

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: PCK20
MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Apex,NC.

Pages or sheets covered by this seal: I58356754 thru I58356772

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



May 16,2023

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK I58356754
PCK20	A01G	GABLE	1	1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:18 2023 Page 1

ID:EFejVcllozOQOVSWnhJDumyoUxo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCDoi7J4zJC?f

-1-0-0	26-4-13	38-7-3	65-0-0	66-0-0
1-0-0	26-4-13	12-2-6	26-4-13	1-0-0

Scale = 1:117.3

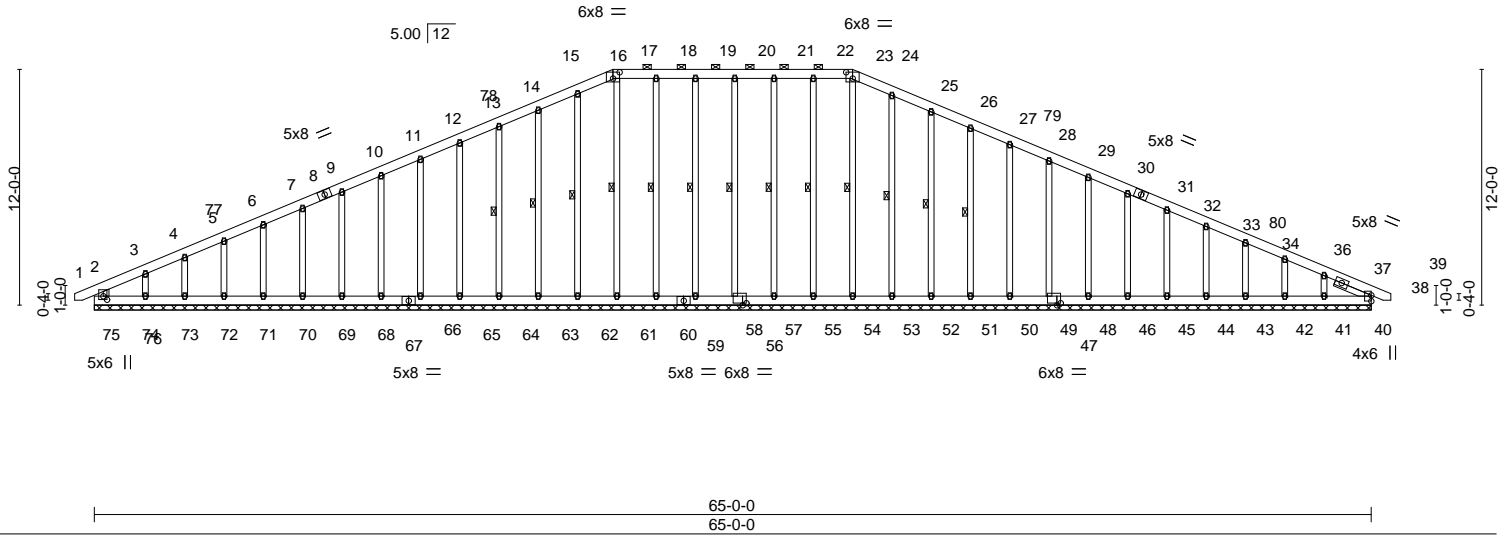


Plate Offsets (X, Y)--	[16:0-4-0-0-3-13], [23:0-4-0-0-3-13], [48:0-2-4-0-1-4], [57:0-2-4-0-1-4], [75:0-2-2-0-2-4]
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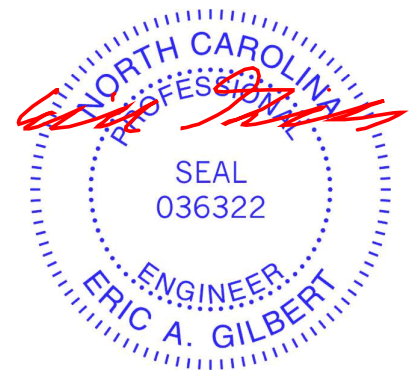
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL) 0.00	38	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT) 0.00	38	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT) -0.01	38	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 643 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (10-0-0 max.): 16-23.
OTHERS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
SLIDER Right 2x4 SP No.2 1-11-12	WEBS 1 Row at midpt 23-53, 22-54, 21-55, 20-57, 19-58, 18-60, 17-61, 15-62, 14-63, 13-64, 24-52, 25-51, 26-50

REACTIONS. All bearings 65-0-0.
 (lb) - Max Horz 76=155(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 76, 55, 57, 58, 60, 63, 64, 65, 66, 68, 69, 70, 71, 72, 73, 74, 75, 52, 51, 50, 49, 48, 46, 45, 44, 43, 42, 41, 40, 38
 Max Grav All reactions 250 lb or less at joint(s) 53, 54, 55, 57, 58, 60, 61, 62, 63, 64, 65, 66, 68, 69, 70, 71, 72, 73, 74, 75, 52, 51, 50, 49, 48, 46, 45, 44, 43, 42, 41, 40, 38

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 7-9=-71/258, 9-10=-82/289, 10-11=-92/319, 11-12=-103/350, 12-13=-114/381, 13-14=-125/412, 14-15=-136/445, 15-16=-143/461, 16-17=-132/444, 17-18=-132/444, 18-19=-132/444, 19-20=-132/444, 20-21=-132/444, 21-22=-132/444, 22-23=-132/444, 23-24=-144/457, 24-25=-135/434, 25-26=-123/401, 26-27=-113/370, 27-28=-102/340, 28-29=-91/309, 29-30=-81/278, 30-32=-70/262

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-10 to 5-8-6, Exterior(2) 5-8-6 to 26-4-13, Corner(3) 26-4-13 to 32-10-13, Exterior(2) 32-10-13 to 38-7-3, Corner(3) 38-7-3 to 45-1-3, Exterior(2) 45-1-3 to 65-9-10 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) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - 5) Provide adequate drainage to prevent water ponding.
 - 6) All plates are 2x4 MT20 unless otherwise indicated.
 - 7) Gable requires continuous bottom chord bearing.
 - 8) Gable studs spaced at 2-0-0 oc.
 - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 10) * 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 is provided between the bottom chord and any other members.



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/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job PCK20	Truss A01G	Truss Type GABLE	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK I58356754 Job Reference (optional)
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:19 2023 Page 2
ID:EFejVcllozOQ0VSWnhJDumyoUxo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

NOTES-

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 76, 55, 57, 58, 60, 63, 64, 65, 66, 68, 69, 70, 71, 72, 73, 74, 75, 52, 51, 50, 49, 48, 46, 45, 44, 43, 42, 41, 40, 38.
- 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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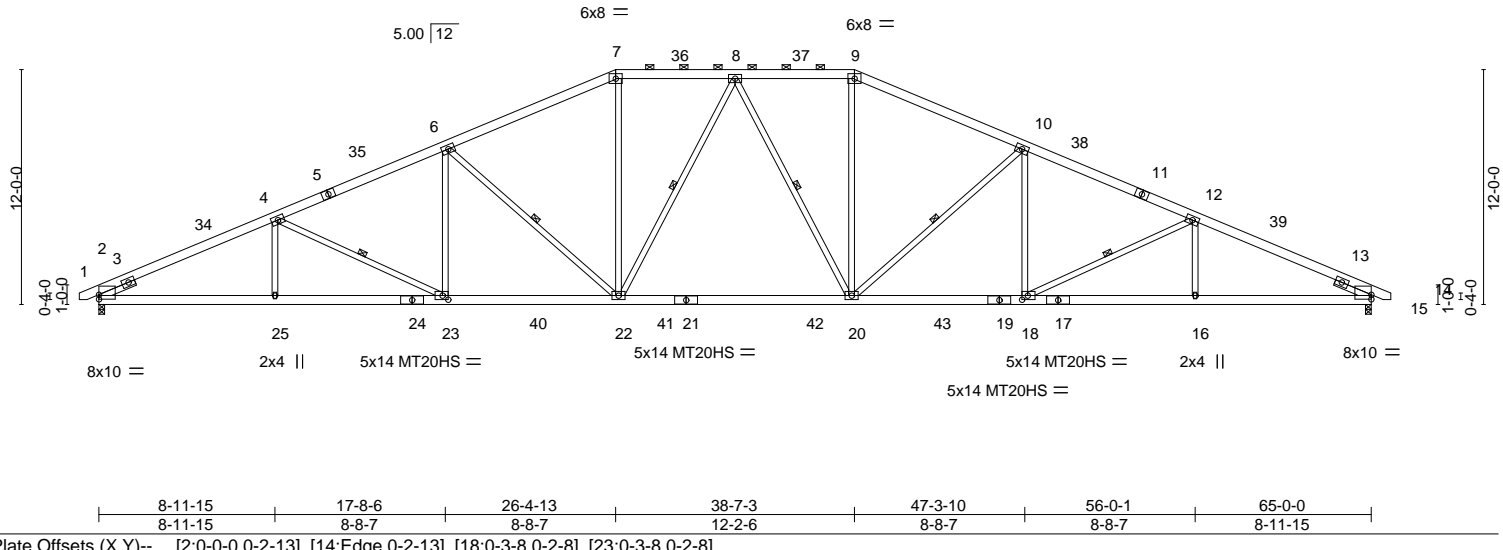
Job PCK20	Truss A02	Truss Type HIP	Qty 5	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK I58356755
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Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:21 2023 Page 1

ID:EFejVcllozOQ0VSWnhJDuMyoUxo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:117.7



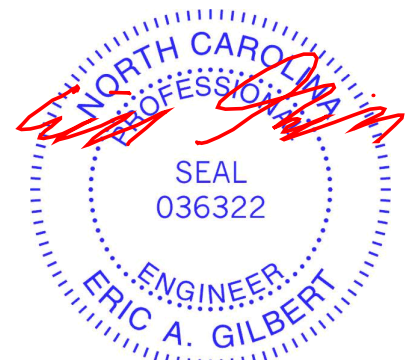
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	BC 0.62	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	TC 0.93	Vert(LL) -0.45 20-22 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.73	Vert(CT) -0.86 20-22 >902 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.23 14 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.21 22 >999 240		
				Weight: 491 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 1-5,11-15: 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 2-8-14 oc purlins, except
BOT CHORD 2x6 SP DSS *Except* 17-19: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3 *Except* 8-22,8-20: 2x4 SP No.2	WEBS 1 Row at midpt 4-23, 6-22, 8-22, 8-20, 10-20, 12-18
SLIDER Left 2x4 SP No.3 1-11-12, Right 2x4 SP No.3 1-11-12	

REACTIONS.
(size) 2=0-3-8, 14=0-3-8
Max Horz 2=151(LC 12)
Max Uplift 2=-111(LC 12), 14=-111(LC 13)
Max Grav 2=2648(LC 1), 14=2648(LC 1)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-5185/257, 4-6=-4748/323, 6-7=-4022/339, 7-8=-3636/352, 8-9=-3636/352, 9-10=-4022/339, 10-12=-4746/324, 12-14=-5185/257
BOT CHORD 2-25=-254/4665, 23-25=-254/4665, 22-23=-145/4339, 20-22=-57/3712, 18-20=-143/4338, 16-18=-158/4665, 14-16=-158/4665
WEBS 4-23=-441/130, 6-23=0/496, 6-22=-1040/189, 7-22=-11/1172, 8-22=-463/158, 8-20=-462/159, 9-20=-11/1172, 10-20=-1038/190, 10-18=0/491, 12-18=-442/129

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-10 to 5-8-6, Interior(1) 5-8-6 to 26-4-13, Exterior(2) 26-4-13 to 35-7-2, Interior(1) 35-7-2 to 38-7-3, Exterior(2) 38-7-3 to 47-9-8, Interior(1) 47-9-8 to 65-9-10 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
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 5x8 MT20 unless otherwise indicated.
 - 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 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) except (jt=lb)



May 16, 2023

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Edenton, NC 27932

Job PCK20	Truss A02	Truss Type HIP	Qty 5	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK I58356755 Job Reference (optional)
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:21 2023 Page 2
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NOTES-

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

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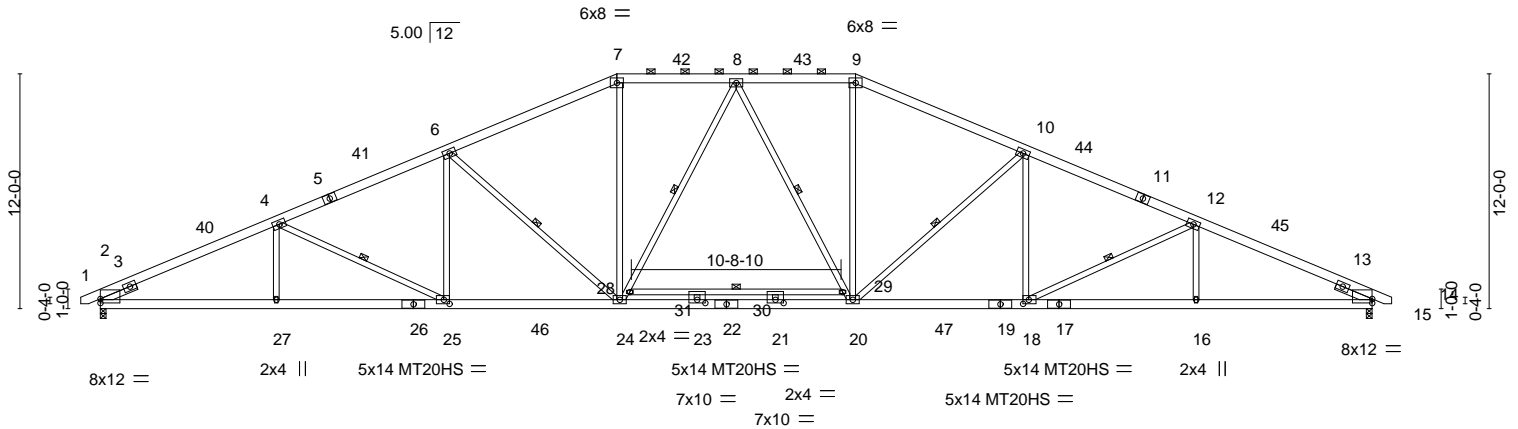
Job PCK20	Truss A02A	Truss Type HIP	Qty 4	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356756
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Builders FirstSource, Apex, NC

8.630 s Mar 9 2023 MiTek Industries, Inc. Mon May 15 13:53:28 2023 Page 1
ID:EFejVcl0zOQ0VSWnhJDumyoUxo-zTijHSe7Ez1P9EEATK4g2DsGBVeG6tfVIRliPqzGERL

-1-0-0	8-11-15	17-8-6	26-4-13	32-6-0	38-7-3	47-3-10	56-0-1	65-0-0	66-0-0
1-0-0	8-11-15	8-8-7	8-8-7	6-1-3	6-1-3	8-8-7	8-8-7	8-11-15	1-0-0

Scale = 1:117.8



8-11-15	17-8-6	26-4-13	30-6-0	34-6-0	38-7-3	47-3-10	56-0-1	65-0-0
8-11-15	8-8-7	8-8-7	4-1-3	4-0-0	4-1-3	8-8-7	8-8-7	8-11-15

Plate Offsets (X,Y)-- [2:0-0-0,0-2-9], [14:0-0-0,0-2-9], [18:0-3-8,0-2-8], [21:0-5-0,0-2-0], [23:0-5-0,0-2-0], [25:0-3-8,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.74	Vert(LL)	-0.51	21-23	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.91	21-23	>858	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.73	Horz(CT)	0.23	14	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.21	24	>999		
								Weight: 508 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except*
1-5,11-15: 2x6 SP DSS
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
8-24,8-20: 2x4 SP No.2
SLIDER Left 2x4 SP No.3 1-11-12, Right 2x4 SP No.3 1-11-12

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-2 oc purlins, except 2-0-0 oc purlins (3-8-1 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-25, 6-24, 8-24, 8-20, 10-20, 12-18, 28-29

REACTIONS.

(lb/size) 2=2648/0-3-8 (min. 0-3-2), 14=2648/0-3-8 (min. 0-3-2)
Max Horz 2=151(LC 12)
Max Uplift 2=-111(LC 12), 14=-111(LC 13)

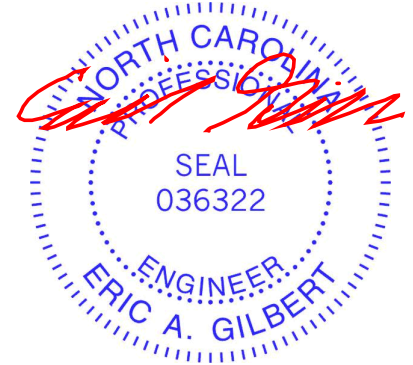
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-2108/0, 3-40=-5203/237, 4-40=-5082/257, 4-5=-4878/295, 5-41=-4832/320,
6-41=-4727/323, 6-7=-4155/339, 7-42=-3759/352, 8-42=-3759/352, 8-43=-3759/352,
9-43=-3759/352, 9-10=-4155/339, 10-44=-4728/323, 11-44=-4832/320, 11-12=-4878/295,
12-45=-5082/257, 13-45=-5203/237, 13-14=-2108/0
BOT CHORD 2-27=-254/4691, 26-27=-254/4691, 25-26=-254/4691, 25-46=-145/4460, 24-46=-145/4460,
23-24=-58/3830, 22-23=-58/3830, 21-22=-58/3830, 20-21=-58/3830, 20-47=-142/4460,
19-47=-142/4460, 18-19=-142/4460, 17-18=-159/4691, 16-17=-159/4691, 14-16=-159/4691
WEBS 4-25=-440/130, 6-25=0/436, 6-24=-1042/188, 7-24=-11/1223, 24-28=-455/157,
8-28=-463/158, 8-29=-463/158, 20-29=-455/156, 9-20=-11/1223, 10-20=-1042/188,
10-18=0/436, 12-18=-440/131

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-9-10 to 5-8-6, Interior(1) 5-8-6 to 26-4-13, Exterior(2) 26-4-13 to 35-7-2, Interior(1) 35-7-2 to 38-7-3, Exterior(2) 38-7-3 to 47-9-8, Interior(1) 47-9-8 to 65-9-10 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
- WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 5x8 MT20 unless otherwise indicated.
- 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 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 111 lb uplift at joint 2 and 111 lb uplift at

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Continued on page 2

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ANSI/TPI 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

Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK	158356756
PCK20	A02A	HIP	4	1	Job Reference (optional)	

Builders FirstSource, Apex, NC

8.630 s Mar 9 2023 MiTek Industries, Inc. Mon May 15 13:53:28 2023 Page 2
ID:EFejVcllozOQ0VSWnhJDuMyoUxo-zTijHSe7Ez1P9EEATK4g2DsGBVeG6tfVIRliPqzGERL

- NOTES-**
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) N/A
 - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60, 7-9=-60, 9-15=-60, 32-36=-20
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-50, 7-9=-50, 9-15=-50, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-7=-20, 7-9=-20, 9-15=-20, 32-36=-40, 28-29=-40(F)
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=42, 2-40=22, 7-40=12, 7-43=20, 9-43=15, 9-44=22, 14-44=12, 14-15=8, 32-36=-12
Horz: 1-2=-54, 2-40=-34, 7-40=-24, 9-44=34, 14-44=24, 14-15=20
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=8, 2-41=12, 7-41=22, 7-42=15, 9-42=20, 9-45=12, 14-45=22, 14-15=42, 32-36=-12
Horz: 1-2=-20, 2-41=-24, 7-41=-34, 9-45=24, 14-45=34, 14-15=54
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-13, 2-7=32, 7-9=-29, 9-14=-32, 14-15=-27, 32-36=-20
Horz: 1-2=-7, 2-7=12, 9-14=-12, 14-15=-7
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-27, 2-7=-32, 7-9=-29, 9-14=-32, 14-15=-13, 32-36=-20
Horz: 1-2=7, 2-7=12, 9-14=-12, 14-15=7
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=20, 2-7=10, 7-9=19, 9-14=8, 14-15=4, 32-36=-12
Horz: 1-2=-32, 2-7=-22, 9-14=20, 14-15=16
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-7=8, 7-9=19, 9-14=10, 14-15=20, 32-36=-12
Horz: 1-2=-16, 2-7=-20, 9-14=22, 14-15=32
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-2, 2-7=-7, 7-9=2, 9-14=-8, 14-15=-4, 32-36=-20
Horz: 1-2=-18, 2-7=-13, 9-14=12, 14-15=16
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-4, 2-7=-8, 7-9=2, 9-14=-7, 14-15=-2, 32-36=-20
Horz: 1-2=-16, 2-7=-12, 9-14=13, 14-15=18
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=14, 2-7=19, 7-8=19, 8-9=5, 9-14=5, 14-15=1, 32-36=-12
Horz: 1-2=-26, 2-7=-31, 9-14=17, 14-15=13
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=1, 2-7=5, 7-8=5, 8-9=19, 9-14=19, 14-15=14, 32-36=-12
Horz: 1-2=-13, 2-7=-17, 9-14=31, 14-15=26
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-7=9, 7-8=9, 8-9=2, 9-14=2, 14-15=-3, 32-36=-12
Horz: 1-2=-17, 2-7=-21, 9-14=14, 14-15=9
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-3, 2-7=2, 7-8=2, 8-9=9, 9-14=9, 14-15=5, 32-36=-12
Horz: 1-2=-9, 2-7=-14, 9-14=21, 14-15=17
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-7=2, 7-8=2, 8-9=-11, 9-14=-11, 14-15=-7, 32-36=-20
Horz: 1-2=-26, 2-7=-22, 9-14=9, 14-15=13
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-7, 2-7=-11, 7-8=-11, 8-9=2, 9-14=2, 14-15=6, 32-36=-20
Horz: 1-2=-13, 2-7=-9, 9-14=22, 14-15=26
- 18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-7=-20, 7-9=-20, 9-15=-20, 25-32=-20, 25-46=-60, 46-47=-20, 18-47=-60, 18-36=-20, 28-29=-40(F)
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK	158356756
PCK20	A02A	HIP	4	1	Job Reference (optional)	

Builders FirstSource, Apex, NC

8.630 s Mar 9 2023 MiTek Industries, Inc. Mon May 15 13:53:28 2023 Page 3
 ID:EFejVciloZQ0VSWnhJDumYoUxo-zTijHSe7Ez1P9EEATK4g2DsGBVeG6tfVIRliPqzGERL

LOAD CASE(S)

- Uniform Loads (plf)
 - Vert: 1-2=-37, 2-7=-40, 7-9=-34, 9-14=-41, 14-15=-38, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
 - Horz: 1-2=-13, 2-7=-10, 9-14=9, 14-15=12
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-38, 2-7=-41, 7-9=-34, 9-14=-40, 14-15=-37, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
 - Horz: 1-2=-12, 2-7=-9, 9-14=10, 14-15=13
- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-30, 2-7=-34, 7-8=-34, 8-9=-44, 9-14=-44, 14-15=-40, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
 - Horz: 1-2=-20, 2-7=-16, 9-14=6, 14-15=10
- 22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-40, 2-7=-44, 7-8=-44, 8-9=-34, 9-14=-34, 14-15=-30, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
 - Horz: 1-2=-10, 2-7=-6, 9-14=16, 14-15=20
- 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-7=-60, 7-9=-60, 9-15=-20, 32-36=-20
- 24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-7=-20, 7-9=-60, 9-15=-60, 32-36=-20
- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-7=-50, 7-9=-50, 9-15=-20, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
- 26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-7=-20, 7-9=-50, 9-15=-50, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)

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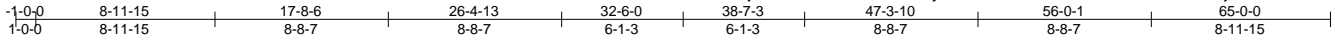


818 Soundside Road
 Edenton, NC 27932

Job PCK20	Truss A03A	Truss Type HIP	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK	158356757
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Builders FirstSource, Apex, NC

8.630 s Mar 9 2023 MiTek Industries, Inc. Mon May 15 13:53:46 2023 Page 1
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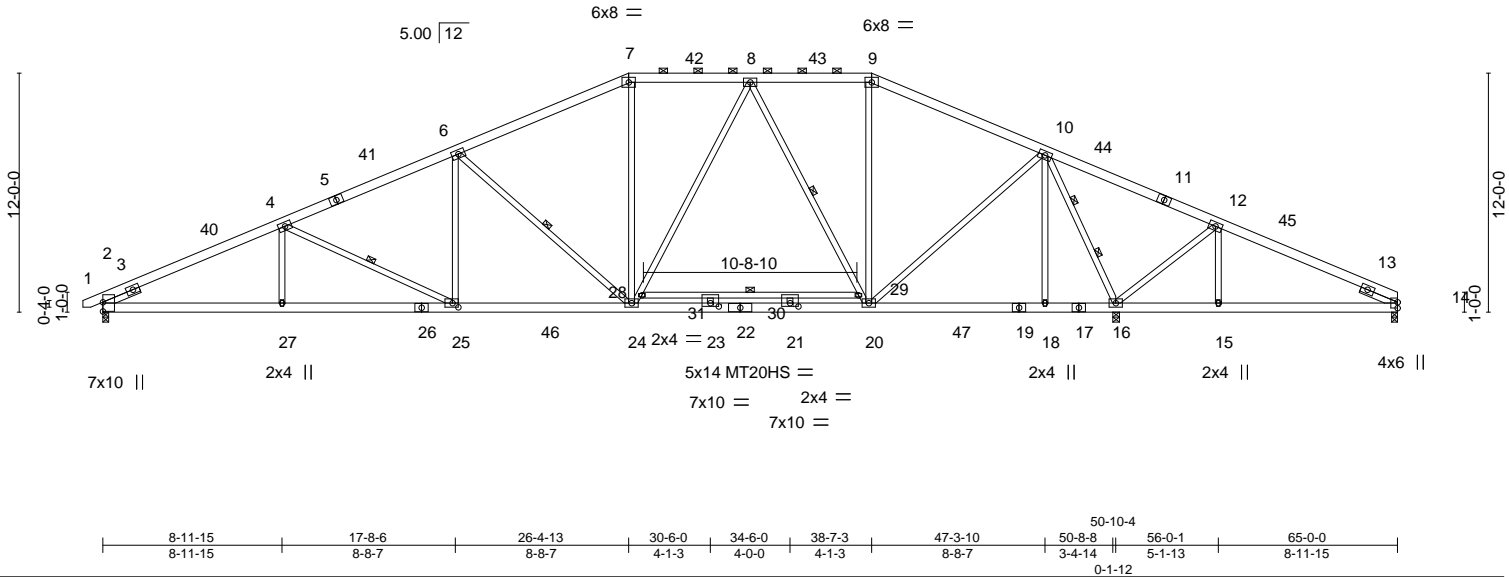


Plate Offsets (X,Y)--	[21:0-5-0,0-2-0], [23:0-5-0,0-2-0], [25:0-3-8,0-2-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL)	-0.38	21-23	>999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 1.00	Vert(CT)	-0.57	21-23	>999	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr NO	WB 0.92	Horz(CT)	0.09	16	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL)	0.12	25-27	>999		
							Weight: 513 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 1-5: 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 3-8-12 oc purlins, except 2-0-0 oc purlins (4-10-6 max.): 7-9.
BOT CHORD 2x6 SP DSS *Except* 17-19,19-22: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 15-16,14-15.
WEBS 2x4 SP No.3 *Except* 8-24,8-20: 2x4 SP No.2	WEBS 1 Row at midpt 4-25, 6-24, 8-20, 28-29 2 Rows at 1/3 pts 10-16
SLIDER Left 2x4 SP No.3 1-11-12, Right 2x4 SP No.3 1-11-12	

REACTIONS.	(lb/size)
2=1992/0-3-8 (min. 0-2-6), 16=3015/0-4-0 (min. 0-3-11), 14=240/0-3-8 (min. 0-1-8)	
Max Horz 2=155(LC 12)	
Max Uplift 2=-120(LC 12), 16=-39(LC 13), 14=-69(LC 13)	
Max Grav 2=1992(LC 1), 16=3100(LC 2), 14=343(LC 24)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1506/0, 3-40=-3729/205, 4-40=-3619/225, 4-5=-3242/230, 5-41=-3189/264, 6-41=-3091/267, 6-7=-2483/282, 7-42=-2209/299, 8-42=-2209/299, 8-43=-1513/256, 9-43=-1513/256, 9-10=-1730/240, 10-44=0/894, 11-44=0/885, 11-12=-1/757, 12-45=-44/478, 13-45=-123/431
BOT CHORD	2-27=-276/3340, 26-27=-276/3340, 25-26=-276/3340, 25-46=-161/2944, 24-46=-161/2944, 23-24=-8/1953, 22-23=-8/1953, 21-22=-8/1953, 20-21=-8/1953, 20-47=0/433, 19-47=0/433, 18-19=0/433, 17-18=0/433, 16-17=0/433, 15-16=-397/113, 14-15=-397/113
WEBS	4-27=0/267, 4-25=-567/128, 6-25=0/478, 6-24=-1069/188, 7-24=0/664, 24-28=-70/585, 8-28=-68/631, 8-29=-1025/148, 20-29=-1051/145, 9-20=-1/410, 10-20=0/1492, 12-16=-808/134, 12-15=0/340, 10-16=-2796/145

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-9-10 to 5-8-6, Interior(1) 5-8-6 to 26-4-13, Exterior(2) 26-4-13 to 35-7-2, Interior(1) 35-7-2 to 38-7-3, Exterior(2) 38-7-3 to 47-9-8, Interior(1) 47-9-8 to 65-0-0 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
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 5x8 MT20 unless otherwise indicated.
 - 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



May 16, 2023

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK	158356757
PCK20	A03A	HIP	1	1	Job Reference (optional)	

Builders FirstSource, Apex, NC

8.630 s Mar 9 2023 MiTek Industries, Inc. Mon May 15 13:53:46 2023 Page 2
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NOTES-

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 2, 39 lb uplift at joint 16 and 69 lb uplift at joint 14.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) N/A
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60, 7-9=-60, 9-14=-60, 32-36=-20
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-50, 7-9=-50, 9-14=-50, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-7=-20, 7-9=-20, 9-14=-20, 32-36=-40, 28-29=-40(F)
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=42, 2-40=22, 7-40=12, 7-43=20, 9-43=15, 9-44=22, 14-44=12, 32-36=-12
Horz: 1-2=-54, 2-40=-34, 7-40=-24, 9-44=34, 14-44=24
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=8, 2-41=12, 7-41=22, 7-42=15, 9-42=20, 9-45=12, 14-45=22, 32-36=-12
Horz: 1-2=-20, 2-41=-24, 7-41=-34, 9-45=24, 14-45=34
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-13, 2-7=-32, 7-9=-29, 9-14=-32, 32-36=-20
Horz: 1-2=-7, 2-7=12, 9-14=-12
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-27, 2-7=-32, 7-9=-29, 9-14=-32, 32-36=-20
Horz: 1-2=7, 2-7=12, 9-14=-12
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=20, 2-7=10, 7-9=19, 9-14=8, 32-36=-12
Horz: 1-2=-32, 2-7=-22, 9-14=20
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-7=8, 7-9=19, 9-14=10, 32-36=-12
Horz: 1-2=-16, 2-7=-20, 9-14=22
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-2, 2-7=-7, 7-9=2, 9-14=-8, 32-36=-20
Horz: 1-2=-18, 2-7=-13, 9-14=12
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-4, 2-7=-8, 7-9=2, 9-14=-7, 32-36=-20
Horz: 1-2=-16, 2-7=-12, 9-14=13
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=14, 2-7=19, 7-8=19, 8-9=5, 9-14=5, 32-36=-12
Horz: 1-2=-26, 2-7=-31, 9-14=17
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=1, 2-7=5, 7-8=5, 8-9=19, 9-14=19, 32-36=-12
Horz: 1-2=-13, 2-7=-17, 9-14=31
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-7=9, 7-8=9, 8-9=2, 9-14=2, 32-36=-12
Horz: 1-2=-17, 2-7=-21, 9-14=14
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-3, 2-7=2, 7-8=2, 8-9=9, 9-14=9, 32-36=-12
Horz: 1-2=-9, 2-7=-14, 9-14=21
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-7=2, 7-8=2, 8-9=-11, 9-14=-11, 32-36=-20
Horz: 1-2=-26, 2-7=-22, 9-14=9
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-7, 2-7=-11, 7-8=-11, 8-9=2, 9-14=2, 32-36=-20
Horz: 1-2=-13, 2-7=-9, 9-14=22
- 18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-7=-20, 7-9=-20, 9-14=-20, 25-32=-20, 25-46=-60, 46-47=-20, 18-47=-60, 18-36=-20, 28-29=-40(F)

Continued on page 3

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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/TPI 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

Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK	158356757
PCK20	A03A	HIP	1	1	Job Reference (optional)	

Builders FirstSource, Apex, NC

8.630 s Mar 9 2023 MiTek Industries, Inc. Mon May 15 13:53:46 2023 Page 3
 ID:EFejVcl0zOQ0VSWnhJDumyoUxo-RxoX3csP?VIsJ?ceW6OumObNjlkFKz79uE6f1ozGER3

LOAD CASE(S)

- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-37, 2-7=-40, 7-9=-34, 9-14=-41, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
 Horz: 1-2=-13, 2-7=-10, 9-14=9
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-38, 2-7=-41, 7-9=-34, 9-14=-40, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
 Horz: 1-2=-12, 2-7=-9, 9-14=10
- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-30, 2-7=-34, 7-8=-34, 8-9=-44, 9-14=-44, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
 Horz: 1-2=-20, 2-7=-16, 9-14=6
- 22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-40, 2-7=-44, 7-8=-44, 8-9=-34, 9-14=-34, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
 Horz: 1-2=-10, 2-7=-6, 9-14=16
- 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-60, 7-9=-60, 9-14=-20, 32-36=-20
- 24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-20, 7-9=-60, 9-14=-60, 32-36=-20
- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-50, 7-9=-50, 9-14=-20, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)
- 26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-20, 7-9=-50, 9-14=-50, 25-32=-20, 25-46=-50, 46-47=-20, 18-47=-50, 18-36=-20, 28-29=-30(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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

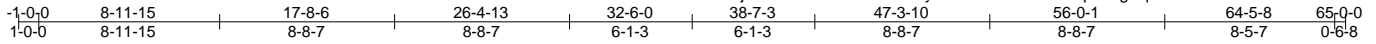


818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK
PCK20	A04	HIP	1	1	I58356758
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:28 2023 Page 1

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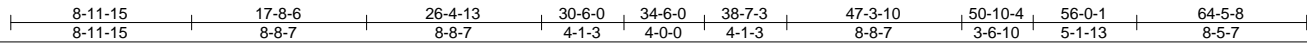
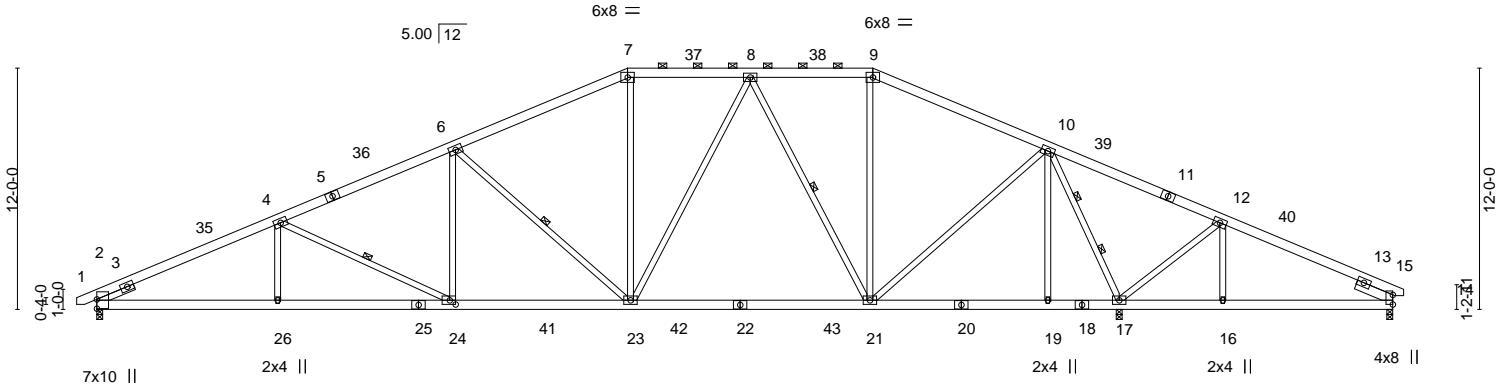


Plate Offsets (X,Y)-- [24:0-3-8,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.89	Vert(LL)	-0.26 21-23	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.46 21-23	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.86	Horz(CT)	0.09 17	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.13 24-26	>999	240	Weight: 496 lb	FT = 20%

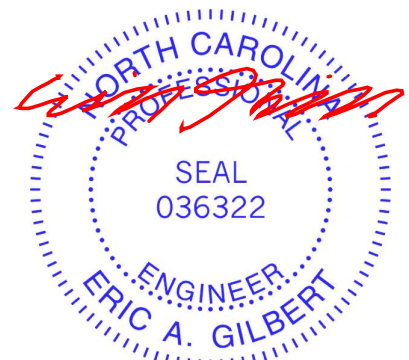
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except
BOT CHORD 2x6 SP No.2 *Except*	2-0-0 oc purlins (4-11-5 max.): 7-9.
2-25,22-25: 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3 *Except*	6-0-0 oc bracing: 16-17,14-16.
8-23,8-21: 2x4 SP No.2	WEBS 1 Row at midpt 4-24, 6-23, 8-21
SLIDER Left 2x4 SP No.3 1-11-12, Right 2x6 SP No.2 1-11-12	2 Rows at 1/3 pts 10-17

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 17=0-3-8
 Max Horz 2=158(LC 12)
 Max Uplift 2=-121(LC 12), 14=-76(LC 13), 17=-33(LC 13)
 Max Grav 2=1999(LC 1), 14=347(LC 24), 17=2975(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-3737/227, 4-6=-3188/273, 6-7=-2410/287, 7-8=-2142/304, 8-9=-1471/260,
 9-10=-1684/248, 10-12=0/821, 12-14=-226/394
 BOT CHORD 2-26=-280/3350, 24-26=-280/3350, 23-24=-167/2879, 21-23=-13/1885, 19-21=0/450,
 17-19=0/450, 16-17=-319/114, 14-16=-319/114
 WEBS 4-26=0/258, 4-24=-561/126, 6-24=0/537, 6-23=-1068/190, 7-23=0/555, 8-23=-66/604,
 8-21=-1017/147, 9-21=-3/330, 10-21=0/1398, 12-16=0/321, 10-17=-2681/140,
 12-17=-781/126

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-10 to 5-8-6, Interior(1) 5-8-6 to 26-4-13, Exterior(2) 26-4-13 to 35-7-2, Interior(1) 35-7-2 to 38-7-3, Exterior(2) 38-7-3 to 47-9-8, Interior(1) 47-9-8 to 64-9-6 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
- WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- Provide adequate drainage to prevent water ponding.
- All plates are 5x8 MT20 unless otherwise indicated.
- 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 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) 14, 17 except (jt=lb) 2=121.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 16, 2023

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK	158356759
PCK20	A04A	HIP	2	1		

Builders FirstSource, Apex, NC

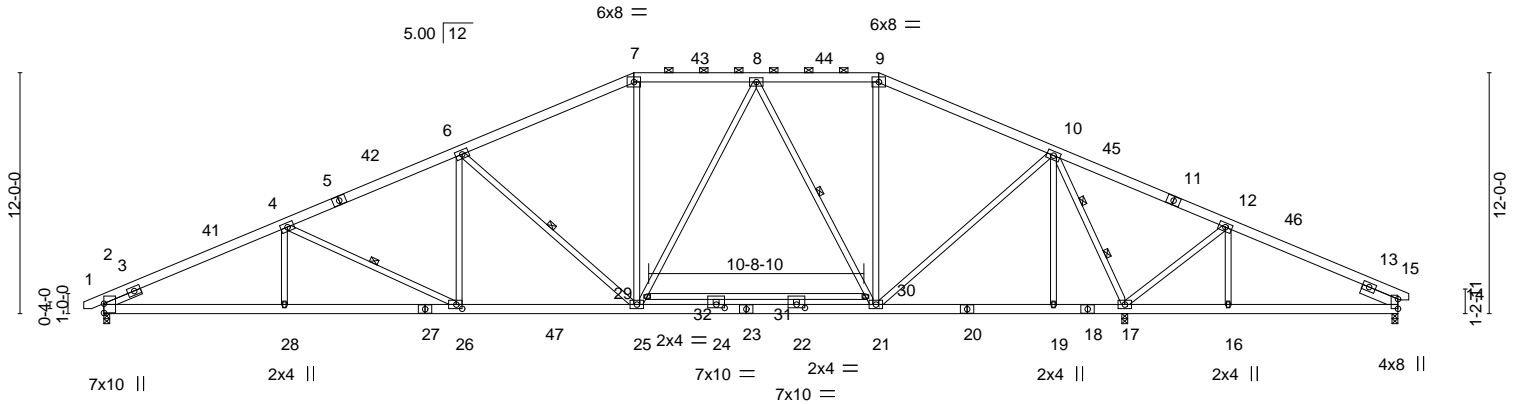
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8.630 s Mar 9 2023 MiTek Industries, Inc. Mon May 15 13:54:04 2023 Page 1

Job Reference (optional)

1-0-0	8-11-15	17-8-6	26-4-13	32-6-0	38-7-3	47-3-10	56-0-1	64-5-8	65-0-0
1-0-0	8-11-15	8-8-7	8-8-7	6-1-3	6-1-3	8-8-7	8-8-7	8-5-7	0-6-8

Scale = 1:114.8



8-11-15	17-8-6	26-4-13	30-6-0	34-6-0	38-7-3	47-3-10	50-10-4	56-0-1	64-5-8
8-11-15	8-8-7	8-8-7	4-1-3	4-0-0	4-1-3	8-8-7	3-6-10	5-1-13	8-5-7

Plate Offsets (X,Y)-- [22:0-5-0,0-2-0], [24:0-5-0,0-2-0], [26:0-3-8,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.17	26-28	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.35	26-28	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.90	Horz(CT)	0.09	17	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.12	26-28	>999		
								Weight: 513 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except*
1-5: 2x6 SP DSS
BOT CHORD 2x6 SP No.2 *Except*
2-27,23-27: 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
8-25,8-21: 2x4 SP No.2
SLIDER Left 2x4 SP No.3 1-11-12, Right 2x6 SP No.2 1-11-12

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-8-13 oc purlins, except 2-0-0 oc purlins (4-11-13 max.); 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-17,14-16.
WEBS 1 Row at midpt 4-26, 6-25, 8-21
2 Rows at 1/3 pts 10-17

REACTIONS.

(lb/size) 2=2005/0-3-8 (min. 0-2-6), 14=273/0-3-8 (min. 0-1-8), 17=2946/0-3-8 (min. 0-3-8)
Max Horz 2=158(LC 12)
Max Uplift 2=-121(LC 12), 14=-74(LC 13), 17=-34(LC 13)
Max Grav 2=2005(LC 1), 14=363(LC 24), 17=2946(LC 1)

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

TOP CHORD 2-3=-1505/0, 3-41=-3758/208, 4-41=-3647/228, 4-5=-3198/237, 5-42=-3112/271, 6-42=-2997/273, 6-7=-2368/288, 7-43=-2084/305, 8-43=-2084/305, 8-44=-1423/261, 9-44=-1423/261, 9-10=-1653/249, 10-45=0/769, 11-45=0/758, 11-12=0/601, 12-46=-65/332, 13-46=-154/284
BOT CHORD 2-28=-281/3366, 27-28=-281/3366, 26-27=-281/3366, 26-47=-167/2873, 25-47=-167/2873, 24-25=-15/1836, 23-24=-15/1836, 22-23=-15/1836, 21-22=-15/1836, 20-21=0/463, 19-20=0/463, 18-19=0/463, 17-18=0/463, 16-17=-262/142, 14-16=-262/142
WEBS 4-28=0/267, 4-26=-564/127, 6-26=0/537, 6-25=-1068/188, 7-25=0/520, 25-29=-69/571, 8-29=-66/572, 8-30=-1010/147, 21-30=-1009/143, 9-21=-3/306, 10-21=0/1313, 10-19=0/286, 12-16=0/319, 10-17=-2584/139, 12-17=-774/126

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-9-10 to 5-8-6, Interior(1) 5-8-6 to 26-4-13, Exterior(2) 26-4-13 to 35-7-2, Interior(1) 35-7-2 to 38-7-3, Exterior(2) 38-7-3 to 47-9-8, Interior(1) 47-9-8 to 64-9-6 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) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 5x8 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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.

May 16,2023

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK	158356759
PCK20	A04A	HIP	2	1	Job Reference (optional)	

Builders FirstSource, Apex, NC

8.630 s Mar 9 2023 MiTek Industries, Inc. Mon May 15 13:54:04 2023 Page 2
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NOTES-

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 121 lb uplift at joint 2, 74 lb uplift at joint 14 and 34 lb uplift at joint 17.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) N/A
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S)

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60, 7-9=-60, 9-15=-60, 33-37=-20
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-50, 7-9=-50, 9-15=-50, 26-33=-20, 26-47=-50, 20-47=-20, 19-20=-50, 19-37=-20
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-7=-20, 7-9=-20, 9-15=-20, 33-37=-40
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=42, 2-41=22, 7-41=12, 7-44=20, 9-44=15, 9-45=22, 14-45=12, 14-15=8, 33-37=-12
Horz: 1-2=-54, 2-41=-34, 7-41=-24, 9-45=34, 14-45=24, 14-15=20
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=8, 2-42=12, 7-42=22, 7-43=15, 9-43=20, 9-46=12, 14-46=22, 14-15=42, 33-37=-12
Horz: 1-2=-20, 2-42=-24, 7-42=-34, 9-46=24, 14-46=34, 14-15=54
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-13, 2-7=32, 7-9=-29, 9-14=-32, 14-15=-27, 33-37=-20
Horz: 1-2=-7, 2-7=12, 9-14=-12, 14-15=-7
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-27, 2-7=-32, 7-9=-29, 9-14=-32, 14-15=-13, 33-37=-20
Horz: 1-2=7, 2-7=12, 9-14=-12, 14-15=7
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=20, 2-7=10, 7-9=19, 9-14=8, 14-15=4, 33-37=-12
Horz: 1-2=-32, 2-7=-22, 9-14=20, 14-15=16
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-7=8, 7-9=19, 9-14=10, 14-15=20, 33-37=-12
Horz: 1-2=-16, 2-7=-20, 9-14=22, 14-15=32
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-2, 2-7=-7, 7-9=2, 9-14=-8, 14-15=-4, 33-37=-20
Horz: 1-2=-18, 2-7=-13, 9-14=12, 14-15=16
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-4, 2-7=-8, 7-9=2, 9-14=-7, 14-15=-2, 33-37=-20
Horz: 1-2=-16, 2-7=-12, 9-14=13, 14-15=18
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=14, 2-7=19, 7-8=19, 8-9=5, 9-14=5, 14-15=1, 33-37=-12
Horz: 1-2=-26, 2-7=-31, 9-14=17, 14-15=13
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=1, 2-7=5, 7-8=5, 8-9=19, 9-14=19, 14-15=14, 33-37=-12
Horz: 1-2=-13, 2-7=-17, 9-14=31, 14-15=26
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-7=9, 7-8=9, 8-9=2, 9-14=2, 14-15=-3, 33-37=-12
Horz: 1-2=-17, 2-7=-21, 9-14=14, 14-15=9
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-3, 2-7=2, 7-8=2, 8-9=9, 9-14=9, 14-15=5, 33-37=-12
Horz: 1-2=-9, 2-7=-14, 9-14=21, 14-15=17
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-7=2, 7-8=2, 8-9=-11, 9-14=-11, 14-15=-7, 33-37=-20
Horz: 1-2=-26, 2-7=-22, 9-14=9, 14-15=13
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-7, 2-7=-11, 7-8=-11, 8-9=2, 9-14=2, 14-15=6, 33-37=-20
Horz: 1-2=-13, 2-7=-9, 9-14=22, 14-15=26
- 18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-7=-20, 7-9=-20, 9-15=-20, 26-33=-20, 26-47=-60, 20-47=-20, 19-20=-60, 19-37=-20
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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/TPI1 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

Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK	158356759
PCK20	A04A	HIP	2	1	Job Reference (optional)	

Builders FirstSource, Apex, NC

8.630 s Mar 9 2023 MiTek Industries, Inc. Mon May 15 13:54:04 2023 Page 3
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LOAD CASE(S)

- Uniform Loads (plf)
 - Vert: 1-2=-37, 2-7=-40, 7-9=-34, 9-14=-41, 14-15=-38, 26-33=-20, 26-47=-50, 20-47=-20, 19-20=-50, 19-37=-20
 - Horz: 1-2=-13, 2-7=-10, 9-14=9, 14-15=12
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-38, 2-7=-41, 7-9=-34, 9-14=-40, 14-15=-37, 26-33=-20, 26-47=-50, 20-47=-20, 19-20=-50, 19-37=-20
 - Horz: 1-2=-12, 2-7=-9, 9-14=10, 14-15=13
- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-30, 2-7=-34, 7-8=-34, 8-9=-44, 9-14=-44, 14-15=-40, 26-33=-20, 26-47=-50, 20-47=-20, 19-20=-50, 19-37=-20
 - Horz: 1-2=-20, 2-7=-16, 9-14=6, 14-15=10
- 22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-40, 2-7=-44, 7-8=-44, 8-9=-34, 9-14=-34, 14-15=-30, 26-33=-20, 26-47=-50, 20-47=-20, 19-20=-50, 19-37=-20
 - Horz: 1-2=-10, 2-7=-6, 9-14=16, 14-15=20
- 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-7=-60, 7-9=-60, 9-15=-20, 33-37=-20
- 24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-7=-20, 7-9=-60, 9-15=-60, 33-37=-20
- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-7=-50, 7-9=-50, 9-15=-20, 26-33=-20, 26-47=-50, 20-47=-20, 19-20=-50, 19-37=-20
- 26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-7=-20, 7-9=-50, 9-15=-50, 26-33=-20, 26-47=-50, 20-47=-20, 19-20=-50, 19-37=-20

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/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

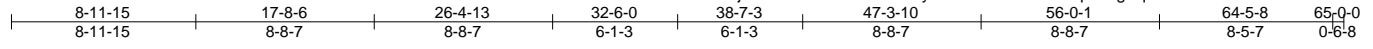


818 Soundside Road
 Edenton, NC 27932

Job PCK20	Truss A05A	Truss Type HIP	Qty 6	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356760
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Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:32 2023 Page 1

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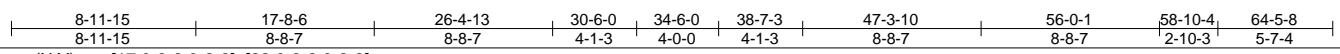
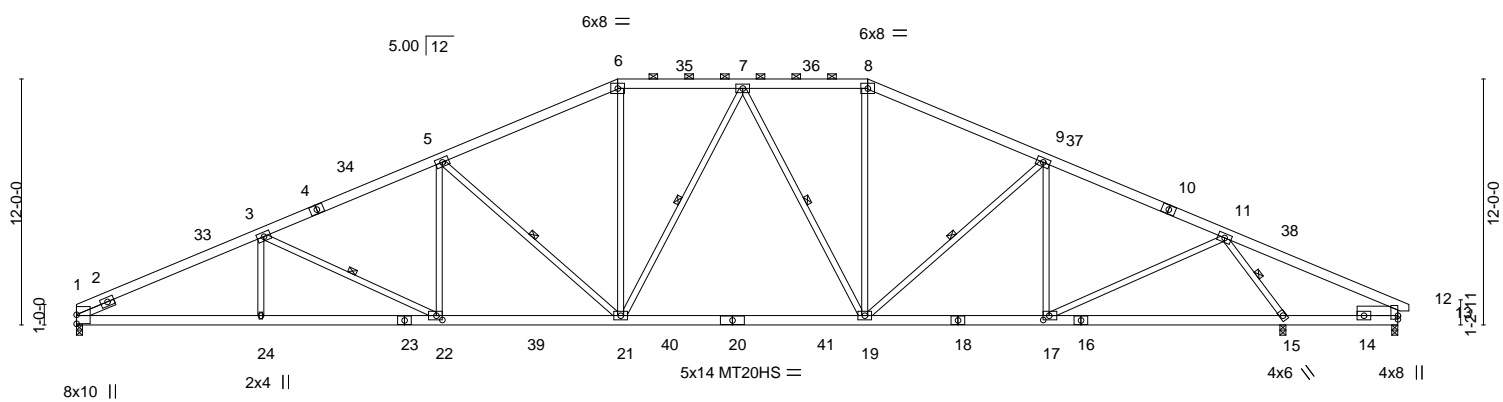


Plate Offsets (X, Y)-- [17:0-3-8,0-2-8], [22:0-3-8,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.55	Vert(LL)	-0.34 19-21	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Vert(CT)	-0.64 19-21	>999	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.76	Horz(CT)	0.15 15	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.16 22-24	>999	240		Weight: 488 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 1-4: 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 3-1-13 oc purlins, except 2-0-0 oc purlins (4-1-13 max.): 6-8.
BOT CHORD 2x6 SP No.2 *Except* 1-23,20-23: 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 19-21 6-0-0 oc bracing: 12-15.
WEBS 2x4 SP No.3 *Except* 7-21,7-19: 2x4 SP No.2	WEBS 1 Row at midpt 3-22, 5-21, 7-21, 7-19, 9-19, 11-15
SLIDER Left 2x4 SP No.3 1-11-12, Right 2x6 SP No.2 1-11-12	

REACTIONS. (size) 1=0-3-8, 12=0-3-8, 15=0-3-8 (req. 0-3-10)
 Max Horz 1=149(LC 12)
 Max Uplift 1=110(LC 12), 12=382(LC 25)
 Max Grav 1=2317(LC 1), 15=3097(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-4563/257, 3-5=-4066/315, 5-6=-3326/329, 6-7=-2991/343, 7-8=-2699/335,
 8-9=-3006/321, 9-11=-2943/278, 11-12=0/972
 BOT CHORD 1-24=-283/4100, 22-24=-283/4100, 21-22=-169/3707, 19-21=-62/2921, 17-19=-110/2636,
 15-17=-141/1126, 12-15=-813/561
 WEBS 3-22=-498/127, 5-22=0/510, 5-21=-1051/190, 6-21=-6/905, 7-21=-181/268,
 7-19=-699/144, 8-19=-6/768, 9-19=-118/294, 9-17=-558/119, 11-15=-3285/207,
 11-17=0/1740

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 6-6-0, Interior(1) 6-6-0 to 26-4-13, Exterior(2) 26-4-13 to 35-7-2, Interior(1) 35-7-2 to 38-7-3, Exterior(2) 38-7-3 to 47-9-8, Interior(1) 47-9-8 to 64-9-6 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
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 5x8 MT20 unless otherwise indicated.
 - 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 will fit between the bottom chord and any other members, with BCDL = 10.0psf.



May 16, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job PCK20	Truss A05A	Truss Type HIP	Qty 6	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK I58356760 Job Reference (optional)
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:33 2023 Page 2
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- NOTES-**
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=110, 12=382.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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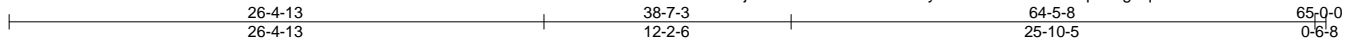
818 Soundside Road
Edenton, NC 27932

Job PCK20	Truss A06AG	Truss Type GABLE	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356761
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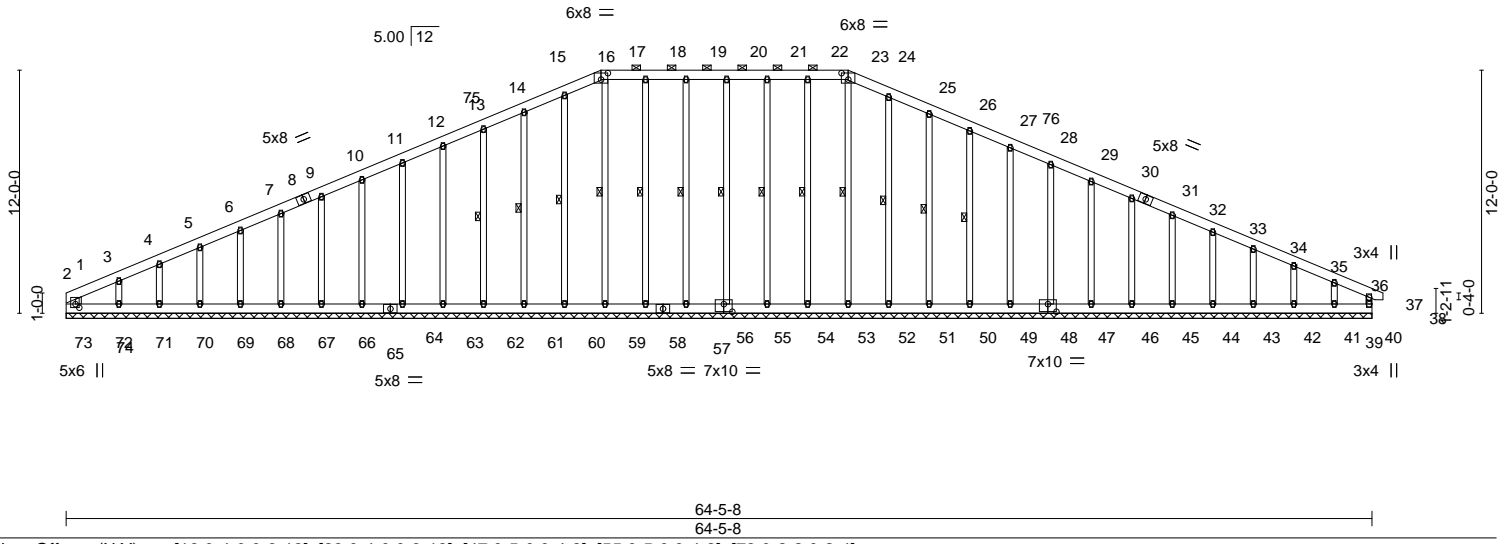
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:39 2023 Page 1

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Scale = 1:113.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.01	Vert(LL) 0.00 37 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.15	Vert(CT) 0.00 37 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 74 n/a n/a		
	Code IRC2015/TPI2014			Weight: 634 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 16-23.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 23-52, 22-53, 21-54, 20-55, 19-56, 18-58, 17-59, 15-60, 14-61, 13-62, 24-51, 25-50, 26-49
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 64-5-8.
 (lb) - Max Horz 1=141 (LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 39, 74, 54, 55, 56, 58, 60, 61, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 1
 Max Grav All reactions 250 lb or less at joint(s) 39, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 1

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 7-9=-87/257, 9-10=-97/288, 10-11=-108/319, 11-12=-119/350, 12-13=-129/380, 13-14=-140/411, 14-15=-152/445, 15-16=-158/461, 16-17=-146/444, 17-18=-146/444, 18-19=-146/444, 19-20=-146/444, 20-21=-147/444, 21-22=-147/444, 22-23=-147/444, 23-24=-160/456, 24-25=-152/415, 25-26=-140/377, 26-27=-129/346, 27-28=-118/315, 28-29=-109/286, 29-30=-98/255

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-0-0 to 6-7-3, Exterior(2) 6-7-3 to 26-4-13, Corner(3) 26-4-13 to 32-7-3, Exterior(2) 32-7-3 to 38-7-3, Corner(3) 38-7-3 to 45-0-9, Exterior(2) 45-0-9 to 64-9-10 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.
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



May 16, 2023

Job PCK20	Truss A06AG	Truss Type GABLE	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK I58356761 Job Reference (optional)
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:40 2023 Page 2
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NOTES-

- 11) * 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.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 39, 74, 54, 55, 56, 58, 60, 61, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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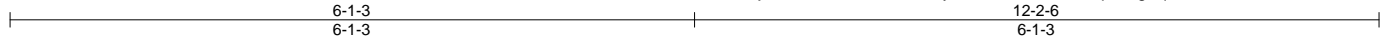
Job PCK20	Truss PB01G	Truss Type GABLE	Qty 2	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356762
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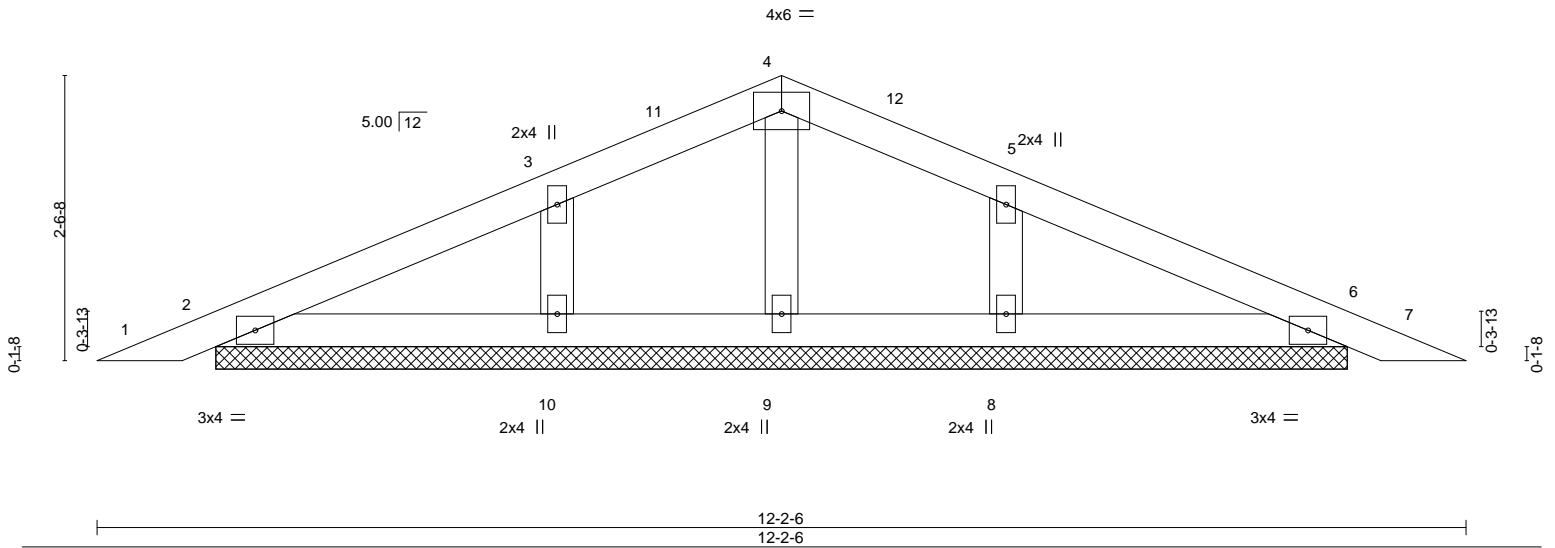
Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:41 2023 Page 1

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Scale = 1:20.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	0.00	7	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	0.00	7	n/r		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.04	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 40 lb	FT = 20%

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

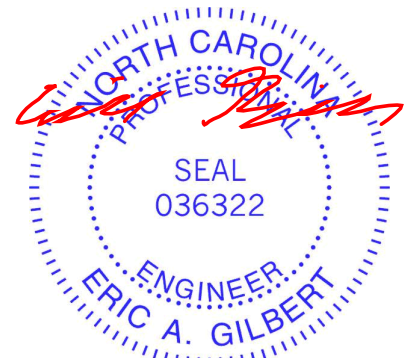
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 10-1-0.
 (lb) - Max Horz 2=32(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=250(LC 23), 8=250(LC 24)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-9 to 5-2-2, Interior(1) 5-2-2 to 6-1-3, Exterior(2) 6-1-3 to 11-1-11, Interior(1) 11-1-11 to 11-9-13 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) Gable requires continuous bottom chord bearing.
- 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 16, 2023

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/TPI1 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

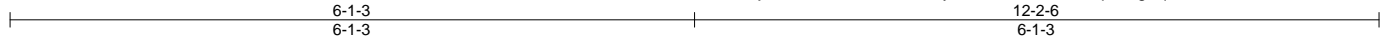
Job PCK20	Truss PB02	Truss Type PIGGYBACK	Qty 19	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356763
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Builders FirstSource (Apex, NC),

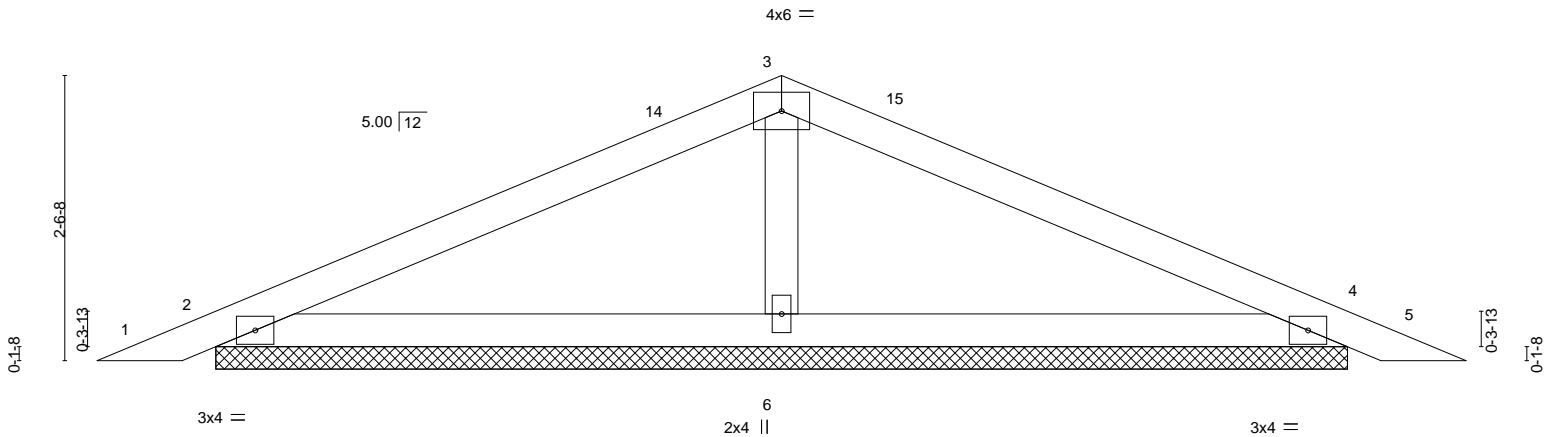
Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:42 2023 Page 1

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Scale = 1:20.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	0.02	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.06	Horz(CT)	0.00	11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						Weight: 37 lb	FT = 20%

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

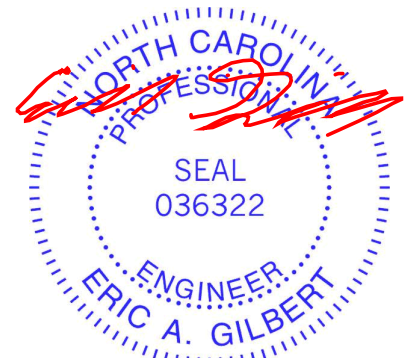
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 10-1-0.
 (lb) - Max Horz 2=-32(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 4
 Max Grav All reactions 250 lb or less at joint(s) 2, 4, 2, 4 except 6=442(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-6=-261/80

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-9 to 5-2-2, Interior(1) 5-2-2 to 6-1-3, Exterior(2) 6-1-3 to 11-1-11, Interior(1) 11-1-11 to 11-9-13 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
- Gable requires continuous bottom chord bearing.
- 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 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) 2, 4, 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 16, 2023

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ANSI/TPI1 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

Job PCK20	Truss V01G	Truss Type GABLE	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK I58356764
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:44 2023 Page 1

ID:EFejVcllozOQ0VSWnhJDumYoUxo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x6 =

Scale = 1:39.0

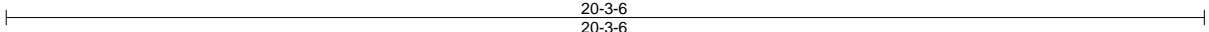
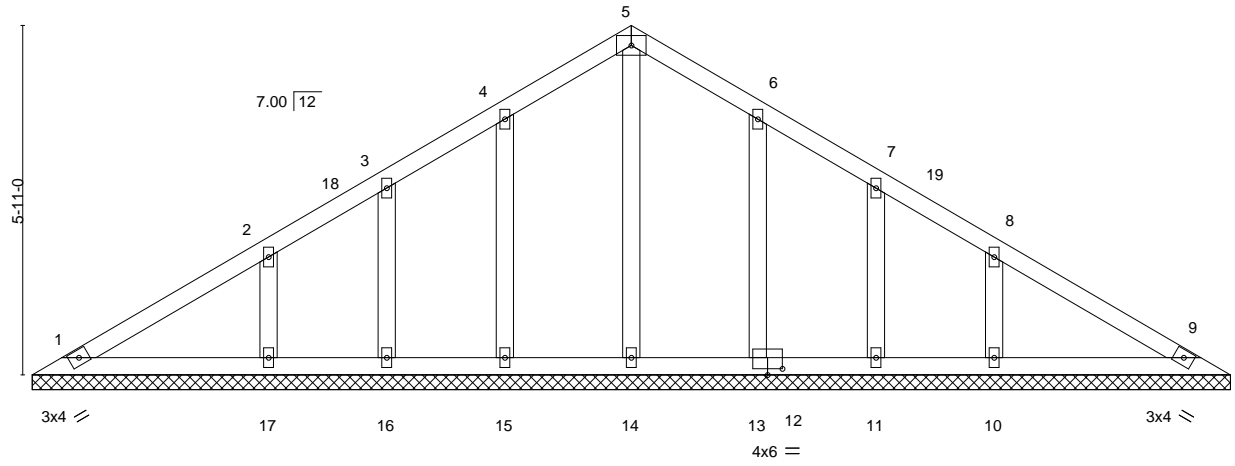


Plate Offsets (X, Y)-- [2:0-0-0,0-0-0], [3:0-0-0,0-0-0], [4:0-0-0,0-0-0], [12:0-3-0,0-1-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 98 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 20-3-6.
 (lb) - Max Horz 1=110(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 10, 11, 13, 17, 16, 15
 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 14, 11, 13, 16, 15 except 10=286(LC 20), 17=287(LC 19)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 10-1-11, Exterior(2) 10-1-11 to 14-11-4, Interior(1) 14-11-4 to 19-8-14 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) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 11, 13, 17, 16, 15.



Job PCK20	Truss V02	Truss Type VALLEY	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356765
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:46 2023 Page 1

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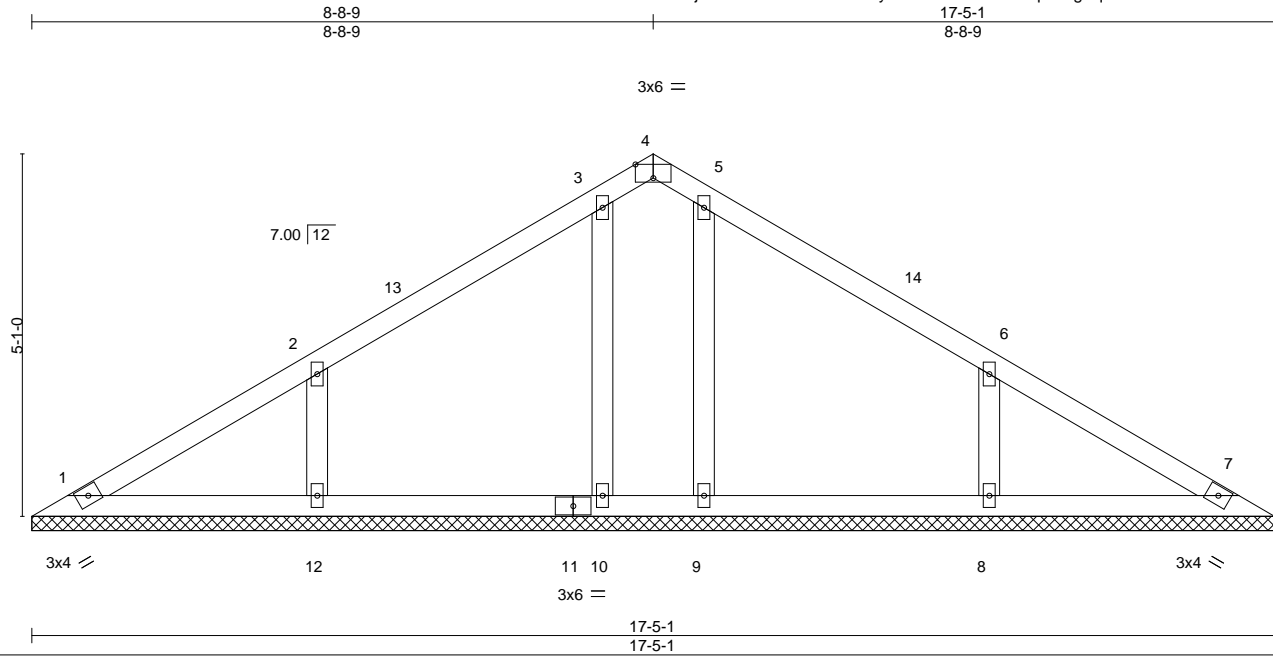


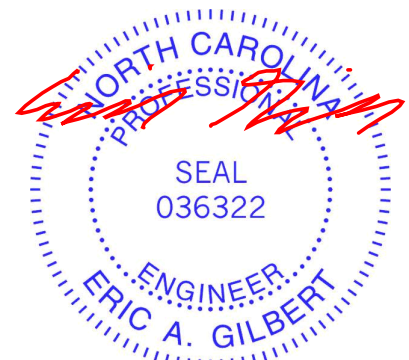
Plate Offsets (X,Y)--	[4:0-3-0,Edge]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 72 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.3	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
OTHERS	2x4 SP No.3		

REACTIONS. All bearings 17-5-1.
 (lb) - Max Horz 1=94(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 12, 10
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 9, 10 except 8=352(LC 20), 12=352(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 6-8=-261/125, 2-12=-260/124

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 8-8-9, Exterior(2) 8-8-9 to 13-5-1, Interior(1) 13-5-1 to 16-10-10 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) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 12, 10.



May 16, 2023

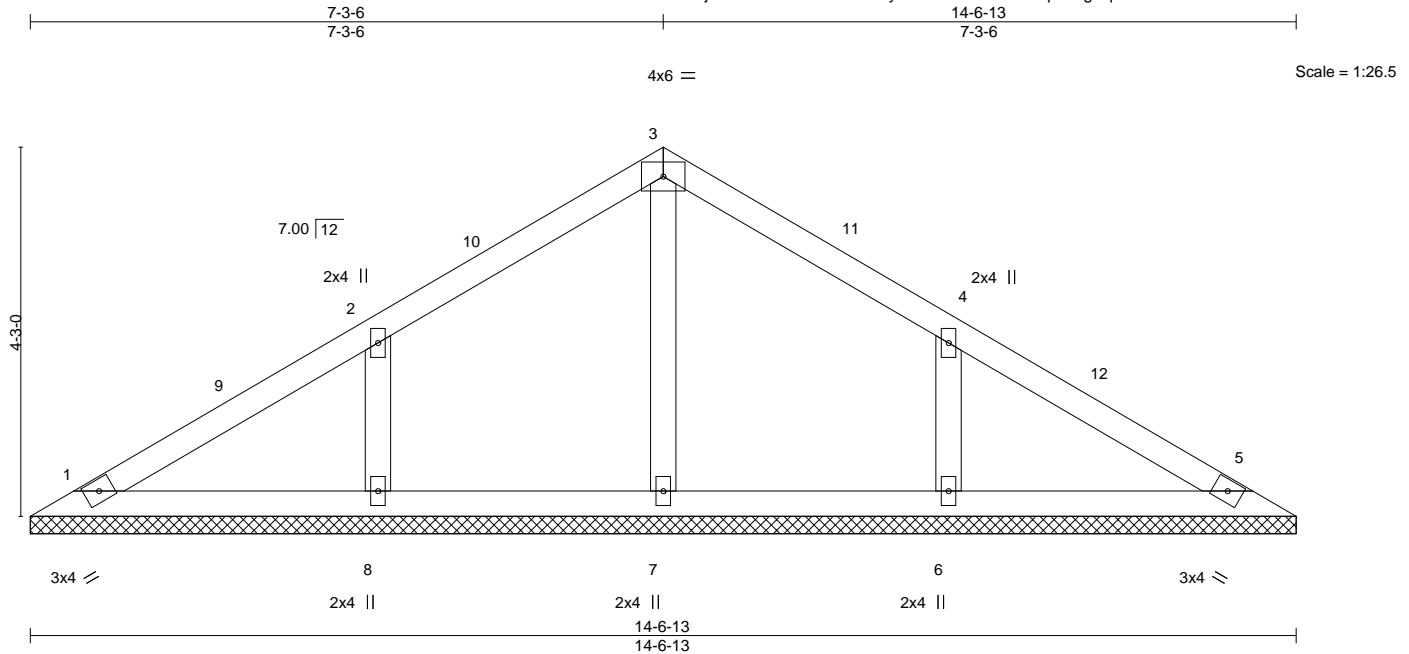
Job PCK20	Truss V03	Truss Type VALLEY	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356766
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:47 2023 Page 1

ID:EFejVcIozOQ0VSWhnJDuMyoUxo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 56 lb	FT = 20%

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

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

REACTIONS. All bearings 14-6-13.
 (lb) - Max Horz 1=78(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=327(LC 20), 8=327(LC 19)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 7-3-6, Exterior(2) 7-3-6 to 12-1-0, Interior(1) 12-1-0 to 14-0-5 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) 1, 6, 8.



May 16, 2023

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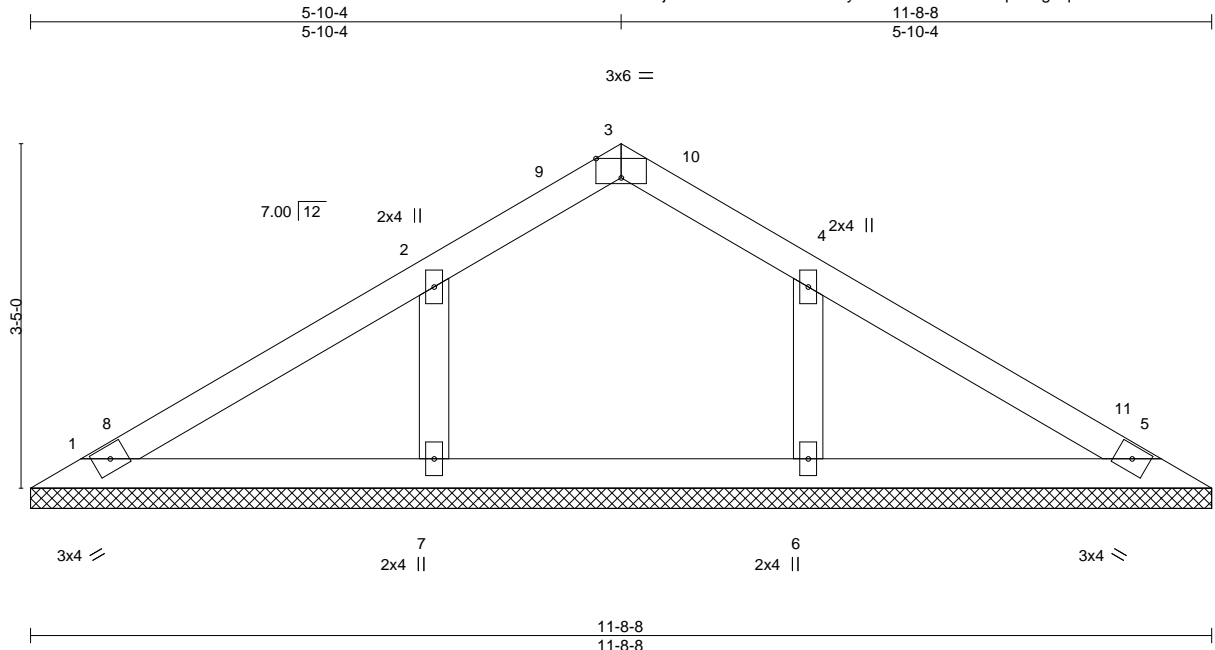
818 Soundside Road
 Edenton, NC 27932

Job PCK20	Truss V04	Truss Type VALLEY	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356767
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:48 2023 Page 1

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Scale = 1:22.8

Plate Offsets (X,Y)--	[3:0-3-0,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 41 lb	FT = 20%

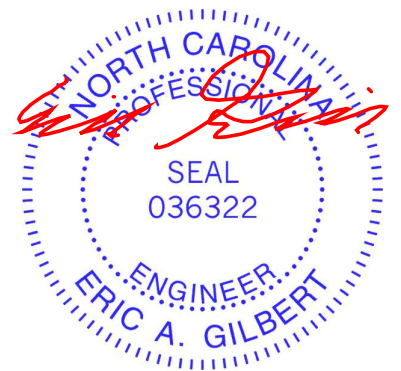
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.3	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 11-8-8.
 (lb) - Max Horz 1=61(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 6, 7
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=298(LC 20), 7=299(LC 19)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 5-10-4, Exterior(2) 5-10-4 to 10-7-14, Interior(1) 10-7-14 to 11-2-0 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
- Gable requires continuous bottom chord bearing.
- 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 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) 6, 7.



May 16, 2023

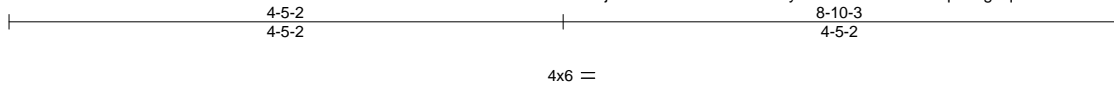
Job PCK20	Truss V05	Truss Type VALLEY	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356768
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:49 2023 Page 1

ID:EFejVcllozOQ0VSWnhJDumyoUxo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:18.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 30 lb	FT = 20%

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

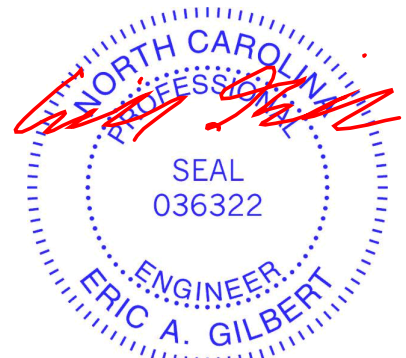
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=8-10-3, 3=8-10-3, 4=8-10-3
 Max Horz 1=-45(LC 10)
 Max Uplift 1=-14(LC 12), 3=-20(LC 13)
 Max Grav 1=146(LC 23), 3=146(LC 24), 4=330(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) 1, 3.



May 16, 2023

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ANSI/TPI1 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

Job PCK20	Truss V06	Truss Type VALLEY	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356769
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

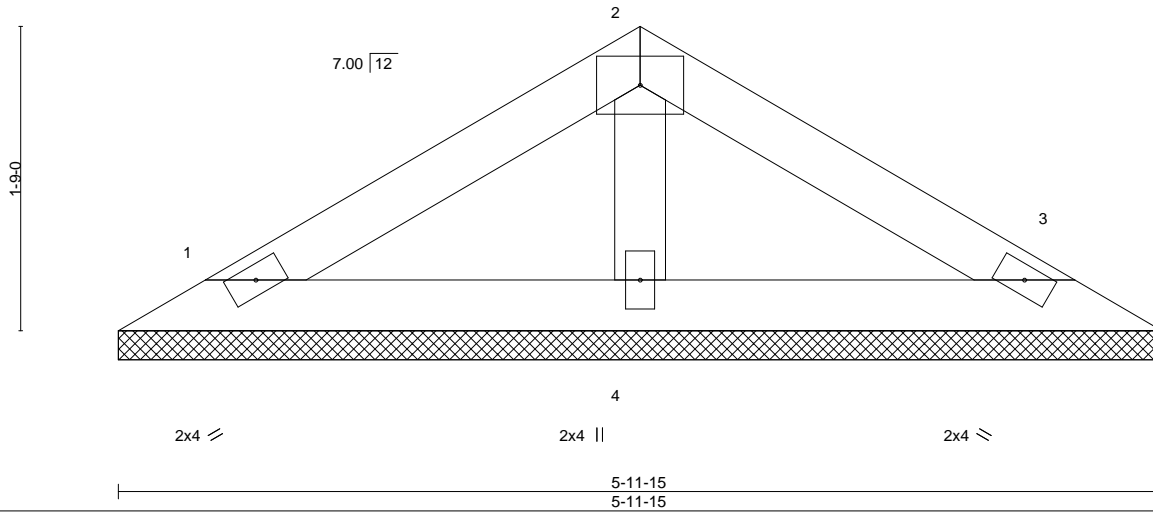
8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:51 2023 Page 1

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4x6 =

Scale = 1:13.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 19 lb	FT = 20%
	Code IRC2015/TPI2014							

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

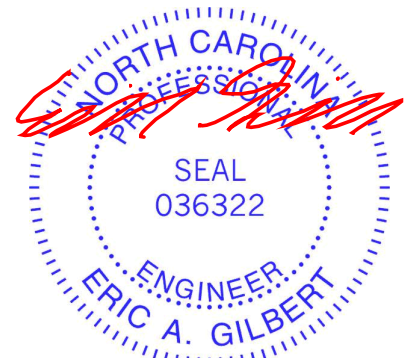
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-11-15 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-11-15, 3=5-11-15, 4=5-11-15
 Max Horz 1=28(LC 11)
 Max Uplift 1=-13(LC 12), 3=-17(LC 13)
 Max Grav 1=102(LC 1), 3=102(LC 1), 4=189(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) 1, 3.



May 16, 2023

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/TPI1 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

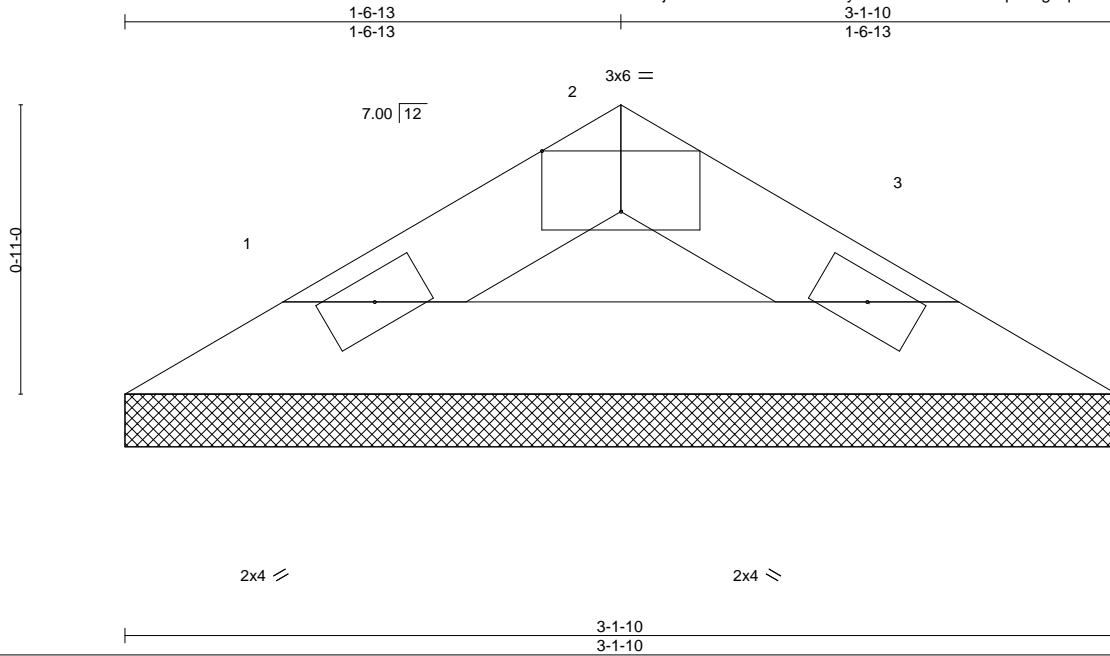
Job PCK20	Truss V07	Truss Type VALLEY	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356770
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:52 2023 Page 1

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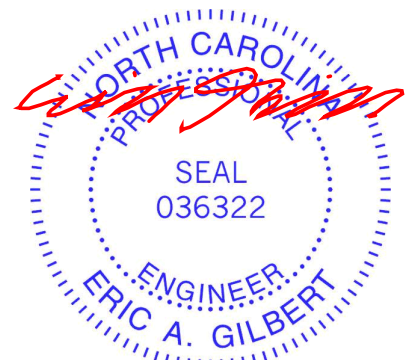
Plate Offsets (X,Y)--	[2:0-3-0,Edge]					PLATES	GRIP
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL)	n/a	-	n/a	999
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P					
							Weight: 8 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.3	TOP CHORD Structural wood sheathing directly applied or 3-1-10 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-1-10, 3=3-1-10
 Max Horz 1=12(LC 11)
 Max Uplift 1=2(LC 12), 3=2(LC 13)
 Max Grav 1=82(LC 1), 3=82(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) 1, 3.



May 16, 2023

Job PCK20	Truss V08	Truss Type GABLE	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356771
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Builders FirstSource (Apex, NC),

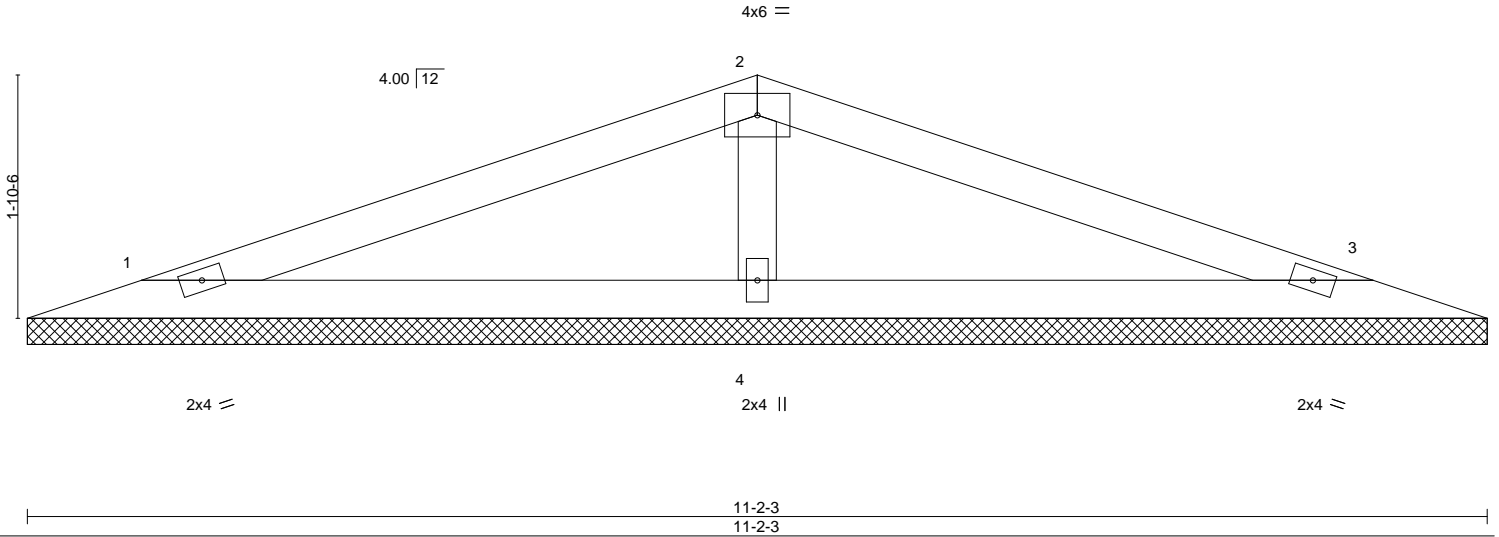
Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:53 2023 Page 1

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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.52	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 33 lb	FT = 20%
	Code IRC2015/TPI2014							

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

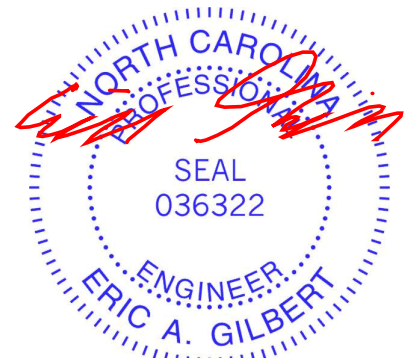
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=11-2-3, 3=11-2-3, 4=11-2-3
 Max Horz 1=-21(LC 13)
 Max Uplift 1=-18(LC 8), 3=-21(LC 13), 4=-2(LC 8)
 Max Grav 1=166(LC 23), 3=166(LC 24), 4=430(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-4=-294/118

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
- Gable requires continuous bottom chord bearing.
- 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 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) 1, 3, 4.



May 16, 2023

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/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



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 Edenton, NC 27932

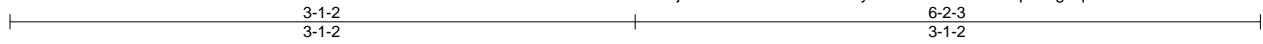
Job PCK20	Truss V09	Truss Type GABLE	Qty 1	Ply 1	MATTAMYHOMES/CASCADE; LOT 20 PROVIDENCE CREEK 158356772
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon May 15 13:36:54 2023 Page 1

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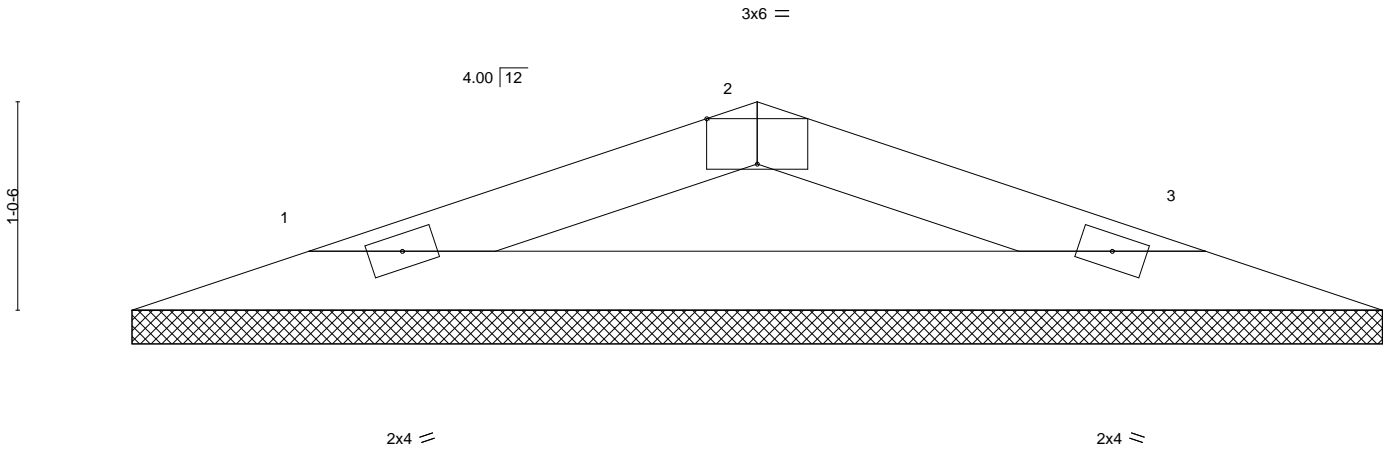


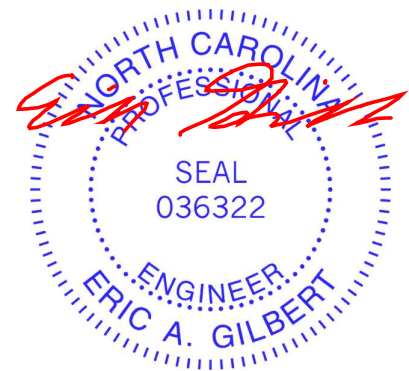
Plate Offsets (X,Y)--	[2:0-3-0,Edge]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 16 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.3	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=6-2-3, 3=6-2-3
 Max Horz 1=-10(LC 13)
 Max Uplift 1=-9(LC 8), 3=-9(LC 9)
 Max Grav 1=175(LC 1), 3=175(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) 1, 3.



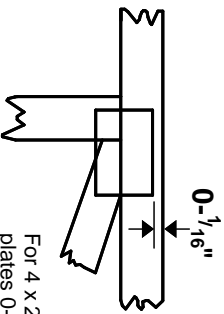
May 16, 2023

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

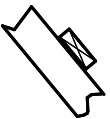
* Plate location details available in **MITek 20/20 software** or upon request.

PLATE SIZE

4 X 4

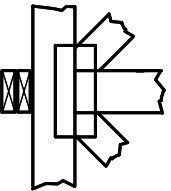
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



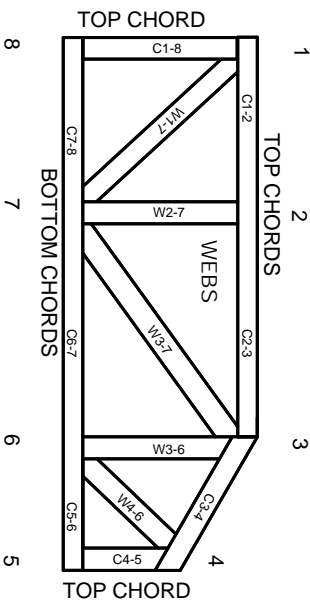
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TFP 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate
Connected Wood Trusses.

Numbering System

6-4-8
dimensions shown in ft-in-sixteenths
(Drawings not to scale)



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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MITek Engineering Reference Sheet: MII-7473 rev. 5/19/2020



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Rewriting pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.