

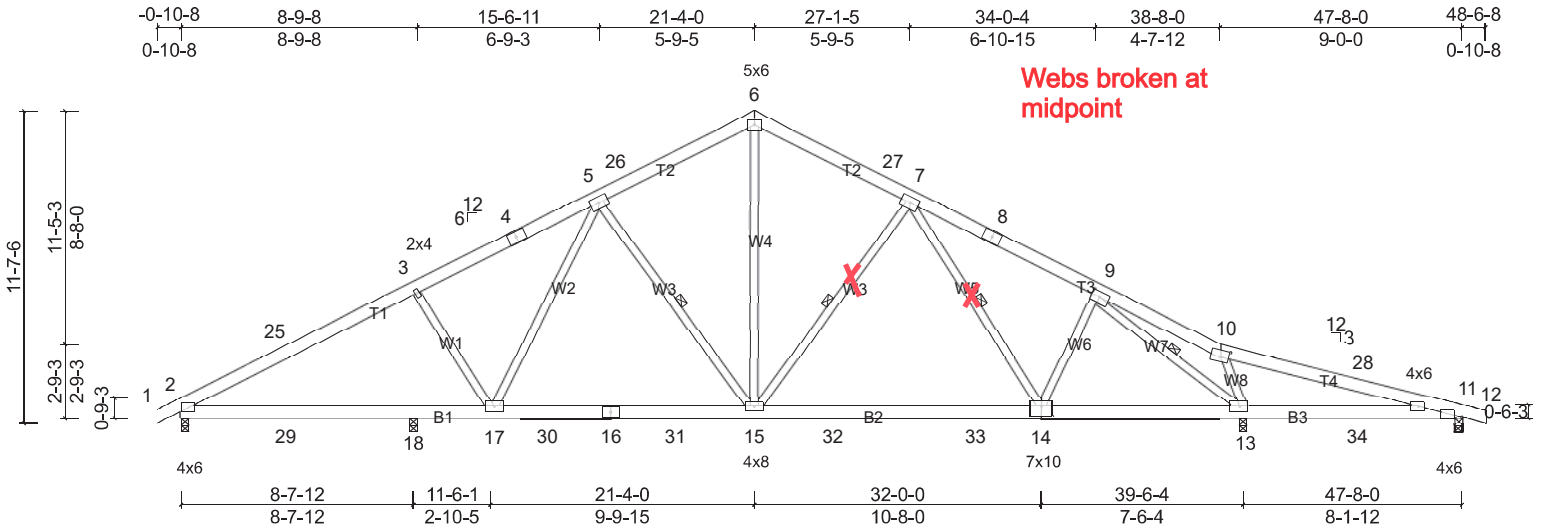
Job 4111091	Truss A04	Truss Type Roof Special	Qty 1	Ply 1	4955 Ray Rd Spring Lake, NC Job Reference (optional)
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Builders FirstSource, Robby Brown

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Fri Sep 20 14:18:00

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Scale = 1:85.7

Plate Offsets (X, Y): [2:Edge,0-0-0], [9:0-3-8,0-2-8], [10:0-3-12,0-3-0], [11:0-3-7,Edge], [14:0-5-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.19	15-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.34	15-17	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.07	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS		Wind(LL)	0.14	15-17	>999	240	Weight: 337 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 5-15, 7-15, 7-14, 9-13

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS All bearings 0-3-8.

(lb) - Max Horiz 2=-252 (LC 13)
 Max Uplift All uplift 100 (lb) or less at joint(s) except 2=-414 (LC 12), 11=-236 (LC 9), 13=-560 (LC 13), 18=-120 (LC 9)
 Max Grav All reactions 250 (lb) or less at joint (s) except 2=1427 (LC 2), 11=305 (LC 26), 13=2127 (LC 2), 18=447 (LC 2)

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-25=-2393/720, 3-25=-2286/748, 3-4=-2174/705, 4-5=-2088/739, 5-26=-1710/670, 6-26=-1642/698, 6-27=-1642/702, 7-27=-1712/674, 7-8=-1902/646, 8-9=-1975/626, 10-28=-136/256
 BOT CHORD 2-29=-690/2085, 18-29=-690/2085, 17-18=-690/2085, 17-30=-417/1781, 16-30=-417/1781, 16-31=-417/1781, 15-31=-417/1781, 15-32=-283/1679, 32-33=-283/1679, 14-33=-283/1679, 13-14=-294/1595
 WEBS 3-17=-396/422, 5-15=-528/410, 6-15=-367/1198, 7-15=-436/358, 9-14=0/350, 9-13=-2075/390, 5-17=-164/337, 10-13=-557/482

NOTES

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-10-11, Interior (1) 3-10-11 to 21-4-0, Exterior(2R) 21-4-0 to 26-1-3, Interior (1) 26-1-3 to 48-6-8 zone; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 5x8 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 414 lb uplift at joint 2, 560 lb uplift at joint 13, 235 lb uplift at joint 11 and 120 lb uplift at joint 18.
- 7) 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.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

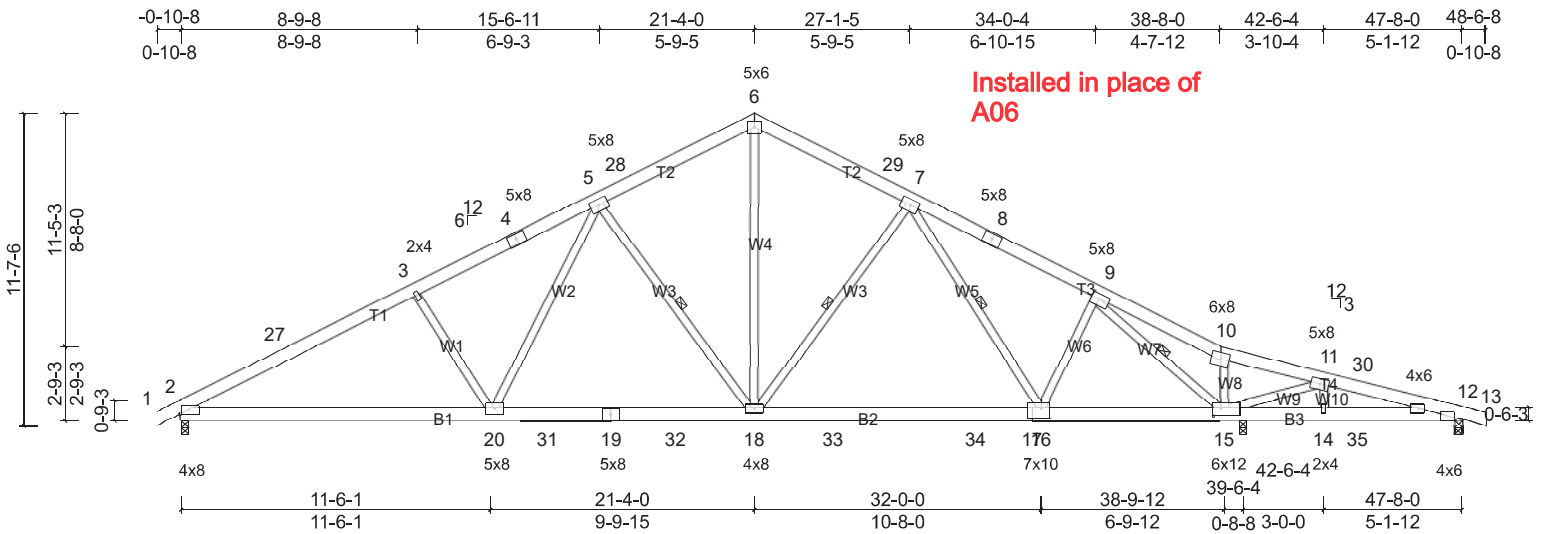
Job 4111091	Truss A05	Truss Type Roof Special	Qty 1	Ply 1	4955 Ray Rd Spring Lake, NC Job Reference (optional)
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Scale = 1:85.7

Plate Offsets (X, Y): [2:Edge,0-0-4], [9:0-3-8,0-2-8], [12:0-3-7,Edge], [15:0-3-4,0-3-4], [17:0-3-12,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.18	16-18	>999	360	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.31	16-18	>999	240	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.08	12	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS		Wind(LL)	0.10	20	>999	240	Weight: 342 lb FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 5-18, 7-18, 7-16, 9-15

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1572/0-3-8, (min. 0-2-1),
 12=262/0-3-8, (min. 0-1-8),
 15=2085/0-3-8, (min. 0-2-12)
 Max Horiz 2=-252 (LC 13)
 Max Uplift 2=-444 (LC 12), 12=-240 (LC 9),
 15=-568 (LC 13)
 Max Grav 2=1723 (LC 2), 12=289 (LC 26),
 15=2309 (LC 2)

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

TOP CHORD 2-27=-2864/882, 3-27=-2771/908,
 3-4=-2641/872, 4-5=-2556/906,
 5-28=-1764/699, 6-28=-1699/727,
 6-29=-1699/725, 7-29=-1767/697,
 7-8=-1732/571, 8-9=-1821/552,
 9-10=-375/605, 10-11=-425/556,
 11-30=-157/436, 12-30=-185/427

BOT CHORD 2-20=-733/2501, 20-31=-435/1976,
 19-31=-435/1976, 19-32=-435/1976,
 18-32=-435/1976, 18-33=-269/1648,
 33-34=-269/1648, 17-34=-269/1648,
 16-17=-269/1648, 15-16=-162/1360,
 14-15=-366/170, 14-35=-366/170,
 12-35=-366/170

WEBS 3-20=-423/375, 5-20=-215/774,
 5-18=-761/440, 6-18=-395/1240,
 7-18=-332/331, 9-15=-2556/929,
 9-16=-25/554, 11-14=-332/155,
 11-15=-604/939

NOTES

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-10-11, Interior (1) 3-10-11 to 21-4-0, Exterior(2R) 21-4-0 to 26-1-3, Interior (1) 26-1-3 to 48-6-8 zone; end vertical left and right exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 5x8 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 444 lb uplift at joint 2, 240 lb uplift at joint 12 and 568 lb uplift at joint 15.
- 7) 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.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

