ENGINEERING BY TRENCO
A MiTek Affiliate

RE: 4600474
BONNET FLOOR - LOT 39 - ILA'S WAY

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: 4600474
Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.8
Wind Code: Wind Speed: 120 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 13 individual, dated Truss Design Drawings and 0 Additional Drawings.

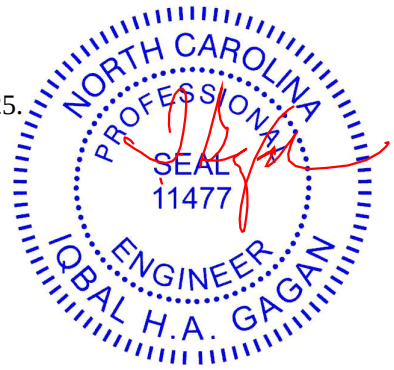
No.	Seal#	Truss Name	Date
1	I71640883	F01	2/25/2025
2	I71640884	F02	2/25/2025
3	I71640885	F03	2/25/2025
4	I71640886	F04	2/25/2025
5	I71640887	F05	2/25/2025
6	I71640888	F06	2/25/2025
7	I71640889	F07	2/25/2025
8	I71640890	F08	2/25/2025
9	I71640891	F09	2/25/2025
10	I71640892	F09G	2/25/2025
11	I71640893	F10	2/25/2025
12	I71640894	F11	2/25/2025
13	I71640895	F12	2/25/2025

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

Truss Design Engineer's Name: Gagan, Iqbal

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844



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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

February 25, 2025

Gagan, Iqbal

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F01	Floor Supported Gable	1	1	I71640883 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:37 Page: 1
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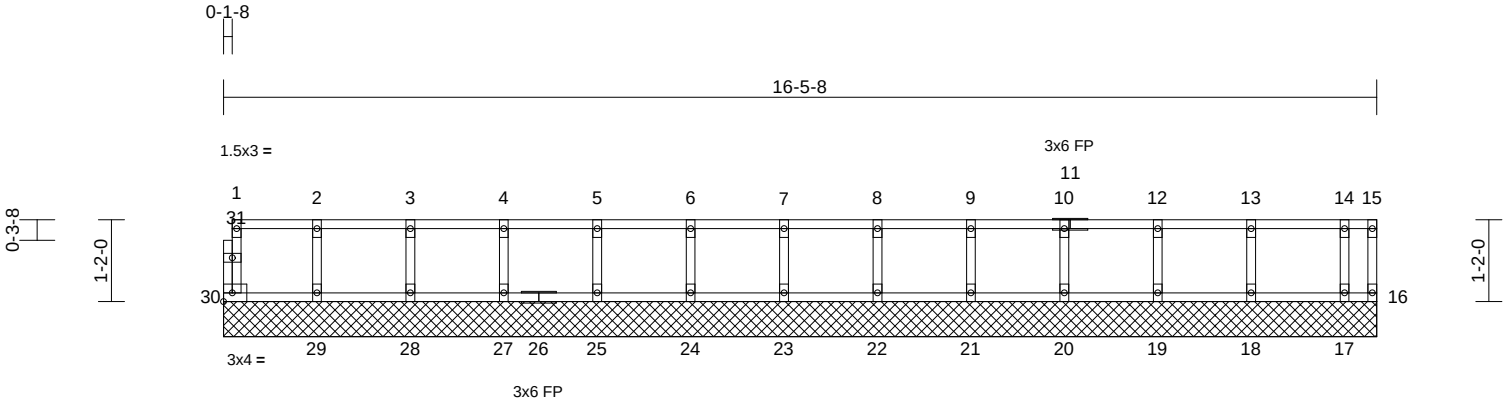


Scale = 1:32.9

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	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	16	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 69 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)

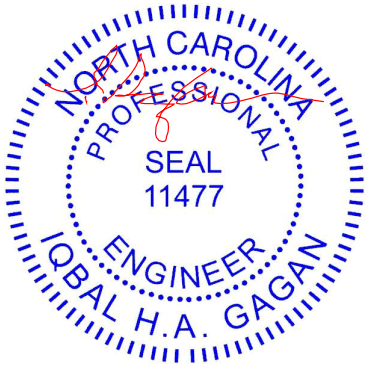
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 16=16-5-8, 17=16-5-8, 18=16-5-8, 19=16-5-8, 20=16-5-8, 21=16-5-8, 22=16-5-8, 23=16-5-8, 24=16-5-8, 25=16-5-8, 27=16-5-8, 28=16-5-8, 29=16-5-8, 30=16-5-8
Max Grav 16=7 (LC 1), 17=105 (LC 1), 18=153 (LC 1), 19=145 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 27=147 (LC 1), 28=146 (LC 1), 29=149 (LC 1), 30=51 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-30=-48/0, 15-16=0/0, 1-2=-5/0, 2-3=-5/0, 3-4=-5/0, 4-5=-5/0, 5-6=-5/0, 6-7=-5/0, 7-8=-5/0, 8-9=-5/0, 9-10=-5/0, 10-12=-5/0, 12-13=-5/0, 13-14=-5/0, 14-15=-5/0
BOT CHORD 29-30=0/5, 28-29=0/5, 27-28=0/5, 25-27=0/5, 24-25=0/5, 23-24=0/5, 22-23=0/5, 21-22=0/5, 20-21=0/5, 19-20=0/5, 18-19=0/5, 17-18=0/5, 16-17=0/5
WEBS 2-29=-133/0, 3-28=-134/0, 4-27=-133/0, 5-25=-133/0, 6-24=-133/0, 7-23=-133/0, 8-22=-133/0, 9-21=-133/0, 10-20=-134/0, 12-19=-132/0, 13-18=-138/0, 14-17=-102/0

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) All bearings are assumed to be SP No.2 .
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



February 25,2025

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

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F02	Floor	11	1	I71640884 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:38 Page: 1
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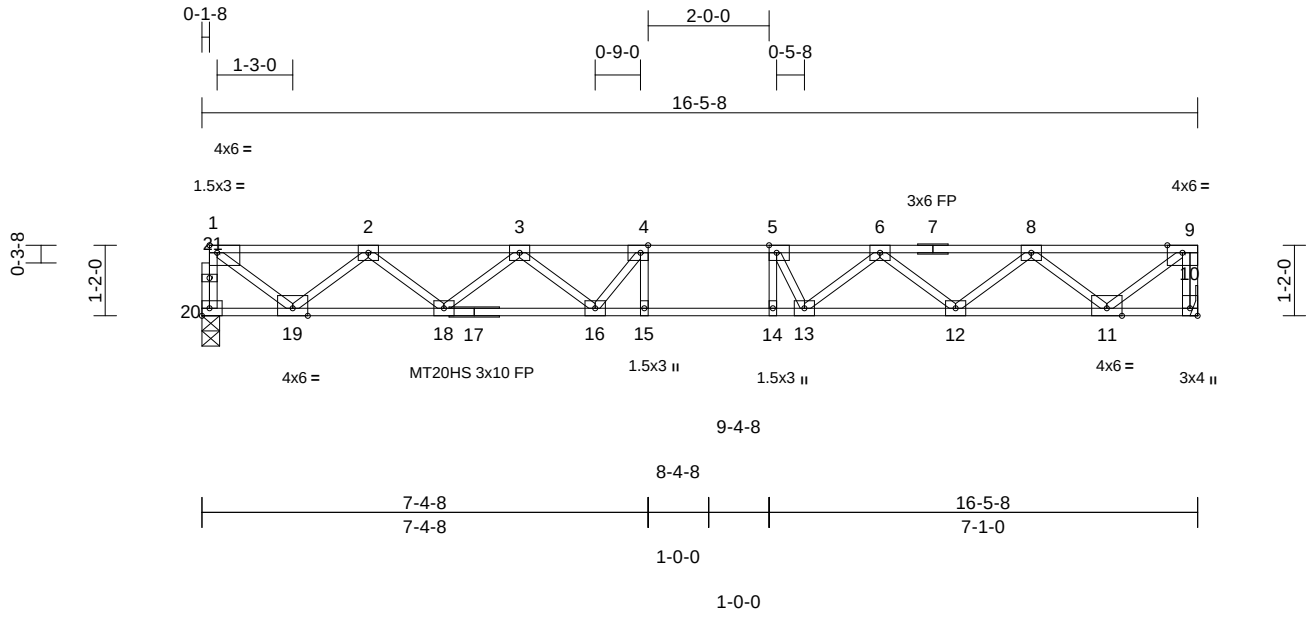


Scale = 1:38.1

Plate Offsets (X, Y): [1:Edge,0-1-8], [4:0-1-8,Edge], [5:0-1-8,Edge], [10: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	0.51	Vert(LL)	-0.22	14-15	>868	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.91	Vert(CT)	-0.31	14-15	>631	240	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.05	10	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 83 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 17-10:2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

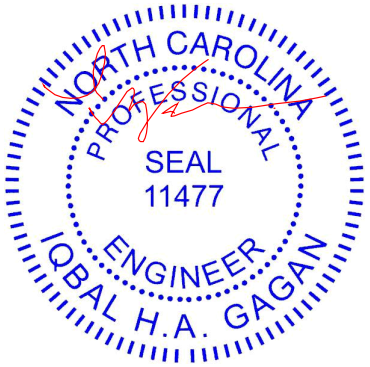
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 10= Mechanical, 20=0-3-8
Max Grav 10=891 (LC 1), 20=885 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-880/0, 9-10=-884/0, 1-2=-1030/0, 2-3=-2494/0, 3-4=-3282/0, 4-5=-3425/0, 5-6=-3299/0, 6-8=-2492/0, 8-9=-1029/0
BOT CHORD 19-20=0/53, 18-19=0/1936, 16-18=0/3020, 15-16=0/3425, 14-15=0/3425, 13-14=0/3425, 12-13=0/3012, 11-12=0/1940, 10-11=0/0
WEBS 4-15=-206/195, 5-14=-232/307, 1-19=0/1248, 2-19=-1180/0, 2-18=0/726, 3-18=-686/0, 3-16=0/465, 4-16=-498/89, 9-11=0/1290, 8-11=-1187/0, 8-12=0/718, 6-12=-676/0, 6-13=0/511, 5-13=-582/116

LOAD CASE(S) Standard

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 3x4 (=) MT20 unless otherwise indicated.
4) Bearings are assumed to be: Joint 20 SP No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.



February 25,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F03	Floor	4	1	I71640885
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:38 Page: 1
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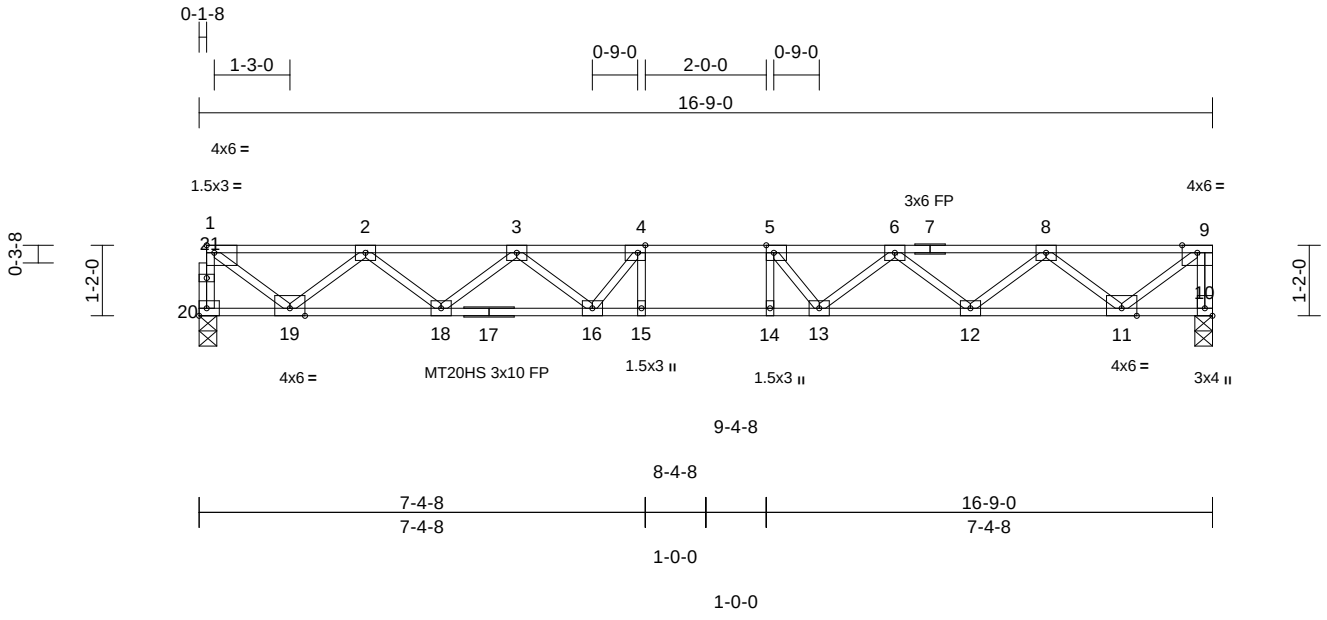


Scale = 1:38.1

Plate Offsets (X, Y): [1:Edge,0-1-8], [4:0-1-8,Edge], [5:0-1-8,Edge], [10: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	0.49	Vert(LL)	-0.24	14-15	>838	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.33	14-15	>607	240	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.06	10	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 84 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 17-10:2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

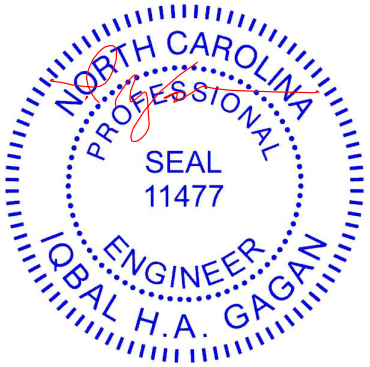
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 10=0-3-8, 20=0-3-8
Max Grav 10=907 (LC 1), 20=901 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-896/0, 9-10=-900/0, 1-2=-1051/0, 2-3=-2553/0, 3-4=-3380/0, 4-5=-3553/0, 5-6=-3381/0, 6-8=-2554/0, 8-9=-1049/0
BOT CHORD 19-20=0/54, 18-19=0/1977, 16-18=0/3097, 15-16=0/3553, 14-15=0/3553, 13-14=0/3553, 12-13=0/3097, 11-12=0/1979, 10-11=0/0
WEBS 4-15=-195/223, 5-14=-196/223, 1-19=0/1273, 2-19=-1205/0, 2-18=0/750, 3-18=-708/0, 3-16=0/491, 4-16=-544/71, 9-11=0/1316, 8-11=-1211/0, 8-12=0/748, 6-12=-707/0, 6-13=0/491, 5-13=-544/72

LOAD CASE(S) Standard

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 3x4 (=) MT20 unless otherwise indicated.
4) Bearings are assumed to be: Joint 20 SP No.2 , Joint 10 SP No.1 .
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
6) CAUTION, Do not erect truss backwards.



February 25,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F04	Floor Supported Gable	1	1	I71640886 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:38 Page: 1
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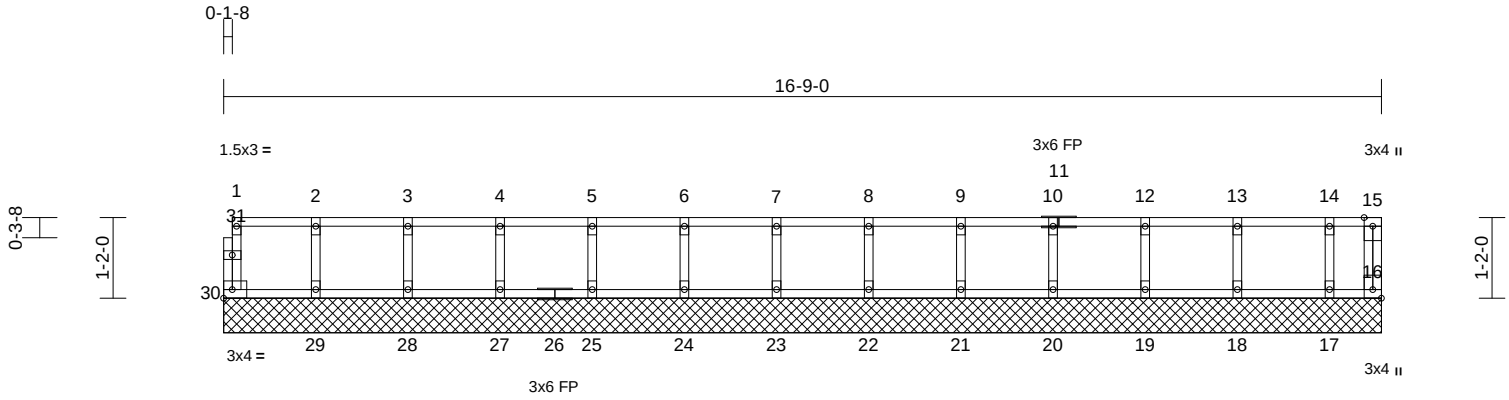


Scale = 1:33.3

Plate Offsets (X, Y): [16: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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	16	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 71 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)

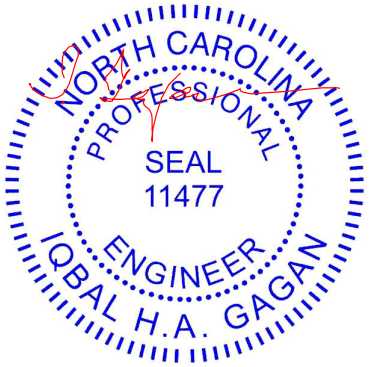
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 16=16-9-0, 17=16-9-0, 18=16-9-0, 19=16-9-0, 20=16-9-0, 21=16-9-0, 22=16-9-0, 23=16-9-0, 24=16-9-0, 25=16-9-0, 27=16-9-0, 28=16-9-0, 29=16-9-0, 30=16-9-0
Max Grav 16=27 (LC 1), 17=110 (LC 1), 18=153 (LC 1), 19=145 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=148 (LC 1), 30=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-30=-49/0, 15-16=-20/0, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0, 5-6=-6/0, 6-7=-6/0, 7-8=-6/0, 8-9=-6/0, 9-10=-6/0, 10-12=-6/0, 12-13=-6/0, 13-14=-6/0, 14-15=-6/0
BOT CHORD 29-30=0/6, 28-29=0/6, 27-28=0/6, 25-27=0/6, 24-25=0/6, 23-24=0/6, 22-23=0/6, 21-22=0/6, 20-21=0/6, 19-20=0/6, 18-19=0/6, 17-18=0/6, 16-17=0/6
WEBS 2-29=-132/0, 3-28=-134/0, 4-27=-133/0, 5-25=-133/0, 6-24=-133/0, 7-23=-133/0, 8-22=-133/0, 9-21=-133/0, 10-20=-134/0, 12-19=-132/0, 13-18=-139/0, 14-17=-105/0

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) All bearings are assumed to be SP No.2 .
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



February 25,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F05	Floor Supported Gable	1	1	I71640887 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:38 Page: 1
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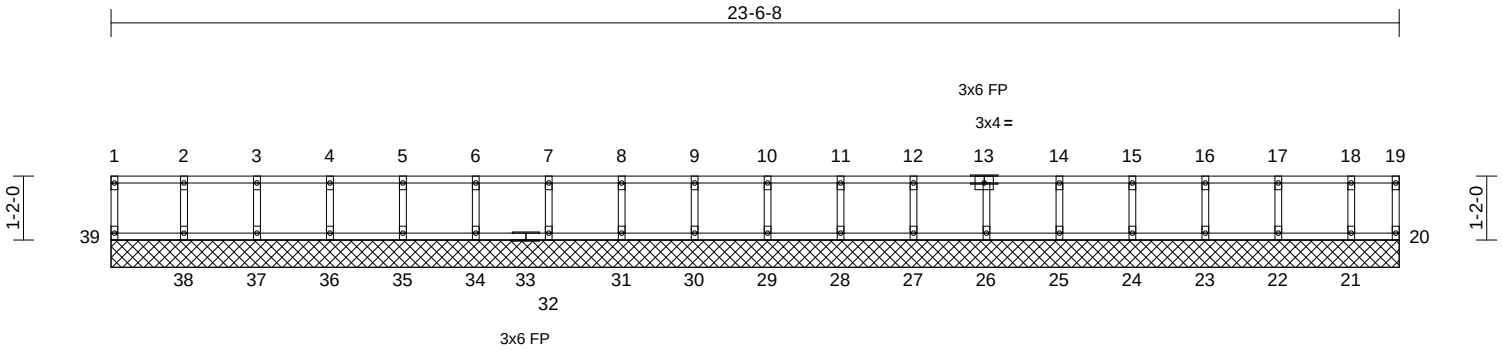


Scale = 1:42.1

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(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	20	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 96 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)

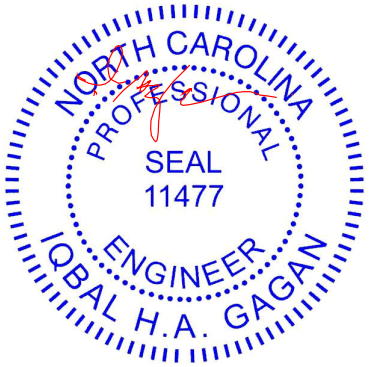
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 20=23-6-8, 21=23-6-8, 22=23-6-8, 23=23-6-8, 24=23-6-8, 25=23-6-8, 26=23-6-8, 27=23-6-8, 28=23-6-8, 29=23-6-8, 30=23-6-8, 31=23-6-8, 32=23-6-8, 34=23-6-8, 35=23-6-8, 36=23-6-8, 37=23-6-8, 38=23-6-8, 39=23-6-8
Max Grav 20=32 (LC 1), 21=127 (LC 1), 22=151 (LC 1), 23=146 (LC 1), 24=146 (LC 1), 25=150 (LC 1), 26=147 (LC 1), 27=143 (LC 1), 28=148 (LC 1), 29=146 (LC 1), 30=147 (LC 1), 31=147 (LC 1), 32=147 (LC 1), 34=147 (LC 1), 35=147 (LC 1), 36=147 (LC 1), 37=146 (LC 1), 38=151 (LC 1), 39=63 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-39=-56/0, 19-20=-28/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0, 7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0, 11-12=-8/0, 12-14=-8/0, 14-15=-2/0, 15-16=-2/0, 16-17=-2/0, 17-18=-2/0, 18-19=-2/0
BOT CHORD 38-39=0/8, 37-38=0/8, 36-37=0/8, 35-36=0/8, 34-35=0/8, 32-34=0/8, 31-32=0/8, 30-31=0/8, 29-30=0/8, 28-29=0/8, 27-28=0/8, 26-27=0/8, 25-26=0/2, 24-25=0/2, 23-24=0/2, 22-23=0/2, 21-22=0/2, 20-21=0/2
WEBS 2-38=-139/0, 3-37=-132/0, 4-36=-134/0, 5-35=-133/0, 6-34=-133/0, 7-32=-133/0, 8-31=-133/0, 9-30=-133/0, 10-29=-133/0, 11-28=-134/0, 12-27=-130/0, 13-26=-134/0, 14-25=-137/0, 15-24=-133/0, 16-23=-133/0, 17-22=-137/0, 18-21=-116/0

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) All bearings are assumed to be SP No.2 .
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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



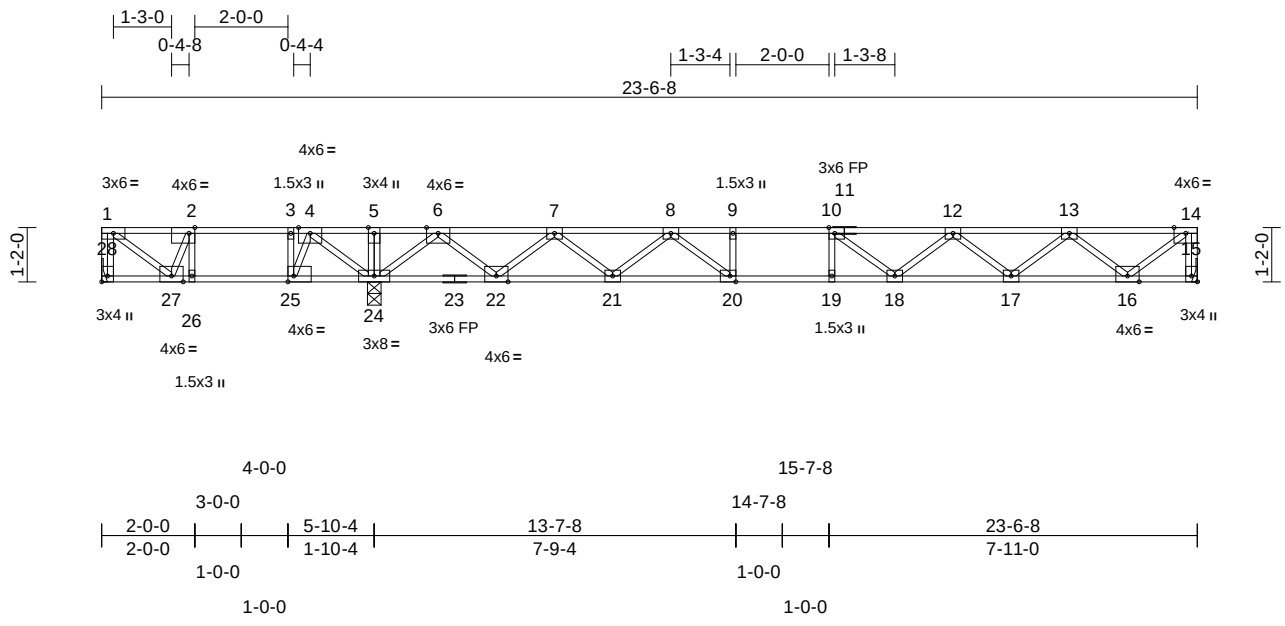
February 25,2025

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

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F06	Floor	7	1	I71640888
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:38 Page: 1

ID:ltfOhrUXvN?oZ3h1KjBcL5zz2_e-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:49.5

Plate Offsets (X, Y): [2:0-1-8,Edge], [10:0-1-8,Edge], [15:Edge,0-1-8], [20:0-1-8,Edge], [25:0-1-8,Edge], [28: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	0.93	Vert(LL)	-0.27	18-19	>778	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.87	Vert(CT)	-0.37	18-19	>569	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.05	15	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 119 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)

BOT CHORD 2x4 SP No.2(flat) *Except* 23-15:2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP SS (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, Except:
6-0-0 oc bracing: 26-27,25-26,24-25.

REACTIONS (size) 15= Mechanical, 24=0-3-8, 28= Mechanical
Max Uplift 28=-115 (LC 4)
Max Grav 15=904 (LC 7), 24=1551 (LC 1), 28=256 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-28=-252/112, 14-15=-897/0, 1-2=-221/231, 2-3=-245/439, 3-4=-245/439, 4-5=0/1191, 5-6=0/1191, 6-7=-1157/0, 7-8=-2572/0, 8-9=-3507/0, 9-10=-3507/0, 10-12=-3338/0, 12-13=-2545/0, 13-14=-1042/0

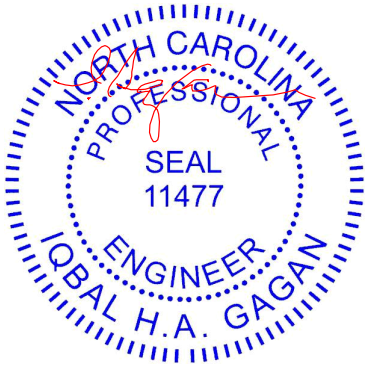
BOT CHORD 27-28=0/0, 26-27=-439/245, 25-26=-439/245, 24-25=-696/97, 22-24=0/234, 21-22=0/2028, 20-21=0/3120, 19-20=0/3507, 18-19=0/3507, 17-18=0/3101, 16-17=0/1964, 15-16=0/0

WEBS 2-26=-429/0, 3-25=-636/0, 5-24=-156/0, 9-20=-279/0, 10-19=-197/102, 4-24=-795/0, 4-25=0/896, 6-24=-1603/0, 6-22=0/1216, 7-22=-1150/0, 7-21=0/721, 8-21=-732/0, 8-20=0/742, 1-27=-289/277, 2-27=-63/539, 14-16=0/1308, 13-16=-1200/0, 13-17=0/756, 12-17=-724/0, 12-18=0/407, 10-18=-476/102

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 (=) MT20 unless otherwise indicated.
3) Bearings are assumed to be: , Joint 24 SP No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 28.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

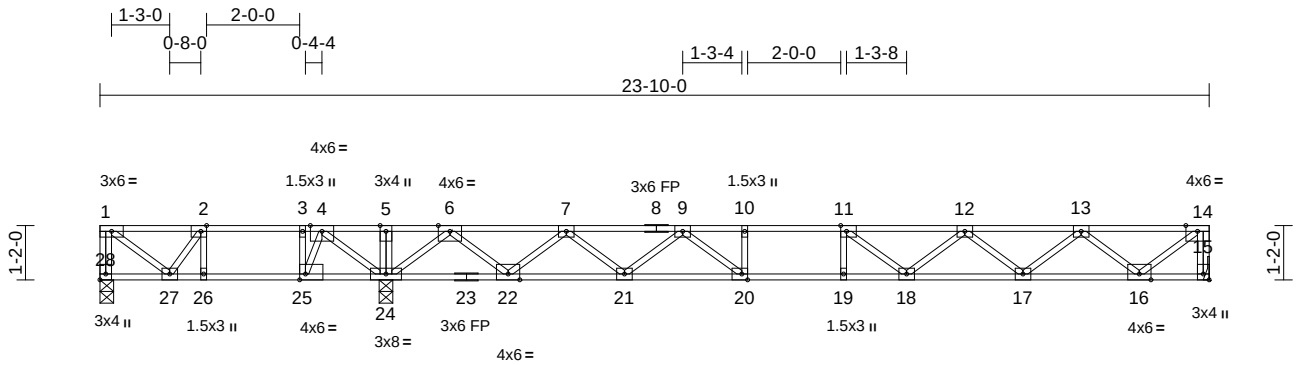


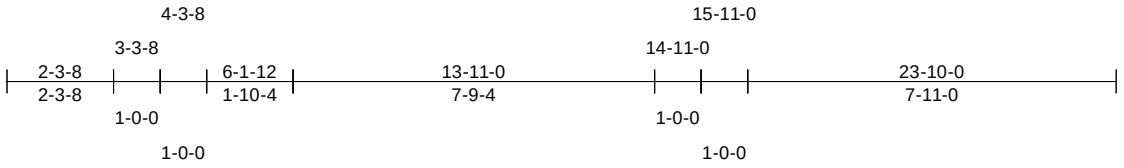
February 25,2025

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

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F07	Floor	1	1	I71640889
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:39 Page: 1
ID:idQHxbY5Q6ySVRrlxUE?NSzz1zH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:49.5

Plate Offsets (X, Y): [2:0-1-8,Edge], [11:0-1-8,Edge], [15:Edge,0-1-8], [20:0-1-8,Edge], [25:0-1-8,Edge], [28: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	0.94	Vert(LL)	-0.27	18-19	>776	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.86	Vert(CT)	-0.37	18-19	>568	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.05	15	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 120 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 23-15:2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP SS (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, Except:
6-0-0 oc bracing: 26-27,25-26,24-25.

REACTIONS (size) 15= Mechanical, 24=0-3-8, 28=0-3-8
Max Uplift 28=-102 (LC 4)
Max Grav 15=906 (LC 7), 24=1550 (LC 1), 28=284 (LC 3)

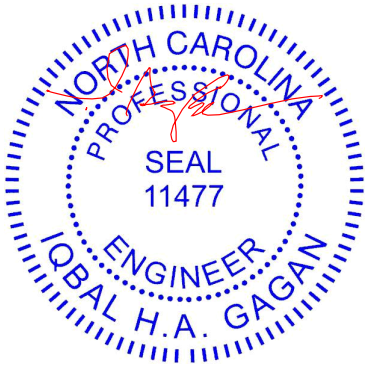
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-28=-282/94, 14-15=-899/0, 1-2=-243/199, 2-3=-312/452, 3-4=-312/452, 4-5=0/1192, 5-6=0/1192, 6-7=-1185/0, 7-9=-2595/0, 9-10=-3523/0, 10-11=-3523/0, 11-12=-3350/0, 12-13=-2552/0, 13-14=-1045/0

BOT CHORD 27-28=0/0, 26-27=-452/312, 25-26=-452/312, 24-25=-710/156, 22-24=0/263, 21-22=0/2054, 20-21=0/3141, 19-20=0/3523, 18-19=0/3523, 17-18=0/3110, 16-17=0/1969, 15-16=0/0

WEBS 2-26=-308/0, 3-25=-646/0, 5-24=-157/0, 10-20=-276/0, 11-19=-194/104, 4-24=-801/0, 4-25=0/912, 6-24=-1604/0, 6-22=0/1217, 7-22=-1150/0, 7-21=0/721, 9-21=-732/0, 9-20=0/735, 1-27=-250/305, 2-27=-121/441, 14-16=0/1311, 13-16=-1203/0, 13-17=0/759, 12-17=-727/0, 12-18=0/411, 11-18=-483/94

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 (=) MT20 unless otherwise indicated.
3) Bearings are assumed to be: Joint 28 SP No.2 , Joint 24 SP No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 28.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



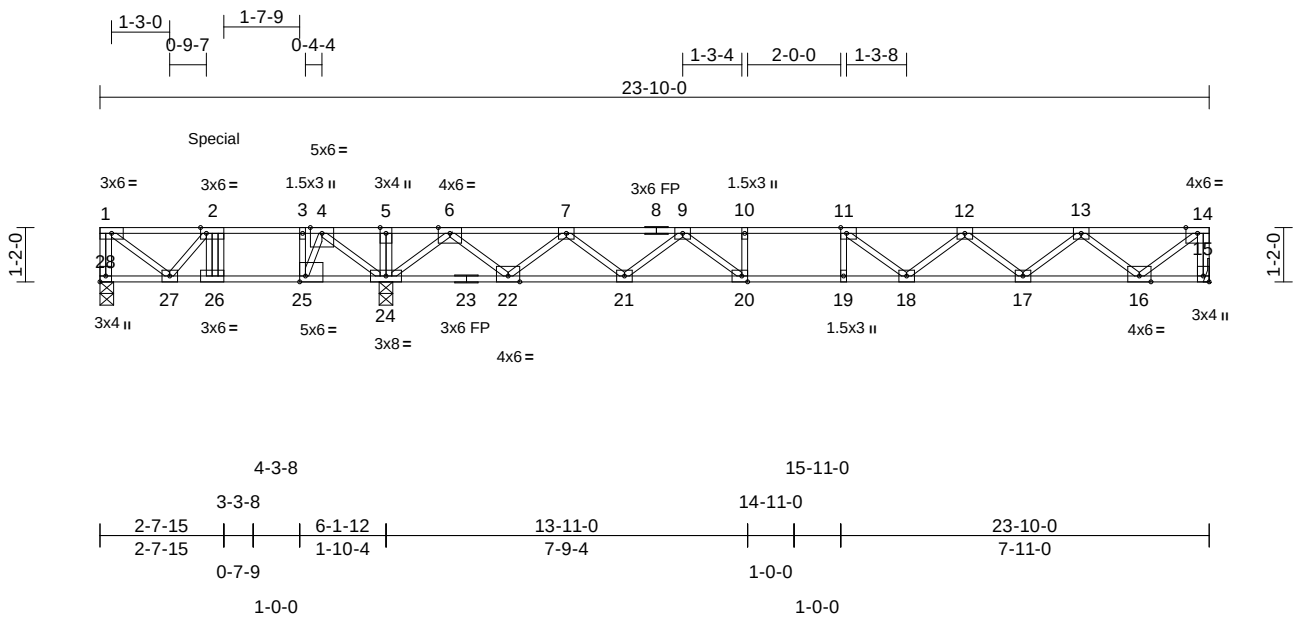
February 25,2025

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

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY	I71640890
4600474	F08	Floor Girder	1	1	Job Reference (optional)	

Builders FirstSource (Albermarle), Albemarle, NC - 28001, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:39 Page: 1

ID:idQHxbY5Q6ySVRrlxUE?NSzz1zH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:49.5

Plate Offsets (X, Y): [2:0-1-8,Edge], [11:0-1-8,Edge], [15:Edge,0-1-8], [20:0-1-8,Edge], [25:0-1-8,Edge], [28: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	0.90	Vert(LL)	-0.27	18-19	>783	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.93	Vert(CT)	-0.37	18-19	>574	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.05	15	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 123 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat) *Except* 8-1:2x4 SP No.1 (flat)

BOT CHORD 2x4 SP No.2(flat) *Except* 23-15:2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP SS (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, Except:
6-0-0 oc bracing: 26-27,24-25
2-2-0 oc bracing: 25-26.

REACTIONS (size) 15= Mechanical, 24=0-3-8, 28=0-3-8
Max Uplift 28=-130 (LC 4)
Max Grav 15=903 (LC 7), 24=1599 (LC 8), 28=317 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-28=-323/119, 14-15=-897/0, 1-2=-264/233, 2-3=-363/552, 3-4=-363/552, 4-5=0/1264, 5-6=0/1264, 6-7=-1151/0, 7-9=-2565/0, 9-10=-3503/0, 10-11=-3503/0, 11-12=-3335/0, 12-13=-2543/0, 13-14=-1042/0

BOT CHORD 27-28=0/0, 26-27=-543/367, 25-26=-552/363, 24-25=-835/194, 22-24=0/224, 21-22=0/2023, 20-21=0/3114, 19-20=0/3503, 18-19=0/3503, 17-18=0/3099, 16-17=0/1963, 15-16=0/0

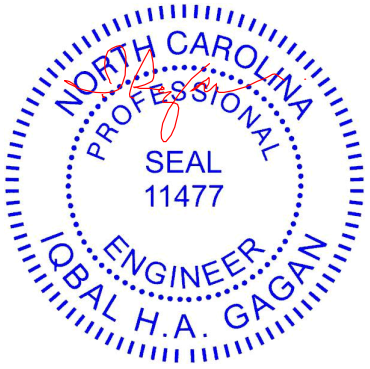
WEBS 2-26=-307/0, 3-25=-744/0, 5-24=-160/0, 10-20=-275/0, 11-19=-190/103, 4-24=-861/0, 4-25=0/1057, 6-24=-1618/0, 6-22=0/1224, 7-22=-1155/0, 7-21=0/725, 9-21=-738/0, 9-20=0/728, 1-27=-292/331, 2-27=-155/464, 14-16=0/1307, 13-16=-1199/0, 13-17=0/755, 12-17=-724/0, 12-18=0/409, 11-18=-480/86

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 (=) MT20 unless otherwise indicated.
3) Bearings are assumed to be: Joint 28 SP No.2 , Joint 24 SP No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 28.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
7) CAUTION, Do not erect truss backwards.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 116 lb down at 2-5-11 on top chord. The design/selection of such connection device(s) is the responsibility of others.
9) 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 (lb/ft)
Vert: 15-28=-10, 1-14=-100
Concentrated Loads (lb)
Vert: 2=-36 (B)

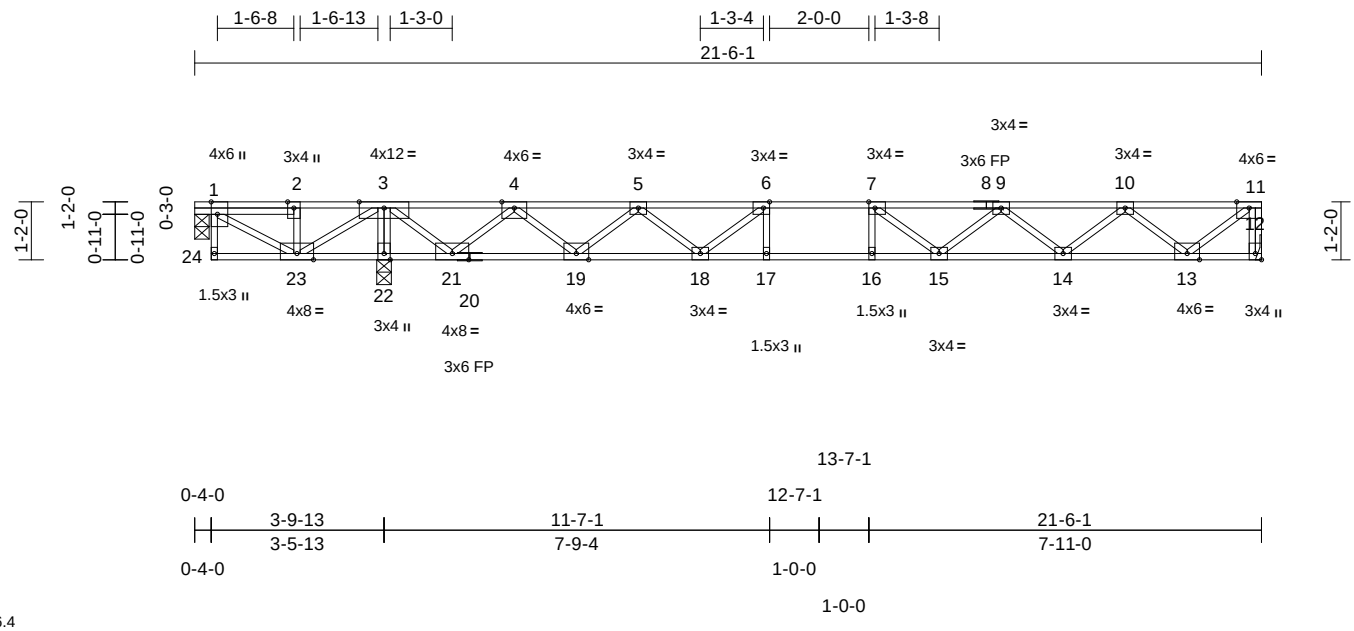


February 25,2025

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

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F09	Floor	1	1	I71640891
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:39 Page: 1
ID:3SzZaN8j4jqT4QuQWAsE8Xzha8D-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:46.4

Plate Offsets (X, Y): [1:0-3-0,Edge], [6:0-1-8,Edge], [7:0-1-8,Edge], [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	0.75	Vert(LL)	-0.24	15-16	>867	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.33	15-16	>631	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.02	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 110 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 20-12:2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP SS (flat)
WEBS 2x4 SP No.3(flat)

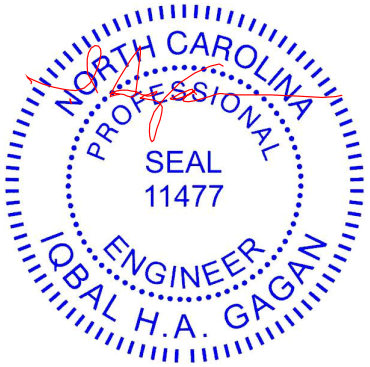
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 22-23,21-22,19-21.

REACTIONS (size) 1=0-3-8, 12= Mechanical, 22=0-3-8
Max Uplift 1=-697 (LC 4)
Max Grav 1=-20 (LC 3), 12=820 (LC 4), 22=2052 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-24=0/9, 11-12=-814/0, 1-2=0/1166, 2-3=0/1165, 3-4=0/1126, 4-5=-864/0, 5-6=-2160/0, 6-7=-2814/0, 7-9=-2828/0, 9-10=-2235/0, 10-11=-932/0
BOT CHORD 23-24=0/0, 22-23=-2379/0, 21-22=-2396/0, 19-21=-95/49, 18-19=0/1645, 17-18=0/2814, 16-17=0/2814, 15-16=0/2814, 14-15=0/2702, 13-14=0/1752, 12-13=0/0
WEBS 3-22=-2005/0, 6-17=-7/302, 7-16=-267/40, 2-23=-205/0, 1-23=-1351/0, 3-23=0/1564, 3-21=0/1596, 4-21=-1501/0, 4-19=0/1085, 5-19=-1020/0, 5-18=0/670, 6-18=-883/0, 11-13=0/1170, 10-13=-1067/0, 10-14=0/630, 9-14=-607/0, 9-15=0/279, 7-15=-283/221

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: Joint 1 SP No.2 , Joint 22 SP No.2 .
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 697 lb uplift at joint 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
6) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



February 25,2025

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

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F09G	Floor Girder	1	1	I71640892 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:40 Page: 1
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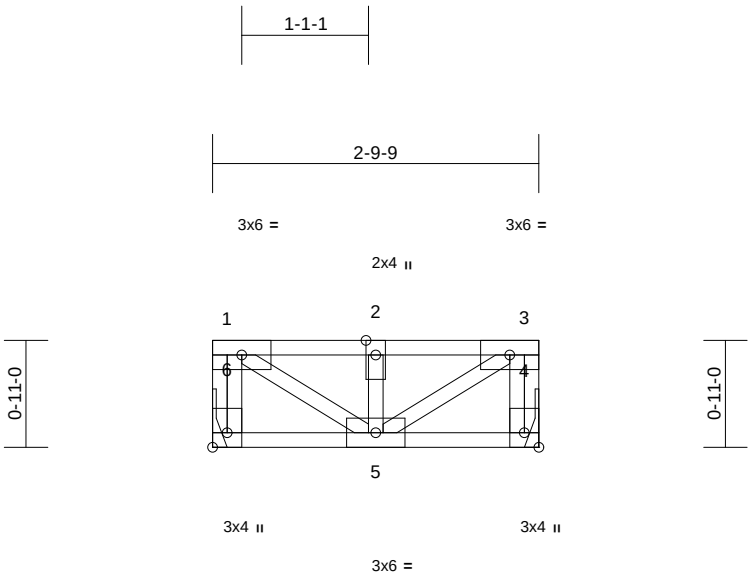


Scale = 1:19.8

Plate Offsets (X, Y): [4:Edge,0-1-8], [6: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	0.27	Vert(LL)	0.00	5	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.05	Vert(CT)	0.00	5	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 17 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)

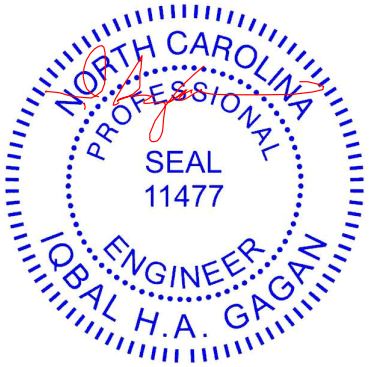
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-9-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 6= Mechanical
Max Uplift 4=-258 (LC 3), 6=-258 (LC 3)
Max Grav 4=53 (LC 1), 6=53 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-48/258, 3-4=-48/258, 1-2=-1/482, 2-3=-1/482
BOT CHORD 5-6=0/0, 4-5=0/0
WEBS 2-5=0/626, 3-5=-568/1, 1-5=-568/1

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 258 lb uplift at joint 6 and 258 lb uplift at joint 4.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 797 lb up at 1-5-7 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 4-6=-10, 1-3=-100
Concentrated Loads (lb)
Vert: 2=174



February 25,2025

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

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F10	Floor Girder	1	1	I71640893 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:40 Page: 1
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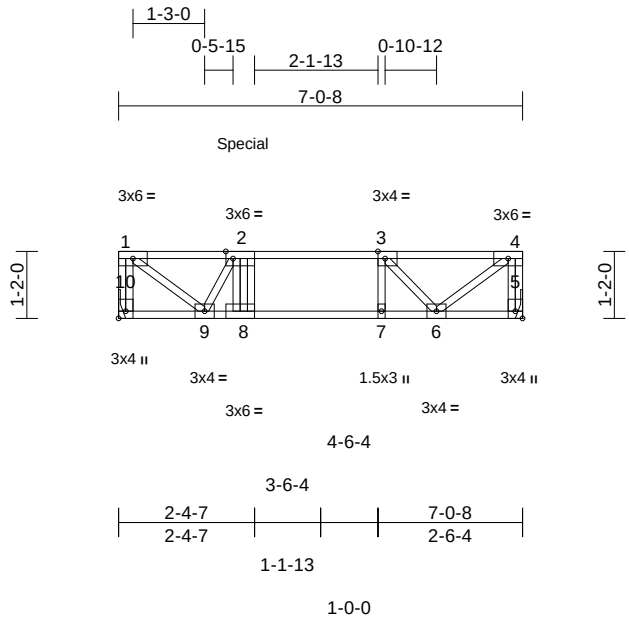

Scale = 1:40.2

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [5:Edge,0-1-8], [10: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	0.56	Vert(LL)	-0.06	6-7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.08	6-7	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 40 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) 5= Mechanical, 10= Mechanical
Max Grav 5=360 (LC 1), 10=365 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-361/0, 4-5=-357/0, 1-2=-367/0, 2-3=-535/0, 3-4=-341/0
BOT CHORD 9-10=0/0, 8-9=0/532, 7-8=0/535, 6-7=0/535, 5-6=0/0
WEBS 2-8=-50/293, 3-7=-198/74, 1-9=0/460, 2-9=-365/0, 4-6=0/428, 3-6=-327/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 33 lb down and 358 lb up at 2-2-3 on top chord. The design/ selection of such connection device(s) is the responsibility of others.
5) 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 (lb/ft)
Vert: 5-10=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 2=47 (F)

NORTH CAROLINA PROFESSIONAL SEAL 11477 ENGINEER IQBAL H.A. GAGAN

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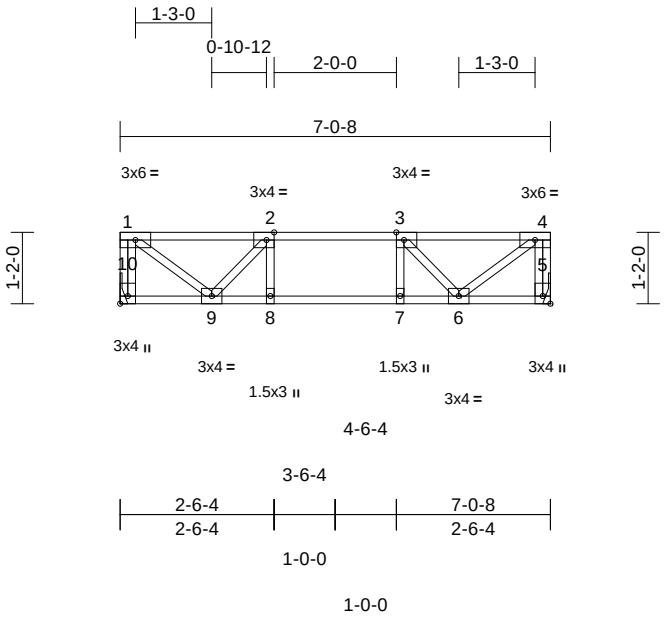
Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F11	Floor	2	1	I71640894 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:40 Page: 1
ID:bCE4UOCbT?uebuYJfXkv52zz1yQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:37.7

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [5:Edge,0-1-8], [10: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	0.34	Vert(LL)	-0.03	8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.35	Vert(CT)	-0.03	8	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 38 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)

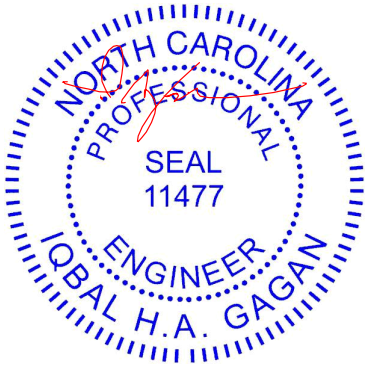
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5= Mechanical, 10= Mechanical
Max Grav 5=374 (LC 1), 10=374 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-366/0, 4-5=-366/0, 1-2=-357/0, 2-3=-596/0, 3-4=-357/0
BOT CHORD 9-10=0/0, 8-9=0/596, 7-8=0/596, 6-7=0/596, 5-6=0/0
WEBS 2-8=-56/90, 3-7=-56/90, 1-9=0/448, 2-9=-353/0, 4-6=0/448, 3-6=-353/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	BONNET FLOOR - LOT 39 - ILA'S WAY
4600474	F12	Floor Supported Gable	1	1	I71640895 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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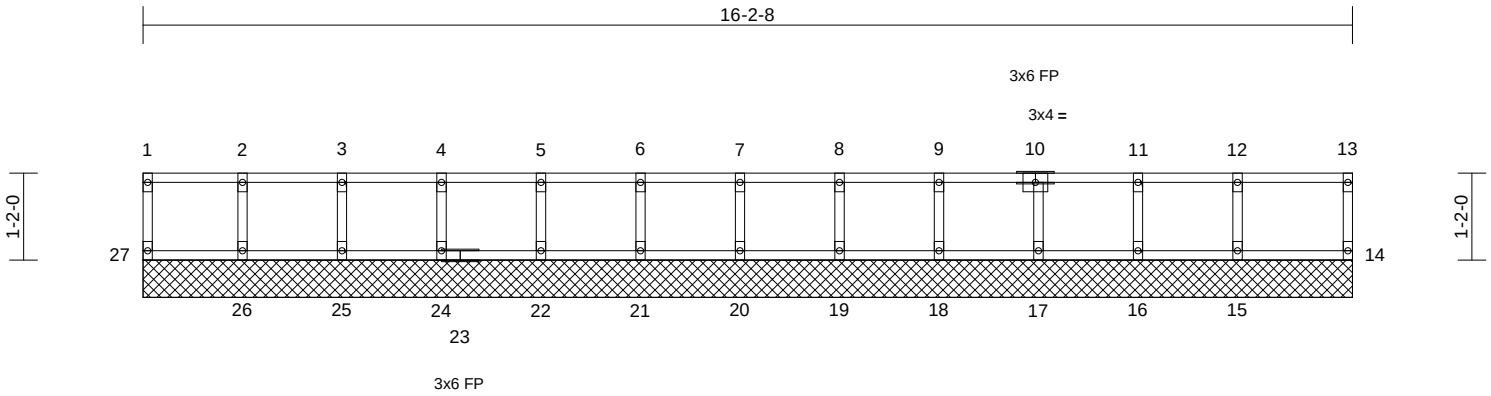


Scale = 1:30.9

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 66 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)

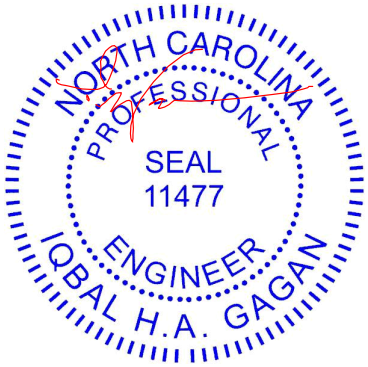
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 14=16-2-8, 15=16-2-8, 16=16-2-8, 17=16-2-8, 18=16-2-8, 19=16-2-8, 20=16-2-8, 21=16-2-8, 22=16-2-8, 24=16-2-8, 25=16-2-8, 26=16-2-8, 27=16-2-8
Max Grav 14=73 (LC 1), 15=167 (LC 1), 16=144 (LC 1), 17=148 (LC 1), 18=143 (LC 1), 19=147 (LC 1), 20=146 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 24=146 (LC 1), 25=148 (LC 1), 26=143 (LC 1), 27=69 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-27=-59/0, 13-14=-67/0, 1-2=-14/0, 2-3=-14/0, 3-4=-14/0, 4-5=-14/0, 5-6=-14/0, 6-7=-14/0, 7-8=-14/0, 8-9=-14/0, 9-11=-14/0, 11-12=-9/0, 12-13=-9/0
BOT CHORD 26-27=0/14, 25-26=0/14, 24-25=0/14, 22-24=0/14, 21-22=0/14, 20-21=0/14, 19-20=0/14, 18-19=0/14, 17-18=0/14, 16-17=0/9, 15-16=0/9, 14-15=0/9
WEBS 2-26=-135/0, 3-25=-133/0, 4-24=-133/0, 5-22=-133/0, 6-21=-133/0, 7-20=-133/0, 8-19=-134/0, 9-18=-130/0, 10-17=-134/0, 11-16=-132/0, 12-15=-152/0

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) All bearings are assumed to be SP No.2 .
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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



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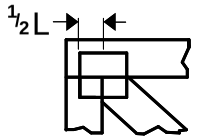
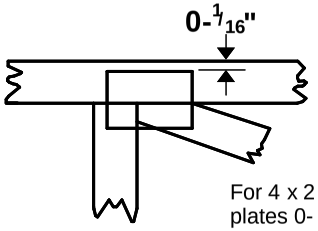
Symbols

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.

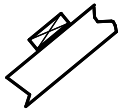
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

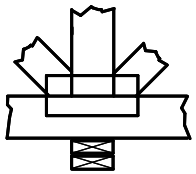
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

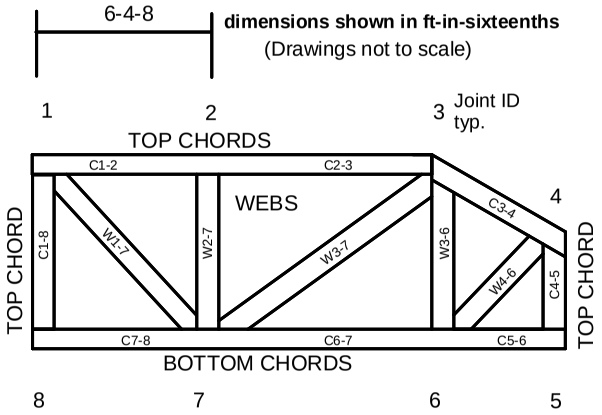


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

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

MiTek®

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MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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