

# Mark Morris, P.E.

#126, 1317-M, Summerville, SC 29483

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The truss drawing(s) listed below have been prepared by **Atlantic Building Components** under my direct supervision based on the parameters provided by the truss designers.

AST #: 49570

JOB: 24-5147-F02

JOB NAME: LOT 0.0109 BLAKE POND

Wind Code: N/A

Wind Speed: Vult= N/A

Exposure Category: N/A

Mean Roof Height (feet): N/A

These truss designs comply with IRC 2015 as well as IRC 2018.

*20 Truss Design(s)*

Trusses:

F201, F202, F203, F204, F205, F206, F208, F209, F210, F211, F212, F213, F214, F215, F216, F217, F218, F219, F220, F221



**6/13/2024**

**Mark Morris**

***Warning !—Verify design parameters and read notes before use.***

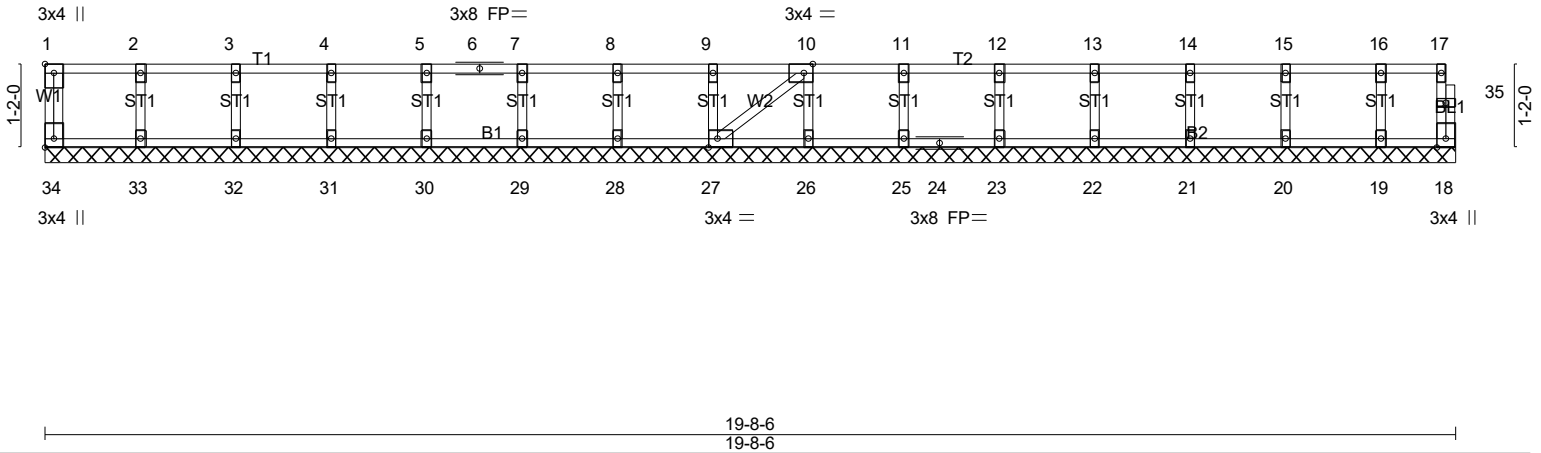
This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for*

Job 24-5147-F02	Truss F201	Truss Type Floor Supported Gable	Qty 1	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) # 49570
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0-1-8

Scale: 3/8"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP			
TCLL	40.0	Plate Grip DOL	2-0-0	TC	0.06	Vert(LL)	n/a	(loc)	-	l/defl	n/a	L/d	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	n/a	999				
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	18	n/a	n/a					
BCDL	5.0	Code IRC2021/TPI2014		Matrix-SH										Weight: 85 lb	FT = 20%F, 11%E

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1(flat)	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.1(flat)	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3(flat)		
OTHERS	2x4 SP No.3(flat)		

**REACTIONS.** All bearings 19-8-6.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 34, 18, 33, 32, 31, 30, 29, 28, 27, 26, 25, 23, 22, 21, 20, 19

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

- NOTES-** (7-8)
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - 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.
  - CAUTION. Do not erect truss backwards.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard

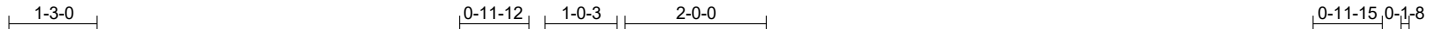


6/13/2024

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Job 24-5147-F02	Truss F202	Truss Type Floor	Qty 3	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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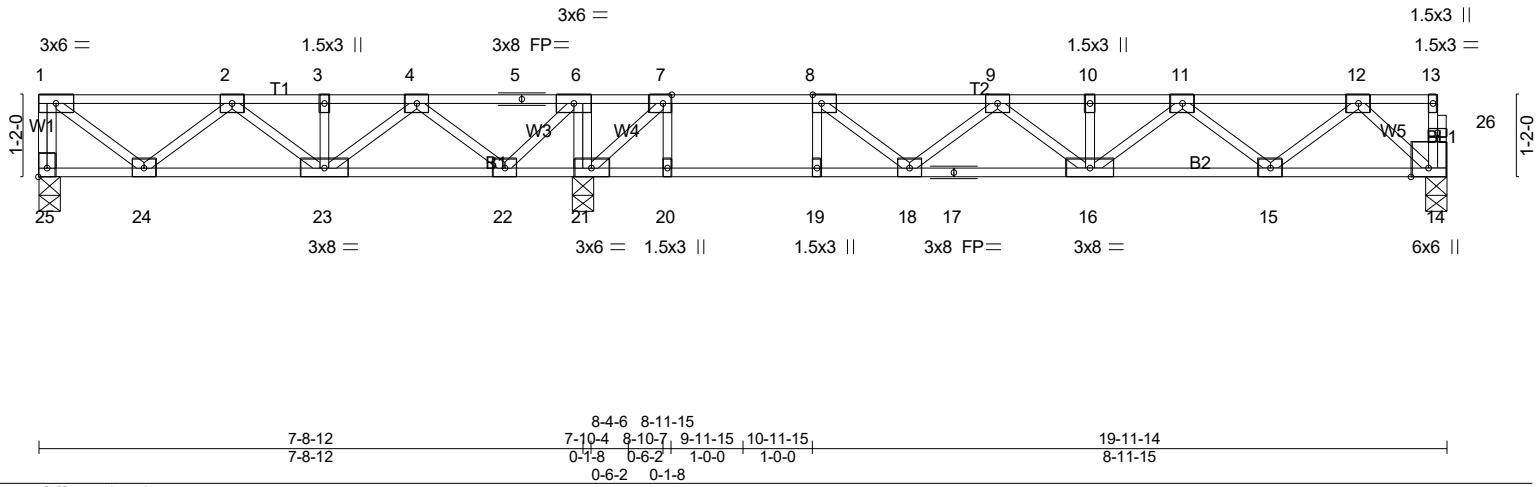


Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge], [25:Edge,0-1-8]					
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	1-7-3 Plate Grip DOL 1.00	TC 0.83	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.74	Vert(LL) -0.22 18-19 >671 480		
BCLL 0.0	Rep Stress Incr YES	WB 0.29	Vert(CT) -0.30 18-19 >491 360		
BCDL 5.0	Code IRC2021/TPI2014	Matrix-SH	Horz(CT) 0.03 14 n/a n/a		
				Weight: 104 lb FT = 20%F, 11%E	

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP SS(flat) *Except* B2: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 21-22.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 25=370/0-3-8 (min. 0-1-8), 21=810/0-3-8 (min. 0-1-8), 14=551/0-3-6 (min. 0-1-8)  
Max Grav 25=375(LC 8), 21=810(LC 1), 14=560(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-25=-371/0, 1-2=-376/0, 2-3=-754/0, 3-4=-754/0, 4-5=-528/0, 5-6=-528/0, 6-7=-310/40, 7-8=-1240/0, 8-9=-1658/0, 9-10=-1627/0, 10-11=-1627/0, 11-12=-1024/0  
BOT CHORD 23-24=0/697, 22-23=0/763, 21-22=-40/310, 20-21=0/1240, 19-20=0/1240, 18-19=0/1240, 17-18=0/1819, 16-17=0/1819, 15-16=0/1435, 14-15=0/582  
WEBS 7-20=0/406, 8-19=-349/0, 6-21=-344/27, 1-24=0/472, 2-24=-417/0, 4-22=-364/0, 6-22=0/389, 7-21=-1230/0, 8-18=0/566, 11-15=-535/0, 12-15=0/576, 12-14=-794/0

- NOTES-** (5-6)
- Unbalanced floor live loads have been considered for this design.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - 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.
  - CAUTION, Do not erect truss backwards.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard

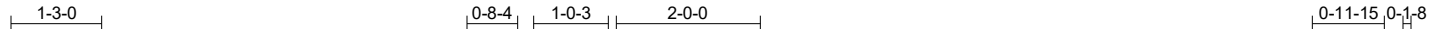


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Job 24-5147-F02	Truss F203	Truss Type Floor	Qty 4	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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Scale: 3/8"=1'

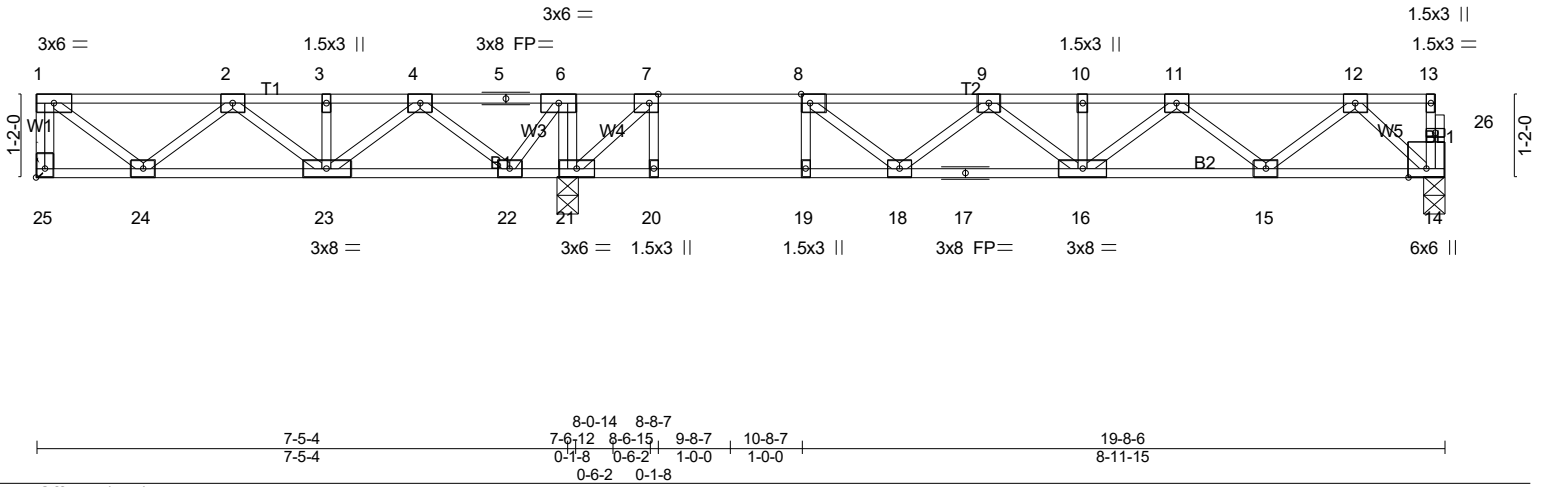


Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge], [25:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.83	Vert(LL)	-0.22	18-19	>676	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.74	Vert(CT)	-0.29	18-19	>494		
BCLL 0.0	Lumber DOL 1.00	WB 0.29	Horz(CT)	0.02	14	n/a		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH						
	Code IRC2021/TPI2014							
							Weight: 103 lb	FT = 20%F, 11%E

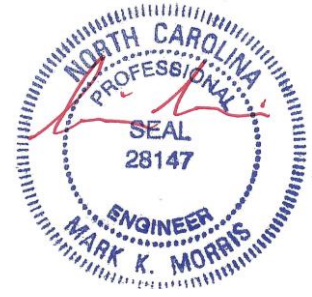
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP SS(flat) *Except* B2: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 21-22.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 25=361/Mechanical, 21=792/0-3-8 (min. 0-1-8), 14=552/0-3-6 (min. 0-1-8)  
Max Grav 25=366(LC 8), 21=792(LC 1), 14=561(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-25=-362/0, 1-2=-365/0, 2-3=-723/0, 3-4=-723/0, 4-5=-476/0, 5-6=-476/0, 6-7=-308/35, 7-8=-1246/0, 8-9=-1662/0, 9-10=-1630/0, 10-11=-1630/0, 11-12=-1026/0  
BOT CHORD 23-24=0/674, 22-23=0/712, 21-22=-35/308, 20-21=0/1246, 19-20=0/1246, 18-19=0/1246, 17-18=0/1822, 16-17=0/1822, 15-16=0/1437, 14-15=0/582  
WEBS 7-20=0/409, 8-19=-347/0, 6-21=-332/11, 1-24=0/457, 2-24=-403/0, 4-22=-366/0, 6-22=0/365, 7-21=-1245/0, 8-18=0/562, 11-15=-536/0, 12-15=0/577, 12-14=-795/0

- NOTES-** (6-7)
- 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) 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) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 7) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/13/2024

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Job 24-5147-F02	Truss F204	Truss Type Floor Supported Gable	Qty 1	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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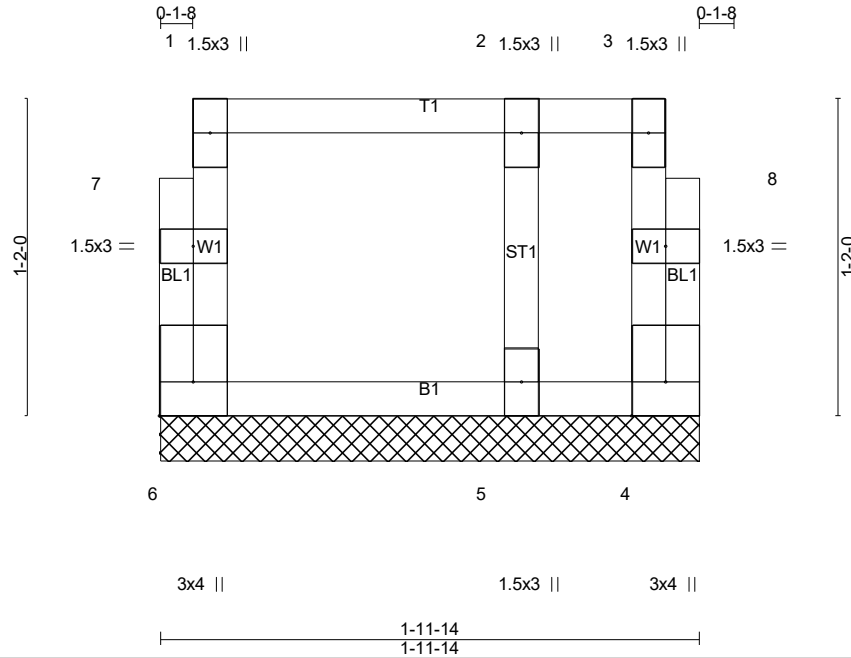


Plate Offsets (X,Y)-- [6:Edge,0-1-8]

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 0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.02	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	4	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-R							
									Weight: 12 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 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 1-11-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=60/1-11-14 (min. 0-1-8), 4=21/1-11-14 (min. 0-1-8), 5=98/1-11-14 (min. 0-1-8)

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

- NOTES-** (5-6)
- Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - 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.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/13/2024

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Job 24-5147-F02	Truss F205	Truss Type Floor	Qty 4	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:19:17 2024 Page 1  
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0-1-8  
0-5-15  
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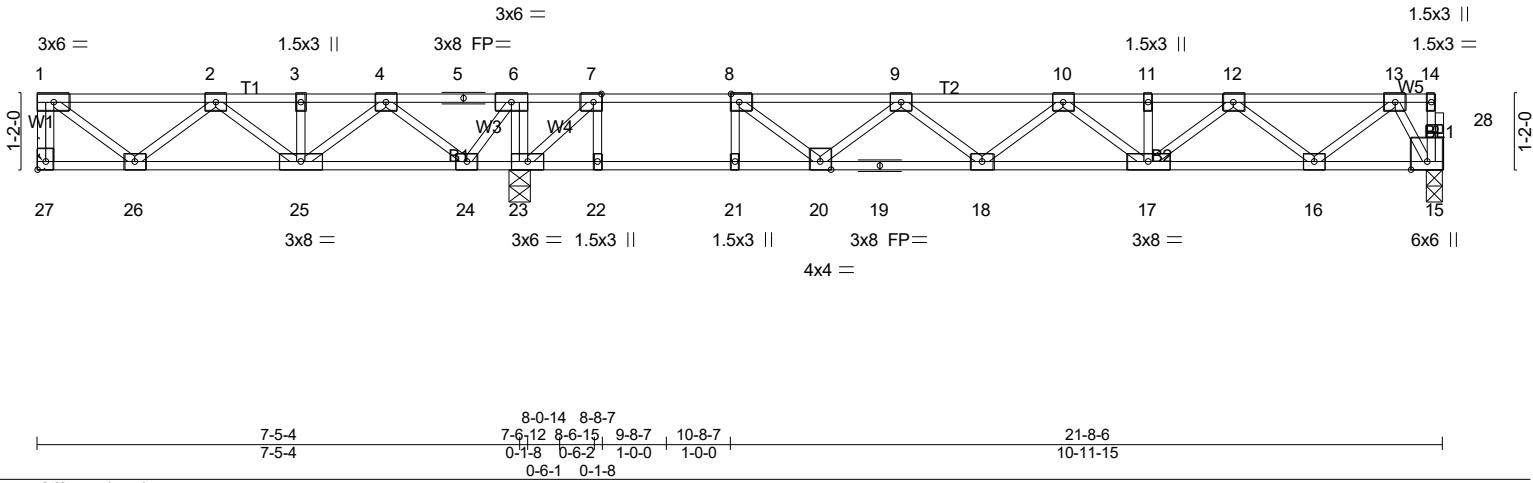


Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge], [27:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	1-7-3 Plate Grip DOL 1.00	TC 0.74	Vert(LL)	-0.29	20-21	>579	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.91	Vert(CT)	-0.40	20-21	>423		
BCLL 0.0	Rep Stress Incr YES	WB 0.41	Horz(CT)	0.03	15	n/a		
BCDL 5.0	Code IRC2021/TPI2014	Matrix-SH						
							Weight: 113 lb	FT = 20%F, 11%E

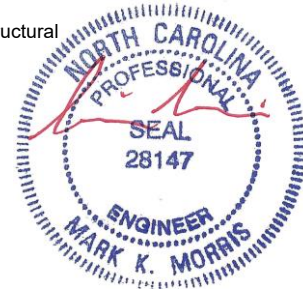
LUMBER-	BRACING-
TOP CHORD 2x4 SP SS(flat) *Except* T1: 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP SS(flat) *Except* B2: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 23-24.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 27=317/Mechanical, 23=949/0-3-8 (min. 0-1-8), 15=614/0-3-6 (min. 0-1-8)  
Max Grav 27=322(LC 8), 23=949(LC 1), 15=622(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-27=-319/0, 1-2=-307/0, 2-3=-557/0, 3-4=-557/0, 7-8=-1201/0, 8-9=-1862/0,  
9-10=-2121/0, 10-11=-1841/0, 11-12=-1841/0, 12-13=-950/0  
BOT CHORD 25-26=0/565, 24-25=0/496, 22-23=0/1201, 21-22=0/1201, 20-21=0/1201, 19-20=0/2188,  
18-19=0/2188, 17-18=0/2063, 16-17=0/1490, 15-16=0/389  
WEBS 7-22=0/520, 8-21=-449/0, 6-23=-333/17, 1-26=0/385, 2-26=-335/0, 4-24=-394/0,  
6-24=0/454, 7-23=-1614/0, 8-20=0/871, 9-20=-439/0, 10-17=-283/0, 12-17=0/448,  
12-16=-703/0, 13-16=0/730, 13-15=-766/0

- NOTES-** (6-7)
- 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) 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) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 7) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/13/2024

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Job 24-5147-F02	Truss F206	Truss Type Floor	Qty 2	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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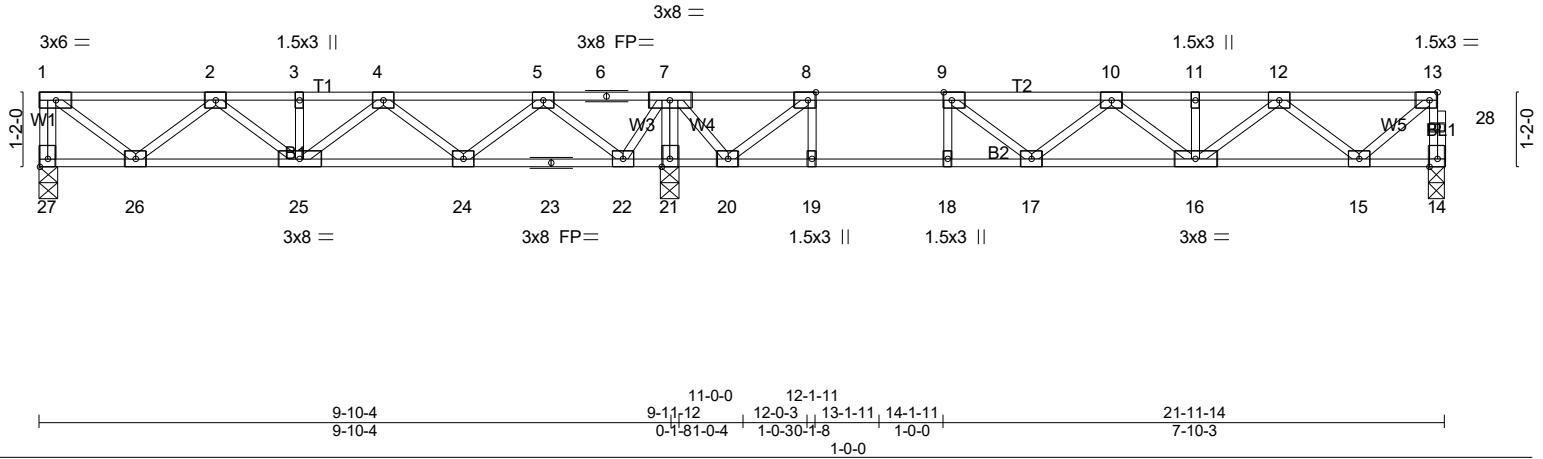


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [9:0-1-8,Edge], [13:0-1-8,Edge], [27:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.67	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.98	Vert(LL) -0.19 17-18 >771 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.32	Vert(CT) -0.25 17-18 >568 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.03 14 n/a n/a		
	Code IRC2021/TPI2014				Weight: 114 lb FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 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 2-2-0 oc bracing.

**REACTIONS.** (lb/size) 27=415/0-3-8 (min. 0-1-8), 14=513/0-3-6 (min. 0-1-8), 21=979/0-3-8 (min. 0-1-8)  
Max Grav 27=427(LC 8), 14=532(LC 4), 21=979(LC 1)

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

TOP CHORD 1-27=-423/0, 14-28=-531/0, 13-28=-530/0, 1-2=-445/0, 2-3=-957/0, 3-4=-957/0,  
4-5=-862/0, 7-8=-479/125, 8-9=-1267/0, 9-10=-1531/0, 10-11=-1326/0, 11-12=-1326/0,  
12-13=-535/0

BOT CHORD 25-26=0/829, 24-25=0/1014, 23-24=0/683, 22-23=0/683, 21-22=-347/110, 20-21=-344/112,  
19-20=0/1267, 18-19=0/1267, 17-18=0/1267, 16-17=0/1596, 15-16=0/1049

WEBS 8-19=0/333, 9-18=-287/0, 7-21=-858/0, 1-26=0/558, 2-26=-500/0, 4-24=-268/0,  
5-24=0/301, 5-22=-601/0, 7-22=0/459, 8-20=-1059/0, 7-20=0/569, 9-17=0/410,  
10-16=-346/0, 12-16=0/353, 12-15=-670/0, 13-15=0/675

**NOTES-** (5-6)

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x4 MT20 unless otherwise indicated.
- 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.
- CAUTION, Do not erect truss backwards.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/13/2024

**Warning!**—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

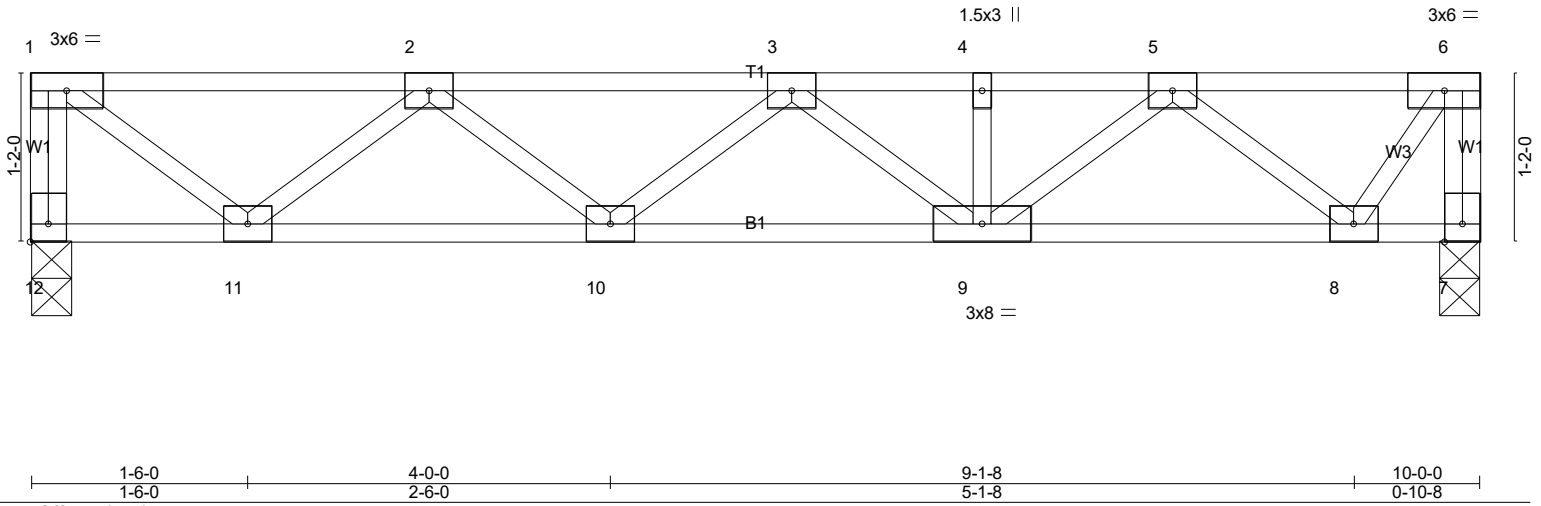
Job 24-5147-F02	Truss F208	Truss Type Floor	Qty 1	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:19:18 2024 Page 1  
ID:gUCksxzC6J7HT2yGkHFINYiOvf-BY1?txW?FD7pQlkhLPP3clwSFqLZnNqefvPQlZ6ead

1-3-0

0-7-8

Scale: 3/4"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL	40.0	1-7-3	1.00	TC	0.22	in	(loc)	l/defl	L/d	MT20	244/190
TCDL	10.0	Plate Grip DOL	1.00	BC	0.20	Vert(LL)	-0.02	9-10	>999		
BCLL	0.0	Lumber DOL	1.00	WB	0.27	Vert(CT)	-0.03	9-10	>999		
BCDL	5.0	Rep Stress Incr	YES	Matrix-SH		Horz(CT)	0.01	7	n/a		
		Code IRC2021/TPI2014								Weight: 54 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 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.** (lb/size) 12=429/0-3-8 (min. 0-1-8), 7=429/0-3-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-12=-424/0, 6-7=-429/0, 1-2=-450/0, 2-3=-941/0, 3-4=-902/0, 4-5=-902/0, 5-6=-261/0  
BOT CHORD 10-11=0/839, 9-10=0/1019, 8-9=0/677  
WEBS 1-11=0/564, 2-11=-507/0, 5-9=0/287, 5-8=-541/0, 6-8=0/447

- NOTES-** (3-4)
- All plates are 3x4 MT20 unless otherwise indicated.
  - 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.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



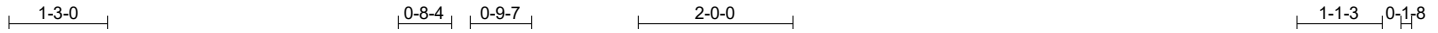
6/13/2024

**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D\*Onofrio Drive, Madison, WI 53719.



Job 24-5147-F02	Truss F209	Truss Type Floor	Qty 5	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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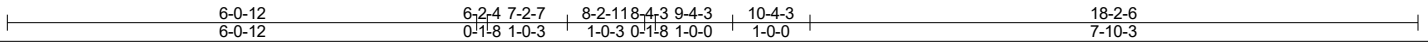
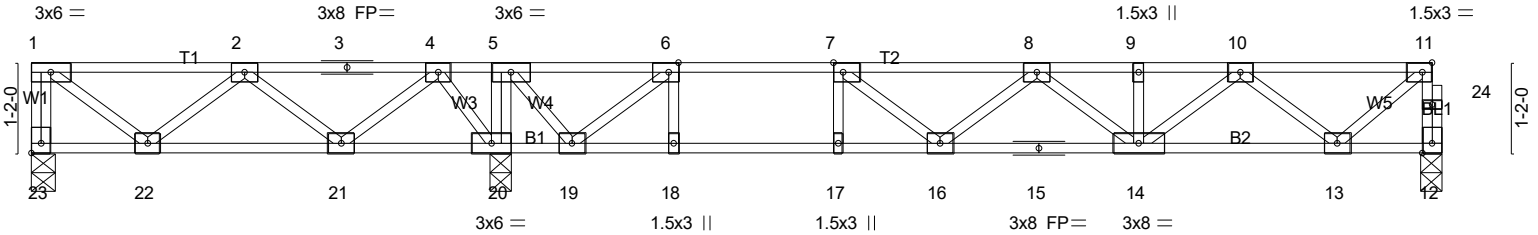


Plate Offsets (X,Y)-- [6:0-1-8,Edge], [7:0-1-8,Edge], [11:0-1-8,Edge], [23:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	1-7-3 Plate Grip DOL 1.00	TC 0.64	Vert(LL)	-0.18 16-17	>809	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.94	Vert(CT)	-0.24 16-17	>595	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.33	Horz(CT)	0.02 12	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014	Matrix-SH					Weight: 95 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 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, Except:  
6-0-0 oc bracing: 19-20  
2-2-0 oc bracing: 17-18.

**REACTIONS.** (lb/size) 23=282/0-3-8 (min. 0-1-8), 12=533/0-3-6 (min. 0-1-8), 20=758/0-3-8 (min. 0-1-8)  
Max Grav 23=305(LC 8), 12=539(LC 4), 20=758(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-23=-301/0, 12-24=-538/0, 11-24=-537/0, 1-2=-287/0, 2-3=-480/0, 3-4=-480/0, 5-6=-552/0, 6-7=-1325/0,  
7-8=-1573/0, 8-9=-1351/0, 9-10=-1351/0, 10-11=-543/0  
BOT CHORD 21-22=0/525, 20-21=0/421, 18-19=0/1325, 17-18=0/1325, 16-17=0/1325, 15-16=0/1629, 14-15=0/1629, 13-14=0/1066  
WEBS 6-18=0/301, 7-17=-259/0, 5-20=-436/0, 1-22=0/360, 2-22=-310/0, 4-20=-337/0, 6-19=-1004/0, 5-19=0/574, 7-16=0/345,  
8-14=-355/0, 10-14=0/364, 10-13=-681/0, 11-13=0/686

- NOTES-** (5-6)
- Unbalanced floor live loads have been considered for this design.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - 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.
  - CAUTION, Do not erect truss backwards.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/13/2024

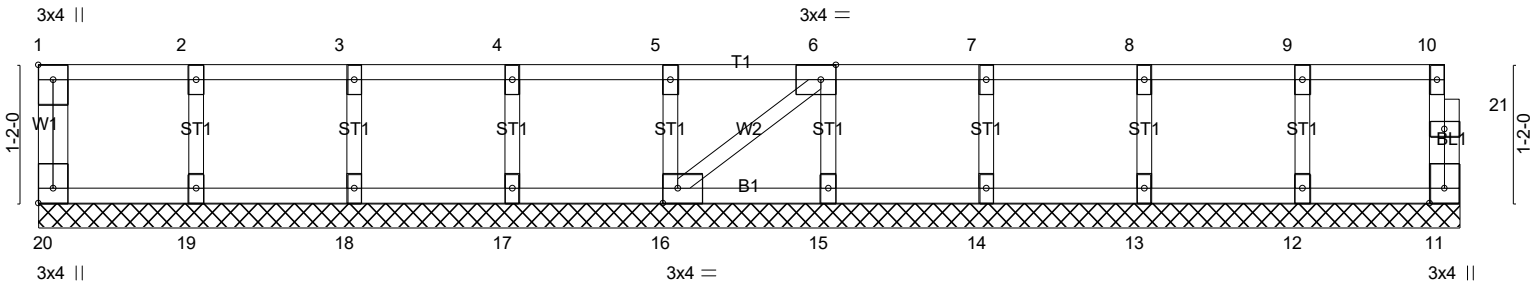
**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job 24-5147-F02	Truss F210	Truss Type Floor Supported Gable	Qty 1	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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0-1-8

Scale = 1:19.4



11-11-14  
11-11-14

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-1-8,Edge], [16:0-1-8,Edge], [20: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 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	11	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH						
								Weight: 54 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 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.** All bearings 11-11-14.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 20, 11, 19, 18, 17, 16, 15, 14, 13, 12

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

- NOTES-** (7-8)
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - 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.
  - CAUTION. Do not erect truss backwards.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard

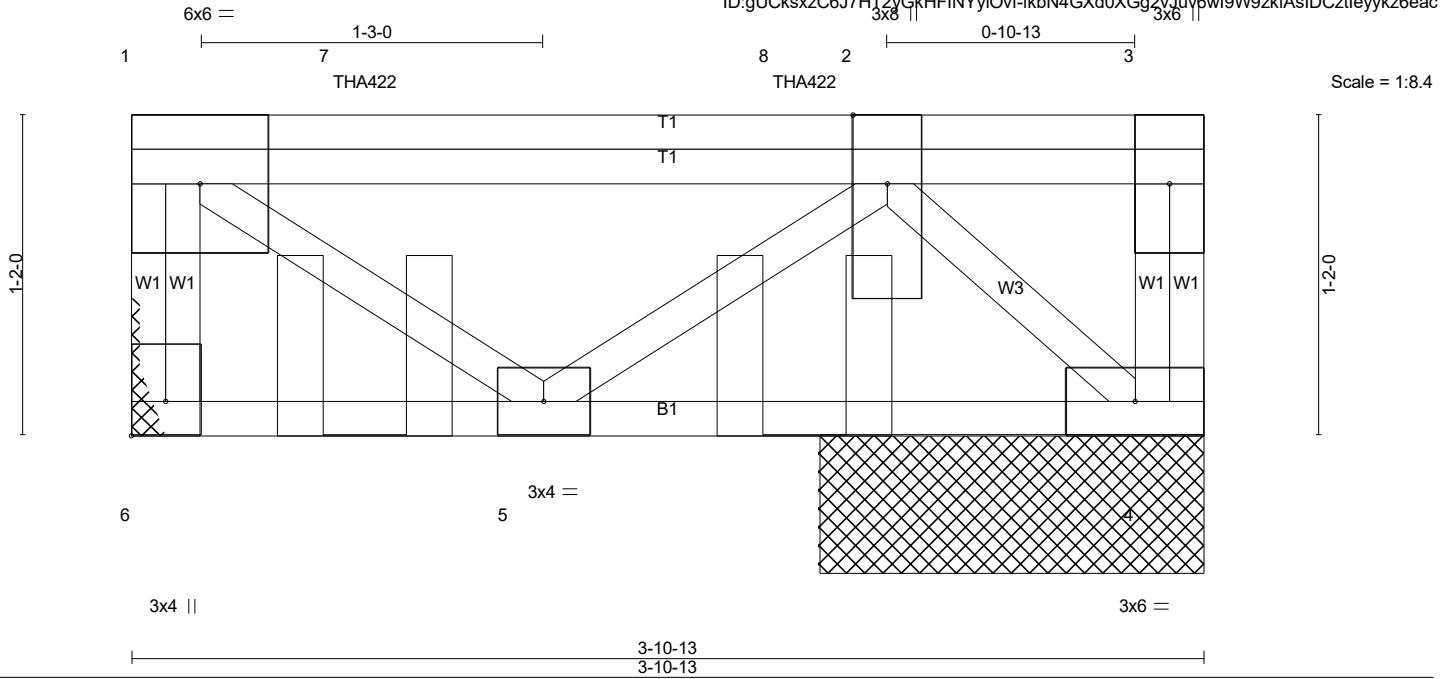


6/13/2024

**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job 24-5147-F02	Truss F211	Truss Type FLOOR GIRDER	Qty 1	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	1-7-3	Plate Grip DOL	1.00	TC	0.77	in	(loc)	l/defl	L/d	MT20	244/190	
TCDL	10.0	1.00	Lumber DOL	1.00	BC	0.25	Vert(LL)	-0.00	5	>999	480		
BCLL	0.0	NO	Rep Stress Incr	NO	WB	0.36	Vert(CT)	-0.01	4-5	>999	360		
BCDL	5.0	Code IRC2021/TPI2014	Code IRC2021/TPI2014	Matrix-P			Horz(CT)	0.00	4	n/a	n/a		
											Weight: 28 lb	FT = 20%F, 11%E	

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 3-10-13 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 6=1059/Mechanical, 4=803/1-4-13 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-1053/0, 3-4=0/283, 1-7=-599/0, 7-8=-599/0, 2-8=-599/0  
BOT CHORD 4-5=0/1127  
WEBS 1-5=0/735, 2-5=-671/0, 2-4=-1558/0

- NOTES-** (6-7)
- 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) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 1-7-3 oc max. starting at 0-10-3 from the left end to 2-5-6 to connect truss(es) F216 (1 ply 2x4 SP) to back face of top chord.
  - 4) Fill all nail holes where hanger is in contact with lumber.
  - 5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 6) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 7) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 4-6=-8, 1-3=-80  
Concentrated Loads (lb)  
Vert: 7=-772(B) 8=-769(B)



6/13/2024

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Job 24-5147-F02	Truss F212	Truss Type Floor Supported Gable	Qty 1	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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0-1-8  
H

Scale = 1:38.1

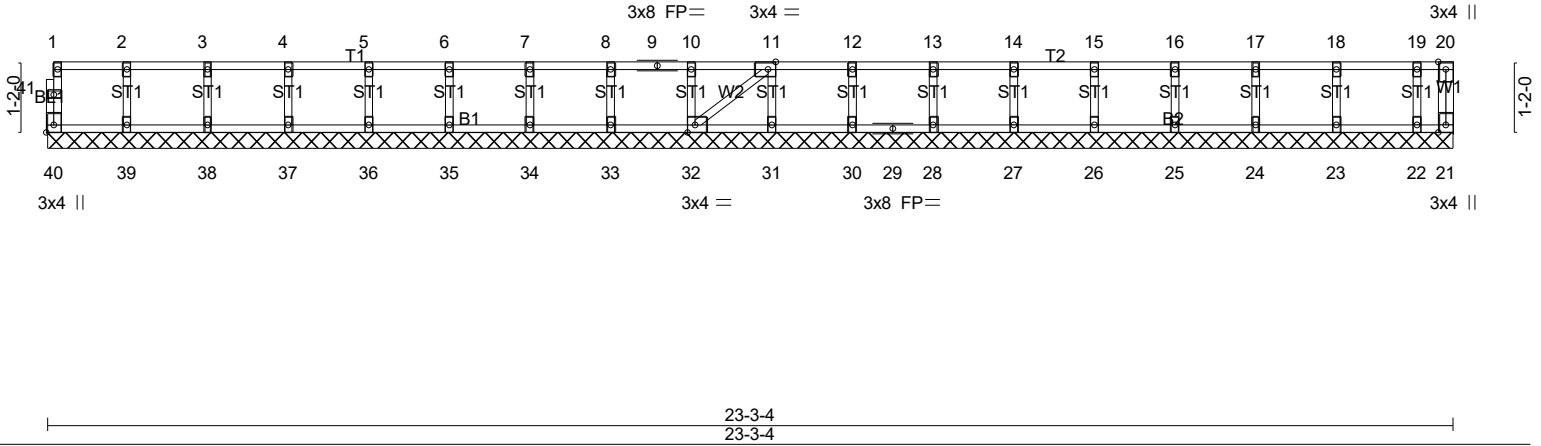


Plate Offsets (X,Y)-- [11:0-1-8,Edge], [32:0-1-8,Edge], [40:Edge,0-1-8]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 21 n/a n/a		
BCDL 5.0	Code IRC2021/TPI2014	Matrix-SH			Weight: 100 lb FT = 20%F, 11%E

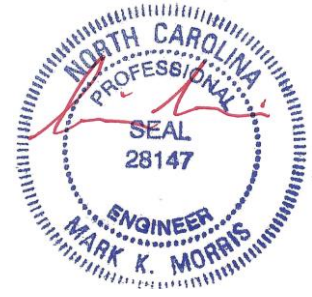
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 2x4 SP No.3(flat)	

**REACTIONS.** All bearings 23-3-4.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 40, 21, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 28, 27, 26, 25, 24, 23, 22

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

- NOTES-** (7-8)
- 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.
  - 6) CAUTION, Do not erect truss backwards.
  - 7) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 8) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard

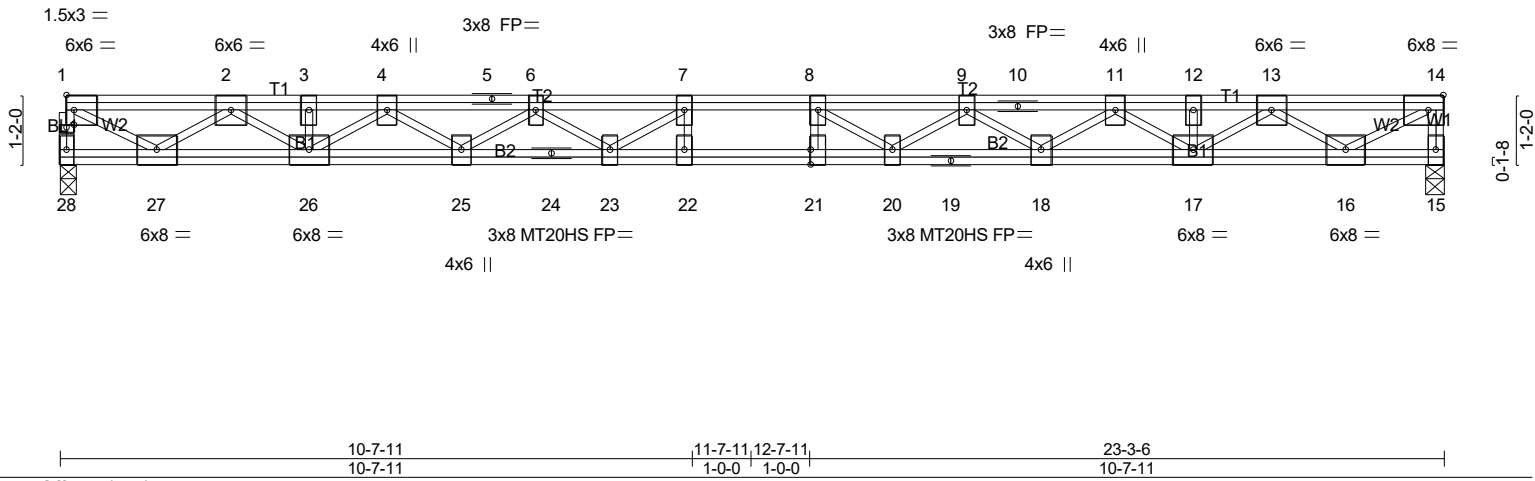
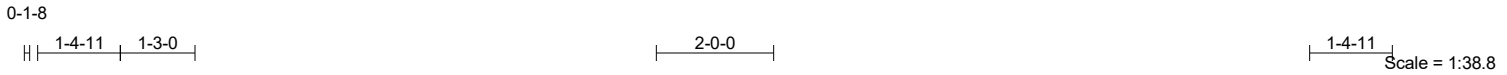


6/13/2024

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Job 24-5147-F02	Truss F213	Truss Type FLOOR	Qty 3	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:19:20 2024 Page 1  
ID:gUCksxzC6J7HT2yGkHFINYiOvf-7w9mlcYFmqOXf3u4TqSXhjiG63Q91Z675yOWUAz6eab



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.63	Vert(LL) -0.42 21-22 >653 480	MT20HS	187/143
BCLL 0.0	Lumber DOL 1.00	WB 0.83	Vert(CT) -0.58 21-22 >475 360	Weight: 180 lb FT = 20%F, 11%E	
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.07 15 n/a n/a		
	Code IRC2021/TPI2014				

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 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.** (lb/size) 28=1013/0-3-6 (min. 0-1-8), 15=1013/0-3-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-28=-996/0, 14-15=-997/0, 1-2=-1501/0, 2-3=-3651/0, 3-4=-3651/0, 4-5=-5118/0, 5-6=-5118/0, 6-7=-5975/0, 7-8=-6248/0, 8-9=-5975/0, 9-10=-5118/0, 10-11=-5118/0, 11-12=-3651/0, 12-13=-3651/0, 13-14=-1485/0  
BOT CHORD 26-27=0/2697, 25-26=0/4521, 24-25=0/5691, 23-24=0/5691, 22-23=0/6248, 21-22=0/6248, 20-21=0/6248, 19-20=0/5691, 18-19=0/5691, 17-18=0/4521, 16-17=0/2697  
WEBS 7-23=-678/135, 6-23=0/527, 6-25=-711/0, 4-25=0/740, 4-26=-1061/0, 2-26=0/1163, 2-27=-1485/0, 1-27=0/1743, 8-20=-678/135, 9-20=0/527, 9-18=-711/0, 11-18=0/740, 11-17=-1061/0, 13-17=0/1163, 13-16=-1503/0, 14-16=0/1735

- NOTES-** (6-7)
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 3x6 MT20 unless otherwise indicated.
  - Required 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.
  - CAUTION, Do not erect truss backwards.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/13/2024

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Job 24-5147-F02	Truss F214	Truss Type FLOOR	Qty 8	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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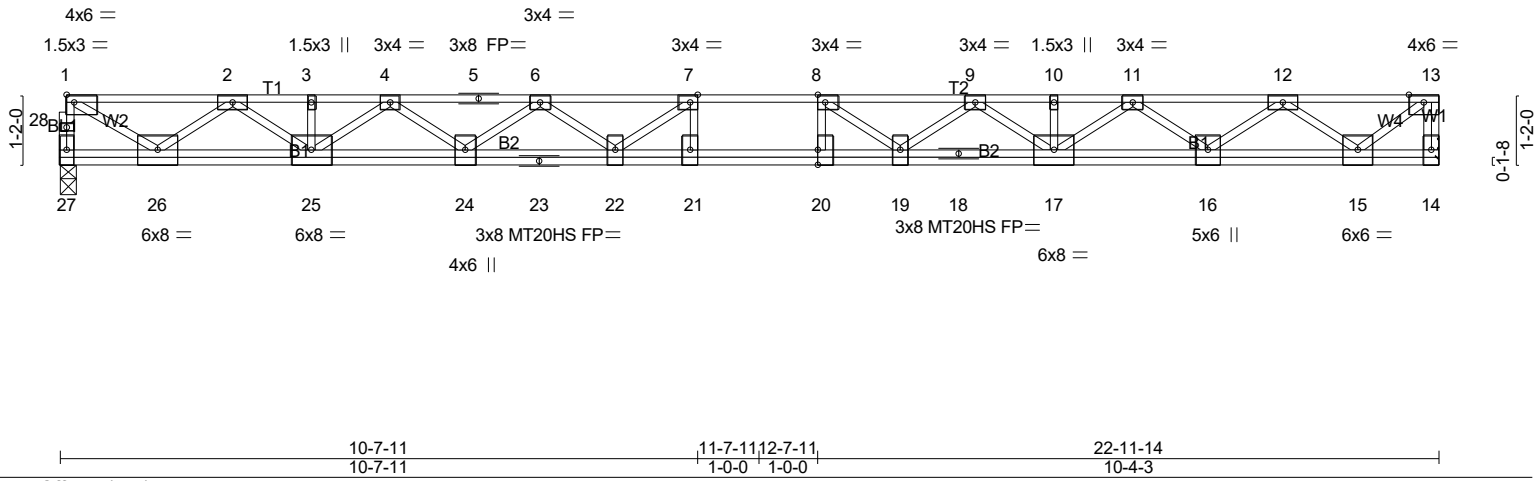
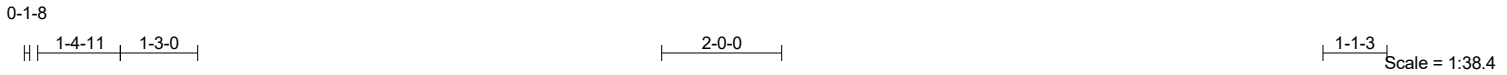


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [7:0-1-8,Edge], [8:0-1-8,Edge], [20:0-3-0,0-0-0]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.76	Vert(LL) -0.50 20-21 >548 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.40	Vert(CT) -0.68 20-21 >399 360	MT20HS	187/143
BCLL 0.0	Rep Stress Incr YES	WB 0.76	Horz(CT) 0.05 14 n/a n/a		
BCDL 5.0	Code IRC2021/TPI2014	Matrix-SH			Weight: 147 lb FT = 20%F, 11%E

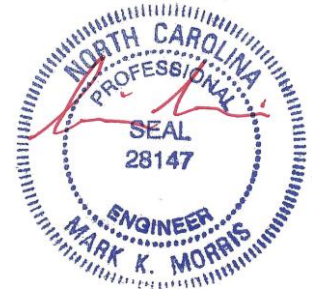
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins, except end verticals.
BOT CHORD 2x4 SP SS(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 27=995/0-3-6 (min. 0-1-8), 14=1000/Mechanical

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 27-28=-978/0, 1-28=-977/0, 13-14=-984/0, 1-2=-1379/0, 2-3=-3366/0, 3-4=-3366/0, 4-5=-4723/0, 5-6=-4723/0, 6-7=-5476/0, 7-8=-5728/0, 8-9=-5411/0, 9-10=-4584/0, 10-11=-4584/0, 11-12=-3122/0, 12-13=-1131/0  
**BOT CHORD** 25-26=0/2500, 24-25=0/4178, 23-24=0/5235, 22-23=0/5235, 21-22=0/5728, 20-21=0/5728, 19-20=0/5728, 18-19=0/5131, 17-18=0/5131, 16-17=0/3948, 15-16=0/2272  
**WEBS** 7-21=-259/279, 8-20=-234/305, 7-22=-675/158, 6-22=0/437, 6-24=-651/0, 4-24=0/691, 4-25=-1013/0, 2-25=0/1081, 2-26=-1423/0, 1-26=0/1588, 8-19=-727/102, 9-19=0/468, 9-17=-682/0, 11-17=0/794, 11-16=-1049/0, 12-16=0/1079, 12-15=-1450/0, 13-15=0/1448

- NOTES-** (7-8)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) All plates are 3x6 MT20 unless otherwise indicated.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Required 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.
  - 7) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 8) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard

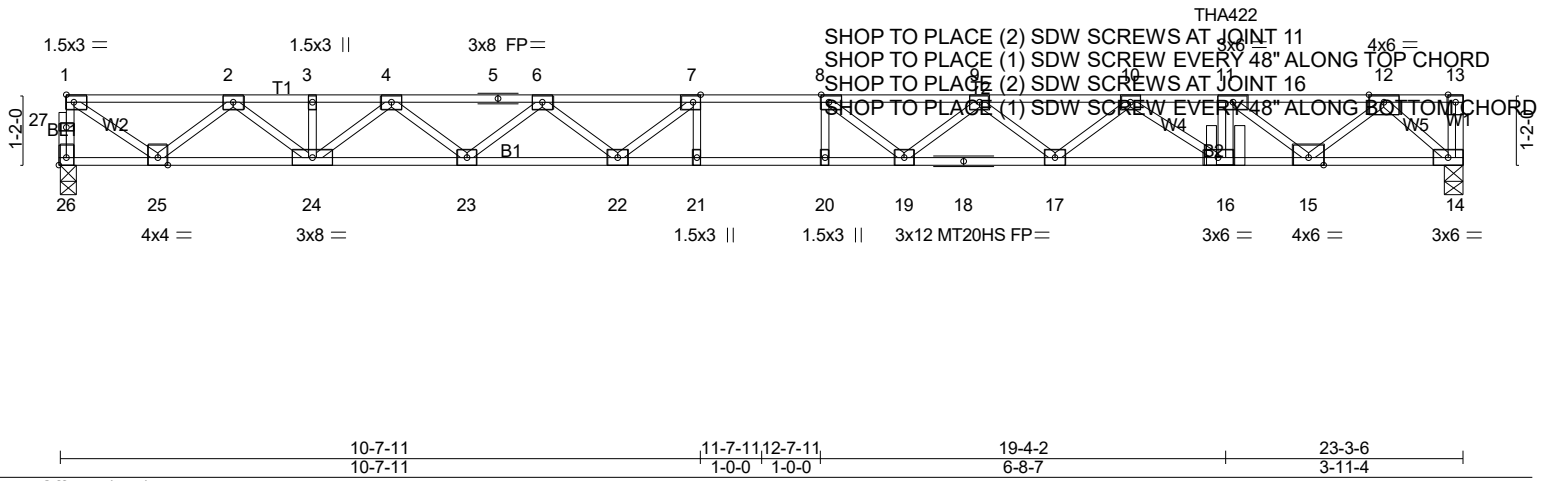
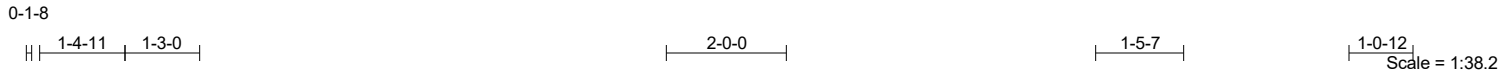


6/13/2024

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Job 24-5147-F02	Truss F215	Truss Type FLOOR GIRDER	Qty 1	Ply 2	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC	# 49570
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ID: gUCksxzC6J7HT2yGkHFINYyOvf-b7j8VYyYt8WOHDSG0XzmExFLWtkNm3sGKc730dz6eaa



LOADING (psf)	SPACING-	1-7-3	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.62	Vert(LL)	-0.45	20	>614	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.76	Vert(CT)	-0.62	19-20	>444	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	NO	WB 0.60	Horz(CT)	0.08	14	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH						
								Weight: 236 lb	FT = 20%F, 11%E

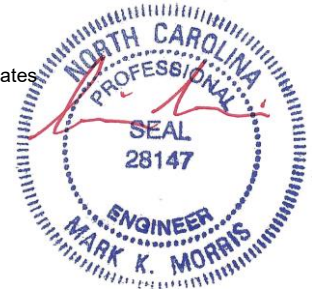
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP SS(flat) *Except* B2: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 26=1173/0-3-6 (min. 0-1-8), 14=1843/0-3-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 26-27=-1167/0, 1-27=-1165/0, 1-2=-1569/0, 2-3=-3885/0, 3-4=-3885/0, 4-5=-5599/0, 5-6=-5599/0, 6-7=-6755/0, 7-8=-7372/0, 8-9=-7494/0, 9-10=-7137/0, 10-11=-6133/0, 11-12=-4018/0  
**BOT CHORD** 24-25=0/2839, 23-24=0/4880, 22-23=0/6279, 21-22=0/7372, 20-21=0/7372, 19-20=0/7372, 18-19=0/7471, 17-18=0/7471, 16-17=0/6785, 15-16=0/6133, 14-15=0/2068  
**WEBS** 11-16=0/438, 7-21=0/406, 8-20=-378/2, 7-22=-1118/0, 6-22=0/778, 6-23=-885/0, 4-23=0/936, 4-24=-1270/0, 2-24=0/1335, 2-25=-1652/0, 1-25=0/1845, 8-19=-150/601, 9-17=-434/0, 10-17=0/458, 10-16=-782/0, 11-15=-2654/0, 12-15=0/2537, 12-14=-2751/0

- NOTES-** (10-11)
- 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) Required 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.
  - 7) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent at 19-4-2 from the left end to connect truss(es) F211 (1 ply 2x4 SP) to back face of top chord.
  - 8) Fill all nail holes where hanger is in contact with lumber.
  - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard  
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 14-26=-8, 1-13=-80  
 Concentrated Loads (lb)  
 Vert: 11=-996(B)

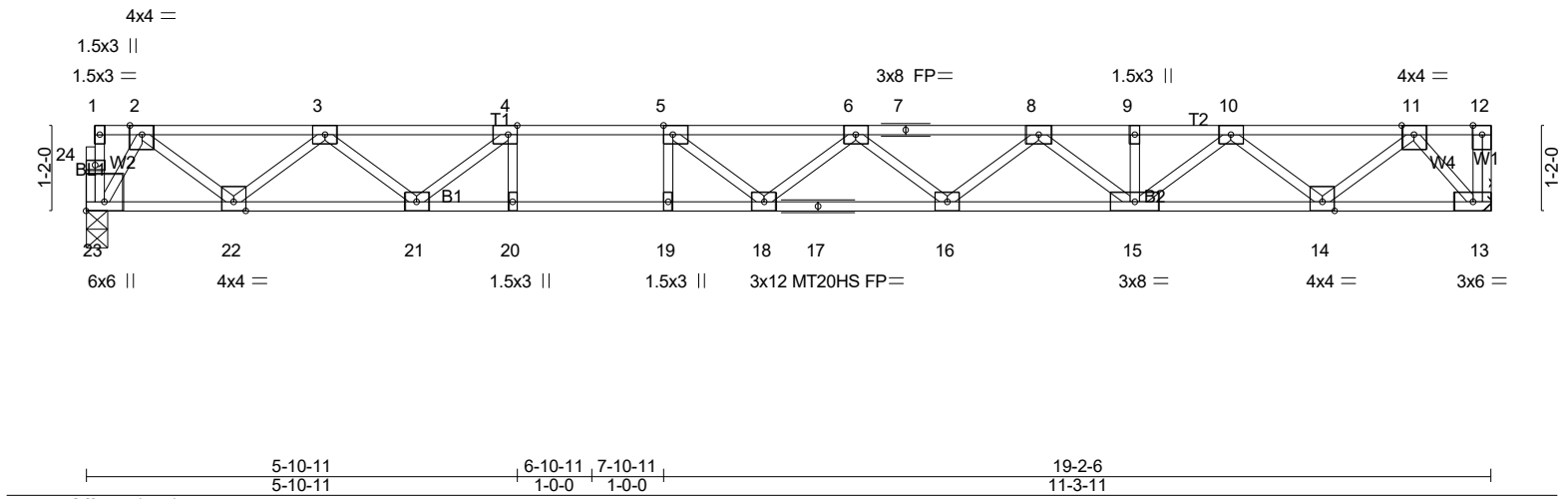


6/13/2024

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Job 24-5147-F02	Truss F216	Truss Type Floor	Qty 2	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) # 49570
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.88	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.93	Vert(LL) -0.40 18-19 >575 480	MT20HS	187/143
BCLL 0.0	Lumber DOL 1.00	WB 0.50	Vert(CT) -0.54 18-19 >418 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.06 13 n/a n/a		
	Code IRC2021/TPI2014			Weight: 97 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP SS(flat) *Except* B2: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 19-20.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 23=828/0-3-6 (min. 0-1-8), 13=833/Mechanical

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

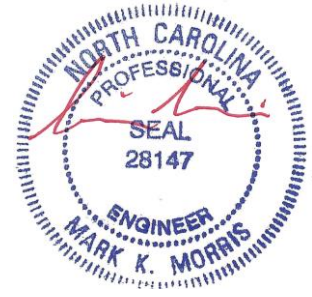
TOP CHORD 2-3=-1336/0, 3-4=-2669/0, 4-5=-3450/0, 5-6=-3738/0, 6-7=-3556/0, 7-8=-3556/0, 8-9=-2838/0, 9-10=-2838/0, 10-11=-1514/0

BOT CHORD 22-23=0/534, 21-22=0/2092, 20-21=0/3450, 19-20=0/3450, 18-19=0/3450, 17-18=0/3812, 16-17=0/3812, 15-16=0/3296, 14-15=0/2268, 13-14=0/736

WEBS 4-20=0/378, 5-19=-352/0, 4-21=-1051/0, 3-21=0/751, 3-22=-984/0, 2-22=0/1044, 2-23=-1025/0, 5-18=-125/535, 6-16=-333/0, 8-16=0/339, 8-15=-584/0, 10-15=0/728, 10-14=-982/0, 11-14=0/1012, 11-13=-1104/0

- NOTES-** (7-8)
- 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) 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.
  - 7) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 8) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



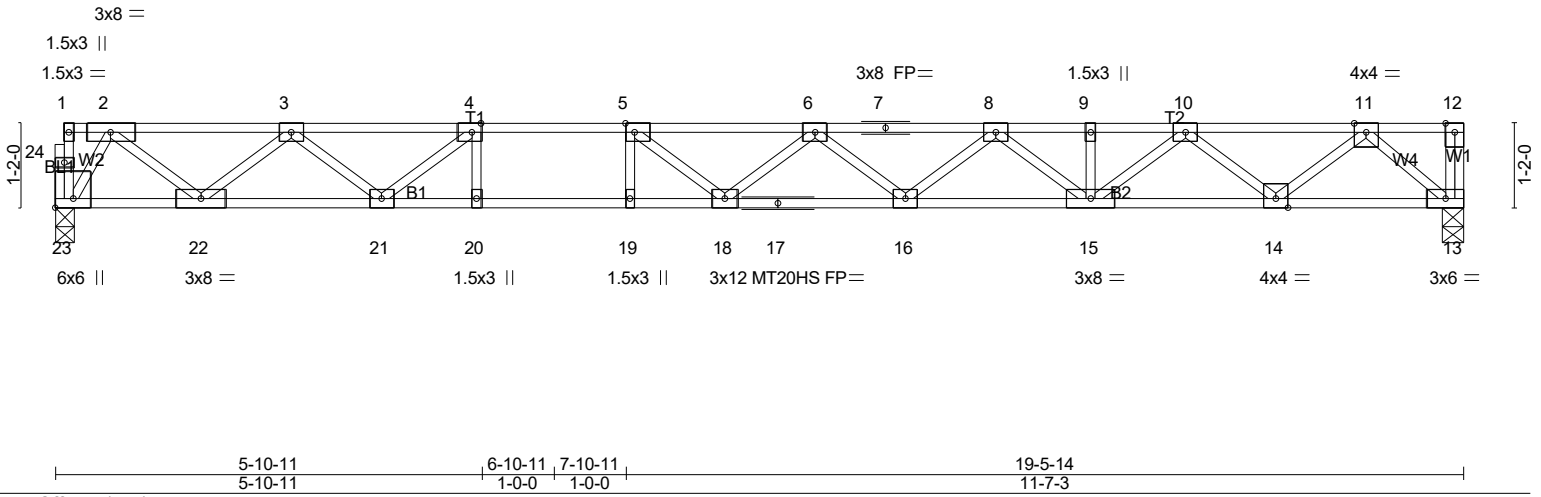
6/13/2024

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Job 24-5147-F02	Truss F217	Truss Type Floor	Qty 4	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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<b>LOADING</b> (psf)	<b>SPACING-</b>	1-7-3	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.93	Vert(LL)	-0.42 18-19	>550	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.96	Vert(CT)	-0.58 18-19	>400	360	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	YES	WB 0.51	Horz(CT)	0.07 13	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH						
								Weight: 98 lb	FT = 20%F, 11%E

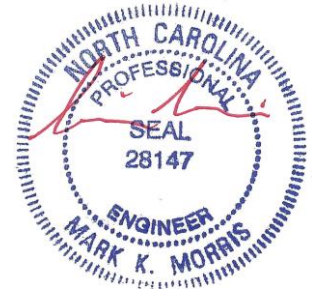
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP SS(flat) *Except* B2: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 19-20.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 23=841/0-3-6 (min. 0-1-8), 13=846/0-3-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1359/0, 3-4=-2723/0, 4-5=-3533/0, 5-6=-3850/0, 6-7=-3699/0, 7-8=-3699/0, 8-9=-3013/0, 9-10=-3013/0, 10-11=-1720/0  
BOT CHORD 22-23=0/543, 21-22=0/2129, 20-21=0/3533, 19-20=0/3533, 18-19=0/3533, 17-18=0/3941, 16-17=0/3941, 15-16=0/3453, 14-15=0/2459, 13-14=0/956  
WEBS 4-20=0/393, 5-19=-366/0, 4-21=-1085/0, 3-21=0/773, 3-22=-1001/0, 2-22=0/1063, 2-23=-1042/0, 5-18=-111/569, 6-16=-315/0, 8-16=0/320, 8-15=-563/0, 10-15=0/707, 10-14=-962/0, 11-14=0/995, 11-13=-1255/0

- NOTES-** (6-7)
- 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) 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) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 7) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard

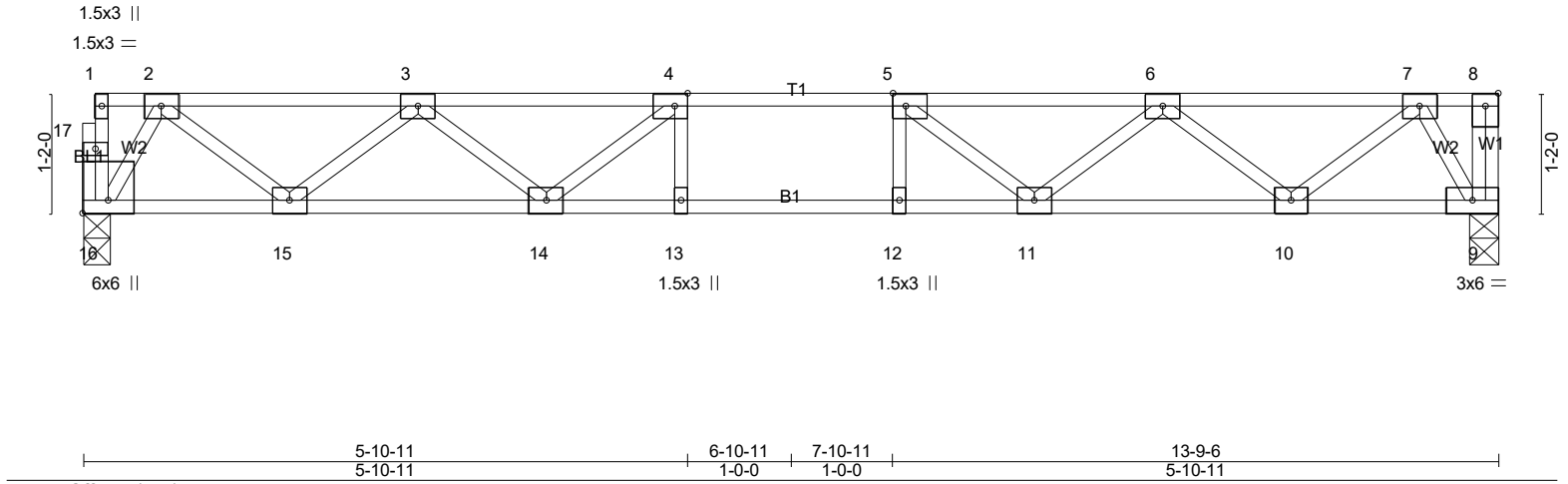
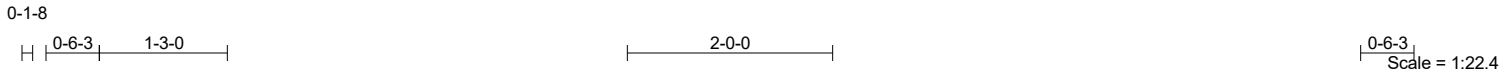


6/13/2024

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Job 24-5147-F02	Truss F218	Truss Type Floor	Qty 13	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:19:22 2024 Page 1  
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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	1-7-3	TC 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.52	Vert(LL) -0.09 11-12 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.33	Vert(CT) -0.12 11-12 >999 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.03 9 n/a n/a		
	Code IRC2021/TPI2014			Weight: 70 lb	FT = 20%F, 11%E

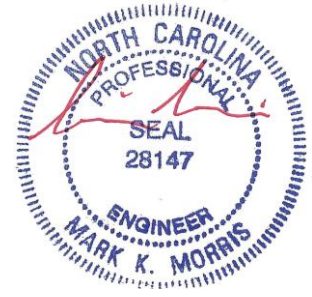
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 16=590/0-3-6 (min. 0-1-8), 9=595/0-3-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-906/0, 3-4=-1665/0, 4-5=-1910/0, 5-6=-1665/0, 6-7=-906/0  
 BOT CHORD 15-16=0/376, 14-15=0/1413, 13-14=0/1910, 12-13=0/1910, 11-12=0/1910, 10-11=0/1413, 9-10=0/376  
 WEBS 4-14=-428/0, 3-14=0/355, 3-15=-660/0, 2-15=0/690, 2-16=-720/0, 5-11=-428/0, 6-11=0/355, 6-10=-660/0, 7-10=0/690, 7-9=-717/0

- NOTES-** (5-6)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 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.
  - 4) CAUTION, Do not erect truss backwards.
  - 5) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 6) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/13/2024

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Job 24-5147-F02	Truss F219	Truss Type Floor Supported Gable	Qty 1	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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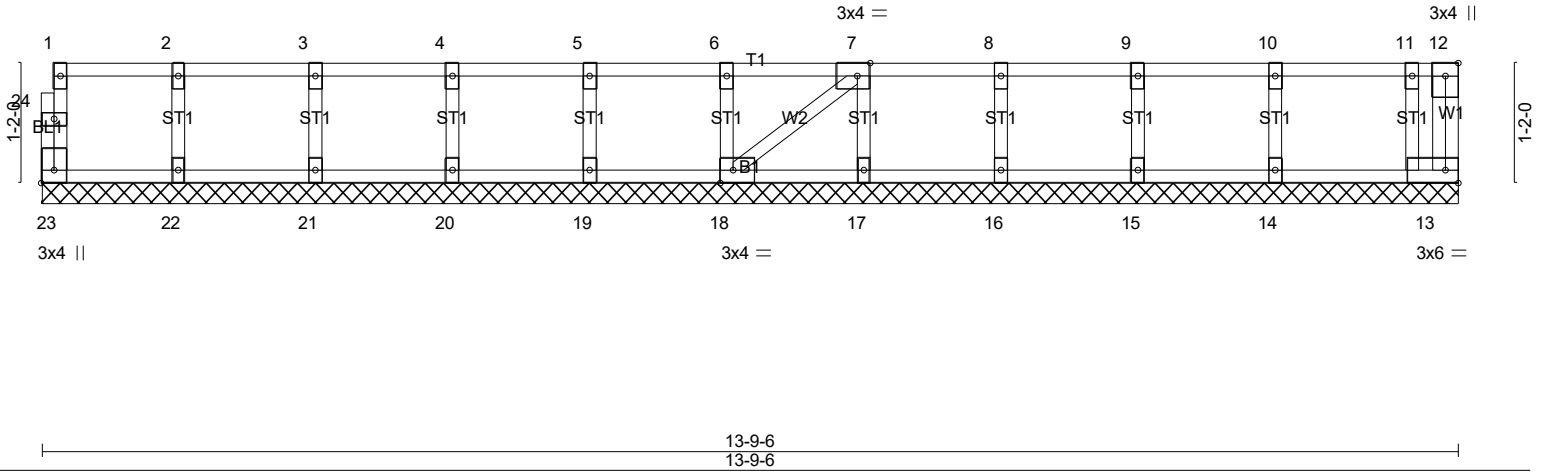


Plate Offsets (X,Y)-- [7:0-1-8,Edge], [18:0-1-8,Edge], [23:Edge,0-1-8]

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 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	13	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH						
								Weight: 62 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 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.** All bearings 13-9-6.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 23, 13, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

- NOTES-** (7-8)
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - 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.
  - CAUTION. Do not erect truss backwards.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/13/2024

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Job 24-5147-F02	Truss F220	Truss Type Floor	Qty 12	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) <b># 49570</b>
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0-3-10 1-3-0

2-0-0

0-3-10

Scale = 1:30.0

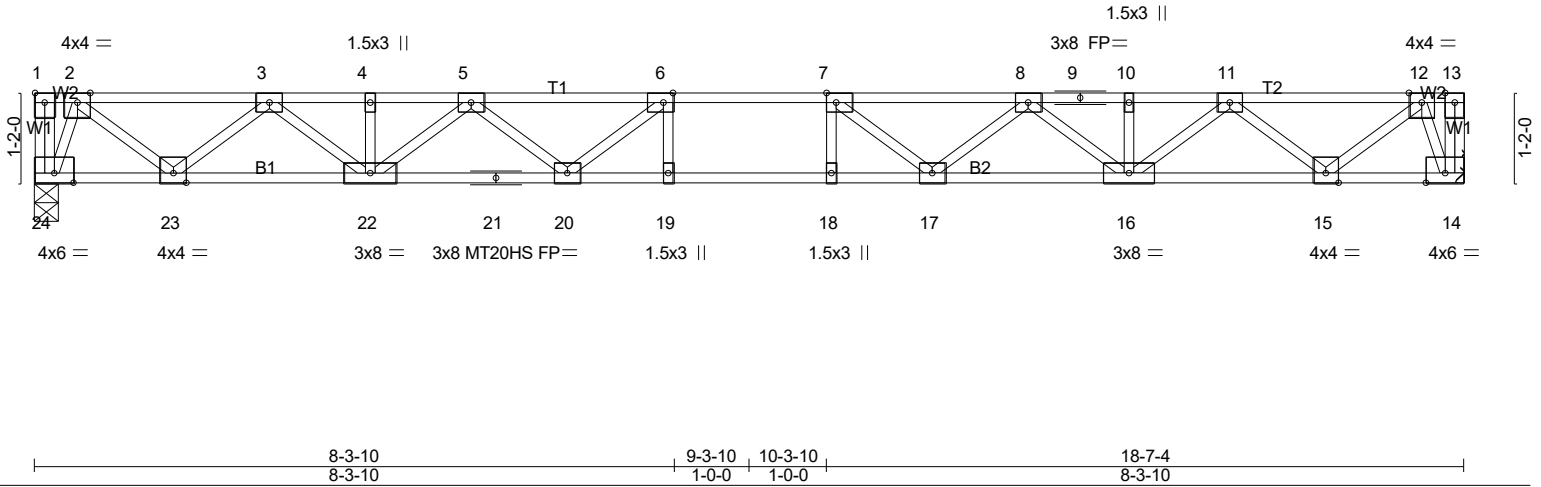


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-1-8,Edge], [7:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.42	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.84	Vert(LL) -0.26 18-19 >832 480	MT20HS	187/143
BCLL 0.0	Lumber DOL 1.00	WB 0.49	Vert(CT) -0.37 18-19 >603 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.06 14 n/a n/a		
	Code IRC2021/TPI2014			Weight: 97 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 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.** (lb/size) 24=807/0-3-8 (min. 0-1-8), 14=807/Mechanical

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1153/0, 3-4=-2517/0, 4-5=-2517/0, 5-6=-3276/0, 6-7=-3528/0, 7-8=-3276/0, 8-9=-2517/0, 9-10=-2517/0, 10-11=-2517/0, 11-12=-1153/0  
BOT CHORD 23-24=0/357, 22-23=0/1927, 21-22=0/3018, 20-21=0/3018, 19-20=0/3528, 18-19=0/3528, 17-18=0/3528, 16-17=0/3018, 15-16=0/1927, 14-15=0/357  
WEBS 6-20=-540/18, 5-20=0/429, 5-22=-640/0, 3-22=0/753, 3-23=-1007/0, 2-23=0/1036, 2-24=-942/0, 7-17=-540/18, 8-17=0/429, 8-16=-640/0, 11-16=0/753, 11-15=-1007/0, 12-15=0/1036, 12-14=-942/0

- NOTES-** (6-7)
- 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) 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) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 7) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/13/2024

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Job 24-5147-F02	Truss F221	Truss Type Floor Supported Gable	Qty 1	Ply 1	LOT 0.0109 BLAKE POND   101 FROST MEADOW WAY LILLINGTON, NC Job Reference (optional) # 49570
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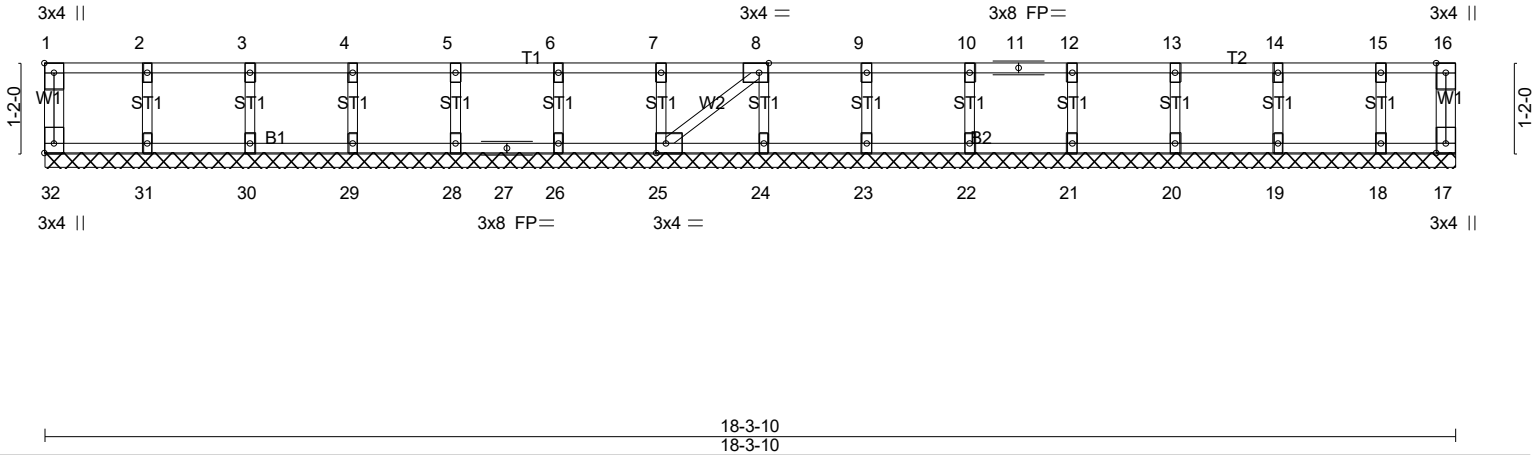


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [8:0-1-8,Edge], [25:0-1-8,Edge], [32:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.00	WB 0.03	Horz(CT)	-0.00	25	n/a		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH					Weight: 80 lb	FT = 20%F, 11%E
	Code IRC2021/TPI2014							

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 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 10-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 18-3-10.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 28, 26, 25, 24, 23, 22, 21, 20, 19, 18

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

- NOTES-** (6-7)
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - 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.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/13/2024

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