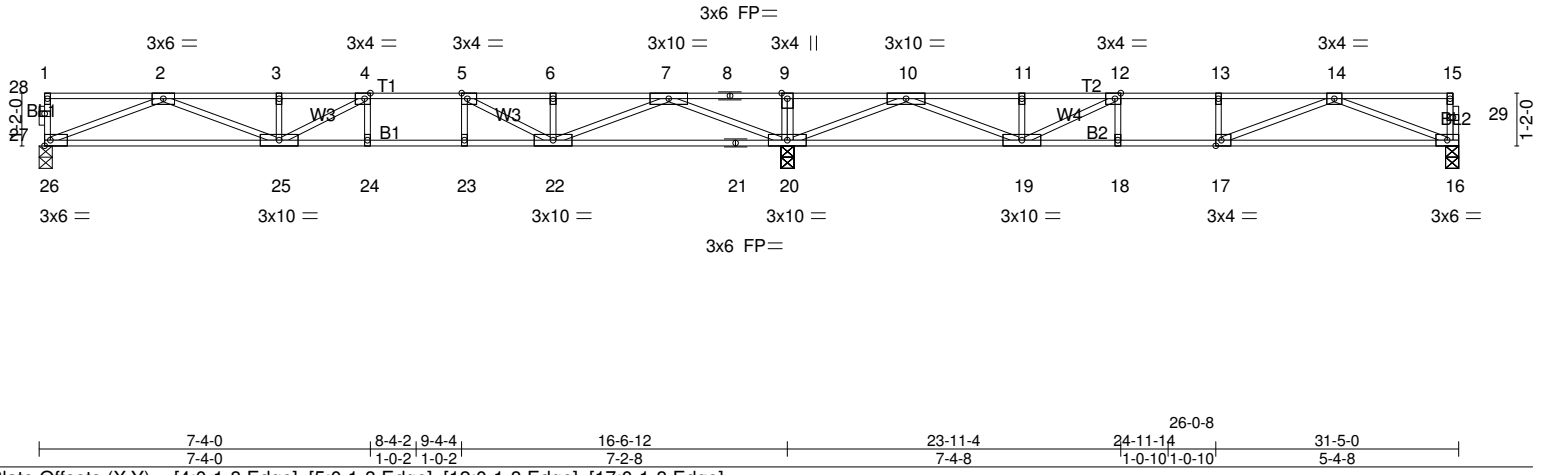


Job <b>B0620-2502</b>	Truss <b>F1</b>	Truss Type <b>Floor</b>	Qty <b>5</b>	Ply <b>1</b>	BeQuest/Douglas Residence/Harnett
Comtech, Inc., Fayetteville, NC 28309, Neil Baggett					Job Reference (optional)

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Tue Jun 9 07:32:48 2020 Page 1  
 ID:aOkUD\_LpNKHsjubZlgKKTmz9dal-DnBTcDyXrps0Y861pBTEBOSVRUa\_pGut6MdCJSz85YT



LOADING (psf)	SPACING-	CS.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.71	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.92	Vert(LL) -0.22 24-25 >877 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.78	Vert(CT) -0.30 24-25 >646 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 16 n/a n/a		
	Code IRC2015/TPI2014			Weight: 151 lb	FT = 20%F, 11%E

**LUMBER-**  
 TOP CHORD 2x4 SP No.1(flat)  
 BOT CHORD 2x4 SP No.1(flat) \*Except\*  
 B2: 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** All bearings 0-3-8 except (jt=length) 20=0-10-13 (input: 0-3-8), 20=0-10-13 (input: 0-3-8), 20=0-10-13 (input: 0-3-8).  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) except 26=801(LC 3), 20=2032(LC 1), 20=2032(LC 1), 20=2032(LC 1), 16=701(LC 4), 16=635(LC 1), 16=635(LC 1)

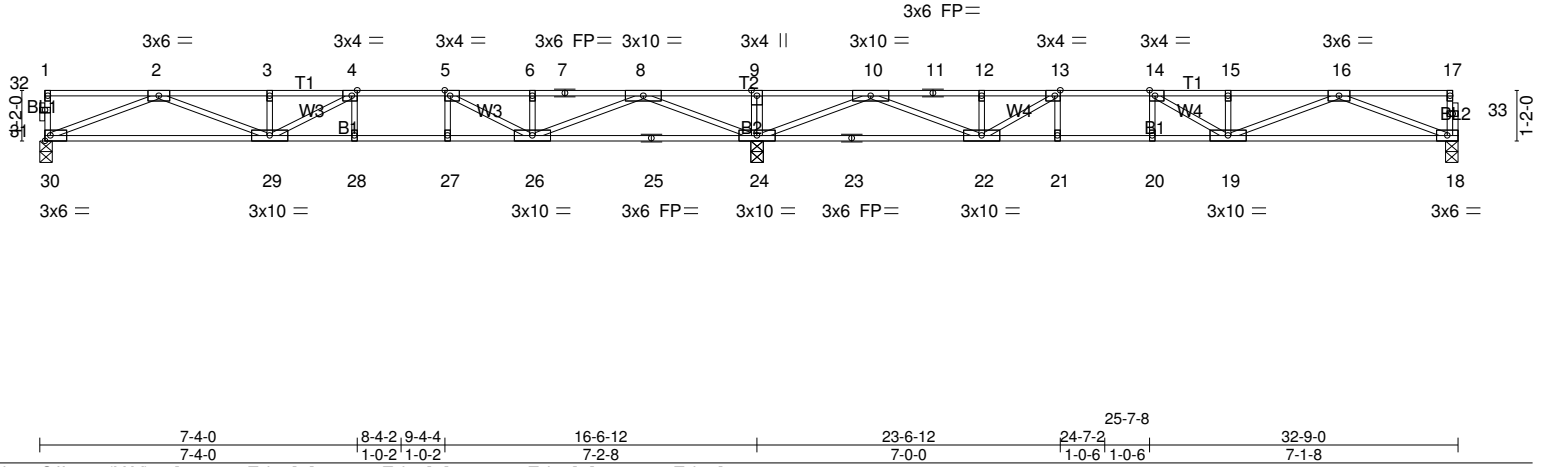
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2617/0, 3-4=-2617/0, 4-5=-2720/0, 5-6=-2016/155, 6-7=-2016/155, 7-8=0/2335, 8-9=0/2335, 9-10=0/2335, 10-11=-1709/296, 11-12=-1709/296, 12-13=-2151/0, 13-14=-2151/0  
 BOT CHORD 25-26=0/1665, 24-25=0/2720, 23-24=0/2720, 22-23=0/2720, 21-22=-708/640, 20-21=-708/640, 19-20=-829/525, 18-19=0/2151, 17-18=0/2151, 16-17=0/1457  
 WEBS 2-26=-1797/0, 2-25=0/1028, 3-25=-306/0, 7-20=-2389/0, 7-22=0/1633, 5-22=-1135/0, 4-25=-245/359, 10-20=-2177/0, 10-19=0/1444, 14-16=-1560/0, 14-17=-62/750, 12-19=-948/0, 9-20=-280/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) WARNING: Required bearing size at joint(s) 20, 20, 20 greater than input bearing size.
  - 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 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 7) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

Job <b>B0620-2502</b>	Truss <b>F2</b>	Truss Type <b>Floor</b>	Qty <b>4</b>	Ply <b>1</b>	BeQuest/Douglas Residence/Harnett
Comtech, Inc., Fayetteville, NC 28309, Neil Baggett					Job Reference (optional)

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Tue Jun 9 07:32:49 2020 Page 1  
ID:aOkUD\_LpNKHsjuzBZlgKKTmz9dal-hzlrpZz9c6\_tAHhDnu\_Tkb\_gVuW4Yj40L0Nmsvz85YS



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.76	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.93	Vert(LL) -0.22 28-29 >877 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.78	Vert(CT) -0.30 28-29 >646 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.06 18 n/a n/a		
	Code IRC2015/TPI2014				Weight: 158 lb FT = 20%F, 11%E

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

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

**REACTIONS.** All bearings 0-3-8 except (jt=length) 24=0-4-4 (input: 0-3-8), 24=0-4-4 (input: 0-3-8).  
(lb) - Max Grav All reactions 250 lb or less at joint(s) except 30=797(LC 3), 24=2107(LC 1), 24=2107(LC 1), 18=775(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2596/0, 3-4=-2596/0, 4-5=-2686/0, 5-6=-1968/237, 6-7=-1968/237, 7-8=-1968/237, 8-9=0/2396, 9-10=0/2396, 10-11=-1927/289, 11-12=-1927/289, 12-13=-1927/289, 13-14=-2573/0, 14-15=-2529/0, 15-16=-2529/0  
BOT CHORD 29-30=0/1654, 28-29=0/2686, 27-28=0/2686, 26-27=0/2686, 25-26=-807/581, 24-25=-807/581, 23-24=-860/590, 22-23=-860/590, 21-22=0/2573, 20-21=0/2573, 19-20=0/2573, 18-19=0/1645  
WEBS 2-30=-1785/0, 2-29=0/1017, 3-29=-309/0, 8-24=-2400/0, 8-26=0/1641, 5-26=-1162/0, 4-29=-217/386, 10-24=-2363/0, 10-22=0/1600, 16-18=-1763/0, 16-19=0/954, 15-19=-307/0, 14-19=-161/424, 13-22=-1120/0, 9-24=-279/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) WARNING: Required bearing size at joint(s) 24, 24 greater than input bearing size.
  - 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 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 7) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

Job B0620-2502	Truss F3	Truss Type Floor	Qty 1	Ply 1	BeQuest/Douglas Residence/Harnett
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Comtech, Inc., Fayetteville, NC 28309, Neil Baggett

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Tue Jun 9 07:32:50 2020 Page 1  
ID:aOkUD\_LpNKHsjuzBZlgKKTmz9dal-9AJD1v\_nNQ6koRGPxcWiGpXrTIGQHbcAag6JOLz85YR



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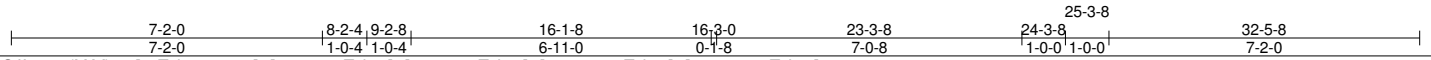
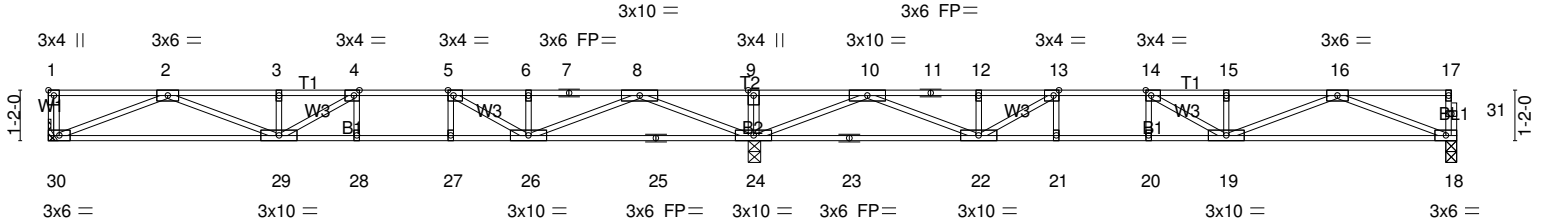


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [5:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge]

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 0.74	Vert(LL)	-0.21	28-29	>904	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.92	Vert(CT)	-0.29	28-29	>667	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.76	Horz(CT)	-0.04	30	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S							
								Weight: 158 lb	FT = 20%F, 11%E	

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
2-2-0 oc bracing: 27-28  
6-0-0 oc bracing: 24-26,22-24.

**REACTIONS.** All bearings 0-3-0 except (jt=length) 30=Mechanical, 24=0-3-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) except 30=784(LC 3), 24=2093(LC 1), 18=776(LC 4), 18=717(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2544/0, 3-4=-2544/0, 4-5=-2594/0, 5-6=-1934/252, 6-7=-1934/252, 7-8=-1934/252, 8-9=0/2367, 9-10=0/2367, 10-11=-1929/259, 11-12=-1929/259, 12-13=-1929/259, 13-14=-2581/0, 14-15=-2534/0, 15-16=-2534/0  
BOT CHORD 29-30=0/1655, 28-29=0/2594, 27-28=0/2594, 26-27=0/2594, 25-26=-817/586, 24-25=-817/586, 23-24=-824/587, 22-23=-824/587, 21-22=0/2581, 20-21=0/2581, 19-20=0/2581, 18-19=0/1647  
WEBS 9-24=-278/0, 2-30=-1780/0, 2-29=0/960, 3-29=-304/0, 8-24=-2366/0, 8-26=0/1604, 5-26=-1119/0, 4-29=-177/411, 10-24=-2360/0, 10-22=0/1599, 16-18=-1765/0, 16-19=0/957, 15-19=-306/0, 14-19=-173/416, 13-22=-1111/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Refer to girder(s) for truss to truss connections.
  - 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 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 7) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

Job <b>B0620-2502</b>	Truss <b>F4</b>	Truss Type <b>FLOOR GIRDER</b>	Qty <b>1</b>	Ply <b>1</b>	BeQuest/Douglas Residence/Harnett
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Comtech, Inc., Fayetteville, NC 28309, Neil Baggett

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Tue Jun 9 07:32:51 2020 Page 1  
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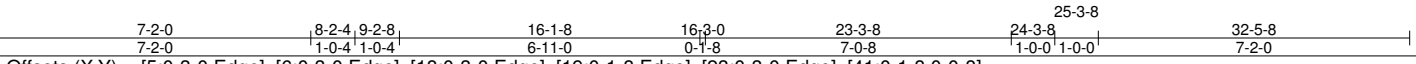
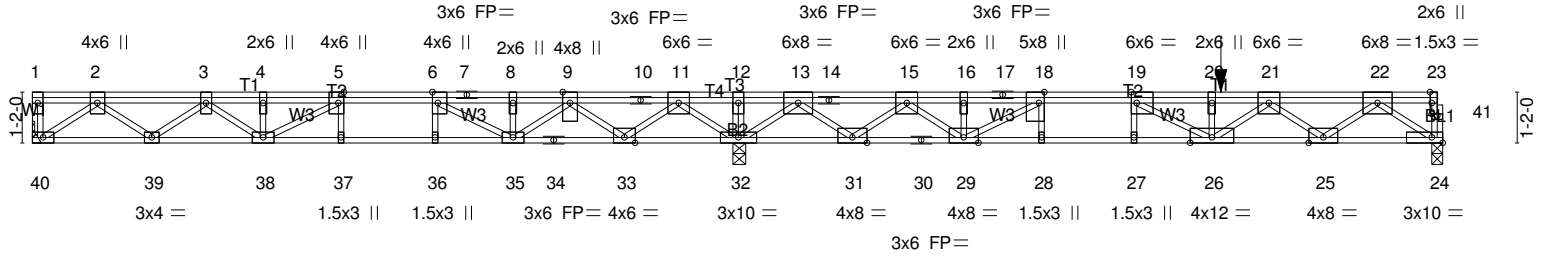


Plate Offsets (X,Y)-- [5:0-3-0,Edge], [6:0-3-0,Edge], [18:0-3-0,Edge], [19:0-1-8,Edge], [23:0-3-0,Edge], [41:0-1-8,0-0-8]

<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 0.96	Vert(LL)	-0.28 26-27	>689	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.86	Vert(CT)	-0.38 26-27	>513	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.88	Horz(CT)	0.06 24	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 207 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 5-1-1 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat) *Except* B3: 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 40=663/Mechanical, 32=2537/0-3-8 (min. 0-1-8), 24=1320/0-3-0 (min. 0-1-8)  
Max Grav 40=724(LC 3), 32=2537(LC 1), 24=1392(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1499/0, 3-4=-2370/0, 4-5=-2370/0, 5-6=-2250/261, 6-7=-1343/855, 7-8=-1343/855,  
8-9=-1343/855, 9-10=0/1537, 10-11=0/1537, 11-12=0/3562, 12-13=0/3562, 13-14=-699/765,  
14-15=-699/765, 15-16=-3042/0, 16-17=-3042/0, 17-18=-3042/0, 18-19=-4896/0,  
19-20=-5938/0, 20-21=-5938/0, 21-22=-3283/0  
BOT CHORD 39-40=0/937, 38-39=0/2028, 37-38=-261/2250, 36-37=-261/2250, 35-36=-261/2250,  
34-35=-1151/664, 33-34=-1151/664, 32-33=-2175/0, 31-32=-1742/0, 30-31=0/2027,  
29-30=0/2027, 28-29=0/4896, 27-28=0/4896, 26-27=0/4896, 25-26=0/4671, 24-25=0/1869  
WEBS 2-40=-1151/0, 2-39=0/713, 3-39=-672/6, 3-38=-24/427, 4-38=-382/0, 11-32=-1703/0,  
11-33=0/1344, 9-33=-1302/0, 22-24=-2291/0, 9-35=0/920, 22-25=0/1796, 21-25=-1764/0,  
21-26=0/1580, 20-26=-1534/0, 13-32=-2238/0, 13-31=0/1857, 15-31=-1804/0, 5-38=-14/640,  
6-35=-1418/0, 15-29=0/1357, 16-29=0/449, 18-29=-2539/0, 19-26=0/1738

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x6 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Refer to girder(s) for truss to truss connections.
  - 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 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 7) CAUTION, Do not erect truss backwards.
  - 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1063 lb down at 27-4-4 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 (plf)  
Vert: 24-40=-10, 1-23=-100

Job	Truss	Truss Type	Qty	Ply	BeQuest/Douglas Residence/Harnett
B0620-2502	F4	FLOOR GIRDER	1	1	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Neil Baggett

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Tue Jun 9 07:32:51 2020 Page 2  
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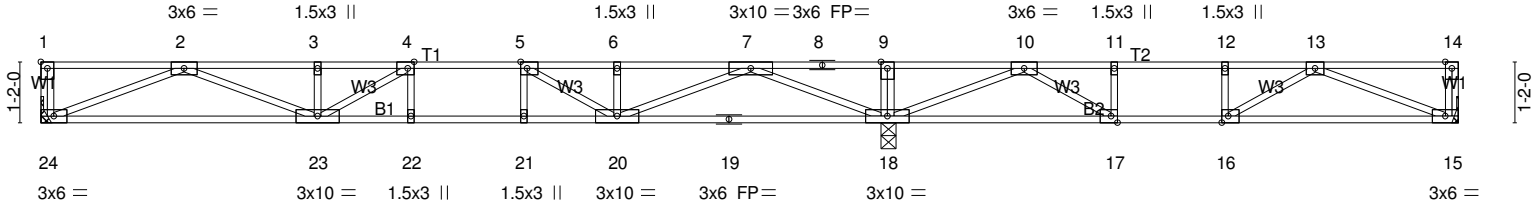
**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 20=-983(B)

Job B0620-2502	Truss F5	Truss Type Floor	Qty 2	Ply 1	BeQuest/Douglas Residence/Harnett
Comtech, Inc., Fayetteville, NC 28309, Neil Baggett					Job Reference (optional)

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Tue Jun 9 07:32:52 2020 Page 1  
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Scale = 1:44.2



24 3x6 = 23 3x10 = 22 1.5x3 || 21 1.5x3 || 20 3x10 = 19 3x6 FP = 18 3x10 = 17 16 15 3x6 =

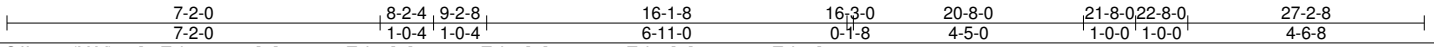


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [5:0-1-8,Edge], [16:0-1-8,Edge], [17:0-1-8,Edge]

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 0.73	Vert(LL)	-0.22	22	>899	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.85	Vert(CT)	-0.29	22	>659		
BCLL 0.0	Rep Stress Incr	YES	WB 0.70	Horz(CT)	-0.04	24	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 132 lb	FT = 20%F, 11%E

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

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

**REACTIONS.** (lb/size) 24=791/Mechanical, 18=1720/0-3-8 (min. 0-1-8), 15=454/Mechanical  
Max Grav 24=812(LC 10), 18=1720(LC 1), 15=533(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2676/0, 3-4=-2676/0, 4-5=-2807/0, 5-6=-2236/0, 6-7=-2236/0, 7-8=0/1505, 8-9=0/1505, 9-10=0/1505,  
10-11=-1195/186, 11-12=-1195/186, 12-13=-1195/186  
BOT CHORD 23-24=0/1724, 22-23=0/2807, 21-22=0/2807, 20-21=0/2807, 19-20=-46/933, 18-19=-46/933, 17-18=-619/678,  
16-17=-186/1195, 15-16=0/1014  
WEBS 9-18=-302/0, 2-24=-1855/0, 2-23=0/1028, 3-23=-278/0, 7-18=-2217/0, 7-20=0/1479, 5-20=-902/0, 4-23=-395/202,  
10-18=-1530/0, 13-15=-1091/0, 10-17=0/895, 11-17=-361/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Refer to girder(s) for truss to truss connections.
  - 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 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 7) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



Job <b>B0620-2502</b>	Truss <b>F7</b>	Truss Type <b>Floor</b>	Qty <b>11</b>	Ply <b>1</b>	BeQuest/Douglas Residence/Harnett
Comtech, Inc., Fayetteville, NC 28309, Neil Baggett					Job Reference (optional)

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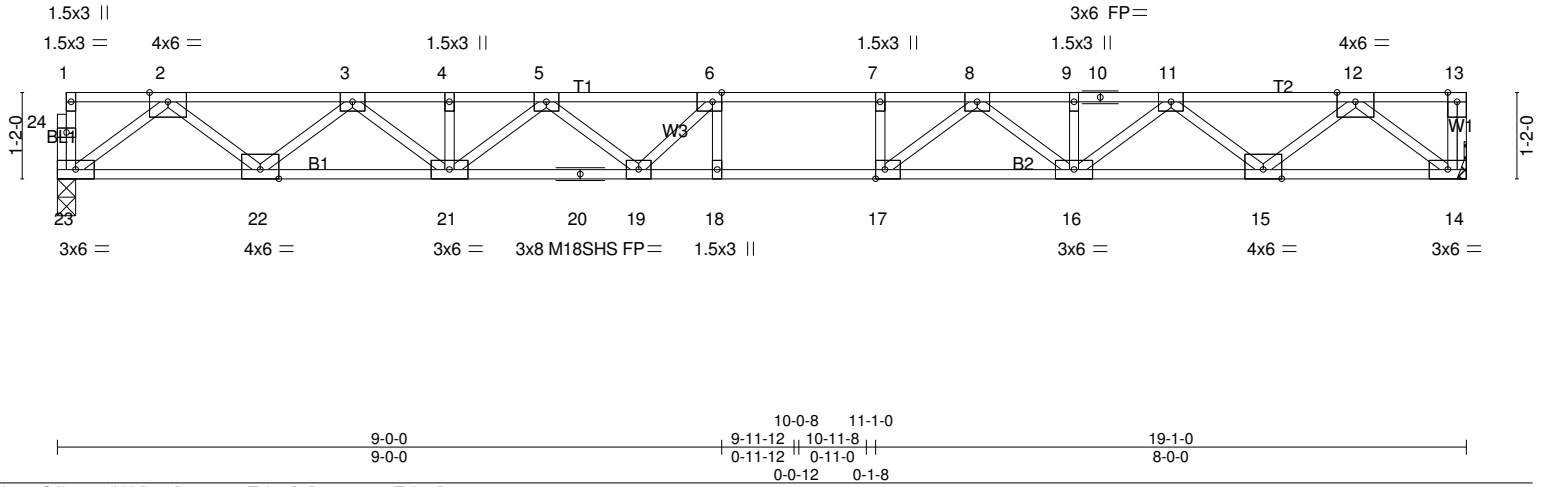
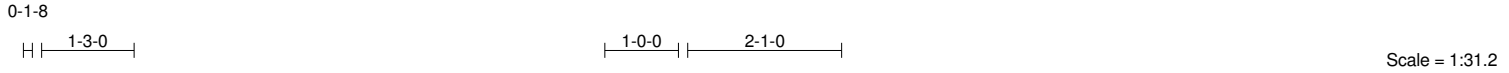


Plate Offsets (X,Y)-- [6:0-1-8,Edge], [17:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.44	Vert(LL)	-0.32	18	>714	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.69	Vert(CT)	-0.43	18	>520	M18SHS	244/190
BCLL 0.0	Rep Stress Incr YES	WB 0.56	Horz(CT)	0.07	14	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 97 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP 2400F 2.0E(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (lb/size) 23=1030/0-3-0 (min. 0-1-8), 14=1036/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2208/0, 3-4=-3721/0, 4-5=-3721/0, 5-6=-4486/0, 6-7=-4619/0, 7-8=-4619/0, 8-9=-3725/0, 9-10=-3725/0, 10-11=-3725/0, 11-12=-2209/0  
BOT CHORD 22-23=0/1297, 21-22=0/3085, 20-21=0/4253, 19-20=0/4253, 18-19=0/4619, 17-18=0/4619, 16-17=0/4222, 15-16=0/3080, 14-15=0/1299  
WEBS 2-23=-1624/0, 2-22=0/1186, 3-22=-1141/0, 3-21=0/812, 12-14=-1630/0, 12-15=0/1185, 11-15=-1134/0, 11-16=0/823, 8-16=-635/0, 8-17=0/813, 5-21=-679/0, 5-19=0/493, 6-19=-539/178, 7-17=-339/0

- NOTES-
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) All plates are 3x4 MT20 unless otherwise indicated.
  - 4) Plates checked for a plus or minus 1 degree rotation about its center.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) 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.
  - 7) 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.
  - 8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



Job <b>B0620-2502</b>	Truss <b>F8</b>	Truss Type <b>GABLE</b>	Qty <b>1</b>	Ply <b>1</b>	BeQuest/Douglas Residence/Harnett
Comtech, Inc., Fayetteville, NC 28309, Neil Baggett					Job Reference (optional)

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Tue Jun 9 07:32:54 2020 Page 1  
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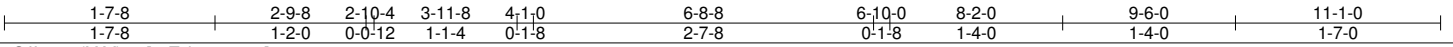
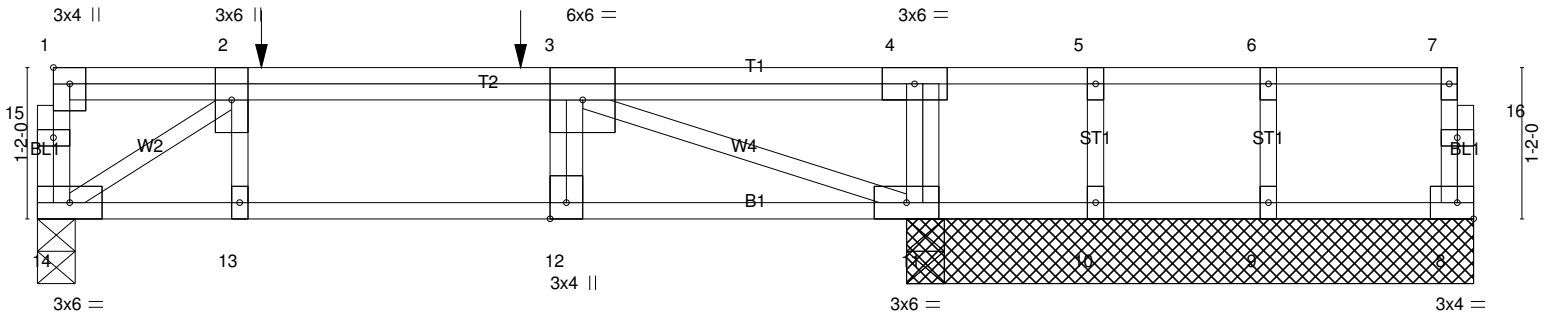
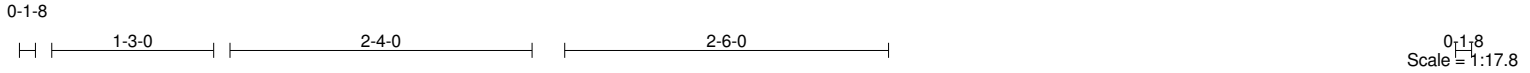


Plate Offsets (X,Y)-- [1:Edge,0-1-8]

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 0.27	Vert(LL)	-0.03	12	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.27	Vert(CT)	-0.04	12	>999	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.20	Horz(CT)	0.01	8	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S							
									Weight: 62 lb	FT = 20%F, 11%E

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

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

**REACTIONS.** All bearings 4-4-8 except (jt=length) 14=0-3-8.  
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 10  
Max Grav All reactions 250 lb or less at joint(s) 8, 10, 9 except 14=465(LC 3), 11=575(LC 1), 11=575(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-17=-720/0, 3-17=-720/0  
BOT CHORD 13-14=0/720, 12-13=0/720, 11-12=0/720  
WEBS 4-11=-280/0, 2-14=-873/0, 3-11=-735/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Gable studs spaced at 1-4-0 oc.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
  - 6) 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.
  - 7) 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.
  - 8) CAUTION, Do not erect truss backwards.
  - 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 170 lb down at 1-8-12, and 170 lb down at 3-8-12 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 (plf)  
Vert: 8-14=-10, 1-7=-100  
Concentrated Loads (lb)  
Vert: 2=-90(B) 17=-90(B)

Job B0620-2502	Truss F9	Truss Type FLOOR GIRDER	Qty 1	Ply 1	BeQuest/Douglas Residence/Harnett
Comtech, Inc., Fayetteville, NC 28309, Neil Baggett					Job Reference (optional)

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Tue Jun 9 07:32:55 2020 Page 1  
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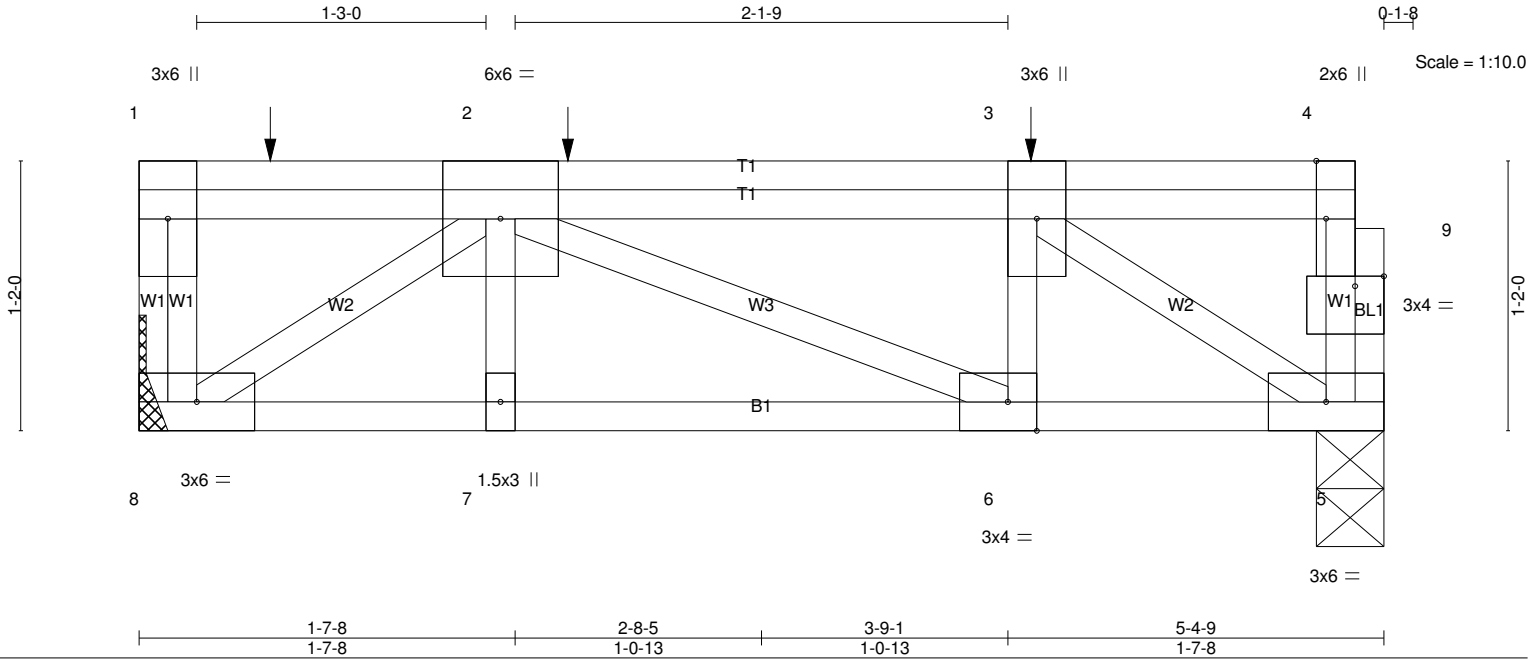


Plate Offsets (X,Y)-- [4:0-3-0,Edge], [6:0-1-8,Edge], [9:0-1-8,0-0-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.21	Vert(LL)	-0.01	6-7	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.25	Vert(CT)	-0.02	6-7	>999		
BCLL 0.0	Lumber DOL 1.00	WB 0.31	Horz(CT)	0.01	5	n/a		
BCDL 5.0	Rep Stress Incr NO	Matrix-P						
	Code IRC2015/TPI2014						Weight: 38 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 5-4-9 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) 8=1083/Mechanical, 5=744/0-3-8 (min. 0-1-8)

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

TOP CHORD 1-8=-324/0, 2-3=-994/0

BOT CHORD 7-8=0/1099, 6-7=0/1099, 5-6=0/994

WEBS 2-8=-1330/0, 3-5=-1198/0

- NOTES-**
- 1) Plates checked for a plus or minus 1 degree rotation about its center.
  - 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 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 5) CAUTION, Do not erect truss backwards.
  - 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 402 lb down at 0-6-13, and 433 lb down at 1-10-4, and 433 lb down at 3-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 5-8=-10, 1-4=-100

Concentrated Loads (lb)

Vert: 2=-433(B) 3=-433(B) 10=-402(F)



Job B0620-2502	Truss KW1	Truss Type GABLE	Qty 1	Ply 1	BeQuest/Douglas Residence/Harnett
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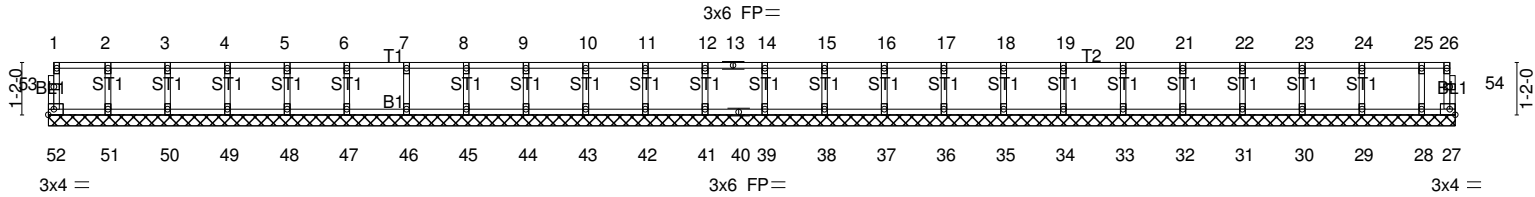
Comtech, Inc., Fayetteville, NC 28309, Neil Baggett

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0-1-8

0-1-8

Scale = 1:51.4



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	14-8-0	16-0-0	17-4-0	18-8-0	20-0-0	21-4-0	22-8-0	24-0-0	25-4-0	26-8-0	28-0-0	29-4-0	30-8-0	31-5-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-9-0

<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 0.06	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	27	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R							
									Weight: 129 lb	FT = 20%F, 11%E

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

**REACTIONS.** All bearings 31-5-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 52, 27, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 oc.
  - 6) 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.
  - 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

**LOAD CASE(S)** Standard

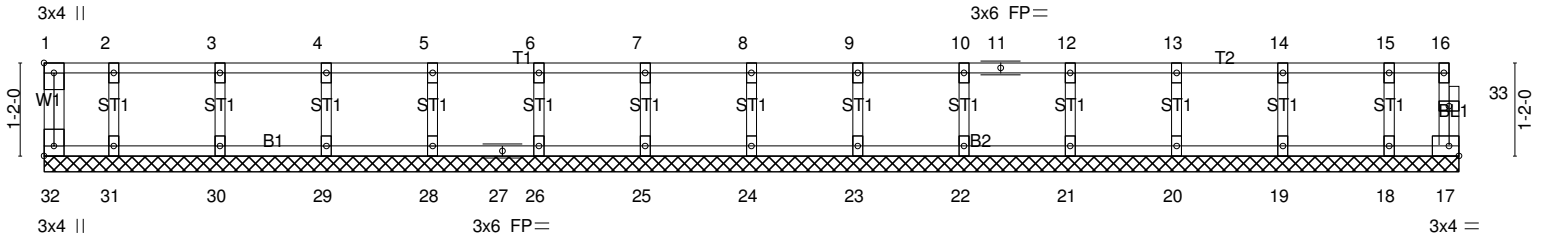
Job B0620-2502	Truss KW2	Truss Type GABLE	Qty 1	Ply 1	BeQuest/Douglas Residence/Harnett
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Comtech, Inc., Fayetteville, NC 28309, Neil Baggett

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Tue Jun 9 07:32:58 2020 Page 1  
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0-1-8

Scale = 1:28.9



0-10-8	2-2-8	3-6-8	4-10-8	6-2-8	7-6-8	8-10-8	10-2-8	11-6-8	12-10-8	14-2-8	15-6-8	16-10-8	17-9-0
0-10-8	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-10-8

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [32: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
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a	999	244/190
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	17	n/a	n/a	
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R						
									Weight: 76 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 17-9-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 24, 25, 26, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 oc.
  - 6) 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.
  - 7) 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.
  - 8) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

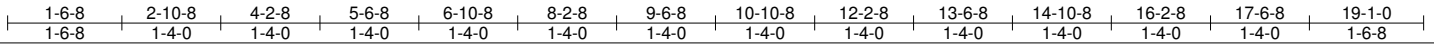
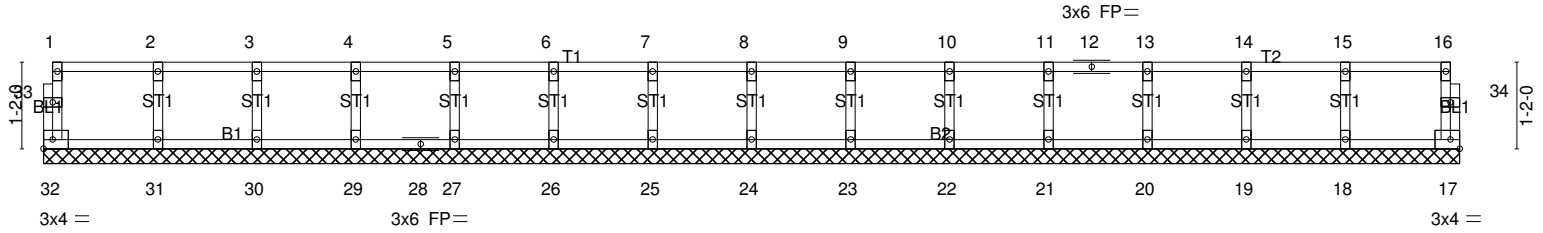
Job B0620-2502	Truss KW3	Truss Type GABLE	Qty 1	Ply 1	BeQuest/Douglas Residence/Harnett
Comtech, Inc., Fayetteville, NC 28309, Neil Baggett					Job Reference (optional)

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Tue Jun 9 07:32:59 2020 Page 1  
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0-1-8

0-1-8

Scale = 1:31.0



<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 0.09	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a	999	244/190
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	17	n/a	n/a	
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R						
									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 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 19-1-0.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 24, 25, 26, 27, 29, 30, 31, 23, 22, 21, 20, 19, 18

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

- NOTES-**
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - 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 2015 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.

**LOAD CASE(S)** Standard

