ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 21041619
WAG-2

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by The Building Center.

Pages or sheets covered by this seal: I45780055 thru I45780089

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844

April 23,2021

Johnson, Andrew

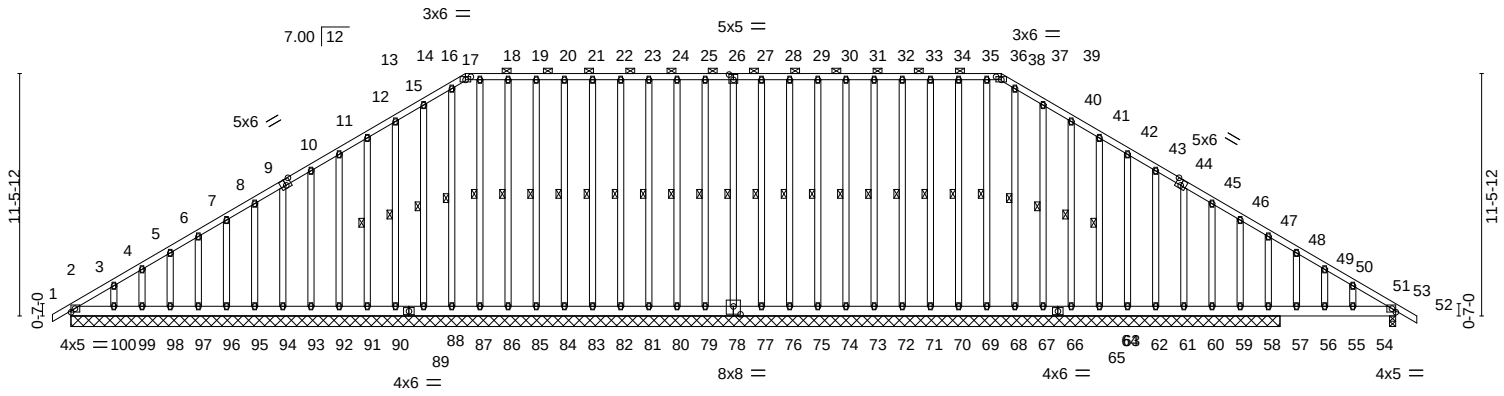
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	A1GE	GABLE	1	1	I45780055
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:09 2021 Page 1
ID:?zx10ePokgnmIfKTtIijo_zX5U0-A9L0?9izi?LBJ58mh7ofjV2oqs5inJ3k8mFGYvzOCK8

-0-10-8 18-8-2 44-0-10 62-8-12 63-8-12
0-10-8 18-8-2 25-4-7 18-8-2 1-0-0

Scale = 1:109.1



62-8-12
62-8-12

Plate Offsets (X,Y)-- [10:0-3-0,0-3-4], [17:0-3-0,0-1-12], [27:0-2-8,0-3-0], [37:0-3-0,0-1-12], [38:0-0-0,0-0-0], [39:0-0-0,0-0-0], [40:0-0-0,0-0-0], [41:0-0-0,0-0-0], [42:0-0-0,0-0-0], [43:0-0-0,0-0-0], [44:0-3-0,0-3-4], [46:0-0-0,0-0-0], [47:0-0-0,0-0-0], [48:0-0-0,0-0-0], [49:0-0-0,0-0-0], [50:0-0-0,0-0-0], [51:0-0-0,0-0-0], [77:0-4-0,0-4-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.02	54-55	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	54-55	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	52	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 777 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.1
OTHERS 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.): 17-37.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 27-77, 26-78, 25-79, 24-80, 23-81, 22-82, 21-83, 20-84, 19-85, 18-86, 16-87, 15-88, 14-90, 13-91, 28-76, 29-75, 30-74, 31-73, 32-72, 33-71, 34-70, 35-69, 36-68, 38-67, 39-66, 40-64, 41-63

REACTIONS. All bearings 57-3-0 except (jt=length) 52=0-3-8.
(lb) - Max Horz 2=-232(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 76, 75, 74, 73, 72, 71, 70, 69, 68, 66, 64, 63, 62, 61, 60, 59 except 58=-211(LC 18), 57=-188(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 2, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 76, 75, 74, 73, 72, 71, 70, 69, 68, 67, 66, 64, 63, 62, 61, 60, 59, 58 except 57=594(LC 18), 52=280(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-254/175

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-0-6, Exterior(2) 2-0-6 to 15-8-2, Corner(3) 15-8-2 to 21-8-2, Exterior(2) 21-8-2 to 41-0-10, Corner(3) 41-0-10 to 47-0-10, Exterior(2) 47-0-10 to 60-8-6, Corner(3) 60-8-6 to 63-8-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON

April 23,2021

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

NOTES-

9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 100 lb uplift at joint(s) 2, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 76, 75, 74, 73, 72, 71, 70, 69, 68, 66, 64, 63, 62, 61, 60, 59 except (jt=lb) 58=211, 57=188.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	A1T	PIGGYBACK BASE	3	1	I45780056
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:12 2021 Page 1
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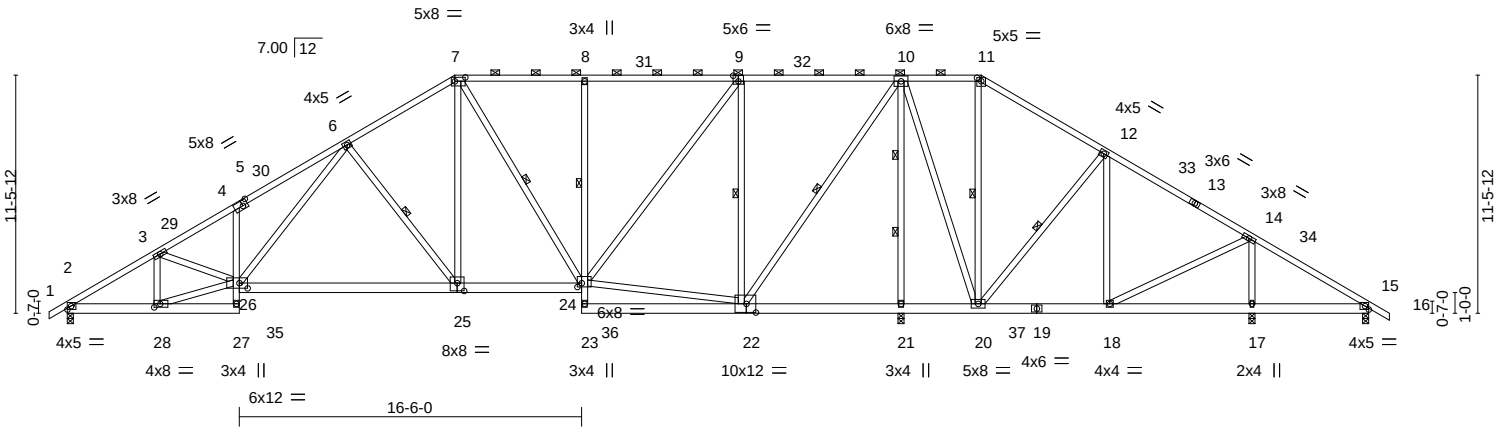
-0-10-8	4-3-15	8-3-8	13-5-13	18-8-2	24-9-8	32-5-14	40-2-4	44-0-10	50-1-4	57-1-4	62-8-12	63-8-12
0-10-8	4-3-15	3-11-9	5-2-5	5-2-5	6-1-6	7-8-6	7-8-6	3-10-6	6-0-10	7-0-0	5-7-8	1-0-0

Scale = 1:111.1



4-3-15	8-3-8	18-8-2	24-9-8	32-5-14	40-2-4	44-0-10	50-1-4	57-1-4	62-8-12
4-3-15	3-11-9	10-4-10	6-1-6	7-8-6	7-8-6	3-10-6	6-0-10	7-0-0	5-7-8

Plate Offsets (X,Y)-- [5:0-3-0,0-3-0], [7:0-6-0,0-2-4], [9:0-3-0,0-3-4], [11:0-2-8,0-2-1], [22:0-5-8,0-5-0], [24:0-2-8,0-2-4], [25:0-4-0,0-4-8], [26:0-4-12,0-3-0], [28:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.27	25-26	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.47	25-26	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.08	21	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 499 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.1 *Except* 4-27,8-23: 2x4 SP No.3, 19-22: 2x6 SP DSS
WEBS	2x4 SP No.3 *Except* 9-22,10-21,11-20: 2x4 SP DSS

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-2-12 oc purlins, except 2-0-0 oc purlins (5-1-5 max.): 7-11.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 1 Row at midpt 8-24
WEBS	1 Row at midpt 6-25, 7-24, 9-22, 10-22, 11-20, 12-20 2 Rows at 1/3 pts 10-21

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-232(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-127(LC 10), 21=-169(LC 7), 17=-142(LC 11), 15=-125(LC 23)
Max Grav All reactions 250 lb or less at joint(s) 15 except 2=1527(LC 17), 21=3321(LC 2), 17=786(LC 22)

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

TOP CHORD	2-3=-2470/258, 3-4=-2864/299, 4-6=-2922/382, 6-7=-1688/287, 7-8=-1090/267, 8-9=-1088/267, 9-10=-340/182, 10-11=-78/571, 11-12=-104/688, 12-14=-164/428, 14-15=-66/489
BOT CHORD	2-28=-239/2164, 4-26=-285/144, 25-26=-203/1858, 24-25=-154/1453, 8-24=-432/158, 21-22=-812/273, 20-21=-812/273, 18-20=-338/152, 17-18=-366/112, 15-17=-366/112
WEBS	3-28=-521/91, 26-28=-184/2191, 3-26=-31/458, 6-26=-178/1211, 6-25=-784/235, 7-25=-84/1157, 7-24=-733/96, 22-24=-96/329, 9-24=-131/1279, 9-22=-1425/267, 10-22=-211/1958, 10-21=-2884/412, 10-20=-101/975, 11-20=-471/49, 12-20=-526/145, 14-17=-625/196

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 5-4-12, Interior(1) 5-4-12 to 9-9-11, Exterior(2) 9-9-11 to 27-6-10, Interior(1) 27-6-10 to 35-2-2, Exterior(2) 35-2-2 to 52-11-1, Interior(1) 52-11-1 to 57-5-8, Exterior(2) 57-5-8 to 63-8-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
4) Provide adequate drainage to prevent water ponding.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON

April 23,2021

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NOTES-

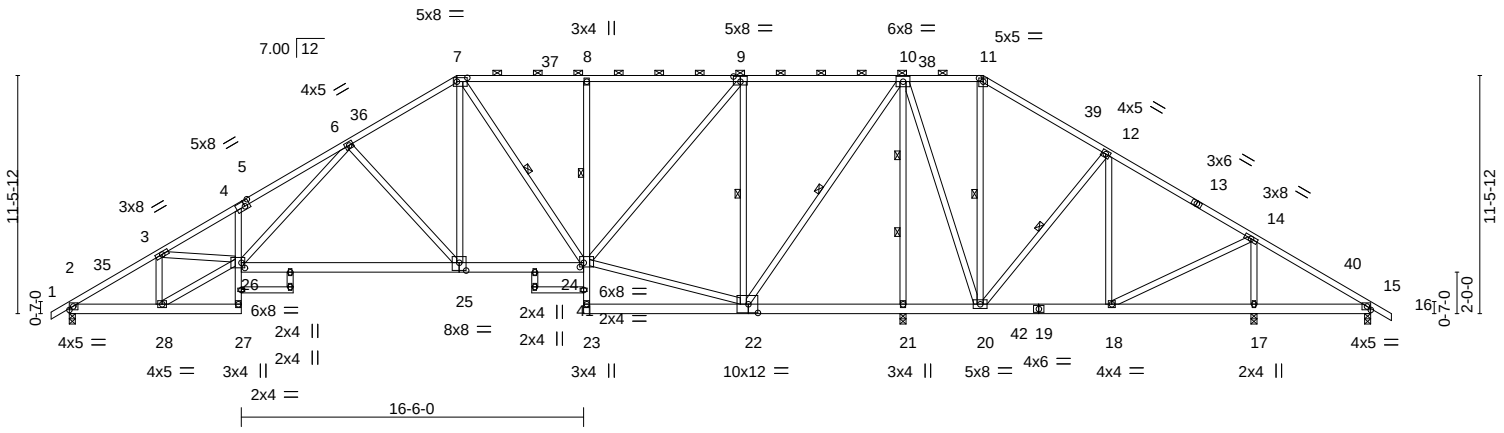
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 127 lb uplift at joint 2, 169 lb uplift at joint 21, 142 lb uplift at joint 17 and 125 lb uplift at joint 15.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	A2T	PIGGYBACK BASE	2	1	I45780057
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:15 2021 Page 1
ID:?zx10ePokgnmIfKTtlijo_zX5U0-?JjHFCnkIr6L10bw2Nv3ymIf5H4FAoOcWiibmZzOCK2

-0-10-8	4-3-15	8-3-8	13-5-13	18-8-2	24-9-8	32-5-14	40-2-4	44-0-10	50-1-4	57-1-4	62-8-12	63-8-12
0-10-8	4-3-15	3-11-9	5-2-5	5-2-5	6-1-6	7-8-6	7-8-6	3-10-6	6-0-10	7-0-0	5-7-8	1-0-0

Scale = 1:111.1



4-3-15	8-3-8	10-9-8	18-8-2	22-3-8	24-9-8	32-5-14	40-2-4	44-0-10	50-1-4	57-1-4	62-8-12
4-3-15	3-11-9	2-6-0	7-10-10	3-7-6	2-6-0	7-8-6	7-8-6	3-10-6	6-0-10	7-0-0	5-7-8

Plate Offsets (X,Y)-- [5:0-3-0,0-3-0], [7:0-6-0,0-2-4], [9:0-4-0,0-3-0], [11:0-2-8,0-2-1], [22:0-5-8,0-5-0], [24:0-2-4,0-2-8], [25:0-4-0,0-4-8], [26:0-2-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.17	25-26	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.41	25-26	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.13	21	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 503 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.1 *Except*
4-27,8-23: 2x4 SP No.3, 19-22: 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
9-22,10-21,11-20: 2x4 SP DSS
29-30,30-31,32-33,32-34: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-12 oc purlins, except
2-0-0 oc purlins (5-9-0 max.): 7-11.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
1 Row at midpt 8-24
10-0-0 oc bracing: 26-27, 23-24
WEBS 1 Row at midpt 7-24, 9-22, 10-22, 11-20, 12-20
2 Rows at 1/3 pts 10-21

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-232(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-118(LC 10), 21=-202(LC 7), 17=-156(LC 11), 15=-170(LC 21)
Max Grav All reactions 250 lb or less at joint(s) 15 except 2=1347(LC 21), 21=3433(LC 2), 17=690(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2122/187, 3-4=-3088/283, 4-6=-3131/378, 6-7=-1395/223, 7-8=-855/210, 8-9=-852/210, 10-11=-109/824, 11-12=-139/963, 12-14=-195/729, 14-15=-63/578
BOT CHORD 2-28=-225/1753, 4-26=-272/141, 25-26=-214/1661, 24-25=-150/1209, 8-24=-432/158, 21-22=-1099/260, 20-21=-1099/260, 18-20=-598/161, 17-18=-436/105, 15-17=-436/105
WEBS 3-28=-830/149, 26-28=-227/1915, 3-26=-97/908, 6-26=-238/1518, 6-25=-810/244, 7-25=-80/928, 7-24=-660/110, 9-24=-145/1271, 9-22=-1459/283, 10-22=-209/1913, 10-21=-2996/360, 10-20=-98/1124, 11-20=-645/60, 12-20=-559/139, 12-18=0/295, 14-17=-541/210

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-5-4, Exterior(2) 14-5-4 to 22-11-1, Interior(1) 22-11-1 to 39-9-11, Exterior(2) 39-9-11 to 48-3-8, Interior(1) 48-3-8 to 60-8-12, Exterior(2) 60-8-12 to 63-8-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
4) Provide adequate drainage to prevent water ponding.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON

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NOTES-

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 2, 202 lb uplift at joint 21, 156 lb uplift at joint 17 and 170 lb uplift at joint 15.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	A3T	PIGGYBACK BASE	2	1	I45780058
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:18 2021 Page 1
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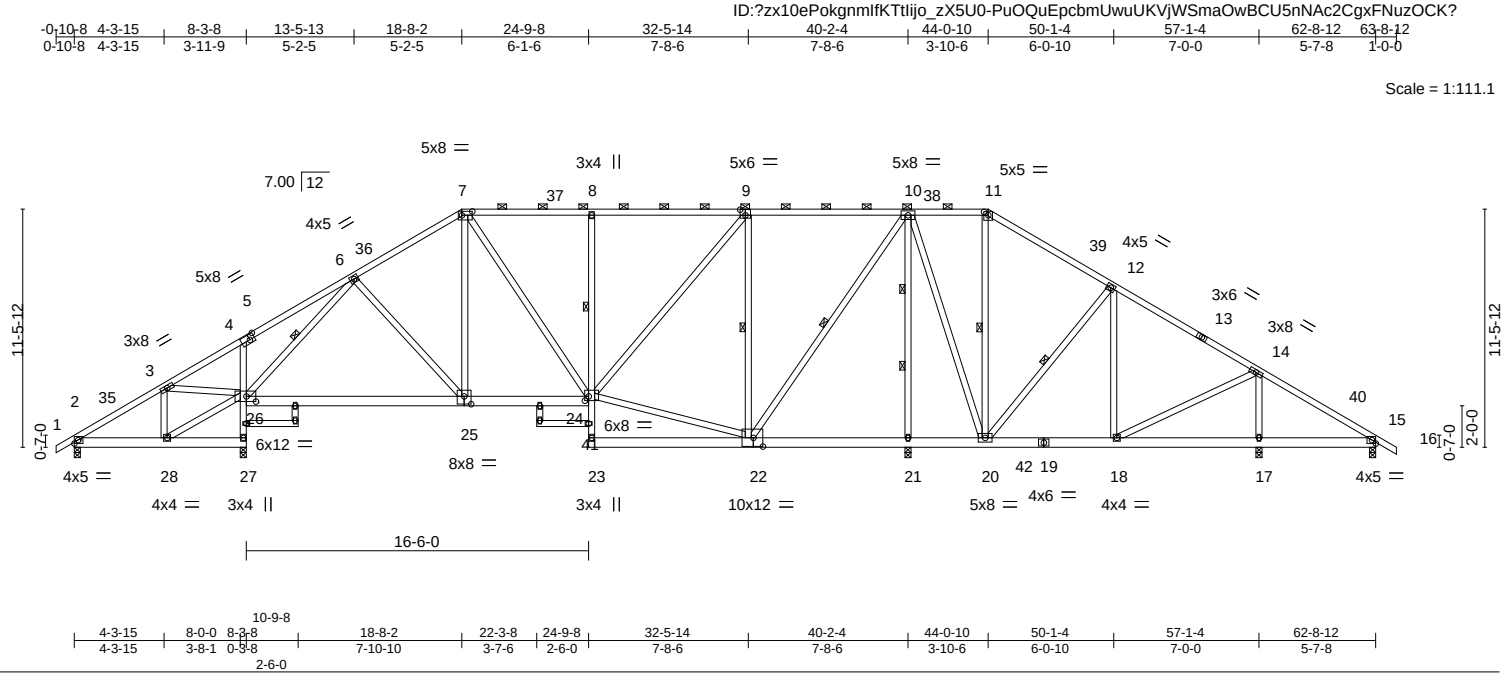

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.09	25-26	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.18	25-26	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.03	17	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 503 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.1 *Except*
4-27,8-23: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
29-30,30-31,32-33,32-34: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-9 oc purlins, except
2-0-0 oc purlins (5-0-8 max.): 7-11.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
1 Row at midpt 8-24
4-2-0 oc bracing: 26-27
10-0-0 oc bracing: 23-24
WEBS 1 Row at midpt 6-26, 9-22, 10-22, 11-20, 12-20
2 Rows at 1/3 pts 10-21

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-232(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 15 except 27=-173(LC 10), 21=-125(LC 6), 17=-141(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 15 except 2=322(LC 21), 27=1640(LC 1), 21=2251(LC 2), 17=1049(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-315/104, 6-7=-1187/209, 7-8=-1074/235, 8-9=-1071/235, 9-10=-607/208, 11-12=-265/181, 12-14=-515/140, 14-15=-35/254
BOT CHORD 26-27=-1608/187, 4-26=-304/144, 25-26=-158/892, 24-25=-137/1038, 8-24=-431/158, 18-20=0/328
WEBS 26-28=-63/301, 3-26=-320/101, 6-26=-1401/147, 6-25=-57/285, 7-24=-165/287, 22-24=-115/699, 9-24=-103/685, 9-22=-997/250, 10-22=-158/1230, 10-21=-1857/253, 10-20=-56/584, 12-20=-403/146, 14-18=0/514, 14-17=-895/194

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-5-4, Exterior(2) 14-5-4 to 22-11-1, Interior(1) 22-11-1 to 39-9-11, Exterior(2) 39-9-11 to 48-3-8, Interior(1) 48-3-8 to 60-8-12, Exterior(2) 60-8-12 to 63-8-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

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Continued on page 2

ENGINEERING BY TRENCO
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Edenton, NC 27932

NOTES-

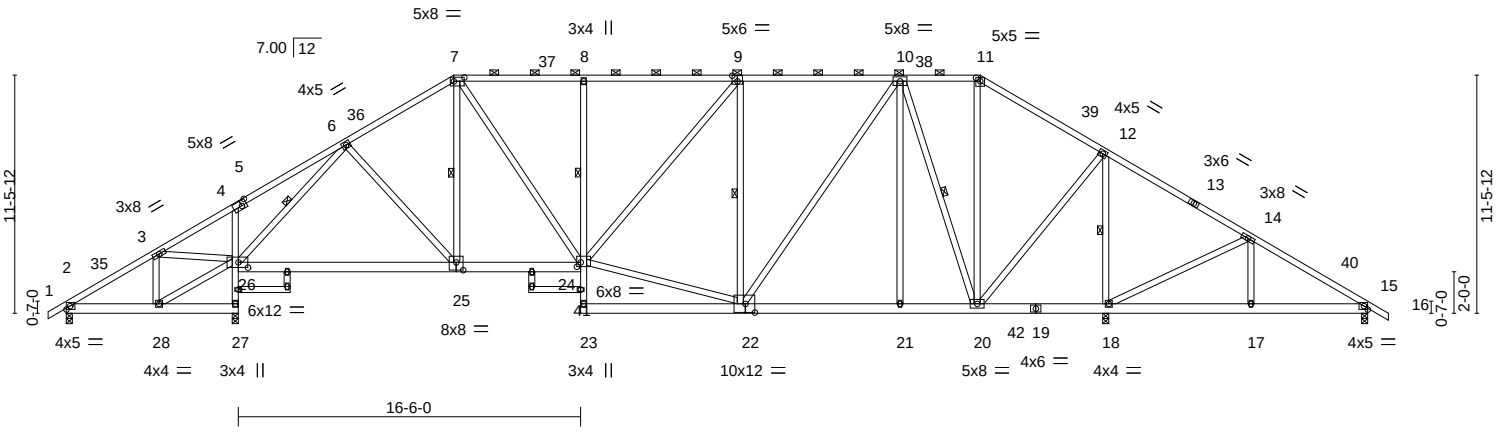
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 15 except (jt=lb) 27=173, 21=125, 17=141.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	A4T	PIGGYBACK BASE	3	1	I45780059
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:21 2021 Page 1
ID:?zx10ePokgnmIfKTtIijo_zX5U0-qT4YWFrUuhsUlx23Oe0TC1Yhzh6waX?Vue9vyCzOCJy

-0-10-8 4-3-15 8-3-8 13-5-13 18-8-2 24-9-8 32-5-14 40-2-4 44-0-10 50-1-4 57-1-4 62-8-12 63-8-12
0-10-8 4-3-15 3-11-9 5-2-5 5-2-5 6-1-6 7-8-6 7-8-6 3-10-6 6-0-10 7-0-0 5-7-8 1-0-0

Scale = 1:111.1



4-3-15 8-0-0 8-3-8 10-9-8 18-8-2 22-3-8 24-9-8 32-5-14 40-2-4 44-0-10 50-1-4 50-3-0 57-1-4 62-8-12
4-3-15 3-8-1 0-3-8 2-6-0 7-10-10 3-7-6 2-6-0 7-8-6 7-8-6 3-10-6 6-0-10 0-1-12 6-10-4 5-7-8

Plate Offsets (X,Y)-- [5:0-3-0,0-3-0], [7:0-6-0,0-2-4], [9:0-3-0,0-3-4], [11:0-2-8,0-2-1], [22:0-5-8,0-5-0], [24:0-2-4,0-2-8], [25:0-4-0,0-4-8], [26:0-5-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.12	21-22	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.20	21-22	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.06	18	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 503 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.1 *Except*
4-27,8-23: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
29-30,30-31,32-33,32-34: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-2 oc purlins, except
2-0-0 oc purlins (3-10-5 max.): 7-11.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
1 Row at midpt 8-24
3-7-0 oc bracing: 26-27
10-0-0 oc bracing: 23-24
WEBS 1 Row at midpt 6-26, 7-25, 9-22, 10-20, 12-18

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-232(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 15 except 27=-172(LC 10), 18=-118(LC 11)
Max Grav All reactions 250 lb or less at joint(s) except 2=293(LC 21), 27=2026(LC 1), 18=2714(LC 2), 15=317(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-264/106, 3-4=-101/319, 4-6=-53/303, 6-7=-1700/257, 7-8=-1790/301, 8-9=-1787/301, 9-10=-1489/290, 10-11=-634/207, 11-12=-822/201, 12-14=-36/572
BOT CHORD 26-27=-1994/194, 4-26=-309/144, 25-26=-191/1185, 24-25=-184/1449, 8-24=-428/158, 21-22=-134/1087, 20-21=-134/1087, 18-20=-412/162
WEBS 26-28=-57/266, 3-26=-340/104, 6-26=-1999/202, 6-25=-70/473, 7-24=-196/730, 22-24=-208/1521, 9-24=-77/460, 9-22=-834/230, 10-22=-108/805, 10-21=0/347, 10-20=-1335/195, 11-20=-46/252, 12-20=-125/1645, 12-18=-2241/281, 14-18=-534/155, 14-17=0/263

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-5-4, Exterior(2) 14-5-4 to 22-11-1, Interior(1) 22-11-1 to 39-9-11, Exterior(2) 39-9-11 to 48-3-8, Interior(1) 48-3-8 to 60-8-12, Exterior(2) 60-8-12 to 63-8-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

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NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON

April 23,2021

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

NOTES-

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 15 except (jt=lb) 27=172, 18=118.

9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	A5T	PIGGYBACK BASE	2	1	I45780060
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:23 2021 Page 1
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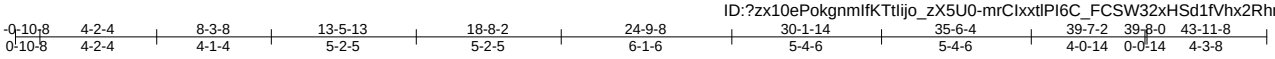

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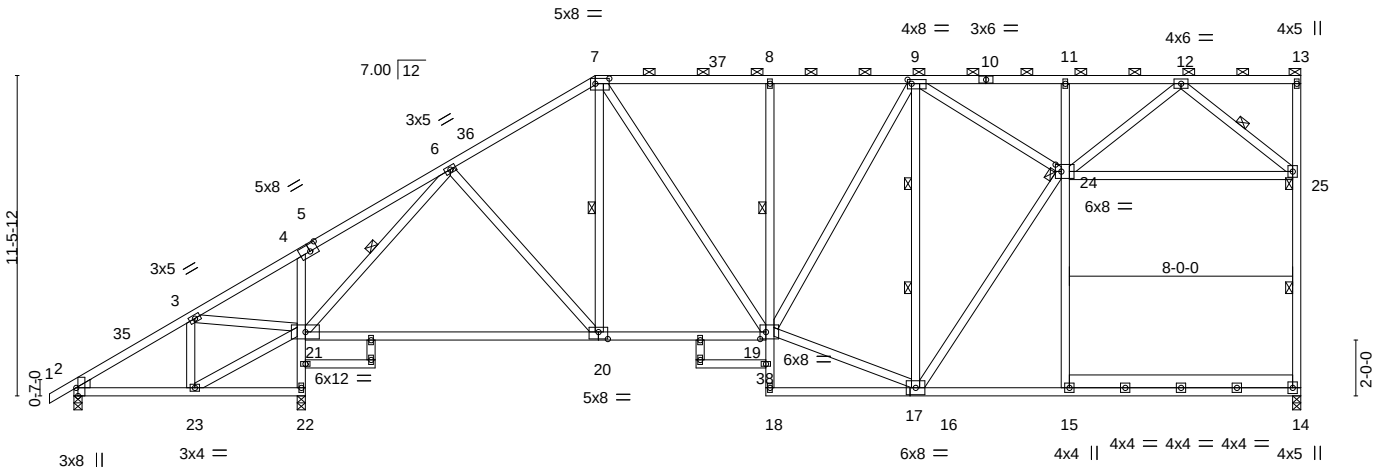

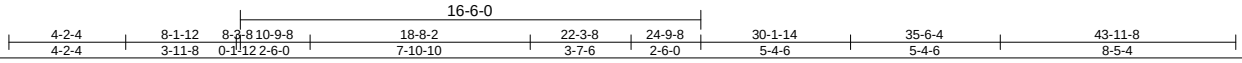

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [5:0-3-8,0-3-0], [7:0-6-0,0-2-4], [9:0-1-12,0-1-12], [19:0-2-8,0-3-0], [20:0-4-0,0-3-0], [24:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.29	20-21	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.60	20-21	>715	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.04	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 378 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-22,8-18: 2x4 SP No.3, 14-15: 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
13-14,26-27,28-29,27-30,28-31: 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-1-15 max.): 7-13.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 8-19
3-6-0 oc bracing: 21-22
10-0-0 oc bracing: 18-19
WEBS 1 Row at midpt 6-21, 7-20, 12-25
2 Rows at 1/3 pts 13-14, 9-16
JOINTS 1 Brace at Jt(s): 13, 24

REACTIONS. (size) 14=0-3-8, 2=0-3-8, 22=0-3-8
Max Horz 2=359(LC 10)
Max Uplift 14=-196(LC 7), 2=-2(LC 16), 22=-230(LC 10)
Max Grav 14=1587(LC 2), 2=150(LC 1), 22=2033(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-174/763, 4-6=-114/735, 6-7=-1343/163, 7-8=-1392/190, 8-9=-1384/188, 9-11=-2875/360, 11-12=-2886/362, 14-25=-1373/231
BOT CHORD 21-22=-2007/279, 4-21=-316/143, 20-21=-203/801, 19-20=-173/1102, 8-19=-358/137
WEBS 3-21=-496/43, 6-21=-2105/244, 6-20=-83/488, 7-19=-154/515, 16-19=-157/1207, 9-19=-109/520, 9-16=-1829/316, 15-24=0/412, 11-24=-274/103, 24-25=-233/1520, 12-24=-162/1717, 12-25=-2035/304, 16-24=-253/1945, 9-24=-255/2078

NOTES-
1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-5-4, Exterior(2) 14-5-4 to 22-11-1, Interior(1) 22-11-1 to 43-9-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) Provide adequate drainage to prevent water ponding.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 14=196, 22=230.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	A6T	PIGGYBACK BASE	1	1	I45780061
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:25 2021 Page 1
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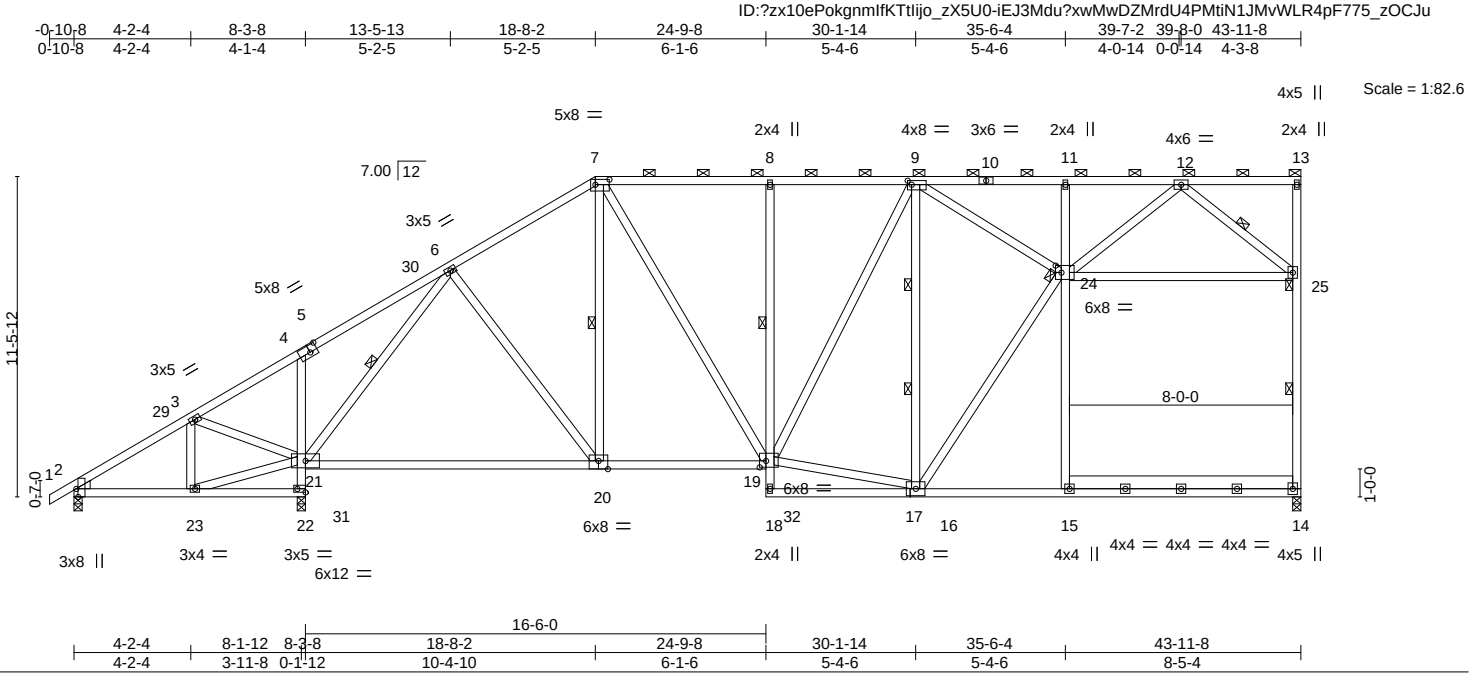

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [5:0-3-4,0-3-0], [7:0-6-0,0-2-4], [9:0-1-12,0-1-12], [19:0-2-12,0-2-12], [20:0-4-0,Edge], [22:Edge,0-1-8], [24:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.49	20-21	>869	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.76	20-21	>565	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.03	14	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 374 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 20-21,19-20: 2x4 SP No.1, 8-18: 2x4 SP No.3, 14-15: 2x6 SP No.1
WEBS	2x4 SP No.3 *Except* 13-14: 2x4 SP No.2
WEDGE	Left: 2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-1-10 max.): 7-13.
BOT CHORD	Rigid ceiling directly applied. Except: 1 Row at midpt 8-19
WEBS	1 Row at midpt 6-21, 7-20, 12-25; 2 Rows at 1/3 pts 13-14, 9-16
JOINTS	1 Brace at Jt(s): 13, 24

REACTIONS. (size) 14=0-3-8, 2=0-3-8, 22=0-3-8
Max Horz 2=359(LC 10)
Max Uplift 14=-196(LC 7), 2=-129(LC 16), 22=-216(LC 10)
Max Grav 14=1604(LC 2), 2=100(LC 7), 22=2454(LC 2)

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

TOP CHORD	2-3=-189/447, 3-4=-196/850, 4-6=-127/825, 6-7=-1289/158, 7-8=-1278/184, 8-9=-1273/183, 9-11=-2917/359, 11-12=-2928/361, 14-25=-1390/231
BOT CHORD	2-23=-416/110, 22-23=-342/0, 21-22=-2434/298, 4-21=-312/146, 20-21=-189/676, 19-20=-168/1055, 8-19=-358/137
WEBS	3-21=-424/79, 6-21=-2217/255, 6-20=-82/656, 7-19=-150/450, 16-19=-148/1091, 9-19=-87/281, 9-16=-1639/287, 15-24=0/413, 11-24=-274/103, 24-25=-233/1541, 12-24=-161/1744, 12-25=-2062/303, 16-24=-252/1980, 9-24=-255/2105

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-6-4, Interior(1) 3-6-4 to 12-5-9, Exterior(2) 12-5-9 to 24-11-4, Interior(1) 24-11-4 to 43-9-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=196, 2=129, 22=216.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	A7	PIGGYBACK BASE	1	1	I45780062

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:27 2021 Page 1
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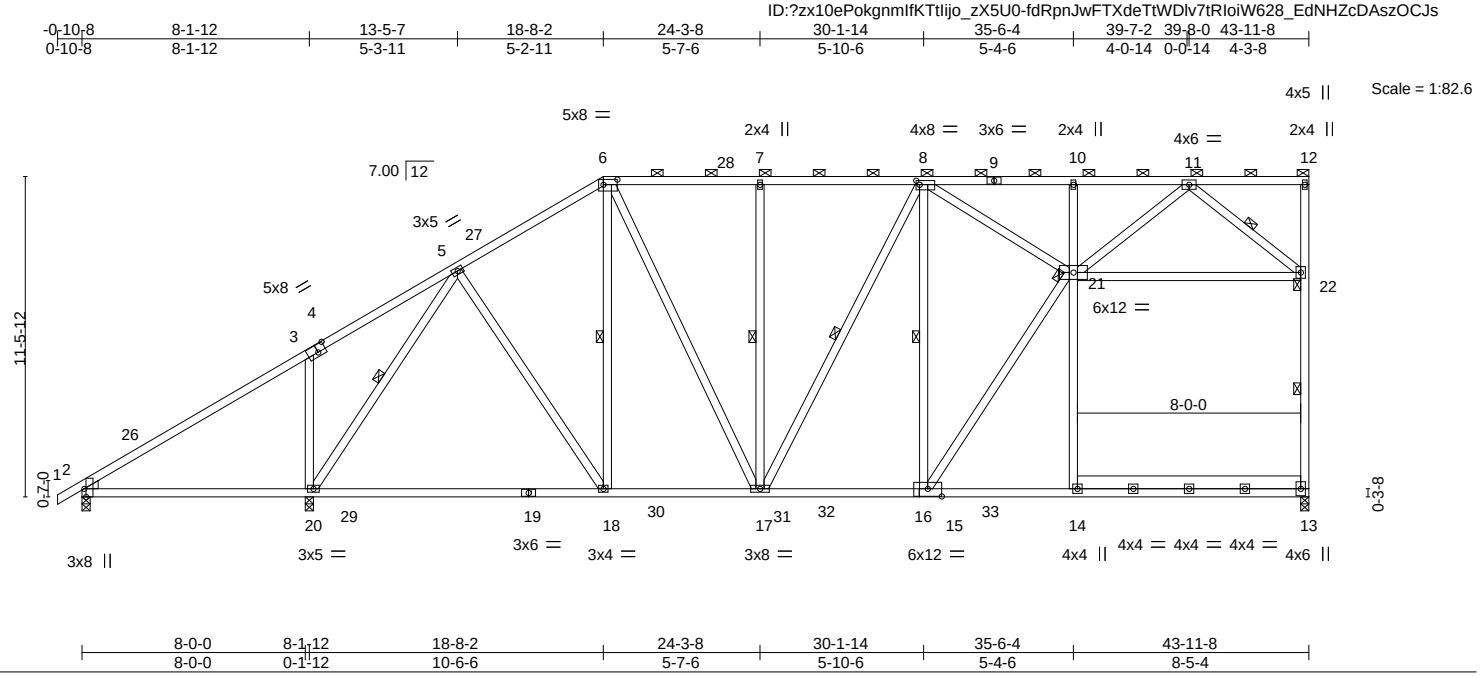


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [4:0-3-8,0-3-4], [6:0-6-0,0-2-4], [8:0-1-8,0-1-12], [16:0-6-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.55	18-20	>784	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.77	18-20	>557	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 358 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except*
13-16: 2x4 SP No.2, 13-14: 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
12-13: 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-0-10 max.): 6-12.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-20, 6-18, 7-17, 8-17, 8-15, 11-22
2 Rows at 1/3 pts 12-13
JOINTS 1 Brace at Jt(s): 12, 21

REACTIONS. (size) 13=0-3-8, 20=0-3-8, 2=0-3-8
Max Horz 2=359(LC 10)
Max Uplift 13=-201(LC 7), 20=-130(LC 7), 2=-206(LC 24)
Max Grav 13=1684(LC 2), 20=2459(LC 2), 2=191(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-149/650, 3-5=-163/615, 5-6=-1260/158, 6-7=-1260/177, 7-8=-1260/177, 8-10=-3102/372, 10-11=-3114/374, 13-22=-1466/237
BOT CHORD 2-20=-530/137, 18-20=-212/689, 17-18=-170/1030, 15-17=-152/1251
WEBS 3-20=-473/237, 5-20=-1961/138, 5-18=-108/759, 6-18=-276/177, 6-17=-158/581, 7-17=-363/137, 8-15=-1474/273, 14-21=0/386, 10-21=-266/100, 21-22=-240/1632, 15-21=-266/2166, 8-21=-259/2184, 11-21=-169/1864, 11-22=-2184/312

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-5-4, Exterior(2) 14-5-4 to 22-11-1, Interior(1) 22-11-1 to 43-9-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Provide adequate drainage to prevent water ponding.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=201, 20=130, 2=206.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

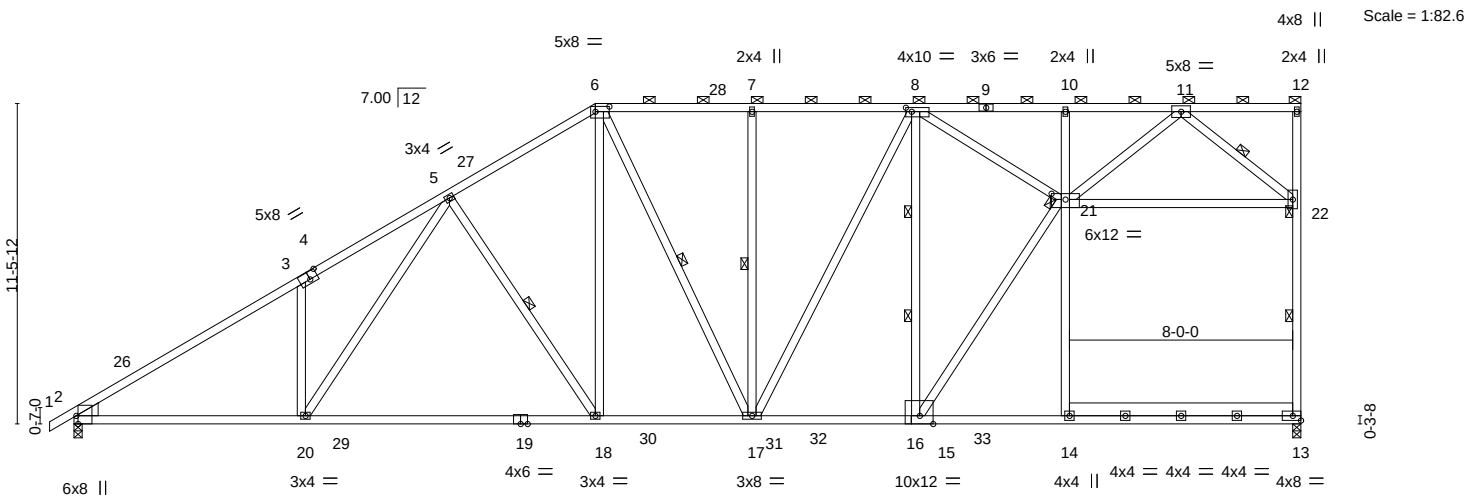
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	A8	PIGGYBACK BASE	6	1	I45780063
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:29 2021 Page 1
ID:?zx10ePokgnmIfKTtIijo_zX5U0-b?ZaC_xW?8tMiAfcsK9LXjt0cwj?S83gkt5KEIzOCJq

-0-10-8	8-1-12	13-5-7	18-8-2	24-3-8	30-1-14	35-6-4	39-7-2	39-8-0	43-11-8
0-10-8	8-1-12	5-3-11	5-2-11	5-7-6	5-10-6	5-4-6	4-0-14	0-0-14	4-3-8

Scale = 1:82.6



8-1-12	18-8-2	24-3-8	30-1-14	35-6-4	43-11-8
8-1-12	10-6-6	5-7-6	5-10-6	5-4-6	8-5-4

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [4:0-3-8,0-3-4], [6:0-6-0,0-2-4], [8:0-2-8,0-1-12], [16:0-5-12,Edge], [21:0-6-0,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.71	18-20	>745	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-1.11	18-20	>474	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.09	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 359 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
13-14: 2x6 SP No.1, 16-19: 2x4 SP DSS, 2-19: 2x4 SP No.1
WEBS 2x4 SP No.2 *Except*
12-13: 2x4 SP No.1, 3-20,5-20,5-18,6-17,8-17,21-22: 2x4 SP No.3
WEDGE
Left: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-5-11 max.): 6-12.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-18, 6-17, 7-17, 11-22
2 Rows at 1/3 pts 12-13, 8-15
JOINTS 1 Brace at Jt(s): 12, 21

REACTIONS. (size) 13=0-3-8, 2=0-3-8
Max Horz 2=359(LC 10)
Max Uplift 13=-225(LC 7), 2=-126(LC 10)
Max Grav 13=2141(LC 2), 2=1987(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3314/200, 3-5=-3258/309, 5-6=-2448/250, 6-7=-2056/239, 7-8=-2056/239, 8-10=-4191/429, 10-11=-4206/431, 13-22=-1913/260
BOT CHORD 2-20=-391/2777, 18-20=-332/2365, 17-18=-250/2063, 15-17=-194/1811
WEBS 3-20=-369/231, 5-20=-176/835, 5-18=-673/220, 6-18=-86/1045, 7-17=-364/137, 8-17=-101/555, 8-15=-2258/332, 14-21=0/370, 10-21=-263/101, 21-22=-268/2153, 15-21=-338/3135, 8-21=-292/2808, 11-21=-219/2582, 11-22=-2893/350

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-5-4, Exterior(2) 14-5-4 to 22-11-1, Interior(1) 22-11-1 to 43-9-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Provide adequate drainage to prevent water ponding.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=225, 2=126.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	A8GE	PIGGYBACK BASE SUPPO	1	1	I45780064
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:32 2021 Page 1
ID:?zx10ePokgnmIfKTtlijo_zX5U0-?aEiq0_OI3FxZeOBXSi28LVjG7zLfiY6QrK_r4zOCJn

-0-10-8 18-8-2 43-11-8
0-10-8 18-8-2 25-3-6

Scale = 1:75.2

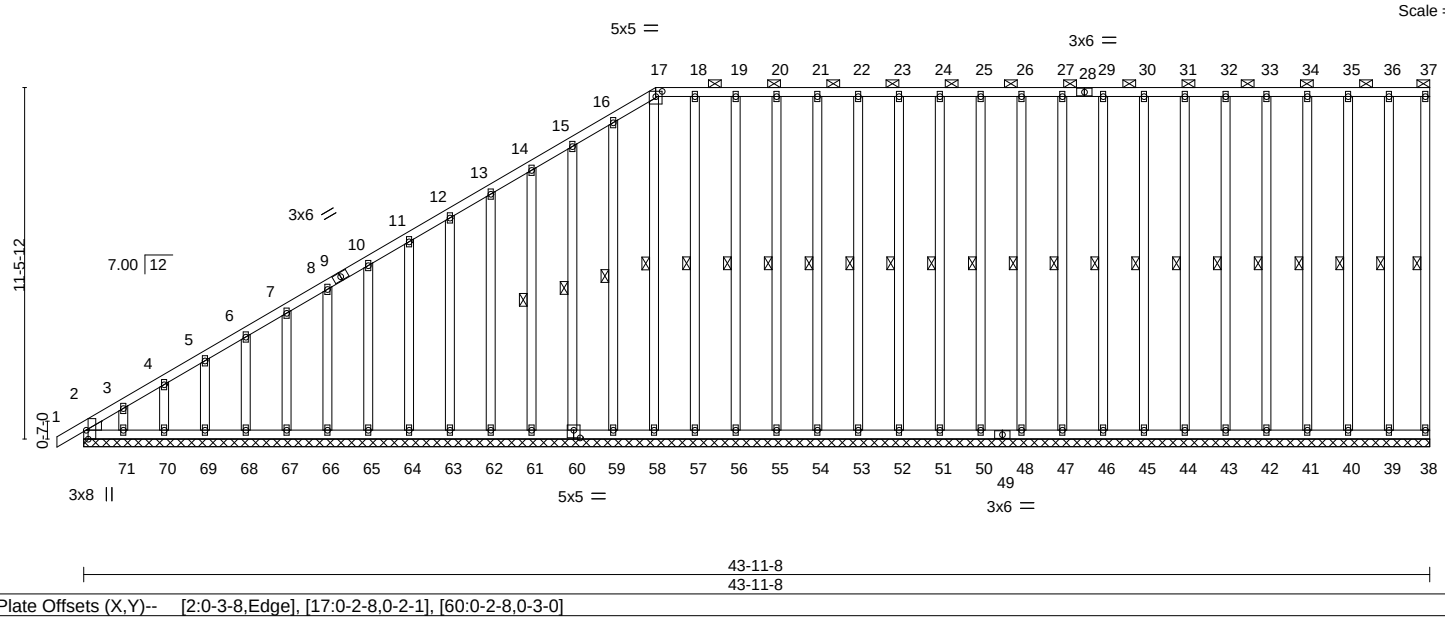


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [17:0-2-8,0-2-1], [60:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	1	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.00	38	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 567 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
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 17-37.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 59-60,58-59.
WEBS 1 Row at midpt 37-38, 36-39, 35-40, 34-41, 33-42, 32-43, 31-44, 30-45, 29-46, 27-47, 26-48, 25-50, 24-51, 23-52, 22-53, 21-54, 20-55, 19-56, 18-57, 17-58, 16-59, 15-60, 14-61

REACTIONS. All bearings 43-11-8.
(lb) - Max Horz 2=360(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 2
Max Grav All reactions 250 lb or less at joint(s) 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 2

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-430/346, 3-4=-362/287, 4-5=-332/264, 5-6=-304/242, 6-7=-275/220

NOTES-
1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 15-8-2, Corner(3) 15-8-2 to 21-8-2, Exterior(2) 21-8-2 to 40-9-12, Corner(3) 40-9-12 to 43-9-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) 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.
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 2.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	B1	ATTIC	6	1	I45780065
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:34 2021 Page 1
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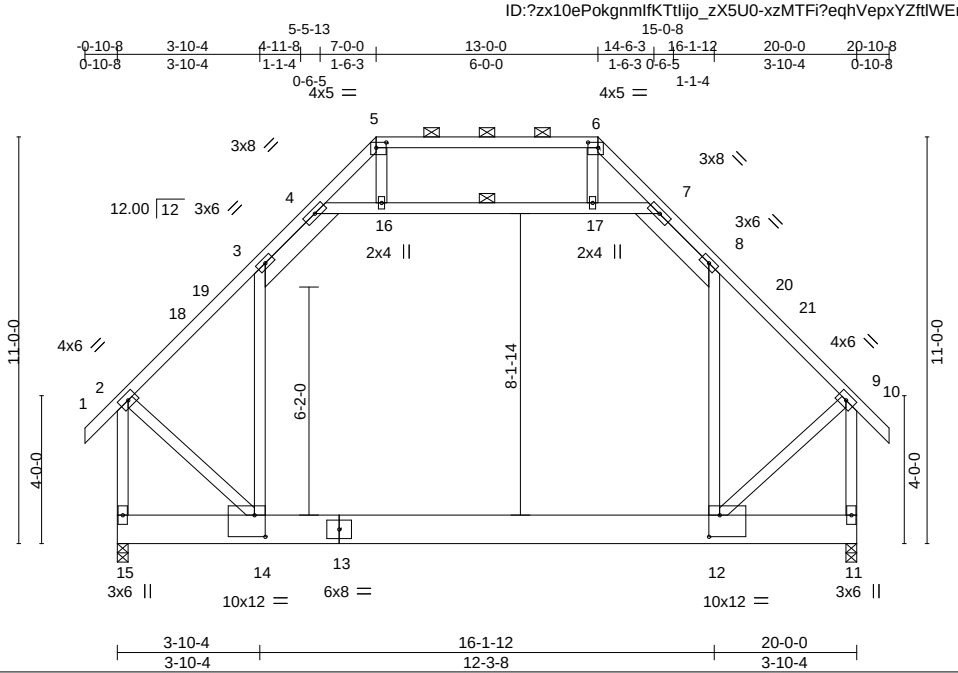

Plate Offsets (X,Y)-- [5:0-3-4,0-1-12], [6:0-3-4,0-1-12], [12:0-3-8,0-7-0], [14:0-3-8,0-7-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.18	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.23	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Attic	-0.13	12-14	1100	360	Weight: 196 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 3-4,7-8: 2x6 SP No.1
BOT CHORD 2x10 SP No.2
WEBS 2x4 SP No.2 *Except* 2-14,9-12,5-16,6-17: 2x4 SP No.3

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

REACTIONS. (size) 15=0-3-8, 11=0-3-8
Max Horz 15=-161(LC 8)
Max Uplift 15=-2(LC 10), 11=-2(LC 11)
Max Grav 15=1171(LC 2), 11=1171(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-944/91, 3-4=-669/154, 4-5=-454/101, 5-6=-324/79, 6-7=-454/102, 7-8=-669/154, 8-9=-944/91, 2-15=-1339/80, 9-11=-1339/80
BOT CHORD 12-14=-16/613
WEBS 3-14=-195/392, 4-16=-570/132, 16-17=-566/134, 7-17=-570/132, 8-12=-195/392, 2-14=-34/817, 9-12=-34/817

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-9-1, Exterior(2) 2-9-1 to 17-2-15, Interior(1) 17-2-15 to 17-10-8, Exterior(2) 17-10-8 to 20-10-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Provide adequate drainage to prevent water ponding.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-16, 16-17, 7-17
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-14
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 11.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	B1GE	GABLE	1	1	I45780066
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:35 2021 Page 1
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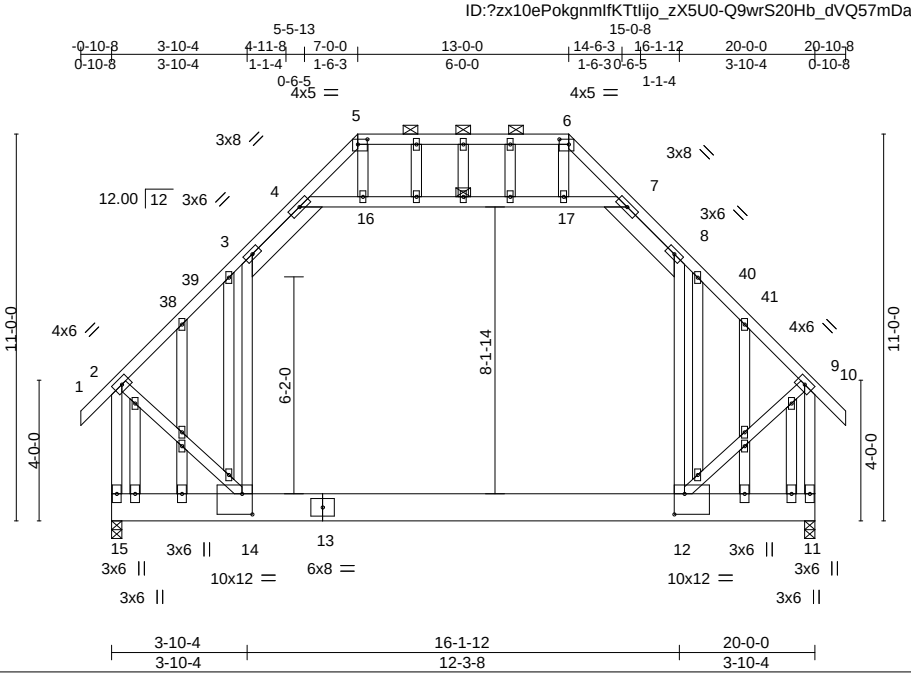


Plate Offsets (X,Y)-- [5:0-3-4,0-1-12], [6:0-3-4,0-1-12], [12:0-3-8,0-7-0], [14:0-3-8,0-7-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.18	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.23	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Attic	-0.13	12-14	1100	360	Weight: 243 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 3-4,7-8: 2x6 SP No.1
BOT CHORD	2x10 SP No.2
WEBS	2x4 SP No.2 *Except* 2-14,9-12,5-16,6-17: 2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

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

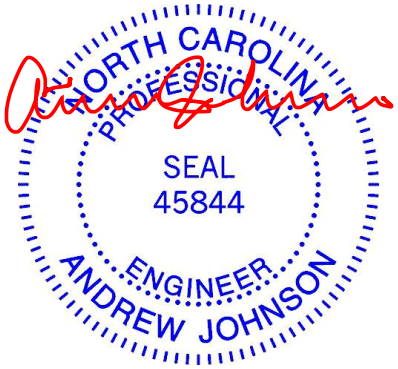
REACTIONS. (size) 15=0-3-8, 11=0-3-8
Max Horz 15=-161(LC 8)
Max Uplift 15=-2(LC 10), 11=-2(LC 11)
Max Grav 15=1171(LC 2), 11=1171(LC 2)

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

TOP CHORD	2-3=-944/91, 3-4=-669/154, 4-5=-454/101, 5-6=-324/79, 6-7=-454/102, 7-8=-669/154, 8-9=-944/91, 2-15=-1339/80, 9-11=-1339/80
BOT CHORD	12-14=-16/613
WEBS	3-14=-195/392, 4-16=-570/132, 16-17=-566/134, 7-17=-570/132, 8-12=-195/392, 2-14=-34/817, 9-12=-34/817

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-9-1, Exterior(2) 2-9-1 to 17-2-15, Interior(1) 17-2-15 to 17-10-8, Exterior(2) 17-10-8 to 20-10-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 1-4-0 oc.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-16, 16-17, 7-17
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-14
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 11.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.



April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	B3	ATTIC	1	1	I45780067
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:36 2021 Page 1
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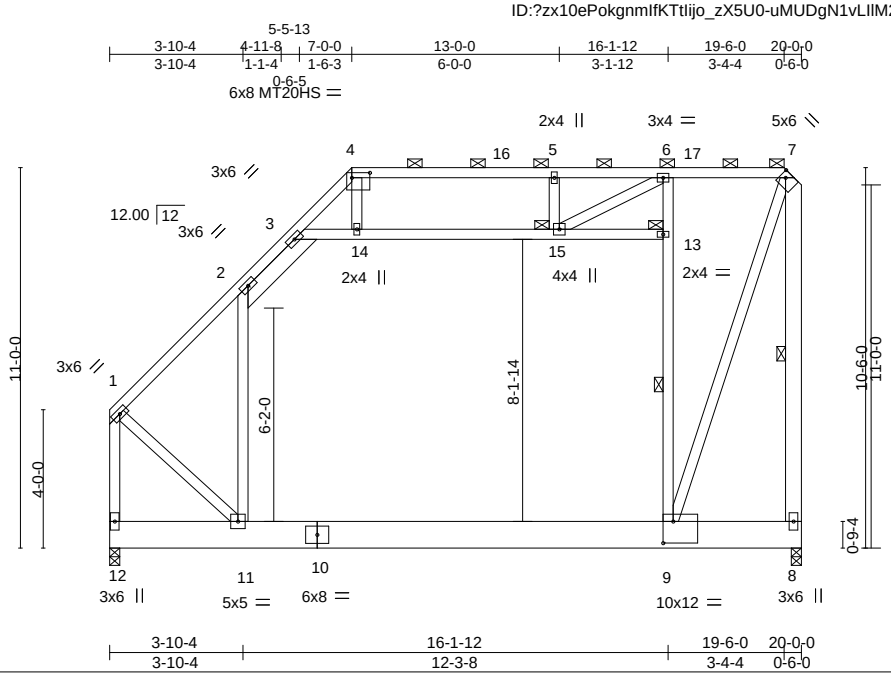


Plate Offsets (X,Y)-- [4:0-6-4,0-1-12], [7:0-1-13,0-2-0], [9:0-3-8,0-7-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.18	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.25	9-11	>930	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Attic	-0.13	9-11	1103	360	Weight: 220 lb	FT = 20%

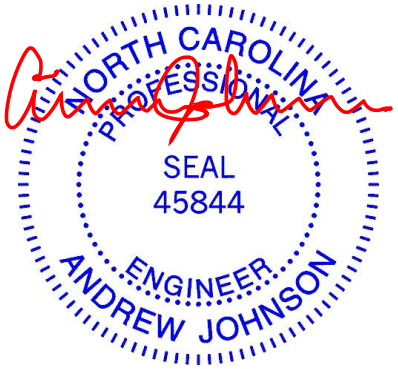
LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
2-3: 2x6 SP No.1
BOT CHORD 2x10 SP No.2
WEBS 2x4 SP No.3 *Except*
2-11,6-9,3-13: 2x4 SP No.2, 7-8: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-13, 7-8
JOINTS 1 Brace at Jt(s): 7, 13, 15

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=218(LC 10)
Max Uplift 8=-105(LC 7)
Max Grav 12=1125(LC 2), 8=1218(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-821/0, 2-3=-683/71, 3-4=-751/129, 4-5=-610/142, 5-6=-609/142, 6-7=-489/77, 1-12=-1125/0, 7-8=-1454/248
BOT CHORD 9-11=-81/498
WEBS 2-11=-289/227, 9-13=-510/140, 6-13=-462/140, 7-9=-235/1485, 3-14=-159/282, 14-15=-142/296, 1-11=0/730, 6-15=-124/387

NOTES-
1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 11-2-15, Interior(1) 11-2-15 to 16-9-4, Exterior(2) 16-9-4 to 19-9-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) Provide adequate drainage to prevent water ponding.
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
6) Ceiling dead load (5.0 psf) on member(s). 2-3, 3-14, 14-15, 13-15
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 9-11
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=105.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Attic room checked for L/360 deflection.



April 23,2021

ENGINEERING BY TRENCO
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	B3GE	ATTIC	1	1	I45780068
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:38 2021 Page 1
ID:?zx10ePokgnmIfKTtlijo_zX5U0-qkcz4329tv?4HZrLujpSOclYiYsA3MH?pnnJ3jzOCJh

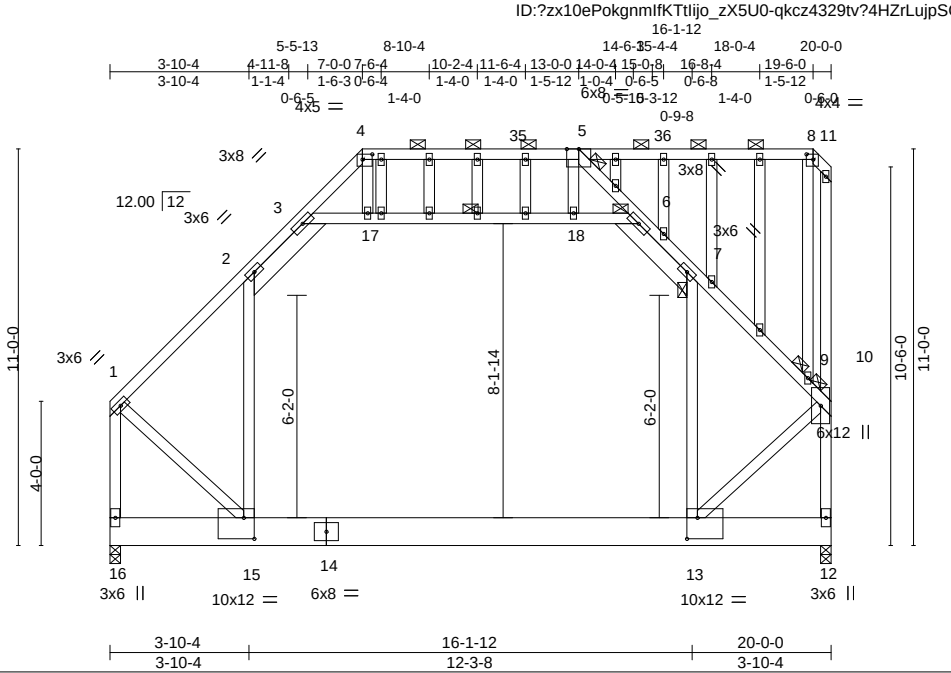


Plate Offsets (X,Y)-- [4:0-3-4,0-1-12], [8:0-2-4,0-1-12], [13:0-3-8,0-7-0], [15:0-3-8,0-7-0]

LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0		Plate Grip DOL 1.15	TC 0.92	Vert(LL) -0.19 13-15 >999 360	MT20 244/190
TCDL 10.0		Lumber DOL 1.15	BC 0.70	Vert(CT) -0.23 13-15 >999 240	
BCLL 0.0	*	Rep Stress Incr YES	WB 0.34	Horz(CT) 0.00 12 n/a n/a	
BCDL 10.0		Code IRC2015/TPI2014	Matrix-MSH	Attic -0.14 13-15 1092 360	Weight: 248 lb FT = 20%

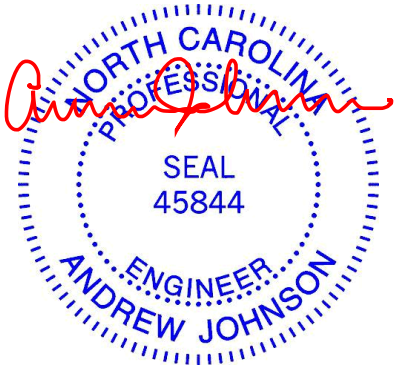
LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 2-3,6-7: 2x6 SP No.1
BOT CHORD 2x10 SP No.2
WEBS 2x4 SP No.3 *Except* 2-15,3-6,7-13,1-16,10-12: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-5 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5, 5-10, 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-6
JOINTS 1 Brace at Jt(s): 5, 10, 6, 7, 9

REACTIONS. (size) 16=0-3-8, 12=0-3-8
Max Horz 16=211(LC 10)
Max Uplift 12=-101(LC 7)
Max Grav 16=1117(LC 2), 12=1109(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-907/0, 2-3=-673/84, 3-4=-492/120, 4-5=-344/104, 5-6=-543/147, 6-7=-674/147, 7-9=-824/120, 9-10=-964/218, 1-16=-1241/0, 10-12=-1274/229
BOT CHORD 13-15=-96/574
WEBS 2-15=-179/369, 3-17=-565/61, 17-18=-559/66, 6-18=-565/65, 7-13=-147/406, 1-15=0/816, 10-13=-126/767, 8-9=-376/162

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 11-2-15, Interior(1) 11-2-15 to 15-3-1, Exterior(2) 15-3-1 to 19-10-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
7) Ceiling dead load (5.0 psf) on member(s). 2-3, 3-17, 17-18, 6-18
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=101.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.



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Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	B3GR	ATTIC	1	2	I45780069

Job Reference (optional)

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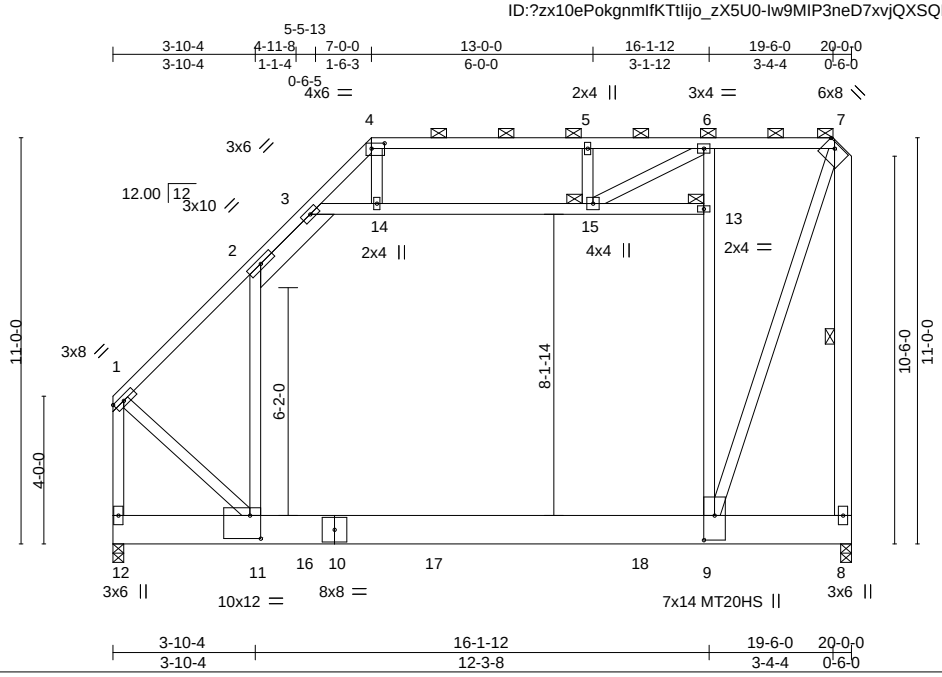


Plate Offsets (X,Y)-- [1:0-3-7,Edge], [4:0-4-4,0-1-12], [7:0-3-4,Edge], [9:0-8-0,0-3-8], [11:0-3-8,0-7-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.25	9-11	>929	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.37	9-11	>642	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH		Attic	-0.18	9-11	840	360	Weight: 440 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP DSS *Except*
4-7: 2x4 SP No.2, 2-3: 2x6 SP No.1
BOT CHORD 2x10 SP No.2 *Except*
8-10: 2x10 SP DSS
WEBS 2x4 SP No.3 *Except*
2-11,6-9,3-13,1-12: 2x4 SP No.2, 7-8: 2x6 SP No.1

BRACING-

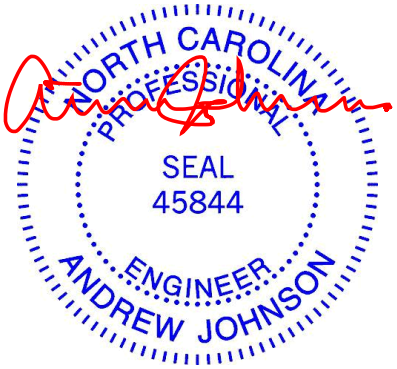
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-8
JOINTS 1 Brace at Jt(s): 7, 13, 15

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=219(LC 8)
Max Uplift 12=-358(LC 5), 8=-458(LC 5)
Max Grav 12=3219(LC 16), 8=2979(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2476/310, 2-3=-1527/218, 3-4=-1102/203, 4-5=-771/170, 5-6=-771/170, 6-7=-1547/261, 1-12=-3374/388, 7-8=-4430/749
BOT CHORD 9-11=-267/1571
WEBS 2-11=-223/1209, 9-13=-436/114, 6-13=-337/97, 7-9=-800/4721, 3-14=-928/169, 14-15=-888/168, 1-11=-260/2084, 4-14=-47/500, 6-15=-848/152

NOTES-

1) 2-ply truss to be connected together with 10d (0.148"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-8-0 oc.
Webs 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 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; Lumber DOL=1.33 plate grip DOL=1.33
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
9) Ceiling dead load (5.0 psf) on member(s). 2-3, 3-14, 14-15, 13-15
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 9-11
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=358, 8=458.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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NOTES-

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1337 lb down and 252 lb up at 5-1-8, and 1337 lb down and 252 lb up at 8-7-8, and 1337 lb down and 252 lb up at 14-2-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-3=-70, 3-4=-60, 4-7=-60, 8-12=-20, 3-13=-10
   Concentrated Loads (lb)
   Vert: 16=-750(F) 17=-750(F) 18=-750(F)

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	B4	Attic	3	1	I45780070
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:40 2021 Page 1
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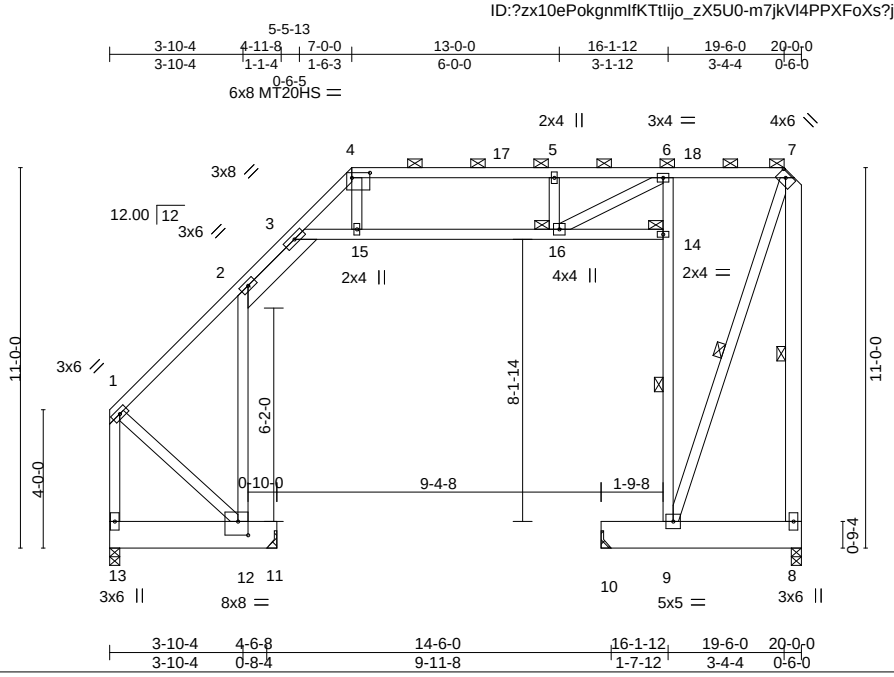

Plate Offsets (X,Y)-- [4:0-6-4,0-1-12], [7:0-2-11,0-1-11], [12:0-3-8,0-4-12]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.01	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.02	8-9	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.53	Horz(CT)	0.14	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 183 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 2-3: 2x6 SP No.1
BOT CHORD 2x10 SP No.2
WEBS 2x4 SP No.3 *Except* 2-12,6-9,3-14,1-13: 2x4 SP No.2, 7-8: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-14, 7-9, 7-8
JOINTS 1 Brace at Jt(s): 7, 14, 16

REACTIONS. All bearings 0-3-8 except (jt=length) 11=Mechanical, 10=Mechanical.
(lb) - Max Horz 13=219(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 8 except 11=-428(LC 10), 10=-115(LC 7)
Max Grav All reactions 250 lb or less at joint(s) except 13=316(LC 20), 11=610(LC 1), 8=372(LC 2), 10=541(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-262/242, 2-3=-313/46, 3-4=-647/187, 4-5=-569/203, 5-6=-569/203, 1-13=-367/267
WEBS 2-12=-617/359, 9-14=-535/182, 6-14=-516/178, 3-15=-203/564, 15-16=-203/569, 1-12=-246/310, 5-16=-278/102, 6-16=-232/655

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 11-2-15, Interior(1) 11-2-15 to 16-9-4, Exterior(2) 16-9-4 to 19-9-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 with a clearance greater than 6-0-0 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 100 lb uplift at joint(s) 8 except (jt=lb) 11=428, 10=115.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.
12) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

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LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-70(F=-10), 3-4=-60, 4-7=-60, 12-13=-20, 11-12=-100(F=-80), 3-14=-10(F), 9-10=-100(F=-80), 8-9=-20

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	C1	Monopitch	1	1	I45780071

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:41 2021 Page 1
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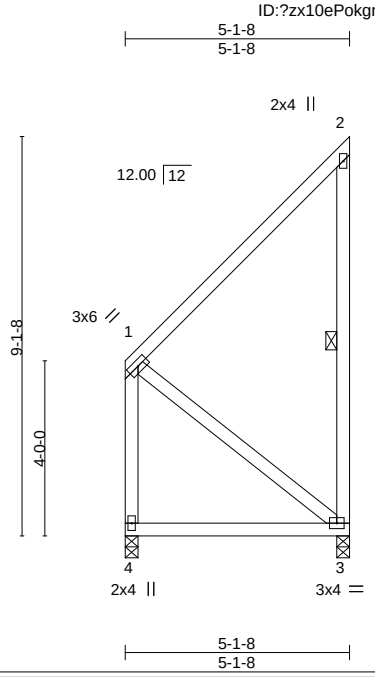

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.03	3-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07	3-4	>886	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 45 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-3

REACTIONS. (size) 4=0-3-8, 3=0-3-8
Max Horz 4=153(LC 10)
Max Uplift 3=-224(LC 10)
Max Grav 4=233(LC 19), 3=243(LC 17)

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=224.
5) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	PB1	Piggyback	20	1	I45780072

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:42 2021 Page 1

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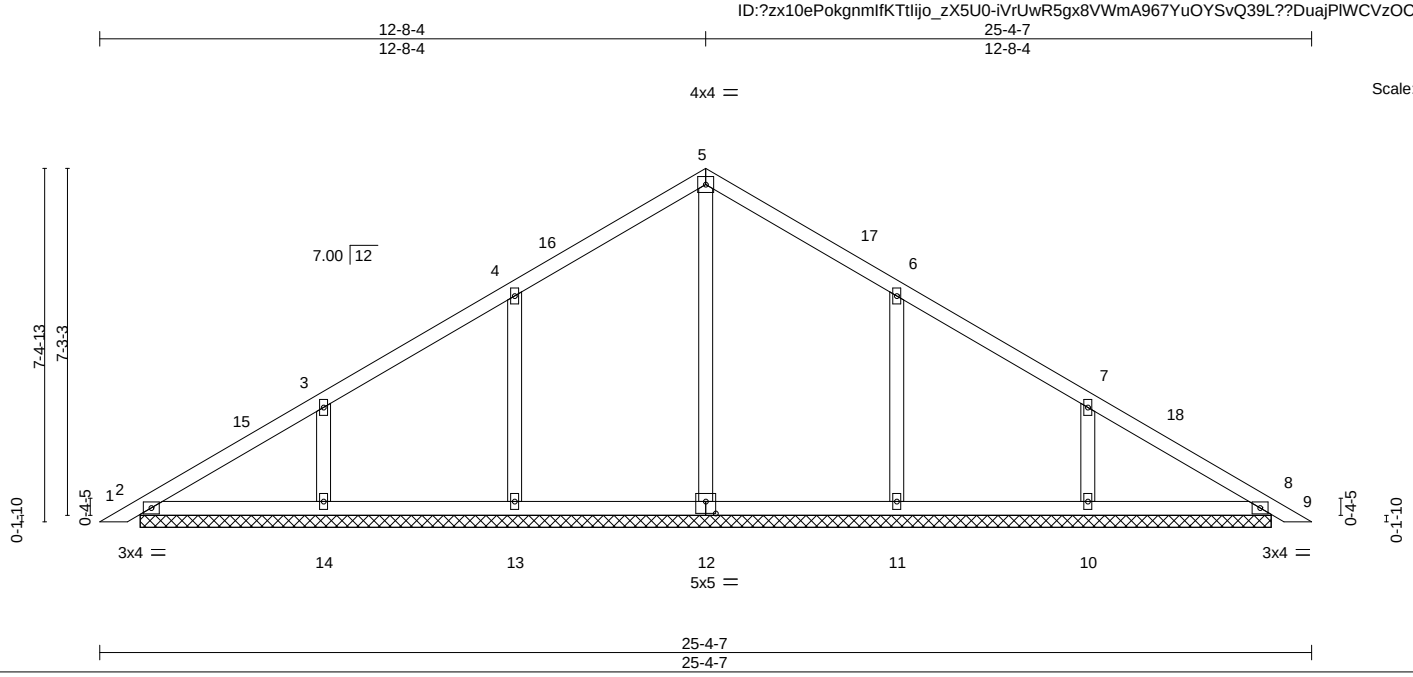

Plate Offsets (X,Y)-- [12:0-2-8,0-3-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	0.00	9	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	0.01	9	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 108 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 23-8-2.
(lb) - Max Horz 2=-146(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8 except 12=396(LC 20), 13=393(LC 17), 14=346(LC 1), 11=393(LC 18), 10=346(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-13=-260/138, 3-14=-257/133, 6-11=-260/138, 7-10=-257/133

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-3-8 to 3-3-8, Interior(1) 3-3-8 to 9-8-4, Exterior(2) 9-8-4 to 15-8-4, Interior(1) 15-8-4 to 22-1-0, Exterior(2) 22-1-0 to 25-1-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13, 14, 11, 10.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	PB2	Piggyback	7	1	I45780073

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:44 2021 Page 1
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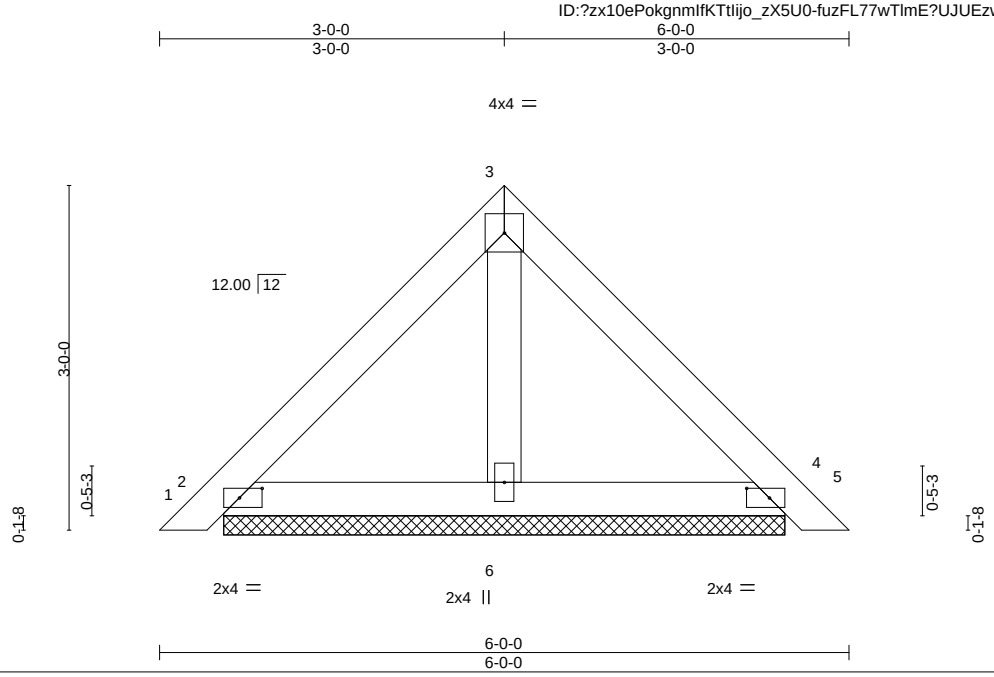

Plate Offsets (X,Y)-- [2:0-2-6,0-1-0], [4:0-2-6,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	5	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 23 lb	FT = 20%

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

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

REACTIONS. (size) 2=4-10-10, 4=4-10-10, 6=4-10-10
Max Horz 2=-57(LC 8)
Max Uplift 2=-26(LC 11), 4=-31(LC 11)
Max Grav 2=141(LC 1), 4=141(LC 1), 6=152(LC 3)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Gable requires continuous bottom chord bearing.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	PB3	Piggyback	4	1	I45780074

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:45 2021 Page 1
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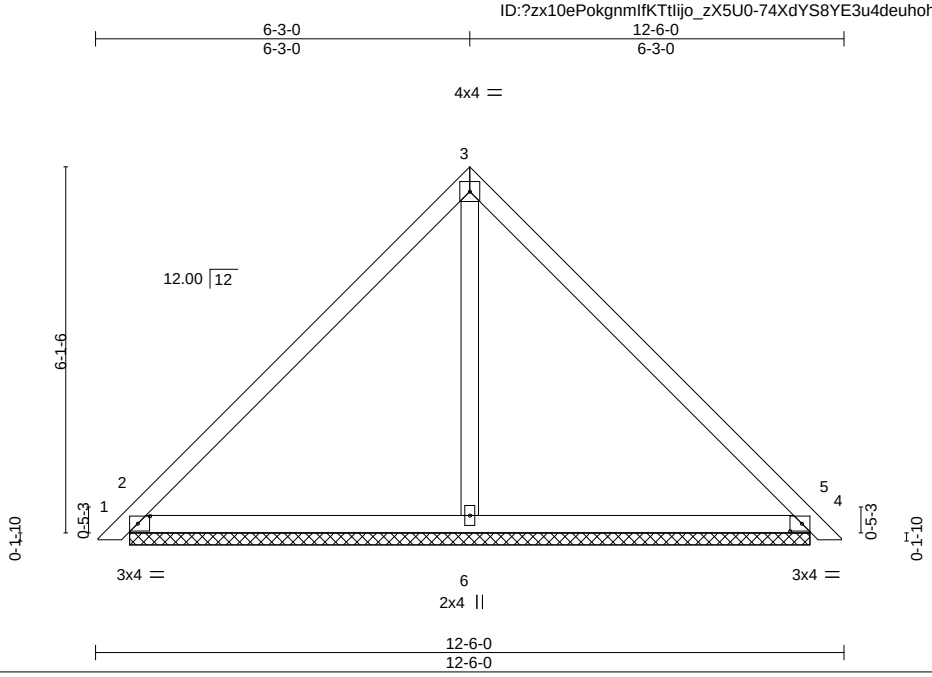


Plate Offsets (X,Y)-- [2:0-2-6,0-1-8], [4:0-2-6,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	0.02	5	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 51 lb	FT = 20%

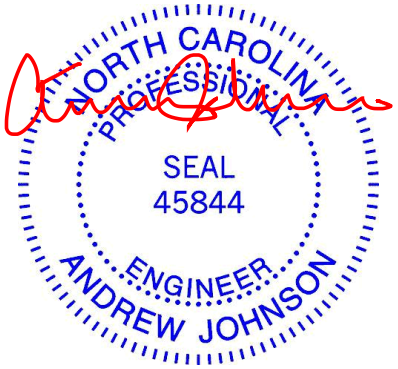
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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

REACTIONS. (size) 2=11-4-6, 4=11-4-6, 6=11-4-6
Max Horz 2=122(LC 9)
Max Uplift 2=-39(LC 11), 4=-43(LC 11), 6=-7(LC 10)
Max Grav 2=273(LC 1), 4=273(LC 1), 6=403(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Gable requires continuous bottom chord bearing.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	PB3A	Piggyback	1	2	I45780075

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:45 2021 Page 1
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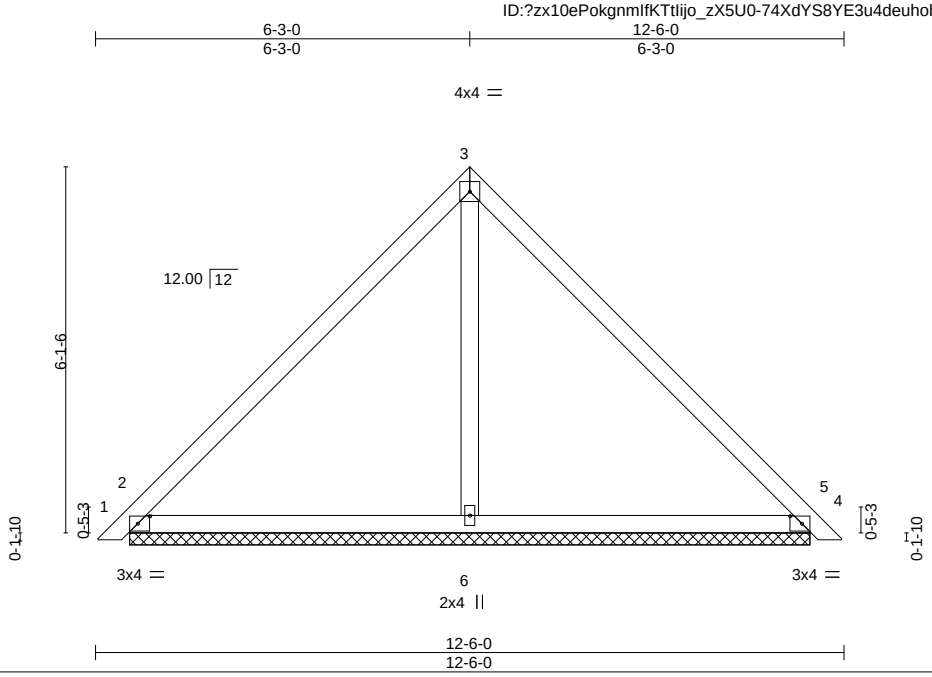

Plate Offsets (X,Y)-- [2:0-2-6,0-1-8], [4:0-2-6,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	0.01	5	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 102 lb	FT = 20%

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

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

REACTIONS. (size) 2=11-4-6, 4=11-4-6, 6=11-4-6
Max Horz 2=122(LC 9)
Max Uplift 2=-39(LC 11), 4=-43(LC 11), 6=-7(LC 10)
Max Grav 2=273(LC 1), 4=273(LC 1), 6=403(LC 1)

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

NOTES-
1) 2-ply truss to be connected together with 10d (0.148"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords 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 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
5) Gable requires continuous bottom chord bearing.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	PB3GE	GABLE	1	1	I45780076

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:47 2021 Page 1
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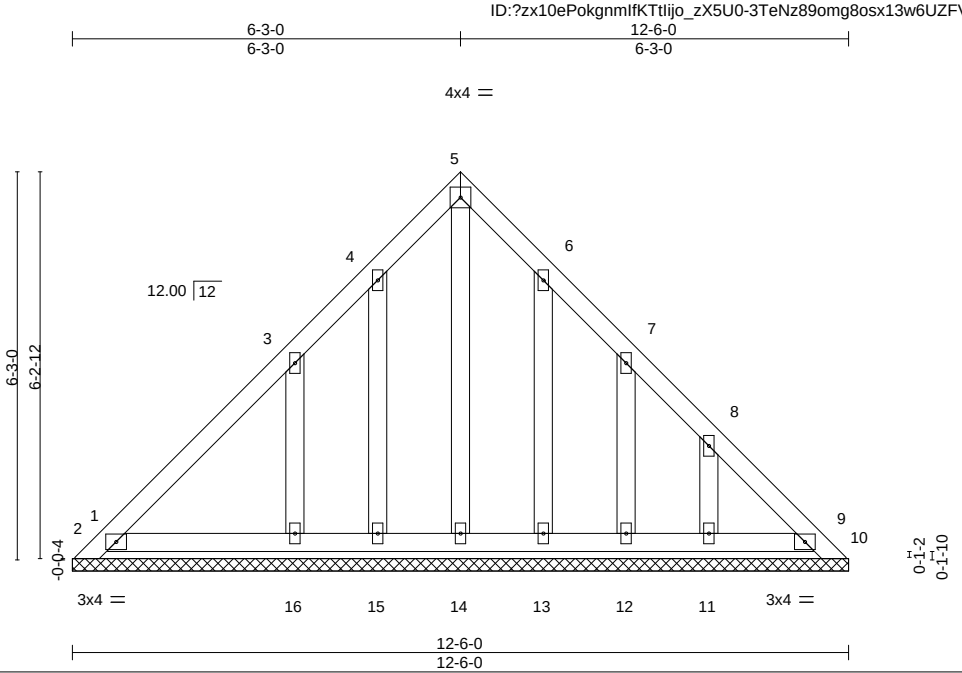

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 75 lb	FT = 20%

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

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

REACTIONS. All bearings 12-6-0.
(lb) - Max Horz 1=-122(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 10, 15, 13, 12, 11 except 1=-225(LC 17), 2=-120(LC 10), 16=-111(LC 10)
Max Grav All reactions 250 lb or less at joint(s) 1, 10, 9, 14, 15, 16, 13, 12, 11 except 2=341(LC 17)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Bearing at joint(s) 10, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 15, 13, 12, 11 except (jt=lb) 1=225, 2=120, 16=111.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	PBGE	GABLE	2	1	I45780077
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:51 2021 Page 1
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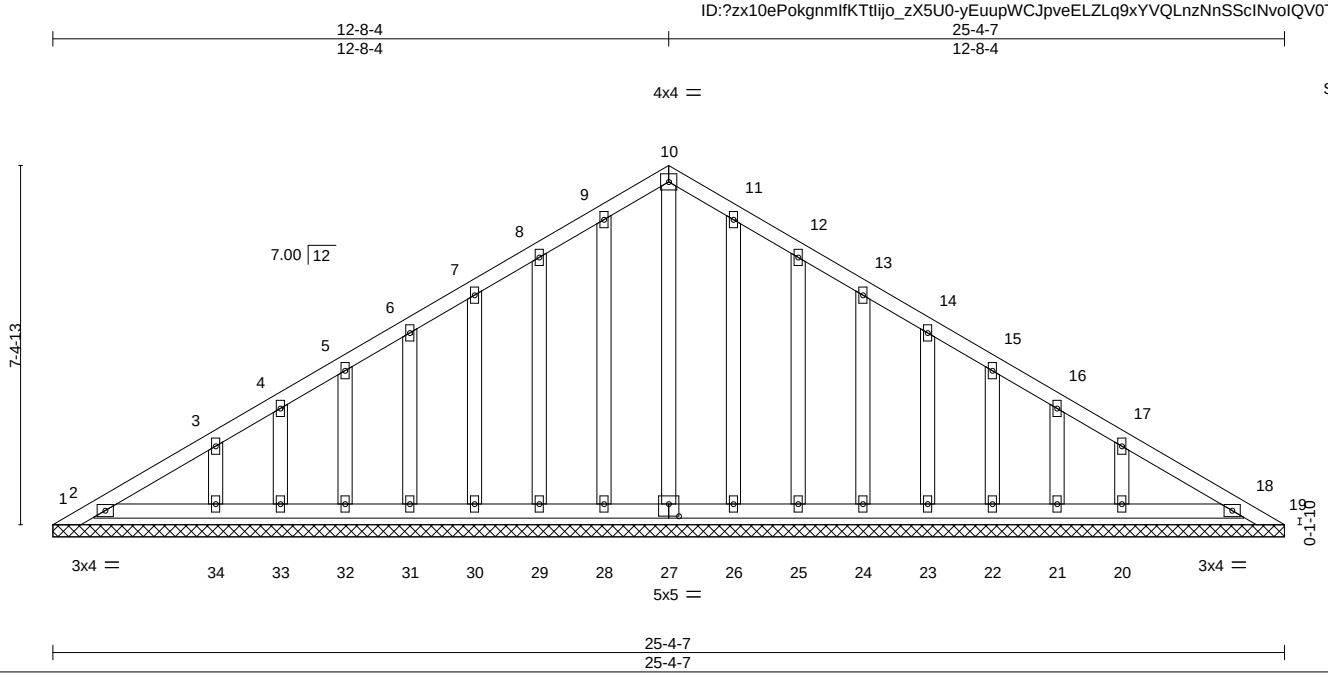

Plate Offsets (X,Y)-- [27:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 164 lb	FT = 20%

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

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

REACTIONS. All bearings 25-4-7.
(lb) - Max Horz 1=-146(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 19, 2, 28, 29, 30, 31, 32, 33, 34, 26, 25, 24, 23, 22, 21, 20
Max Grav All reactions 250 lb or less at joint(s) 1, 19, 2, 27, 28, 29, 30, 31, 18, 32, 33, 34, 26, 25, 24, 23, 22, 21, 20

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-8 to 3-4-4, Exterior(2) 3-4-4 to 9-8-4, Corner(3) 9-8-4 to 15-8-4, Exterior(2) 15-8-4 to 22-0-4, Corner(3) 22-0-4 to 25-1-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 19, 2, 28, 29, 30, 31, 32, 33, 34, 26, 25, 24, 23, 22, 21, 20.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V01	GABLE	1	1	I45780078
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:52 2021 Page 1
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6-0-12
6-0-12

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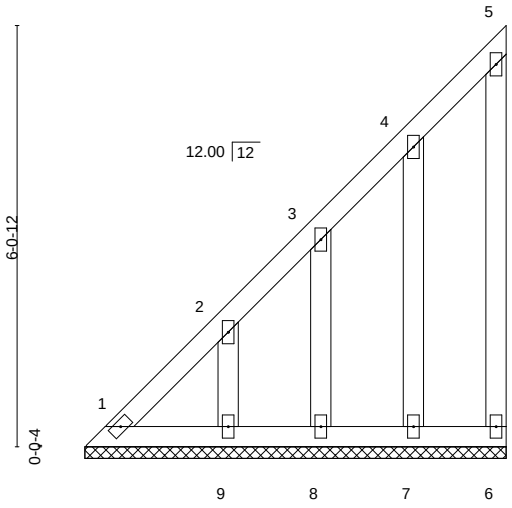

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 42 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 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 6-0-12.
(lb) - Max Horz 1=176(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 7, 8, 9
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 7, 8, 9

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

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 7, 8, 9.

NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V02	Valley	1	1	I45780079
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:53 2021 Page 1
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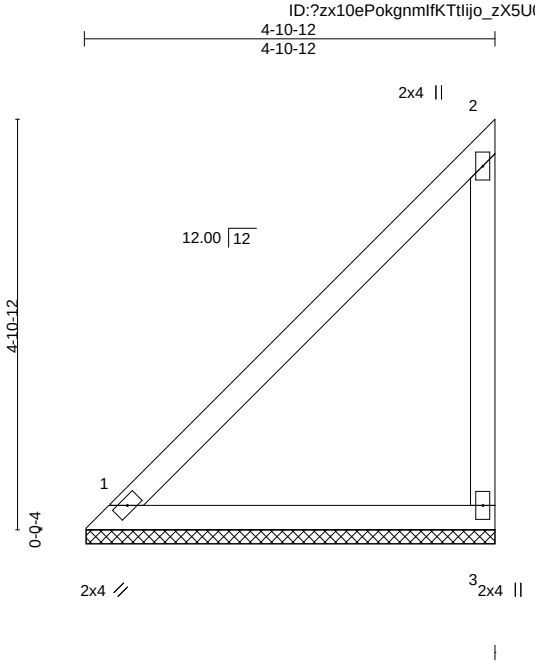

Scale = 1:27.5

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							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 4-10-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-10-8, 3=4-10-8
Max Horz 1=139(LC 10)
Max Uplift 3=-95(LC 10)
Max Grav 1=176(LC 1), 3=192(LC 17)

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V03	Valley	1	1	I45780080

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:53 2021 Page 1

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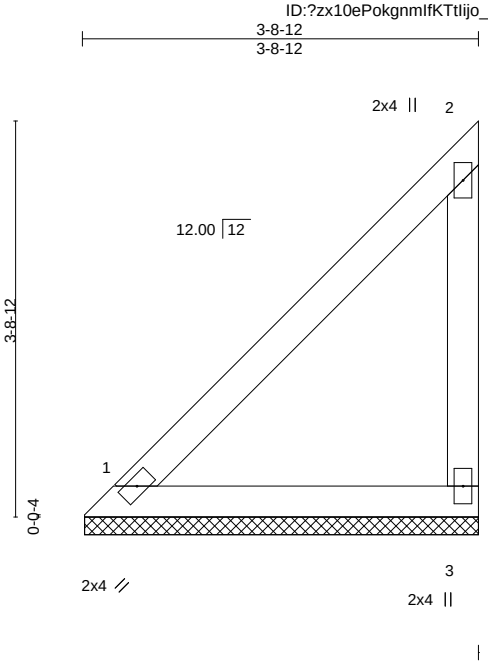


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 17 lb	FT = 20%

LUMBER-

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

BRACING-

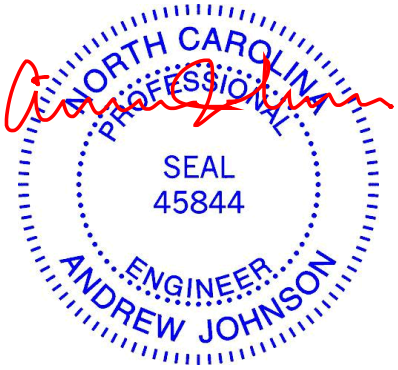
TOP CHORD	Structural wood sheathing directly applied or 3-8-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-8-8, 3=3-8-8
Max Horz 1=102(LC 10)
Max Uplift 3=-70(LC 10)
Max Grav 1=129(LC 1), 3=141(LC 17)

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

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.



April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V04	Valley	1	1	I45780081

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:54 2021 Page 1
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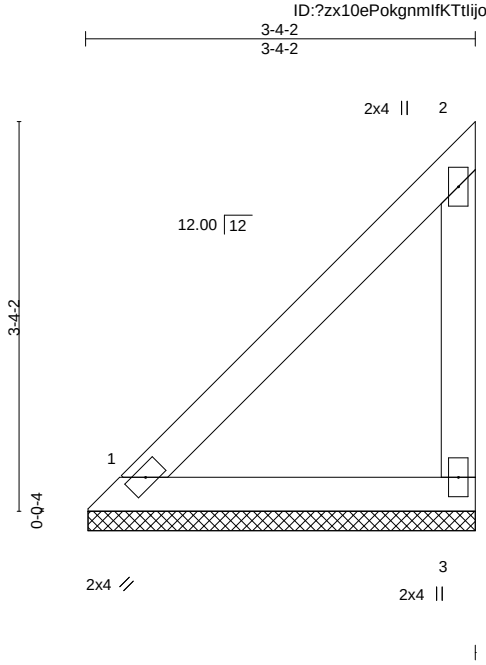

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 15 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 3-4-2 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-3-14, 3=3-3-14
Max Horz 1=90(LC 10)
Max Uplift 3=-61(LC 10)
Max Grav 1=114(LC 1), 3=124(LC 17)

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

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V05	Valley	1	1	I45780082

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:55 2021 Page 1
ID:?zx10ePokgnmIfKTtIijo_zX5U0-q?7PftGpt88gqAfcOndRaBygoPpZY7pVjwOi9EzOCJQ

2-2-2
2-2-2

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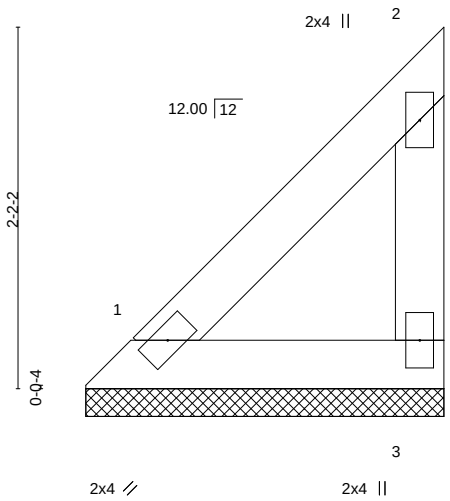

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 9 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 2-2-2 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-1-14, 3=2-1-14
Max Horz 1=53(LC 10)
Max Uplift 3=-36(LC 10)
Max Grav 1=67(LC 1), 3=73(LC 17)

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

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V06	Valley	1	1	I45780083

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:56 2021 Page 1
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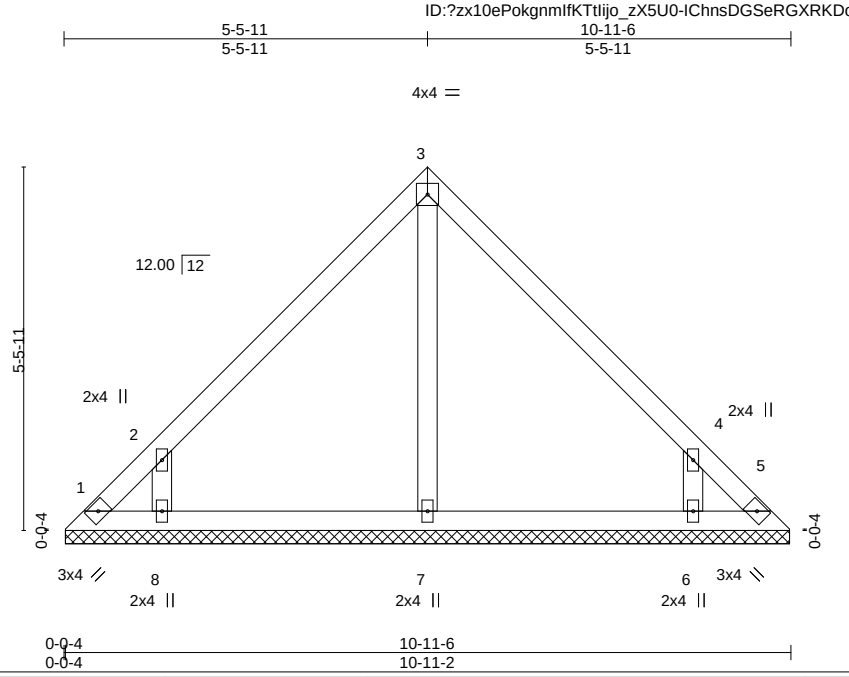

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 48 lb	FT = 20%

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

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

REACTIONS. All bearings 10-10-14.
(lb) - Max Horz 1=-104(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-176(LC 10), 6=-176(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=332(LC 17), 6=332(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-282/219, 4-6=-282/219

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Gable requires continuous bottom chord bearing.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=176, 6=176.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V07	Valley	1	1	I45780084
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:57 2021 Page 1
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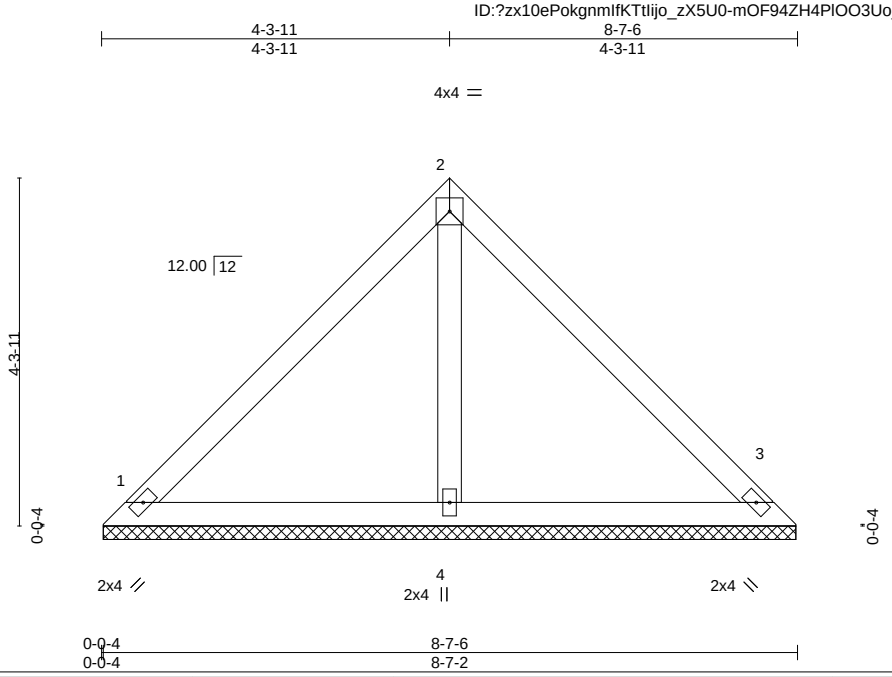

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 35 lb	FT = 20%

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

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

REACTIONS. (size) 1=8-6-14, 3=8-6-14, 4=8-6-14
Max Horz 1=80(LC 7)
Max Uplift 1=-38(LC 11), 3=-38(LC 11)
Max Grav 1=191(LC 1), 3=191(LC 1), 4=251(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Gable requires continuous bottom chord bearing.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V08	Valley	1	1	I45780085

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:58 2021 Page 1

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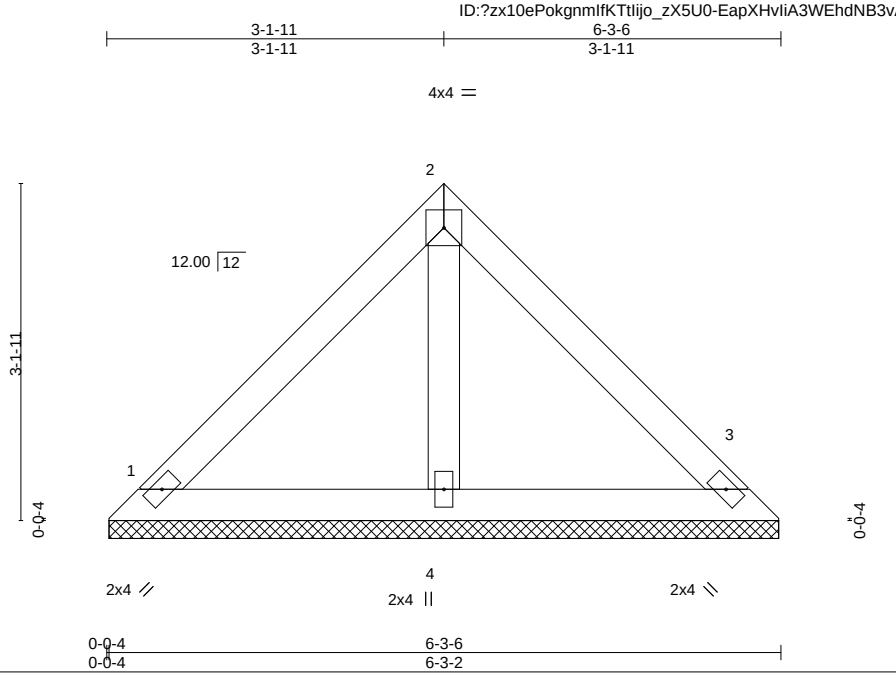

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=6-2-14, 3=6-2-14, 4=6-2-14
Max Horz 1=56(LC 7)
Max Uplift 1=-27(LC 11), 3=-27(LC 11)
Max Grav 1=135(LC 1), 3=135(LC 1), 4=177(LC 1)

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Gable requires continuous bottom chord bearing.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V09	Valley	1	1	I45780086

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:45:59 2021 Page 1
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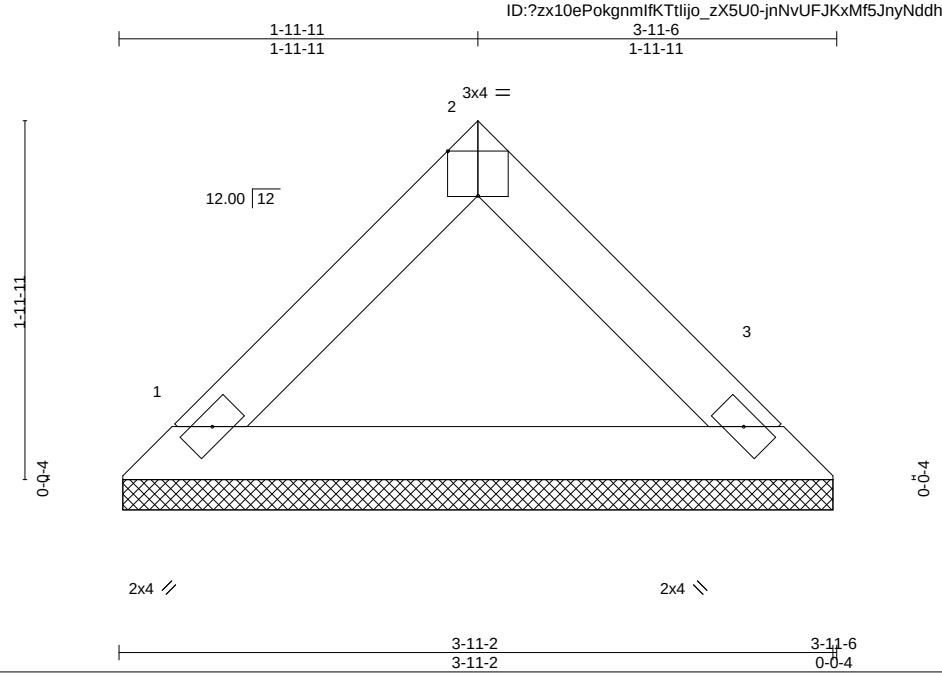


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 13 lb	FT = 20%

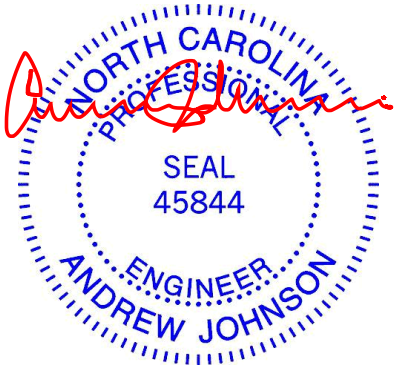
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-10-14, 3=3-10-14
Max Horz 1=-33(LC 6)
Max Uplift 1=-8(LC 10), 3=-8(LC 10)
Max Grav 1=130(LC 1), 3=130(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Gable requires continuous bottom chord bearing.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V10	GABLE	1	1	I45780087

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:46:00 2021 Page 1
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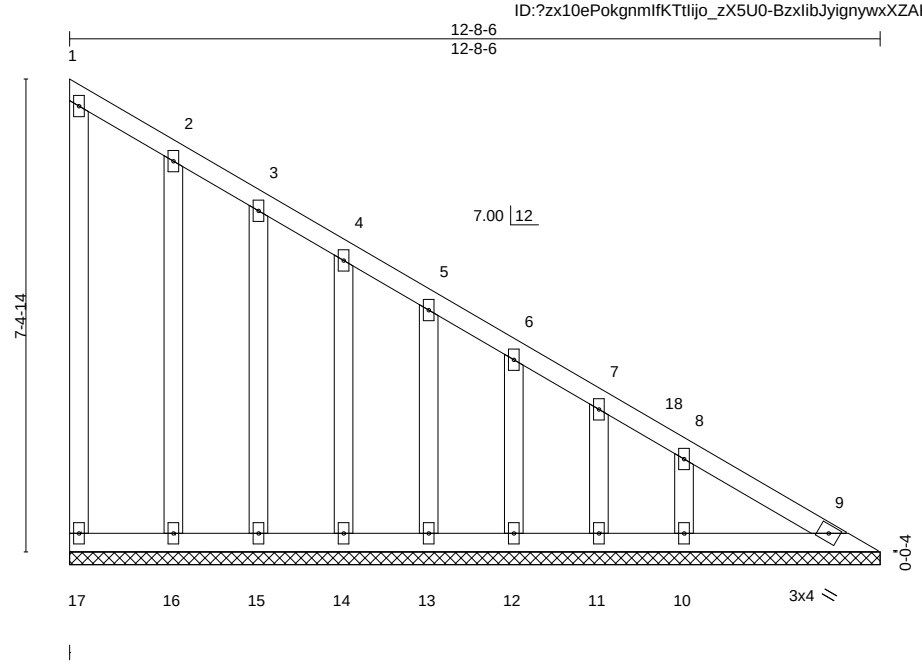

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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 87 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 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-8-6.
(lb) - Max Horz 17=-221(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 17, 16, 15, 14, 13, 12, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 17, 9, 16, 15, 14, 13, 12, 11, 10

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

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 2-11-8, Interior(1) 2-11-8 to 9-1-14, Exterior(2) 9-1-14 to 12-1-14 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 16, 15, 14, 13, 12, 11, 10.

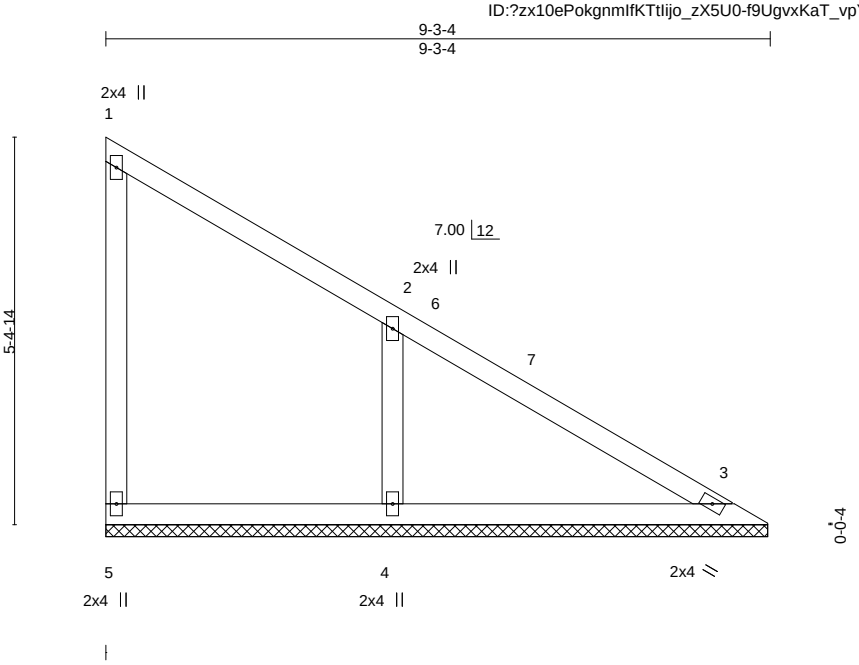
April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V11	VALLEY	1	1	I45780088

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:46:01 2021 Page 1
ID:?zx10ePokgnmIfKTtIijo_zX5U0-f9UgvxKaT_vpY56lk2krqSCecpqayqAN5sr1NuzOCJK



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 40 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-

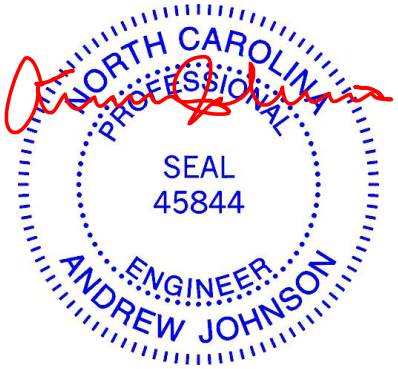
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=9-2-13, 3=9-2-13, 4=9-2-13
Max Horz 5=-158(LC 11)
Max Uplift 5=-31(LC 11), 4=-118(LC 11)
Max Grav 5=111(LC 18), 3=152(LC 1), 4=434(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-319/165

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-4-11, Interior(1) 4-4-11 to 5-8-12, Exterior(2) 5-8-12 to 8-8-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 4=118.



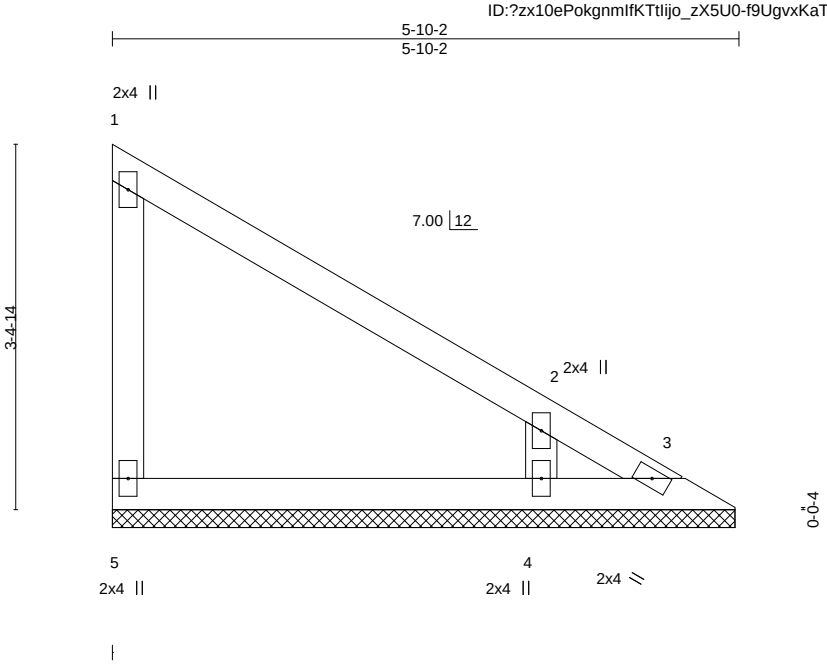
April 23,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-2
21041619	V12	VALLEY	1	1	I45780089

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 09:46:01 2021 Page 1
ID:?zx10ePokgnmIfKTtlijo_zX5U0-f9UgvxKaT_vpY56lk2krqSCf9prbyrVN5sr1NuzOCJK



Scale = 1:21.5

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 23 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-

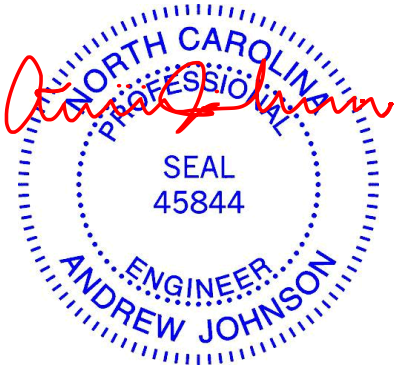
TOP CHORD	Structural wood sheathing directly applied or 5-10-2 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=5-9-11, 3=5-9-11, 4=5-9-11
Max Horz 5=-95(LC 11)
Max Uplift 5=-35(LC 11), 3=-52(LC 18), 4=-90(LC 11)
Max Grav 5=127(LC 18), 3=65(LC 11), 4=330(LC 18)

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

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.



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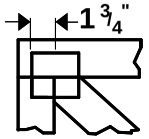
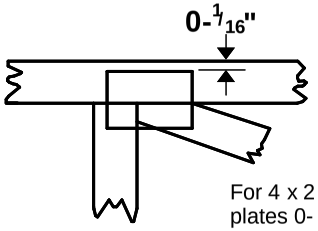
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

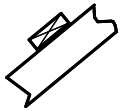
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

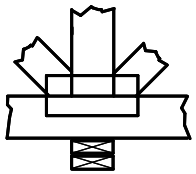
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

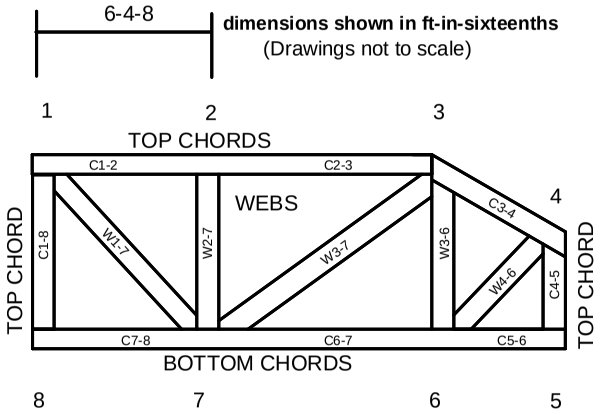


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek
ENGINEERING BY TRENCO
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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

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.