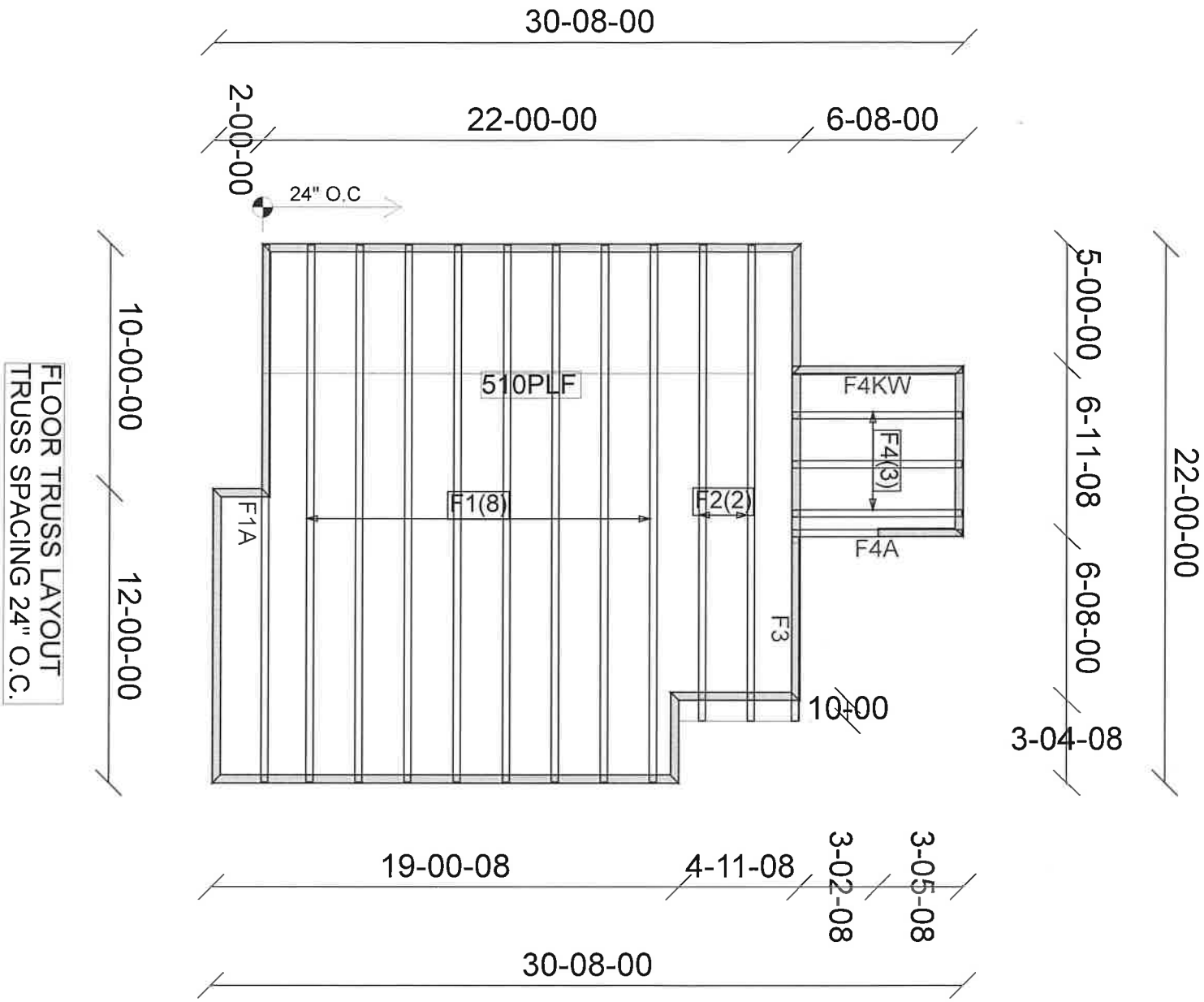
FLOOR TRUSS LAYOUT
TRUSS SPACING 24" O.C.



TRUSS BUILDERS INC.

10401 Chapel Hill Rd
Morrisville, NC 27560
Ph. 919-467-9988
Fax. 919-481-3255

SP210819
PINE MEADOW
110 THORTON'S CREEK DR
ERWIN, NC

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: SP210818
COOL MEADOW FARM FLOOR

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

Pages or sheets covered by this seal: I47466154 thru I47466162

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

North Carolina COA: C-0844

August 16,2021

Sevier, Scott

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

Job	Truss	Truss Type	Qty	Ply	COOL MEADOW FARM FLOOR
SP210818	F1	Floor	6	1	I47466154
					Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Aug 16 09:31:14 2021 Page 1
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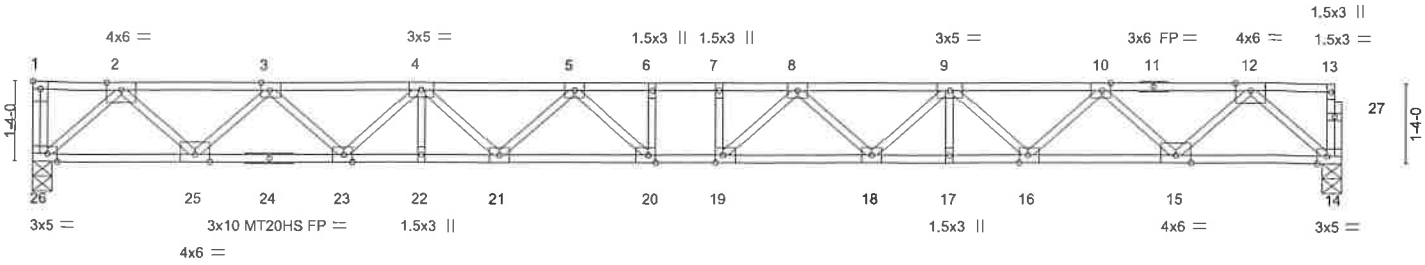
1-3-0 1-0-0 0-1-8

Scale = 1:36,9



2-9-0	5-3-0	7-10-8	14-1-8	16-9-0	19-3-0	22-0-0
2-9-0	2-6-0	2-7-8	6-3-0	2-7-8	2-6-0	2-9-0

Plate Offsets (X,Y)– [1:Edge,0-1-8], [3:0-1-12,Edge], [10:0-1-12,Edge], [14:0-2-0,Edge], [16:0-1-12,Edge], [19:0-1-8,Edge], [20:0-1-8,Edge], [23:0-1-12,Edge], [26:0-2-0,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	0.86	Vert(LL)	-0.49	19-20	>532	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.91	Vert(CT)	-0.67	19-20	>387	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.10	14	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-R							Weight: 117 lb	FT = 0%F, 6%E

LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except*
14-24: 2x4 SP No.1D(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) 26=0-4-0, 14=0-4-0
Max Grav 26=1196(LC 1), 14=1190(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2257/0, 3-4=-3844/0, 4-5=-4897/0, 5-6=-5356/0, 6-7=-5356/0, 7-8=-5356/0, 8-9=-4897/0, 9-10=-3845/0, 10-12=-2257/0
BOT CHORD 25-26=0/1300, 23-25=0/3184, 22-23=0/4519, 21-22=0/4519, 20-21=0/5235, 19-20=0/5356, 18-19=0/5235, 17-18=0/4518, 16-17=0/4518, 15-16=0/3184, 14-15=0/1299
WEBS 12-14=-1726/0, 2-26=-1730/0, 12-15=0/1332, 2-25=0/1332, 10-15=-1290/0, 3-25=-1289/0, 10-16=0/918, 3-23=0/918, 9-16=-916/0, 4-23=-917/0, 9-18=0/514, 4-21=0/514, 8-18=-490/0, 5-21=-490/0, 8-19=-240/530, 5-20=-240/530

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) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
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.
6) CAUTION, Do not erect truss backwards.

August 16,2021

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

Job	Truss	Truss Type	Qty	Ply	COOL MEADOW FARM FLOOR
SP210818	F1A	Floor	1	1	I47466155
					Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Aug 16 09:31:15 2021 Page 1
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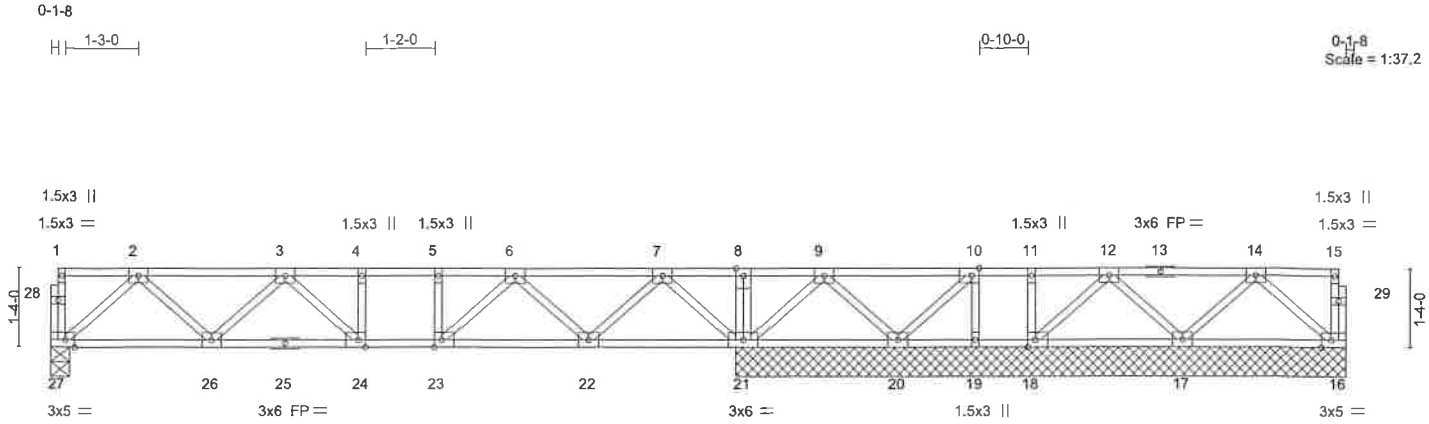

Plate Offsets (X,Y)– [10:0-1-8,Edge], [16:0-2-0,Edge], [18:0-1-8,Edge], [23:0-1-8,Edge], [24:0-1-8,Edge], [27:0-2-0,Edge]

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	0.44	Vert(LL)	-0.05	24-26	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.47	Vert(CT)	-0.07	24-26	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	21	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-R							Weight: 118 lb	FT = 0%F, 6%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 6-0-0 oc bracing.

REACTIONS. All bearings 10-4-0 except (jt=length) 27=0-4-0.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 20
Max Grav All reactions 250 lb or less at joint(s) 16, 20, 18, 19 except 27=547(LC 1), 21=1199(LC 1), 17=295(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-868/0, 3-4=-1109/0, 4-5=-1109/0, 5-6=-1109/0, 6-7=-387/0, 7-8=0/834, 8-9=0/834
BOT CHORD 26-27=0/575, 24-26=0/1118, 23-24=0/1109, 22-23=0/836, 20-21=-367/0
WEBS 2-27=-762/0, 7-21=-1013/0, 2-26=0/409, 7-22=0/639, 3-26=-348/0, 6-22=-624/0, 6-23=0/432, 9-21=-620/0, 9-20=0/269

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20.
4) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
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.
6) CAUTION, Do not erect truss backwards.

August 16,2021

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	COOL MEADOW FARM FLOOR
SP210818	F1GT	Floor	1	2	I47466156
					Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Aug 16 09:31:17 2021 Page 1
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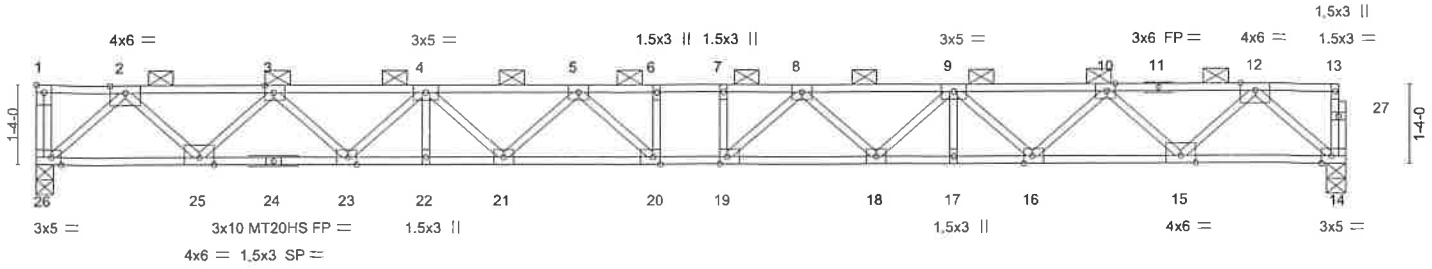
1-3-0 1-0-0 0-1-8

Scale = 1:36.9



22-0-0
22-0-0

Plate Offsets (X,Y)— [1:Edge,0-1-8], [3:0-1-12,Edge], [10:0-1-12,Edge], [14:0-2-0,Edge], [16:0-1-12,Edge], [19:0-1-8,Edge], [20:0-1-8,Edge], [23:0-1-12,Edge], [26:0-2-0,Edge]

LOADING (psf)		SPACING-	4-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.70	Vert(LL)	-0.43	19-20	>602	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.99	Vert(CT)	-0.60	19-20	>438	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	NO	WB	0.63	Horz(CT)	0.10	14	n/a	n/a		
BCDL	5.0	Code	IBC2015/TPI2014	Matrix-R							Weight: 234 lb	FT = 0%F, 6%E

LUMBER-
TOP CHORD 2x4 SP No.2(flat) *Except* 1-11: 2x4 SP No.1D(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 14-24: 2x4 SP No.1D(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-13 (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 26=0-3-8, 14=0-4-0
Max Grav 26=2392(LC 1), 14=2380(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4514/0, 3-4=-7691/0, 4-5=-9795/0, 5-6=-10713/0, 6-7=-10713/0, 7-8=-10713/0, 8-9=-9795/0, 9-10=-7693/0, 10-12=-4513/0
BOT CHORD 25-26=0/2598, 23-25=0/6369, 22-23=0/9034, 21-22=0/9034, 20-21=0/10469, 19-20=0/10713, 18-19=0/10470, 17-18=0/9032, 16-17=0/9032, 15-16=0/6372, 14-15=0/2597
WEBS 12-14=-3452/0, 2-26=-3459/0, 12-15=0/2666, 2-25=0/2664, 10-15=-2586/0, 3-25=-2580/0, 10-16=0/1837, 3-23=0/1839, 9-16=-1820/0, 4-23=-1825/0, 9-18=0/1037, 4-21=0/1035, 8-18=-968/0, 5-21=-967/0, 8-19=-485/1069, 5-20=-485/1069, 6-20=-485/160, 7-19=-485/160

NOTES-
1) Fasten trusses together to act as a single unit as per standard industry detail, or loads are to be evenly applied to all plies.
2) Unbalanced floor live loads have been considered for this design.
3) All plates are MT20 plates unless otherwise indicated.
4) All plates are 3x4 MT20 unless otherwise indicated.
5) The Fabrication Tolerance at joint 24 = 6%
6) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) 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.
9) CAUTION, Do not erect truss backwards.

August 16,2021

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

Job	Truss	Truss Type	Qty	Ply	COOL MEADOW FARM FLOOR
SP210818	F2	Floor	3	1	I47466157
					Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Aug 16 09:31:18 2021 Page 1
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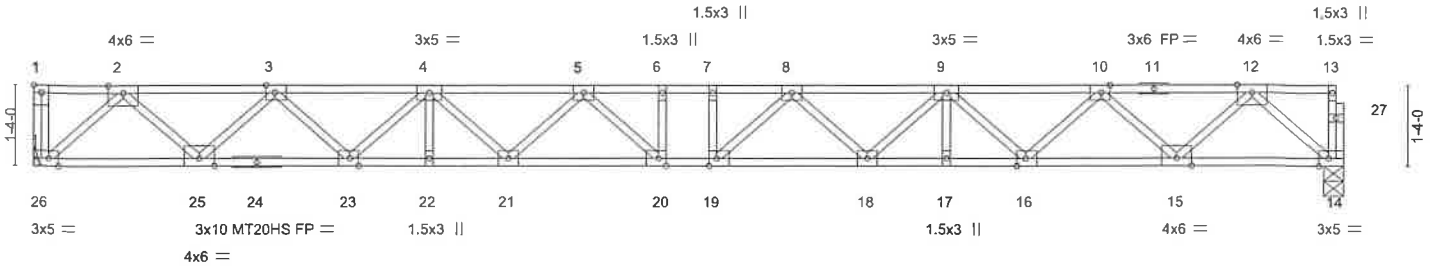
1-3-0 0-8-8 0-1-8

Scale = 1:36.4



2-9-0	5-3-0	7-10-8	13-10-0	16-5-8	18-11-8	21-8-8
2-9-0	2-6-0	2-7-8	5-11-8	2-7-8	2-6-0	2-9-0

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [3:0-1-12,Edge], [10:0-1-12,Edge], [14:0-2-0,Edge], [16:0-1-12,Edge], [19:0-1-8,Edge], [20:0-1-8,Edge], [23:0-1-12,Edge], [26:0-2-0,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	0.82	Vert(LL)	-0.47	20	>553	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.89	Vert(CT)	-0.64	20	>402	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.10	14	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-R							Weight: 116 lb	FT = 0%F, 6%E

LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except*
14-24: 2x4 SP No.1D(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) 26=Mechanical, 14=0-4-0
Max Grav 26=1180(LC 1), 14=1174(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2223/0, 3-4=-3776/0, 4-5=-4794/0, 5-6=-5217/0, 6-7=-5217/0, 7-8=-5217/0, 8-9=-4794/0, 9-10=-3777/0, 10-12=-2222/0
BOT CHORD 25-26=0/1281, 23-25=0/3133, 22-23=0/4433, 21-22=0/4433, 20-21=0/5116, 19-20=0/5217, 18-19=0/5116, 17-18=0/4433, 16-17=0/4433, 15-16=0/3133, 14-15=0/1281
WEBS 12-14=-1702/0, 2-26=-1706/0, 12-15=0/1309, 2-25=0/1309, 10-15=-1267/0, 3-25=-1266/0, 10-16=0/895, 3-23=0/895, 9-16=-892/0, 4-23=-893/0, 9-18=0/491, 4-21=0/491, 8-18=-464/0, 5-21=-464/0, 8-19=-242/477, 5-20=-242/477

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) Refer to girder(s) for truss to truss connections.
5) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
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.
7) CAUTION, Do not erect truss backwards.

August 16,2021

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

Job	Truss	Truss Type	Qty	Ply	COOL MEADOW FARM FLOOR
SP210818	F3	Floor	2	1	I47466158
					Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Aug 16 09:31:18 2021 Page 1
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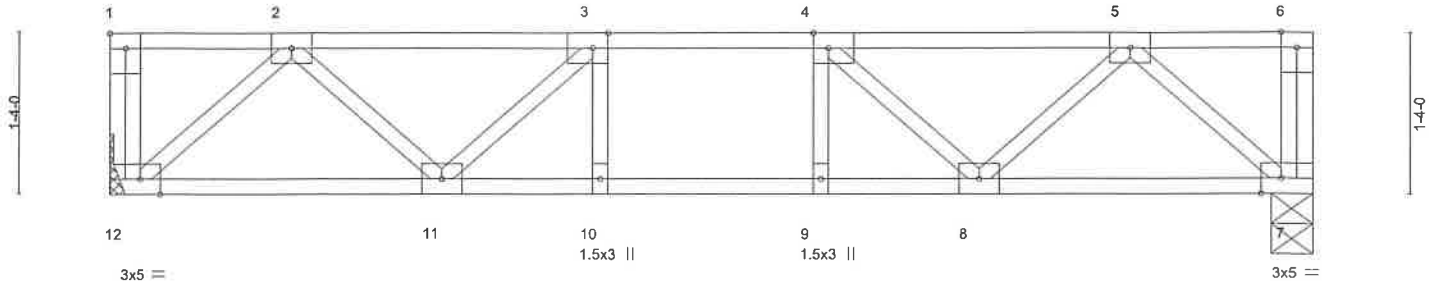
1-3-0 1-8-8

Scale = 1:18.2



2-9-0 7-2-8 9-11-8
2-9-0 4-5-8 2-9-0

Plate Offsets (X,Y)– [1:Edge,0-1-8], [3:0-1-8,Edge], [4:0-1-8,Edge], [7:0-2-0,Edge], [12:0-2-0,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	0.32	Vert(LL)	-0.05	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.50	Vert(CT)	-0.06	10-11	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-R							Weight: 54 lb	FT = 0%F, 6%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) 12=Mechanical, 7=0-4-0
Max Grav 12=534(LC 1), 7=534(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-817/0, 3-4=-1066/0, 4-5=-817/0
BOT CHORD 11-12=0/554, 10-11=0/1066, 9-10=0/1066, 8-9=0/1066, 7-8=0/554
WEBS 5-7=-738/0, 2-12=-738/0, 5-8=0/366, 2-11=0/366, 4-8=-369/0, 3-11=-369/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
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.

August 16,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	COOL MEADOW FARM FLOOR
SP210818	F3GT	Floor	1	1	I47466159
					Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Aug 16 09:31:19 2021 Page 1
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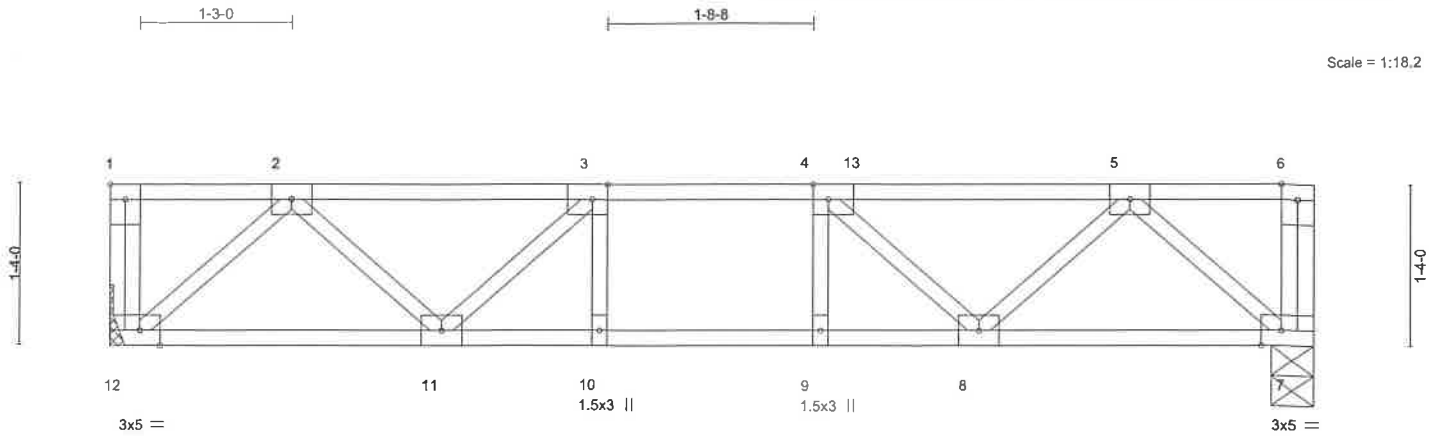


2-9-0 | 7-2-8 | 9-11-8
2-9-0 | 4-5-8 | 2-9-0

Plate Offsets (X,Y)– [1:Edge,0-1-8], [3:0-1-8,Edge], [4:0-1-8,Edge], [7:0-2-0,Edge], [12:0-2-0,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	0.79	Vert(LL)	-0.09	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.11	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.37	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-R							Weight: 54 lb	FT = 0%F, 6%E

LUMBER-
TOP CHORD 2x4 SP No.1D(flat)
BOT CHORD 2x4 SP No.1D(flat)
WEBS 2x4 SP No.3(flat)

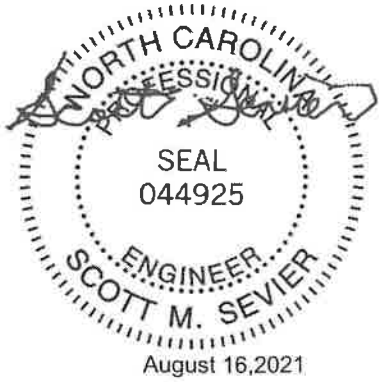
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=Mechanical, 7=0-4-0
Max Grav 12=666(LC 1), 7=1118(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1105/0, 3-4=-1615/0, 4-5=-1443/0
BOT CHORD 11-12=0/684, 10-11=0/1615, 9-10=0/1615, 8-9=0/1615, 7-8=0/1164
WEBS 5-7=-1549/0, 2-12=-910/0, 5-8=0/389, 2-11=0/585, 4-8=-264/0, 3-11=-725/0, 3-10=0/285, 4-9=-261/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
5) Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 7-12=-10, 1-13=-100, 6-13=-300



August 16,2021

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

Job	Truss	Truss Type	Qty	Ply	COOL MEADOW FARM FLOOR
SP210818	F4	Floor	2	1	I47466160
					Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Aug 16 09:31:20 2021 Page 1
ID:GQ?sPwS6Pjxty0k2Oor3Ejyozl1-VQ3e?ha7zHk?XshhzQoQ??XD9lA1bAZx8CTl0BynJT5

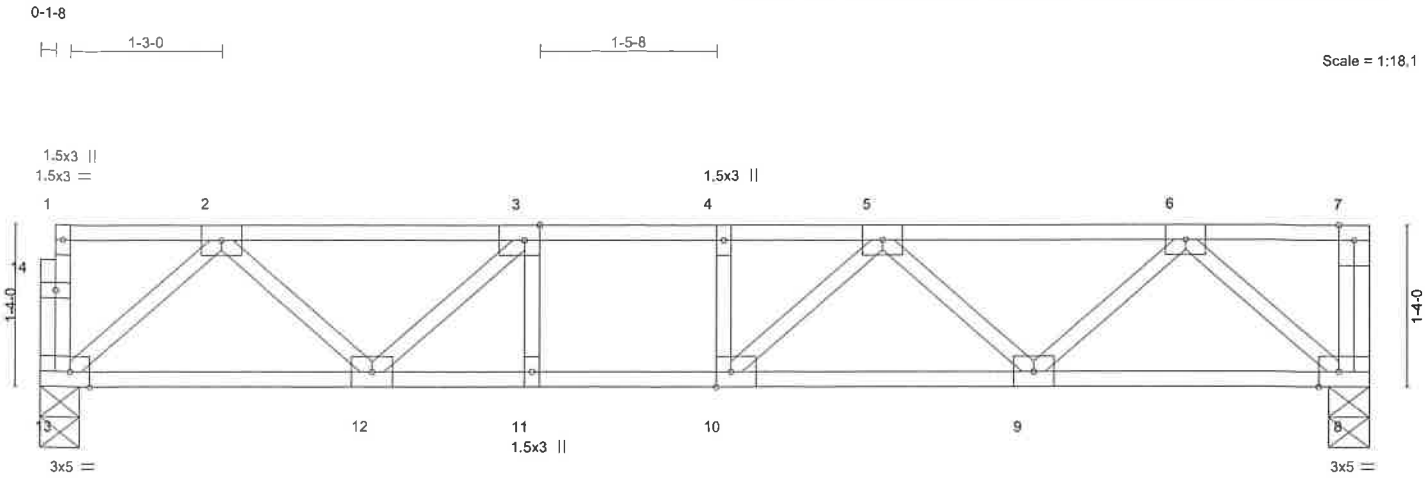


Plate Offsets (X,Y)-- [3:0-1-8,Edge], [8:0-2-0,Edge], [10:0-1-8,Edge], [13:0-2-0,Edge]

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	0.39	Vert(LL)	-0.07	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.09	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-R							Weight: 59 lb	FT = 0%F, 6%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) 13=0-4-0, 8=0-4-0
Max Grav 13=583(LC 1), 8=589(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-939/0, 3-4=-1276/0, 4-5=-1276/0, 5-6=-943/0
BOT CHORD 12-13=0/609, 11-12=0/1276, 10-11=0/1276, 9-10=0/1232, 8-9=0/615
WEBS 6-8=-819/0, 2-13=-808/0, 6-9=0/457, 2-12=0/459, 5-9=-402/0, 3-12=-466/0, 5-10=-83/253

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
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) CAUTION, Do not erect truss backwards.

August 16,2021

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	COOL MEADOW FARM FLOOR
SP210818	F5	Floor	4	1	I47466161
					Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Aug 16 09:31:21 2021 Page 1
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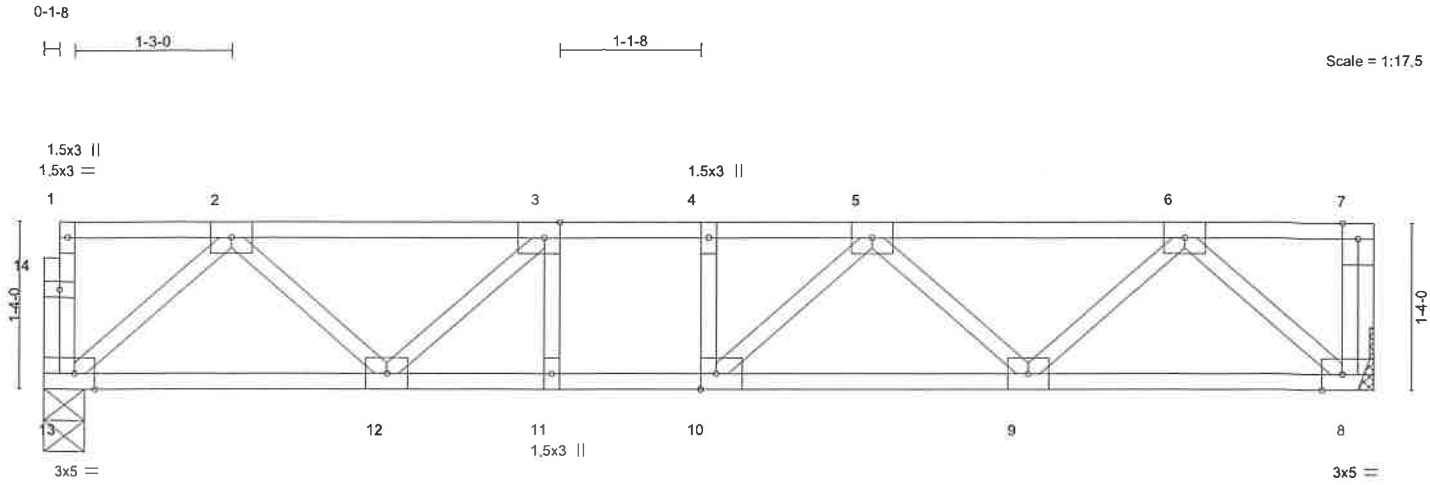


Plate Offsets (X,Y)– [3:0-1-8,Edge], [8:0-2-0,Edge], [10:0-1-8,Edge], [13:0-2-0,Edge]

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)	-0.05	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.48	Vert(CT)	-0.07	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-R							Weight: 58 lb	FT = 0%F, 6%E

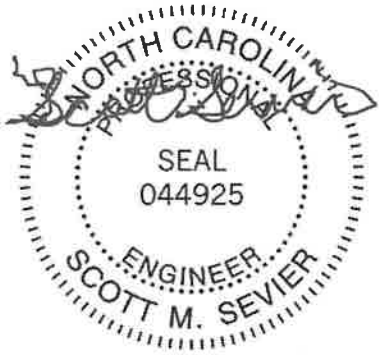
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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) 13=0-4-0, 8=Mechanical
Max Grav 13=564(LC 1), 8=571(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-898/0, 3-4=-1204/0, 4-5=-1204/0, 5-6=-902/0
BOT CHORD 12-13=0/591, 11-12=0/1204, 10-11=0/1204, 9-10=0/1175, 8-9=0/594
WEBS 6-8=-790/0, 2-13=-784/0, 6-9=0/429, 2-12=0/428, 5-9=-380/0, 3-12=-416/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
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.
6) CAUTION, Do not erect truss backwards.



August 16,2021

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	COOL MEADOW FARM FLOOR
SP210818	GT1	Floor Girder	1	1	I47466162
					Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Aug 16 09:31:21 2021 Page 1
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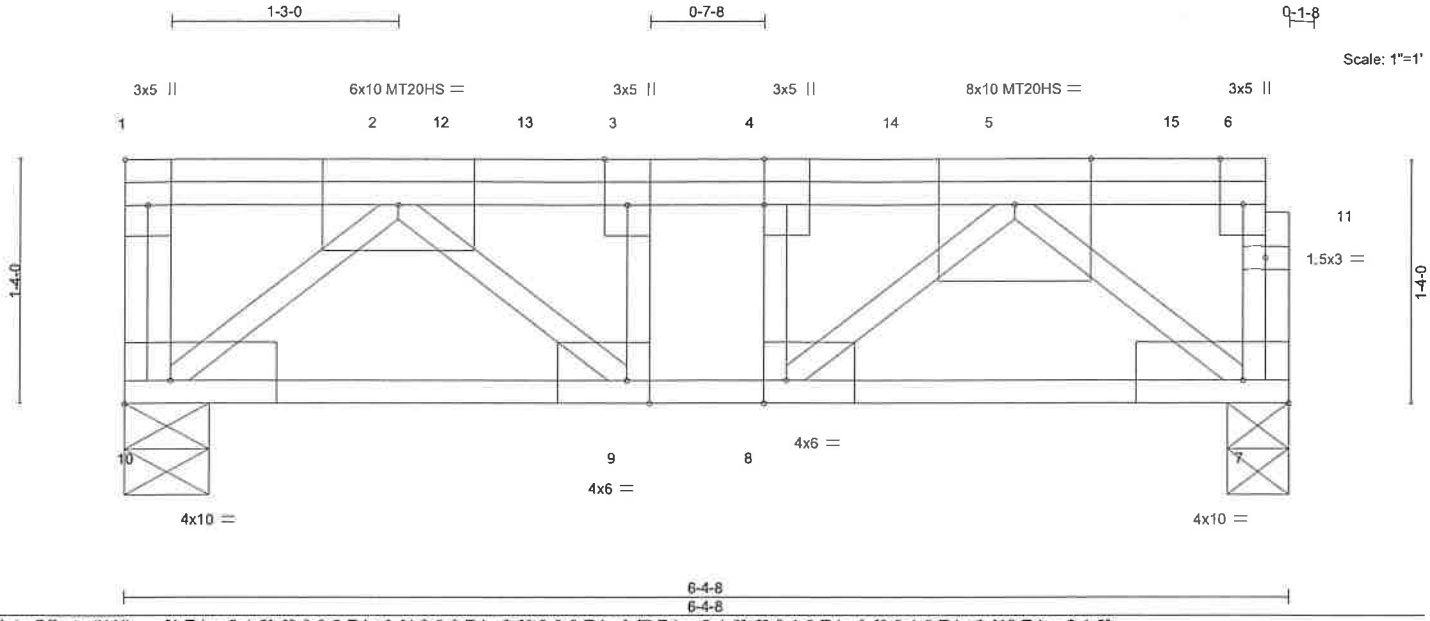

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [3:0-3-0,Edge], [4:0-3-0,Edge], [6:0-3-0,Edge], [7:Edge,0-1-8], [8:0-1-8,Edge], [9:0-1-8,Edge], [10:Edge,0-1-8]

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	0.63	Vert(LL)	-0.04	8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.06	8	>999	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IBC2015/TPI2014	Matrix-R							Weight: 46 lb	FT = 0%F, 6%E

LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.1D(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) 10=0-5-9, 7=0-4-0
Max Grav 10=2745(LC 3), 7=3164(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-508/0, 6-7=-802/0, 2-3=-3916/0, 3-4=-3916/0, 4-5=-3916/0
BOT CHORD 9-10=0/2668, 8-9=0/3916, 7-8=0/2867
WEBS 5-7=-3676/0, 2-10=-3473/0, 5-8=0/1393, 2-9=0/1657, 3-9=-1053/0, 4-8=-926/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
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) CAUTION, Do not erect truss backwards.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 559 lb down at 0-1-8, 1159 lb down at 1-10-4, 531 lb down at 2-3-12, 1132 lb down at 3-10-4, 541 lb down at 4-3-12, and 551 lb down at 4-11-12, and 1167 lb down at 5-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
7) 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: 7-10=-10, 1-6=-100
Concentrated Loads (lb)
Vert: 1=-511(B) 5=-471(B) 4=-1080(F) 12=-1080(F) 13=-471(B) 14=-471(B) 15=-1114(F)

August 16,2021

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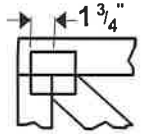
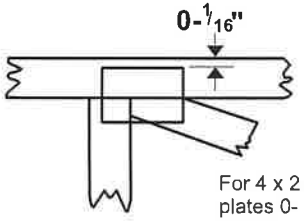
Edenton, NC 27932

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

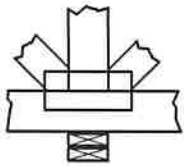
4 x 4

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

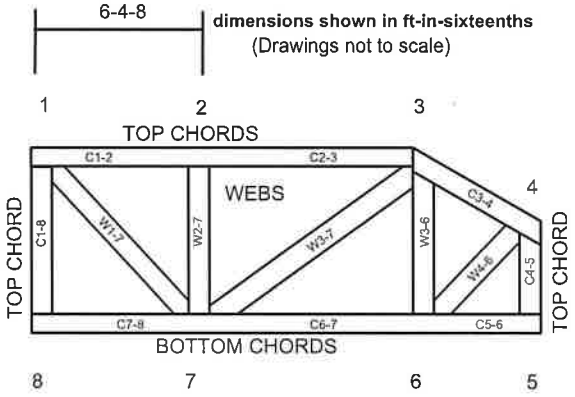


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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 lo 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.