

RE: B0419-1992 Engage A Trenco 818 Soundside Rd Edenton, NC 27932

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Wind Code: ASCE 7-10 Roof Load: 40.0 psf Design Program: MiTek 20/20 8.1 Wind Speed: 130 mph Floor Load: N/A psf

This package includes 12 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E12612646	a1	1/17/2019
2	E12612647	a2	1/17/2019
3	E12612648	а5-р	1/17/2019
4	E12612649	а6-р	1/17/2019
5	E12612650	a7	1/17/2019
6	E12612651	а7-р	1/17/2019
7	E12612652	a8	1/17/2019
8	E12612653	b1	1/17/2019
9	E12612654	b2	1/17/2019
10	E12612655	c1	1/17/2019
11	E12612656	g1	1/17/2019
12	E12612657	g2	1/17/2019

The truss drawing(s) referenced above have been prepared by

Truss Engineering Co. under my direct supervision

based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2019

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. TRENCO has not independently verified the applicability of the design parameters or the design 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.







TOP CHORD

BOT CHORD

33

32

3130

4x8 =

29

28

27

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

26

25

24

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x6 SP No.1

2x4 SP No.3 OTHERS

REACTIONS. All bearings 37-0-0. (lb) -

42

41

40

39

38

37

3635

4x8 =

34

Max Horz 2=131(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 35, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24 22 Max Grav All reactions 250 lb or less at joint(s) 2, 33, 34, 35, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27,

26, 25, 24, 22

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

NOTES

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 18-6-0, Corner(3) 18-6-0 to 22-10-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 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 4-0-0
- 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) 2, 34, 35, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24, 22.

10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



818 Soundside Road Edenton, NC 27932

🙏 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not being real of the set only water the building designer must verify the subject of building designer much the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component** fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



	12-7-13 12-7-13		24-4-3 11-8-7			37-0-0 12-7-13	
Plate Offsets (X,	,Y) [4:0-0-0,0-0-0], [7:0-0-0,0-0-0]						
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 * Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.46 BC 0.81 WB 0.51 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.52 10-13 -0.69 10-13 0.11 8 0.11 13	l/defl L/d >855 360 >636 240 n/a n/a >999 240	PLATES MT20 Weight: 219 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS	2x6 SP No.1 2x6 SP No.1 2x4 SP No.3		BRACING- TOP CHORE BOT CHORE	D Structur D Rigid ce	ral wood sheathing o eiling directly applied	lirectly applied or 3-6-2 c l or 9-10-15 oc bracing.	c purlins.
REACTIONS.	(lb/size) 2=1516/0-3-8, 8=1516/0-3-8 Max Horz 2=-77(LC 17) Max Uplift 2=-144(LC 8), 8=-144(LC 9) Max Grav 2=1588(LC 2), 8=1588(LC 2)						
FORCES. (Ib) TOP CHORD BOT CHORD WEBS	- Max. Comp./Max. Ten All forces 250 (lb) or 2-4=-3854/735, 4-5=-3516/646, 5-6=-3516/64 2-13=-610/3566, 10-13=-325/2447, 8-10=-61 5-10=-107/1223, 6-10=-608/312, 5-13=-107/2	less except when shown. 16, 6-8=-3854/735 0/3567 1223, 4-13=-608/312					
NOTES							

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 18-6-0, Exterior(2) 18-6-0 to 22-10-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 30.0psf on the bottom chord in all areas with a clearance greater than 4-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=144, 8=144.



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	12-7-13 12-7-13		<u>24-4-3</u> 11-8-7				37-0-0 12-7-13	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-1-8 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2015/TPI2014	CSI. TC 0.70 BC 0.94 WB 0.54 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.55 9-12 -0.74 9-12 0.11 8 0.12 9-12	l/defl >802 >598 5 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 236 lb	GRIP 244/190 FT = 20%

LUWBER-	
TOP CHORD	

- 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WEBS
 - 2x4 SP No.3 *Except* 10-11: 2x6 SP No.1

- BRACING TOP CHORD
- BOT CHORD

2-0-0 oc purlins (3-2-6 max.) (Switched from sheeted: Spacing > 2-0-0). Rigid ceiling directly applied or 9-6-8 oc bracing.

- REACTIONS. (lb/size) 2=1611/0-3-8, 8=1560/0-3-8 Max Horz 2=82(LC 12) Max Uplift 2=-153(LC 8), 8=-122(LC 9) Max Grav 2=1688(LC 2), 8=1644(LC 2)
- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- TOP CHORD 2-4=-4097/784, 4-5=-3737/687, 5-6=-3739/702, 6-8=-4084/803
- BOT CHORD 2-12=-656/3791, 9-12=-352/2600, 8-9=-656/3796
- WEBS 5-9=-116/1302, 6-9=-649/336, 5-12=-115/1299, 4-12=-646/331

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 18-6-0, Exterior(2) 18-6-0 to 22-10-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 30.0psf on the bottom chord in all areas with a clearance greater than 4-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=153, 8=122.

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



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Scale: 3/16"=1'



	1	12-7-13	I	24-4-3			1		36-10-8	37 ₁ 2 _Γ 8
		12-7-13		11-8-6			1		12-6-5	0-4-0
Plate Offse	ets (X,Y)	[8:0-1-11,Edge]								
LOADING TCLL	(psf) 20.0	SPACING- 2-1-8 Plate Grip DOL 1.15	CSI. TC 0.76	DEFL. Vert(LL) -0.	in .41	(loc) 9-12	l/defl >999	L/d 360	PLATES MT20	GRIP 244/190
TCDL BCLL	10.0 0.0 *	Lumber DOL 1.15 Rep Stress Incr NO	BC 0.82 WB 0.50	Vert(CT) -0. Horz(CT) 0.	.60 .11	9-12 8	>740 n/a	240 n/a		
3CDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.	.13	9-12	>999	240	Weight: 237 lb	FT = 20%
LUMBER- TOP CHOF BOT CHOF WEBS	RD 2x6 SP RD 2x6 SP 2x4 SP 10-11: :	No.1 No.1 No.3 *Except* 2x6 SP No.1		BRACING- TOP CHORD BOT CHORD	2 (2-0-0 o (Switch Rigid c	c purlins ned from eiling dir	(3-1-13 max.) sheeted: Space ectly applied c) cing > 2-0-0). or 9-5-0 oc bracing.	
REACTION	NS. (Ib/size Max He Max U	e) 2=1621/0-3-8, 8=1569/0-3-0 orz 2=82(LC 12) plift 2=-153(LC 8), 8=-124(LC 9)								
FORCES. TOP CHOF BOT CHOF WEBS	(lb) - Max. RD 2-4=- RD 2-12= 4-12=	Comp./Max. Ten All forces 250 (lb) o 3810/790, 4-5=-3461/693, 5-6=-3495/7 -661/3538, 9-12=-357/2426, 8-9=-673/ -646/331, 5-12=-116/1169, 5-9=-123/1	r less except when shown. 12, 6-8=-3862/817 3597 212, 6-9=-683/346							
NOTES-										

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-12 to 3-9-1, Interior(1) 3-9-1 to 18-6-1, Exterior(2) 18-6-1 to 22-10-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 4-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=153, 8=124.

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



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 	<u>12-7-13</u> 12-7-13		24-4-3 11-8-6				<u>36-10-8</u> 12-6-5	<u>37-</u> 2-8 0-4-0
Plate Offsets (X	,Y) [8:0-1-11,Edge]							
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 * Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.57 BC 0.81 WB 0.52 Matrix-S	DEFL. Vert(LL) -0. Vert(CT) -0. Horz(CT) 0. Wind(LL) 0.	in (loc) 52 9-12 70 9-12 11 8 12 9-12	l/defl >851 >633 s n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 218 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS	2x6 SP No.1 2x6 SP No.1 2x4 SP No.3		BRACING- TOP CHORD BOT CHORD	Struct Rigid	tural wood ceiling dire	sheathing di ectly applied	rectly applied or 3-3-3 or or 9-8-9 oc bracing.	oc purlins.
REACTIONS.	(lb/size) 2=1525/0-3-8, 8=1477/0-3-0 Max Horz 2=77(LC 16) Max Uplift 2=-144(LC 8), 8=-116(LC 9) Max Grav 2=1598(LC 2), 8=1554(LC 2)							
FORCES. (lb) TOP CHORD BOT CHORD WEBS	- Max. Comp./Max. Ten All forces 250 (lb) o 2-4=-3884/743, 4-5=-3546/652, 5-6=-3578/6 2-12=-623/3595, 9-12=-336/2475, 8-9=-633/ 4-12=-608/312, 5-12=-109/1222, 5-9=-116/1	r less except when shown. 70, 6-8=-3920/769 /3654 263, 6-9=-643/326						

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-12 to 3-9-1, Interior(1) 3-9-1 to 18-6-1, Exterior(2) 18-6-1 to 22-10-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 30.0psf on the bottom chord in all areas with a clearance greater than 4-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=144, 8=116.



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	12-7-13 12-7-13		24-4-3 11-8-6				36-10-8 12-6-5	37 ₁ 2 ₁ 8 0-4-0
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2015/TPI2014	CSI. TC 0.57 BC 0.70 WB 0.47 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (la -0.38 9- -0.56 9- 0.10 0.12 9-	oc) I/de -12 >99 -12 >78 8 n/ -12 >99	fl L/d 9 360 6 240 ′a n/a 9 240	PLATES MT20 Weight: 237 lb	GRIP 244/190 FT = 20%
LUMBER-			BRACING-				·	

TOP CHORD

BOT CHORD

L	U	M	в	E	F	۲.	•
			-				

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.3 *Except*
	10-11: 2x6 SP No.1

REACTIONS. (lb/size) 2=1525/0-3-8, 8=1477/0-3-0 Max Horz 2=77(LC 16) Max Uplift 2=-144(LC 8), 8=-116(LC 9)

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

TOP CHORD 2-4=-3586/743, 4-5=-3258/652, 5-6=-3289/670, 6-8=-3635/769

BOT CHORD 2-12=-623/3330, 9-12=-336/2284, 8-9=-633/3386

WEBS 4-12=-608/312, 5-12=-109/1101, 5-9=-116/1141, 6-9=-643/326

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-12 to 3-9-1, Interior(1) 3-9-1 to 18-6-1, Exterior(2) 18-6-1 to 22-10-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 4-0-0

between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=144, 8=116.

0 WITTER PARTY SEAL 036322 GI minum January 17,2019

Structural wood sheathing directly applied or 3-4-7 oc purlins.

Rigid ceiling directly applied or 9-8-9 oc bracing.

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. ARXING - Verify design parameters and READ NOTES ON THIS AND INCLODED WITER REFERENCE PAGE MIL-14's rev. 10/03/2013 BEFORE USE. Design valid for use only with MITER® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





			<u>37-2-8</u> 37-2-8	—
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2015/TPI2014	CSI. TC 0.03 BC 0.02 WB 0.08 Matrix-S	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 1 n/r 120 Vert(CT) 0.00 1 n/r 120 Horz(CT) 0.00 22 n/a n/a	%
LUMBER-			BRACING-	

TOP CHORD

BOT CHORD

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 OTHERS 2x4 SP No.3

REACTIONS. All bearings 36-10-8.

> Max Horz 2=130(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27, 26, 25, 24, 23 Max Grav All reactions 250 lb or less at joint(s) 2, 22, 32, 33, 34, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27,

26, 25, 24, 23

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

TOP CHORD 11-12=-90/263, 12-13=-90/264

NOTES-

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

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-7-12 to 3-9-1, Exterior(2) 3-9-1 to 18-6-1, Corner(3) 18-6-1 to 22-10-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.

5) Gable studs spaced at 2-0-0 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 4-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27, 26, 25, 24, 23.

9) Non Standard bearing condition. Review required.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

📣 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE WARNING - Verify design parameters and KEAD NOTES ON THIS AND INCLODED INTER REFERENCE FACE INTERVISED. INCLOSE DEL ONE OCL Design valid for use only with MITER® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

818 Soundside Road Edenton, NC 27932





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	4-6	0	4-6-0	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.25 BC 0.19 WB 0.08 Matrix-S	DEFL. in (loc) I/defl L/d Vert(LL) -0.00 2-6 >999 360 Vert(CT) -0.01 2-6 >999 240 dorz(CT) 0.00 4 n/a n/a Mind(LL) 0.00 6 >999 240	PLATES GRIP MT20 244/190 Weight: 43 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD2x4 SP No.1BOT CHORD2x6 SP No.1WEBS2x4 SP No.3

REACTIONS. (Ib/size) 2=410/0-3-8, 4=410/0-3-8 Max Horz 2=35(LC 11) Max Uplift 2=-35(LC 12), 4=-35(LC 13)

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

 TOP CHORD
 2-3=-412/141, 3-4=-412/141

 BOT CHORD
 2-6=-19/296, 4-6=-19/296

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 4-6-0, Exterior(2) 4-6-0 to 8-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 4-0-0

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) 2, 4.
 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- SEAL 036322 January 17,2019

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

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Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-6 to 3-8-7, Exterior(2) 3-8-7 to 6-4-0, Corner(3) 6-4-0 to 10-8-13
- zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 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 4-0-0
- 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, 8, 13, 14, 11, 10.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.



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0-10-8 0-10-8			20-10-8 20-0-0	21-9-0
Plate Offsets (X,Y)	[14:0-4-0,0-4-8]			
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.11 BC 0.04 WB 0.07 Matrix-S	DEFL. in (loc) l/defl L/d Vert(LL) 0.00 11 n/r 120 MT20 244/190 Vert(CT) 0.00 11 n/r 120 MT20 244/190 Horz(CT) 0.00 10 n/a n/a MT2 244/190) 20%
LUMBER-	. No 1		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.

TOP CHORD2x4 SP No.1BOT CHORD2x6 SP No.1OTHERS2x4 SP No.3

REACTIONS. All bearings 20-0-0.

(lb) - Max Horz 2=73(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 10, 2, 16, 17, 14, 13 except 18=-112(LC 12), 12=-112(LC 13) Max Grav All reactions 250 lb or less at joint(s) 10, 2, 15, 16, 17, 14, 13 except 18=315(LC 23), 12=315(LC 24)

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

NOTES-

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

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 10-0-0, Corner(3) 10-0-0 to 14-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 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 4-0-0 between the bottom chord and any other members.
 9) Brovide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at ioint(c) 10, 2, 16
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 2, 16, 17, 14, 13 except (jt=lb) 18=112, 12=112.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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	<u> 10-0-0</u> 10-0-0				20-0-0 10-0-0		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.59 BC 0.78 WB 0.17 Matrix-S	DEFL. Vert(LL) -0.1 Vert(CT) -0.3 Horz(CT) 0.0 Wind(LL) 0.0	in (loc) // 7 2-7 > 88 2-7 > 94 4 96 2-7 >	/defl L/d .999 360 .624 240 n/a n/a .999 240	PLATES MT20 Weight: 88 lb	GRIP 244/190 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD2x6 SP No.1BOT CHORD2x4 SP No.1WEBS2x4 SP No.3

REACTIONS. (lb/size) 4=836/0-3-8, 2=836/0-3-8 Max Horz 2=-43(LC 13) Max Uplift 4=-91(LC 9), 2=-91(LC 8)

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

 TOP CHORD
 2-3=-1438/333, 3-4=-1438/333

BOT CHORD 2-3=-1438/333, 3-4=-1438/333 BOT CHORD 2-7=-213/1294, 4-7=-213/1294

WEBS 3-7=0/455

NOTES

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 4-0-0 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) 4, 2.

 See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

Structural wood sheathing directly applied or 5-0-10 oc purlins.

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

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SEAL 036322 January 17,2019

