

RE: J0621-4089 Lot 12 Pendegraft Rd. Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0621-4089 Lot/Block: Address: City:

Model: Subdivision: State:

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

Design Code: IRC2015/TPI2014 Wind Code: N/A Roof Load: N/A psf Design Program: MiTek 20/20 8.3 Wind Speed: N/A mph Floor Load: 55.0 psf

This package includes 14 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E15774719	ET-1	6/29/2021
2	E15774720	ET-2	6/29/2021
3	E15774721	ET-3	6/29/2021
4	E15774722	ET-4	6/29/2021
5	E15774723	ET-5	6/29/2021
6	E15774724	F01	6/29/2021
7	E15774725	F02	6/29/2021
8	E15774726	F03	6/29/2021
9	E15774727	F04	6/29/2021
10	E15774728	F07	6/29/2021
11	E15774729	F08	6/29/2021
12	E15774730	F09	6/29/2021
13	E15774731	F11	6/29/2021
14	E15774732	F12	6/29/2021

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.

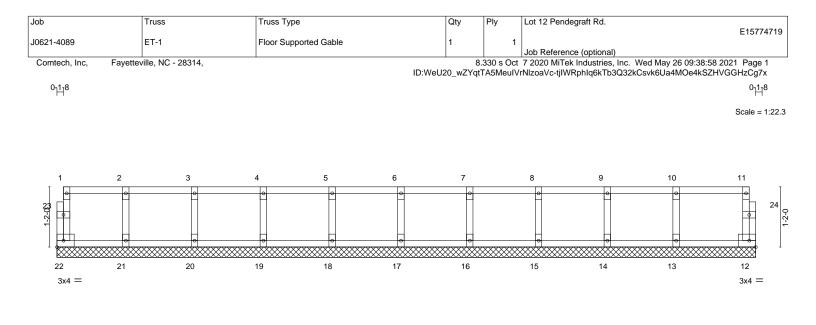
Truss Design Engineer's Name: Gilbert, Eric

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

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 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.





					13-6-8						
TCDL 1	psf) 40.0 10.0 0.0	Plate Grip DOL Lumber DOL	2-0-0 <b>CSI.</b> 1.00 TC 1.00 BC YES WB	0.08 0.01 0.03	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 12	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 244/190
	5.0	Code IRC2015/TPI2	-		1012(01)	0.00	12	n/a	174	Weight: 57 lb	FT = 20%F, 11%E
LUMBER- TOP CHORI BOT CHORI WEBS OTHERS	D 2x4 SP 2x4 SP	No.1(flat) No.1(flat) No.3(flat) No.3(flat)			BRACING- TOP CHOR BOT CHOR		except	end verti	cals.	rectly applied or 6-0-0 or 10-0-0 oc bracing.	oc purlins,

13-6-8

#### REACTIONS. All bearings 13-6-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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

#### NOTES-

1) All plates are 1.5x3 MT20 unless otherwise indicated.

2) Plates checked for a plus or minus 1 degree rotation about its center.

3) Gable requires continuous bottom chord bearing.

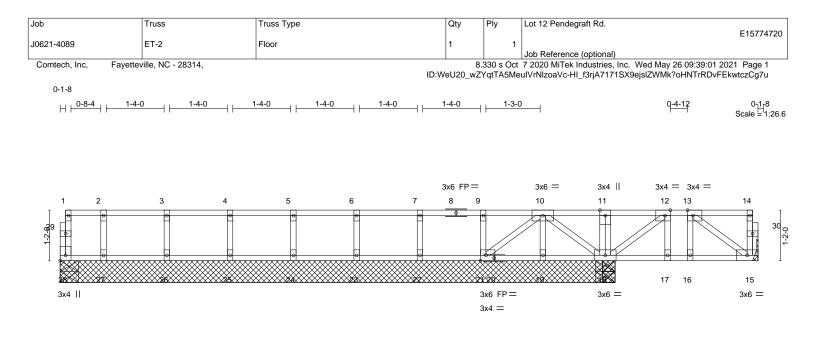
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

5) Gable studs spaced at 1-4-0 oc.

6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.







L	<u>12-6-12</u> <u>12-978</u>							16-1	-0		
			12-6-12						0-2-12	3-3-	-8
Plate Offs	sets (X,Y)	[12:0-1-8,Edge], [13:0-1-8,Edge], [21:	0-1-8,Edge], [28:Edge,0-1-8]								
LOADING TCLL TCDL BCLL	40.0 10.0 0.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code. IRC2015/TPI2014	CSI. TC 0.08 BC 0.05 WB 0.05 Matrix C	Vert(CT) -0	in ( ).00 ).00 ).00	(loc) 16 16 15	l/defl >999 >999 n/a	L/d 480 360 n/a		PLATES MT20	<b>GRIP</b> 244/190
BCDL	5.0	Code IRC2015/1P12014	Matrix-S							Weight: 78 lb	FT = 20%F, 11%E
LUMBER	-			BRACING-							
	TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)				P CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.				oc purlins,		
WEBS	2x4 SF	P No.3(flat)		BOT CHORD	R	igid ce	iling dire	ctly applie	ed or 10-	0-0 oc bracing.	

REACTIONS. All bearings 12-9-8 except (jt=length) 28=0-5-0, 28=0-5-0, 15=Mechanical, 18=0-5-8, 18=0-5-8, 18=0-5-8. (lb) - Max Grav All reactions 250 lb or less at joint(s) 28, 28, 15, 19, 21, 22, 23, 24, 25, 26, 27 except 18=307(LC 25), 18=301(LC 1), 18=301(LC 1)

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

#### NOTES-

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

2) All plates are 1.5x3 MT20 unless otherwise indicated.

3) Plates checked for a plus or minus 1 degree rotation about its center.

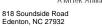
4) Refer to girder(s) for truss to truss connections.

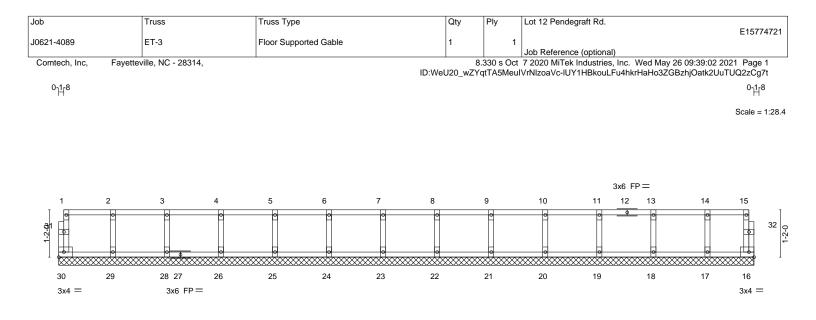
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.

Strongbacks to be attached to walls at their outer ends or restrained by other means.

6) CAUTION, Do not erect truss backwards.







			17-1-12 17-1-12			
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES	CSI. TC 0.06 BC 0.01 WB 0.03	DEFL. i Vert(LL) n/ Vert(CT) n/ Horz(CT) 0.0	a - n/a 999	PLATES MT20	<b>GRIP</b> 244/190
BOT CHORD 2x4 SP	Code IRC2015/TPI2014 No.1(flat) No.1(flat) No.3(flat)	Matrix-R	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir except end verticals. Rigid ceiling directly applied of	, ,,	FT = 20%F, 11%E

## **REACTIONS.** All bearings 17-1-12.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 30, 16, 29, 28, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17

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

#### NOTES-

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.





E15774		Pendegraft Rd.	Lot 12	Ply	Qt		Truss Type	SS	Truss	lob
E13/74	N		1		1	d Gable	Floor Supporter	Ļ	ET-4	621-4089
Wed May 26 10:40:42 2021 Page 2 9PGW?se06TmTShmxFzCg6J	hal) k Industries, Inc. 5vPW7eO7k49	eference (optional In 15 2021 MiTek Ind /I BH0uvXKaz5vE	JOD R 8.330 s Ja	atTA5Meul\/rN	ID:Wel 120 w7			Mitek	vetteville, NC 28309, I	omtech, Inc., Fay
0-1-1	Syl Wregzka	EBHOUYARd23y	120010	quixomedium	1D.WC020_w2					0 <sub>1</sub> 18
Scale = 1:										
9 10 11		8		7	6	5	4	3	2	1
		•	•		•	•	•	•	•	22
9-13		8-14	15	7-1	6-16	5-17	4-18	3-19	2-20	22 
			•  ※※※※		12-21 o					
13 12		14		15	16	17	18	19	20	21
3x6 =										3x4 =
					10.1.0					
					12-4-0 12-4-0					

LOADING         (psf)           TCLL         40.0           TCDL         10.0           BCLL         0.0           BCDL         5.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode IRC2015/TPI2014	CSI. TC 0.07 BC 0.02 WB 0.03 Matrix-R	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	a - a -	l/defl L/d n/a 999 n/a 999 n/a n/a	PLATES MT20 Weight: 54 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E
LUMBER- TOP CHORD 2x4 \$	SP No.1(flat)		BRACING- TOP CHORD	Structura	l wood sheathing di	rectly applied or 6-0-0	
BOT CHORD 2x4 S	SP No.3(flat) SP No.3(flat)		BOT CHORD	except er	nd verticals.	or 10-0-0 oc bracing.	oo purmio,

WEBS 2x4 SP No.3(flat) 2x4 SP No.3(flat) OTHERS

REACTIONS. All bearings 12-4-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 21, 12, 20, 19, 18, 17, 16, 15, 14, 13

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

#### NOTES-

1) All plates are 1.5x3 MT20 unless otherwise indicated.

2) Plates checked for a plus or minus 1 degree rotation about its center.

3) Gable requires continuous bottom chord bearing.

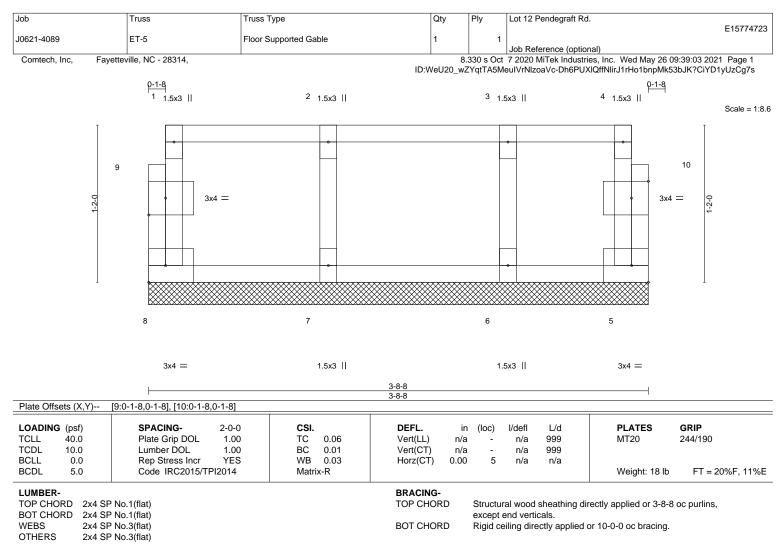
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

5) Gable studs spaced at 1-4-0 oc.

6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 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 Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



REACTIONS. All bearings 3-8-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 8, 5, 7, 6

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

#### NOTES-

1) Plates checked for a plus or minus 1 degree rotation about its center.

2) Gable requires continuous bottom chord bearing.

3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

4) Gable studs spaced at 1-4-0 oc.

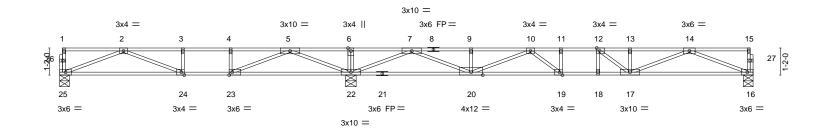
 Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.





Job	Truss	Truss Type	Qty	Ply	Lot 12 Pendegraft Rd.
					E15774724
J0621-4089	F01	Floor	4	1	
					Job Reference (optional)
Comtech, Inc, Fayette	ville, NC - 28314,		8.	330 s Oct	7 2020 MiTek Industries, Inc. Wed May 26 09:39:04 2021 Page 1





L	12-6-12	ĺ.	20-5-4	<sub>1</sub> 21-9-10	29-11-0	
	12-6-12		7-10-8	1-4-6	8-1-6	1
Plate Offsets (X,Y)	[12:0-1-8,Edge], [19:0-1-8,Edge], [23:0-	1-8,Edge], [24:0-1-8,Edge	2]			
LOADING (psf) TCLL 40.0	SPACING- 2-0-0 Plate Grip DOL 1.00	<b>CSI.</b> TC 0.85	<b>DEFL.</b> in Vert(LL) -0.25	(loc) l/defl L/d 19-20 >833 480	PLATES MT20	<b>GRIP</b> 244/190
TCDL 10.0 BCLL 0.0	Lumber DOL 1.00 Rep Stress Incr YES	BC 0.63 WB 0.84	( )	24-25 >426 360		21,1,100
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			Weight: 145 lb	FT = 20%F, 11%E
LUMBER-			BRACING-			
TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)			TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.			
WEBS 2x4 SF	/EBS 2x4 SP No.3(flat)			BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.		

REACTIONS. (size) 25=0-5-0, 22=0-5-8, 16=0-5-0 Max Grav 25=597(LC 3), 22=1933(LC 1), 16=844(LC 7)

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

TOP CHORD 2-3=-1551/275, 3-4=-1551/275, 4-5=-1551/275, 5-6=0/2162, 6-7=0/2162, 7-9=-2242/0,

9-10=-2242/0, 10-11=-3119/0, 11-12=-3119/0, 12-13=-2849/0, 13-14=-2849/0 BOT CHORD 24-25=0/1196, 23-24=-275/1551, 22-23=-972/641, 20-22=-274/695, 19-20=0/3010, 18-19=0/3119, 17-18=0/3119, 16-17=0/1819

WEBS 6-22=-304/0, 2-25=-1280/0, 2-24=-302/384, 5-22=-1863/0, 5-23=0/1344, 4-23=-402/0, 7-22=-2468/0, 7-20=0/1772, 9-20=-267/0, 14-16=-1951/0, 14-17=0/1111, 12-17=-516/154, 10-20=-942/0, 10-19=-62/516

#### NOTES-

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

2) All plates are 1.5x3 MT20 unless otherwise indicated.

3) Plates checked for a plus or minus 1 degree rotation about its center.

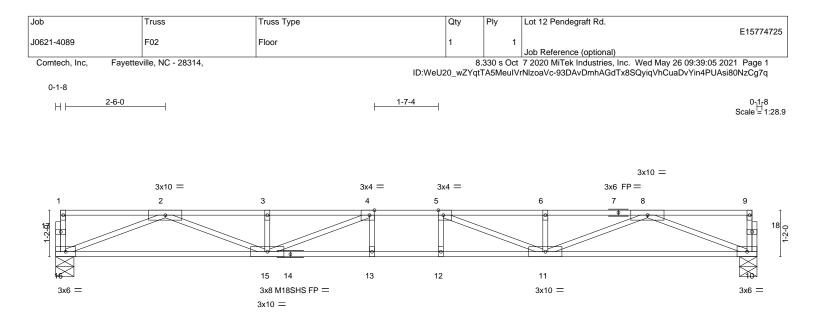
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.

Strongbacks to be attached to walls at their outer ends or restrained by other means.

5) CAUTION, Do not erect truss backwards.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



			<u>17-7-4</u> 17-7-4			
Plate Offsets (X,Y)	[4:0-1-8,Edge], [5:0-1-8,Edge]					
LOADING         (psf)           TCLL         40.0           TCDL         10.0           BCLL         0.0           BCDL         5.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode IRC2015/TPI2014	<b>CSI.</b> TC 0.57 BC 0.87 WB 0.68 Matrix-S	Vert(LL) -0.30	n (loc) l/defl L/d ) 12-13 >699 480 l 12-13 >507 360 7 10 n/a n/a	PLATES MT20 M18SHS Weight: 86 lb	<b>GRIP</b> 244/190 244/190 FT = 20%F, 11%E
BOT CHORD 2x4 SI	P No.1(flat) P No.1(flat) P No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dire except end verticals. Rigid ceiling directly applied o	,	oc purlins,

REACTIONS.	(size)	16=0-5-8, 10=0-5-4
	Max Grav	16=948(LC 1), 10=948(LC 1)

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

TOP CHORD 2-3=-3390/0, 3-4=-3390/0, 4-5=-3953/0, 5-6=-3390/0, 6-8=-3390/0

BOT CHORD 15-16=0/2074, 13-15=0/3953, 12-13=0/3953, 11-12=0/3953, 10-11=0/2074

WEBS 2-16=-2224/0, 2-15=0/1421, 3-15=-299/0, 8-10=-2224/0, 8-11=0/1421, 6-11=-299/0, 5-11=-890/0, 4-15=-890/0

## NOTES-

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

2) All plates are MT20 plates unless otherwise indicated.

3) All plates are 1.5x3 MT20 unless otherwise indicated.

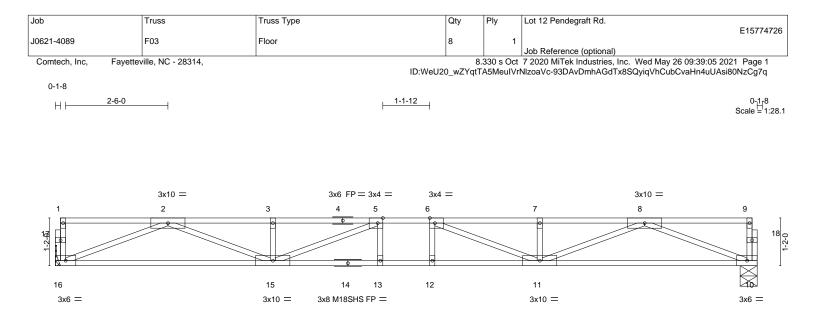
4) Plates checked for a plus or minus 1 degree rotation about its center.

5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.

Strongbacks to be attached to walls at their outer ends or restrained by other means.







			17-1-12 17-1-12			
Plate Offsets (X,Y)	[5:0-1-8,Edge], [6:0-1-8,Edge]					
LOADING         (psf)           TCLL         40.0           TCDL         10.0           BCLL         0.0           BCDL         5.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode IRC2015/TPI2014	<b>CSI.</b> TC 0.51 BC 0.76 WB 0.65 Matrix-S	Vert(LL) -0.2	n (loc) l/defl L/d 7 12-13 >751 480 7 12-13 >545 360 6 10 n/a n/a	PLATES MT20 M18SHS Weight: 85 lb	<b>GRIP</b> 244/190 244/190 FT = 20%F, 11%E
BOT CHORD 2x4 SP	P No.1(flat) P No.1(flat) P No.3(flat)	BRACING- TOP CHORD BOT CHORD	RD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.			

REACTIONS.	(size)	16=Mechanical, 10=0-5-0
	Max Grav	16=923(LC 1), 10=923(LC 1)

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

TOP CHORD 2-3=-3266/0, 3-5=-3266/0, 5-6=-3762/0, 6-7=-3266/0, 7-8=-3266/0

BOT CHORD 15-16=0/2010, 13-15=0/3762, 12-13=0/3762, 11-12=0/3762, 10-11=0/2010

WEBS 2-16=-2156/0, 2-15=0/1356, 3-15=-292/0, 8-10=-2156/0, 8-11=0/1356, 7-11=-292/0, 6-11=-788/0, 5-15=-788/0

## NOTES-

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

2) All plates are MT20 plates unless otherwise indicated.

3) All plates are 1.5x3 MT20 unless otherwise indicated.

4) Plates checked for a plus or minus 1 degree rotation about its center.

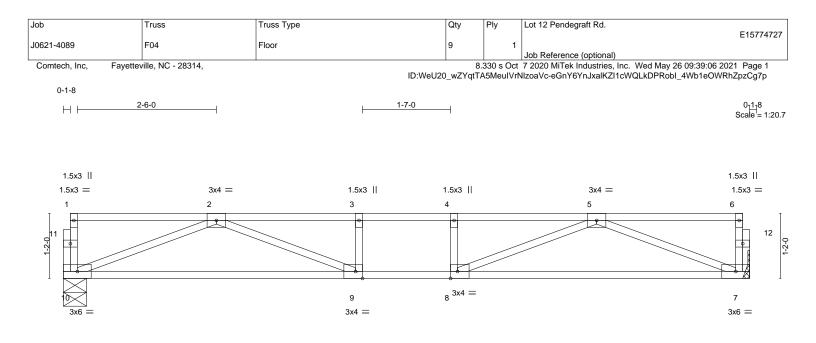
5) Refer to girder(s) for truss to truss connections.

6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.

Strongbacks to be attached to walls at their outer ends or restrained by other means.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 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/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



L			12-4-0			
I			12-4-0			I
Plate Offsets (X,Y)	[8:0-1-8,Edge], [9:0-1-8,Edge]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. i	n (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.34	Vert(LL) -0.13	3 9-10 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.47	Vert(CT) -0.20	0 9-10 >716 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.02	2 7 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			Weight: 60 lb	FT = 20%F, 11%E
LUMBER-			BRACING-			
TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)			TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.		
WEBS 2x4 SI	P No.3(flat)		BOT CHORD	Rigid ceiling directly applied of	or 10-0-0 oc bracing.	
REACTIONS. (siz	ze) 10=0-5-0. 7=Mechanical					

REACTIONS. (size) 10=0-5-0, 7=Mechanical Max Grav 10=658(LC 1), 7=658(LC 1)

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

TOP CHORD 2-3=-1931/0, 3-4=-1931/0, 4-5=-1931/0

BOT CHORD 9-10=0/1351, 8-9=0/1931, 7-8=0/1351

WEBS 5-7=-1447/0, 2-10=-1447/0, 5-8=0/720, 2-9=0/720

NOTES-

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

2) Plates checked for a plus or minus 1 degree rotation about its center.

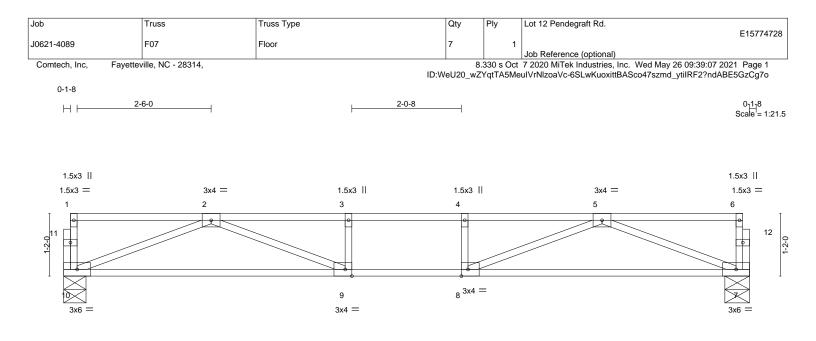
3) Refer to girder(s) for truss to truss connections.

4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.

Strongbacks to be attached to walls at their outer ends or restrained by other means.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



			12-9-8			
Plate Offsets (X,Y)	[8:0-1-8,Edge], [9:0-1-8,Edge]		12-9-8			
LOADING         (psf)           TCLL         40.0           TCDL         10.0           BCLL         0.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES	<b>CSI.</b> TC 0.43 BC 0.53 WB 0.41	<b>DEFL.</b> in Vert(LL) -0.17 Vert(CT) -0.24 Horz(CT) 0.03	9-10 >624 360	<b>PLATES</b> MT20	<b>GRIP</b> 244/190
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			Weight: 61 lb	FT = 20%F, 11%E
LUMBER- TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)		BRACING- TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.			
WEBS 2x4 SF	P No.3(flat)		BOT CHORD	Rigid ceiling directly applied of	or 10-0-0 oc bracing.	
REACTIONS (siz	a) 10-0-5-0 7-0-5-8					

REACTIONS. (size) 10=0-5-0, 7=0-5-8 Max Grav 10=684(LC 1), 7=684(LC 1)

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

TOP CHORD 2-3=-2062/0, 3-4=-2062/0, 4-5=-2062/0

BOT CHORD 9-10=0/1412, 8-9=0/2062, 7-8=0/1412

WEBS 5-7=-1512/0, 2-10=-1512/0, 5-8=0/805, 2-9=0/805

#### NOTES-

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

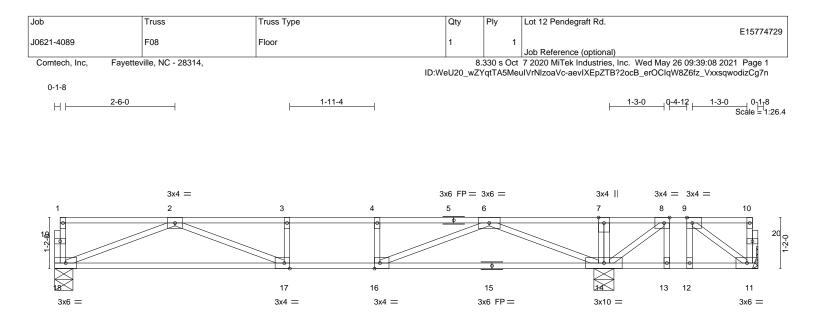
2) Plates checked for a plus or minus 1 degree rotation about its center.

3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.

Strongbacks to be attached to walls at their outer ends or restrained by other means.







12-0-12		10-1-	
-		3-6-4	
Edge], [17:0-1-8,Edge]			
CSI. DEFL. i	n (loc) l/defl L/d	PLATES	GRIP
		MT20	244/190
	17-18 >625 360		
Matrix-S		Weight: 81 lb	FT = 20%F, 11%E
BRACING-			
TOP CHORD	Structural wood sheathing dir	ectly applied or 6-0-0	oc purlins.
	0		
BOT CHORD		or 6-0-0 oc bracing.	
	3	<b>j</b>	
,	12-6-12           Edge], [17:0-1-8,Edge]           CSI.         DEFL.         ir           TC 0.37         Vert(LL) -0.15           BC 0.51         Vert(CT) -0.24           WB 0.43         Horz(CT) 0.02           Matrix-S         BRACING-           TOP CHORD         BOT CHORD	12-6-12           Edge], [17:0-1-8,Edge]           CSI.         DEFL.         in         (loc)         l/defl         L/d           TC         0.37         Vert(LL)         -0.15         17-18         >993         480           Vert(CT)         -0.24         17-18         >625         360           WB         0.43         Horz(CT)         0.02         14         n/a         n/a           BRACING-         TOP CHORD         Structural wood sheathing dir except end verticals.         BOT CHORD         Rigid ceiling directly applied of	12-6-12         3-6-4           Edge], [17:0-1-8,Edge]         3-6-4           CSI.         DEFL.         in         (loc)         l/defl         L/d         PLATES           TC         0.37         Vert(LL)         -0.15         17-18         >993         480         MT20           WB         0.43         Vert(CT)         -0.24         17-18         >625         360         MT20           Watrix-S         Horz(CT)         0.02         14         n/a         n/a         Weight: 81 lb           BRACING-         TOP CHORD         Structural wood sheathing directly applied or 6-0-0 except end verticals.         BOT CHORD         Rigid ceiling directly applied or 6-0-0 oc bracing.

12-6-12

Max Grav 11=161(LC 7), 18=621(LC 10), 14=1133(LC 8)

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

2-3=-1696/0, 3-4=-1696/0, 4-6=-1696/0, 6-7=0/836, 7-8=0/829, 8-9=-126/289 TOP CHORD

- BOT CHORD 17-18=0/1256, 16-17=0/1696, 14-16=0/866, 13-14=-289/126, 12-13=-289/126, 11-12=-289/126
- WFBS 2-18=-1345/0, 6-14=-1575/0, 2-17=0/495, 6-16=0/911, 4-16=-285/0, 8-14=-662/0, 9-11=-151/362

#### NOTES-

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

2) All plates are 1.5x3 MT20 unless otherwise indicated.

- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 150 lb uplift at joint 11.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.

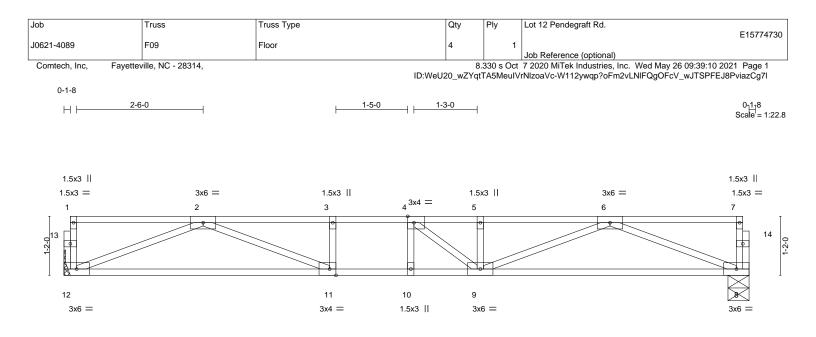
Strongbacks to be attached to walls at their outer ends or restrained by other means.

7) CAUTION, Do not erect truss backwards.



16-1-0

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 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 MSIVTP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



ŀ	<u>6-9-4</u> 6-9-4		8-2-0		3-6-8 5-4-8	
Plate Offsets (X,Y)	[4:0-1-8,Edge], [11:0-1-8,Edge]	r				
LOADING         (psf)           TCLL         40.0           TCDL         10.0           BCLL         0.0           BCDL         5.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode IRC2015/TPI2014	<b>CSI.</b> TC 0.31 BC 0.64 WB 0.45 Matrix-S	Vert(LL) -0.13	n (loc) I/defl L/d 3 9-10 >999 480 7 11-12 >929 360 3 8 n/a n/a	PLATES MT20 Weight: 67 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E
LUMBER-TOP CHORD2x4 SP No.1(flat)BOT CHORD2x4 SP No.1(flat)WEBS2x4 SP No.3(flat)			BRACING- TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.		

REACTIONS.	(size)	12=Mechanical, 8=0-5-0
	Max Grav	12=725(LC 1), 8=725(LC 1)

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

TOP CHORD 2-3=-2287/0, 3-4=-2287/0, 4-5=-2269/0, 5-6=-2269/0

BOT CHORD 11-12=0/1519, 10-11=0/2287, 9-10=0/2287, 8-9=0/1519

WEBS 6-8=-1628/0, 6-9=0/809, 5-9=-257/12, 2-12=-1628/0, 2-11=0/869, 4-9=-345/231

NOTES-

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

2) Plates checked for a plus or minus 1 degree rotation about its center.

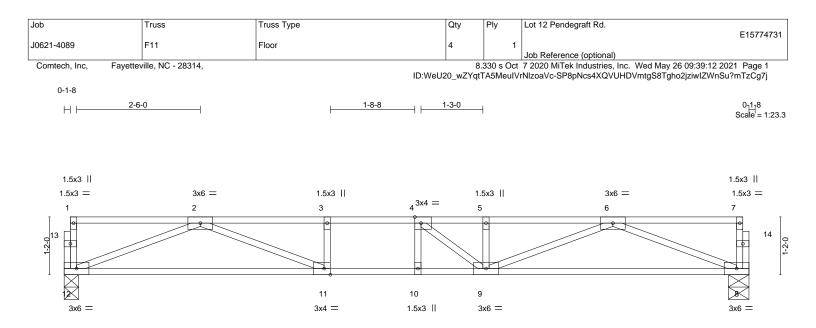
3) Refer to girder(s) for truss to truss connections.

4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.

Strongbacks to be attached to walls at their outer ends or restrained by other means.







			<u>13-10-0</u> 13-10-0			
Plate Offsets (X,Y)	[4:0-1-8,Edge], [11:0-1-8,Edge]					
LOADING         (psf)           TCLL         40.0           TCDL         10.0           BCLL         0.0           BCDL         5.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode IRC2015/TPI2014	<b>CSI.</b> TC 0.40 BC 0.71 WB 0.46 Matrix-S	DEFL.         ir           Vert(LL)         -0.15           Vert(CT)         -0.20           Horz(CT)         0.03	5 9-10 >999 480 0 9-10 >827 360	PLATES MT20 Weight: 68 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E
LUMBER-           TOP CHORD         2x4 SP No.1(flat)           BOT CHORD         2x4 SP No.1(flat)           WEBS         2x4 SP No.3(flat)			BRACING- TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.		
REACTIONS. (siz Max G	e) 12=0-3-8, 8=0-5-0 Grav 12=741(LC 1), 8=741(LC 1)					

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

TOP CHORD 2-3=-2380/0, 3-4=-2380/0, 4-5=-2349/0, 5-6=-2349/0

BOT CHORD 11-12=0/1559, 10-11=0/2380, 9-10=0/2380, 8-9=0/1560

WEBS 6-8=-1672/0, 6-9=0/852, 5-9=-264/19, 2-12=-1670/0, 2-11=0/932, 3-11=-256/0, 4-9=-380/226

### NOTES-

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

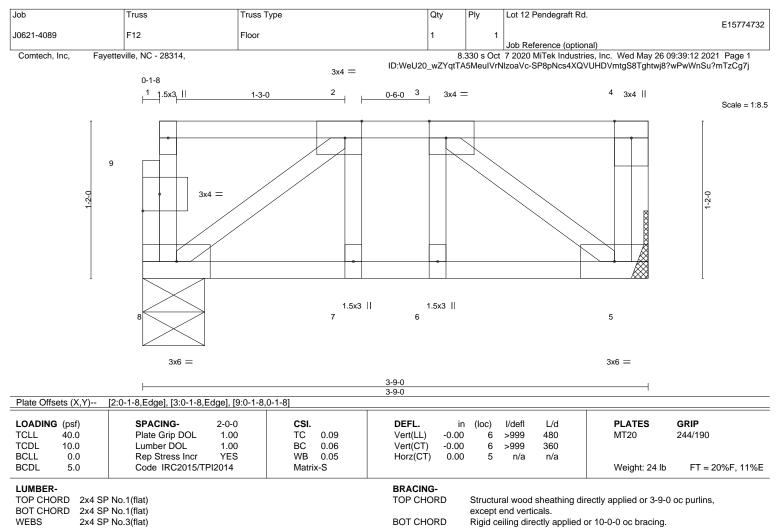
2) Plates checked for a plus or minus 1 degree rotation about its center.

3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.

Strongbacks to be attached to walls at their outer ends or restrained by other means.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



REACTIONS. (size) 8=0-5-8, 5=Mechanical

Max Grav 8=186(LC 1), 5=192(LC 1)

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

NOTES-

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

2) Plates checked for a plus or minus 1 degree rotation about its center.

3) Refer to girder(s) for truss to truss connections.

4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.

Strongbacks to be attached to walls at their outer ends or restrained by other means.

5) CAUTION, Do not erect truss backwards.





