Job	Truss	Truss Type	Qty	Ply	19 Sweetwater-Floor	
20020068-B	F1	Floor	5	1	Job Reference (optional)	E14200261

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:41:54
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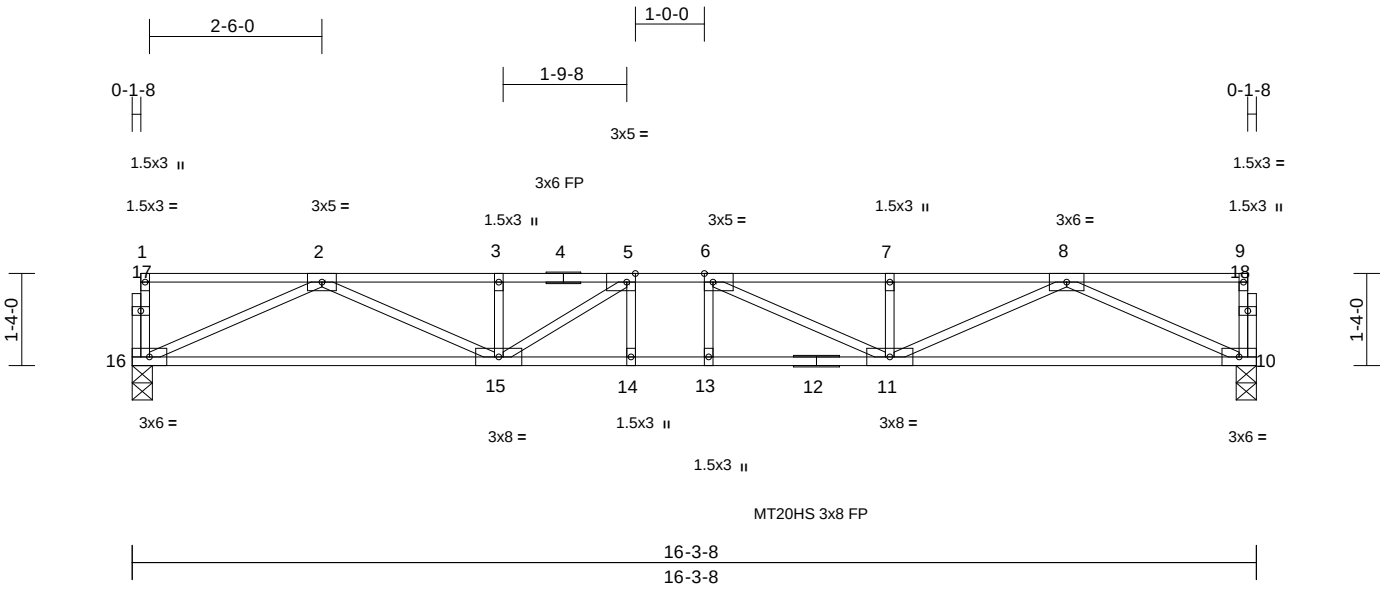

Scale = 1:33.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.60	Vert(LL)	-0.20	11-13	>972	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.93	Vert(CT)	-0.27	11-13	>711	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.05	10	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 84 lb	FT = 20%F, 11%E

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 11-13.

REACTIONS (size) 10=0-3-8, 16=0-3-8
Max Grav 10=876 (LC 1), 16=876 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 16-17=-103/0, 1-17=-103/0, 10-18=-105/0, 9-18=-105/0, 1-2=-5/0, 2-3=-2601/0, 3-4=-2601/0, 4-5=-2601/0, 5-6=-2920/0, 6-7=-2624/0, 7-8=-2624/0, 8-9=-5/0
BOT CHORD 15-16=0/1637, 14-15=0/2920, 13-14=0/2920, 12-13=0/2920, 11-12=0/2920, 10-11=0/1635
WEBS 8-10=-1794/0, 2-16=-1797/0, 8-11=0/1094, 2-15=0/1066, 7-11=-291/0, 3-15=-250/2, 6-11=-553/51, 5-15=-585/31, 5-14=-82/134, 6-13=-113/82

LOAD CASE(S) Standard

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

March 18,2020

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

Job	Truss	Truss Type	Qty	Ply	19 Sweetwater-Floor
20020068-B	F1GE	Floor Supported Gable	1	1	E14200262 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:41:57 Page: 1
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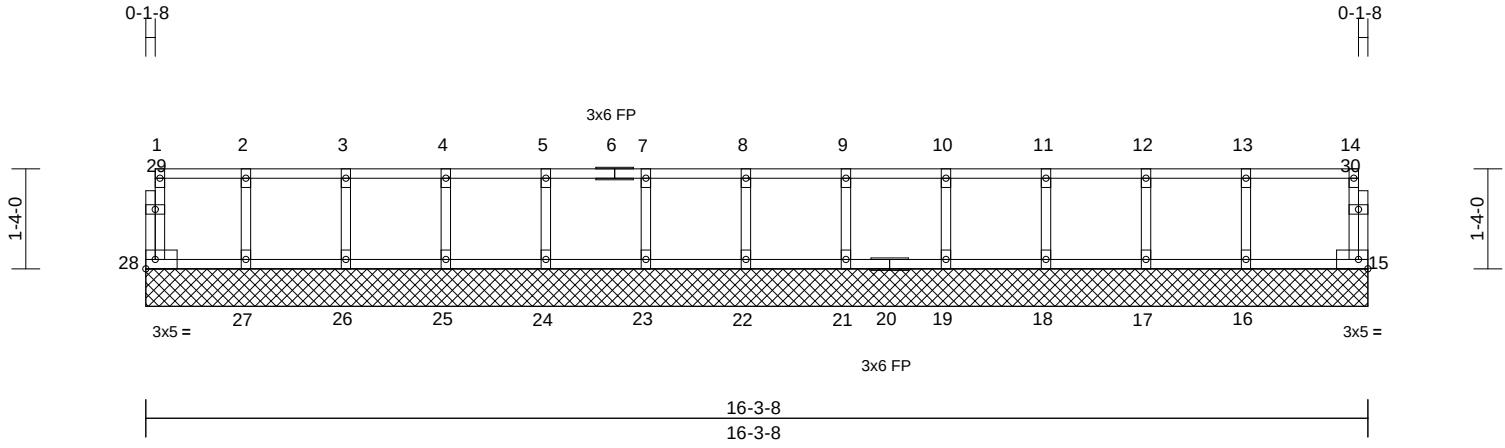

Scale = 1:30.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	15	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 72 lb	FT = 20%F, 11%E

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

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

REACTIONS (size) 15=16-3-8, 16=16-3-8, 17=16-3-8, 18=16-3-8, 19=16-3-8, 21=16-3-8, 22=16-3-8, 23=16-3-8, 24=16-3-8, 25=16-3-8, 26=16-3-8, 27=16-3-8, 28=16-3-8
Max Grav 15=73 (LC 1), 16=163 (LC 1), 17=142 (LC 1), 18=148 (LC 1), 19=146 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=146 (LC 1), 26=149 (LC 1), 27=137 (LC 1), 28=61 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 28-29=-53/0, 1-29=-52/0, 15-30=-67/0, 14-30=-66/0, 1-2=-12/0, 2-3=-12/0, 3-4=-12/0, 4-5=-12/0, 5-6=-12/0, 6-7=-12/0, 7-8=-12/0, 8-9=-12/0, 9-10=-12/0, 10-11=-12/0, 11-12=-12/0, 12-13=-12/0, 13-14=-12/0
BOT CHORD 27-28=0/12, 26-27=0/12, 25-26=0/12, 24-25=0/12, 23-24=0/12, 22-23=0/12, 21-22=0/12, 20-21=0/12, 19-20=0/12, 18-19=0/12, 17-18=0/12, 16-17=0/12, 15-16=0/12
WEBS 2-27=-128/0, 3-26=-135/0, 4-25=-133/0, 5-24=-133/0, 7-23=-133/0, 8-22=-133/0, 9-21=-133/0, 10-19=-133/0, 11-18=-134/0, 12-17=-129/0, 13-16=-147/0

NOTES
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

March 18,2020

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

Job	Truss	Truss Type	Qty	Ply	19 Sweetwater-Floor	
20020068-B	F2	Floor	7	1	Job Reference (optional)	E14200263

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:41:57 Page: 1
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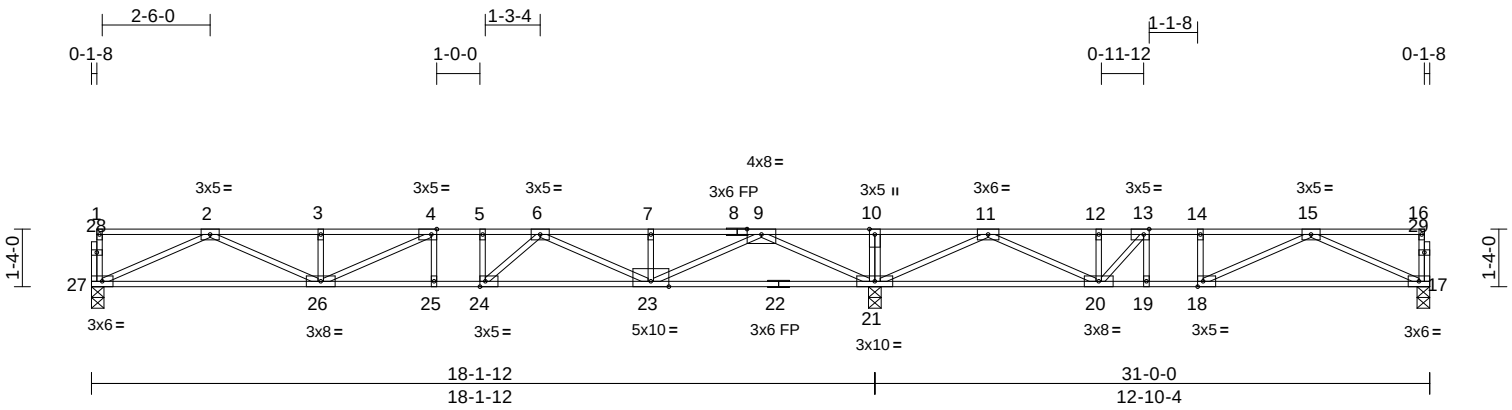

Scale = 1:53.4

Plate Offsets (X, Y): [4:0-1-8,Edge], [13:0-1-8,Edge], [18:0-1-8,Edge], [24:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.97	Vert(LL)	-0.23	25-26	>947	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.94	Vert(CT)	-0.30	25-26	>711	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.05	21	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 157 lb	FT = 20%F, 11%E

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

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

REACTIONS (size) 17=0-3-8, 21=0-3-8, 27=0-3-8
Max Grav 17=588 (LC 4), 21=2081 (LC 1), 27=855 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 27-28=-105/0, 1-28=-105/0, 17-29=-98/0, 16-29=-98/0, 1-2=-5/0, 2-3=-2538/0, 3-4=-2538/0, 4-5=-2775/0, 5-6=-2775/0, 6-7=-1702/0, 7-8=-1702/0, 8-9=-1702/0, 9-10=0/2313, 10-11=0/2313, 11-12=-1147/654, 12-13=-1147/654, 13-14=-1333/348, 14-15=-1333/348, 15-16=-5/0

BOT CHORD 26-27=0/1590, 25-26=0/2775, 24-25=0/2775, 23-24=0/2544, 22-23=-467/224, 21-22=-467/224, 20-21=-1207/360, 19-20=-348/1333, 18-19=-348/1333, 17-18=-75/1015

WEBS 10-21=-277/0, 9-21=-2343/0, 2-27=-1744/0, 9-23=0/1715, 2-26=0/1048, 7-23=-270/0, 3-26=-301/0, 6-23=-1005/0, 4-26=-416/210, 6-24=0/605, 4-25=-129/31, 5-24=-258/0, 11-21=-1815/0, 15-17=-1112/83, 11-20=0/1151, 15-18=-302/351, 12-20=-158/102, 14-18=-132/103, 13-20=-769/0, 13-19=0/213

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

March 18,2020

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

Job	Truss	Truss Type	Qty	Ply	19 Sweetwater-Floor
20020068-B	F2GE	Floor Supported Gable	1	1	E14200264 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

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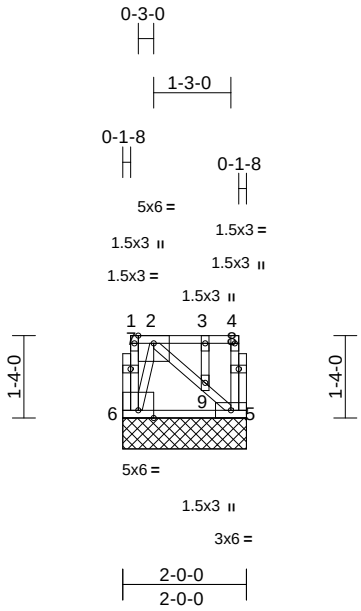

Scale = 1:37.3

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	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 17 lb	FT = 20%F, 11%E

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

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

REACTIONS (size) 5=2-0-0, 6=2-0-0
Max Grav 5=90 (LC 1), 6=90 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 6-7=0/24, 1-7=0/24, 5-8=-44/0, 4-8=-44/0, 1-2=0/1, 2-3=-2/0, 3-4=-2/0
BOT CHORD 5-6=0/32
WEBS 2-9=-34/0, 5-9=-46/0, 2-6=-111/0, 3-9=-18/0

NOTES
1) Gable requires continuous bottom chord bearing.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.
4) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

March 18,2020

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

Job	Truss	Truss Type	Qty	Ply	19 Sweetwater-Floor	
20020068-B	F2GR	Floor Girder	1	1	Job Reference (optional)	E14200265

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:41:58 Page: 1
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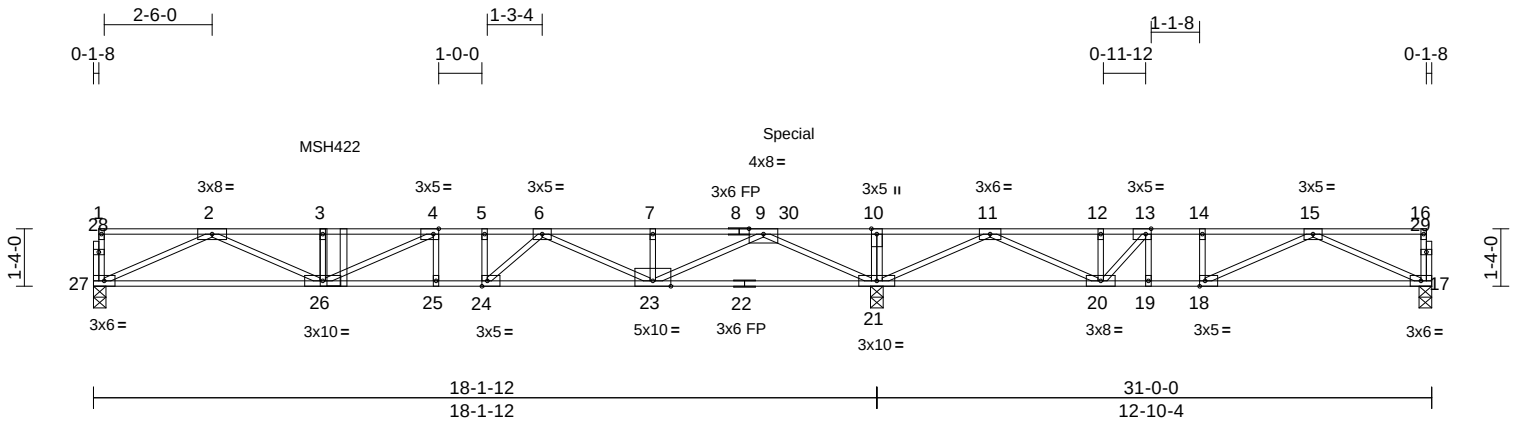

Scale = 1:53.4

Plate Offsets (X, Y): [4:0-1-8,Edge], [13:0-1-8,Edge], [18:0-1-8,Edge], [24:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.89	Vert(LL)	-0.27	25-26	>808	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.96	Vert(CT)	-0.35	25-26	>618	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.05	21	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 157 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat) *Except* 22-17:2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

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

REACTIONS (size) 17=0-3-8, 21=0-3-8, 27=0-3-8
Max Uplift 17=-4 (LC 3)
Max Grav 17=598 (LC 18), 21=2183 (LC 9), 27=1052 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 27-28=-106/0, 1-28=-106/0, 17-29=-99/0, 16-29=-99/0, 1-2=-5/0, 2-3=-3387/0, 3-4=-3387/0, 4-5=-3360/0, 5-6=-3360/0, 6-7=-1912/38, 7-8=-1912/38, 8-9=-1912/38, 9-30=0/2501, 10-30=0/2501, 10-11=0/2501, 11-12=-1209/720, 12-13=-1209/720, 13-14=-1379/397, 14-15=-1379/397, 15-16=-5/0

BOT CHORD 26-27=0/2017, 25-26=0/3360, 24-25=0/3360, 23-24=0/2974, 22-23=-672/261, 21-22=-672/261, 20-21=-1293/450, 19-20=-397/1379, 18-19=-397/1379, 17-18=-95/1037

WEBS 10-21=-302/0, 9-21=-2697/0, 2-27=-2214/0, 9-23=0/1910, 2-26=0/1515, 7-23=-309/0, 3-26=-611/0, 6-23=-1225/0, 4-26=-318/486, 6-24=0/803, 4-25=-176/16, 5-24=-348/0, 11-21=-1841/0, 15-17=-1136/106, 11-20=0/1176, 15-18=-333/378, 12-20=-154/119, 14-18=-135/119, 13-20=-821/0, 13-19=0/211

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
4) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.
7) Use USP MSH422 (With 10d nails into Girder & 6-10d nails into Truss) or equivalent at 5-6-12 from the left end to connect truss(es) to back face of top chord.
8) Fill all nail holes where hanger is in contact with lumber.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 77 lb down and 301 lb up at 16-2-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 17-27=-10, 1-16=-100
Concentrated Loads (lb)
Vert: 3=-217 (B), 30=3 (B)

March 18,2020

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

Job	Truss	Truss Type	Qty	Ply	19 Sweetwater-Floor
20020068-B	F3	Floor	1	1	E14200266
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

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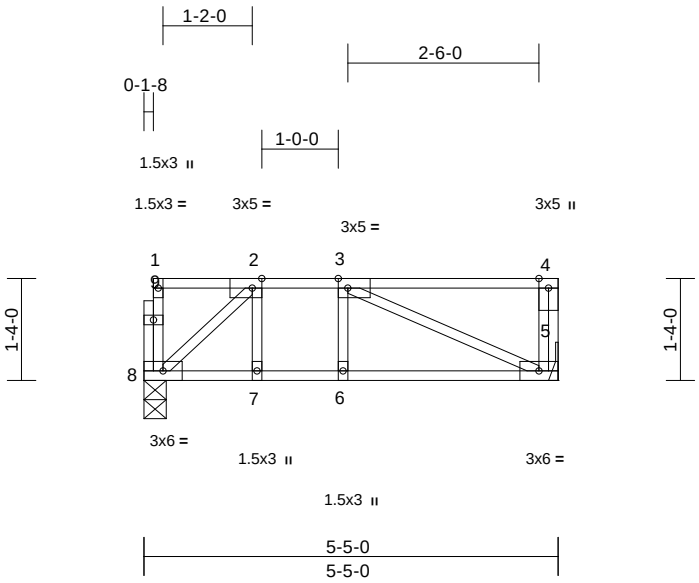

Scale = 1:30.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.50	Vert(LL)	-0.03	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.38	Vert(CT)	-0.05	5-6	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 32 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-5-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5= Mechanical, 8=0-3-8
Max Grav 5=284 (LC 1), 8=278 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 8-9=-48/23, 1-9=-48/23, 4-5=-123/0, 1-2=-2/1, 2-3=-310/0, 3-4=0/0
BOT CHORD 7-8=0/310, 6-7=0/310, 5-6=0/310
WEBS 3-5=-340/0, 2-8=-413/0, 2-7=0/124, 3-6=-66/13

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

March 18,2020

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

Job	Truss	Truss Type	Qty	Ply	19 Sweetwater-Floor	E14200267
20020068-B	F3GE	Floor Supported Gable	1	1	Job Reference (optional)	

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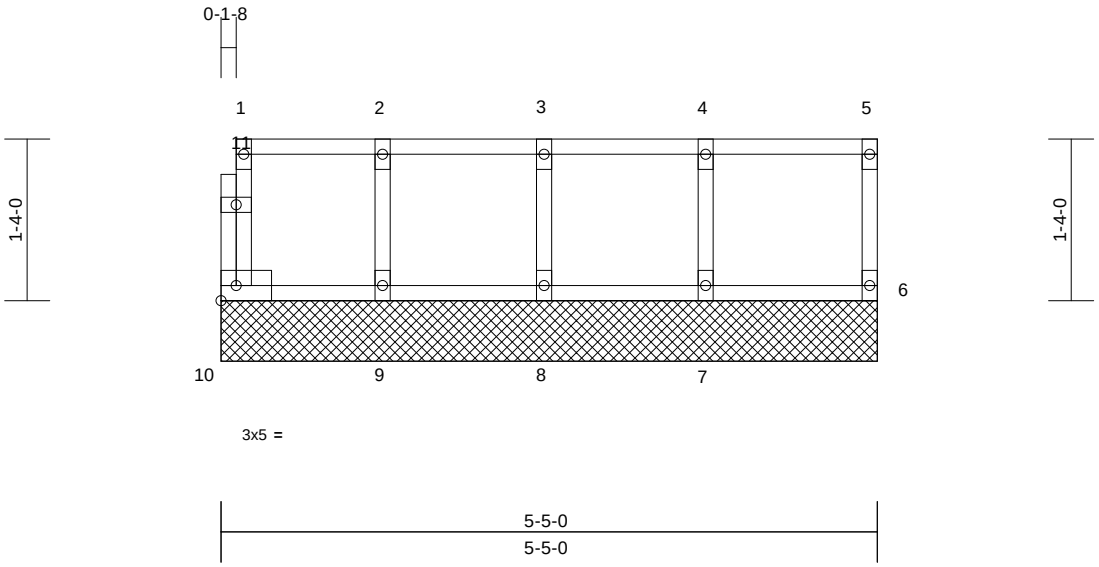


Scale = 1:19

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 25 lb	FT = 20%F, 11%E

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6=5-5-0, 7=5-5-0, 8=5-5-0, 9=5-5-0, 10=5-5-0
Max Grav 6=69 (LC 1), 7=154 (LC 1), 8=146 (LC 1), 9=143 (LC 1), 10=57 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 10-11=-51/0, 1-11=-50/0, 5-6=-61/0, 1-2=-9/0, 2-3=-9/0, 3-4=-9/0, 4-5=-9/0
BOT CHORD 9-10=0/9, 8-9=0/9, 7-8=0/9, 6-7=0/9
WEBS 2-9=-130/0, 3-8=-132/0, 4-7=-142/0

NOTES
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

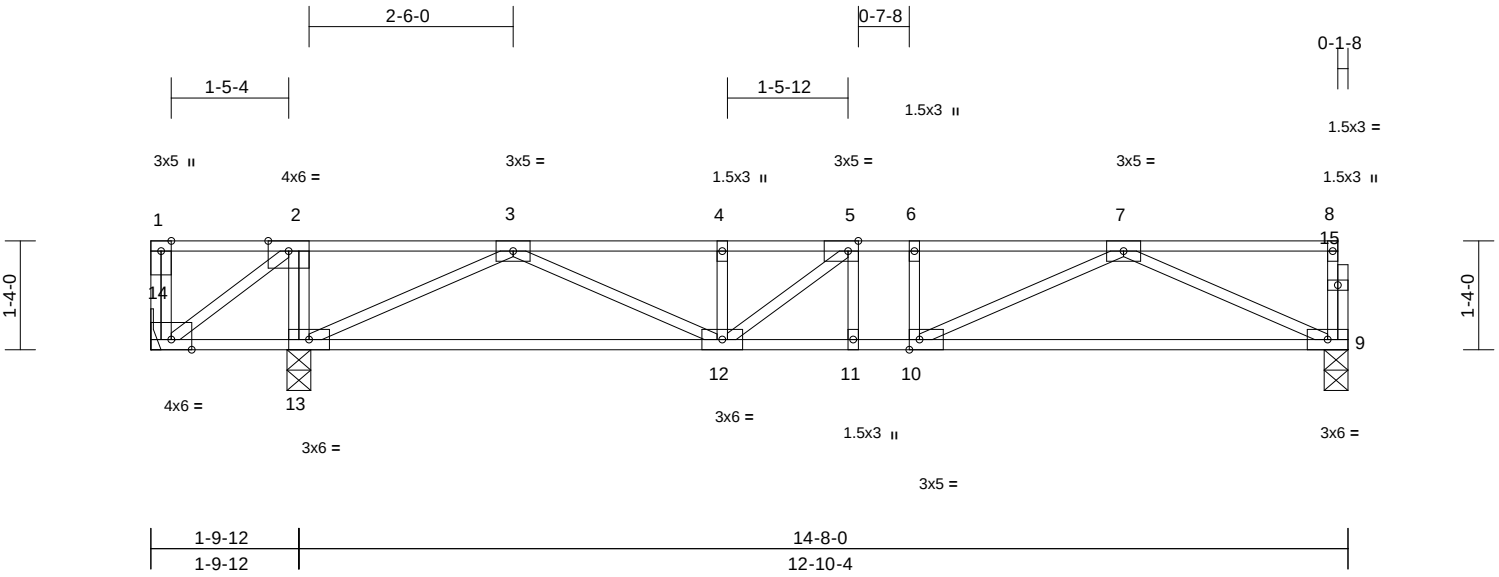
LOAD CASE(S) Standard

March 18,2020

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

Job	Truss	Truss Type	Qty	Ply	19 Sweetwater-Floor	E14200268
20020068-B	F4	Floor	1	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:42:00 Page: 1
ID:xf_6tEa?Cb99S2O06lchxbzaNPc-EAgsyYWgJIRnXw9u?iAKQA5xqRgK9htEPRQmX?zZi0L



Scale = 1:28.2

Plate Offsets (X, Y): [5:0-1-8,Edge], [10:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.56	Vert(LL)	-0.06	9-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.47	Vert(CT)	-0.14	9-10	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 79 lb	FT = 20%F, 11%E

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 13-14.

REACTIONS (size) 9=0-3-8, 13=0-3-8, 14= Mechanical
Max Uplift 14=-705 (LC 4)
Max Grav 9=597 (LC 4), 13=1622 (LC 1), 14=-97 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-70/10, 9-15=-100/0, 8-15=-99/0, 1-2=0/0, 2-3=0/960, 3-4=-1212/0, 4-5=-1212/0, 5-6=-1389/0, 6-7=-1389/0, 7-8=-5/0
BOT CHORD 13-14=-960/0, 12-13=0/436, 11-12=0/1389, 10-11=0/1389, 9-10=0/1036
WEBS 2-13=-931/0, 2-14=0/1181, 3-13=-1537/0, 7-9=-1135/0, 3-12=0/862, 7-10=0/445, 4-12=-230/0, 6-10=-127/2, 5-12=-354/19, 5-11=-79/64

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 705 lb uplift at joint 14.
4) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

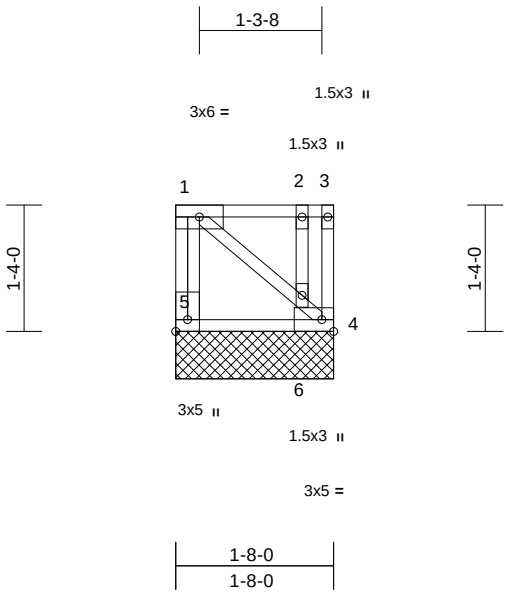
March 18,2020

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

Job	Truss	Truss Type	Qty	Ply	19 Sweetwater-Floor
20020068-B	F4GE	Floor Supported Gable	1	1	E14200269
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:42:00 Page: 1
ID:xf_6tEa?Cb99S2O06lchxbzaNPc-EAgsyYWgJIRnXw9u?iAKQA52mRnM9nGEPRQmX?zZi0L



Scale = 1:24.3

Plate Offsets (X, Y): [5: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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 14 lb	FT = 20%F, 11%E

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4=1-8-0, 5=1-8-0
Max Grav 4=81 (LC 1), 5=81 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-5=-74/0, 3-4=-26/0, 1-2=0/0, 2-3=0/0
BOT CHORD 4-5=0/0
WEBS 1-6=0/7, 4-6=-31/0, 2-6=-59/0

NOTES
1) Gable requires continuous bottom chord bearing.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.
4) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

March 18,2020

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

Job	Truss	Truss Type	Qty	Ply	19 Sweetwater-Floor
20020068-B	F5GR	Floor Girder	1	1	E14200270 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:42:00 Page: 1
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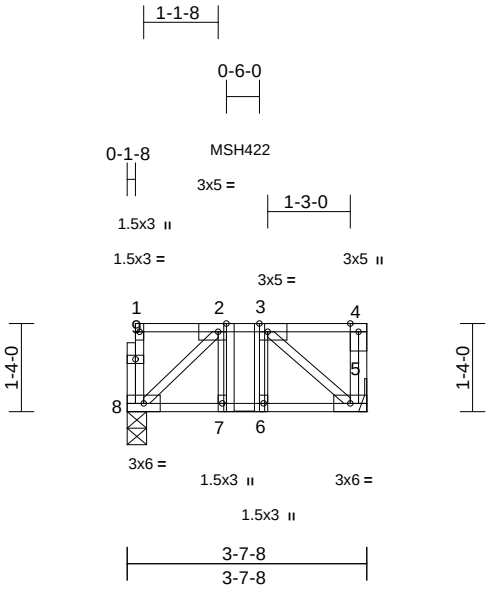

Scale = 1:34.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.21	Vert(LL)	-0.01	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.24	Vert(CT)	-0.01	5-6	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 25 lb	FT = 20%F, 11%E

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5= Mechanical, 8=0-3-8
Max Grav 5=317 (LC 4), 8=267 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 8-9=-42/9, 1-9=-42/9, 4-5=-78/0, 1-2=-2/0, 2-3=-255/0, 3-4=0/0
BOT CHORD 7-8=0/255, 6-7=0/255, 5-6=0/255
WEBS 3-5=-333/0, 2-8=-347/0, 2-7=0/111, 3-6=-89/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.
6) Use USP MSH422 (With 10d nails into Girder & 6-10d nails into Truss) or equivalent at 1-9-4 from the left end to connect truss(es) to front face of top chord.
7) Fill all nail holes where hanger is in contact with lumber.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 3=-184 (F)

March 18,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	19 Sweetwater-Floor
20020068-B	F5GRA	Floor Girder	1	1	E14200271
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S Mar 10 2020 Print: 8.330 S Mar 10 2020 MiTek Industries, Inc. Wed Mar 18 12:42:00 Page: 1
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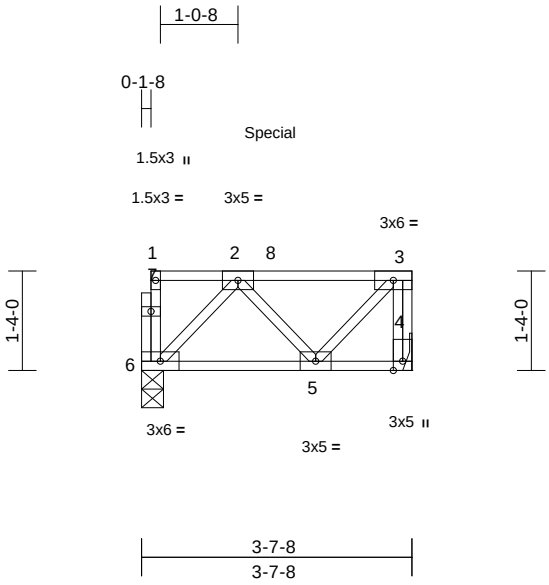

Scale = 1:30.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.54	Vert(LL)	0.00	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.04	Vert(CT)	0.00	5-6	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-3-8
Max Uplift 4=-201 (LC 3), 6=-227 (LC 3)
Max Grav 4=97 (LC 1), 6=87 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 6-7=-170/0, 1-7=-170/0, 3-4=-95/201, 1-2=-9/0, 2-8=-26/190, 3-8=-26/190
BOT CHORD 5-6=-382/29, 4-5=0/0
WEBS 2-6=-38/562, 2-5=-5/294, 3-5=-274/37

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 201 lb uplift at joint 4.
4) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
5) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 793 lb up at 1-9-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 4-6=-10, 1-3=-100
Concentrated Loads (lb)
Vert: 8=181 (B)

March 18,2020

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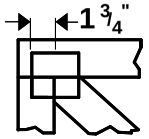
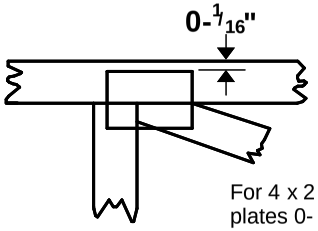
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

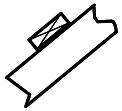
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

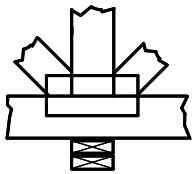
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

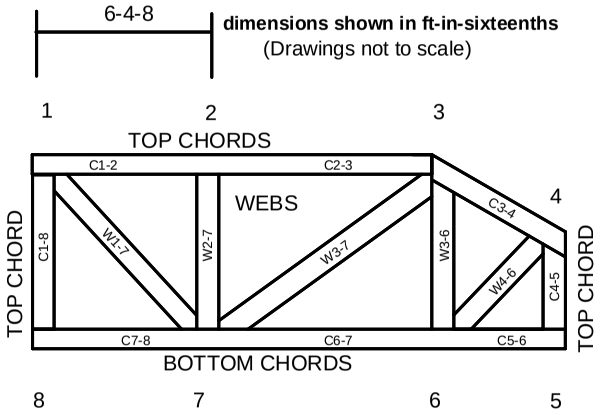


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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