RLH-VK-0018-DSP00-01

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-14556	COMN	1	1		I49147396
					Job Reference (optional)	

NVR,   Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:31 2021 Page 1
ID:YstCVLXCi8aib5IKGG1z3?yC_bB-wBmQ0gLEtmbklTMlhFxtluDG1X80O?hJfOhCkczyBF8s
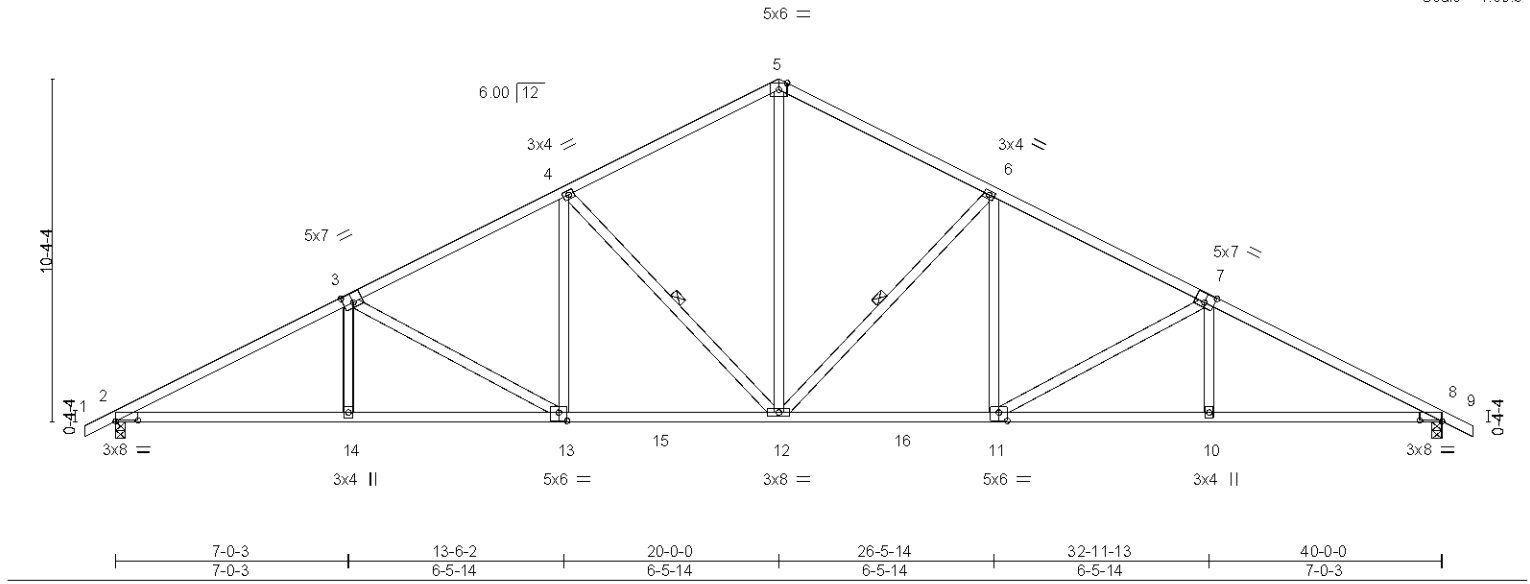
Scale = 1:69.5

Plate Offsets (X,Y)-- [2:0-8-0,0-0-5], [3:0-3-8,0-3-4], [7:0-3-8,0-3-4], [8:0-8-0,0-0-5], [11:0-3-0,0-3-0], [13:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.19	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.39	11-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.16	8	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.16	12-13	>999	240	Weight: 221 lb	FT = 5%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied.
BOT CHORD   Rigid ceiling directly applied or 9-0-13 oc bracing.
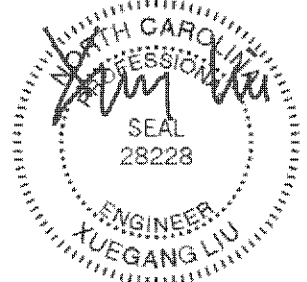WEBS   1 Row at midpt   4-12, 6-12

REACTIONS.   (size) 2=0-3-8, 8=0-3-8
              Max Horz 2=-180(LC 15)
              Max Uplift 2=-229(LC 10), 8=-229(LC 11)
              Max Grav 2=1653(LC 1), 8=1653(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-3030/371, 3-4=-2441/332, 4-5=-1866/308, 5-6=-1866/308, 6-7=-2441/332,
             7-8=-3030/372
BOT CHORD   2-14=-410/2615, 13-14=-412/2612, 12-13=-240/2105, 11-12=-90/2105, 10-11=-233/2612,
             8-10=231/2615
WEBS   3-14=0/293, 4-13=-19/465, 5-12=-135/1224, 6-11=-19/465, 7-10=0/293, 3-13=-587/198,
             4-12=-764/256, 6-12=-764/256, 7-11=-587/198

NOTES-   (6-8)
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=33ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
   2=229, 8=229.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction
   to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of
   100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the
   required maximum reaction.

January 12,2022
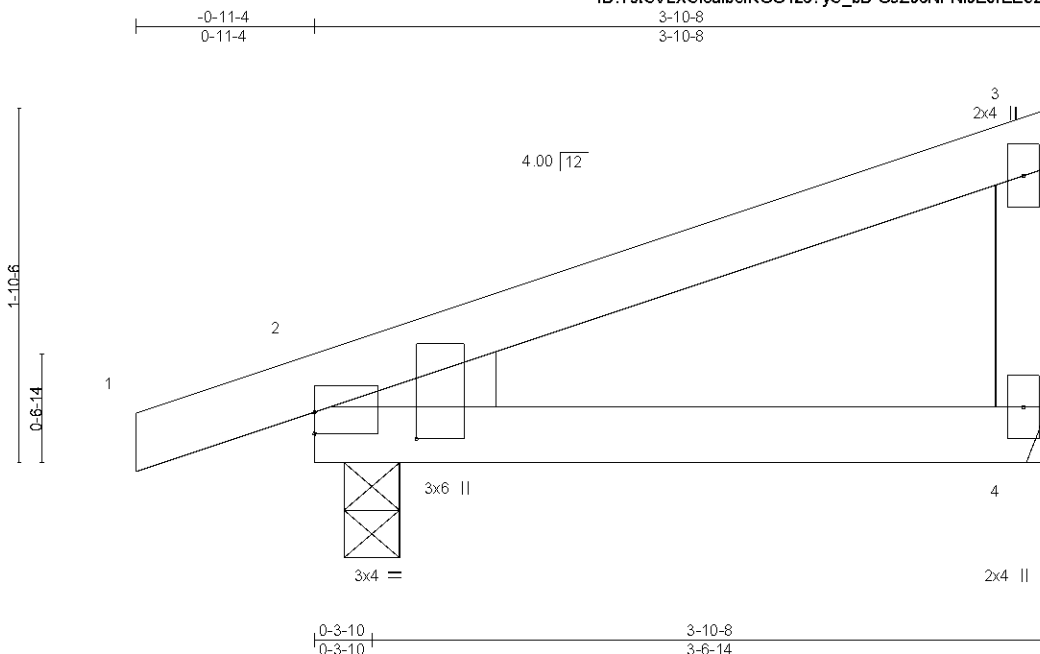
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast	I49147401
ORDERS	SE-14561	MONO	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:36 2021 Page 1
ID:YstCVLXCi8aib5lKGG1z3?yC_bB-G9ZJ3NPNiJE0rEEe2UTTbH_3j9uSg6oOYzwVHAyBF8n

-0-11-4 | 3-10-8
0-11-4 | 3-10-8

Scale: 1"=1'

4.00 [12

3
2x4 ||

2

1

1-10-6

0-6-14

3x6 ||

3x4 =

3x4 ==

4

2x4 ||

0-3-10 | 3-10-8
0-3-10 | 3-6-14

Plate Offsets (X,Y)-- [2:0-0-0,0-1-5], [2:0-1-11,0-6-7]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.02	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 17 lb	FT = 5%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-10-8 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
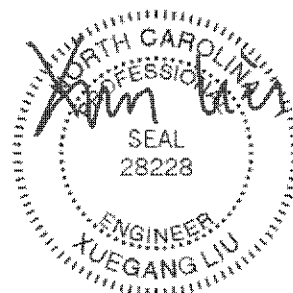
REACTIONS.   (size)   4=Mechanical, 2=0-3-8
         Max Horz 2=62(LC 6)
         Max Uplift 4=-37(LC 10), 2=-66(LC 6)
         Max Grav 4=134(LC 1), 2=218(LC 1)

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

NOTES-   (6-8)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

January 12,2022

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

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-14635	COMN	1	1		I49147448
					Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:37:44 2021 Page 1
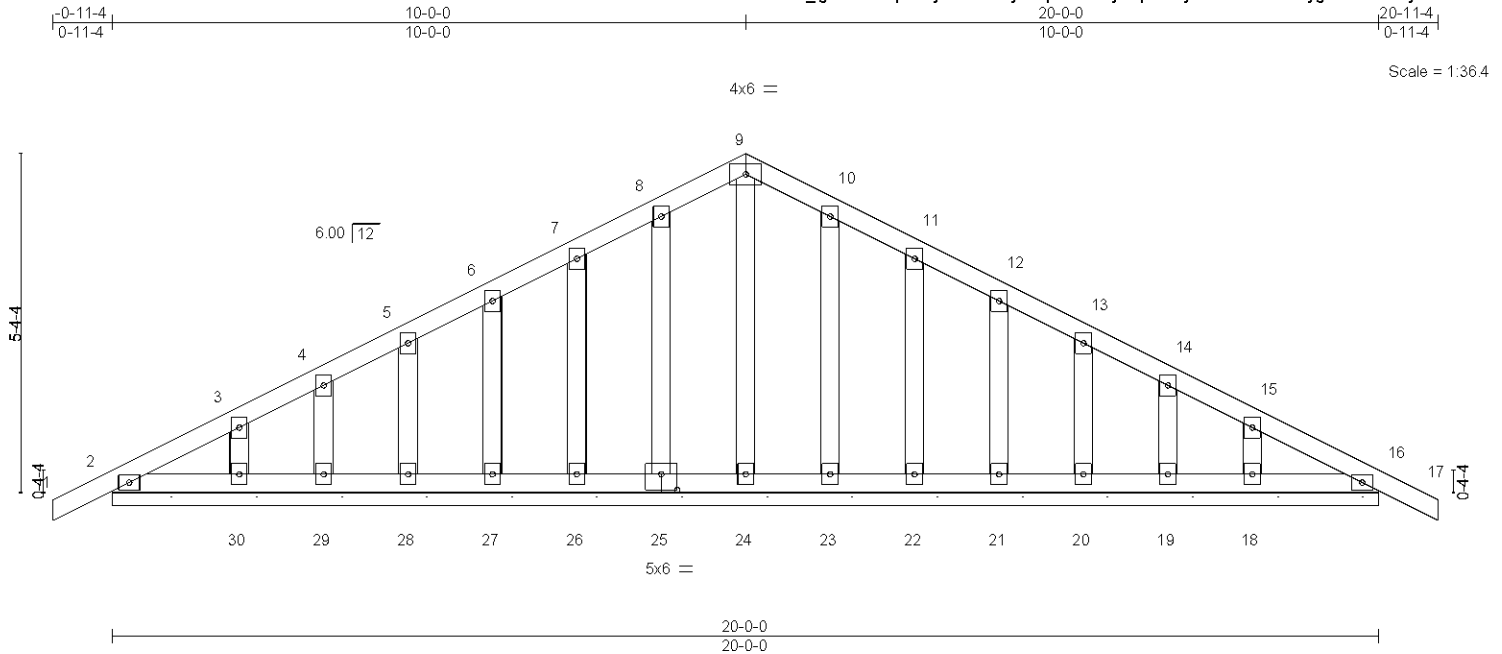ID:KS_igM7X9ovqwNHjEMQaQEy68xp-kUQ7ujbrvp9IB0yv7N9rxXiFsh0Tyg0OzYb8JMyBF25

Scale = 1:36.4

Plate Offsets (X,Y)--	[25:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	16	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	17	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S							Weight: 118 lb	FT = 5%

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

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.

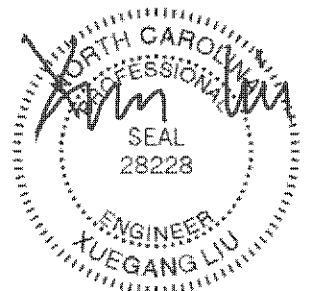**REACTIONS.** All bearings 20-0-0.
(lb) - Max Horz 2=94(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18, 16

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

NOTES- (10-12)
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=33ft; Cat. II; Exp B; Enclosed;
MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever 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) All plates are 3x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 26, 27, 28,
29, 30, 23, 22, 21, 20, 19, 18, 16.
10) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction
to a wind speed of 115 mph.
11) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of
100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
12) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the
required maximum reaction.

January 12,2022

TRENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-14636	COMN	1	1		I49147449
					Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:37:46 2021 Page 1
ID:KS_igM7X9ovqwNHjEMQaQEy68xp-gtYtJPc5RQP?RK6IEoBJ0ynbMUh?QavhQs4FOFyBF23
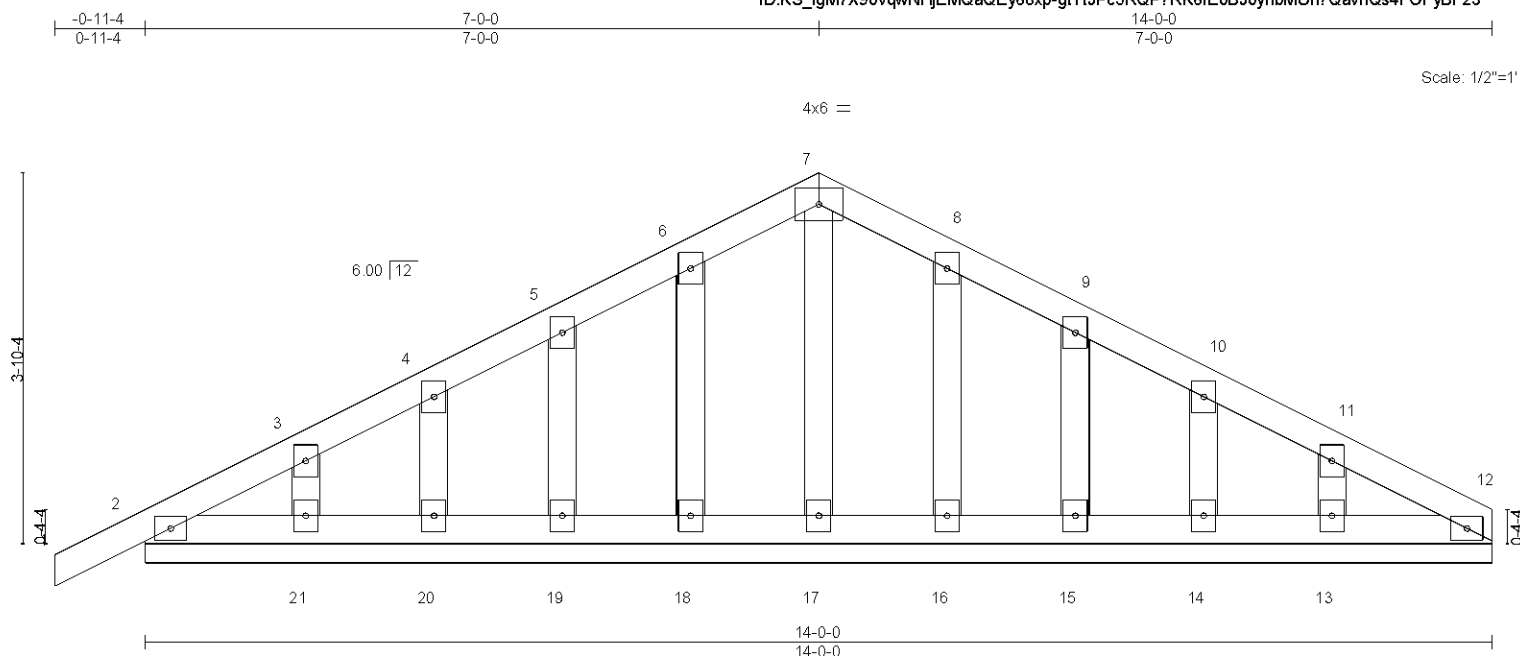
Scale: 1/2"=1'

4x6 =

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S							Weight: 70 lb	FT = 5%

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

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 14-0-0.
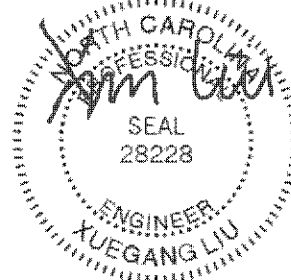   (lb) -   Max Horz 2=75(LC 14)
           Max Uplift   All uplift 100 lb or less at joint(s) 2, 18, 19, 20, 21, 16, 15, 14, 13
           Max Grav   All reactions 250 lb or less at joint(s) 2, 12, 17, 18, 19, 20, 21, 16, 15, 14, 13

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

NOTES-   (10-12)
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=33ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever 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) All plates are 3x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 19, 20, 21,
   16, 15, 14, 13.
10) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction
    to a wind speed of 115 mph.
11) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of
    100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
12) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the
    required maximum reaction.

January 12,2022

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

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-16895	COMN	1	1		I49170455
					Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 20:43:23 2021 Page 1
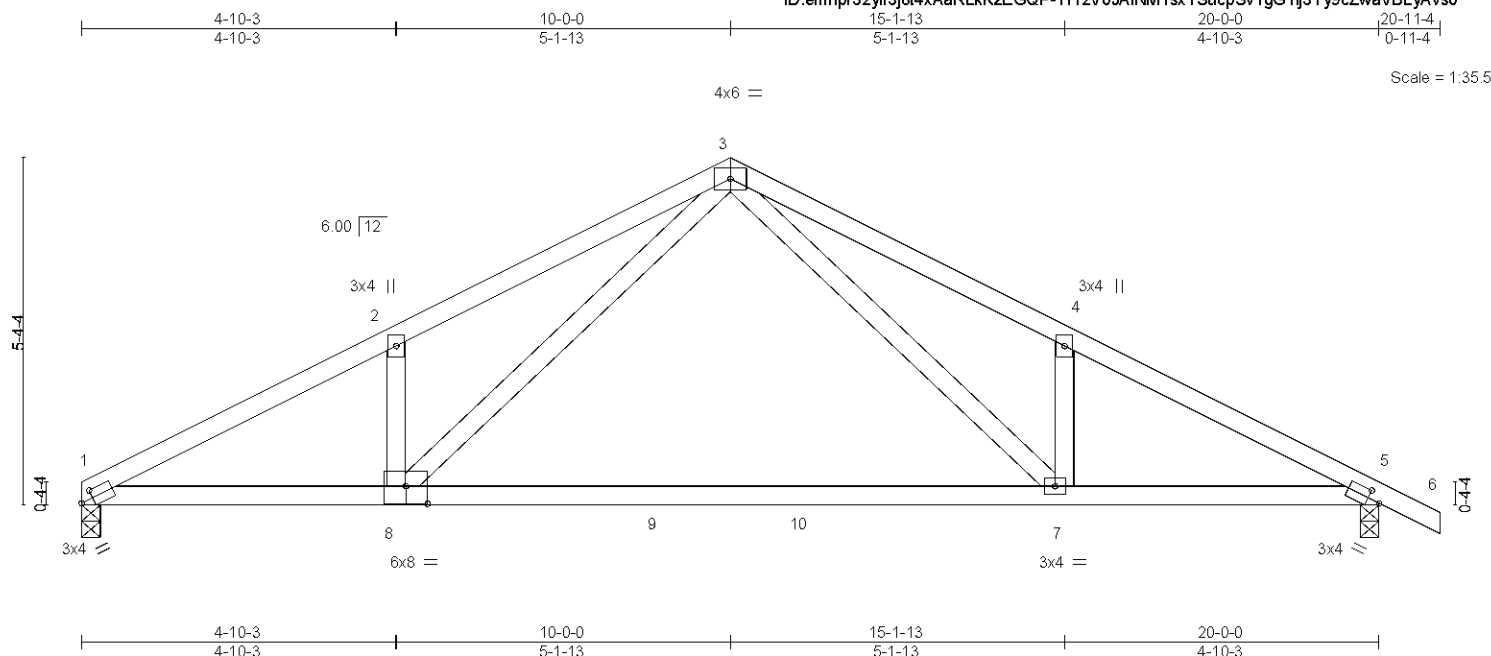ID:emnpr32yll3j8t4xAaRLkKzEGQP-Yf12VoJAINM1sxTSucpSv1gG1lj3Yy9cZwaVBLyAvso

Scale = 1:35.5

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.26	7-8	>925	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.54	7-8	>439	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.05	7-8	>999	240	Weight: 92 lb	FT = 5%

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

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

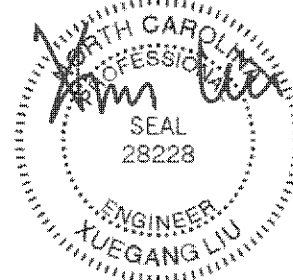REACTIONS.   (size)   1=0-3-8, 5=0-3-8
              Max Horz 1=-101(LC 15)
              Max Uplift 1=-101(LC 10), 5=-126(LC 11)
              Max Grav 1=787(LC 1), 5=855(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
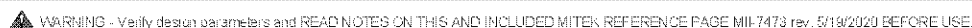TOP CHORD   1-2=-1466/148, 2-3=-1469/273, 3-4=-1456/267, 4-5=-1458/143
BOT CHORD   1-8=-157/1248, 7-8=-46/758, 5-7=-57/1238
WEBS   4-7=-298/211, 2-8=-307/215, 3-8=-155/706, 3-7=-149/691

NOTES-   (6-8)
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=33ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
   1=101, 5=126.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction
   to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of
   100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the
   required maximum reaction.

January 12,2022

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-16896	COMN	1	1		I49170456
					Job Reference (optional)	

NVR,   Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 20:43:24 2021 Page 1
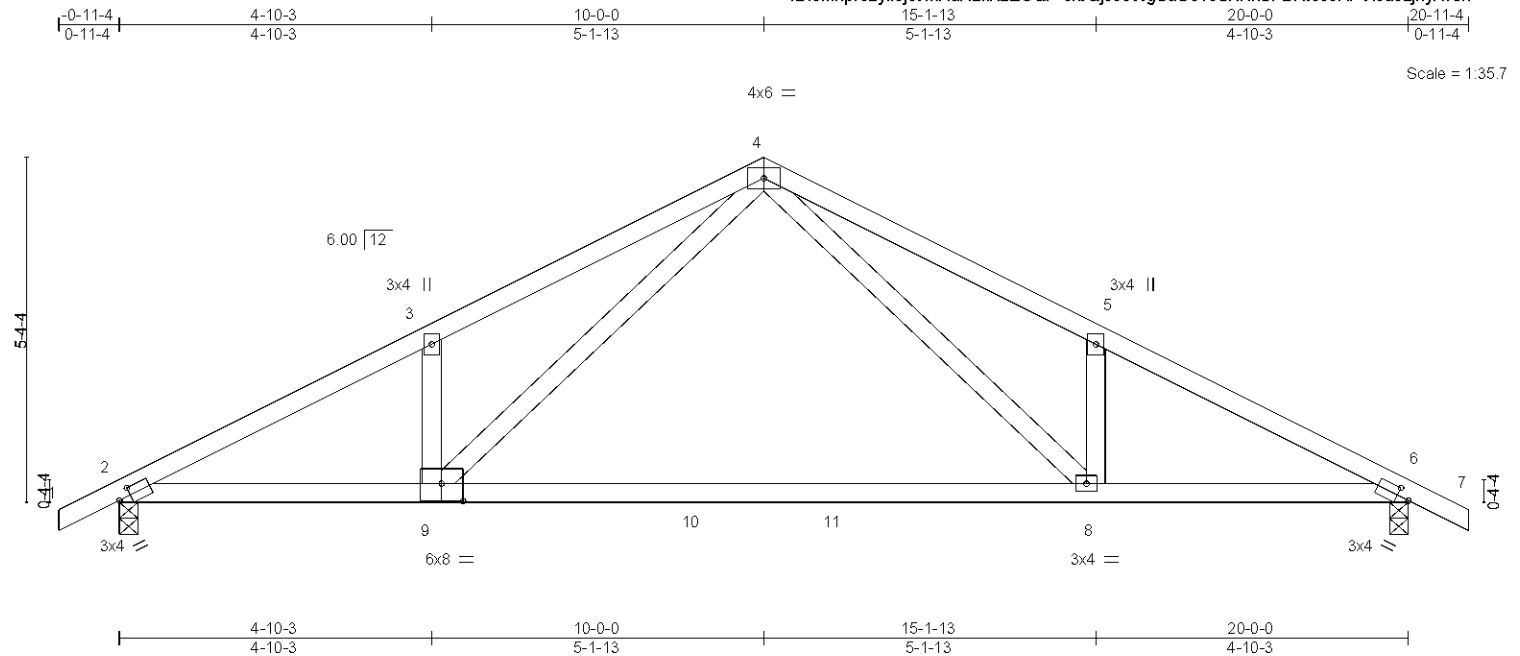ID:emnpr32ylI3j8t4xAaRLkKzEGQP-0rbQj8JoWgUuU51eSKKhSFDRt63JHPVloaJ2jnyAvsn

Scale = 1:35.7

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.26	8-9	>926	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.54	8-9	>439	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.05	8-9	>999	240	Weight: 94 lb	FT = 5%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-5-12 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
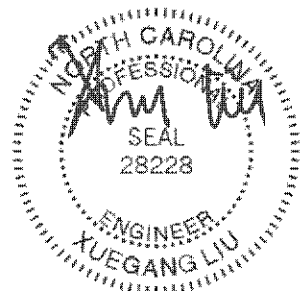
REACTIONS.   (size)   2=0-3-8, 6=0-3-8
              Max Horz 2=94(LC 14)
              Max Uplift 2=-126(LC 10), 6=-126(LC 11)
              Max Grav 2=853(LC 1), 6=853(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1454/142, 3-4=-1452/266, 4-5=-1452/266, 5-6=-1454/142
BOT CHORD   2-9=-151/1234, 8-9=-45/754, 6-8=-57/1234
WEBS   5-8=-297/211, 3-9=-297/211, 4-9=-149/691, 4-8=-149/691

NOTES-   (6-8)
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=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=126, 6=126.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

January 12,2022

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

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-16897	COMN	1	1		I49170457
					Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 20:43:25 2021 Page 1
ID:emnpr32yIl3j8t4xAaRLkKzEGQP-U19owUKQH_cl5Fcq01rw?SIZGWR30s_v1E3bGDyAvsm

	-0-11-4		3-7-7		7-0-0		12-6-0		14-0-0
	0-11-4		3-7-7		3-4-9		5-6-0		1-6-0

Scale = 1:25.5

4x6 ||

6.00 |12

3x4 ||

3x4 ||

3x4 ||

8 3x4 =

3x4 =

3x4 =

3x4 =

	3-7-7		7-0-0		12-6-0		14-0-0
	3-7-7		3-4-9		5-6-0		1-6-0
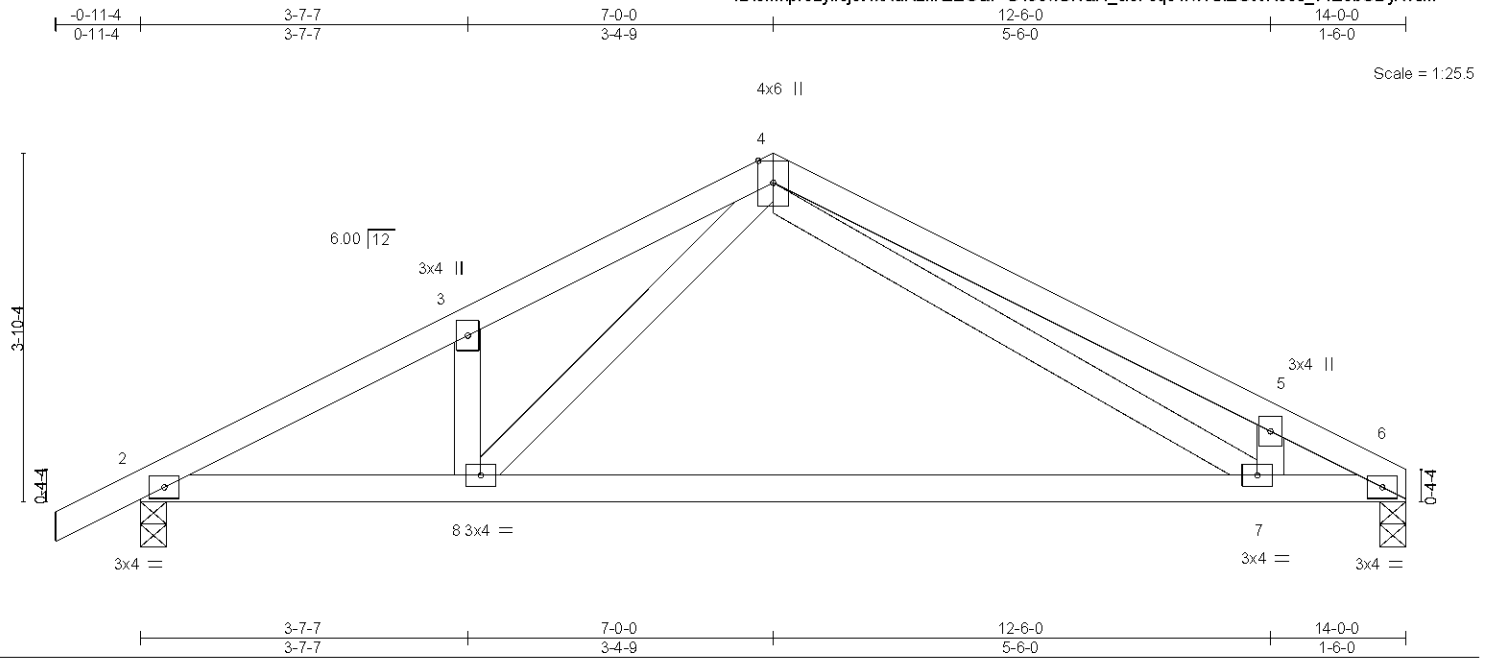
LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.14	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.30	7-8	>555	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.04	7-8	>999	240	Weight: 65 lb	FT = 5%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-4-12 oc purlins.
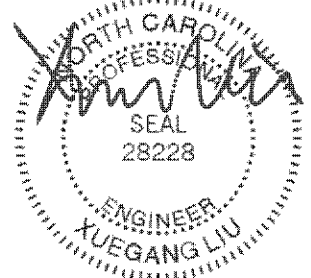BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   2=0-3-8, 6=0-3-8
Max Horz 2=75(LC 14)
Max Uplift 2=-95(LC 10), 6=-70(LC 11)
Max Grav 2=616(LC 1), 6=546(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-994/78, 3-4=-966/161, 4-5=-1248/219, 5-6=-1203/87
BOT CHORD   2-8=-87/830, 7-8=-38/524, 6-7=92/1050
WEBS   4-8=-70/469, 4-7=-129/657

NOTES-   (6-8)
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=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

January 12,2022

TRENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-17194	COMN	1	1		I49171116
					Job Reference (optional)	

NVR, Frederick, MD - 21703,
8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 22:07:44 2021 Page 1
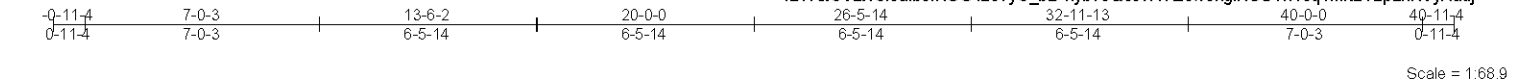ID:YstCVLXCi8aib5IKGG1z3?yC_bB-hyb?eQcevHYE0w3hgIKOSYn48q4mrtzYLp2nKVyAudj

Scale = 1:68.9

Plate Offsets (X,Y)-- [4:0-3-8,0-3-4], [6:0-3-8,0-3-4], [11:0-3-8,0-3-4], [12:0-3-8,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	0.03	9	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	0.08	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S							Weight: 245 lb	FT = 5%

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

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.
WEBS   1 Row at midpt   4-13, 5-12, 5-11, 6-10
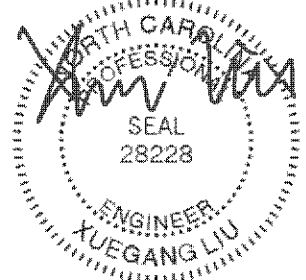
REACTIONS.   All bearings 40-0-0.
    (lb) - Max Horz   2=-180(LC 15)
            Max Uplift   All uplift 100 lb or less at joint(s) 2, 11, 8 except 13=-168(LC 10), 12=-110(LC 10), 10=-174(LC 11)
            Max Grav   All reactions 250 lb or less at joint(s) except 2=343(LC 23), 13=718(LC 23), 12=672(LC 17),
                        11=665(LC 2), 10=718(LC 24), 8=343(LC 24)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   3-13=-399/240, 4-12=-279/210, 6-11=-279/206, 7-10=-399/239

NOTES-   (7-10)
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=33ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11, 8 except
   (jt=lb) 13=168, 12=110, 10=174.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction
   to a wind speed of 115 mph.
8) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of
   100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
9) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the
   required maximum reaction.
10) Framing and bracing of the gable end frame shall be provided by the building designer.
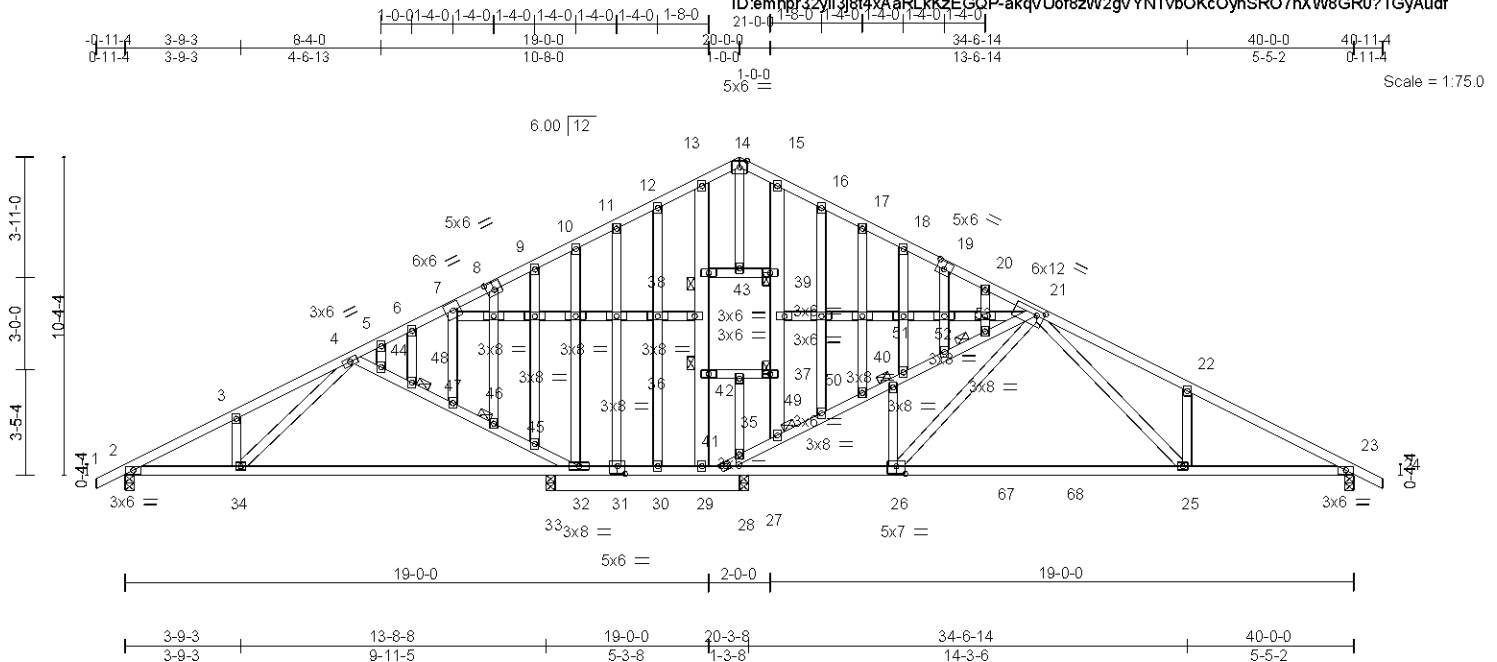
January 12, 2022

Scale = 1:75.0

Plate Offsets (X,Y)-- [8:0-3-0,0-3-0], [19:0-3-0,0-3-0], [21:0-3-0,0-2-0], [26:0-3-8,0-3-0], [31:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.19	25-26	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.41	25-26	>577	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.04	23	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.06	25-26	>999	240	Weight: 361 lb	FT = 5%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.2 or 2x4 SPF No.2 *Except*
21-28,4-32,36-37,38-39,3-34,21-26,26-40,21-25,22-25,4-34,41-42
,14-43: 2x4 SP No.3 or 2x4 SPF Stud
13-29,15-35: 2x6 SP No.2
OTHERS 2x4 SP No.3 or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 21-40
JOINTS 1 Brace at Jt(s): 35, 36, 37, 38, 39, 40, 46, 48

REACTIONS. All bearings 6-7-0 except (jt=length) 2=0-3-8, 23=0-3-8, 27=0-3-8, 33=0-3-8.
(lb) - Max Horz 2=-180(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 29, 31, 27 except 28=-148(LC 11),
32=-537(LC 10), 23=-157(LC 11), 30=-116(LC 24)
Max Grav All reactions 250 lb or less at joint(s) 31, 27 except 2=544(LC 23),
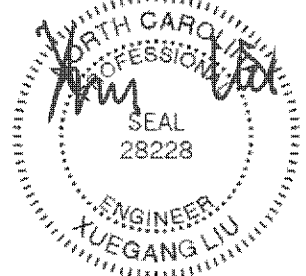28=633(LC 2), 32=409(LC 1), 29=525(LC 1), 23=823(LC 24), 33=733(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-840/0, 3-4=-802/63, 9-10=-79/287, 12-13=0/299, 21-22=-1329/329,
22-23=-1341/211
BOT CHORD 2-34=-112/692, 33-34=-99/391, 32-33=-99/391, 31-32=-224/265, 30-31=-224/265,
29-30=-224/265, 28-29=-243/270, 27-28=-74/1098, 26-27=-74/1098, 25-26=-8/681,
23-25=-108/1127
WEBS 28-41=-1455/389, 35-41=-1425/381, 35-49=-1368/386, 49-50=-1363/373,
40-50=-1323/351, 40-51=-1453/423, 51-52=-1374/379, 52-53=-1357/367,
21-53=-1340/362, 4-44=-598/267, 44-48=-552/240, 47-48=-582/258, 46-47=-588/262,
45-46=-623/284, 32-45=-590/264, 29-36=-450/17, 36-38=-484/18, 13-38=-454/33,
21-26=-89/622, 26-40=-314/173, 21-25=-147/658, 22-25=-297/202, 4-34=-17/517,
10-32=-426/263

NOTES- (9-11)
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=33ft; Cat. II; Exp B; Enclosed;
MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever 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) All plates are 3x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
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.

January 12,2022

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

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-17195	SPEC	1	1		I49171117
					Job Reference (optional)	

NVR, Frederick, MD - 21703,
8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 22:07:48 2021 Page 2
ID:emnpr32yll3j8t4xAaRLkKzEGQP-akqVUof8zW2gVYNTvbOKcOynSRO7nXW8GR0?TGyAudf

NOTES-   (9-11)

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 29, 31, 27 except (jt=lb) 28=148, 32=537, 23=157, 30=116.

9) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.

10) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.

11) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-18660	COMN	1	1		I49194704
					Job Reference (optional)	

NVR, Frederick, MD - 21703,
8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Dec 9 21:29:23 2021 Page 1
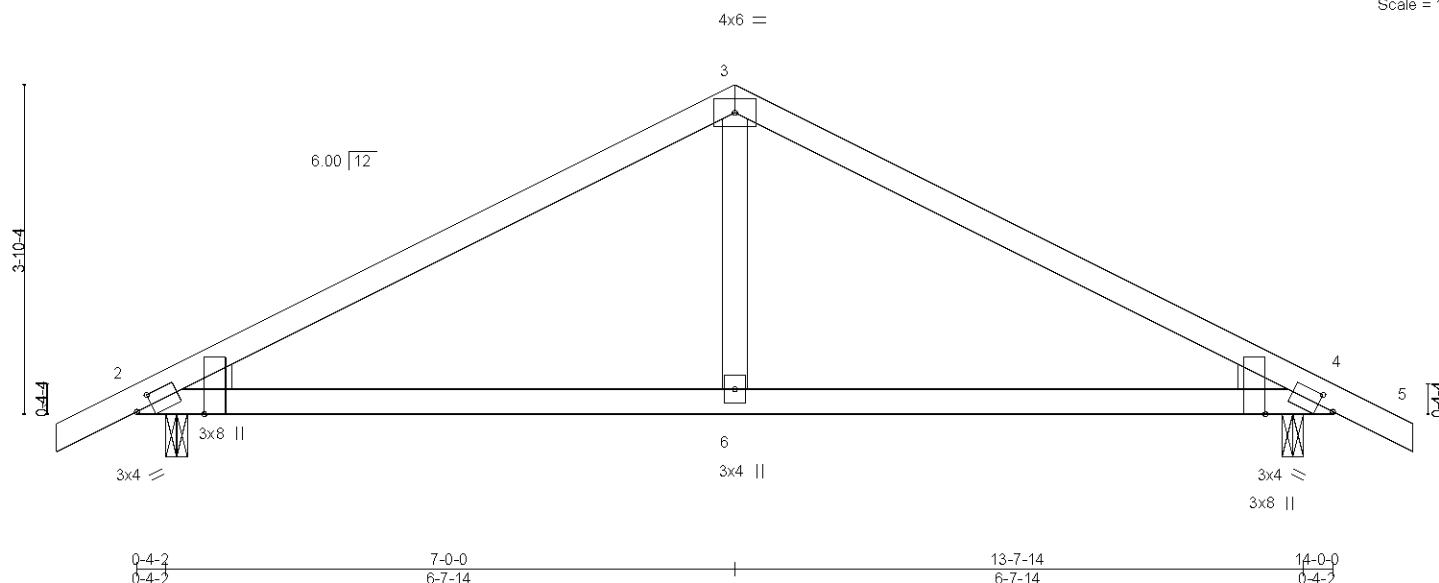ID:ysQ2IfleTUPclEyIvGcyuSzmZKC-zZQCEhK6RnaGTwYH?pOoV4PzwezduFJBtTWRZUyAa5g
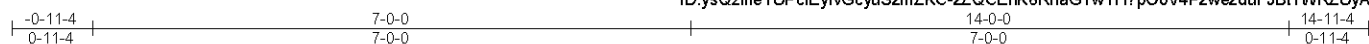
Scale = 1:27.0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.05	2-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.12	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.05	2-6	>999	240	Weight: 54 lb	FT = 5%

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

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

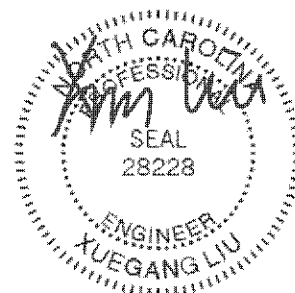**REACTIONS.**   (size) 2=0-3-0, 4=0-3-0
          Max Horz 2=-68(LC 15)
          Max Uplift 2=-95(LC 10), 4=-95(LC 11)
          Max Grav 2=614(LC 1), 4=614(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-780/95, 3-4=-780/95
BOT CHORD   2-6=-22/612, 4-6=-22/612
WEBS   3-6=0/335

NOTES-   (6-8)
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=33ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction
   to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of
   100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the
   required maximum reaction.

January 12,2022

TRENCO
A MiTek Affiliate

ENGINEERING BY

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast	I49194705
ORDERS	SE-18661	COMN	1	1		
					Job Reference (optional)	

NVR,   Frederick, MD - 21703,
8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Dec 9 21:29:24 2021 Page 1
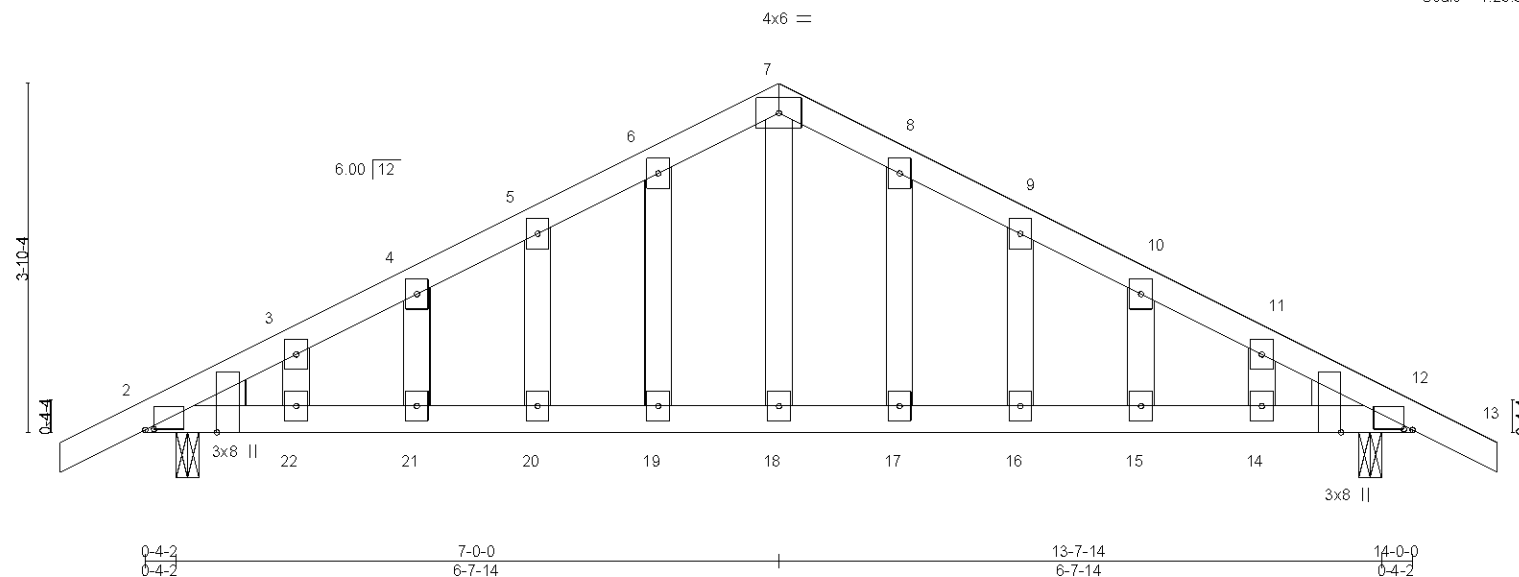ID:ysQ2lfleTUPclEylvGcyuSzmZKC-Sm_aS1KkC5i7547UYWv12HyEl2Gbdi2K67G?5xyAa5f

Scale = 1:25.5

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.10	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.16	15-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.10	20-21	>999	240	Weight: 74 lb	FT = 5%

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

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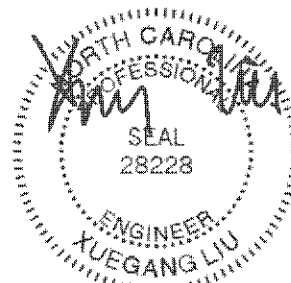BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   2=0-3-0, 12=0-3-0
Max Horz 2=-68(LC 11)
Max Uplift 2=-95(LC 10), 12=-95(LC 11)
Max Grav 2=614(LC 1), 12=614(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-783/64, 3-4=-736/80, 4-5=-713/96, 5-6=-691/111, 6-7=-685/131, 7-8=-685/130,
            8-9=-691/111, 9-10=-713/96, 10-11=-736/80, 11-12=-783/64
BOT CHORD   2-22=-35/634, 21-22=-35/634, 20-21=-35/634, 19-20=-35/634, 18-19=-35/634,
            17-18=-35/634, 16-17=-35/634, 15-16=-35/634, 14-15=-35/634, 12-14=-35/634
WEBS   7-18=-55/384

NOTES-   (9-11)
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=33ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever 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) All plates are 3x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
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, 12.
9) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction
   to a wind speed of 115 mph.
10) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of
    100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
11) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the
    required maximum reaction.

January 12,2022

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