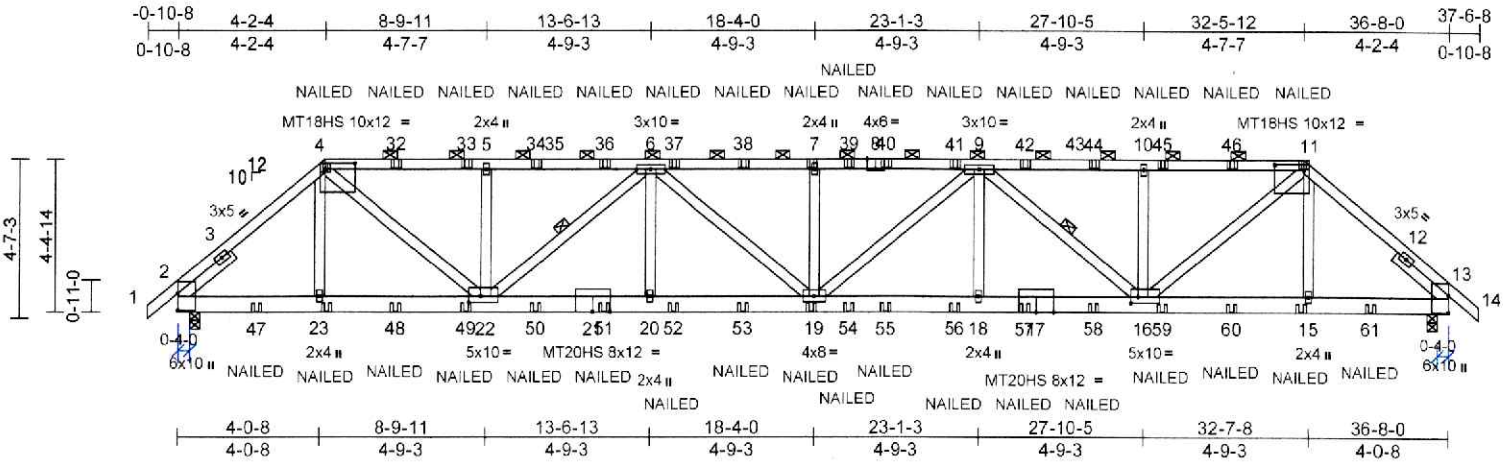
Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	B1GR	Hip Girder	1	1	I64834839 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:55 ID:OCxjv5bmLobJUf_ohZrCWxzaLPE-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

CANTILEVER EACH END 4"

NO REPAIR REQUIRED



Scale = 1:66.3

Plate Offsets (X, Y): [4:0-10-4,0-2-0], [8:0-3-0,Edge], [11:0-10-4,0-2-0], [16:0-2-8,0-2-4], [22:0-4-0,0-2-4]

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	0.84	Vert(LL)	-0.41	19	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.63	19	>701	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.12	13	n/a	n/a	MT18HS	244/190
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 243 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1 *Except* 4-8,8-11:2x4 SP 2400F 2.0E

BOT CHORD 2x6 SP 2400F 2.0E

WEBS 2x4 SP No.3 *Except* 22-4,22-6,19-6,19-9,16-9,16-11:2x4 SP No.2

SLIDER Left 2x4 SP No.3 -- 2-0-0, Right 2x4 SP No.3 -- 2-0-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-4-15 oc purlins, except 2-0-0 oc purlins (2-4-15 max.): 4-11.

BOT CHORD Rigid ceiling directly applied or 7-0-10 oc bracing.

WEBS 1 Row at midpt 6-22, 9-16

REACTIONS (size) 2=0-3-8, 13=0-3-8
Max Horiz 2=100 (LC 11)
Max Uplift 2=-969 (LC 12), 13=-967 (LC 13)
Max Grav 2=3016 (LC 19), 13=3025 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/59, 2-4=-3787/1247, 4-5=-5300/1733, 5-6=-5300/1733, 6-7=-7268/2397, 7-9=-7268/2397, 9-10=-5317/1739, 10-11=-5317/1739, 11-13=-3799/1244, 13-14=0/59

BOT CHORD 2-23=-946/2837, 22-23=-948/2840, 20-22=-2218/6737, 19-20=-2218/6737, 18-19=-2215/6777, 16-18=-2215/6777, 15-16=-877/2850, 13-15=-873/2846

WEBS 4-23=-102/119, 4-22=-1087/3265, 5-22=-755/307, 6-22=-1914/661, 6-20=0/282, 6-19=-287/727, 7-19=-736/338, 9-19=-269/676, 9-18=0/295, 9-16=-1943/675, 10-16=-743/301, 11-16=-1093/3275, 11-15=-104/119

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

April 12,2024

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

14) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 1-4=-60, 4-11=-60, 11-14=-60, 24-28=-20
   Concentrated Loads (lb)
   Vert: 23=-20 (F), 4=-143 (F), 19=-20 (F), 7=-143 (F), 11=-143 (F), 15=-20 (F), 32=-143 (F), 33=-143 (F), 34=-143 (F), 36=-143 (F), 37=-143 (F), 38=-143 (F), 39=-143 (F), 40=-143 (F), 41=-143 (F), 42=-143 (F), 44=-143 (F), 45=-143 (F), 46=-143 (F), 47=-181 (F), 48=-20 (F), 49=-20 (F), 50=-20 (F), 51=-20 (F), 52=-20 (F), 53=-20 (F), 54=-20 (F), 55=-20 (F), 56=-20 (F), 57=-20 (F), 58=-20 (F), 59=-20 (F), 60=-20 (F), 61=-181 (F)

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	B2	Hip	1	1	I64834840 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:55 Page: 1
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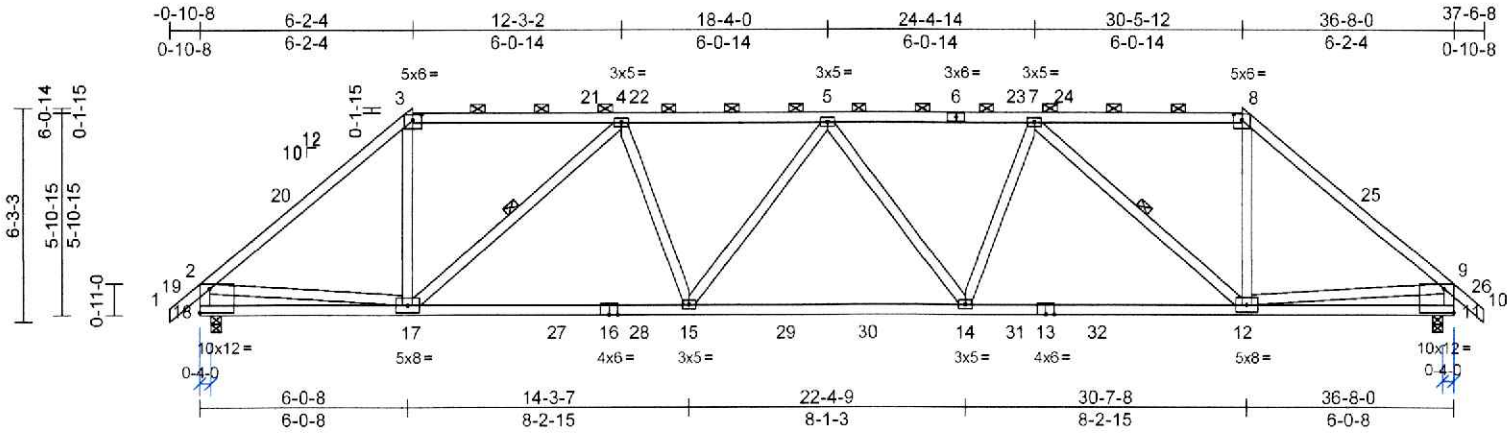
CANTILEVER EACH END 4"

NO REPAIR REQUIRED



Scale = 1:67.3

Plate Offsets (X, Y): [3:0-3-0,0-2-1], [8:0-3-0,0-2-1], [11:Edge,0-8-6], [18:Edge,0-8-6]

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	0.85	Vert(LL)	-0.22	14-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.39	15-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.10	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 214 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 16-13:2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 18-2,11-9:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-12 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-3 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-17, 7-12

REACTIONS (size) 11=0-3-8, 18=0-3-8
Max Horiz 18=160 (LC 13)
Max Uplift 11=-172 (LC 15), 18=-172 (LC 14)
Max Grav 11=1684 (LC 44), 18=1684 (LC 44)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/67, 2-3=-2129/205, 3-4=-1598/224, 4-5=-2765/290, 5-7=-2765/290, 7-8=-1598/223, 8-9=-2129/205, 9-10=0/67, 2-18=-1597/201, 9-11=-1597/201
BOT CHORD 17-18=-250/600, 15-17=-324/2598, 14-15=-342/2860, 12-14=-278/2598, 11-12=-184/491
WEBS 3-17=-50/1028, 4-17=-1361/243, 4-15=-12/546, 5-15=-272/136, 5-14=-272/136, 7-14=-12/546, 7-12=-1361/242, 8-12=-49/1028, 2-17=-191/1401, 9-12=-198/1401

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-9-8, Exterior(2R) 2-9-8 to 11-4-8, Interior (1) 11-4-8 to 25-3-8, Exterior(2R) 25-3-8 to 33-10-8, Exterior(2E) 33-10-8 to 37-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18 and 11. This connection is for uplift only and does not consider lateral forces.
10) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	B3	Hip	1	1	I64834841 Job Reference (optional)

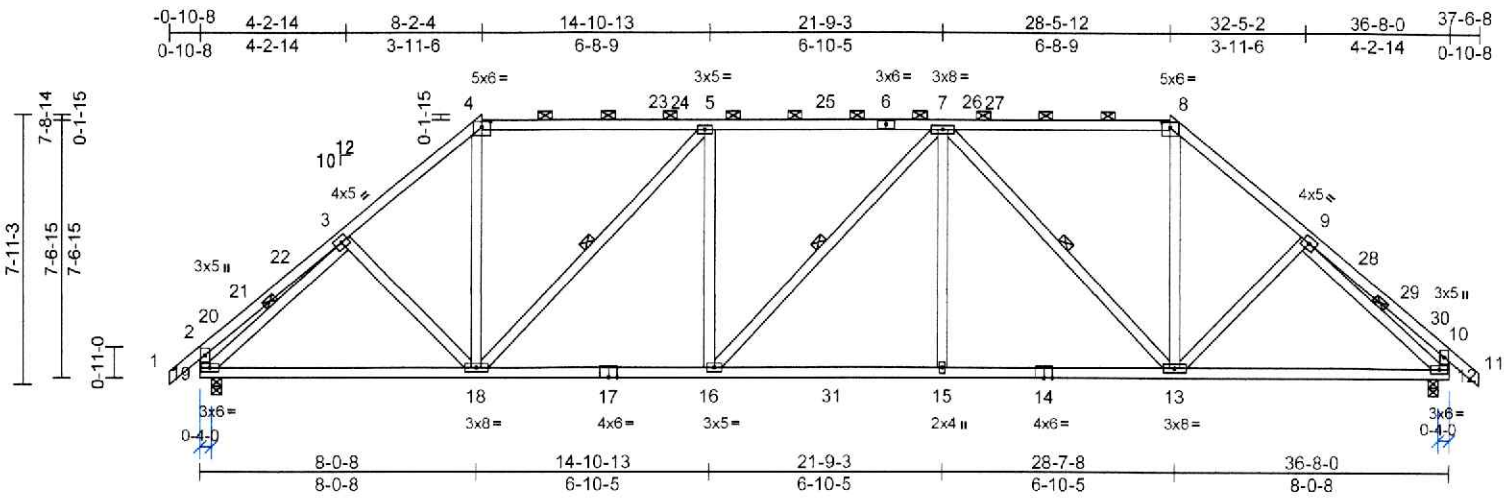
Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:56 Page: 1

ID:ZzTINoiMm3HpcHKZM1WrWKzaLQO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

CANTILEVER EACH END 4"

NO REPAIR REQUIRED



Scale = 1:67.5

Plate Offsets (X, Y): [4:0-3-0,0-2-1], [8:0-3-0,0-2-1]

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	0.90	Vert(LL)	-0.16	15-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.29	15-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.11	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 238 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-6,6-8:2x4 SP No.1

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-10-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-8.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 5-18, 7-16, 7-13, 3-19, 9-12

REACTIONS (size) 12=0-3-8, 19=0-3-8

Max Horiz 19=-200 (LC 12)

Max Uplift 12=-167 (LC 15), 19=-167 (LC 14)

Max Grav 12=1693 (LC 6), 19=1688 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/39, 2-3=-517/117, 3-4=-2001/246, 4-5=-1528/236, 5-7=-2236/248, 7-8=-1533/236, 8-9=-2008/246, 9-10=-518/117, 10-11=0/39, 2-19=-474/130, 10-12=-475/130

BOT CHORD 18-19=-220/1446, 16-18=-235/2236, 15-16=-200/2246, 13-15=-200/2246, 12-13=-82/1451

WEBS 3-18=-177/215, 4-18=-26/936, 5-18=-1035/192, 5-16=0/350, 7-16=-106/107, 7-15=0/367, 7-13=-1043/192, 8-13=-26/939, 9-13=-177/216, 3-19=-1629/120, 9-12=-1635/120

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-9-8, Exterior(2R) 2-9-8 to 13-4-8, Interior (1) 13-4-8 to 23-3-8, Exterior(2R) 23-3-8 to 33-10-8, Exterior(2E) 33-10-8 to 37-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19 and 12. This connection is for uplift only and does not consider lateral forces.
10) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	B4	Roof Special	1	1	I64834842 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:56 Page: 1

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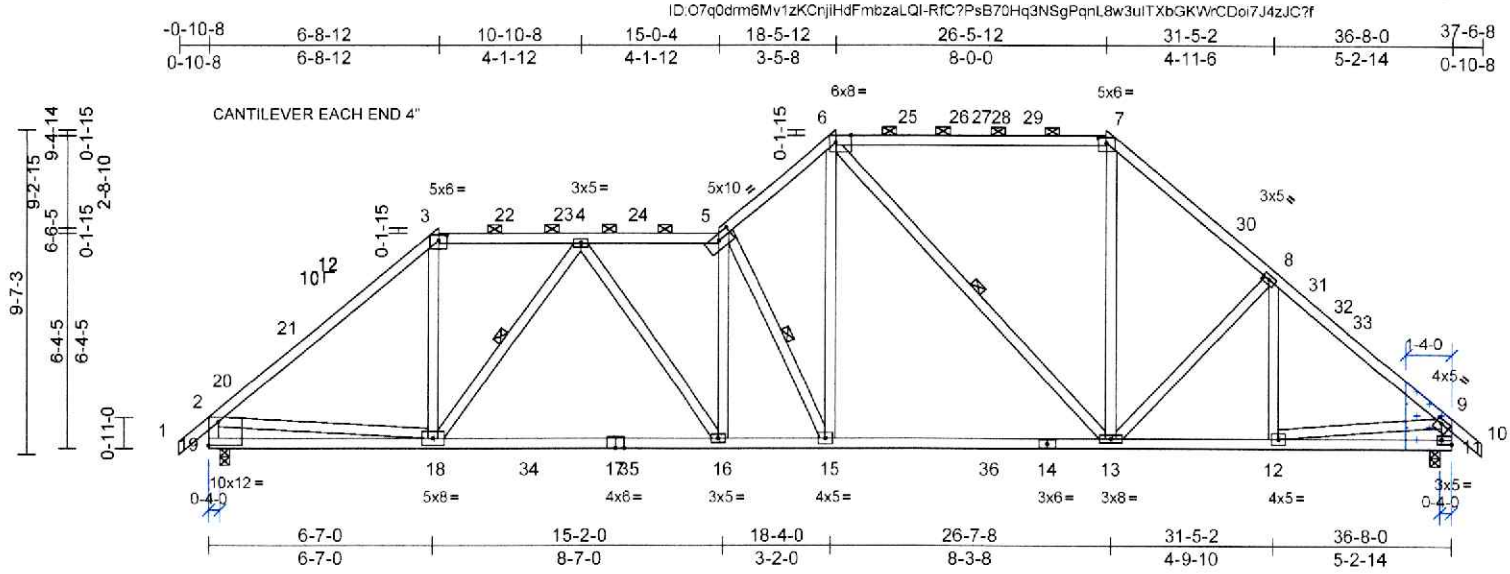

ATTACH 1/2" PLYWOOD OR OSB GUSSET (15/32" RATED SHEATHING 32/16 EXP 1) TO EACH FACE OF TRUSS WITH (0.131" X 2.5" MIN.) NAILS PER THE FOLLOWING NAIL SCHEDULE: 2 X 3'S - 2 ROWS, 2 X 4'S - 3 ROWS, 2 X 6'S AND LARGER - 4 ROWS: SPACED @ 4" O.C. NAILS TO BE DRIVEN FROM BOTH FACES. STAGGER SPACING FROM FRONT TO BACK FACE FOR A NET 2" O.C. SPACING IN EACH COVERED TRUSS MEMBER. USE 2" MEMBER END DISTANCE.

Scale = 1:67.9

Plate Offsets (X, Y): [3:0-3-0,0-2-1], [5:0-5-0,0-2-0], [6:0-5-11,Edge], [7:0-3-0,0-2-1], [9:0-2-0,0-1-8], [11:Edge,0-1-8], [19:Edge,0-8-6]

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	0.97	Vert(LL)	-0.26	16-18	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.45	16-18	>966	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.07	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 250 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 6-7:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 13-6,19-2,11-9:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-5, 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-18, 5-15, 6-13

REACTIONS (size) 11=0-3-8, 19=0-3-8
Max Horiz 19=-239 (LC 12)
Max Uplift 11=-82 (LC 15), 19=-162 (LC 14)
Max Grav 11=1702 (LC 53), 19=1720 (LC 53)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/67, 2-3=-2144/228, 3-4=-1595/240, 4-5=-2610/322, 5-6=-2431/353, 6-7=-1429/280, 7-8=-1886/294, 8-9=-2033/230, 9-10=0/39, 2-19=-1633/220, 9-11=-1603/214
BOT CHORD 18-19=-345/756, 16-18=-162/2242, 15-16=-130/2601, 13-15=-42/1845, 12-13=-43/1498, 11-12=-72/261
WEBS 3-18=-12/1110, 4-18=-1139/147, 4-16=-27/691, 5-16=-373/90, 5-15=-1531/231, 6-15=-135/1600, 6-13=-620/107, 7-13=-33/792, 8-13=-328/182, 8-12=-91/57, 2-18=-107/1347, 9-12=-26/1273

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-9-8, Exterior(2R) 2-9-8 to 10-4-12, Interior (1) 10-4-12 to 15-0-4, Exterior(2R) 15-0-4 to 22-1-12, Interior (1) 22-1-12 to 22-9-12, Exterior(2R) 22-9-12 to 30-1-12, Interior (1) 30-1-12 to 33-10-8, Exterior(2E) 33-10-8 to 37-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19 and 11. This connection is for uplift only and does not consider lateral forces.
10) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	B5	Roof Special	1	1	I64834843 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:56 ID:DHCHuurtxIn627FI3Ykf?szaLQC-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

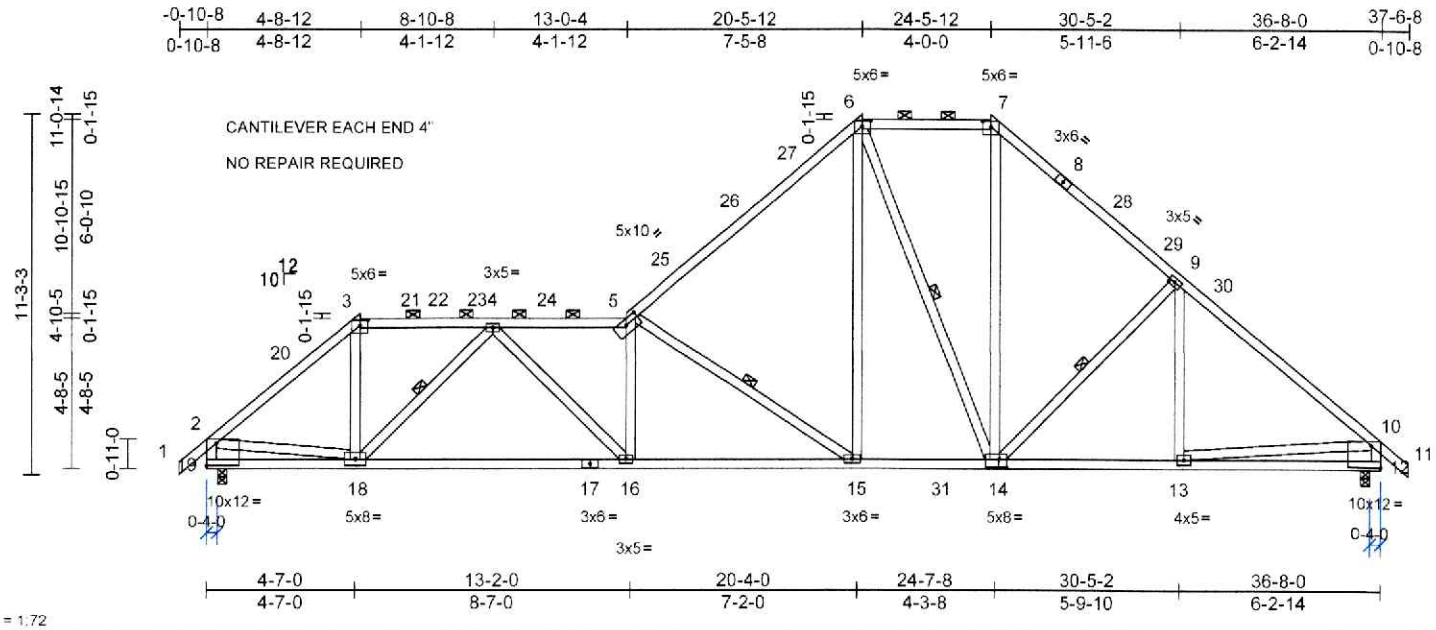

Plate Offsets (X, Y): [3:0-3-0,0-2-1], [5:0-5-4,0-2-0], [6:0-3-0,0-2-1], [7:0-3-0,0-2-1], [12:Edge,0-8-6], [14:0-3-0,0-3-0], [19:Edge,0-8-6]

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	0.95	Vert(LL)	-0.22	16-18	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.43	16-18	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.09	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 250 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 5-6:2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP No.2 *Except* 17-14:2x4 SP No.1
WEBS	2x4 SP No.3 *Except* 15-6,14-6,14-7:2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-9-12 max.): 3-5, 6-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 16-18.
WEBS	1 Row at midpt 4-18, 5-15, 6-14, 9-14

REACTIONS (size) 12=0-3-8, 19=0-3-8
Max Horiz 19=278 (LC 13)
Max Uplift 12=-97 (LC 15), 19=-170 (LC 14)
Max Grav 12=1771 (LC 53), 19=1750 (LC 53)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/68, 2-3=-2060/195, 3-4=-1490/198, 4-5=-3213/335, 5-6=-2113/287, 6-7=-1305/284, 7-9=-1877/298, 9-10=-2156/214, 10-11=0/39, 2-19=-1699/190, 10-12=-1667/201
BOT CHORD	18-19=-281/445, 16-18=-274/2438, 15-16=-279/3195, 13-15=-18/1586, 12-13=-115/334
WEBS	3-18=-20/1037, 4-18=-1377/143, 4-16=-62/1175, 5-16=-642/146, 5-15=-2004/314, 6-15=-97/1260, 6-14=-509/130, 7-14=-111/847, 9-14=-470/210, 9-13=-31/161, 2-18=0/1395, 10-13=0/1315

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-9-8, Exterior(2R) 2-9-8 to 8-4-12, Interior (1) 8-4-12 to 16-9-12, Exterior(2R) 16-9-12 to 28-1-12, Interior (1) 28-1-12 to 33-10-8, Exterior(2E) 33-10-8 to 37-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) The Fabrication Tolerance at joint 5 = 8%
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19 and 12. This connection is for uplift only and does not consider lateral forces.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	B6	Piggyback Base	1	1	I64834844 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:56 ID:wCo3_Jz9bq2hFg0oeev0PzzaLQ2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

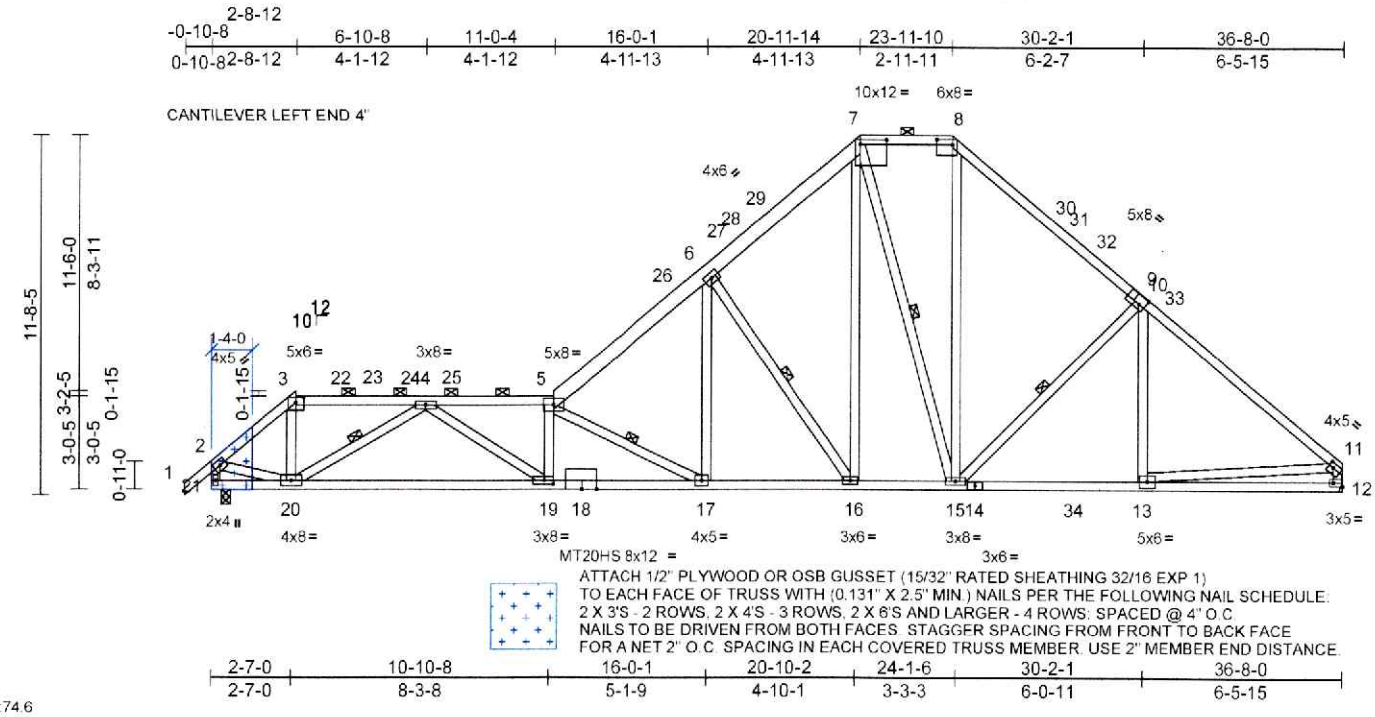

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Plate Offsets (X, Y): [3:0-3-0,0-2-1], [7:0-10-0,0-1-12], [8:0-6-4,0-2-0], [9:0-2-8,0-3-4], [11:0-2-0,0-1-12], [12:Edge,0-1-8], [19:0-3-8,0-1-8]

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	0.94	Vert(LL)	-0.30	19-20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.56	19-20	>786	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.11	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 269 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-7:2x6 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 16-7,15-7,15-8:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-4-2 max.): 3-5, 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-20, 6-16, 7-15, 10-15, 5-17

REACTIONS (size) 12= Mechanical, 21=0-3-8
Max Horiz 21=284 (LC 13)
Max Uplift 12=-80 (LC 15), 21=-171 (LC 14)
Max Grav 12=1761 (LC 53), 21=1736 (LC 53)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/69, 2-3=-1932/159, 3-4=-1398/151, 4-5=-4735/373, 5-6=-3095/301, 6-7=-2036/316, 7-8=-1317/284, 8-10=-1905/293, 10-11=-2221/205, 2-21=-1766/157, 11-12=-1655/159
BOT CHORD 20-21=-280/272, 19-20=-420/3238, 17-19=-439/4777, 16-17=-185/2356, 15-16=-8/1440, 13-15=-51/1641, 12-13=-83/272
WEBS 3-20=-24/1035, 4-20=-2183/229, 4-19=-60/1814, 5-19=-866/123, 6-16=-1563/304, 7-16=-200/1398, 7-15=-457/109, 8-15=-99/835, 10-15=-543/224, 10-13=-32/210, 2-20=-38/1476, 11-13=-10/1412, 6-17=-88/1514, 5-17=-2801/289

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-8-12, Exterior(2R) 2-8-12 to 6-4-12, Interior (1) 6-4-12 to 17-3-14, Exterior (2R) 17-3-14 to 27-7-10, Interior (1) 27-7-10 to 32-10-4, Exterior(2E) 32-10-4 to 36-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 12.
12) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 21. This connection is for uplift only and does not consider lateral forces.
13) 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.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	B7	Piggyback Base	1	1	I64834845 Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332. Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:57 Page: 1

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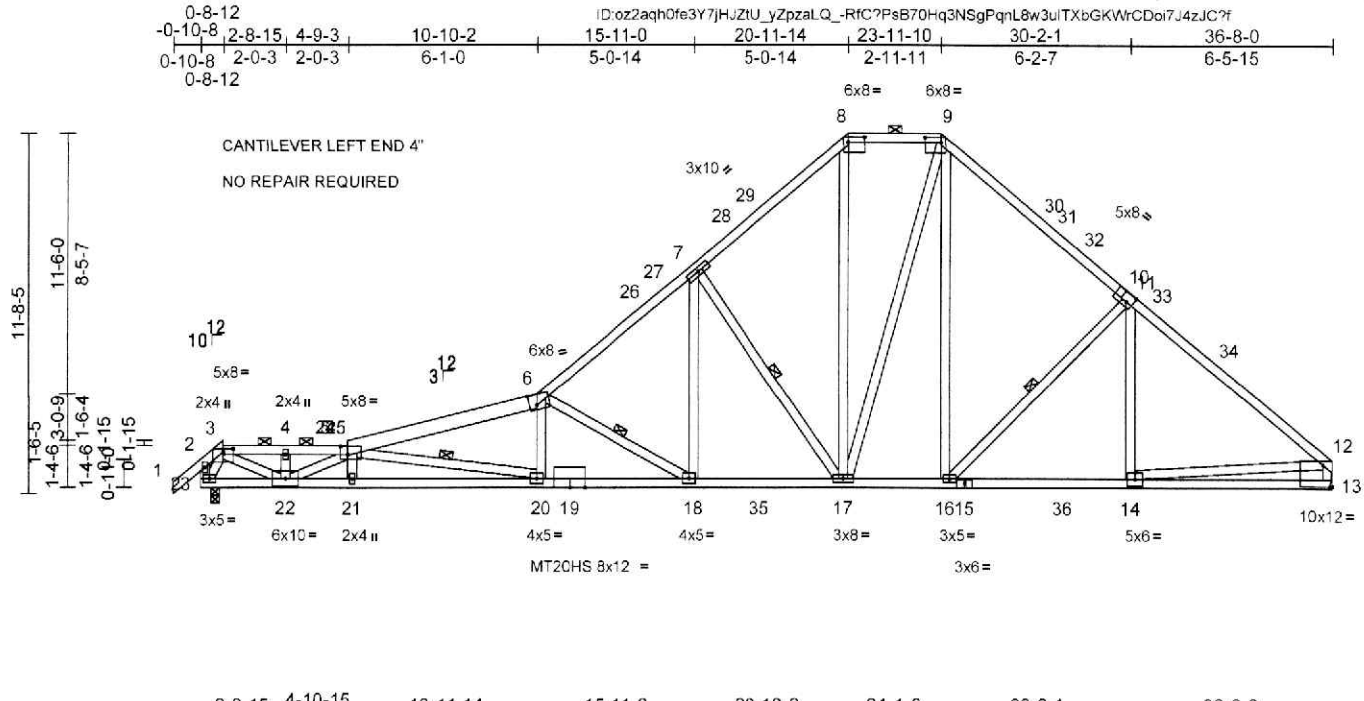
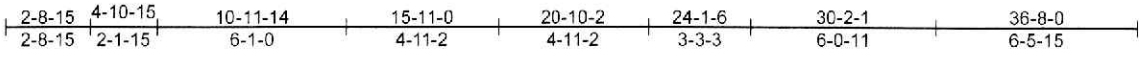




Scale = 1:74.6

Plate Offsets (X, Y): [3:0-4-0,0-1-4], [5:0-2-12,0-3-4], [6:0-2-12,0-4-4], [8:0-6-4,0-2-0], [9:0-6-4,0-2-0], [10:0-2-8,0-3-4], [13:Edge,0-8-6]

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	0.97	Vert(LL)	-0.41	20-21	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.72	20-21	>609	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.13	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 261 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 5-6:2x6 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E *Except* 19-15:2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 17-8,17-9,16-9,22-3,22-5:2x4 SP No.2, 23-2:2x4 SP No.1

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-8-14 max.): 3-5, 8-9.
BOT CHORD Rigid ceiling directly applied or 7-10-10 oc bracing.
WEBS 1 Row at midpt 5-20, 6-18, 7-17, 11-16

REACTIONS (size) 13= Mechanical, 23=0-3-8
Max Horiz 23=289 (LC 11)
Max Uplift 13=-80 (LC 15), 23=-171 (LC 14)
Max Grav 13=1787 (LC 57), 23=1776 (LC 57)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/70, 2-3=-293/102, 3-4=-3711/605, 4-5=-3710/604, 5-6=-5227/775, 6-7=-3161/540, 7-8=-2064/499, 8-9=-1458/446, 9-11=-1938/466, 11-12=-2258/381, 2-23=-358/162, 12-13=-1681/322
BOT CHORD 22-23=-232/919, 21-22=-882/6361, 20-21=-872/6375, 18-20=-642/5038, 17-18=-211/2401, 16-17=0/1359, 14-16=-148/1670, 13-14=-107/277
WEBS 5-21=0/161, 5-20=-1400/232, 6-20=0/466, 6-18=-3017/489, 7-18=-170/1608, 7-17=-1563/361, 8-17=-201/1052, 9-17=-118/482, 9-16=-106/544, 11-16=-548/226, 11-14=-30/213, 12-14=-41/1434, 3-22=-502/3234, 4-22=-263/73, 5-22=-3001/393, 3-23=-1508/211

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-4-12, Interior (1) 4-4-12 to 17-3-14, Exterior(2R) 17-3-14 to 27-7-10, Interior (1) 27-7-10 to 32-10-4, Exterior(2E) 32-10-4 to 36-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 13.
12) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 23. This connection is for uplift only and does not consider lateral forces.
13) 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.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	B8	Piggyback Base	4	1	I64834846 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:57 ID:DYjjSi2Yx_wiak28YcXfBRzaLPx-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

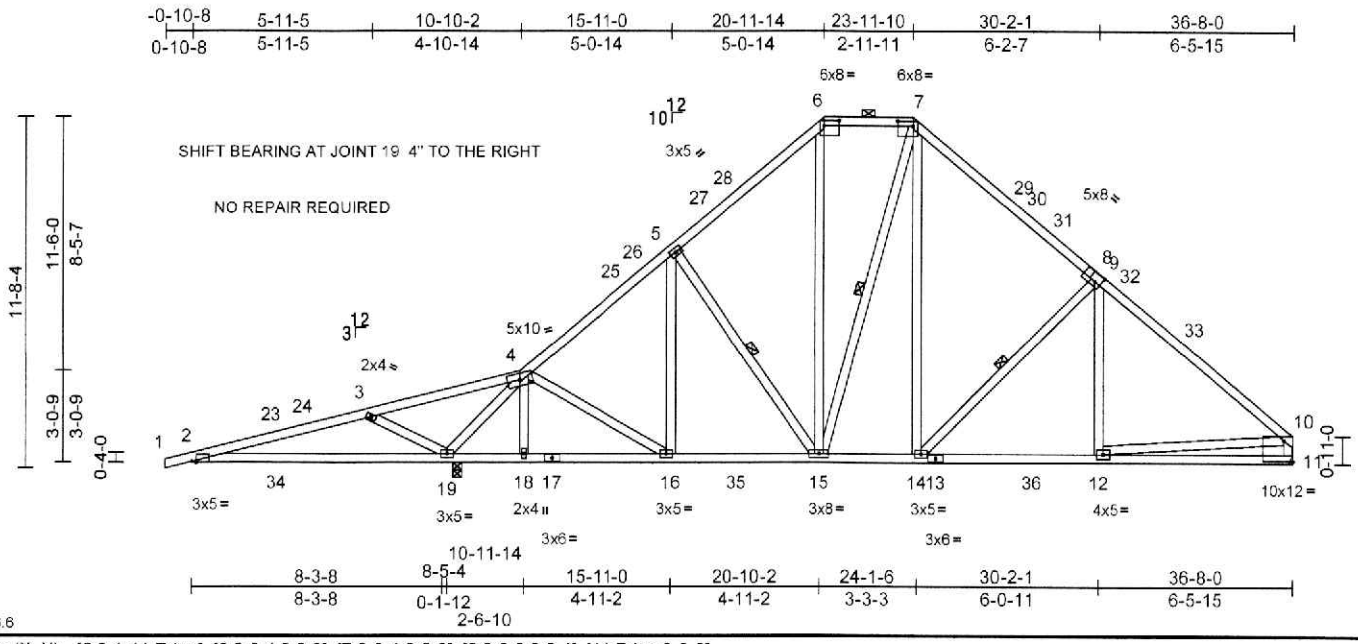


Plate Offsets (X, Y): [2:0-1-11,Edge], [6:0-6-4,0-2-0], [7:0-6-4,0-2-0], [8:0-2-8,0-3-4], [11:Edge,0-8-6]

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	0.76	Vert(LL)	-0.08	12-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.13	12-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.03	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 245 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-4:2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 15-6,15-7,14-7:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 5-1-10 oc bracing.
WEBS 1 Row at midpt 5-15, 7-15, 9-14

REACTIONS (size) 11= Mechanical, 19=0-3-8
Max Horiz 19=283 (LC 13)
Max Uplift 11=-78 (LC 15), 19=-223 (LC 10)
Max Grav 11=1312 (LC 53), 19=2127 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-1190/1149, 3-4=-1447/1856, 4-5=-1375/134, 5-6=-1190/207, 6-7=-812/196, 7-9=-1252/204, 9-10=-1602/136, 10-11=-1211/145
BOT CHORD 2-19=-1050/1176, 18-19=-605/1042, 16-18=-605/1052, 15-16=-65/1164, 14-15=0/890, 12-14=0/1189, 11-12=-94/244
WEBS 3-19=-849/369, 4-19=-2098/708, 4-18=0/179, 4-16=-835/945, 5-16=-327/448, 5-15=-448/159, 6-15=-105/503, 7-15=-284/174, 7-14=-117/579, 9-14=-590/243, 9-12=0/252, 10-12=0/1011

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-9-8, Interior (1) 2-9-8 to 17-3-14, Exterior(2R) 17-3-14 to 27-7-10, Interior (1) 27-7-10 to 32-10-4, Exterior(2E) 32-10-4 to 36-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 11.
11) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19. This connection is for uplift only and does not consider lateral forces.
12) 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.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 12,2024

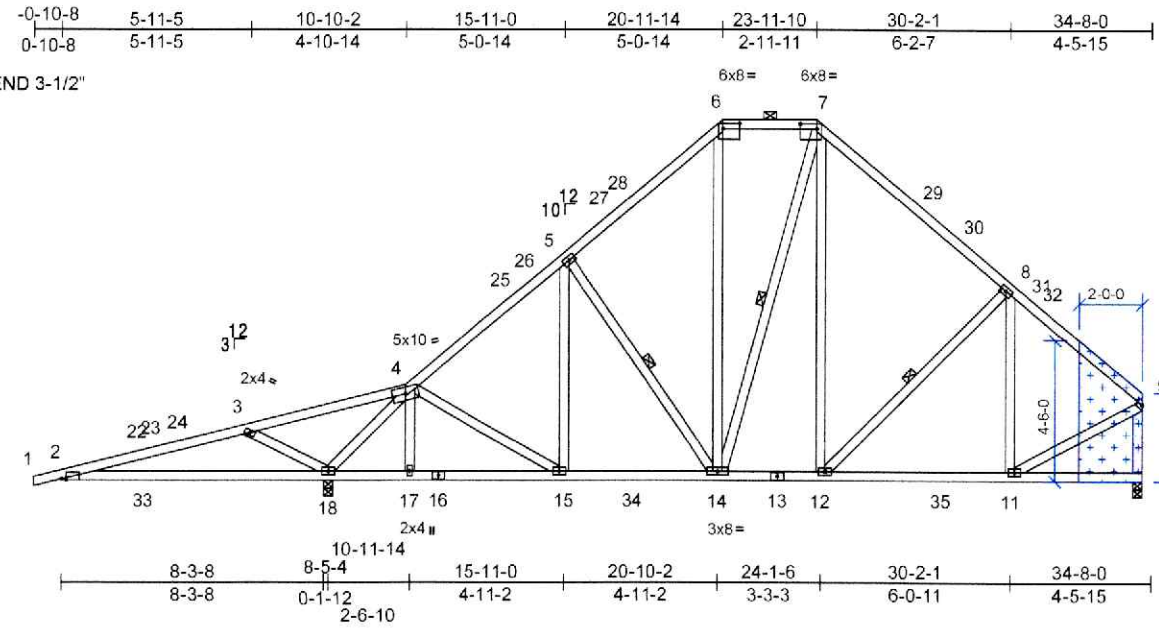
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	B9	Piggyback Base	4	1	I65002238 Job Reference (optional)

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

Run: 8.73 S Apr 3 2024 Print: 8.730 S Apr 3 2024 MiTek Industries, Inc. Thu Apr 18 09:37:43 ID:Lb3UJnc1tQr1jz8Ap_tgbMzaLPC-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



INSTALL 2 X 4 SPF/DF/SP NO.2 CUT TO FIT TIGHT.

ATTACH 1/2" PLYWOOD OR OSB GUSSET (15/32" RATED SHEATHING 32/16 EXP 1) TO EACH FACE OF TRUSS WITH (0.131" X 2.5" MIN.) NAILS PER THE FOLLOWING NAIL SCHEDULE: 2 X 3'S - 2 ROWS, 2 X 4'S - 3 ROWS, 2 X 6'S AND LARGER - 4 ROWS. SPACED @ 4" O.C. NAILS TO BE DRIVEN FROM BOTH FACES. STAGGER SPACING FROM FRONT TO BACK FACE FOR A NET 2" O.C. SPACING IN EACH COVERED TRUSS MEMBER. USE 2" MEMBER END DISTANCE.

Scale = 1:73.2

Plate Offsets (X, Y): [2:0-1-11,Edge], [6:0-6-4,0-2-0], [7:0-6-4,0-2-0]

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	0.80	Vert(LL)	-0.06	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.11	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.02	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 238 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-4:2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 14-6,14-7,12-7:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-4-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 5-2-0 oc bracing.
WEBS 1 Row at midpt 5-14, 7-14, 8-12

REACTIONS (size) 10=0-3-8, 18=0-3-8
Max Horiz 18=304 (LC 13)
Max Uplift 10=-63 (LC 15), 18=-236 (LC 10)
Max Grav 10=1232 (LC 51), 18=2058 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-1181/1138, 3-4=-1436/1824, 4-5=-1245/121, 5-6=-1053/193, 6-7=-709/190, 7-8=-1080/190, 8-9=-1086/126, 9-10=-1177/109
BOT CHORD 2-18=-1041/1167, 17-18=-621/1026, 15-17=-621/1036, 14-15=-98/1062, 12-14=-22/760, 11-12=-31/842, 10-11=-27/26
WEBS 3-18=-830/365, 4-18=-2007/697, 4-17=0/178, 4-15=-826/921, 5-15=-314/445, 5-14=-456/159, 6-14=-100/420, 7-14=-210/188, 7-12=-97/374, 8-12=-283/220, 8-11=-310/78, 9-11=-13/941

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-7-2, Interior (1) 2-7-2 to 17-6-5, Exterior(2R) 17-6-5 to 27-5-3, Interior (1) 27-5-3 to 31-0-10, Exterior(2E) 31-0-10 to 34-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 3x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 236 lb uplift at joint 18 and 63 lb uplift at joint 10.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 19,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	B10	Piggyback Base	7	1	Job Reference (optional) I64834848

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:57
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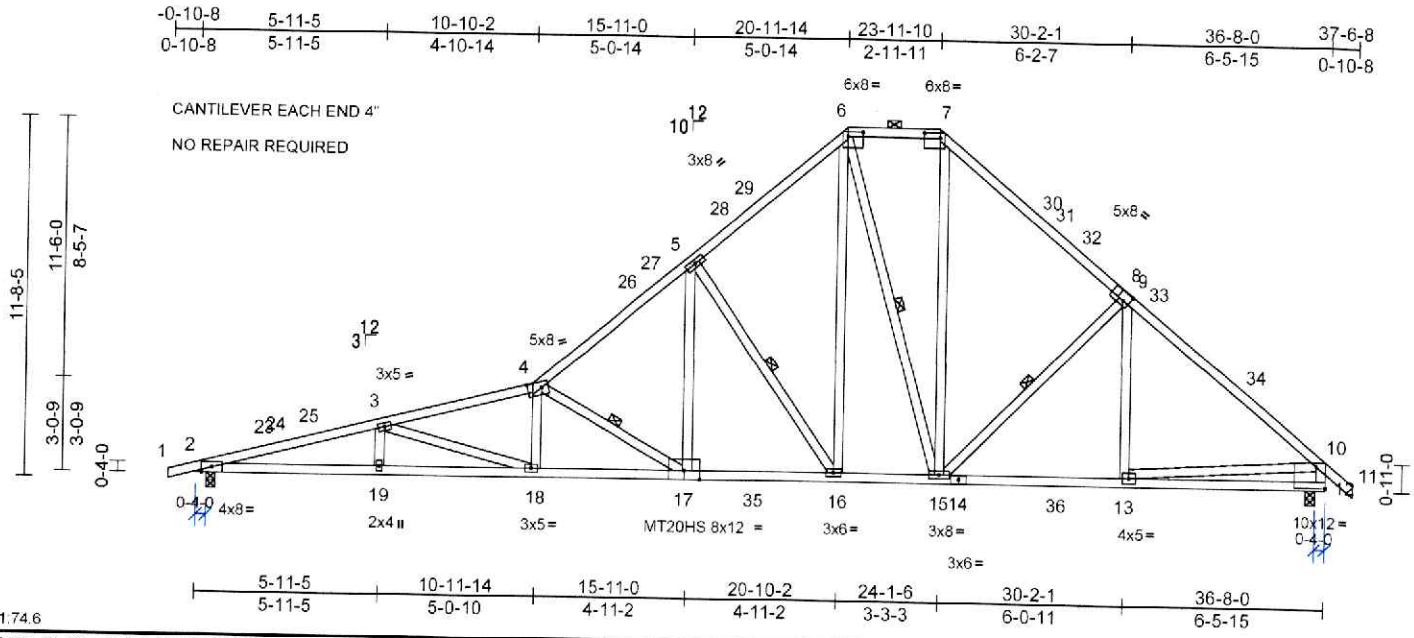

Scale = 1:74.6

Plate Offsets (X, Y): [4:0-5-8,0-2-4], [6:0-6-0,0-1-12], [7:0-6-4,0-2-0], [8:0-2-8,0-3-4], [12:Edge,0-8-6]

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	0.98	Vert(LL)	-0.38	18-19	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.69	18-19	>634	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.13	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 246 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 2-17:2x4 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 16-6,15-6,15-7:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-10-5 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-17, 5-16, 6-15, 9-15

REACTIONS (size) 2=0-3-8, 12=0-3-8
Max Horiz 2=290 (LC 13)
Max Uplift 2=-169 (LC 14), 12=-100 (LC 15)
Max Grav 2=1636 (LC 5), 12=1800 (LC 49)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-5424/837, 3-4=-4699/748, 4-5=-3021/530, 5-6=-1988/492, 6-7=-1301/427, 7-9=-1880/455, 9-10=-2204/375, 10-11=0/39, 10-12=-1695/372
BOT CHORD 2-19=-688/5240, 18-19=-688/5240, 16-18=-555/4564, 15-16=0/1429, 13-15=-75/1622, 12-13=-126/346
WEBS 3-19=0/201, 3-18=-1144/198, 4-18=0/488, 4-17=-2667/463, 5-17=-162/1505, 5-16=-1469/359, 6-16=-246/1326, 6-15=-471/117, 7-15=-141/831, 9-15=-538/221, 9-13=-19/212, 10-13=0/1353

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-9-8, Interior (1) 2-9-8 to 17-3-14, Exterior(2R) 17-3-14 to 27-7-10, Interior (1) 27-7-10 to 33-10-8, Exterior(2E) 33-10-8 to 37-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	C1	Attic	3	1	I64834849 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:58 Page: 1
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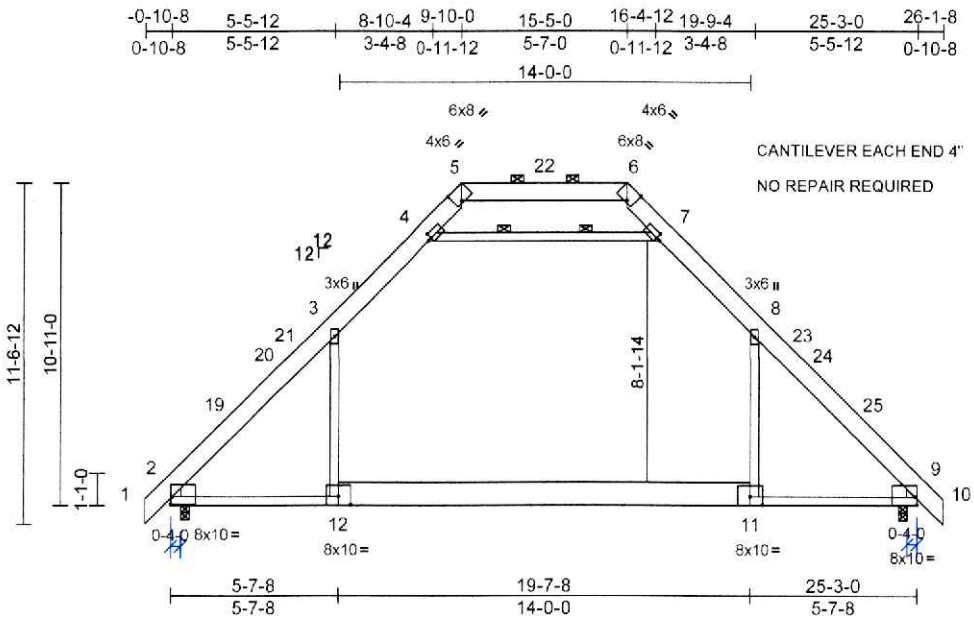

Scale = 1:77.8

Plate Offsets (X, Y): [2:Edge,0-3-4], [4:0-1-9,0-2-4], [5:0-2-14,Edge], [6:0-2-14,Edge], [7:0-1-9,0-2-4], [9:Edge,0-3-4]

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	0.36	Vert(LL)	-0.39	11-12	>775	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.57	11-12	>536	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.03	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH		Attic	-0.31	11-12	>546	360		
BCDL	10.0										Weight: 215 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SP No.1 *Except* 12-11:2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 4-7:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2 Rows at 1/3 pts 4-7

REACTIONS (size) 2=0-3-8, 9=0-3-8
Max Horiz 2=254 (LC 13)
Max Grav 2=1671 (LC 46), 9=1671 (LC 46)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-3=-1945/0, 3-4=-1184/138, 4-5=-239/563, 5-6=-2/804, 6-7=-239/565, 7-8=-1184/138, 8-9=-1944/0, 9-10=0/37
BOT CHORD 2-9=-86/1218
WEBS 3-12=0/949, 8-11=0/949, 4-7=-1935/82

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-4-15, Exterior(2R) 5-4-15 to 19-10-1, Interior (1) 19-10-1 to 23-1-8, Exterior(2E) 23-1-8 to 26-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-7; Wall dead load (5.0psf) on member(s).3-12, 8-11
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-12
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	C1E	Attic Structural Gable	1	1	I64834850 Job Reference (optional)

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

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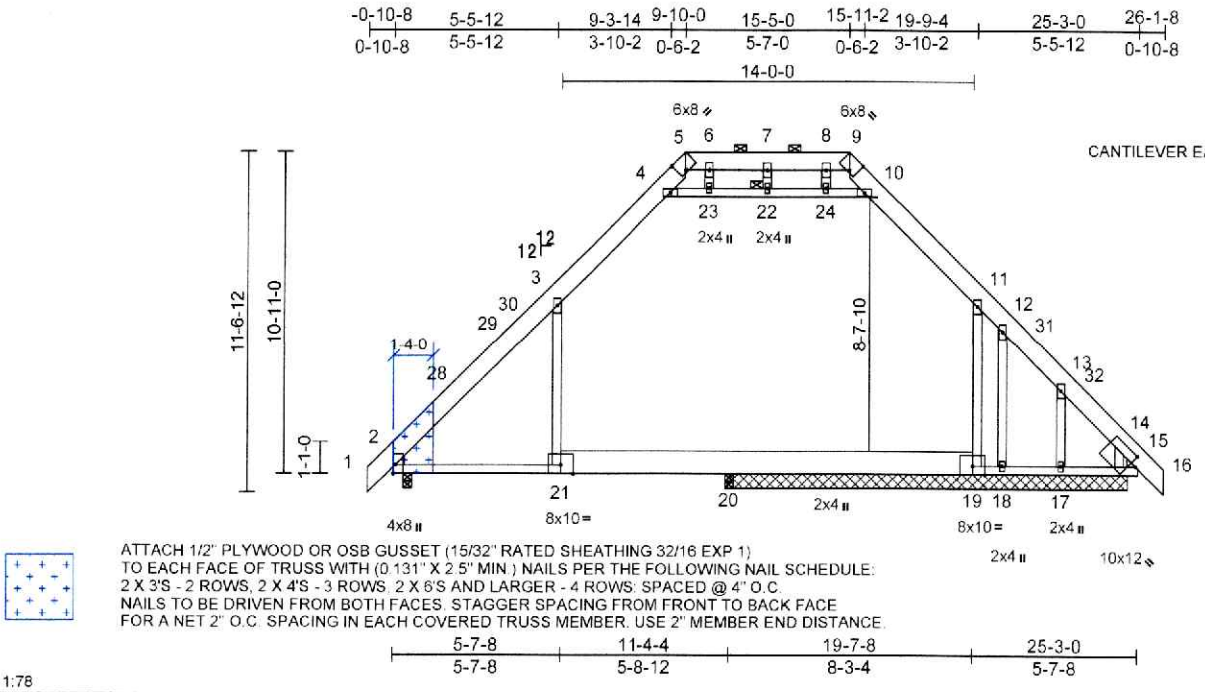

Scale = 1:78

Plate Offsets (X, Y): [2:Edge,0-0-12], [5:0-2-14,Edge], [9:0-2-14,Edge], [15:0-2-8,0-3-9]

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	0.17	Vert(LL)	0.10	21-27	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.15	21-27	>886	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH		Attic	-0.08	20-21	>999	360		
BCDL	10.0										Weight: 228 lb	FT = 20%

LUMBER

TOP CHORD	2x8 SP 2400F 2.0E
BOT CHORD	2x4 SP No.2 *Except* 21-19:2x10 SP 2400F 2.0E
WEBS	2x4 SP No.3 *Except* 4-10:2x4 SP No.2
OTHERS	2x4 SP No.3
WEDGE	Left: 2x4 SP No.3 Right: 2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 22

REACTIONS (size) 2=0-3-8, 15=14-0-8, 17=14-0-8, 18=14-0-8, 19=14-0-8, 20=0-3-8
Max Horiz 2=255 (LC 13)
Max Uplift 2=-42 (LC 14), 15=-76 (LC 11), 17=-127 (LC 15), 18=-121 (LC 14), 19=-401 (LC 42)
Max Grav 2=1107 (LC 40), 15=904 (LC 40), 17=219 (LC 50), 18=277 (LC 40), 19=451 (LC 51), 20=1121 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/37, 2-3=-1130/35, 3-4=-877/182, 4-5=-437/231, 5-6=-269/418, 6-7=-269/418, 7-8=-269/418, 8-9=-269/418, 9-10=-451/176, 10-11=-903/184, 11-12=-1123/246, 12-13=-1080/189, 13-14=-988/145, 14-15=-1007/130, 15-16=0/34
BOT CHORD	2-20=-192/741, 18-20=-99/735, 17-18=-90/708, 15-17=-94/727
WEBS	3-21=-69/199, 11-19=-211/428, 4-23=-1052/357, 22-23=-1050/356, 22-24=-1050/356, 10-24=-1052/357, 7-22=-17/19, 6-23=-6/69, 8-24=-16/92, 12-18=-204/70, 13-17=-237/131

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-4-15, Exterior(2R) 5-4-15 to 19-10-1, Interior (1) 19-10-1 to 23-1-8, Exterior(2E) 23-1-8 to 26-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 3x6 MT20 unless otherwise indicated.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) Ceiling dead load (5.0 psf) on member(s). 3-4, 10-11, 4-23, 22-23, 22-24, 10-24; Wall dead load (5.0psf) on member(s).3-21, 11-19
13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 20-21, 19-20
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 15.
15) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
16) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19, 18, and 17. This connection is for uplift only and does not consider lateral forces.

April 12,2024

Continued on page 2

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

17) 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.
18) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
19) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	C2G2	Attic Girder	2	4	Job Reference (optional) I64834851

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

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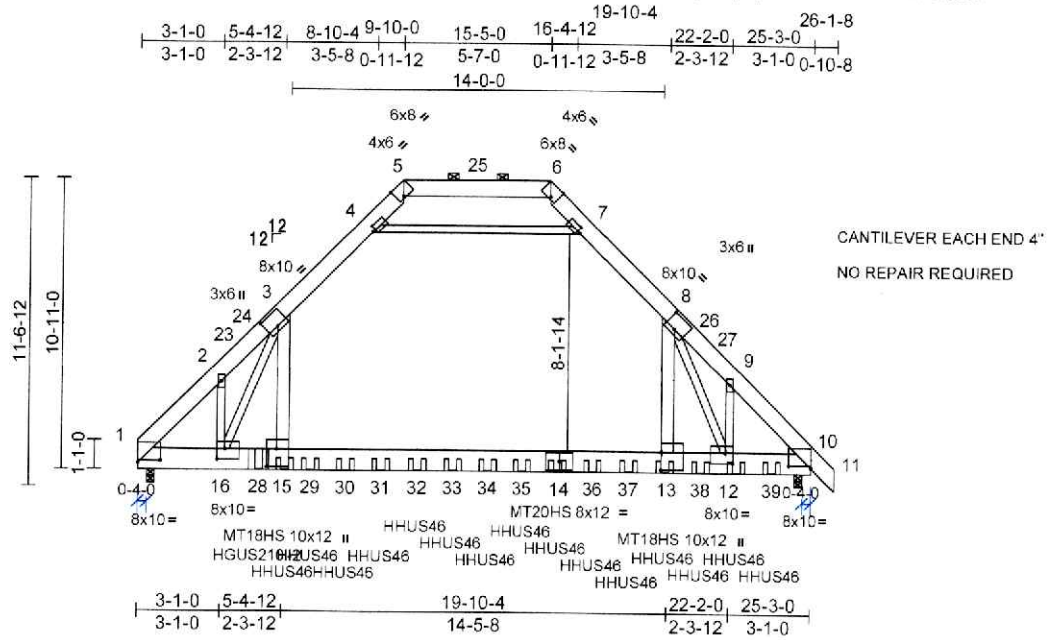


Scale = 1:86.3

Plate Offsets (X, Y): [1:0-10-0,0-1-0], [3:0-5-0,0-6-0], [4:0-1-9,0-2-4], [5:0-2-14,Edge], [6:0-2-14,Edge], [7:0-1-9,0-2-4], [8:0-5-0,0-6-0], [10:0-10-0,0-1-0], [12:0-3-8,0-4-12], [13:0-8-0,Edge], [15:0-8-0,0-4-8], [16:0-3-8,0-4-12]

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	0.84	Vert(LL)	-0.36	13-15	>847	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.56	13-15	>542	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.01	10	n/a	n/a	MT18HS	244/190
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH		Attic	-0.22	13-15	>778	360		
BCDL	10.0										Weight: 1071 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 3-15,8-13:2x6 SP No.2, 4-7:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 10=0-3-8
Max Horiz 1=-247 (LC 10)
Max Grav 1=9965 (LC 47), 10=8396 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-11831/0, 2-3=-15233/0, 3-4=-4756/0, 4-5=0/3967, 5-6=0/5676, 6-7=0/3686, 7-8=-5018/0, 8-9=-12546/0, 9-10=-9436/0, 10-11=0/37
BOT CHORD 1-16=-46/8419, 15-16=0/6515, 13-15=0/6515, 12-13=0/6515, 10-12=0/6697
WEBS 2-16=-5088/0, 3-16=-1234/5819, 3-15=0/9731, 8-13=0/9778, 8-12=-1378/1814, 9-12=-4537/0, 4-7=-12104/0

NOTES
1) 4-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected with Simpson SDS 1/4 x 6 screws as follows: 2x10 - 3 rows staggered at 0-4-0 oc.
Web chords connected with 10d (0.131"x3") nails as follows: 2x4 - 2 rows staggered at 0-6-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.
10) The Fabrication Tolerance at joint 15 = 4%, joint 13 = 4%
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-7; Wall dead load (5.0psf) on member(s).3-15, 8-13
14) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 13-15
15) 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.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
17) Use Simpson Strong-Tie HGUS210-2 (46-10d Girder, 16-10d Truss) or equivalent at 4-6-0 from the left end to connect truss(es) to front face of bottom chord.
18) Use Simpson Strong-Tie HHUS46 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 1-4-0 oc max. starting at 5-5-12 from the left end to 23-9-4 to connect truss(es) to front face of bottom chord.
19) Fill all nail holes where hanger is in contact with lumber.
20) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)

April 12,2024

Continued on page 2

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

Vert: 1-3=-60, 3-4=-70, 4-5=-60, 5-6=-60, 6-7=-60, 7-8=-70, 8-11=-60, 15-17=-20, 13-15=-30, 13-20=-20, 4-7=-10
Drag: 3-15=-10, 8-13=-10

Concentrated Loads (lb)
Vert: 14=-143 (F), 15=-143 (F), 13=-551 (F), 12=-551 (F), 28=-6706 (F), 29=-143 (F), 30=-143 (F), 31=-143 (F), 32=-143 (F), 33=-143 (F), 34=-143 (F), 35=-143 (F), 36=-143 (F), 37=-143 (F), 38=-551 (F), 39=-551 (F)

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	C2G3	Attic Girder	1	2	I64834852 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:59 ID:DqF80WFCxC3I7MrP2hLeN1zaLPg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

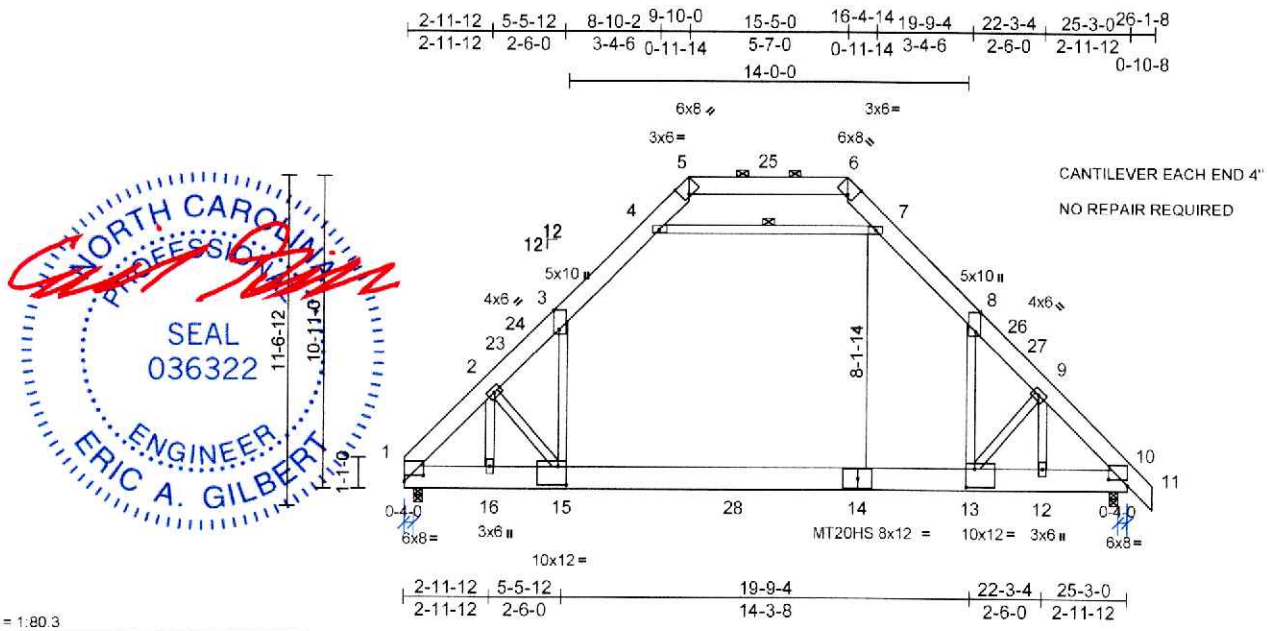


Plate Offsets (X, Y): [1:0-8-0,0-2-8], [3:0-8-2,Edge], [5:0-2-14,Edge], [6:0-2-14,Edge], [8:0-8-2,Edge], [10:0-8-0,0-2-8], [13:0-3-8,0-7-12], [15:0-3-8,0-7-12]

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	0.74	Vert(LL)	-0.46	13-15	>663	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.68	13-15	>449	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.01	1	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH		Attic	-0.30	13-15	>564	360		
BCDL	10.0										Weight: 508 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 3-15,8-13,4-7:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-7

REACTIONS (size) 1=0-3-8, 10=0-3-8
Max Horiz 1=-247 (LC 10)
Max Uplift 1=-98 (LC 12), 10=-130 (LC 13)
Max Grav 1=3418 (LC 46), 10=3626 (LC 48)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4016/125, 2-3=-6213/291, 3-4=-2664/215, 4-5=-20/1745, 5-6=-43/2618, 6-7=-23/1777, 7-8=-2635/212, 8-9=-6305/300, 9-10=-4227/143, 10-11=0/37
BOT CHORD 1-16=-188/3062, 15-16=-176/3062, 13-15=-80/3352, 12-13=-32/3040, 10-12=-32/3040
WEBS 2-16=-3361/279, 2-15=-251/795, 3-15=-217/4901, 8-13=-232/5076, 9-13=-233/558, 9-12=-3154/267, 4-7=-5883/321

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 4 rows staggered at 0-7-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-7; Wall dead load (5.0psf) on member(s).3-15, 8-13
13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 13-15
14) LGT2 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 10. This connection is for uplift only and does not consider lateral forces.
15) 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.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
17) LGT2 Hurricane ties must have two studs in line below the truss.
18) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2317 lb down and 210 lb up at 11-5-8, and 1462 lb down and 132 lb up at 15-9-8 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.
19) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-70, 4-5=-60, 5-6=-60, 6-7=-60, 7-8=-70, 8-11=-60, 15-17=-20, 13-15=-30, 13-20=-20, 4-7=-10

April 12,2024

Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	C2G3	Attic Girder	1	2	I64834852 Job Reference (optional)

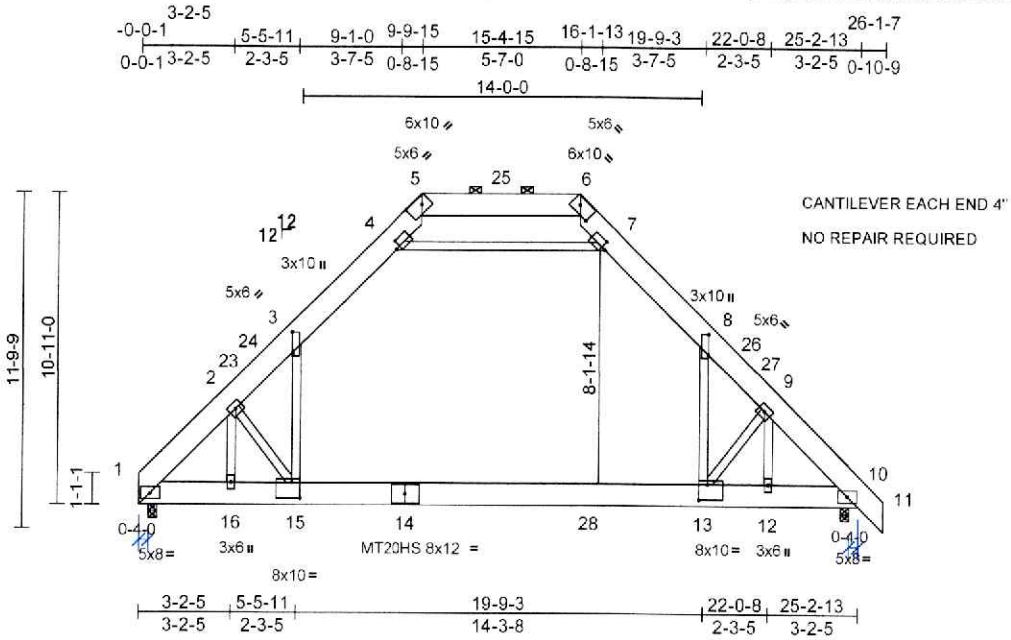
Drag: 3-15=-10, 8-13=-10
Concentrated Loads (lb)
Vert: 14=-836 (F), 28=-1325 (F)

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	C2G4	Attic Girder	1	2	I64834853
					Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:59 ID:9CNuRCHTTpK?Mf?oA6N6SSzaLPe-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:80.6

Plate Offsets (X, Y): [3:0-8-8,0-0-4], [4:0-1-13,0-3-0], [5:0-6-7,0-3-0], [6:0-6-7,0-3-0], [7:0-1-13,0-3-0], [8:0-8-8,0-0-4], [13:0-3-8,0-6-8], [15:0-3-8,0-6-8]

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	0.34	Vert(LL)	-0.20	13-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.31	13-15	>991	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.01	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH		Attic	-0.14	13-15	>999	360		
BCDL	10.0										Weight: 568 lb	FT = 20%

LUMBER
TOP CHORD 2x10 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 4-7:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 10=0-3-8
Max Horiz 1=-248 (LC 10)
Max Uplift 10=-37 (LC 13)
Max Grav 1=2154 (LC 46), 10=2571 (LC 48)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2648/0, 2-3=-3648/37, 3-4=-1830/145, 4-5=-8/917, 5-6=0/1491, 6-7=0/1053, 7-8=-1710/134, 8-9=-4046/73, 9-10=-3090/17, 10-11=0/37
BOT CHORD 1-16=-100/1955, 15-16=-64/1955, 13-15=0/2089, 12-13=0/2113, 10-12=0/2113
WEBS 2-16=-1668/101, 2-15=-235/574, 3-15=0/2479, 8-13=-23/3240, 9-13=-448/266, 9-12=-1443/87, 4-7=-3493/104

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-7-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-7; Wall dead load (5.0psf) on member(s).3-15, 8-13
13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 13-15
14) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10. This connection is for uplift only and does not consider lateral forces.
15) 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.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
17) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1462 lb down and 132 lb up at 15-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
18) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-70, 4-5=-60, 5-6=-60, 6-7=-60, 7-8=-70, 8-11=-60, 15-17=-20, 13-15=-30, 13-20=-20, 4-7=-10
Drag: 3-15=-10, 8-13=-10
Concentrated Loads (lb)

April 12,2024

Continued on page 2

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

Vert: 28=-836 (F)

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	C3	Piggyback Base	7	1	I64834854 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:59 ID:OxQIKHO6LaSkx2BXBV1DKLzaLPV-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

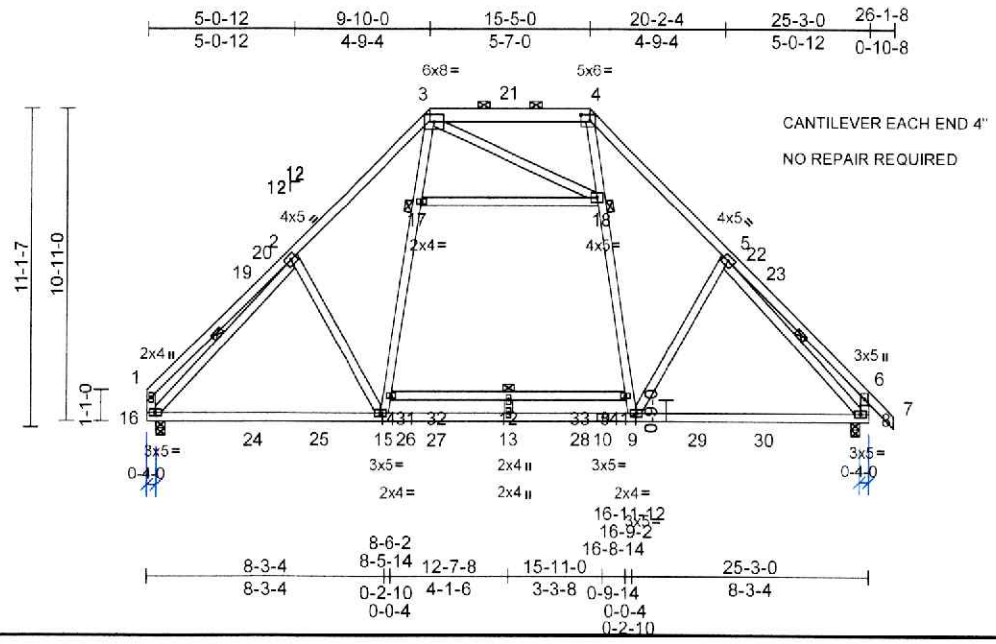


Plate Offsets (X, Y): [4:0-3-12,0-2-8]

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	0.62	Vert(LL)	-0.34	12	>879	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.63	12	>478	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 199 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 3-4:2x6 SP No.2
BOT CHORD 2x4 SP No.1 *Except* 14-11:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 15-3,9-4:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 2-16, 5-8
JOINTS 1 Brace at Jt(s): 17, 18

REACTIONS (size) 8=0-3-8, 16=0-3-8
Max Horiz 16=-273 (LC 12)
Max Grav 8=1623 (LC 45), 16=1571 (LC 45)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-384/167, 2-3=-1704/31, 3-4=-989/114, 4-5=-1698/31, 5-6=-440/212, 6-7=0/43, 1-16=-345/148, 6-8=-449/203
BOT CHORD 15-16=-2/1302, 13-15=0/1024, 9-13=0/1024, 8-9=0/1164, 12-14=-6/10, 11-12=-6/10
WEBS 2-15=-245/286, 5-9=-236/285, 2-16=-1549/0, 5-8=-1510/0, 14-15=-9/772, 14-17=0/922, 3-17=0/915, 4-18=0/858, 11-18=0/912, 9-11=-7/761, 12-13=-127/1, 17-18=-65/68, 3-18=-161/159

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 5-7-1, Exterior(2R) 5-7-1 to 19-7-15, Interior (1) 19-7-15 to 23-1-8, Exterior(2E) 23-1-8 to 26-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) 200.0lb AC unit load placed on the bottom chord, 12-7-8 from left end, supported at two points, 5-0-0 apart.
7) Provide adequate drainage to prevent water ponding.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	C4	Hip	1	1	I64834855 Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332. Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:35:59 Page: 1

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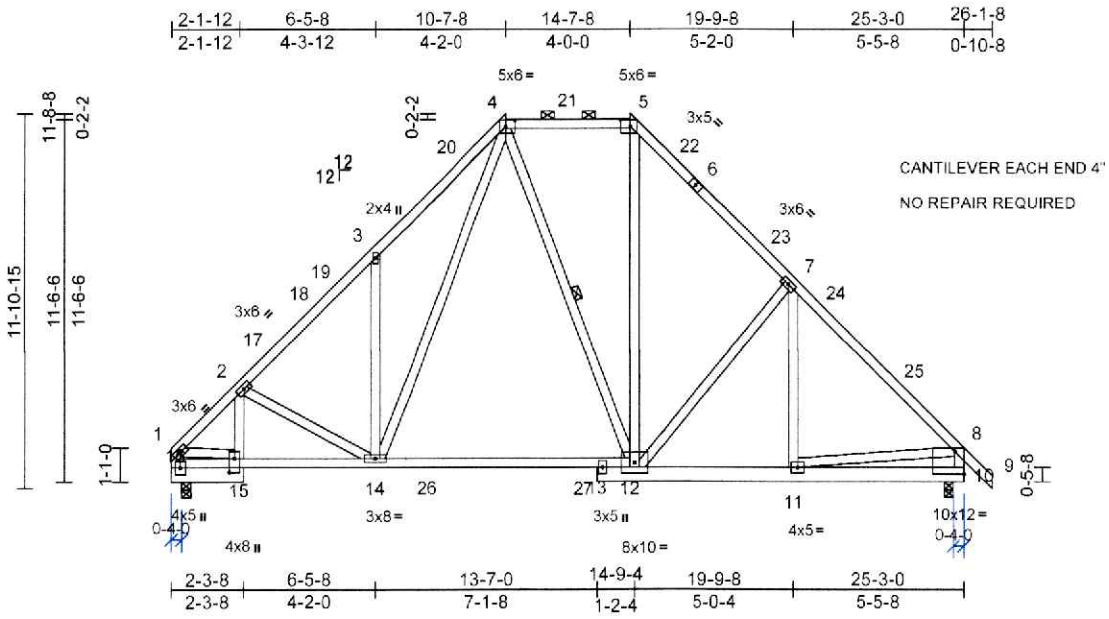

Scale = 1:73.2

Plate Offsets (X, Y): [4:0-3-9,0-2-8], [5:0-3-9,0-2-8], [10:Edge,0-8-9], [15:0-5-4,0-2-0]

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	0.48	Vert(LL)	-0.14	12-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.24	12-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.04	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 208 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 15-2:2x4 SP No.3, 16-12:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 14-4,12-4,12-5:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-12

REACTIONS (size) 10=0-3-8, 16=0-3-8
Max Horiz 16=-287 (LC 10)
Max Uplift 10=-90 (LC 15), 16=-70 (LC 14)
Max Grav 10=1284 (LC 45), 16=1243 (LC 45)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1260/108, 2-3=-1419/159, 3-4=-1499/366, 4-5=-745/225, 5-7=-1204/227, 7-8=-1344/149, 8-9=0/43, 1-16=-1171/90, 8-10=-1172/152
BOT CHORD 15-16=-251/297, 14-15=-184/1088, 12-14=-68/799, 11-12=0/908, 10-11=-97/231, 2-15=-285/48
WEBS 2-14=-66/142, 4-14=-288/817, 4-12=-96/209, 5-12=-81/522, 7-12=-322/237, 7-11=-104/58, 8-11=0/731, 1-15=-45/850, 3-14=-424/276

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 6-4-9, Exterior(2R) 6-4-9 to 18-10-7, Interior (1) 18-10-7 to 23-1-8, Exterior(2E) 23-1-8 to 26-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 10. This connection is for uplift only and does not consider lateral forces.
10) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	C5	Hip	1	1	I64834856 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:36:00 Page: 1
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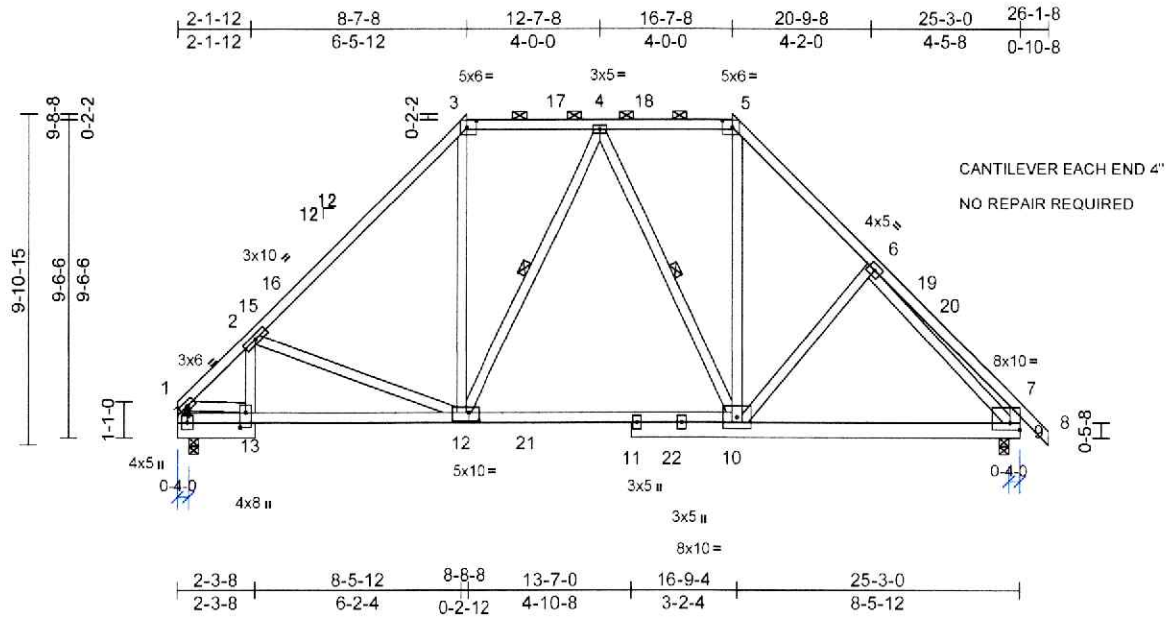


Scale = 1.69

Plate Offsets (X, Y): [3:0-3-9,0-2-8], [5:0-3-9,0-2-8], [7:Edge,0-2-8], [12:0-3-12,0-3-0], [13:0-5-4,0-2-0]

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	0.87	Vert(LL)	-0.14	10-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.22	10-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 197 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 13-2:2x4 SP No.3, 14-12,12-10:2x4 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 13-14.
WEBS 1 Row at midpt 4-12, 4-10

REACTIONS (size) 9=0-3-8, 14=0-3-8
Max Horiz 14=-240 (LC 10)
Max Uplift 9=-103 (LC 15), 14=-83 (LC 14)
Max Grav 9=1243 (LC 45), 14=1190 (LC 45)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1249/92, 2-3=-1282/169, 3-4=-769/199, 4-5=-773/181, 5-6=-1211/188, 6-7=-394/166, 7-8=0/43, 1-14=-1146/70, 7-9=-408/169
BOT CHORD 13-14=-208/227, 10-13=-206/1126, 9-10=0/865, 2-13=-271/113
WEBS 2-12=-317/227, 3-12=-24/529, 4-12=-246/149, 5-10=-53/565, 6-10=-217/206, 6-9=-1042/15, 4-10=-260/157, 1-13=-102/944

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 4-4-9, Exterior(2R) 4-4-9 to 20-11-7, Interior (1) 20-11-7 to 23-1-8, Exterior(2E) 23-1-8 to 26-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 9. This connection is for uplift only and does not consider lateral forces.
10) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

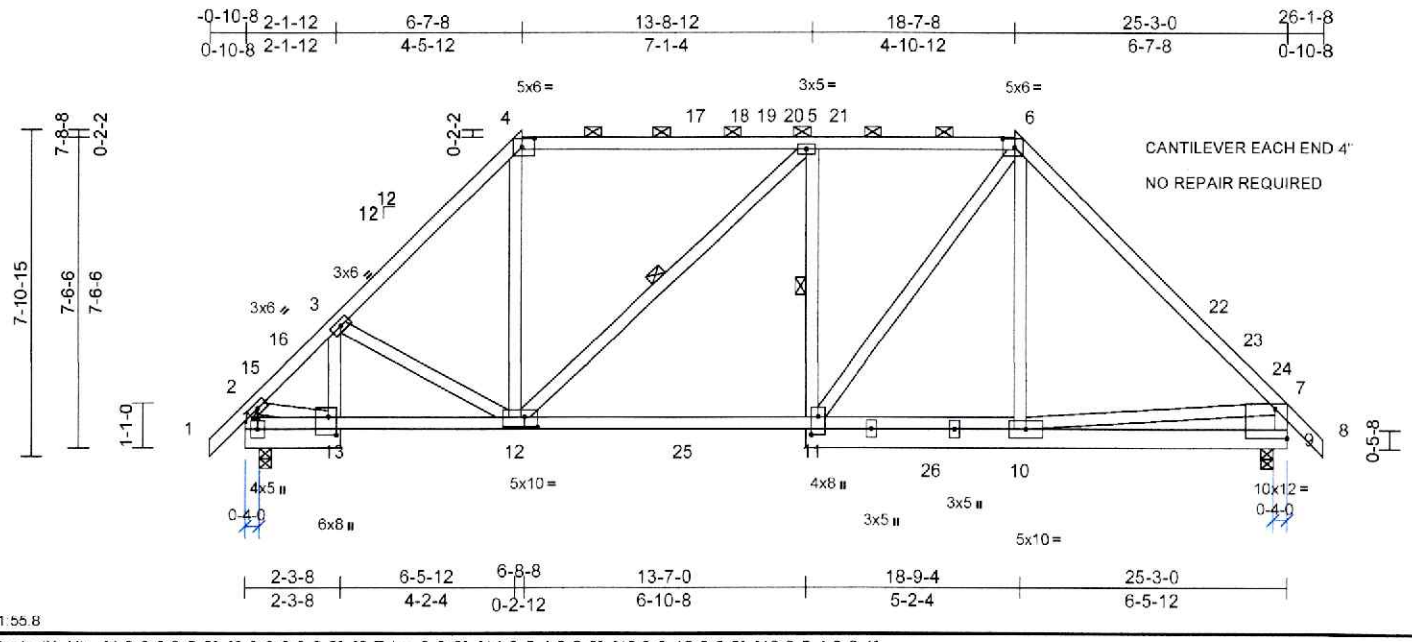
LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	C6	Hip	1	1	I64834857 Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:36:00 ID:V534DfWxlSOxJ_hhzNlKP9zaLQd-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:55.8

Plate Offsets (X, Y): [4:0-3-9,0-2-8], [6:0-3-9,0-2-8], [9:Edge,0-8-9], [11:0-5-4,0-2-0], [12:0-3-12,0-3-0], [13:0-5-4,0-2-4]

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	0.89	Vert(LL)	-0.09	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.16	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.03	9	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 189 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 4-6:2x4 SP No.1
BOT CHORD 2x6 SP No.2 *Except* 13-3,5-11:2x4 SP No.3, 14-12,12-10:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 14-2,9-7:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-10 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 13-14.
6-0-0 oc bracing: 5-11
WEBS 1 Row at midpt 5-12

REACTIONS (size) 9=0-3-8, 14=0-3-8
Max Horiz 14=201 (LC 13)
Max Uplift 9=-113 (LC 15), 14=-113 (LC 14)
Max Grav 9=1212 (LC 45), 14=1201 (LC 45)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-1198/128, 3-4=-1310/186, 4-5=-911/191, 5-6=-1254/208, 6-7=-1295/168, 7-8=0/43, 2-14=-1139/140, 7-9=-1104/175
BOT CHORD 13-14=-174/185, 11-13=-178/1265, 10-11=-34/873, 9-10=-243/539, 3-13=-223/61, 5-11=-404/192
WEBS 3-12=-176/181, 4-12=-6/568, 5-12=-482/126, 6-11=-137/669, 6-10=-4/176, 7-10=-132/749, 2-13=-63/825

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Exterior(2R) 2-1-12 to 10-10-7, Interior (1) 10-10-7 to 14-4-9, Exterior (2R) 14-4-9 to 23-1-8, Exterior(2E) 23-1-8 to 26-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) The Fabrication Tolerance at joint 7 = 16%
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 9. This connection is for uplift only and does not consider lateral forces.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	C7	Hip Girder	1	1	I64834858 Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:36:00 Page: 1
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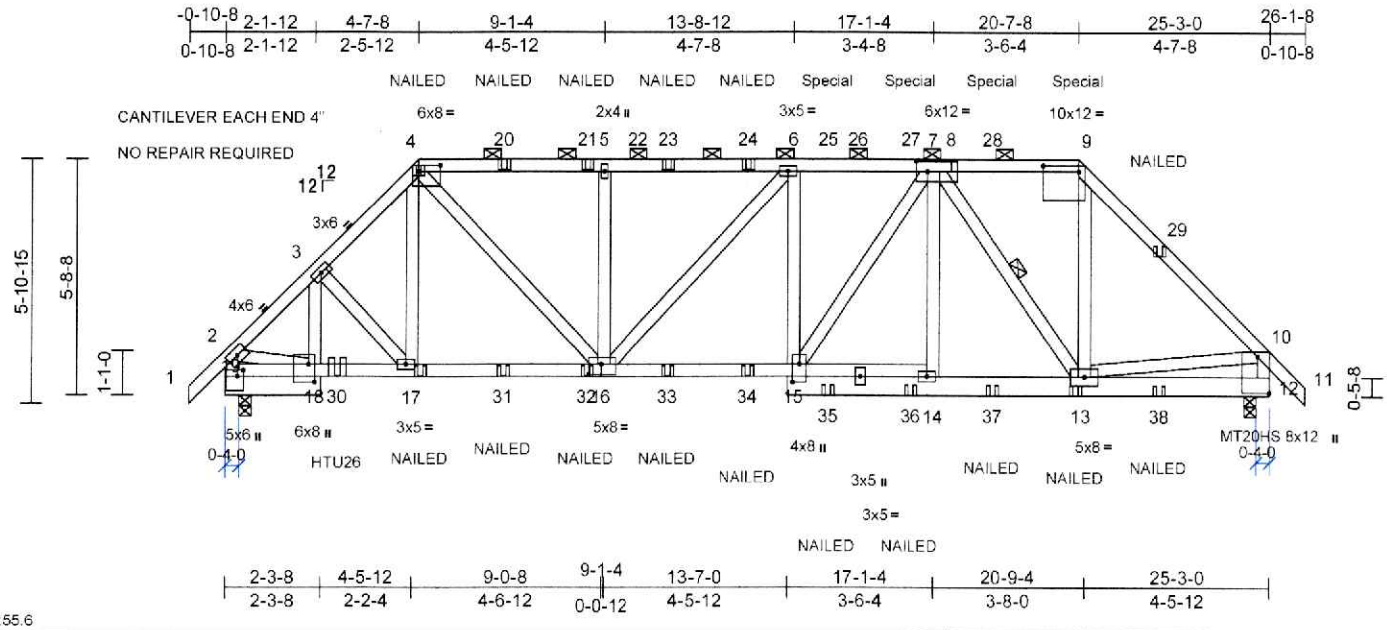

Scale = 1:55.6

Plate Offsets (X, Y): [4:0-6-4,0-1-12], [8:0-3-4,0-3-0], [9:0-10-4,0-1-12], [12:Edge,0-3-8], [15:0-5-4,0-2-0], [16:0-3-12,0-3-0], [18:0-5-4,0-1-12], [19:0-1-12,0-1-12]

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	0.83	Vert(LL)	-0.13	15-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.20	15-16	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.07	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 194 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 18-3,6-15:2x4 SP No.3, 19-16,16-14:2x4 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-5 oc purlins, except end verticals, and 2-0-0 oc purlins (2-7-6 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 5-5-13 oc bracing.
WEBS 1 Row at midpt 7-13

REACTIONS (size) 12=0-3-8, 19=0-3-8
Max Horiz 19=158 (LC 11)
Max Uplift 12=-849 (LC 13), 19=-863 (LC 12)
Max Grav 12=2211 (LC 37), 19=2280 (LC 37)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/72, 2-3=-2327/955, 3-4=-2519/1051, 4-5=-2788/1147, 5-6=-2797/1151, 6-7=-2897/1175, 7-9=-1611/725, 9-10=-2387/950, 10-11=0/72, 2-19=-2232/879, 10-12=-2087/811
BOT CHORD 18-19=-174/221, 17-18=-738/1650, 15-17=-1170/2908, 14-15=-967/2437, 13-14=-964/2426, 12-13=-171/313, 3-18=-335/97, 6-15=-460/262
WEBS 3-17=-112/252, 4-17=-105/313, 4-16=-636/1547, 5-16=-734/355, 6-16=-199/114, 7-15=-365/860, 7-14=-97/99, 7-13=-1464/595, 9-13=-456/1181, 10-13=-600/1438, 2-18=-587/1542

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19 and 12. This connection is for uplift only and does not consider lateral forces.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use Simpson Strong-Tie HTU26 (10-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 2-8-4 from the left end to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 222 lb down and 125 lb up at 14-6-12, 222 lb down and 125 lb up at 16-6-12, and 222 lb down and 125 lb up at 18-6-12, and 202 lb down and 125 lb up at 20-7-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
17) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-4=-60, 4-9=-60, 9-10=-60, 10-11=-60, 18-19=-20, 15-18=-20, 12-15=-20
Concentrated Loads (lb)

April 12,2024

Continued on page 2

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

Vert: 9=-174 (B), 17=-55 (B), 4=-143 (B), 13=-25 (B), 20=-143 (B), 21=-143 (B), 23=-143 (B), 24=-143 (B), 25=-174 (B), 27=-174 (B), 28=-174 (B), 29=-34 (B), 30=-246 (B), 31=-55 (B), 32=-55 (B), 33=-55 (B), 34=-55 (B), 35=-25 (B), 36=-25 (B), 37=-25 (B), 38=-160 (B)

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	CJ1	Jack-Open	2	1	I64834859
					Job Reference (optional)

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Fri Apr 12 09:44:42 Page: 1
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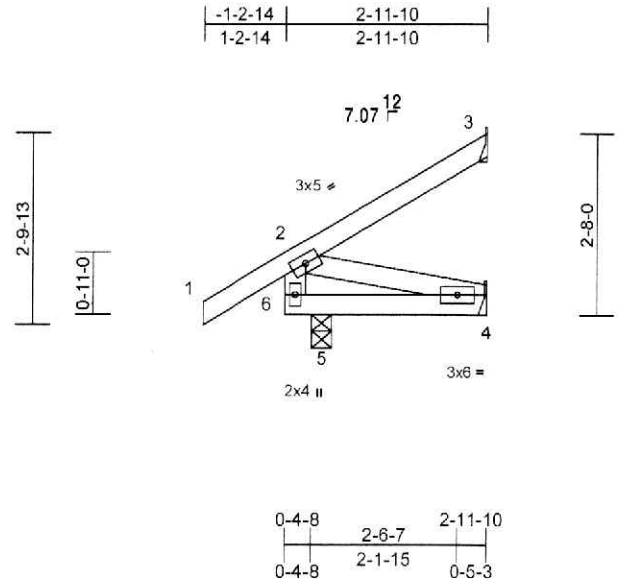
CANTILEVER LEFT END 4"

NO REPAIR REQUIRED



Scale = 1:33.8

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	0.21	Vert(LL)	0.01	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	0.01	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 17 lb	FT = 20%

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

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

REACTIONS (lb/size) 3=62/ Mechanical, 4=-5/ Mechanical, 5=248/0-3-8
Max Horiz 5=77 (LC 14)
Max Uplift 3=-41 (LC 14), 4=-22 (LC 21), 5=-20 (LC 14)
Max Grav 3=99 (LC 21), 4=38 (LC 7), 5=375 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-297/130, 1-2=0/67, 2-3=-84/42
BOT CHORD 5-6=-12/7, 4-5=-160/38
WEBS 2-4=-39/164

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Bearings are assumed to be: Joint 3 User Defined crushing capacity of 425 psi, Joint 4 User Defined crushing capacity of 425 psi, Joint 5 SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 3, 22 lb uplift at joint 4 and 20 lb uplift at joint 5.
10) 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) Standard

April 12,2024

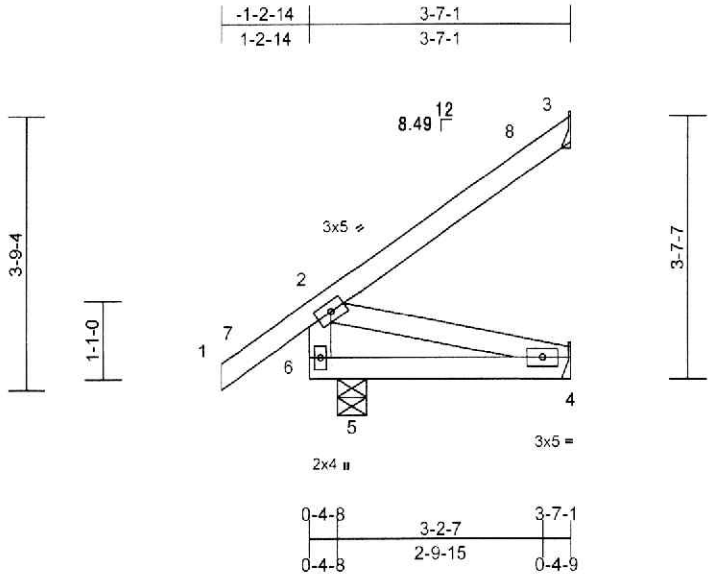
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	CJ2	Jack-Open	1	1	I64834860 Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Fri Apr 12 09:45:14 Page: 1
ID:gxipycRBjcdob3DXd6ew9uzaLQj-eBx_57U0j3KK38?q6ZUvZwU88DnNnQLDobjjaszRVG3

CANTILEVER LEFT END 4"

NO REPAIR REQUIRED



Scale = 1:31.6

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)	0.01	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	0.01	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 20 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=84/ Mechanical, 4=2/ Mechanical, 5=269/0-4-9
Max Horiz 5=107 (LC 14)
Max Uplift 3=-63 (LC 14), 4=-15 (LC 21)
Max Grav 3=148 (LC 21), 4=50 (LC 7), 5=405 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-321/122, 1-7=0/12, 2-7=0/73, 2-8=-113/39, 3-8=-70/66
BOT CHORD 5-6=-15/8, 4-5=-240/57
WEBS 2-4=-58/248

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-14 to 3-0-1, Exterior(2R) 3-0-1 to 3-6-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Bearings are assumed to be: Joint 3 User Defined crushing capacity of 425 psi, Joint 5 SP No.2 crushing capacity of 565 psi, Joint 4 User Defined crushing capacity of 425 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 3 and 15 lb uplift at joint 4.
10) 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) Standard

April 12,2024

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

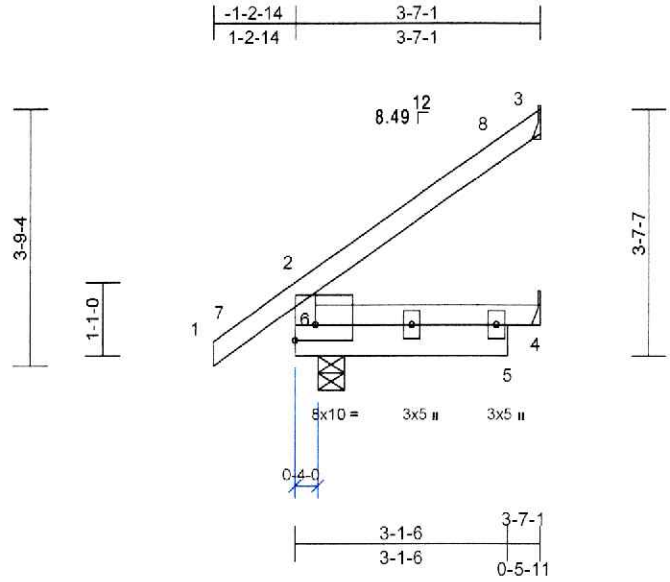
Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	CJ2T	Jack-Open	1	1	I64834861 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:36:01 ID:Ck8RiGRYyJVxzveL3P7hdhzaLQk-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

CANTILEVER LEFT END 4"

NO REPAIR REQUIRED



Scale = 1.33.7

Plate Offsets (X, Y): [6:Edge,0-2-12]

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	0.50	Vert(LL)	0.00	4-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	4-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 22 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 6-4:2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 6=0-4-9
Max Horiz 6=109 (LC 14)
Max Uplift 3=-64 (LC 14), 4=-5 (LC 14), 6=-1 (LC 14)
Max Grav 3=137 (LC 21), 4=68 (LC 7), 6=355 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-332/172, 1-2=0/73, 2-3=-119/59
BOT CHORD 4-6=-9/0

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-14 to 3-0-1, Exterior(2R) 3-0-1 to 3-6-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) All bearings are assumed to be User Defined .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 6, 64 lb uplift at joint 3 and 5 lb uplift at joint 4.
10) 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) Standard

April 12,2024

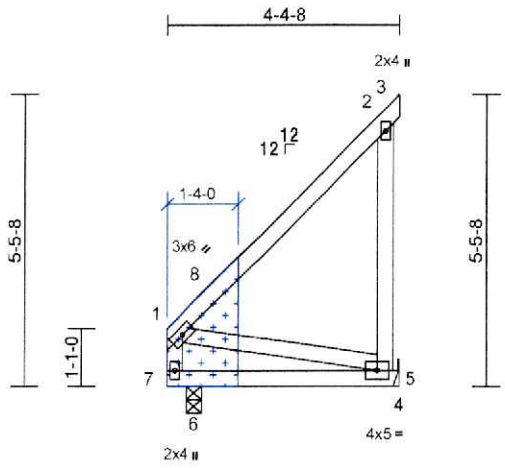
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	D1	Jack-Closed	4	1	I64834862 Job Reference (optional)

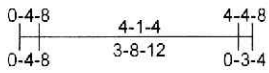
Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Fri Apr 12 09:45:52 Page: 1
ID:RCfP4XKXqrV4?g1objzpl?zaLQs-WVEM37xrml7xczv7KY9p6w3dMYoLhbNpXWwkvfzRVFT

CANTILEVER LEFT END 4"



ATTACH 1/2" PLYWOOD OR OSB GUSSET (15/32" RATED SHEATHING 32/16 EXP 1)
TO EACH FACE OF TRUSS WITH (0.131" X 2.5" MIN) NAILS PER THE FOLLOWING NAIL SCHEDULE:
2 X 3'S - 2 ROWS, 2 X 4'S - 3 ROWS, 2 X 6'S AND LARGER - 4 ROWS: SPACED @ 4" O.C.
NAILS TO BE DRIVEN FROM BOTH FACES. STAGGER SPACING FROM FRONT TO BACK FACE
FOR A NET 2" O.C. SPACING IN EACH COVERED TRUSS MEMBER. USE 2" MEMBER END DISTANCE.



Scale = 1:42.9

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	0.35	Vert(LL)	0.01	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 30 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-4-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=164/ Mechanical, 6=174/0-3-8
Max Horiz 6=176 (LC 11)
Max Uplift 5=-115 (LC 11), 6=-25 (LC 10)
Max Grav 5=260 (LC 20), 6=241 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-7=-189/64, 1-8=-166/140, 2-8=-104/185, 2-3=-20/0, 2-5=-237/90
BOT CHORD 6-7=-51/82, 5-6=-197/380, 4-5=0/0
WEBS 1-5=-304/160

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
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.
6) Bearings are assumed to be: Joint 6 SP No.2 crushing capacity of 565 psi, Joint 5 User Defined crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 5 and 25 lb uplift at joint 6.
9) 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) Standard

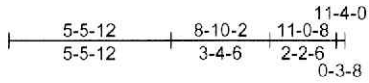
April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	F1	Roof Special	3	1	I64834863 Job Reference (optional)

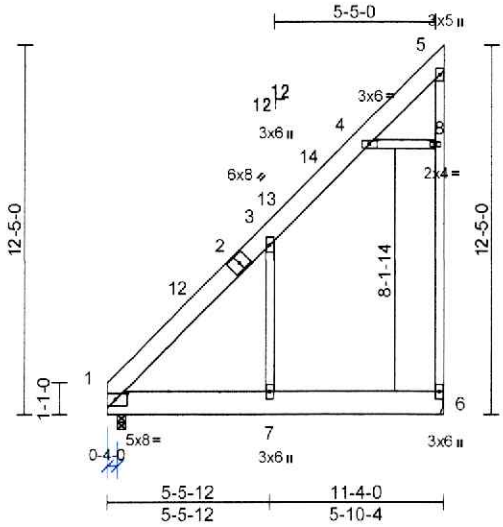
Carter Components (Sanford, NC), Sanford, NC - 27332.

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:36:01 Page: 1
ID:eHwxcJVi1kPloFh?q?Br7FzaPP_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



CANTILEVER LEFT END 4"

NO REPAIR REQUIRED



Scale = 1:77.1

Plate Offsets (X, Y): [1:0-4-12,0-2-8]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.08	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.16	6-7	>866	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.01	1	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH		Attic	-0.04	6-7	>999	360		
BCDL	10.0										Weight: 123 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2

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) 1=0-3-8, 6= Mechanical
Max Horiz 1=395 (LC 13)
Max Uplift 6=-110 (LC 11)
Max Grav 1=632 (LC 25), 6=883 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-440/420, 3-4=-268/266, 4-5=-94/248, 6-8=-362/103, 5-8=-347/114
BOT CHORD 1-7=-240/315, 6-7=-99/133
WEBS 3-7=-370/218, 4-8=-219/290

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 11-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
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.
6) Ceiling dead load (5.0 psf) on member(s). 3-4, 4-8; Wall dead load (5.0psf) on member(s).3-7
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 6-7
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 6.
10) 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.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

April 12,2024

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

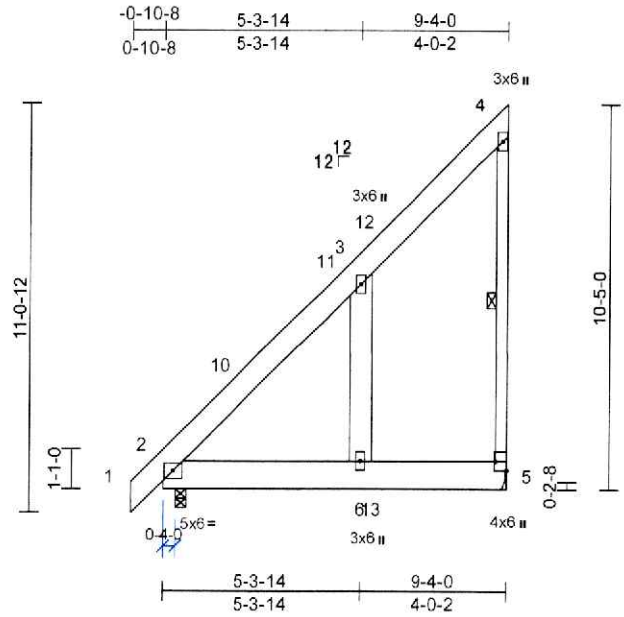
Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	G1	Roof Special	5	1	I64834864 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:36:01 Page: 1
ID:qlkEm7gwQEV7J?1RS9vM0VzaPNU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

CANTILEVER LEFT END 4"

NO REPAIR REQUIRED



Scale = 1:62.2

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

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	0.92	Vert(LL)	0.04	6-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.06	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 112 lb	FT = 20%

LUMBER

TOP CHORD	2x8 SP 2400F 2.0E
BOT CHORD	2x10 SP 2400F 2.0E
WEBS	2x4 SP No.3 *Except* 3-6:2x8 SP 2400F 2.0E

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.
WEBS	1 Row at midpt 4-5

REACTIONS (size) 2=0-3-8, 5= Mechanical
Max Horiz 2=349 (LC 13)
Max Uplift 5=-159 (LC 11)
Max Grav 2=531 (LC 26), 5=557 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/37, 2-3=-310/186, 3-4=-187/151, 4-5=-249/105
BOT CHORD	2-6=-210/163, 5-6=-149/163
WEBS	3-6=-287/263

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 4-11-5, Exterior(2R) 4-11-5 to 9-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 159 lb uplift at joint 5.
9) 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.
10) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	H1	Common Supported Gable	1	1	I64834865 Job Reference (optional)

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Fri Apr 12 09:19:01 Page: 1
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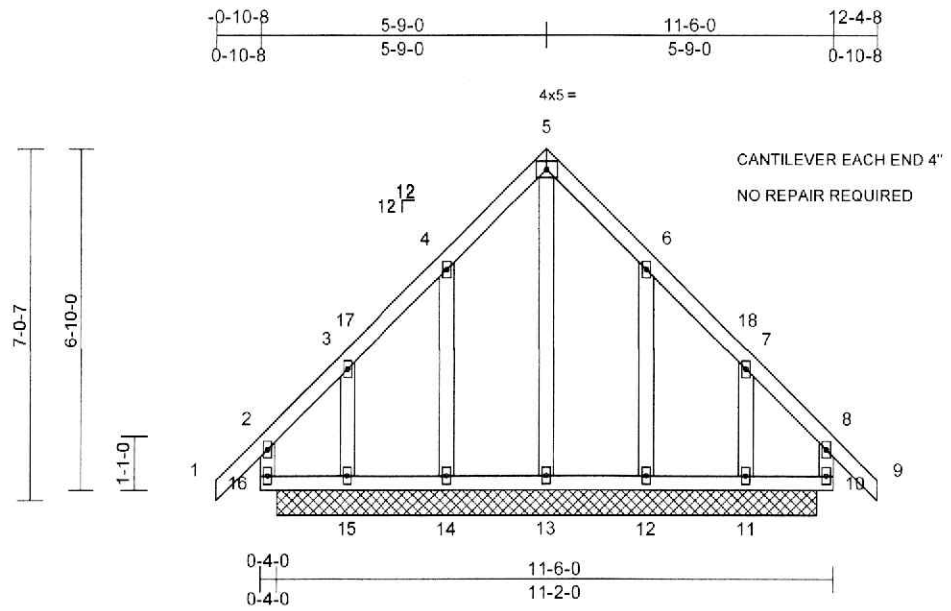

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 76 lb	FT = 20%

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

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

REACTIONS (lb/size) 11=219/10-10-0, 12=143/10-10-0, 13=295/10-10-0, 14=143/10-10-0, 15=219/10-10-0
Max Horiz 15=-186 (LC 12)
Max Uplift 11=-129 (LC 14), 12=-150 (LC 15), 14=-151 (LC 14), 15=-130 (LC 15)
Max Grav 11=283 (LC 22), 12=239 (LC 26), 13=309 (LC 28), 14=240 (LC 25), 15=283 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-16=-32/55, 1-2=0/43, 2-3=-63/172, 3-17=-60/125, 4-17=-55/174, 4-5=-125/260, 5-6=-124/261, 6-18=-53/173, 7-18=-59/124, 7-8=-62/171, 8-9=0/43, 8-10=-32/53
BOT CHORD 15-16=-130/126, 14-15=-129/188, 13-14=-129/188, 12-13=-129/188, 11-12=-129/188, 10-11=-129/188
WEBS 5-13=-279/69, 4-14=-226/158, 3-15=-187/223, 6-12=-226/166, 7-11=-191/218

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 2-9-0, Corner(3R) 2-9-0 to 8-9-0, Exterior(2N) 8-9-0 to 9-4-8, Corner(3E) 9-4-8 to 12-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) The Fabrication Tolerance at joint 2 = 15%, joint 8 = 15%
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
14) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14, 15, 12, and 11. This connection is for uplift only and does not consider lateral forces.
15) Non Standard bearing condition. Review required.
16) 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) Standard

April 12,2024

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

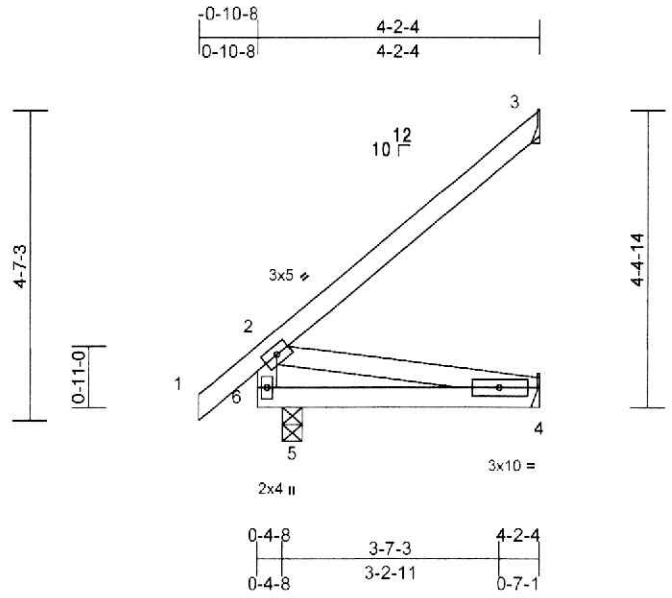
Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	J1	Jack-Open	16	1	I64834866 Job Reference (optional)

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Fri Apr 12 09:20:38 ID:gxipycRBjcdob3DXd6ew9uzaLQj-rEI?JRdAJZNm_JA8ea?nlfMsyE3mysvzOzAcmQzRVd7

CANTILEVER LEFT END 4"

NO REPAIR REQUIRED



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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	0.51	Vert(LL)	0.02	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.02	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 23 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-2-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=112/ Mechanical, 4=17/ Mechanical, 5=252/0-3-8
Max Horiz 5=139 (LC 14)
Max Uplift 3=-94 (LC 14), 4=-3 (LC 14)
Max Grav 3=203 (LC 21), 4=66 (LC 7), 5=353 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-6=-280/50, 1-2=0/39, 2-3=-132/103
BOT CHORD	5-6=-12/7, 4-5=-252/79
WEBS	2-4=-80/256

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Bearings are assumed to be: Joint 3 User Defined crushing capacity of 425 psi, Joint 4 User Defined crushing capacity of 425 psi, Joint 5 SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 3 and 3 lb uplift at joint 4.
10) 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) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	J2	Jack-Open	2	1	I64834867 Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Fri Apr 12 09:21:26 Page: 1
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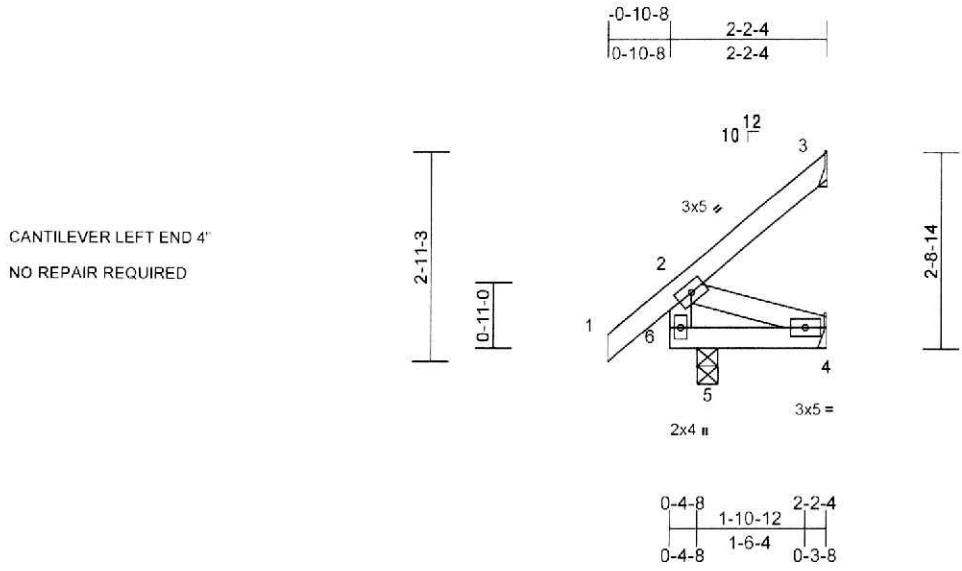

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 13 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=44/ Mechanical, 4=-15/ Mechanical, 5=192/0-3-8
Max Horiz 5=78 (LC 14)
Max Uplift 3=-39 (LC 14), 4=-33 (LC 21)
Max Grav 3=70 (LC 21), 4=21 (LC 7), 5=292 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-218/58, 1-2=0/63, 2-3=-77/44
BOT CHORD 5-6=-12/7, 4-5=-175/39
WEBS 2-4=-41/185

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Bearings are assumed to be: Joint 3 User Defined crushing capacity of 425 psi, Joint 5 SP No.2 crushing capacity of 565 psi, Joint 4 User Defined crushing capacity of 425 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 3 and 33 lb uplift at joint 4.
10) 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) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	J2GR	Half Hip Girder	2	1	I64834868 Job Reference (optional)

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Fri Apr 12 09:22:05 ID:9xrTtO4cTbAQc2CXg1Z7GszaLPv-ozVuaAgkqIKPwgJsEL3Bn?SpJJmArExnO?IjJtzRVbm

CANTILEVER LEFT END 4"

NO REPAIR REQUIRED

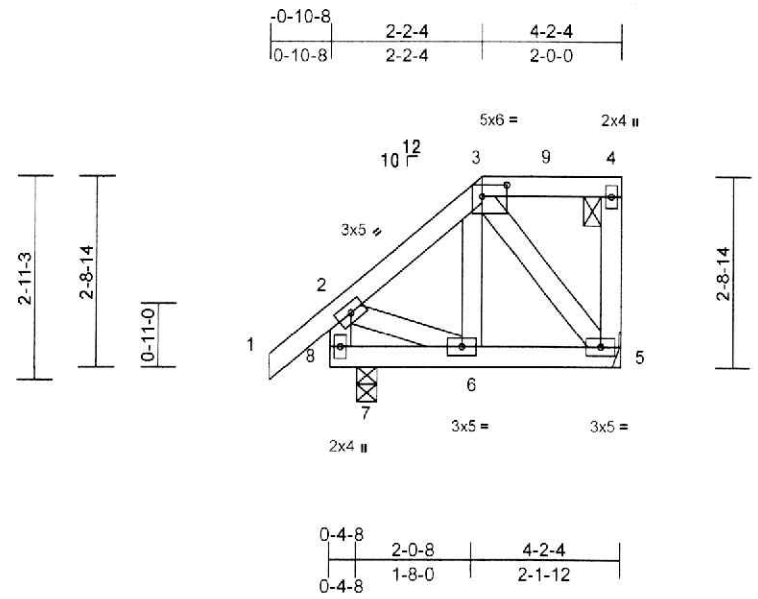

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Plate Offsets (X, Y): [3:0-4-4,0-2-0]

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	0.17	Vert(LL)	0.00	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	0.00	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 29 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-2-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 5=141/ Mechanical, 7=269/0-3-8
Max Horiz 7=100 (LC 9)
Max Uplift 5=-82 (LC 9), 7=-72 (LC 12)
Max Grav 5=182 (LC 33), 7=358 (LC 34)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/63, 2-3=-148/61, 3-9=-33/25, 4-9=-33/25, 4-5=-89/27, 2-8=-282/70
BOT CHORD 7-8=-64/14, 6-7=-121/64, 5-6=-71/87
WEBS 3-6=-65/37, 3-5=-122/85, 2-6=-60/143

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) Bearings are assumed to be: Joint 7 SP No.2 crushing capacity of 565 psi.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 5 and 72 lb uplift at joint 7.
12) 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.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 114 lb down and 89 lb up at 2-2-4 on top chord, and 22 lb down and 48 lb up at 2-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
15) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-8=-20
Concentrated Loads (lb)
Vert: 6=-1 (B), 3=-36 (B)

April 12,2024

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

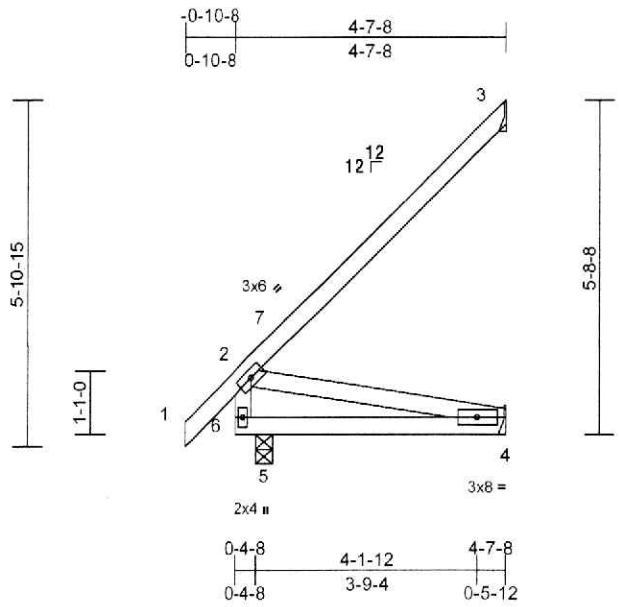
Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	J3	Jack-Open	4	1	I64834869 Job Reference (optional)

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Fri Apr 12 09:22:36 ID:gxipycRBjcdob3DXd6ew9uzaLQj-Oxtc4n2BXqE08RBqZM7SXYE_epKMcEiLWKlsvazRVbH

CANTILEVER LEFT END 4"

NO REPAIR REQUIRED



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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	0.67	Vert(LL)	0.02	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.03	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 26 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=125/ Mechanical, 4=22/ Mechanical, 5=268/0-3-8
Max Horiz 5=183 (LC 14)
Max Uplift 3=-130 (LC 14), 4=-16 (LC 14)
Max Grav 3=234 (LC 21), 4=75 (LC 7), 5=356 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-282/0, 1-2=0/43, 2-7=-196/57, 3-7=-176/131
BOT CHORD 5-6=-15/8, 4-5=-337/105
WEBS 2-4=-107/344

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Bearings are assumed to be: Joint 3 User Defined crushing capacity of 425 psi, Joint 5 SP No.2 crushing capacity of 565 psi, Joint 4 User Defined crushing capacity of 425 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 3 and 16 lb uplift at joint 4.
10) 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) Standard

April 12,2024

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

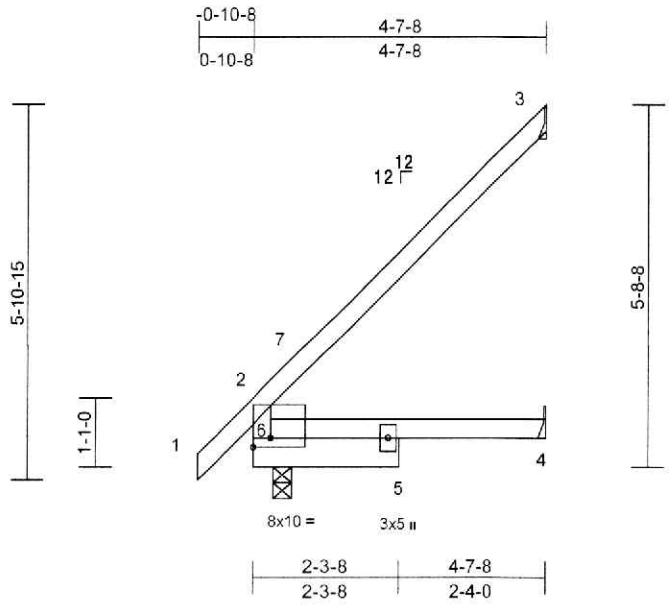
Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	J3T	Jack-Open	5	1	I64834870 Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:36:02 ID:gxipycRBjcdob3DXd6ew9uzaLQj-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

CANTILEVER LEFT END 4"

NO REPAIR REQUIRED



Scale = 1:36.2

Plate Offsets (X, Y): [6:Edge,0-1-12]

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	0.94	Vert(LL)	0.03	4-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.03	4-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.03	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 25 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 6-4:2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 6=0-3-8
Max Horiz 6=184 (LC 14)
Max Uplift 3=-118 (LC 14), 4=-19 (LC 14)
Max Grav 3=203 (LC 21), 4=90 (LC 7), 6=326 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-313/73, 1-2=0/43, 2-3=-186/109
BOT CHORD 4-6=-18/1

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) All bearings are assumed to be User Defined .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 3 and 19 lb uplift at joint 4.
10) 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) Standard

April 12,2024

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

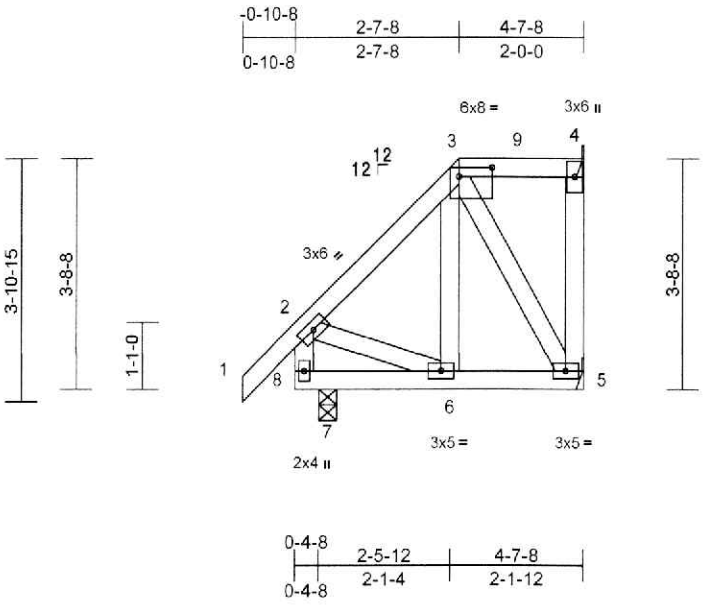
Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	J4	Half Hip Girder	1	1	I64834871 Job Reference (optional)

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Fri Apr 12 09:23:20 ID:hlH5g23AiH2ZCudK6K2ukfzaLPw-6PXFJqanALnmQCYH8bvmJp3deYLPw9lpeAQBR1zRVab

CANTILEVER LEFT END 4"

NO REPAIR REQUIRED



Scale = 1:36.9

Plate Offsets (X, Y): [3:0-6-4,0-1-12]

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	0.15	Vert(LL)	0.00	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.01	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	-0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 36 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=56/ Mechanical, 5=149/ Mechanical, 7=319/0-3-8
Max Horiz 7=137 (LC 9)
Max Uplift 4=-23 (LC 8), 5=-123 (LC 9), 7=-92 (LC 12)
Max Grav 4=93 (LC 33), 5=196 (LC 37), 7=429 (LC 34)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/72, 2-3=-208/94, 3-9=-44/33, 4-9=-44/33, 4-5=0/0, 2-8=-323/83
BOT CHORD 7-8=-11/8, 6-7=-133/83, 5-6=-95/102
WEBS 3-6=-65/68, 3-5=-191/147, 2-6=-64/137

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) Bearings are assumed to be: , Joint 7 SP No.2 crushing capacity of 565 psi.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 4, 123 lb uplift at joint 5 and 92 lb uplift at joint 7.
12) 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.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 177 lb down and 135 lb up at 2-7-8 on top chord, and 42 lb down and 62 lb up at 2-7-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
16) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-8=-20
Concentrated Loads (lb)
Vert: 6=-11 (B), 3=-105 (B)

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	J4T	Half Hip Girder	1	1	I64834872 Job Reference (optional)

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

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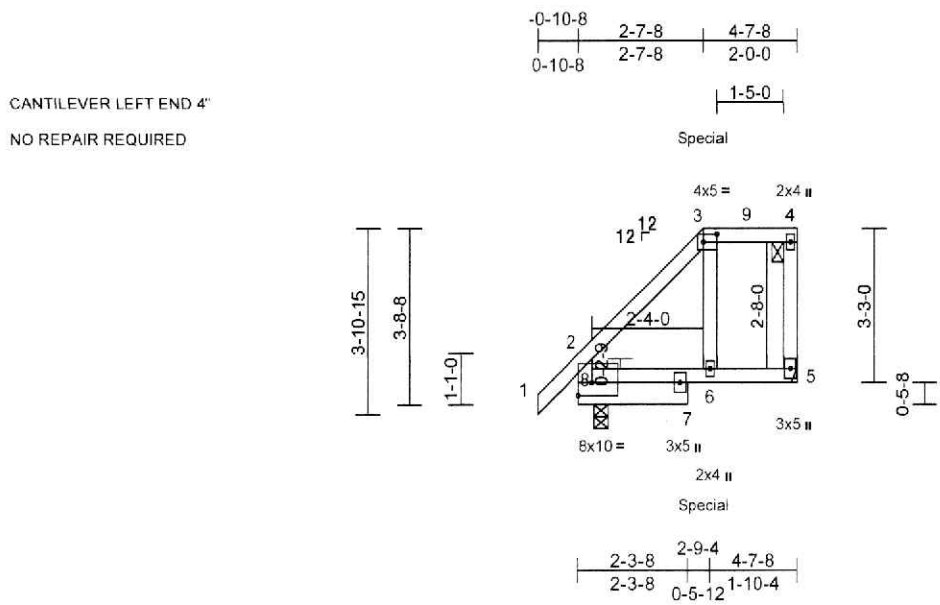

Scale = 1:48.4

Plate Offsets (X, Y): [3:0-3-8,0-2-0], [8:Edge,0-3-4]

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	0.32	Vert(LL)	0.03	6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.03	6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 31 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 8-5:2x4 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5= Mechanical, 8=0-3-8
Max Horiz 8=128 (LC 9)
Max Uplift 5=-145 (LC 9), 8=-78 (LC 12)
Max Grav 5=269 (LC 37), 8=391 (LC 34)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/72, 2-3=-210/85, 3-4=-64/55, 4-5=-139/57, 2-8=-315/77
BOT CHORD 6-8=-61/67, 5-6=-56/65
WEBS 3-6=-110/90

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 145 lb uplift at joint 5.
11) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
12) 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.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 164 lb down and 142 lb up at 2-7-8 on top chord, and 59 lb down and 52 lb up at 2-7-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
15) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-8=-20
Concentrated Loads (lb)
Vert: 3=-91 (F), 6=-25 (F)

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	J5	Jack-Open	1	1	I64834873 Job Reference (optional)

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

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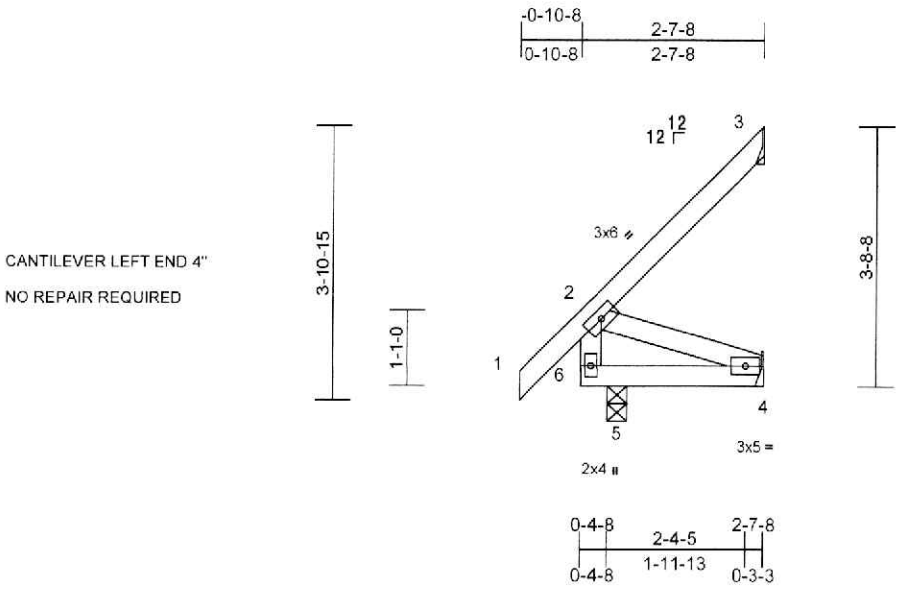

CANTILEVER LEFT END 4"

NO REPAIR REQUIRED

Scale = 1:32.7

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	0.13	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	0.01	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 16 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-7-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=60/ Mechanical, 4=-6/ Mechanical, 5=202/0-3-8
Max Horiz 5=110 (LC 14)
Max Uplift 3=-63 (LC 14), 4=-33 (LC 14)
Max Grav 3=101 (LC 21), 4=32 (LC 7), 5=323 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-6=-249/11, 1-2=0/74, 2-3=-106/67
BOT CHORD	5-6=-15/8, 4-5=-251/59
WEBS	2-4=-62/266

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Bearings are assumed to be: Joint 3 User Defined crushing capacity of 425 psi, Joint 5 SP No.2 crushing capacity of 565 psi, Joint 4 User Defined crushing capacity of 425 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 3 and 33 lb uplift at joint 4.
10) 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) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	J5T	Jack-Open	1	1	I64834874 Job Reference (optional)

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

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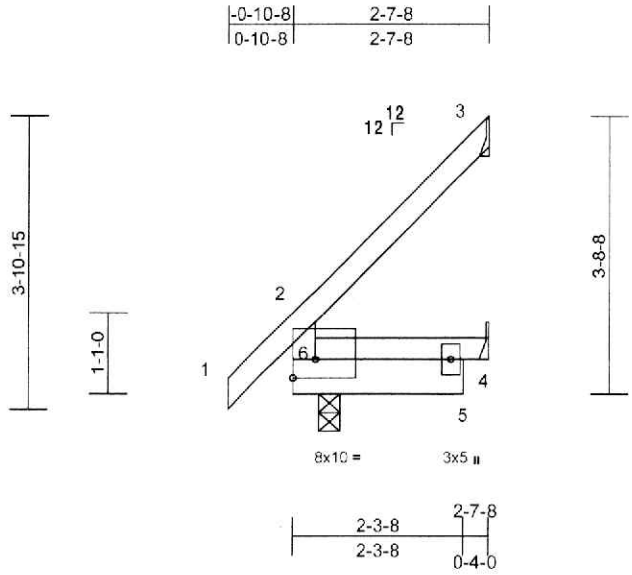
CANTILEVER LEFT END 4"

NO REPAIR REQUIRED



Scale = 1:30.7

Plate Offsets (X, Y): [6:Edge,0-3-0]

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	0.47	Vert(LL)	0.00	4-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	4-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 17 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 6-4:2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 6=0-3-8
Max Horiz 6=111 (LC 14)
Max Uplift 3=-68 (LC 14), 4=-18 (LC 14)
Max Grav 3=97 (LC 21), 4=49 (LC 7), 6=273 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-254/80, 1-2=0/74, 2-3=-120/56
BOT CHORD 4-6=-15/2

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) All bearings are assumed to be User Defined .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 3 and 18 lb uplift at joint 4.
10) 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) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	L1	Roof Special	4	1	I64834875 Job Reference (optional)

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

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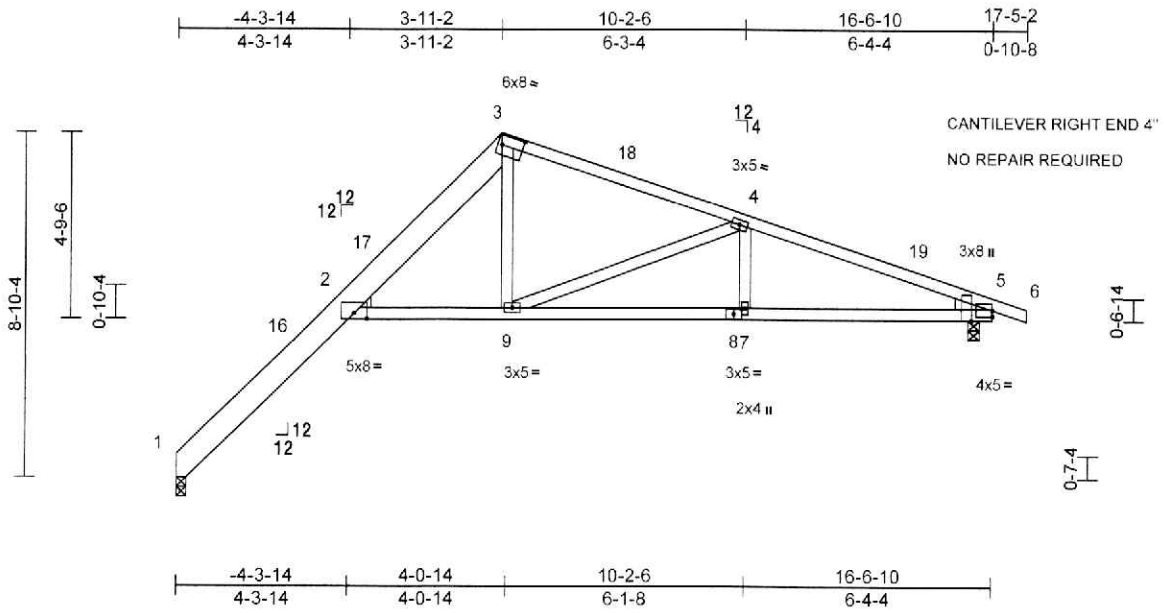


Scale = 1:59

Plate Offsets (X, Y): [3:0-6-9,0-3-0], [5:Edge,0-1-13], [5:0-3-3,Edge], [8:0-2-7,0-1-8]

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	0.74	Vert(LL)	0.36	9-12	>696	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.70	9-12	>354	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.68	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 104 lb	FT = 20%

LUMBER
- TOP CHORD 2x8 SP 2400F 2.0E *Except* 3-6:2x4 SP No.2
- BOT CHORD 2x4 SP No.1 *Except* 8-5:2x4 SP No.2
- WEBS 2x4 SP No.3
- WEDGE Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING
- TOP CHORD Structural wood sheathing directly applied or 3-4-13 oc purlins.
- BOT CHORD Rigid ceiling directly applied or 9-8-12 oc bracing.

REACTIONS (size) 1=0-3-0, 5=0-3-8
Max Horiz 1=216 (LC 14)
Max Uplift 1=-19 (LC 11), 5=-122 (LC 11)
Max Grav 1=887 (LC 21), 5=943 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-601/95, 2-3=-1711/516, 3-4=-1189/407, 4-5=-1908/471, 5-6=0/17
- BOT CHORD 2-9=-383/1162, 7-9=-361/1765, 5-7=-361/1765
- WEBS 4-9=-773/175, 4-7=0/214, 3-9=-42/514

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-8 to 3-1-8, Interior (1) 3-1-8 to 5-3-0, Exterior(2R) 5-3-0 to 11-3-0, Interior (1) 11-3-0 to 18-9-0, Exterior(2E) 18-9-0 to 21-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 1.
10) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
11) 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.

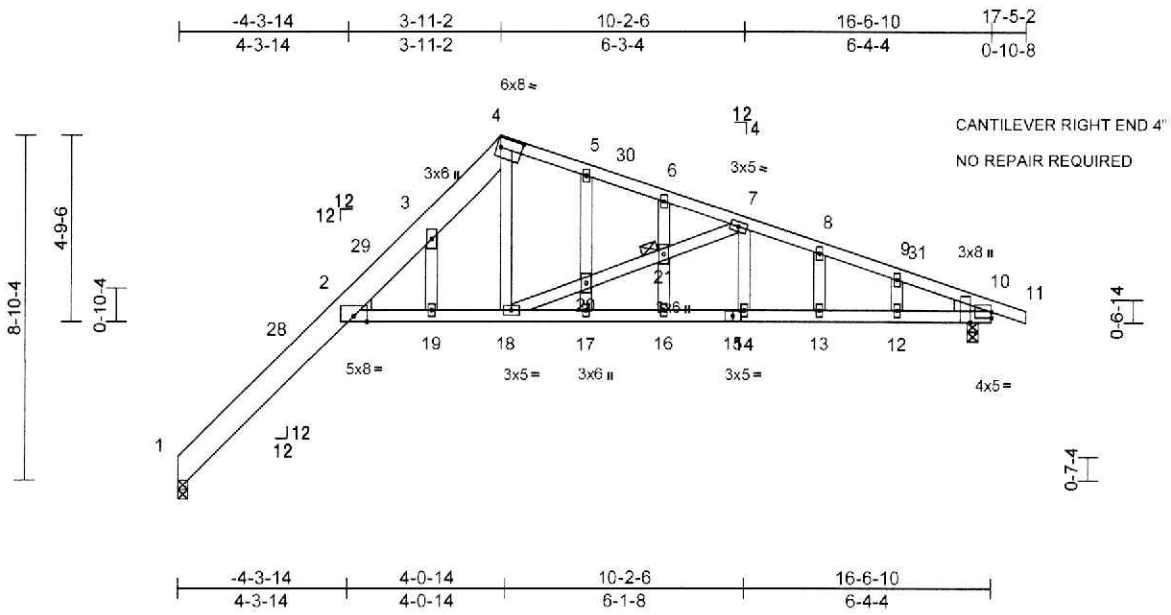
LOAD CASE(S) Standard

April 12,2024

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

Job	Truss	Truss Type	Qty	Ply	3202 Leaflet Church-Roof-Abby GRH
24020093-01	L2	Roof Special Structural Gable	2	1	I64834876 Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 11 07:36:03 Page: 1
ID:8ZOn?9LfxtnQ9EMNMcZ0WGzB_8Z-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:59

Plate Offsets (X, Y): [4:0-6-9,0-3-0], [10:Edge,0-1-13], [10:0-3-3,Edge], [15:0-2-7,0-1-8]

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	0.74	Vert(LL)	0.36	19-24	>691	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.71	19-24	>350	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.69	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 119 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E *Except* 4-11:2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except* 15-10:2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-10-14 oc bracing.
JOINTS 1 Brace at Jt(s): 21

REACTIONS (size) 1=0-3-0, 10=0-3-8
Max Horiz 1=216 (LC 14)
Max Uplift 1=-19 (LC 11), 10=-122 (LC 11)
Max Grav 1=887 (LC 21), 10=943 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-601/95, 2-3=-1752/540, 3-4=-1115/345, 4-5=-1117/434, 5-6=-1138/405, 6-7=-1170/383, 7-8=-1837/479, 8-9=-1860/458, 9-10=-1878/438, 10-11=0/17
BOT CHORD 2-19=-352/1109, 18-19=-227/1040, 17-18=-354/1744, 16-17=-354/1744, 14-16=-354/1744, 13-14=-354/1744, 12-13=-354/1744, 10-12=-354/1744
WEBS 4-18=-144/663, 18-20=-741/168, 20-21=-737/164, 7-21=-719/165, 7-14=-15/176, 5-20=-93/62, 17-20=-86/66, 3-19=-109/87, 6-21=-101/47, 16-21=-50/43, 8-13=-39/40, 9-12=-44/42

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 B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-8 to 3-1-8, Interior (1) 3-1-8 to 5-3-0, Exterior(2R) 5-3-0 to 11-3-0, Interior (1) 11-3-0 to 18-9-0, Exterior(2E) 18-9-0 to 21-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 1.
13) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10. This connection is for uplift only and does not consider lateral forces.
14) 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.

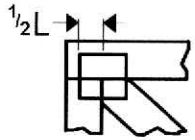
LOAD CASE(S) Standard

April 12,2024

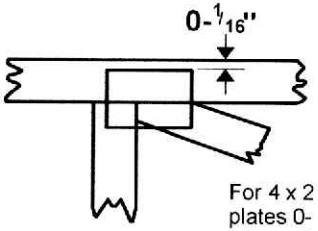
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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 software or upon request.

PLATE SIZE

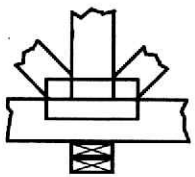
4 x 4

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

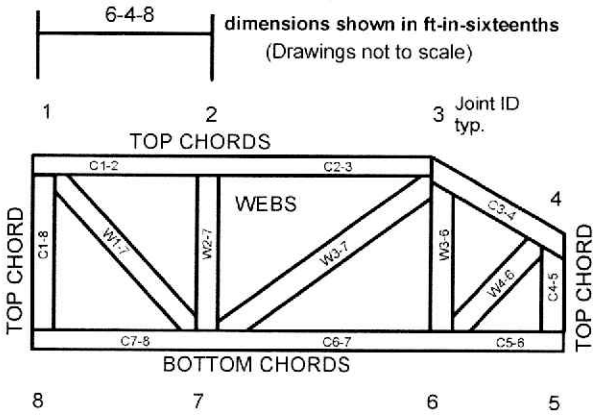


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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.

MiTek®

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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.
21. The design does not take into account any dynamic or other loads other than those expressly stated.