

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 3673321

DR HORTON; CALI; NP120; MASTER.RT

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: I62516014 thru I62516025

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

North Carolina COA: C-0844



December 12,2023

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 DR HORTON: CALI: NP120: MASTER.RT 162516014 3673321 A09 FAN 14 Job Reference (optional) Builders FirstSource (Apex, NC), Apex, NC - 27523 8.630 s Aug 30 2023 MiTek Industries, Inc. Tue Dec 12 12:48:39 2023 Page 1 ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 39-6-0 0-6-0 19-6-0 28-10-6 39-0-0

9-4-6

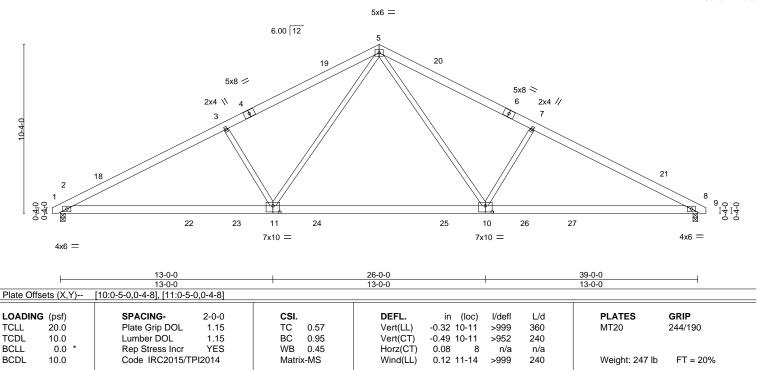
9-4-6

Scale = 1:70.5

10-1-10

Structural wood sheathing directly applied or 3-10-0 oc purlins.

Rigid ceiling directly applied or 2-2-0 oc bracing.



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 8=0-3-8

Max Horz 2=144(LC 12) Max Uplift 2=-103(LC 12), 8=-103(LC 13)

10-1-10

Max Grav 2=1585(LC 2), 8=1585(LC 2)

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

TOP CHORD 2-3=-2813/196, 3-5=-2596/229, 5-7=-2596/229, 7-8=-2813/197

BOT CHORD 2-11=-208/2461, 10-11=-3/1623, 8-10=-64/2461

WFBS 5-10=-114/1093, 7-10=-601/281, 5-11=-113/1093, 3-11=-601/281

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-3-14 to 2-8-2, Interior(1) 2-8-2 to 19-6-0, Exterior(2) 19-6-0 to 22-6-0, Interior(1) 22-6-0 to 39-3-14 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) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=103, 8=103.



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Job Truss Truss Type Qty DR HORTON: CALI: NP120: MASTER.RT 162516015 3673321 A09C CATHEDRAL Job Reference (optional) Builders FirstSource (Apex, NC), Apex, NC - 27523 8.630 s Aug 30 2023 MiTek Industries, Inc. Tue Dec 12 12:48:40 2023 Page 1 ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

28-10-6

9-4-6

19-6-0

9-4-6

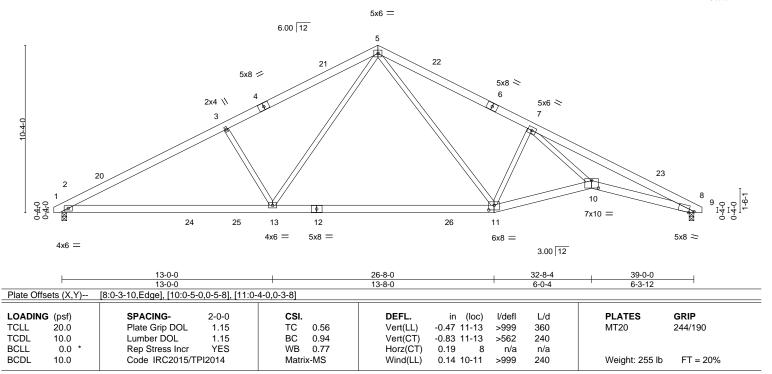
Scale = 1:71.1

10-1-10

Structural wood sheathing directly applied or 2-8-14 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

2-2-0 oc bracing: 8-10.



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x6 SP No.2 TOP CHORD **BOT CHORD**

-0<u>-6-0</u> 0-6-0

10-1-10

2x6 SP No.2 *Except*

2-12: 2x6 SP DSS WEBS 2x4 SP No.3 *Except*

7-10: 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 8=0-3-8

Max Horz 2=144(LC 12)

Max Uplift 2=-103(LC 12), 8=-103(LC 13) Max Grav 2=1579(LC 1), 8=1579(LC 1)

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

2-3=-2823/188, 3-5=-2586/220, 5-7=-2509/264, 7-8=-5136/227 **BOT CHORD** 2-13=-200/2446, 11-13=-7/1578, 10-11=-86/2718, 8-10=-108/4638

3-13=-588/283, 5-13=-91/1161, 5-11=-153/981, 7-11=-1308/288, 7-10=-27/2594 **WEBS**

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-3-14 to 2-8-2, Interior(1) 2-8-2 to 19-6-0, Exterior(2) 19-6-0 to 22-6-0, Interior(1) 22-6-0 to 39-3-14 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=103, 8=103.



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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty DR HORTON: CALI: NP120: MASTER.RT 162516016 3673321 A10 FAN Job Reference (optional) Builders FirstSource, Apex, NC 27523 8.630 s Mar 9 2023 MiTek Industries, Inc. Tue Dec 12 14:22:22 2023 Page 1 ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-i1jpS6VyH4pkt9IX9wRBUv2?Ql9ELclzHByJrOy9h4?

-0-6-0 0-6-0 10-1-10 19-6-0 28-10-6 39-0-0 10-1-10 9-4-6 9-4-6 10-1-10 0-6-0

Scale = 1:68.1

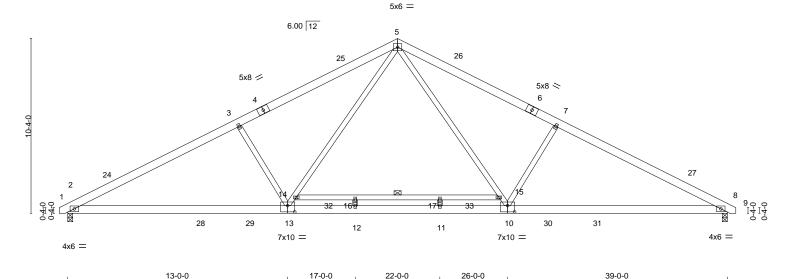


Plate Off	sets (X,Y)	[10:0-5-0,0-4-8], [13:0-5-0),0-4-8]	_		_					
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.39 11-12	>999	360	MT20	244/190
CDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.53 11-12	>889	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.06 8	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	12014	Matri	x-MS	Wind(LL)	0.10 13-20	>999	240	Weight: 266 lb	FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x6 SP No.2 **BOT CHORD** 2x6 SP DSS 2x4 SP No.3 *Except* **WEBS**

14-15: 2x4 SP No.2

2=1579/0-3-8 (min. 0-1-14), 8=1579/0-3-8 (min. 0-1-14) (lb/size)

Max Horz 2=144(LC 12)

Max Uplift 2=-103(LC 12), 8=-103(LC 13) Max Grav 2=1593(LC 2), 8=1593(LC 2)

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

TOP CHORD 2-24=-2828/152, 3-24=-2765/197, 3-4=-2611/184, 4-25=-2493/208, 5-25=-2466/230, 5-26=-2466/230, 6-26=-2493/208, 6-7=-2611/184, 7-27=-2765/197, 8-27=-2828/152 **BOT CHORD**

2-28=-208/2473, 28-29=-208/2473, 13-29=-208/2473, 12-13=-4/1787, 11-12=-4/1787,

10-11=-4/1787, 10-30=-64/2473, 30-31=-64/2473, 8-31=-64/2473

WEBS 5-15=-114/1105, 10-15=-115/1024, 7-10=-594/280, 13-14=-115/1024, 5-14=-114/1105, 3-13=-594/280

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-3-14 to 2-8-2, Interior(1) 2-8-2 to 19-6-0, Exterior(2) 19-6-0 to 22-6-0, Interior(1) 22-6-0 to 39-3-14 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) 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, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 2 and 103 lb uplift at joint 8.
- 7) 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.
- 8) N/A
- 9) 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: 1-5=-60, 5-9=-60, 18-21=-20

Structural wood sheathing directly applied or 3-10-14 oc purlins.

14-15

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

1 Row at midpt

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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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



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8.630 s Mar 9 2023 MiTek Industries, Inc. Tue Dec 12 14:22:22 2023 Page 2 ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-i1jpS6VyH4pkt9IX9wRBUv2?Ql9ELclzHByJrOy9h4?

LOAD CASE(S)

2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-50, 5-9=-50, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F)

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-5=-20, 5-9=-20, 18-21=-40, 32-33=-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=47, 2-24=25, 5-24=14, 5-26=25, 8-26=14, 8-9=9, 18-21=-12

Horz: 1-2=-59, 2-24=-37, 5-24=-26, 5-26=37, 8-26=26, 8-9=21

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=9, 2-25=14, 5-25=25, 5-27=14, 8-27=25, 8-9=47, 18-21=-12

Horz: 1-2=-21, 2-25=-26, 5-25=-37, 5-27=26, 8-27=37, 8-9=59

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=-12, 2-5=-33, 5-8=-33, 8-9=-28, 18-21=-20

Horz: 1-2=-8, 2-5=13, 5-8=-13, 8-9=-8

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=-28, 2-5=-33, 5-8=-33, 8-9=-12, 18-21=-20

Horz: 1-2=8, 2-5=13, 5-8=-13, 8-9=8

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=9, 2-5=-2, 5-8=9, 8-9=4, 18-21=-12

Horz: 1-2=-21, 2-5=-10, 5-8=21, 8-9=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, 2-5=9, 5-8=-2, 8-9=9, 18-21=-12

Horz: 1-2=-16, 2-5=-21, 5-8=10, 8-9=21

10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-15, 2-5=-20, 5-8=-9, 8-9=-4, 18-21=-20

Horz: 1-2=-5, 2-5=-0, 5-8=11, 8-9=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, 2-5=-9, 5-8=-20, 8-9=-15, 18-21=-20

Horz: 1-2=-16, 2-5=-11, 5-8=0, 8-9=5

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=17, 2-5=22, 5-8=7, 8-9=2, 18-21=-12

Horz: 1-2=-29, 2-5=-34, 5-8=19, 8-9=14

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=2, 2-5=7, 5-8=22, 8-9=17, 18-21=-12

Horz: 1-2=-14, 2-5=-19, 5-8=34, 8-9=29

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=7, 2-5=11, 5-8=3, 8-9=-2, 18-21=-12

Horz: 1-2=-19, 2-5=-23, 5-8=15, 8-9=10

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-2, 2-5=3, 5-8=11, 8-9=7, 18-21=-12

Horz: 1-2=-10, 2-5=-15, 5-8=23, 8-9=19

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=9, 2-5=4, 5-8=-11, 8-9=-6, 18-21=-20

Horz: 1-2=-29, 2-5=-24, 5-8=9, 8-9=14

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-6, 2-5=-11, 5-8=4, 8-9=9, 18-21=-20

Horz: 1-2=-14, 2-5=-9, 5-8=24, 8-9=29

18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-5=-20, 5-9=-20, 18-28=-20, 28-29=-60, 29-30=-20, 30-31=-60, 21-31=-20, 32-33=-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

Uniform Loads (plf)

Vert: 1-2=-46, 2-5=-50, 5-8=-42, 8-9=-38, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F) Horz: 1-2=-4, 2-5=-0, 5-8=8, 8-9=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, 2-5=-42, 5-8=-50, 8-9=-46, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F)

Horz: 1-2=-12, 2-5=-8, 5-8=0, 8-9=4

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters.

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Job	Truss	Truss Type	Qty	Ply	DR HORTON; CALI; NP120; MASTER.RT	
3673321	A10	FAN	5	1	I62516	016
					Job Reference (optional)	

Builders FirstSource, Apex, NC 27523

B.630 s Mar 9 2023 Mirak Industries, Inc. Tue Dec 12 14:22:22 2023 Page 3 ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-i1jpS6VyH4pkt9IX9wRBUv2?Ql9ELclzHByJrOy9h4?

LOAD CASE(S)

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=-28, 2-5=-32, 5-8=-43, 8-9=-39, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F) Horz: 1-2=-22, 2-5=-18, 5-8=7, 8-9=11

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=-39, 2-5=-43, 5-8=-32, 8-9=-28, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F)

Horz: 1-2=-11, 2-5=-7, 5-8=18, 8-9=22 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-5=-60, 5-9=-20, 18-21=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-20, 5-9=-60, 18-21=-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: 1-5=-50, 5-9=-20, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-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: 1-5=-20, 5-9=-50, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F)



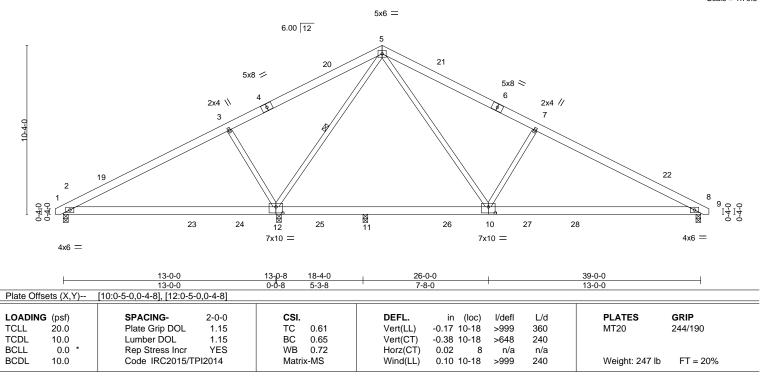
Job Truss Truss Type Qty Ply DR HORTON: CALI: NP120: MASTER.RT 162516017 3673321 A12 FAN Job Reference (optional) Builders FirstSource (Apex, NC), Apex, NC - 27523 8.630 s Aug 30 2023 MiTek Industries, Inc. Tue Dec 12 12:48:43 2023 Page 1 ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 39-6-0 0-6-0 19-6-0 28-10-6 39-0-0

9-4-6

9-4-6

Scale = 1:70.5

10-1-10



LUMBER-

2x6 SP No.2 TOP CHORD BOT CHORD 2x6 SP No.2 WEBS 2x4 SP No.3 BRACING-

TOP CHORD **BOT CHORD** WEBS

Structural wood sheathing directly applied or 5-3-6 oc purlins.

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

1 Row at midpt 5-12

REACTIONS. All bearings 0-3-8.

Max Horz 2=144(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2 except 12=-154(LC 12), 8=-106(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 11 except 2=491(LC 23), 12=1657(LC 1), 8=1013(LC 1)

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

TOP CHORD 2-3=-352/73, 5-7=-1219/242, 7-8=-1480/209

10-1-10

BOT CHORD 2-12=-60/258, 11-12=0/441, 10-11=0/441, 8-10=-74/1263 WFBS 5-10=-135/1005, 7-10=-615/279, 5-12=-1013/115, 3-12=-627/281

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-3-14 to 2-8-2, Interior(1) 2-8-2 to 19-6-0, Exterior(2) 19-6-0 to 22-6-0, Interior(1) 22-6-0 to 39-3-14 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) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 12=154, 8=106.





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

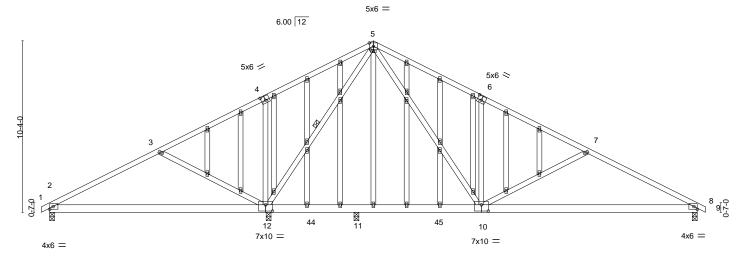


Job Truss Truss Type Qty DR HORTON: CALI: NP120: MASTER.RT 162516018 3673321 A14GR **GABLE** Job Reference (optional) 8.630 s Aug 30 2023 MiTek Industries, Inc. Tue Dec 12 12:48:46 2023 Page 1 Builders FirstSource (Apex, NC), Apex, NC - 27523

ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

39-6-0 0-6-0 26-0-0 32-3-9 39-0-0 6-3-9 6-6-0 6-6-0 6-3-9 6-8-7

Scale = 1:69.4



		13-0-0		13-ρ-8	18-4-0	26-	0-0	1		39-0-0	
	1	13-0-0		0- 0 -8	5-3-8	7-8	3-0	1		13-0-0	
Plate Offse	ets (X,Y)	[4:0-3-0,0-3-0], [5:0-2-0,0-0	-8], [6:0-3-0,0	0-3-0], [10:0	-5-0,0-4-8], [1	2:0-5-0,0-4-8]					
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	0.61	Vert(LL)	-0.19 10-43	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.41 10-43	>598	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.02 2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2	2014	Matri	x-MS	Wind(LL)	0.06 10-43	>999	240	Weight: 334 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x6 SP No.2 WEBS 2x4 SP No.3 **OTHERS** 2x4 SP No.3 BRACING-

TOP CHORD **BOT CHORD** WEBS

Structural wood sheathing directly applied or 4-2-1 oc purlins.

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

1 Row at midpt 5-12

REACTIONS. All bearings 0-3-8.

Max Horz 2=-145(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 8 except 12=-208(LC 8)

Max Grav All reactions 250 lb or less at joint(s) except 2=481(LC 19), 12=1802(LC 1), 8=996(LC 1), 11=361(LC

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

TOP CHORD 2-3=-442/0, 3-4=-128/252, 4-5=-92/251, 5-6=-1135/230, 6-7=-1129/102, 7-8=-1545/178

BOT CHORD 2-12=-48/349, 11-12=0/390, 10-11=0/390, 8-10=-77/1318

5-10=-184/1016, 6-10=-413/212, 7-10=-435/192, 5-12=-973/156, 4-12=-413/212, **WEBS**

3-12=-450/194

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 12=208
- 9) 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) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-5=-60, 5-9=-60, 12-38=-20, 11-12=-58(F=-38), 11-41=-20



December 12,2023



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Job Truss Truss Type Qty Ply DR HORTON: CALI: NP120: MASTER.RT 162516019 3673321 A15C CATHEDRAL Job Reference (optional) Builders FirstSource (Apex, NC), Apex, NC - 27523 8.630 s Aug 30 2023 MiTek Industries, Inc. Tue Dec 12 12:48:47 2023 Page 1 ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

9-4-6

28-10-6

9-4-6

Scale = 1:71.1

39-6-0 0-6-0

39-0-0

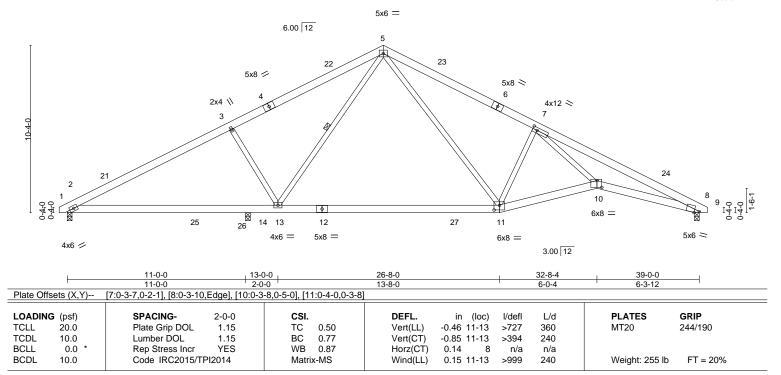
10-1-10

Structural wood sheathing directly applied or 3-2-3 oc purlins.

5-13

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

1 Row at midpt



BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

2x6 SP No.2 TOP CHORD **BOT CHORD** 2x6 SP No.2 *Except*

2-12,11-12: 2x6 SP DSS

WEBS 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 8=0-3-8, 14=0-3-8

Max Horz 2=144(LC 12)

10-1-10

Max Uplift 2=-69(LC 12), 8=-103(LC 13), 14=-48(LC 12) Max Grav 2=1004(LC 2), 8=1332(LC 1), 14=866(LC 1)

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

TOP CHORD $2-3=-1730/129,\ 3-5=-1494/168,\ 5-7=-2030/264,\ 7-8=-4157/227$

BOT CHORD 2-14=-143/1480, 13-14=-143/1480, 11-13=0/1106, 10-11=-86/2212, 8-10=-108/3747 **WEBS** 3-13=-566/281, 5-13=-165/406, 5-11=-152/1038, 7-11=-1170/288, 7-10=-27/2111

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-3-14 to 2-8-2, Interior(1) 2-8-2 to 19-6-0, Exterior(2) 19-6-0 to 22-6-0, Interior(1) 22-6-0 to 39-3-14 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14 except (jt=lb) 8=103.



December 12,2023



Job Truss Truss Type Qty DR HORTON: CALI: NP120: MASTER.RT 162516020 3673321 A16CG **GABLE** Job Reference (optional) Builders FirstSource (Apex, NC), Apex, NC - 27523 8.630 s Aug 30 2023 MiTek Industries, Inc. Tue Dec 12 12:48:49 2023 Page 1

ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 39-6-0 0-6-0 19-6-0 19-6-0

Scale = 1:73.6

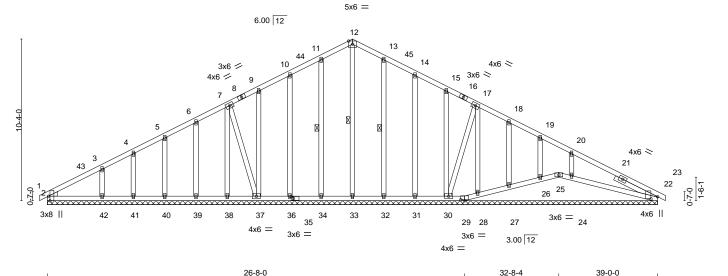


Plate Offsets (X,Y)--[2:0-3-8,Edge], [22:0-1-9,0-5-2], [29:0-3-0,0-0-12], [35:0-1-11,0-1-8] **PLATES** LOADING (psf) SPACING-CSI in (loc) I/defl L/d GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.36 Vert(LL) 0.01 23 120 244/190 n/r MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.24 Vert(CT) 0.01 23 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.15 Horz(CT) 0.01 22 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Weight: 282 lb FT = 20%Matrix-S

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

2x4 SP No.2 TOP CHORD 2x4 SP No.2 **BOT CHORD** WEBS 2x4 SP No.3 **OTHERS**

2x4 SP No.3

Left: 2x4 SP No.3 SLIDER

WEDGE

Right 2x4 SP No.3 3-0-1

REACTIONS. All bearings 39-0-0. (lb) -

Max Horz 2=145(LC 16) Max Uplift All uplift 100 lb or less at joint(s) 2, 29, 22, 34, 36, 37, 39, 40, 41,

42, 32, 31, 27, 24 except 25=-121(LC 3), 30=-136(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 29, 25, 22, 33, 34, 36, 37, 38,

39, 40, 41, 32, 31, 28, 27, 26 except 42=279(LC 23), 30=257(LC 24),

24=481(LC 24)

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

WEBS 20-24=-307/160

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 19-6-0, Exterior(2) 19-6-0 to 22-6-0, Interior(1) 22-6-0 to 39-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 29, 22, 34, 36, 37, 39, 40, 41, 42, 32, 31, 27, 24 except (jt=lb) 25=121, 30=136.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 25, 28, 27, 26, 24.



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

12-33, 11-34, 13-32

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 24-25.

1 Row at midpt

December 12,2023



Job Truss Truss Type Qty DR HORTON: CALI: NP120: MASTER.RT 162516021 3673321 B01G **GABLE** Job Reference (optional) Builders FirstSource (Apex, NC), Apex, NC - 27523 8.630 s Aug 30 2023 MiTek Industries, Inc. Tue Dec 12 12:48:51 2023 Page 1 ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

21-2-0 0-6-0 20-8-0 10-4-0

Scale = 1:38.9

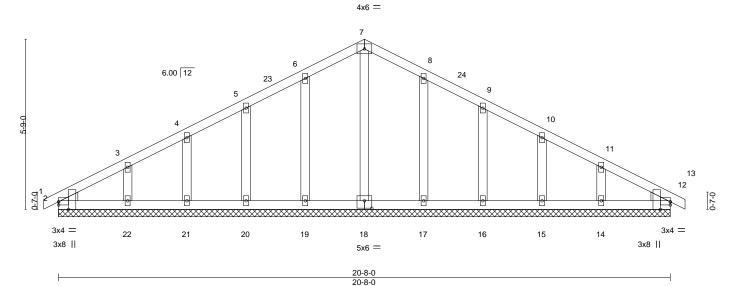


Plate Offsets (X,Y)--[2:0-0-0,0-1-5], [2:0-3-1,Edge], [12:0-3-1,Edge], [12:0-0-0,0-1-5], [18:0-3-0,0-3-0] SPACING-(loc) **PLATES GRIP** LOADING (psf) DEFL. in I/defI L/d TCLL 20.0 Plate Grip DOL 1.15 TC 0.07 Vert(LL) 0.00 12 120 244/190 n/r MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.05 Vert(CT) 0.00 13 n/r 120 BCLL 0.0 Rep Stress Incr NO WB 0.06 Horz(CT) 0.00 12 n/a n/a Code IRC2015/TPI2014 FT = 20% **BCDL** 10.0 Weight: 109 lb Matrix-S

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 **OTHERS** 2x4 SP No.3 WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

REACTIONS. All bearings 20-8-0.

Max Horz 2=78(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14

Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 22, 17, 16, 15, 12, 14

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-6-0 to 2-4-0, Exterior(2) 2-4-0 to 10-4-0, Corner(3) 10-4-0 to 13-4-0, Exterior(2) 13-4-0 to 21-2-0 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
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14.



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

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

December 12,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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

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Job Truss Truss Type Qty DR HORTON; CALI; NP120; MASTER.RT 162516022 3673321 B02 COMMON Job Reference (optional) 8.630 s Aug 30 2023 MiTek Industries, Inc. Tue Dec 12 12:48:52 2023 Page 1 Builders FirstSource (Apex, NC), Apex, NC - 27523 ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

20-8-0

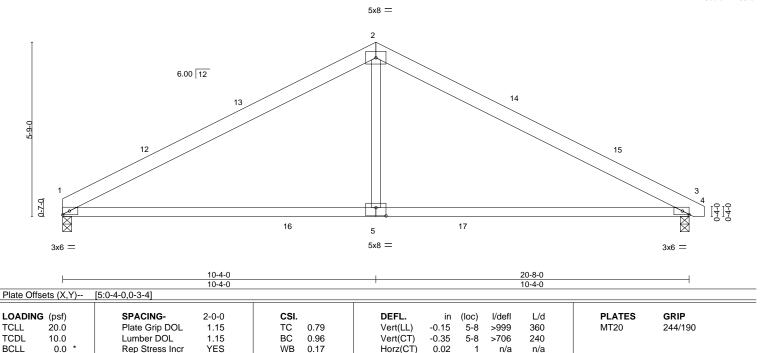
10-4-0

Scale = 1:38.0

21-2-0 0-6-0

FT = 20%

Weight: 94 lb



Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.12

>999

5-8

240

Rigid ceiling directly applied or 2-2-0 oc bracing.

Structural wood sheathing directly applied or 4-2-2 oc purlins.

LUMBER-

BCDL

2x6 SP No.2 2x4 SP No.2 TOP CHORD BOT CHORD WEBS 2x4 SP No.3

10.0

REACTIONS. (size) 1=0-3-8, 3=0-3-8

Max Horz 1=-80(LC 17)

Max Uplift 1=-16(LC 12), 3=-21(LC 13) Max Grav 1=827(LC 1), 3=846(LC 1)

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

Code IRC2015/TPI2014

TOP CHORD 1-2=-1157/125, 2-3=-1157/123

BOT CHORD 1-5=0/969, 3-5=0/969

WFBS 2-5=0/438

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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 3-0-0, Interior(1) 3-0-0 to 10-4-0, Exterior(2) 10-4-0 to 14-6-15, Interior(1) 14-6-15 to 20-11-14 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

Matrix-MS

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

10-4-0

- * 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



December 12,2023

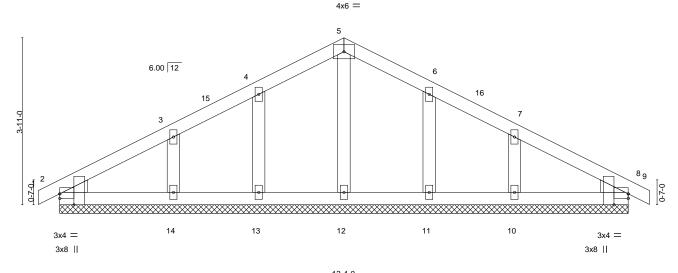
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Job Truss Truss Type Qty DR HORTON: CALI: NP120: MASTER.RT 162516023 3673321 C01G **GABLE** Job Reference (optional) Builders FirstSource (Apex, NC), Apex, NC - 27523 8.630 s Aug 30 2023 MiTek Industries, Inc. Tue Dec 12 12:48:54 2023 Page 1 ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 13-10-0 0-6-0 6-8-0 6-8-0

Scale = 1:27.0



13-4-0 Plate Offsets (X,Y)--[2:0-0-0,0-1-5], [2:0-3-1,Edge], [8:0-0-0,0-1-5], [8:0-3-1,Edge]

LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.08 BC 0.06 WB 0.04	DEFL. in Vert(LL) 0.00 Vert(CT) 0.00 Horz(CT) 0.00	9 1	efl L/d n/r 120 n/r 120 n/a n/a	PLATES GRIP MT20 244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	11012(01) 0.00	0 1	1/4 11/4	Weight: 62 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 **OTHERS** 2x4 SP No.3 WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

REACTIONS. All bearings 13-4-0.

Max Horz 2=-52(LC 13) (lb) -

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

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-6-0 to 2-8-0, Exterior(2) 2-8-0 to 6-8-0, Corner(3) 6-8-0 to 9-8-0, Exterior(2) 9-8-0 to 13-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10



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

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

December 12,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty DR HORTON; CALI; NP120; MASTER.RT 162516024 3673321 C02 COMMON Job Reference (optional) 8.630 s Aug 30 2023 MiTek Industries, Inc. Tue Dec 12 12:48:55 2023 Page 1 Builders FirstSource (Apex, NC), Apex, NC - 27523, ID:GkdJTsrewC8FsrdZ9sGJOzyyZcn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 0-6-0 6-8-0 6-8-0 Scale = 1:26.3

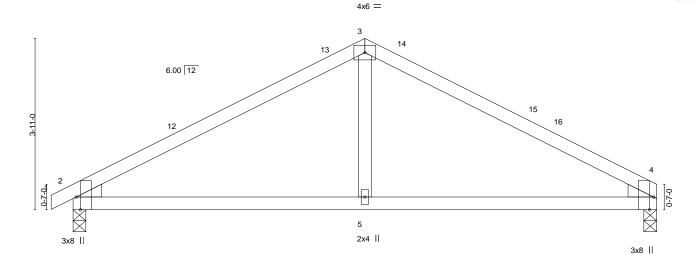


Plate Off	rsets (X,Y)	[2:0-3-8,Edge], [4:0-3-8,Edge]		
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.53	Vert(LL) -0.06 5-11 >999 360 MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.45	Vert(CT) -0.11 5-11 >999 240
BCLL	0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.02 2 n/a n/a
BCDL	10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.06 5-11 >999 240 Weight: 50 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SP No.2 TOP CHORD BOT CHORD 2x4 SP No.2 **WEBS** 2x4 SP No.3

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 4=0-3-8

Max Horz 2=66(LC 16)

Max Uplift 2=-29(LC 12), 4=-21(LC 13) Max Grav 2=564(LC 1), 4=533(LC 1)

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

TOP CHORD 2-3=-714/119. 3-4=-714/122 **BOT CHORD** 2-5=-29/568, 4-5=-29/568

WEBS 3-5=0/294

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 6-8-0, Exterior(2) 6-8-0 to 10-10-15, Interior(1) 10-10-15 to 13-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



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

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

December 12,2023



Job	Truss	Truss Type	Qty	Ply	DR HORTON; CALI; NP120; MASTER.RT
3673321	P02	MONO TRUSS	2	_	16251602
3073321	P02	IMONO TROSS	3	'	Job Reference (optional)

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

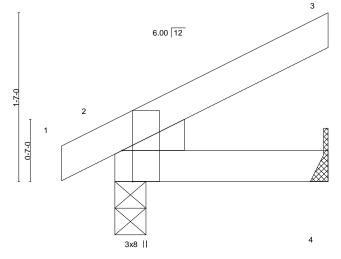
8.630 s Aug 30 2023 MiTek Industries, Inc. Tue Dec 12 12:48:56 2023 Page 1

Structural wood sheathing directly applied or 2-0-0 oc purlins.

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

2-0-0 2-0-0 0-6-0

Scale = 1:10.8



VERTICAL SUPPORT OF FREE END OF CHORD IS REQUIRED.

2-0-0

BRACING-

TOP CHORD

BOT CHORD

Plate Off	Plate Offsets (X,Y) [2:0-3-8,Edge]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.01	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/Ti	PI2014	Matri	x-MP	Wind(LL)	0.00	7	>999	240	Weight: 8 lb	FT = 20%

LUMBER-

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

WEDGE Left: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 4=Mechanical

Max Horz 2=37(LC 12)

Max Uplift 2=-5(LC 12), 4=-18(LC 9) Max Grav 2=113(LC 1), 4=77(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=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
- 2) 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



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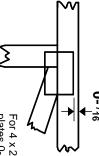


Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 × 4

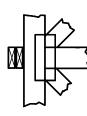
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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/letter where bearings occur Min size shown is for crushing only.

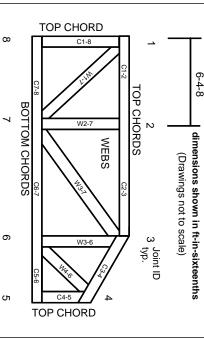
Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction Design Standard for Bracing.

Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-22:

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282 ESR-4722, ESL-1388

Design General Notes

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

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

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MiTek



MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

▲ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

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- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.

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- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.