



FRONT ELEVATION

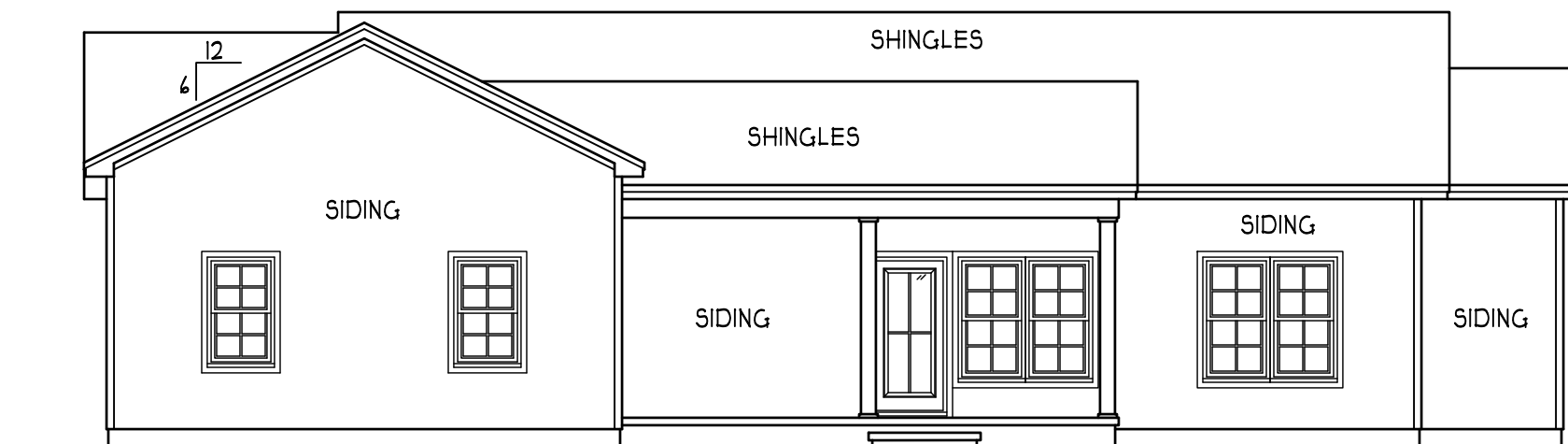
SCALE 1/4" = 1'-0"

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

APPROVED
Limited building only review.
Permit holder responsible for full compliance with the code.

02/26/2024

ENERGY COMPLIANCE
ZONE 3 = MAX. GLAZING U-FACTOR .35
R-VALUE = CEILING R38, WALLS R15, FLOORS R19
FOR JOHNSTON, SAMPSON, WAYNE COUNTY
ZONE 4 = MAX. GLAZING U-FACTOR .35
R-VALUE = CEILING R38, WALLS R15, FLOORS R19
FOR WAKE, DURHAM, ORANGE COUNTY



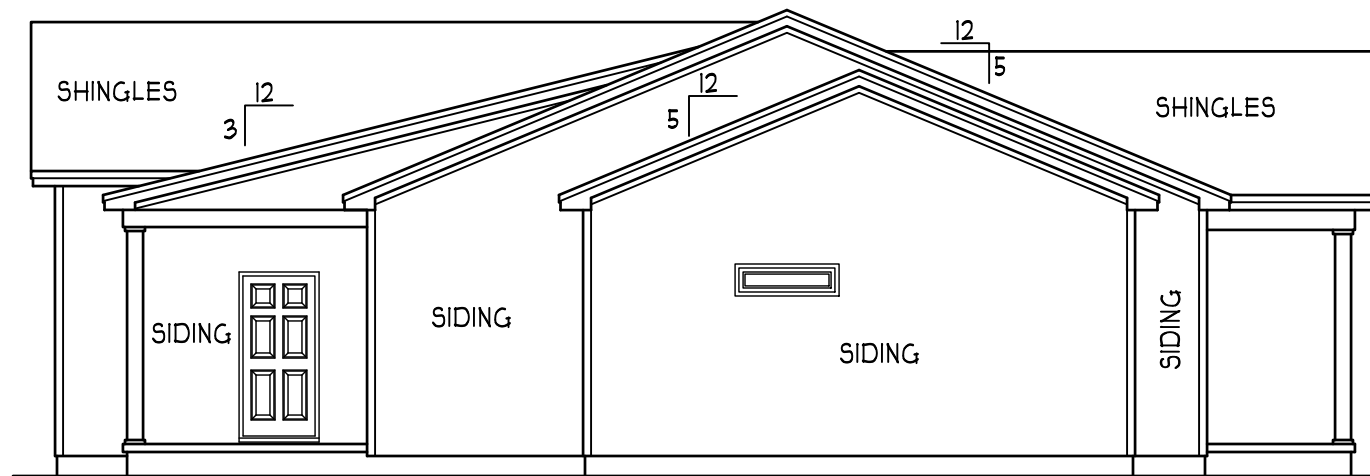
REAR ELEVATION

SCALE 1/8" = 1'-0"

ATTIC VENTILATION:

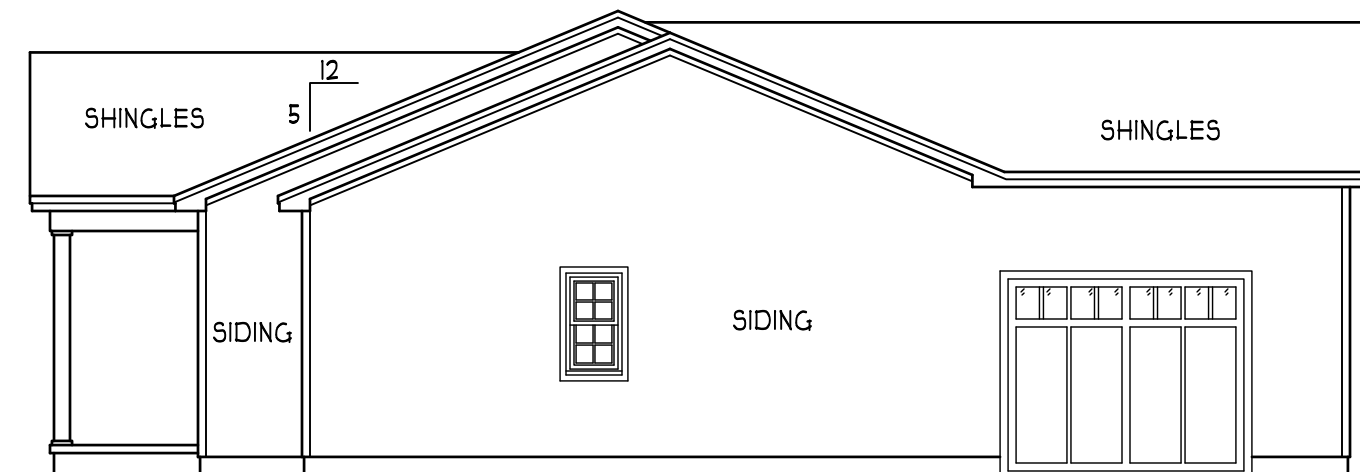
THE NET FREE VENTILATING AREA SHALL BE NOT LESS THAN 1 TO 150 OF THE AREA OF THE SPACE VENTILATED EXCEPT THAT THE AREA MAY BE 1 TO 300 PROVIDED AT LEAST 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION TO BE PROVIDED BY EAVE OR CORNICE VENTS.

GROSS ATTIC AREA TO BE VENTILATED 2801 SQ.FT.
2801/150 = 18.67 SQ.FT. NET FREE AREA



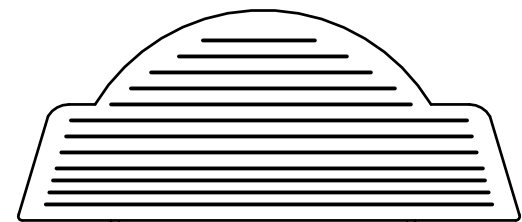
LEFT ELEVATION

SCALE 1/8" = 1'-0"



RIGHT ELEVATION

SCALE 1/8" = 1'-0"



MONIKA FOUNTAIN
CASTON CONST.

HEATED FOOTAGE:

#2029

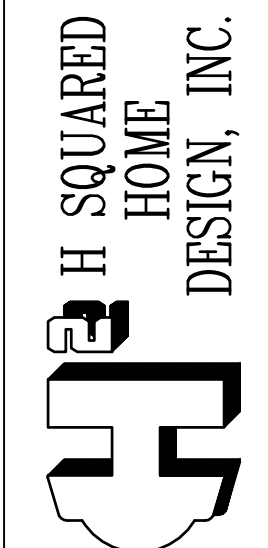
SQUARE FOOTAGE:

= 2029
= 132
= 220
= 420

FIRST FLOOR
FRONT PORCH
REAR PORCH
GARAGE

DESIGNED BY:

HEATHER or
JOHNATHAN HALL
165 HEATHERSTONE CT
BENSON NC 27504
(919) 207-1403



ANY DEVIATION OF THE SPECIFIED MEASUREMENTS OR DIMENSIONS VOIDS H SQUARED HOME DESIGN, INC.'S LIABILITY.

THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODES 2018 EDITION.

THIS PLAN IS TO ONLY BE BUILT BY THE ABOVE CITED BUILDER OR HOMEOWNER. NOT FOR MULTIPLE BUILDS UNLESS APPROVED BY H SQUARED.

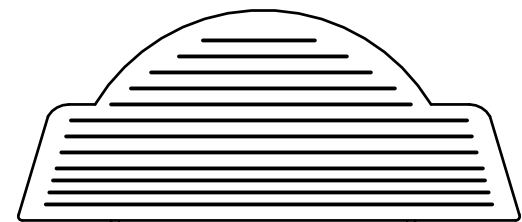
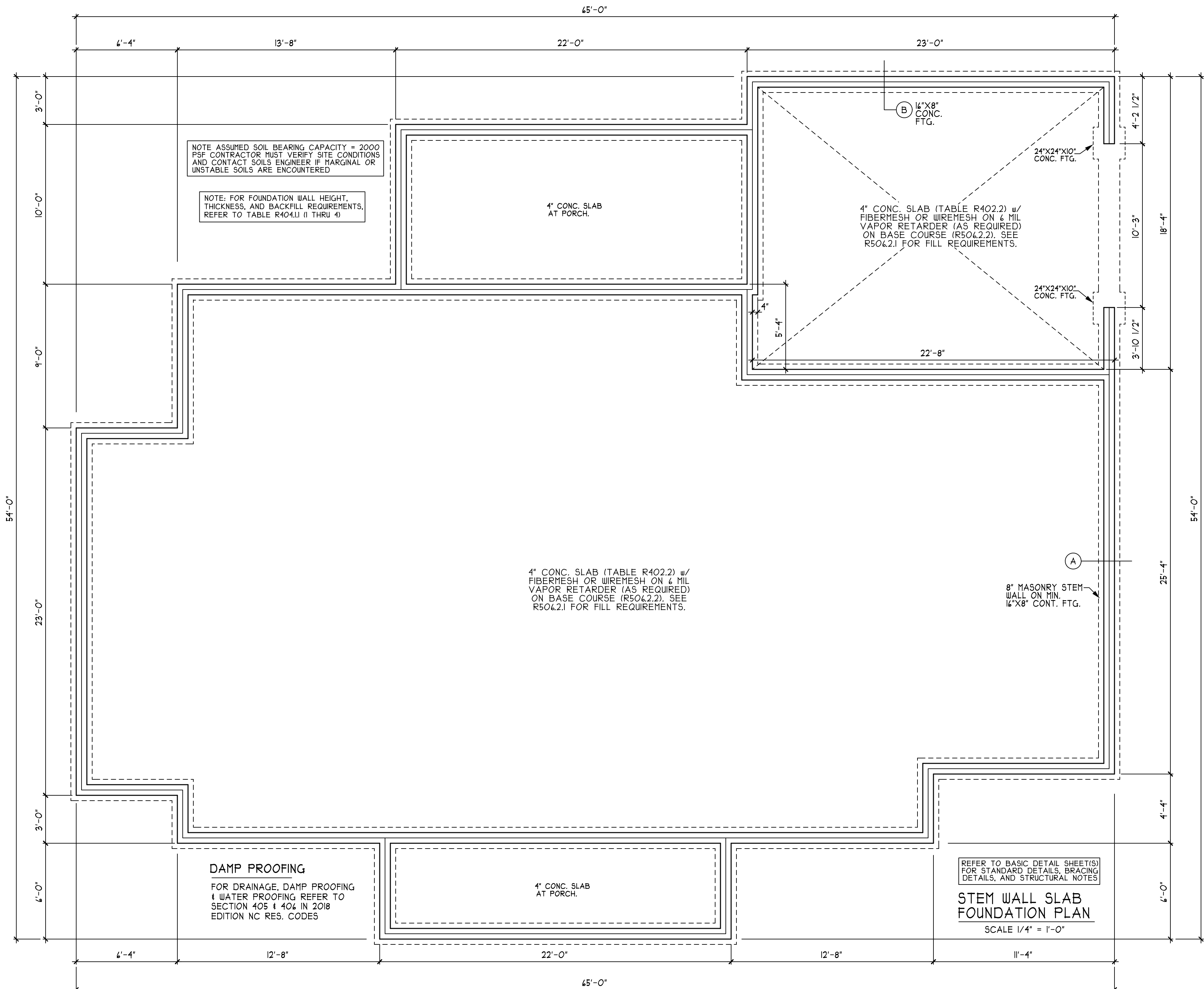
DATE:

04/06/23

1 STORY

FILE:

120122

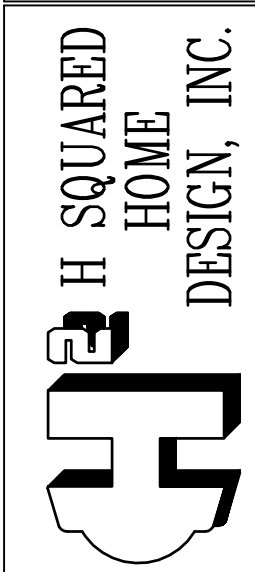


MONIKA FOUNTAIN
CASTON CONST.

HEATED FOOTAGE:
#2029

SQUARE FOOTAGE:
FIRST FLOOR = 2029
FRONT PORCH = 132
REAR PORCH = 220
GARAGE = 420

DESIGNED BY:
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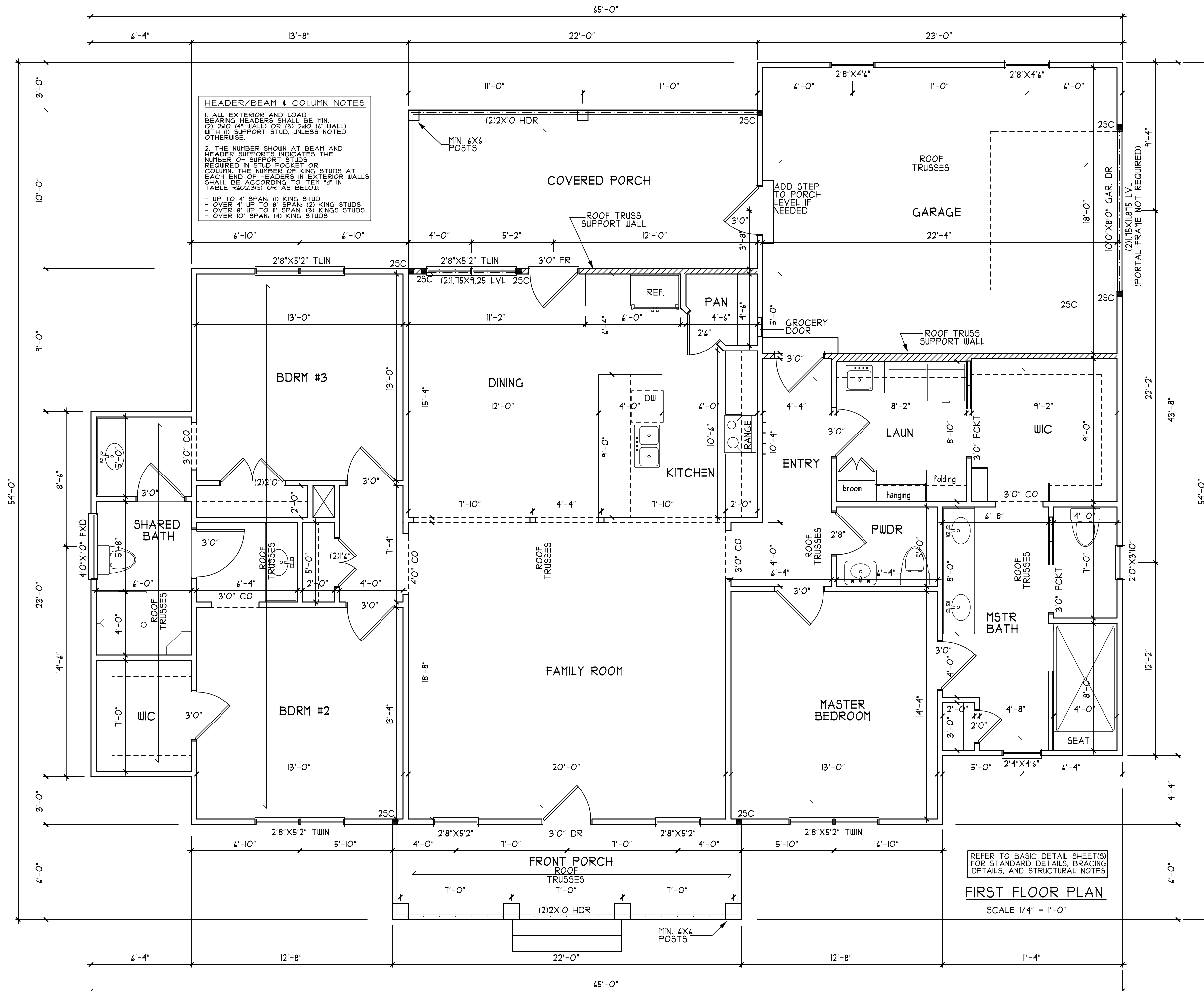
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DATE:
04/06/23

1 STORY

FILE:
120122



HEADER/BEAM & COLUMN NOTES

1. ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2X10 (4" WALL) OR (3) 2X10 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.

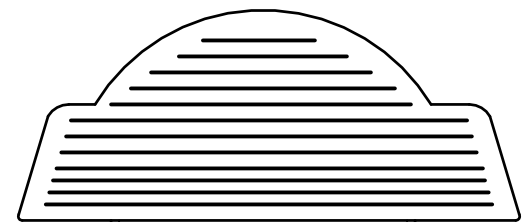
2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW:

- UP TO 4' SPAN: (1) KING STUD
- OVER 4' UP TO 8' SPAN: (2) KING STUDS
- OVER 8' UP TO 12' SPAN: (3) KING STUDS
- OVER 12' SPAN: (4) KING STUDS

REFER TO BASIC DETAIL SHEET(S) FOR STANDARD DETAILS, BRACING DETAILS, AND STRUCTURAL NOTES

FIRST FLOOR PLAN

SCALE 1/4" = 1'-0"



MONIKA FOUNTAIN
CASTTON CONST.

HEATED FOOTAGE:
#2029

SQUARE FOOTAGE:
= 2029
FIRST FLOOR = 132
FRONT PORCH = 220
REAR PORCH = 420
GARAGE

DESIGNED BY:
HEATHER or
JOHNATHAN HALL
165 HEATHERSTONE CT
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H SQUARED HOME DESIGN, INC.

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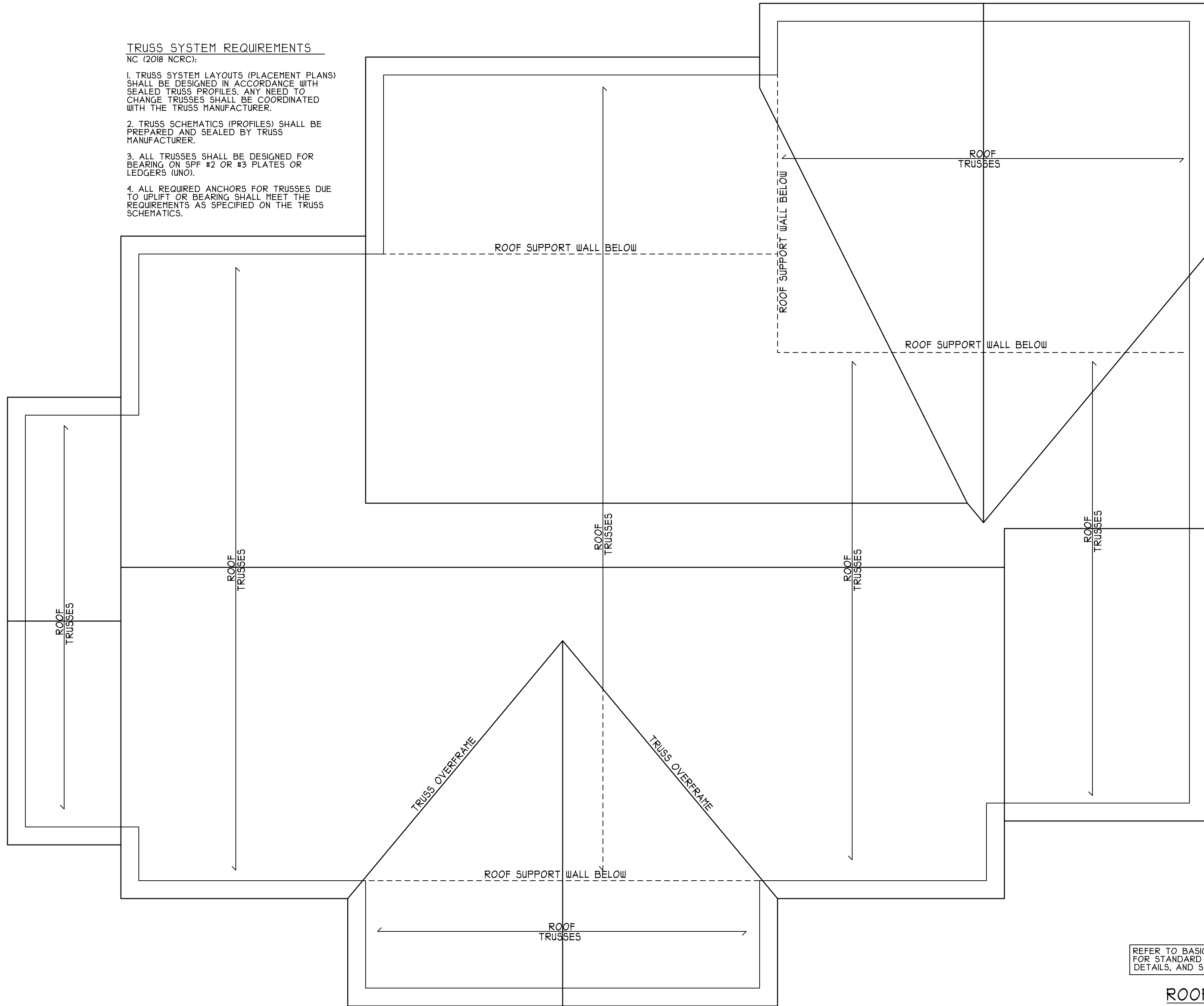
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DATE:
04/06/23

1 STORY

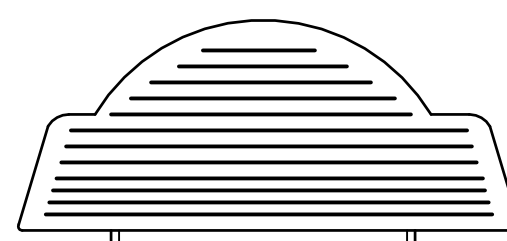
FILE:
120122

- TRUSS SYSTEM REQUIREMENTS**
NC (2018 NCRC):
1. TRUSS SYSTEM LAYOUTS (PLACEMENT PLANS) SHALL BE DESIGNED IN ACCORDANCE WITH SEALED TRUSS PROFILES. ANY NEED TO CHANGE TRUSSES SHALL BE COORDINATED WITH THE TRUSS MANUFACTURER.
 2. TRUSS SCHEMATICS (PROFILES) SHALL BE PREPARED AND SEALED BY TRUSS MANUFACTURER.
 3. ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SPF #2 OR #3 PLATES OR LEDGERS (UNO).
 4. ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATICS.



REFER TO BASIC DETAIL SHEET(S)
FOR STANDARD DETAILS, BRACING
DETAILS, AND STRUCTURAL NOTES

ROOF PLAN
SCALE 1/4" = 1'-0"



MONIKA FOUNTAIN					
CASTON CONST.					
HEATED FOOTAGE:	#2029				
SQUARE FOOTAGE:	<table border="0"> <tr> <td>= 2029</td> </tr> <tr> <td>= 132</td> </tr> <tr> <td>= 220</td> </tr> <tr> <td>= 420</td> </tr> </table>	= 2029	= 132	= 220	= 420
= 2029					
= 132					
= 220					
= 420					
DESIGNED BY:	HEATHER or JOHNATHAN HALL 165 HEATHERSTONE CT BENSON NC 27504 (919) 207-1403				
H SQUARED HOME DESIGN, INC.					
<small>ANY DEVIATION OF THE SPECIFIED MEASUREMENTS OR DIMENSIONS VOIDS H SQUARED HOME DESIGN, INC.'S LIABILITY.</small>					
<small>THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODES 2018 EDITION.</small>					
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DATE:	04/06/23				
FILE:	120122				

STRUCTURAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER OR DESIGNER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK. NOR WILL THE ENGINEER OR DESIGNER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. "CONSTRUCTION REVIEW" SERVICES ARE NOT PART OF OUR CONTRACT. ALL MEMBERS SHALL BE FRAMED, ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.
- DESIGN LOADS (R301.4)

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (LL)
ROOMS OTHER THAN SLEEPING ROOMS	40	10	L/360
SLEEPING ROOMS	30	10	L/360
ATTIC WITH PERMANENT STAIR	40	10	L/360
ATTIC WITH OUT PERMANENT STAIR	20	10	L/360
ATTIC WITH OUT STORAGE	10	10	L/240
STAIRS	40	---	L/360
EXTERIOR BALCONIES	60	10	L/360
DECKS	40	10	L/360
GUARDRAILS AND HANDRAILS	200	---	---
PASSENGER VEHICLE GARAGES	50	10	L/360
FIRE ESCAPES	40	10	L/360
SNOW	20	---	---

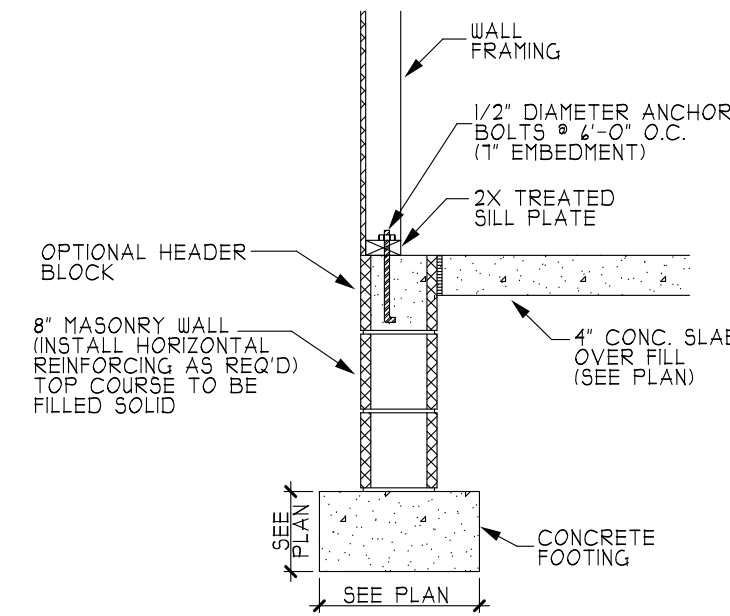
WIND LOAD (BASED ON 115/120 MPH WIND VELOCITY & EXPOSURE B)
- WALL BRACING: BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO SECTION R602.10.3. THE AMOUNT AND LOCATION OF BRACING SHALL COMPLY WITH TABLE R602.10.1. THE LENGTH OF BRACED PANELS SHALL BE DETERMINED BY SECTION R602.10.4. LATERAL BRACING SHALL BE SATISFIED PER METHOD 3 BY CONTINUOUSLY SHEATHING WALLS WITH STRUCTURAL SHEATHING PER SECTION R602.10.3. NOTE THAT ANY SPECIFIC BRACED WALL DETAIL SHALL BE INSTALLED AS SPECIFIED.
- CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINMENT PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP.
- ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.
- ALL FRAMING LUMBER SHALL BE SPF #2 (F_b = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP #2 (F_b=975 PSI). PLATE MATERIAL MAY BE SPF #3 OR SYP #3 (F_{c(perp)} = 425 PSI - MIN).
- ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (1) 2x4 STUD COLUMN FOR 4'-0" MAX. BEAM SPAN (UNO), (2) 2x4 STUDS FOR BEAM SPAN GREATER THAN 4'-0" (UNO).
- L.V.L. SHALL BE LAMINATED VENEER LUMBER: F_b=2400 PSI, F_v=285 PSI, E=1.9x10⁶ PSI. P.S.L. SHALL BE PARALLEL STRAND LUMBER: F_b=2900 PSI, F_v=290 PSI, E=2.0x10⁶ PSI. L.S.L. SHALL BE LAMINATED STRAND LUMBER: F_b=2250 PSI, F_v=400 PSI, E=1.55x10⁶ PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.
- ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH ANY SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH DESIGNER OR ENGINEER.
- ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDED THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. . ALL STEEL TUBING SHALL BE ASTM A500.
- REBAR SHALL BE DEFORMED STEEL, ASTM#65, GRADE 60.
- FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX), AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.
- BRICK LINTELS SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 4'-0" SPAN AND 4"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-0". SEE PLANS FOR SPANS OVER 9'-0".
- THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS FOR A MEAN ROOF HEIGHT OF 35 FEET OR LESS SHALL BE 25 PSF.
- THE POSITIVE AND NEGATIVE DESIGN PRESSURES REQUIRED FOR ANY ROOF OR WALL CLADDING APPLICATION NOT SPECIFICALLY ADDRESSED IN THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION SHALL BE AS FOLLOWS:
ROOF:
 45.4 PSF - 2.25:12 PITCH OR LESS
 34.8 PSF - 2.25:12 TO 1:12 PITCH
 21 PSF - 1:12 TO 12:12 PITCH
WALLS:
 24.1 PSF - WALLS
 SEE ALSO SECTION R103.1.3 LINTELS

HEADER/BEAM & COLUMN NOTES

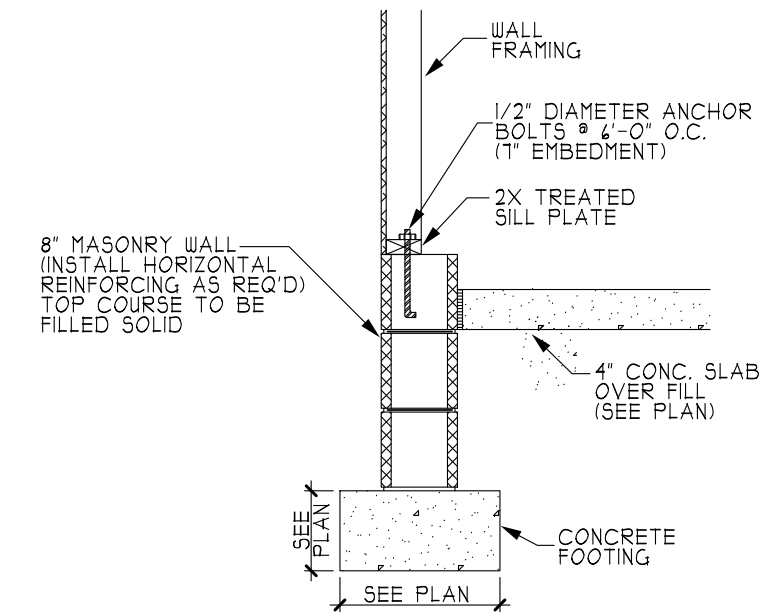
- ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2x10 (4" WALL) OR (3) 2x10 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.
- THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW:
 - UP TO 4' SPAN: (1) KING STUD
 - OVER 4' UP TO 8' SPAN: (2) KING STUDS
 - OVER 8' UP TO 11' SPAN: (3) KING STUDS
 - OVER 11' SPAN: (4) KING STUDS

TRUSS SYSTEM REQUIREMENTS

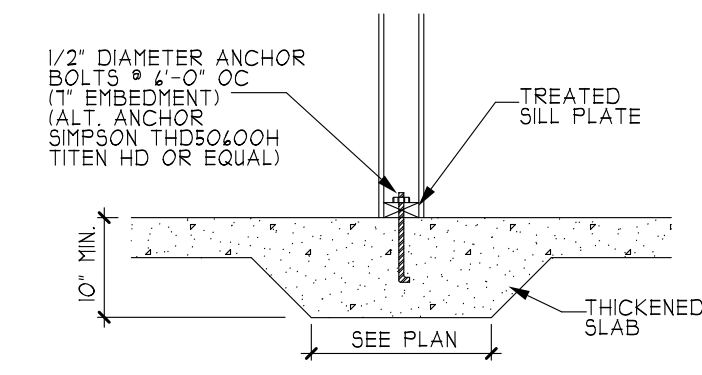
- NC (2018 NCRC):
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 - TRUSS SCHEMATICS (PROFILES) SHALL BE PREPARED AND SEALED BY TRUSS MANUFACTURER.
 - ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SPF #2 OR #3 PLATES OR LEDGERS (UNO).
 - ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATICS.



(A) STEM WALL FOOTING (SIDING)



(B) GARAGE WALL FOOTING (SIDING)



(C) THICKENED SLAB (INTERIOR BEARING WALL)

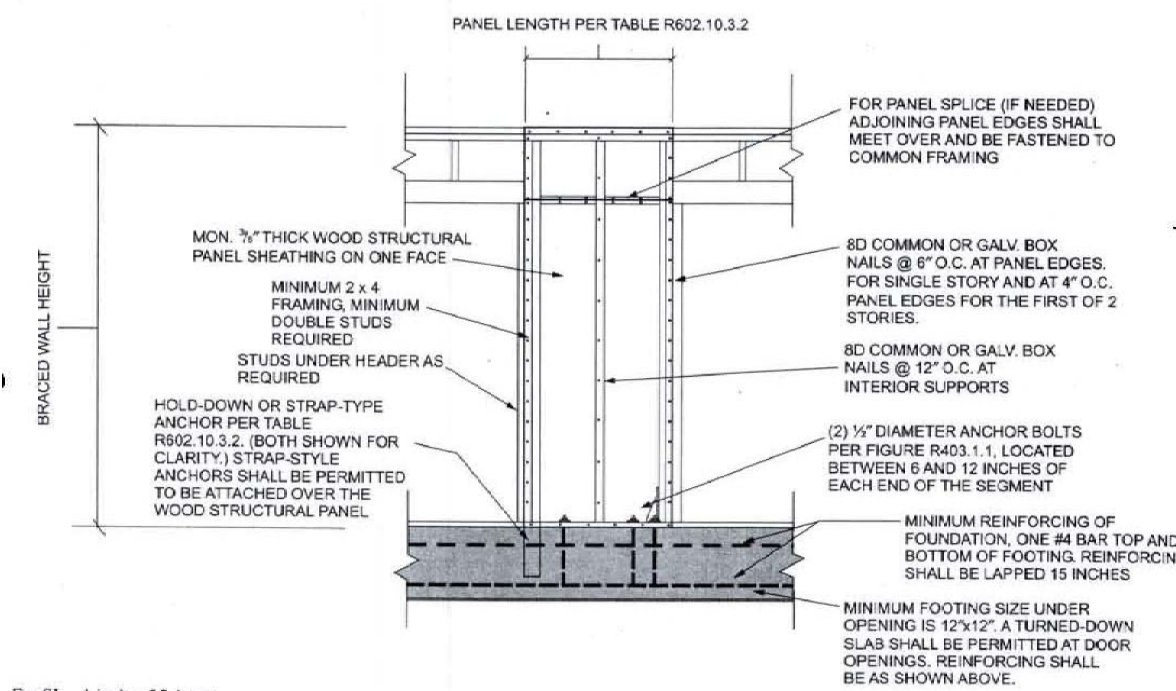


FIGURE R602.10.3.2 ALTERNATE BRACED WALL PANEL

For SF: 1 inch = 25.4 mm.

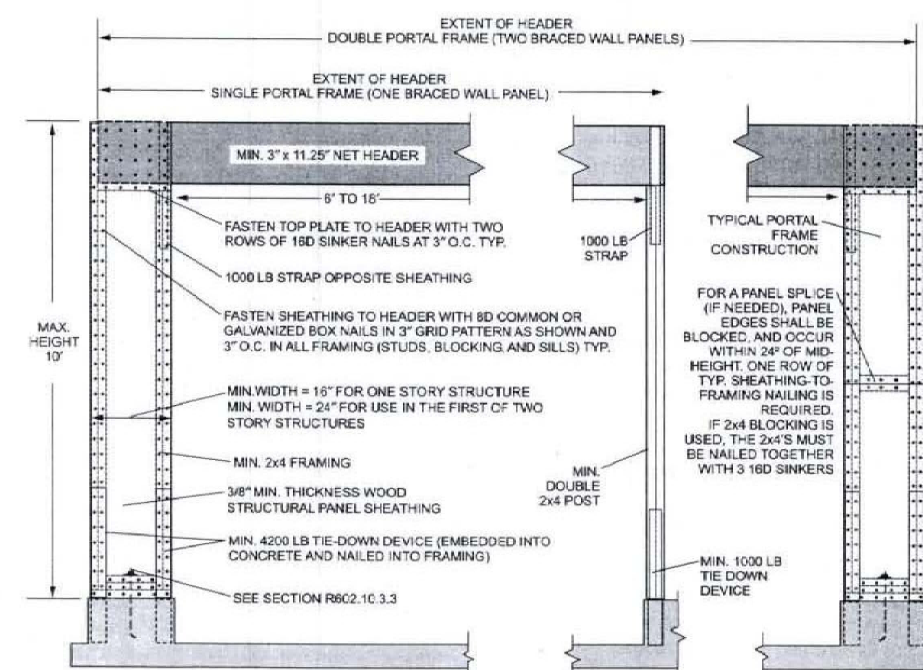
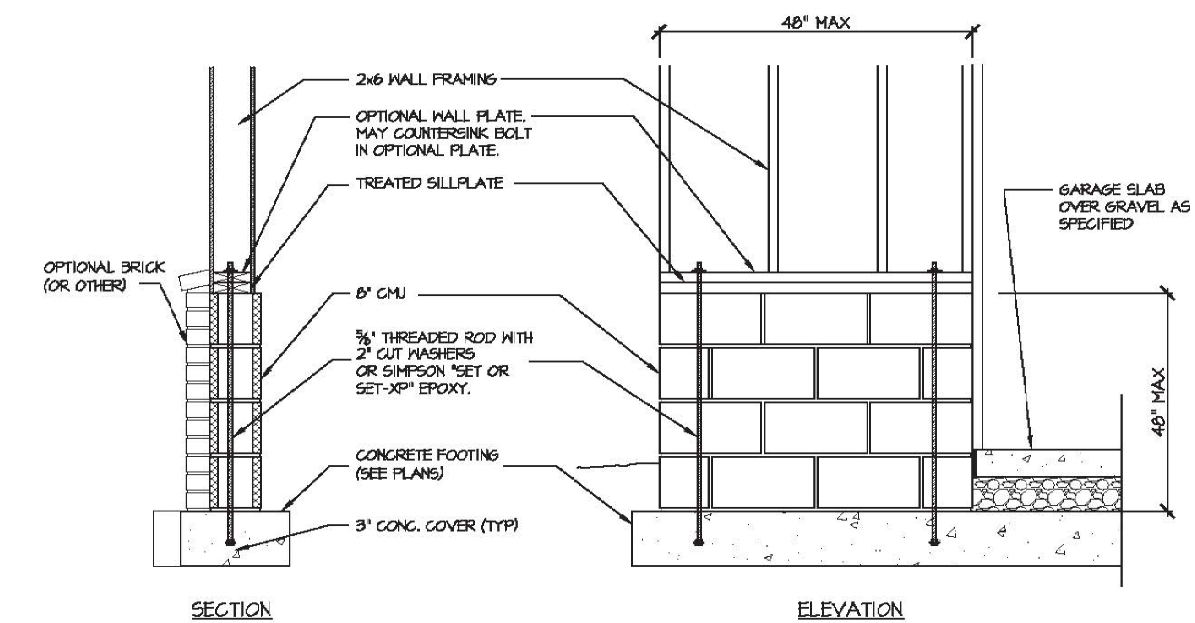


FIGURE R602.10.3.3 METHOD PFH: PORTAL FRAME WITH HOLD-DOWNS

For SF: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound force = 4.448 N.



GARAGE WING WALL REINFORCING PER IRC FIGURE R602.10.4.3

BASIC BUILDING
DETAIL SHEET
(115/120 MPH)

*PLEASE NOTE THAT NOT ALL DETAILS APPLY TO EVERY PLAN.

HEATHER HALL
165 HEATHERSTONE CT
BENSON NC 27504
(919) 207-1403

H SQUARED HOME DESIGN, INC.

ANY DEVIATION OF THE H SQUARED HOME DESIGN, INC.'S LIABILITY. THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH THE BUILDING CODES 2018 EDITION.

DATE:

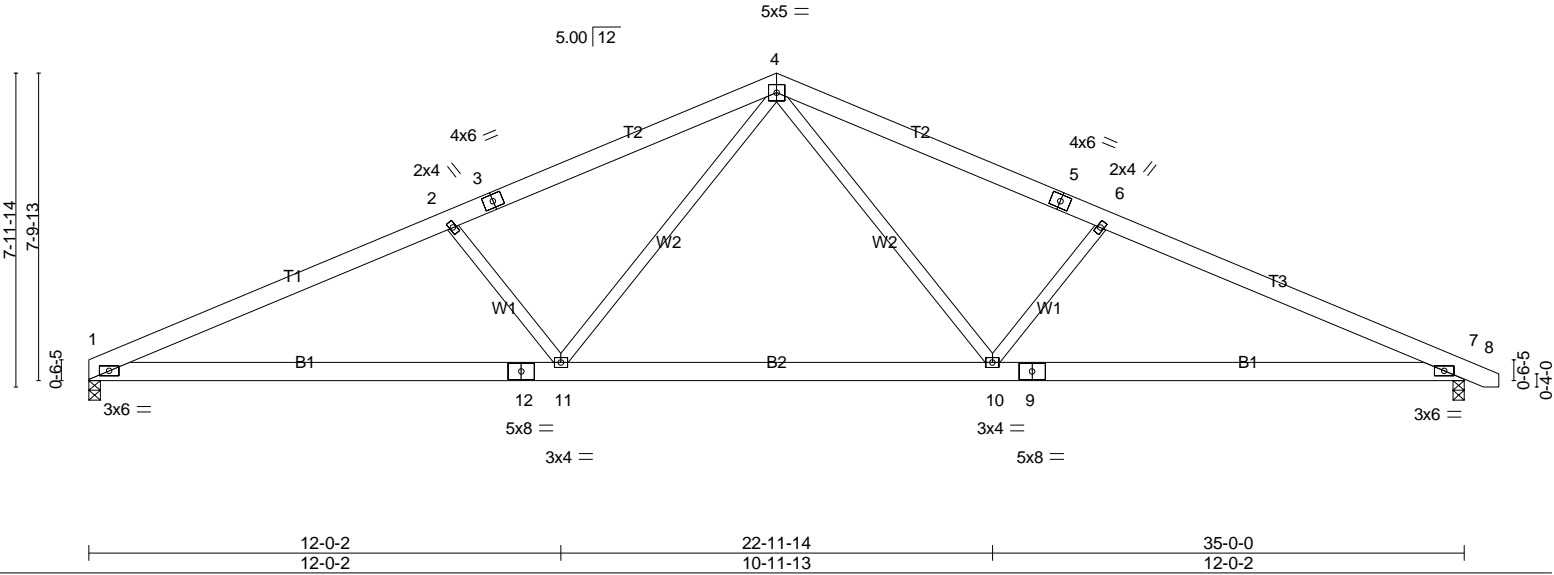
FILE:

Job FOUNTAIN RES	Truss A2	Truss Type FINK	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Sun Apr 2 12:33:18 2023 Page 1
 ID:4ZVSt?bZ?X9_VP0QdbZHFLzVSfg-Ch8FBnw2yp2m4jY_qdIKhNmKxJm8LkxNI3gNYozUmcl



Scale = 1:58.6



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 0.41	Vert(LL) -0.26 10-11 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.56	Vert(CT) -0.37 10-11 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.23	Horz(CT) 0.07 7 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.07 11 >999 240		Weight: 213 lb FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-1-8 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=1388/0-3-8 (min. 0-1-10), 7=1438/0-3-8 (min. 0-1-11)
 Max Horz 1=-94(LC 17)
 Max Uplift1=-88(LC 12), 7=-99(LC 13)

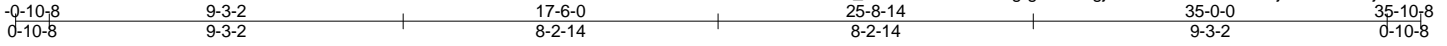
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-15=-2780/599, 2-15=-2697/624, 2-3=-2473/555, 3-16=-2396/556, 4-16=-2382/590,
 4-17=-2381/575, 5-17=-2395/555, 5-6=-2471/541, 6-18=-2710/606, 7-18=-2777/581
 BOT CHORD 1-12=-462/2494, 11-12=-462/2494, 11-13=-203/1654, 13-14=-203/1654, 10-14=-203/1654,
 9-10=-462/2490, 7-9=-462/2490
 WEBS 2-11=-561/307, 4-11=-129/929, 4-10=-128/926, 6-10=-558/303

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 17-6-0, Exterior(2) 17-6-0 to 21-10-13, Interior(1) 21-10-13 to 35-8-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas 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, 7.
 - 6) 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.

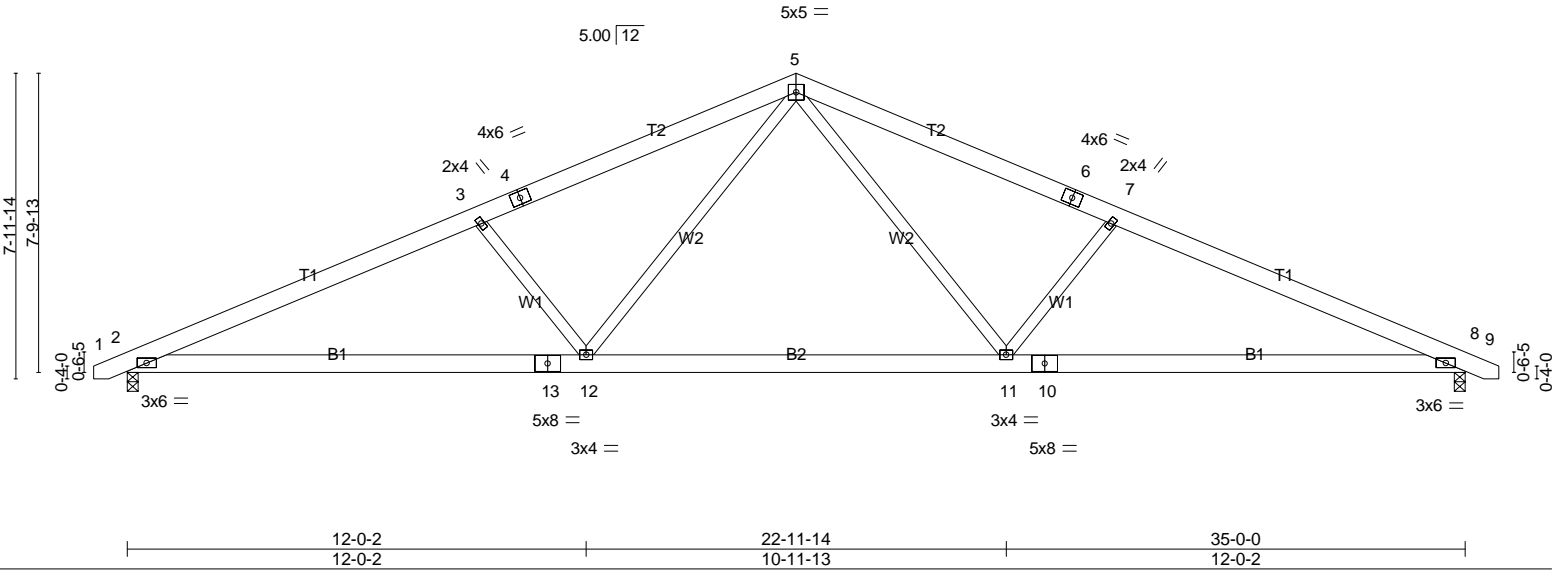
LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss A3	Truss Type FINK	Qty 6	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Sun Apr 2 12:33:19 2023 Page 1
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Scale = 1:60.3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.36	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.56	Vert(LL) -0.26 11-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.23	Vert(CT) -0.37 11-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.07 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.07 2-12 >999 240		
				Weight: 215 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-2-7 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1438/0-3-8 (min. 0-1-11), 8=1438/0-3-8 (min. 0-1-11)
 Max Horz 2=-91(LC 17)
 Max Uplift 2=-99(LC 12), 8=-99(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-16=-2775/580, 3-16=-2708/605, 3-4=-2470/540, 4-17=-2393/554, 5-17=-2380/575,
 5-18=-2380/575, 6-18=-2393/554, 6-7=-2470/540, 7-19=-2708/605, 8-19=-2775/580
 BOT CHORD 2-13=-448/2489, 12-13=-448/2489, 12-14=-198/1653, 14-15=-198/1653, 11-15=-198/1653,
 10-11=-456/2489, 8-10=-456/2489
 WEBS 3-12=-558/303, 5-12=-127/926, 5-11=-127/926, 7-11=-558/303

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-2 to 3-8-10, Interior(1) 3-8-10 to 17-6-0, Exterior(2) 17-6-0 to 21-10-13, Interior(1) 21-10-13 to 35-8-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas 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, 8.
 - 6) 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.

LOAD CASE(S) Standard

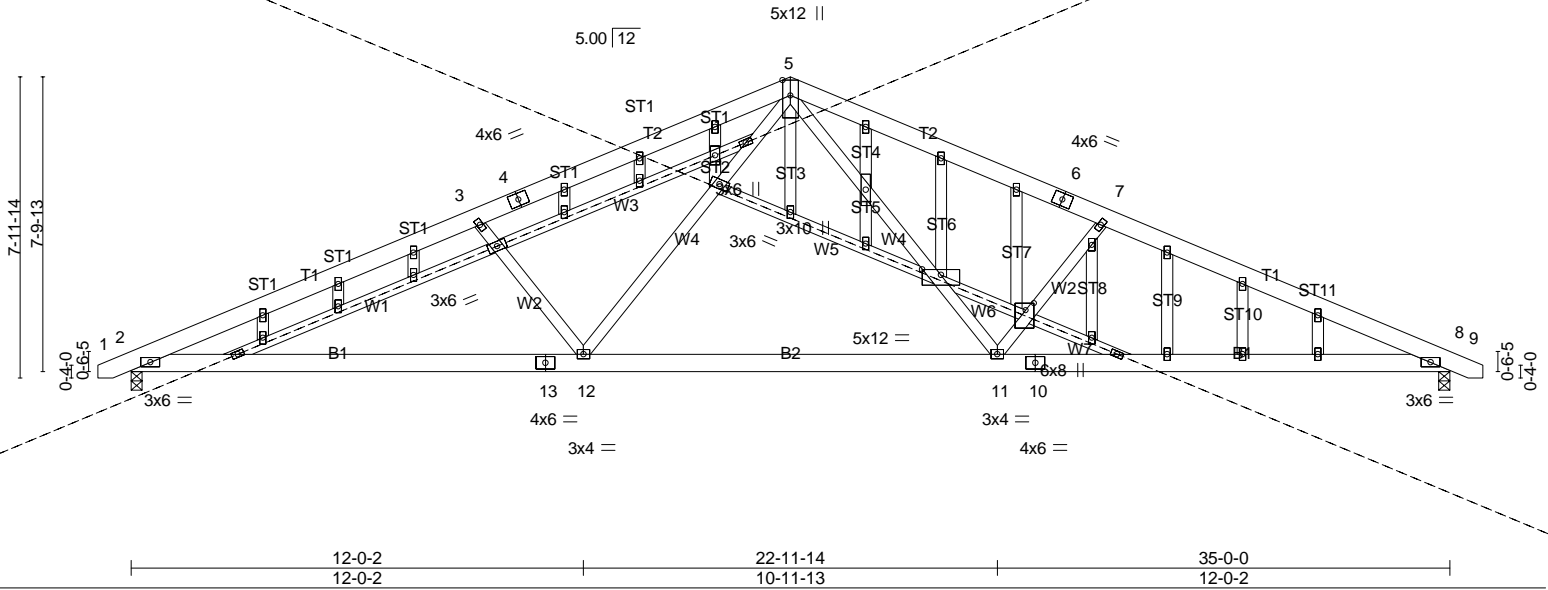
Job FOUNTAIN RES	Truss A4	Truss Type GABLE	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC 28309, Linwood Norris

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0-10-8 9-3-2 17-6-0 25-8-14 35-0-0 35-10-8
0-10-8 9-3-2 8-2-14 8-2-14 9-3-2 0-10-8

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12-0-2	22-11-14	35-0-0
12-0-2	10-11-13	12-0-2

Plate Offsets (X,Y)-- [15:0-2-4,0-2-11], [16:0-6-0,0-1-12]					
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 0.36	Vert(LL) -0.14 8-11 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.54	Vert(CT) -0.33 8-11 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.33	Horz(CT) 0.07 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.10 2-12 >999 240		
				Weight: 293 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1438/0-3-8 (min. 0-1-11), 8=1438/0-3-8 (min. 0-1-11)
Max Horz 2=153(LC 12)
Max Uplift 2=-316(LC 12), 8=-316(LC 13)

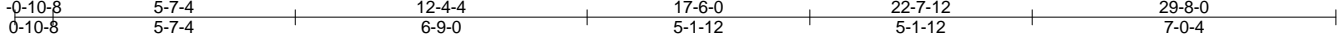
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-48=-2775/580, 3-48=-2708/605, 3-4=-2453/540, 4-49=-2361/554, 5-49=-2344/575,
5-50=-2344/575, 6-50=-2361/554, 6-7=-2453/540, 7-51=-2708/605, 8-51=-2775/580
BOT CHORD 2-13=-586/2489, 12-13=-586/2489, 11-12=-213/1653, 10-11=-456/2489, 8-10=-456/2489
WEBS 3-12=-558/396, 5-12=-226/871, 5-11=-226/871, 7-11=-558/397

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-2 to 3-8-10, Interior(1) 3-8-10 to 17-6-0, Exterior(2) 17-6-0 to 21-10-13, Interior(1) 21-10-13 to 35-8-2 zone; 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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.
 - * This truss has been designed for a live load of 30.0psf 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) except (jt=lb) 2=316, 8=316.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss A5	Truss Type COMMON	Qty 5	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

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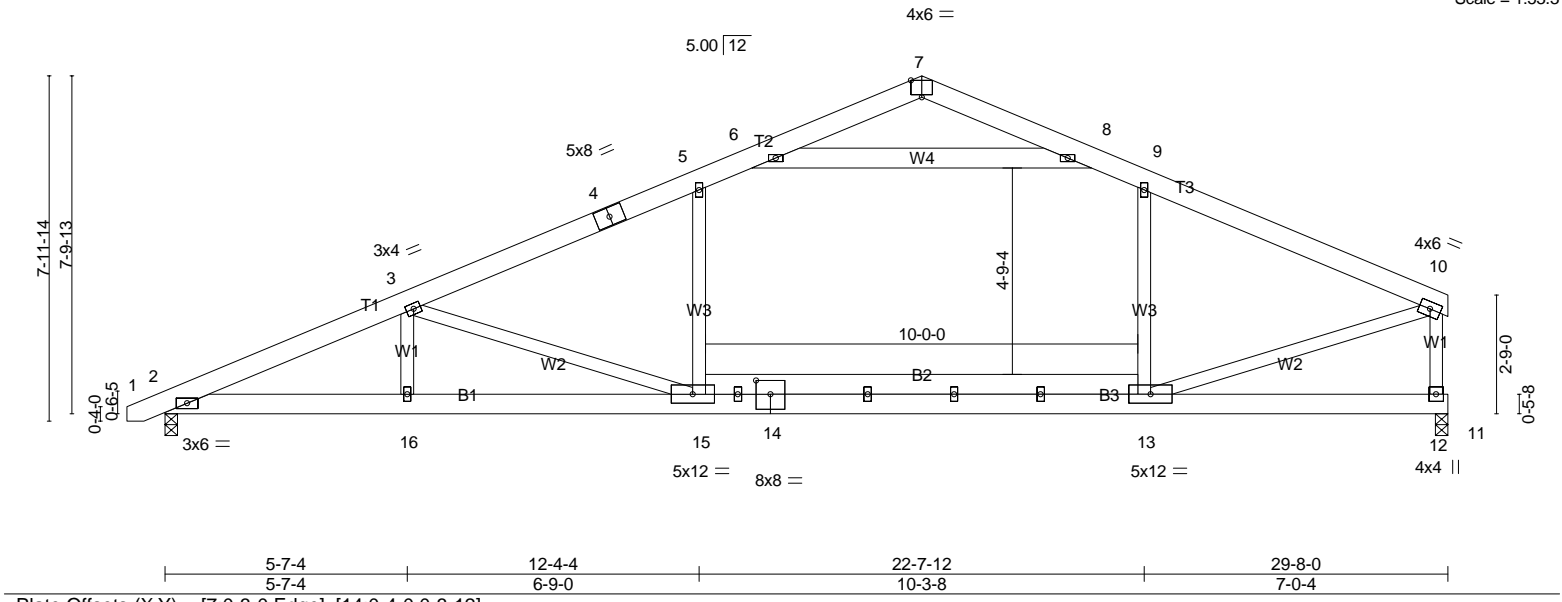


Plate Offsets (X,Y)-- [7:0-3-0,Edge], [14:0-4-0,0-3-12]

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 0.71	Vert(LL)	-0.47 13-15	>742	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.79 13-15	>445	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.04 12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.33 15-16	>999	240		
								Weight: 229 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2 *Except*
 W4: 2x6 SP No.1

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-11-6 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1220/0-3-8 (min. 0-1-8), 12=1175/0-3-8 (min. 0-1-9)
 Max Horz 2=143(LC 12)
 Max Uplift 2=-95(LC 12), 12=-53(LC 13)
 Max Grav 2=1254(LC 2), 12=1303(LC 2)

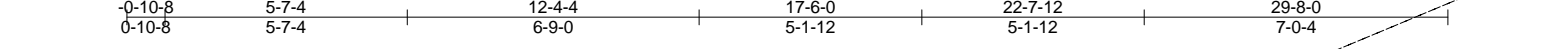
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-17=-2735/510, 3-17=-2648/525, 3-4=-1927/367, 4-5=-1810/375, 5-18=-1589/398,
 6-18=-1574/403, 8-19=-1657/439, 9-19=-1675/437, 9-20=-1724/370, 10-20=-1827/352,
 10-12=-1393/332
 BOT CHORD 2-16=-507/2490, 15-16=-507/2490, 14-15=-267/1662, 13-14=-267/1662
 WEBS 3-16=0/306, 3-15=-1115/267, 5-15=0/570, 9-13=-107/250, 10-13=-271/1791, 6-8=-1687/338

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-2 to 3-8-10, Interior(1) 3-8-10 to 17-6-0, Exterior(2) 17-6-0 to 21-10-13, Interior(1) 21-10-13 to 29-4-12 zone; 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 30.0psf 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 100 lb uplift at joint(s) 2, 12.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss A6	Truss Type GABLE	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

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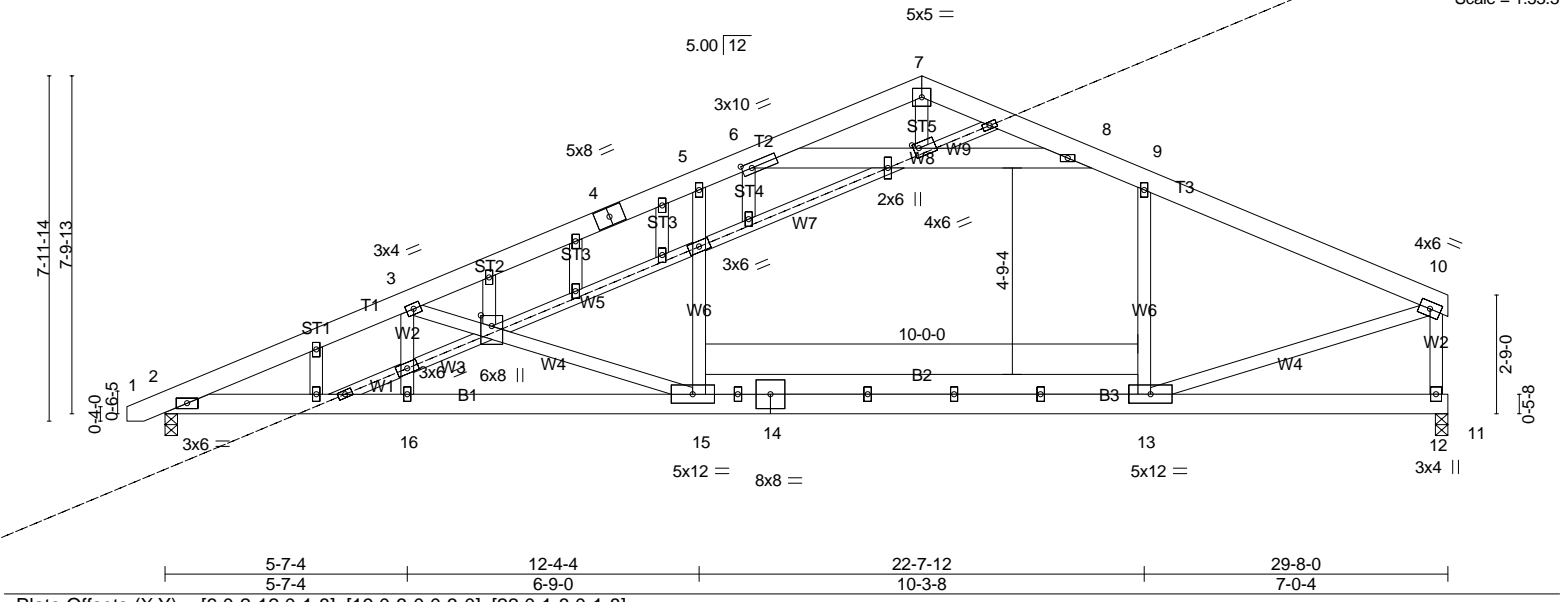


Plate Offsets (X,Y)-- [6:0-2-12,0-1-8], [19:0-3-0,0-3-0], [22:0-1-8,0-1-8]

LOADING (psf)	SPACING-	CS.I.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.62	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.76	Vert(LL) -0.44 15-16 >799 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.97	Vert(CT) -0.76 15-16 >461 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 12 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.48 15-16 >728 240		
				Weight: 263 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2 *Except*
 W8: 2x6 SP No.1
 OTHERS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-9-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1220/0-3-8 (min. 0-1-8), 12=1175/0-3-8 (min. 0-1-8)
 Max Horz 2=221(LC 12)
 Max Uplift 2=287(LC 12), 12=212(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-32=-2605/592, 3-32=-2501/609, 3-4=-1650/367, 4-5=-1520/375, 5-33=-1373/398,
 6-33=-1355/403, 8-34=-1430/439, 9-34=-1452/437, 9-35=-1429/370, 10-35=-1554/352,
 10-12=-1211/332
 BOT CHORD 2-16=-713/2361, 15-16=-713/2361, 14-15=-273/1403, 13-14=-273/1403
 WEBS 3-16=0/306, 3-15=-1115/467, 5-15=0/461, 10-13=-314/1494, 6-8=-1325/338

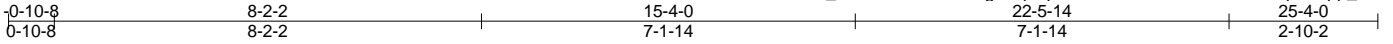
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-2 to 3-8-10, Interior(1) 3-8-10 to 17-6-0, Exterior(2) 17-6-0 to 21-10-13, Interior(1) 21-10-13 to 29-4-12 zone; 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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.
 - * This truss has been designed for a live load of 30.0psf 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) except (jt=lb) 2=287, 12=212.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss B1	Truss Type COMMON	Qty 5	Ply 1	Caston / Fountain Res. / Harnett
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Comtech, Inc., Fayetteville, NC 28309, Linwood Norris

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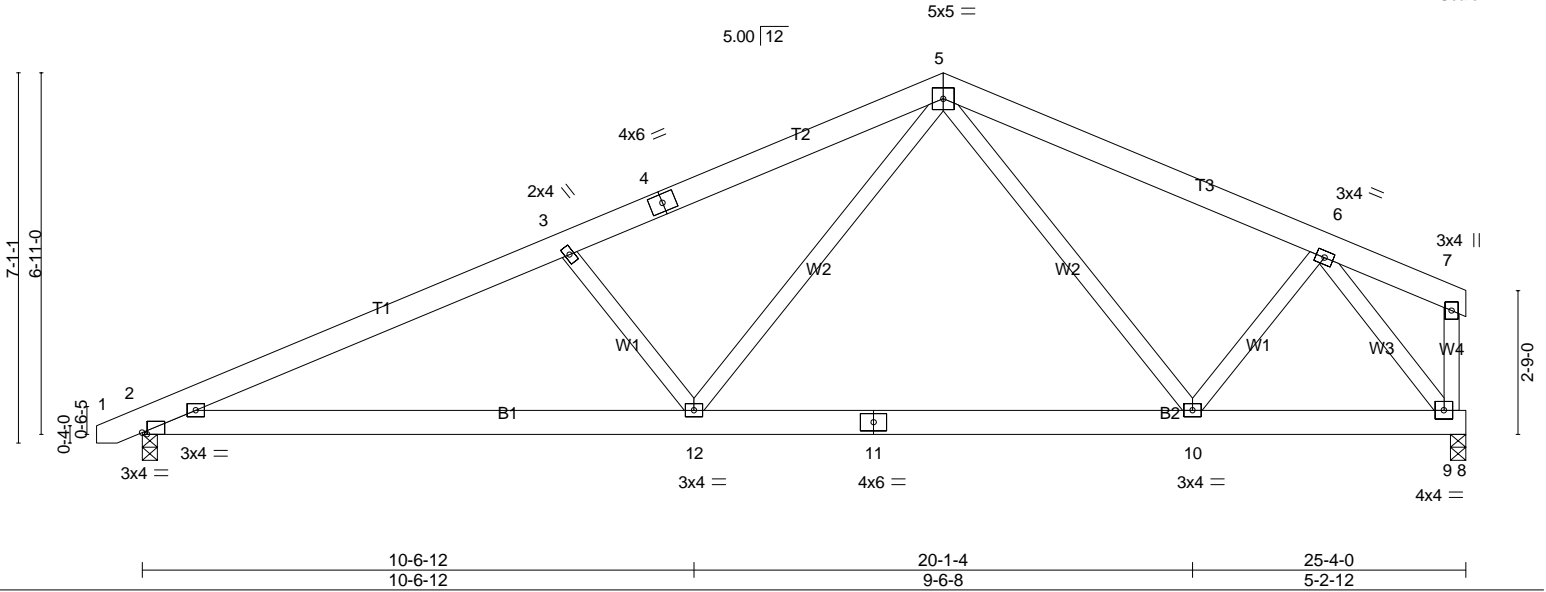


Plate Offsets (X,Y)-- [2:0-1-2,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.40	Vert(LL) -0.10 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.35	Vert(CT) -0.17 2-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.04 2-12 >999 240		Weight: 169 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1047/0-3-8 (min. 0-1-8), 9=1001/0-3-8 (min. 0-1-8)
Max Horz 2=132(LC 12)
Max Uplift 2=84(LC 12), 9=42(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-13=-1868/409, 3-13=-1802/430, 3-4=-1588/369, 4-14=-1521/379, 5-14=-1495/400,
5-15=-983/314, 15-16=-1001/294, 6-16=-1057/289
BOT CHORD 2-12=-408/1661, 12-17=-183/926, 11-17=-183/926, 11-18=-183/926, 10-18=-183/926,
9-10=-195/704
WEBS 3-12=-485/269, 5-12=-108/790, 6-10=0/382, 6-9=-1199/334

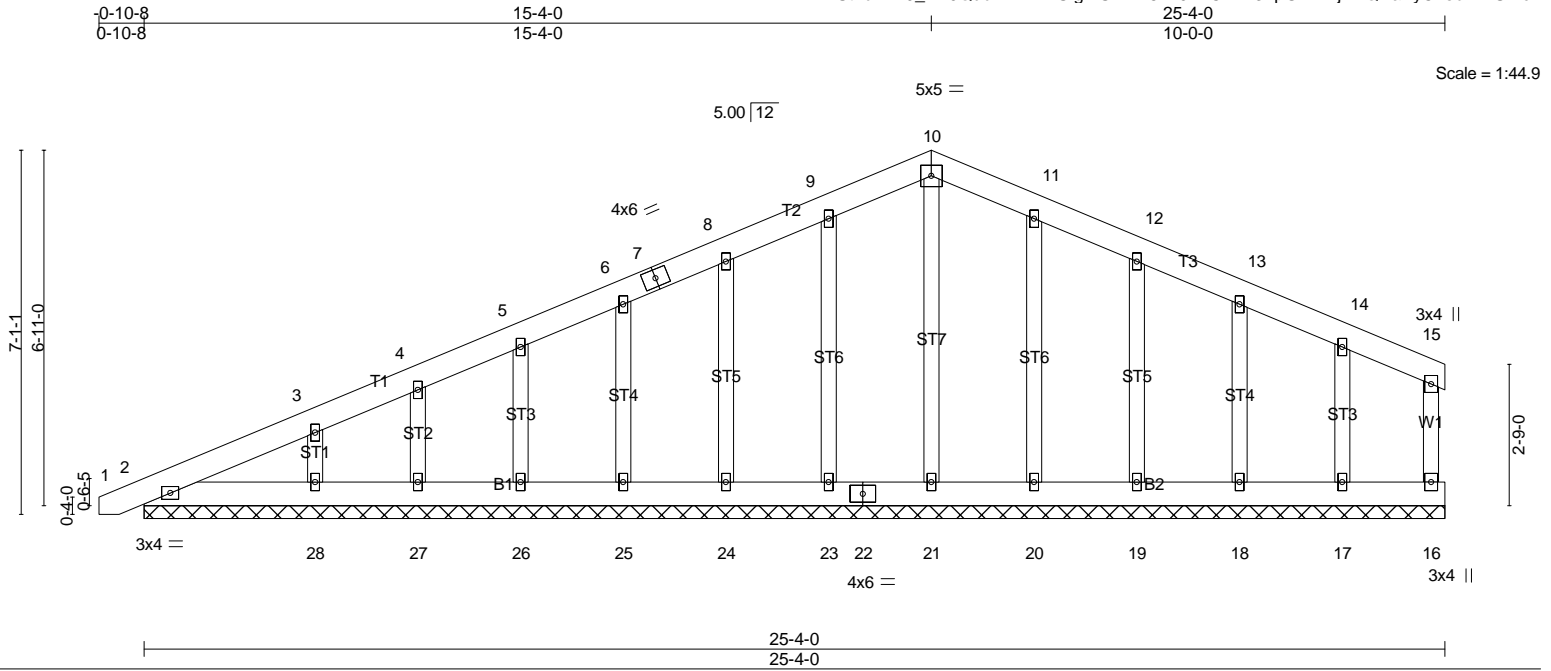
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-2 to 3-8-10, Interior(1) 3-8-10 to 15-4-0, Exterior(2) 15-4-0 to 19-8-13, Interior(1) 19-8-13 to 25-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 30.0psf 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) 2, 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss B1GE	Truss Type GABLE	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Linwood Norris

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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 0.04	Vert(LL) -0.00 1 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00 1 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00 16 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			Weight: 189 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 25-4-0.
(lb) - Max Horz 2=203(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 23, 24, 25, 26, 27, 20, 19, 18, 17 except 28=-102(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 16, 21, 23, 24, 25, 26, 27, 20, 19, 18, 17 except 28=261(LC 23)

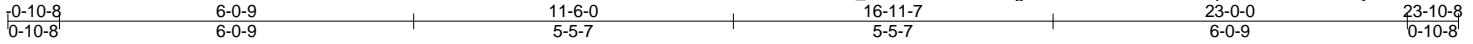
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-78/259, 10-11=-78/260

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-2 to 3-8-10, Exterior(2) 3-8-10 to 15-4-0, Corner(3) 15-4-0 to 19-8-13, Exterior(2) 19-8-13 to 25-0-12 zone; 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - 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.
 - * This truss has been designed for a live load of 30.0psf 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, 16, 23, 24, 25, 26, 27, 20, 19, 18, 17 except (jt=lb) 28=102.
 - 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.

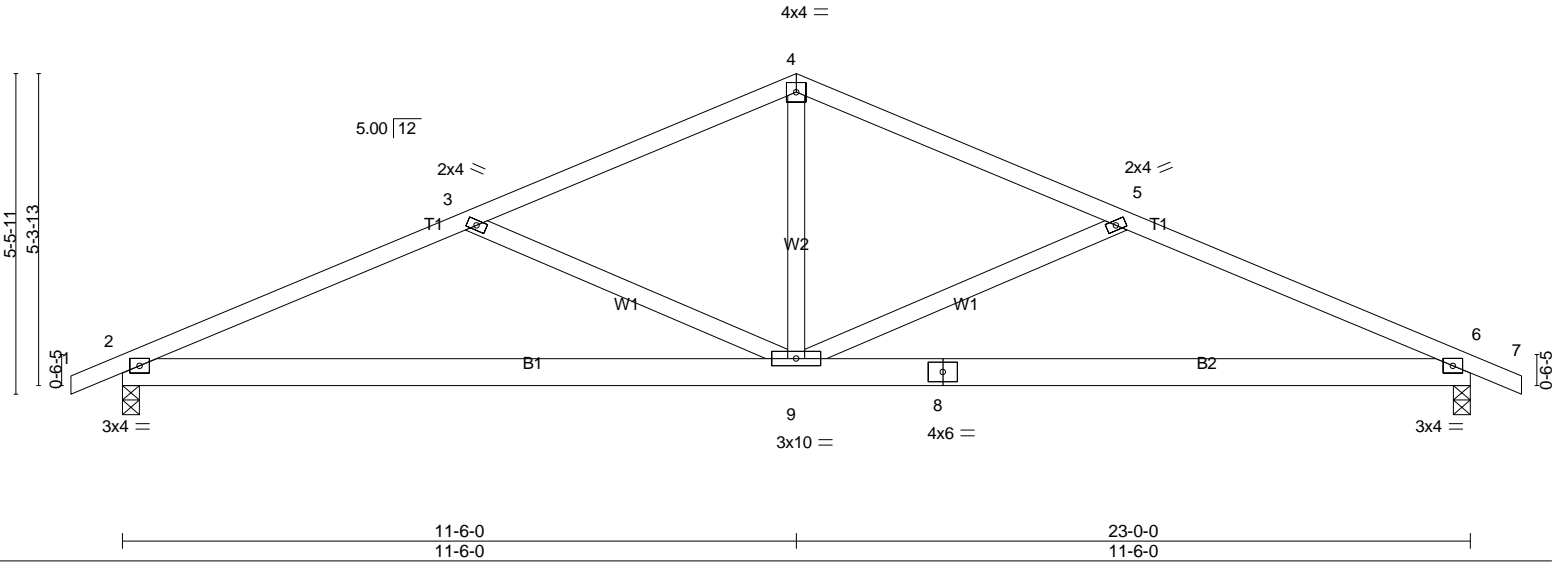
LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss C1	Truss Type QUEENPOST	Qty 3	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Sun Apr 2 12:33:22 2023 Page 1
 ID:4ZVStf?bZ?X9_VP0QdbZHFLzVStg-4SNm18zZ02YCZKrI3TpGrDxRNw8DHX2yChebhZzUmch



Scale = 1:39.3



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) -0.10 2-9 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.49	Vert(CT) -0.22 2-9 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.28	Horz(CT) 0.03 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04 2-9 >999 240		
				Weight: 118 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-6-4 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 6=970/0-3-8 (min. 0-1-8), 2=970/0-3-8 (min. 0-1-8)
 Max Horz 2=62(LC 16)
 Max Uplift 6=-72(LC 13), 2=-72(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-10=-1698/429, 3-10=-1615/444, 3-11=-1280/284, 4-11=-1208/308, 4-12=-1208/308,
 5-12=-1280/284, 5-13=-1615/444, 6-13=-1698/429
 BOT CHORD 2-9=-333/1492, 8-9=-340/1492, 6-8=-340/1492
 WEBS 3-9=-437/268, 4-9=-56/660, 5-9=-437/268

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-10-8 to 3-6-5, Interior(1) 3-6-5 to 11-6-0, Exterior(2) 11-6-0 to 15-10-13, Interior(1) 15-10-13 to 23-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 30.0psf 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, 2.
 - 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.

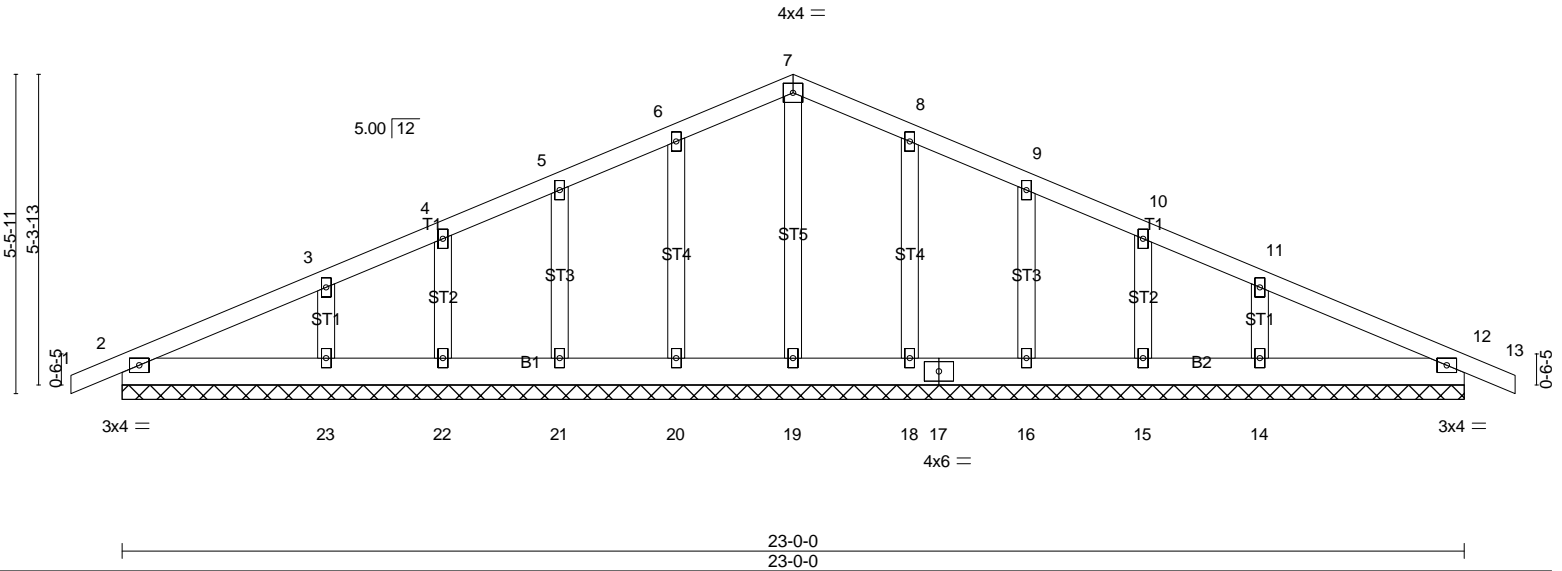
LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss C1GE	Truss Type GABLE	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Sun Apr 2 12:33:23 2023 Page 1
 ID:4ZVSt?bZ?X9_VP0QdbZHFLzVSfg-Zex8EU_BnLg3BUQxdBLVORTfeKbV0246RLN8D?zUmcg

0-10-8	11-6-0	23-0-0	23-10-8
0-10-8	11-6-0	11-6-0	0-10-8

Scale = 1:39.5



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 0.09	Vert(LL) 0.00 12 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) 0.00 13 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00 12 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			Weight: 131 lb FT = 20%

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

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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 23-0-0.
 (lb) - Max Horz 2=104(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 12, 2, 20, 21, 22, 18, 16, 15 except 23=110(LC 12), 14=109(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 12, 2, 19, 20, 21, 22, 18, 16, 15 except 23=272(LC 23), 14=272(LC 24)

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=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 3-6-0, Exterior(2) 3-6-0 to 11-6-0, Corner(3) 11-6-0 to 15-10-13, Exterior(2) 15-10-13 to 23-10-8 zone; 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - 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.
 - * This truss has been designed for a live load of 30.0psf 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) 12, 2, 18, 16, 15 except (jt=lb) 23=110, 14=109.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss D1	Truss Type COMMON	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Sun Apr 2 12:33:23 2023 Page 1
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0-11-0 0-11-0	7-3-12 7-3-12	11-5-8 4-1-12	15-7-4 4-1-12	22-11-0 7-3-12	23-10-0 0-11-0
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Scale = 1:42.5

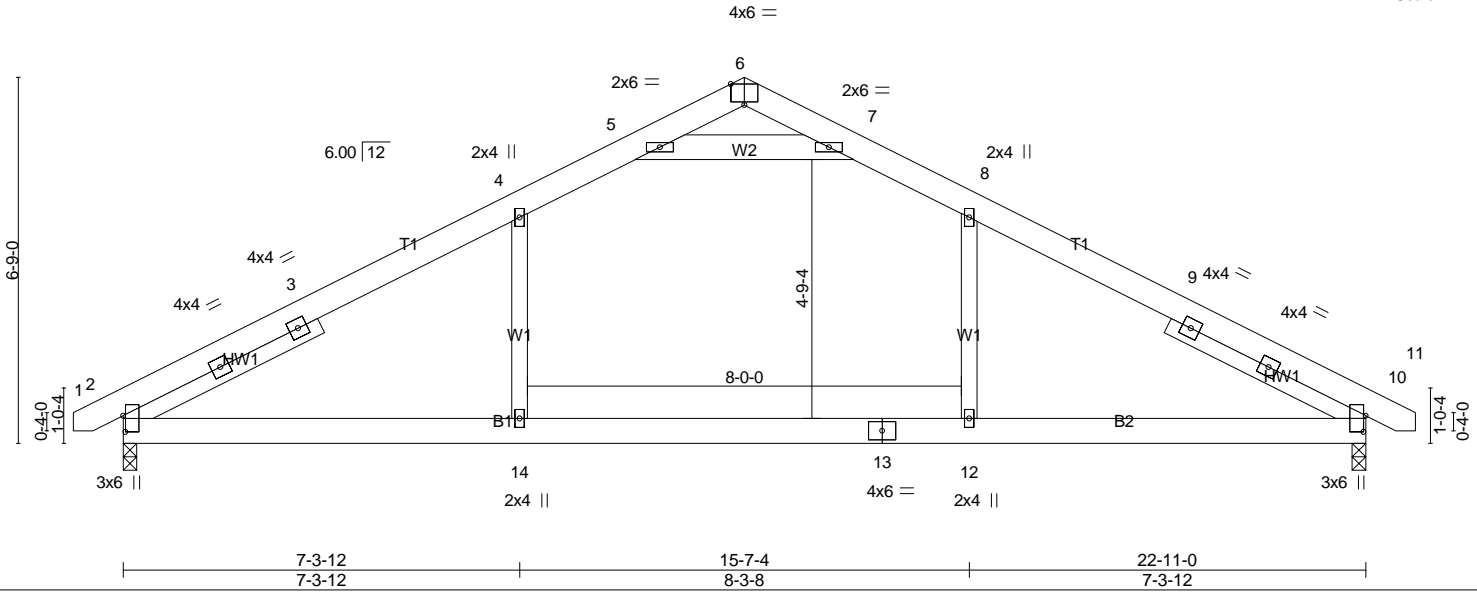


Plate Offsets (X,Y)--	[2:0-3-10,0-0-8], [6:0-3-0,Edge], [10:0-3-10,0-0-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	-0.15	12-14	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.21	12-14	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.03	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.08	2-14	>999		
								Weight: 152 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-10-8 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	
W2: 2x6 SP No.1	
SLIDER Left 2x4 SP No.2 -p 4-0-6, Right 2x4 SP No.2 -p 4-0-6	

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=961/0-3-0 (min. 0-1-8), 10=961/0-3-0 (min. 0-1-8)
 Max Horz 2=83(LC 9)
 Max Uplift 2=-64(LC 12), 10=-64(LC 13)
 Max Grav 2=1026(LC 2), 10=1026(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1571/283, 3-4=-1400/307, 4-5=-1210/356, 5-6=-94/521, 6-7=-94/521, 7-8=-1210/356,
 8-9=-1400/307, 9-10=-1571/283
 BOT CHORD 2-14=-148/1249, 13-14=-148/1249, 12-13=-148/1249, 10-12=-148/1249
 WEBS 8-12=0/454, 4-14=0/454, 5-7=-1831/480

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-14 to 3-7-15, Interior(1) 3-7-15 to 11-5-8, Exterior(2) 11-5-8 to 15-7-4, Interior(1) 15-7-4 to 23-7-14 zone; 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 30.0psf 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 BCCL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
 - 6) 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss D2	Truss Type COMMON	Qty 5	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Sun Apr 2 12:33:24 2023 Page 1
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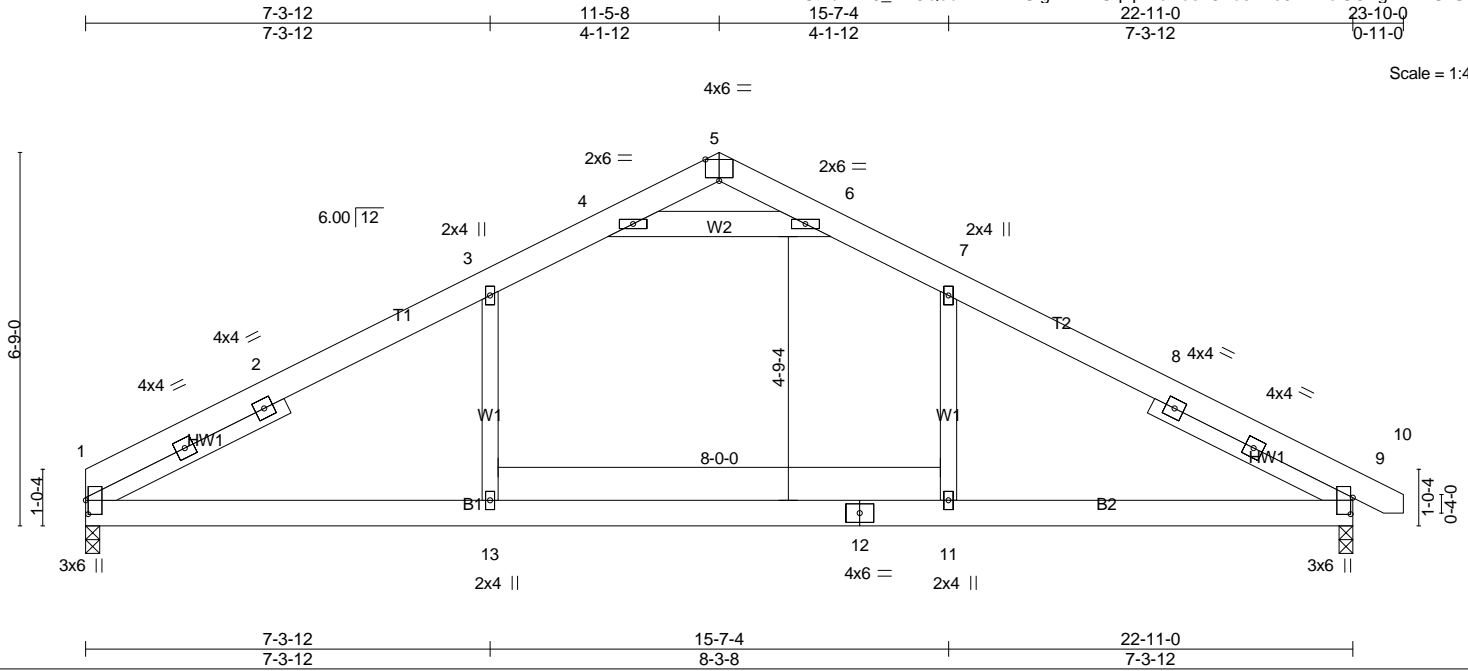


Plate Offsets (X,Y)-- [1:0-3-0,0-0-8], [5:0-3-0,Edge], [9:0-3-10,0-0-8]

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 0.48	Vert(LL)	-0.15 11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.21 11-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.03 9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.08 1-13	>999	240		
								Weight: 149 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2 *Except*
 W2: 2x6 SP No.1
 SLIDER Left 2x4 SP No.2 -p 4-0-6, Right 2x4 SP No.2 -p 4-0-6

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-10-1 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=916/0-3-0 (min. 0-1-8), 9=962/0-3-0 (min. 0-1-8)
 Max Horz 1=86(LC 9)
 Max Uplift 1=-54(LC 12), 9=-64(LC 13)
 Max Grav 1=988(LC 2), 9=1026(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1571/291, 2-14=-1449/295, 3-14=-1401/310, 3-4=-1211/365, 4-5=-96/524,
 5-6=-108/524, 6-7=-1211/356, 7-8=-1402/308, 8-9=-1573/284
 BOT CHORD 1-13=-154/1251, 12-13=-154/1251, 11-12=-154/1251, 9-11=-154/1251
 WEBS 7-11=0/454, 3-13=0/452, 4-6=-1836/507

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 11-5-8, Exterior(2) 11-5-8 to 15-7-4, Interior(1) 15-7-4 to 23-7-14 zone; end vertical 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 30.0psf 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 BCCL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9.
 - 6) 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss D3	Truss Type COMMON	Qty 3	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Sun Apr 2 12:33:25 2023 Page 1
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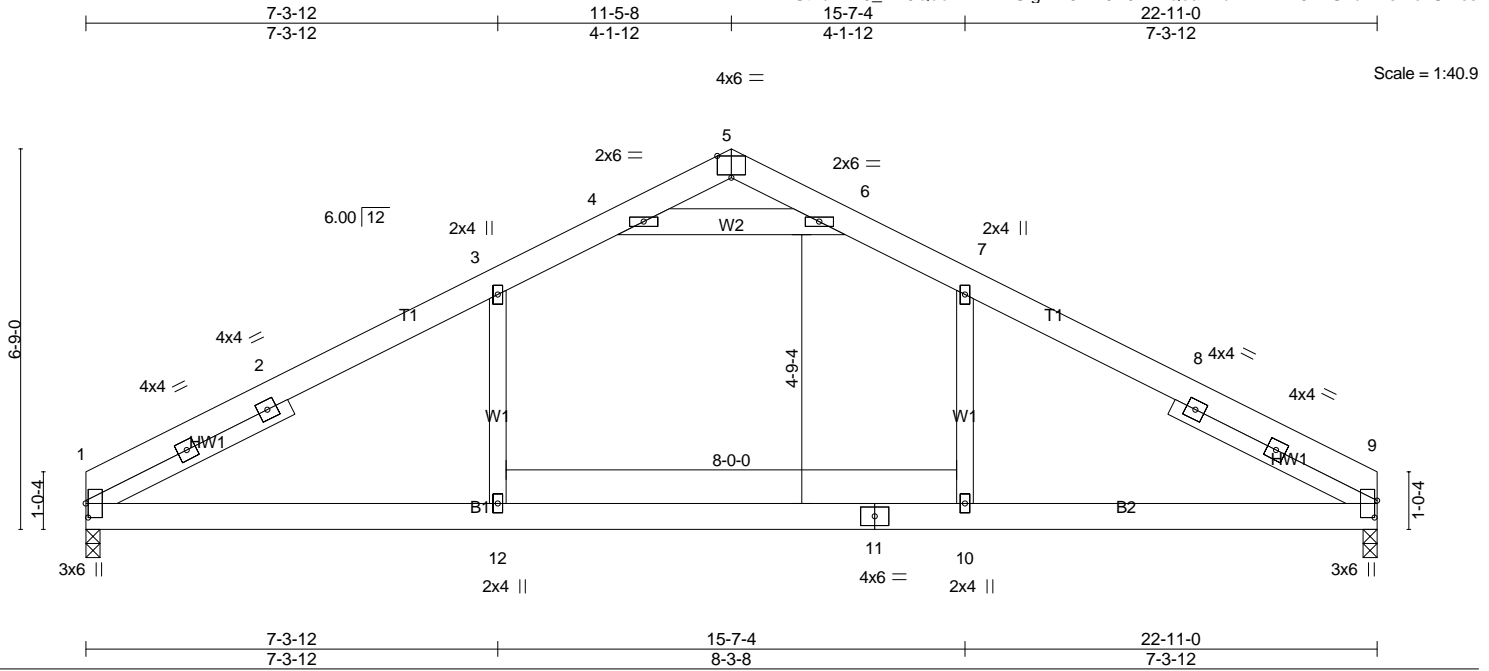


Plate Offsets (X,Y)-- [1:0-3-0,0-0-8], [5:0-3-0,Edge], [9:0-3-10,0-0-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.48	Vert(LL)	-0.15	10-12	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(CT)	-0.21	10-12	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.23	Horz(CT)	0.03	9	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.08	1-12	>999		
	Code IRC2015/TPI2014						Weight: 147 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2 *Except*
 W2: 2x6 SP No.1
 SLIDER Left 2x4 SP No.2 -p 4-0-6, Right 2x4 SP No.2 -p 4-0-6

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-10-1 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=917/0-3-0 (min. 0-1-8), 9=917/0-3-0 (min. 0-1-8)
 Max Horz 1=-82(LC 10)
 Max Uplift1=-54(LC 12), 9=-54(LC 13)
 Max Grav 1=989(LC 2), 9=989(LC 2)

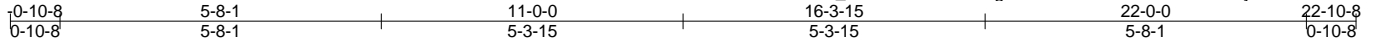
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1573/292, 2-13=-1450/296, 3-13=-1402/311, 3-4=-1213/366, 4-5=-110/527,
 5-6=-110/527, 6-7=-1213/366, 7-14=-1402/311, 8-14=-1450/296, 8-9=-1573/292
 BOT CHORD 1-12=-149/1254, 11-12=-149/1254, 10-11=-149/1254, 9-10=-149/1254
 WEBS 7-10=0/453, 3-12=0/453, 4-6=-1841/509

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 11-5-8, Exterior(2) 11-5-8 to 15-7-4, Interior(1) 15-7-4 to 22-11-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9.
 - 6) 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss G1	Truss Type QUEENPOST	Qty 3	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

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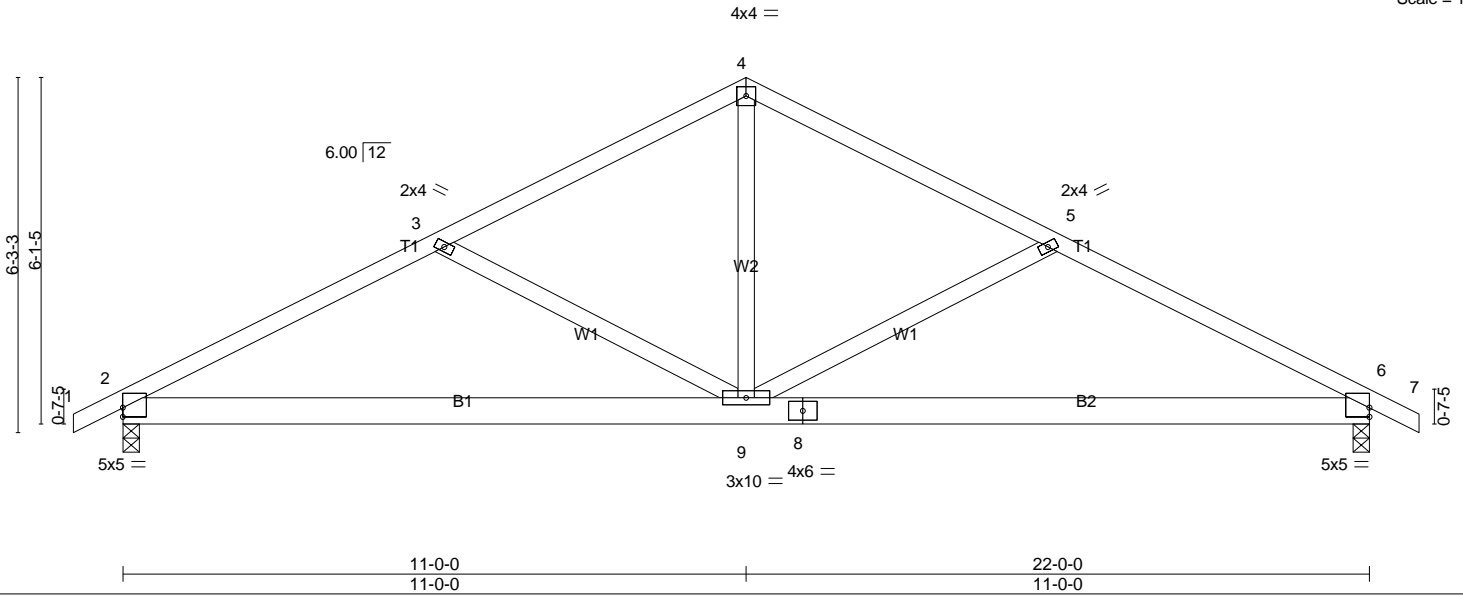


Plate Offsets (X,Y)-- [2:Edge,0-1-15], [6:0-0-0,0-1-15]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.30	Vert(LL) -0.08	6-9	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.43	Vert(CT) -0.17	6-9	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.42	Horz(CT) 0.02	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.18	2-9	>999	240		
	Code IRC2015/TPI2014						Weight: 117 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-0-8 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 7-6-14 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 6=930/0-3-8 (min. 0-1-8), 2=930/0-3-8 (min. 0-1-8)
 Max Horz 2=-77(LC 10)
 Max Uplift 6=-196(LC 8), 2=-155(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-10=-1405/1120, 3-10=-1265/1139, 3-11=-1065/1027, 4-11=-983/1053, 4-12=-983/1053,
 5-12=-1065/1027, 5-13=-1265/1139, 6-13=-1405/1120
 BOT CHORD 2-9=-928/1171, 8-9=-934/1171, 6-8=-934/1171
 WEBS 3-9=-352/239, 4-9=-769/622, 5-9=-352/239

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-10-8 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 30.0psf 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) except (jt=lb) 6=196, 2=155.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss G1GE	Truss Type GABLE	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

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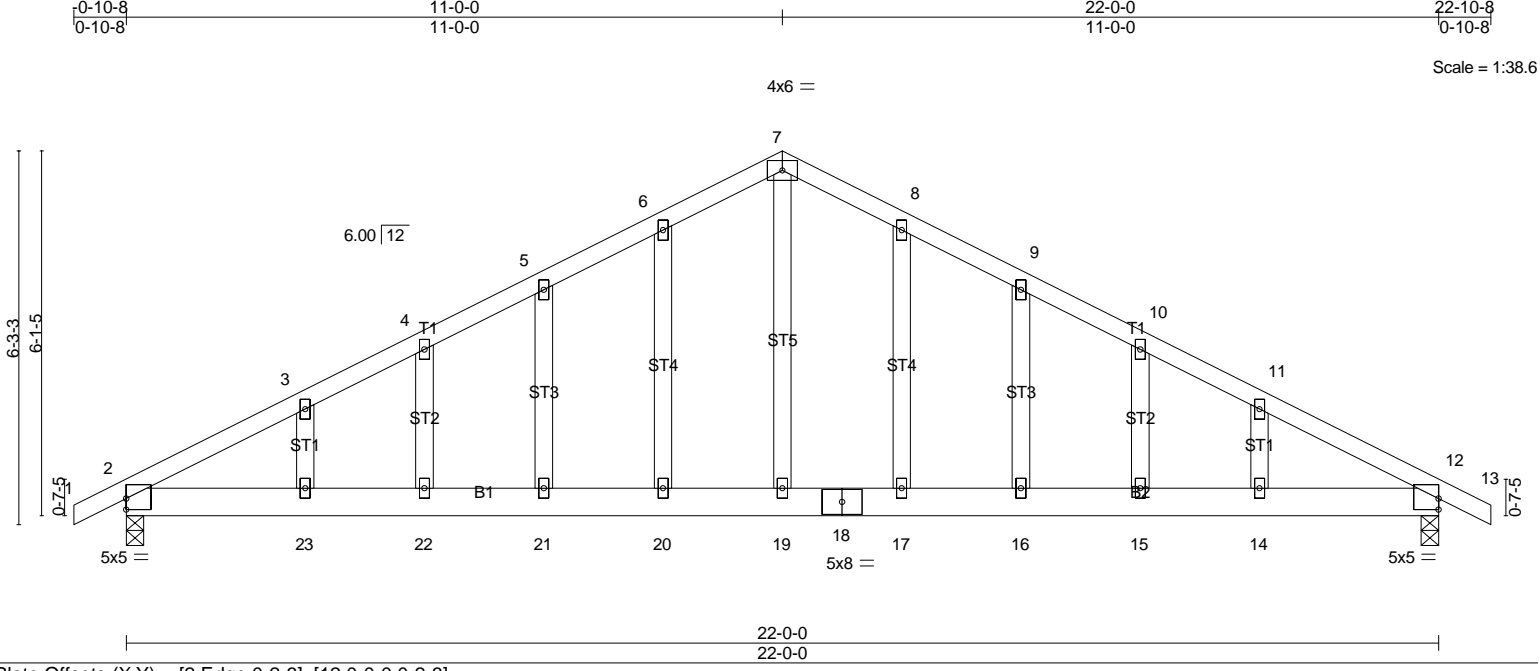


Plate Offsets (X,Y)-- [2:Edge,0-2-3], [12:0-0-0,0-2-3]

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 0.36	Vert(LL)	-0.21 15-16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.32 15-16	>810	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.02 12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.26 15	>999	240		
								Weight: 134 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-6-2 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-2-15 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 12=930/0-3-8 (min. 0-1-8), 2=930/0-3-8 (min. 0-1-8)
 Max Horz 2=-120(LC 13)
 Max Uplift 12=-251(LC 8), 2=-207(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1217/1174, 3-28=-1139/1220, 4-28=-1109/1227, 4-29=-1121/1253, 5-29=-1084/1261,
 5-6=-1109/1305, 6-7=-1115/1364, 7-8=-1115/1364, 8-9=-1109/1305, 9-30=-1084/1261,
 10-30=-1121/1253, 10-31=-1109/1227, 11-31=-1139/1220, 11-12=-1217/1174
 BOT CHORD 2-23=-893/992, 23-24=-893/992, 22-24=-893/992, 22-25=-893/992, 21-25=-893/992,
 20-21=-893/992, 19-20=-893/992, 18-19=-893/992, 17-18=-893/992, 16-17=-893/992,
 16-26=-893/992, 15-26=-893/992, 15-27=-893/992, 14-27=-893/992, 12-14=-893/992
 WEBS 7-19=-1006/780

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 11-0-0, Corner(3) 11-0-0 to 15-4-13, Exterior(2) 15-4-13 to 22-10-8 zone; porch left 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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.
 - * This truss has been designed for a live load of 30.0psf 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) except (jt=lb) 12=251, 2=207.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss M1GE	Truss Type GABLE	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

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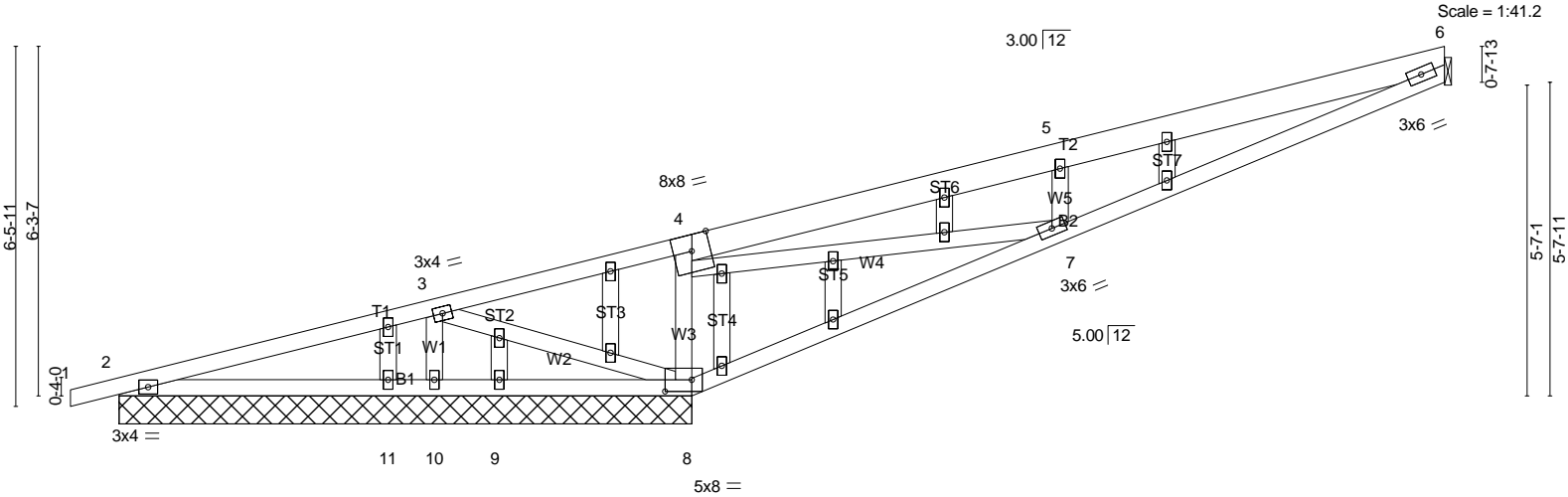


Plate Offsets (X,Y)-- [8:0-5-12,0-2-8]

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 0.34	Vert(LL)	-0.06	6-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.14	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.57	Horz(CT)	-0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.06	6-7	>999	240		
									Weight: 122 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1 *Except*
 T1: 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.2
 OTHERS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
 8-9-6 oc bracing: 6-7.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 10-3-8 except (jt=length) 6=Mechanical.
 (lb) - Max Horz 2=276(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 2 except 6=-136(LC 12), 8=-366(LC 8), 10=-239(LC 3)
 Max Grav All reactions 250 lb or less at joint(s) 2, 9 except 6=399(LC 1), 8=1182(LC 1), 11=281(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-24=-289/201, 3-24=-278/233, 3-4=-493/735, 4-5=-870/319, 5-25=-867/406,
 6-25=-817/415
 BOT CHORD 7-8=-766/297, 6-7=-506/883
 WEBS 3-8=-528/283, 4-8=-633/361, 4-7=-709/1486, 5-7=-413/361

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 23-9-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable studs spaced at 2-0-0 oc.
 - 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 30.0psf 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) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 6=136, 8=366, 10=239.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss VD1	Truss Type VALLEY	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

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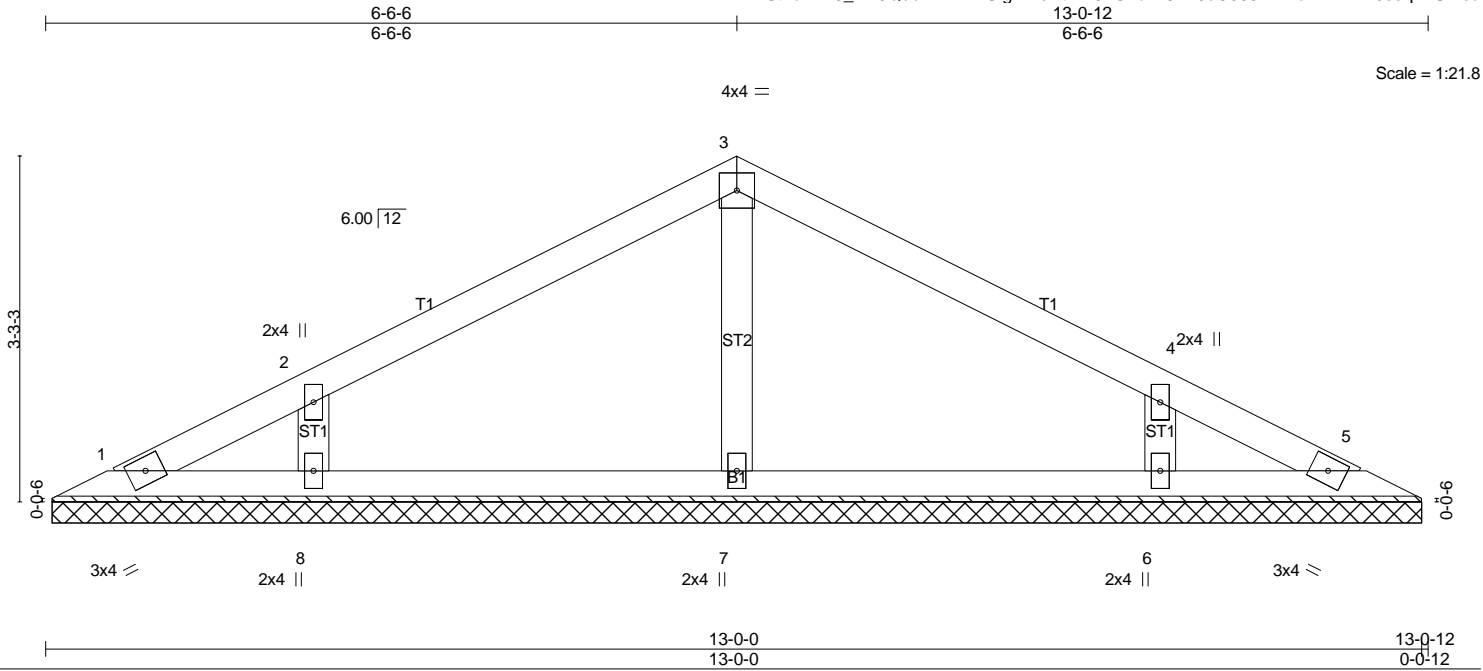


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

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 0.04	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 45 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 12-11-4.
 (lb) - Max Horz 1=39(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=286(LC 1), 8=297(LC 23), 6=297(LC 24)

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

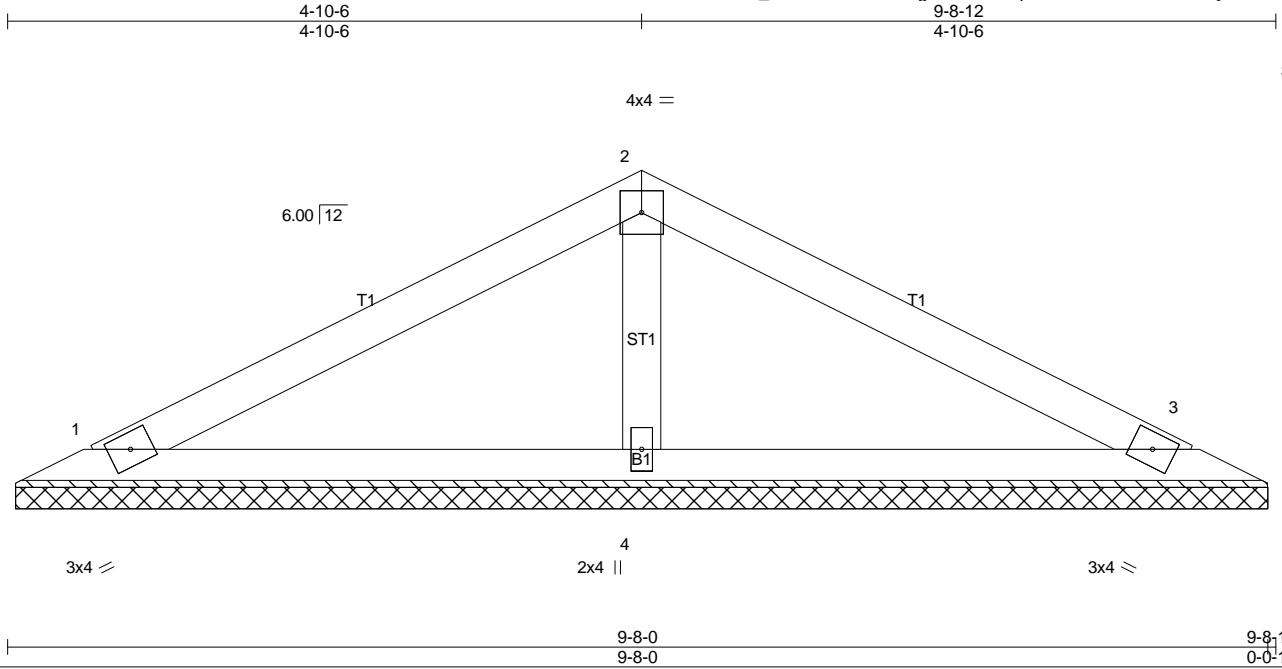
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 6-6-6, Exterior(2) 6-6-6 to 10-11-3, Interior(1) 10-11-3 to 12-4-15 zone;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 30.0psf 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, 8, 6.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss VD2	Truss Type VALLEY	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Linwood Norris

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 31 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

BRACING-
 TOP CHORD
 BOT CHORD

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=155/9-7-4 (min. 0-1-8), 3=154/9-7-4 (min. 0-1-8), 4=365/9-7-4 (min. 0-1-8)
 Max Horz 1=28(LC 9)
 Max Uplift1=-21(LC 12), 3=-25(LC 13)
 Max Grav 1=156(LC 23), 3=156(LC 24), 4=365(LC 1)

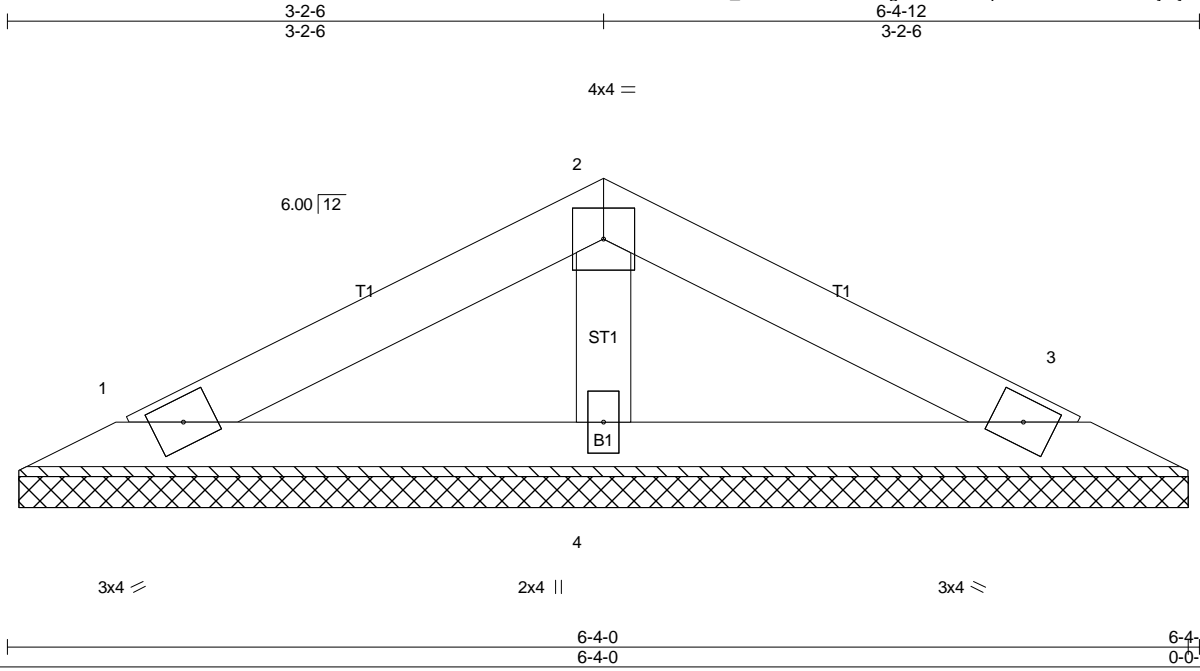
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;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 30.0psf 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.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss VD3	Truss Type VALLEY	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2015/TPI2014						Weight: 19 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

BRACING-
 TOP CHORD
 BOT CHORD

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=104/6-3-4 (min. 0-1-8), 3=104/6-3-4 (min. 0-1-8), 4=200/6-3-4 (min. 0-1-8)
 Max Horz 1=-17(LC 8)
 Max Uplift 1=-17(LC 12), 3=-19(LC 13)

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=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;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 30.0psf 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.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss VD4	Truss Type VALLEY	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

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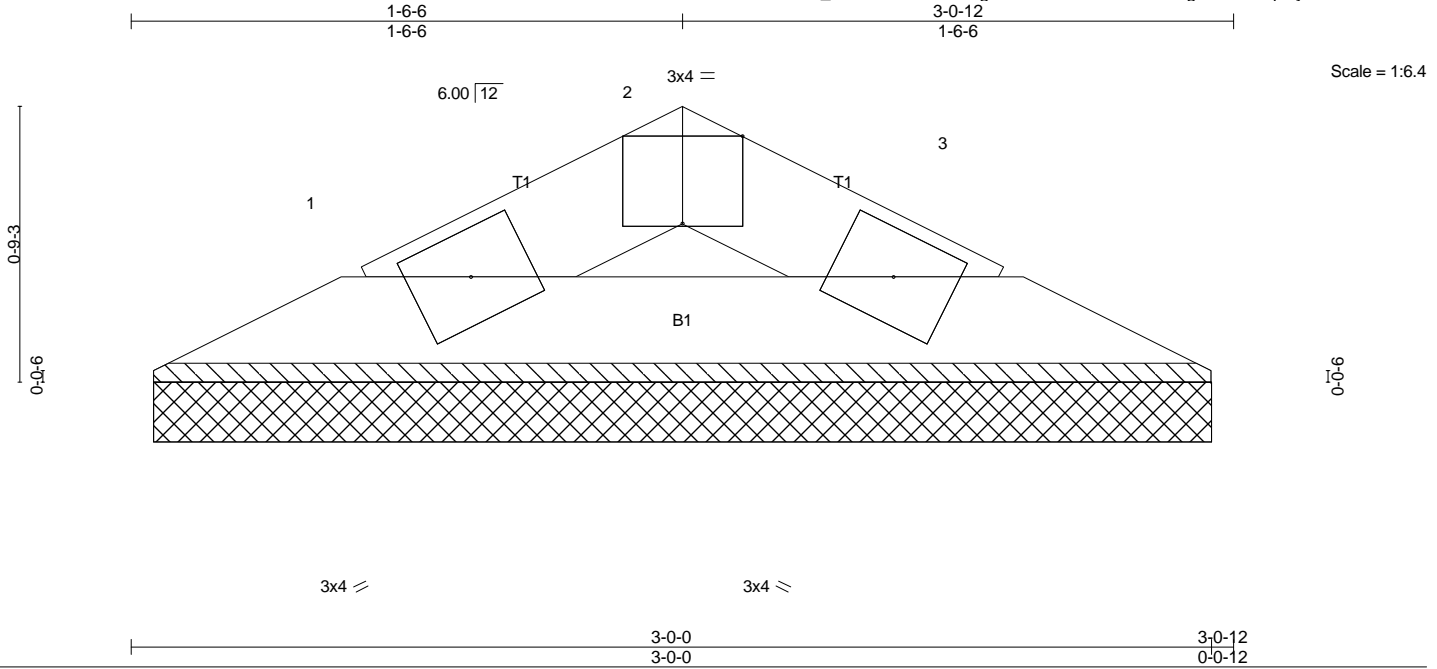


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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 0.01	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 7 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=70/2-11-4 (min. 0-1-8), 3=70/2-11-4 (min. 0-1-8)
Max Horz 1=-6(LC 8)
Max Uplift1=-4(LC 12), 3=-4(LC 13)

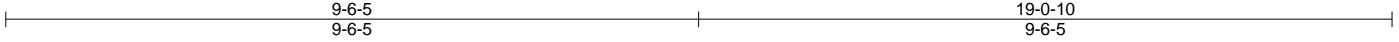
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;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 30.0psf 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.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss VG1	Truss Type VALLEY	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

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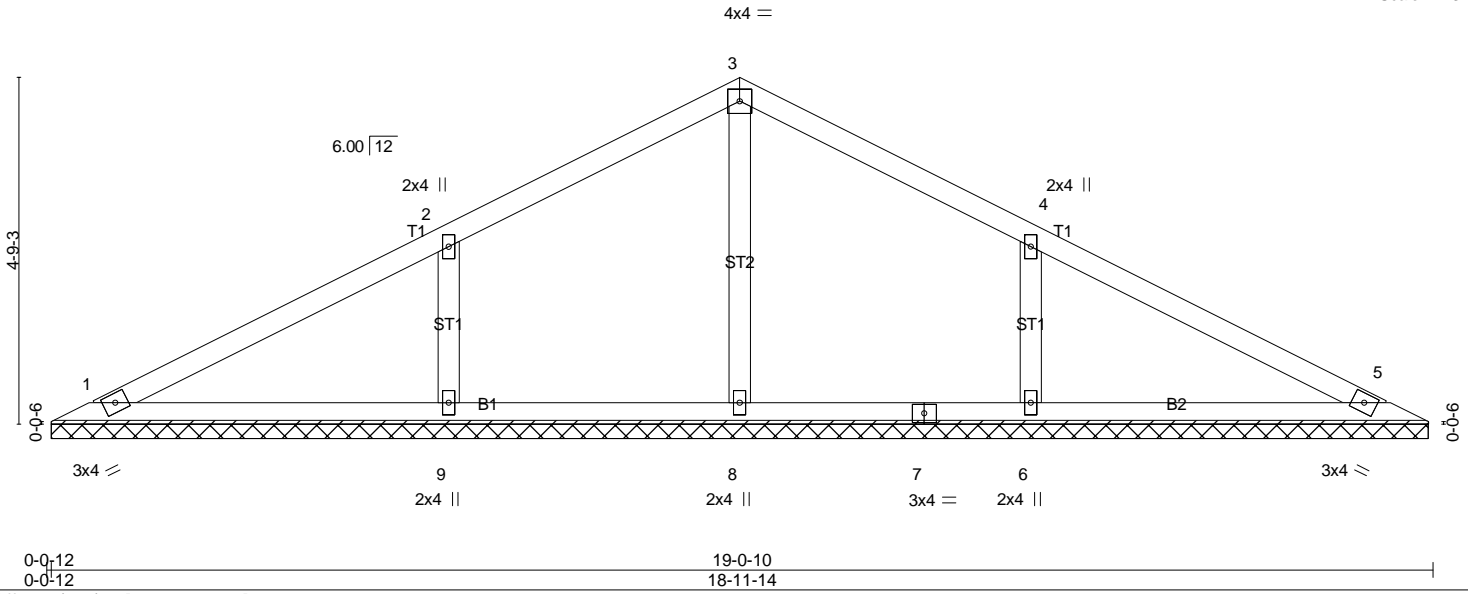


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.14	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 70 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 18-11-2.
 (lb) - Max Horz 1=58(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 9, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 8 except 9=435(LC 23), 6=435(LC 24)

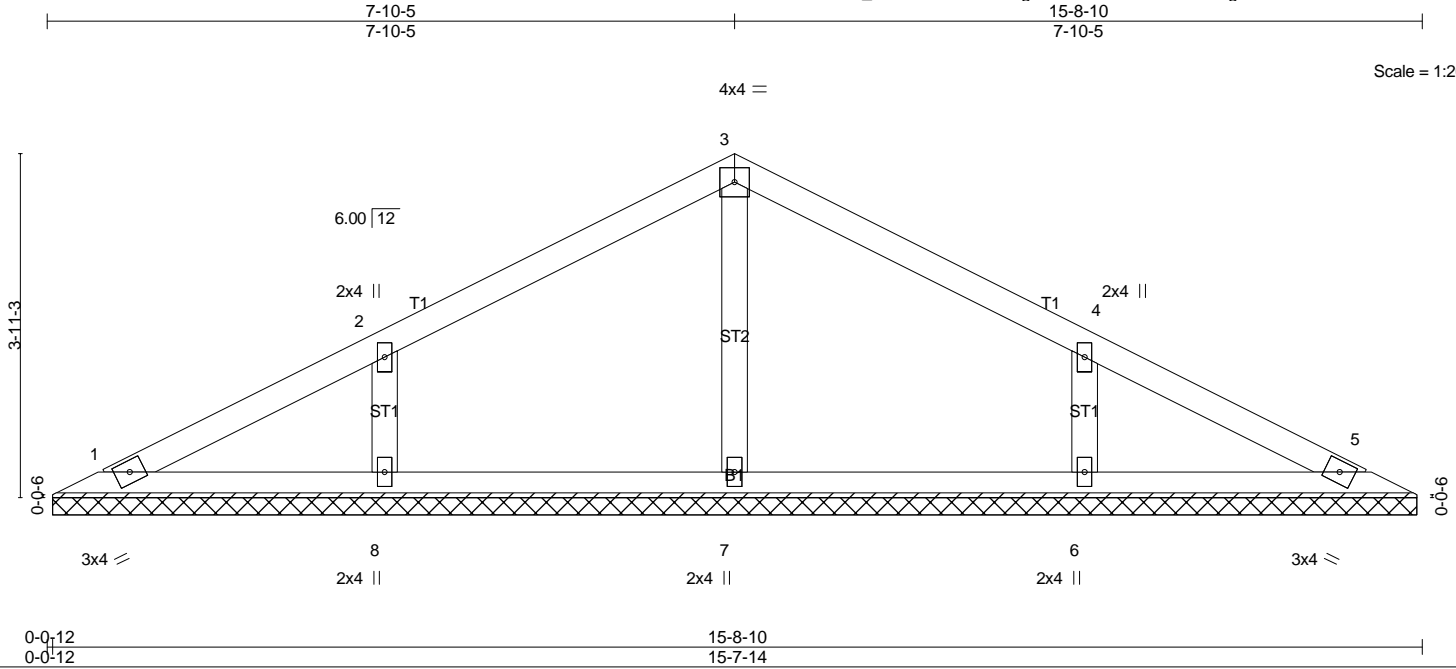
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-9=-320/227, 4-6=-320/226

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 9-6-5, Exterior(2) 9-6-5 to 13-11-2, Interior(1) 13-11-2 to 18-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 30.0psf 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, 5, 9, 6.
 - Non Standard bearing condition. Review required.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss VG2	Truss Type VALLEY	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

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0-0-12	15-8-10
0-0-12	15-7-14

LOADING (psf)		SPACING-		CSI.		DEFL.				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	0.08	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.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 15-7-2.
 (lb) - Max Horz 1=-47(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=273(LC 1), 8=341(LC 23), 6=341(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=-258/201, 4-6=-258/201

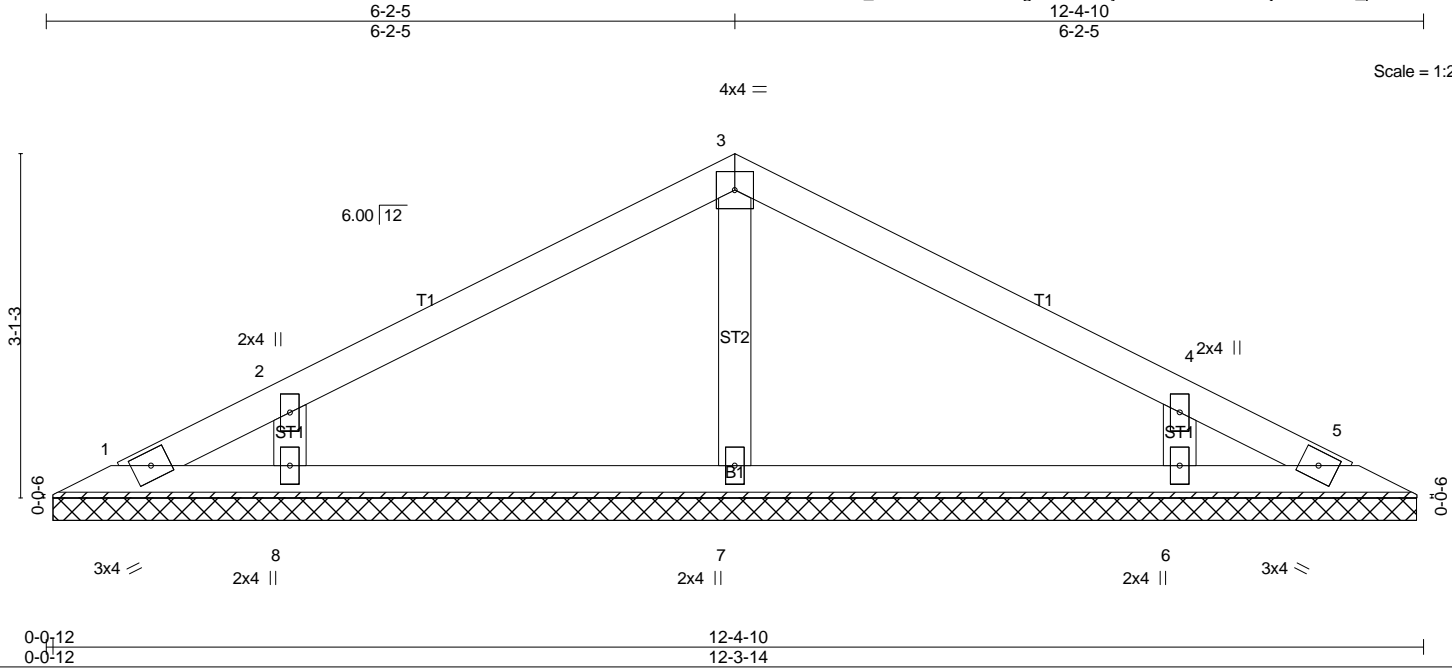
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 7-10-5, Exterior(2) 7-10-5 to 12-3-2, Interior(1) 12-3-2 to 15-0-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 30.0psf 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, 8, 6.
 - Non Standard bearing condition. Review required.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss VG3	Truss Type VALLEY	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
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Comtech, Inc., Fayetteville, NC 28309, Linwood Norris

Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Sun Apr 2 12:33:29 2023 Page 1
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Scale = 1:20.7

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 42 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 12-3-2.
(lb) - Max Horz 1=36(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=285(LC 1), 8=295(LC 23), 6=295(LC 24)

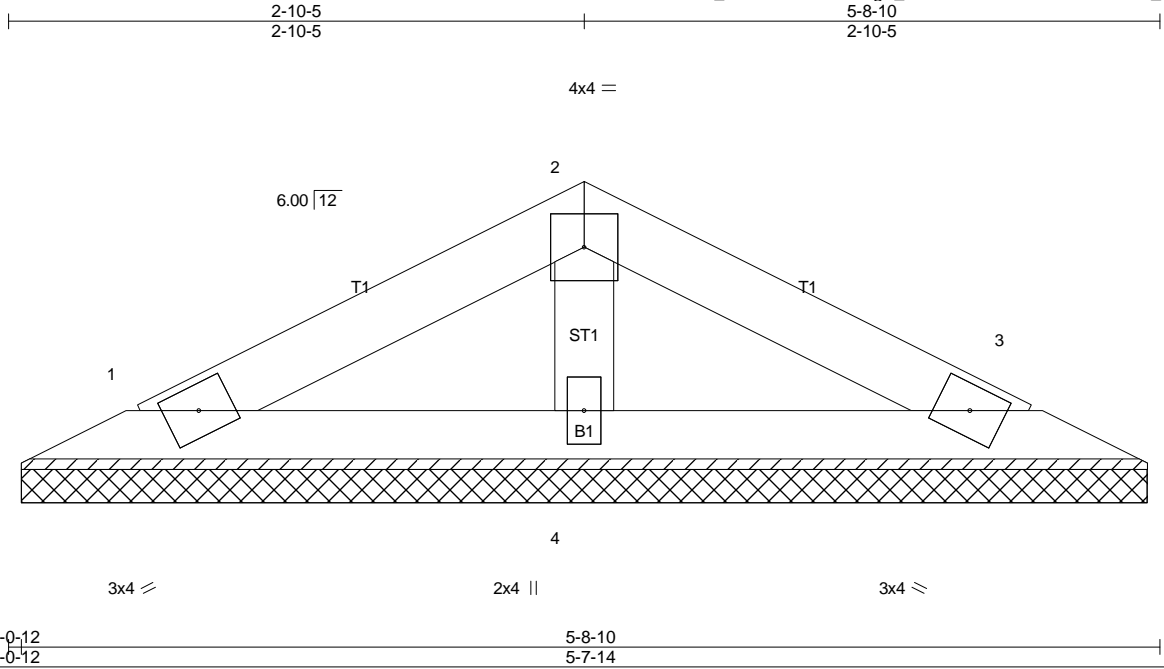
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 6-2-5, Exterior(2) 6-2-5 to 10-7-2, Interior(1) 10-7-2 to 11-8-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 30.0psf 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, 8, 6.
 - Non Standard bearing condition. Review required.
 - 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.

LOAD CASE(S) Standard

Job FOUNTAIN RES	Truss VG5	Truss Type VALLEY	Qty 1	Ply 1	Caston / Fountain Res. / Harnett
Comtech, Inc., Fayetteville, NC 28309, Linwood Norris					Job Reference (optional)

Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Sun Apr 2 12:33:30 2023 Page 1
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Scale = 1:11.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2015/TPI2014						Weight: 17 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

BRACING-
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 5-8-10 oc purlins.
 Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=90/5-7-2 (min. 0-1-8), 3=90/5-7-2 (min. 0-1-8), 4=173/5-7-2 (min. 0-1-8)
 Max Horz 1=15(LC 9)
 Max Uplift1=-14(LC 12), 3=-17(LC 13)

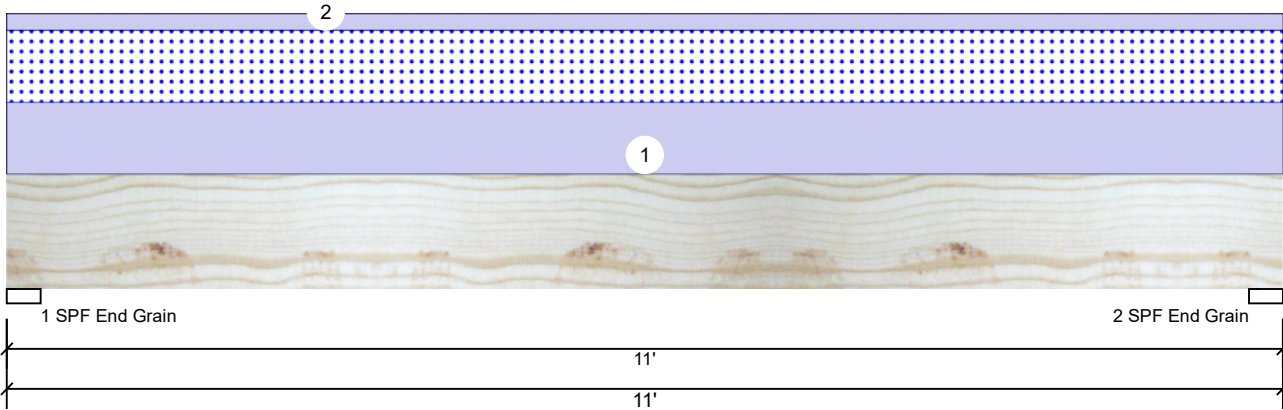
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 30.0psf 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.
 - Non Standard bearing condition. Review required.
 - 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.

LOAD CASE(S) Standard

GDH 10' SL Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1794	1414	0	0
2	Vertical	0	1794	1414	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	31%	1794 / 1414	3208	L	D+S
2 - SPF End Grain	3.500"	Vert	31%	1794 / 1414	3208	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8102 ft-lb	5'6"	22897 ft-lb	0.354 (35%)	D+S	L
Unbraced	8102 ft-lb	5'6"	8975 ft-lb	0.903 (90%)	D+S	L
Shear	2470 lb	1'3 3/8"	10197 lb	0.242 (24%)	D+S	L
LL Defl inch	0.083 (L/1524)	5'6"	0.264 (L/480)	0.315 (31%)	S	L
TL Defl inch	0.188 (L/672)	5'6"	0.527 (L/240)	0.357 (36%)	D+S	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at end bearings.
- 6 Bottom must be laterally braced at end bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	257 PLF	0 PLF	257 PLF	0 PLF	0 PLF	D2 TRUSS
2	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	DEAD WALL
	Self Weight				9 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

Metsä Wood
 301 Merritt 7 Building, 2nd Floor
 Norwalk, CT 06851
 (800) 622-5850
www.metsawood.com/us