ENGINEERING BY TRENCO
A MiTek Affiliate

RE: 2489030 - H&H/Kenzie/Lot/669/ManoratLexingtonPlan

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Project Customer: H and H   Project Name:
Lot/Block: 669   Subdivision: MANOR @ LEXINGTON PLANTATION
Model:
Address:
City: CAMERON   State: NC

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

Design Code: IRC2015/TPI2014   Design Program: MiTek 20/20 8.2
Wind Code: ASCE 7-10   Wind Speed: 130 mph   Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-10
Roof Load: 40.0 psf   Floor Load: N/A psf

Mean Roof Height (feet): 25   Exposure Category: C

No.	Seal#	Truss Name	Date
1	I43516040	A01	11/6/20
2	I43516041	A02	11/6/20
3	I43516042	A03	11/6/20
4	I43516043	A04	11/6/20
5	I43516044		11/6/20
6	I43516045	B01	11/6/20
7		B02	11/6/20
8	I43516047	C01	11/6/20
9	I43516048	C02	11/6/20
10	I43516049	H01	11/6/20
11	I43516050	H02	11/6/20
12	I43516051	H03	11/6/20
13	I43516052	H04	11/6/20
14	I43516053	J01	11/6/20
	I43516054	J02	11/6/20
16		J03	11/6/20

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Sumter,SC.

Truss Design Engineer's Name: Sevier, Scott

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

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.

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER SCOTT M. SEVIER

Scott Sevier

November 6,2020

Sevier, Scott

Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan
2489030	A01	Common Supported Gable	1	1	I43516040 Job Reference (optional)

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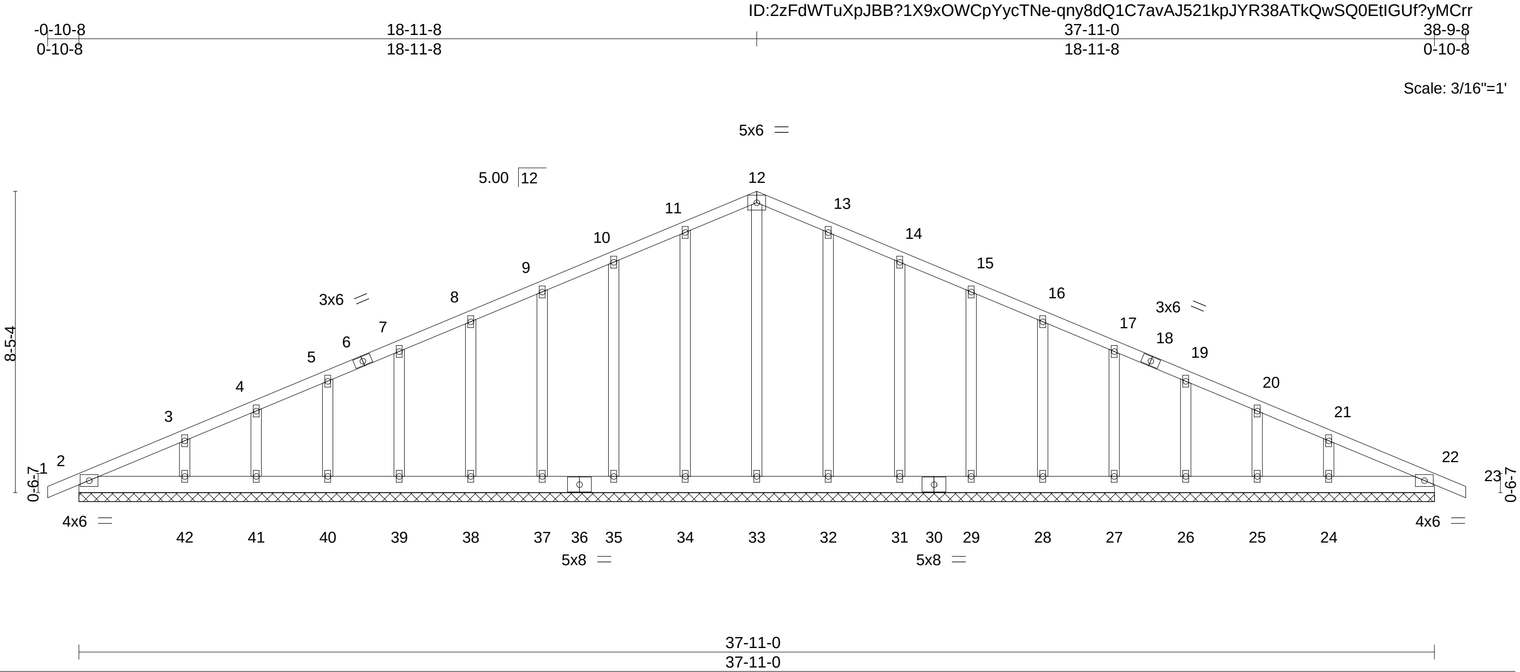

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	22	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	22	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	22	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 259 lb	FT = 20%

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

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

REACTIONS. All bearings 37-11-0.
(lb) - Max Horz 2=-186(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 35, 37, 38, 39, 40, 41, 32, 31, 29, 28, 27, 26, 25, 22 except 42=-118(LC 12), 24=-115(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 33, 34, 35, 37, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25, 24, 22

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-97/253, 11-12=-115/303, 12-13=-115/303, 13-14=-97/253

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 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, 34, 35, 37, 38, 39, 40, 41, 32, 31, 29, 28, 27, 26, 25, 22 except (jt=lb) 42=118, 24=115.

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Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan
2489030	A02	COMMON	6	1	I43516041 Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153,
8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 14:07:38 2020 Page 1
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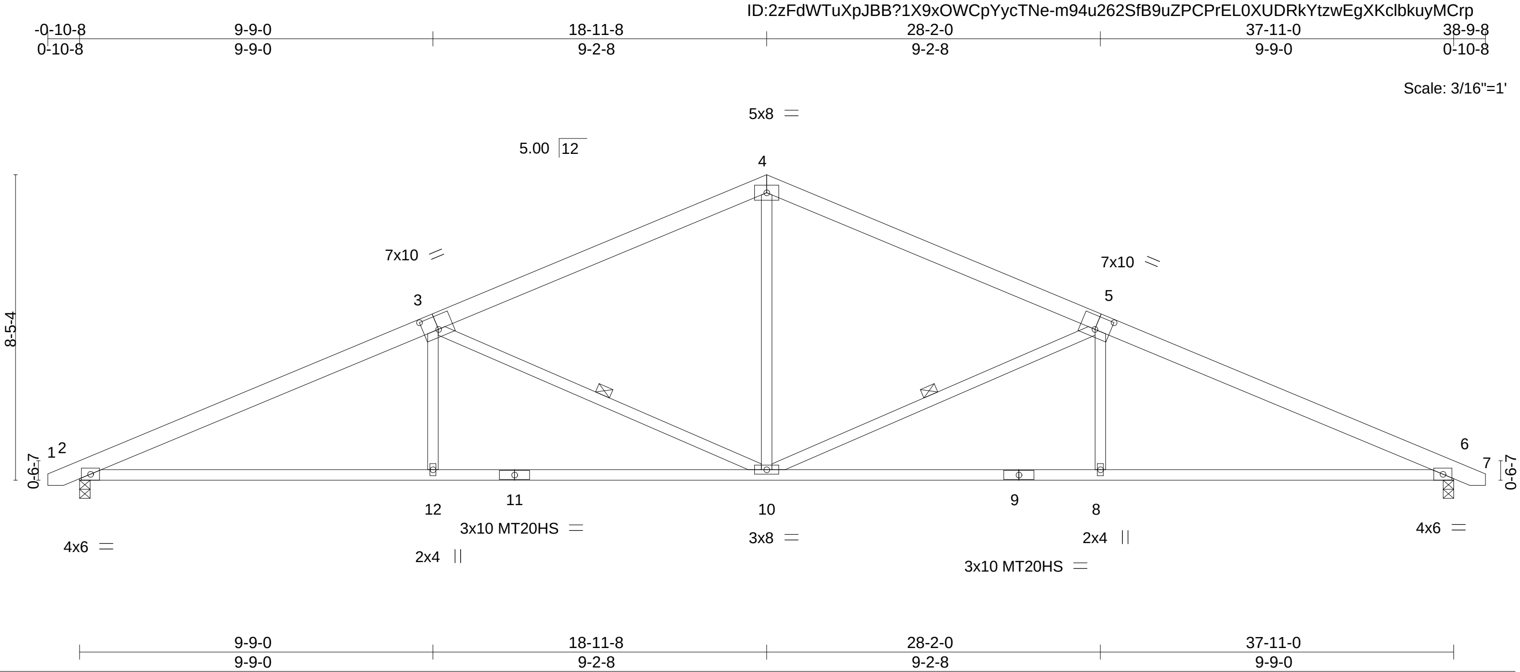

Plate Offsets (X,Y)-- [3:0-5-0,0-4-8], [5:0-5-0,0-4-8]

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	0.42	Vert(LL)	-0.17	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.42	10-12	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.16	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.18	12-15	>999	240	Weight: 209 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-10, 3-10

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=184(LC 12)
Max Uplift 2=-429(LC 12), 6=-429(LC 13)
Max Grav 2=1556(LC 1), 6=1556(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3058/1294, 3-4=-2107/996, 4-5=-2107/996, 5-6=-3058/1294
BOT CHORD 2-12=-1044/2737, 10-12=-1046/2734, 8-10=-1047/2734, 6-8=-1046/2737
WEBS 4-10=-362/1011, 5-10=-1020/565, 5-8=0/372, 3-10=-1020/565, 3-12=0/372

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=429, 6=429.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan
2489030	A03	Common Structural Gable	1	1	I43516042 Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 14:07:40 2020 Page 1
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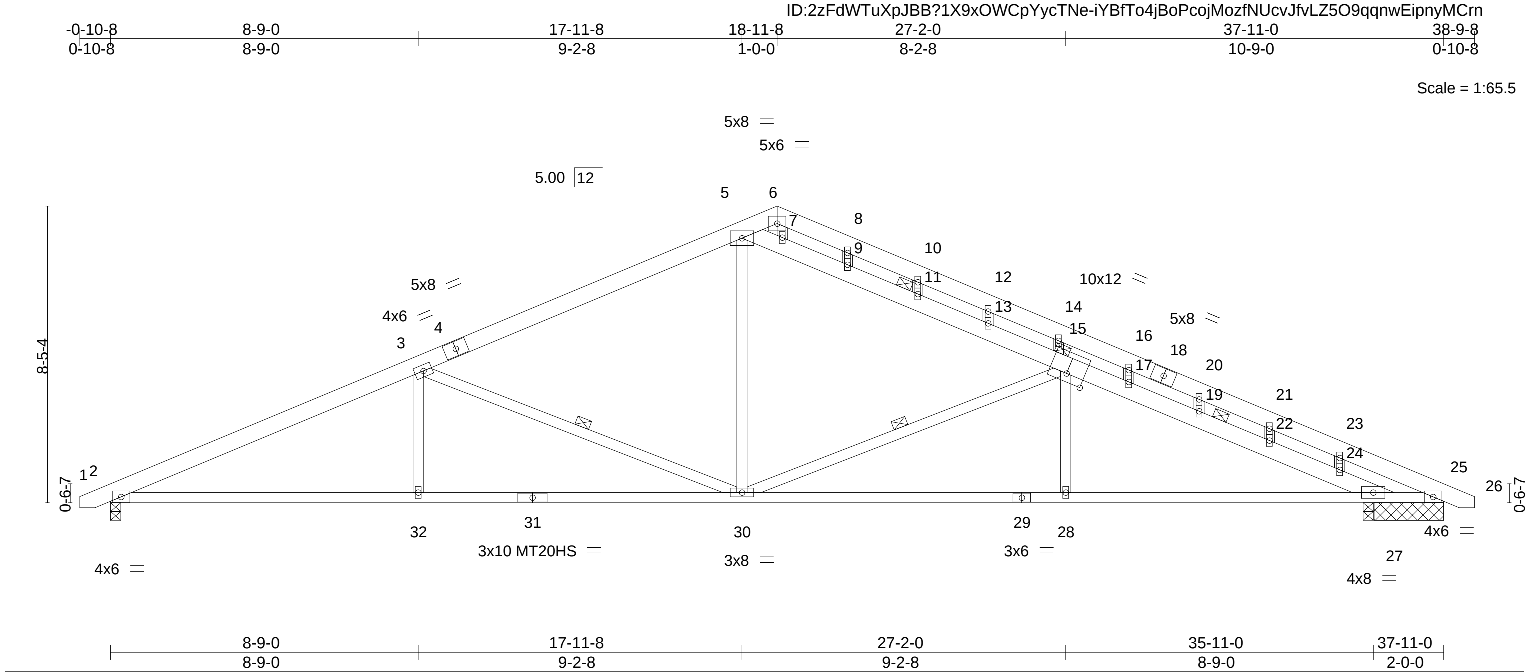

Plate Offsets (X,Y)-- [15:0-6-0,0-2-12]

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	0.95	Vert(LL)	-0.17	30-32	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.41	30-32	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.15	25	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.16	30-32	>999	240	Weight: 259 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 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. Except:
3 Rows at 1/4 pts 5-41
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-30, 15-30

REACTIONS. All bearings 1-11-12 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=184(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-412(LC 12), 27=-513(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 25, 25 except 2=1479(LC 1), 27=1475(LC 1), 27=1475(LC 1), 27=1475(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2936/1225, 3-5=-2014/923, 5-6=-629/448, 6-8=-669/446, 8-10=-681/401, 10-12=-706/375, 12-14=-735/341, 14-16=-637/198, 16-20=-655/161, 20-21=-672/129, 21-23=-727/114, 23-25=-669/5, 5-7=-1332/627, 7-9=-1168/503, 9-11=-1208/539, 11-13=-1226/555, 13-15=-1250/581, 15-17=-1971/957, 17-19=-1995/984, 19-22=-2024/1007, 22-24=-2019/1014, 24-27=-2132/1114
BOT CHORD 2-32=-995/2633, 30-32=-995/2633, 28-30=-870/2437, 27-28=-868/2441, 27-36=0/593
WEBS 6-7=-235/311, 14-15=-305/266, 23-24=-292/263, 5-30=-253/863, 3-32=0/349, 3-30=-968/543, 15-30=-803/408, 15-28=0/346

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) All plates are MT20 plates unless otherwise indicated.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 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 412 lb uplift at joint 2, 513 lb uplift at joint 27 and 513 lb uplift at joint 27.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan
2489030	A04	COMMON	3	1	I43516043 Job Reference (optional)

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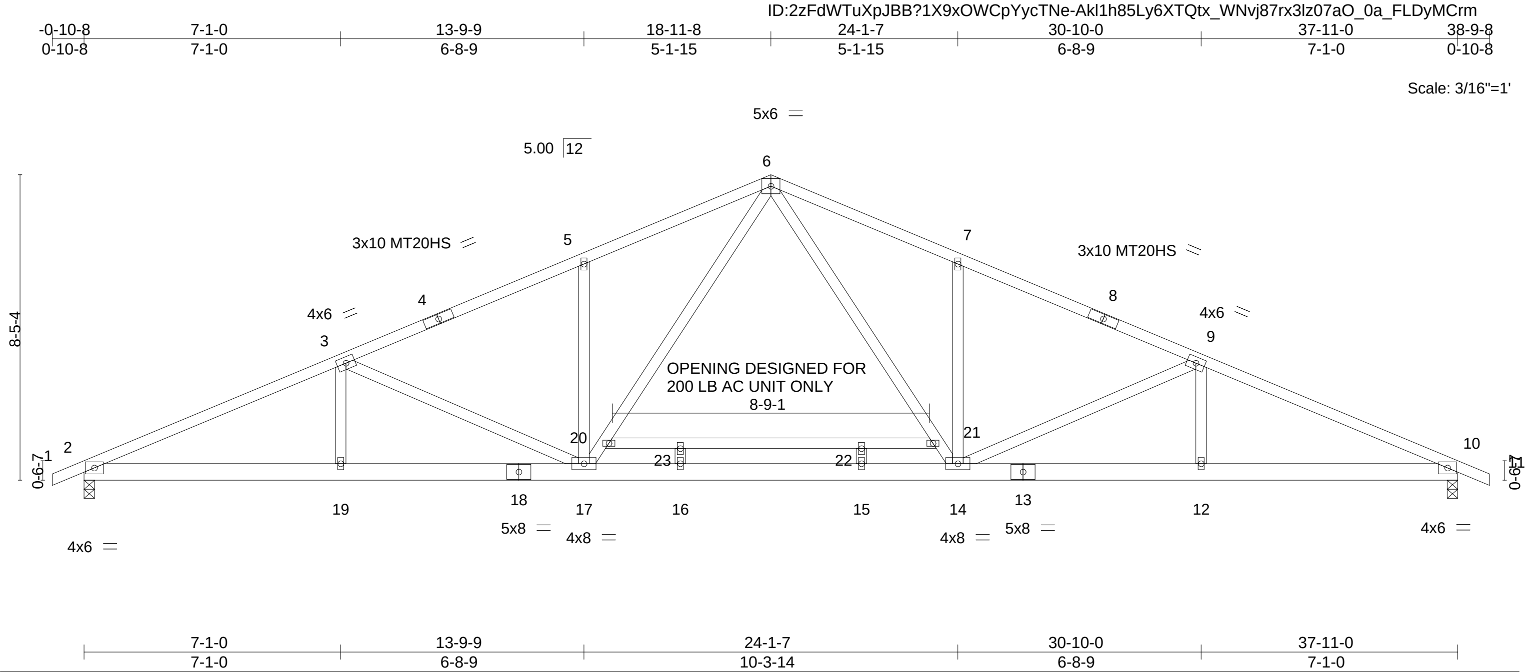
Scale: 3/16"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.18	16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.50	15-16	>902	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.19	17	>999	240	Weight: 241 lb	FT = 20%

SPACING- 2-0-0

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
20-21: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=186(LC 12)
Max Uplift 2=-336(LC 12), 10=-336(LC 13)
Max Grav 2=1669(LC 1), 10=1669(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3402/1114, 3-5=-2851/876, 5-6=-2838/1031, 6-7=-2838/1031, 7-9=-2851/876, 9-10=-3402/1114
BOT CHORD 2-19=-902/3071, 17-19=-902/3071, 16-17=-320/1951, 15-16=-320/1951, 14-15=-320/1951, 12-14=-907/3071, 10-12=-907/3071
WEBS 6-21=-344/1113, 14-21=-370/1098, 7-14=-376/343, 9-14=-588/422, 17-20=-370/1098, 6-20=-344/1113, 5-17=-376/343, 3-17=-588/422

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 2x4 MT20 unless otherwise indicated.
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 336 lb uplift at joint 2 and 336 lb uplift at joint 10.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan
2489030	A05	COMMON	2	1	I43516044 Job Reference (optional)

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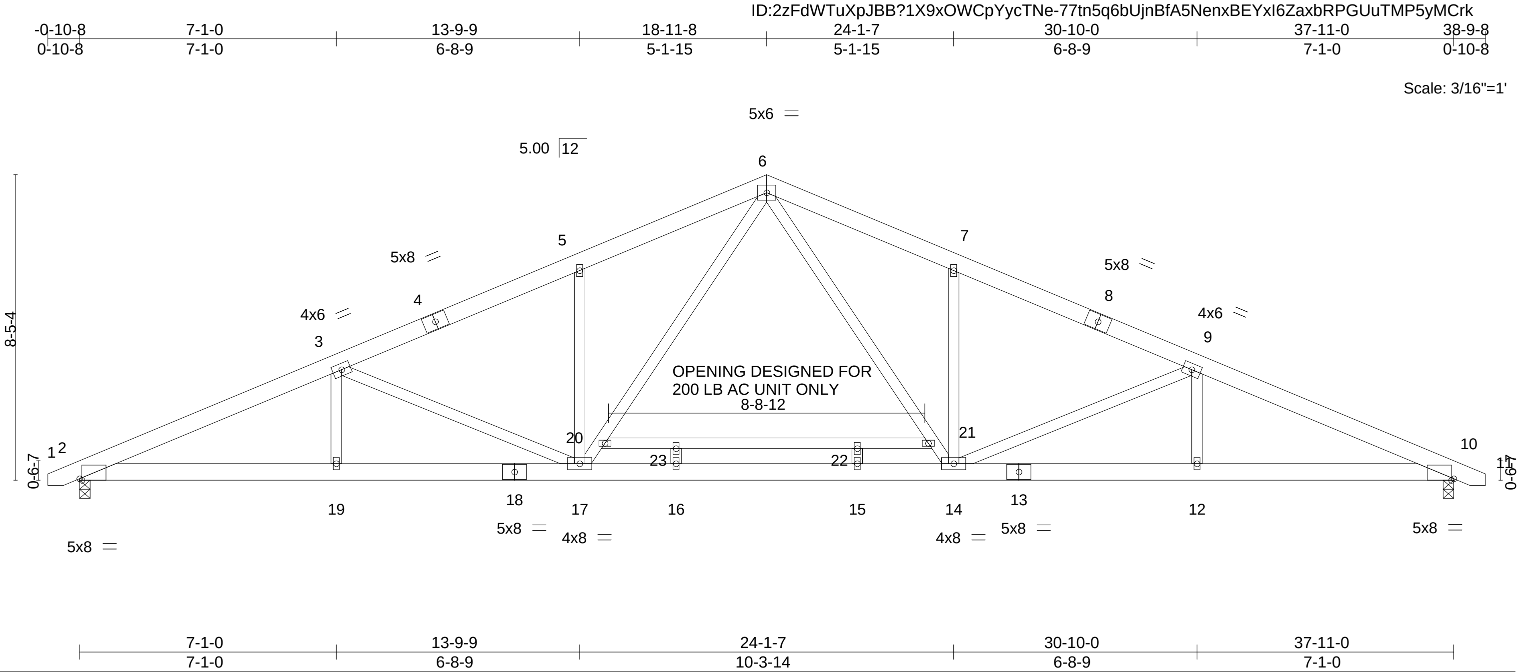

Plate Offsets (X,Y)-- [2:0-0-12,Edge], [10:0-0-12,Edge]

LOADING (psf)		SPACING-	2-5-8	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.17	16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.50	15-16	>908	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.13	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.19	17	>999	240	Weight: 275 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
20-21: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-2-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-6-3 oc bracing.

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=226(LC 12)
Max Uplift 2=-428(LC 12), 10=-428(LC 13)
Max Grav 2=2013(LC 1), 10=2013(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4235/1467, 3-5=-3490/1152, 5-6=-3472/1344, 6-7=-3472/1344, 7-9=-3490/1152, 9-10=-4235/1467
BOT CHORD 2-19=-1208/3858, 17-19=-1208/3858, 16-17=-446/2378, 15-16=-446/2378, 14-15=-446/2378, 12-14=-1211/3858, 10-12=-1211/3858
WEBS 6-21=-461/1356, 14-21=-491/1342, 7-14=-455/423, 9-14=-813/539, 9-12=0/257, 17-20=-491/1342, 6-20=-461/1356, 5-17=-455/423, 3-17=-813/539, 3-19=0/257

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 428 lb uplift at joint 2 and 428 lb uplift at joint 10.

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2489030	B01	Common Supported Gable	1	1	I43516045 Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 14:07:45 2020 Page 1
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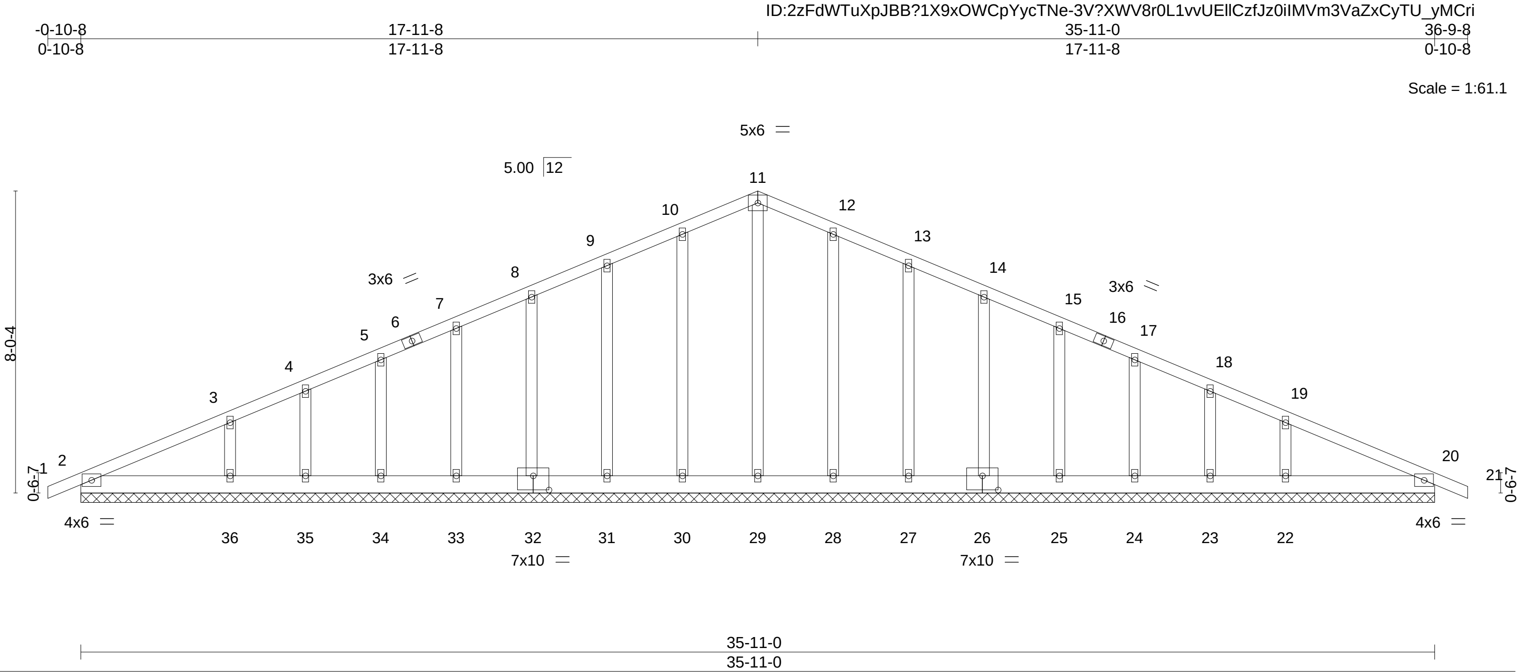

Plate Offsets (X,Y)-- [26:0-5-0,0-4-8], [32:0-5-0,0-4-8]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	0.00	21	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	21	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 238 lb	FT = 20%

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

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

REACTIONS. All bearings 35-11-0.
(lb) - Max Horz 2=-177(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 30, 31, 32, 33, 34, 35, 28, 27, 26, 25, 24, 23, 20 except 36=-153(LC 12), 22=-151(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 29, 30, 31, 32, 33, 34, 35, 28, 27, 26, 25, 24, 23, 20 except 36=311(LC 23), 22=311(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-109/286, 11-12=-109/286

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 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, 30, 31, 32, 33, 34, 35, 28, 27, 26, 25, 24, 23, 20 except (jt=lb) 36=153, 22=151.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 20.

November 6,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan I43516046
2489030	B02	Common	4	1	Job Reference (optional)

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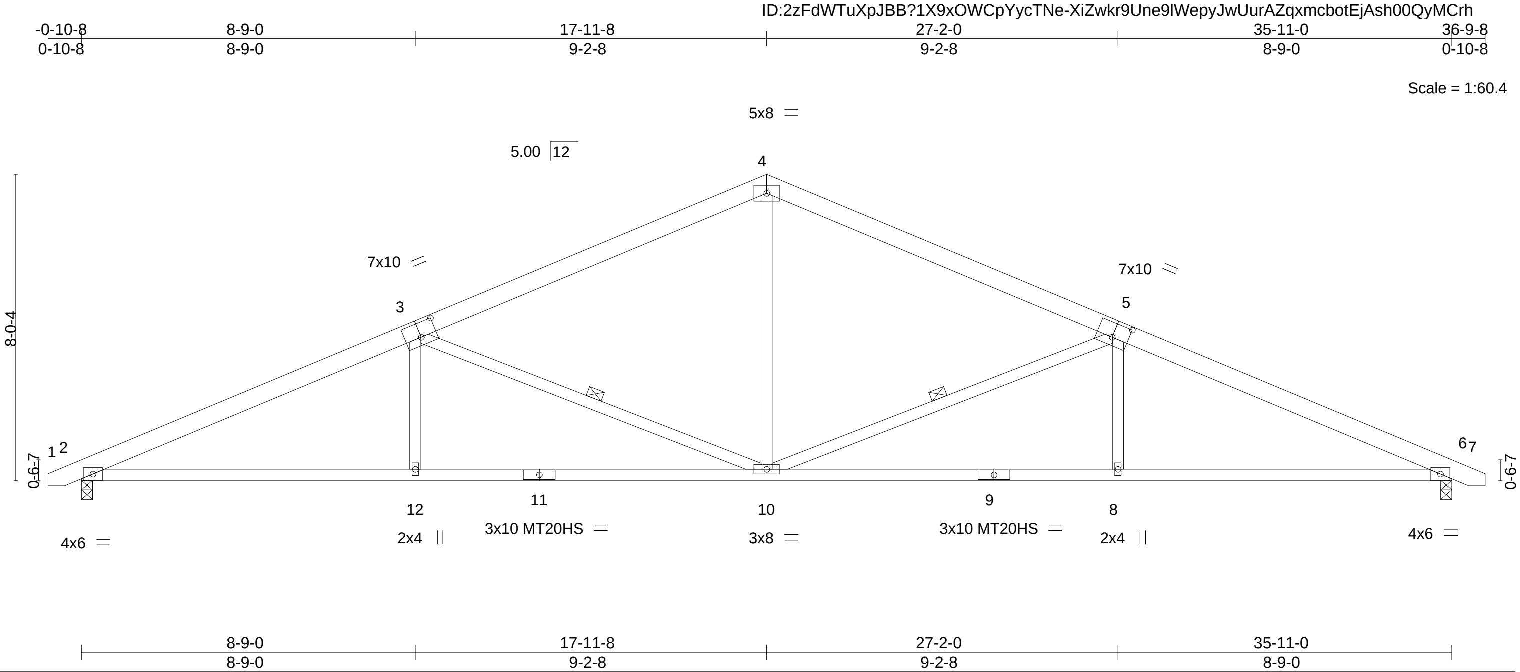


Plate Offsets (X,Y)-- [3:0-5-0,0-4-8], [5:0-5-0,0-4-8]

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)	-0.17	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.42	10-12	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.14	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.16	10-12	>999	240	Weight: 199 lb	FT = 20%

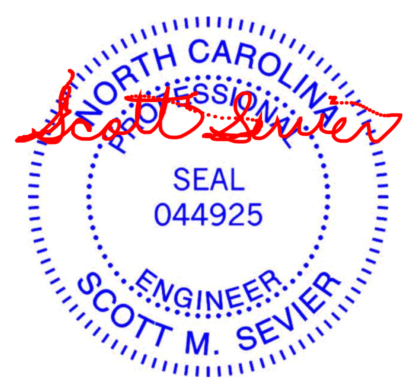
LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-10, 3-10

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=175(LC 12)
Max Uplift 2=-408(LC 12), 6=-408(LC 13)
Max Grav 2=1476(LC 1), 6=1476(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2924/1238, 3-4=-2007/940, 4-5=-2007/940, 5-6=-2924/1238
BOT CHORD 2-12=-1006/2621, 10-12=-1008/2618, 8-10=-1010/2618, 6-8=-1008/2621
WEBS 4-10=-304/914, 5-10=-977/541, 5-8=0/349, 3-10=-977/541, 3-12=0/349

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=408, 6=408.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 6,2020

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan
2489030	C01	Common Supported Gable	1	1	I43516047 Job Reference (optional)

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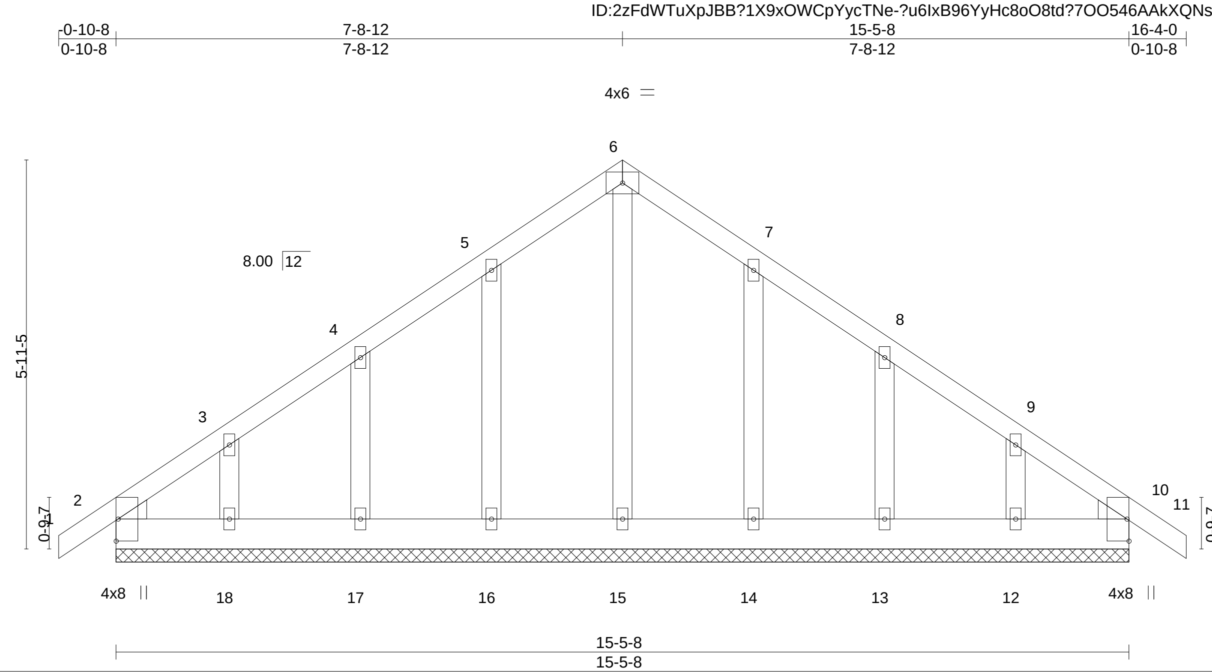

Plate Offsets (X,Y)-- [2:0-0-2,0-0-3], [2:0-0-4,0-3-14], [2:Edge,0-0-6], [10:0-0-2,0-0-3], [10:0-0-4,0-3-14], [10:Edge,0-0-6]

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	0.05	Vert(LL)	-0.00	10	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 99 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.2, Right: 2x4 SP No.2

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

REACTIONS. All bearings 15-5-8.
(lb) - Max Horz 2=-191(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10 except 16=-107(LC 12), 17=-103(LC 12), 18=-134(LC 12), 14=-106(LC 13), 13=-103(LC 13), 12=-128(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 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, 10 except (jt=lb) 16=107, 17=103, 18=134, 14=106, 13=103, 12=128.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

November 6,2020

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Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan
2489030	C02	Common Girder	1	2	I43516048 Job Reference (optional)

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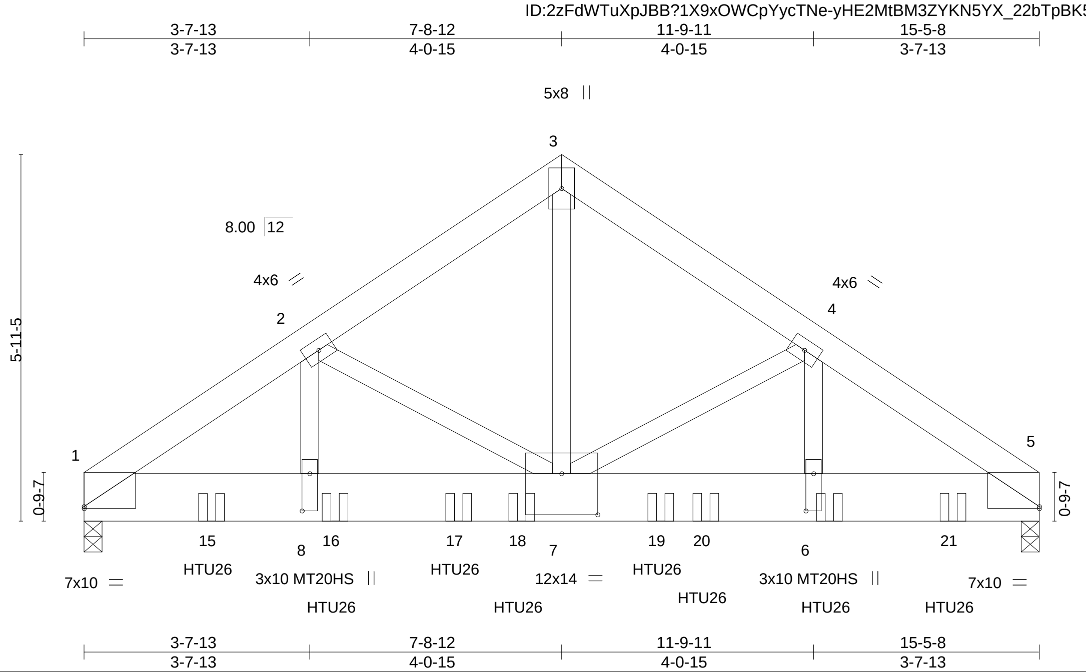

Plate Offsets (X,Y)-- [1:0-0-0,0-0-6], [5:Edge,0-0-6], [6:0-7-4,0-1-8], [7:0-7-0,0-8-0], [8:0-7-4,0-1-8]

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	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.13	6-7	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 262 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP DSS
WEBS 2x4 SP No.2 *Except*
3-7: 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8 (req. 0-4-4), 5=0-3-8 (req. 0-4-8)
Max Horz 1=172(LC 7)
Max Uplift 1=-2839(LC 8), 5=-3233(LC 9)
Max Grav 1=7168(LC 1), 5=7601(LC 1)

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-10355/4127, 2-3=-8199/3396, 3-4=-8199/3395, 4-5=-10638/4479
BOT CHORD 1-8=-3456/8539, 7-8=-3456/8539, 6-7=-3638/8774, 5-6=-3638/8774
WEBS 3-7=-3556/8620, 4-7=-2325/1211, 4-6=-1193/2556, 2-7=-2048/863, 2-8=-815/2249

NOTES-
1) 2-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: 2x10 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates unless otherwise indicated.
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) WARNING: Required bearing size at joint(s) 1, 5 greater than input bearing size.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=2839, 5=3233.
10) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 6-0-12 to connect truss(es) to back face of bottom chord.
11) Use Simpson Strong-Tie HTU26 (20-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-3-0 oc max. starting at 7-1-0 from the left end to 14-0-12 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.

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LOAD CASE(S) Standard

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
      Vert: 1-3=-60, 3-5=-60, 9-12=-20
   Concentrated Loads (lb)
      Vert: 6=-1536(B) 15=-1649(B) 16=-1649(B) 17=-1649(B) 18=-1988(B) 19=-1988(B) 20=-1536(B) 21=-1536(B)

Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan
2489030	H01	GABLE	1	1	I43516049 Job Reference (optional)

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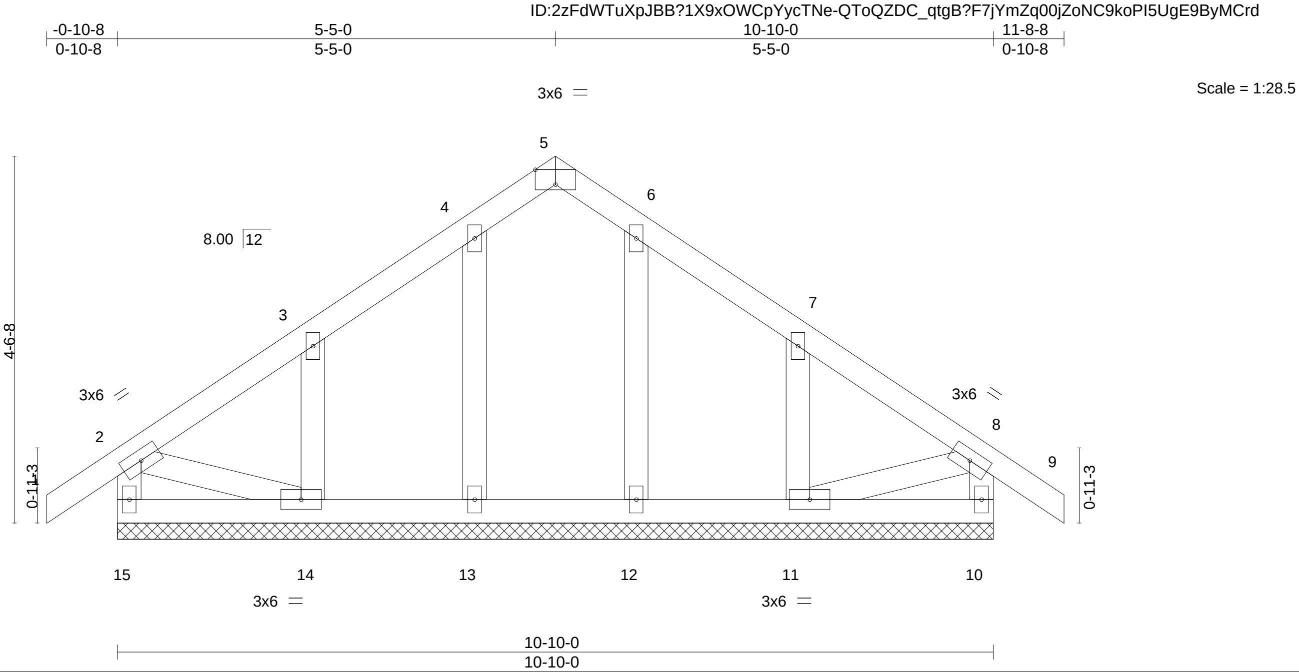

Plate Offsets (X,Y)-- [5:0-3-0,Edge]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	9	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 63 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 10-0-0 oc bracing.

REACTIONS. All bearings 10-10-0.
(lb) - Max Horz 15=-174(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 15, 13, 12 except 14=-166(LC 12), 11=-165(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 15, 10, 13, 14, 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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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 100 lb uplift at joint(s) 15, 13, 12 except (jt=lb) 14=166, 11=165.

November 6,2020

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A MiTek Affiliate
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan I43516050
2489030	H02	Common	1	1	Job Reference (optional)

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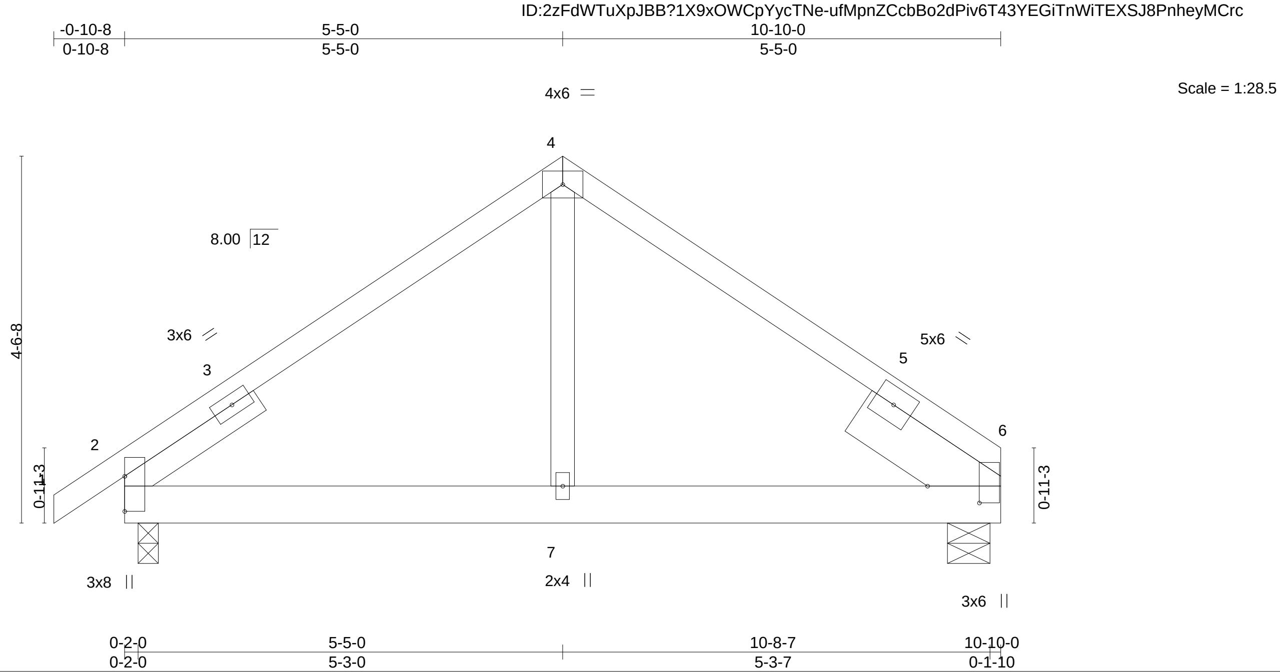

Plate Offsets (X,Y)-- [6:0-2-8,0-7-11]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.01	7-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	7-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.02	7-16	>999	240	Weight: 61 lb	FT = 20%

Spacing: 2-0-0

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-11-12, Right 2x8 SP DSS 1-11-12

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=0-6-5, 2=0-3-0
Max Horz 2=133(LC 11)
Max Uplift 6=-108(LC 13), 2=-131(LC 12)
Max Grav 6=448(LC 1), 2=472(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-371/505, 4-6=-419/514
BOT CHORD 2-7=-301/293, 6-7=-301/293
WEBS 4-7=-363/212

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left and right exposed; porch left 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) except (jt=lb) 6=108, 2=131.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

November 6,2020

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Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan
2489030	H03	Common	1	1	I43516051 Job Reference (optional)

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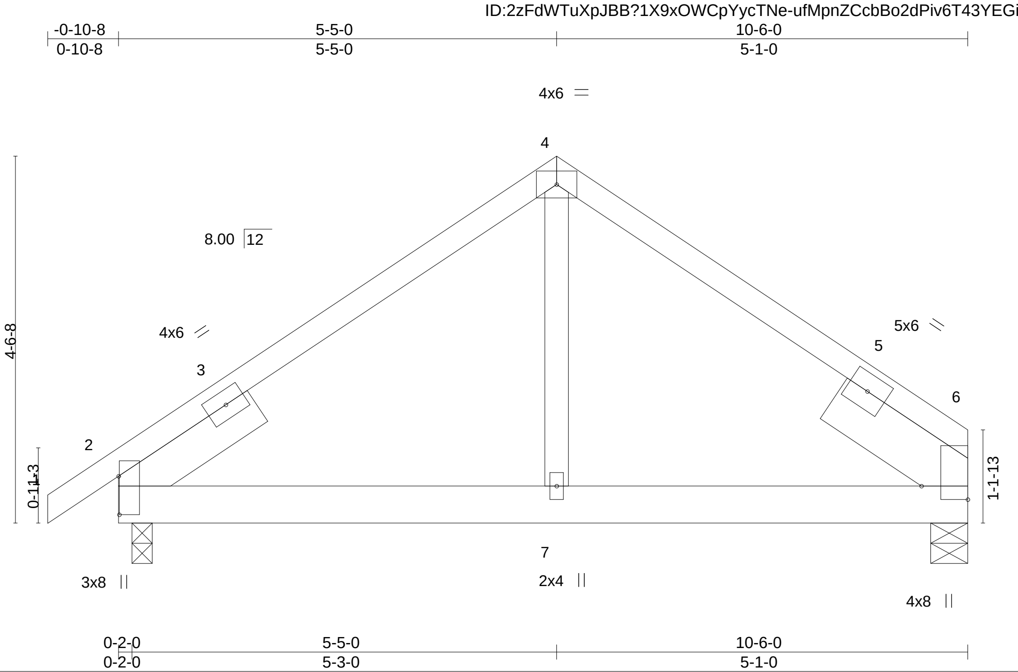


Plate Offsets (X,Y)-- [2:0-5-11,0-0-2], [6:Edge,0-6-14]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.02	7-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	7-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	2-0-0	Matrix-AS							Weight: 62 lb	FT = 20%

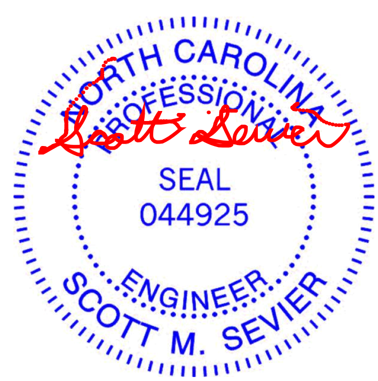
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-12, Right 2x8 SP DSS 1-11-12

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=0-5-8, 2=0-3-0
Max Horz 2=133(LC 9)
Max Uplift 6=-99(LC 13), 2=-131(LC 12)
Max Grav 6=418(LC 1), 2=475(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-380/518, 4-6=-385/524
BOT CHORD 2-7=-321/300, 6-7=-321/300
WEBS 4-7=-379/218

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 6 except (jt=lb) 2=131.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 6,2020

Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan I43516052
2489030	H04	Common	2	1	Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 14:07:52 2020 Page 1
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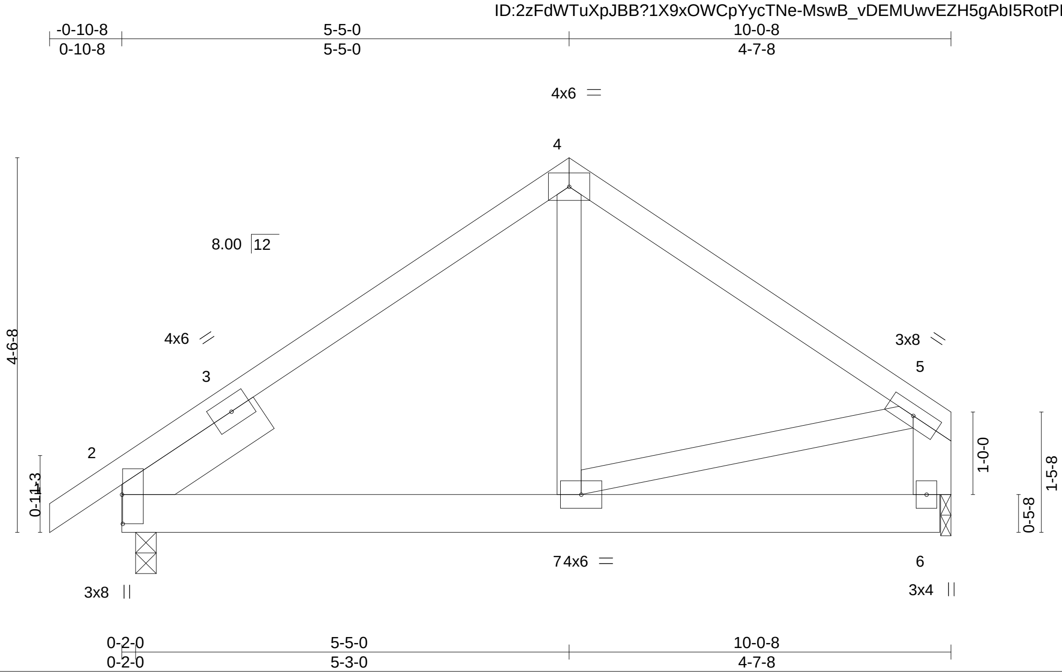

Plate Offsets (X,Y)-- [2:0-4-4,0-0-2]

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	0.21	Vert(LL)	0.02	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	7-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 62 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
5-6: 2x6 SP No.2
SLIDER Left 2x6 SP No.2 1-11-12

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-0, 6=0-1-8
Max Horz 2=131(LC 9)
Max Uplift 2=-124(LC 12), 6=-88(LC 13)
Max Grav 2=447(LC 1), 6=390(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-330/456, 4-5=-389/461, 5-6=-357/388
BOT CHORD 2-7=-295/264
WEBS 4-7=-299/177

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=124.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

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Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan
2489030	J01	Monopitch Supported Gable	1	1	I43516053 Job Reference (optional)

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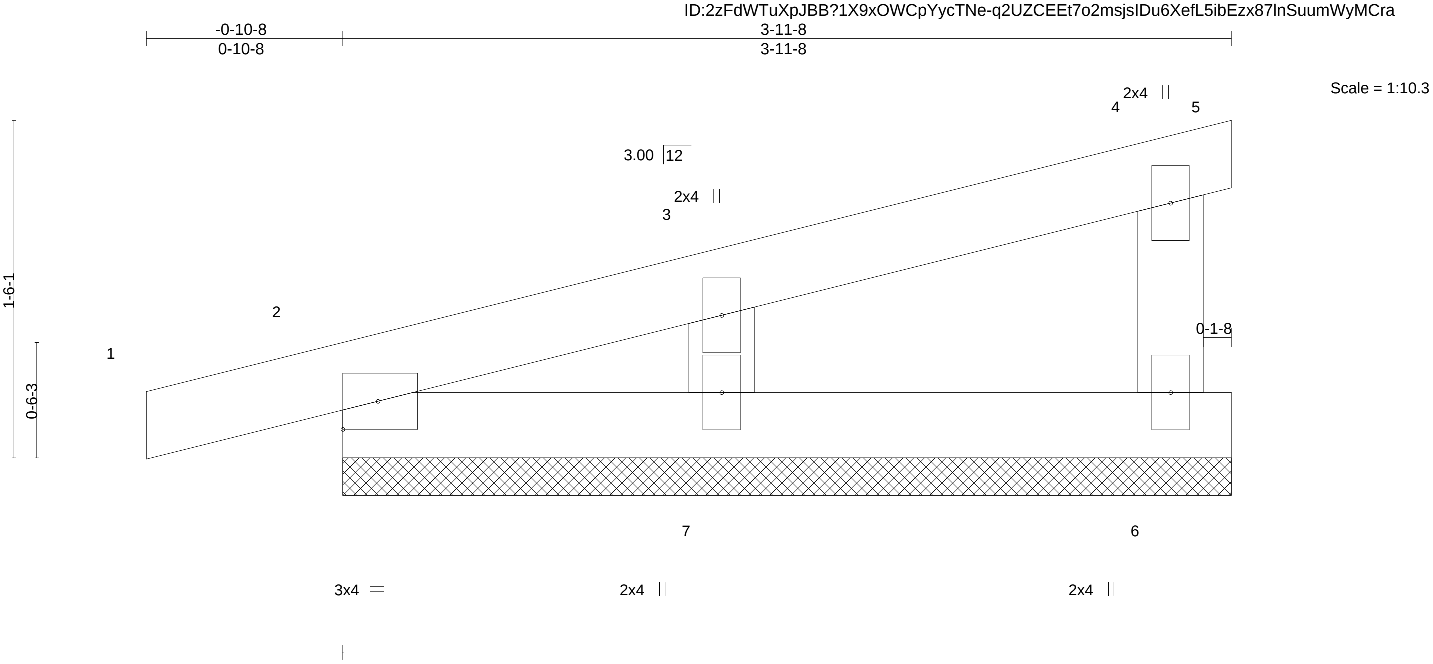

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	4	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 15 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 3-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=3-11-8, 2=3-11-8, 7=3-11-8
Max Horz 2=64(LC 9)
Max Uplift 6=-33(LC 8), 2=-71(LC 8), 7=-67(LC 12)
Max Grav 6=71(LC 1), 2=117(LC 1), 7=165(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7.

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Scott Sevier

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Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan
2489030	J02	Monopitch	3	1	I43516054 Job Reference (optional)

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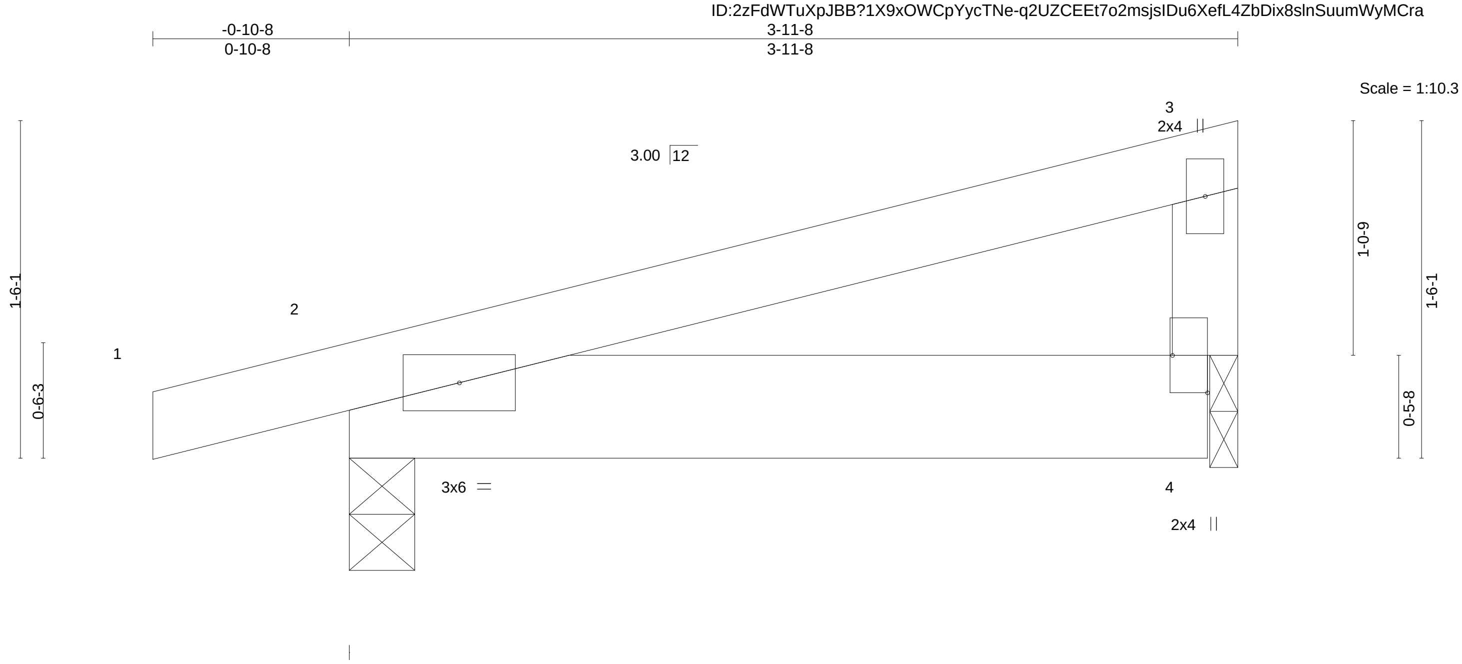


Plate Offsets (X,Y)-- [4:Edge,0-1-14]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP		Wind(LL)	0.01	4-7	>999	240	Weight: 18 lb	FT = 20%

SPACING- 2-0-0

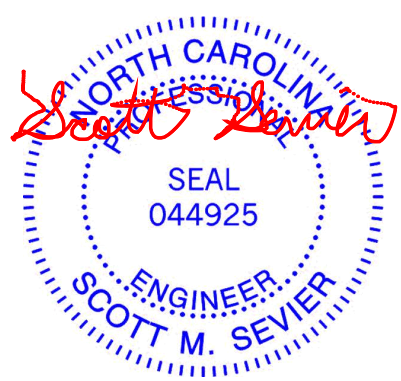
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-1-8
Max Horz 2=63(LC 11)
Max Uplift 2=-106(LC 8), 4=-54(LC 12)
Max Grav 2=211(LC 1), 4=146(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=106.



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Job	Truss	Truss Type	Qty	Ply	H&H/Kenzie/Lot/669/ManoratLexingtonPlan I43516055
2489030	J03	Half Hip	7	1	Job Reference (optional)

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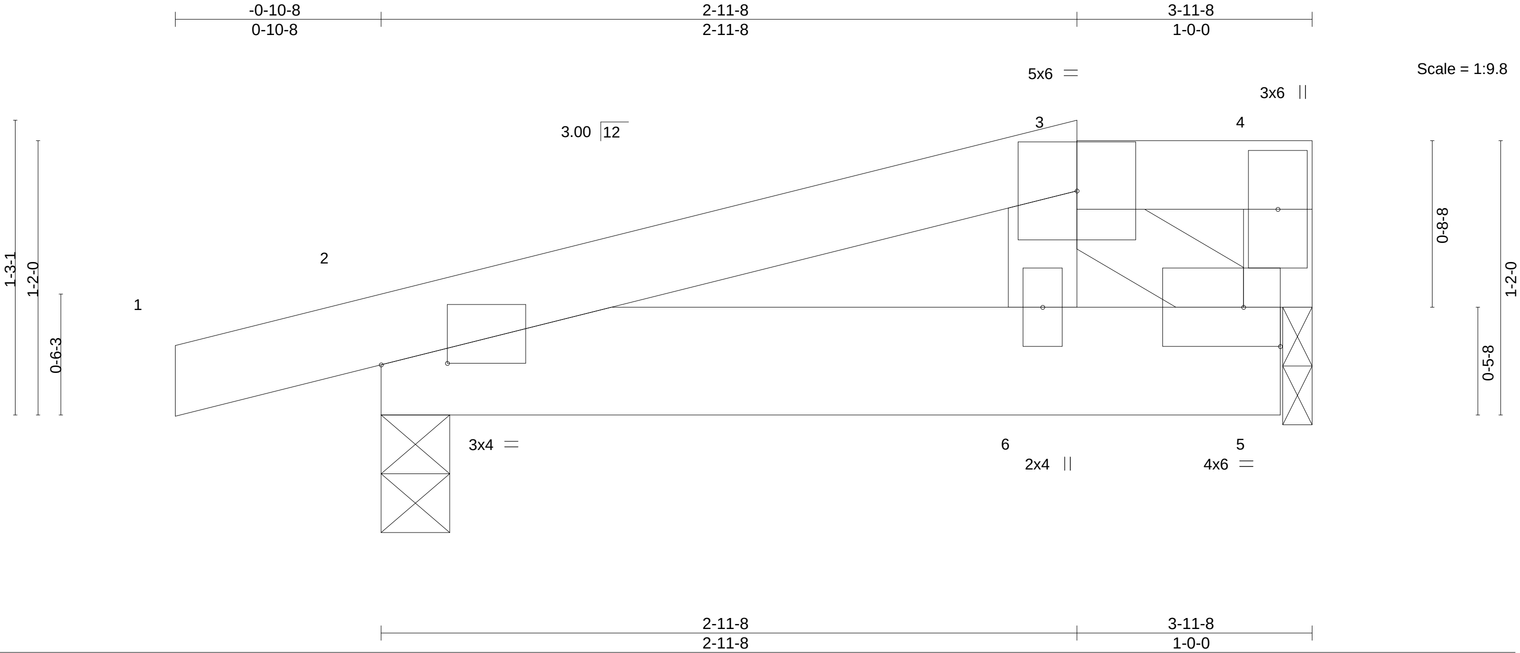

Plate Offsets (X,Y)-- [2:0-3-6,0-0-1]

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	0.10	Vert(LL)	-0.00	9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.00	9	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP		Wind(LL)	0.00	9	>999	240	Weight: 19 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-8 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) 4=0-1-8, 2=0-3-8
Max Horz 2=46(LC 11)
Max Uplift 2=-77(LC 8)
Max Grav 4=282(LC 2), 2=247(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-258/16
WEBS 3-5=-321/12

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) C-C wind load user defined.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
10) 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 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S)
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-80, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-150
2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

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Scott Sevier
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LOAD CASE(S)

Uniform Loads (plf)
Vert: 1-3=-50, 3-4=-99, 5-7=-20
Concentrated Loads (lb)
Vert: 4=-15 3=-130

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-40, 5-7=-40
Concentrated Loads (lb)
Vert: 3=-130

4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=80, 2-3=66, 3-4=59, 5-7=-12
Horz: 1-2=-92, 2-3=-78, 3-4=83, 4-5=53
Concentrated Loads (lb)
Vert: 3=-130

5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=59, 2-3=66, 3-4=59, 5-7=-12
Horz: 1-2=-71, 2-3=-78, 3-4=83, 4-5=-34
Concentrated Loads (lb)
Vert: 3=-130

6) 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=-48, 3-4=-52, 5-7=-20
Horz: 1-2=-21, 2-3=28, 3-4=-20, 4-5=-49
Concentrated Loads (lb)
Vert: 3=-130

7) 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=-48, 3-4=-52, 5-7=-20
Horz: 1-2=21, 2-3=28, 3-4=-20, 4-5=38
Concentrated Loads (lb)
Vert: 3=-130

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=57, 2-3=40, 3-4=28, 5-7=-12
Horz: 1-2=-69, 2-3=-52, 3-4=52, 4-5=28
Concentrated Loads (lb)
Vert: 3=-130

9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=14, 2-3=22, 3-4=28, 5-7=-12
Horz: 1-2=-26, 2-3=-34, 3-4=52, 4-5=-21
Concentrated Loads (lb)
Vert: 3=-130

10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=25, 2-3=17, 3-4=5, 5-7=-20
Horz: 1-2=-45, 2-3=-37, 3-4=37, 4-5=13
Concentrated Loads (lb)
Vert: 3=-130

11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=-1, 3-4=5, 5-7=-20
Horz: 1-2=-26, 2-3=-19, 3-4=37, 4-5=-36
Concentrated Loads (lb)
Vert: 3=-130

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=33, 2-3=40, 3-4=6, 5-7=-12
Horz: 1-2=-45, 2-3=-52, 3-4=30, 4-5=25
Concentrated Loads (lb)
Vert: 3=-130

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=10, 2-3=18, 3-4=6, 5-7=-12
Horz: 1-2=-22, 2-3=-30, 3-4=30, 4-5=-18
Concentrated Loads (lb)
Vert: 3=-130

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=33, 2-3=40, 3-4=6, 5-7=-12
Horz: 1-2=-45, 2-3=-52, 3-4=30, 4-5=25
Concentrated Loads (lb)
Vert: 3=-130

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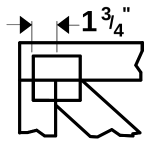
LOAD CASE(S)

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=10, 2-3=18, 3-4=6, 5-7=-12
Horz: 1-2=-22, 2-3=-30, 3-4=30, 4-5=-18
Concentrated Loads (lb)
Vert: 3=-130
16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=25, 2-3=17, 3-4=-17, 5-7=-20
Horz: 1-2=-45, 2-3=-37, 3-4=15, 4-5=10
Concentrated Loads (lb)
Vert: 3=-130
17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=2, 2-3=-5, 3-4=-17, 5-7=-20
Horz: 1-2=-22, 2-3=-15, 3-4=15, 4-5=-33
Concentrated Loads (lb)
Vert: 3=-130
18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-40, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-130
19) 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=-17, 2-3=-22, 3-4=-65, 5-7=-20
Horz: 1-2=-33, 2-3=-28, 3-4=28, 4-5=9
Concentrated Loads (lb)
Vert: 4=-15 3=-130
20) 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=-30, 2-3=-36, 3-4=-65, 5-7=-20
Horz: 1-2=-20, 2-3=-14, 3-4=28, 4-5=-27
Concentrated Loads (lb)
Vert: 4=-15 3=-130
21) 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=-17, 2-3=-22, 3-4=-82, 5-7=-20
Horz: 1-2=-33, 2-3=-28, 3-4=11, 4-5=8
Concentrated Loads (lb)
Vert: 4=-15 3=-130
22) 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=-33, 2-3=-39, 3-4=-82, 5-7=-20
Horz: 1-2=-17, 2-3=-11, 3-4=11, 4-5=-25
Concentrated Loads (lb)
Vert: 4=-15 3=-130
23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-80, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-150
24) 2nd Dead + Roof Live (unbalanced): 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=-150
25) 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=-99, 5-7=-20
Concentrated Loads (lb)
Vert: 4=-15 3=-130
26) 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=-99, 5-7=-20
Concentrated Loads (lb)
Vert: 4=-15 3=-130

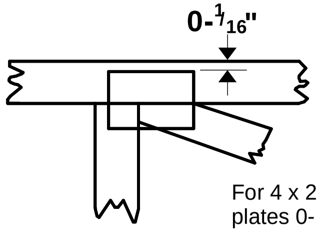
ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$" from outside edge of truss.

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

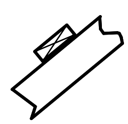
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

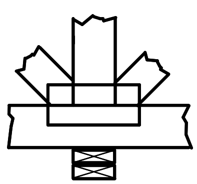
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



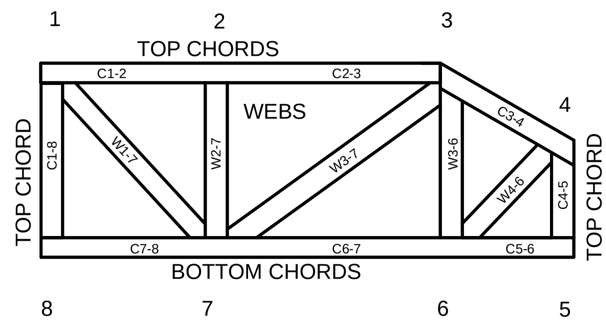
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

6-4-8 **dimensions shown in ft-in-sixteenths**
(Drawings not to scale)



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.