ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 23-6980-A
RVF-LOT #21 ROOF

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Riverside Roof Truss.

Pages or sheets covered by this seal: I62525954 thru I62525983

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844

December 14,2023

Gilbert, Eric

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	RVF-LOT #21 ROOF
23-6980-A	M01	Monopitch	6	1	I62525954
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:06:55 2023 Page 1
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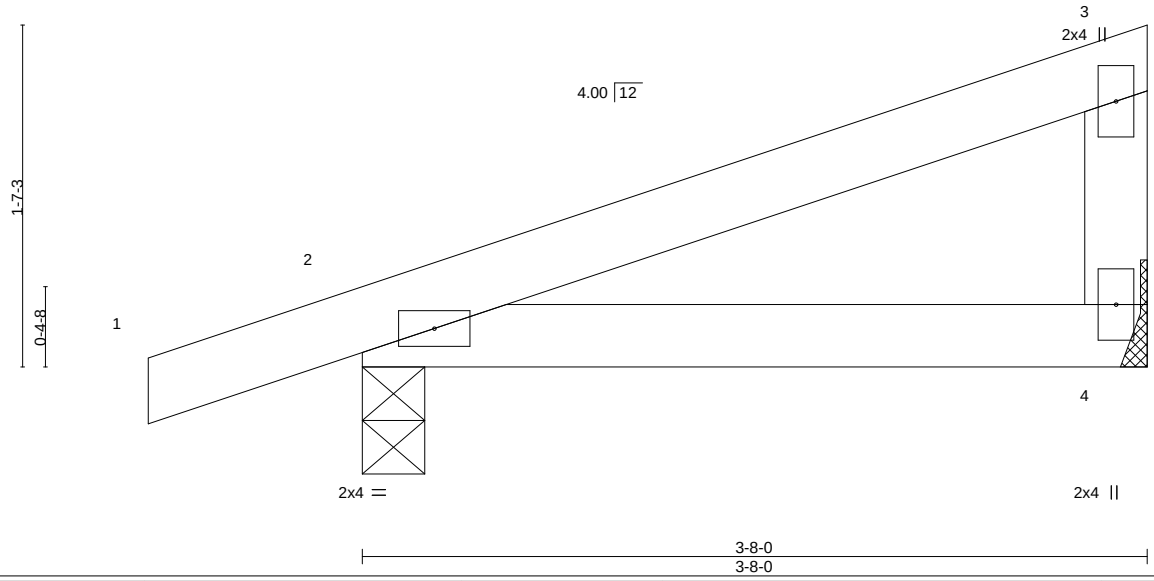

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.01	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-8-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=48(LC 15)
Max Uplift 4=-5(LC 16), 2=-44(LC 16)
Max Grav 4=136(LC 21), 2=215(LC 21)

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

NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; 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 5 lb uplift at joint 4 and 44 lb uplift at joint 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.

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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	M01GE	GABLE	1	1	I62525955
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:06:56 2023 Page 1
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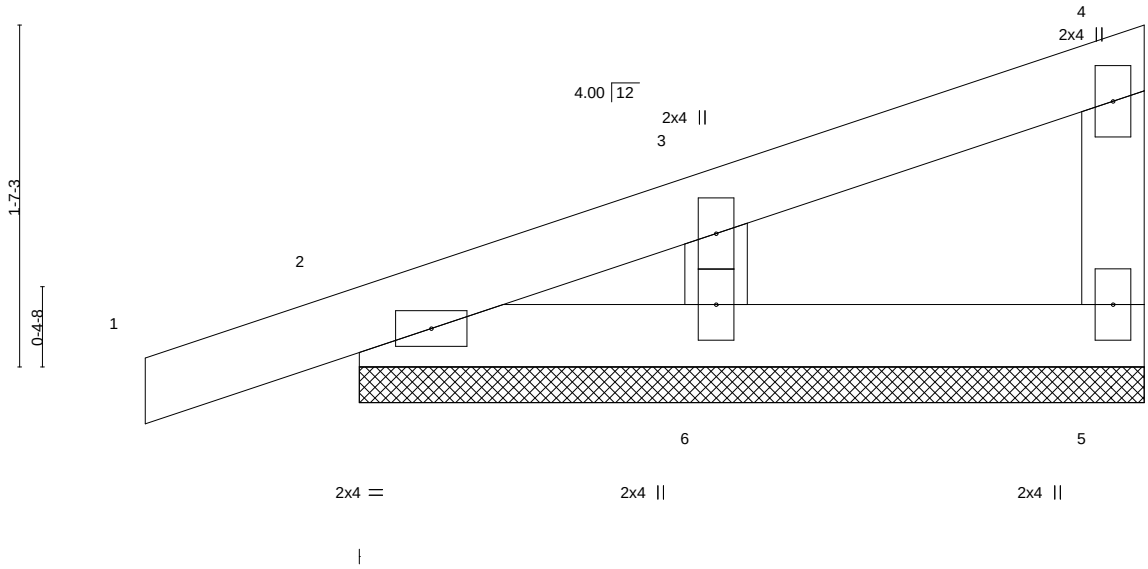

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	1	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-8-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=3-8-0, 2=3-8-0, 6=3-8-0
Max Horz 2=47(LC 13)
Max Uplift 5=-3(LC 16), 2=-42(LC 16), 6=-4(LC 16)
Max Grav 5=63(LC 21), 2=134(LC 21), 6=154(LC 21)

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

NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 3-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 5, 42 lb uplift at joint 2 and 4 lb uplift at joint 6.
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.

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Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	M02	Half Hip	3	1	I62525956
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:06:57 2023 Page 1
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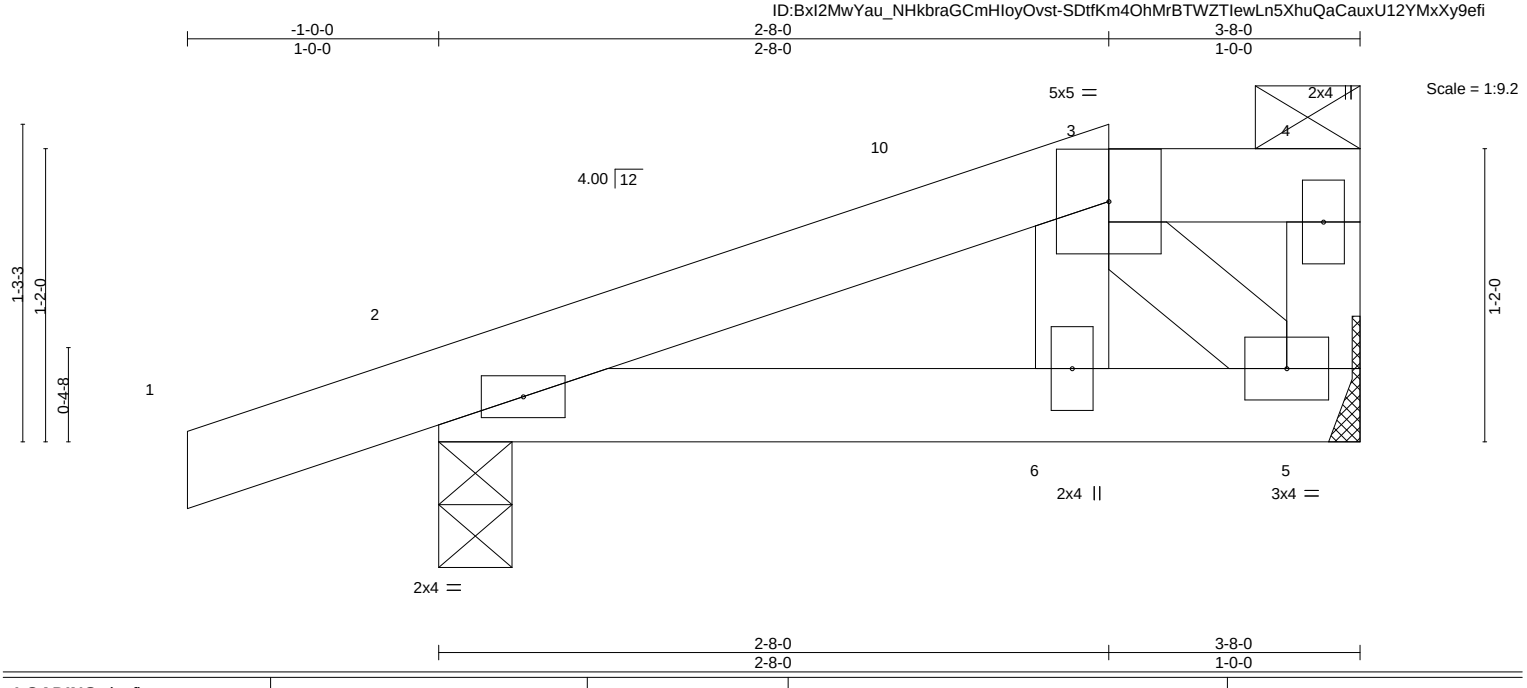

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	9	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.00	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 16 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=Mechanical
Max Horz 2=35(LC 15)
Max Uplift 2=-4(LC 16)
Max Grav 2=275(LC 36), 5=304(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-251/0
WEBS 3-5=-323/0

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 2-8-0, Exterior(2E) 2-8-0 to 3-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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 4 lb uplift at joint 2.
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) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-43, 3-4=-83, 5-7=-20
   Concentrated Loads (lb)
   Vert: 3=-160
2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-4=-90, 5-7=-20
   Concentrated Loads (lb)
   Vert: 3=-160
3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-50, 3-4=-139, 5-7=-20
   Concentrated Loads (lb)
   Vert: 3=-160
4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-37, 3-4=-133, 5-7=-20
   Concentrated Loads (lb)
   Vert: 3=-160
5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-37, 2-3=-42, 3-4=-114, 5-7=-20
   Concentrated Loads (lb)
   Vert: 3=-160
6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-25, 3-4=-135, 5-7=-20
   Concentrated Loads (lb)
   Vert: 3=-160
7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-20, 3-4=-50, 5-7=-40
   Concentrated Loads (lb)
   Vert: 3=-160
8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=60, 2-10=50, 3-10=34, 3-4=32, 5-7=-12
   Horz: 1-2=-72, 2-10=-62, 3-10=-46, 3-4=62, 4-5=38
   Concentrated Loads (lb)
   Vert: 3=-160
9) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=58, 2-3=64, 3-4=32, 5-7=-12
   Horz: 1-2=-70, 2-3=-76, 3-4=62, 4-5=-24
   Concentrated Loads (lb)
   Vert: 3=-160
10) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=1, 2-3=-46, 3-4=-64, 5-7=-20
    Horz: 1-2=-21, 2-3=26, 3-4=-26, 4-5=-35
    Concentrated Loads (lb)
    Vert: 3=-160
11) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-41, 2-3=-46, 3-4=-64, 5-7=-20
    Horz: 1-2=21, 2-3=26, 3-4=-26, 4-5=27
    Concentrated Loads (lb)
    Vert: 3=-160
12) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=28, 2-3=13, 3-4=8, 5-7=-12
    Horz: 1-2=-40, 2-3=-25, 3-4=38, 4-5=18
    Concentrated Loads (lb)
    Vert: 3=-160
13) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=3, 2-3=8, 3-4=8, 5-7=-12
    Horz: 1-2=-15, 2-3=-20, 3-4=38, 4-5=-15
    Concentrated Loads (lb)
    Vert: 3=-160
14) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-16, 2-3=-21, 3-4=-39, 5-7=-20
    Horz: 1-2=-4, 2-3=1, 3-4=-1, 4-5=7

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LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 3=-160

15) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-5, 2-3=-10, 3-4=-39, 5-7=-20
Horz: 1-2=-15, 2-3=-10, 3-4=-1, 4-5=-25
Concentrated Loads (lb)
Vert: 3=-160

16) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=32, 2-3=17, 3-4=-1, 5-7=-12
Horz: 1-2=-44, 2-3=-29, 3-4=29, 4-5=23
Concentrated Loads (lb)
Vert: 3=-160

17) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=21, 2-3=6, 3-4=-12, 5-7=-12
Horz: 1-2=-33, 2-3=-18, 3-4=18, 4-5=23
Concentrated Loads (lb)
Vert: 3=-160

18) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-3=-21, 3-4=-39, 5-7=-20
Horz: 1-2=-4, 2-3=1, 3-4=-1, 4-5=12
Concentrated Loads (lb)
Vert: 3=-160

19) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-3=-21, 3-4=-39, 5-7=-20
Horz: 1-2=-4, 2-3=1, 3-4=-1, 4-5=12
Concentrated Loads (lb)
Vert: 3=-160

20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-43, 2-3=-20, 3-4=-50, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

21) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-43, 2-3=-49, 3-4=-57, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

22) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-27, 3-4=-85, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

23) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-50, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

24) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-34, 2-3=-38, 3-4=-124, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=5
Concentrated Loads (lb)
Vert: 3=-160

25) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-26, 2-3=-30, 3-4=-124, 5-7=-20
Horz: 1-2=-11, 2-3=-7, 3-4=-1, 4-5=-19
Concentrated Loads (lb)
Vert: 3=-160

26) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-34, 2-3=-38, 3-4=-124, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=9
Concentrated Loads (lb)
Vert: 3=-160

27) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=-34, 2-3=-38, 3-4=-124, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=9
Concentrated Loads (lb)
Vert: 3=-160

28) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-3=-51, 3-4=-129, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=5
Concentrated Loads (lb)
Vert: 3=-160

29) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-3=-43, 3-4=-129, 5-7=-20
Horz: 1-2=-11, 2-3=-7, 3-4=-1, 4-5=-19
Concentrated Loads (lb)
Vert: 3=-160

30) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-3=-51, 3-4=-129, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=9
Concentrated Loads (lb)
Vert: 3=-160

31) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-3=-51, 3-4=-129, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=9
Concentrated Loads (lb)
Vert: 3=-160

32) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-80, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-3=-28, 3-4=-46, 5-7=-12
Horz: 1-2=-16, 2-3=16, 3-4=-16, 4-5=-16
Concentrated Loads (lb)
Vert: 3=-160

34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=4, 3-4=-14, 5-7=-12
Horz: 1-3=-16, 3-4=16, 4-5=16
Concentrated Loads (lb)
Vert: 3=-160

35) 3rd Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-27, 3-4=-100, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

36) 4th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-57, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

37) 5th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-25, 3-4=-146, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

38) 6th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-57, 3-4=-114, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

39) 7th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-3=-26, 3-4=-137, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=5
Concentrated Loads (lb)
Vert: 3=-160

Continued on page 5

LOAD CASE(S) Standard

40) 8th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-58, 3-4=-105, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=5
Concentrated Loads (lb)
Vert: 3=-160

41) 9th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-14, 2-3=-18, 3-4=-137, 5-7=-20
Horz: 1-2=-11, 2-3=-7, 3-4=-1, 4-5=-19
Concentrated Loads (lb)
Vert: 3=-160

42) 10th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-46, 2-3=-50, 3-4=-105, 5-7=-20
Horz: 1-2=-11, 2-3=-7, 3-4=-1, 4-5=-19
Concentrated Loads (lb)
Vert: 3=-160

43) 11th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-3=-26, 3-4=-137, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=9
Concentrated Loads (lb)
Vert: 3=-160

44) 12th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-58, 3-4=-105, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=9
Concentrated Loads (lb)
Vert: 3=-160

45) 13th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-3=-26, 3-4=-137, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=9
Concentrated Loads (lb)
Vert: 3=-160

46) 14th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-58, 3-4=-105, 5-7=-20
Horz: 1-2=-3, 2-3=1, 3-4=-1, 4-5=9
Concentrated Loads (lb)
Vert: 3=-160

47) 15th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-27, 3-4=-100, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

48) 16th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-57, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

49) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-90, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

50) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-90, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

51) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 3-4=-139, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

52) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-139, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-160

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF	
23-6980-A	M03	Monopitch	6	1	Job Reference (optional)	I62525957

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:06:58 2023 Page 1
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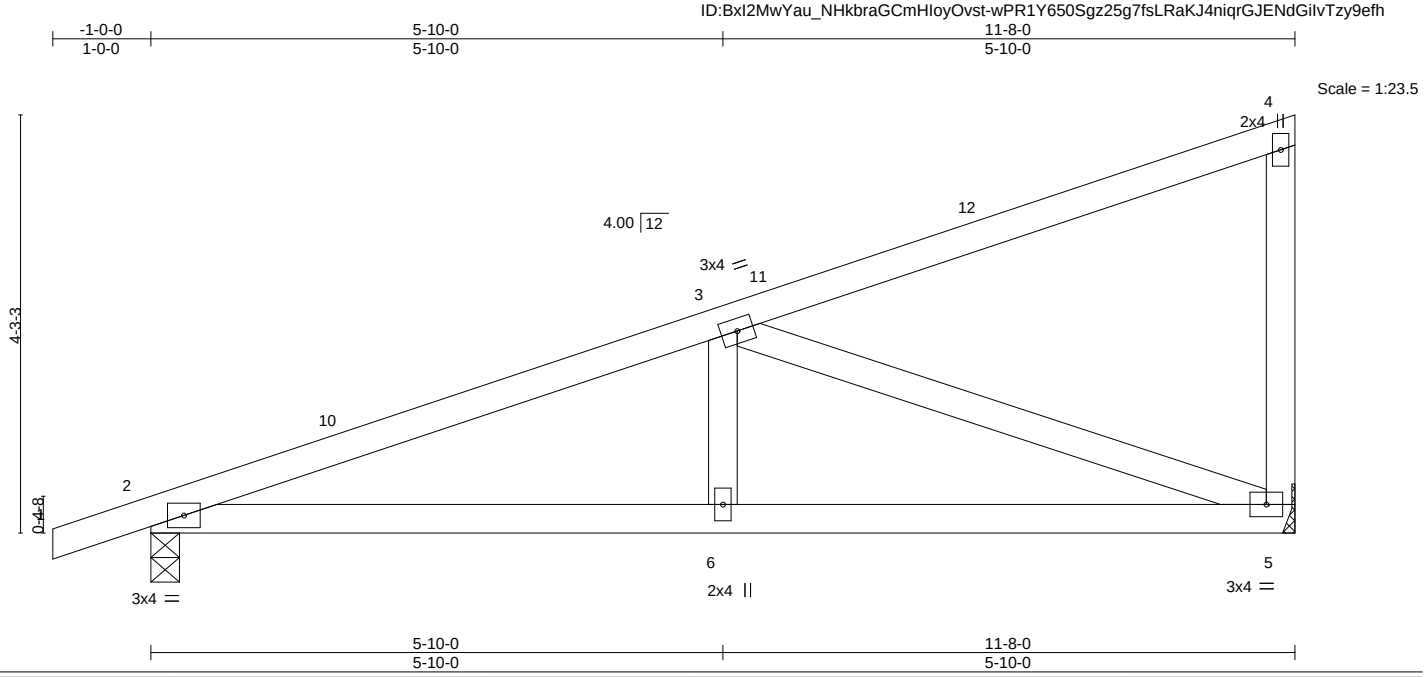

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.03	6-9	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.07	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 54 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 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 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=Mechanical
Max Horz 2=141(LC 15)
Max Uplift 2=-57(LC 16), 5=-30(LC 16)
Max Grav 2=523(LC 2), 5=458(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-849/193
BOT CHORD 2-6=-282/778, 5-6=-282/778
WEBS 3-6=0/259, 3-5=-805/241

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 11-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; 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 57 lb uplift at joint 2 and 30 lb uplift at joint 5.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	M03GE	Monopitch Supported Gable	1	1	I62525958

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:06:59 2023 Page 1

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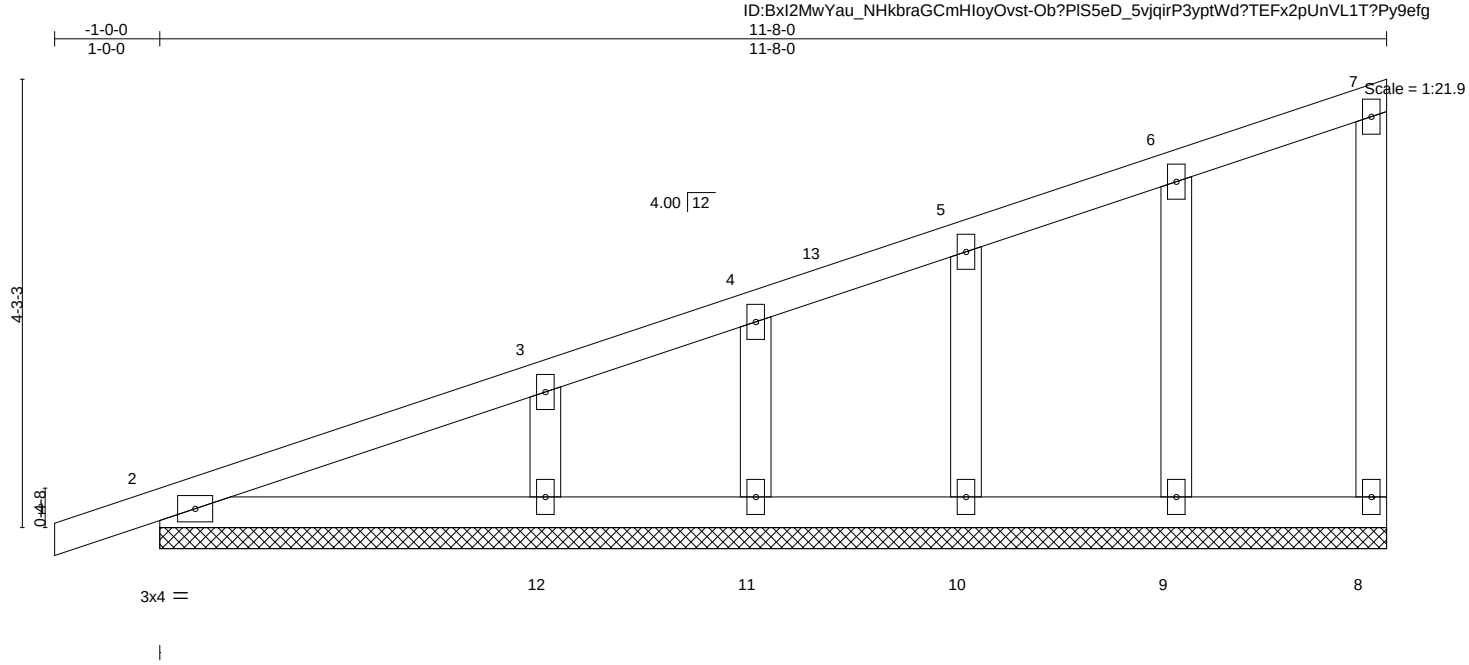

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.00	1	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 55 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 11-8-0.

(lb) - Max Horz 2=141(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 8, 2, 9, 10, 11, 12
Max Grav All reactions 250 lb or less at joint(s) 8, 2, 9, 10, 11 except 12=282(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-284/151

NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 11-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
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) All plates are 2x4 MT20 unless otherwise indicated.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2, 9, 10, 11, 12.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T01	Half Hip	3	1	I62525959
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:00 2023 Page 1
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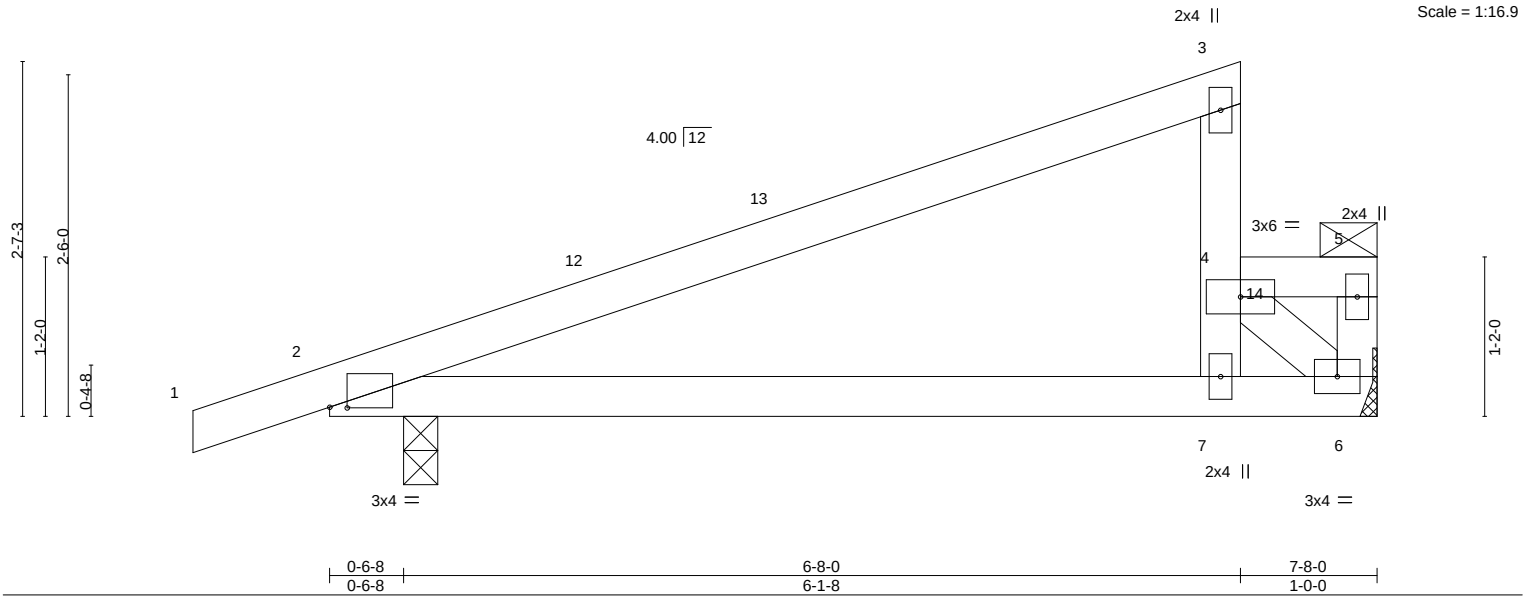


Plate Offsets (X,Y)-- [2:0-1-9,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.03	7-11	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.08	7-11	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 30 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 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, and 2-0-0 oc purlins: 4-7, 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 6=Mechanical
Max Horz 2=104(LC 16)
Max Uplift 2=-21(LC 16)
Max Grav 2=466(LC 36), 6=457(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-251/0
BOT CHORD 6-7=-68/426
WEBS 4-6=-564/77

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) 2.
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) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 14,2023

LOAD CASE(S) Standard

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: 1-3=-43, 4-5=-83, 6-8=-20
   Concentrated Loads (lb)
   Vert: 14=-160
2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 4-5=-90, 6-8=-20
   Concentrated Loads (lb)
   Vert: 14=-160
3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-50, 4-5=-139, 6-8=-20
   Concentrated Loads (lb)
   Vert: 14=-160
4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-37, 4-5=-133, 6-8=-20
   Concentrated Loads (lb)
   Vert: 14=-160
5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-13=-37, 3-13=-42, 4-5=-114, 6-8=-20
   Concentrated Loads (lb)
   Vert: 14=-160
6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-25, 4-5=-137, 6-8=-20
   Concentrated Loads (lb)
   Vert: 14=-160
7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-20, 4-5=-50, 6-8=-40
   Concentrated Loads (lb)
   Vert: 14=-160
8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=58, 2-12=45, 3-12=34, 4-5=16, 6-8=-12
   Horz: 1-2=-70, 2-12=-57, 3-12=-46, 3-4=7, 5-6=36
   Concentrated Loads (lb)
   Vert: 14=-160
9) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=29, 2-12=34, 3-12=45, 4-5=27, 6-8=-12
   Horz: 1-2=-41, 2-12=-46, 3-12=-57, 3-4=-51, 5-6=-23
   Concentrated Loads (lb)
   Vert: 14=-160
10) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-3, 2-3=-42, 4-5=-60, 6-8=-20
   Horz: 1-2=-17, 2-3=22, 3-4=-30, 5-6=-33
   Concentrated Loads (lb)
   Vert: 14=-160
11) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-37, 2-3=-42, 4-5=-60, 6-8=-20
   Horz: 1-2=17, 2-3=22, 3-4=28, 5-6=25
   Concentrated Loads (lb)
   Vert: 14=-160
12) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=28, 2-3=13, 4-5=8, 6-8=-12
   Horz: 1-2=-40, 2-3=-25, 3-4=-11, 5-6=18
   Concentrated Loads (lb)
   Vert: 14=-160
13) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=3, 2-3=8, 4-5=8, 6-8=-12
   Horz: 1-2=-15, 2-3=-20, 3-4=-26, 5-6=-15
   Concentrated Loads (lb)
   Vert: 14=-160
14) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-16, 2-3=-21, 4-5=-39, 6-8=-20
   Horz: 1-2=-4, 2-3=1, 3-4=31, 5-6=7

Continued on page 3

LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 14=-160

15) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-5, 2-3=-10, 4-5=-39, 6-8=-20
Horz: 1-2=-15, 2-3=-10, 3-4=-4, 5-6=-25
Concentrated Loads (lb)
Vert: 14=-160

16) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=32, 2-3=17, 4-5=-1, 6-8=-12
Horz: 1-2=-44, 2-3=-29, 3-4=-34, 5-6=23
Concentrated Loads (lb)
Vert: 14=-160

17) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=21, 2-3=6, 4-5=-12, 6-8=-12
Horz: 1-2=-33, 2-3=-18, 3-4=-24, 5-6=23
Concentrated Loads (lb)
Vert: 14=-160

18) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-3=-21, 4-5=-39, 6-8=-20
Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12
Concentrated Loads (lb)
Vert: 14=-160

19) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-3=-21, 4-5=-39, 6-8=-20
Horz: 1-2=-4, 2-3=1, 3-4=6, 5-6=12
Concentrated Loads (lb)
Vert: 14=-160

20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-43, 2-3=-20, 4-5=-50, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

21) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-13=-43, 3-13=-49, 4-5=-57, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

22) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-27, 4-5=-88, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

23) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-3=-20, 4-5=-50, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

24) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-34, 2-3=-38, 4-5=-124, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5
Concentrated Loads (lb)
Vert: 14=-160

25) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-26, 2-3=-30, 4-5=-124, 6-8=-20
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19
Concentrated Loads (lb)
Vert: 14=-160

26) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-34, 2-3=-38, 4-5=-124, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
Concentrated Loads (lb)
Vert: 14=-160

27) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=-34, 2-3=-38, 4-5=-124, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
Concentrated Loads (lb)
Vert: 14=-160

28) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-3=-51, 4-5=-129, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5
Concentrated Loads (lb)
Vert: 14=-160

29) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-3=-43, 4-5=-129, 6-8=-20
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19
Concentrated Loads (lb)
Vert: 14=-160

30) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-3=-51, 4-5=-129, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
Concentrated Loads (lb)
Vert: 14=-160

31) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-3=-51, 4-5=-129, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
Concentrated Loads (lb)
Vert: 14=-160

32) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 4-5=-80, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-3=-28, 4-5=-46, 6-8=-12
Horz: 1-2=-16, 2-3=16, 3-4=-16, 5-6=-16
Concentrated Loads (lb)
Vert: 14=-160

34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=4, 4-5=-14, 6-8=-12
Horz: 1-3=-16, 3-4=16, 5-6=16
Concentrated Loads (lb)
Vert: 14=-160

35) 3rd Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-27, 4-5=-100, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

36) 4th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 4-5=-57, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

37) 5th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-25, 4-5=-146, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

38) 6th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-57, 4-5=-114, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

39) 7th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-3=-26, 4-5=-137, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5
Concentrated Loads (lb)
Vert: 14=-160

Continued on page 5

LOAD CASE(S) Standard

40) 8th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-58, 4-5=-105, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=23, 5-6=5
Concentrated Loads (lb)
Vert: 14=-160

41) 9th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-14, 2-3=-18, 4-5=-137, 6-8=-20
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19
Concentrated Loads (lb)
Vert: 14=-160

42) 10th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-46, 2-3=-50, 4-5=-105, 6-8=-20
Horz: 1-2=-11, 2-3=-7, 3-4=-3, 5-6=-19
Concentrated Loads (lb)
Vert: 14=-160

43) 11th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-3=-26, 4-5=-137, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
Concentrated Loads (lb)
Vert: 14=-160

44) 12th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-58, 4-5=-105, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
Concentrated Loads (lb)
Vert: 14=-160

45) 13th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-3=-26, 4-5=-137, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
Concentrated Loads (lb)
Vert: 14=-160

46) 14th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-58, 4-5=-105, 6-8=-20
Horz: 1-2=-3, 2-3=1, 3-4=5, 5-6=9
Concentrated Loads (lb)
Vert: 14=-160

47) 15th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-27, 4-5=-100, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

48) 16th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 4-5=-57, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

49) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 4-5=-50, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

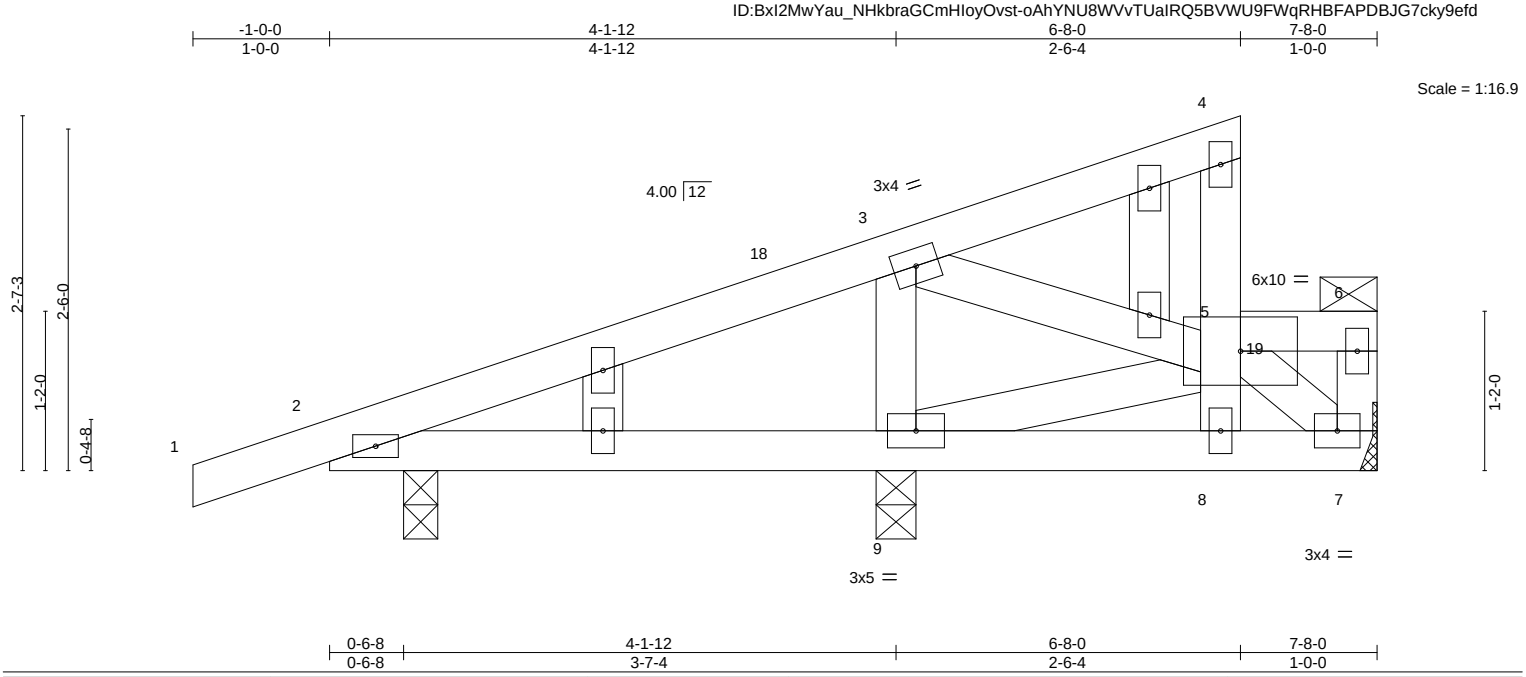
50) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 4-5=-90, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

51) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 4-5=-109, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

52) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 4-5=-139, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-160

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T01GE	GABLE	1	1	I62525960
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:02 2023 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-oAhYNU8WVvTUaIRQ5BVWU9FWqRHBFAPDBJG7cky9efd



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	0.20	Vert(LL)	-0.00	9-17	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	9-17	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 41 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 5-8, 5-6.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 9=0-3-8, 7=Mechanical
Max Horz 2=104(LC 16)
Max Uplift 2=-31(LC 16)
Max Grav 2=282(LC 36), 9=374(LC 36), 7=301(LC 28)

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; 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) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
12) Refer to girder(s) for truss to truss connections.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
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) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 14,2023

LOAD CASE(S) Standard

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: 1-4=-43, 5-6=-83, 7-14=-20
   Concentrated Loads (lb)
   Vert: 19=-160
2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-60, 5-6=-90, 7-14=-20
   Concentrated Loads (lb)
   Vert: 19=-160
3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-50, 5-6=-139, 7-14=-20
   Concentrated Loads (lb)
   Vert: 19=-160
4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-37, 5-6=-133, 7-14=-20
   Concentrated Loads (lb)
   Vert: 19=-160
5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-18=-37, 4-18=-42, 5-6=-114, 7-14=-20
   Concentrated Loads (lb)
   Vert: 19=-160
6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-25, 5-6=-137, 7-14=-20
   Concentrated Loads (lb)
   Vert: 19=-160
7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-20, 5-6=-50, 7-14=-40
   Concentrated Loads (lb)
   Vert: 19=-160
8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=61, 2-4=52, 5-6=34, 7-14=-12
   Horz: 1-2=-73, 2-4=-64, 4-5=7, 6-7=36
   Concentrated Loads (lb)
   Vert: 19=-160
9) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=47, 2-4=52, 5-6=34, 7-14=-12
   Horz: 1-2=-59, 2-4=-64, 4-5=-69, 6-7=-23
   Concentrated Loads (lb)
   Vert: 19=-160
10) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-3, 2-4=-42, 5-6=-60, 7-14=-20
   Horz: 1-2=-17, 2-4=22, 4-5=-48, 6-7=-33
   Concentrated Loads (lb)
   Vert: 19=-160
11) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-37, 2-4=-42, 5-6=-60, 7-14=-20
   Horz: 1-2=17, 2-4=22, 4-5=28, 6-7=25
   Concentrated Loads (lb)
   Vert: 19=-160
12) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=28, 2-4=13, 5-6=8, 7-14=-12
   Horz: 1-2=-40, 2-4=-25, 4-5=-11, 6-7=18
   Concentrated Loads (lb)
   Vert: 19=-160
13) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=3, 2-4=8, 5-6=8, 7-14=-12
   Horz: 1-2=-15, 2-4=-20, 4-5=-26, 6-7=-15
   Concentrated Loads (lb)
   Vert: 19=-160
14) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-16, 2-4=-21, 5-6=-39, 7-14=-20
   Horz: 1-2=-4, 2-4=1, 4-5=31, 6-7=7

Continued on page 3

LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 19=-160

15) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-5, 2-4=-10, 5-6=-39, 7-14=-20
Horz: 1-2=-15, 2-4=-10, 4-5=-4, 6-7=-25
Concentrated Loads (lb)
Vert: 19=-160

16) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=32, 2-4=17, 5-6=-1, 7-14=-12
Horz: 1-2=-44, 2-4=-29, 4-5=-34, 6-7=23
Concentrated Loads (lb)
Vert: 19=-160

17) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=21, 2-4=6, 5-6=-12, 7-14=-12
Horz: 1-2=-33, 2-4=-18, 4-5=-24, 6-7=23
Concentrated Loads (lb)
Vert: 19=-160

18) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-4=-21, 5-6=-39, 7-14=-20
Horz: 1-2=-4, 2-4=1, 4-5=6, 6-7=12
Concentrated Loads (lb)
Vert: 19=-160

19) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-4=-21, 5-6=-39, 7-14=-20
Horz: 1-2=-4, 2-4=1, 4-5=6, 6-7=12
Concentrated Loads (lb)
Vert: 19=-160

20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-43, 2-4=-20, 5-6=-50, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

21) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-18=-43, 4-18=-49, 5-6=-57, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

22) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-27, 5-6=-88, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

23) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-4=-20, 5-6=-50, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

24) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-34, 2-4=-38, 5-6=-124, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=23, 6-7=5
Concentrated Loads (lb)
Vert: 19=-160

25) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-26, 2-4=-30, 5-6=-124, 7-14=-20
Horz: 1-2=-11, 2-4=-7, 4-5=-3, 6-7=-19
Concentrated Loads (lb)
Vert: 19=-160

26) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-34, 2-4=-38, 5-6=-124, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=5, 6-7=9
Concentrated Loads (lb)
Vert: 19=-160

27) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=-34, 2-4=-38, 5-6=-124, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=5, 6-7=9
Concentrated Loads (lb)
Vert: 19=-160

28) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-4=-51, 5-6=-129, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=23, 6-7=5
Concentrated Loads (lb)
Vert: 19=-160

29) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-4=-43, 5-6=-129, 7-14=-20
Horz: 1-2=-11, 2-4=-7, 4-5=-3, 6-7=-19
Concentrated Loads (lb)
Vert: 19=-160

30) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-4=-51, 5-6=-129, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=5, 6-7=9
Concentrated Loads (lb)
Vert: 19=-160

31) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-4=-51, 5-6=-129, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=5, 6-7=9
Concentrated Loads (lb)
Vert: 19=-160

32) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-20, 5-6=-80, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-4=-28, 5-6=-46, 7-14=-12
Horz: 1-2=-16, 2-4=16, 4-5=-16, 6-7=-16
Concentrated Loads (lb)
Vert: 19=-160

34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=4, 5-6=-14, 7-14=-12
Horz: 1-4=-16, 4-5=16, 6-7=16
Concentrated Loads (lb)
Vert: 19=-160

35) 3rd Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-27, 5-6=-100, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

36) 4th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 5-6=-57, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

37) 5th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-25, 5-6=-146, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

38) 6th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-57, 5-6=-114, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

39) 7th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-4=-26, 5-6=-137, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=23, 6-7=5
Concentrated Loads (lb)
Vert: 19=-160

Continued on page 5

LOAD CASE(S) Standard

40) 8th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-58, 5-6=-105, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=23, 6-7=5
Concentrated Loads (lb)
Vert: 19=-160

41) 9th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-14, 2-4=-18, 5-6=-137, 7-14=-20
Horz: 1-2=-11, 2-4=-7, 4-5=-3, 6-7=-19
Concentrated Loads (lb)
Vert: 19=-160

42) 10th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-46, 2-4=-50, 5-6=-105, 7-14=-20
Horz: 1-2=-11, 2-4=-7, 4-5=-3, 6-7=-19
Concentrated Loads (lb)
Vert: 19=-160

43) 11th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-4=-26, 5-6=-137, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=5, 6-7=9
Concentrated Loads (lb)
Vert: 19=-160

44) 12th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-58, 5-6=-105, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=5, 6-7=9
Concentrated Loads (lb)
Vert: 19=-160

45) 13th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-22, 2-4=-26, 5-6=-137, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=5, 6-7=9
Concentrated Loads (lb)
Vert: 19=-160

46) 14th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-58, 5-6=-105, 7-14=-20
Horz: 1-2=-3, 2-4=1, 4-5=5, 6-7=9
Concentrated Loads (lb)
Vert: 19=-160

47) 15th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-27, 5-6=-100, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

48) 16th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 5-6=-57, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

49) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 5-6=-50, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

50) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-20, 5-6=-90, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

51) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-50, 5-6=-109, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

52) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-20, 5-6=-139, 7-14=-20
Concentrated Loads (lb)
Vert: 19=-160

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T02GE	Common Supported Gable	1	1	I62525961
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:03 2023 Page 1
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1-0-0 5-9-8 5-9-8 1-0-0

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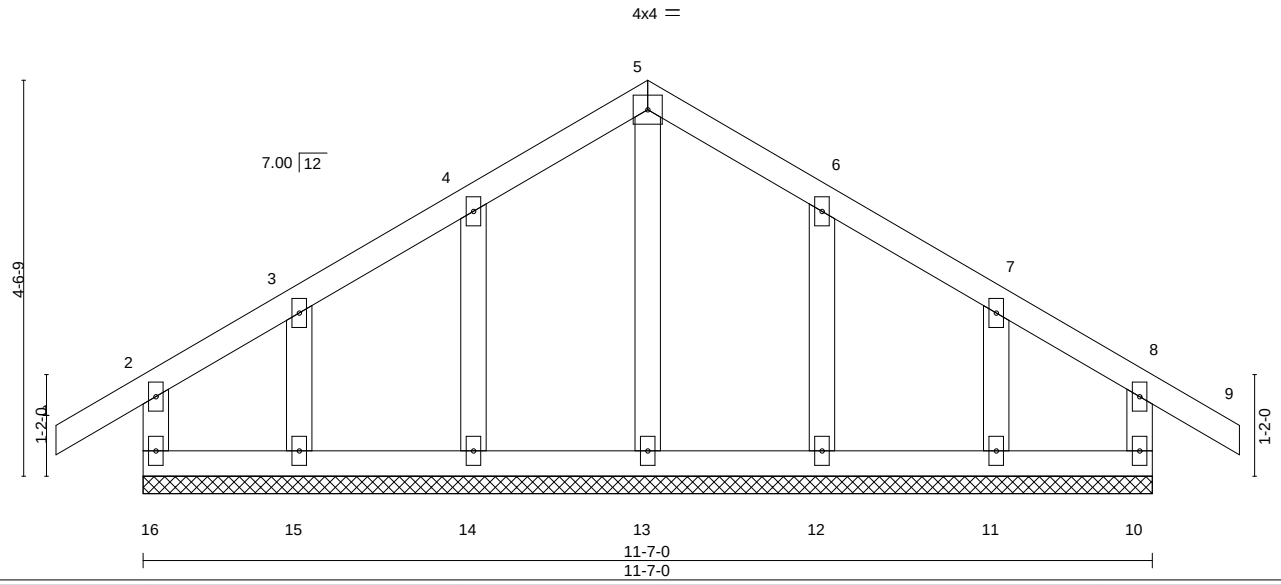

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00	9	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.01	9	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-R							Weight: 62 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 11-7-0.
(lb) - Max Horz 16=-109(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 1-9-8, Exterior(2N) 1-9-8 to 5-9-8, Corner(3R) 5-9-8 to 8-9-8, Exterior(2N) 8-9-8 to 12-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; 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) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF	I62525962
23-6980-A	T03	COMMON	1	1	Job Reference (optional)	

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:05 2023 Page 1
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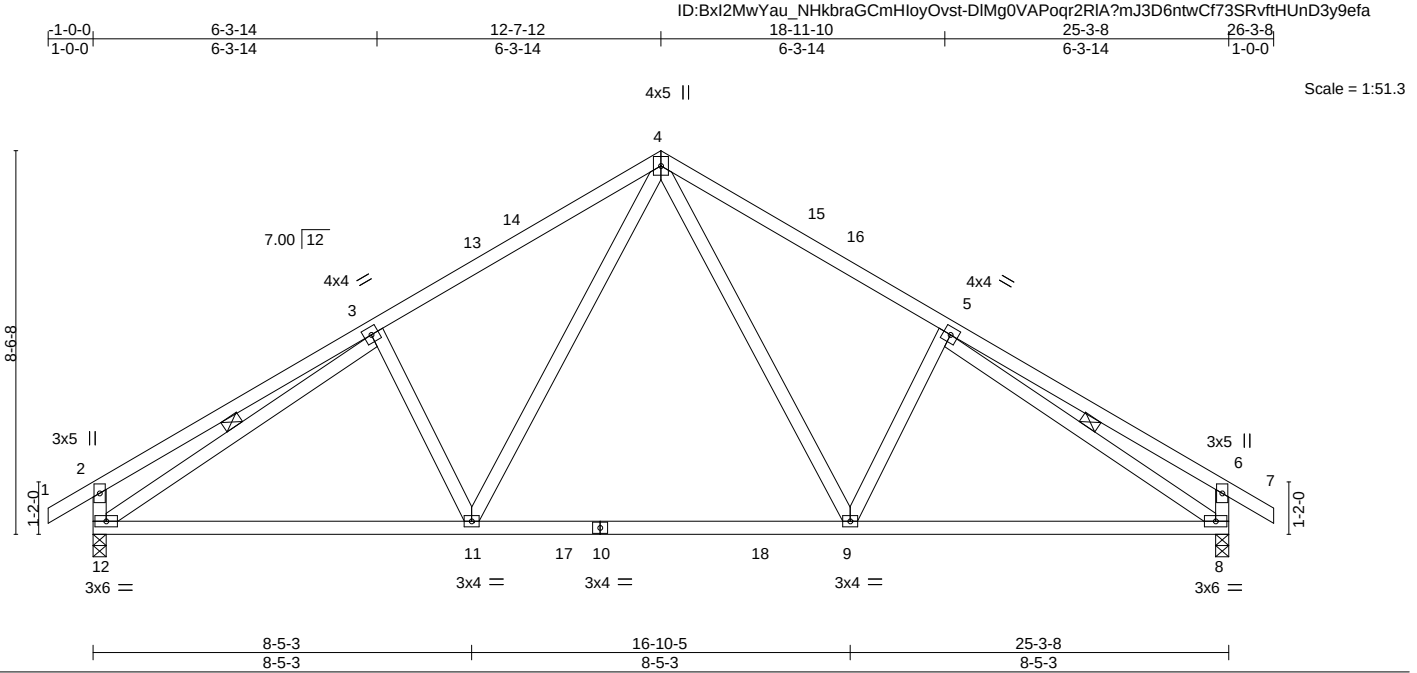

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.18	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.27	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 149 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 5-8

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=189(LC 15)
Max Uplift 12=-97(LC 16), 8=-97(LC 16)
Max Grav 12=1186(LC 28), 8=1186(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-391/119, 3-4=-1376/195, 4-5=-1376/195, 5-6=-391/119, 2-12=-389/130, 6-8=-389/130
BOT CHORD 11-12=-62/1292, 9-11=0/911, 8-9=-51/1179
WEBS 4-9=-43/614, 5-9=-261/161, 4-11=-43/614, 3-11=-261/161, 3-12=-1174/55, 5-8=-1174/55

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 12-7-12, Exterior(2R) 12-7-12 to 15-7-12, Interior(1) 15-7-12 to 26-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T03G	COMMON GIRDER	1	4	I62525963
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:07 2023 Page 1
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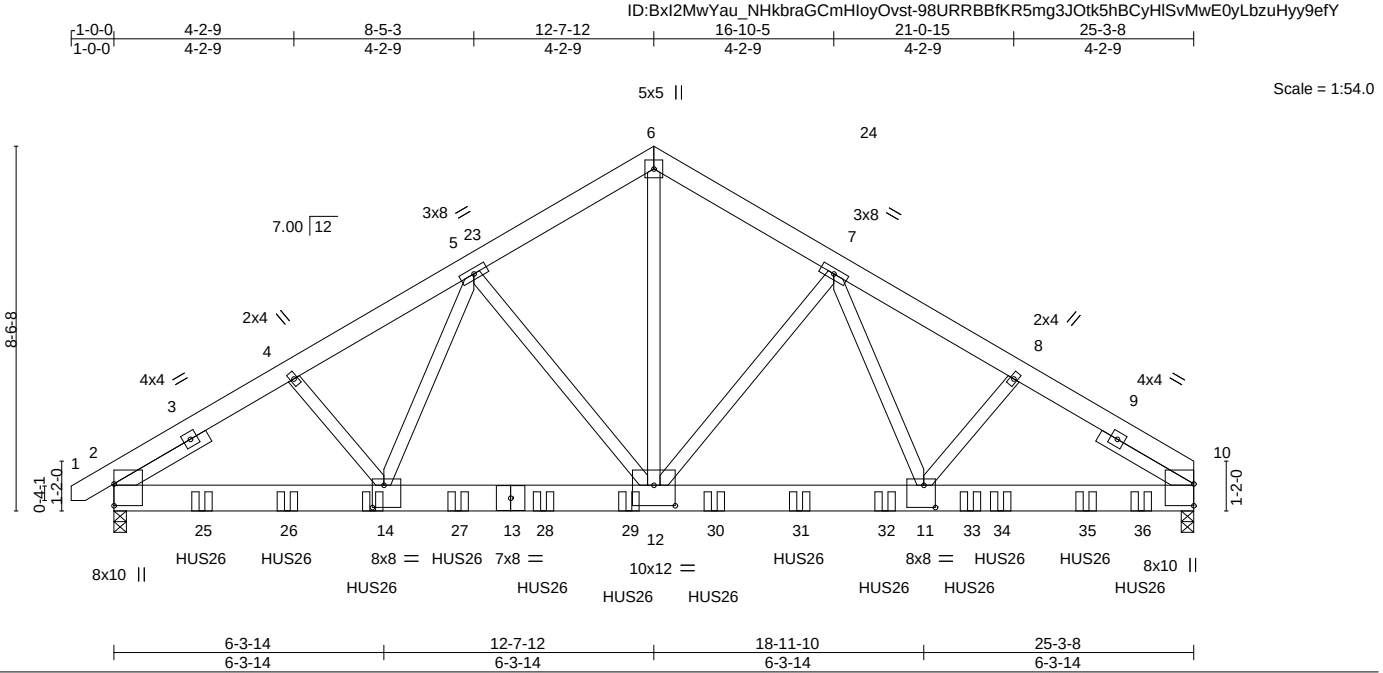

Plate Offsets (X,Y)-- [11:0-3-4,0-6-4], [12:0-6-0,0-5-12], [14:0-3-4,0-6-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.13	12-14	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.24	12-14	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.06	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 853 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.3 *Except*
6-12: 2x4 SP No.2
SLIDER Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0

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) 10=0-3-8, 2=0-3-8
Max Horz 2=155(LC 37)
Max Uplift 10=-484(LC 12), 2=-517(LC 12)
Max Grav 10=13368(LC 3), 2=11196(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-15643/671, 4-5=-15717/693, 5-6=-12231/525, 6-7=-12229/525, 7-8=-17181/638, 8-10=-17118/617
BOT CHORD 2-14=-519/13005, 12-14=-412/12267, 11-12=-387/12916, 10-11=-475/14316
WEBS 6-12=-450/11990, 7-12=-3934/202, 7-11=-145/5620, 8-11=-100/1060, 5-12=-2866/244, 5-14=-209/3907, 4-14=-104/1144

NOTES-
1) 4-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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) 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=484, 2=517.

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Continued on page 2

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 HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 24-0-12 to connect truss(es) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-43, 6-10=-43, 15-19=-20
   Concentrated Loads (lb)
   Vert: 14=-1170(B) 25=-1170(B) 26=-1170(B) 27=-1261(B) 28=-1261(B) 29=-1261(B) 30=-1258(B) 31=-1258(B) 32=-1258(B) 33=-1258(B) 34=-1258(B) 35=-1258(B) 36=-1170(B)

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T03GE	Common Structural Gable	1	1	I62525964
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:09 2023 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-5WcBrtDvs2LUvMTm?989Gd1d5GYYOEDFovS?Mqy9efW

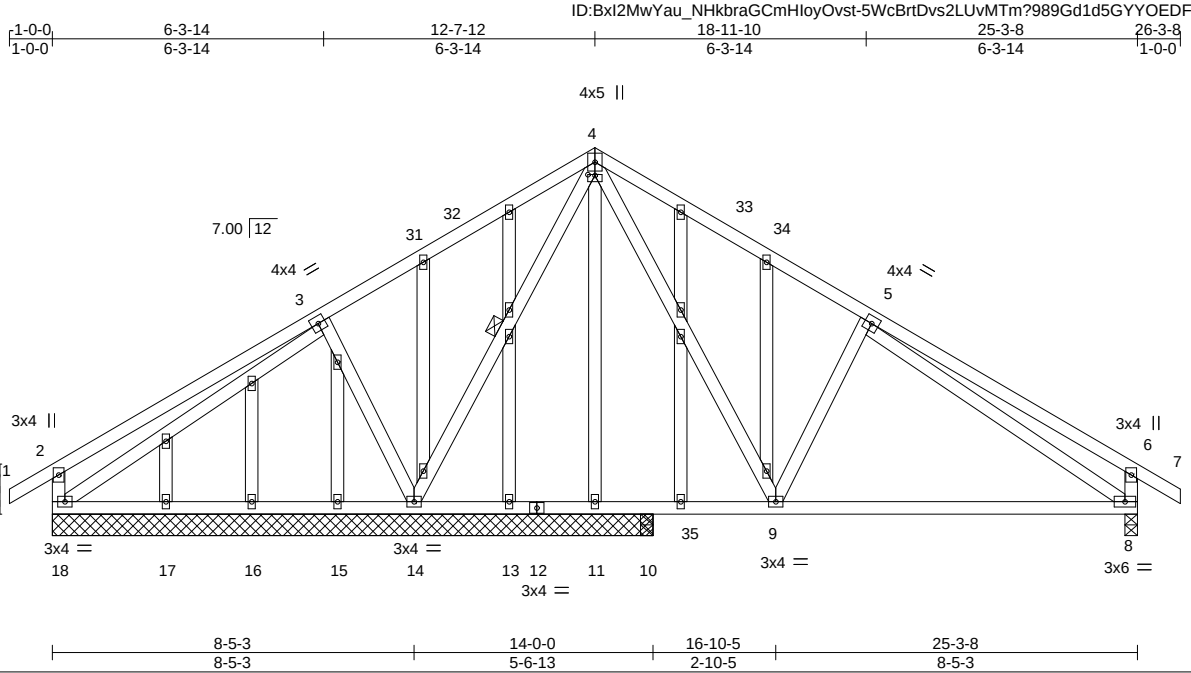

Plate Offsets (X,Y)-- [4:0-2-0,0-0-4]

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	0.52	Vert(LL)	-0.12	8-9	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.25	8-9	>549	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 208 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-14

REACTIONS. All bearings 14-0-0 except (jt=length) 8=0-3-8, 10=0-3-8.
(lb) - Max Horz 18=189(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 18, 8, 10 except 14=-128(LC 16)
Max Grav All reactions 250 lb or less at joint(s) 11, 13, 15, 16, 17, 10 except 14=933(LC 28), 18=322(LC 34), 8=769(LC 29)

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

TOP CHORD	4-5=-669/168, 5-6=-375/115, 2-18=-293/144, 6-8=-377/128
BOT CHORD	13-14=0/257, 11-13=0/257, 10-11=0/257, 9-10=0/257, 8-9=-22/579
WEBS	4-9=-51/607, 5-9=-312/164, 4-14=-637/31, 3-14=-374/174, 5-8=-452/23

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 12-7-12, Exterior(2R) 12-7-12 to 15-7-12, Interior(1) 15-7-12 to 26-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; 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) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 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, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 8, 10 except (jt=lb) 14=128.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T04	Common	6	1	I62525965
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:11 2023 Page 1
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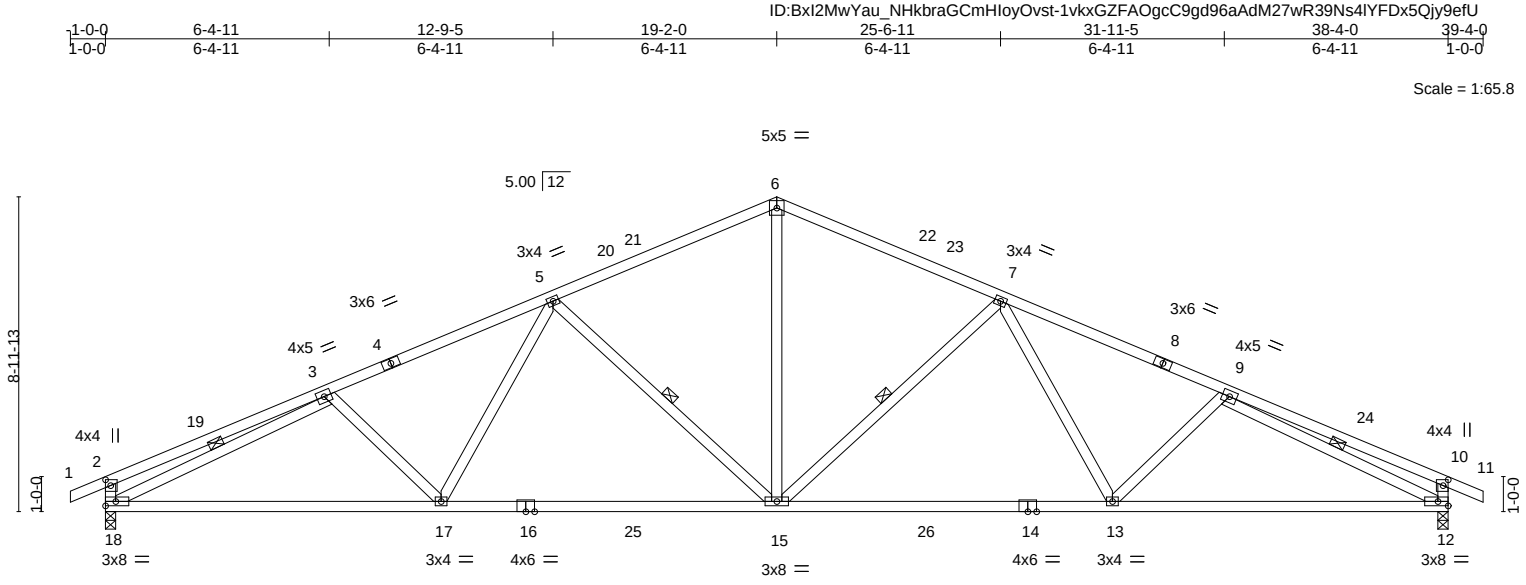

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [10:0-2-0,0-1-12]

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	0.72	Vert(LL)	-0.30	13-15	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.53	13-15	>860	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.13	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 214 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-15, 5-15, 3-18, 9-12

REACTIONS. (size) 18=0-3-8, 12=0-3-8
Max Horz 18=-160(LC 14)
Max Uplift 18=-128(LC 16), 12=-128(LC 16)
Max Grav 18=1742(LC 28), 12=1742(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-583/96, 3-5=-2862/255, 5-6=-2123/271, 6-7=-2123/271, 7-9=-2862/255, 9-10=-583/96, 2-18=-441/142, 10-12=-441/142
BOT CHORD 17-18=-187/2710, 15-17=-129/2446, 13-15=-113/2387, 12-13=-176/2614
WEBS 6-15=-64/1290, 7-15=-722/138, 7-13=0/471, 5-15=-722/138, 5-17=0/471, 3-18=-2451/192, 9-12=-2451/192

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-10-0, Interior(1) 2-10-0 to 19-2-0, Exterior(2R) 19-2-0 to 23-0-0, Interior(1) 23-0-0 to 39-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=128, 12=128.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T04A	Common	2	1	I62525966
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:12 2023 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-V5HKUuFo9zk3mqCLgHhsuGf5DTVabWlhUthfy9y9efT

1-0-0 6-4-11 12-9-5 19-2-0 25-5-8 31-9-0 38-0-8
1-0-0 6-4-11 6-4-11 6-4-11 6-3-8 6-3-8 6-3-8

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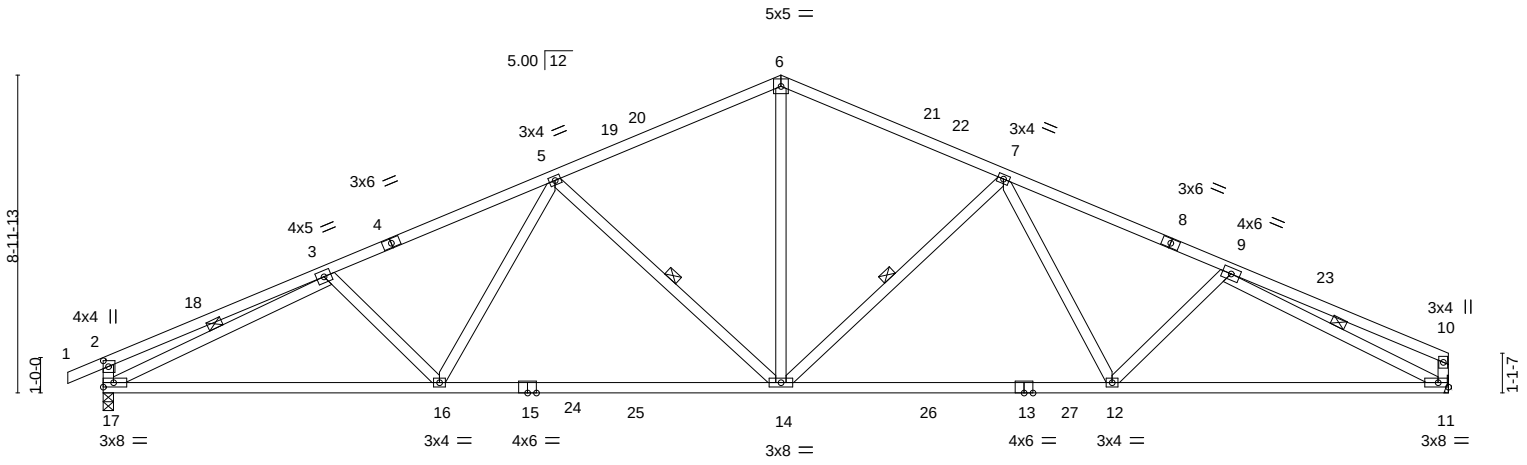

9-6-2 19-2-0 28-6-6 38-0-8
9-6-2 9-7-14 9-4-6 9-6-2

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

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	0.72	Vert(LL)	-0.31	14-16	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.55	14-16	>829	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.13	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 212 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-14, 7-14, 3-17, 9-11

REACTIONS. (size) 17=0-3-8, 11=Mechanical
Max Horz 17=161(LC 15)
Max Uplift 17=-128(LC 16), 11=-91(LC 16)
Max Grav 17=1735(LC 28), 11=1673(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-576/97, 3-5=-2851/253, 5-6=-2101/269, 6-7=-2099/271, 7-9=-2784/259, 9-10=-412/62, 2-17=-438/143, 10-11=-297/75
BOT CHORD 16-17=-218/2694, 14-16=-161/2422, 12-14=-143/2337, 11-12=-211/2516
WEBS 5-16=0/480, 5-14=-724/138, 6-14=-64/1273, 7-14=-689/134, 7-12=0/437, 3-17=-2446/188, 9-11=-2529/225

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 19-2-0, Exterior(2R) 19-2-0 to 22-11-10, Interior(1) 22-11-10 to 37-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 17=128.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T04AGE	Common Supported Gable	1	1	I62525967

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:14 2023 Page 1
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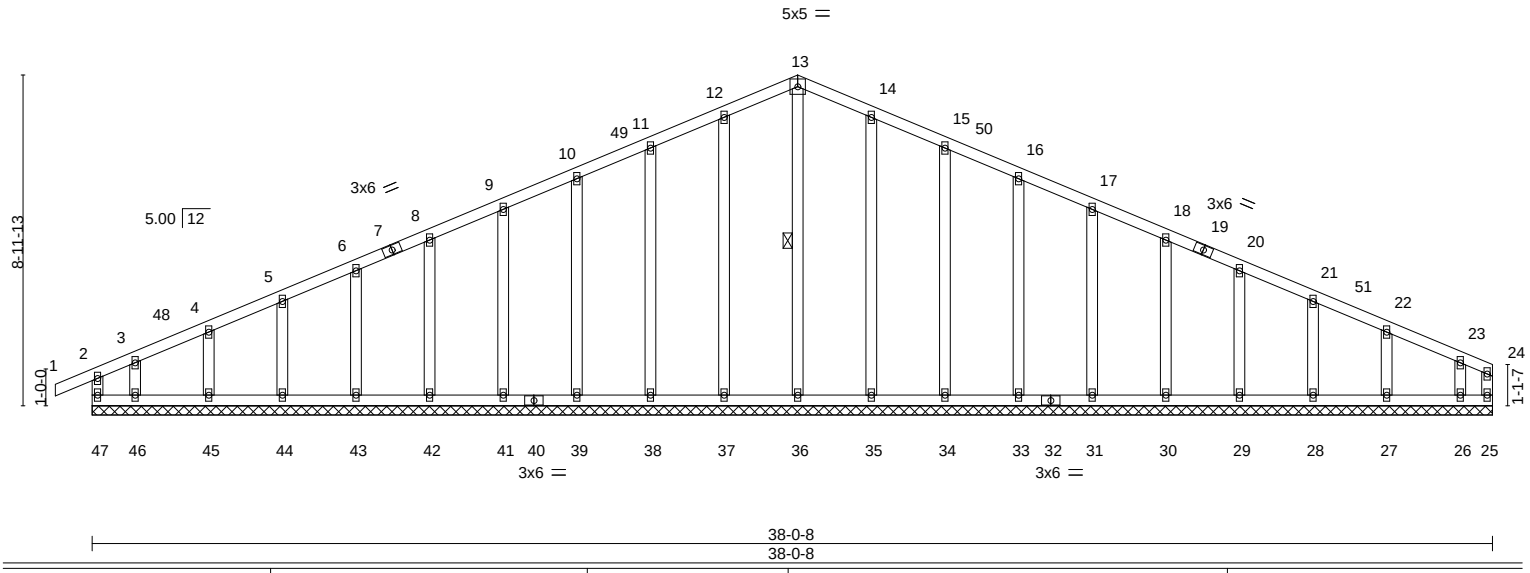
1-0-0 19-2-0 38-0-8
1-0-0 19-2-0 18-10-8

Scale = 1:62.6



38-0-8
38-0-8

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	0.12	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	-0.00	25	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-R							Weight: 248 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 13-36

REACTIONS. All bearings 38-0-8.
(lb) - Max Horz 47=161(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 47, 25, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 30, 29, 28, 27, 26
Max Grav All reactions 250 lb or less at joint(s) 47, 25, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 30, 29, 28, 27, 26

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=-98/257, 12-13=-111/290, 13-14=-111/290, 14-15=-98/257

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-9-10, Exterior(2N) 2-9-10 to 19-2-0, Corner(3R) 19-2-0 to 23-2-0, Exterior(2N) 23-2-0 to 37-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 47, 25, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 30, 29, 28, 27, 26.
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.

December 14,2023

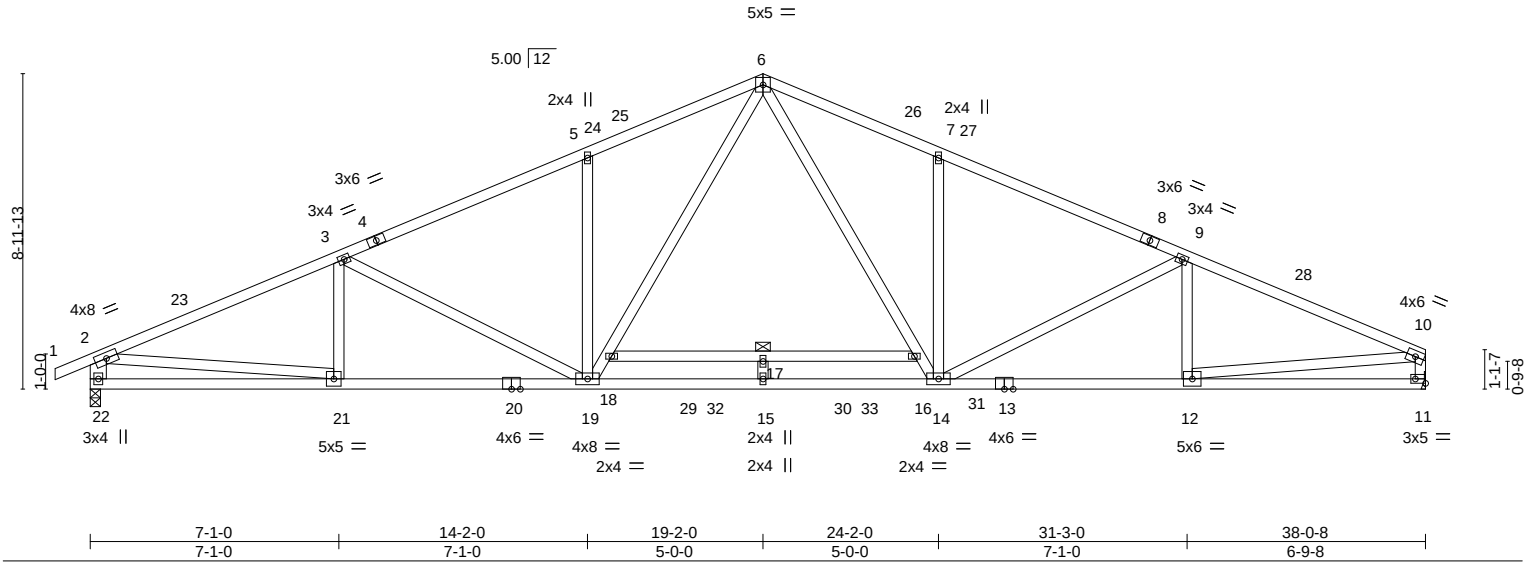
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T04AS	Common	6	1	I62525968
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:16 2023 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-OtXqJGIICCEUFRW6v7mo36qnn4s?WLYHPVfs6wy9efP

1-0-0	7-1-0	14-2-0	19-2-0	24-2-0	31-3-0	38-0-8
1-0-0	7-1-0	7-1-0	5-0-0	5-0-0	7-1-0	6-9-8

Scale = 1:65.6



7-1-0	14-2-0	19-2-0	24-2-0	31-3-0	38-0-8
7-1-0	7-1-0	5-0-0	5-0-0	7-1-0	6-9-8

Plate Offsets (X,Y)-- [11:Edge,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	0.75	Vert(LL)	-0.53	17	>859	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.92	17	>492	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.09	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 235 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 13-20: 2x4 SP DSS
WEBS	2x4 SP No.3 *Except* 2-22: 2x6 SP No.2, 2-21,10-12: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 12-14. 6-0-0 oc bracing: 16-18

REACTIONS. (size) 22=0-3-8, 11=Mechanical
Max Horz 22=162(LC 15)
Max Uplift 22=-77(LC 16), 11=-37(LC 16)
Max Grav 22=1908(LC 28), 11=1845(LC 29)

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

TOP CHORD	2-3=-3268/130, 3-5=-2988/129, 5-6=-2979/212, 6-7=-2962/209, 7-9=-2973/134, 9-10=-3198/139, 2-22=-1777/172, 10-11=-1719/118
BOT CHORD	21-22=-105/555, 19-21=-95/3045, 15-19=0/2106, 14-15=0/2106, 12-14=-92/2902, 11-12=-38/273
WEBS	3-19=-384/104, 5-19=-395/164, 18-19=-95/1143, 6-18=-48/1248, 6-16=-47/1217, 14-16=-94/1112, 7-14=-388/162, 9-14=-355/108, 2-21=-12/2534, 10-12=-55/2652

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 19-2-0, Exterior(2R) 19-2-0 to 22-11-10, Interior(1) 22-11-10 to 37-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 11.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T04GE	Common Supported Gable	1	1	I62525969

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:19 2023 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-oSDzyILBV7c36vEhaGJVgkSSkI5Djqkj5TtWiFy9efM

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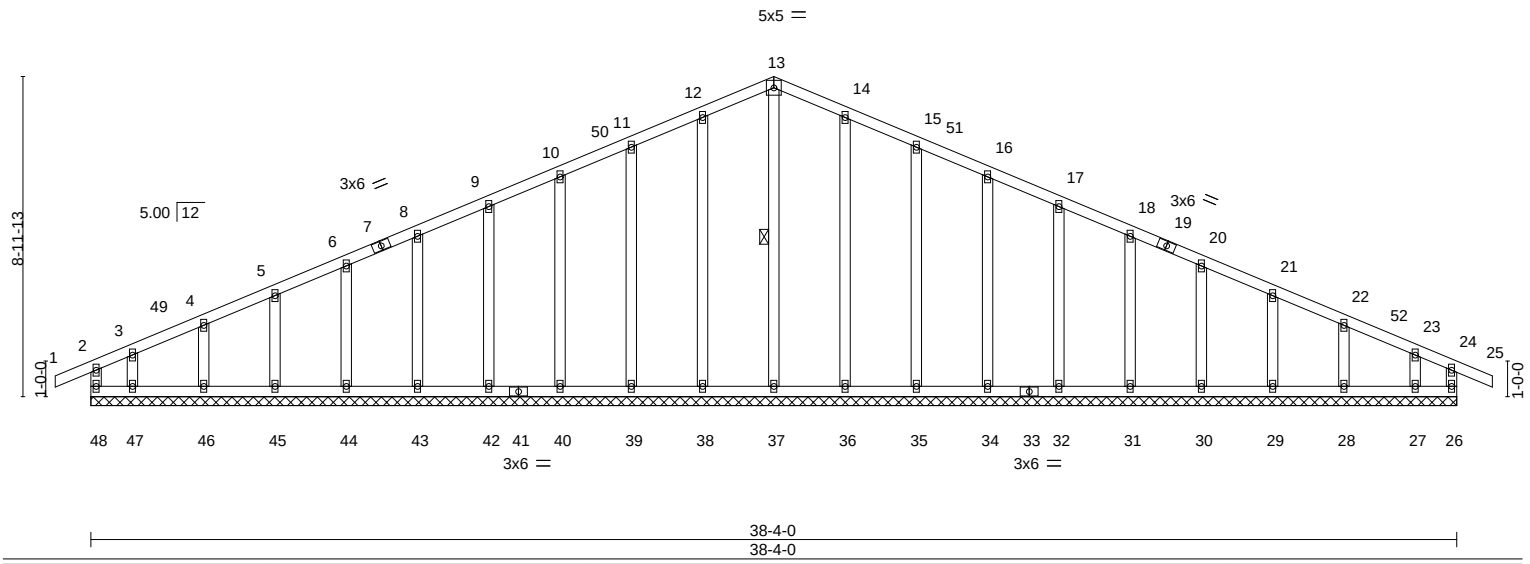

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	25	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	25	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	26	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-R							Weight: 251 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 13-37

REACTIONS. All bearings 38-4-0.
(lb) - Max Horz 48=-160(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 48, 26, 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, 32, 31, 30, 29, 28, 27
Max Grav All reactions 250 lb or less at joint(s) 48, 26, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, 32, 31, 30, 29, 28, 27

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=-96/257, 12-13=-110/291, 13-14=-110/291, 14-15=-96/257

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-10-0, Exterior(2N) 2-10-0 to 19-2-0, Corner(3R) 19-2-0 to 23-2-0, Exterior(2N) 23-2-0 to 39-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; 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) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 48, 26, 38, 39, 40, 42, 43, 44, 45, 46, 47, 36, 35, 34, 32, 31, 30, 29, 28, 27.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T05	Common	5	1	I62525970
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:20 2023 Page 1
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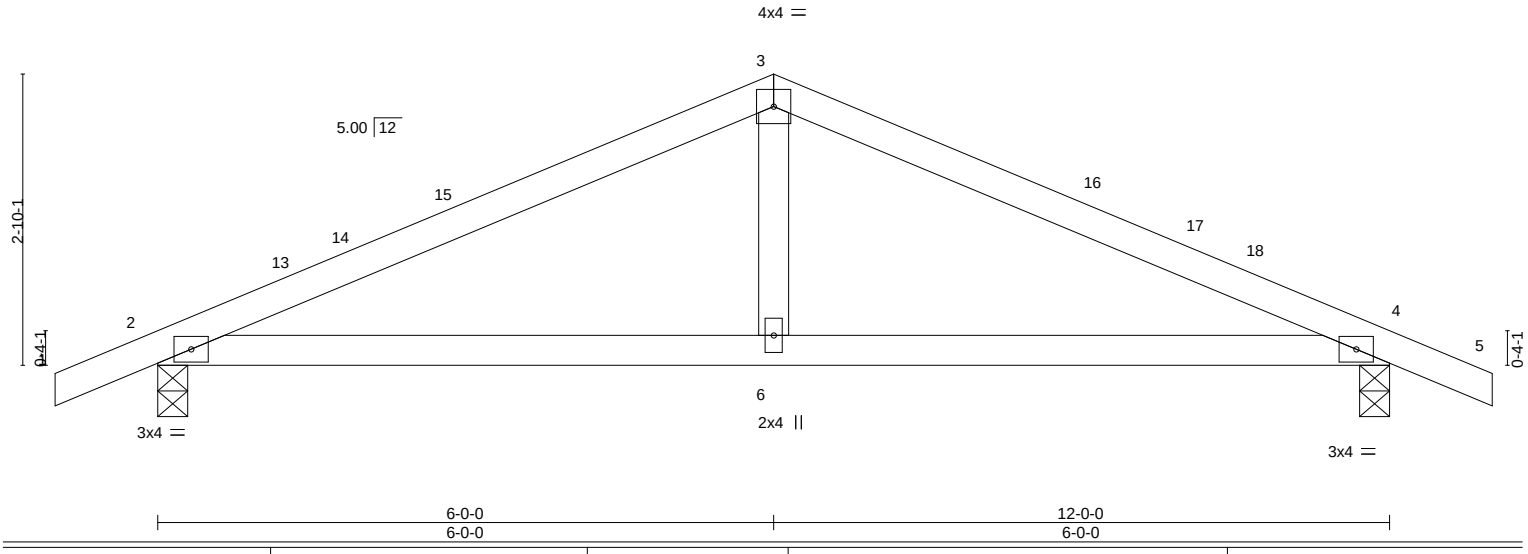

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.05	6-12	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.09	6-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 44 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-37(LC 14)
Max Uplift 2=-61(LC 16), 4=-61(LC 16)
Max Grav 2=540(LC 2), 4=540(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-763/235, 3-4=-763/235
BOT CHORD 2-6=-115/652, 4-6=-115/652
WEBS 3-6=0/280

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T05GE	Common Supported Gable	1	1	I62525971

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:21 2023 Page 1

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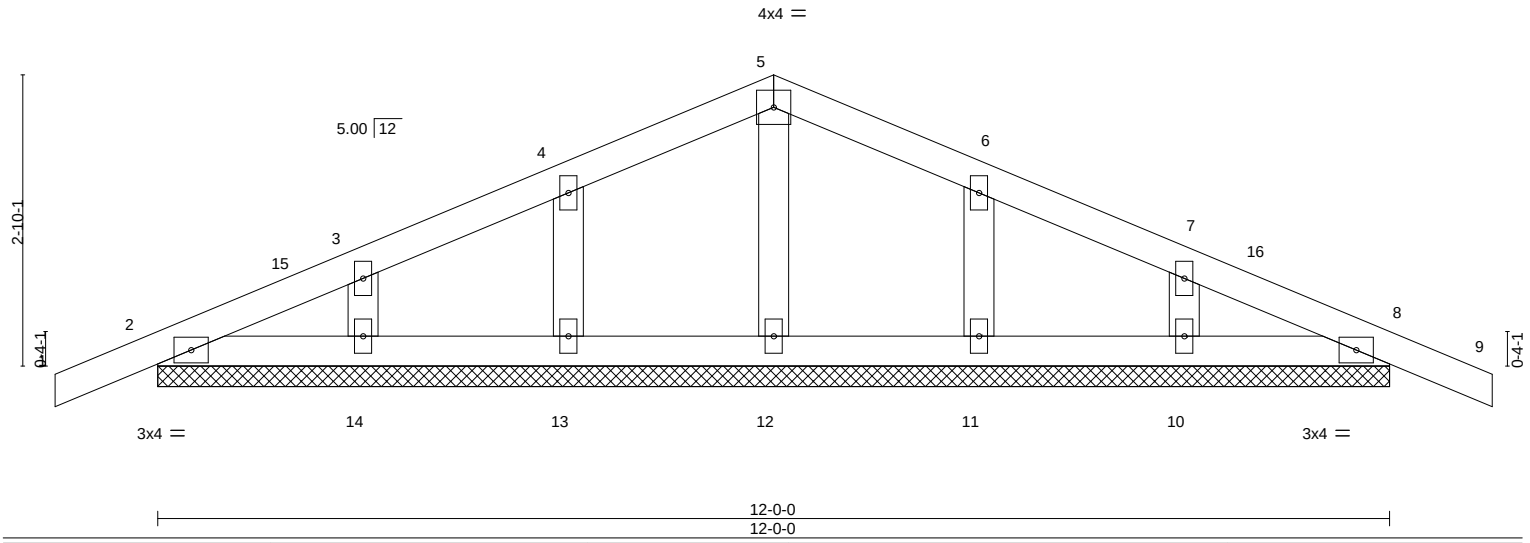

12-0-0

12-0-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	9	n/r	120	MT20	244/190
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	IRC2018/TPI2014	Matrix-S							Weight: 50 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 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 12-0-0.

(lb) - Max Horz 2=-37(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 6-0-0, Corner(3R) 6-0-0 to 9-0-0, Exterior(2N) 9-0-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; 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) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T06	Common	5	1	I62525972
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:22 2023 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-D1u6aJN3o2_ezMzGGOsCIN4shV?5wAt9nQ6BJay9efJ

-1-0-0 5-4-14 10-9-12 16-2-10 21-7-8 22-7-8
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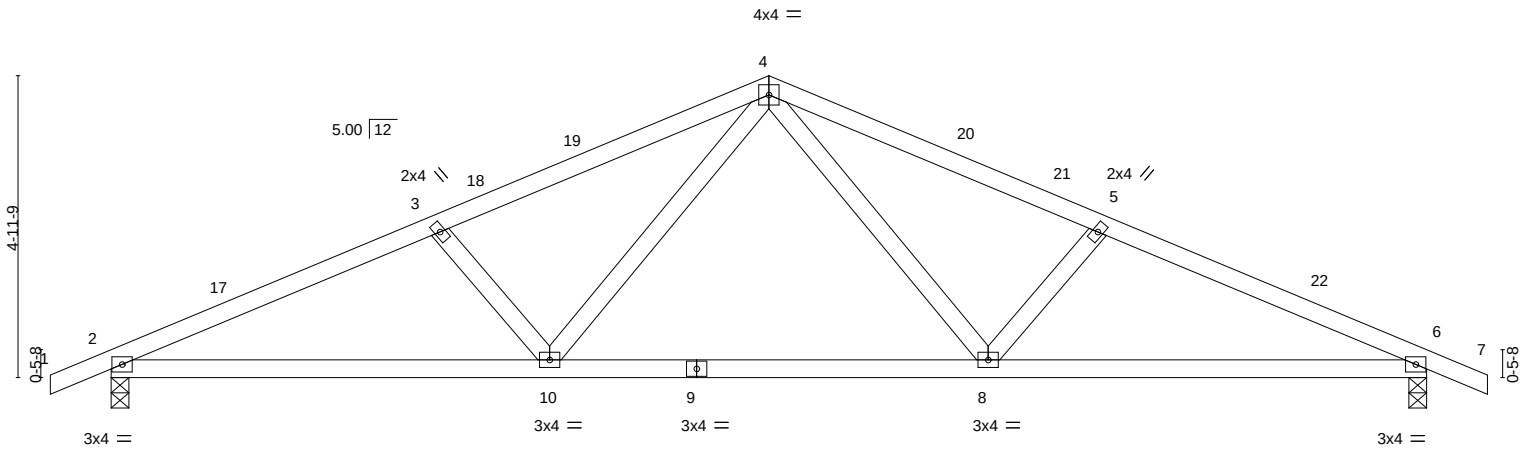

7-2-8 14-5-0 21-7-8
7-2-8 7-2-8 7-2-8

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	0.47	Vert(LL)	-0.08	8-10	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.18	8-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.04	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 96 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-63(LC 14)
Max Uplift 2=-84(LC 16), 6=-84(LC 16)
Max Grav 2=925(LC 2), 6=925(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1680/265, 3-4=-1478/248, 4-5=-1478/248, 5-6=-1680/265
BOT CHORD 2-10=-176/1499, 8-10=-64/1004, 6-8=-183/1499
WEBS 4-8=-39/506, 5-8=-330/152, 4-10=-39/506, 3-10=-330/152

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-9-12, Exterior(2R) 10-9-12 to 13-9-12, Interior(1) 13-9-12 to 22-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	T06GE	Common Supported Gable	1	1	I62525973
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:24 2023 Page 1
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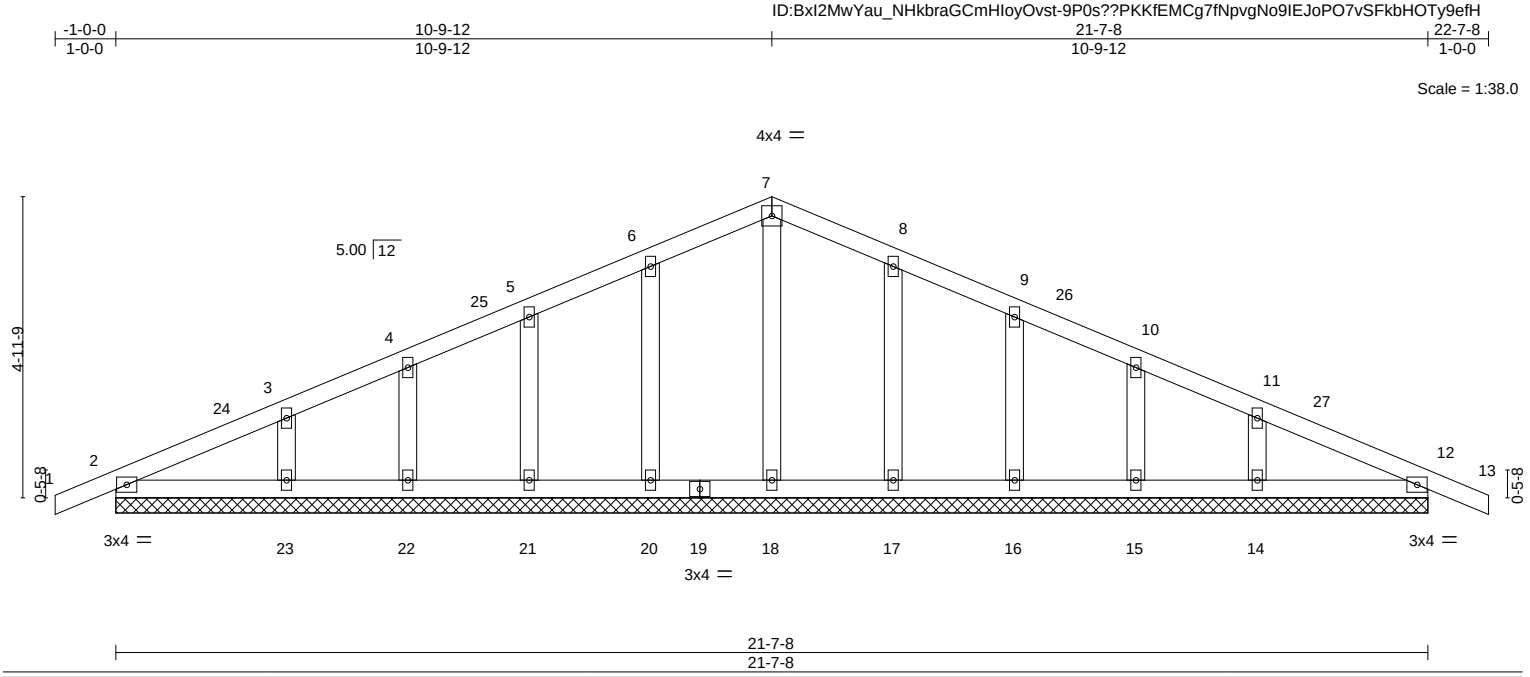


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	12	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	13	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 105 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 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 21-7-8.
(lb) - Max Horz 2=-63(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 23, 17, 16, 15, 14, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 20, 21, 22, 23, 17, 16, 15, 14, 12

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 10-9-12, Corner(3R) 10-9-12 to 13-9-12, Exterior(2N) 13-9-12 to 22-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; 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) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 23, 17, 16, 15, 14, 12.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 12.
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.

December 14,2023

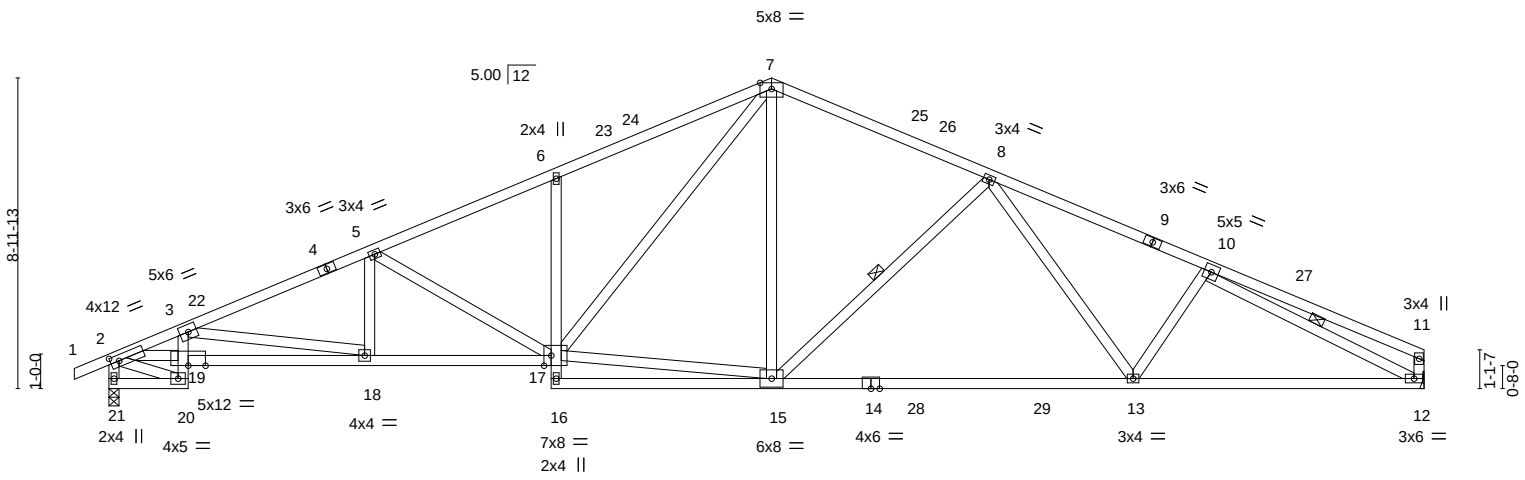
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	TR01	Roof Special	2	1	I62525974
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:26 2023 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-5o8cQhQasGV4S_G1VEx8TDEUI6GnsruIi24OSLy9efF

1-0-0	2-3-8	7-6-8	12-9-8	19-2-0	25-5-8	31-9-0	38-0-8
1-0-0	2-3-8	5-3-0	5-3-0	6-4-8	6-3-8	6-3-8	6-3-8

Scale = 1:66.6



2-3-8	7-6-8	12-9-8	19-2-0	29-7-8	38-0-8
2-3-8	5-3-0	5-3-0	6-4-8	10-5-8	8-5-0

Plate Offsets (X,Y)-- [2:0-2-15,0-2-0], [17:0-2-8,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)	-0.44	13-15	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.78	13-15	>580	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.21	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 232 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.1 *Except* 20-21,3-20: 2x4 SP No.2, 6-16: 2x4 SP No.3
WEBS	2x4 SP No.3 *Except* 2-19: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 19-20 2-2-0 oc bracing: 13-15.
WEBS	1 Row at midpt 8-15, 10-12

REACTIONS. (size) 21=0-3-8, 12=Mechanical
Max Horz 21=161(LC 15)
Max Uplift 21=-128(LC 16), 12=-91(LC 16)
Max Grav 21=1704(LC 28), 12=1660(LC 29)

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

TOP CHORD	2-3=-3469/278, 3-5=-3454/278, 5-6=-2853/285, 6-7=-2849/376, 7-8=-2071/271, 8-10=-2808/266, 10-11=-356/81, 2-21=-1695/195, 11-12=-276/82
BOT CHORD	18-19=-334/3786, 17-18=-223/3246, 6-17=-371/156, 13-15=-149/2289, 12-13=-198/2534
WEBS	3-18=-547/112, 5-18=0/285, 5-17=-689/65, 15-17=-51/1665, 7-17=-177/1262, 7-15=0/657, 8-15=-663/143, 8-13=0/483, 10-12=-2608/189, 2-19=-211/2680, 2-20=-89/562

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 19-2-0, Exterior(2R) 19-2-0 to 22-11-10, Interior(1) 22-11-10 to 37-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 21=128.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	TR01S	Roof Special	3	1	I62525975
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:28 2023 Page 1
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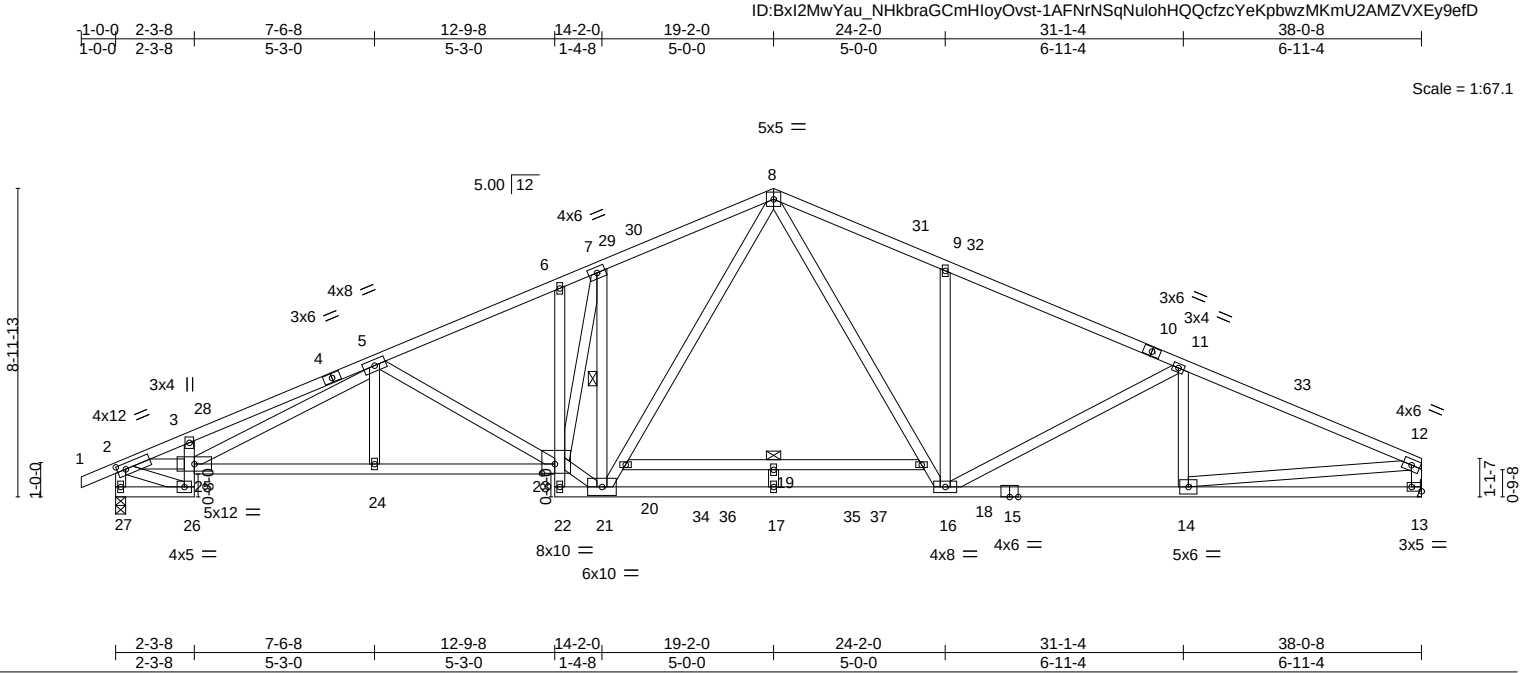

Plate Offsets (X,Y)-- [2:0-2-15,0-2-0], [13:Edge,0-1-8], [23:0-4-8,0-3-4]

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	0.82	Vert(LL)	-0.49	17	>916	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.89	17	>508	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.21	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MS							Weight: 256 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except*
	23-25: 2x4 SP No.1, 6-22: 2x4 SP No.3, 15-22: 2x4 SP DSS
WEBS	2x4 SP No.3 *Except*
	21-23,12-14,2-25: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
	6-0-0 oc bracing: 25-26,22-23.
	6-0-0 oc bracing: 18-20
WEBS	1 Row at midpt 7-21

REACTIONS. (size) 27=0-3-8, 13=Mechanical
Max Horz 27=161(LC 15)
Max Uplift 27=-74(LC 16), 13=-37(LC 16)
Max Grav 27=1907(LC 28), 13=1849(LC 29)

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

TOP CHORD	2-3=-3645/150, 3-5=-4130/237, 5-6=-3359/143, 6-7=-3253/161, 7-8=-3004/203, 8-9=-2962/209, 9-11=-2975/135, 11-12=-3211/139, 2-27=-1898/141, 12-13=-1721/119
BOT CHORD	3-25=-257/93, 24-25=-103/3729, 23-24=-104/3727, 22-23=-547/0, 17-21=0/2119, 16-17=0/2119, 14-16=-91/2915, 13-14=-40/283
WEBS	5-24=0/269, 5-23=-718/83, 21-23=0/2968, 7-23=-124/1492, 7-21=-1598/245, 20-21=-80/1176, 8-20=-35/1267, 8-18=-48/1184, 16-18=-93/1092, 9-16=-378/158, 11-16=-361/107, 12-14=-51/2653, 2-25=-110/2765, 2-26=-73/630

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 19-2-0, Exterior(2R) 19-2-0 to 22-11-10, Interior(1) 22-11-10 to 37-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 2x4 MT20 unless otherwise indicated.
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) 27, 13.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	V01	Valley	1	1	I62525976
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:29 2023 Page 1
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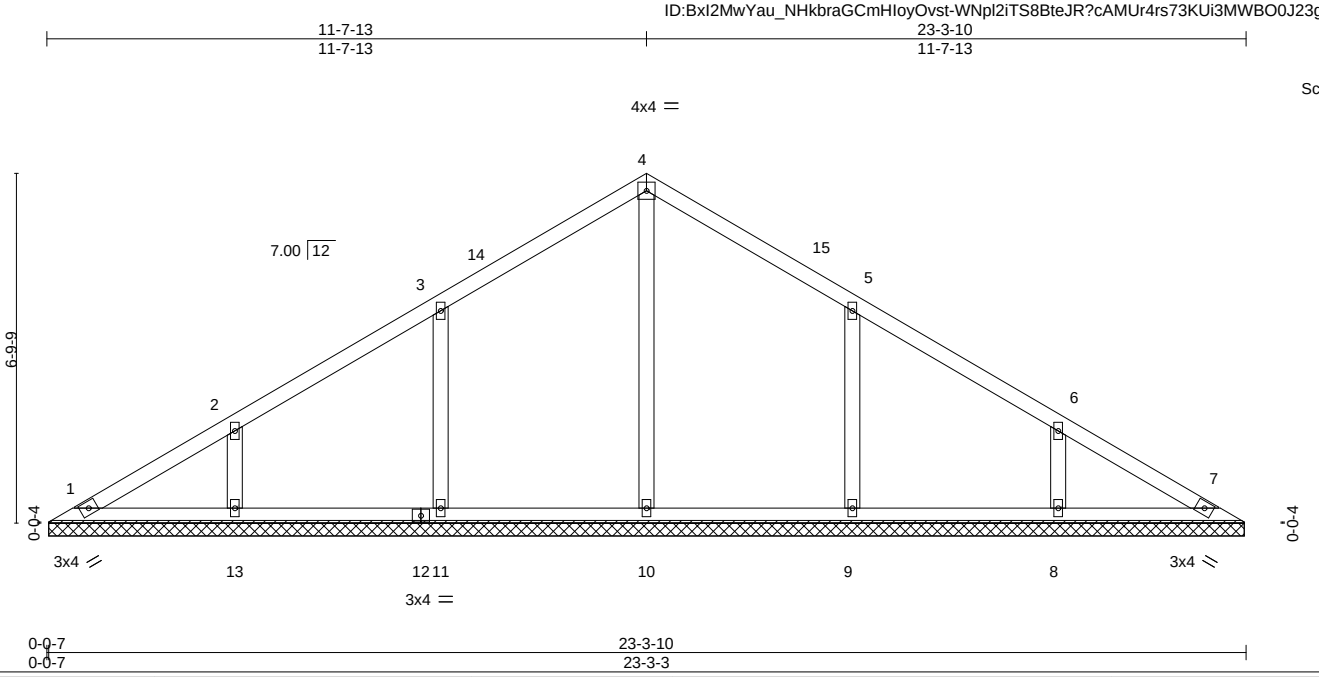

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 98 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 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 23-2-13.
(lb) - Max Horz 1=-129(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 11, 13, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=380(LC 27), 11=430(LC 27), 13=368(LC 27), 9=430(LC 28), 8=368(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-11=-263/125, 5-9=-263/125

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-7-13, Interior(1) 3-7-13 to 11-7-13, Exterior(2R) 11-7-13 to 14-7-13, Interior(1) 14-7-13 to 22-9-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 13, 9, 8.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	V02	Valley	1	1	I62525977

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:30 2023 Page 1

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10-2-11 20-5-6

10-2-11 10-2-11

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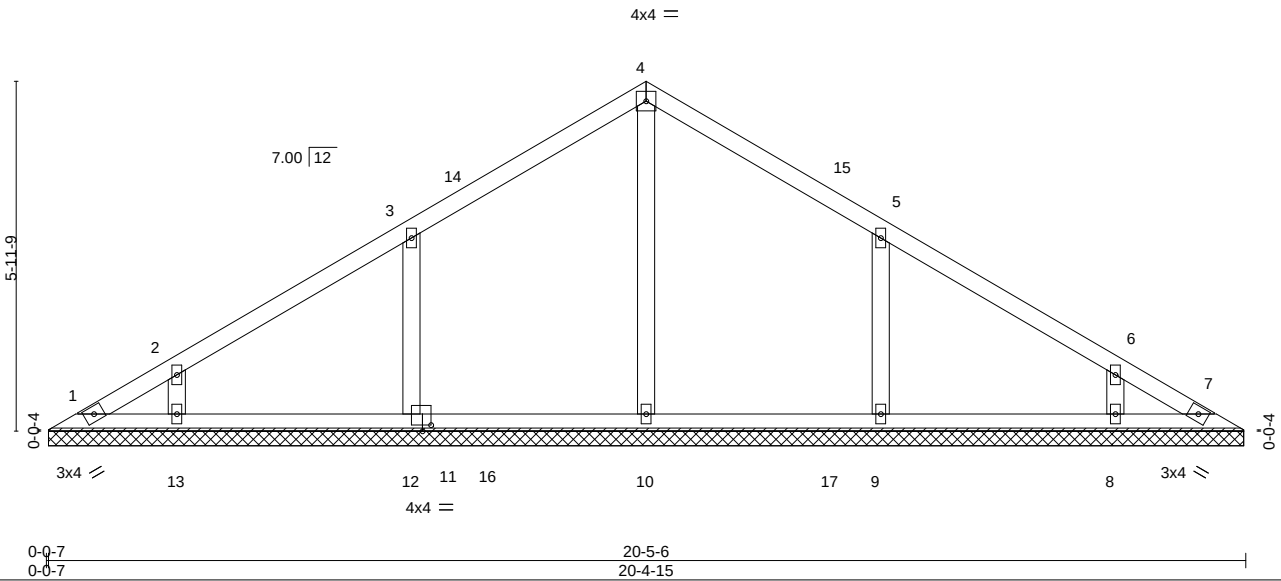

Plate Offsets (X,Y)-- [11:0-1-12,0-1-4]

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	0.20	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	0.11	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 83 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 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 20-4-8.

(lb) - Max Horz 1=113(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 12, 13, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=371(LC 27), 12=429(LC 27), 13=308(LC 27), 9=429(LC 28), 8=308(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-268/127, 5-9=-268/127

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 10-2-11, Exterior(2R) 10-2-11 to 13-2-11, Interior(1) 13-2-11 to 19-10-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 12, 13, 9, 8.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	V03	Valley	1	1	I62525978

Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:32 2023 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-wyVtgkVLR6FDAvkBrU2YiUUeSXVqGjMd4_Xig?y9ef9

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8-9-9 8-9-9

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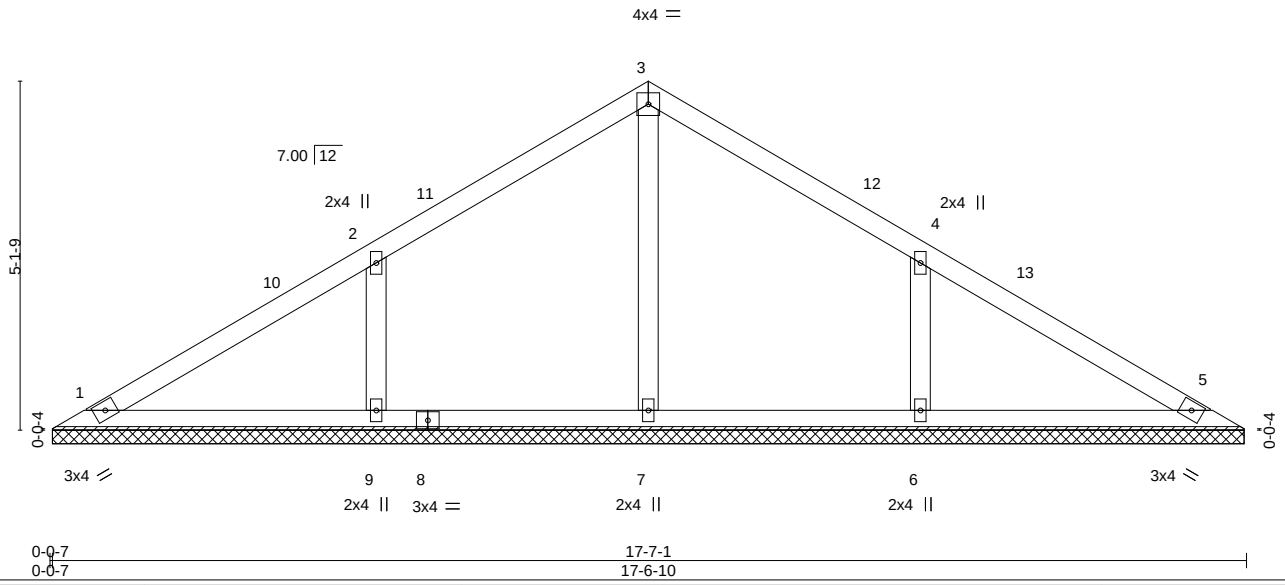


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 68 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 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 17-6-3.
(lb) - Max Horz 1=96(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 9, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 9=397(LC 33), 6=397(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-294/136, 4-6=-294/136

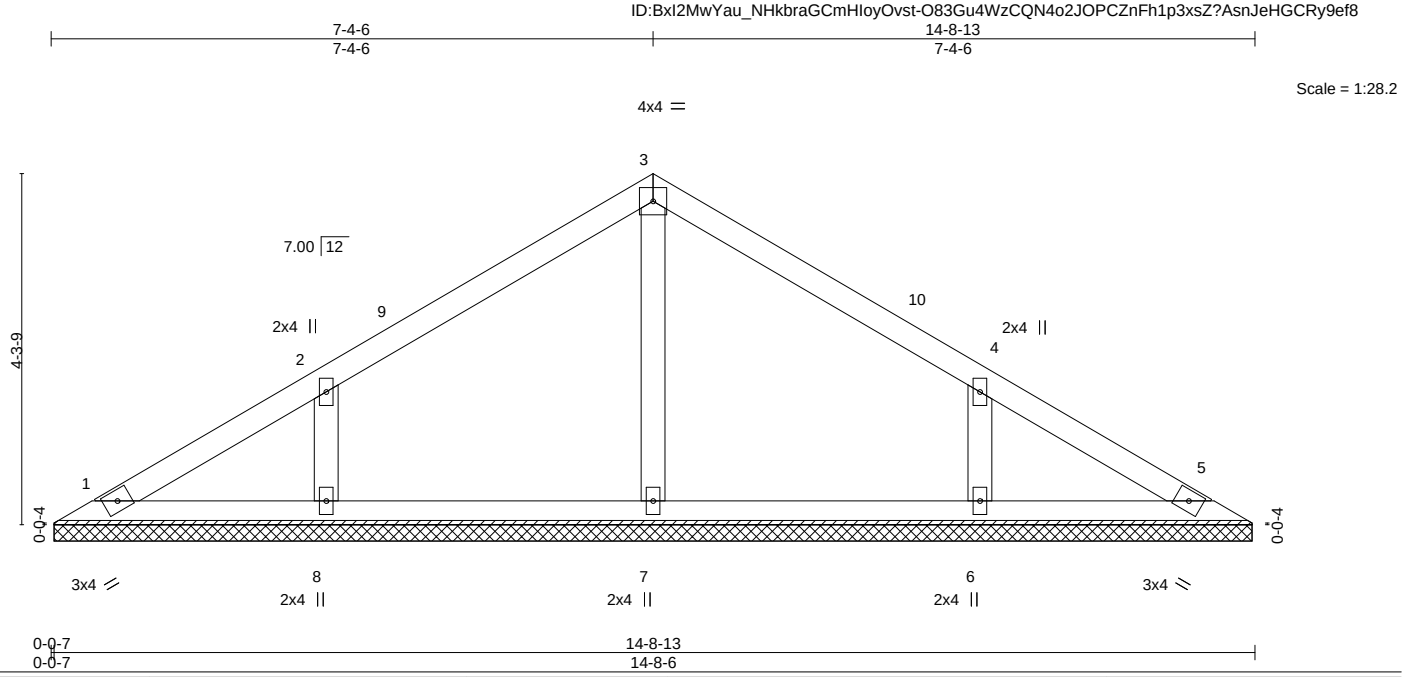
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 8-9-9, Exterior(2R) 8-9-9 to 11-9-9, Interior(1) 11-9-9 to 17-0-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	V04	Valley	1	1	I62525979
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:33 2023 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-O83Gu4WzCQN4o2JOPCZnFh1p3xsZ?AsnJeHGCRy9ef8



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	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 55 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 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 14-7-15.
(lb) - Max Horz 1=-79(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=270(LC 2), 8=324(LC 33), 6=324(LC 34)

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-4-6, Interior(1) 3-4-6 to 7-4-6, Exterior(2R) 7-4-6 to 10-4-6, Interior(1) 10-4-6 to 14-2-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
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.

December 14,2023

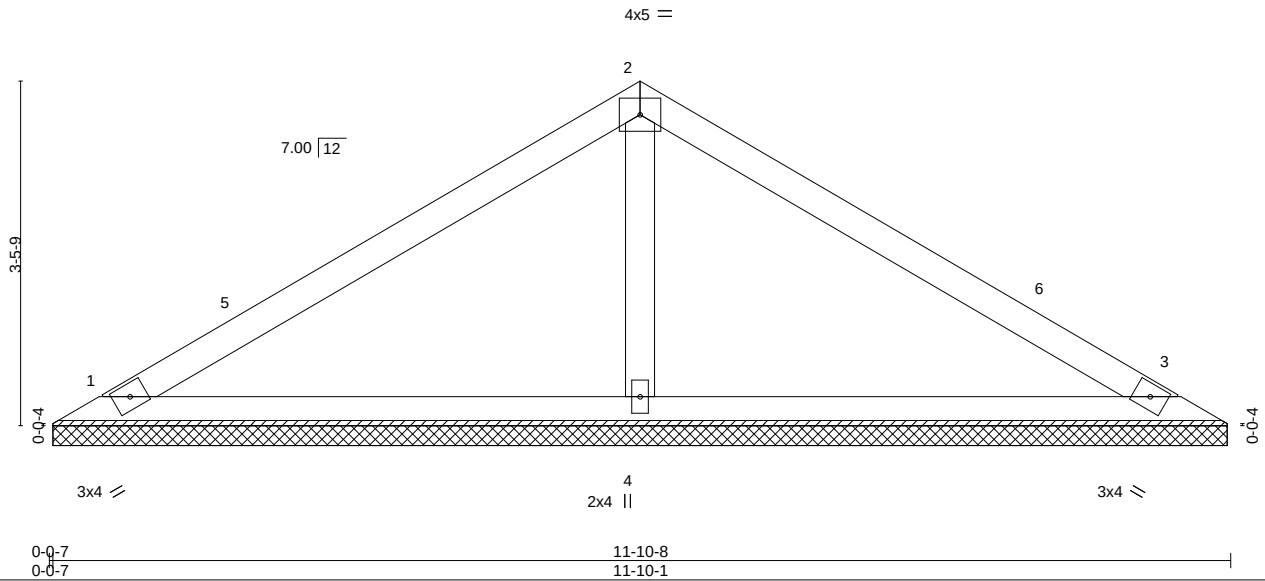
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	V05	Valley	1	1	I62525980
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:34 2023 Page 1
ID:BxI2MwYau_NHkbraGCmHIoyOvst-sKde5QWbzkVxPCuazv40nvZwmL93kdwwYI0pkuy9ef7

5-11-4 11-10-8
5-11-4 5-11-4

Scale = 1:23.2



0-0-7 11-10-8
0-0-7 11-10-1

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 40 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 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. (size) 1=11-9-10, 3=11-9-10, 4=11-9-10
Max Horz 1=-63(LC 14)
Max Uplift 1=-26(LC 16), 3=-26(LC 16)
Max Grav 1=204(LC 2), 3=204(LC 2), 4=455(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-296/106

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 5-11-4, Exterior(2R) 5-11-4 to 8-11-4, Interior(1) 8-11-4 to 11-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	V06	Valley	1	1	I62525981
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:35 2023 Page 1
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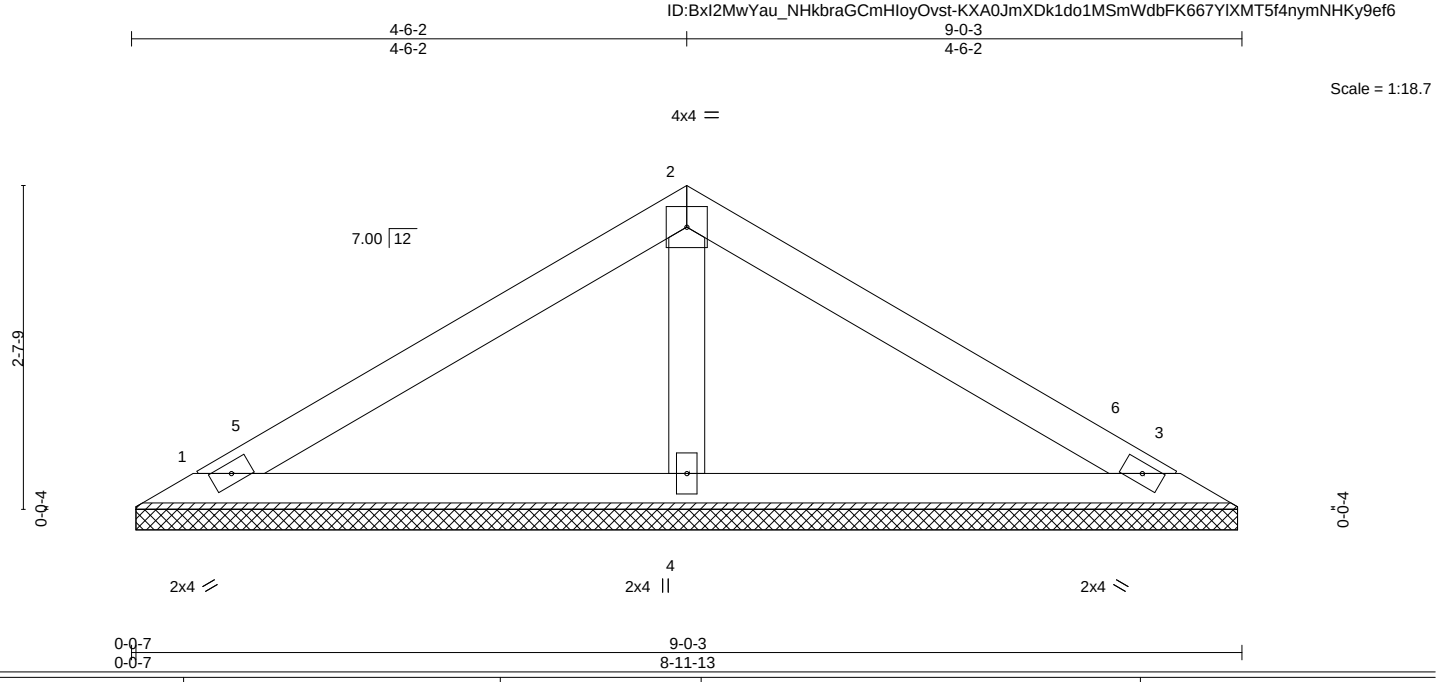

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 30 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 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. (size) 1=8-11-6, 3=8-11-6, 4=8-11-6
Max Horz 1=-46(LC 14)
Max Uplift 1=-27(LC 16), 3=-27(LC 16)
Max Grav 1=166(LC 2), 3=166(LC 2), 4=303(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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-6-2, Exterior(2R) 4-6-2 to 7-6-2, Interior(1) 7-6-2 to 8-5-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	V07	Valley	1	1	I62525982
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:36 2023 Page 1
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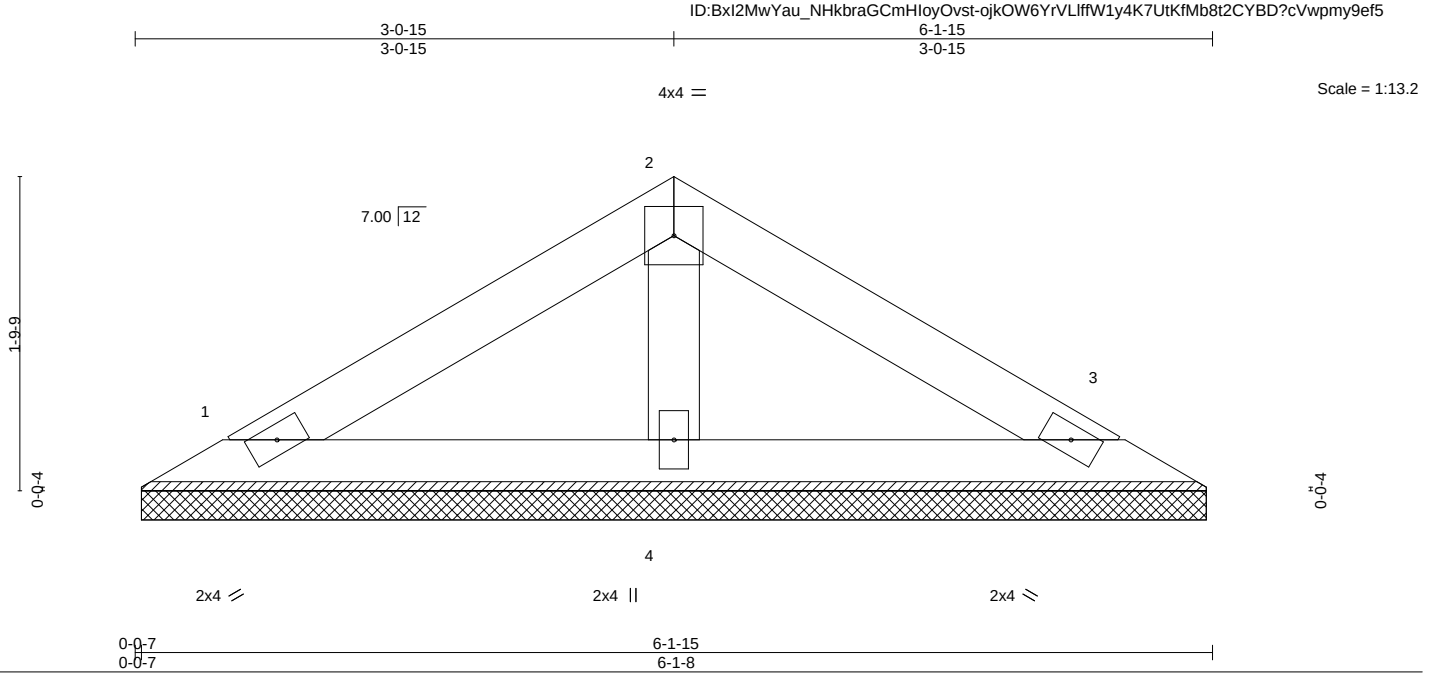

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 20 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 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. (size) 1=6-1-1, 3=6-1-1, 4=6-1-1
Max Horz 1=-30(LC 14)
Max Uplift 1=-17(LC 16), 3=-17(LC 16)
Max Grav 1=106(LC 2), 3=106(LC 2), 4=194(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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.

December 14,2023

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

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #21 ROOF
23-6980-A	V08	Valley	1	1	I62525983
					Job Reference (optional)

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Aug 2 2023 MiTek Industries, Inc. Tue Dec 12 17:07:36 2023 Page 1
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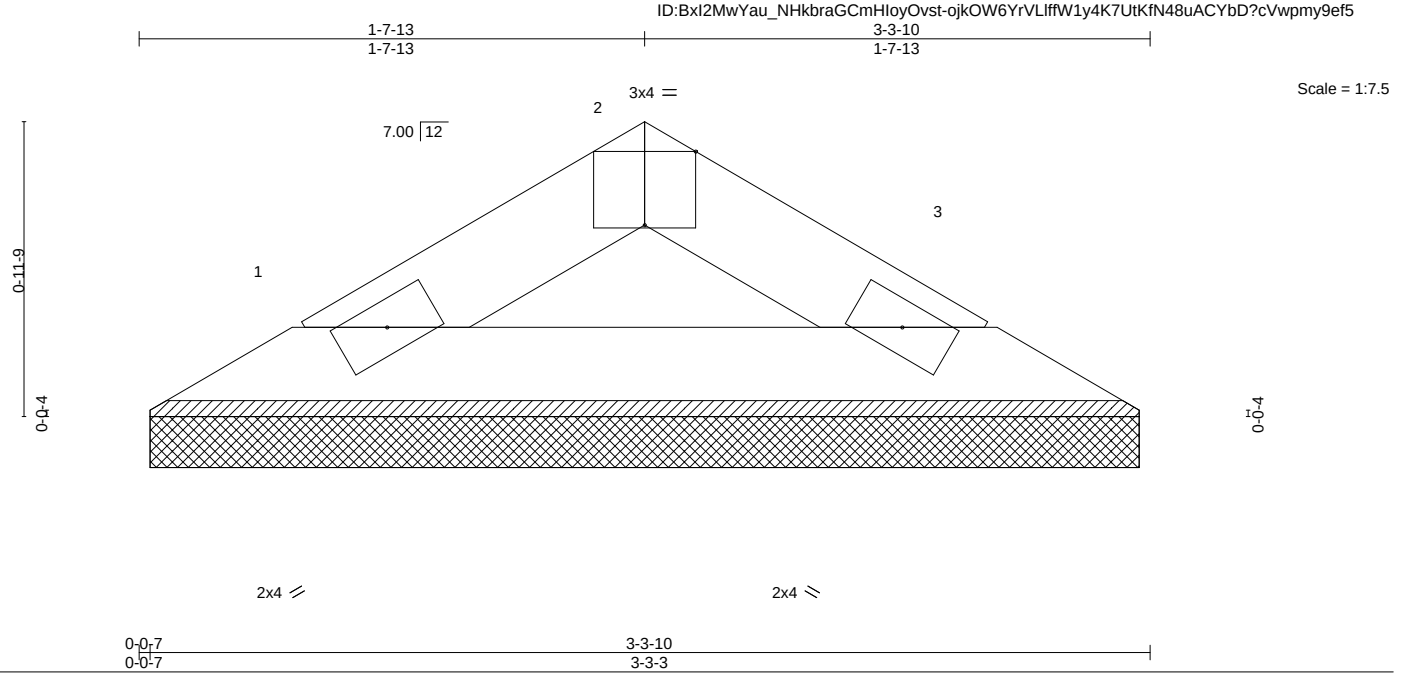

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.06	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								
BCDL	10.0										Weight: 9 lb	FT = 20%

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

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

REACTIONS. (size) 1=3-2-13, 3=3-2-13
Max Horz 1=-13(LC 14)
Max Uplift 1=-5(LC 16), 3=-5(LC 16)
Max Grav 1=89(LC 2), 3=89(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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.

December 14,2023

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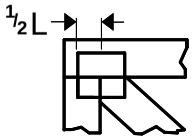
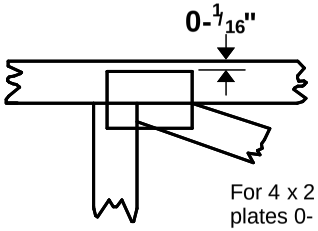
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

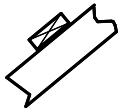
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

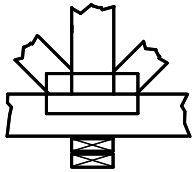
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

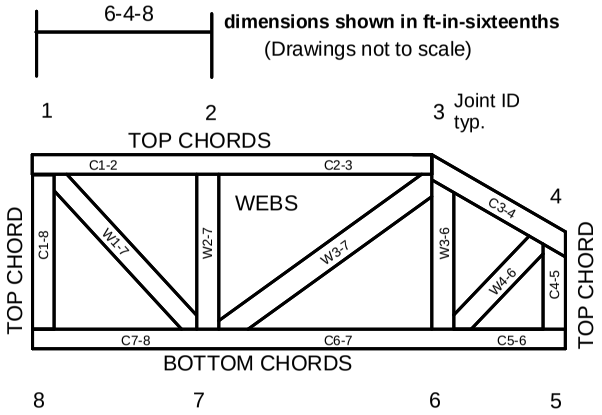


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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. 1/2/2023

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.