ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 21062548
WAG-15

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: I46794277 thru I46794310

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

North Carolina COA: C-0844

June 30,2021

Sevier, Scott

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.

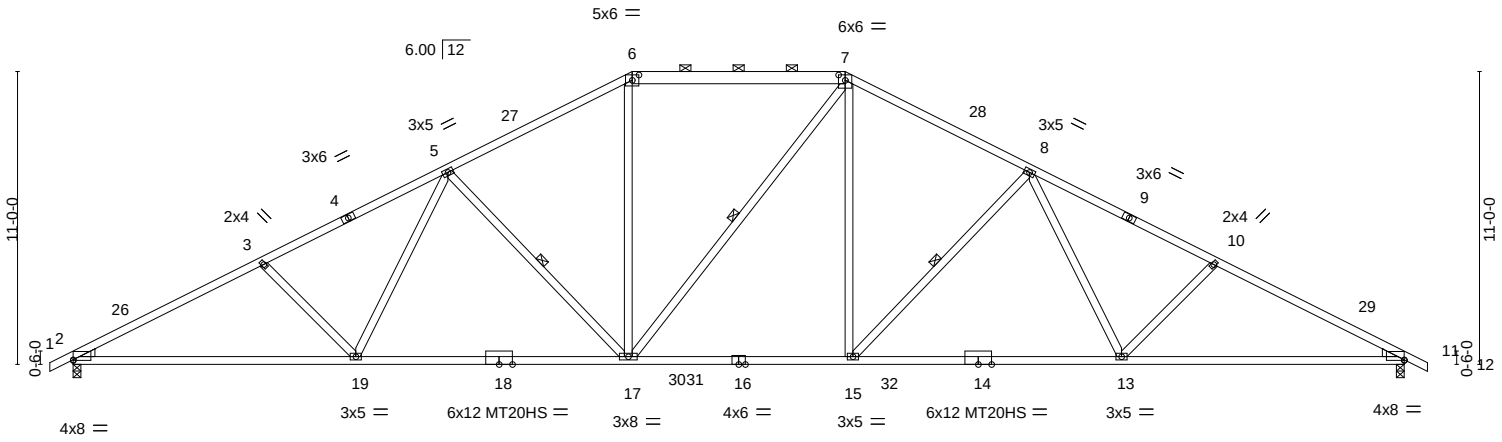
Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A01	PIGGYBACK BASE	5	1	I46794277
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:24 2021 Page 1

ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-wuqv5BE1VhW38tWtbwMq4YpkiuGVSuhOxFGthYz1Peb

-0-10-8	7-1-14	14-0-15	21-0-0	29-0-0	35-11-1	42-10-2	50-0-0	50-10-8
0-10-8	7-1-14	6-11-1	6-11-1	8-0-0	6-11-1	6-11-1	7-1-14	0-10-8

Scale = 1:86.5



10-7-7	21-0-0	29-0-0	39-4-9	50-0-0
10-7-7	10-4-9	8-0-0	10-4-9	10-7-7

Plate Offsets (X,Y)-- [2:0-0-0,0-0-5], [6:0-3-0,0-2-7], [7:0-3-0,0-2-7], [11:0-0-0,0-0-5]

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	0.95	Vert(LL)	-0.65	13-15	>921	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-1.01	13-15	>593	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.20	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 284 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except* 6-7: 2x6 SP No.1
BOT CHORD 2x4 SP DSS
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-4-14 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-17, 8-15, 7-17

REACTIONS. (size) 11=0-3-8, 2=0-3-8
Max Horz 2=163(LC 10)
Max Uplift 11=-235(LC 11), 2=-235(LC 10)
Max Grav 11=2211(LC 2), 2=2209(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4194/546, 3-5=-3963/535, 5-6=-3121/524, 6-7=-2705/516, 7-8=-3124/524, 8-10=-3966/535, 10-11=-4197/546
BOT CHORD 2-19=-449/3665, 17-19=-291/3222, 15-17=-172/2707, 13-15=-291/3225, 11-13=-385/3668
WEBS 3-19=-365/209, 5-19=-48/610, 5-17=-740/259, 6-17=-47/994, 7-15=-99/1004, 8-15=-742/259, 8-13=-48/611, 10-13=-365/210

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 16-9-1, Exterior(2) 16-9-1 to 33-2-15, Interior(1) 33-2-15 to 47-10-8, Exterior(2) 47-10-8 to 50-10-8 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=235, 2=235.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 30,2021

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A01GE	GABLE	1	1	I46794278
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:28 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-og4PwZIYZv0VcVqeqmRmFO_d7WopOnbzssE5qJz1PeX

-0-10-8 21-0-0 29-0-0 50-0-0 50-10-8
0-10-8 21-0-0 8-0-0 21-0-0 0-10-8

Scale = 1:87.7

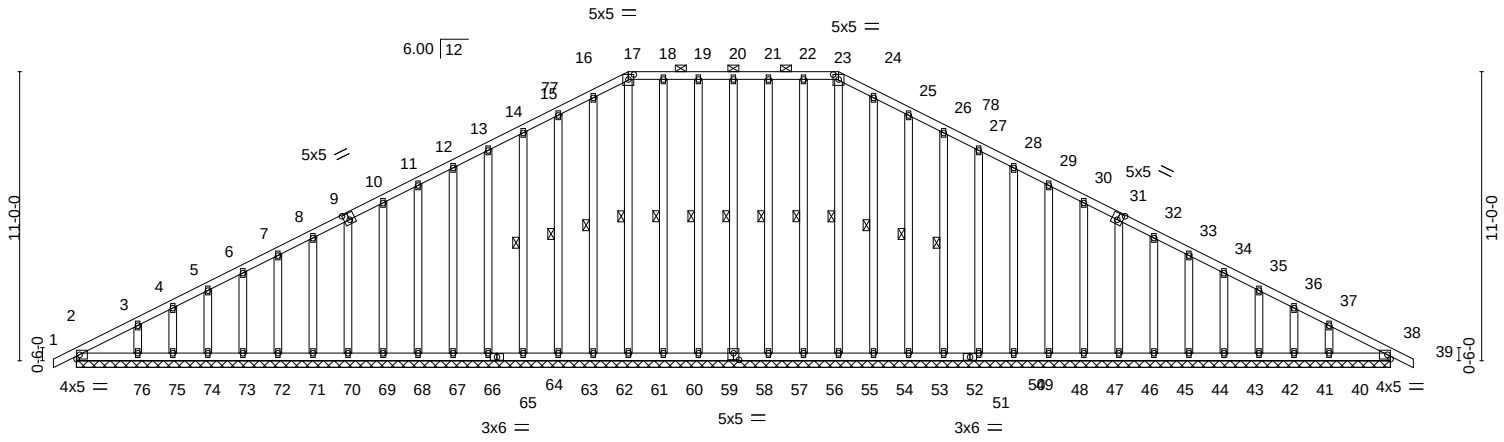

Plate Offsets (X,Y)-- [9:0-2-8,0-3-0], [17:0-2-8,0-2-4], [23:0-2-8,0-2-4], [31:0-2-8,0-3-0], [58:0-2-8,0-3-0]

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)	0.00	38	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	38	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	38	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 495 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, except 2-0-0 oc purlins (6-0-0 max.): 17-23.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 20-58, 19-59, 18-60, 17-61, 16-62, 15-63, 14-64, 21-57, 22-56, 23-55, 24-54, 25-53, 26-52

REACTIONS. All bearings 50-0-0.
(lb) - Max Horz 2=163(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 58, 59, 60, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 57, 56, 54, 53, 52, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 2
Max Grav All reactions 250 lb or less at joint(s) 38, 58, 59, 60, 61, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 57, 56, 55, 54, 53, 52, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 2

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 14-15=-88/251, 15-16=-99/294, 16-17=-107/333, 17-18=-96/319, 18-19=-95/319, 19-20=-95/319, 20-21=-95/319, 21-22=-95/319, 22-23=-96/319, 23-24=-107/333, 24-25=-99/294, 25-26=-88/251

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 2-4-0, Exterior(2) 2-4-0 to 18-0-0, Corner(3) 18-0-0 to 24-0-0, Exterior(2) 24-0-0 to 26-0-0, Corner(3) 26-0-0 to 32-0-0, Exterior(2) 32-0-0 to 47-8-0, Corner(3) 47-8-0 to 50-10-8 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 requires continuous bottom chord bearing.
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.
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) 58, 59, 60, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 57, 56, 54, 53, 52, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 2.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 30,2021

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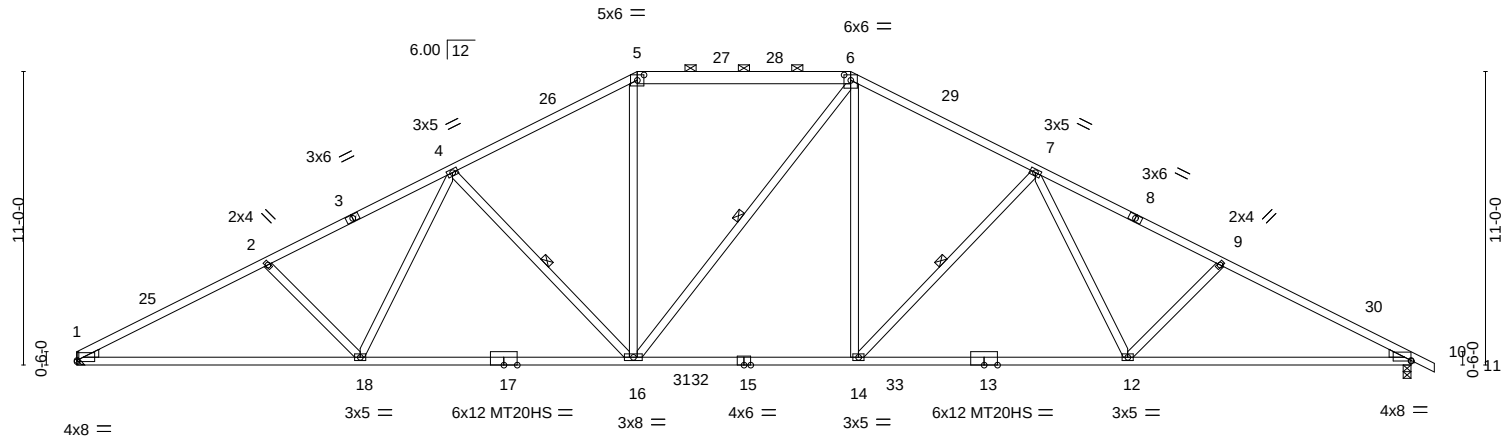
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A02	PIGGYBACK BASE	7	1	I46794279
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:30 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-l2CALFJo5XHDso_1xBTEKp3mBJJwsc9GJAjCvBz1PeV

7-1-14	14-0-15	21-0-0	29-0-0	35-11-1	42-10-2	50-0-0	50-10-8
7-1-14	6-11-1	6-11-1	8-0-0	6-11-1	6-11-1	7-1-14	0-10-8

Scale = 1:86.4



10-7-7	21-0-0	29-0-0	39-4-9	50-0-0
10-7-7	10-4-9	8-0-0	10-4-9	10-7-7

Plate Offsets (X,Y)-- [1:0-0-0,0-0-9], [5:0-3-0,0-2-7], [6:0-3-0,0-2-7], [10:0-0-0,0-0-5]

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	0.95	Vert(LL)	-0.65	12-14	>922	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-1.01	12-14	>593	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.20	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 283 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 5-6: 2x6 SP No.1
BOT CHORD 2x4 SP DSS
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-4-14 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-16, 7-14, 6-16

REACTIONS. (size) 10=0-3-8, 1=Mechanical
Max Horz 1=-169(LC 15)
Max Uplift 10=-235(LC 11), 1=-218(LC 10)
Max Grav 10=2211(LC 2), 1=2165(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4198/518, 2-4=-3967/505, 4-5=-3122/487, 5-6=-2706/479, 6-7=-3125/486, 7-9=-3967/496, 9-10=-4198/508
BOT CHORD 1-18=-451/3670, 16-18=-284/3224, 14-16=-141/2708, 12-14=-255/3226, 10-12=-351/3669
WEBS 2-18=-368/210, 4-18=-49/613, 4-16=-742/260, 5-16=-47/995, 6-14=-99/1004, 7-14=-743/259, 7-12=-48/611, 9-12=-365/210

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 18-0-0, Exterior(2) 18-0-0 to 24-0-0, Interior(1) 24-0-0 to 26-0-0 , Exterior(2) 26-0-0 to 32-0-0, Interior(1) 32-0-0 to 47-10-8, Exterior(2) 47-10-8 to 50-10-8 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) 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) except (jt=lb) 10=235, 1=218.
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.

June 30,2021

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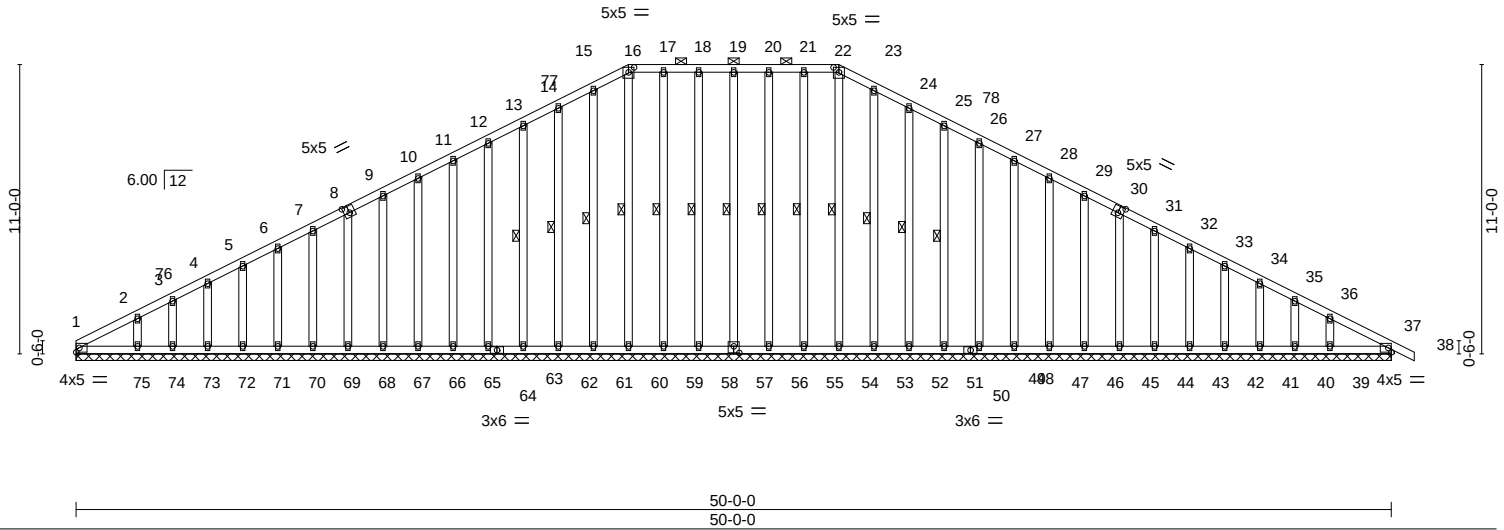
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A02GE	GABLE	1	1	I46794280
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:33 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-9dtIzGLgOSfnjGjcdJ0xyRhTtXVq32qj08xsWWz1PeS

21-0-0 29-0-0 50-0-0 50-10-8
21-0-0 8-0-0 21-0-0 0-10-8

Scale = 1:87.6



50-0-0
50-0-0

Plate Offsets (X,Y)-- [8:0-2-8,0-3-0], [16:0-2-8,0-2-4], [22:0-2-8,0-2-4], [30:0-2-8,0-3-0], [57:0-2-8,0-3-0]

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)	0.00	37	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC	0.06	Vert(CT)	0.00	37	n/r	90		
BCLL	0.0 *	Rep Stress Incr YES	WB	0.10	Horz(CT)	0.01	37	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S							Weight: 493 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, except 2-0-0 oc purlins (6-0-0 max.): 16-22.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 19-57, 18-58, 17-59, 16-60, 15-61, 14-62, 13-63, 20-56, 21-55, 22-54, 23-53, 24-52, 25-51

REACTIONS. All bearings 50-0-0.
(lb) - Max Horz 1=-166(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 57, 58, 59, 61, 62, 63, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 56, 55, 53, 52, 51, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39
Max Grav All reactions 250 lb or less at joint(s) 1, 37, 57, 58, 59, 60, 61, 62, 63, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 56, 55, 54, 53, 52, 51, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 13-14=-88/252, 14-15=-99/294, 15-16=-107/333, 16-17=-96/320, 17-18=-95/320, 18-19=-95/320, 19-20=-95/320, 20-21=-95/320, 21-22=-96/320, 22-23=-107/333, 23-24=-99/294, 24-25=-88/252

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-0-0 to 3-0-0, Exterior(2) 3-0-0 to 18-0-0, Corner(3) 18-0-0 to 24-0-0, Exterior(2) 24-0-0 to 26-0-0 , Corner(3) 26-0-0 to 32-0-0, Exterior(2) 32-0-0 to 47-8-0, Corner(3) 47-8-0 to 50-10-8 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 requires continuous bottom chord bearing.
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.
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) 1, 57, 58, 59, 61, 62, 63, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 56, 55, 53, 52, 51, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 30,2021

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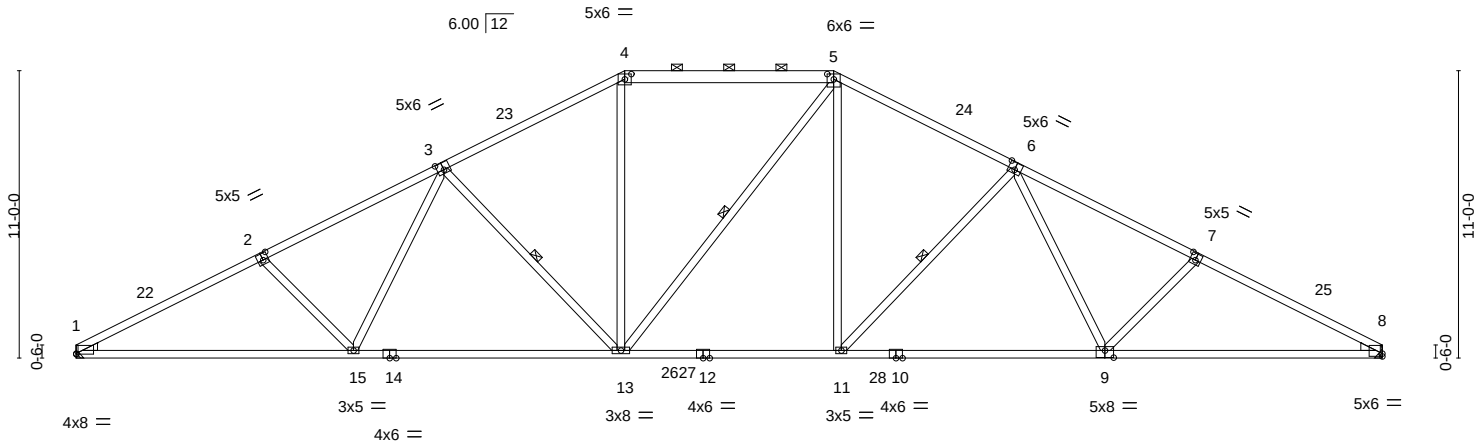
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A03	PIGGYBACK BASE	1	1	I46794281
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:35 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-50?3OyNxv3vVyZs?kk3P1smc_KzNXsP?TSQyaPz1PeQ

7-1-14	14-0-15	21-0-0	29-0-0	35-11-1	42-10-2	50-0-0
7-1-14	6-11-1	6-11-1	8-0-0	6-11-1	6-11-1	7-1-14

Scale = 1:88.2



10-7-7	21-0-0	29-0-0	39-4-9	50-0-0
10-7-7	10-4-9	8-0-0	10-4-9	10-7-7

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

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	0.95	Vert(LL)	-0.66	9-11	>904	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-1.03	9-11	>584	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.21	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 281 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
4-5: 2x6 SP No.1
BOT CHORD 2x4 SP DSS *Except*
8-9: 2x4 SP No.1
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (4-4-15 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-13, 6-11, 5-13

REACTIONS. (size) 8=Mechanical, 1=Mechanical
Max Horz 1=156(LC 10)
Max Uplift 8=-218(LC 11), 1=-218(LC 10)
Max Grav 8=2167(LC 2), 1=2165(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4197/560, 2-3=-3968/548, 3-4=-3124/529, 4-5=-2707/521, 5-6=-3127/529, 6-7=-3969/548, 7-8=-4197/560
BOT CHORD 1-15=-455/3668, 13-15=-321/3230, 11-13=-198/2709, 9-11=-321/3232, 8-9=-420/3667
WEBS 2-15=-365/208, 3-15=-49/612, 3-13=-744/259, 4-13=-46/993, 5-11=-97/1003, 6-11=-744/259, 6-9=-50/609, 7-9=-363/208

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-9-1, Exterior(2) 16-9-1 to 33-2-15, Interior(1) 33-2-15 to 47-0-0, Exterior(2) 47-0-0 to 50-0-0 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) 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=218, 1=218.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 30,2021

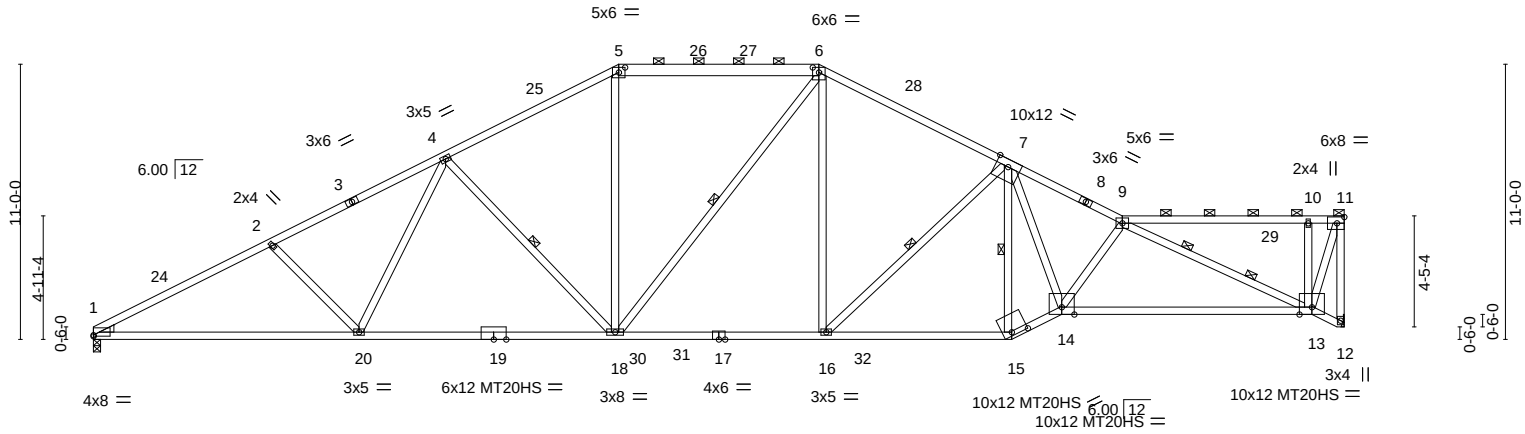
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A05T	Piggyback Base	1	1	I46794282
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:37 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-2O7ppePBRg9DBt0Ns95t6Hsyy8dK?dIlwmv3fHz1PeO

7-1-14	14-0-15	21-0-0	29-0-0	36-8-8	41-1-9	48-8-8	50-0-0
7-1-14	6-11-1	6-11-1	8-0-0	7-8-8	4-5-1	7-6-15	1-3-8

Scale = 1:92.1



10-7-7	21-0-0	29-0-0	36-8-8	38-8-8	48-8-8	50-0-0
10-7-7	10-4-9	8-0-0	7-8-8	2-0-0	10-0-0	1-3-8

Plate Offsets (X,Y)-- [1:0-0-0,0-0-9], [5:0-3-0,0-2-7], [6:0-3-0,0-2-7], [15:0-7-12,0-1-12]

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	0.92	Vert(LL)	-0.67	18-20	>891	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-1.06	18-20	>566	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.28	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 314 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
5-6: 2x6 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
12-13: 2x4 SP No.2, 17-19: 2x4 SP DSS
WEBS 2x4 SP No.3 *Except*
9-13,11-13: 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 (4-5-11 max.): 5-6, 9-11.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-18, 6-18, 7-16, 7-15
2 Rows at 1/3 pts 9-13

REACTIONS. (size) 1=0-3-7, 12=Mechanical
Max Horz 1=243(LC 10)
Max Uplift 1=-214(LC 10), 12=-224(LC 11)
Max Grav 1=2140(LC 2), 12=2102(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4142/509, 2-4=-3910/496, 4-5=-3072/477, 5-6=-2661/471, 6-7=-3038/470, 7-9=-4448/566, 9-10=-761/100, 10-11=-744/92, 11-12=-2173/222
BOT CHORD 1-20=-536/3619, 18-20=-408/3177, 16-18=-290/2630, 15-16=-392/3193, 14-15=-427/3523, 13-14=-554/4291
WEBS 2-20=-367/210, 4-20=-50/607, 4-18=-739/261, 5-18=-42/979, 6-16=-67/889, 7-16=-760/219, 7-15=-1334/214, 7-14=-249/2298, 9-14=-653/170, 9-13=-3917/505, 10-13=-520/212, 11-13=-301/2447

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 18-0-0, Exterior(2) 18-0-0 to 24-0-0, Interior(1) 24-0-0 to 26-0-0 , Exterior(2) 26-0-0 to 32-0-0, Interior(1) 32-0-0 to 46-10-4, Exterior(2) 46-10-4 to 49-10-4 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 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) except (jt=lb) 1=214, 12=224.
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.

June 30,2021

ENGINEERING BY TRENCO
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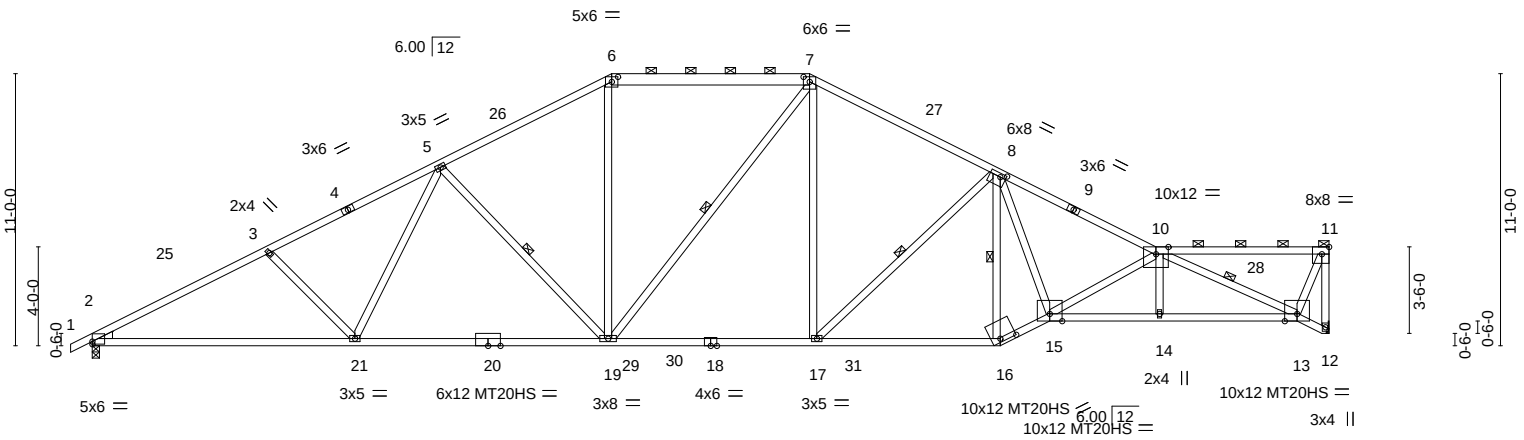
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A06T	PIGGYBACK BASE	1	1	I46794283
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:39 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-_nFZEKQRzIPxRBAmza7LBixHTxJmTYlbO4OAjAz1PeM

-0-10-8	7-1-14	14-0-15	21-0-0	29-0-0	36-8-8	43-0-1	48-8-8	50-0-0
0-10-8	7-1-14	6-11-1	6-11-1	8-0-0	7-8-8	6-3-9	5-8-7	1-3-8

Scale = 1:93.1



10-7-7	21-0-0	29-0-0	36-8-8	38-8-8	43-0-1	48-8-8	50-0-0
10-7-7	10-4-9	8-0-0	7-8-8	2-0-0	4-3-9	5-8-7	1-3-8

Plate Offsets (X,Y)-- [2:0-0-0,0-1-5], [6:0-3-0,0-2-7], [7:0-3-0,0-2-7], [8:0-2-13,0-1-12], [11:0-3-8,Edge], [16:0-7-12,0-1-12]

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	0.98	Vert(LL)	-0.68	19-21	>882	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-1.07	19-21	>560	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.29	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 310 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
6-7: 2x6 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
12-13: 2x4 SP No.2, 18-20: 2x4 SP DSS
WEBS 2x4 SP No.3 *Except*
10-13: 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 (4-5-10 max.): 6-7, 10-11.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-16, 5-19, 7-19, 8-17, 10-13

REACTIONS. (size) 2=0-3-8, 12=Mechanical
Max Horz 2=238(LC 10)
Max Uplift 2=-233(LC 10), 12=-222(LC 11)
Max Grav 2=2184(LC 2), 12=2101(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4137/540, 3-5=-3906/529, 5-6=-3071/518, 6-7=-2661/510, 7-8=-3039/513, 8-10=-4439/619, 10-11=-874/107, 11-12=-2088/277
BOT CHORD 2-21=-519/3614, 19-21=-418/3175, 17-19=-299/2628, 16-17=-412/3200, 15-16=-462/3508, 14-15=-629/4744, 13-14=-626/4750
WEBS 3-21=-365/209, 5-21=-49/604, 8-16=-1281/253, 8-15=-280/2185, 5-19=-737/260, 11-13=-213/2076, 6-19=-44/976, 7-17=-78/895, 8-17=-774/234, 10-15=-1009/176, 10-13=-4290/575

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 16-9-1, Exterior(2) 16-9-1 to 33-2-15, Interior(1) 33-2-15 to 46-10-4, Exterior(2) 46-10-4 to 49-10-4 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 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) except (jt=lb) 2=233, 12=222.
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.

June 30,2021

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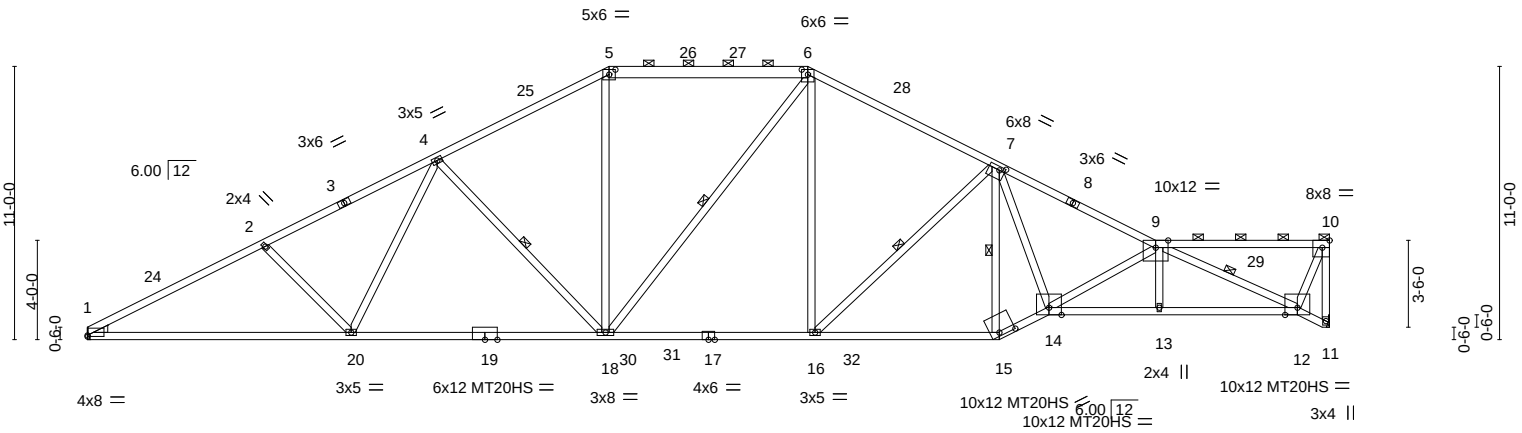
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A07T	Piggyback Base	1	1	I46794284
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:41 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-wAMKf?SiVvffgUK85?ApG70dxl?GxSEurOtHo3z1PeK

7-1-14	14-0-15	21-0-0	29-0-0	36-8-8	43-0-1	48-8-8	50-0-0
7-1-14	6-11-1	6-11-1	8-0-0	7-8-8	6-3-9	5-8-7	1-3-8

Scale = 1:92.8



10-7-7	21-0-0	29-0-0	36-8-8	38-8-8	43-0-1	48-8-8	50-0-0
10-7-7	10-4-9	8-0-0	7-8-8	2-0-0	4-3-9	5-8-7	1-3-8

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

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	0.98	Vert(LL)	-0.68	18-20	>883	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-1.07	18-20	>561	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.29	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 308 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
5-6: 2x6 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
11-12: 2x4 SP No.2, 17-19: 2x4 SP DSS
WEBS 2x4 SP No.3 *Except*
9-12: 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 (4-5-10 max.): 5-6, 9-10.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-15, 4-18, 6-18, 7-16, 9-12

REACTIONS. (size) 1=Mechanical, 11=Mechanical
Max Horz 1=225(LC 10)
Max Uplift 1=-215(LC 10), 11=-222(LC 11)
Max Grav 1=2140(LC 2), 11=2102(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4142/512, 2-4=-3910/499, 4-5=-3072/480, 5-6=-2661/473, 6-7=-3040/475, 7-9=-4440/571, 9-10=-874/99, 10-11=-2089/259
BOT CHORD 1-20=-521/3619, 18-20=-385/3177, 16-18=-268/2629, 15-16=-376/3201, 14-15=-422/3509, 13-14=-584/4745, 12-13=-581/4751
WEBS 2-20=-367/210, 4-20=-50/607, 7-15=-1281/236, 7-14=-260/2186, 4-18=-739/260, 10-12=-194/2076, 5-18=-44/977, 6-16=-78/895, 7-16=-774/234, 9-14=-1009/176, 9-12=-4291/534

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 18-0-0, Exterior(2) 18-0-0 to 24-0-0, Interior(1) 24-0-0 to 26-0-0 , Exterior(2) 26-0-0 to 32-0-0, Interior(1) 32-0-0 to 46-10-4, Exterior(2) 46-10-4 to 49-10-4 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 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) except (jt=lb) 1=215, 11=222.
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.

June 30,2021

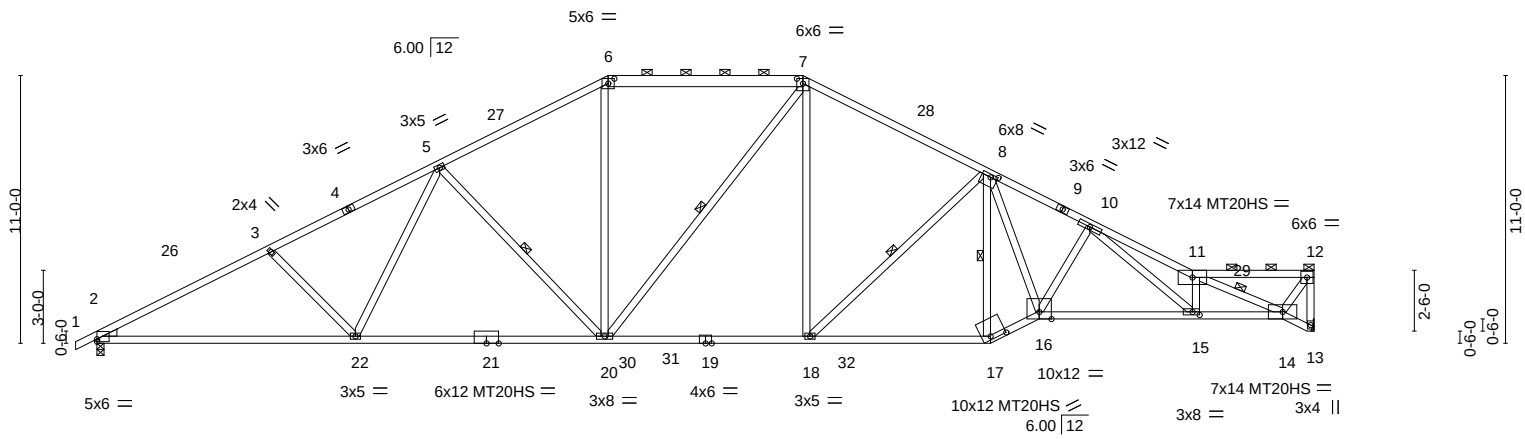
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A08T	PIGGYBACK BASE	1	1	I46794285
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:43 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-sYU44hTy1WvNwoTXCQCHMY5_4ZgiPLhBJiMOsxz1PeI

-0-10-8	7-1-14	14-0-15	21-0-0	29-0-0	36-8-8	40-9-8	45-0-1	48-8-8	50-0-0
0-10-8	7-1-14	6-11-1	6-11-1	8-0-0	7-8-8	4-1-0	4-2-9	3-8-7	1-3-8

Scale = 1:94.6



10-7-7	21-0-0	29-0-0	36-8-8	38-8-8	45-0-1	48-8-8	50-0-0
10-7-7	10-4-9	8-0-0	7-8-8	2-0-0	6-3-9	3-8-7	1-3-8

Plate Offsets (X,Y)-- [2:0-0-0,0-1-5], [6:0-3-0,0-2-7], [7:0-3-0,0-2-7], [8:0-3-9,0-1-8], [15:0-3-8,0-1-8], [17:0-7-12,0-1-12]

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	0.94	Vert(LL)	-0.69	20-22	>863	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-1.10	20-22	>545	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.31	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 309 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
6-7: 2x6 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
13-14: 2x4 SP No.2, 19-21: 2x4 SP DSS
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-9 max.): 6-7, 11-12.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-17, 5-20, 7-20, 8-18, 11-14

REACTIONS. (size) 2=0-3-8, 13=Mechanical
Max Horz 2=218(LC 10)
Max Uplift 2=-234(LC 10), 13=-219(LC 11)
Max Grav 2=2184(LC 2), 13=2101(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4137/542, 3-5=-3906/532, 5-6=-3071/520, 6-7=-2660/512, 7-8=-3037/516, 8-10=-4446/631, 10-11=-6199/835, 11-12=-1377/175, 12-13=-2097/292
BOT CHORD 2-22=-501/3614, 20-22=-394/3175, 18-20=-276/2630, 17-18=-389/3191, 16-17=-434/3512, 15-16=-541/4247, 14-15=-692/5438
WEBS 3-22=-364/209, 5-22=-49/604, 8-17=-1313/236, 8-16=-283/2293, 5-20=-737/260, 11-15=-1055/218, 12-14=-279/2347, 6-20=-47/979, 7-18=-79/886, 8-18=-759/235, 10-16=-654/162, 10-15=-227/1700, 11-14=-4471/570

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 16-9-1, Exterior(2) 16-9-1 to 33-2-15, Interior(1) 33-2-15 to 46-10-4, Exterior(2) 46-10-4 to 49-10-4 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 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) except (jt=lb) 2=234, 13=219.
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.

June 30,2021

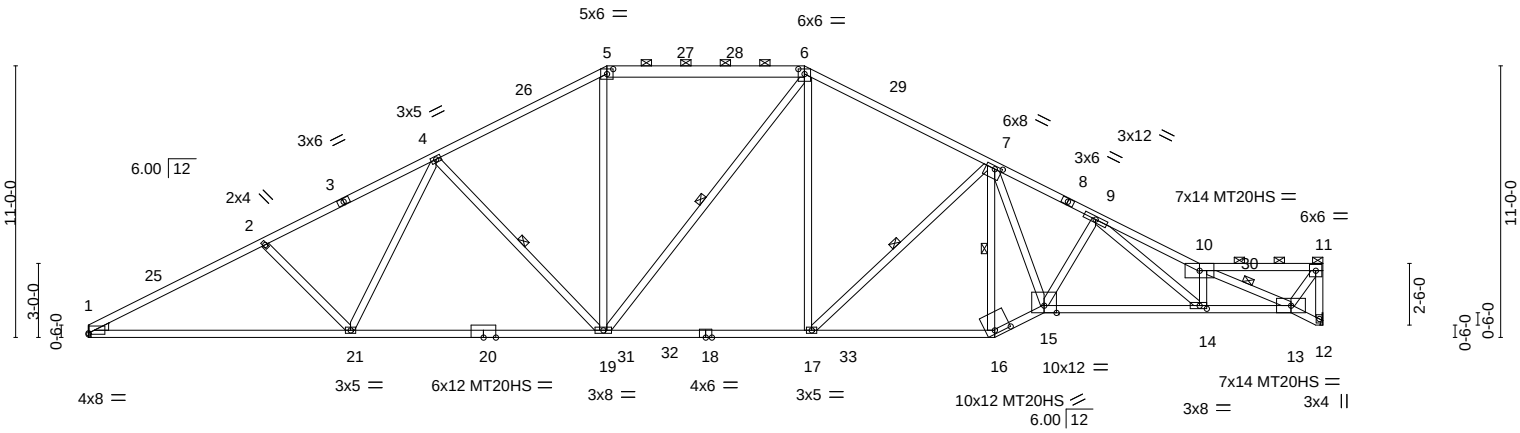
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A09T	Piggyback Base	1	1	I46794286
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:45 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-pxcrVNVCZ8A596dwKqElRzBKxMMBtFAUm0rUxqz1PeG

7-1-14	14-0-15	21-0-0	29-0-0	36-8-8	40-9-8	45-0-1	48-8-8	50-0-0
7-1-14	6-11-1	6-11-1	8-0-0	7-8-8	4-1-0	4-2-9	3-8-7	1-3-8

Scale = 1:93.3



10-7-7	21-0-0	29-0-0	36-8-8	38-8-8	45-0-1	48-8-8	50-0-0
10-7-7	10-4-9	8-0-0	7-8-8	2-0-0	6-3-9	3-8-7	1-3-8

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

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	0.92	Vert(LL)	-0.69	19-21	>865	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-1.10	19-21	>546	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.31	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 308 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
5-6: 2x6 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
12-13: 2x4 SP No.2, 18-20: 2x4 SP DSS
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-9 max.): 5-6, 10-11.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-16, 4-19, 6-19, 7-17, 10-13

REACTIONS. (size) 1=Mechanical, 12=Mechanical
Max Horz 1=205(LC 10)
Max Uplift 1=-217(LC 10), 12=-219(LC 11)
Max Grav 1=2140(LC 2), 12=2102(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4142/515, 2-4=-3910/501, 4-5=-3072/482, 5-6=-2661/475, 6-7=-3037/478, 7-9=-4447/585, 9-10=-6200/777, 10-11=-1377/162, 11-12=-2097/274
BOT CHORD 1-21=-503/3619, 19-21=-360/3177, 17-19=-245/2630, 16-17=-352/3192, 15-16=-394/3513, 14-15=-499/4248, 13-14=-641/5439
WEBS 2-21=-367/210, 4-21=-50/607, 7-16=-1313/219, 7-15=-264/2294, 4-19=-739/260, 10-14=-1055/218, 11-13=-257/2348, 5-19=-47/979, 6-17=-79/887, 7-17=-759/235, 9-15=-654/161, 9-14=-227/1700, 10-13=-4472/527

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 18-0-0, Exterior(2) 18-0-0 to 24-0-0, Interior(1) 24-0-0 to 26-0-0 , Exterior(2) 26-0-0 to 32-0-0, Interior(1) 32-0-0 to 46-10-4, Exterior(2) 46-10-4 to 49-10-4 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 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) except (jt=lb) 1=217, 12=219.
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.

June 30,2021

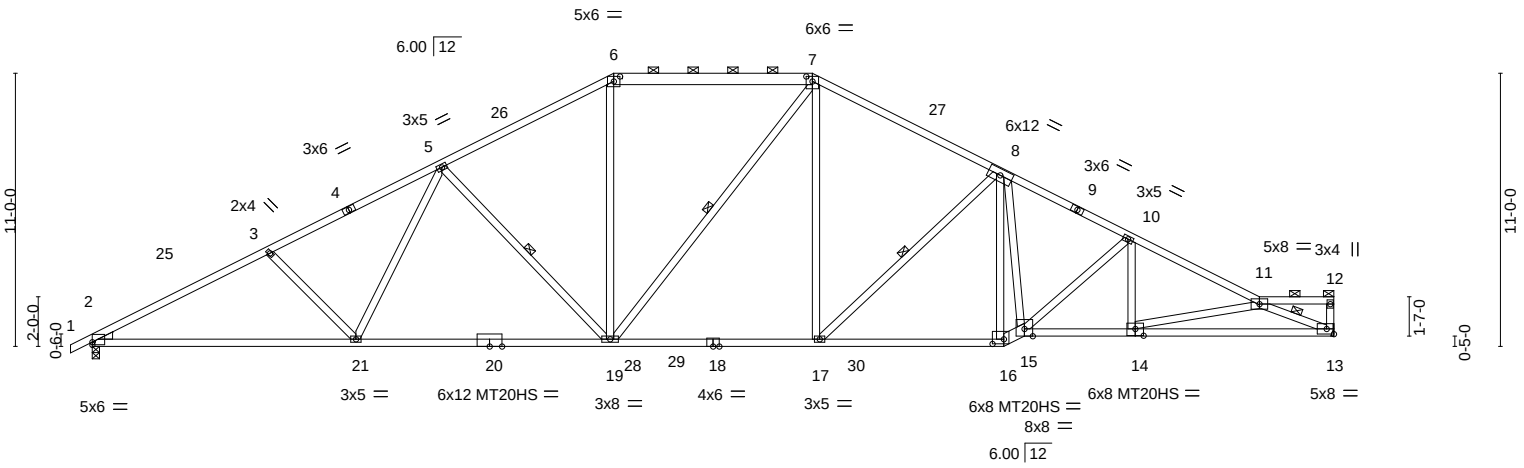
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A10T	PIGGYBACK BASE	1	1	I46794287
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:47 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-lKjbw3WT5lQoOPnIRFGDWOGf4A2jL9RmEKKb?iz1PeE

-0-10-8	7-1-14	14-0-15	21-0-0	29-0-0	36-8-8	41-10-4	47-0-1	50-0-0
0-10-8	7-1-14	6-11-1	6-11-1	8-0-0	7-8-8	5-1-12	5-1-12	2-11-15

Scale = 1:92.8



10-7-7	21-0-0	29-0-0	36-8-8	37-6-7	41-10-4	50-0-0
10-7-7	10-4-9	8-0-0	7-8-8	0-9-15	4-3-13	8-1-12

Plate Offsets (X,Y)-- [2:0-0-0,0-1-5], [6:0-3-0,0-2-7], [7:0-3-0,0-2-7], [14:0-4-0,0-3-4], [16:0-5-8,0-2-4]

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	0.94	Vert(LL)	-0.66	19-21	>900	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-1.04	19-21	>573	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.25	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 310 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
6-7: 2x6 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
15-16: 2x6 SP No.1, 18-20: 2x4 SP DSS
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-12 max.): 6-7, 11-12.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-19, 7-19, 8-17, 11-13

REACTIONS. (size) 13=Mechanical, 2=0-3-8
Max Horz 2=199(LC 10)
Max Uplift 13=-218(LC 11), 2=-235(LC 10)
Max Grav 13=2101(LC 2), 2=2184(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4137/544, 3-5=-3906/533, 5-6=-3072/521, 6-7=-2661/514, 7-8=-3035/518, 8-10=-3874/564, 10-11=-4318/555
BOT CHORD 2-21=-484/3614, 19-21=-368/3175, 17-19=-251/2628, 16-17=-366/3202, 15-16=-409/3385, 14-15=-456/3825, 13-14=-604/4333
WEBS 3-21=-365/209, 5-21=-49/603, 5-19=-737/260, 6-19=-49/978, 7-17=-83/885, 8-17=-772/241, 8-16=-1064/226, 8-15=-226/1595, 10-15=-603/136, 10-14=0/381, 11-14=-561/181, 11-13=-4630/684

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 16-9-1, Exterior(2) 16-9-1 to 33-2-15, Interior(1) 33-2-15 to 47-0-1, Exterior(2) 47-0-1 to 49-10-4 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 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) except (jt=lb) 13=218, 2=235.
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.

June 30,2021

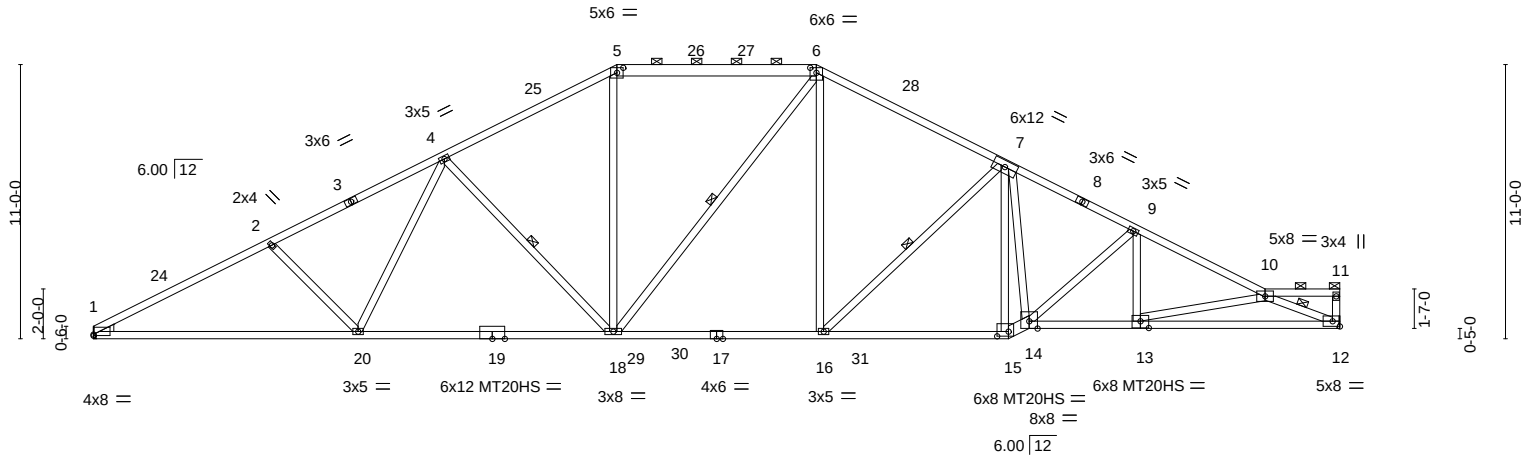
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	A11T	Piggyback Base	1	1	I46794288
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:49 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-hirLKkYjcMgWejxhZgJhbpL?xzjCp3x3hepi4bz1PeC

7-1-14	14-0-15	21-0-0	29-0-0	36-8-8	41-10-4	47-0-1	50-0-0
7-1-14	6-11-1	6-11-1	8-0-0	7-8-8	5-1-12	5-1-12	2-11-15

Scale = 1:92.4



10-7-7	21-0-0	29-0-0	36-8-8	37-6-7	41-10-4	50-0-0
10-7-7	10-4-9	8-0-0	7-8-8	0-9-15	4-3-13	8-1-12

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

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	0.92	Vert(LL)	-0.66	18-20	>902	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-1.04	18-20	>575	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.25	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 309 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
5-6: 2x6 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
14-15: 2x6 SP No.1, 17-19: 2x4 SP DSS
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-12 max.): 5-6, 10-11.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-18, 6-18, 7-16, 10-12

REACTIONS. (size) 1=Mechanical, 12=Mechanical
Max Horz 1=186(LC 10)
Max Uplift 1=-218(LC 10), 12=-218(LC 11)
Max Grav 1=2140(LC 2), 12=2102(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4142/516, 2-4=-3910/503, 4-5=-3073/484, 5-6=-2662/477, 6-7=-3036/480, 7-9=-3874/522, 9-10=-4319/514
BOT CHORD 1-20=-486/3619, 18-20=-335/3177, 16-18=-220/2628, 15-16=-329/3203, 14-15=-369/3386, 13-14=-418/3826, 12-13=-565/4334
WEBS 2-20=-367/210, 4-20=-50/606, 4-18=-738/261, 5-18=-48/979, 6-18=-223/250, 6-16=-84/885, 7-16=-772/241, 7-15=-1065/211, 7-14=-211/1595, 9-14=-603/135, 9-13=0/381, 10-13=-561/181, 10-12=-4631/641

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 18-0-0, Exterior(2) 18-0-0 to 24-0-0, Interior(1) 24-0-0 to 26-0-0 , Exterior(2) 26-0-0 to 32-0-0, Interior(1) 32-0-0 to 47-0-1, Exterior(2) 47-0-1 to 49-10-4 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 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) except (jt=lb) 1=218, 12=218.
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.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	B1GE	GABLE	1	1	I46794289
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:50 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-9vPkY4ZLNgoNFtWt6Oqw81uJENAnYYADwHZFc1z1PeB

-0-10-8 10-1-12 20-3-8 21-2-0
0-10-8 10-1-12 10-1-12 0-10-8

Scale: 3/16"=1'

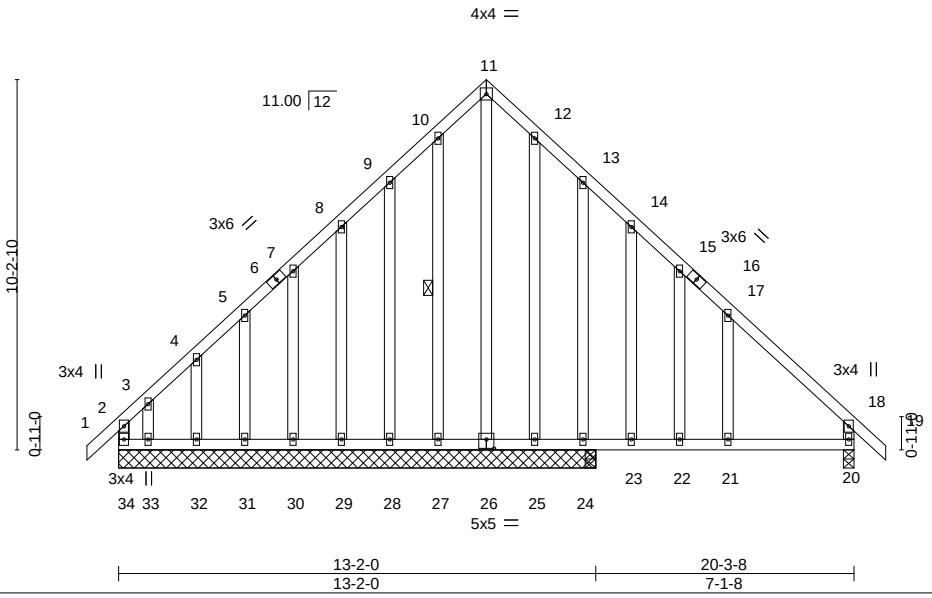


Plate Offsets (X,Y)-- [26:0-2-8,0-3-0]

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	0.37	Vert(LL)	0.14	21	>613	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.16	21	>561	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 185 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.
WEBS	1 Row at midpt 10-27

REACTIONS. All bearings 13-2-0 except (jt=length) 20=0-3-8.
(lb) - Max Horz 34=-222(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 27, 28, 29, 30, 31, 32 except 34=-349(LC 6), 20=-162(LC 11), 26=-180(LC 9), 33=-367(LC 18), 25=-374(LC 18), 24=-454(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 27, 28, 29, 30, 31, 32, 33 except 34=732(LC 18), 20=485(LC 1), 26=425(LC 11), 25=264(LC 11), 24=896(LC 18), 24=735(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-553/297, 3-4=-413/239, 4-5=-412/275, 5-7=-400/307, 7-8=-400/339, 8-9=-444/371, 9-10=-507/418, 10-11=-500/407, 11-12=-490/395, 12-13=-603/433, 13-14=-369/287, 14-15=-335/235, 15-17=-343/213, 17-18=-350/140, 2-34=-525/247, 18-20=-386/180
WEBS 11-26=-460/531, 13-24=-370/222

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 2-1-12, Exterior(2) 2-1-12 to 7-1-12, Corner(3) 7-1-12 to 13-1-12, Exterior(2) 13-1-12 to 18-2-0, Corner(3) 18-2-0 to 21-2-0 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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) 27, 28, 29, 30, 31, 32 except (jt=lb) 34=349, 20=162, 26=180, 33=367, 25=374, 24=454.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	B1GR	COMMON GIRDER	1	3	I46794290

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:52 2021 Page 1
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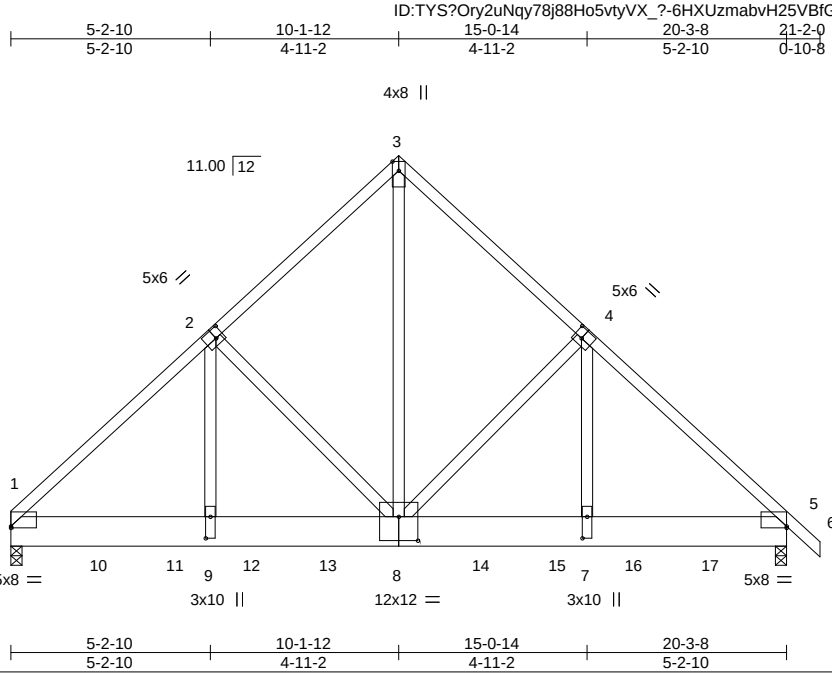

Plate Offsets (X,Y)-- [1:0-0-0,0-0-8], [2:0-2-8,0-3-0], [4:0-2-8,0-3-0], [5:Edge,0-0-8], [7:0-6-12,0-1-8], [8:0-6-0,0-7-8], [9:0-6-12,0-1-8]

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	0.72	Vert(LL)	-0.10	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.18	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 510 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x10 SP DSS
WEBS 2x4 SP No.3 *Except*
3-8: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8 (req. 0-3-9)
Max Horz 1=-219(LC 25)
Max Uplift 1=-1113(LC 8), 5=-1188(LC 9)
Max Grav 1=10296(LC 2), 5=10642(LC 2)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-12106/1353, 2-3=-8493/1051, 3-4=-8493/1052, 4-5=-12233/1386
BOT CHORD 1-9=-969/8480, 8-9=-964/8435, 7-8=-901/8523, 5-7=-906/8570
WEBS 3-8=-1303/11112, 4-8=-3385/548, 4-7=-541/5154, 2-8=-3257/514, 2-9=-492/4972

NOTES-
1) 3-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: 2x10 - 2 rows staggered at 0-4-0 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=120mph Vasd=95mph; 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) 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) WARNING: Required bearing size at joint(s) 5 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1113, 5=1188.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2120 lb down and 235 lb up at 2-2-13, 2120 lb down and 237 lb up at 4-2-13, 2120 lb down and 238 lb up at 6-2-13, 2151 lb down and 238 lb up at 8-2-13, 2195 lb down and 255 lb up at 10-2-12, 2195 lb down and 255 lb up at 12-2-12, 2195 lb down and 255 lb up at 14-2-12, and 2195 lb down and 255 lb up at 16-2-12, and 2195 lb down and 255 lb up at 18-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

June 30,2021

Continued on page 2

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-6=-60, 1-5=-20
   Concentrated Loads (lb)
   Vert: 8=-2033(B) 10=-1974(B) 11=-1974(B) 12=-1974(B) 13=-1980(B) 14=-2033(B) 15=-2033(B) 16=-2033(B) 17=-2033(B)

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	C1	COMMON	1	1	I46794291
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:53 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-aT5sA6bDgbAy6KESoWNdmfWs_b9El3JfcFnvDMz1Pe8

-0-10-8	4-7-7	9-0-0	13-4-9	18-0-0	18-10-8
0-10-8	4-7-7	4-4-9	4-4-9	4-7-7	0-10-8

Scale = 1:33.8

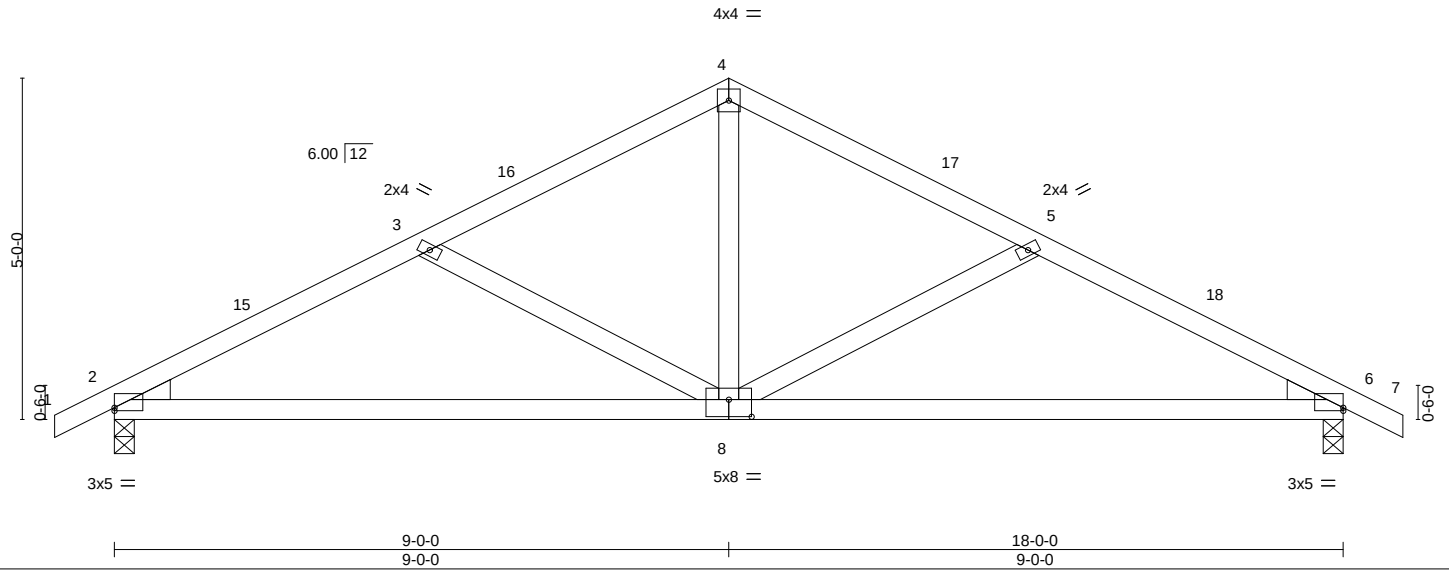

Plate Offsets (X,Y)-- [2:0-0-0,0-0-9], [6:0-0-0,0-0-9], [8:0-4-0,0-3-0]

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	0.21	Vert(LL)	-0.10	8-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.21	8-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 83 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=73(LC 10)
Max Uplift 2=-105(LC 10), 6=-105(LC 11)
Max Grav 2=773(LC 1), 6=773(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1167/221, 3-4=-879/172, 4-5=-879/172, 5-6=-1167/221
BOT CHORD 2-8=-159/996, 6-8=-118/996
WEBS 4-8=-18/508, 5-8=-321/158, 3-8=-321/157

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 6-0-0, Exterior(2) 6-0-0 to 12-0-0, Interior(1) 12-0-0 to 15-10-8, Exterior(2) 15-10-8 to 18-10-8 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) 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) except (jt=lb) 2=105, 6=105.
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.

June 30,2021

ENGINEERING BY
TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	C2GE	GABLE	1	1	I46794292
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:54 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-2gfEOScsRvIpkUpeLDusIt346_g0UYxorvXTloz1Pe7

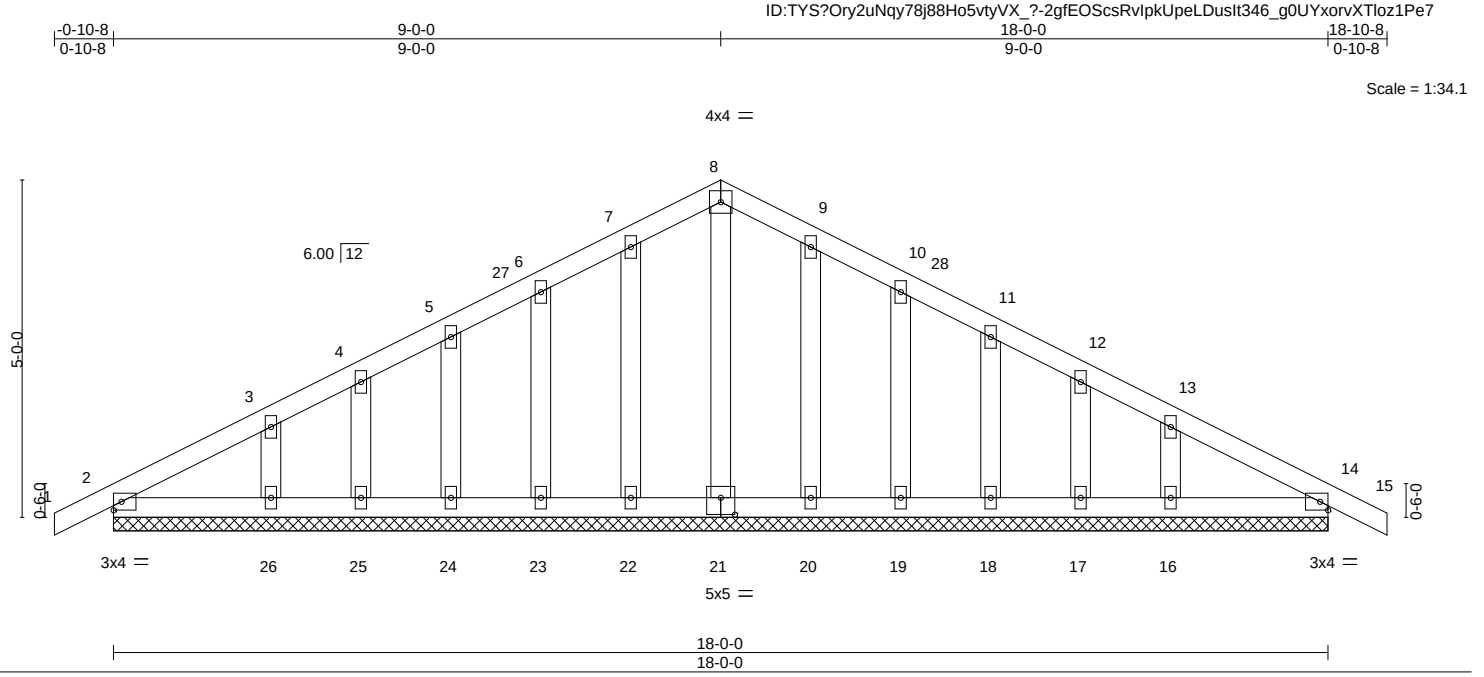

Plate Offsets (X,Y)-- [21:0-2-8,0-3-0]

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	0.06	Vert(LL)	-0.00	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	14	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 103 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 18-0-0.
(lb) - Max Horz 2=-73(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14
Max Grav All reactions 250 lb or less at joint(s) 2, 21, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14

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=120mph Vasd=95mph; 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 2-4-0, Exterior(2) 2-4-0 to 6-0-0, Corner(3) 6-0-0 to 12-0-0, Exterior(2) 12-0-0 to 15-8-0, Corner(3) 15-8-0 to 18-10-8 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14.

June 30,2021

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

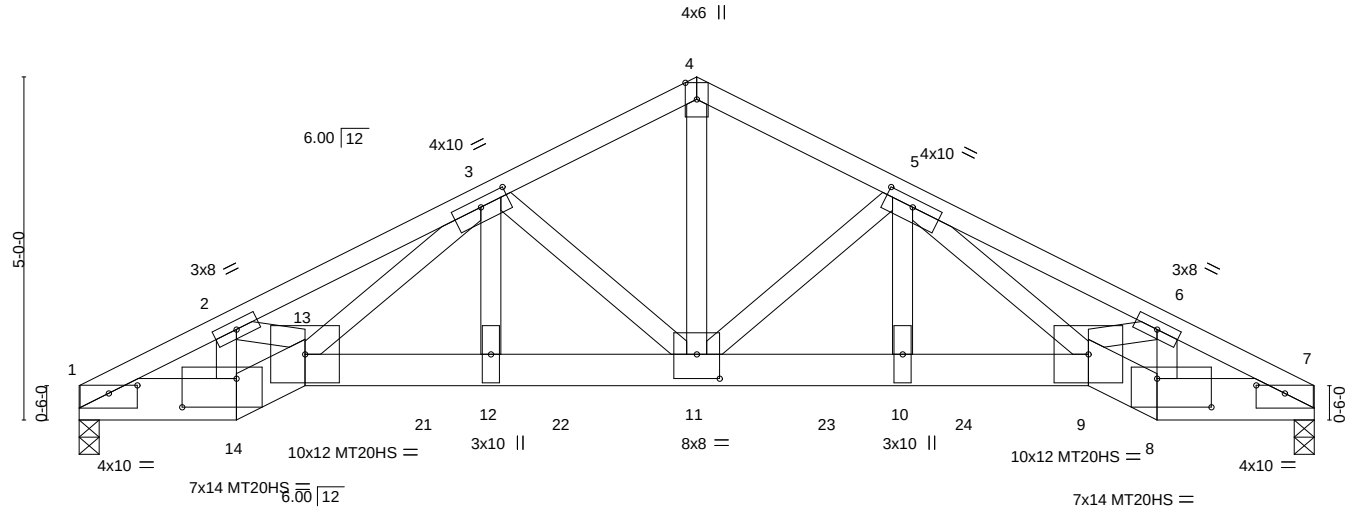
Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	C3GR	ROOF SPECIAL GIRDER	1	3	I46794293

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:57 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-SFKN0UekkqgObyYD1MSZwVhRbCYagh7FXtl7M7z1Pe4

2-3-8	6-0-0	9-0-0	12-0-0	15-8-8	18-0-0
2-3-8	3-8-8	3-0-0	3-0-0	3-8-8	2-3-8

Scale = 1:33.6



2-3-8	3-3-8	6-0-0	9-0-0	12-0-0	14-8-8	15-8-8	18-0-0
2-3-8	1-0-0	2-8-8	3-0-0	3-0-0	2-8-8	1-0-0	2-3-8

Plate Offsets (X,Y)-- [1:0-5-0,0-1-7], [3:0-4-15,0-1-8], [5:0-4-15,0-1-8], [7:0-5-0,0-1-7], [8:0-9-8,0-5-0], [11:0-4-0,0-4-4], [14:0-9-8,0-5-0]

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	0.68	Vert(LL)	-0.16	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.31	10-11	>708	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 353 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP DSS
BOT CHORD 2x8 SP DSS *Except*
9-13: 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
4-11: 2x4 SP No.2

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

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=67(LC 31)
Max Uplift 1=-1122(LC 8), 7=-1122(LC 9)
Max Grav 1=10068(LC 2), 7=10064(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-17881/2013, 2-3=-22542/2550, 3-4=-12708/1443, 4-5=-12708/1451, 5-6=-22531/2527, 6-7=-17873/2012
BOT CHORD 1-14=-1827/15789, 13-14=-1853/16032, 12-13=-1781/15893, 11-12=-1781/15893, 10-11=-1707/15890, 9-10=-1707/15890, 8-9=-1784/16024, 7-8=-1759/15783
WEBS 4-11=-1237/11115, 5-11=-6000/738, 5-10=-407/3993, 5-9=-673/5924, 6-9=-614/5808, 6-8=-4736/559, 3-11=-6004/743, 3-12=-408/3993, 3-13=-686/5934, 2-13=-610/5812, 2-14=-4740/580

NOTES-
1) 3-ply truss to be connected together with 10d (0.148"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-4-0 oc, 2x6 - 2 rows staggered at 0-4-0 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=120mph Vasd=95mph; 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) All plates are MT20 plates 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1122, 7=1122.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2151 lb down and 238 lb up at 1-0-11, 2082 lb down and 238 lb up at 3-3-8, 2082 lb down and 239 lb up at 5-0-11, 2082 lb down and 242 lb up at 7-0-11, 2082 lb down and 244 lb up at 9-0-11, 2081 lb down and 242 lb up at 10-11-3, 2081 lb down and 239 lb up at 12-11-3, and 2081 lb down and 238 lb up at 14-8-8, and 2151 lb down and 238 lb up at 16-11-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

June 30,2021

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

LOAD CASE(S) Standard

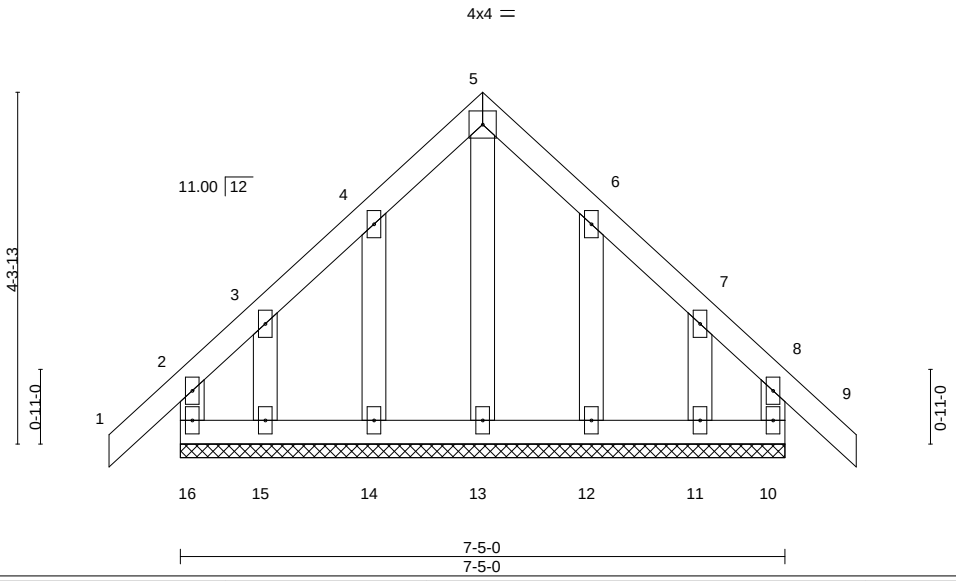
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-60, 4-7=-60, 14-15=-20, 13-14=-20, 9-13=-20, 8-9=-20, 8-18=-20
   Concentrated Loads (lb)
   Vert: 13=-1974(B) 9=-1974(B) 11=-1974(B) 17=-1980(B) 20=-1980(B) 21=-1974(B) 22=-1974(B) 23=-1974(B) 24=-1974(B)

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	DGE	COMMON SUPPORTED GAB	1	1	I46794294
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:58 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-wRulDpfMV7oED67Pa3zoSjDl6c1tPM?OlXVguZz1Pe3

-0-10-8 3-8-8 7-5-0 8-3-8
0-10-8 3-8-8 3-8-8 0-10-8

Scale = 1:28.3



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	9	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	9	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 49 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 6-0-0 oc bracing.

REACTIONS. All bearings 7-5-0.
(lb) - Max Horz 16=93(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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=120mph Vasd=95mph; 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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.
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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	F	COMMON	5	1	I46794295
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:24:59 2021 Page 1
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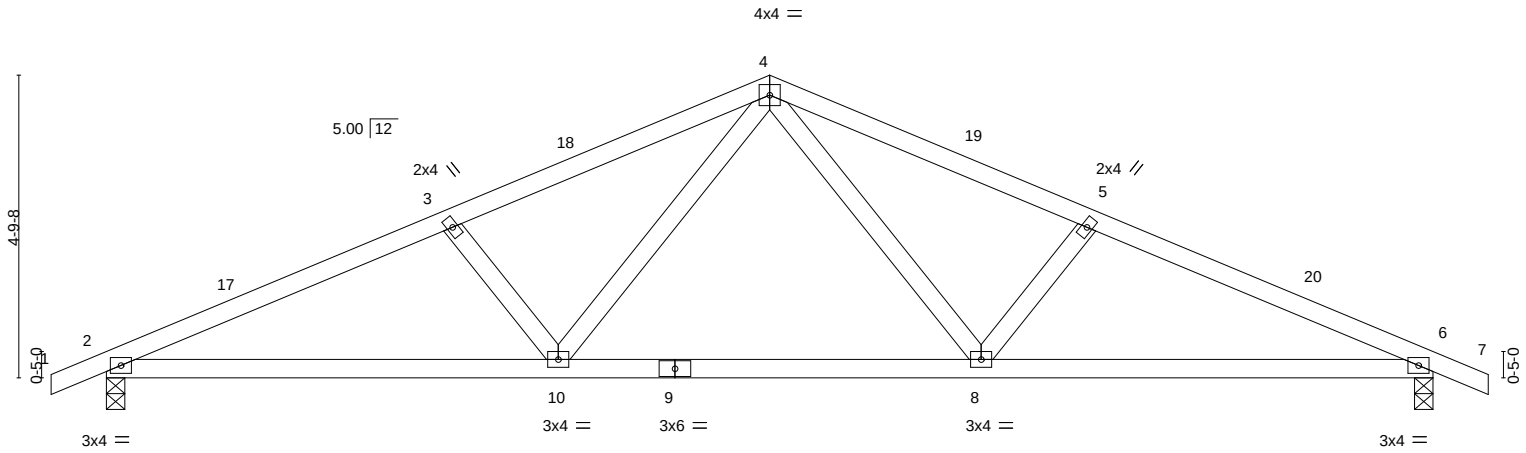
-0-10-8	5-5-12	10-6-0	15-6-4	21-0-0	21-10-8
0-10-8	5-5-12	5-0-4	5-0-4	5-5-12	0-10-8

Scale = 1:36.5



7-1-13	13-10-3	21-0-0
7-1-13	6-8-5	7-1-13

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	0.28	Vert(LL)	-0.06	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.14	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 92 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-70(LC 11)
Max Uplift 2=-122(LC 10), 6=-122(LC 11)
Max Grav 2=893(LC 1), 6=893(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1634/261, 3-4=-1445/251, 4-5=-1445/251, 5-6=-1634/261
BOT CHORD 2-10=-204/1461, 8-10=-78/990, 6-8=-168/1461
WEBS 4-8=-75/498, 5-8=-322/157, 4-10=-74/498, 3-10=-322/157

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 7-6-0, Exterior(2) 7-6-0 to 13-6-0, Interior(1) 13-6-0 to 18-10-8, Exterior(2) 18-10-8 to 21-10-8 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) 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) except (jt=lb) 2=122, 6=122.
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.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	FGE	COMMON SUPPORTED GAB	1	1	I46794296

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:00 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-tq0WeVgc1l3ySPHoiU?GY8J6XPjLtGUhDr_nzSz1Pe1

0-10-8 10-6-0 21-0-0 21-10-8
0-10-8 10-6-0 10-6-0 0-10-8

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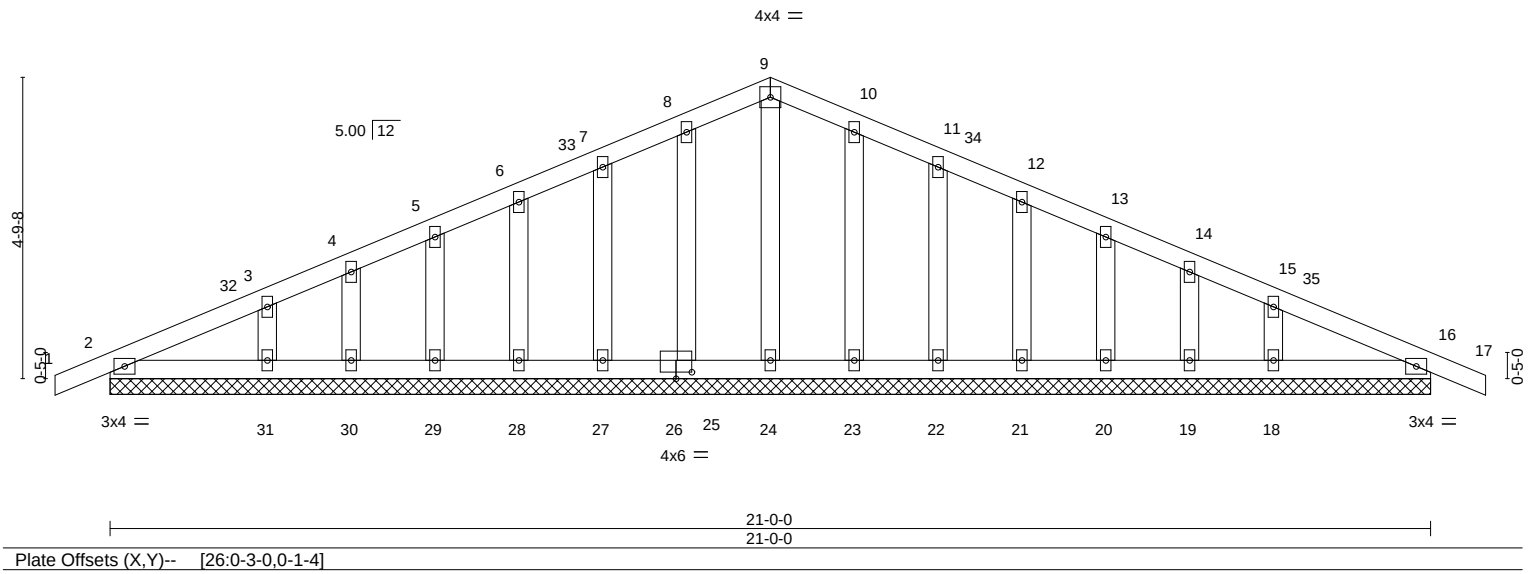

Plate Offsets (X,Y)-- [26:0-3-0,0-1-4]

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	0.06	Vert(LL)	0.00	16	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	16	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 115 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 21-0-0.
(lb) - Max Horz 2=-70(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 25, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16

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=120mph Vasd=95mph; 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 7-6-0, Corner(3) 7-6-0 to 13-6-0, Exterior(2) 13-6-0 to 18-10-8, Corner(3) 18-10-8 to 21-10-8 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 16.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	M	MONOPITCH	6	1	I46794297
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:01 2021 Page 1
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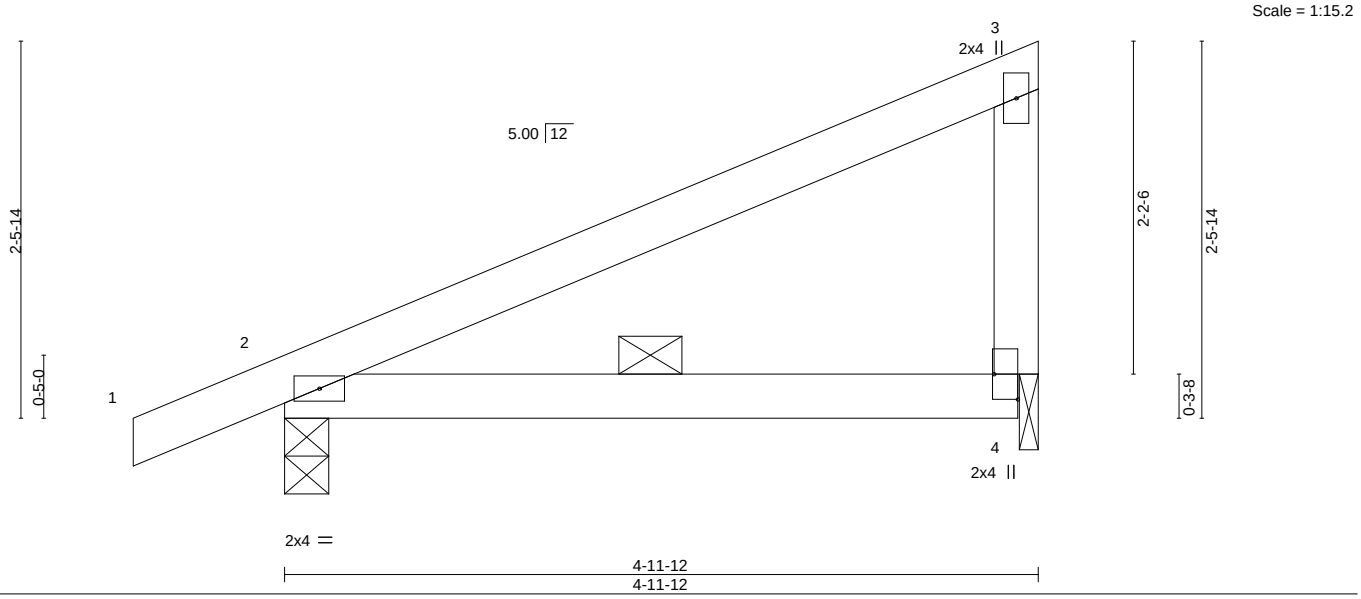

Plate Offsets (X,Y)-- [4:Edge,0-1-14]

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	0.31	Vert(LL)	-0.02	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 20 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 3-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-1-8
Max Horz 2=82(LC 10)
Max Uplift 2=-40(LC 10), 4=-49(LC 10)
Max Grav 2=260(LC 1), 4=187(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	M1	MONOPITCH	4	1	I46794298
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:02 2021 Page 1
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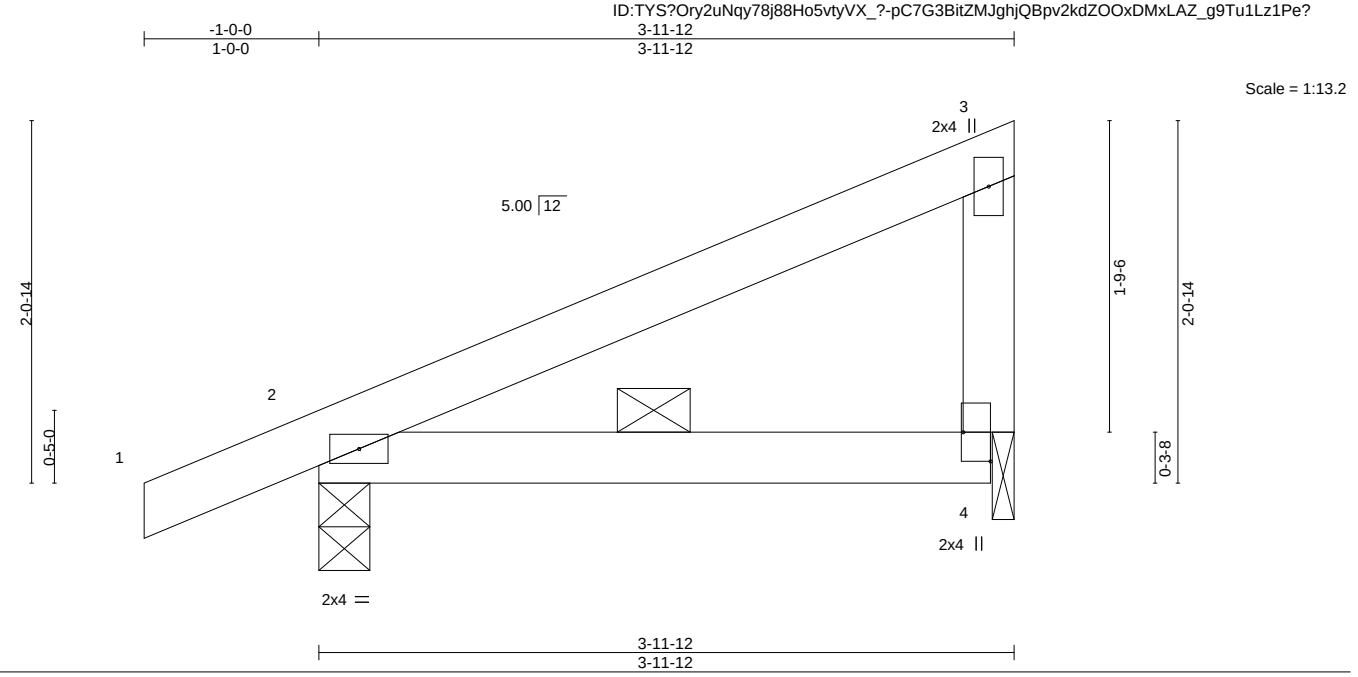

Plate Offsets (X,Y)-- [4:Edge,0-1-14]

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)	-0.01	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							Weight: 16 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-12 oc purlins, except end verticals.
BOT CHORD 3-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-1-8
Max Horz 2=67(LC 10)
Max Uplift 2=-37(LC 10), 4=-38(LC 10)
Max Grav 2=221(LC 1), 4=146(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	M1GE	GABLE	1	1	I46794299
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:03 2021 Page 1
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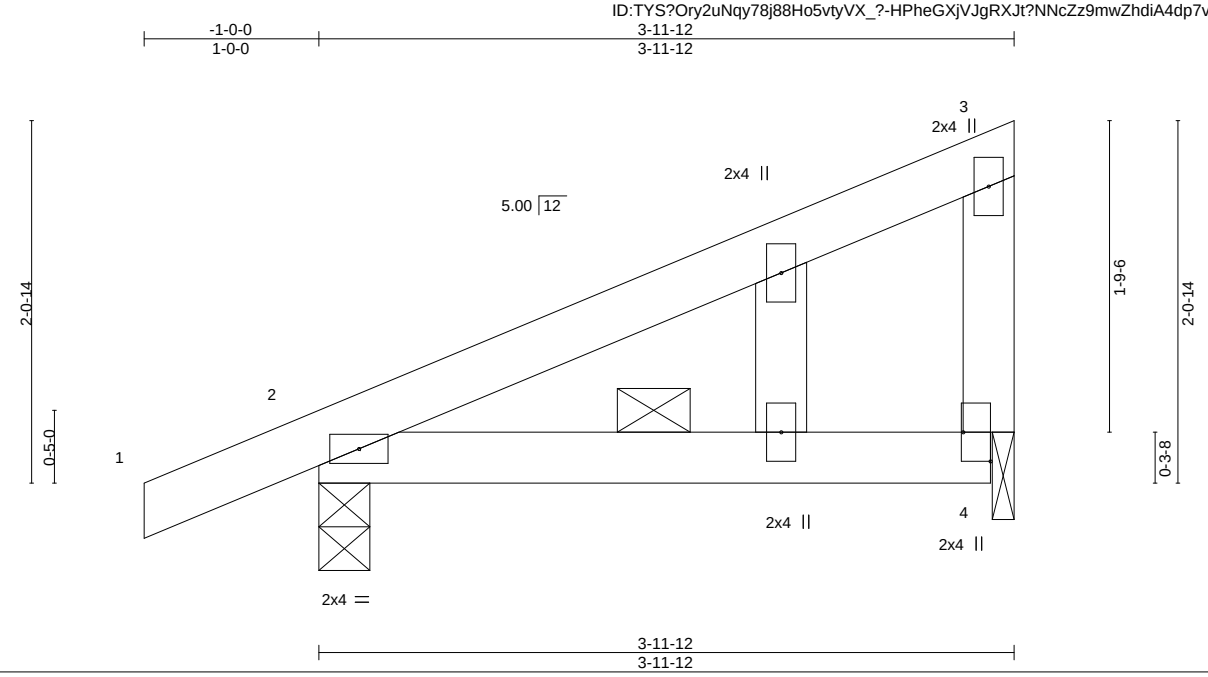

Plate Offsets (X,Y)-- [4:Edge,0-1-14]

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)	-0.01	4-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	4-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							Weight: 18 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 3-11-12 oc purlins, except end verticals.
BOT CHORD	3-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-1-8
Max Horz 2=67(LC 10)
Max Uplift 2=-37(LC 10), 4=-38(LC 10)
Max Grav 2=221(LC 1), 4=146(LC 1)

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

NOTES-

1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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) Gable studs spaced at 1-4-0 oc.
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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	MGE	GABLE	1	1	I46794300
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:03 2021 Page 1
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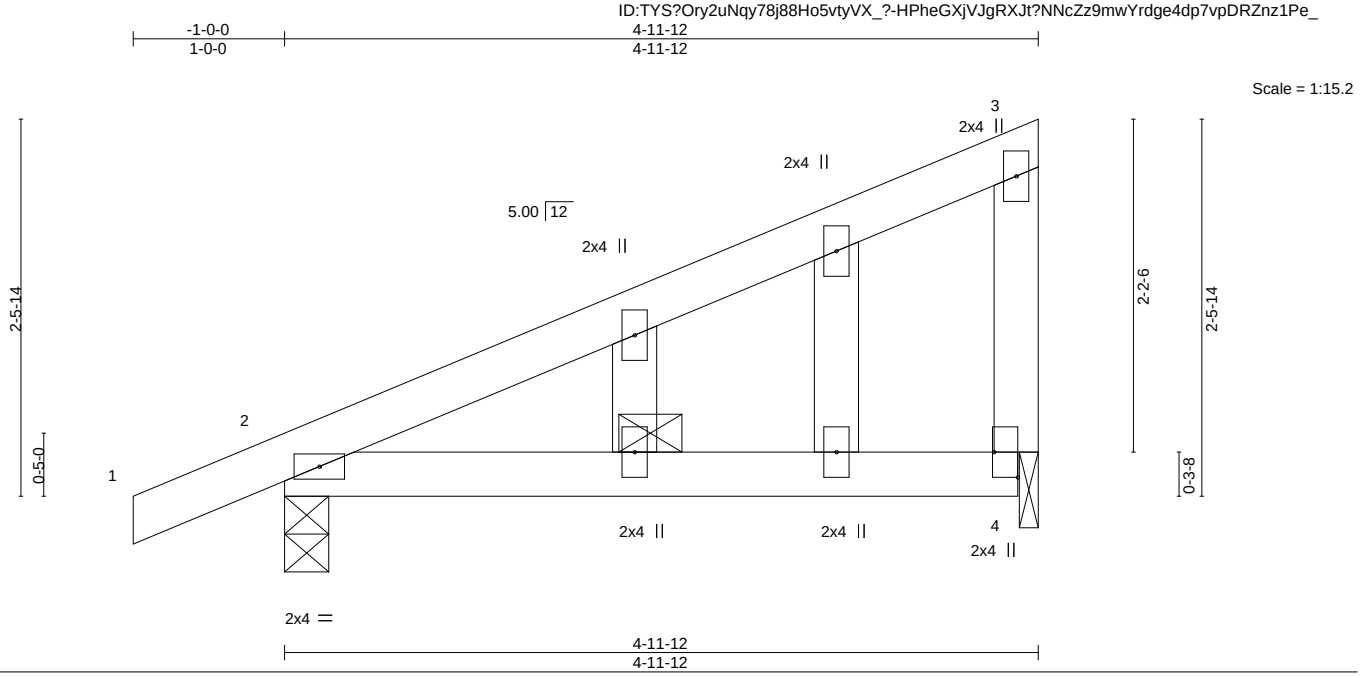

Plate Offsets (X,Y)-- [4:Edge,0-1-14]

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	0.31	Vert(LL)	-0.02	4-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	4-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							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, except end verticals.
BOT CHORD 3-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-1-8
Max Horz 2=82(LC 10)
Max Uplift 2=-40(LC 10), 4=-49(LC 10)
Max Grav 2=260(LC 1), 4=187(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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) Gable studs spaced at 1-4-0 oc.
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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	PB1	Piggyback	20	1	I46794301
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:04 2021 Page 1
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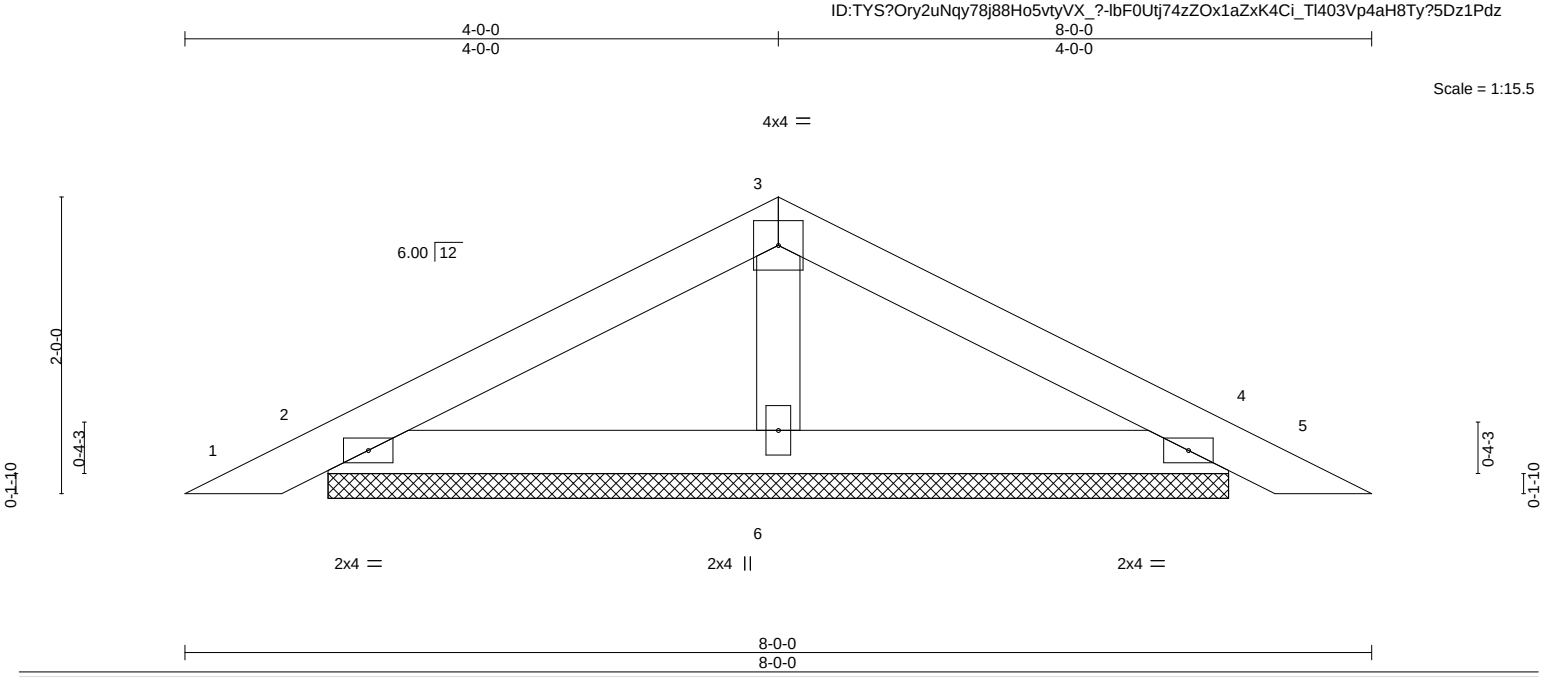

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	0.00	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.01	5	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 24 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=6-0-14, 4=6-0-14, 6=6-0-14
Max Horz 2=27(LC 10)
Max Uplift 2=-42(LC 10), 4=-47(LC 11), 6=-1(LC 10)
Max Grav 2=165(LC 1), 4=165(LC 1), 6=232(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=120mph Vasd=95mph; 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.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	PB1GE	GABLE	2	1	I46794302
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:05 2021 Page 1
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4-0-0 4-0-0

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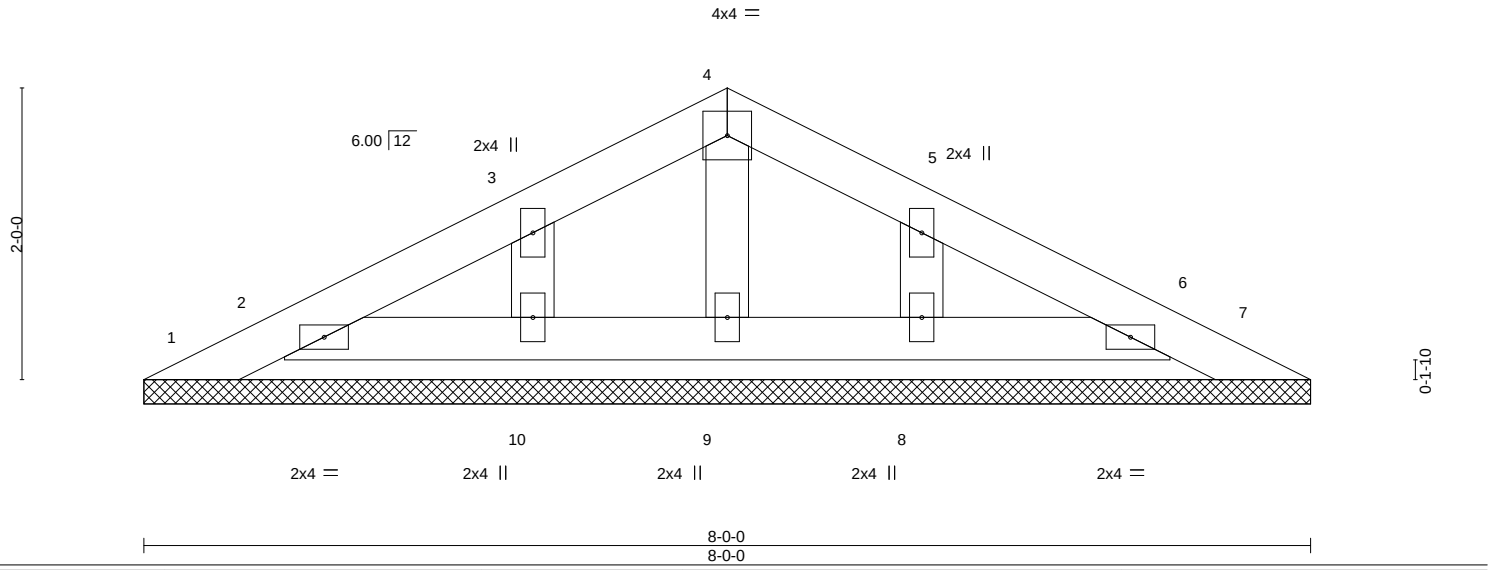

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 26 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 8-0-0.
(lb) - Max Horz 1=27(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9, 10, 8

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=120mph Vasd=95mph; 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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 1-4-0 oc.
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) 1, 2, 6, 10, 8.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	V01	Valley	1	1	I46794303
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:06 2021 Page 1
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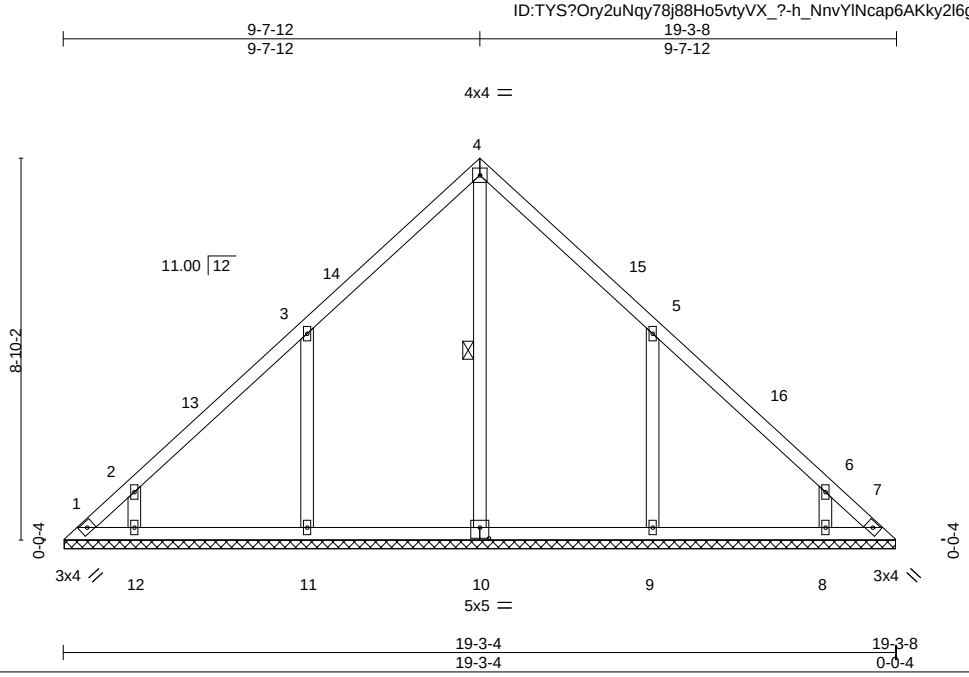

Plate Offsets (X,Y)-- [10:0-2-8,0-3-0]

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	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 95 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.
WEBS 1 Row at midpt 4-10

REACTIONS. All bearings 19-2-15.
(lb) - Max Horz 1=187(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-103(LC 8), 11=-194(LC 10), 12=-139(LC 10), 9=-194(LC 11), 8=-139(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=380(LC 20), 11=439(LC 17), 12=271(LC 17), 9=439(LC 18), 8=271(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-11=-303/236, 5-9=-303/235

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-8 to 3-4-8, Interior(1) 3-4-8 to 6-7-12, Exterior(2) 6-7-12 to 12-7-12, Interior(1) 12-7-12 to 15-11-0, Exterior(2) 15-11-0 to 18-11-0 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) 7 except (jt=lb) 1=103, 11=194, 12=139, 9=194, 8=139.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	V02	Valley	1	1	I46794304
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:07 2021 Page 1
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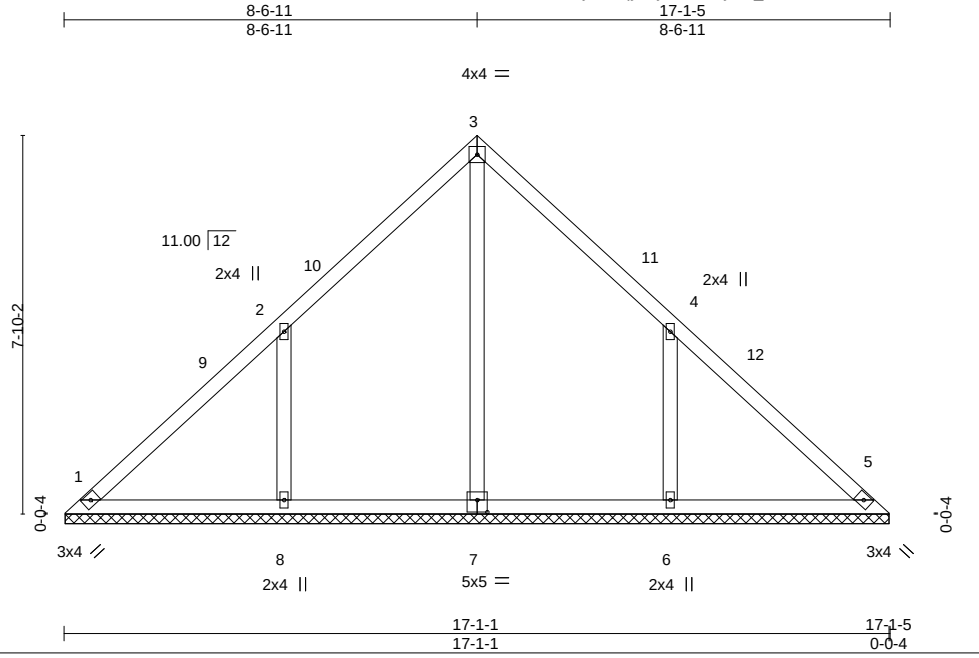

Plate Offsets (X,Y)-- [7:0-2-8,0-3-0]

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	0.25	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	0.16	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 80 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 17-0-12.
(lb) - Max Horz 1=-165(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-216(LC 10), 6=-216(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=360(LC 20), 8=481(LC 17), 6=481(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-331/253, 4-6=-331/252

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-8 to 3-4-8, Interior(1) 3-4-8 to 5-6-11, Exterior(2) 5-6-11 to 11-6-11, Interior(1) 11-6-11 to 13-8-13, Exterior(2) 13-8-13 to 16-8-13 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=216, 6=216.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	V03	Valley	1	1	I46794305

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:08 2021 Page 1

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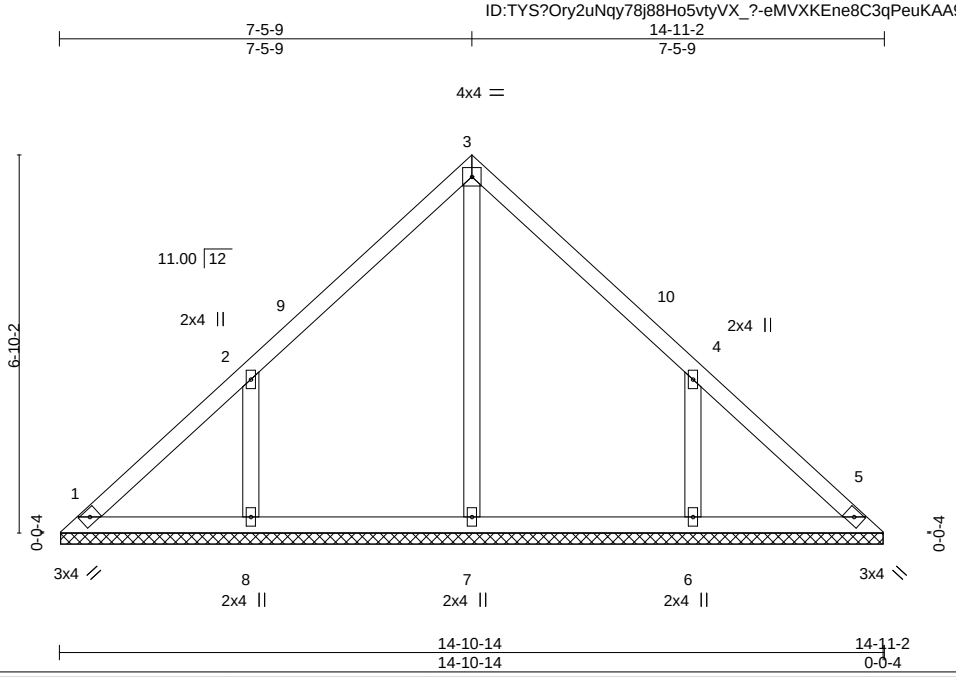

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 68 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 14-10-9.
(lb) - Max Horz 1=143(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-187(LC 10), 6=-187(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=359(LC 20), 8=423(LC 17), 6=423(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-289/221, 4-6=-289/221

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-8 to 3-5-9, Interior(1) 3-5-9 to 4-5-9, Exterior(2) 4-5-9 to 10-5-9, Interior(1) 10-5-9 to 11-5-9, Exterior(2) 11-5-9 to 14-6-10 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, with BCDL = 10.0psf.
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=187, 6=187.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	V04	Valley	1	1	I46794306

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:10 2021 Page 1
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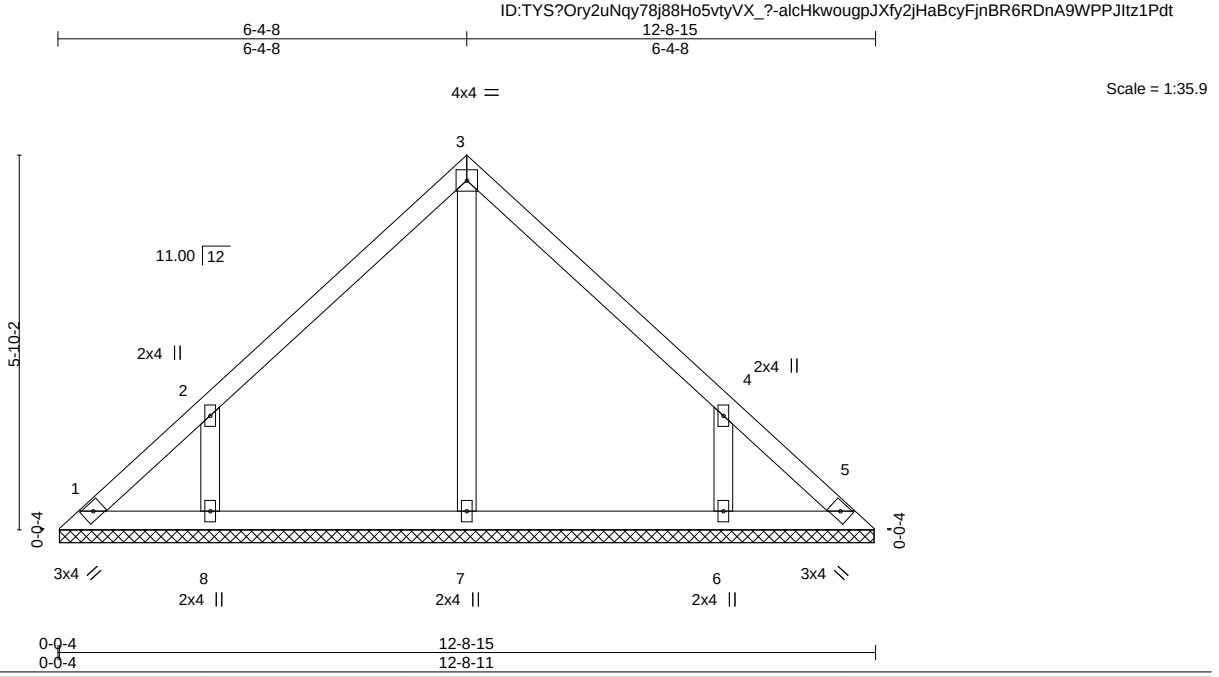

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 56 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 12-8-7.
(lb) - Max Horz 1=121(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-169(LC 10), 6=-169(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=323(LC 17), 6=323(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-265/204, 4-6=-265/204

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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=169, 6=169.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	V05	Valley	1	1	I46794307
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:11 2021 Page 1
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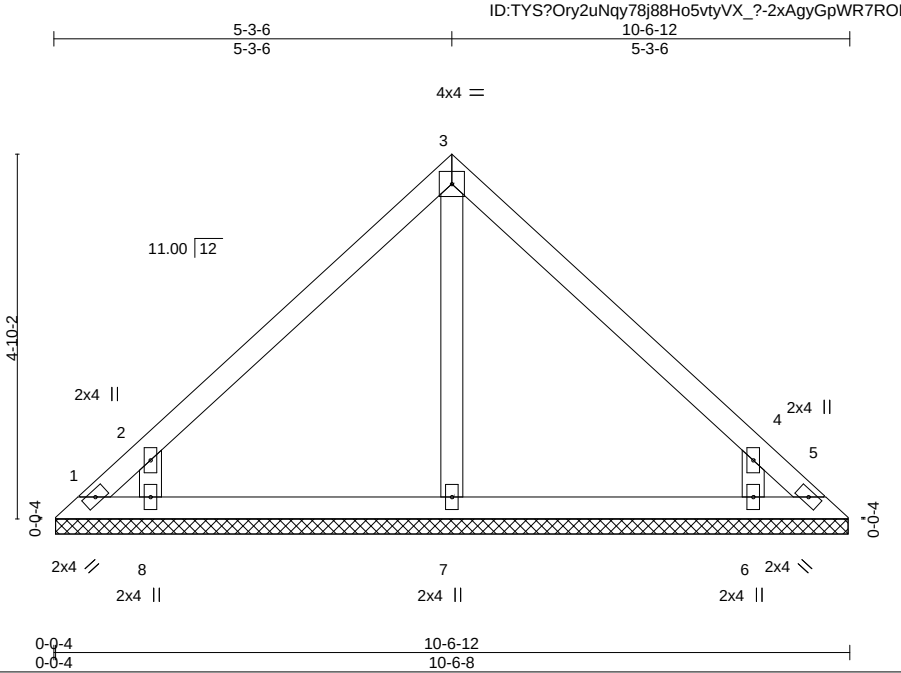

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 44 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 10-6-4.
(lb) - Max Horz 1=-99(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 5 except 1=-107(LC 8), 8=-188(LC 10), 6=-188(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=351(LC 17), 6=351(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-302/235, 4-6=-302/235

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 5 except (jt=lb) 1=107, 8=188, 6=188.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	V06	Valley	1	1	I46794308
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:12 2021 Page 1
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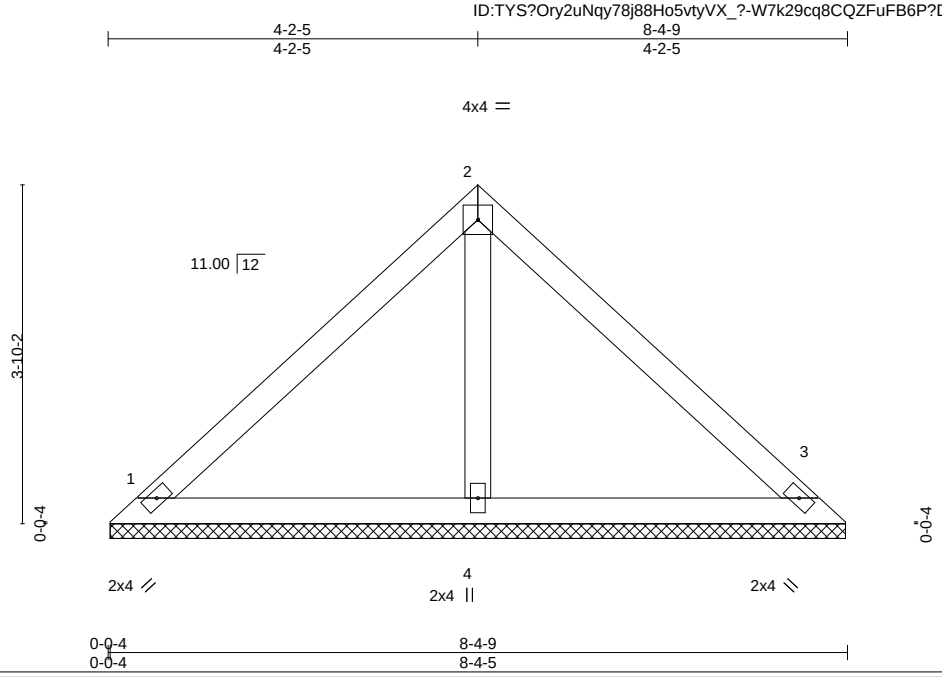

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 33 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=8-4-1, 3=8-4-1, 4=8-4-1
Max Horz 1=77(LC 9)
Max Uplift 1=-39(LC 11), 3=-44(LC 11)
Max Grav 1=180(LC 1), 3=180(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=120mph Vasd=95mph; 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.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	V07	Valley	1	1	I46794309
					Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:13 2021 Page 1
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3-1-3 6-2-7
3-1-3 3-1-3

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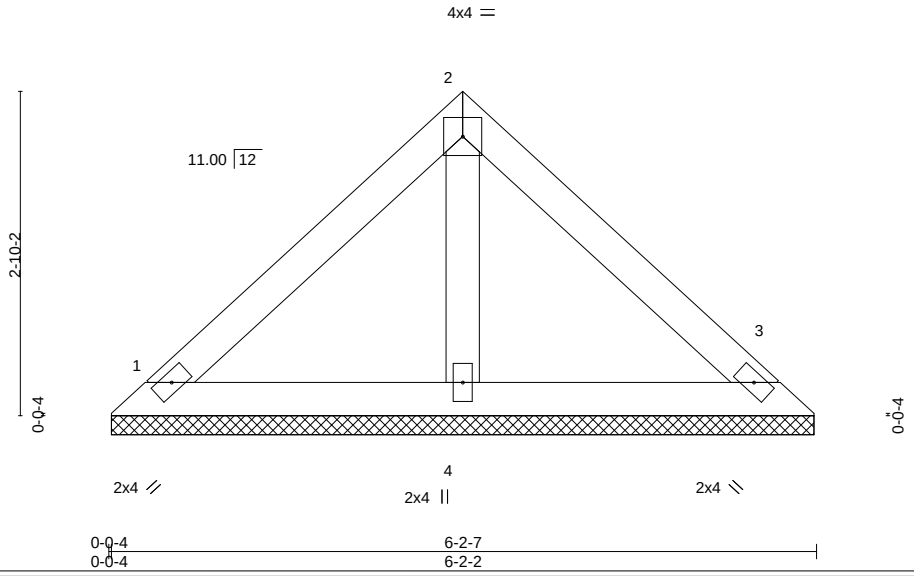

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 24 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=6-1-14, 3=6-1-14, 4=6-1-14
Max Horz 1=-55(LC 8)
Max Uplift 1=-28(LC 11), 3=-31(LC 11)
Max Grav 1=129(LC 1), 3=129(LC 1), 4=179(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=120mph Vasd=95mph; 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.

June 30,2021

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

Job	Truss	Truss Type	Qty	Ply	WAG-15
21062548	V08	Valley	1	1	I46794310

Job Reference (optional)

The Building Center, Gastonia, NC - 28052, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 13:25:14 2021 Page 1
ID:TYS?Ory2uNqy78j88Ho5vtyVX_?-SWsoaIrOk2pz8ZLUWQFZ65uVB2TI9bXIR0NXRez1Pdp

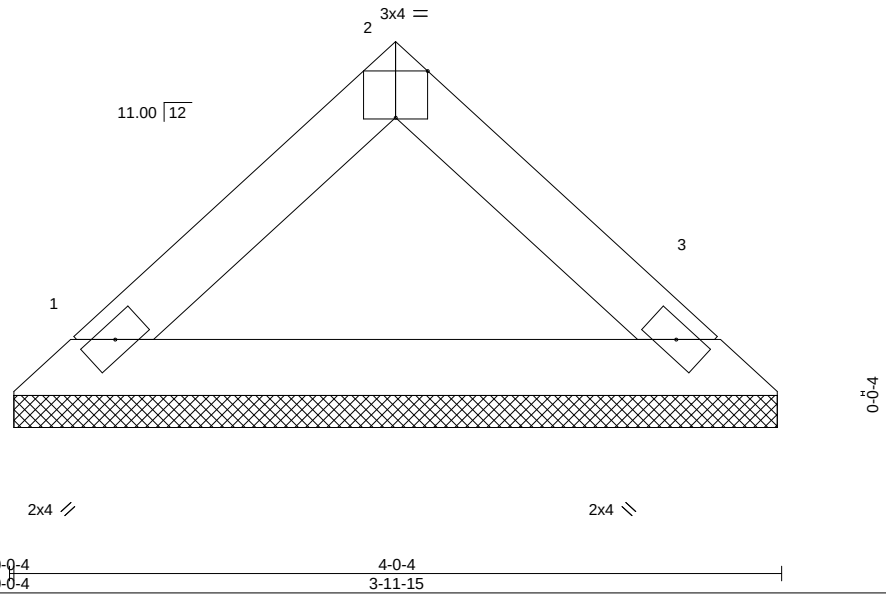

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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 4-0-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-11-11, 3=3-11-11
Max Horz 1=-33(LC 6)
Max Uplift 1=-12(LC 10), 3=-12(LC 11)
Max Grav 1=131(LC 1), 3=131(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=120mph Vasd=95mph; 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.

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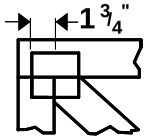
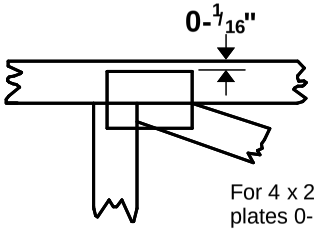
Symbols

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.

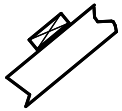
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

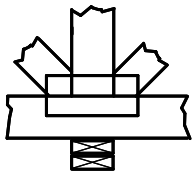
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

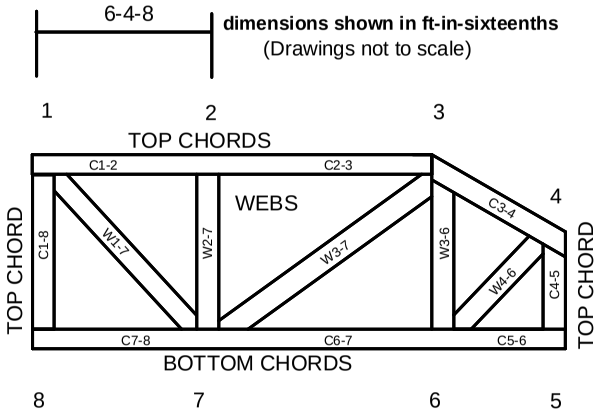


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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 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.