ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 2100217-2100217A
Chelsea Roof

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I44904581 thru I44904607

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

North Carolina COA: C-0844

February 22,2021

Sevier, Scott

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

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof	I44904581
2100217-2100217A	A	Common	3	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:25:31 2021 Page 1
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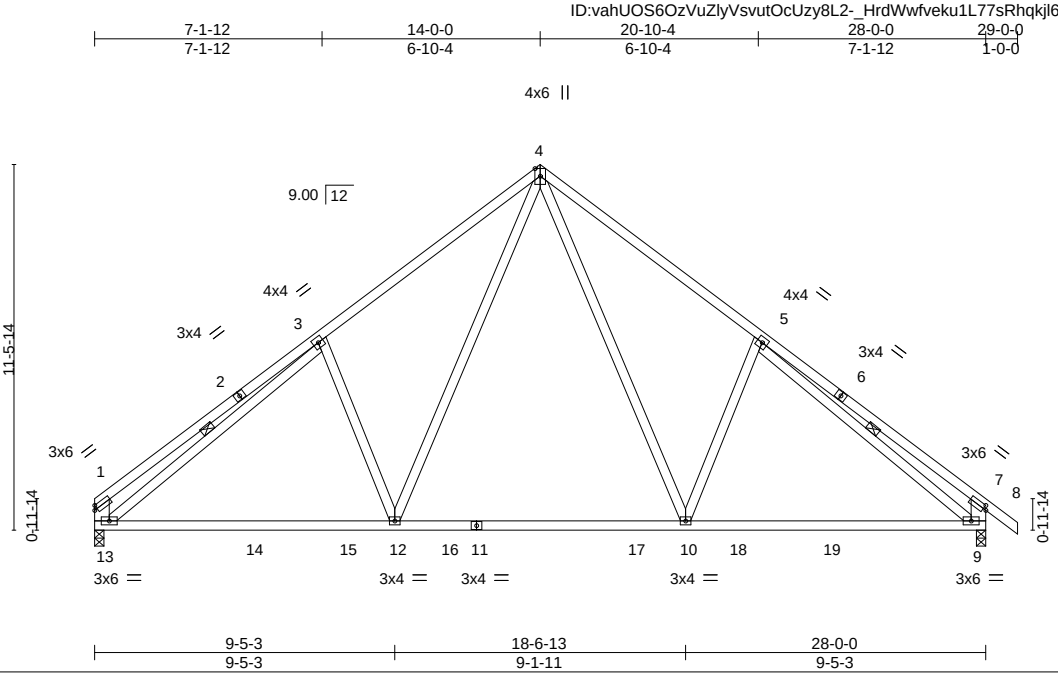

Plate Offsets (X,Y)-- [7:0-1-2,0-1-8]

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	0.66	Vert(LL)	-0.24	10-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.33	10-12	>990	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 178 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3 *Except*
1-13,7-9: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-13, 5-9

REACTIONS. (size) 13=0-3-8, 9=0-3-8
Max Horz 13=-349(LC 8)
Max Uplift 13=-177(LC 12), 9=-210(LC 13)
Max Grav 13=1183(LC 19), 9=1256(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-511/239, 3-4=-1377/503, 4-5=-1370/500, 5-7=-631/341, 1-13=-441/216, 7-9=-593/327
BOT CHORD 12-13=-241/1291, 10-12=-2/870, 9-10=-125/1103
WEBS 4-10=-246/735, 5-10=-406/370, 4-12=-250/745, 3-12=-415/375, 3-13=-1120/156, 5-9=-1057/63

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13 and 9. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	A1	Common	1	1	I44904582
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:25:34 2021 Page 1
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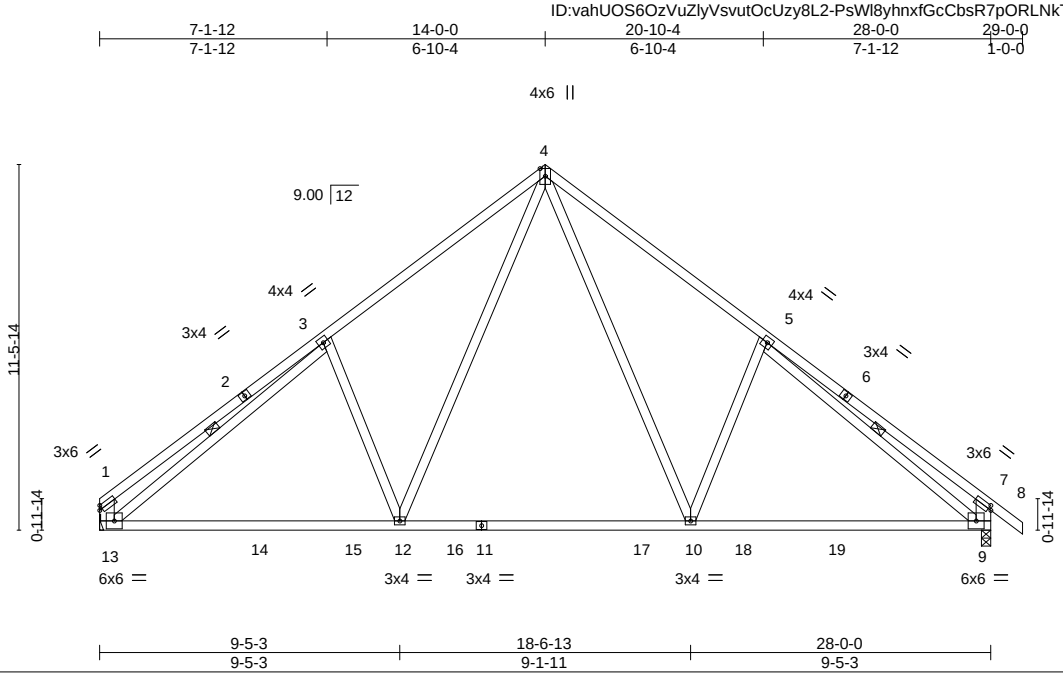

Plate Offsets (X,Y)-- [7:0-1-2,0-1-8]

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	0.66	Vert(LL)	-0.24	10-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.33	10-12	>990	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 178 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3 *Except*
1-13,7-9: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-13, 5-9

REACTIONS. (size) 13=Mechanical, 9=0-3-8
Max Horz 13=-349(LC 8)
Max Uplift 13=-177(LC 12), 9=-210(LC 13)
Max Grav 13=1183(LC 19), 9=1256(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-511/239, 3-4=-1377/503, 4-5=-1370/500, 5-7=-631/341, 1-13=-441/216, 7-9=-593/327
BOT CHORD 12-13=-241/1291, 10-12=-2/870, 9-10=-125/1103
WEBS 4-10=-246/735, 5-10=-406/370, 4-12=-250/745, 3-12=-415/375, 3-13=-1120/156, 5-9=-1057/63

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 13.
7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	A2	Common	4	1	I44904583
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:25:43 2021 Page 1
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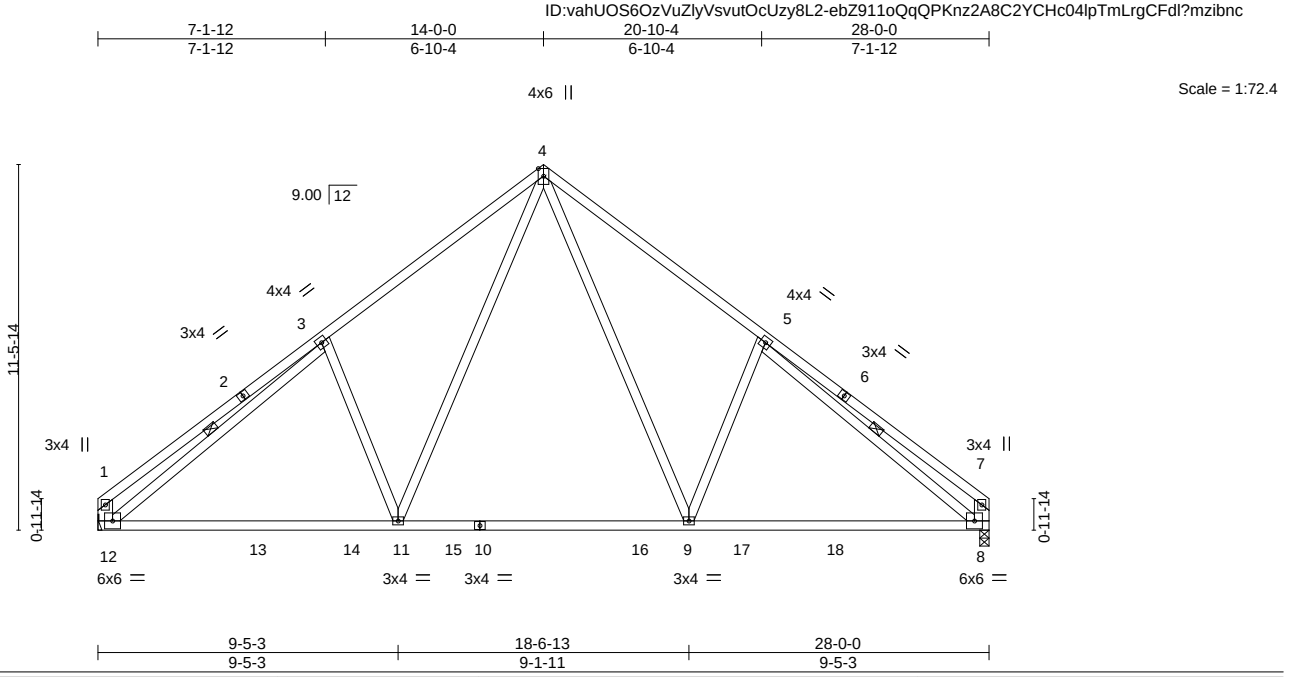

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.24	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.33	9-11	>987	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 176 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3 *Except*
1-12,7-8: 2x6 SP No.2

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

REACTIONS. (size) 12=Mechanical, 8=0-3-8
Max Horz 12=-331(LC 8)
Max Uplift 12=-177(LC 12), 8=-177(LC 13)
Max Grav 12=1184(LC 19), 8=1184(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-511/239, 3-4=-1379/504, 4-5=-1379/504, 5-7=-510/239, 1-12=-441/215, 7-8=-441/215
BOT CHORD 11-12=-258/1280, 9-11=-20/858, 8-9=-190/1097
WEBS 4-9=-251/745, 5-9=-416/376, 4-11=-251/745, 3-11=-416/376, 3-12=-1123/157, 5-8=-1123/157

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 12.
7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	A3	ROOF TRUSS	5	1	I44904584
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:25:46 2021 Page 1
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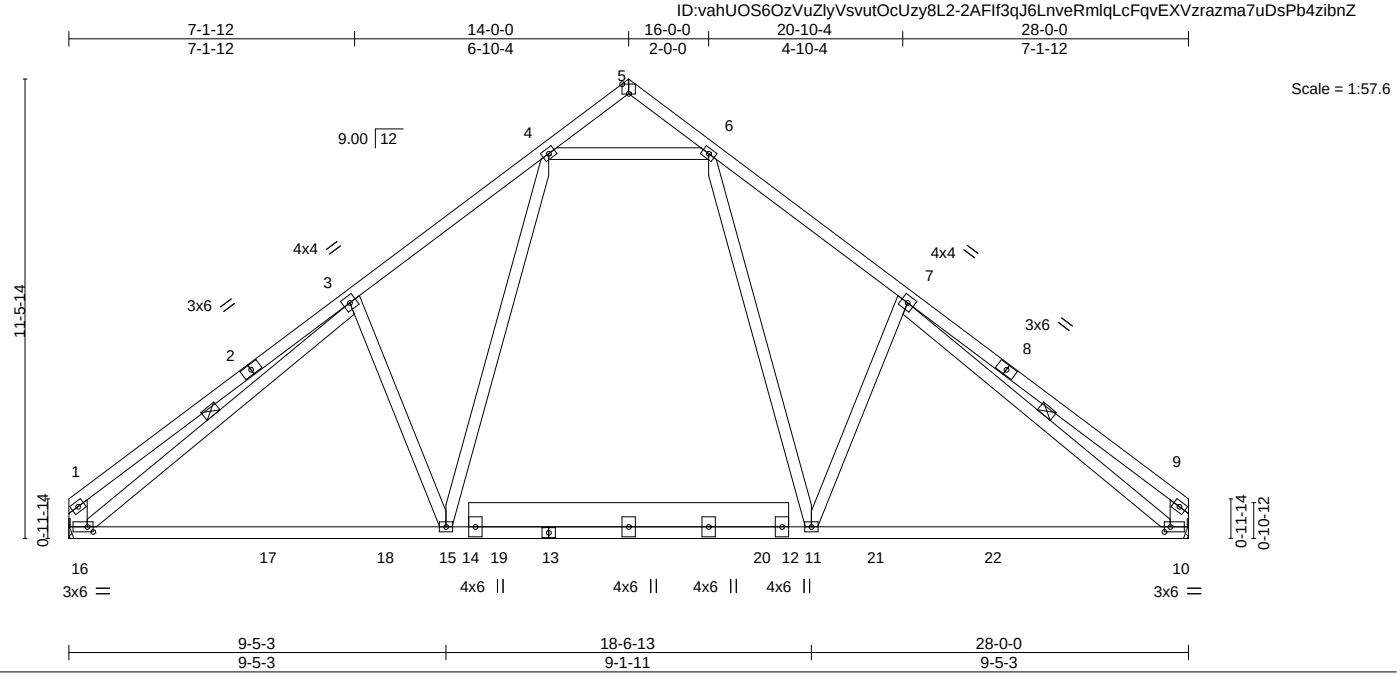

Plate Offsets (X,Y)-- [5:0-2-0,Edge], [10:0-1-12,0-1-8], [16:0-1-12,0-1-8]

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	0.58	Vert(LL)	0.26	15-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.40	15-16	>820	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 201 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*
12-14: 2x8 SP No.2
WEBS 2x4 SP No.3 *Except*
1-16,9-10: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-16, 7-10

REACTIONS. (size) 16=Mechanical, 10=Mechanical
Max Horz 16=-331(LC 10)
Max Uplift 16=-177(LC 12), 10=-177(LC 13)
Max Grav 16=1194(LC 20), 10=1194(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-577/268, 3-4=-1364/470, 6-7=-1364/470, 7-9=-577/268, 1-16=-482/240, 9-10=-482/240
BOT CHORD 15-16=-245/1271, 11-15=-53/963, 10-11=-180/1098
WEBS 6-11=-207/676, 7-11=-353/365, 4-15=-206/676, 3-15=-353/365, 3-16=-1103/121, 7-10=-1103/121, 4-6=-900/413

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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 3x4 MT20 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, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 16 and 177 lb uplift at joint 10.
8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

February 22,2021

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	A4	Common	4	1	I44904585
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:25:50 2021 Page 1
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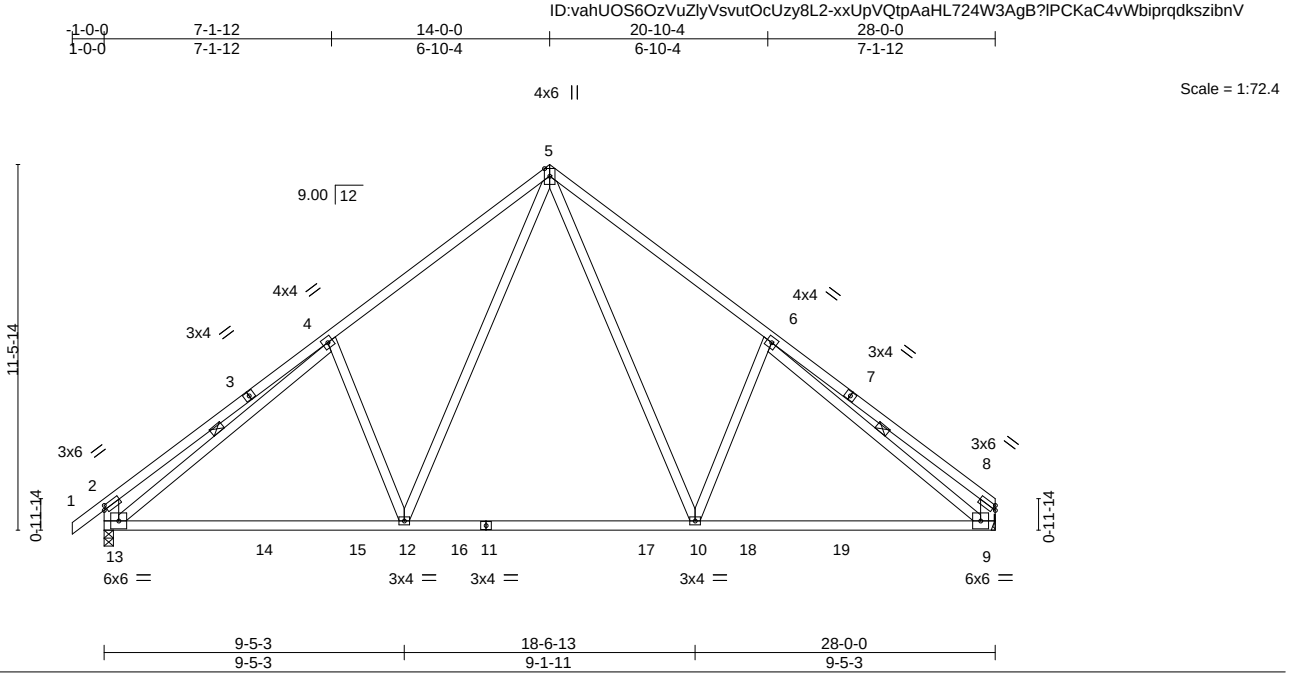

Plate Offsets (X,Y)-- [2:0-1-2,0-1-8]

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	0.66	Vert(LL)	-0.24	10-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.33	10-12	>990	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 178 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3 *Except*
2-13,8-9: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-13, 6-9

REACTIONS. (size) 13=0-3-8, 9=Mechanical
Max Horz 13=349(LC 9)
Max Uplift 13=-210(LC 12), 9=-177(LC 13)
Max Grav 13=1256(LC 19), 9=1183(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-630/341, 4-5=-1370/500, 5-6=-1377/503, 6-8=-511/239, 2-13=-593/327, 8-9=-441/216
BOT CHORD 12-13=-254/1270, 10-12=-20/856, 9-10=-190/1095
WEBS 5-10=-250/745, 6-10=-415/375, 5-12=-246/735, 4-12=-406/370, 4-13=-1057/63, 6-9=-1120/156

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 9.
7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	A4A	ROOF TRUSS	2	1	I44904586
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:25:56 2021 Page 1
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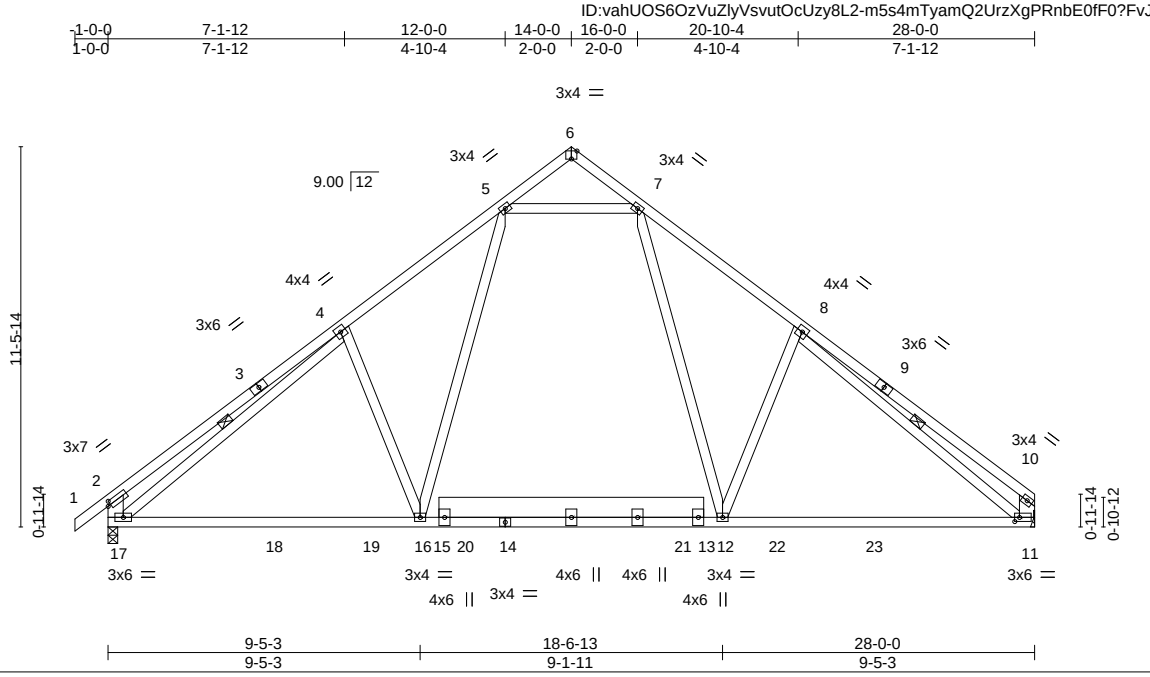

Plate Offsets (X,Y)-- [2:0-1-2,0-1-8], [6:0-2-0,Edge], [11:0-1-12,0-1-8]

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	0.58	Vert(LL)	0.27	16-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.41	16-17	>815	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.04	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 203 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*
13-15: 2x8 SP No.2
WEBS 2x4 SP No.3 *Except*
2-17,10-11: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-17, 8-11

REACTIONS. (size) 17=0-3-8, 11=Mechanical
Max Horz 17=349(LC 9)
Max Uplift 17=-210(LC 12), 11=-177(LC 13)
Max Grav 17=1266(LC 20), 11=1193(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-704/391, 4-5=-1353/464, 7-8=-1363/469, 8-10=-577/268, 2-17=-650/367, 10-11=-482/240
BOT CHORD 16-17=-240/1259, 12-16=-53/962, 11-12=-180/1096
WEBS 7-12=-206/676, 8-12=-352/364, 5-16=-199/661, 4-16=-338/356, 4-17=-1009/36, 8-11=-1101/121, 5-7=-907/418

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 11.
7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

February 22,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	A4E	Common Supported Gable	1	1	I44904587
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:25:59 2021 Page 1
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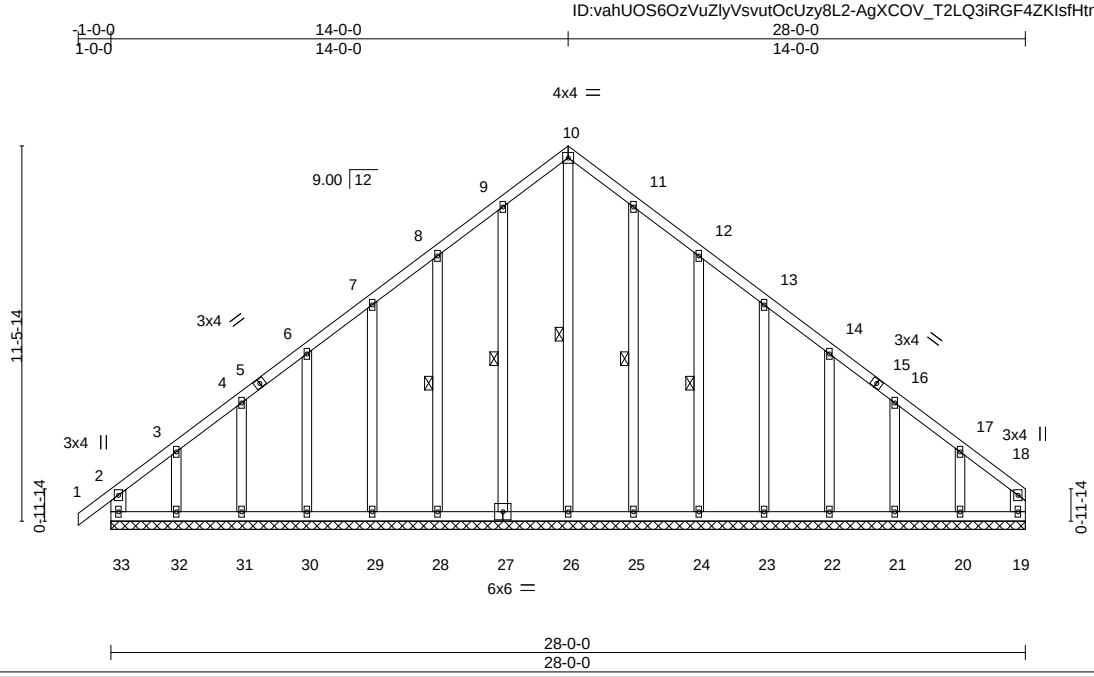

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.00	1	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	19	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 217 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x6 SP No.2
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.
WEBS	1 Row at midpt 10-26, 9-27, 8-28, 11-25, 12-24

REACTIONS. All bearings 28-0-0.
(lb) - Max Horz 33=349(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 27, 29, 30, 31, 25, 23, 22, 21 except 33=-187(LC 8), 19=-113(LC 11), 28=-100(LC 12), 32=-226(LC 12), 24=-102(LC 13), 20=-207(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 19, 27, 28, 29, 30, 31, 25, 24, 23, 22, 21 except 33=294(LC 20), 26=367(LC 13), 32=257(LC 10), 20=252(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-288/257, 7-8=-218/264, 8-9=-289/324, 9-10=-345/391, 10-11=-345/391, 11-12=-289/324
WEBS 10-26=-383/278

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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.

February 22,2021

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

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	AE	Common Supported Gable	1	1	I44904588
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:26:05 2021 Page 1
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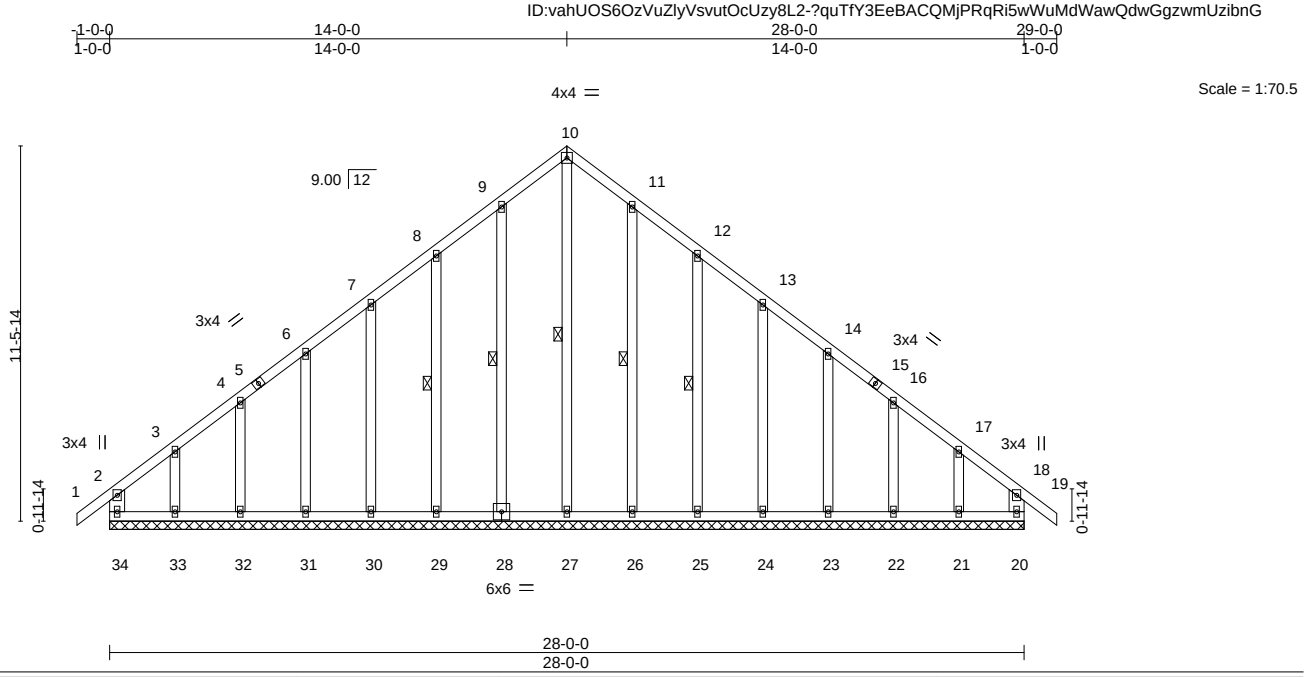

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.00	19	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	19	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 219 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 10-27, 9-28, 8-29, 11-26, 12-25

REACTIONS. All bearings 28-0-0.
(lb) - Max Horz 34=-358(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 28, 30, 31, 32, 26, 24, 23, 22 except 34=-177(LC 8), 20=-114(LC 9), 29=-101(LC 12), 33=-224(LC 12), 25=-101(LC 13), 21=-205(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 20, 28, 29, 30, 31, 32, 26, 25, 24, 23, 22, 21 except 34=275(LC 20), 27=359(LC 13), 33=254(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-274/251, 7-8=-210/257, 8-9=-281/321, 9-10=-337/388, 10-11=-337/388, 11-12=-281/321
WEBS 10-27=-380/269

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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.

February 22,2021

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

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	B	Common	2	1	I44904589
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:26:15 2021 Page 1
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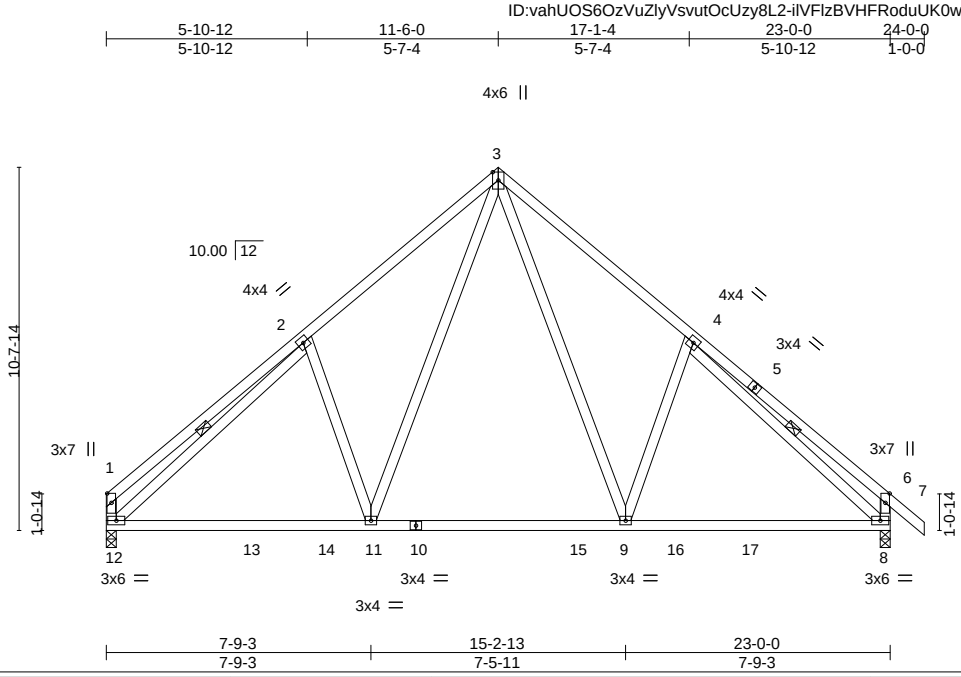

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.11	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.17	8-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 154 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-12, 4-8

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=-326(LC 8)
Max Uplift 12=-137(LC 12), 8=-167(LC 13)
Max Grav 12=956(LC 19), 8=1023(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-380/210, 2-3=-1053/436, 3-4=-1045/434, 4-6=-461/278, 1-12=-358/191, 6-8=-474/282
BOT CHORD 11-12=-180/967, 9-11=-15/659, 8-9=-67/813
WEBS 3-9=-235/589, 4-9=-349/337, 3-11=-238/601, 2-11=-357/340, 2-12=-903/110, 4-8=-873/50

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 8. This connection is for uplift only and does not consider lateral forces.

February 22,2021

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	B1E	Common Supported Gable	1	1	I44904590

Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:26:22 2021 Page 1

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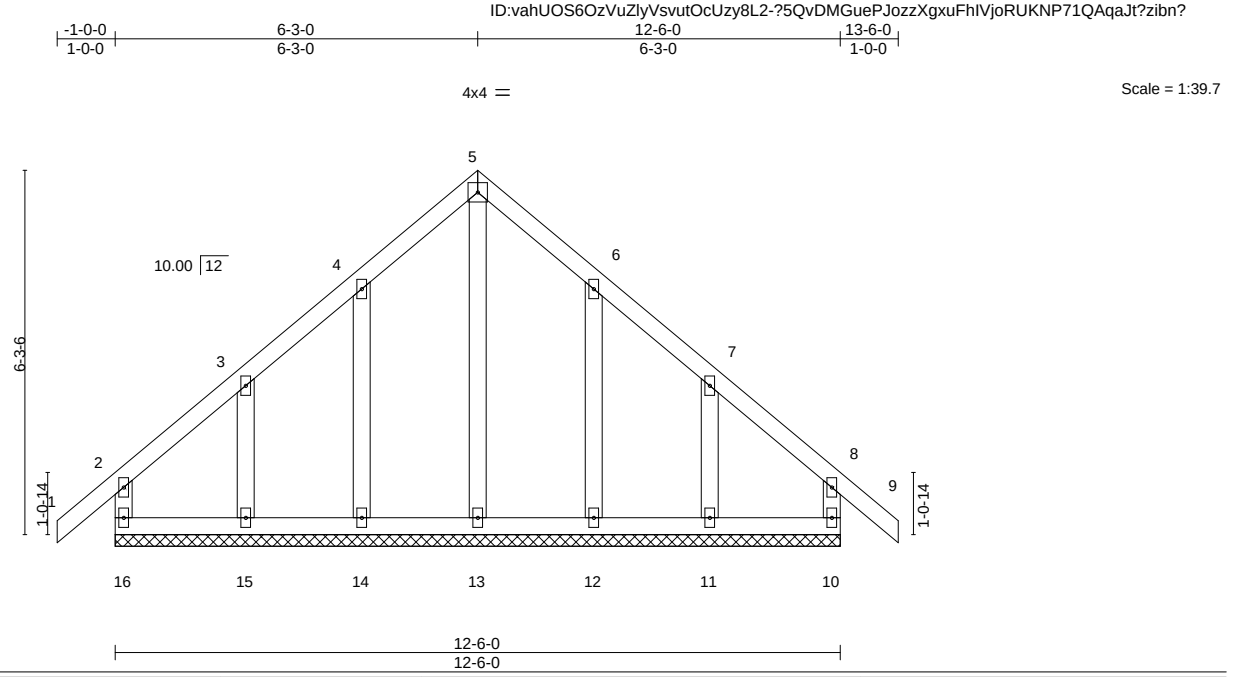

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	9	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	9	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 77 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 12-6-0.

(lb) - Max Horz 16=209(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 12 except 15=-154(LC 12), 11=-151(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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.

February 22,2021

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	BE	GABLE	1	1	I44904591
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:26:27 2021 Page 1
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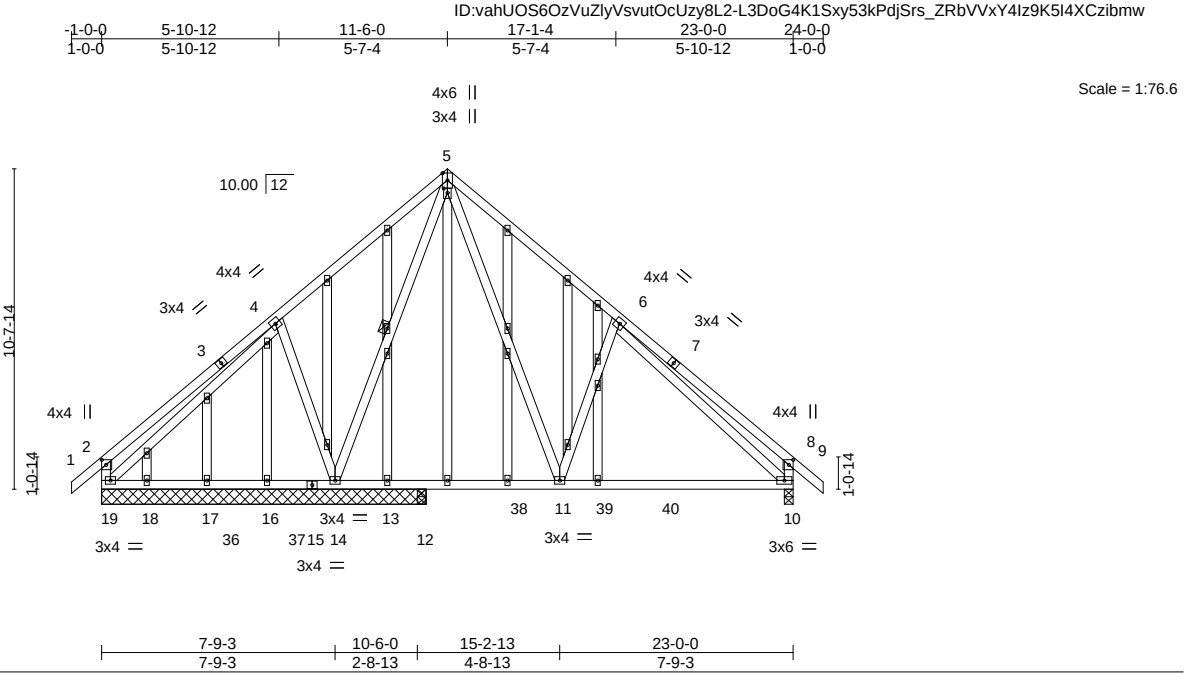

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [5:0-1-12,0-1-8], [8:0-2-0,0-1-12]

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	0.43	Vert(LL)	-0.09	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.18	10-11	>825	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 235 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-14

REACTIONS. All bearings 10-9-8 except (jt=length) 10=0-3-8, 12=0-3-8.
(lb) - Max Horz 19=-335(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 13, 18 except 14=-257(LC 12), 19=-109(LC 13), 10=-149(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 13, 16, 17, 18, 12 except 14=780(LC 19), 19=345(LC 1), 10=704(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-304/276, 4-5=-263/256, 5-6=-627/349, 6-8=-432/269, 2-19=-369/281, 8-10=-454/275
BOT CHORD 18-19=-150/253, 17-18=-150/253, 16-17=-150/253, 14-16=-150/253, 13-14=-57/264, 12-13=-57/264, 11-12=-57/264, 10-11=-2/431
WEBS 5-11=-243/577, 6-11=-389/339, 5-14=-463/15, 4-14=-417/354, 6-10=-362/1

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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 studs spaced at 2-0-0 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.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	BGR	Common Girder	1	2	I44904592

Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:26:42 2021 Page 1
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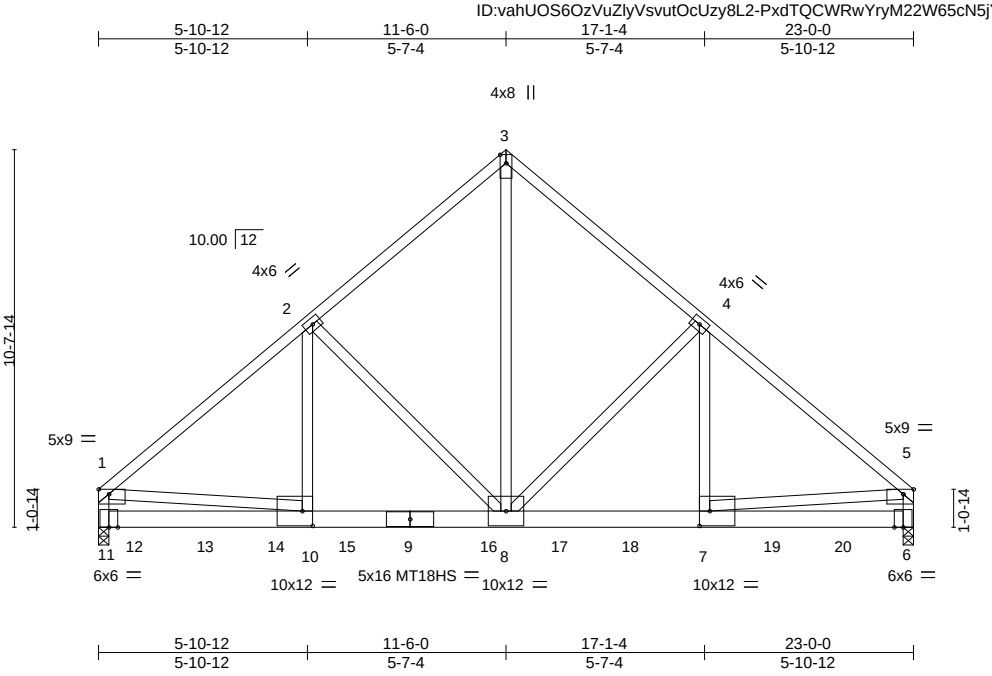

Plate Offsets (X,Y)-- [1:Edge,0-1-10], [5:0-3-8,Edge], [7:0-3-8,0-5-0], [10:0-3-8,0-5-0]

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	0.98	Vert(LL)	-0.12	8-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.23	8-10	>999	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 338 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
3-8: 2x4 SP No.2 or 2x4 SPF No.2, 1-11,5-6: 2x4 SP No.1

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

REACTIONS. (size) 11=0-3-8 (req. 0-5-12), 6=0-3-8 (req. 0-5-4)
Max Horz 11=304(LC 34)
Max Uplift 11=-1227(LC 12), 6=-1126(LC 13)
Max Grav 11=7311(LC 2), 6=6668(LC 2)

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-7700/1408, 2-3=-5448/1142, 3-4=-5448/1142, 4-5=-7620/1398, 1-11=-5632/1056, 5-6=-5583/1051
BOT CHORD 10-11=-492/1438, 8-10=-1055/5840, 7-8=-979/5778, 6-7=-282/1216
WEBS 3-8=-1287/6578, 4-8=-2356/618, 4-7=-438/2785, 2-8=-2443/628, 2-10=-451/2898, 1-10=-700/4583, 5-7=-710/4604

NOTES-
1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 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=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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
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) 11, 6 greater than input bearing size.
9) Bearing at joint(s) 11, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

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Continued on page 2

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NOTES-

10) H10A-2 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.
11) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1133 lb down and 195 lb up at 0-11-4, 1131 lb down and 197 lb up at 2-11-4, 1131 lb down and 197 lb up at 4-11-4, 1131 lb down and 197 lb up at 6-11-4, 1131 lb down and 197 lb up at 8-11-4, 1129 lb down and 197 lb up at 10-11-4, 1129 lb down and 197 lb up at 12-11-4, 1119 lb down and 197 lb up at 14-11-4, 1119 lb down and 197 lb up at 16-11-4, and 1119 lb down and 197 lb up at 18-11-4, and 1119 lb down and 197 lb up at 20-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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, 6-11=-20
   Concentrated Loads (lb)
   Vert: 9=-1082(B) 7=-1080(B) 12=-1084(B) 13=-1082(B) 14=-1082(B) 15=-1082(B) 16=-1080(B) 17=-1080(B) 18=-1080(B) 19=-1080(B) 20=-1080(B)

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	C	Common	2	1	I44904593
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:26:50 2021 Page 1
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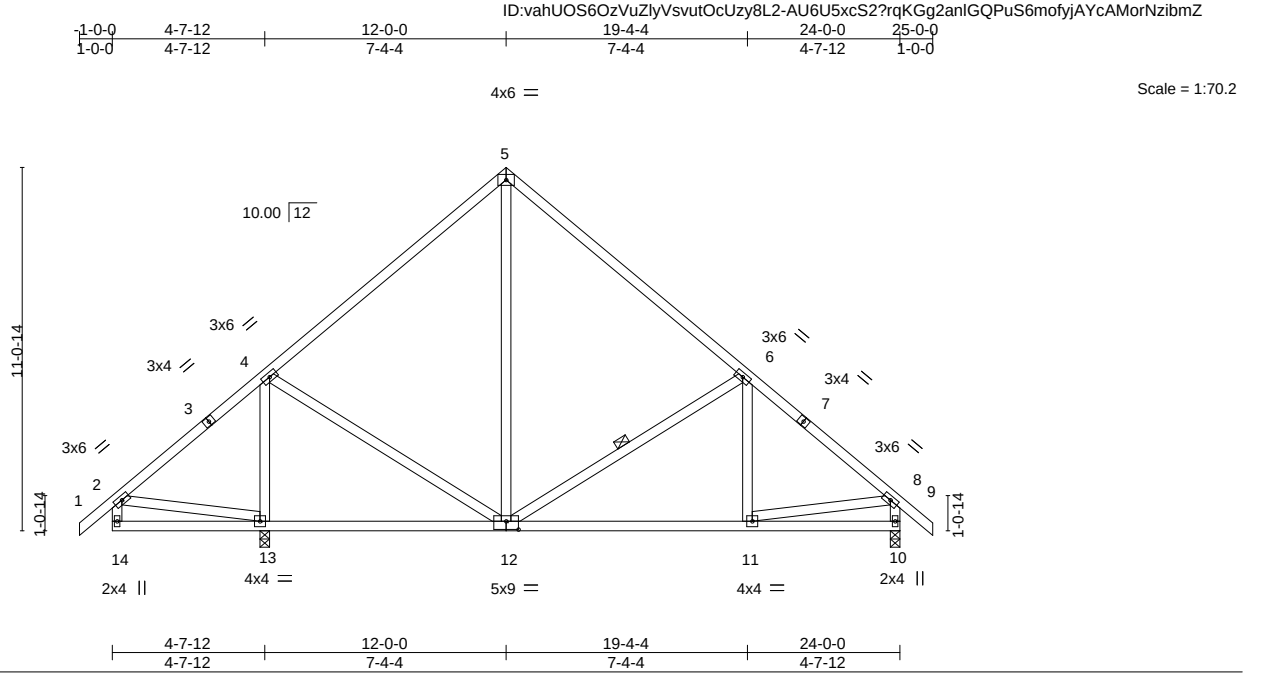

Plate Offsets (X,Y)-- [12:0-4-8,0-3-0]

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	0.66	Vert(LL)	-0.05	11-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.11	11-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 155 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-12

REACTIONS. (size) 13=0-3-8, 10=0-3-8
Max Horz 13=347(LC 11)
Max Uplift 13=-214(LC 12), 10=-144(LC 13)
Max Grav 13=1255(LC 1), 10=779(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-103/351, 4-5=-542/247, 5-6=-541/247, 6-8=-807/212, 8-10=-744/240
BOT CHORD 12-13=-360/287, 11-12=-50/576
WEBS 6-12=-475/302, 4-12=-15/567, 4-13=-1090/394, 8-11=-80/568

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13 and 10. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof	I44904594
2100217-2100217A	CE	GABLE	1	1	Job Reference (optional)	

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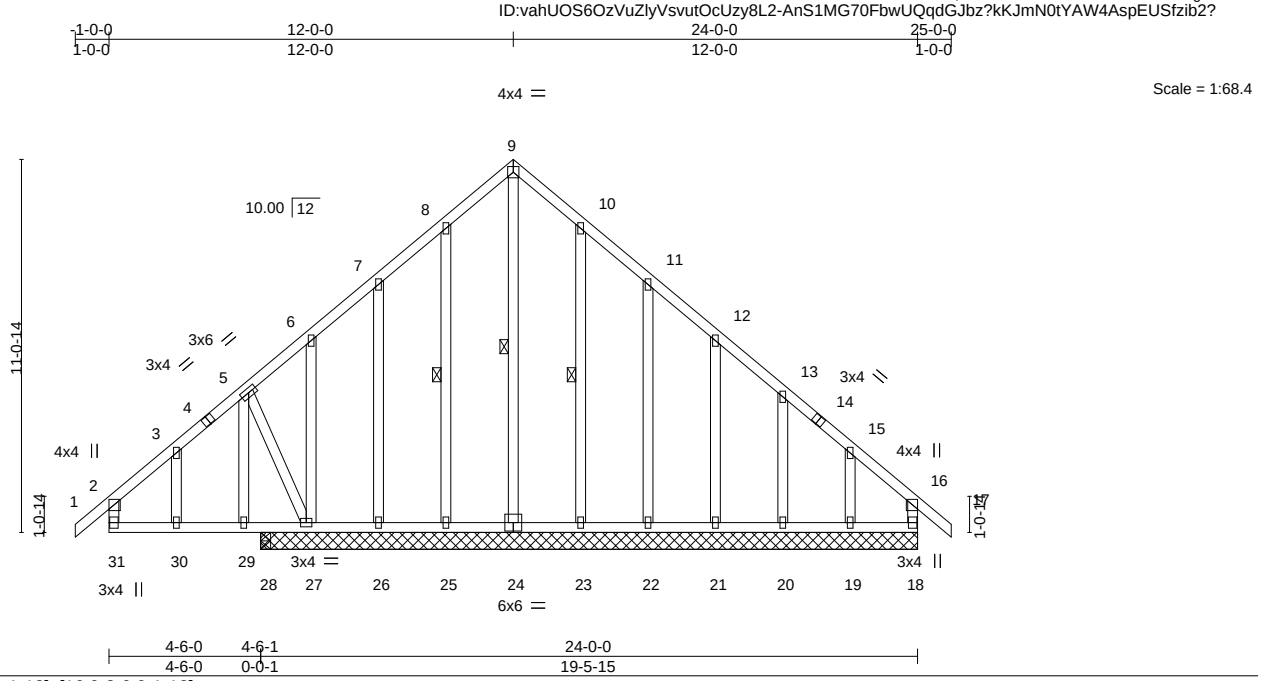

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [16:0-2-0,0-1-12]

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	0.45	Vert(LL)	0.00	18-19	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	0.00	27-28	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	18	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 193 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 9-24, 8-25, 10-23

REACTIONS. All bearings 19-6-0 except (jt=length) 28=0-3-8.

(lb) - Max Horz 27=347(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 25, 23, 20 except 18=-264(LC 20), 26=-117(LC 12), 27=-352(LC 9), 22=-109(LC 13), 21=-111(LC 13), 19=-261(LC 13), 28=-185(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 18, 25, 26, 23, 22, 21, 20 except 24=485(LC 1), 27=316(LC 10), 19=382(LC 20), 28=561(LC 20)

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

TOP CHORD	2-3=-123/268, 3-4=-64/263, 4-5=-52/332, 5-6=-44/324, 6-7=-2/327, 7-8=-54/339, 8-9=-130/336, 9-10=-130/338, 10-11=-54/341, 11-12=-18/321, 12-13=-75/352, 13-14=-133/364, 14-15=-146/306, 15-16=-293/454, 16-18=-163/272
BOT CHORD	26-27=-319/250, 25-26=-319/250, 24-25=-319/250, 23-24=-319/250, 22-23=-319/250, 21-22=-319/250, 20-21=-319/250, 19-20=-319/250, 18-19=-319/250
WEBS	9-24=-442/40, 5-29=-289/206, 15-19=-272/207, 5-27=-285/280

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 23, 20 except (jt=lb) 18=264, 26=117, 27=352, 22=109, 21=111, 19=261, 28=185.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	CGR	Common Girder	1	2	I44904595
					Job Reference (optional)

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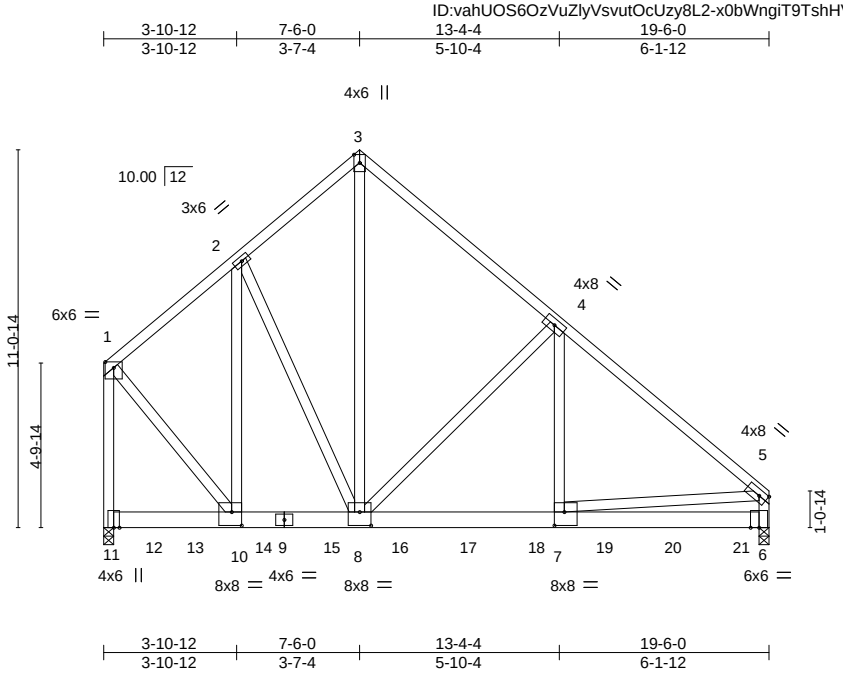

Plate Offsets (X,Y)-- [7:0-3-8,0-4-12], [8:0-4-0,0-4-12], [10:0-3-8,0-4-12]

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	0.78	Vert(LL)	-0.09	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.18	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 331 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
5-6: 2x4 SP No.1
OTHERS 2x4 SP No.3

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

REACTIONS. (size) 11=0-3-8, 6=0-3-8
Max Horz 11=-372(LC 8)
Max Uplift 11=-1099(LC 13), 6=-1044(LC 13)
Max Grav 11=6375(LC 2), 6=6230(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3277/711, 2-3=-3552/849, 3-4=-3619/823, 4-5=-6204/1138, 1-11=-5095/968, 5-6=-4507/856
BOT CHORD 10-11=-286/345, 8-10=-503/2465, 7-8=-778/4692, 6-7=-287/1241
WEBS 2-10=-875/254, 2-8=-226/619, 3-8=-916/4255, 4-8=-2797/697, 4-7=-492/3333, 1-10=-693/3811, 5-7=-510/3480

NOTES-
1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 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=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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
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) 11, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11 and 6. This connection is for uplift only and does not consider lateral forces.

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NOTES-

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1124 lb down and 192 lb up at 0-7-4, 1120 lb down and 197 lb up at 2-7-4, 1120 lb down and 197 lb up at 4-7-4, 1120 lb down and 197 lb up at 6-7-4, 1120 lb down and 197 lb up at 8-7-4, 1131 lb down and 197 lb up at 10-7-4, 1131 lb down and 197 lb up at 12-7-4, 1131 lb down and 197 lb up at 14-7-4, and 1131 lb down and 197 lb up at 16-7-4, and 1133 lb down and 194 lb up at 18-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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, 6-11=-20
   Concentrated Loads (lb)
   Vert: 12=-1085(F) 13=-1082(F) 14=-1082(F) 15=-1082(F) 16=-1082(F) 17=-1082(F) 18=-1082(F) 19=-1082(F) 20=-1082(F) 21=-1084(F)

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	M1	GABLE	1	1	I44904596
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:27:03 2021 Page 1
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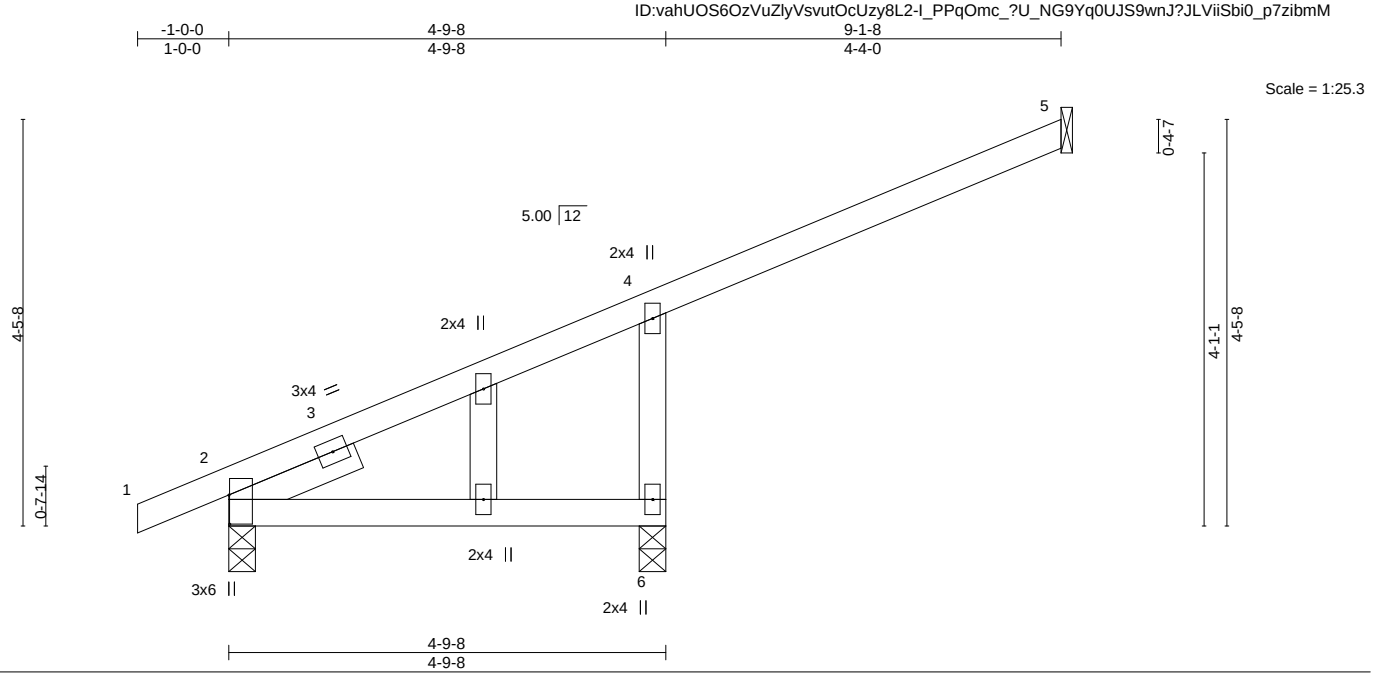

Plate Offsets (X,Y)-- [2:0-3-13,0-0-2]

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	0.31	Vert(LL)	-0.02	6-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.04	6-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							Weight: 31 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -t 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 6=0-3-8, 2=0-3-8
Max Horz 2=164(LC 9)
Max Uplift 5=-69(LC 12), 6=-195(LC 12), 2=-12(LC 8)
Max Grav 5=100(LC 1), 6=375(LC 1), 2=221(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-6=-327/378

NOTES-
1) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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 studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	M2	Monopitch	3	1	I44904597
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:27:04 2021 Page 1
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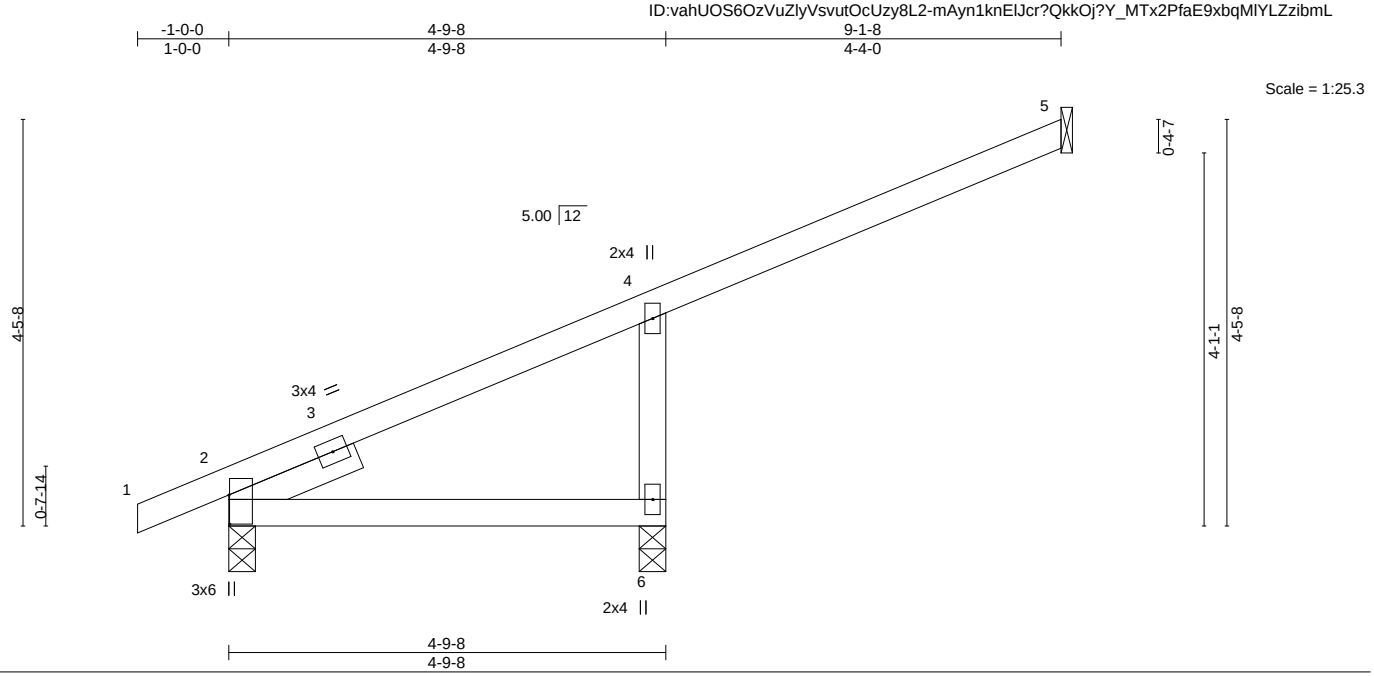

Plate Offsets (X,Y)-- [2:0-3-13,0-0-2]

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	0.31	Vert(LL)	-0.02	6-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.04	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							Weight: 29 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -t 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 6=0-3-8, 2=0-3-8
Max Horz 2=164(LC 9)
Max Uplift 5=-69(LC 12), 6=-195(LC 12), 2=-12(LC 8)
Max Grav 5=100(LC 1), 6=375(LC 1), 2=221(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-6=-327/378

NOTES-
1) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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) 5.
6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	V1	Valley	1	1	I44904598
					Job Reference (optional)

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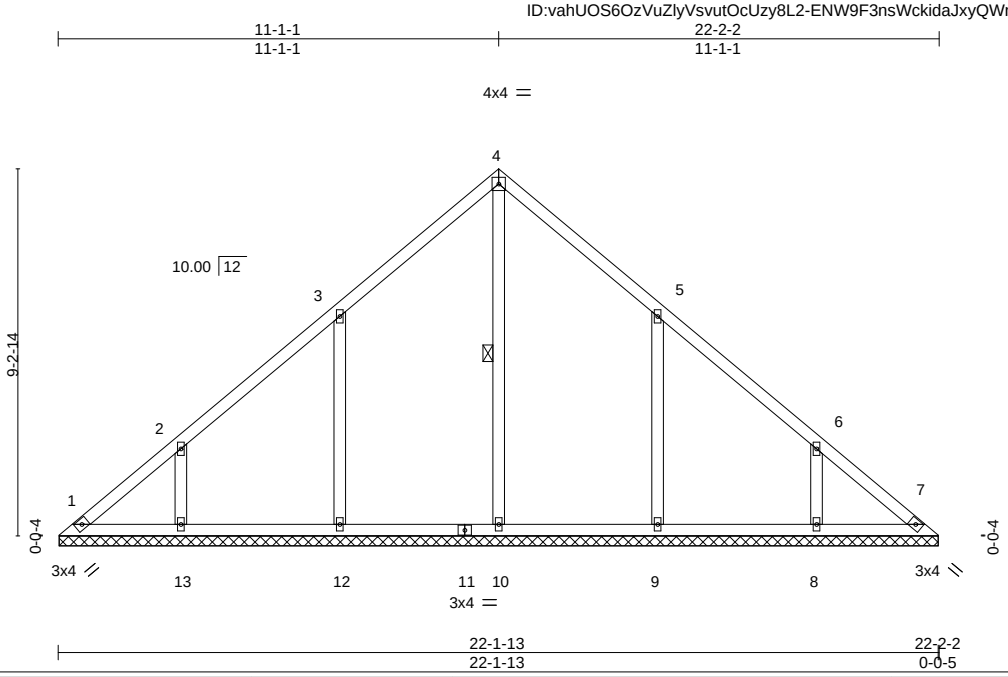

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 109 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-10

REACTIONS. All bearings 22-1-8.
(lb) - Max Horz 1=255(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-230(LC 12), 13=-188(LC 12), 9=-230(LC 13), 8=-188(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=415(LC 22), 12=449(LC 19), 13=321(LC 19), 9=449(LC 20), 8=322(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-271/203
WEBS 3-12=-342/280, 2-13=-286/227, 5-9=-342/279, 6-8=-286/228

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

February 22,2021

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

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	V2	Valley	1	1	I44904599
					Job Reference (optional)

84 Components, Dunn, NC 28334

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 22 12:18:14 2021 Page 1
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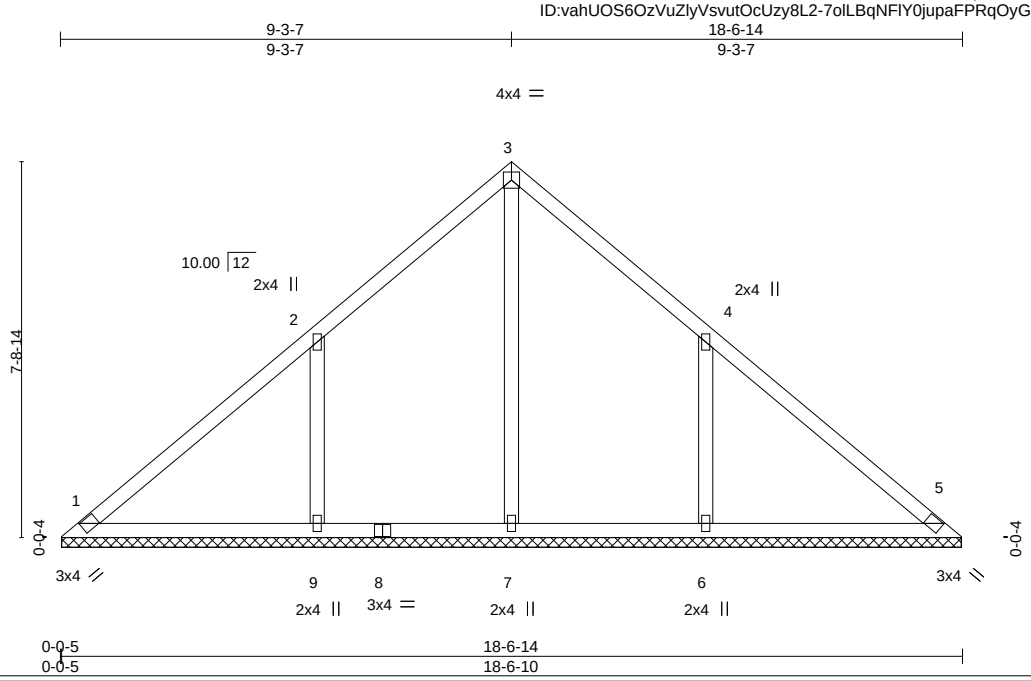

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 84 lb	FT = 20%

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

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

REACTIONS. All bearings 18-6-5.
(lb) - Max Horz 1=-212(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-286(LC 12), 6=-286(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=370(LC 22), 9=546(LC 19), 6=546(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-417/333, 4-6=-417/333

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=286, 6=286.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 22,2021

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	V3	Valley	1	1	I44904600
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:27:11 2021 Page 1
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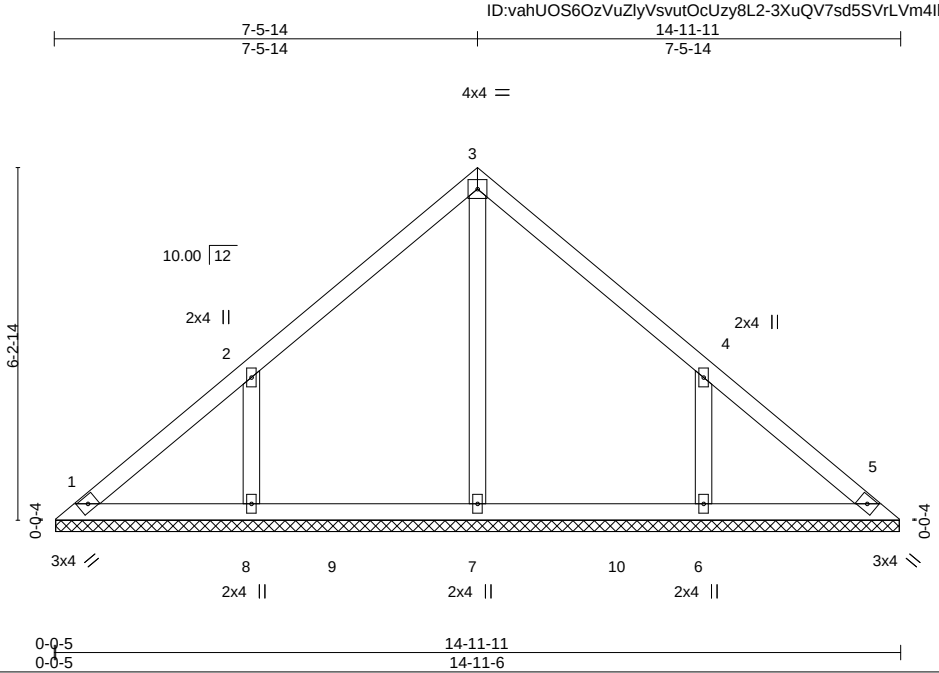

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 65 lb	FT = 20%

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

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

REACTIONS. All bearings 14-11-2.
(lb) - Max Horz 1=-169(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-225(LC 12), 6=-225(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=352(LC 19), 8=398(LC 19), 6=398(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-330/266, 4-6=-330/265

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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.

February 22,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	V4	Valley	1	1	I44904601
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:27:11 2021 Page 1
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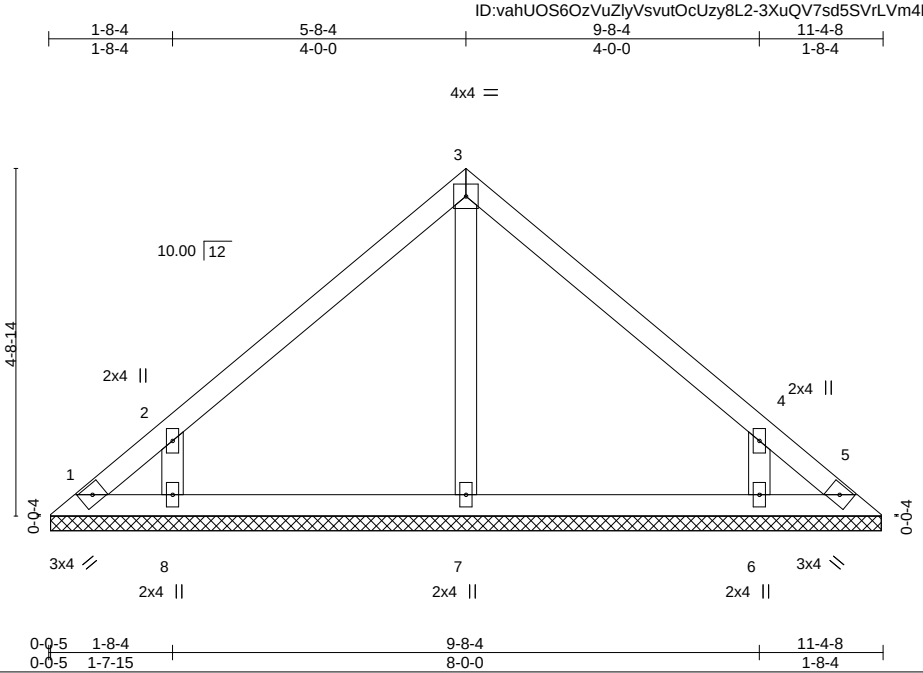

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 46 lb	FT = 20%

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

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

REACTIONS. All bearings 11-3-14.
(lb) - Max Horz 1=126(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-207(LC 12), 6=-207(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=339(LC 19), 6=338(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-313/255, 4-6=-313/255

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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.

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	V5	Valley	1	1	I44904602
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:27:12 2021 Page 1
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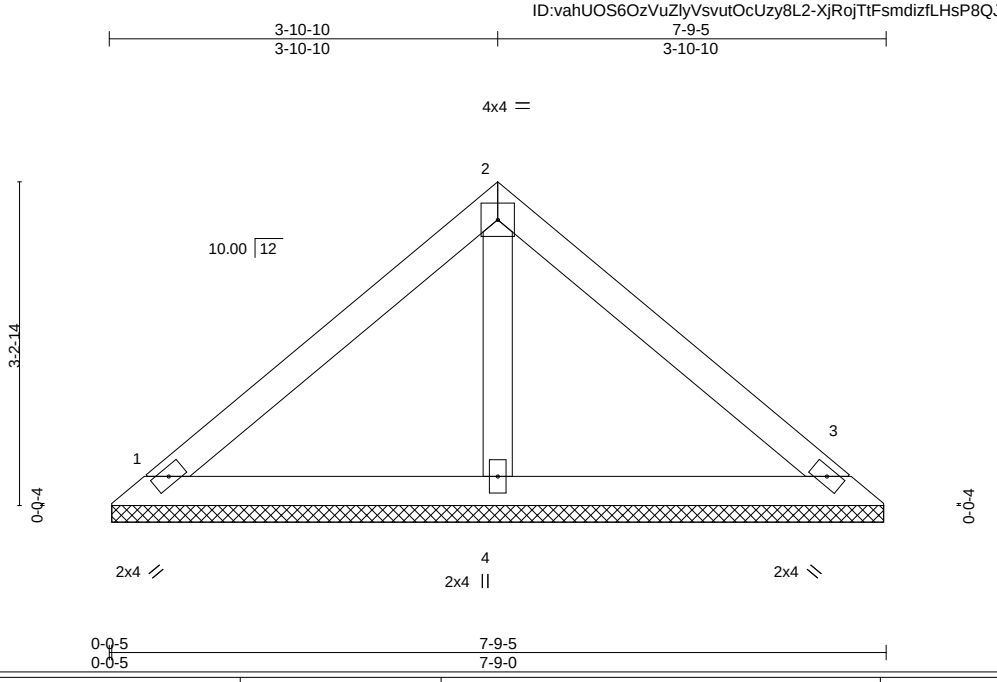

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%

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

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

REACTIONS. (size) 1=7-8-11, 3=7-8-11, 4=7-8-11
Max Horz 1=-83(LC 8)
Max Uplift 1=-45(LC 13), 3=-56(LC 13)
Max Grav 1=158(LC 1), 3=158(LC 1), 4=241(LC 1)

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=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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.
6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	V6	Valley	1	1	I44904603
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:27:13 2021 Page 1
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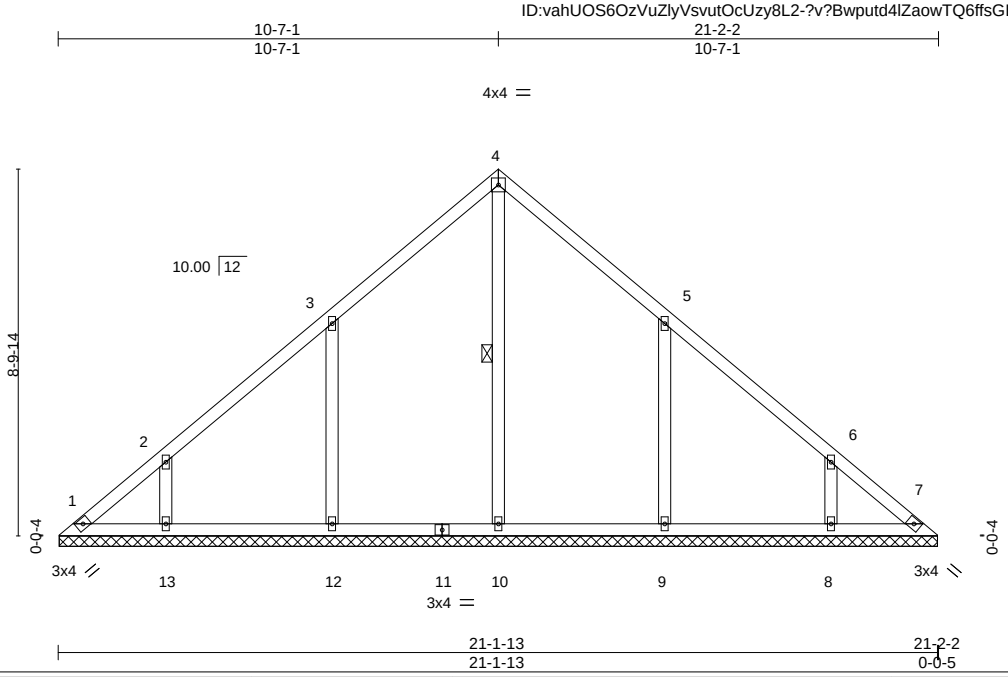

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 103 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-10

REACTIONS. All bearings 21-1-8.
(lb) - Max Horz 1=243(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-232(LC 12), 13=-176(LC 12), 9=-232(LC 13), 8=-176(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=407(LC 22), 12=453(LC 19), 13=299(LC 19), 9=453(LC 20), 8=300(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-267/196
WEBS 3-12=-345/282, 2-13=-270/215, 5-9=-345/282, 6-8=-270/216

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

February 22,2021

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Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	V7	Valley	1	1	I44904604
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:27:14 2021 Page 1
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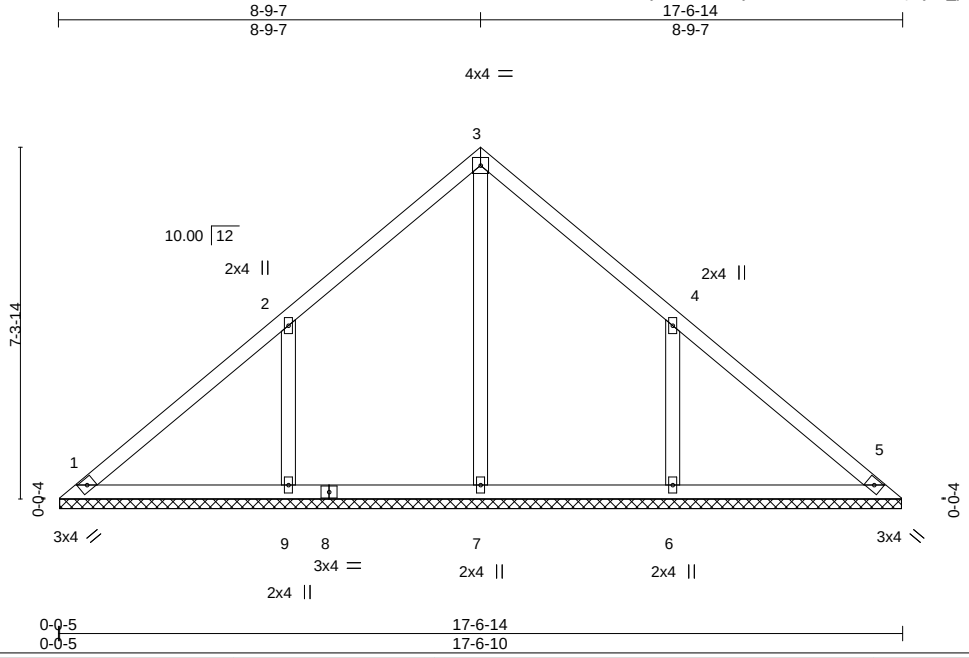

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 79 lb	FT = 20%

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

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

REACTIONS. All bearings 17-6-5.
(lb) - Max Horz 1=-200(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-267(LC 12), 6=-267(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=372(LC 22), 9=512(LC 19), 6=512(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-388/311, 4-6=-388/311

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 9, and 6. This connection is for uplift only and does not consider lateral forces.

February 22,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	V8	Valley	1	1	I44904605
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:27:15 2021 Page 1
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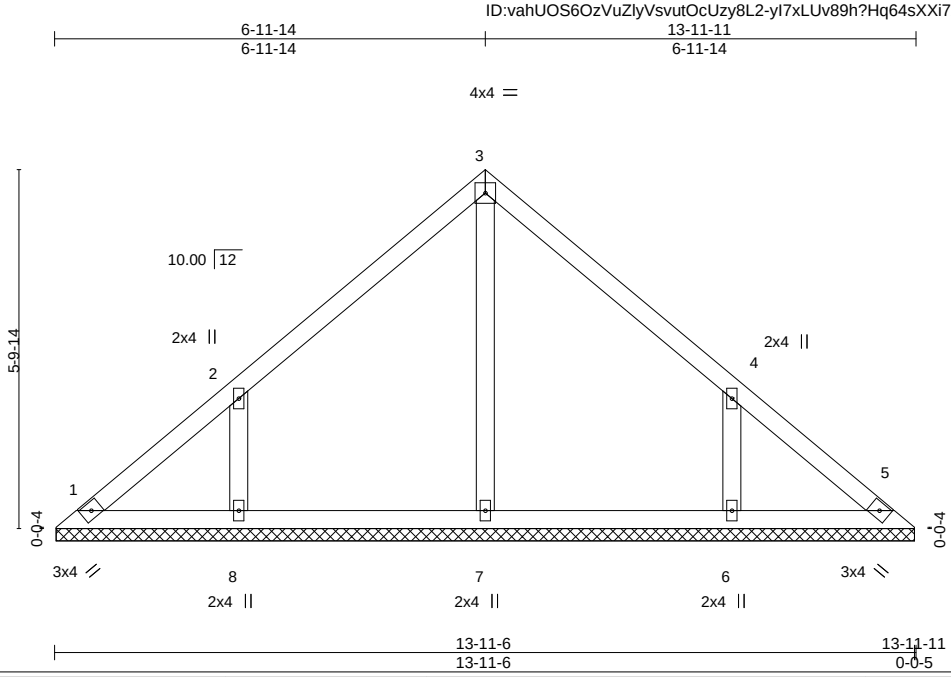

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 60 lb	FT = 20%

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

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

REACTIONS. All bearings 13-11-2.
(lb) - Max Horz 1=-157(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-213(LC 12), 6=-212(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=356(LC 19), 6=356(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-314/253, 4-6=-314/253

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	V9	Valley	1	1	I44904606
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Feb 22 11:27:16 2021 Page 1
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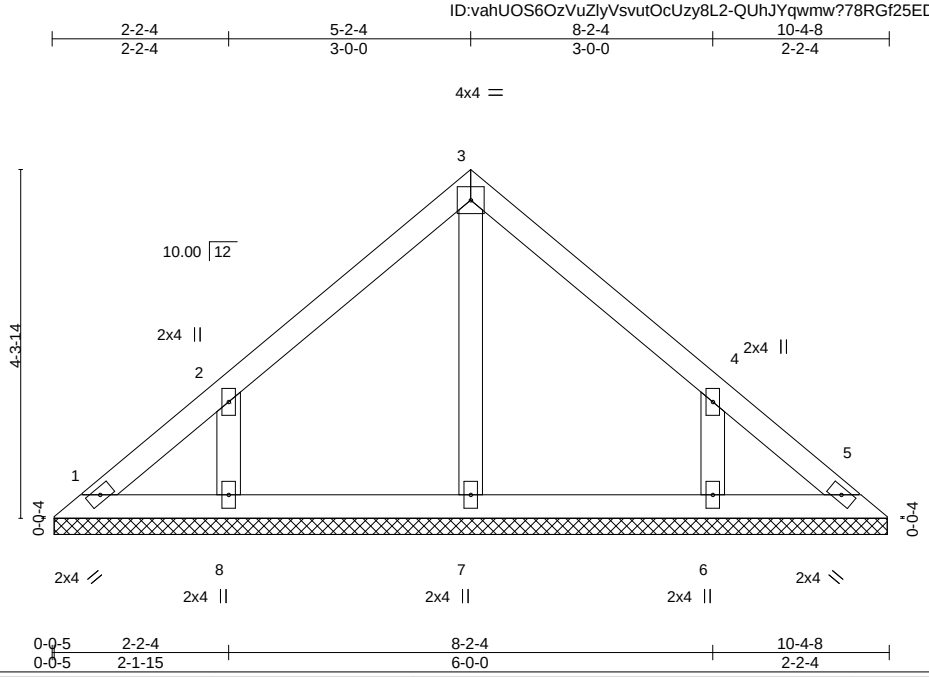

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 43 lb	FT = 20%

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

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

REACTIONS. All bearings 10-3-14.
(lb) - Max Horz 1=114(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-156(LC 12), 6=-156(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=261(LC 19), 6=261(LC 20)

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=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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.

February 22,2021

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

Job	Truss	Truss Type	Qty	Ply	Chelsea Roof
2100217-2100217A	V10	Valley	1	1	I44904607
					Job Reference (optional)

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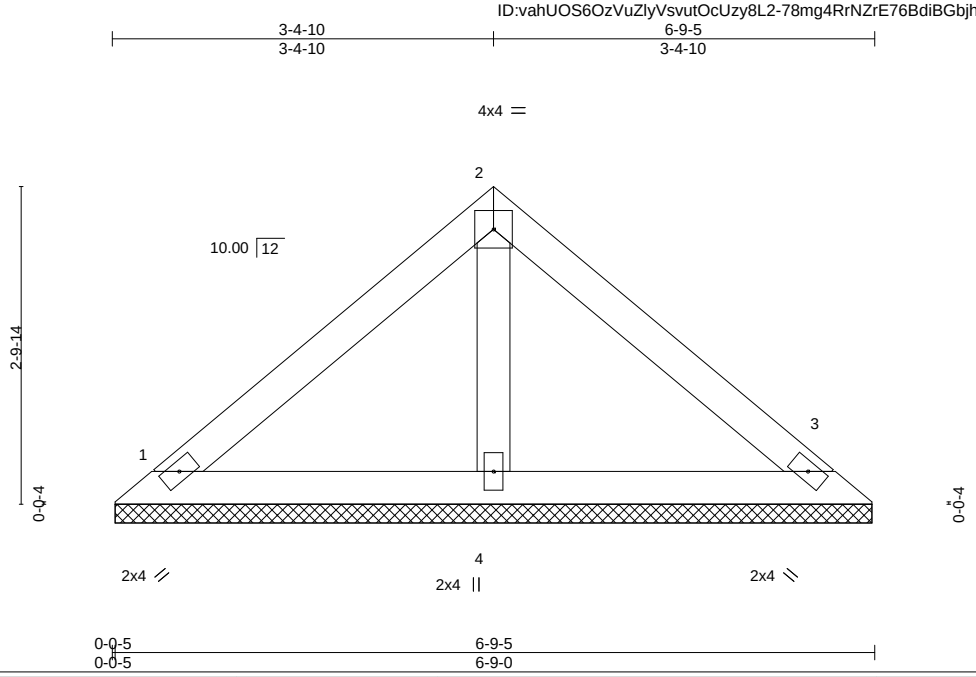

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

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

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

REACTIONS. (size) 1=6-8-11, 3=6-8-11, 4=6-8-11
Max Horz 1=71(LC 11)
Max Uplift 1=-39(LC 13), 3=-48(LC 13)
Max Grav 1=136(LC 1), 3=136(LC 1), 4=206(LC 1)

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=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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.

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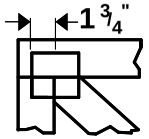
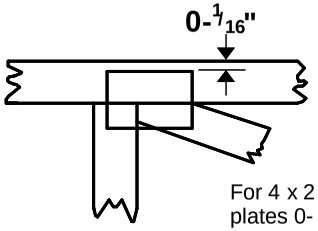
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

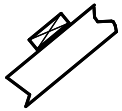
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

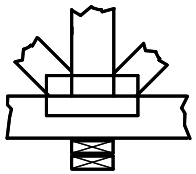
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

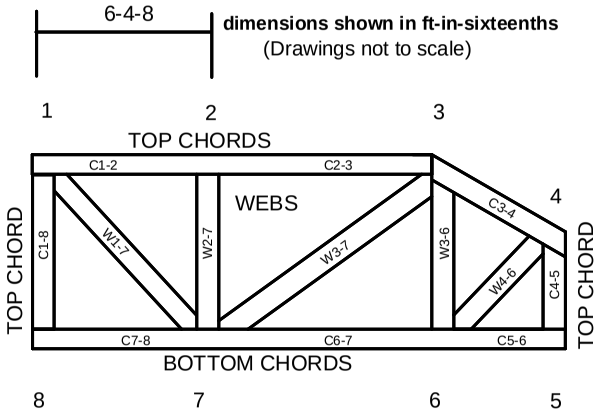


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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