

# 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 #: 26909

JOB: 21-3145-F02

JOB NAME: LOT 1152 CARRIAGE CIRCLE

Wind Code: N/A

Wind Speed: Vult= N/A

Exposure Category: N/A

Mean Roof Height (feet): N/A

*8 Truss Design(s)*

Trusses:

F01, F02, F03, F04, F06, F07, F08, F09



**6/3/2021**

**Mark Morris**

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

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Job 21-3145-F02	Truss F01	Truss Type Floor	Qty 15	Ply 1	LOT 1152 CARRIAGE CIRCLE   162 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. Job Reference (optional) <b># 26909</b>
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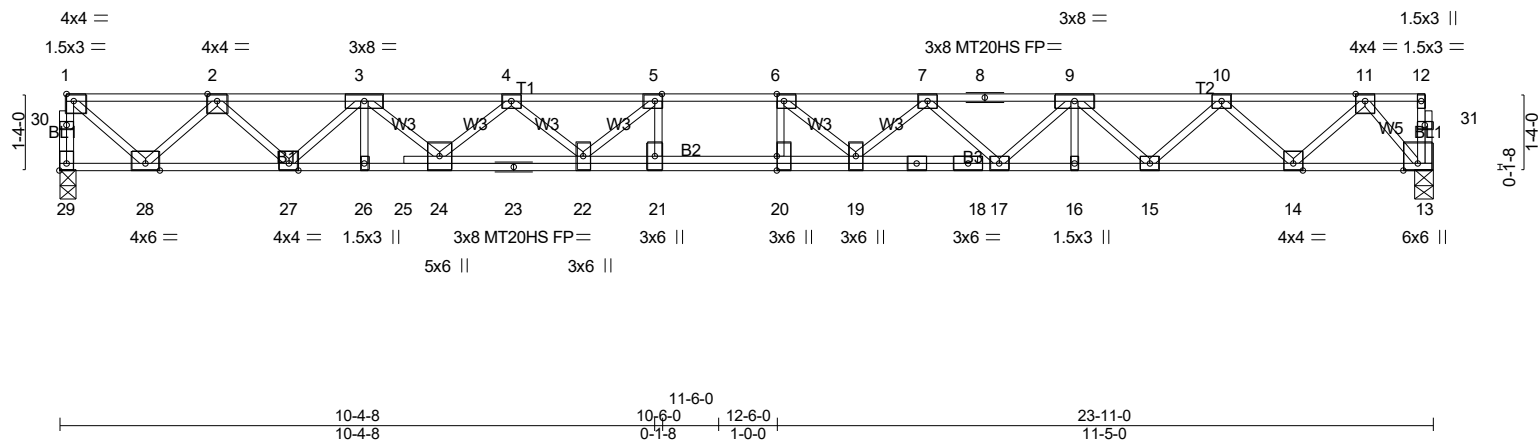
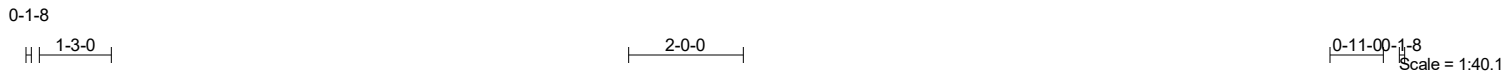


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [5:0-1-8,Edge], [6:0-1-8,Edge], [20:0-3-0,0-0-0], [29:Edge,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	1-7-3	TC 0.68	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.92	Vert(LL) -0.47 20 >601 480	MT20HS	187/143
BCLL 0.0	Lumber DOL 1.00	WB 0.67	Vert(CT) -0.65 20 >437 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.09 13 n/a n/a		
	Code IRC2018/TPI2014			Weight: 138 lb	FT = 0%F, 0%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 4-11-11 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: 2-2-0 oc bracing: 17-19.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 29=1036/0-3-8 (min. 0-1-8), 13=1036/0-3-8 (min. 0-1-8)

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

TOP CHORD 29-30=-1031/0, 1-30=-1029/0, 1-2=-1081/0, 2-3=-2772/0, 3-4=-4179/0, 4-5=-5007/0, 5-6=-5313/0, 6-7=-5141/0, 7-8=-4344/0, 8-9=-4344/0, 9-10=-3263/0, 10-11=-1760/0

BOT CHORD 27-28=0/2046, 26-27=0/3492, 25-26=0/3492, 24-25=0/3487, 23-24=0/4707, 22-23=0/4707, 21-22=0/5313, 20-21=0/5313, 19-20=0/5313, 18-19=0/4847, 17-18=0/4846, 16-17=0/3924, 15-16=0/3924, 14-15=0/2620, 13-14=0/877

WEBS 5-21=-228/336, 6-20=-288/264, 5-22=-720/90, 4-22=0/492, 4-24=-715/0, 3-24=0/913, 3-27=-979/0, 2-27=0/1009, 2-28=-1342/0, 1-28=0/1397, 6-19=-592/200, 7-19=0/483, 7-17=-699/0, 9-17=0/571, 9-15=-898/0, 10-15=0/895, 10-14=-1196/0, 11-14=0/1227, 11-13=-1343/0

- NOTES-** (6-7)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) All plates are 3x4 MT20 unless otherwise indicated.
  - 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 6) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 7) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/3/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1152 CARRIAGE CIRCLE   162 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
21-3145-F02	F02	Floor Supported Gable	2	1	# 26909

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Jun 4 20:46:26 2021 Page 1

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0<sub>1</sub>-8

Scale: 1/2"=1'

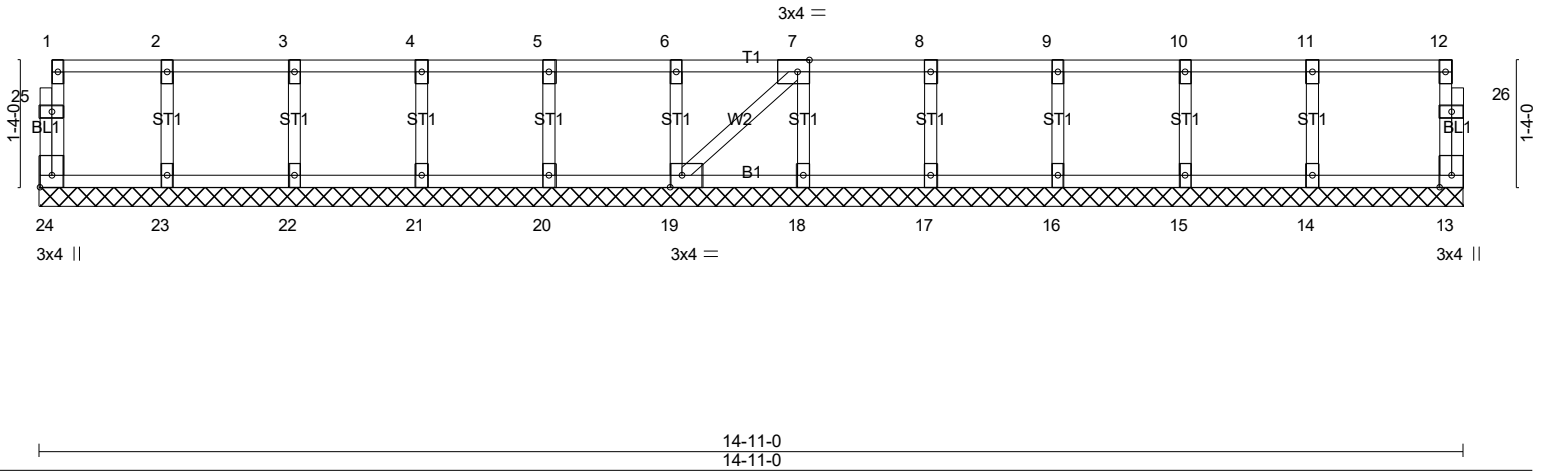


Plate Offsets (X,Y)-- [7:0-1-8,Edge], [19:0-1-8,Edge], [24:Edge,0-1-8]

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 0.07	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 0.04	Horz(CT)	0.00	13	n/a		
BCDL 5.0	Code IRC2018/TPI2014		Matrix-SH						
								Weight: 68 lb	FT = 0%F, 0%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 14-11-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

- NOTES-** (7-8)
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Gable requires continuous bottom chord bearing.
  - 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 4) Gable studs spaced at 1-4-0 oc.
  - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 7) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 8) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/3/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1152 CARRIAGE CIRCLE   162 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
21-3145-F02	F03	GABLE	1	1	
Job Reference (optional)					# 26909

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Jun 4 20:46:27 2021 Page 1  
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0<sub>1</sub>-8

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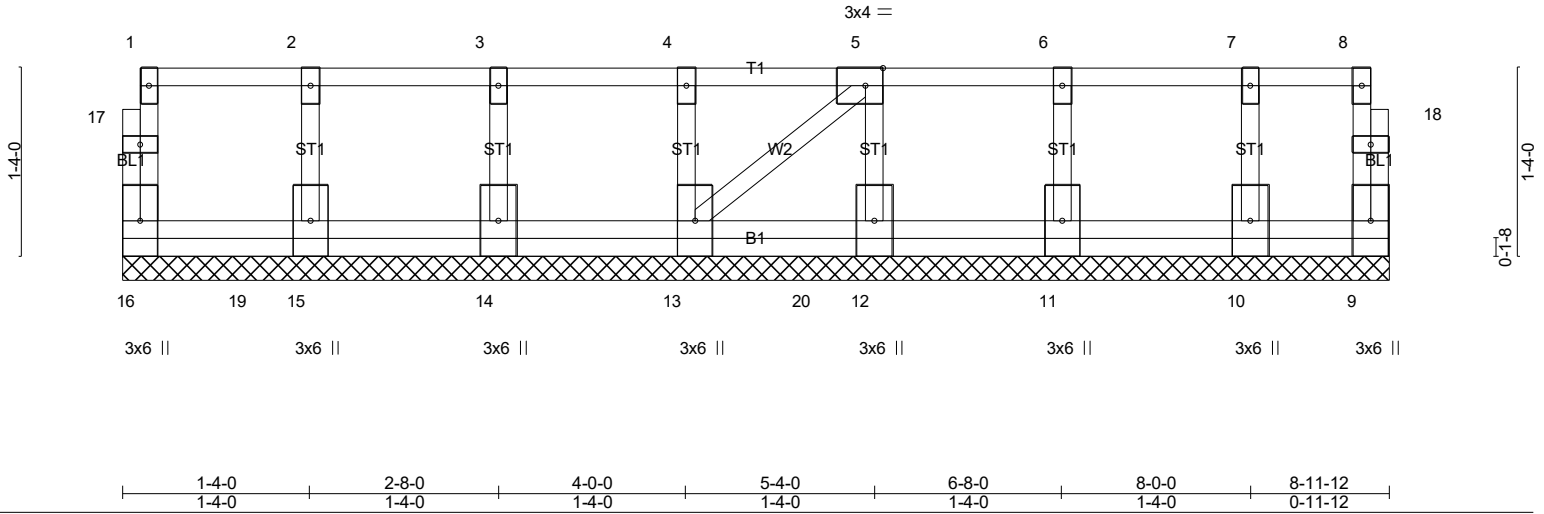


Plate Offsets (X,Y)-- [5:0-1-8,Edge]	
LOADING (psf)	SPACING- 2-0-0
TCLL 40.0	Plate Grip DOL 1.00
TCDL 10.0	Lumber DOL 1.00
BCLL 0.0	Rep Stress Incr NO
BCDL 5.0	Code IRC2018/TPI2014
CSI.	DEFL. in (loc) l/defl L/d
TC 0.07	Vert(LL) n/a - n/a 999
BC 0.02	Vert(CT) n/a - n/a 999
WB 0.03	Horz(CT) 0.00 9 n/a n/a
Matrix-P	PLATES GRIP
	MT20 244/190
	Weight: 56 lb FT = 0%F, 0%E

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

**REACTIONS.** All bearings 8-11-12.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

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

- NOTES-** (10-11)
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Load case(s) 1, 2 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - 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.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down at 0-11-0, 68 lb down at 2-11-0, and 68 lb down at 4-11-0, and 68 lb down at 6-11-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

- LOAD CASE(S)** Standard
- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 9-16=-10, 1-8=-100  
 Concentrated Loads (lb)  
 Vert: 14=-68(F) 11=-68(F) 19=-68(F) 20=-68(F)
  - Dead: Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 9-16=-10, 1-8=-100



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Continued on Page 2  
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Job	Truss	Truss Type	Qty	Ply	LOT 1152 CARRIAGE CIRCLE   162 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
21-3145-F02	F03	GABLE	1	1	Job Reference (optional) # 26909

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Jun 4 20:46:27 2021 Page 2  
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**LOAD CASE(S)** Standard  
 Concentrated Loads (lb)  
 Vert: 14=-68(F) 11=-68(F) 19=-68(F) 20=-68(F)

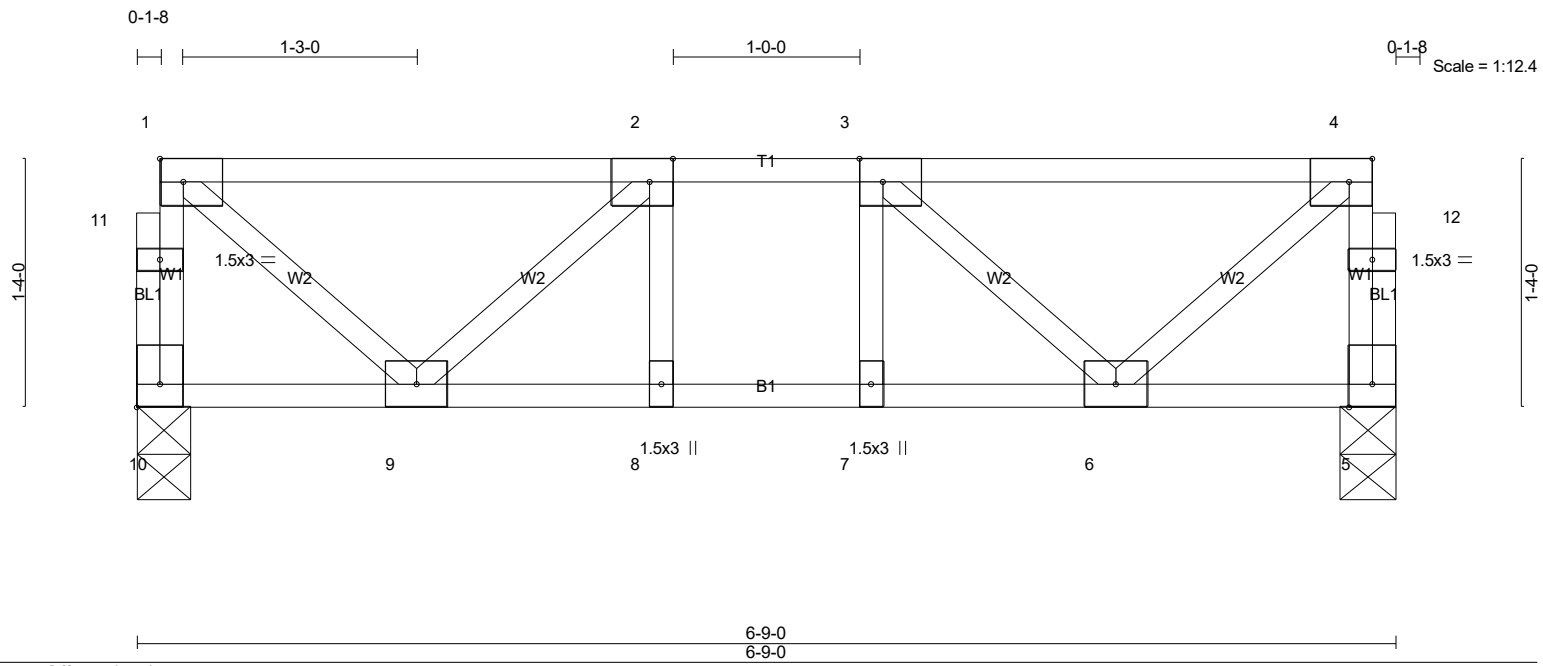


6/3/2021

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Job 21-3145-F02	Truss F04	Truss Type Floor	Qty 2	Ply 1	LOT 1152 CARRIAGE CIRCLE   162 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. # 26909
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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 0.32	Vert(LL)	-0.02	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.22	Vert(CT)	-0.02	8-9	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.17	Horz(CT)	0.00	5	n/a		
BCDL 5.0	Code IRC2018/TPI2014		Matrix-SH						
								Weight: 39 lb	FT = 0%F, 0%E

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

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

**REACTIONS.** (lb/size) 10=351/0-3-8 (min. 0-1-8), 5=351/0-3-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 10-11=-346/0, 1-11=-345/0, 5-12=-346/0, 4-12=-345/0, 1-2=-273/0, 2-3=-510/0, 3-4=-273/0  
BOT CHORD 8-9=0/510, 7-8=0/510, 6-7=0/510  
WEBS 1-9=0/347, 4-6=0/347, 2-9=-323/0, 3-6=-323/0

- NOTES-** (5-6)
- Unbalanced floor live loads have been considered for this design.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 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.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/3/2021

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Job 21-3145-F02	Truss F06	Truss Type Floor	Qty 1	Ply 1	LOT 1152 CARRIAGE CIRCLE   162 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. Job Reference (optional) <b># 26909</b>
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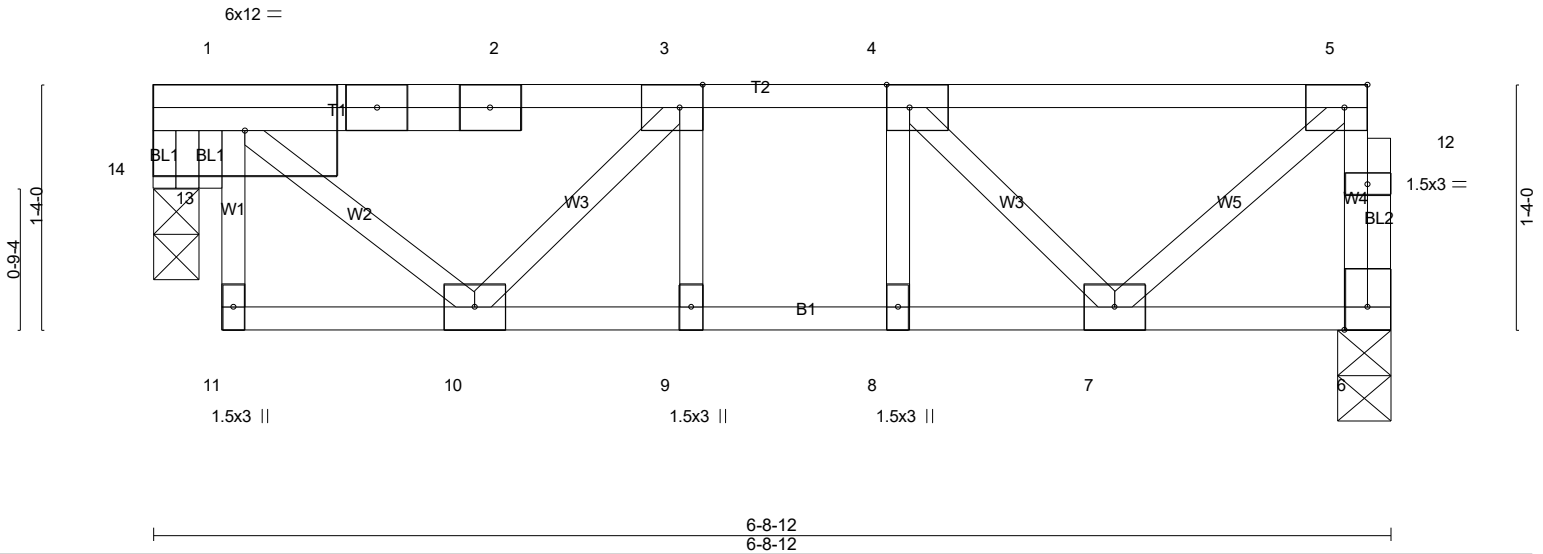


Plate Offsets (X,Y)-- [3:0-1-8,Edge], [4:0-1-8,Edge], [5:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.51	Vert(LL) -0.01	9	>999	480		MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.19	Vert(CT) -0.02	9	>999	360			
BCLL 0.0	Lumber DOL 1.00	WB 0.17	Horz(CT) 0.01	6	n/a	n/a			
BCDL 5.0	Rep Stress Incr YES	Matrix-P							
	Code IRC2018/TPI2014								
								Weight: 41 lb	FT = 0%F, 0%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.** (lb/size) 6=346/0-3-8 (min. 0-1-8), 14=326/0-3-0 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 6-12=-341/0, 5-12=-341/0, 1-2=-305/0, 2-3=-301/0, 3-4=-484/0, 4-5=-274/0  
BOT CHORD 9-10=0/484, 8-9=0/484, 7-8=0/484  
WEBS 1-10=0/304, 5-7=0/349, 3-10=-263/0, 4-7=-301/0, 1-14=-402/0

- NOTES-** (7-8)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 6) CAUTION, Do not erect truss backwards.
  - 7) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - 8) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/3/2021

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Job 21-3145-F02	Truss F07	Truss Type Floor Supported Gable	Qty 1	Ply 1	LOT 1152 CARRIAGE CIRCLE   162 SPRUCE HOLLOW CIRCLE SPRING LAKE, N # 26909
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0-1-8

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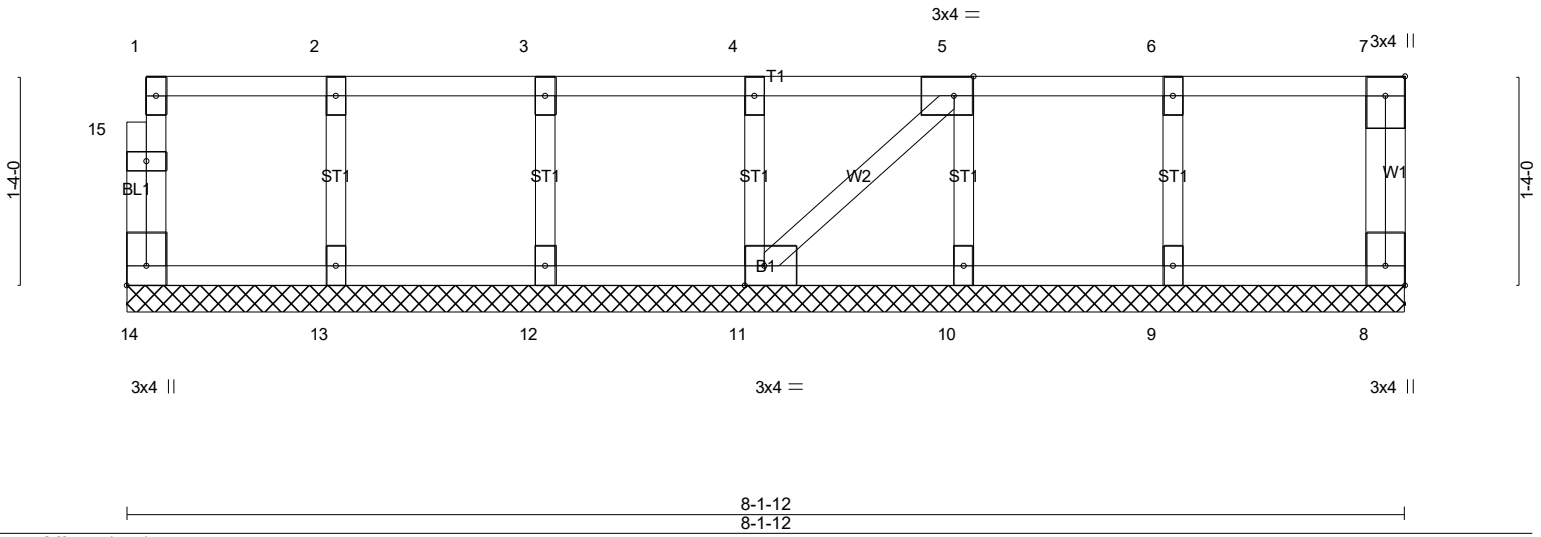


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [8:Edge,0-1-8], [11:0-1-8,Edge], [14:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.00	WB 0.03	Horz(CT)	0.00	8	n/a		
BCDL 5.0	Rep Stress Incr YES	Matrix-P					Weight: 41 lb	FT = 0%F, 0%E
	Code IRC2018/TPI2014							

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

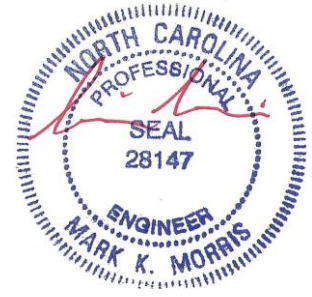
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 8-1-12.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 14, 8, 13, 12, 11, 10, 9

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

- NOTES-** (8-9)
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 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.
  - CAUTION, Do not erect truss backwards.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/3/2021

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Job 21-3145-F02	Truss F08	Truss Type Floor Supported Gable	Qty 1	Ply 1	LOT 1152 CARRIAGE CIRCLE   162 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
Job Reference (optional)					# 26909

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Jun 4 20:46:29 2021 Page 1  
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Q-1-8

Scale = 1:11.7

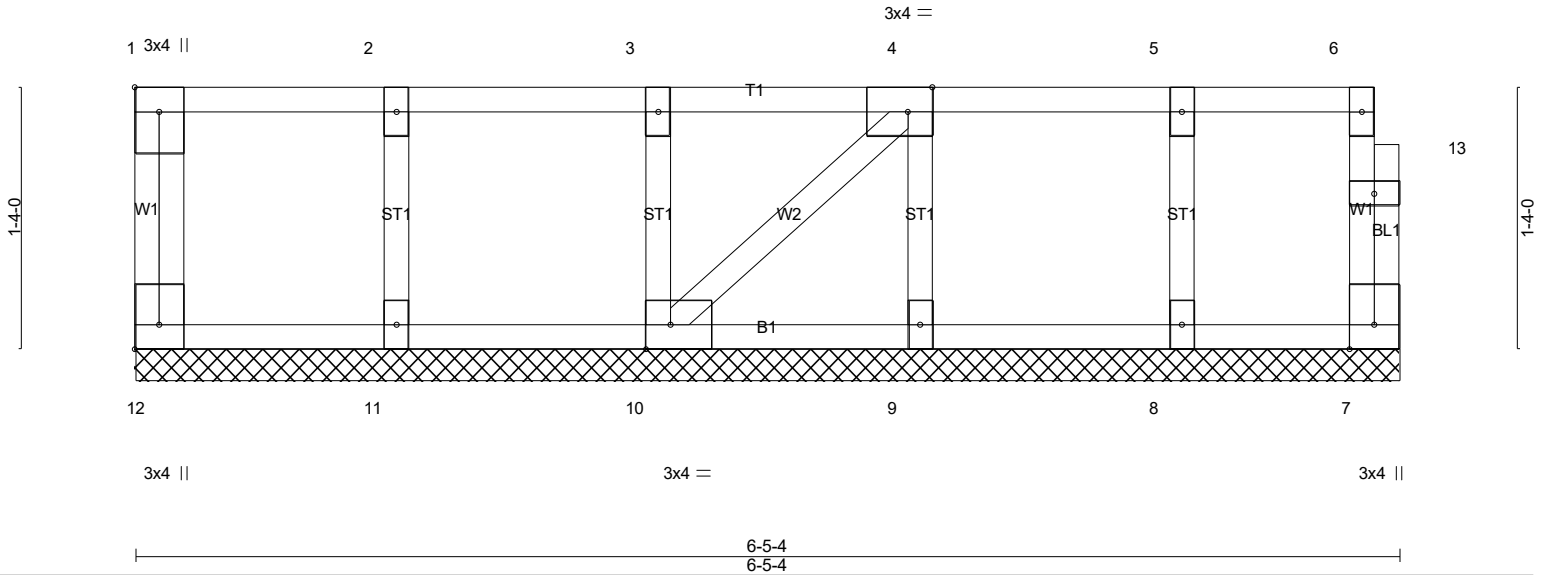


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [10:0-1-8,Edge], [12:Edge,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.06	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	7	n/a	n/a		
BCDL 5.0	Code IRC2018/TPI2014		Matrix-P						Weight: 34 lb	FT = 0%F, 0%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 6-5-4.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 12, 7, 11, 10, 9, 8

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

- NOTES-** (8-9)
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 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.
  - CAUTION, Do not erect truss backwards.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/3/2021

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Job 21-3145-F02	Truss F09	Truss Type Floor	Qty 3	Ply 1	LOT 1152 CARRIAGE CIRCLE   162 SPRUCE HOLLOW CIRCLE SPRING LAKE, NC	# 26909
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8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Jun 4 20:46:29 2021 Page 1  
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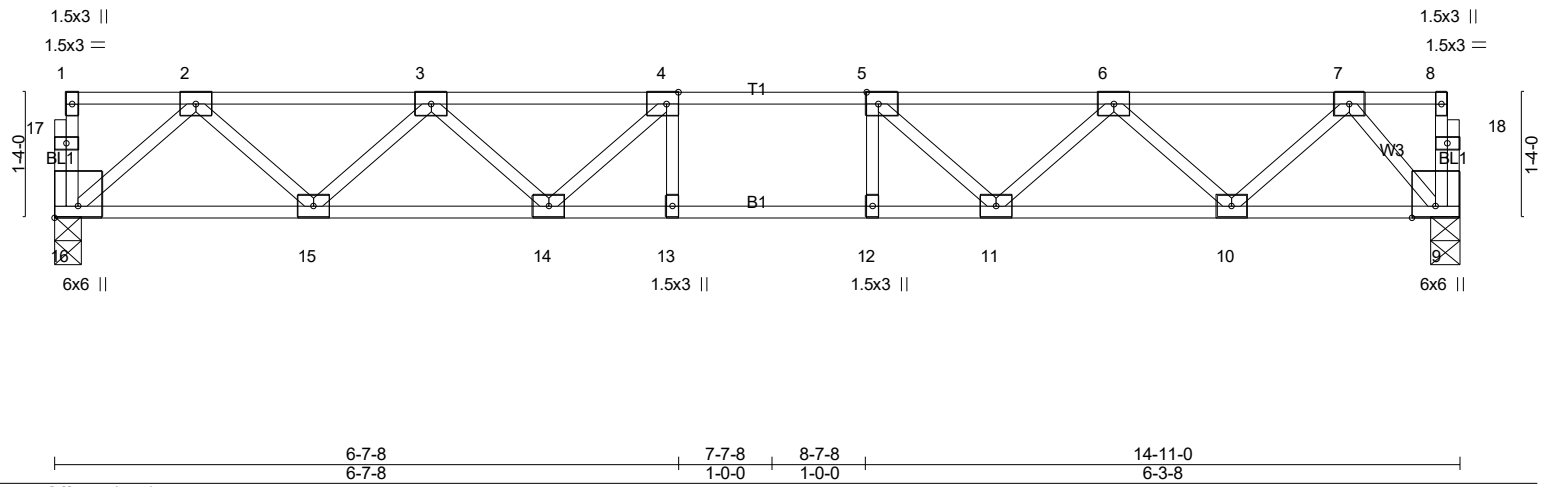
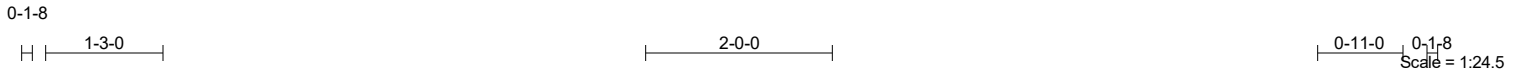


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [16:Edge,0-3-0]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.38	Vert(LL) -0.13 13-14 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.72	Vert(CT) -0.17 13-14 >999 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.39	Horz(CT) 0.04 9 n/a n/a		
BCDL 5.0	Code IRC2018/TPI2014	Matrix-SH		Weight: 77 lb	FT = 0%F, 0%E

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

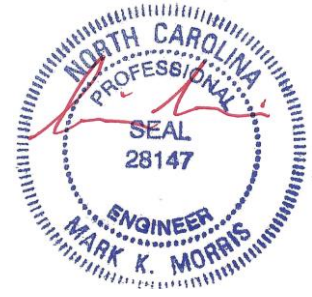
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 16=800/0-3-8 (min. 0-1-8), 9=800/0-3-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1415/0, 3-4=-2194/0, 4-5=-2424/0, 5-6=-2124/0, 6-7=-1266/0  
 BOT CHORD 15-16=0/855, 14-15=0/1945, 13-14=0/2424, 12-13=0/2424, 11-12=0/2424, 10-11=0/1830, 9-10=0/672  
 WEBS 4-14=-489/0, 3-14=0/406, 3-15=-738/0, 2-15=0/778, 2-16=-1136/0, 5-11=-555/0, 6-11=0/449, 6-10=-785/0, 7-10=0/826, 7-9=-1029/0

- NOTES-** (5-6)
- Unbalanced floor live loads have been considered for this design.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 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.
  - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

**LOAD CASE(S)** Standard



6/3/2021

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