

RE: 173_Carolina_Beach_TH South Scan Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:Customer: SOUTH SCANProject Name: 173_Carolina_Beach_THLot/Block: 173Model:Address: 186 LAKEWIND CTSubdivision: CLCity: SANFORDState: NC

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

Design Code: IRC2018/TPI2014 Wind Code: N/A Roof Load: 40.0 psf Design Program: MiTek 20/20 8.3 Wind Speed: 125 mph Floor Load: N/A psf

This package includes 25 individual, dated Truss Design Drawings and 0 Additional Drawings.

No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Seal# E14688775 E14688776 E14688777 E14688778 E14688780 E14688780 E14688781 E14688783 E14688783 E14688784 E14688785 E14688786 E14688787 E14688789 E14688790 E14688791 E14688792 E14688793	Truss Name A02 A02ALT A04 A05 B01 B02 B03 B04 B05 C01 C02 C03 C03A C04 C04ALT C06 C07 C08 C09	Date 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020 8/10/2020	No. 21 22 23 24 25	Seal# E14688795 E14688796 E14688797 E14688798 E14688799	Truss Name P02 P03 P04 P05 P06	Date 8/10/2020 8/10/2020 8/10/2020 8/10/2020

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

Truss Engineering Co. under my direct supervision

based on the parameters provided by Carolina Structural Systems, LLC.

Truss Design Engineer's Name: Gilbert, Eric

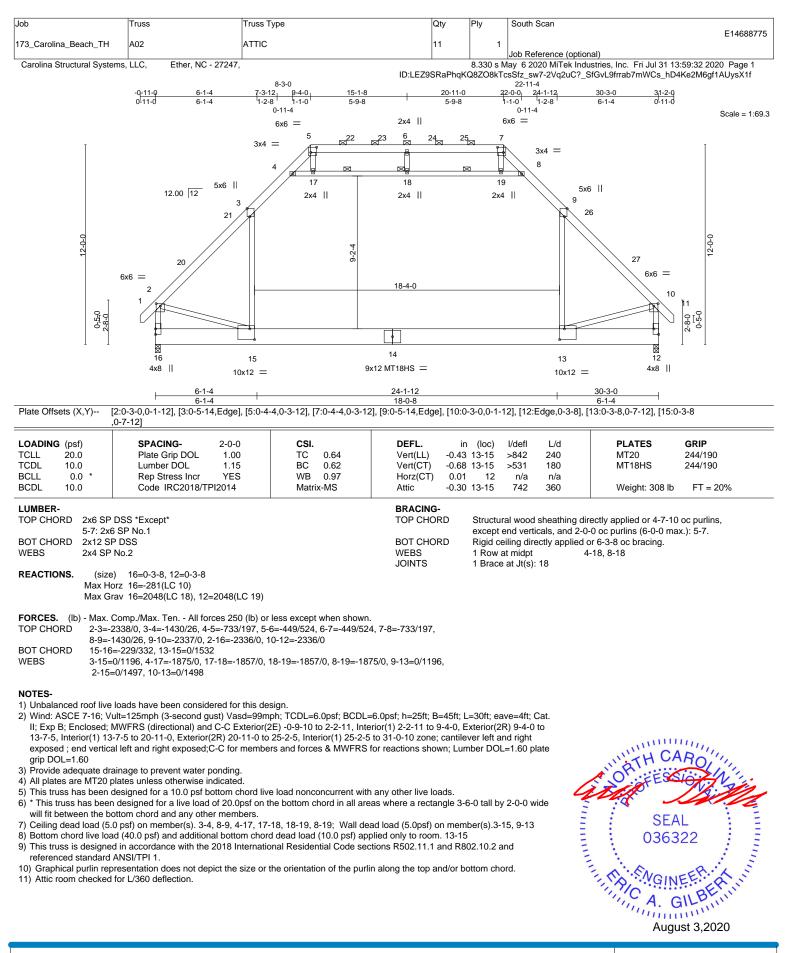
My license renewal date for the state of North Carolina is December 31, 2020

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.

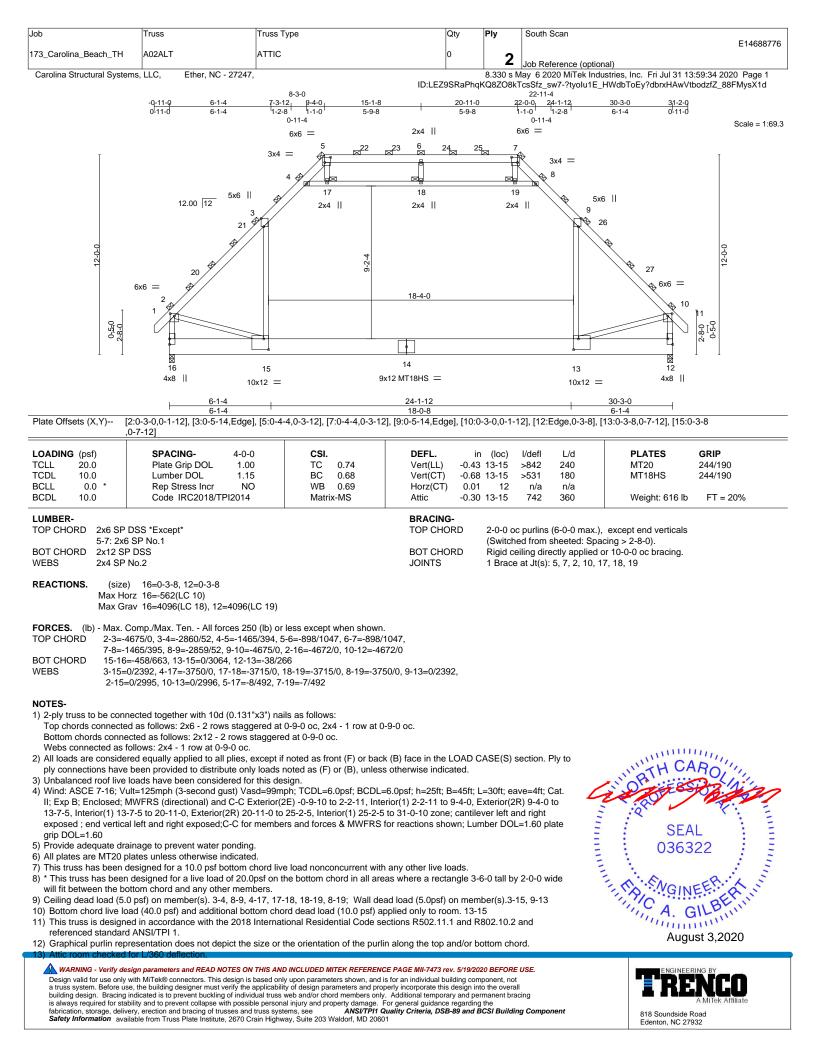


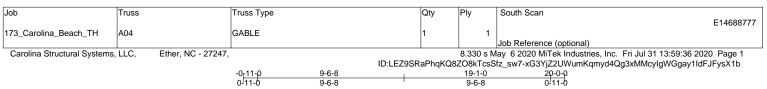
Gilbert, Eric



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 property 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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTPH / Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

818 Soundside Road Edenton, NC 27932







Scale = 1:74.9

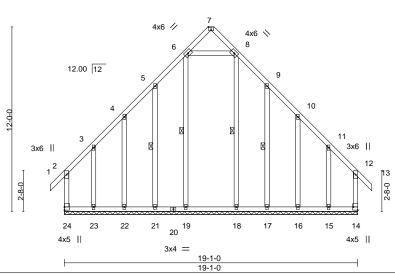


Plate Offsets (X,Y)-- [7:0-2-0,Edge], [14:Edge,0-3-8]

LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.32 BC 0.20 WB 0.10 Matrix-S	DEFL. i Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) -0.0) 13 n/r 120	PLATES GRIP MT20 244/190 Weight: 167 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP OTHERS 2x4 SP	No.1 No.2		BRACING- TOP CHORD BOT CHORD WEBS	except end verticals. Rigid ceiling directly applied	rectly applied or 6-0-0 oc purlins, or 6-0-0 oc bracing. 5-19, 5-21, 8-18, 9-17

REACTIONS. All bearings 19-1-0.

(lb) - Max Horz 24=-289(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 21, 22, 17, 16 except 24=-226(LC 10), 14=-218(LC 11), 23=-217(LC 11), 15=-211(LC 10)

Max Grav All reactions 250 lb or less at joint(s) 21, 22, 17, 16 except 24=346(LC 18), 14=340(LC 17), 19=284(LC 17), 23=384(LC 17), 18=281(LC 18), 15=380(LC 18)

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

TOP CHORD 4-5=-143/330, 5-6=-190/422, 8-9=-191/422, 9-10=-142/329

WEBS 6-8=-136/356

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 1-10-12, Exterior(2N) 1-10-12 to 9-6-8, Corner(3R) 9-6-8 to 12-6-8, Exterior(2N) 12-6-8 to 20-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) 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 2-0-0 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 10) Provide mochanical expendition (by others) of trues to begins a place acceleration of the unit to the second acceleration of the true to begins a place.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 22, 17, 16 except (jt=lb) 24=226, 14=218, 23=217, 15=211.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



ENGINEERING BY REENCO A MITEK Affiliate 818 Soundside Road

Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	South Scan
					E14688778
173_Carolina_Beach_TH	A05	MONOPITCH SUPPORTED	1	1	Job Reference (optional)
Carolina Structural Systems,	LLC, Ether, NC - 27247,			8.330 s N	Aay 6 2020 MiTek Industries, Inc. Fri Jul 31 13:59:37 2020 Page 1
	220, 200,00 2020,	ID:LEZ	9SRaPhqk	<q8zo8k1< td=""><td>CcsSfz_sw7-PSdxxv36HCuBSwXpe8BITavjCi_5?8S5FyNorhysX1a</td></q8zo8k1<>	CcsSfz_sw7-PSdxxv36HCuBSwXpe8BITavjCi_5?8S5FyNorhysX1a
		-0-11-0 2-0-0			
		0-11-0 2-0-0			
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		12.00 12			
		4x6			
		4-8-0			
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		q			
		2-8-0			

		-			
		5	4		
		5x10 MT18HS	4x5	П	

Plate Offsets (X,Y)	[2:0-3-0,0-1-12], [3:0-0-9,0-1-8], [4:Edge	9,0-3-8]			
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.61 BC 0.37 WB 0.00 Matrix-R	DEFL. i Vert(LL) -0.00 Vert(CT) -0.00 Horz(CT) -0.00) 1 n/r 120	PLATES GRIP MT20 244/190 MT18HS 244/190 Weight: 19 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP	No.1		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dire except end verticals. Rigid ceiling directly applied or	ectly applied or 2-0-0 oc purlins, r 10-0-0 oc bracing.

REACTIONS. (size) 5=2-0-0, 4=2-0-0 Max Horz 5=144(LC 9) Max Uplift 5=-62(LC 8), 4=-172(LC 9) Max Grav 5=242(LC 18), 4=158(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-4=-209/321

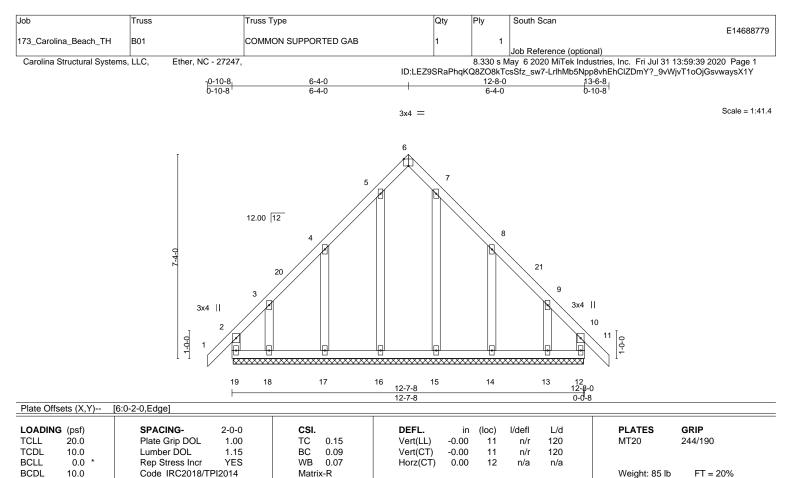
NOTES-

- Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) All plates are MT20 plates unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 4=172.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



818 Soundside Road Edenton, NC 27932

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 LUMBER BRACING

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

 BOT CHORD 2x4 SP No.1
 Edsection of the second second

REACTIONS. All bearings 12-7-0.

(Ib) - Max Horz 19=173(LC 11) Max Uplift All uplift 100 lb or less at joint(s) 19, 12, 17, 14 except 18=-113(LC 12), 13=-113(LC 12)

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

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 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 6-4-0, Corner(3R) 6-4-0 to 9-4-0, Exterior(2N) 9-4-0 to 13-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 19, 12, 17, 14 except (jt=lb) 18=113, 13=113.

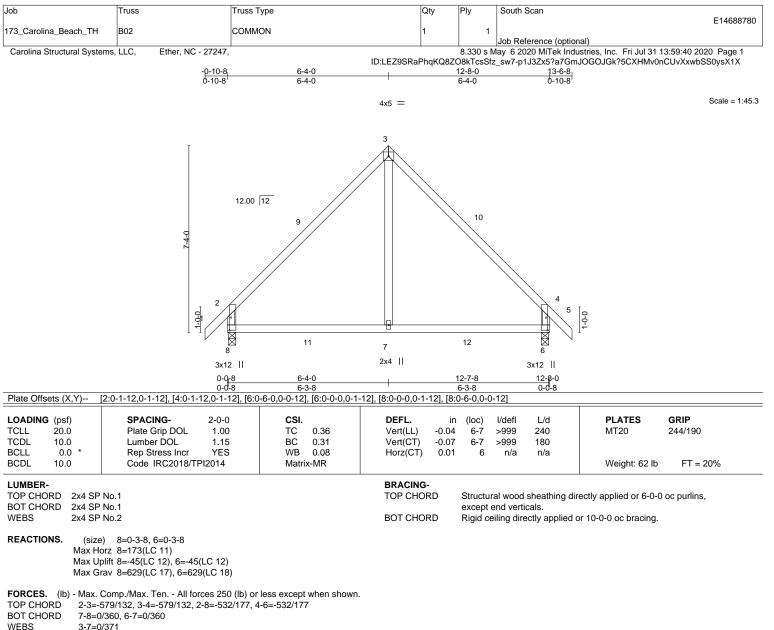
10) Non Standard bearing condition. Review required.

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

SEAL 036322 August 3,2020

> ENGINEERING BY EREPACED AMITEK Affiliate 818 Soundside Road Edenton, NC 27932

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WEBS

NOTES-

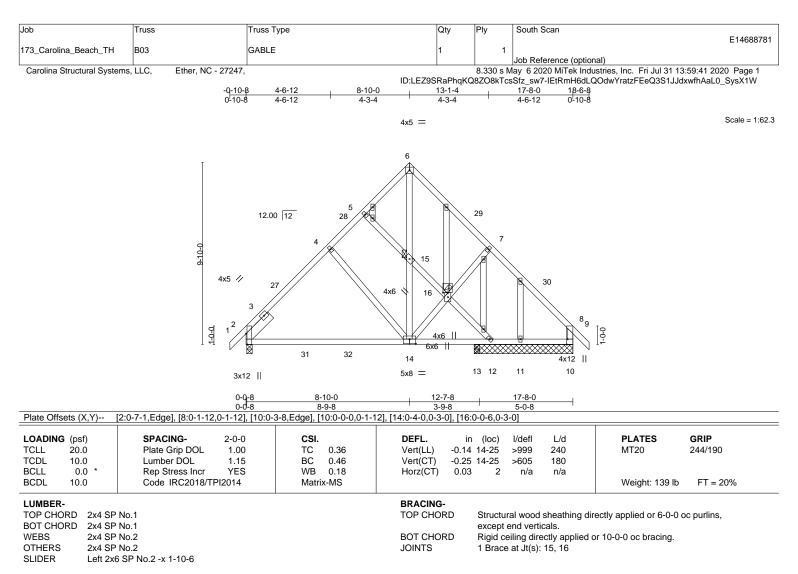
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-4-0, Exterior(2R) 6-4-0 to 9-4-0 , Interior(1) 9-4-0 to 13-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide 4) will fit 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) 8, 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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 Satisfies
 Ansi/TPH Qu

 Safety Information
 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





REACTIONS. All bearings 5-4-0 except (jt=length) 2=0-3-8, 13=0-3-8.

(lb) - Max Horz 2=219(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 11, 10, 13

Max Grav All reactions 250 lb or less at joint(s) 12, 11, 13 except 2=780(LC 18), 10=691(LC 18)

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

- TOP CHORD 2-4=-706/113, 4-5=-583/137, 5-6=-517/158, 6-7=-511/139, 7-8=-660/90, 8-10=-594/109
- BOT CHORD 2-14=-12/564, 13-14=-6/520, 12-13=-6/520, 11-12=0/421, 10-11=0/421
- WEBS 14-15=-126/474, 6-15=-127/465

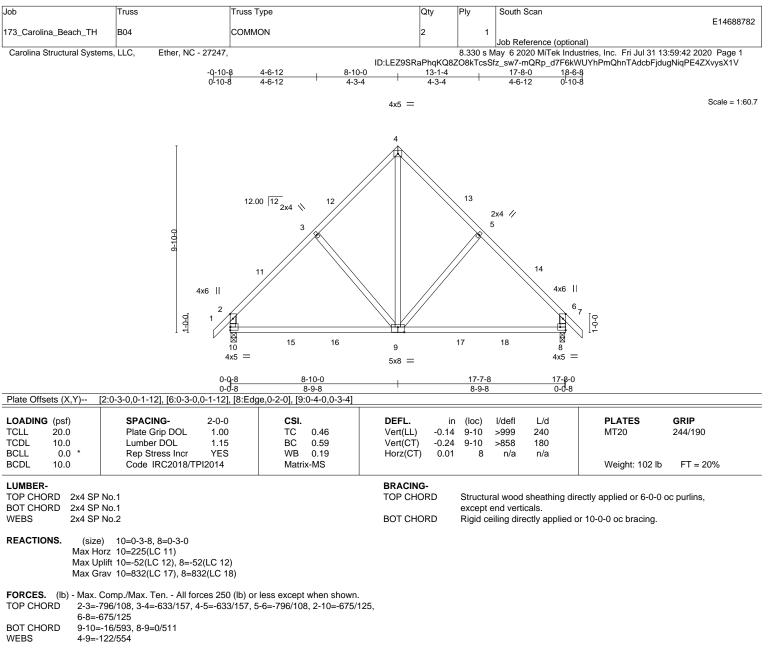
NOTES-

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

- 2) Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-10-0, Exterior(2R) 8-10-0 to 11-10-0, Interior(1) 11-10-0 to 18-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 12, 11, 10, 13.
 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPL 1.
- SEAL 036322 August 3,2020

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NOTES-

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

2) Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-10-0, Exterior(2R) 8-10-0 to 11-10-0, Interior(1) 11-10-0 to 18-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

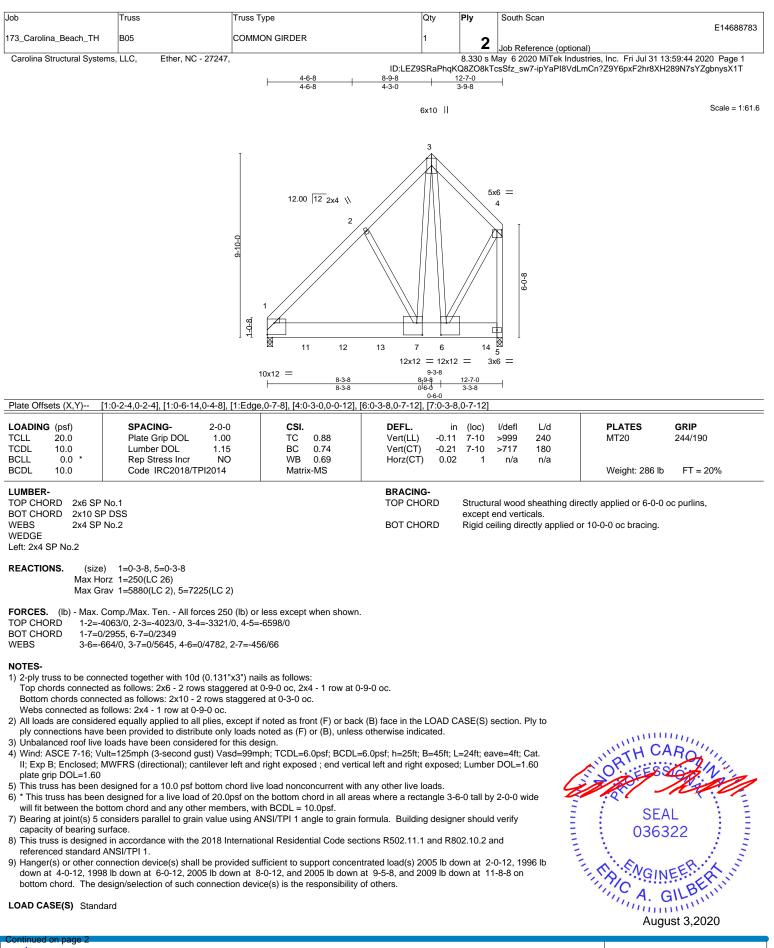
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 8.
 This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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[Job	Truss	Truss Type	Qty	Ply	South Scan	
	173 Carolina Beach TH	B05	COMMON GIRDER	1	_	E14688783	
		605		1	2	Job Reference (optional)	
	Carolina Structural Systems,	LLC, Ether, NC - 27247	8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 13:59:44 2020 Page 2				
	ID:LEZ9SRaPhqKQ8ZO8kTcsSfz_sw7-ipYaPI8VdLmCn?Z9Y6pxF2hr8XH289N7sYZgbnysX1						

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.00

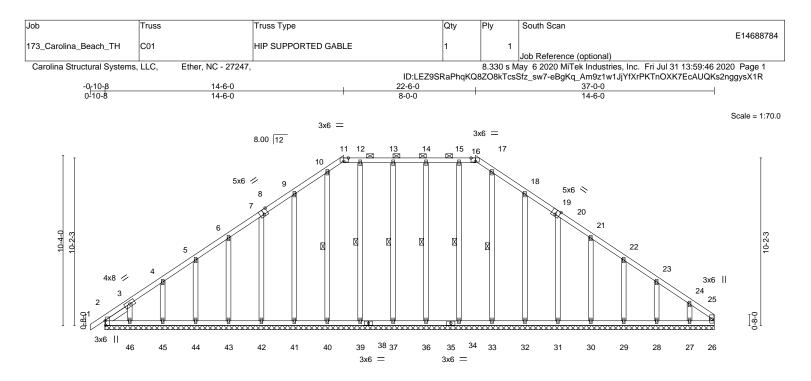
Uniform Loads (plf) Vert: 1-3=-60, 3-4=-60, 5-8=-20

Concentrated Loads (lb)

Vert: 6=-1632(F) 7=-1632(F) 11=-1632(F) 12=-1632(F) 13=-1632(F) 14=-1635(F)

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L				37-0-0						
				37-0-0						
Plate Offsets (X,Y)	[2:0-3-4,0-0-7], [7:0-2-2,0-0	-0], [8:0-3-0,Edge], [8:0-	0-0,0-1-12], [11:0)-3-5,Edge], [1	6:0-3-5,	Edge], [19:0-0-0	,0-1-12], [19:0)-3-0,Edge], [20:0-2-2,0	0-0-0]
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI2	2-0-0 CSI. 1.00 TC 1.15 BC YES WB 2014 Matri	0.06 0.05 0.14	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 -0.00 0.01	(loc) 1 1 26	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 287 lb	GRIP 244/190 FT = 20%
BOT CHORD2x4 SWEBS2x4 SOTHERS2x4 S	P No.1 P No.1 P No.2 P No.2 x4 SP No.2 -x 1-7-11			BRACING TOP CHOR BOT CHOR WEBS	RD RD	except Rigid c	end verti	cals, and 2-0- ectly applied o	ectly applied or 6-0-0 c ·0 oc purlins (6-0-0 ma or 10-0-0 oc bracing. 3-37, 12-39, 10-40, 14	x.): 11-16.

REACTIONS. All bearings 37-0-0.

(lb) - Max Horz 2=203(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 26, 2, 37, 41, 42, 43, 44, 45, 46, 36, 32, 31, 30, 29, 28, 27 Max Grav All reactions 250 lb or less at joint(s) 26, 2, 37, 39, 40, 41, 42, 43, 44, 45, 46, 36, 34, 33, 32, 31, 30, 29, 28, 27

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 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=37ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-9-14, Exterior(2N) 2-9-14 to 14-6-0, Corner(3R) 14-6-0 to 18-2-6, Exterior(2N) 18-2-6 to 22-6-0, Corner(3R) 22-6-0 to 26-2-6, Exterior(2N) 26-2-6 to 36-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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 2-0-0 oc.

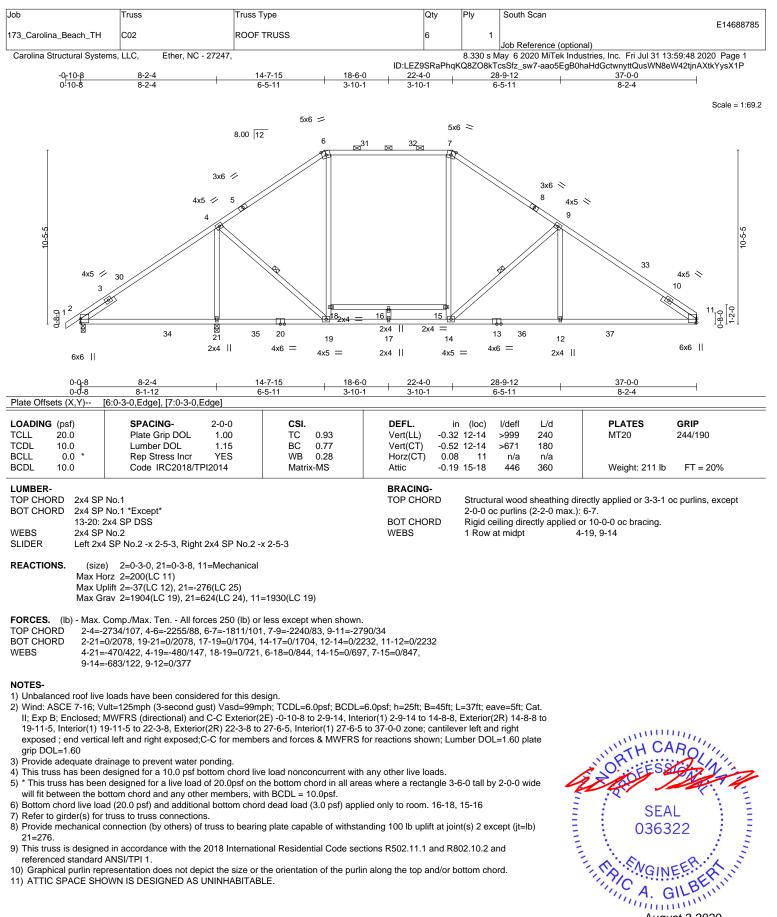
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 2, 37, 41, 42, 43, 44, 45, 46, 36, 32, 31, 30, 29, 28, 27.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



TRENCO AMITEK Affiliate

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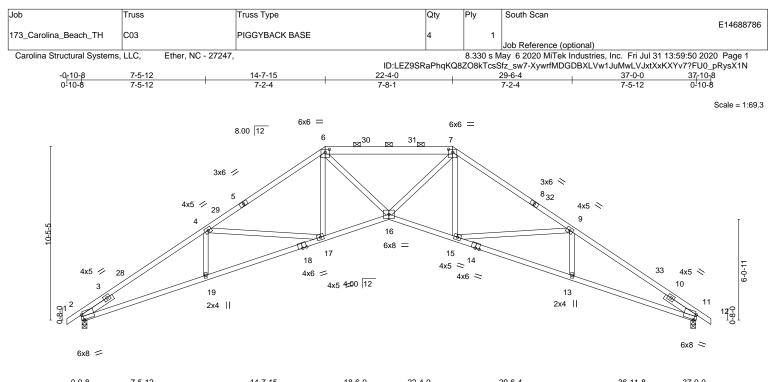


August 3,2020



🙏 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 design parameters and READ NOTES ON TIPS ON TIPS AND INCLODED MITCR REPERINCE PAGE MIT-14/3 revealed by 3072/020 DEPORE DEPORE DES. Design valid for use only with MITER (be 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 quidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTP11 Quality Criteria, DSB-89 and BCSI Building Component**
 Satisfies
 Ansi/TPH Qu

 Safety Information
 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Ĺ	J-4 <u>-8</u> 7-5-12	1	14-7-15	18-6-0	22-4-0	1	29-6-4	36-11-8	37-0-0
C)-0-8 7-5-4		7-2-4	3-10-0	3-10-1		7-2-4	7-5-4	0-0-8
Plate Offsets (X	(,Y) [2:0-0-14,0-3	3-15], [6:0-3-0,0-2-3],	[7:0-3-0,0-2-3], [11	1:0-0-14,0-3-15]				
LOADING (psf TCLL 20.0 TCDL 10.0	D Plate	CING- 2-0-0 Grip DOL 1.00 er DOL 1.15	CSI. TC BC	0.89 0.73	DEFL. Vert(LL) Vert(CT)	in (loc) -0.30 16 -0.63 17-19	l/defl L/d >999 240 >705 180	MT20	GRIP 244/190
	0 * Rep S	Stress Incr YES IRC2018/TPI2014	-	0.48	Horz(CT)	0.57 11	n/a n/a		FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP DSS *Except*	TOP CHORD	Structural wood sheathing directly applied, except
	6-7: 2x6 SP No.1		2-0-0 oc purlins (3-11-3 max.): 6-7.
BOT CHORD	2x4 SP DSS *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	16-18,14-16: 2x4 SP No.1		
WEBS	2x4 SP No.2		
SLIDER	Left 2x4 SP No.2 -x 2-3-4, Right 2x4 SP No.2 -x 2-3-4		
REACTIONS.			
REACTIONS.	(size) 2=0-3-8, 11=0-3-8		
	Max Horz 2=203(LC 11)		
	Max Unlift 2=-74(I C 12) 11=-74(I C 12)		

Max Grav 2=1533(LC 1), 11=1533(LC 1)

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

TOP CHORD 2-4=-3733/101, 4-6=-3134/55, 6-7=-3299/9, 7-9=-3134/55, 9-11=-3733/101

- BOT CHORD 2-19=0/3162, 17-19=0/3194, 16-17=0/2638, 15-16=0/2638, 13-15=0/3194, 11-13=0/3162
- WEBS 4-17=-538/175, 6-17=0/433, 6-16=0/1159, 7-16=0/1163, 7-15=0/432, 9-15=-556/175

NOTES-

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

2) Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=37ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-9-14, Interior(1) 2-9-14 to 14-7-15, Exterior(2R) 14-7-15 to 19-10-12, Interior(1) 19-10-12 to 22-4-0, Exterior(2R) 22-4-0 to 27-6-13, Interior(1) 27-6-13 to 37-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60

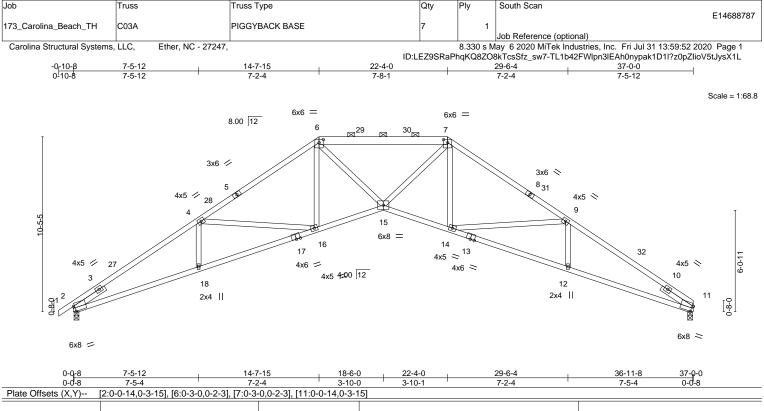
plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding.

- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 2, 11 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 capable of withstanding 100 lb uplift at joint(s) 2, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) 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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LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.89 BC 0.73 WB 0.49 Matrix-MS	Vert(LL) -0.30	n (loc) I/defl L/d) 16-18 >999 240 3 16-18 >706 180 7 11 n/a n/a	PLATES MT20 Weight: 197 lb	GRIP 244/190 FT = 20%		
LUMBER- TOP CHORD 2x4 SP DSS *Except* 6-7: 2x6 SP No.1 BRACING- TOP CHORD BOT CHORD 2x4 SP DSS *Except* 15-17,13-15: 2x4 SP No.1 BOT CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-11-2 max.): 6-7. WEBS 2x4 SP No.2 SLIDER Left 2x4 SP No.2 -x 2-3-4, Right 2x4 SP No.2 -x 2-3-4								
REACTIONS. (size Max H Max U	4 SP No.2 -x 2-3-4, Right 2x4 SP No.2 - 2) 2=0-3-8, 11=0-3-8 2 2=199(LC 11) 2 2=194(LC 12), 11=-49(LC 12) rav 2=1533(LC 1), 11=1479(LC 1)	x 2-3-4						
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-3734/125, 4-6=-3136/81, 6-7=-3302/45, 7-9=-3137/82, 9-11=-3741/127 BOT CHORD 2-18=-33/3163, 16-18=-32/3195, 15-16=0/2640, 14-15=0/2641, 12-14=-34/3202, 11-12=-35/3171 WEBS 4-16=-538/172, 6-16=0/432, 6-15=0/1160, 7-15=0/1159, 7-14=0/433, 9-14=-561/174								
NOTES- 1) Unbalanced roof live	loads have been considered for this de	sian.						

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

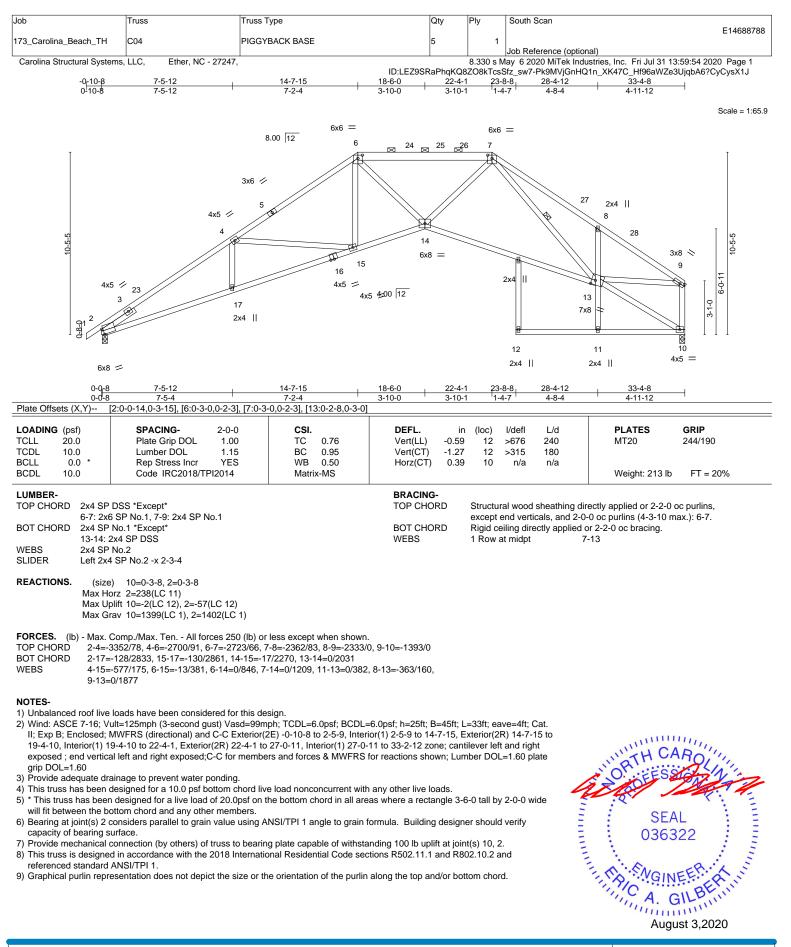
2) Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=37ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-9-14, Interior(1) 2-9-14 to 14-7-15, Exterior(2R) 14-7-15 to 19-10-12, Interior(1) 19-10-12 to 22-4-0, Exterior(2R) 22-4-0 to 27-6-13, Interior(1) 27-6-13 to 37-0-0 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 2, 11 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 capable of withstanding 100 lb uplift at joint(s) 2, 11.
 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 9) 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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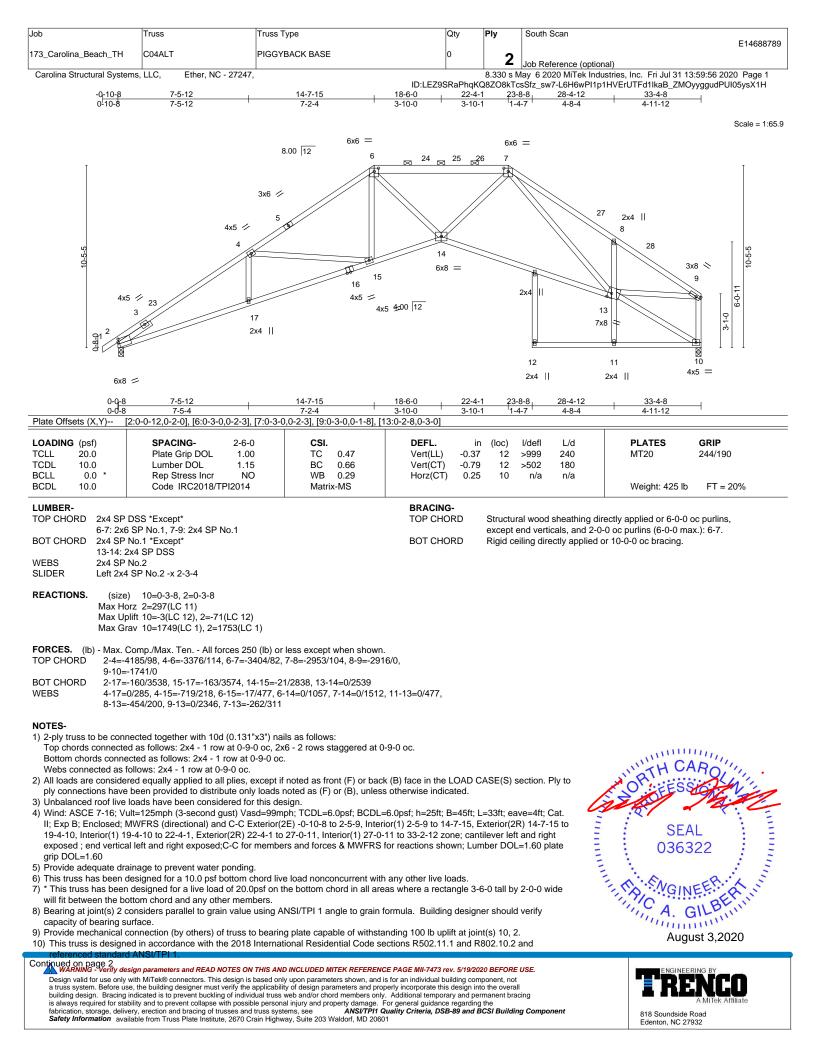




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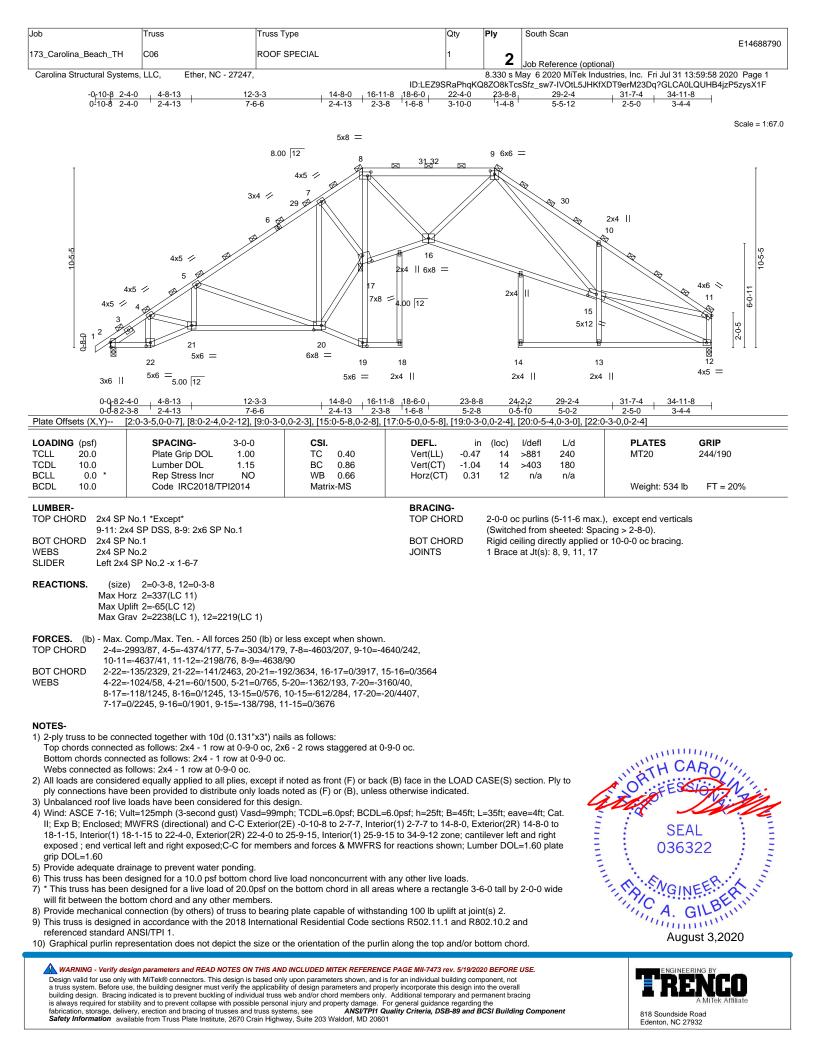
[lob	Truss		Truss Type	(Qty	Ply	South Scan
		004417				-		E14688789
	173_Carolina_Beach_TH	C04ALT		PIGGYBACK BASE	C	0	2	
							–	Job Reference (optional)
	Carolina Structural Systems, LLC, Ether, NC - 27247, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 13:59:56 2020 Page 2							
ID						RaPhqKC	08ZO8kTc	sSfz_sw7-L6H6wPI1p1HVErUTFd1lkaB_ZMOyyggudPUI05ysX1H

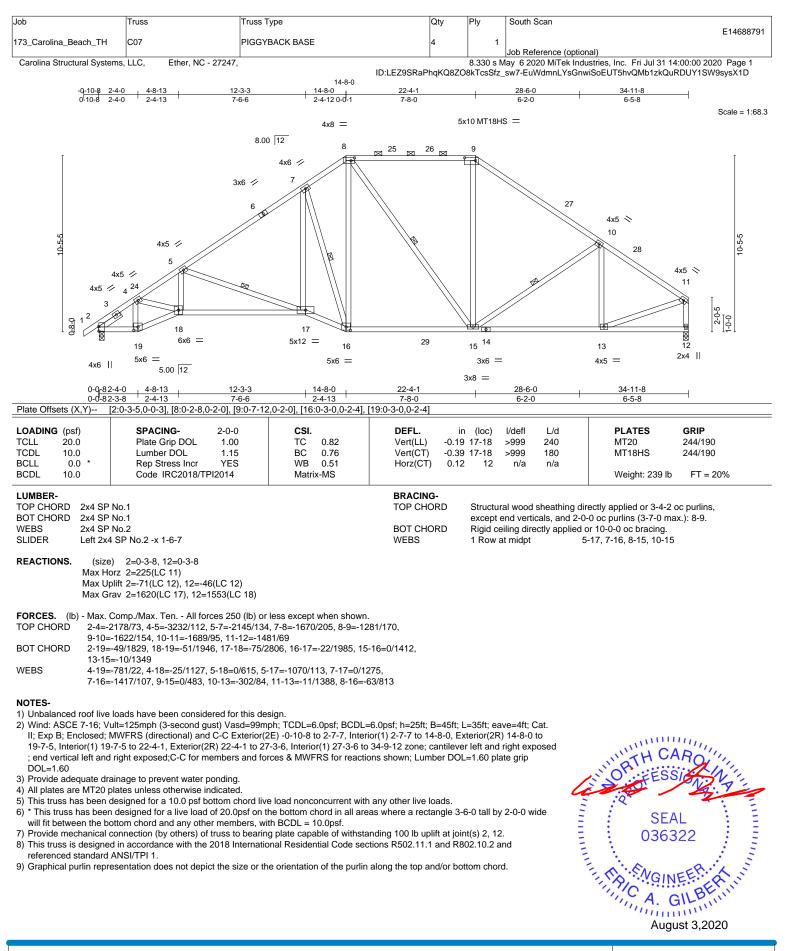
NOTES-

11) 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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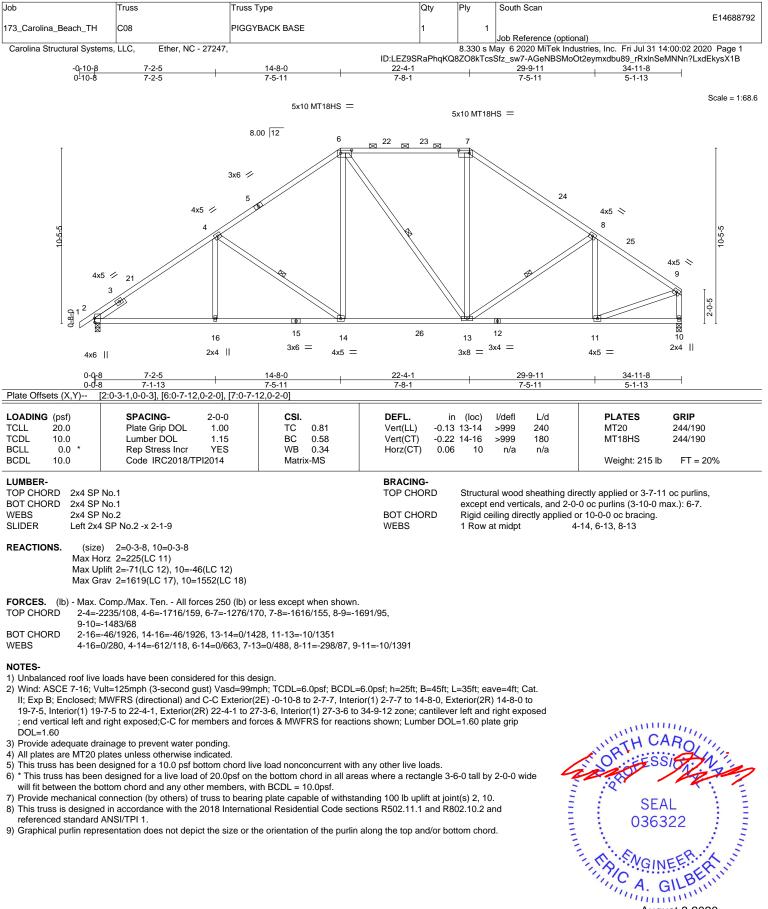






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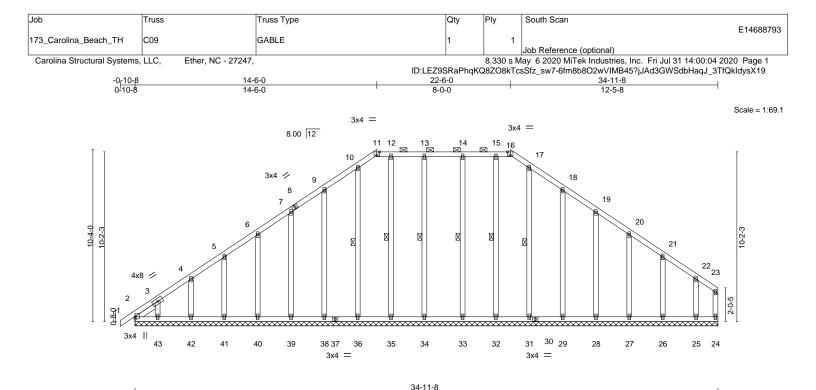
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			04110		
Plate Offsets (X,Y)	[11:0-2-0,Edge], [16:0-2-0,Edge]				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.08 BC 0.04 WB 0.14 Matrix-S	DEFL. ir Vert(LL) 0.00 Vert(CT) -0.00 Horz(CT) 0.00	1 n/r 120 1 n/r 120	PLATES GRIP MT20 244/190 Weight: 279 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP OTHERS 2x4 SP SLIDER Left 2x4	No.1 No.2		BRACING- TOP CHORD BOT CHORD WEBS	except end verticals, and 2-0 Rigid ceiling directly applied	rectly applied or 6-0-0 oc purlins, -0 oc purlins (6-0-0 max.): 11-16. or 10-0-0 oc bracing. 3-34, 12-35, 10-36, 14-33, 15-32, 17-31

34-11-8

REACTIONS. All bearings 34-11-8.

(lb) - Max Horz 2=219(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 24, 2, 34, 38, 39, 40, 41, 42, 43, 33, 29, 28, 27, 26, 25 All reactions 250 lb or less at joint(s) 24, 2, 34, 35, 36, 38, 39, 40, 41, 42, 43, 33, 32, 31, 29, Max Grav 28 27 26 25

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

TOP CHORD 9-10=-175/270, 10-11=-170/262, 11-12=-156/252, 12-13=-157/255, 13-14=-157/255, 14-15=-157/255, 15-16=-156/252, 16-17=-170/262, 17-18=-175/270

NOTES-

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

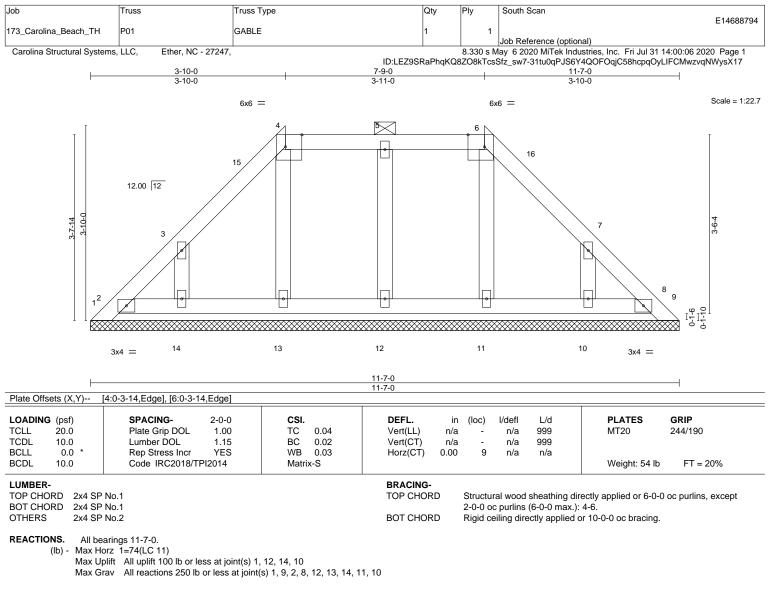
- 2) Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=35ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-7-7, Exterior(2N) 2-7-7 to 14-6-0, Corner(3R) 14-6-0 to 17-11-15. Exterior(2N) 17-11-15 to 22-6-0. Corner(3R) 22-6-0 to 25-11-15. Exterior(2N) 25-11-15 to 34-9-12 zone: cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) 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 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide 9) will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 2, 34, 38, 39, 40, 41, 42, 43, 33, 29, 28, 27, 26, 25.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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 Satisfies
 Ansi/TPH Qu

 Safety Information
 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601







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

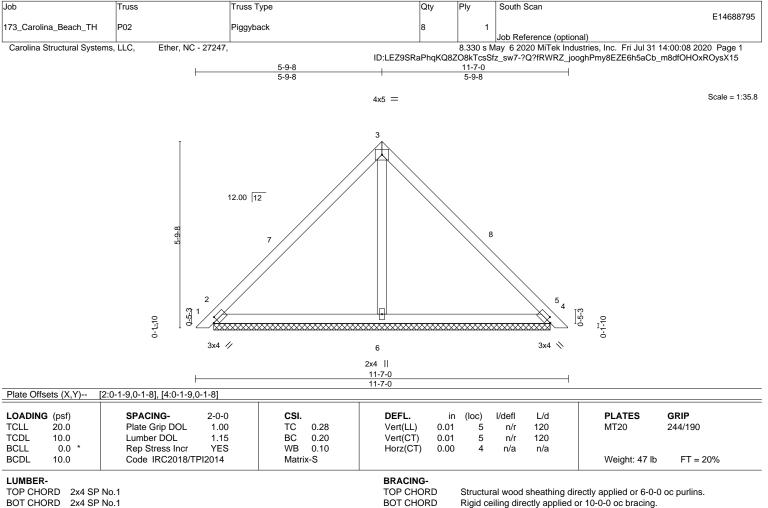
NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-2-10 to 3-2-10, Interior(1) 3-2-10 to 3-10-0, Exterior(2E) 3-10-0 to 11-4-6 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) 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 2-0-0 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 1, 12, 14, 10.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 13) 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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BOT CHORD 2x4 SP No 1 OTHERS 2x4 SP No 2

REACTIONS. (size) 2=10-5-6, 4=10-5-6, 6=10-5-6

Max Horz 2=-116(LC 10)

Max Uplift 2=-35(LC 12), 4=-35(LC 12) Max Grav 2=256(LC 1), 4=256(LC 1), 6=365(LC 1)

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 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-2-10 to 3-2-10, Interior(1) 3-2-10 to 5-9-8, Exterior(2R) 5-9-8 to 8-9-8, Interior(1) 8-9-8 to 11-4-6 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

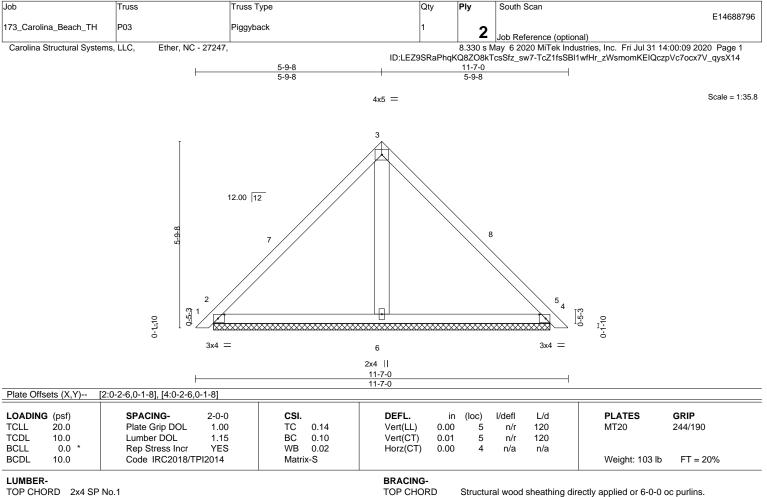
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide 5) will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



🙏 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 design parameters and READ NOTES ON TIRS AND INCLODED MITER REFERENCE PAGE mit-143 a few, 3192/2020 BEFORE DSE. Design valid for use only with MITeK go 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**
 Satisfies
 Ansi/TPI Qu

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BOT CHORD

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

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

REACTIONS. (size) 2=10-5-6, 4=10-5-6, 6=10-5-6

Max Horz 2=-116(LC 10)

Max Uplift 2=-34(LC 12), 4=-34(LC 12)

Max Grav 2=240(LC 1), 4=240(LC 1), 6=397(LC 1)

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

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

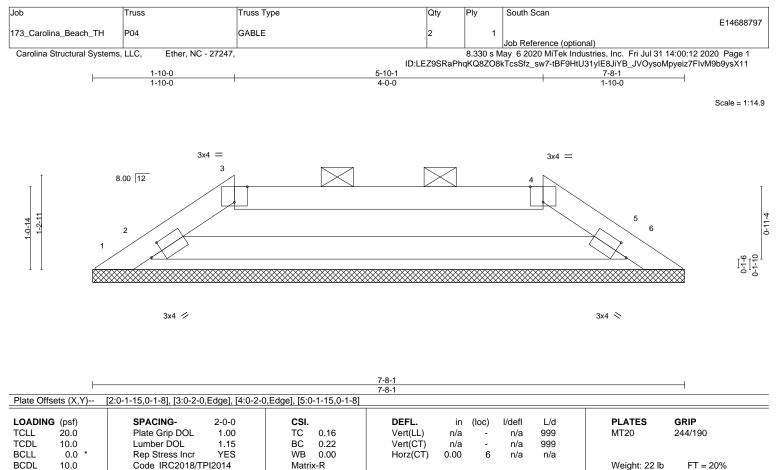
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

- Bottom chords connected as follows: 2x4 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-2-10 to 3-2-10, Interior(1) 3-2-10 to 5-9-8, Exterior(2R) 5-9-8 to 8-9-8, Interior(1) 8-9-8 to 11-4-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

SEAL 036322 August 3,2020

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LUMBER-		BRACING-		
TOP CHORD 2x4 SP	No.1	TOP CHORD	Structural wood sheathing dire	ectly applied or 6-0-0 oc purlins, except
BOT CHORD 2x4 SP	No.1		2-0-0 oc purlins (6-0-0 max.):	3-4.
		BOT CHORD	Rigid ceiling directly applied of	or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-8-1, 6=7-8-1, 2=7-8-1, 5=7-8-1

Max Horz 1=-18(LC 10) Max Uplift 1=-128(LC 3), 6=-128(LC 3)

Max Grav 2=378(LC 23), 5=378(LC 24)

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

TOP CHORD 2-3=-333/167, 3-4=-277/155, 4-5=-333/167

BOT CHORD 2-5=-111/277

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 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.

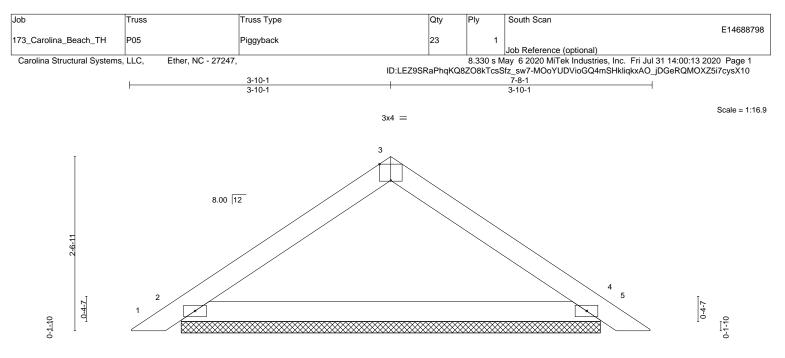
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=128, 6=128.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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818 Soundside Road Edenton, NC 27932



2x4 =

2x4 =

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

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

	•		7-8-1	•
Plate Offsets (X,Y)	[3:0-2-0,Edge]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.00	TC 0.12	Vert(LL) 0.00 5 n/r 120	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) 0.01 5 n/r 120	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 4 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		Weight: 23 lb FT = 20%
LUMBER-			BRACING.	

7-8-1

TOP CHORD

BOT CHORD

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

REACTIONS. (size) 2=6-1-13, 4=6-1-13

Max Horz 2=44(LC 11) Max Uplift 2=-22(LC 12), 4=-22(LC 12)

Max Grav 2=275(LC 1), 4=275(LC 1)

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 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-5 to 3-3-5, Interior(1) 3-3-5 to 3-10-1, Exterior(2R) 3-10-1 to 6-10-15, Interior(1) 6-10-15 to 7-4-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

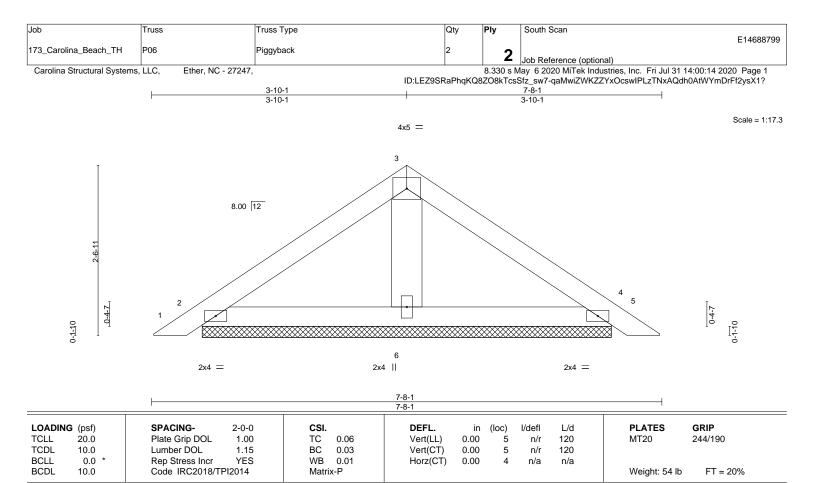
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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



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BRACING-

TOP CHORD

BOT CHORD

LUMBER-	
---------	--

TOP CHORD2x4 SP No.1BOT CHORD2x4 SP No.1OTHERS2x6 SP No.2

REACTIONS. (size) 2=6-1-13, 4=6-1-13, 6=6-1-13

Max Horz 2=-44(LC 10)

Max Uplift 2=-35(LC 12), 4=-35(LC 12)

Max Grav 2=159(LC 1), 4=159(LC 1), 6=232(LC 1)

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

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

4) Wind: ASCE 7-16; Vult=125mph (3-second gust) Vasd=99mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-5 to 3-3-5, Interior(1) 3-3-5 to 3-10-1, Exterior(2R) 3-10-1 to 6-10-15, Interior(1) 6-10-15 to 7-4-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

5) Gable requires continuous bottom chord bearing.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) 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 6-0-0 oc purlins.

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

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