ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

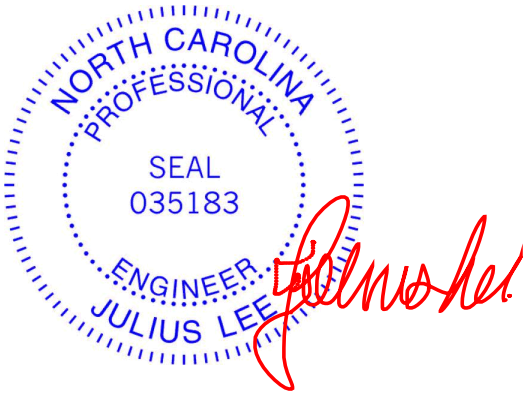
Re: 21110326-01
Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carter Components (Lexington, NC).

Pages or sheets covered by this seal: T26189785 thru T26189805

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

North Carolina COA: C-0844



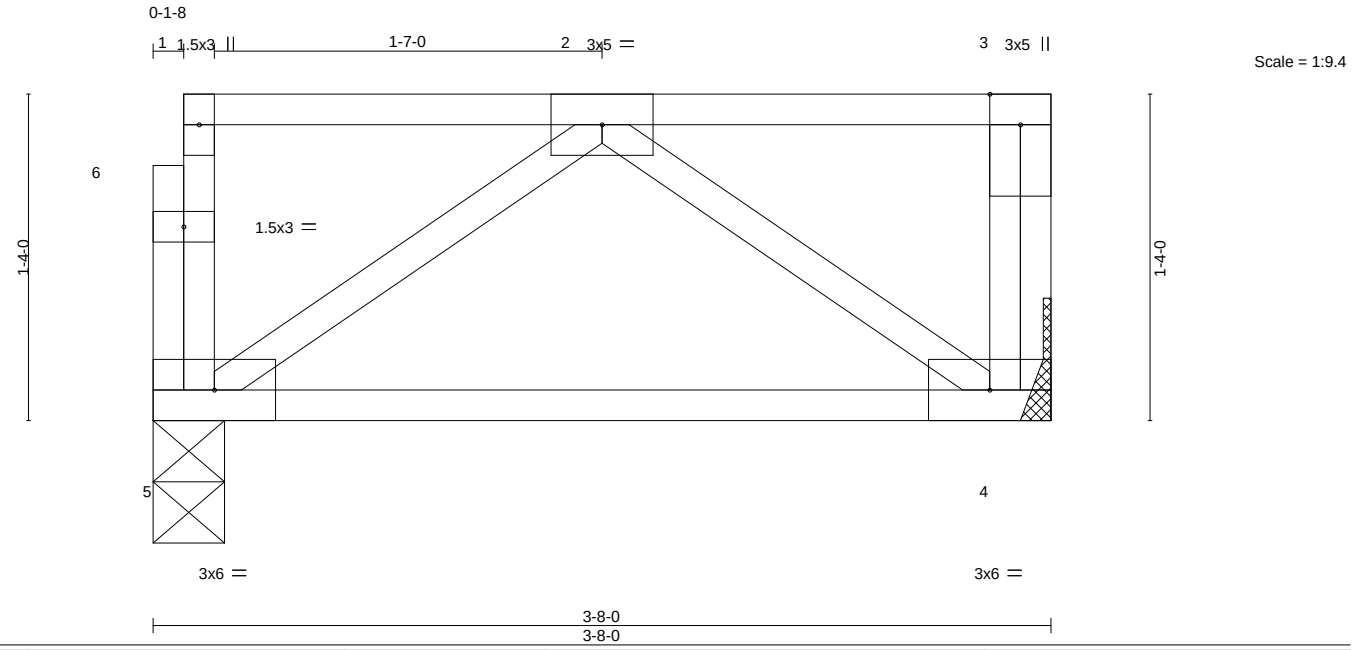
December 8,2021

Lee, Julius

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	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	F1S	FLOOR	1	1	T26189785 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:54 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-eYna53tXks8ltzPQ0b_G9ofORU_nBczw_GUyI3yBNOJ



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.17	Vert(LL)	0.00	5	****	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.14	Vert(CT)	-0.02	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-P							Weight: 23 lb	FT = 20%F, 11%E

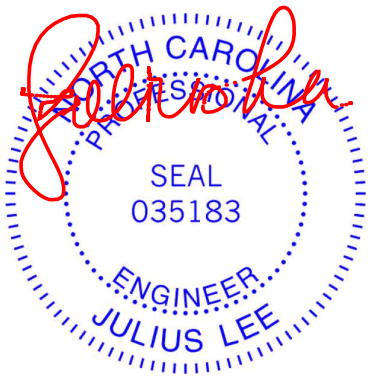
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 5=0-3-8, 4=Mechanical
Max Grav 5=182(LC 1), 4=188(LC 1)

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

NOTES-
1) Refer to girder(s) for truss to truss connections.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) CAUTION, Do not erect truss backwards.



December 8,2021

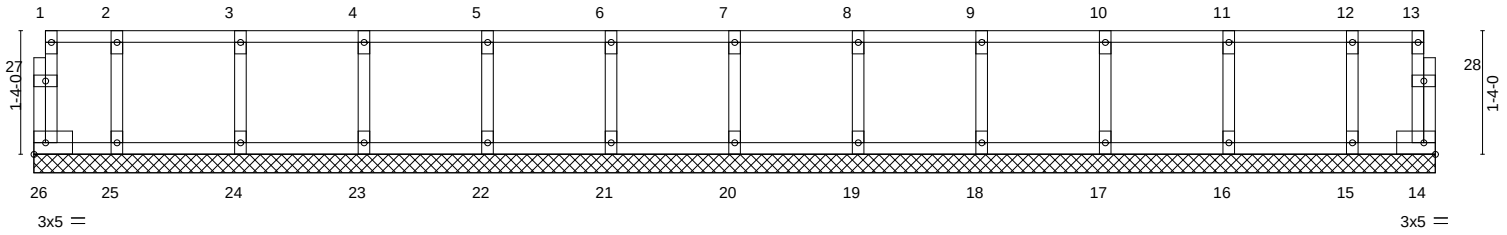
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	L1F	GABLE	1	1	T26189786 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:55 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-6lLyJPu9V9GcU7_caJVVi0CacuM6w3Q3DwEVqWyBNOI

0-1-8 0-1-8

Scale = 1:24.9



0-10-12	2-2-12	3-6-12	4-10-12	6-2-12	7-6-12	8-10-12	10-2-12	11-6-12	12-10-12	14-2-12	15-1-8
0-10-12	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-10-12

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 68 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

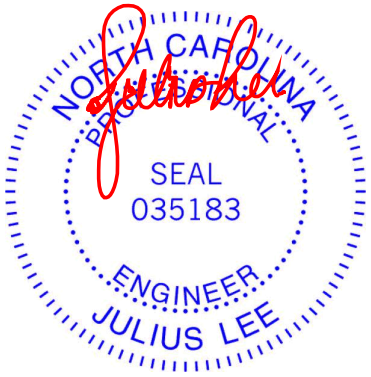
BRACING-

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 15-1-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 26, 14, 20, 21, 22, 23, 24, 25, 19, 18, 17, 16, 15

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss T26189787
21110326-01	F1FA	FLOOR	2	1	Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:32 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-HJSGUYckv5MtEakCk_a6G9lVQdHk1Wrhwr9oWLyBNOf

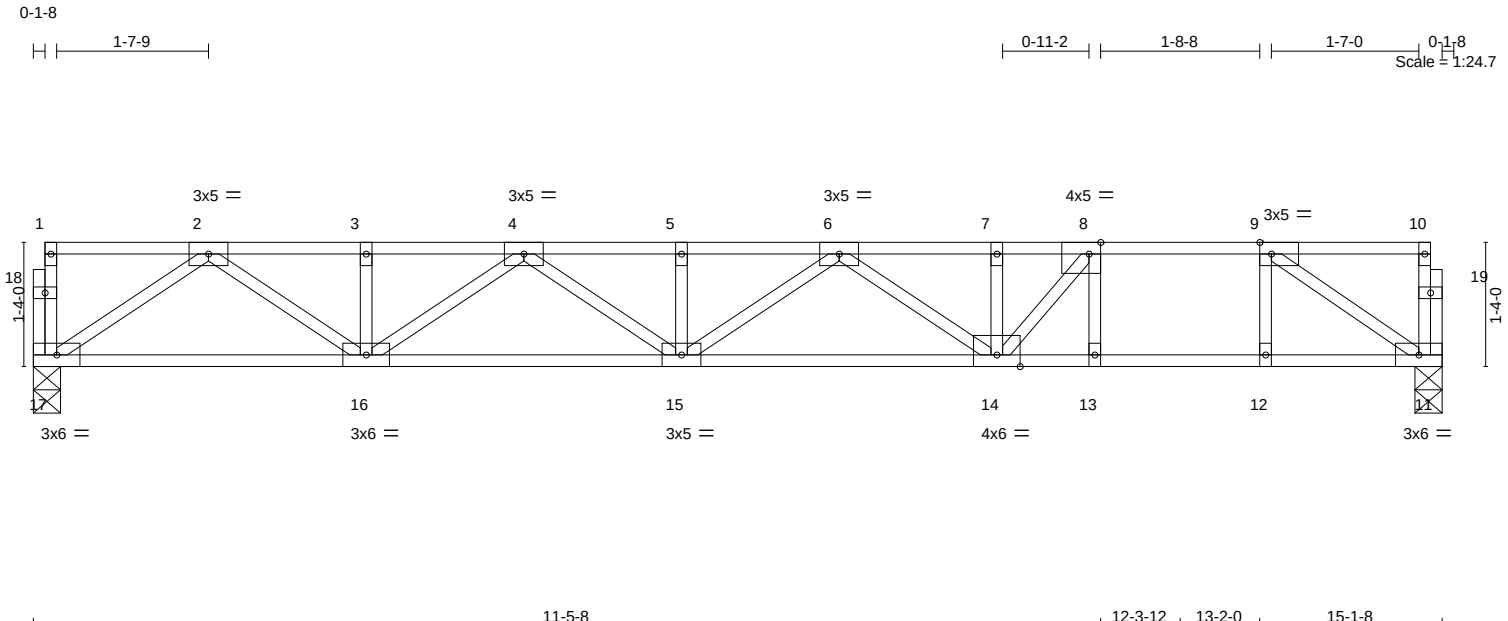


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [9:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	-0.24	13-14	>737	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.33	13-14	>540	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 81 lb	FT = 20%F, 11%E

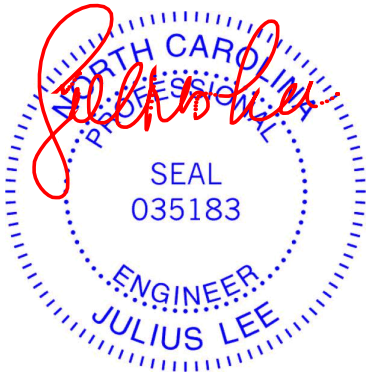
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 17=0-3-8, 11=0-3-8
Max Grav 17=812(LC 1), 11=812(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1815/0, 3-4=-1815/0, 4-5=-2513/0, 5-6=-2513/0, 6-7=-2241/0, 7-8=-2241/0, 8-9=-1433/0
BOT CHORD 16-17=0/1062, 15-16=0/2283, 14-15=0/2470, 13-14=0/1433, 12-13=0/1433, 11-12=0/1433
WEBS 8-13=-534/0, 9-12=0/404, 2-17=-1285/0, 2-16=0/925, 4-16=-575/0, 4-15=0/283, 6-14=-294/0, 7-14=-462/0, 8-14=0/1261, 9-11=-1739/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss T26189788
21110326-01	F1F	FLOOR	2	1	Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:31 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-p7utGCb68nE0cR9?AG3tkyCKdDxdI3aXiBQE_vyBNOg

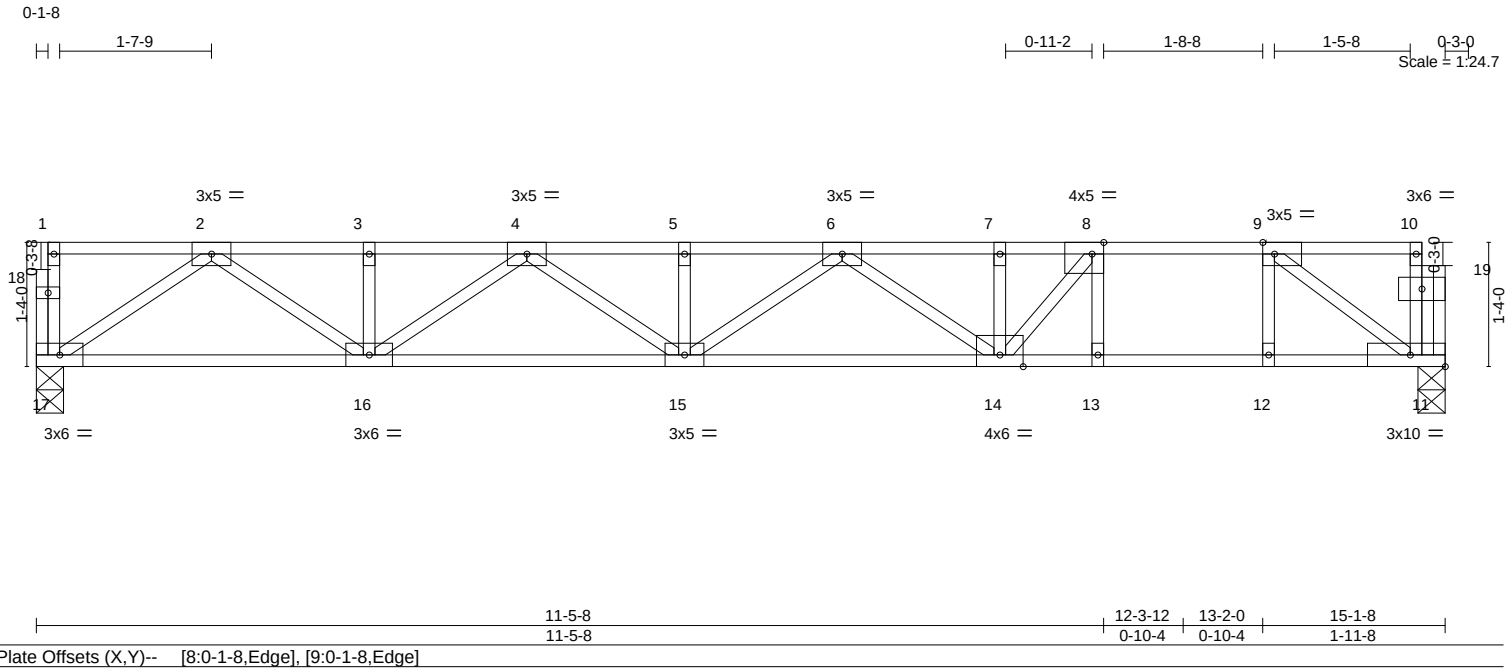


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [9:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	-0.24	13-14	>744	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.33	13-14	>545	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 82 lb	FT = 20%F, 11%E

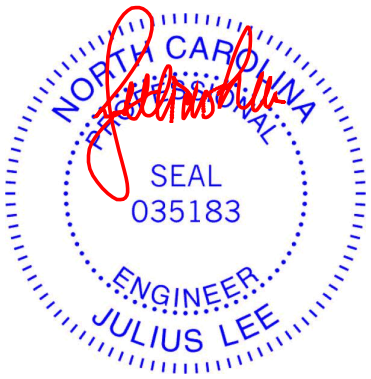
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 17=0-3-8, 11=0-3-8
Max Grav 17=808(LC 1), 11=802(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1805/0, 3-4=-1805/0, 4-5=-2493/0, 5-6=-2493/0, 6-7=-2212/0, 7-8=-2212/0, 8-9=-1401/0
BOT CHORD 16-17=0/1057, 15-16=0/2268, 14-15=0/2446, 13-14=0/1401, 12-13=0/1401, 11-12=0/1401
WEBS 8-13=-532/0, 9-12=0/409, 2-17=-1278/0, 2-16=0/919, 4-16=-569/0, 4-15=0/277, 6-14=-299/0, 7-14=-462/0, 8-14=0/1262, 9-11=-1726/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

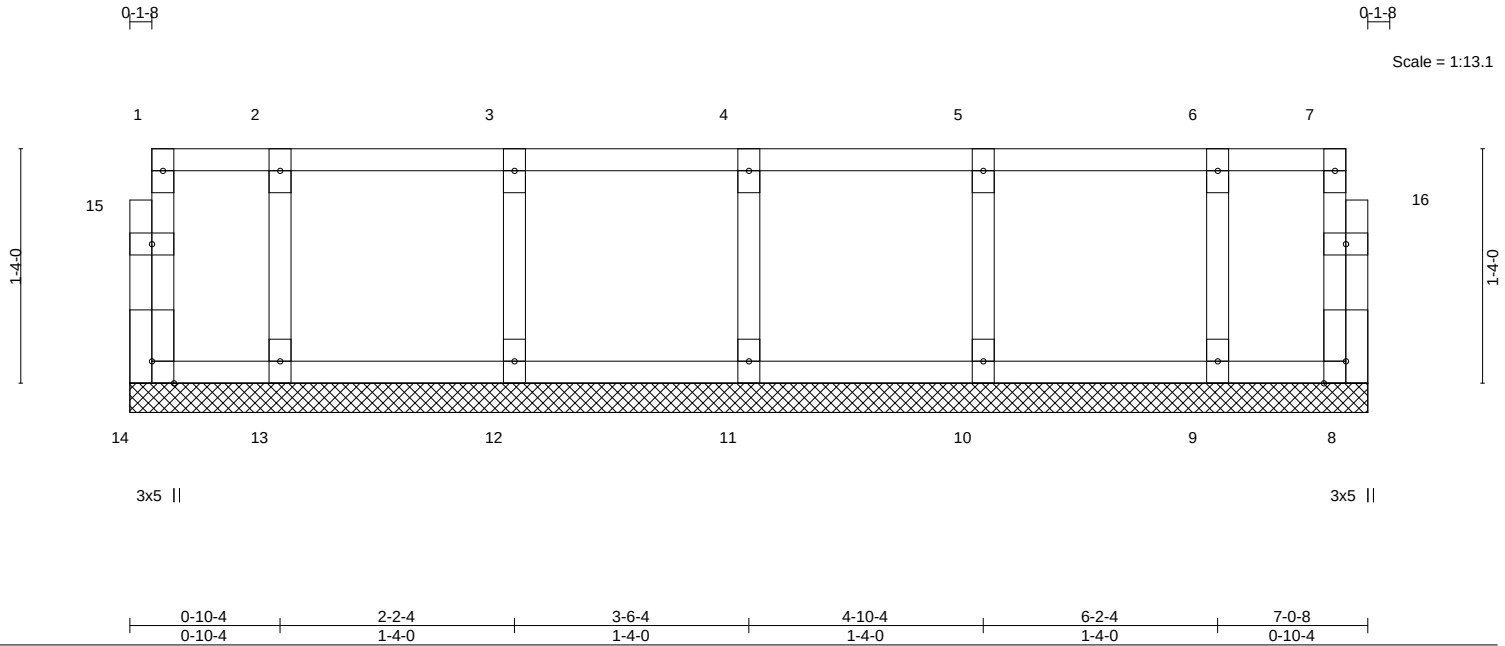


December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	L1SA	GABLE	1	1	T26189789 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:57 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-27Tik5vQ0nWKkQ8?ikXznRHw5i1aOzwMgEjcvOyBNOG



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 35 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

BRACING-

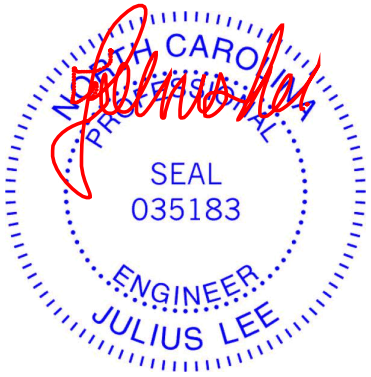
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 7-0-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 14, 8, 11, 12, 13, 10, 9

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

NOTES-

1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Bearing at joint(s) 14, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	F1L	FLOOR	3	1	T26189790 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:53 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-AMDCuksvzY0uFpqETuS1db7Ck4dFS7jmlclPmdyBNOK

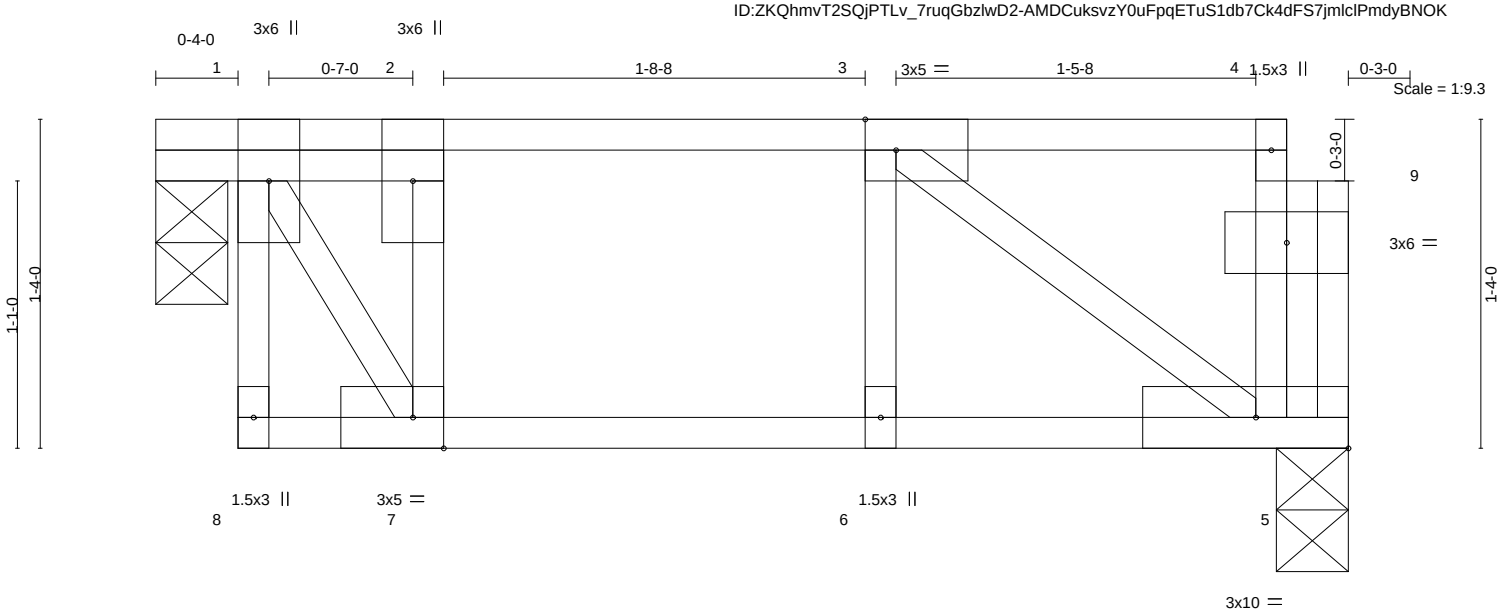


Plate Offsets (X,Y)-- [3:0-1-8,Edge], [7:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.30	Vert(LL)	-0.01	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.23	Vert(CT)	-0.02	6	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	5	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 29 lb	FT = 20%F, 11%E

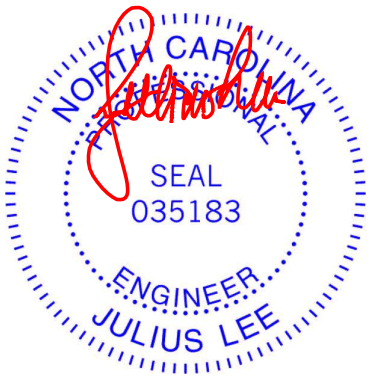
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Grav 1=234(LC 1), 5=221(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 1-7=0/363

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
4) CAUTION, Do not erect truss backwards.



December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	F1GRB	FLOOR	1	1	T26189791 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:49 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-Hb_h2MpOvJVSmCXTE2O5SlyL5T7jWFGBq_nBdsyBNOO

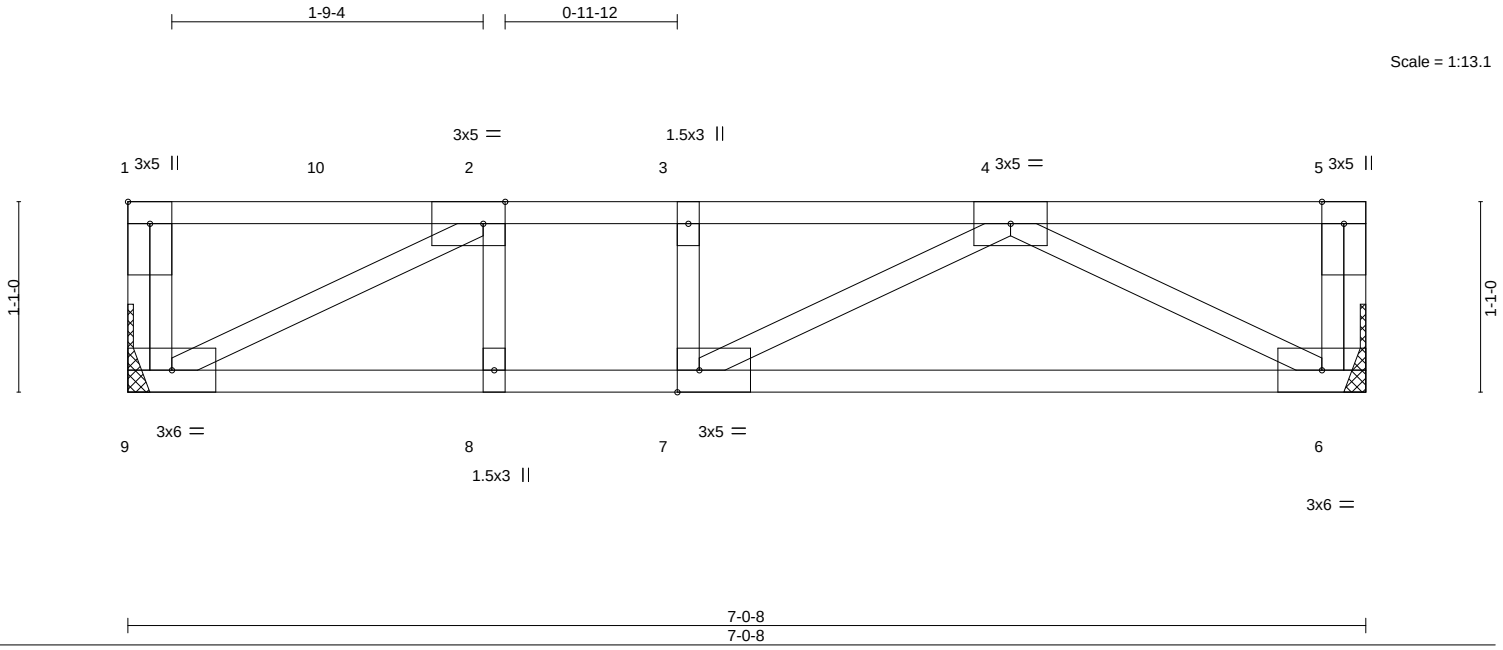


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-1-8,Edge], [7:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.98	Vert(LL)	-0.05	6-7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.12	6-7	>684	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.02	6	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 37 lb	FT = 20%F, 11%E

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

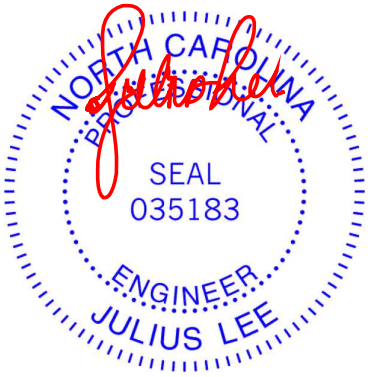
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=Mechanical, 6=Mechanical
Max Grav 9=852(LC 1), 6=806(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1446/0, 3-4=-1446/0
BOT CHORD 8-9=0/1446, 7-8=0/1446, 6-7=0/1297
WEBS 4-6=-1453/0, 2-9=-1610/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Load case(s) 1, 2, 3, 4, 5, 6 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 6-9=-10, 1-5=-175
Concentrated Loads (lb)
Vert: 4=-134 3=-134 10=-134
2) Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 6-9=-10, 1-5=-175
Concentrated Loads (lb)
Vert: 4=-134 3=-134 10=-134
3) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 6-9=-10, 1-3=-175, 3-5=-95
Concentrated Loads (lb)
Vert: 4=-214 3=-174 10=-134
4) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 6-9=-10, 1-2=-95, 2-5=-175



December 8,2021

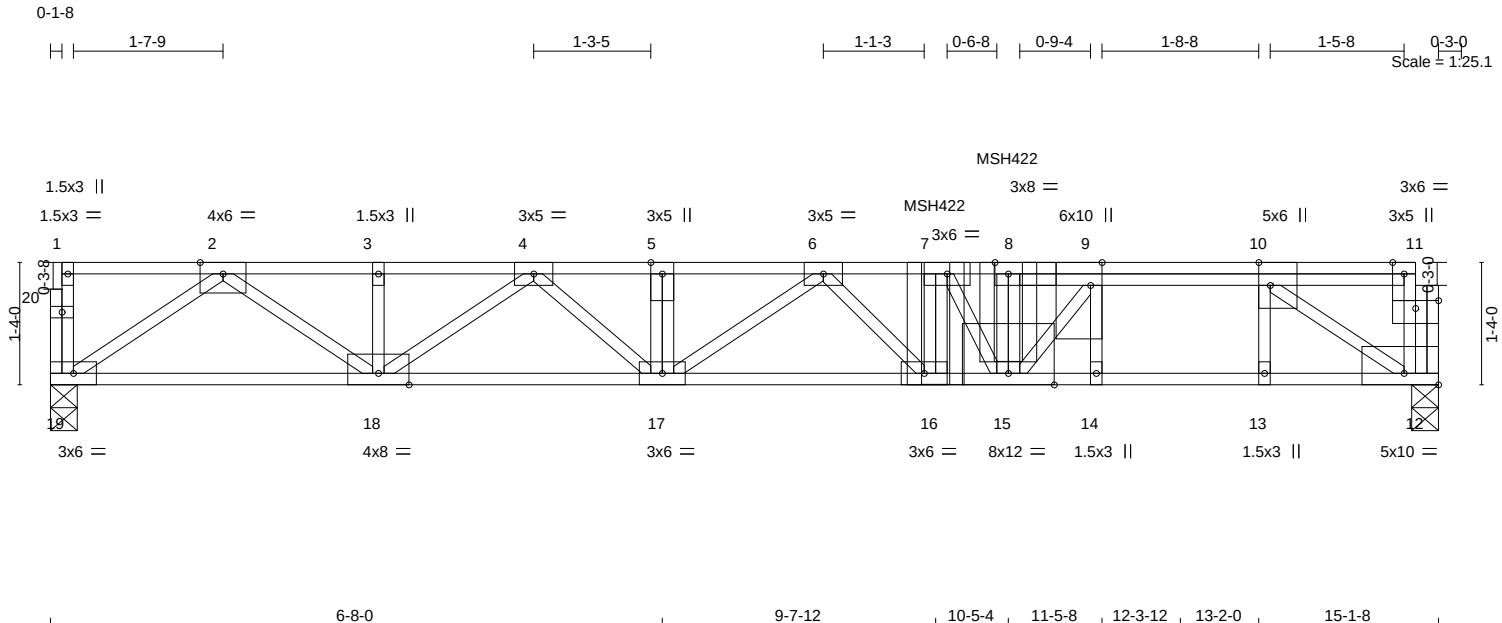
Continued on page 2

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

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 4=-134 3=-134 10=-209
5) 3rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 6-9=-10, 1-3=-175, 3-5=-95
Concentrated Loads (lb)
Vert: 4=-214 3=-174 10=-134
6) 4th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 6-9=-10, 1-2=-95, 2-5=-175
Concentrated Loads (lb)
Vert: 4=-134 3=-134 10=-209

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss T26189792
21110326-01	F1GRA	FLOOR	1	1	Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:48 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-pOQJr0om80Nb92yGgLtswXPA63lTnhi1cK1e5QyBNOP



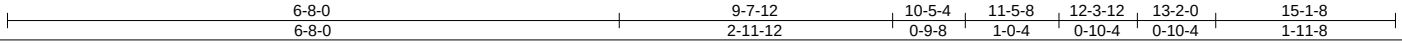


Plate Offsets (X,Y)-- [8:0-1-12,Edge], [9:0-3-0,Edge], [10:0-3-0,Edge], [11:0-3-0,0-1-0], [12:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.99	Vert(LL)	-0.21	16	>860	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.34	16	>524	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.05	12	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 95 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat) *Except*
9-15: 2x4 SP No.2(flat)

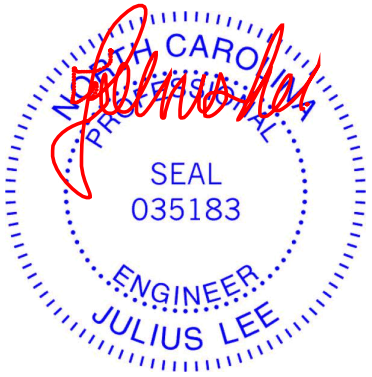
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 19=0-3-8, 12=0-3-8
Max Grav 19=1062(LC 1), 12=1401(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=0/424, 2-3=-2524/0, 3-4=-2524/0, 4-5=-3847/0, 5-6=-3846/0, 6-7=-4285/0, 7-8=-4449/0, 8-9=-4674/0, 9-10=-2740/0
BOT CHORD 18-19=0/1422, 17-18=0/3341, 16-17=0/4197, 15-16=0/4285, 14-15=0/2740, 13-14=0/2740, 12-13=0/2740
WEBS 8-15=-2305/0, 9-14=-408/0, 10-13=0/301, 7-16=-304/0, 6-17=-579/0, 6-16=0/428, 7-15=0/429, 10-12=-3299/0, 2-19=-1722/0, 2-18=0/1354, 4-18=-1004/0, 4-17=0/666, 9-15=0/3055

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) CAUTION, Do not erect truss backwards.
4) Use MiTek MSH422 (With 10d nails into Girder & 6-10d nails into Truss) or equivalent spaced at 0-9-8 oc max. starting at 9-7-12 from the left end to 10-5-4 to connect truss(es) to back face of top chord.
5) Fill all nail holes where hanger is in contact with lumber.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 12-19=-10, 1-11=-100
Concentrated Loads (lb)
Vert: 7=-88(B) 8=-752(B)

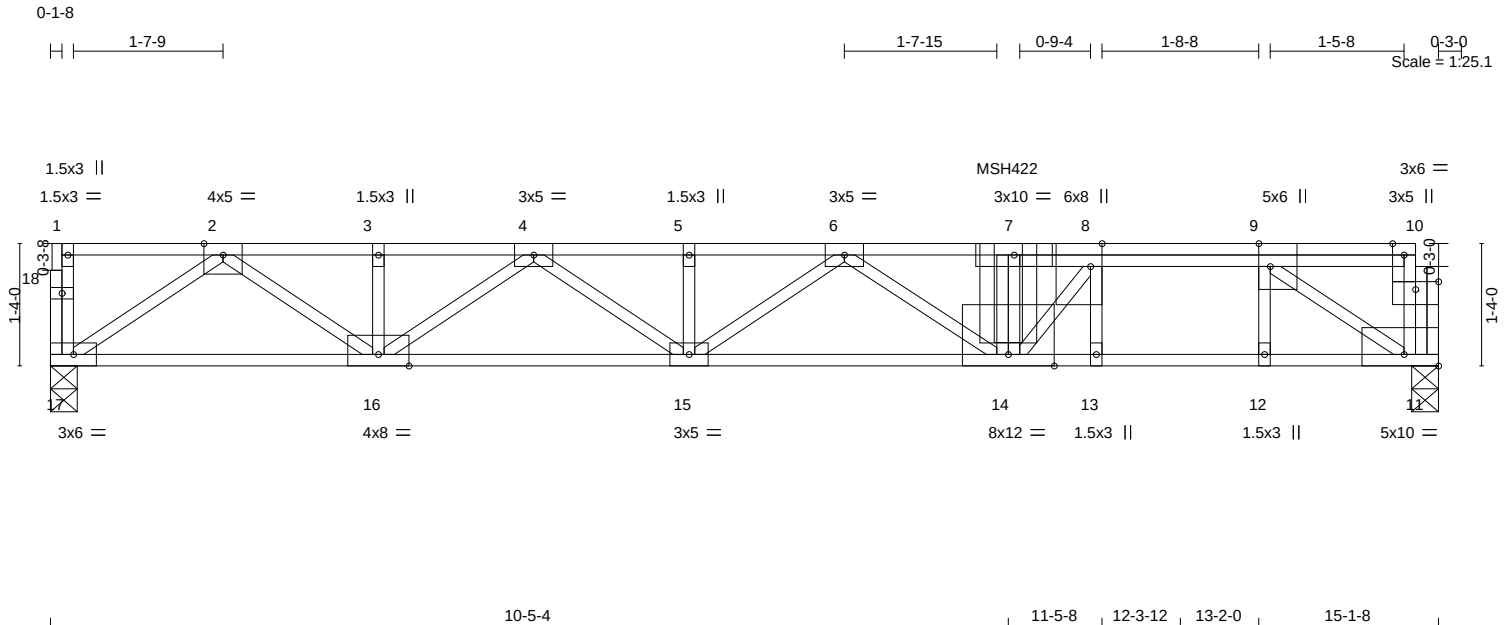


December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss T26189793
21110326-01	F1GR	FLOOR	1	1	Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:46 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-t0IYQKnWcO7uvkouYwqOr6KrrG5EJoAk80YX0XyBNOR



10-5-4 | 11-5-8 | 12-3-12 | 13-2-0 | 15-1-8
10-5-4 | 1-0-4 | 0-10-4 | 0-10-4 | 1-11-8

Plate Offsets (X,Y)-- [8:0-3-0,Edge], [9:0-3-0,Edge], [10:0-3-0,0-1-0], [11:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.91	Vert(LL)	-0.19	14	>940	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.31	14	>567	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 89 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat) *Except*
8-14: 2x4 SP No.2(flat)

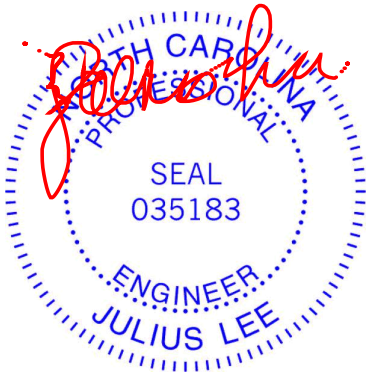
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 17=0-3-8, 11=0-3-8
Max Grav 17=1017(LC 1), 11=1312(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=0/391, 2-3=-2396/0, 3-4=-2396/0, 4-5=-3669/0, 5-6=-3669/0, 6-7=-4117/0, 7-8=-4366/0, 8-9=-2546/0
BOT CHORD 16-17=0/1358, 15-16=0/3154, 14-15=0/3917, 13-14=0/2546, 12-13=0/2546, 11-12=0/2546
WEBS 7-14=-2078/0, 8-13=-358/0, 9-12=0/277, 2-17=-1644/0, 2-16=0/1276, 4-16=-931/0, 4-15=0/633, 6-15=-433/0, 6-14=0/554, 8-14=0/2838, 9-11=-3066/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) CAUTION, Do not erect truss backwards.
4) Use MiTek MSH422 (With 10d nails into Girder & 6-10d nails into Truss) or equivalent at 10-5-4 from the left end to connect truss(es) to front face of top chord.
5) Fill all nail holes where hanger is in contact with lumber.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 11-17=-10, 1-10=-100
Concentrated Loads (lb)
Vert: 7=-706(F)



December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss T26189794
21110326-01	F1G	FLOOR	8	1	Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:33 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-lW0ehucMgPUkrkIOlh5LpNIjI0gomwDq9VvL3nyBNOe

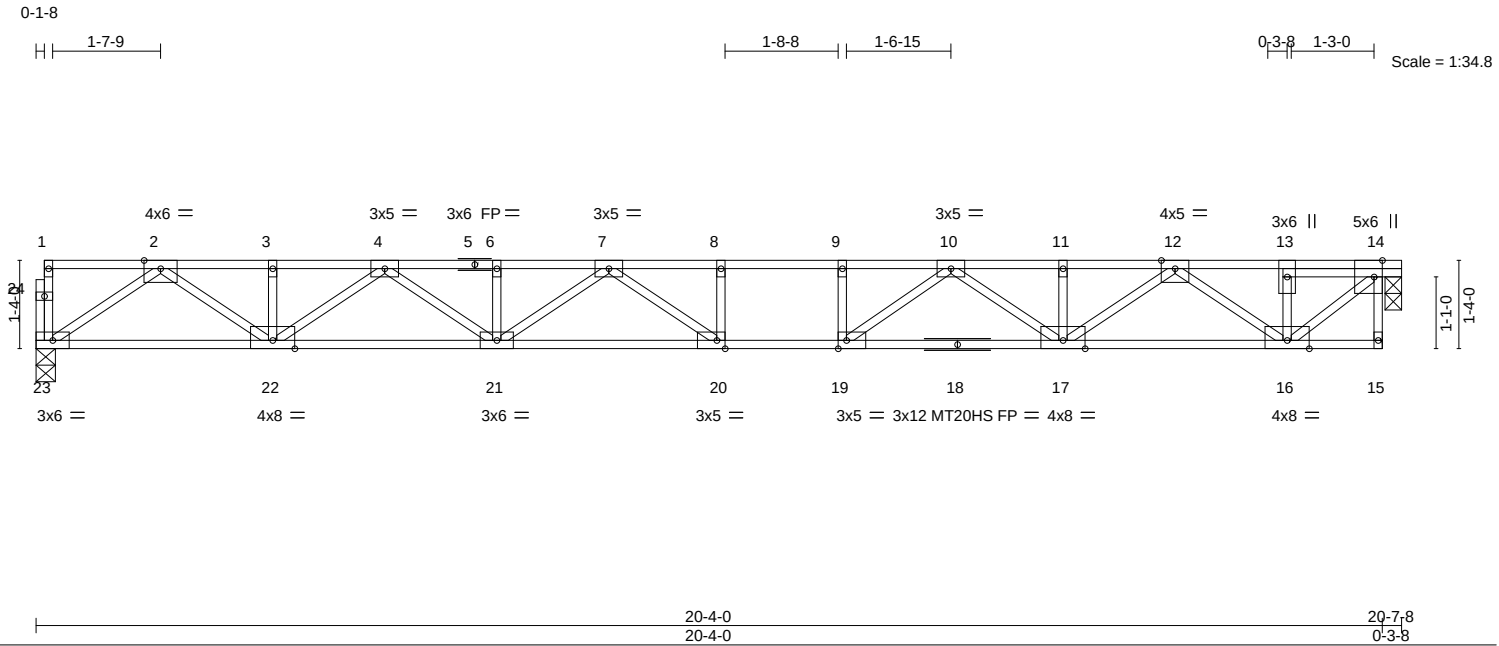


Plate Offsets (X,Y)-- [14:0-3-0,Edge], [19:0-1-8,Edge], [20:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.52	Vert(LL)	-0.34	20-21	>707	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.72	Vert(CT)	-0.47	20-21	>511	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.02	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 109 lb	FT = 20%F, 11%E

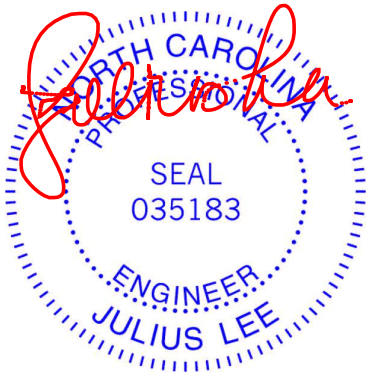
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except*
15-18: 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 23=0-3-8, 14=0-3-0
Max Grav 23=1102(LC 1), 14=1108(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2635/0, 3-4=-2635/0, 4-6=-4156/0, 6-7=-4156/0, 7-8=-4538/0, 8-9=-4538/0, 9-10=-4538/0, 10-11=-3345/0, 11-12=-3345/0, 12-13=-1268/0, 13-14=-1264/0
BOT CHORD 22-23=0/1479, 21-22=0/3519, 20-21=0/4508, 19-20=0/4538, 17-19=0/4019, 16-17=0/2387
WEBS 14-16=0/1645, 9-19=-377/0, 2-23=-1791/0, 2-22=0/1420, 4-22=-1087/0, 4-21=0/783, 7-21=-443/0, 7-20=-312/489, 12-16=-1380/0, 12-17=0/1178, 10-17=-827/0, 10-19=0/894

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
6) CAUTION, Do not erect truss backwards.



December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss T26189795
21110326-01	F1H	FLOOR	6	1	Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:50 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-lnY3Giq1gdeJOL6fnmvK?yVY5tRjFekK3eWl9IyBNON

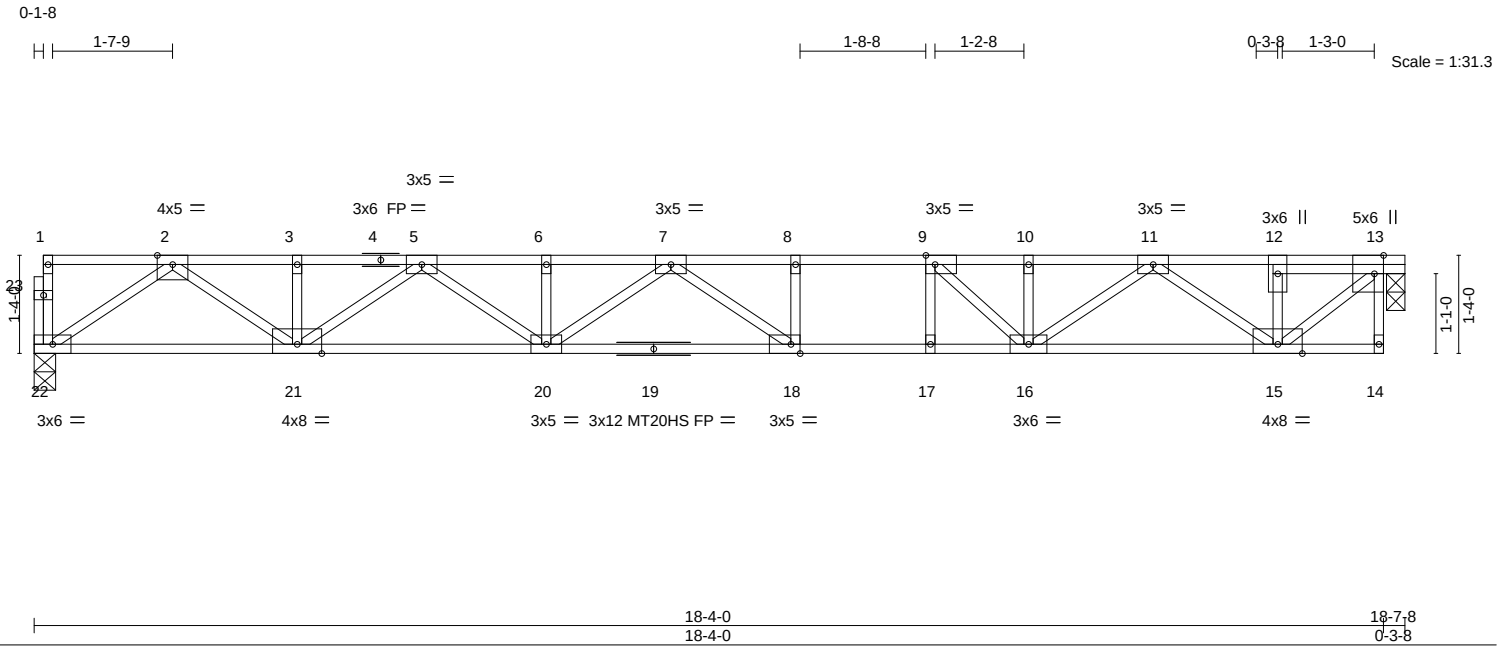


Plate Offsets (X,Y)-- [9:0-1-8,Edge], [13:0-3-0,Edge], [18:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.83	Vert(LL)	-0.32	18-20	>679	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.45	18-20	>487	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.02	13	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 99 lb	FT = 20%F, 11%E

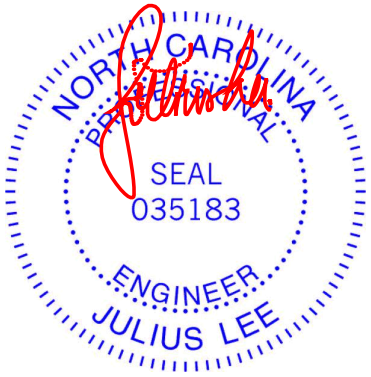
LUMBER-
TOP CHORD 2x4 SP No.2(flat) *Except* 4-13: 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat) *Except* 14-19: 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 22=0-3-8, 13=0-3-0
Max Grav 22=992(LC 1), 13=998(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2320/0, 3-5=-2320/0, 5-6=-3542/0, 6-7=-3542/0, 7-8=-3543/0, 8-9=-3543/0, 9-10=-2870/0, 10-11=-2870/0, 11-12=-1134/0, 12-13=-1131/0
BOT CHORD 21-22=0/1320, 20-21=0/3057, 18-20=0/3730, 17-18=0/3543, 16-17=0/3543, 15-16=0/2115
WEBS 13-15=0/1472, 9-17=0/308, 2-22=-1598/0, 2-21=0/1229, 5-21=-906/0, 5-20=0/596, 7-20=-291/0, 7-18=-436/253, 11-15=-1210/0, 11-16=0/928, 9-16=-1076/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
6) CAUTION, Do not erect truss backwards.



December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	F1J	FLOOR	1	1	T26189796 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:51 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-Dz5RT2qfRxmA0VgrLTQZYA1hmHp0_68UIIGIhlyBNOM

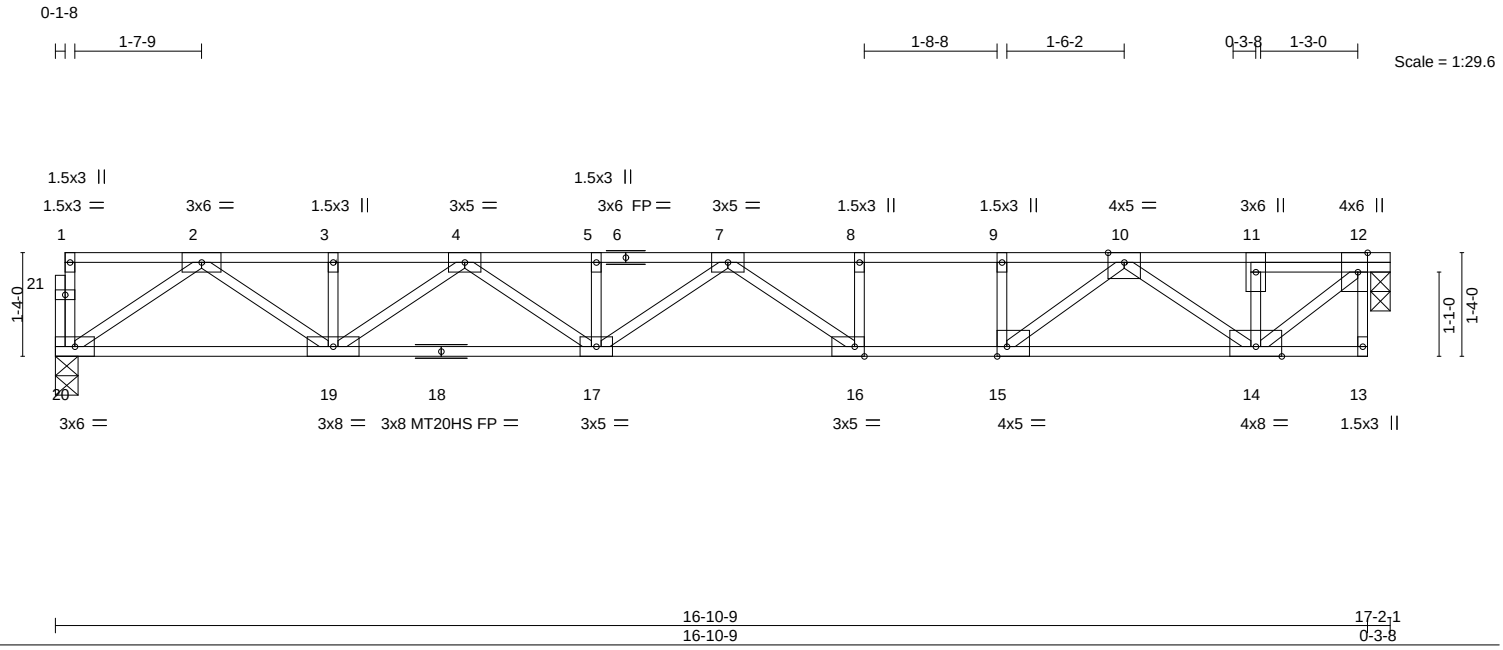


Plate Offsets (X,Y)-- [12:0-3-0,Edge], [15:0-1-8,Edge], [16:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.97	Vert(LL)	-0.32	16-17	>632	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.72	Vert(CT)	-0.44	16-17	>457	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.02	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 91 lb	FT = 20%F, 11%E

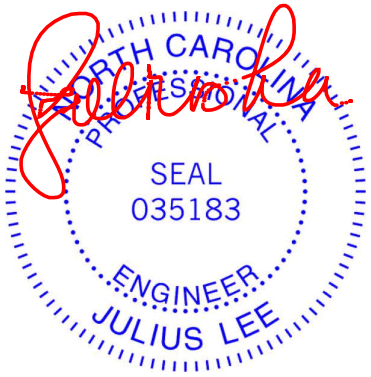
LUMBER-
TOP CHORD 2x4 SP No.2(flat) *Except*
6-12: 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.2(flat) *Except*
13-18: 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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) 20=0-3-8, 12=0-3-0
Max Grav 20=912(LC 1), 12=918(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2092/0, 3-4=-2092/0, 4-5=-3097/0, 5-7=-3097/0, 7-8=-2797/0, 8-9=-2797/0, 9-10=-2797/0, 10-11=-1015/0, 11-12=-1010/0
BOT CHORD 19-20=0/1203, 17-19=0/2723, 16-17=0/3168, 15-16=0/2797, 14-15=0/1911
WEBS 11-14=-255/0, 12-14=0/1315, 9-15=-469/0, 2-20=-1457/0, 2-19=0/1091, 4-19=-776/0, 4-17=0/459, 7-16=-592/100, 10-14=-1106/0, 10-15=0/1167

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
5) CAUTION, Do not erect truss backwards.



December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss T26189797
21110326-01	F1K	FLOOR	6	1	Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:52 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-iAfpgOrHCEu1dfF2vAxo4Nat5h8RjahdXy?rEByBNOL

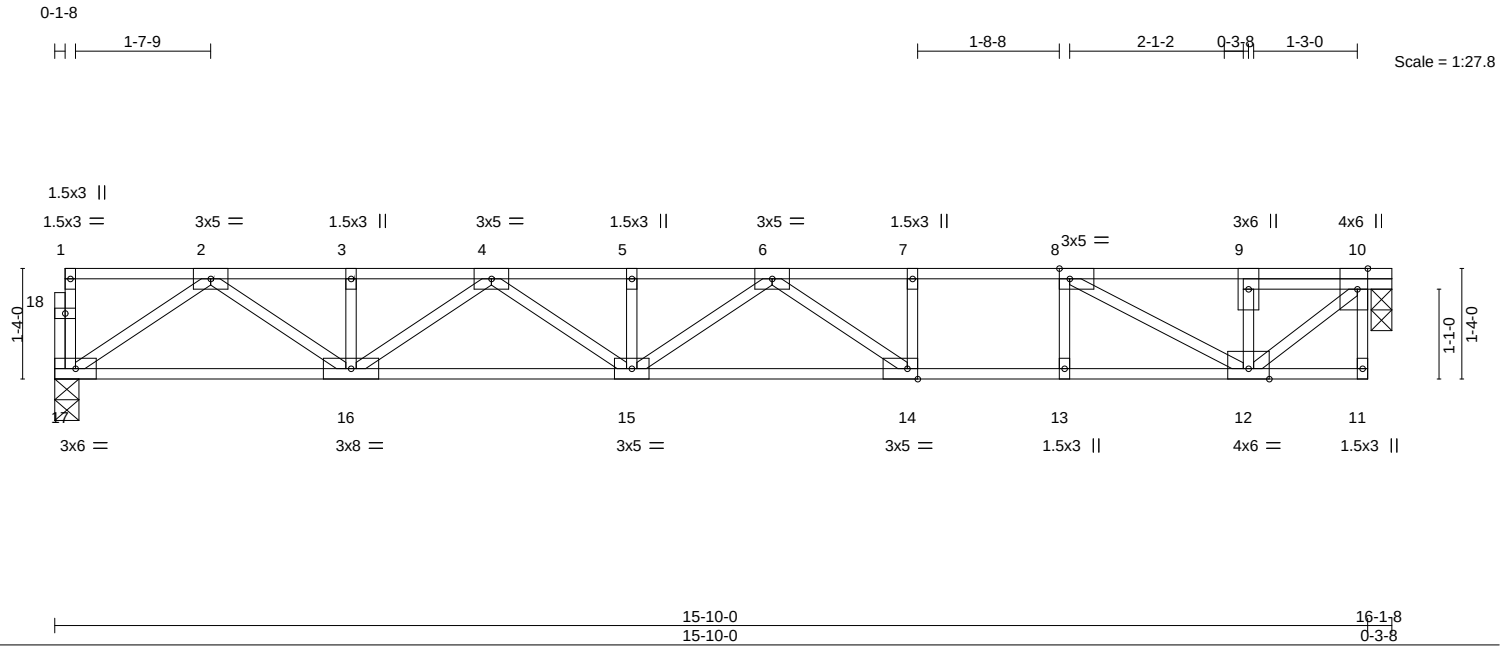


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [10:0-3-0,Edge], [14:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.93	Vert(LL)	-0.31	14-15	>603	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.43	14-15	>438	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 86 lb	FT = 20%F, 11%E

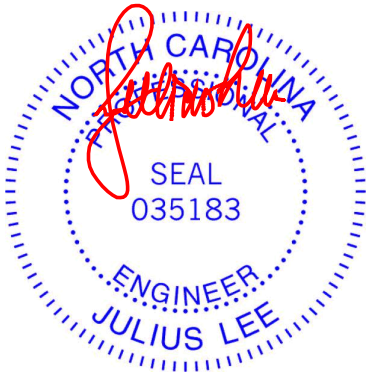
LUMBER-
TOP CHORD 2x4 SP No.1(flat) *Except* 9-10: 2x4 SP No.2(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 17=0-3-8, 10=0-3-0
Max Grav 17=854(LC 1), 10=861(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1924/0, 3-4=-1924/0, 4-5=-2777/0, 5-6=-2777/0, 6-7=-2275/0, 7-8=-2275/0, 8-9=-875/0, 9-10=-875/0
BOT CHORD 16-17=0/1119, 15-16=0/2481, 14-15=0/2761, 13-14=0/2275, 12-13=0/2275
WEBS 10-12=0/1138, 8-13=0/329, 2-17=-1354/0, 2-16=0/989, 4-16=-685/0, 4-15=0/363, 6-14=-688/0, 8-12=-1594/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
4) CAUTION, Do not erect truss backwards.



December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	F1E	FLOOR	1	1	T26189798 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:31 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-p7utGCb68nE0cR9?AG3tkyCKdDxdI3aXiBQE_vyBNOg

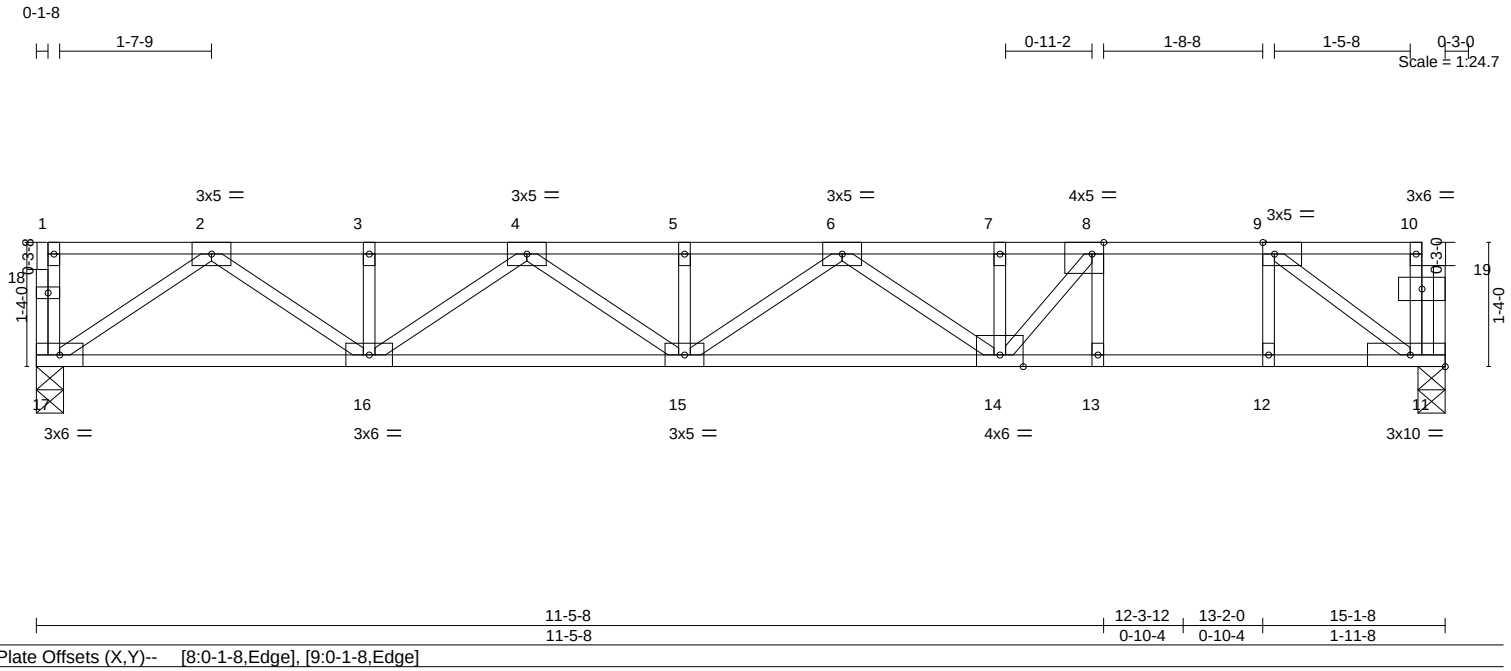


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [9:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	-0.24	13-14	>744	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.33	13-14	>545	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 82 lb	FT = 20%F, 11%E

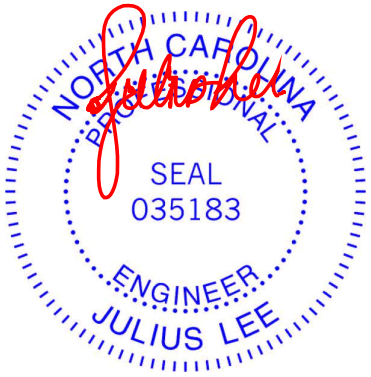
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 17=0-3-8, 11=0-3-8
Max Grav 17=808(LC 1), 11=802(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1805/0, 3-4=-1805/0, 4-5=-2493/0, 5-6=-2493/0, 6-7=-2212/0, 7-8=-2212/0, 8-9=-1401/0
BOT CHORD 16-17=0/1057, 15-16=0/2268, 14-15=0/2446, 13-14=0/1401, 12-13=0/1401, 11-12=0/1401
WEBS 8-13=-532/0, 9-12=0/409, 2-17=-1278/0, 2-16=0/919, 4-16=-569/0, 4-15=0/277, 6-14=-299/0, 7-14=-462/0, 8-14=0/1262, 9-11=-1726/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

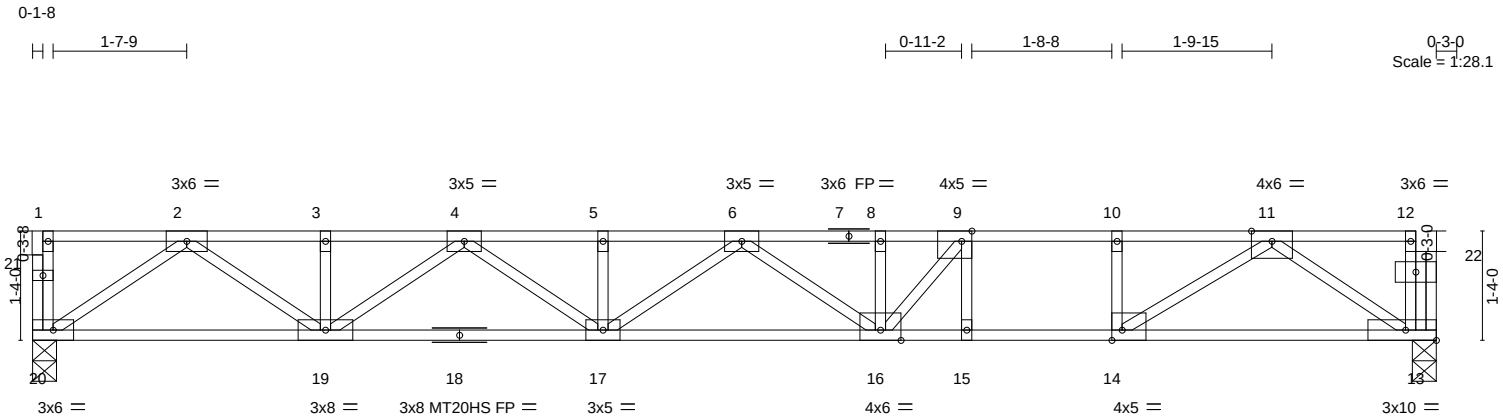


December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	F1D	FLOOR	6	1	T26189799 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:29 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-tkm7sWZscA_IN7?d3r1PeX7?cPHaq8bEEtx7w0yBNOi



11-5-8	12-3-12	13-2-0	17-1-8
11-5-8	0-10-4	0-10-4	3-11-8

Plate Offsets (X,Y)-- [9:0-1-8,Edge], [14:0-1-8,Edge]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	40.0	Plate Grip DOL	1.00	TC	0.69	Vert(LL)	-0.28	15-16	>711	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.87	Vert(CT)	-0.39	15-16	>522	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.05	13	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 92 lb	FT = 20%F, 11%E

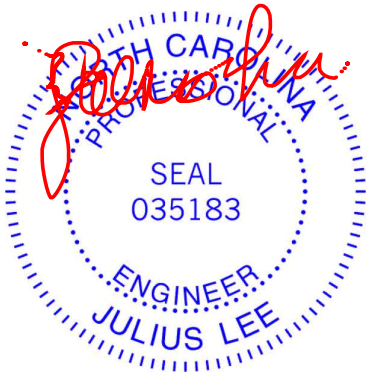
LUMBER-
TOP CHORD 2x4 SP No.2(flat) *Except* 7-12: 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 13-18: 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 20=0-3-8, 13=0-3-8
Max Grav 20=918(LC 1), 13=912(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2117/0, 3-4=-2117/0, 4-5=-3112/0, 5-6=-3112/0, 6-8=-3125/0, 8-9=-3125/0, 9-10=-2492/0, 10-11=-2492/0
BOT CHORD 19-20=0/1216, 17-19=0/2736, 16-17=0/3221, 15-16=0/2492, 14-15=0/2492, 13-14=0/1259
WEBS 9-15=-428/0, 10-14=-545/0, 2-20=-1472/0, 2-19=0/1107, 4-19=-760/0, 4-17=0/462, 8-16=-430/0, 9-16=0/1064, 11-13=-1500/0, 11-14=0/1463

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	F1C	FLOOR	1	1	T26189800 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:28 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-PYCleBZDrssRlzQQV8WA6Jam8?x15i_5?DBaNayBNOj

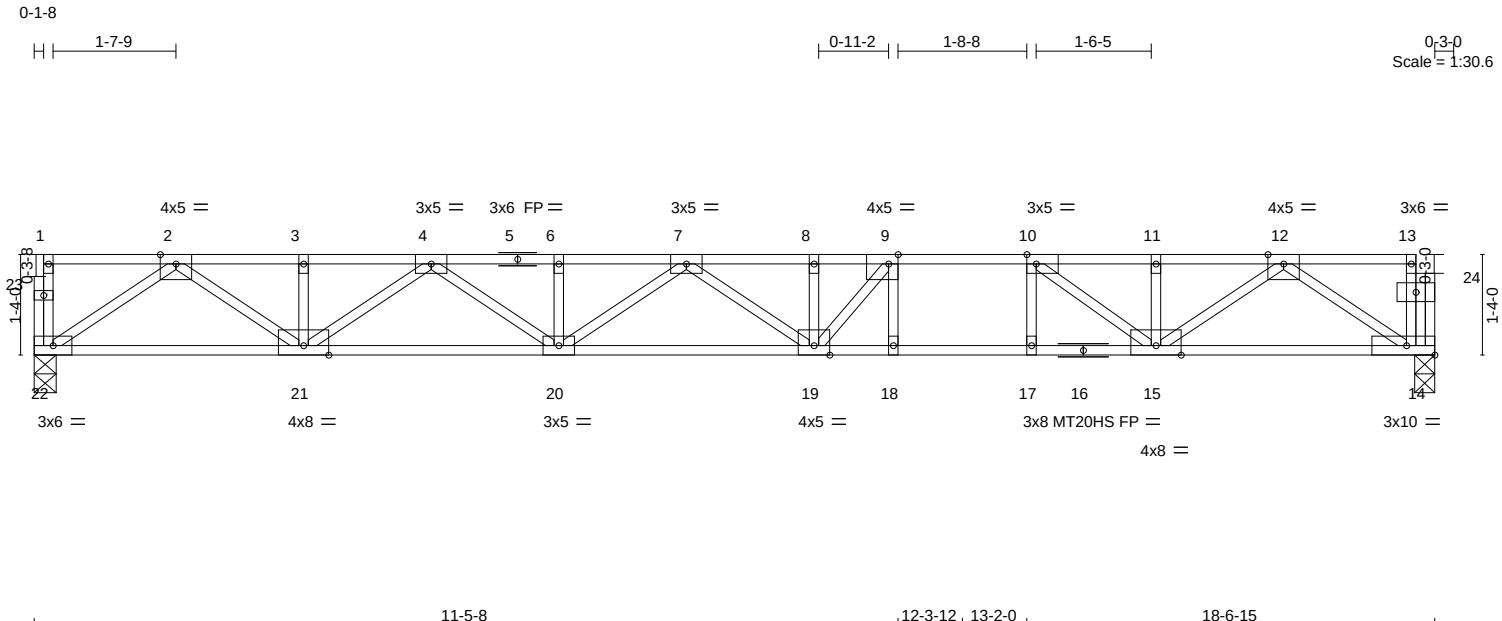


Plate Offsets (X,Y)-- [9:0-1-8,Edge], [10:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.93	Vert(LL)	-0.32	18-19	>691	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.89	Vert(CT)	-0.44	18-19	>502	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 100 lb	FT = 20%F, 11%E

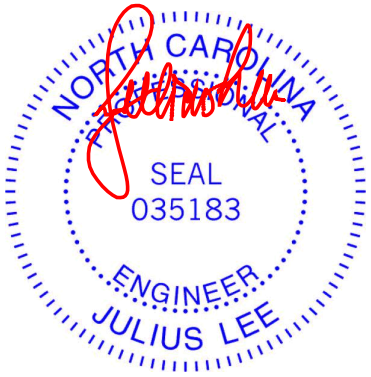
LUMBER-
TOP CHORD 2x4 SP No.2(flat) *Except* 5-13: 2x4 SP No.1(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except* 14-16: 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 22=0-3-8, 14=0-3-3
Max Grav 22=998(LC 1), 14=992(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2342/0, 3-4=-2342/0, 4-6=-3562/0, 6-7=-3562/0, 7-8=-3785/0, 8-9=-3785/0, 9-10=-3324/0, 10-11=-2328/0, 11-12=-2328/0
BOT CHORD 21-22=0/1332, 20-21=0/3076, 19-20=0/3784, 18-19=0/3324, 17-18=0/3324, 15-17=0/3324, 14-15=0/1369
WEBS 9-18=-431/0, 10-17=0/351, 2-22=-1613/0, 2-21=0/1241, 4-21=-902/0, 4-20=0/597, 7-20=-272/0, 8-19=-341/0, 9-19=-20/868, 12-14=-1635/0, 12-15=0/1179, 10-15=-1297/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

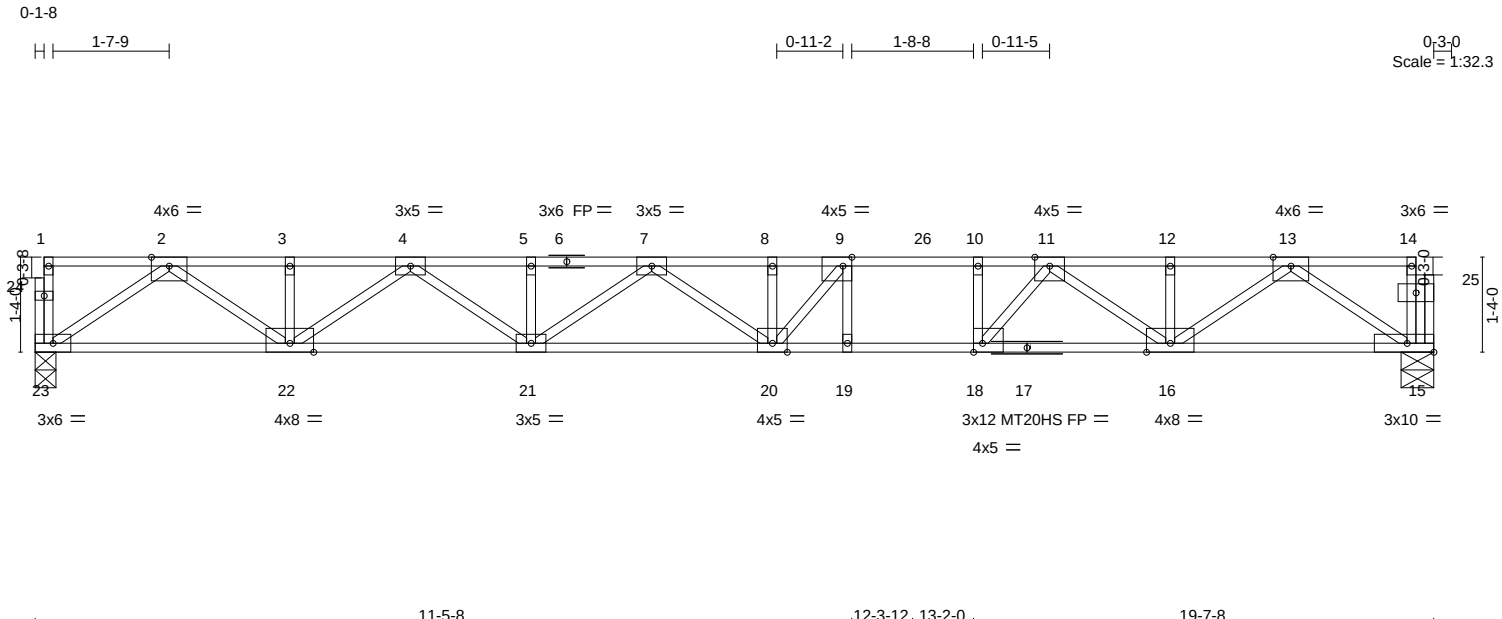


December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	F1B	FLOOR	4	1	T26189801 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:27 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-wMfNRrYb5Zka7prExQ?xZ62dOcZYMDvxnZS1r8yBNOk



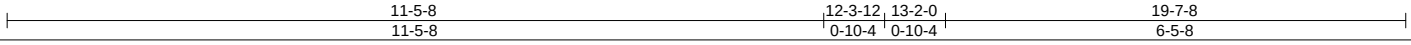


Plate Offsets (X,Y)-- [9:0-1-8,Edge], [18:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.80	Vert(LL)	-0.33	19-20	>701	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.97	Vert(CT)	-0.51	19-20	>457	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.07	15	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 105 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat) *Except* 1-6: 2x4 SP No.2(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except* 15-17: 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

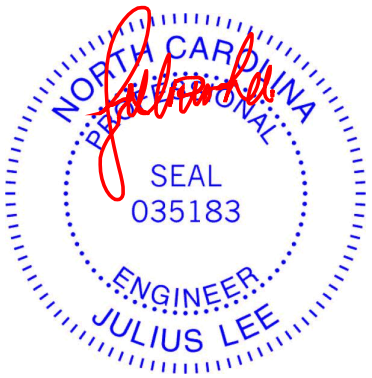
BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 23=0-3-8, 15=0-5-8
Max Grav 23=1181(LC 1), 15=1109(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2793/0, 3-4=-2793/0, 4-5=-4312/0, 5-7=-4312/0, 7-8=-4692/0, 8-9=-4692/0, 9-10=-4248/0, 10-11=-4248/0, 11-12=-2707/0, 12-13=-2707/0
BOT CHORD 22-23=0/1583, 21-22=0/3695, 20-21=0/4626, 19-20=0/4248, 18-19=0/4248, 16-18=0/3612, 15-16=0/1534
WEBS 9-19=-364/0, 10-18=-630/0, 2-23=-1917/0, 2-22=0/1487, 4-22=-1108/0, 4-21=0/757, 7-21=-387/0, 8-20=-416/0, 9-20=-8/895, 13-15=-1833/0, 13-16=0/1441, 11-16=-1112/0, 11-18=0/1146

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) Load case(s) 1, 2, 3, 4, 5, 6 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 15-23=-10, 1-26=-115, 14-26=-100
2) Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 15-23=-10, 1-26=-115, 14-26=-100
3) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 15-23=-10, 1-26=-115, 10-26=-100, 10-14=-20
4) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00



December 8,2021

Continued on page 2

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

LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 15-23=-10, 1-9=-35, 9-26=-115, 14-26=-100
5) 3rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 15-23=-10, 1-26=-115, 10-26=-100, 10-14=-20
6) 4th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 15-23=-10, 1-9=-35, 9-26=-115, 14-26=-100

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	F1A	FLOOR	2	1	T26189802 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:26 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-SA5_DVXzKFcjWfG2NjTi1uVTcCFAdohoYviTJhyBNOl

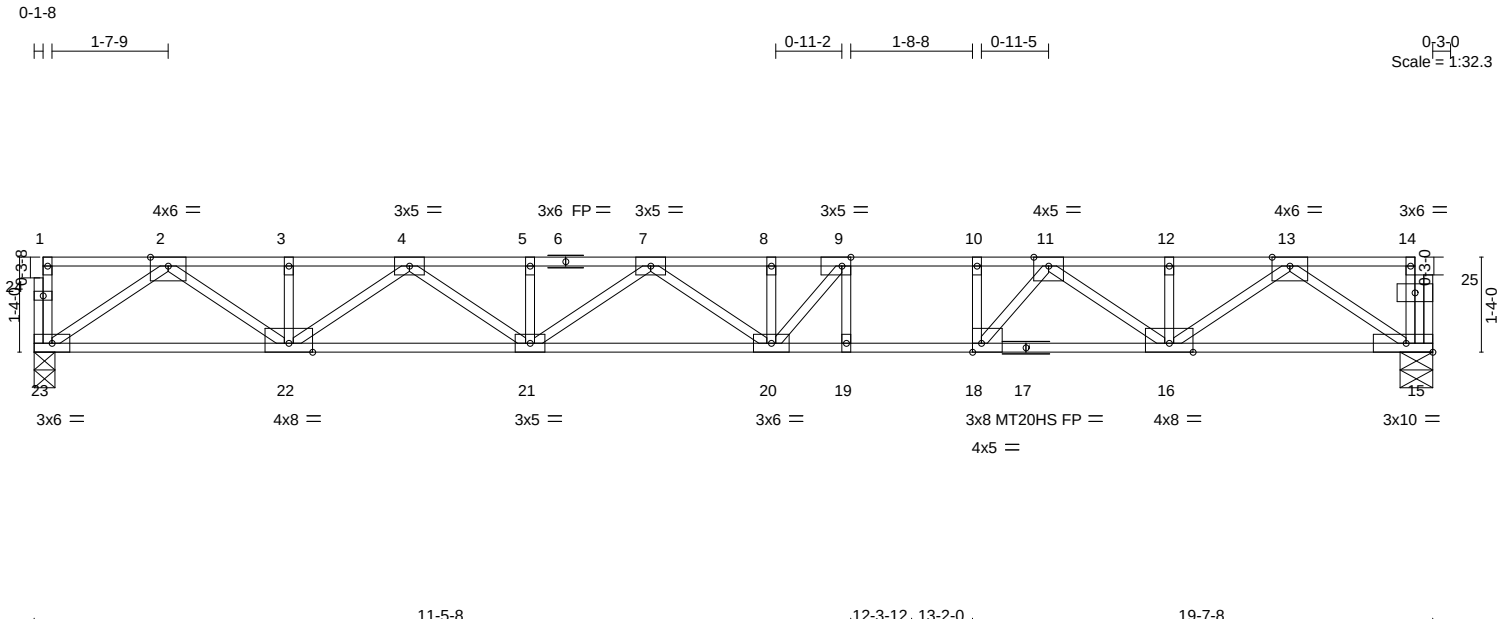


Plate Offsets (X,Y)-- [9:0-1-8,Edge], [18:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.74	Vert(LL)	-0.31	19-20	>737	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.43	19-20	>535	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.06	15	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 105 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

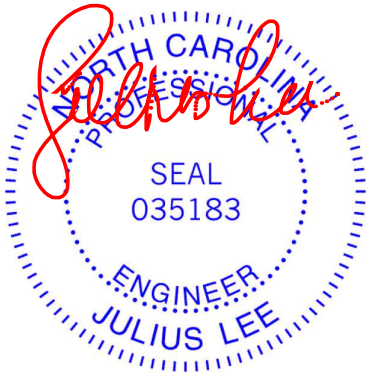
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 23=0-3-8, 15=0-5-8
Max Grav 23=1061(LC 1), 15=1096(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2521/0, 3-4=-2521/0, 4-5=-3917/0, 5-7=-3917/0, 7-8=-4305/0, 8-9=-4305/0, 9-10=-3954/0, 10-11=-3954/0, 11-12=-2597/0, 12-13=-2597/0
BOT CHORD 22-23=0/1421, 21-22=0/3339, 20-21=0/4219, 19-20=0/3954, 18-19=0/3954, 16-18=0/3412, 15-16=0/1502
WEBS 9-19=-313/0, 10-18=-544/0, 2-23=-1721/0, 2-22=0/1351, 4-22=-1005/0, 4-21=0/710, 7-21=-372/0, 7-20=-18/260, 8-20=-354/0, 9-20=-146/754, 13-15=-1793/0, 13-16=0/1345, 11-16=-1002/0, 11-18=0/998

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) Load case(s) 1, 2, 3, 4, 5, 6 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 15-23=-10, 1-12=-100, 12-14=-115
2) Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 15-23=-10, 1-12=-100, 12-14=-115
3) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 15-23=-10, 1-10=-100, 10-12=-20, 12-14=-35
4) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 15-23=-10, 1-9=-20, 9-12=-100, 12-14=-115



December 8,2021

Continued on page 2

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

LOAD CASE(S) Standard

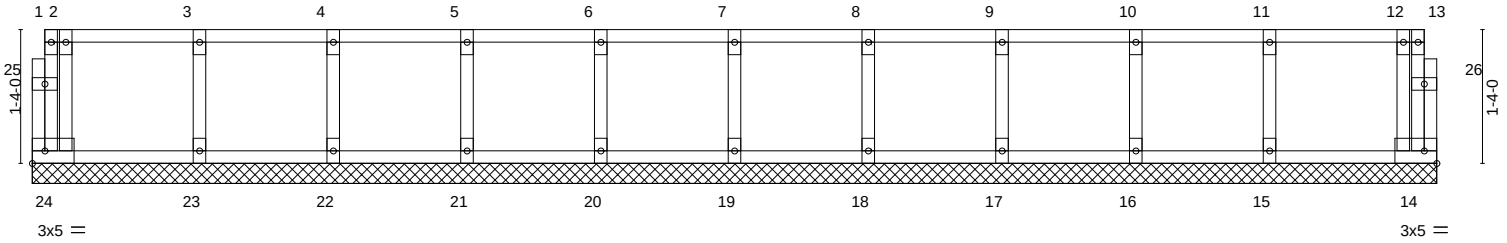
5) 3rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 15-23=-10, 1-10=-100, 10-12=-20, 12-14=-35
6) 4th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 15-23=-10, 1-9=-20, 9-12=-100, 12-14=-115

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	L1K	GABLE	1	1	T26189803 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:56 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-axvKWlunFTOT6GZp800kEDklJIhGfWfDRaz3NyyBNOH

0-1-8 0-1-8

Scale = 1:23.0



0-4-0	1-8-0	3-0-0	4-4-0	5-8-0	7-0-0	8-4-0	9-8-0	11-0-0	12-4-0	13-8-0	14-0-0
0-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-4-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 65 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

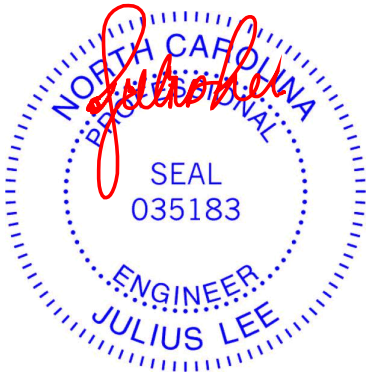
BRACING-

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 14-0-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

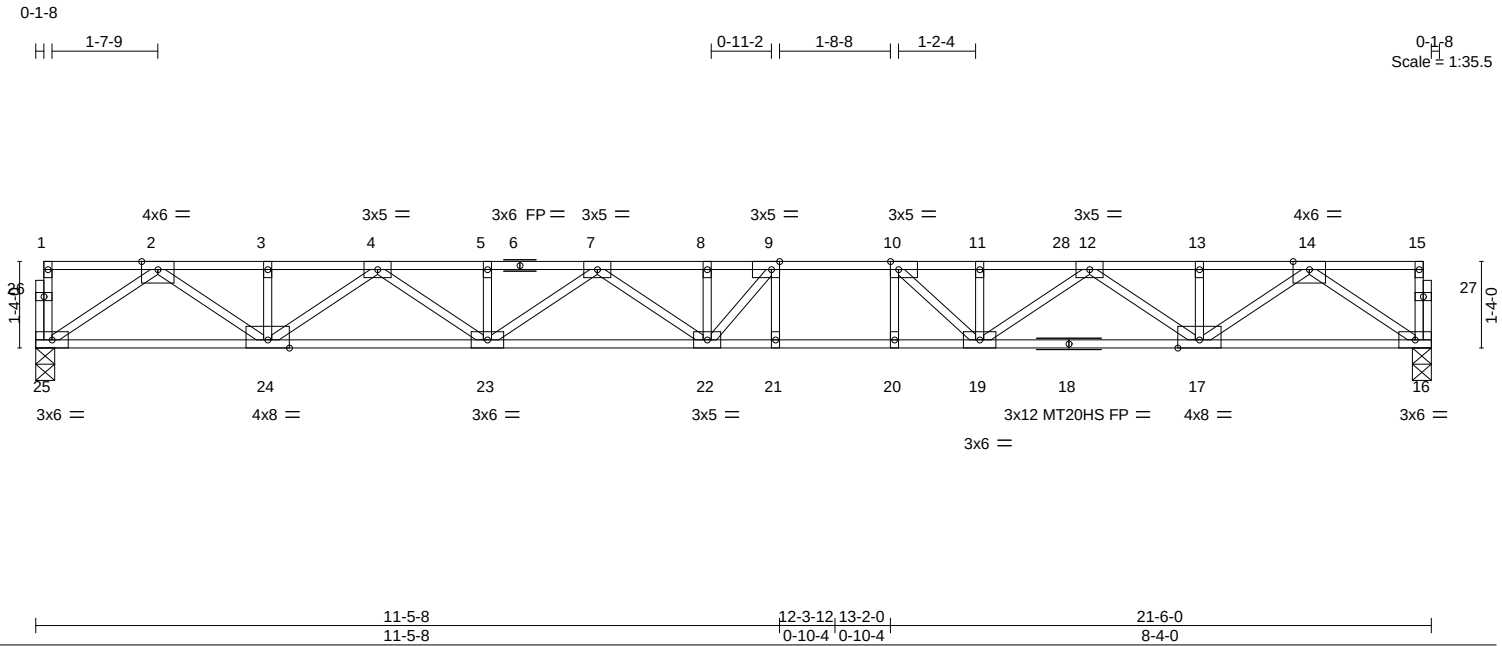


December 8,2021

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	F1	FLOOR	5	1	T26189804 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:25 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-_zXc09WLZxUsuWhrq0yTUhyKfov8uKkfJFzwnFyBNOm



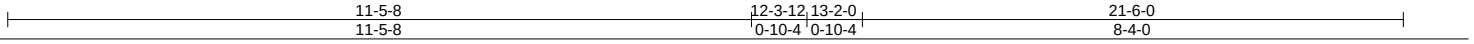


Plate Offsets (X,Y)-- [9:0-1-8,Edge], [10:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.63	Vert(LL)	-0.40	21-22	>640	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.55	21-22	>460	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.09	16	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 114 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

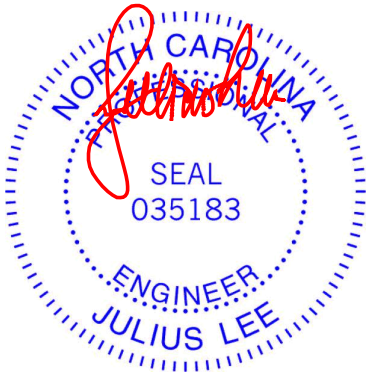
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 25=0-3-8, 16=0-3-8
Max Grav 25=1173(LC 1), 16=1234(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2841/0, 3-4=-2841/0, 4-5=-4552/0, 5-7=-4552/0, 7-8=-5239/0, 8-9=-5239/0, 9-10=-5096/0, 10-11=-4592/0, 11-12=-4592/0, 12-13=-2946/0, 13-14=-2946/0
BOT CHORD 24-25=0/1584, 23-24=0/3817, 22-23=0/5012, 21-22=0/5096, 20-21=0/5096, 19-20=0/5096, 17-19=0/3918, 16-17=0/1659
WEBS 9-21=-274/87, 10-20=-58/263, 2-25=-1919/0, 2-24=0/1544, 4-24=-1200/0, 4-23=0/903, 7-23=-565/0, 7-22=0/399, 8-22=-294/45, 9-22=-385/557, 14-16=-2009/0, 14-17=0/1581, 12-17=-1194/0, 12-19=0/828, 10-19=-955/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) Load case(s) 1, 2, 3, 4, 5, 6 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 16-25=-10, 1-28=-100, 15-28=-115
2) Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 16-25=-10, 1-28=-100, 15-28=-115
3) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 16-25=-10, 1-10=-100, 10-28=-20, 15-28=-35
4) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 16-25=-10, 1-9=-20, 9-28=-100, 15-28=-115



December 8,2021

Continued on page 2

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

LOAD CASE(S) Standard

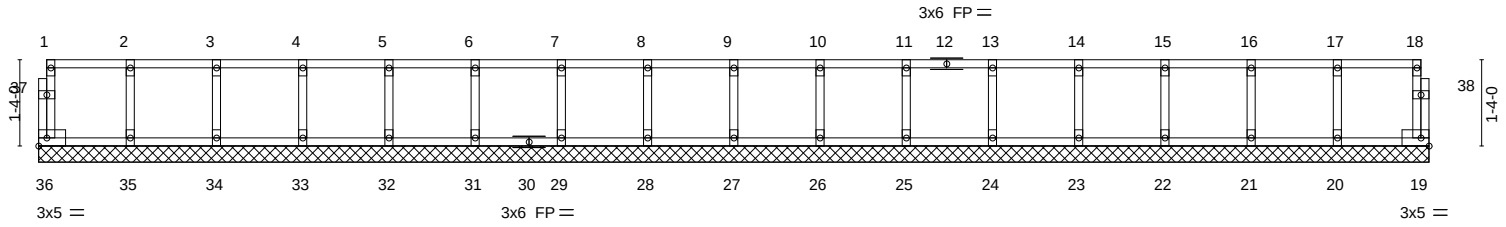
5) 3rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 16-25=-10, 1-10=-100, 10-28=-20, 15-28=-35
6) 4th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 16-25=-10, 1-9=-20, 9-28=-100, 15-28=-115

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 25- 3030 elev A PERMIT-floor truss
21110326-01	L1	GABLE	1	1	T26189805 Job Reference (optional)

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 11:07:54 2021 Page 1
ID:ZKQhmvT2SQjPTLv_7ruqGbzlwD2-eYna53tXks8ltzPQ0b_G9ofPwU0rBcBw_GUyI3yBNOJ

0-1-8 0-1-8

Scale = 1:35.6



1-5-0	2-9-0	4-1-0	5-5-0	6-9-0	8-1-0	9-5-0	10-9-0	12-1-0	13-5-0	14-9-0	16-1-0	17-5-0	18-9-0	20-1-0	21-6-0
1-5-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-5-0

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	19	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 94 lb	FT = 20%F, 11%E

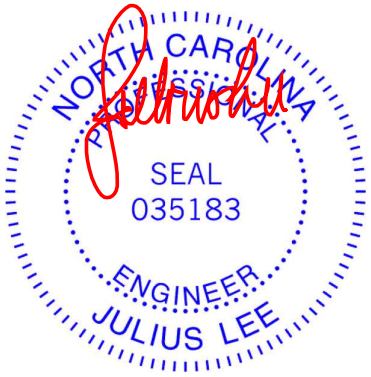
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 21-6-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 36, 19, 27, 28, 29, 31, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

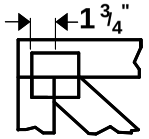


December 8,2021

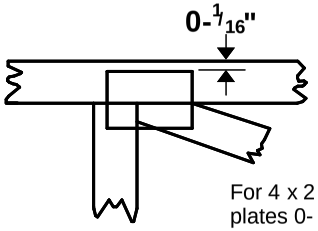
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

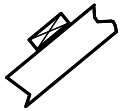
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

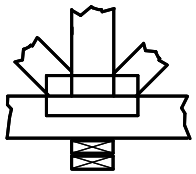
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

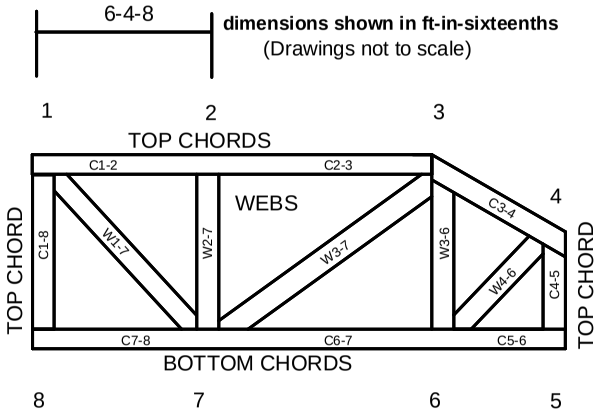


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek
ENGINEERING BY TRENCO
A MiTek Affiliate

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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