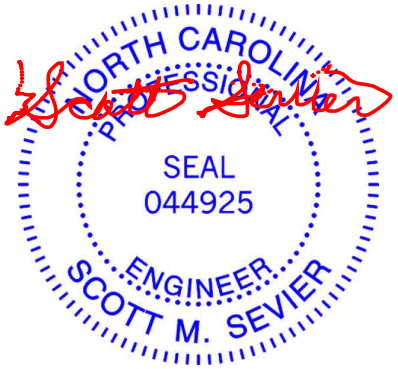
LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x6 SP No.2 *Except*
4-5: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 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) 6=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 6=73(LC 14)
Max Uplift 6=-8(LC 14), 4=-29(LC 14)
Max Grav 6=214(LC 2), 4=79(LC 2), 5=76(LC 5)

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

NOTES-
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-9-0, Exterior(2E) 2-9-0 to 3-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
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) 6. This connection is for uplift only and does not consider lateral forces.
11) 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.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	J4	Jack-Open Girder	1	1	I45987487
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:51:59 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-YDvo0kLzDn_3vJR4drqJSUpa6h9u2Jkj394zjbzJTtk

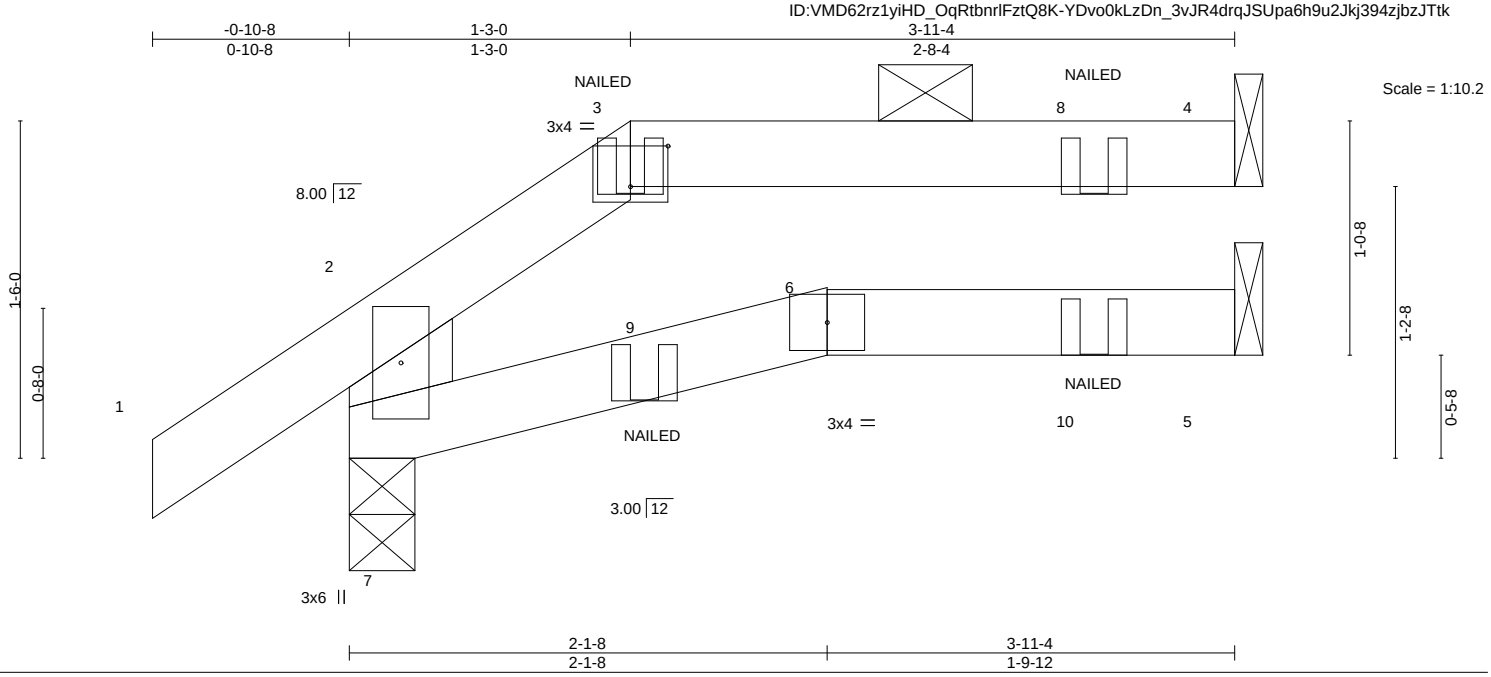


Plate Offsets (X,Y)-- [3:0-2-0,0-2-3]

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	0.22	Vert(LL)	-0.01	6	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.03	6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.03	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-R							Weight: 15 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 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=42(LC 10)
Max Uplift 7=-24(LC 10), 4=-44(LC 7)
Max Grav 7=225(LC 2), 4=107(LC 30), 5=75(LC 5)

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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
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) 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.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
16) 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

May 6,2021

Continued on page 2

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

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-43, 2-3=-43, 3-4=-53, 6-7=-20, 5-6=-20
   Concentrated Loads (lb)
   Vert: 3=-3(B) 8=-16(B) 9=-1(B) 10=-4(B)

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	J5	Jack-Open Girder	1	1	I45987488
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:00 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-0PTAD4Lbz46wXT0GAYLY?hLmc5VGnmztHpqXF2zJTtj

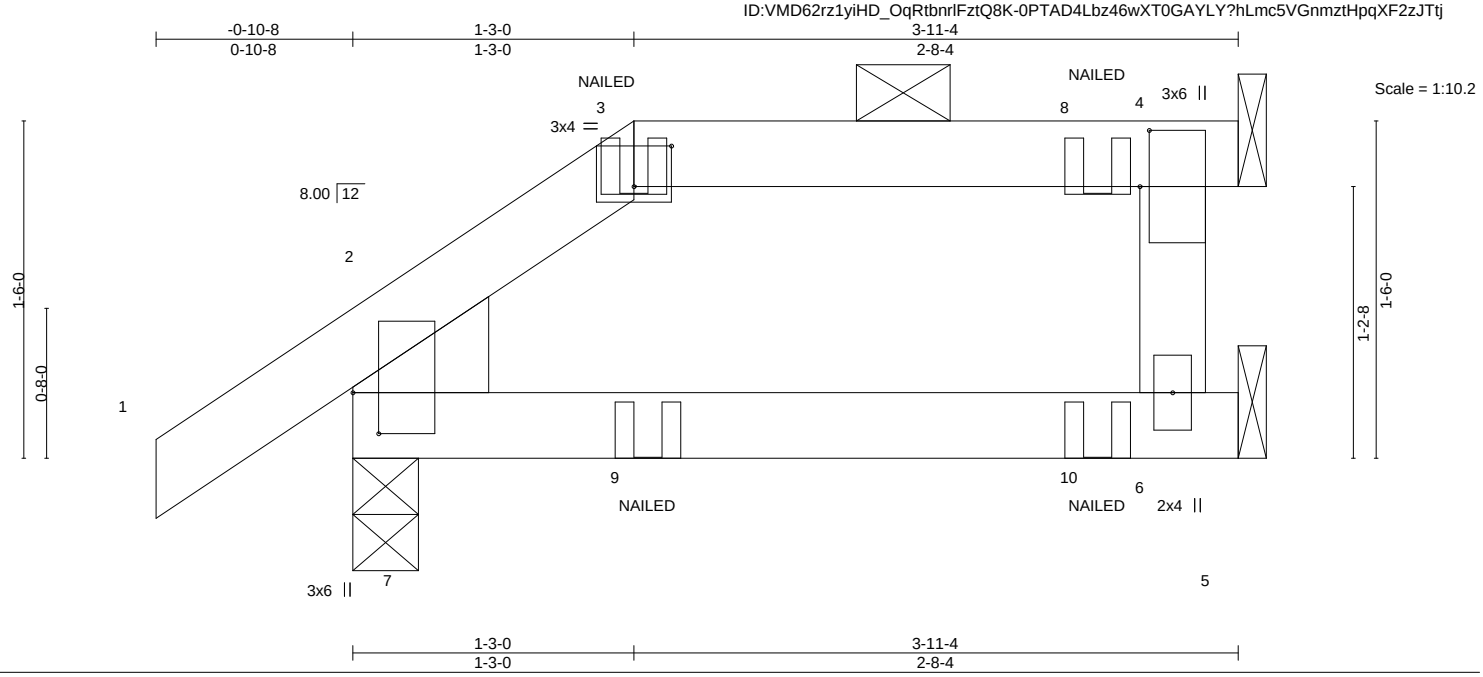


Plate Offsets (X,Y)-- [3:0-2-0,0-2-3], [4:0-3-0,0-0-8], [7:0-2-3,0-1-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01	6-7	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.02	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 17 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 2x8 SP No.2 *Except*
4-6: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 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) 7=0-3-8, 4=Mechanical, 6=Mechanical
Max Horz 7=42(LC 10)
Max Uplift 7=-25(LC 10), 4=-42(LC 7)
Max Grav 7=218(LC 2), 4=93(LC 30), 6=82(LC 5)

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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
10) 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.
11) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
16) 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

May 6,2021

Continued on page 2

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

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-43, 2-3=-43, 3-4=-53, 5-7=-20
   Concentrated Loads (lb)
   Vert: 3=-4(F) 8=-12(F) 10=-3(F)

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	J8	Jack-Open	1	1	I45987489
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:01 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-Ub1ZRQMEkOEn8dbSkGsnYvuw1VrGWDD0WTZ4oUzJTti

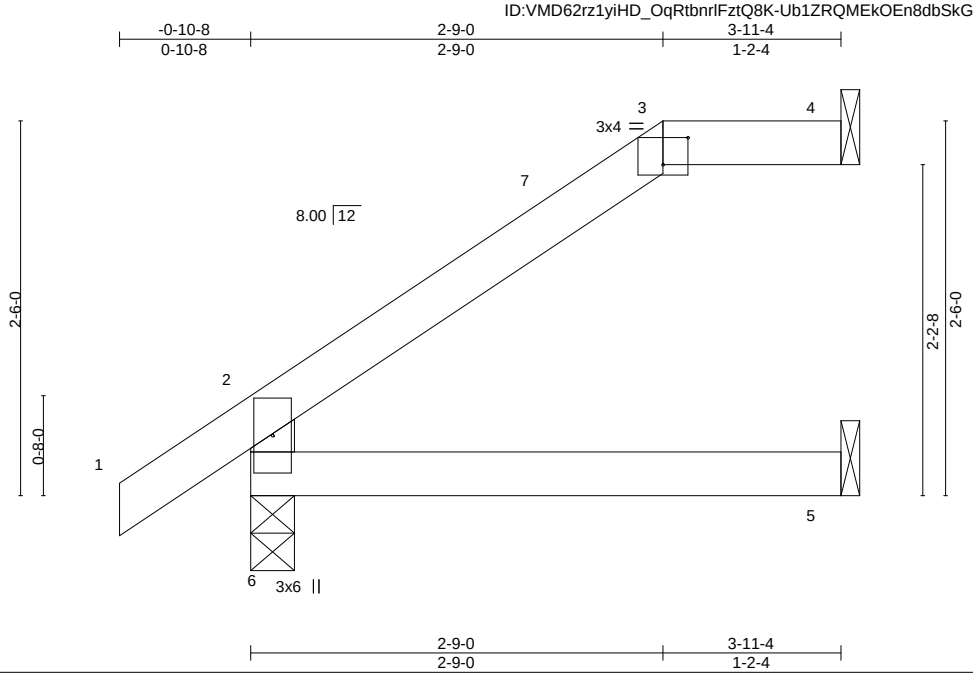


Plate Offsets (X,Y)-- [3:0-2-0,0-2-3]

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	0.19	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-R							Weight: 15 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.2 or 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 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) 6=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 6=73(LC 14)
Max Uplift 6=-8(LC 14), 4=-30(LC 14)
Max Grav 6=219(LC 2), 4=98(LC 2), 5=70(LC 5)

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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-9-0, Exterior(2E) 2-9-0 to 3-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
11) 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.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	JA	Jack-Open	1	1	I45987490
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:02 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-yobxemNsViMemnAflzN046Q7jvDJFgT9l7JeKwzJTth

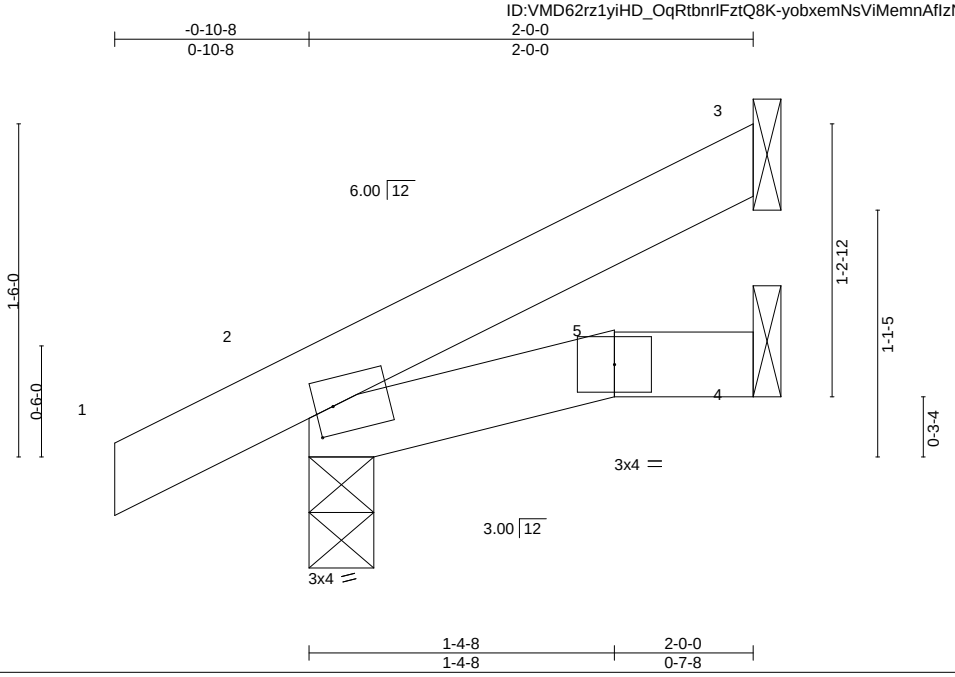


Plate Offsets (X,Y)-- [2:0-0-15,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	2	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 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 2-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=44(LC 16)
Max Uplift 3=-24(LC 16), 2=-11(LC 16)
Max Grav 3=49(LC 23), 2=148(LC 23), 4=35(LC 7)

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

NOTES-
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
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) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	JB	Jack-Open	1	1	I45987491
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:02 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-yobxemNsViMemnAfIzN046Q7mvD8FgT9l7JeKwzJTth

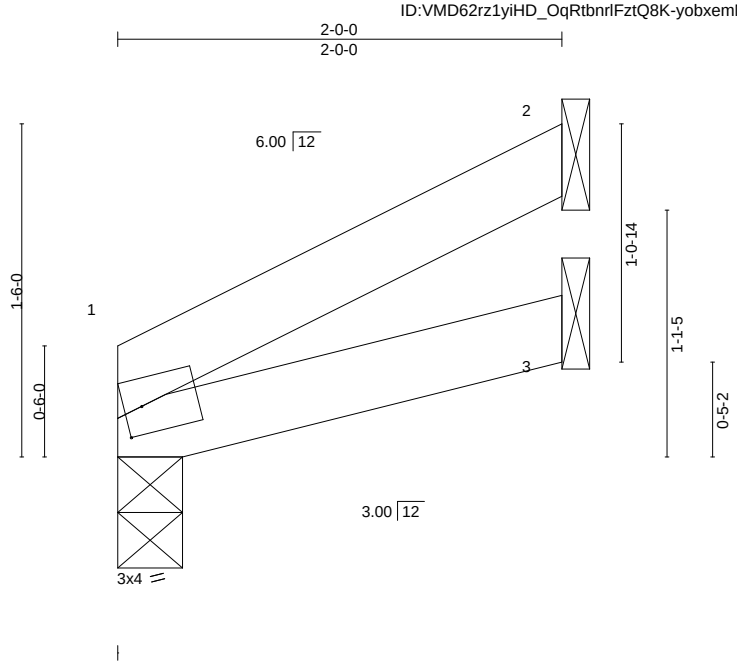


Plate Offsets (X,Y)-- [1:0-0-15,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	1	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	1-3	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 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 2-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=39(LC 16)
Max Uplift 2=-31(LC 16)
Max Grav 1=78(LC 2), 2=59(LC 2), 3=39(LC 7)

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

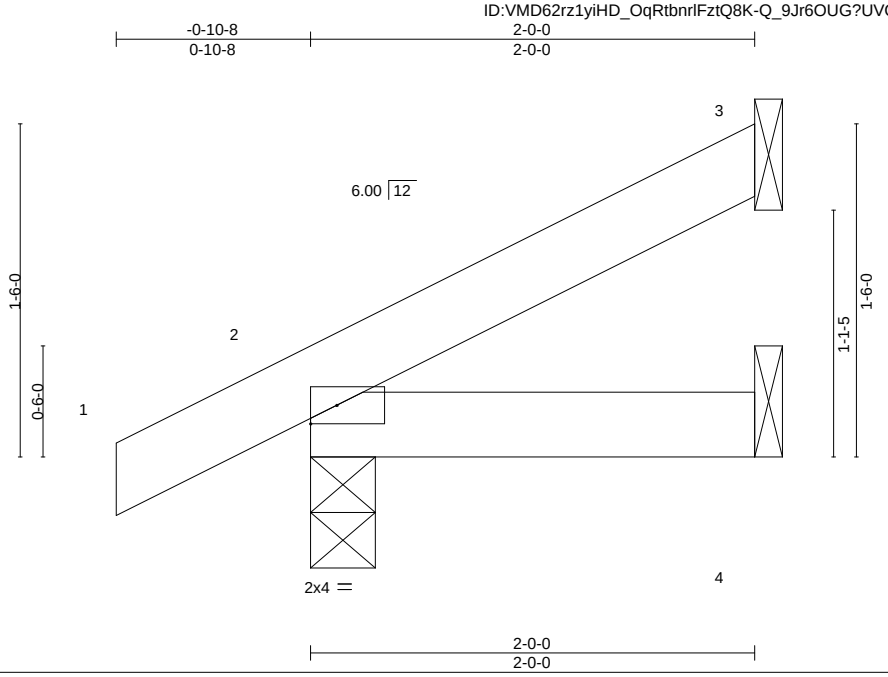
NOTES-
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	JC	Jack-Open	2	1	I45987492
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:03 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-Q_9Jr6OUG?UVOxkrshuFdKzJgJZO_7jJ_n2BsMzJTtg



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	0.06	Vert(LL)	-0.00	2	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	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	IRC2018/TPI2014	Matrix-P							Weight: 8 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 2-0-0 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=44(LC 16)
Max Uplift 3=-27(LC 16), 2=-13(LC 16)
Max Grav 3=47(LC 23), 2=148(LC 23), 4=39(LC 7)

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

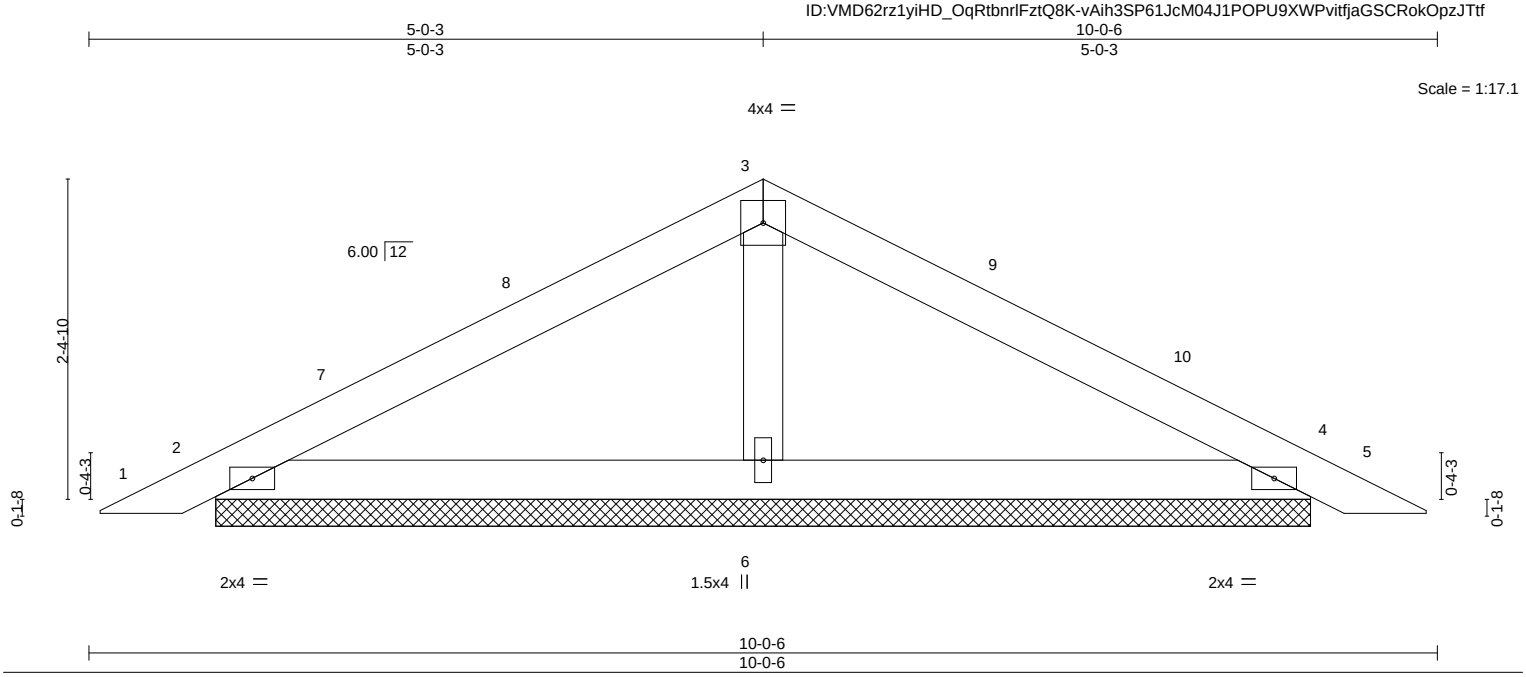
NOTES-
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	PB1	Piggyback	8	1	I45987493
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:04 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-vAih3SP61JcM04J1POPU9XWPvitfjaGSCRokOpzJTtf



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	0.34	Vert(LL)	0.01	5	n/r	120	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	0.02	5	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 31 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 2=8-1-12, 4=8-1-12, 6=8-1-12
Max Horz 2=-31(LC 17)
Max Uplift 2=-32(LC 16), 4=-38(LC 17)
Max Grav 2=202(LC 23), 4=202(LC 24), 6=317(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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-11 to 3-4-11, Interior(1) 3-4-11 to 5-0-3, Exterior(2R) 5-0-3 to 8-0-3, Interior(1) 8-0-3 to 9-7-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) 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.
9) N/A
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	PB2	Piggyback	2	1	I45987494
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:05 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-NNG3GoPkodkDdEuDz5wjil2dp6DwS0UcR5XIxFzJTte

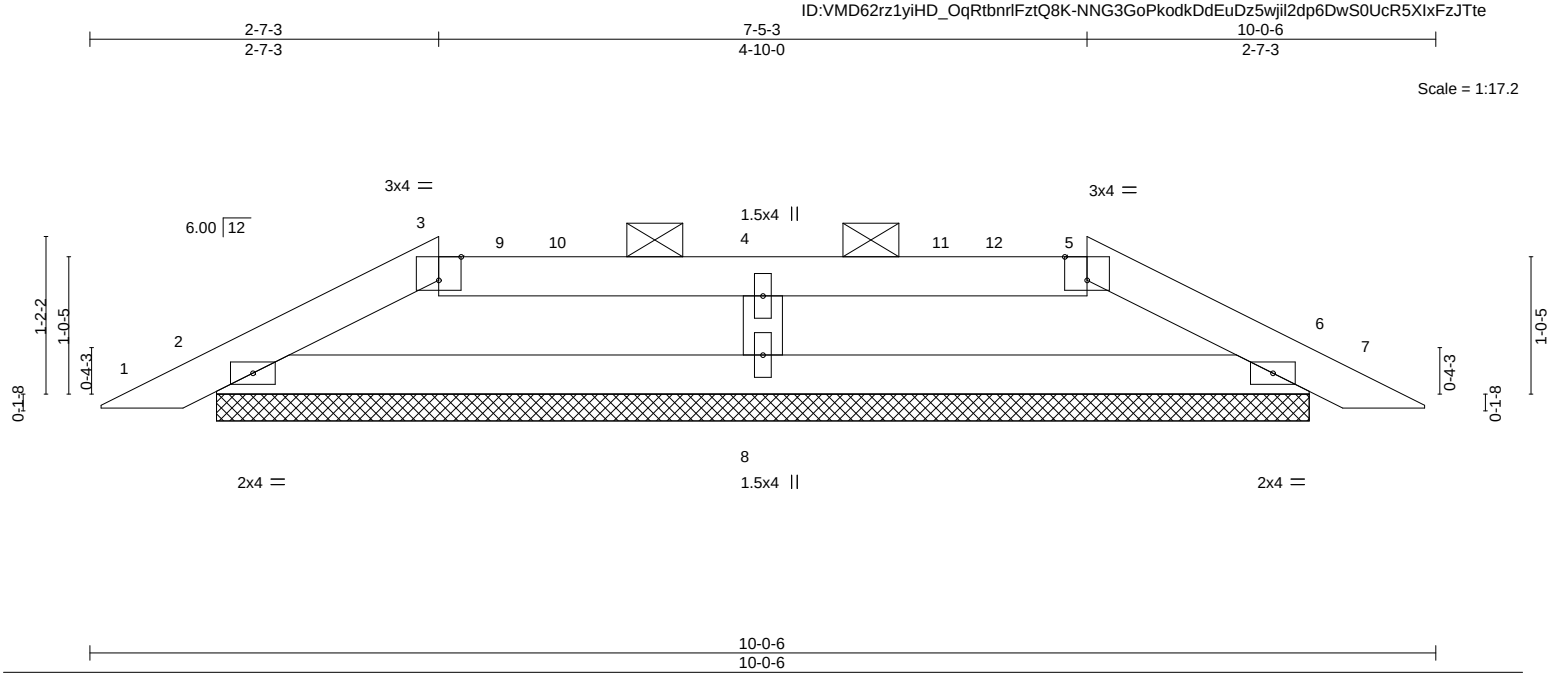


Plate Offsets (X,Y)-- [3:0-2-0,Edge], [5:0-2-0,Edge]

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	0.14	Vert(LL)	0.00	7	n/r	120	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	0.00	7	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 28 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 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=8-1-12, 6=8-1-12, 8=8-1-12
Max Horz 2=-14(LC 21)
Max Uplift 2=-20(LC 16), 6=-21(LC 17), 8=-5(LC 13)
Max Grav 2=215(LC 41), 6=215(LC 41), 8=342(LC 40)

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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-11 to 2-7-3, Exterior(2R) 2-7-3 to 6-10-2, Interior(1) 6-10-2 to 7-5-3, Exterior(2E) 7-5-3 to 9-7-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) Gable requires continuous bottom chord bearing.
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) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	T1	ROOF TRUSS	3	1	I45987495
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:08 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-nyyCvpSd5Y6nUidoeEUQKNg2KK2If8W273myXazJTtb

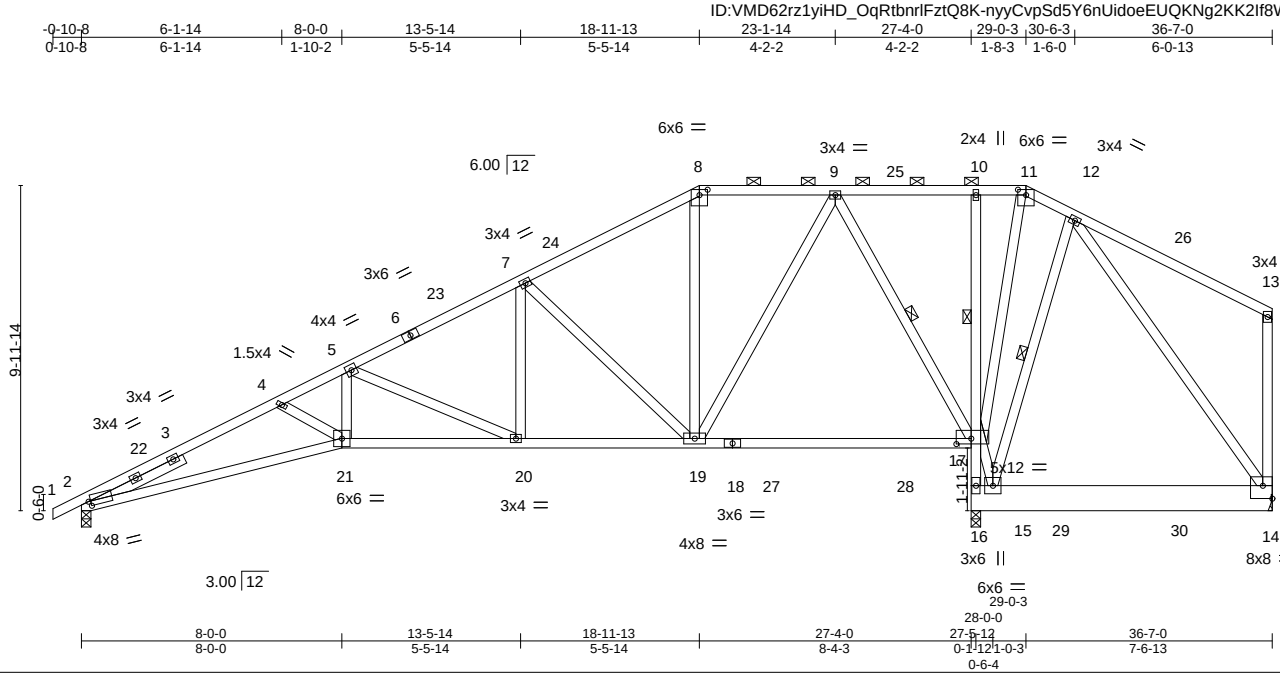


Plate Offsets (X,Y)-- [2:0-0-13,0-1-12], [8:0-3-0,0-2-0], [11:0-3-0,0-2-0], [14:Edge,0-4-12], [17:0-5-8,0-2-0]

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	0.57	Vert(LL)	-0.26	17-19	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.42	17-19	>778	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.07	16	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 275 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 *Except* 2-21: 2x4 SP No.1, 10-16: 2x4 SP No.3, 14-16: 2x10 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -t 3-2-13

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-1-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-11.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 1 Row at midpt 10-17
WEBS	1 Row at midpt 9-17, 12-15

REACTIONS. (size) 2=0-3-8, 16=0-3-8, 14=Mechanical
Max Horz 2=244(LC 16)
Max Uplift 2=-46(LC 16), 16=-71(LC 16), 14=-282(LC 57)
Max Grav 2=1071(LC 3), 16=2247(LC 3), 14=150(LC 46)

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

TOP CHORD	2-4=-2853/277, 4-5=-2707/236, 5-7=-1487/103, 7-8=-720/91, 8-9=-579/103, 9-10=-7/525, 10-11=-5/520, 11-12=-10/529
BOT CHORD	2-21=-436/2551, 20-21=-321/2382, 19-20=-145/1272, 16-17=-984/0, 14-15=-359/47
WEBS	5-21=-77/857, 5-20=-1231/192, 7-20=-24/643, 7-19=-968/183, 9-19=-77/1026, 9-17=-1245/100, 15-17=-1094/273, 11-17=-312/0, 12-14=-85/651, 12-15=-618/137

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-11-13, Exterior(2R) 18-11-13 to 23-1-14, Interior(1) 23-1-14 to 29-0-3, Exterior(2R) 29-0-3 to 33-3-2, Interior(1) 33-3-2 to 36-5-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) Refer to girder(s) for truss to truss connections.
10) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=282.
12) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16. This connection is for uplift only and does not consider lateral forces.

Continued on page 2

May 6,2021

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

NOTES-

13) 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.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
16) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	T2A	ROOF TRUSS	3	1	I45987496
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:10 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-jK4yKVTtd9MVk?nBmfWuPomKf7kT73lLbNF3cSzJTtZ

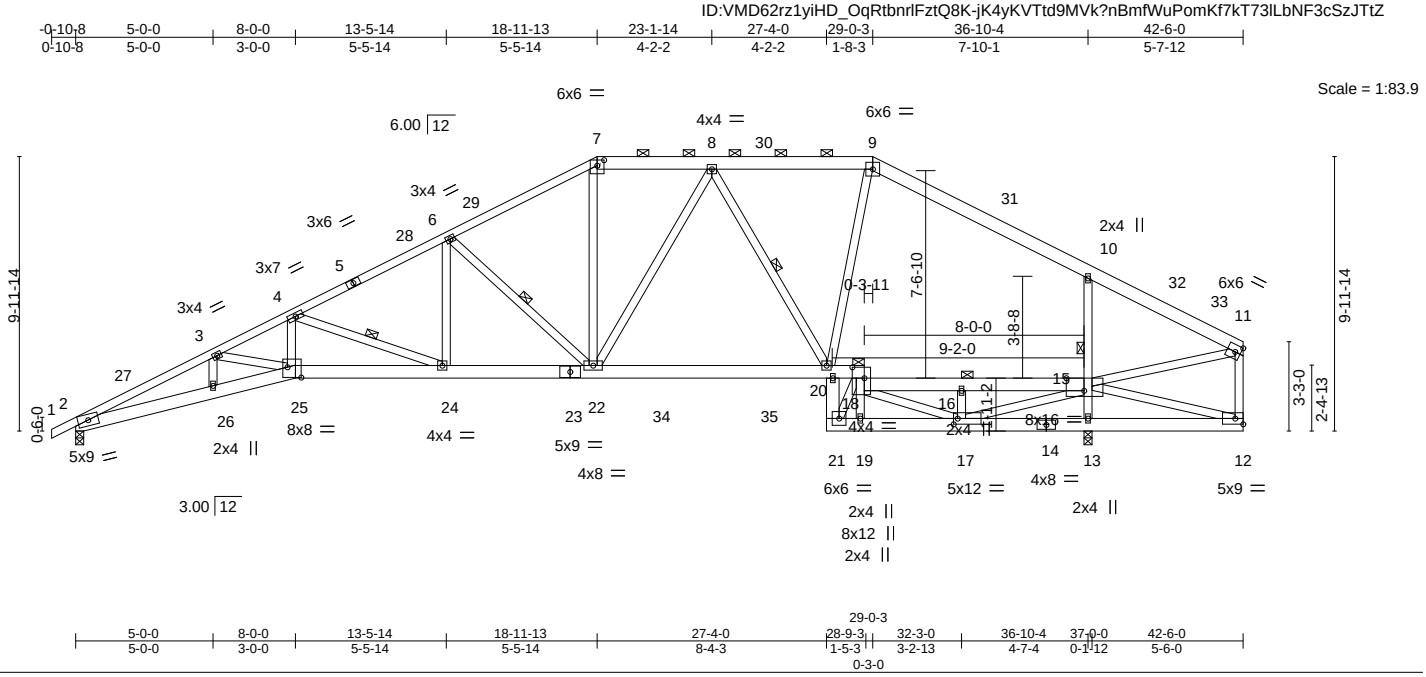


Plate Offsets (X,Y)-- [7:0-3-0,0-2-7], [15:0-7-12,Edge], [17:0-1-12,0-2-8], [18:0-4-12,0-5-4], [25:0-6-0,0-4-8]

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	0.78	Vert(LL)	-0.37	20-22	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.69	20-22	>643	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.33	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 343 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 7-9,9-11: 2x6 SP No.2
BOT CHORD	2x6 SP No.2 *Except* 2-25: 2x6 SP DSS
WEBS	2x4 SP No.3 *Except* 12-15,11-15: 2x4 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-0-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-1 max.): 7-9.
BOT CHORD	Rigid ceiling directly applied or 3-1-4 oc bracing.
WEBS	1 Row at midpt 4-24, 6-22, 8-20, 10-13
JOINTS	1 Brace at Jt(s): 16, 18

REACTIONS. (size) 2=0-3-8, 13=(0-3-8 + H10A Simpson Strong-Tie) (req. 0-3-11)
Max Horz 2=189(LC 16)
Max Uplift 2=-63(LC 16)
Max Grav 2=1634(LC 3), 13=2360(LC 3)

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

TOP CHORD	2-3=-5087/256, 3-4=-5044/254, 4-6=-3167/124, 6-7=-2288/104, 7-8=-1976/117, 8-9=-1452/88, 9-10=-1651/75, 10-11=-1521/0, 11-12=-1041/0
BOT CHORD	2-26=-368/4549, 25-26=-366/4582, 24-25=-301/4587, 22-24=-110/2784, 20-22=0/1804, 18-20=0/1417, 20-21=-582/20, 19-21=-407/11, 17-19=-417/7, 13-17=-3916/0, 12-13=-4046/0, 16-18=0/3130, 15-16=0/3123
WEBS	4-25=-54/1321, 4-24=-1925/204, 6-24=-13/827, 6-22=-1137/173, 7-22=0/792, 8-22=-64/489, 8-20=-744/87, 15-17=0/2273, 9-20=0/531, 13-15=-1997/54, 10-15=-687/201, 17-18=-1486/66, 12-15=0/4150, 18-21=-36/684, 11-15=0/1431

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-11-13, Exterior(2R) 18-11-13 to 23-1-14, Interior(1) 23-1-14 to 29-0-3, Exterior(2R) 29-0-3 to 33-3-2, Interior(1) 33-3-2 to 42-4-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

Continued on page 2

May 6,2021

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

NOTES-

10) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	T3A	ROOF TRUSS	2	1	I45987497
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:13 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-8vl5yXVlw4l4bTVmRn4b1ROsdLncKQonHKTjDnzJTtW

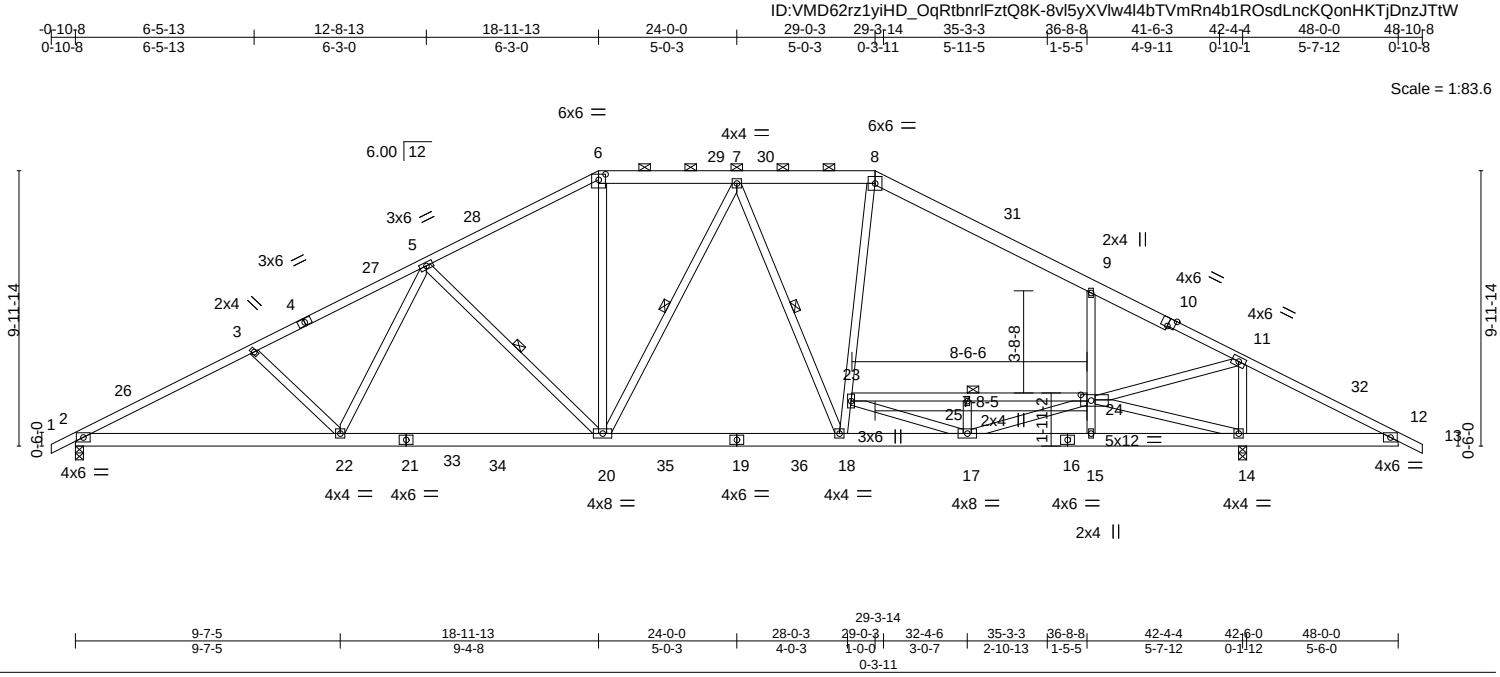


Plate Offsets (X,Y)-- [6:0-3-0,0-2-7], [10:0-3-0,Edge], [24:0-4-8,0-2-8]

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	0.67	Vert(LL)	-0.19	20-22	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.34	20-22	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.08	14	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 354 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 6-8,8-10: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-12 oc purlins, except 2-0-0 oc purlins (5-1-5 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 12-14.
WEBS 1 Row at midpt 5-20, 7-20, 7-18
JOINTS 1 Brace at Jt(s): 25

REACTIONS. (size) 2=0-3-8, 14=(0-3-8 + H10A Simpson Strong-Tie) (req. 0-3-13)
Max Horz 2=134(LC 16)
Max Uplift 2=-69(LC 16), 14=-64(LC 17)
Max Grav 2=1877(LC 3), 14=2413(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3391/122, 3-5=-3177/108, 5-6=-2325/151, 6-7=-2028/155, 7-8=-1787/158, 8-9=-2016/143, 9-11=-1956/36, 11-12=-107/571
BOT CHORD 2-22=-166/2939, 20-22=-57/2509, 18-20=0/1948, 17-18=0/1712, 15-17=-156/771, 14-15=-154/767, 12-14=-438/139
WEBS 3-22=-296/159, 5-22=0/625, 5-20=-757/167, 6-20=0/739, 7-20=-96/313, 7-18=-517/90, 11-14=-1891/118, 9-24=-567/195, 11-24=-27/2226, 23-25=-72/459, 24-25=-72/459, 17-23=-480/75, 17-24=0/963, 14-24=-1136/267, 18-23=0/749, 8-23=0/590

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-11-13, Exterior(2R) 18-11-13 to 23-2-11, Interior(1) 23-2-11 to 29-0-3, Exterior(2R) 29-0-3 to 33-3-2, Interior(1) 33-3-2 to 48-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
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.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER
May 6,2021

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

NOTES-

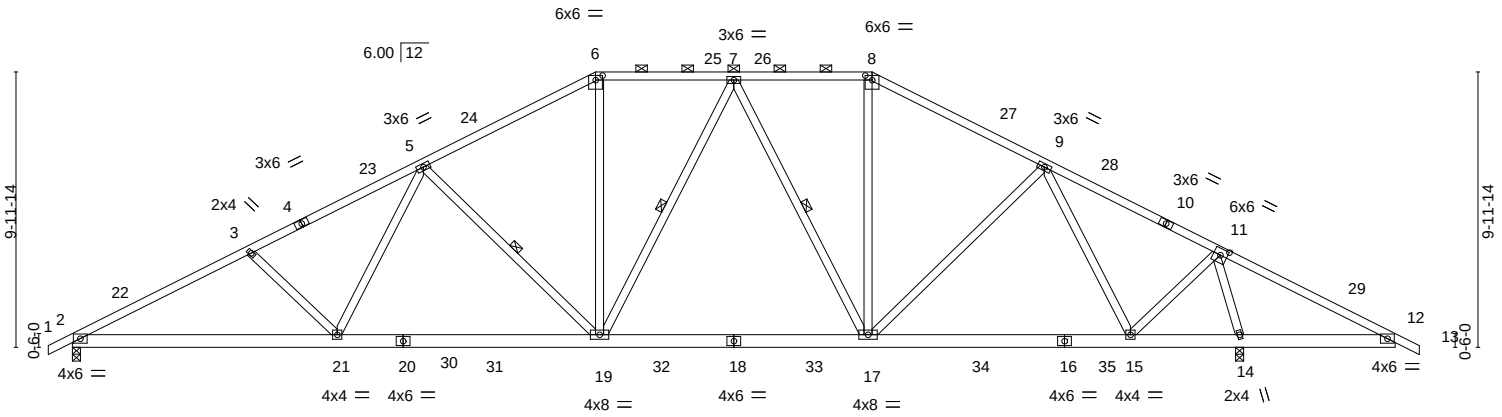
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	T4	PIGGYBACK BASE	2	1	I45987498
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:15 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-4ItrNDX0Rh?oqnf8ZC636sTCt8T_oKA4keyqHgzJTtU

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

Scale = 1:83.6



9-7-5	18-11-13	24-0-0	29-0-3	35-3-3	38-4-11	42-4-4	42-6-0	48-0-0
9-7-5	9-4-8	5-0-3	5-0-3	6-3-0	3-1-8	3-11-9	0-1-12	5-6-0

Plate Offsets (X,Y)-- [6:0-3-0,0-2-0], [8:0-3-0,0-2-0], [11:0-3-0,0-2-12]

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	0.68	Vert(LL)	-0.19	19-21	>999	240	MT20	197/144
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.35	19-21	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.09	14	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 316 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-4 oc purlins, except 2-0-0 oc purlins (3-10-11 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-19, 7-19, 7-17

REACTIONS. (size) 2=0-3-8, 14=(0-3-8 + H10A Simpson Strong-Tie) (req. 0-3-14)
Max Horz 2=134(LC 16)
Max Uplift 2=-68(LC 16), 14=-63(LC 17)
Max Grav 2=1894(LC 3), 14=2459(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3428/121, 3-5=-3215/108, 5-6=-2361/151, 6-7=-2054/156, 7-8=-1774/154, 8-9=-2050/142, 9-11=-1383/81, 11-12=-105/614
BOT CHORD 2-21=-166/2972, 19-21=-57/2544, 17-19=0/1978, 15-17=0/1568, 12-14=-469/140
WEBS 3-21=-295/158, 5-21=0/622, 5-19=-772/171, 6-19=0/761, 7-19=-93/301, 7-17=-541/90, 8-17=0/635, 9-17=0/374, 11-15=0/1538, 11-14=-2309/124, 9-15=-938/92

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-11-13, Exterior(2R) 18-11-13 to 23-2-11, Interior(1) 23-2-11 to 29-0-3, Exterior(2R) 29-0-3 to 33-3-2, Interior(1) 33-3-2 to 48-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
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) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	V1	Valley	1	1	I45987499
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:16 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-YUREaYYeC?7fSwEL6vdIe30XeY_HX?xDzIiNq6zJTtT

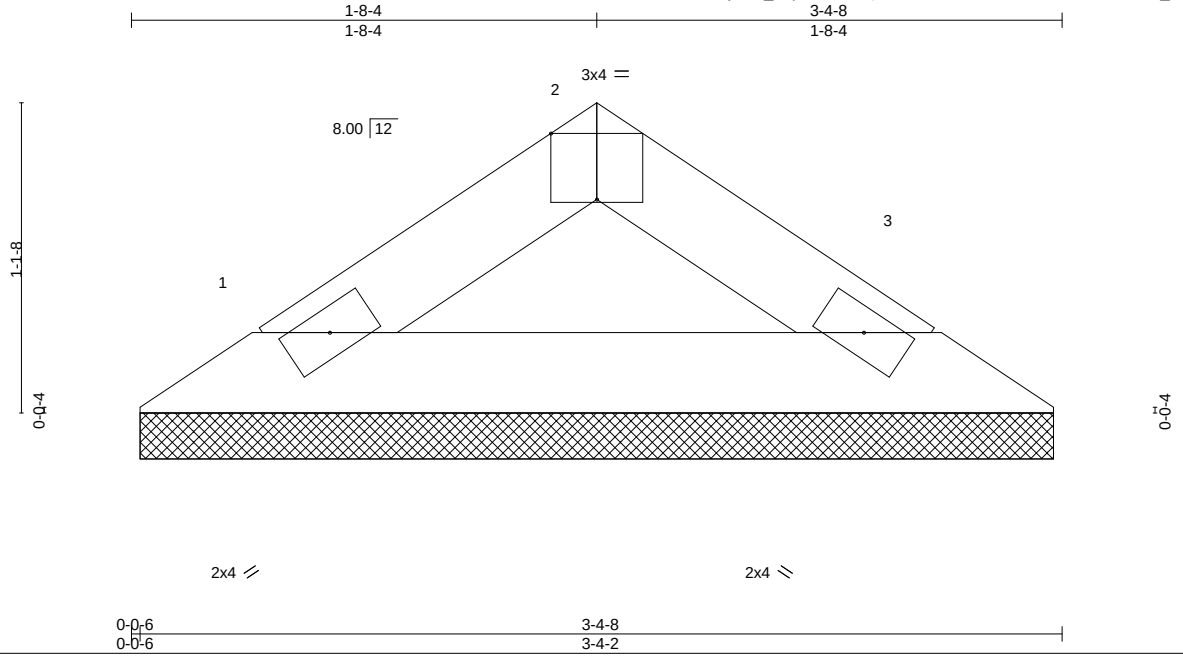


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-3-12, 3=3-3-12
Max Horz 1=-16(LC 10)
Max Uplift 1=-3(LC 14), 3=-3(LC 15)
Max Grav 1=96(LC 2), 3=96(LC 2)

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

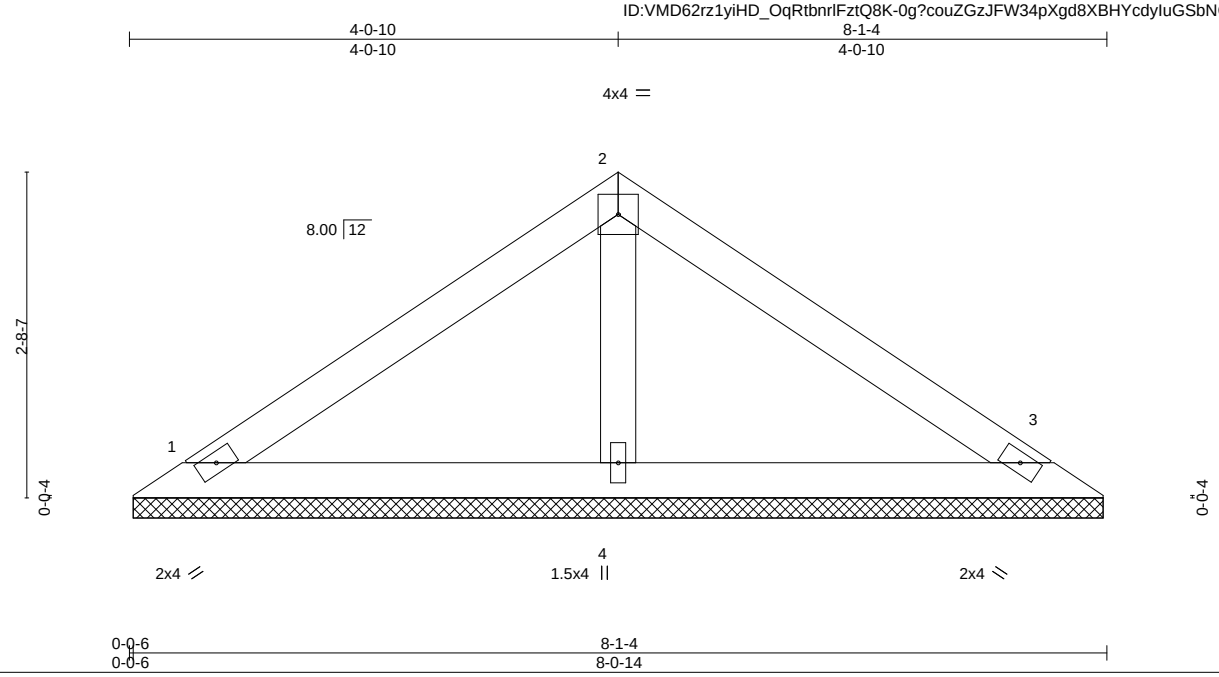
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) N/A
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	V2	Valley	1	1	I45987500
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:17 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-0g?couZGzJFW34pXgd8XBHYcdyluGSbNCyRwMZzJTtS



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	0.41	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 28 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 1=8-0-8, 3=8-0-8, 4=8-0-8
Max Horz 1=-48(LC 10)
Max Uplift 1=-20(LC 14), 3=-26(LC 15)
Max Grav 1=153(LC 2), 3=153(LC 2), 4=265(LC 2)

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

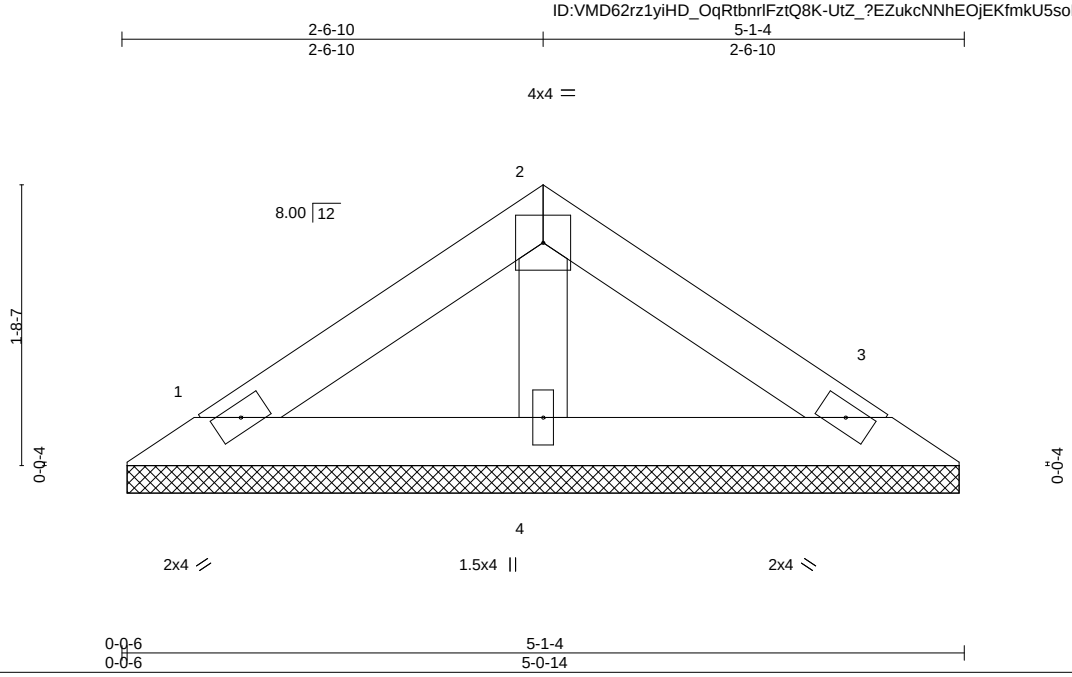
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-0-10, Exterior(2R) 4-0-10 to 7-0-10 , Interior(1) 7-0-10 to 7-7-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) N/A
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 6,2021

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

Job	Truss	Truss Type	Qty	Ply	KB Home 150.1910.D Vo2
150_1910_D_VO	V3	Valley	1	1	I45987501
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 5 17:52:18 2021 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-UtZ_?EZukcNNhEOjEKfmkU5soMfN?v7WQcBUu?zJTtR



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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 17 lb	FT = 20%

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

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

REACTIONS. (size) 1=5-0-8, 3=5-0-8, 4=5-0-8
Max Horz 1=-28(LC 10)
Max Uplift 1=-11(LC 14), 3=-15(LC 15)
Max Grav 1=89(LC 2), 3=89(LC 2), 4=154(LC 2)

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

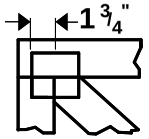
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) N/A
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 6,2021

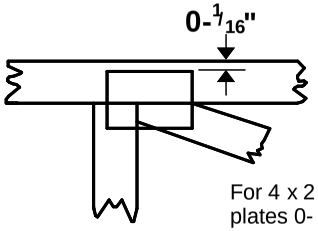
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

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

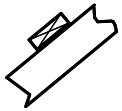
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

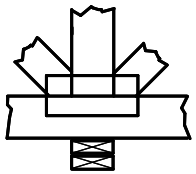
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

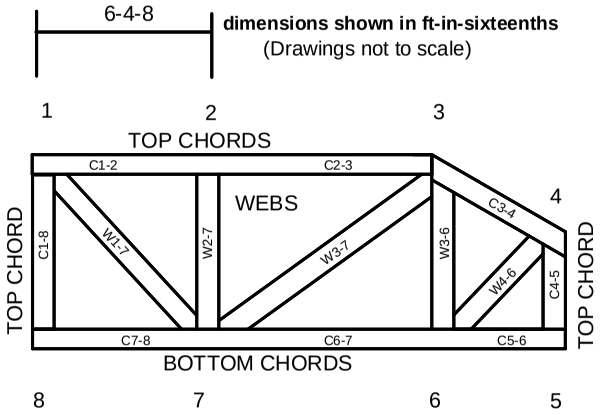


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/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 BY TRENCO
A MiTek Affiliate

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.

ENGINEERING BY TRENCO
A MiTek Affiliate

RE: 150_1910_D
KB 10x10 8pi

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: 150_1910_D
Lot/Block: Model:
Address: Subdivision:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-10 Wind Speed: 115 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 5 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	I43213654	P10	11/23/2020
2	I43213655	P10E	11/23/2020
3	I43213656	VP1	11/23/2020
4	I43213657	VP2	11/23/2020
5	I43213658	VP3	11/23/2020

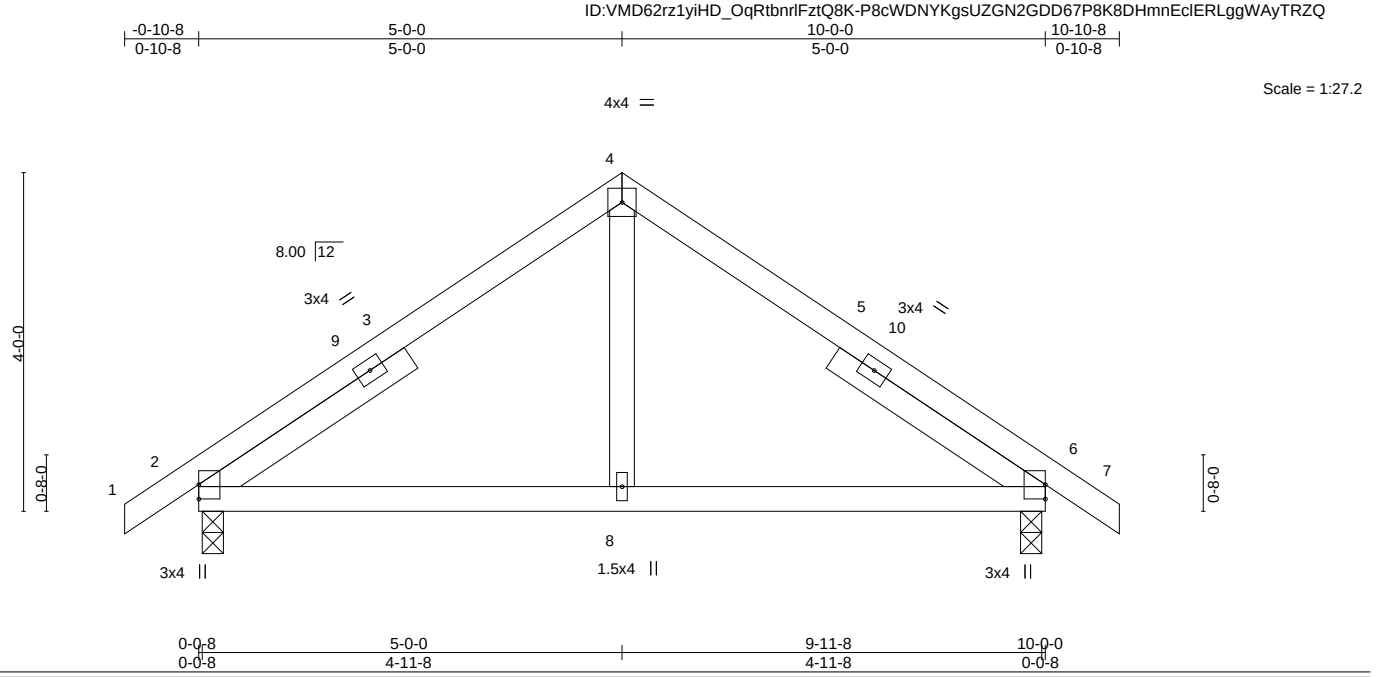
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.
Truss Design Engineer's Name: Sevier, Scott
My license renewal date for the state of North Carolina is December 31, 2020.
North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

November 23, 2020
Sevier, Scott

Job	Truss	Truss Type	Qty	Ply	KB 10x10 8pi
150_1910_D	P10	COMMON	4	1	I43213654
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Oct 14 16:39:47 2020 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-P8cWDNYKgsUZGN2GDD67P8K8DHmnEclERLggWAyTRZQ



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	0.30	Vert(LL)	0.02	6-8	>999	240	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.03	2-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 50 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -t 2-11-3, Right 2x4 SP No.3 -t 2-11-3

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, 6=0-3-0
Max Horz 2=-76(LC 12)
Max Uplift 2=-19(LC 14), 6=-19(LC 15)
Max Grav 2=453(LC 2), 6=453(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-464/244, 4-6=-464/244
BOT CHORD 2-8=-121/301, 6-8=-121/301

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-0-0, Exterior(2) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 10-10-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.

October 15,2020

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

Job	Truss	Truss Type	Qty	Ply	KB 10x10 8pi
150_1910_D	P10E	COMMON SUPPORTED GAB	1	1	I43213655
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Oct 14 16:39:48 2020 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-tLAuQiZyRAcQuXdSnweMxMtNxhAez3vNf?QD2cyTRZP

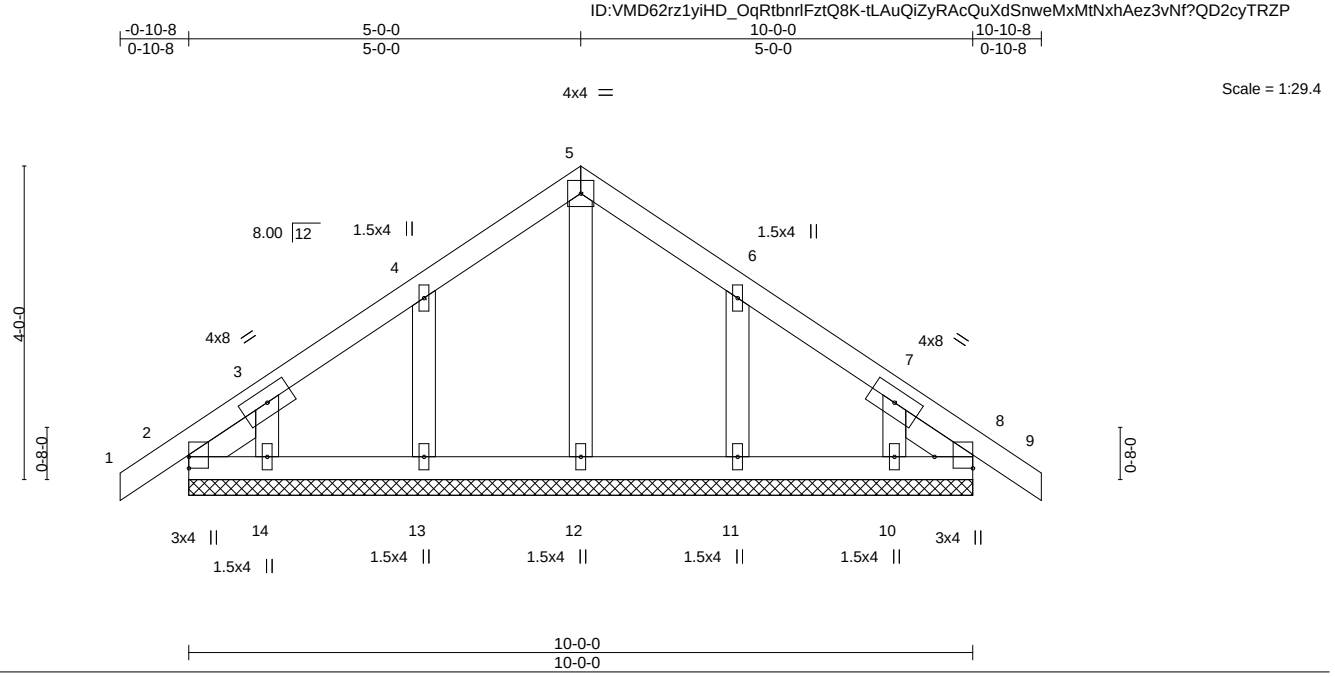


Plate Offsets (X,Y)-- [8:Edge,0-5-14]

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	0.05	Vert(LL)	-0.00	8	n/r	120	MT20	197/144
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	9	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S								
BCDL	10.0										Weight: 53 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -t 1-0-8, Right 2x4 SP No.3 -t 1-0-8

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 10-0-0.
(lb) - Max Horz 2=-76(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 5-0-0, Corner(3) 5-0-0 to 8-0-0, Exterior(2) 8-0-0 to 10-10-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 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) Gable requires continuous bottom chord bearing.
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.

October 15,2020

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

Job	Truss	Truss Type	Qty	Ply	KB 10x10 8pi
150_1910_D	VP1	GABLE	1	1	I43213656
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Oct 14 16:39:48 2020 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-tLAuQiZyRAcQuXdSnweMxMtLUh8Tz3pNf?QD2cyTRZP

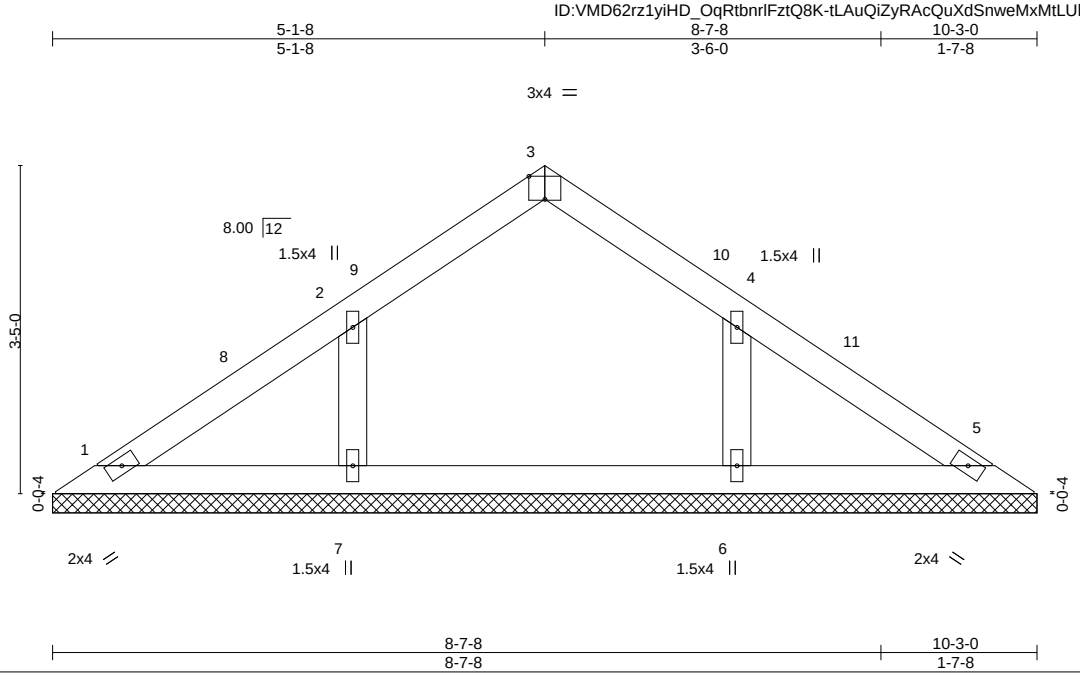


Plate Offsets (X,Y)-- [3:0-2-0,Edge]

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.17	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-S								
BCDL	10.0										Weight: 36 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 10-3-0.
(lb) - Max Horz 1=-60(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 7, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=255(LC 25), 6=254(LC 26)

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

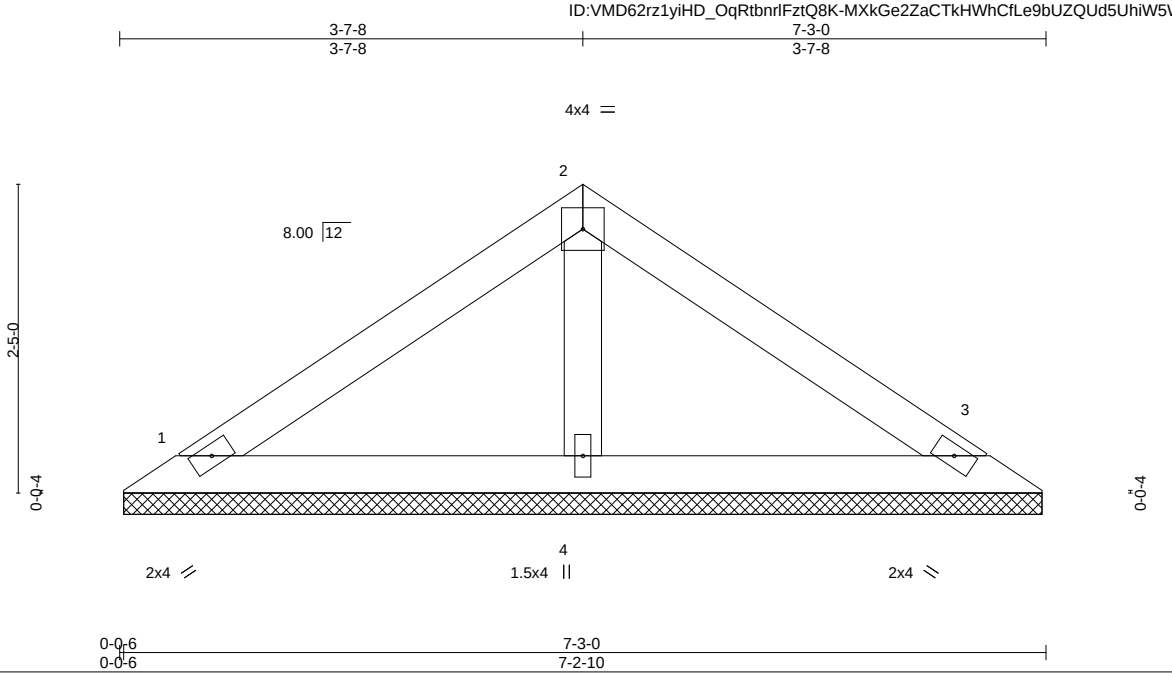
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-1-8, Exterior(2) 5-1-8 to 8-1-8, Interior(1) 8-1-8 to 9-9-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

October 15,2020

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

Job	Truss	Truss Type	Qty	Ply	KB 10x10 8pi
150_1910_D	VP2	Valley	1	1	I43213657
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Oct 14 16:39:49 2020 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-MXkGe2ZaCTkHWhCfLe9bUZQUd5UhiW5Wuf9na3yTRZO



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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 25 lb	FT = 20%

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

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

REACTIONS. (size) 1=7-2-4, 3=7-2-4, 4=7-2-4
Max Horz 1=-41(LC 12)
Max Uplift 1=-15(LC 14), 3=-21(LC 15)
Max Grav 1=135(LC 2), 3=135(LC 2), 4=234(LC 2)

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

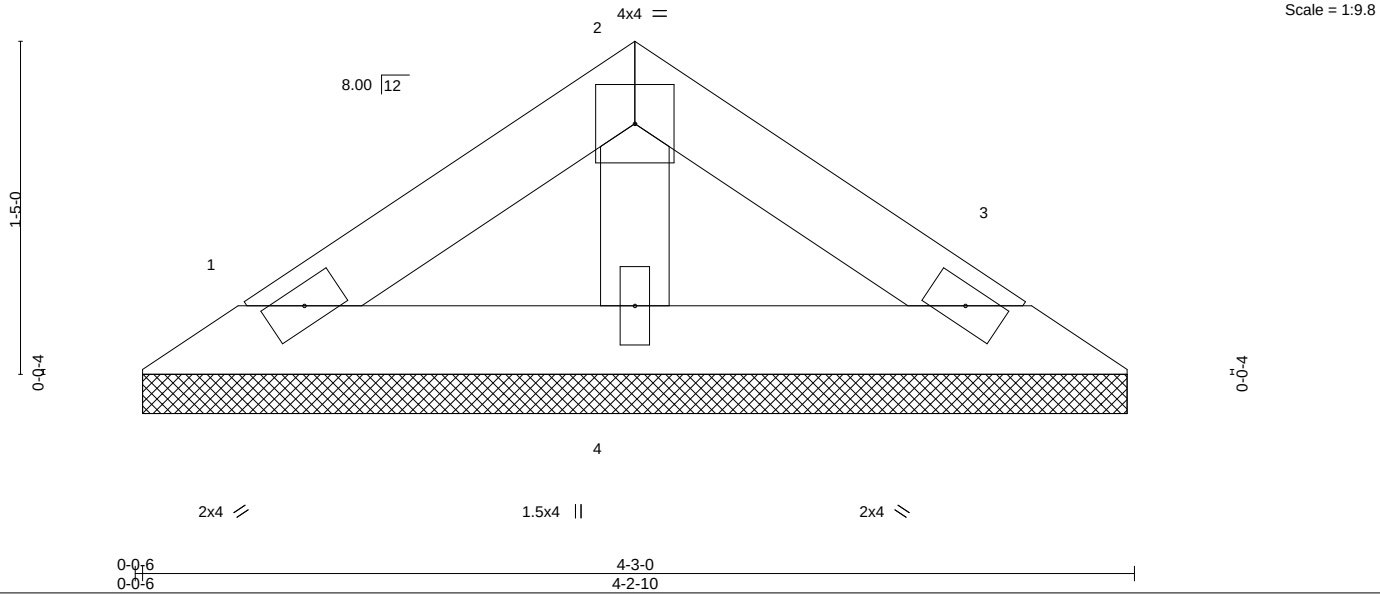
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60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

October 15,2020

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

Job	Truss	Truss Type	Qty	Ply	KB 10x10 8pi
150_1910_D	VP3	Valley	1	1	I43213658
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Oct 14 16:39:50 2020 Page 1
ID:VMD62rz1yiHD_OqRtbnrlFztQ8K-qjlerOaCzns87rnrvLgq0nyh1VsqRzcg7JvK6VyTRZN



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)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 13 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 4-3-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-2-4, 3=4-2-4, 4=4-2-4
Max Horz 1=-21(LC 10)
Max Uplift 1=-8(LC 14), 3=-11(LC 15)
Max Grav 1=70(LC 2), 3=70(LC 2), 4=122(LC 2)

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

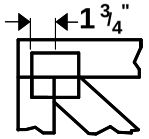
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60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

October 15,2020

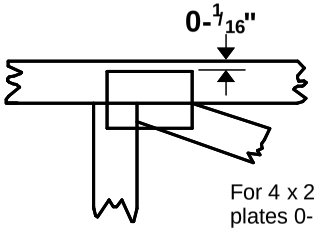
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

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

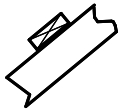
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

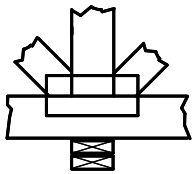
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

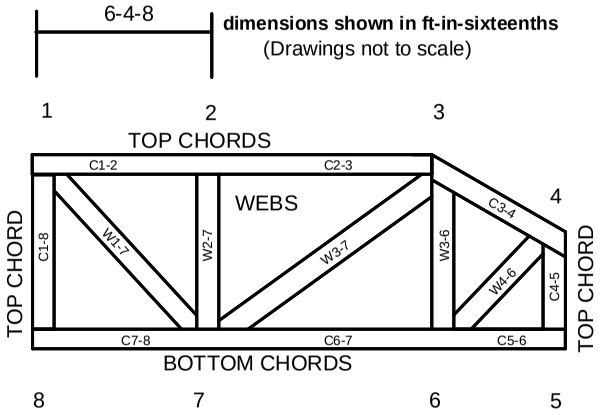


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/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 BY TRENCO
A MiTek Affiliate

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.