

# 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 #: 46472

JOB: 24-1221-F02

JOB NAME: LOT 0.0092 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.

*24 Truss Design(s)*

Trusses:

F201, F202, F203, F204, F205, F206, F207, F208, F209, F210, F211, F212, F213, F213A, F214, F215, F216, F217, F218, F219, F219A, F220, F221, F222



**3/13/2024**

**Mark Morris**

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

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F201	Floor Supported Gable	1	1	Job Reference (optional) # 46472

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0-1-8

Scale: 3/8"=1'

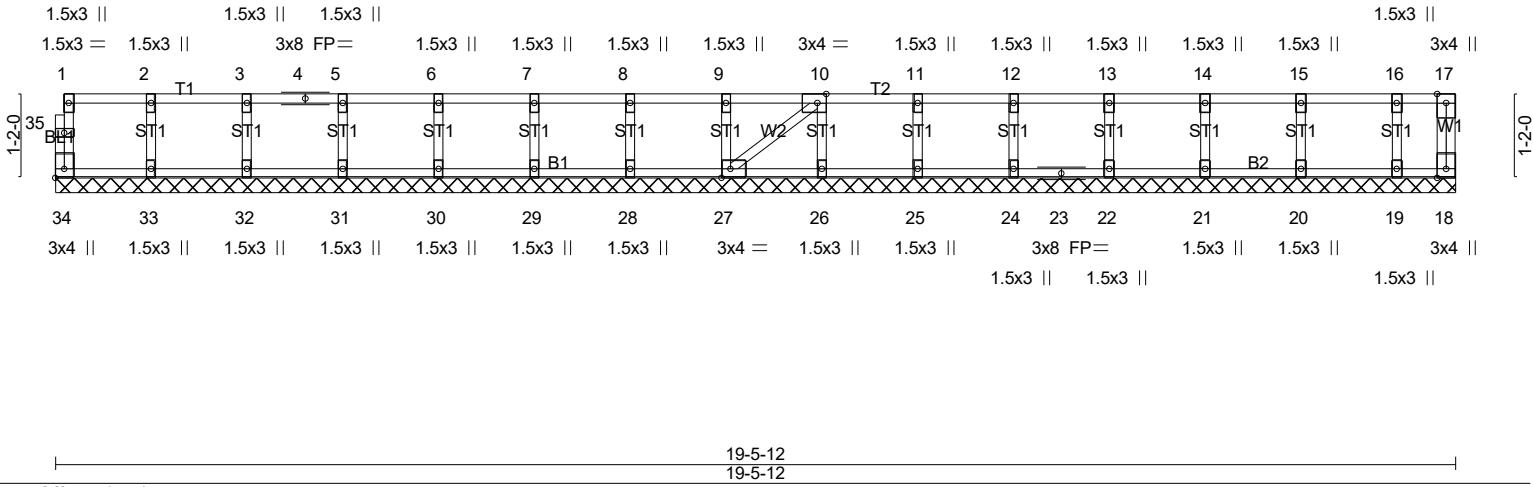


Plate Offsets (X,Y)-- [10:0-1-8,Edge], [27:0-1-8,Edge], [34:Edge,0-1-8]

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	18	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH					Weight: 84 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 19-5-12.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 34, 18, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 22, 21, 20, 19

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

- NOTES-** (6-9)
- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



3/13/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F202	Floor	4	1	Job Reference (optional) # 46472

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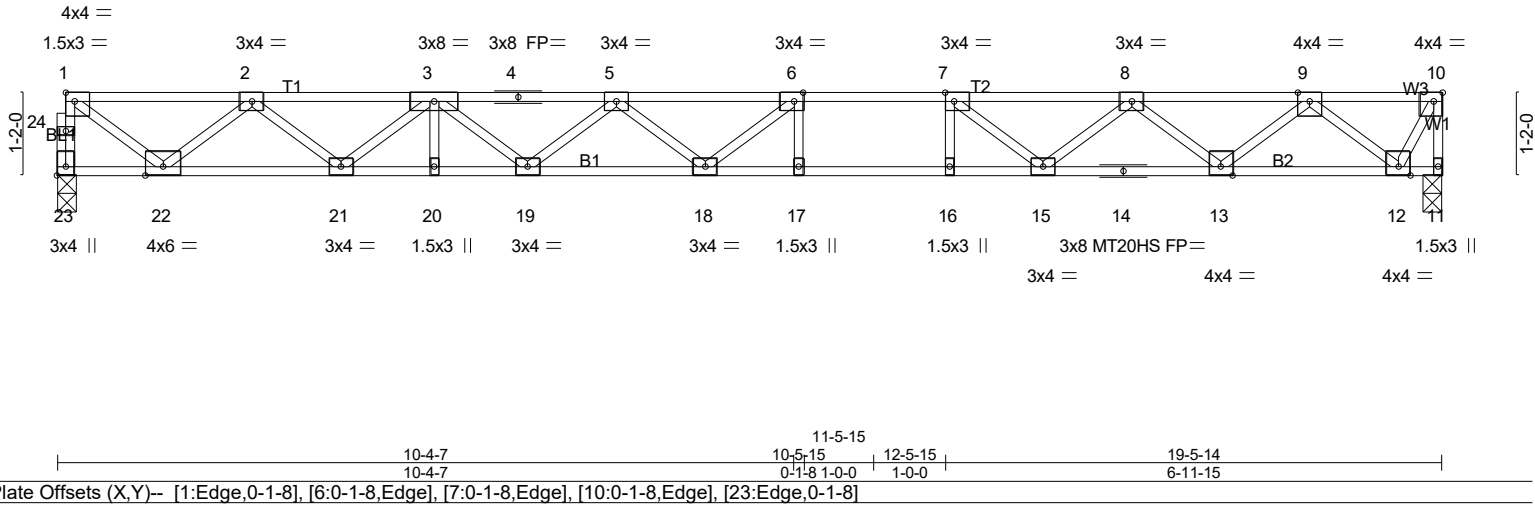
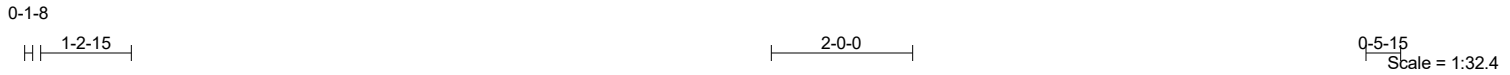


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-1-8,Edge], [7:0-1-8,Edge], [10:0-1-8,Edge], [23:Edge,0-1-8]																																				
<table border="1"> <thead> <tr> <th>LOADING (psf)</th> <th>SPACING-</th> <th>CSI.</th> <th>DEFL.</th> <th>PLATES</th> <th>GRIP</th> </tr> </thead> <tbody> <tr> <td>TCLL 40.0</td> <td>1-7-3</td> <td>TC 0.67</td> <td>in (loc) l/defl L/d</td> <td>MT20</td> <td>244/190</td> </tr> <tr> <td>TCDL 10.0</td> <td>Plate Grip DOL 1.00</td> <td>BC 0.81</td> <td>Vert(LL) -0.37 17-18 &gt;625 480</td> <td>MT2OHS</td> <td>187/143</td> </tr> <tr> <td>BCLL 0.0</td> <td>Lumber DOL 1.00</td> <td>WB 0.58</td> <td>Vert(CT) -0.51 17-18 &gt;454 360</td> <td></td> <td></td> </tr> <tr> <td>BCDL 5.0</td> <td>Rep Stress Incr YES</td> <td>Matrix-SH</td> <td>Horz(CT) 0.07 11 n/a n/a</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Code IRC2021/TPI2014</td> <td></td> <td></td> <td>Weight: 97 lb</td> <td>FT = 20%F, 11%E</td> </tr> </tbody> </table>	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 0.81	Vert(LL) -0.37 17-18 >625 480	MT2OHS	187/143	BCLL 0.0	Lumber DOL 1.00	WB 0.58	Vert(CT) -0.51 17-18 >454 360			BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.07 11 n/a n/a				Code IRC2021/TPI2014			Weight: 97 lb	FT = 20%F, 11%E
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<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 5-6-9 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) 23=844/0-3-6 (min. 0-1-8), 11=849/0-3-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 23-24=-839/0, 1-24=-838/0, 10-11=-843/0, 1-2=-999/0, 2-3=-2492/0, 3-4=-3475/0, 4-5=-3475/0, 5-6=-3870/0, 6-7=-3777/0, 7-8=-3190/0, 8-9=-2069/0, 9-10=-423/0  
 BOT CHORD 21-22=0/1886, 20-21=0/3109, 19-20=0/3109, 18-19=0/3822, 17-18=0/3777, 16-17=0/3777, 15-16=0/3777, 14-15=0/2732, 13-14=0/2732, 12-13=0/1366  
 WEBS 6-17=-277/56, 7-16=-30/302, 6-18=-281/354, 5-18=-74/261, 5-19=-452/0, 3-19=0/468, 3-21=-787/0, 2-21=0/790, 2-22=-1155/0, 1-22=0/1213, 7-15=-867/0, 8-15=0/623, 8-13=-863/0, 9-13=0/916, 9-12=-1227/0, 10-12=0/897

- NOTES-** (5-8)
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



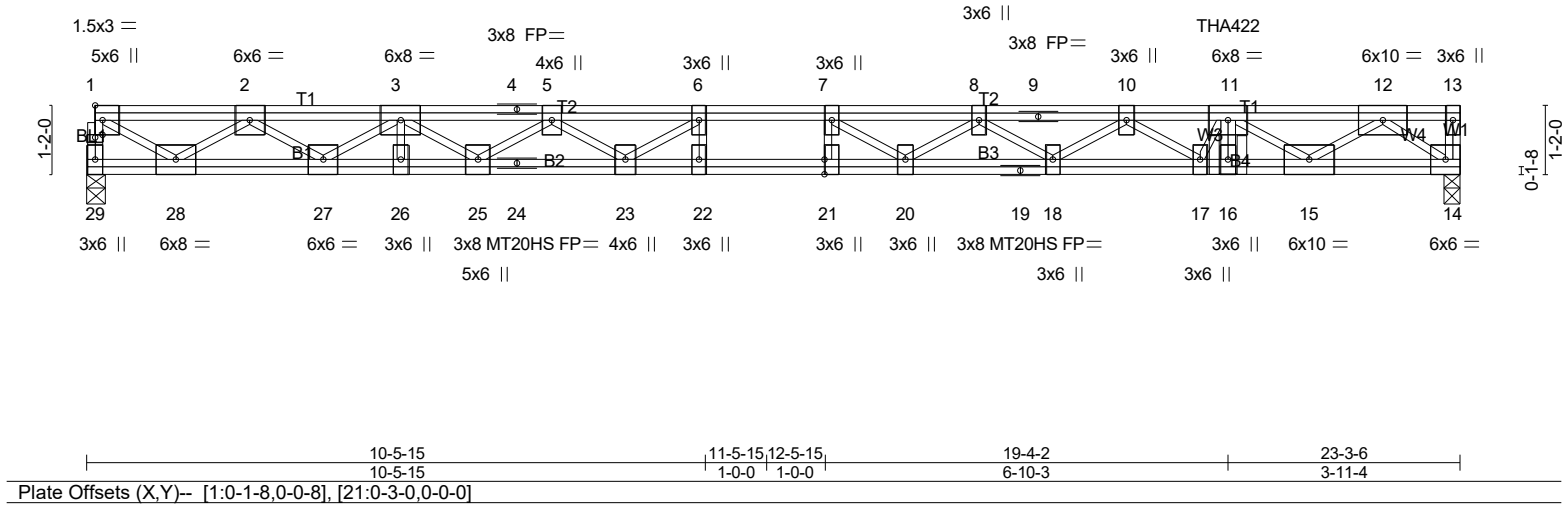
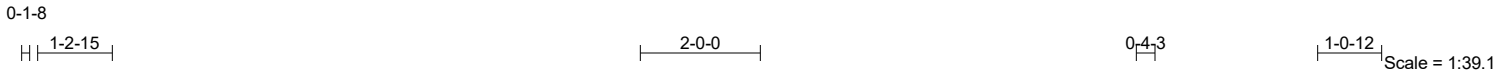
3/13/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F204	FLOOR GIRDER	1	1	# 46472
					Job Reference (optional)

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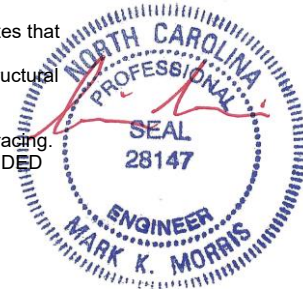
LOADING (psf)	SPACING-	1-4-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.35	Vert(LL)	-0.47	21	>585	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.86	Vert(CT)	-0.65	21	>423	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	NO	WB 0.60	Horz(CT)	0.08	14	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH						
								Weight: 182 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.2(flat) *Except*	
BL1,W1,W4,W3: 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 29=966/0-3-6 (min. 0-1-8), 14=1465/0-3-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-29=-952/0, 1-2=-1323/0, 2-3=-3417/0, 3-4=-5062/0, 4-5=-5062/0, 5-6=-6141/0, 6-7=-6698/0, 7-8=-6799/0, 8-9=-6452/0, 9-10=-6452/0, 10-11=-5620/0, 11-12=-3578/0  
 BOT CHORD 27-28=0/2493, 26-27=0/4355, 25-26=0/4355, 24-25=0/5696, 23-24=0/5696, 22-23=0/6698, 21-22=0/6698, 20-21=0/6698, 19-20=0/6770, 18-19=0/6770, 17-18=0/6127, 16-17=0/5356, 15-16=0/5360, 14-15=0/1851  
 WEBS 6-22=0/302, 7-21=-285/6, 11-15=-2158/0, 12-15=0/2142, 12-14=-2338/0, 6-23=-957/0, 5-23=0/689, 5-25=-787/0, 3-25=0/861, 3-27=-1144/0, 2-27=0/1146, 2-28=-1452/0, 1-28=0/1580, 7-20=-150/503, 8-18=-394/0, 10-18=0/403, 10-17=-629/0, 11-17=0/547

- NOTES-** (8-11)
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates 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.
  - Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 19-4-2 from the left end to connect truss(es) F205 (1 ply 2x4 SP) to front face of top chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



3/13/2024

**LOAD CASE(S)** Standard

**Continued on Page 2** 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	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F204	FLOOR GIRDER	1	1	Job Reference (optional) # 46472

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**LOAD CASE(S)** Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 14-29=-7, 1-13=-67

Concentrated Loads (lb)

Vert: 11=-742(F)



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Job 24-1221-F02	Truss F205	Truss Type FLOOR GIRDER	Qty 1	Ply 1	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) <b># 46472</b>
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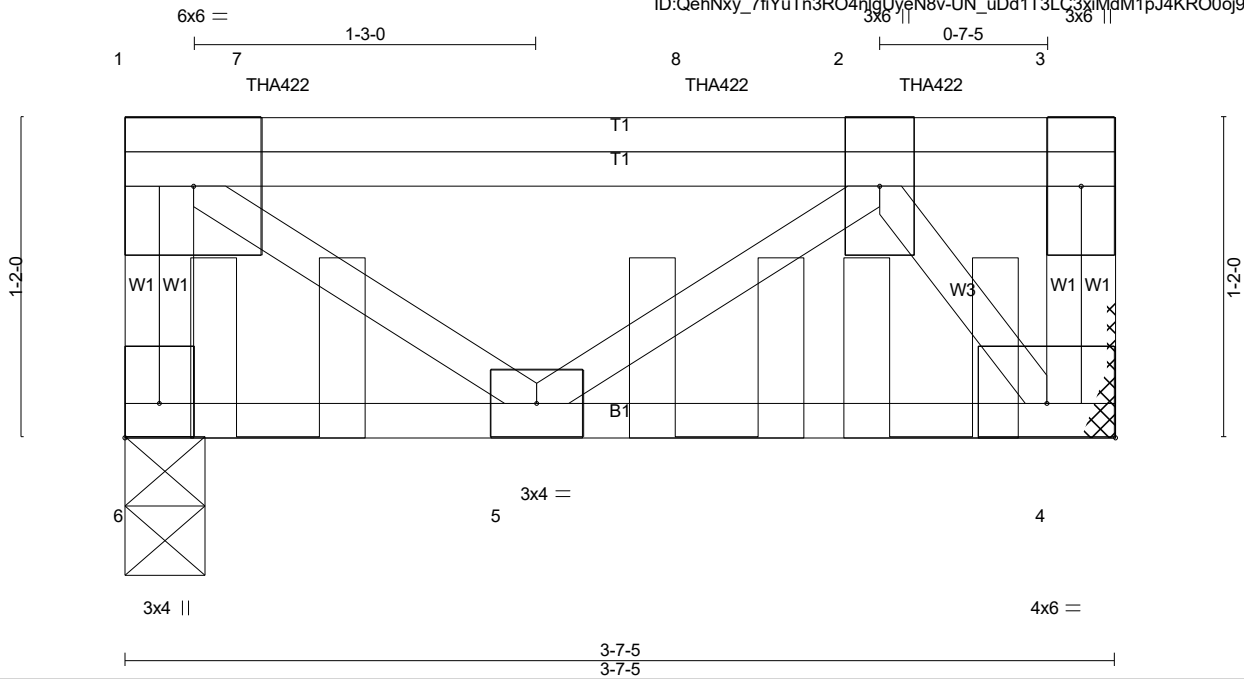


Plate Offsets (X,Y)-- [4:Edge,0-1-8], [6:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.59	Vert(LL) -0.00	5	>999	480	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.21	Vert(CT) -0.01	5	>999	360		
BCLL 0.0	Lumber DOL 1.00	WB 0.37	Horz(CT) 0.00	4	n/a	n/a		
BCDL 5.0	Rep Stress Incr NO	Matrix-P						
	Code IRC2021/TPI2014						Weight: 27 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 3-7-5 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=1174/0-3-8 (min. 0-1-8), 4=808/Mechanical

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

TOP CHORD 1-6=-1167/0, 3-4=0/492, 1-7=-517/0, 7-8=-517/0, 2-8=-517/0  
BOT CHORD 4-5=0/968  
WEBS 1-5=0/635, 2-5=-572/0, 2-4=-1613/0

**NOTES-** (7-10)

- Refer to girder(s) for truss to truss connections.
- 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.
- Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 2-11-4 from the left end to connect truss(es) F206 (1 ply 2x4 SP) to front face of top chord.
- Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 1-7-3 oc max. starting at 0-6-11 from the left end to 2-1-14 to connect truss(es) F203 (1 ply 2x4 SP) to back face of top chord.
- Fill all nail holes where hanger is in contact with lumber.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
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**LOAD CASE(S)** Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 4-6=-10, 1-3=-100  
Concentrated Loads (lb)  
Vert: 2=-88(F) 7=-772(B) 8=-753(B)

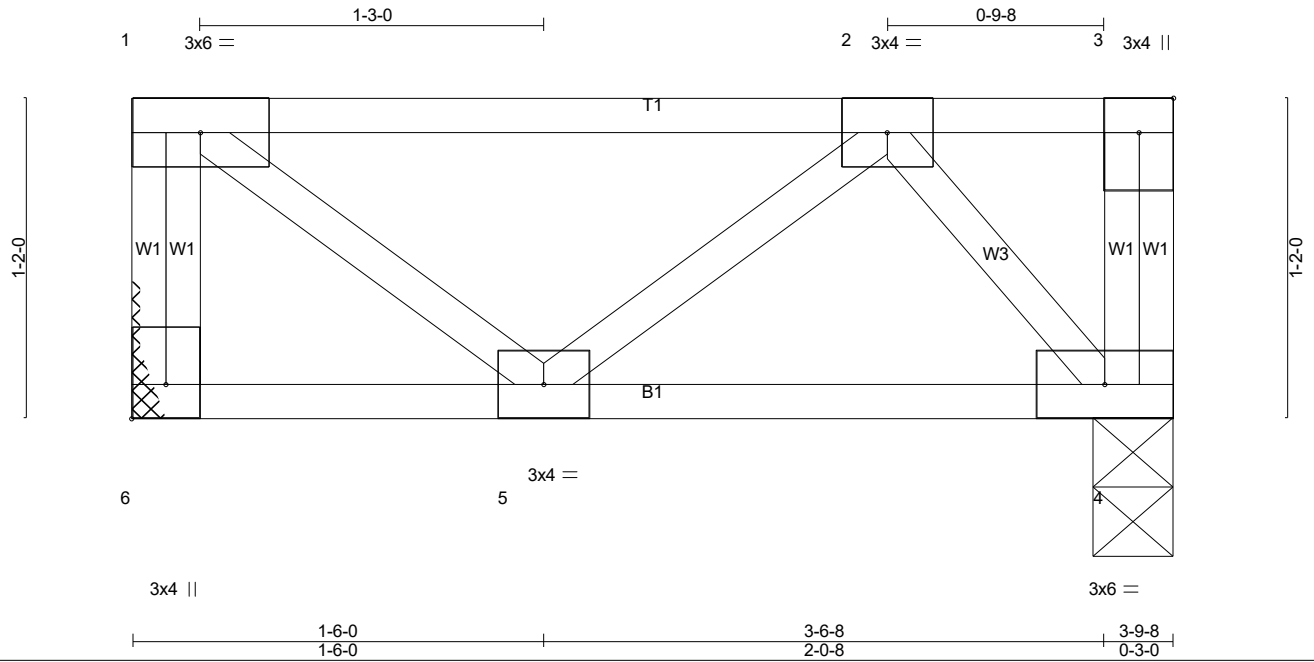


3/13/2024

**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 24-1221-F02	Truss F206	Truss Type Floor	Qty 1	Ply 1	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) <b># 46472</b>
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Mar 16 10:56:06 2024 Page 1  
ID:QehNxy\_7ffYuTn3RO4nlqUyeN8v-zZYGRy25qfKwZsxpwkKYdYzfeC51auBRBPxhCizaOdt



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	1-7-3	Plate Grip DOL	1.00	TC	0.22	in	(loc)	l/defl	L/d	MT20	244/190	
TCDL	10.0	1.00	Lumber DOL	1.00	BC	0.04	Vert(LL)	-0.00	5	>999	480		
BCLL	0.0	YES	Rep Stress Incr	YES	WB	0.05	Vert(CT)	-0.00	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: 23 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 3-9-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=156/Mechanical, 4=156/0-3-8 (min. 0-1-8)

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

**NOTES-** (3-6)

- Refer to girder(s) for truss to truss connections.
- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET - PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



3/13/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F207	Floor	9	1	Job Reference (optional) # 46472

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Mar 16 10:56:07 2024 Page 1  
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0-1-8  
 H | 1-2-15 | 2-0-0 |  
 Scale = 1:37.9

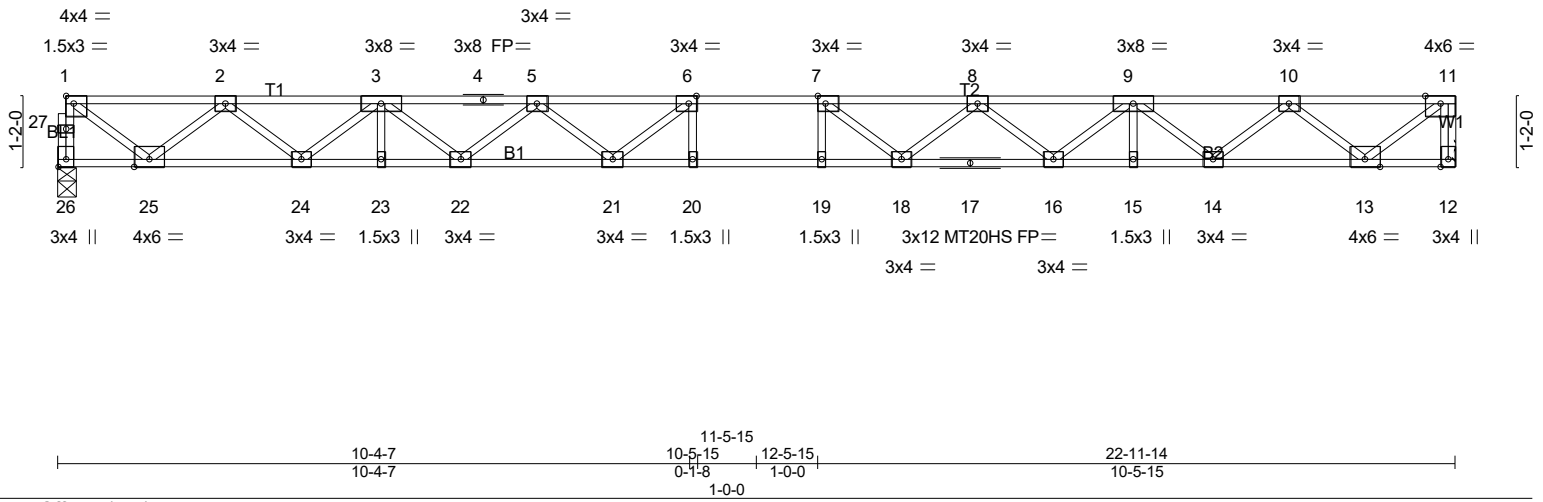


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-1-8,Edge], [7:0-1-8,Edge], [26:Edge,0-1-8]					
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	1-4-0 Plate Grip DOL 1.00	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.62	Vert(LL) -0.48 19-20 >567 480	MT20HS	187/143
BCLL 0.0	Rep Stress Incr YES	WB 0.60	Vert(CT) -0.66 19-20 >412 360		
BCDL 5.0	Code IRC2021/TPI2014	Matrix-SH	Horz(CT) 0.09 12 n/a n/a		
				Weight: 116 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 5-11-7 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) 26=830/0-3-6 (min. 0-1-8), 12=834/Mechanical

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 26-27=-826/0, 1-27=-824/0, 11-12=-828/0, 1-2=-997/0, 2-3=-2546/0, 3-4=-3680/0, 4-5=-3680/0, 5-6=-4313/0, 6-7=-4518/0, 7-8=-4313/0, 8-9=-3680/0, 9-10=-2547/0, 10-11=-996/0  
 BOT CHORD 24-25=0/1887, 23-24=0/3219, 22-23=0/3219, 21-22=0/4102, 20-21=0/4518, 19-20=0/4518, 18-19=0/4518, 17-18=0/4102, 16-17=0/4102, 15-16=0/3218, 14-15=0/3218, 13-14=0/1889  
 WEBS 6-21=-532/104, 5-21=0/400, 5-22=-549/0, 3-22=0/589, 3-24=-859/0, 2-24=0/857, 2-25=-1158/0, 1-25=0/1212, 7-18=-532/104, 8-18=0/400, 8-16=-550/0, 9-16=0/590, 9-14=-858/0, 10-14=0/856, 10-13=-1162/0, 11-13=0/1251

- NOTES-** (6-9)
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - Refer to girder(s) for truss to truss connections.
  - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



3/13/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F208	Floor	4	1	# 46472

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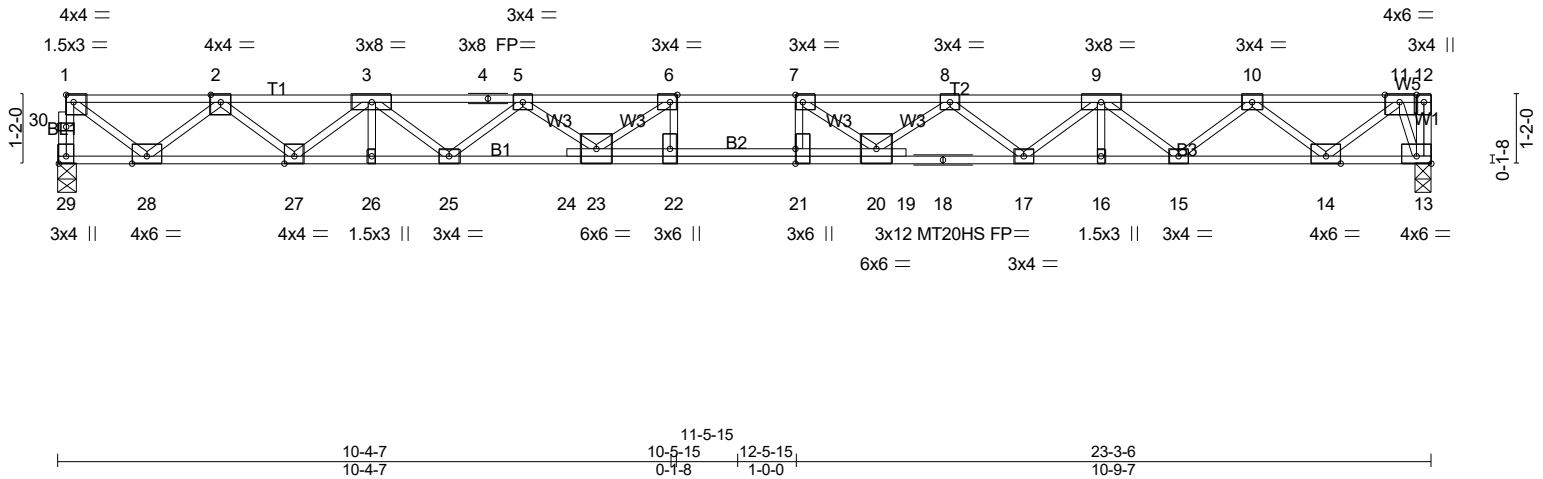
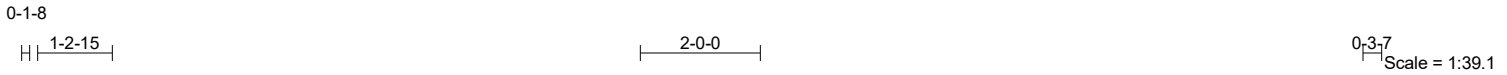


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-1-8,Edge], [7:0-1-8,Edge], [13:Edge,0-1-8], [21:0-3-0,0-0-0], [29:Edge,0-1-8]

LOADING (psf)	SPACING-	1-4-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.56	Vert(LL)	-0.50	21	>557	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.87	Vert(CT)	-0.68	21	>405	360	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.09	13	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH							
										Weight: 126 lb FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 5-8-7 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) 29=840/0-3-6 (min. 0-1-8), 13=844/0-3-8 (min. 0-1-8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 29-30=-837/0, 1-30=-835/0, 1-2=-1012/0, 2-3=-2585/0, 3-4=-3730/0, 4-5=-3730/0, 5-6=-4478/0, 6-7=-4923/0, 7-8=-4526/0, 8-9=-3830/0, 9-10=-2735/0, 10-11=-1228/0  
 BOT CHORD 27-28=0/1914, 26-27=0/3275, 25-26=0/3275, 24-25=0/4200, 23-24=0/4172, 22-23=0/4923, 21-22=0/4923, 20-21=0/4923, 19-20=0/4247, 18-19=0/4275, 17-18=0/4275, 16-17=0/3404, 15-16=0/3404, 14-15=0/2085, 13-14=0/352  
 WEBS 6-22=-83/329, 7-21=-103/306, 6-23=-736/0, 5-23=0/439, 5-25=-612/0, 3-25=0/581, 3-27=-881/0, 2-27=0/874, 2-28=-1175/0, 1-28=0/1229, 7-20=-693/0, 8-20=0/416, 8-17=-579/0, 9-17=0/544, 9-15=-854/0, 10-15=0/846, 10-14=-1115/0, 11-14=0/1140, 11-13=-959/0

- NOTES- (5-8)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) 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.
  - 4) CAUTION, Do not erect truss backwards.
  - 5) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - 7) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - 8) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



3/13/2024

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Job 24-1221-F02	Truss F209	Truss Type FLOOR SUPPORTED GABL	Qty 1	Ply 1	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46472
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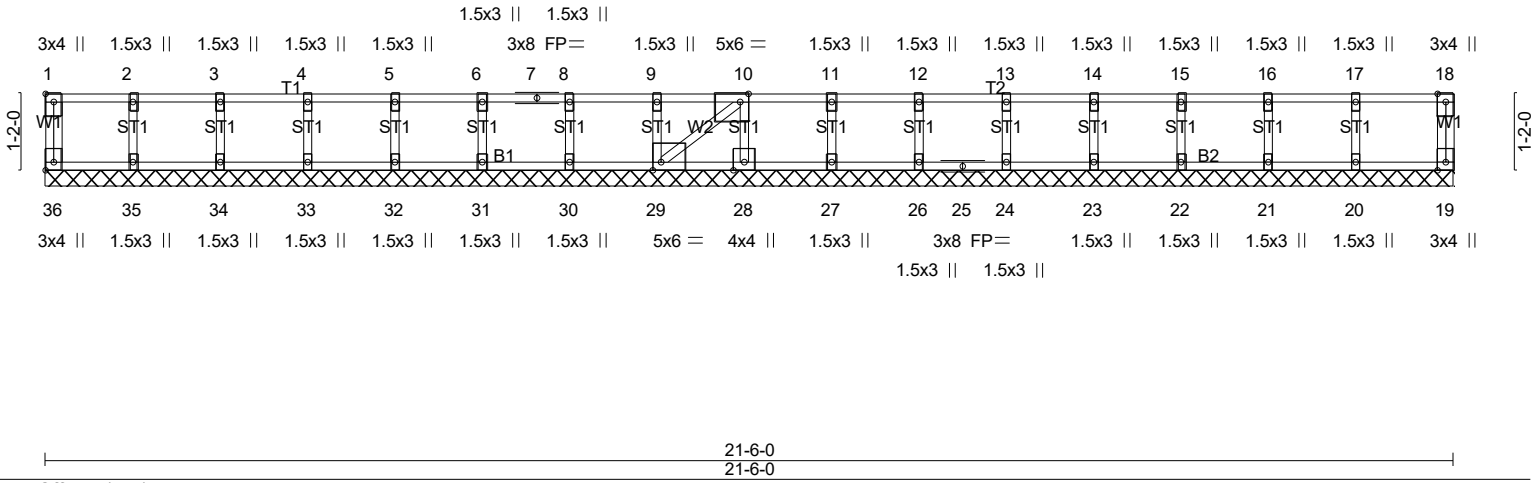


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [10:0-1-8,Edge], [29:0-1-8,Edge], [36:Edge,0-1-8]

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 0.18	Vert(LL)	n/a	-	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.18	Vert(CT)	n/a	-	999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.97	Horz(CT)	0.01	29	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH					Weight: 92 lb	FT = 20%F, 11%E

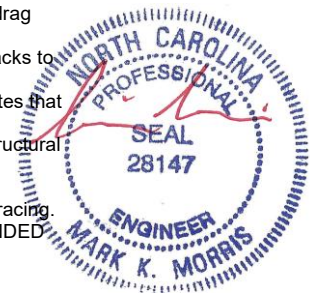
**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP No.1(flat)  
WEBS 2x4 SP No.3(flat)  
OTHERS 2x4 SP No.3(flat)

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

**REACTIONS.** All bearings 21-6-0.  
(lb) - Max Uplift All uplift 100 lb or less at joint(s) except 29=-1619(LC 6), 28=-1614(LC 7)  
Max Grav All reactions 250 lb or less at joint(s) 36, 19, 35, 34, 33, 32, 31, 30, 27, 26, 24, 23, 22, 21, 20  
except 29=1688(LC 5), 28=1684(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-254/254, 3-4=-388/388, 4-5=-521/521, 5-6=-654/654, 6-7=-729/667, 7-8=-788/788,  
8-9=-921/908, 9-10=-1054/1054, 10-11=-1071/1071, 11-12=-924/938, 12-13=-804/804,  
13-14=-671/671, 14-15=-538/538, 15-16=-404/404, 16-17=-271/271  
BOT CHORD 34-35=-254/254, 33-34=-387/387, 32-33=-521/521, 31-32=-654/654, 30-31=-787/787,  
29-30=-921/921, 28-29=-1204/1204, 27-28=-1071/1071, 26-27=-938/938, 25-26=-804/804,  
24-25=-738/738, 23-24=-671/671, 22-23=-538/538, 21-22=-404/404, 20-21=-271/271  
WEBS 10-28=-1670/1628, 10-29=-2697/2697

- NOTES-** (8-11)
- Unbalanced floor live loads have been considered for this design.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1619 lb uplift at joint 29 and 1614 lb uplift at joint 28.
  - This truss has been designed for a total drag load of 100 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 21-6-0 for 100.0 plf.
  - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



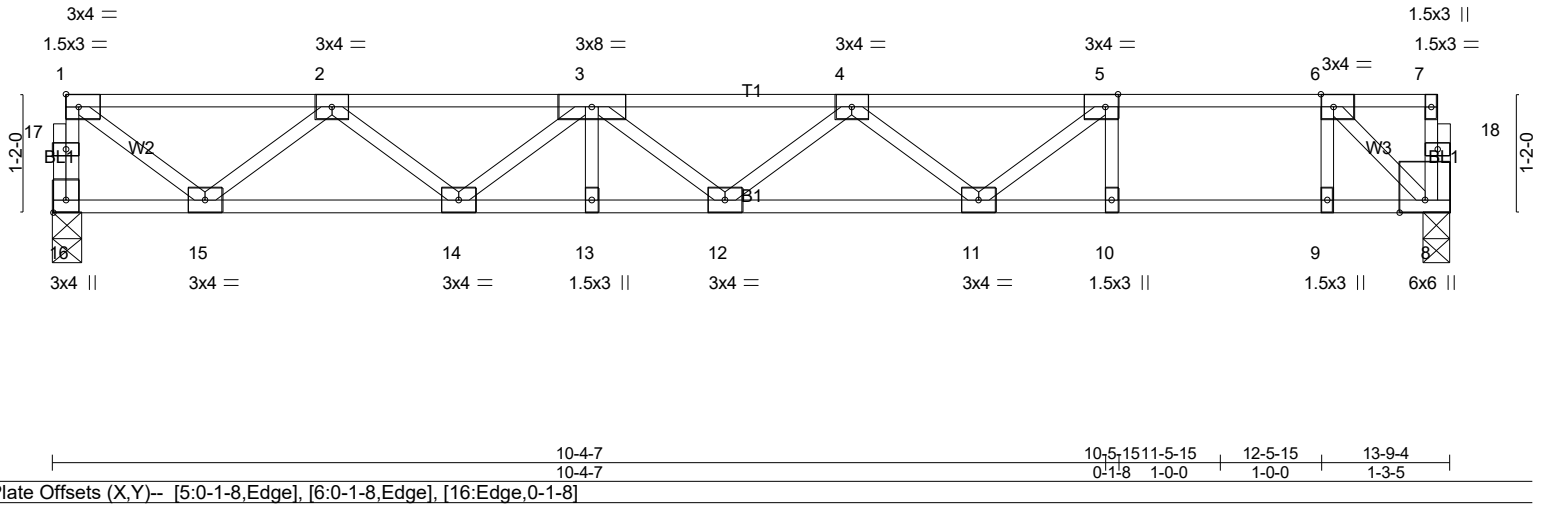
3/13/2024

**LOAD CASE(S)** Standard

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Job 24-1221-F02	Truss F210	Truss Type Floor	Qty 12	Ply 1	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) <b># 46472</b>
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.73	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.85	Vert(LL) -0.27 10-11 >602 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.39	Vert(CT) -0.37 10-11 >440 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.02 8 n/a n/a		
	Code IRC2021/TPI2014			Weight: 70 lb	FT = 20%F, 11%E

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

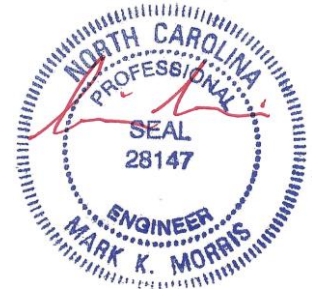
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 16-17=-586/0, 1-17=-585/0, 1-2=-667/0, 2-3=-1550/0, 3-4=-1901/0, 4-5=-1672/0, 5-6=-1036/0  
BOT CHORD 14-15=0/1251, 13-14=0/1844, 12-13=0/1844, 11-12=0/1977, 10-11=0/1036, 9-10=0/1036, 8-9=0/1036  
WEBS 5-10=-427/0, 6-9=0/462, 5-11=0/821, 4-11=-403/0, 3-14=-376/0, 2-14=0/388, 2-15=-760/0, 1-15=0/808, 6-8=-1450/0

- NOTES-** (3-6)
- Unbalanced floor live loads have been considered for this design.
  - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET - PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



3/13/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F211	Floor Supported Gable	1	1	# 46472

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MITek Industries, Inc. Sat Mar 16 10:56:13 2024 Page 1  
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0<sub>1</sub>-8

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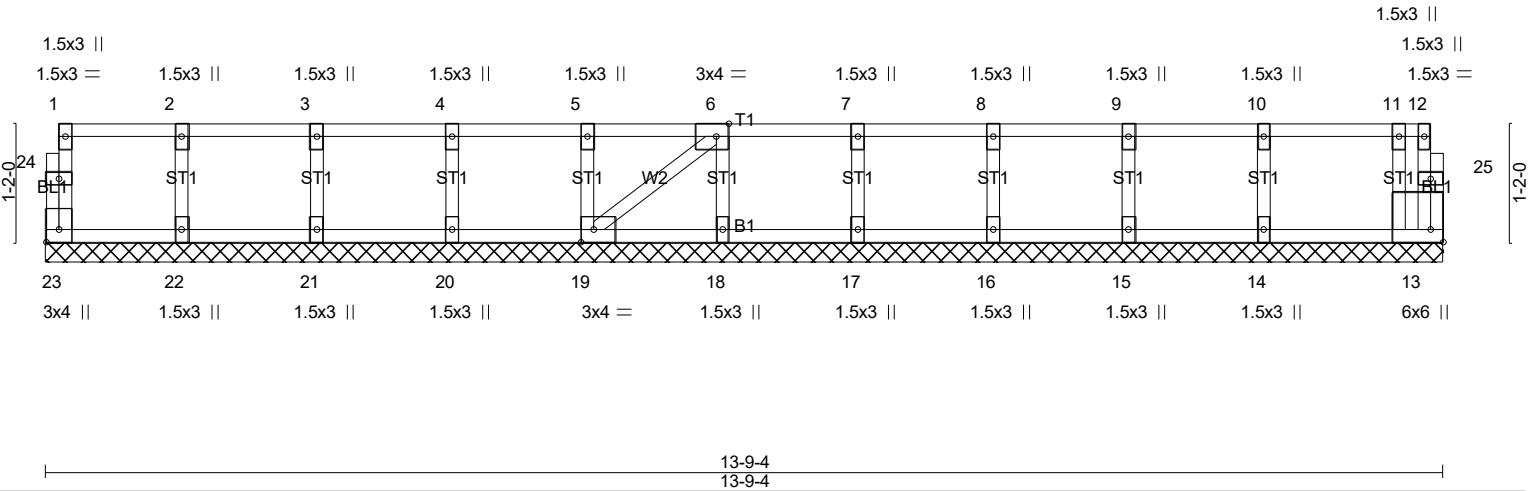


Plate Offsets (X,Y)-- [6:0-1-8,Edge], [13:Edge,0-1-8], [19:0-1-8,Edge], [23:Edge,0-1-8]

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: 61 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)

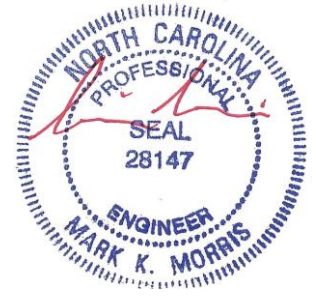
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 13-9-4.  
 (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-** (5-8)
- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



3/13/2024

**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	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F212	Floor Girder	1	1	
					<b># 46472</b>

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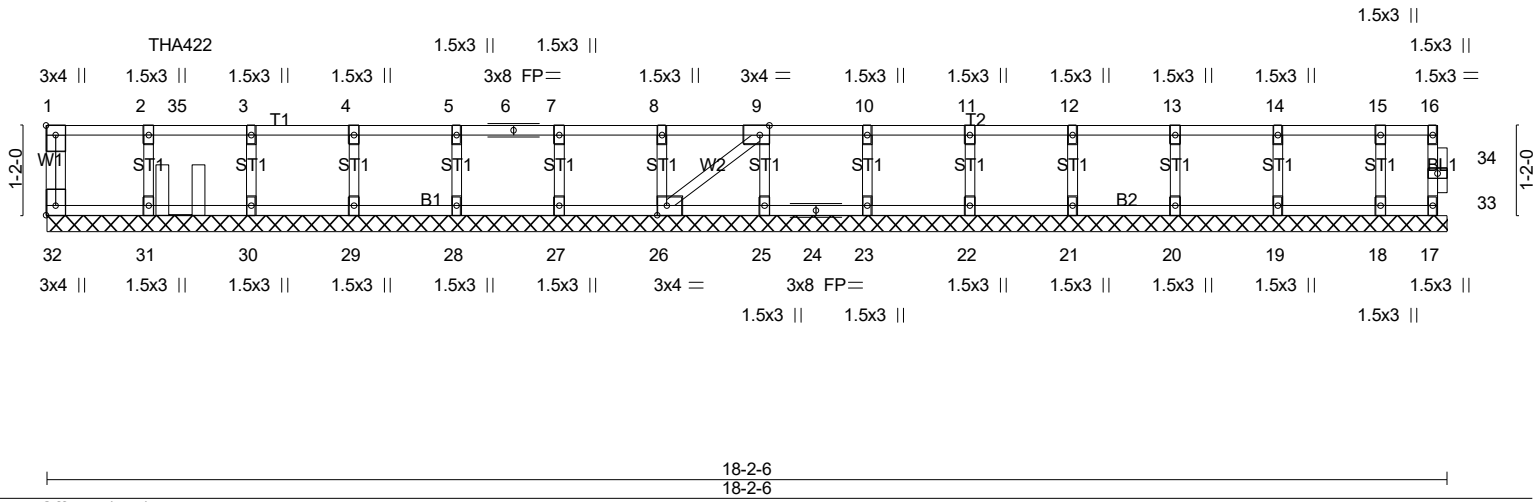


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [9:0-1-8,Edge], [26:0-1-8,Edge], [32:Edge,0-1-8]

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 0.28	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	NO	WB 0.08	Horz(CT)	-0.00	17	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH						
								Weight: 79 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 10-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 18-2-6.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 30, 29, 28, 27, 26, 25, 23, 22, 21, 20, 19, 18 except 31=386(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-31=-371/0

- NOTES-** (9-12)
- 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.
  - Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent at 1-8-15 from the left end to connect truss(es) F221 (1 ply 2x4 SP) to back face of top chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard  
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 17-32=-10, 1-16=-100  
 Concentrated Loads (lb)  
 Vert: 35=-285(B)



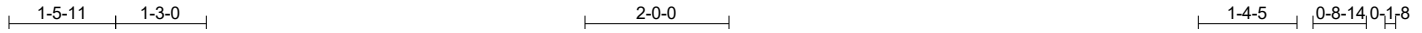
3/13/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F213	Floor	3	1	# 46472

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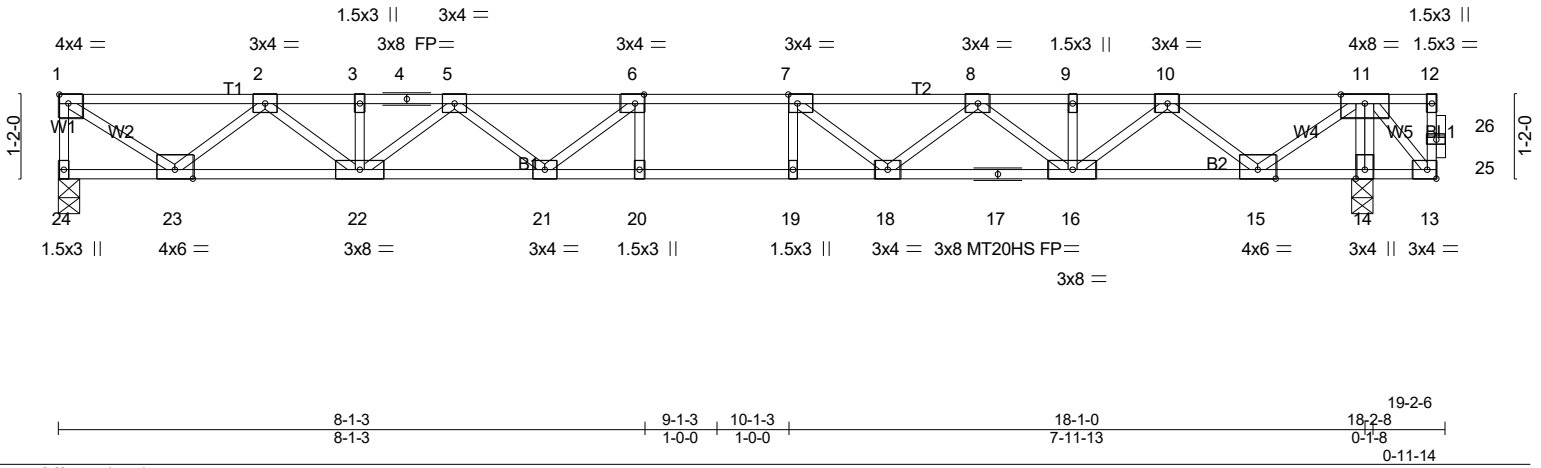


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-1-8,Edge], [7:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.49	Vert(LL)	-0.25	19-20	>870	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.92	Vert(CT)	-0.34	19-20	>637	MT20HS	187/143
BCLL 0.0	Lumber DOL 1.00	WB 0.59	Horz(CT)	0.06	14	n/a		
BCDL 5.0	Rep Stress Incr NO	Matrix-SH						
	Code IRC2021/TPI2014						Weight: 98 lb	FT = 20%F, 11%E

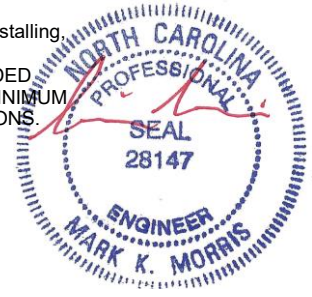
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3(flat)	6-0-0 oc bracing: 14-15,13-14.

**REACTIONS.** (lb/size) 24=777/0-3-8 (min. 0-1-8), 14=1139/0-3-8 (min. 0-1-8)  
 Max Grav 24=788(LC 3), 14=1139(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-24=-782/0, 13-25=-273/0, 25-26=-273/0, 12-26=-273/0, 1-2=-1017/0, 2-3=-2379/0,  
 3-4=-2379/0, 4-5=-2379/0, 5-6=-3128/0, 6-7=-3365/0, 7-8=-3099/0, 8-9=-2324/0,  
 9-10=-2324/0, 10-11=-937/0  
 BOT CHORD 22-23=0/1825, 21-22=0/2880, 20-21=0/3365, 19-20=0/3365, 18-19=0/3365, 17-18=0/2833,  
 16-17=0/2833, 15-16=0/1731  
 WEBS 11-14=-1108/0, 6-21=-517/58, 5-21=0/413, 5-22=-640/0, 2-22=0/707, 2-23=-1052/0,  
 1-23=0/1229, 7-18=-580/0, 8-18=0/454, 8-16=-663/0, 10-16=0/777, 10-15=-1049/0,  
 11-15=0/1171, 11-13=0/365

- NOTES-** (5-8)
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard  
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 13-24=-8, 1-12=-80  
 Concentrated Loads (lb)  
 Vert: 12=-250

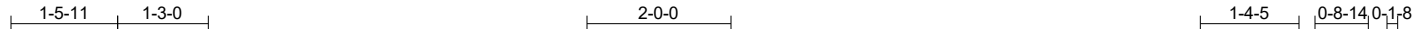


3/13/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F213A	Floor Girder	1	1	# 46472

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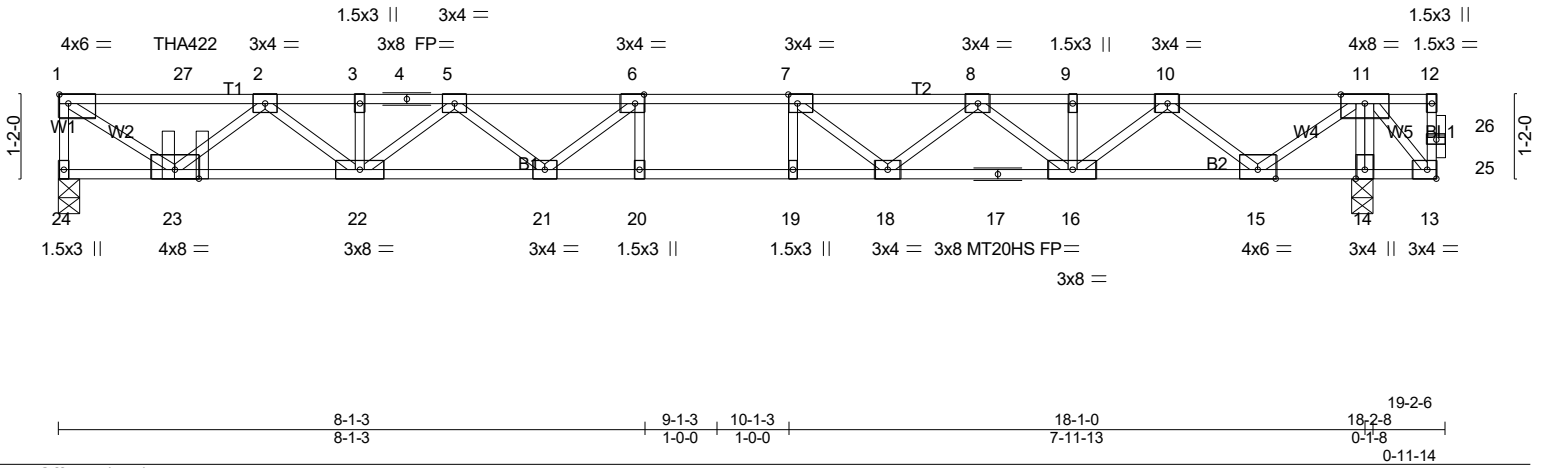


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-1-8,Edge], [7:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.94	Vert(LL) -0.27	20	>801	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.71	Vert(CT) -0.37	20	>583	360	MT20HS	187/143
BCLL 0.0	Rep Stress Incr NO	WB 0.80	Horz(CT) 0.06	14	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014	Matrix-SH						
							Weight: 98 lb	FT = 20%F, 11%E

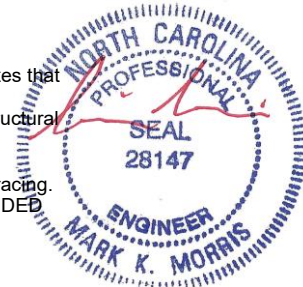
LUMBER-	BRACING-
TOP CHORD 2x4 SP SS(flat) *Except* T2: 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP SS(flat) *Except* B2: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-15,13-14.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 24=1140/0-3-8 (min. 0-1-8), 14=1176/0-3-8 (min. 0-1-8)  
 Max Grav 24=1151(LC 3), 14=1176(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-24=-1143/0, 13-25=-273/0, 25-26=-273/0, 12-26=-273/0, 1-27=-1393/0, 2-27=-1393/0,  
 2-3=-2838/0, 3-4=-2838/0, 4-5=-2838/0, 5-6=-3535/0, 6-7=-3685/0, 7-8=-3335/0,  
 8-9=-2471/0, 9-10=-2471/0, 10-11=-989/0  
 BOT CHORD 22-23=0/2510, 21-22=0/3342, 20-21=0/3685, 19-20=0/3685, 18-19=0/3685, 17-18=0/3017,  
 16-17=0/3017, 15-16=0/1829  
 WEBS 11-14=-1144/0, 6-21=-394/171, 5-21=-7/328, 5-22=-644/0, 2-22=-144/418, 2-23=-1454/0,  
 1-23=0/1684, 7-18=-690/0, 8-18=0/517, 8-16=-711/0, 10-16=0/840, 10-15=-1107/0,  
 11-15=0/1234, 11-13=0/363

- NOTES-** (8-11)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 4) CAUTION, Do not erect truss backwards.
  - 5) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent at 1-8-15 from the left end to connect truss(es) F221 (1 ply 2x4 SP) to front face of top chord.
  - 6) Fill all nail holes where hanger is in contact with lumber.
  - 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 8) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
  - 9) 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.
  - 10) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - 11) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



3/13/2024

Continued on page 2 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	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F213A	Floor Girder	1	1	Job Reference (optional) # 46472

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**LOAD CASE(S)** Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
- Uniform Loads (plf)
  - Vert: 13-24=-8, 1-12=-80
- Concentrated Loads (lb)
  - Vert: 12=-250 27=-400(F)

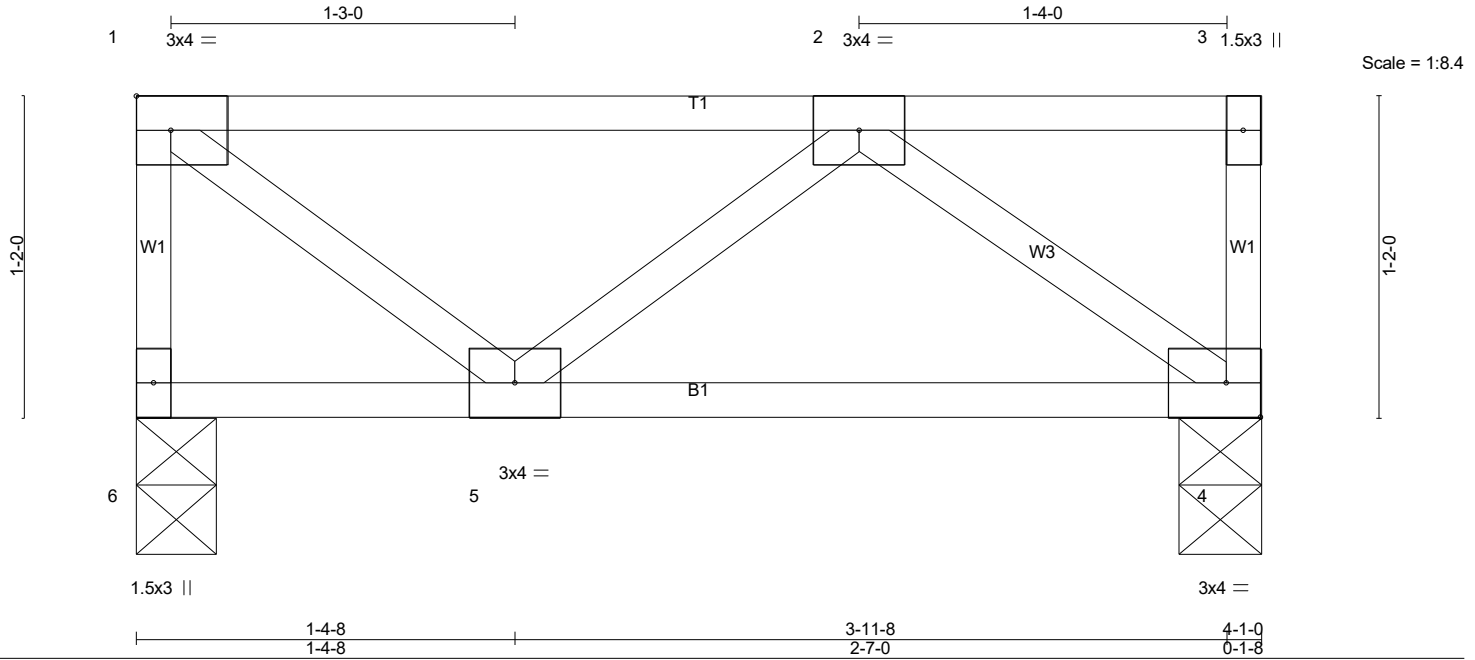


3/13/2024

**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 24-1221-F02	Truss F214	Truss Type Floor	Qty 1	Ply 1	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) <b># 46472</b>
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<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 0.26	Vert(LL) -0.00 5 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.07	Vert(CT) -0.01 4-5 >999 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00 4 n/a n/a		
BCDL 5.0	Code IRC2021/TPI2014	Matrix-P		Weight: 22 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 4-1-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=218/0-3-8 (min. 0-1-8), 4=218/0-3-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-4=-300/0

**NOTES-** (2-5)

- 1) 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.
- 2) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 3) 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.
- 4) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 5) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



3/13/2024

**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	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F215	Floor	2	1	# 46472

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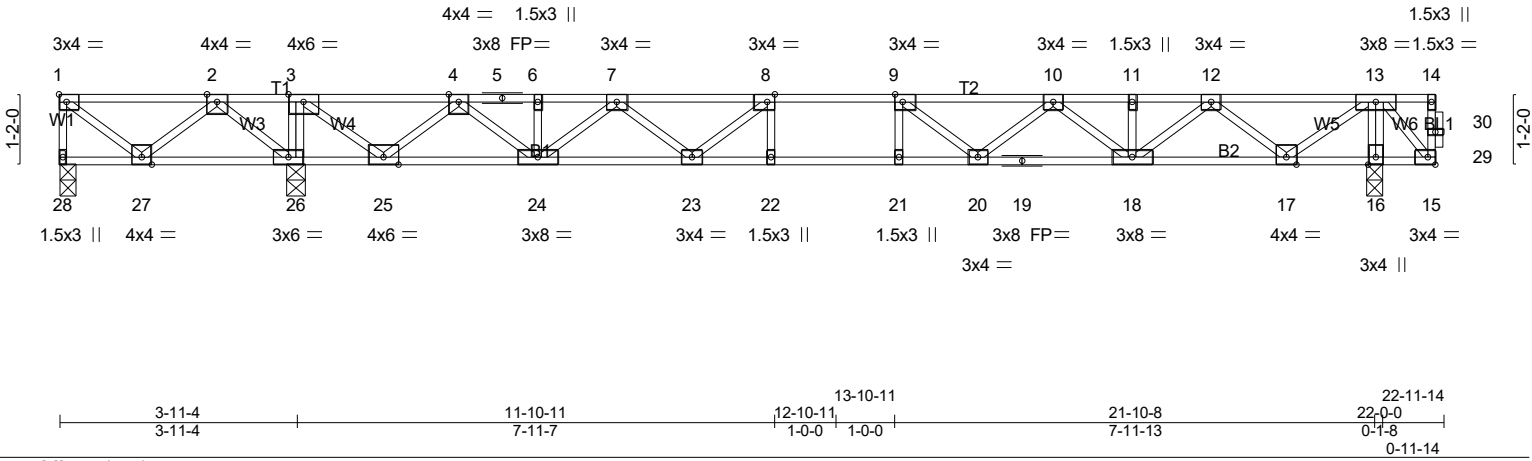
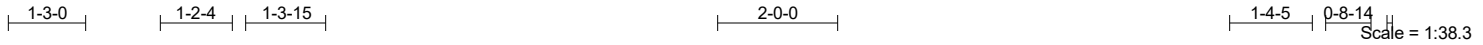


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [9:0-1-8,Edge]

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 0.63	Vert(LL)	-0.20 20-21	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.97	Vert(CT)	-0.28 20-21	>782	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.64	Horz(CT)	0.02 16	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH						
								Weight: 119 lb	FT = 20%F, 11%E

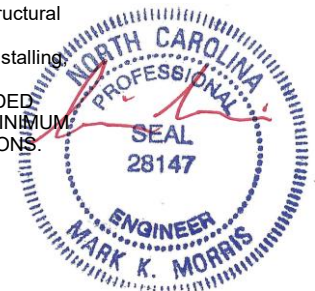
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 28=-405/0-3-8 (min. 0-1-8), 26=1644/0-3-8 (min. 0-1-8), 16=1011/0-3-8 (min. 0-1-8)  
Max Uplift 28=-532(LC 6)  
Max Grav 28=17(LC 5), 26=1665(LC 3), 16=1012(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-28=-13/535, 15-29=-273/0, 29-30=-273/0, 14-30=-273/0, 1-2=0/697, 2-3=0/2110, 3-4=0/1017, 4-5=-680/0, 5-6=-680/0, 6-7=-680/0, 7-8=-1735/0, 8-9=-2260/0, 9-10=-2283/0, 10-11=-1818/0, 11-12=-1818/0, 12-13=-756/6  
BOT CHORD 26-27=-1376/0, 25-26=-2110/0, 23-24=0/1305, 22-23=0/2260, 21-22=0/2260, 20-21=0/2260, 19-20=0/2197, 18-19=0/2197, 17-18=0/1395  
WEBS 3-26=-947/0, 13-16=-986/0, 1-27=-889/0, 2-27=0/884, 2-26=-1102/0, 8-23=-710/0, 7-23=0/561, 7-24=-800/0, 4-24=0/953, 4-25=-1220/0, 3-25=0/1345, 9-20=-258/188, 10-18=-500/0, 12-18=0/563, 12-17=-849/0, 13-17=0/958, 13-15=0/366

- NOTES-** (5-8)
- Unbalanced floor live loads have been considered for this design.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 532 lb uplift at joint 28.
  - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 15-28=-8, 1-14=-80  
Concentrated Loads (lb)  
Vert: 14=-250



3/13/2024

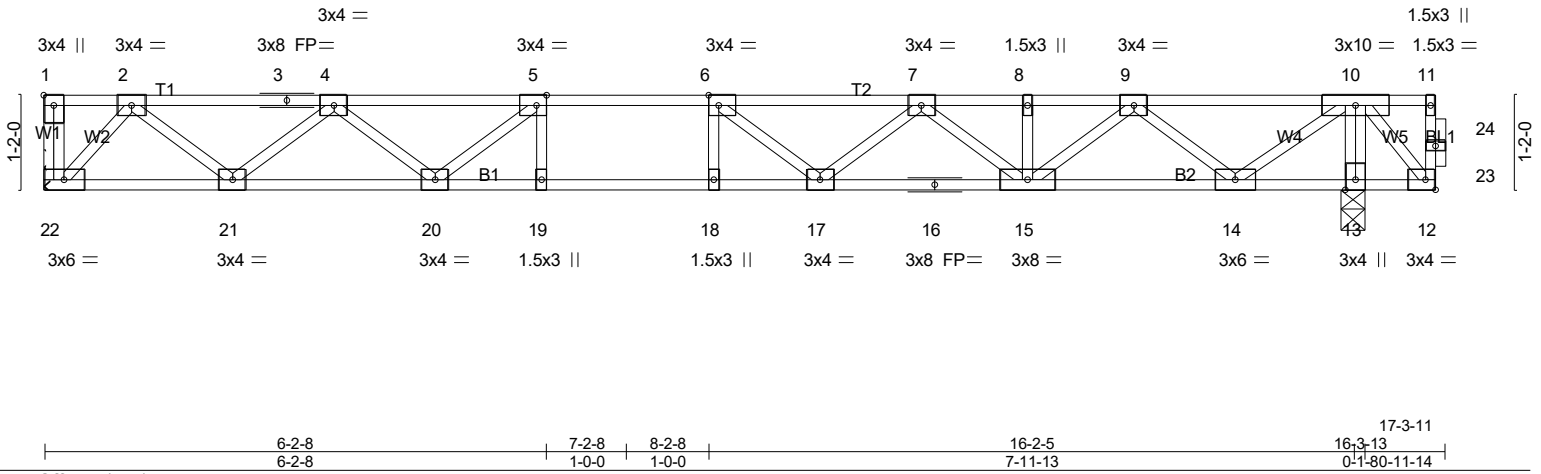
**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building 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	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F216	Floor	1	1	Job Reference (optional) # 46472

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Scale = 1:28.4



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.48	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.93	Vert(LL) -0.20 17-18 >989 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.49	Vert(CT) -0.26 17-18 >743 360		
BCDL 5.0	Rep Stress Incr NO	Matrix-SH	Horz(CT) 0.04 13 n/a n/a		
	Code IRC2021/TPI2014			Weight: 90 lb	FT = 20%F, 11%E

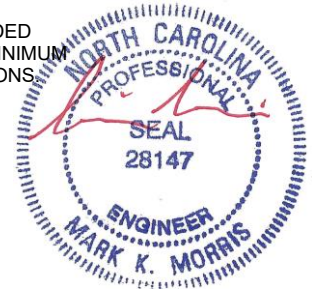
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-14,12-13.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 22=683/Mechanical, 13=1297/0-3-8 (min. 0-1-8)  
 Max Grav 22=700(LC 3), 13=1297(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 12-23=-381/0, 23-24=-381/0, 11-24=-381/0, 2-3=-1253/0, 3-4=-1253/0, 4-5=-2200/0, 5-6=-2618/0, 6-7=-2541/0,  
 7-8=-1968/0, 8-9=-1968/0, 9-10=-792/80  
 BOT CHORD 21-22=0/633, 20-21=0/1841, 19-20=0/2618, 18-19=0/2618, 17-18=0/2618, 16-17=0/2392, 15-16=0/2392, 14-15=0/1484,  
 13-14=-330/0, 12-13=-342/0  
 WEBS 10-13=-1267/0, 5-20=-636/0, 4-20=0/485, 4-21=-766/0, 2-21=0/807, 2-22=-935/0, 6-17=-396/118, 7-17=0/337,  
 7-15=-562/0, 9-15=0/652, 9-14=-920/0, 10-14=0/1032, 10-12=0/509

- NOTES-** (5-8)
- Unbalanced floor live loads have been considered for this design.
  - Refer to girder(s) for truss to truss connections.
  - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard  
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 12-22=-8, 1-10=-80, 10-11=-330  
 Concentrated Loads (lb)  
 Vert: 11=-250



3/13/2024

**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	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F217	Floor	4	1	# 46472

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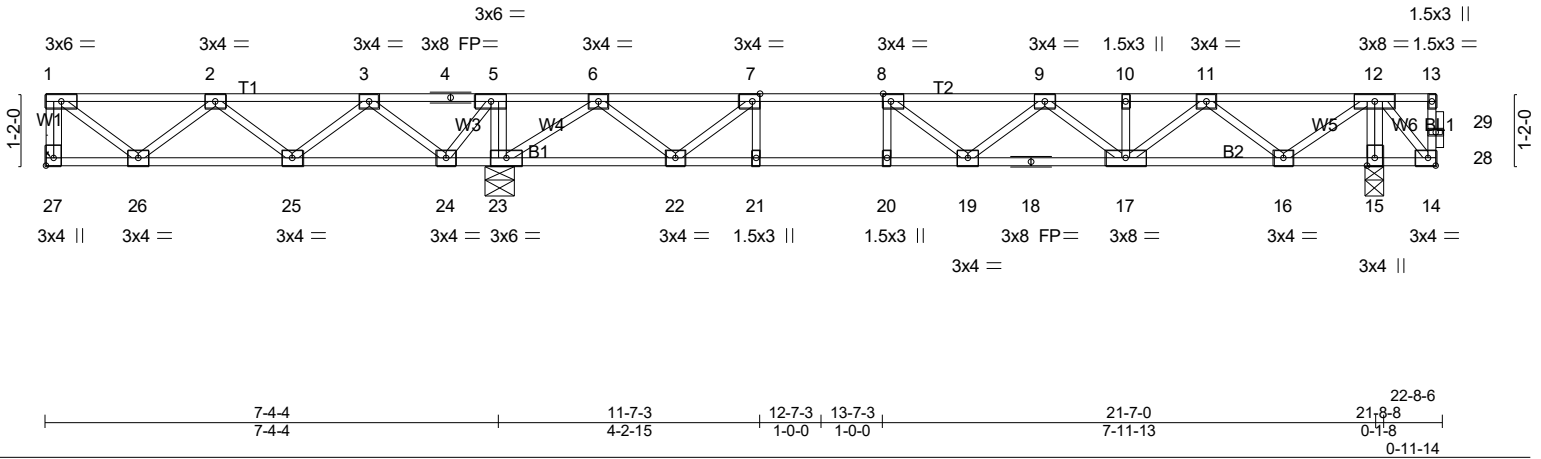
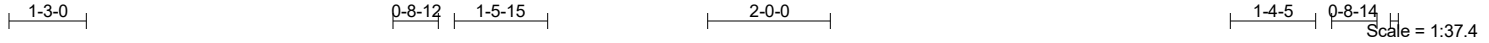


Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge], [27:Edge,0-1-8]

LOADING (psf)	SPACING-	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)	-0.18 19-20	>940	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.69	Vert(CT)	-0.24 19-20	>708	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.39	Horz(CT)	0.02 15	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH						
								Weight: 118 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP SS(flat) \*Except\*  
B2: 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 6-0-0 oc bracing.

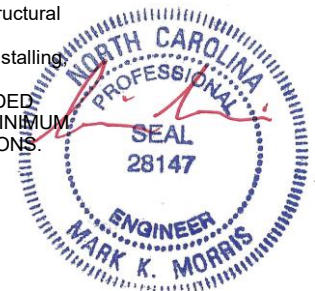
**REACTIONS.** (lb/size) 27=217/Mechanical, 15=925/0-3-8 (min. 0-1-8), 23=1077/0-5-8 (min. 0-1-8)  
Max Grav 27=276(LC 5), 15=932(LC 4), 23=1091(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-27=-272/3, 14-28=-274/0, 28-29=-274/0, 13-29=-274/0, 2-3=-378/171, 3-4=0/462,  
4-5=0/462, 5-6=0/705, 6-7=-856/0, 7-8=-1565/0, 8-9=-1772/0, 9-10=-1500/0,  
10-11=-1500/0, 11-12=-642/47  
BOT CHORD 25-26=-69/454, 24-25=-300/277, 23-24=-705/0, 22-23=-59/317, 21-22=0/1565,  
20-21=0/1565, 19-20=0/1565, 18-19=0/1796, 17-18=0/1796, 16-17=0/1183  
WEBS 7-21=0/294, 8-20=-269/0, 5-23=-474/0, 12-15=-909/0, 1-26=-33/311, 2-26=-268/56,  
3-24=-511/0, 5-24=0/422, 7-22=-930/0, 6-22=0/715, 6-23=-1048/0, 8-19=-44/338,  
9-17=-395/0, 11-17=0/430, 11-16=-724/0, 12-16=0/825, 12-14=0/367

- NOTES-** (5-8)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Refer to girder(s) for truss to truss connections.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - 7) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - 8) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 14-27=-8, 1-13=-80  
Concentrated Loads (lb)  
Vert: 13=-250



3/13/2024

**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	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F218	Floor	4	1	# 46472

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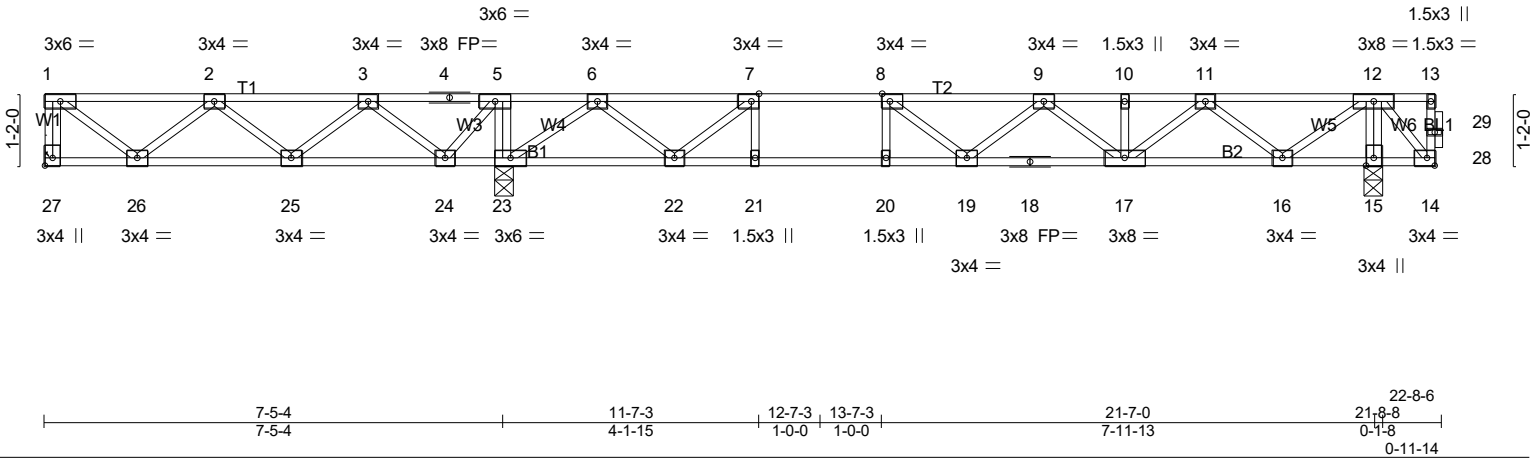
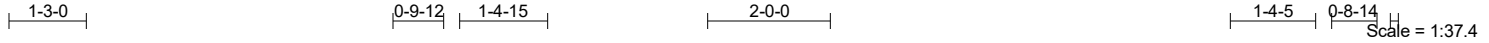


Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge], [27:Edge,0-1-8]

LOADING (psf)	SPACING-	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)	-0.18 19-20	>935	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.69	Vert(CT)	-0.24 19-20	>704	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.39	Horz(CT)	0.02 15	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH						
								Weight: 118 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP SS(flat) \*Except\*  
B2: 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 6-0-0 oc bracing.

**REACTIONS.** (lb/size) 27=225/Mechanical, 15=923/0-3-8 (min. 0-1-8), 23=1071/0-3-8 (min. 0-1-8)  
Max Grav 27=280(LC 5), 15=931(LC 4), 23=1085(LC 3)

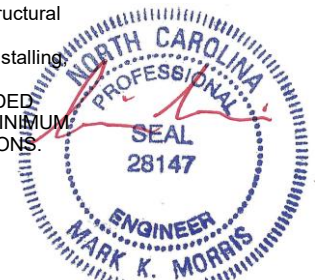
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-27=-276/0, 14-28=-274/0, 28-29=-274/0, 13-29=-274/0, 1-2=-254/18, 2-3=-395/148,  
3-4=0/426, 4-5=0/426, 5-6=0/688, 6-7=-836/0, 7-8=-1550/0, 8-9=-1760/0, 9-10=-1493/0,  
10-11=-1493/0, 11-12=-640/48  
BOT CHORD 25-26=-54/465, 24-25=-270/300, 23-24=-688/0, 22-23=-69/296, 21-22=0/1550,  
20-21=0/1550, 19-20=0/1550, 18-19=0/1787, 17-18=0/1787, 16-17=0/1179  
WEBS 7-21=0/296, 8-20=-271/0, 5-23=-474/0, 12-15=-907/0, 1-26=-23/318, 2-26=-275/47,  
3-24=-505/0, 5-24=0/437, 7-22=-937/0, 6-22=0/719, 6-23=-1006/0, 8-19=-39/342,  
9-17=-392/0, 11-17=0/427, 11-16=-721/0, 12-16=0/822, 12-14=0/367

**NOTES-** (5-8)

- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 14-27=-8, 1-13=-80  
Concentrated Loads (lb)  
Vert: 13=-250



3/13/2024

**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	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F219	Floor	2	1	# 46472

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Mar 16 10:56:26 2024 Page 1  
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Scale = 1:37.9

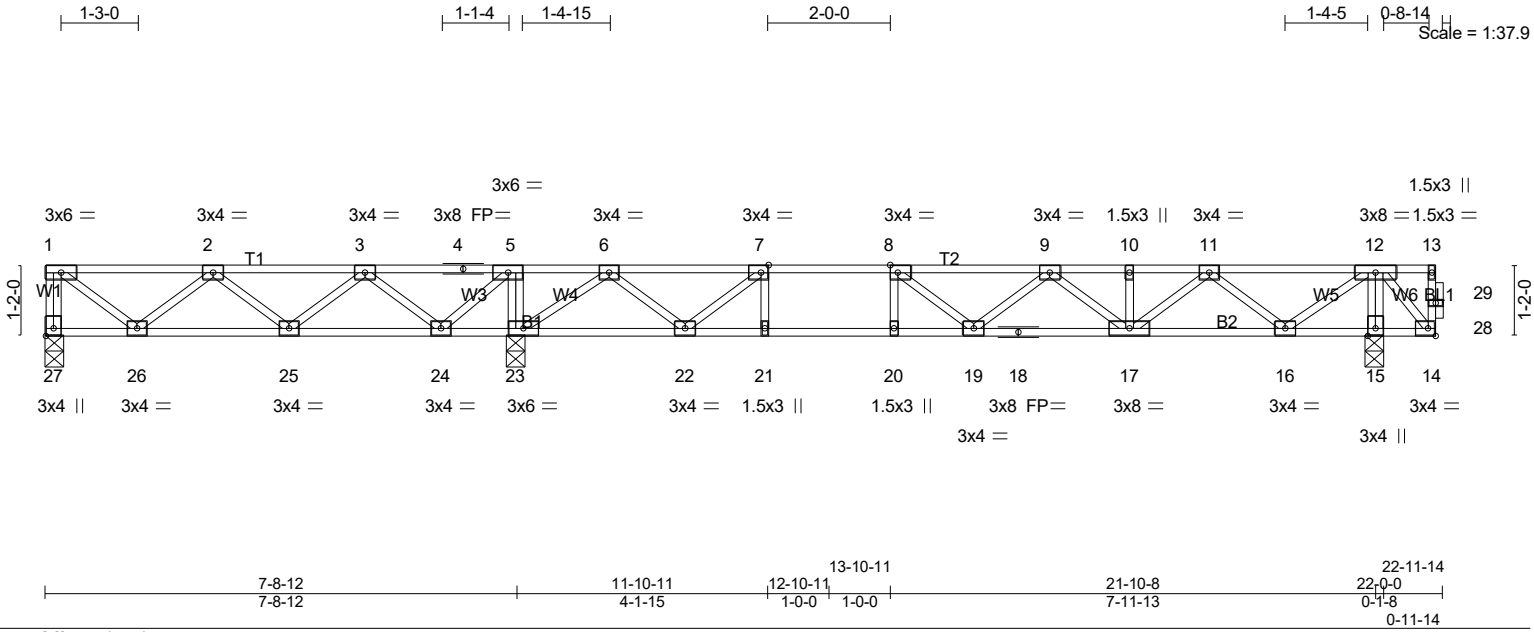


Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge], [27:Edge,0-1-8]

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 0.63	Vert(LL)	-0.18 19-20	>934	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.69	Vert(CT)	-0.24 19-20	>703	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.39	Horz(CT)	0.02 15	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH						
								Weight: 119 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP SS(flat) \*Except\*  
B2: 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 6-0-0 oc bracing.

**REACTIONS.** (lb/size) 27=240/0-3-8 (min. 0-1-8), 15=922/0-3-8 (min. 0-1-8), 23=1082/0-3-8 (min. 0-1-8)  
Max Grav 27=293(LC 5), 15=931(LC 4), 23=1097(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-27=-288/0, 14-28=-274/0, 28-29=-274/0, 13-29=-274/0, 1-2=-269/10, 2-3=-443/124,  
3-4=-51/389, 4-5=-51/389, 5-6=0/692, 6-7=-836/0, 7-8=-1550/0, 8-9=-1760/0,  
9-10=-1493/0, 10-11=-1493/0, 11-12=-640/49  
BOT CHORD 25-26=-38/495, 24-25=-237/365, 23-24=-692/0, 22-23=-85/295, 21-22=0/1550,  
20-21=0/1550, 19-20=0/1550, 18-19=0/1787, 17-18=0/1787, 16-17=0/1179  
WEBS 7-21=0/297, 8-20=-272/0, 5-23=-494/0, 12-15=-907/0, 1-26=-12/338, 2-26=-294/37,  
3-24=-498/0, 5-24=0/501, 7-22=-940/0, 6-22=0/722, 6-23=-1006/0, 8-19=-36/345,  
9-17=-392/0, 11-17=0/427, 11-16=-721/0, 12-16=0/822, 12-14=0/367

- NOTES-** (4-7)
- Unbalanced floor live loads have been considered for this design.
  - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 14-27=-8, 1-13=-80  
Concentrated Loads (lb)  
Vert: 13=-250



3/13/2024

**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	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC
24-1221-F02	F219A	Floor	1	1	# 46472

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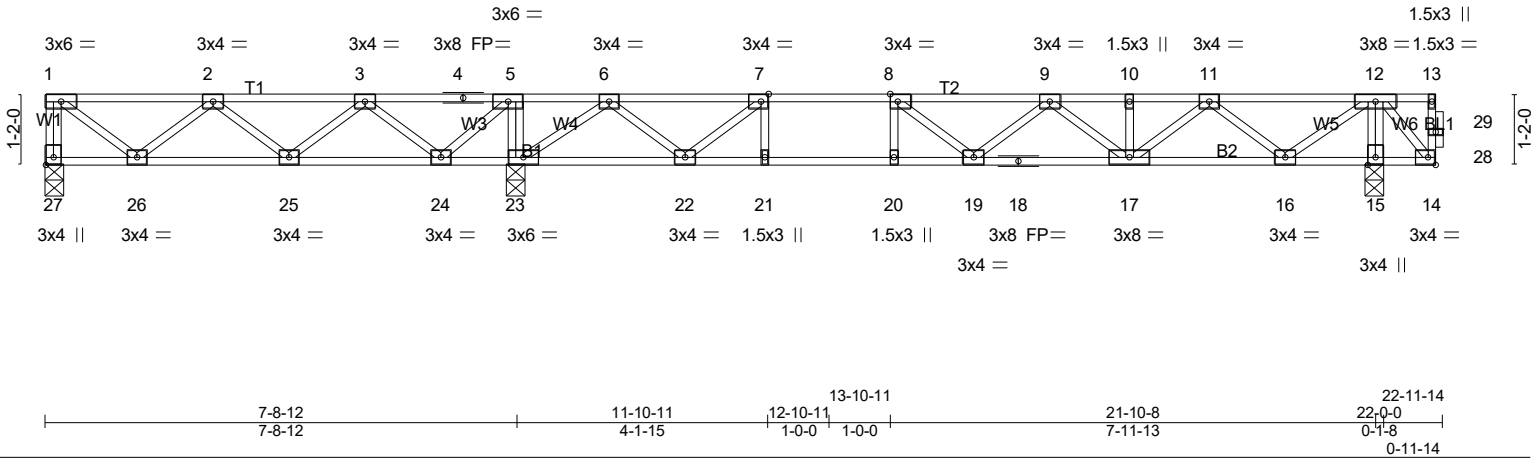
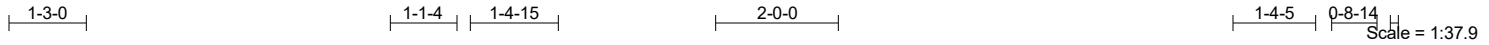


Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge], [27:Edge,0-1-8]

LOADING (psf)	SPACING-	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)	-0.18 19-20	>934	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.68	Vert(CT)	-0.24 19-20	>710	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.39	Horz(CT)	0.02 15	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-SH						
								Weight: 119 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 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 27=240/0-3-8 (min. 0-1-8), 15=1165/0-3-8 (min. 0-1-8), 23=1075/0-3-8 (min. 0-1-8)  
 Max Grav 27=293(LC 5), 15=1174(LC 4), 23=1095(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-27=-288/0, 14-28=-382/0, 28-29=-382/0, 13-29=-382/0, 1-2=-269/10, 2-3=-443/124,  
 3-4=-52/389, 4-5=-52/389, 5-6=0/692, 6-7=-830/0, 7-8=-1540/0, 8-9=-1745/0,  
 9-10=-1474/0, 10-11=-1474/0, 11-12=-615/139  
 BOT CHORD 25-26=-38/495, 24-25=-237/366, 23-24=-692/0, 22-23=-94/292, 21-22=0/1540,  
 20-21=0/1540, 19-20=0/1540, 18-19=0/1769, 17-18=0/1769, 16-17=0/1155, 15-16=-332/0,  
 14-15=-343/0  
 WEBS 7-21=0/295, 8-20=-269/0, 5-23=-494/0, 12-15=-1148/0, 1-26=-12/338, 2-26=-294/37,  
 3-24=-498/0, 5-24=0/501, 7-22=-934/0, 6-22=0/719, 6-23=-1003/0, 8-19=-58/339,  
 9-17=-401/0, 11-17=0/445, 11-16=-727/0, 12-16=0/825, 12-14=0/510

- NOTES-** (4-7)
- Unbalanced floor live loads have been considered for this design.
  - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard  
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 14-27=-8, 1-12=-80, 12-13=-330  
 Concentrated Loads (lb)  
 Vert: 13=-250



3/13/2024

**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 24-1221-F02	Truss F220	Truss Type Floor Supported Gable	Qty 1	Ply 1	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) <b># 46472</b>
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0-1-8

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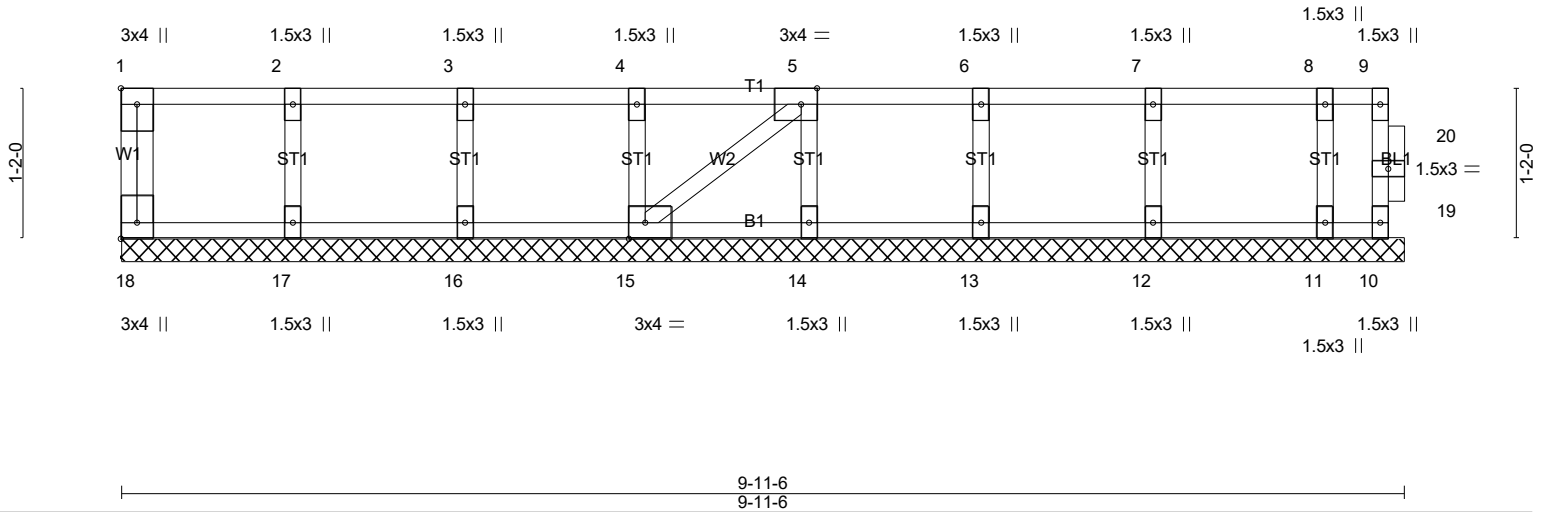


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [5:0-1-8,Edge], [15:0-1-8,Edge], [18:Edge,0-1-8]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 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 10 n/a n/a		
BCDL 5.0	Code IRC2021/TPI2014	Matrix-SH			
				Weight: 46 lb	FT = 20%F, 11%E

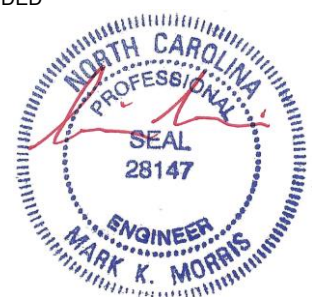
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 9-11-6 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 2x4 SP No.3(flat)	

**REACTIONS.** All bearings 9-11-6.  
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 10  
Max Grav All reactions 250 lb or less at joint(s) 18, 10, 17, 16, 15, 14, 13, 12, 11

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

- NOTES-** (7-10)
- 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
  - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



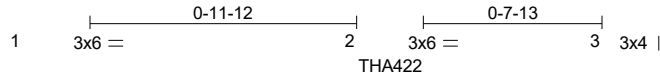
3/13/2024

**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 24-1221-F02	Truss F221	Truss Type Floor Girder	Qty 1	Ply 1	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) <b># 46472</b>
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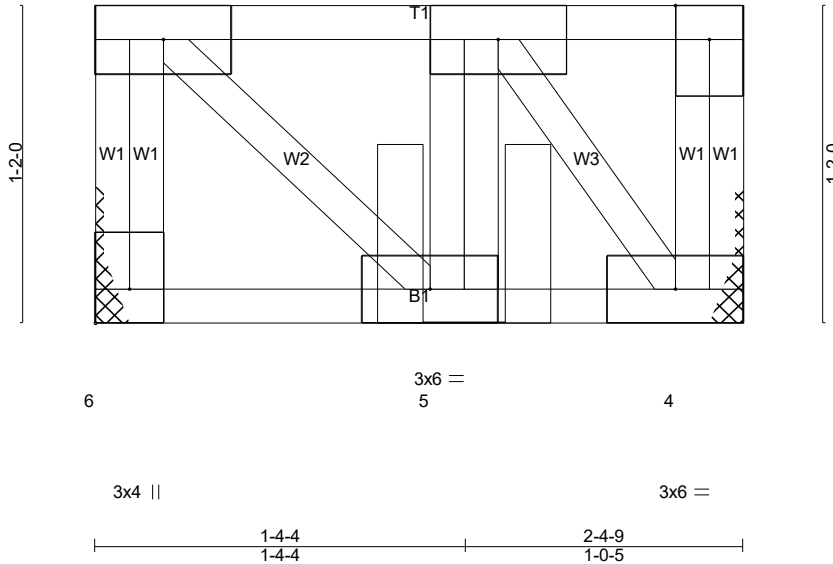


Plate Offsets (X,Y)-- [6:Edge,0-1-8]

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 0.06	Vert(LL) -0.00	5	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.09	Vert(CT) -0.00	5	>999	360		
BCLL 0.0	Rep Stress Incr NO	WB 0.23	Horz(CT) 0.00	4	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014	Matrix-P						
							Weight: 19 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 2-4-9 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=365/Mechanical, 4=464/Mechanical

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

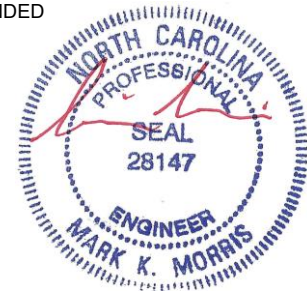
TOP CHORD 1-6=-356/0, 1-2=-368/0  
BOT CHORD 4-5=0/368  
WEBS 2-5=-313/0, 1-5=0/482, 2-4=-562/0

**NOTES-** (7-10)

- 1) Refer to girder(s) for truss to truss connections.
- 2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 3) CAUTION, Do not erect truss backwards.
- 4) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent at 1-4-4 from the left end to connect truss(es) F216 (1 ply 2x4 SP) to front face of top chord.
- 5) Fill all nail holes where hanger is in contact with lumber.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 7) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
- 9) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 10) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**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: 2=-642(F)



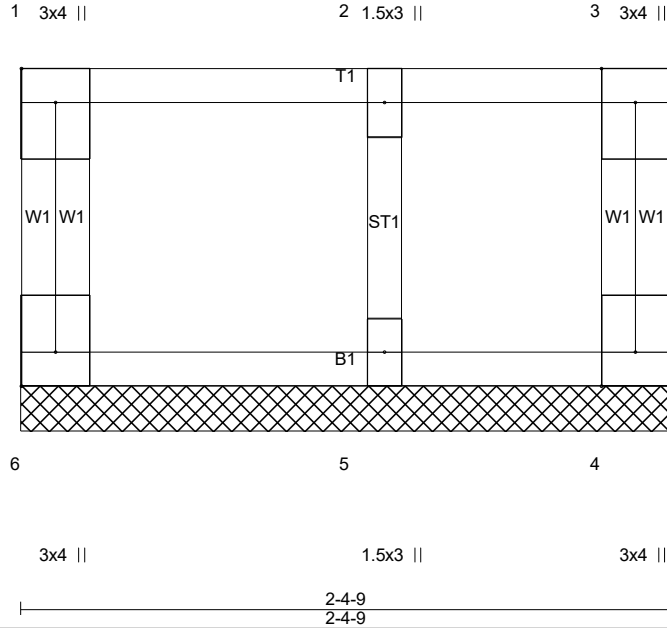
3/13/2024

**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 24-1221-F02	Truss F222	Truss Type Floor Supported Gable	Qty 1	Ply 1	LOT 0.0092 BLAKE POND   122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) <b># 46472</b>
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Scale = 1:8.5

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.04	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	4	n/a	n/a		
BCDL 5.0	Code IRC2021/TPI2014		Matrix-R							
									Weight: 14 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 2-4-9 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=65/2-4-9 (min. 0-1-8), 4=49/2-4-9 (min. 0-1-8), 5=119/2-4-9 (min. 0-1-8)

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

**NOTES-** (5-8)

- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. 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.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



3/13/2024

**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.