





H SQUARED HOME DESIGN, INC.



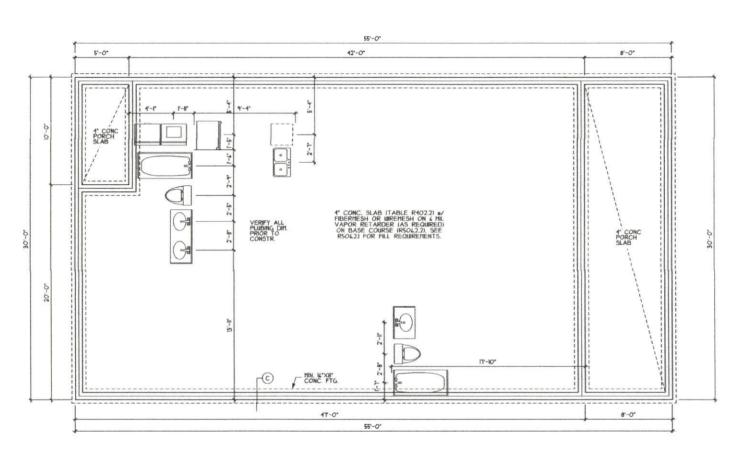
FIRST FLOOR FRONT PORCH REAR PORCH

= 1380 = 240 = 50

#1360

CHARLESTON THE (RIGHT HAND

Seven Magnolias Const.



Const.

CHARLESTON (RIGHT HAND)

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Magnolias

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#1360

= 1360 = 240 = 50

FIRST FLOOR FRONT PORCH REAR PORCH

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

ANCHOR BOLTS

ANCHOR BOLTS TO BE PLACED WITHIN 12" OF EVERY CORNER AND FROM EVERY SPLICE AND AT 4'-O' O.C. WITH 1" MIN. M CONC.

DAMP PROOFING

FOR DAMP PROOFING I WATER PROOFING REFER TO SECTION 405 I 406 IN 2018 EDITION NC RES. CODES

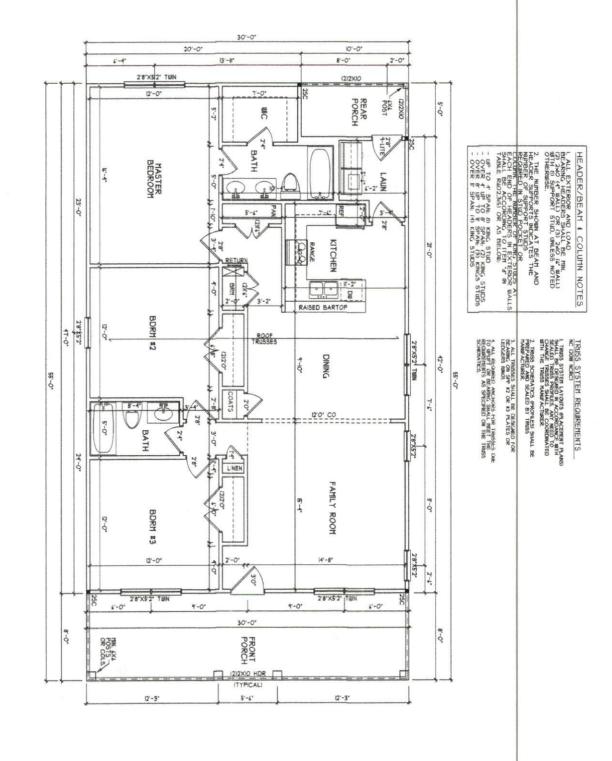
STEM WALL SLAB FOUNDATION PLAN SCALE 1/4" = 1'-0"

H SQUARED HOME DESIGN, INC.

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DATE: 05/24/21 I STORY

PLE: 050521



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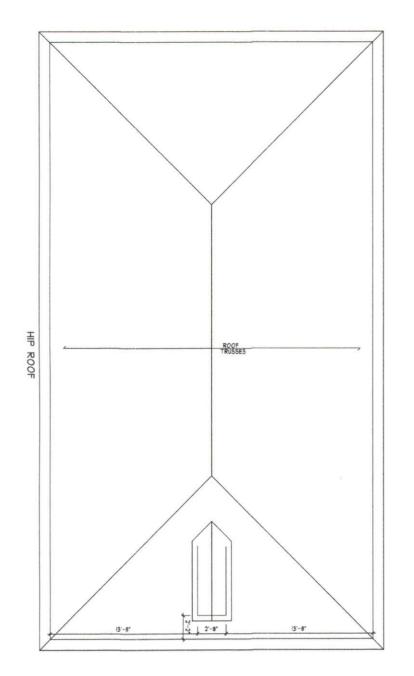
H SQUARED HOME DESIGN, INC.

HEATHER HALL 165 HEATHERSTONE CT BENSON NC 27504 (919) 207-1403 FIRST FLOOR FRONT PORCH REAR PORCH = 1380 = 240 = 50

#1360

THE CHARLESTON

Seven Magnolias Const.



ROOF TRUSSE

GABLE OPT.

3. ALL TRESSES SHALL BE DESIGNED FOR BEAGING ON SEP 13 OR 15 PATES OR LEDGERS (1800).

4. ALL REQUIRED ANCHORS OF TRESSES DUE TO PUBLIF TO REASHING SHALL HEET THE RECOMEMENT AS SPECKED ON THE TRIASS SCHEMATCS. 2. TRUSS SCHEMATICS (PROPILES) SHALL BE PREPARED AND SEALED BY TRUSS HANDFACTURER. TRUSS SYSTEM REQUIREMENTS

SCALE V4" = 1'-0"

050521	I STORY	DATE: 05/24/21	ANT DEVIATION OF THE SPECIFIED REASUREMENTS OR OTHERSENIS YOUGH H SOURRED HOTE DESIGN, RICES LABBLITY. THIS PLAK HAS BEEN ORAIN IN ACCORDING STITH ROPTH CAROLINA STATE RESIDENTIAL SELDING COORS 2018 EDITION.
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DE	SIGN,	INC.	

HEATHER HALL 185 HEATHERSTONE CT BENSON NC 27504 (919) 207-1403

FIRST FLOOR FRONT PORCH REAR PORCH

= 1360 = 240 = 50

#1360

THE CHARLESTON

Seven Magnolias Const.

STRUCTURAL NOTES

D ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 208 EXTING PLISS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER OR DESIGNER IS NOT RESPONSIBLE FOR, AND BULL NOT HAVE CONTROL OF, CONSTRUCTION HEARS, HETHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION SHORK NOR BULL THE ENGINEER OR DESIGNER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY CUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONSTRUCTION SHORK NOR BULL THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT LOCALINE SERVICES ARE NOT PART OF OUR CONTRACT. ALL MEMBERS SHALL BE FERSHED, ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.

2)	DESIGN LOADS (R3OL4)	LIVE LOAD (PSF)	(PSE)	DEFLECTION (LL)
	ROOMS OTHER THAN SLEEPING RO	OMS 40	10	L/340
	SLEEPING ROOMS	30	10	L/340
	ATTIC WITH PERHANENT STAIR	40	10	L/340
	ATTIC WITH OUT PERMANENT STAIR	R 20	10	L/340
	ATTIC WITH OUT STORAGE	10	10	L/240
	STAIR5	40		L/340
	EXTERIOR BALCONIES	40	10	L/340
	DECK5	40	10	L/340
	GUARDRAILS AND HANDRAILS	200		-
	PASSENGER VEHICLE GARAGES	50	Ю	L/360
	FIRE ESCAPES	10	10	L/340
	SNOW	20		

WIND LOAD (BASED ON 15/120 MPH WIND VELOCITY I EXPOSURE B)

3) WALL BRACING: BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO SECTION RADAIO3.

THE AMOUNT AND LOCATION OF BRACING SHALL COMPLY WITH TABLE RADAIO.

THE LENGTH OF BRACED PANELS SHALL BE DETERMINED BY SECTION RADAIO.

LATERAL BRACING SHALL BE SATISFEED PER INTENDO 3 BY CONTINUOUSLY.

SHEATHING WALLS WITH STRUCTURAL SHEATHING PER SECTION RADAIO.3.

NOTE THAT MY SPECFICE BRACED WALL DETAIL SHALL BE INSTALLED AS SPECIFIED.

4) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A CONCRETE SHALL HAYE A TIMBUTE 20 MT STERRICH OF 3000 PG AND.

HAXBUM SLUPP OF 5 INCHES UNLESS NOTED OTHERWISE UND), AIR ENTRAINED PER TABLE 4022, ALL CONCRETE SHALL BE PROPORTIONED, INXED, HANDLED, ASHPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACT STARDARDS, ALL, SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE ETT END OF THE PUMP.

SAMPLES FOR PUTIPING SHALL BE TAKEN FROM THE EXIT END OF THE PUTIF.

3 ALLOWABLE SOIL BEARING PRESSURE A SUBJECT TO BE 2000 PSF. THE CONTRACTOR MUST CONTRACT A GEOTECHNICAL ENGINEER AND THE STRUCTUAL ENGINEER FOR MUSTATISFACTORY SUBJECTACE CONDITIONS ARE ENCOUNTERED. THE SUBFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAWAGE, AND SHALL BE GRADED SO AS TO DRAWAGESTER OF THE MUST AND FOUNDATION WALLS.

ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 815 PSI) UNLESS NOTED
 OTHERSISE (UND). ALL TREATED LUMBER SHALL BE SYP # 2 (Fb-#15 PSI).
 PLATE MATERIAL MAY BE SPF # 3 OR SYP #3 (Fc(perp) = 425 PSI - MIN).

1) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (0 2.4 STUD COLUMN FOR ℓ^* -O" HAX. BEAM SPAN (UNO), (2) 2X4 STUDS FOR BEAM SPAN GREATER THAN ℓ^* -O" (UNO).

B LV.L. SHALL BE LAMNATED VENEER LUMBER: Fb=2400 PSI, Fv=285 PSI, E=1410 PSI, P.S.L. SHALL BE PARALLEL STRAID LUMBER: Fb=2900 PSI, Fv=700 PSI, E=2.040 PSI, LS.L. SHALL BE LAMNATED STRAND LUMBER: Fb=290 PSI, Fv=400 PSI, E=15540 PSI, INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.

1) ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH ANY SEALED STRUCTURAL DRAWINGS. TRUSSES AND 1-JOISTS SHALL BE INSTALLED ACCORDING TO THE HANDFACTURE'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR 1-JOIST LAYOUT SHALL BE COORDINATED WITH DESIGNER OR ENGINEER

TRUSS OR 1-JOST LAYOUT SHALL BE COORDINATED WITH DESIGNER OR ENGINED ALL STRUCTURAL STEEL SHALL BE ASTH A-3s. STEEL BEARTS SHALL BE ESTED AT EACH END WITH A MINIMUM BEARING, LENGTH OF 5 L/2" INCHES AND MILL FLANGE WOTH, PROVIDE SOLD BEARING, FROM BEAM SHAPPORT TO FOUNDATION, BEARTS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREENS IN/2" DMRIETER » 4" LONG, LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDED THE JOST ARE TOE MALED TO THE SOLE PLATE, AND SOLE PLATE IS MALED OR BOLLED TO THE BEAM FLANGE * 46" O.C. .
ALL STEEL TUBBING SHALL BE ASTH ASOL

ID REBAR SHALL BE DEFORMED STEEL, ASTMAIS, GRADE 40.

12) FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A30T) 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 BEAN (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 4" FROM EACH END.

B) BRICK LINTELS SHALL BE 3 L/2"x3 L/2"x1/4" STEEL ANGLE FOR UP TO L"-O" SPAN AND L"x4"x5/4" STEEL ANGLE WITH L" LEG VERTICAL FOR SPANS UP TO Y-O' (UNO)

M) THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS FOR A MEAN ROOF HEIGHT OF 35 FEET OR LESS SHALL BE 25 PSF.

(5) THE POSITIVE AND NEGATIVE DESIGN PRESSURES REQUIRED FOR ANY ROOF OR BALL CLADDING APPLICATION NOT SPECIFICALLY ADDRESSED IN THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2008 EDITION SHALL BE AS FOLLOWS:

45.4 PSF - 2.25/2 PITCH OR LESS 34.8 PSF - 2.25/2 TO 1/2 PITCH 21 PSF - 142 TO 1242 PITCH BALLS

241 PSF - WALLS

TRUSS SYSTEM REQUIREMENTS

L TRUSS SYSTEM LAYOUTS (PLACEMENT PLANS) SHALL BE DESIGNED IN ACCORDANCE WITH ROOF TRUSS LAYOUTS AND SEALED PROPULED PROVIDED BY THE ROOF TRUSS HAMIFACTURETH. ANY NEED TO CHANGE TRUSSES SHALL BE COORDINATED WITH THE ROOF TRUSS TAMEN ACTURED.

2. TRUSS SCHEMATICS (PROFILES) SHALL BE PREPARED AND SEALED BY TRUSS HANUFACTURER.

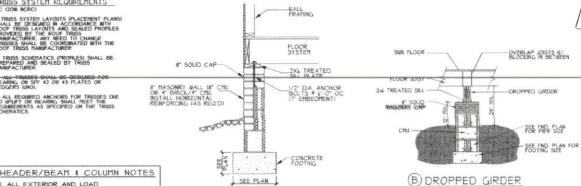
3. ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SPF #2 OR #3 PLATES OR LEDGERS (UNO).

4. ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATICS.

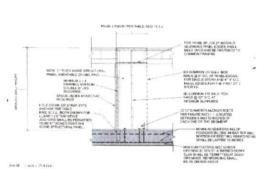
LALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. 122 23d0 (4" WALL) OR (3) 23d0 (4" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.

2. THE NUMBER SHOWN AT BEAH AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORTS STUDS OF COLUMN. THE NUMBER OF KING STUDS AT EACH BUT OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "of IN TABLE REQUISITION TO S

UP TO 4' SPAN: (1) KING STUD OVER 4' UP TO 8' SPAN: (2) KING STUDS OVER 8' UP TO 11' SPAN: (3) KINGS STUDS OVER 11' SPAN: (4) KING STUDS



(A) CRAWL SPACE FOOTING (SIDING #/ BRICK SKIRT)



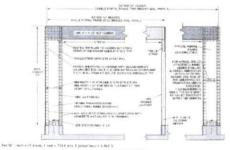
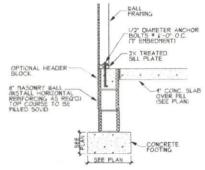
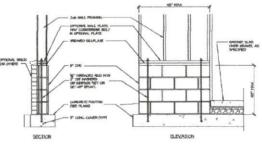


FIGURE R002.10.3.2 METHOD PFH: PORTAL FRAME WITH HOLD-DOWNS.



(C) STEM WALL FOOTING



GARAGE WING WALL' REINFORCING

BUILDING SHEET MPH) DETAIL SI (115-120 BASIC

TOT 5 THAT APPLY *PLEASE NOTE ' ALL DETALLS A EVERY PLAN.

5 HEATHER HALL 35 HEATHERSTONE CT BENSON NC 27504 (819) 207-1403 165

H SQUARED HOME DESIGN, INC.

PRICE DEVATOR OF THE SECRET SE

DATE

FRE.



Trenco

818 Soundside Rd Edenton, NC 27932

Re: 2861338 2861338

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Stock Building Supply.

Pages or sheets covered by this seal: T24885358 thru T24885361

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

North Carolina COA: C-0844



August 2,2021

Magid, Michael

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.

Truss Type Qty Ply 2861338 Job Truss T24885358 A1GE 2861338 Common Job Reference (optional) Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.43 S Jul 16 2021 Print: 8.430 S Jul 16 2021 MiTek Industries, Inc. Mon Aug 02 10:57 57 Page: 1 ID:qllmkHh_2wgBCM5R69T94lz_7fl-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? 16-0-0 32-0-0 16-0-0 16-0-0 5x6= 9 612 2x4 II 2x4 II 2×4 # 10 8 2x4 II 2x4 II 3x4 = 3×4 11 2x4 2x4 i 12 5 13 14 2x4 II 2x4 II 8-4-2 3 15 2x4 2x4 2 16 04-2 H 32 31 30 29 2827 26 25 24 23 22 21 20 19 18 3x4 = 3x4= 2x4 II 2x41 2x4 II 2x4 II 2x4 # 2x4 II 2x4 II 2x4 i 2x4 H 2x4 II 2x4 II 2x41 3×4= 3×4= 1-0-0 32-0-0 31-0-0 1-0-0 Scale = 1:60.6 DEFL 2-0-0 CSI I/defl L/d **PLATES** GRIP Loading (psf) Spacing in (loc) TCLL (roof) 20.0 Plate Grip DOL 1.00 TC 0.16 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.15 Vert(TL) n/a n/a 999 0.0* Rep Stress Incr YES WB 0.37 Horiz(TL) -0.01 18 BCLL n/a n/a IRC2015/TPI2014 Weight: 189 lb FT = 20% Code Matrix-MS BCDI 10.0 **BOT CHORD** 1-32=-237/75, 31-32#-237/73, LUMBER TOP CHORD 2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 30-31=-237/73, 29-30=-237/73, LOAD CASE(S) Standard 27-29=-237/73, 26-27=-237/73, SP M 31 2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 25-26=-237/73, 24-25=-237/73, **BOT CHORD** SP M 31 23-24=-237/73, 22-23=-237/73, 20-22=-237/73, 19-20=-237/73, **OTHERS** 2x4 SP No.2 18-19=-237/73, 17-18=-237/73 BRACING WEBS 9-25=-329/0, 8-26=-139/51, 7-27=-116/64 TOP CHORD Structural wood sheathing directly applied or 6-29=-119/58, 4-30=-141/62, 3-31=-67/62, 10-0-0 oc purlins. 2-32=-282/94, 10-24=-139/51, **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc 11-23=-116/64, 12-22=-119/58, bracing. 14-20=-141/62, 15-19=-67/61, 16-18=-282/94 REACTIONS (lb/size) 18=364/30-0-0, 19=58/30-0-0, NOTES 20=185/30-0-0, 22=155/30-0-0 Unbalanced roof live loads have been considered for 1) 23=155/30-0-0, 24=179/30-0-0 this design 25=370/30-0-0, 26=179/30-0-0, Wind: ASCE 7-10; Vult=115mph (3-second gust) 27=155/30-0-0, 29=155/30-0-0 Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. 30=185/30-0-0, 31=58/30-0-0, II; Exp B; Enclosed; MWFRS (envelope) exterior zone 32=364/30-0-0 and C-C Exterior (2) zone; cantilever left and right Max Horiz 32=-105 (LC 11) exposed; end vertical left and right exposed; C-C for Max Uplift 18=-28 (LC 10), 19=-61 (LC 11), members and forces & MWFRS for reactions shown; 20=-19 (LC 11), 22=-29 (LC 11), Lumber DOL=1.60 plate grip DOL=1.33 23=-30 (LC 11), 24=-22 (LC 11), Truss designed for wind loads in the plane of the truss 26=-22 (LC 10), 27=-30 (LC 10), only. For studs exposed to wind (normal to the face), 29=-29 (LC 10), 30=-18 (LC 10), see Standard Industry Gable End Details as applicable 31=-64 (LC 10), 32=-32 (LC 11) or consult qualified building designer as per ANSI/TPI 1. 18=469 (LC 22), 19=123 (LC 21), Max Grav Gable studs spaced at 2-0-0 oc. 20=208 (LC 22), 22=155 (LC 1), This truss has been designed for a 10.0 psf bottom 23=158 (LC 22), 24=179 (LC 1), chord live load nonconcurrent with any other live loads 25=370 (LC 1), 26=179 (LC 1), * This truss has been designed for a live load of 20.0psf 27=158 (LC 21), 29=155 (LC 1) on the bottom chord in all areas where a rectangle EAL 30=208 (LC 21), 31=123 (LC 22), 3-06-00 tall by 2-00-00 wide will fit between the bottom 32=469 (LC 21) chord and any other members. **FORCES** (lb) - Maximum Compression/Maximum Provide mechanical connection (by others) of truss to Tension bearing plate capable of withstanding 22 lb uplift at joint TOP CHORD 1-2=-52/323, 2-3=-7/272, 3-4=0/296, 26, 30 lb uplift at joint 27, 29 lb uplift at joint 29, 18 lb MAGIO 4-6=0/291, 6-7=0/291, 7-8=0/298, 8-9=0/293 uplift at joint 30, 64 lb uplift at joint 31, 32 lb uplift at joint 9-10=0/291, 10-11=0/297, 11-12=0/291, 32, 22 lb uplift at joint 24, 30 lb uplift at joint 23, 29 lb 12-14=0/291, 14-15=0/296, 15-16=-4/272, uplift at joint 22, 19 lb uplift at joint 20, 61 lb uplift at joint 16-17=-50/323 19 and 28 lb uplift at joint 18. August 2,2021 eters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Edenton, NC 27932

യൽ പ്രത്യാപ്രത്യാന് അവ വാരവും വാരുന്നു. സാധാന്യാന് വാരു വാരുന്നു വാരു വാരുന്നു ആവും . പ്രത്യാന് പ്രോഗം സ്ഥാന് വാരു പ്രത്യാന് പ്രവാധ നാന്യാന് പ്രത്യാന് ആവും പ്രത്യാന് വാരുന്നു. വാരുന്നു വരുന്നു ഇന്

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Job Truss Type Qty Ply 2861338 Truss T24885359 Common 2 2861338 A2 lob Reference (optional) Run: 8.43 S Jul 16 2021 Print: 8.430 S Jul 16 2021 MITek Industries. Inc. Mon Aug 02 10:57:59 Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557 Page: 1 ID:k6Po4UkJMXzs1FQxKjiGtDz_7H9-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC? 3-6-15 9-10-0 16-0-0 22-2-0 28-5-1 32-0-0 3-6-15 6-3-1 6-2-0 6-2-0 6-3-1 3-6-15 5x6= 5 612 4x5 3x4 = THIS TRUSS IS NOT SYMMETRIC. PROPER ORIENTATION IS ESSENTIAL. 4x5 6 2x4 & 2 5x8 5x8 # 047 T 15 16 28 13 11 10 12 4x5= MT20HS 3x10 = 4x5= 3x6= 4x5= 4x5= 32-0-0 1-0-0 5-10-0 13-10-0 18-2-0 20-10-4 26-2-0 31-0-0 4-10-0 4-4-0 2-8-4 8-0-0 5-3-12 4-10-0 1-0-0 1-0-0 Scale = 1:59.6 Plate Offsets (X, Y): [1:0-3-12,0-2-0], [1:0-0-13,0-11-7], [9:0-3-12,0-2-0], [9:0-0-13,0-11-7] Spacing 2-0-0 DEFL (loc) I/defl L/d **PLATES** GRIP Loading (psf) Plate Grip DOL 1.00 TC 0.46 -0.09 14-16 240 MT20 TCLL (roof) Vert(LL) >999 244/190 20.0 Vert(CT) 1.15 BC -0.21180 TCDL 10.0 Lumber DOL 0.40 14-16 >999 MT20HS 187/143 BCLL 0.0* Rep Stress Incr YES WB 0.34 Horz(CT) 0.04 9 n/a n/a IRC2015/TPI2014 FT = 20% BCDL 10.0 Matrix-MS Weight: 174 lb Wind: ASCE 7-10; Vult=115mph (3-second gust) LUMBER Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. TOP CHORD 2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 II: Exp B; Enclosed; MWFRS (envelope) exterior zone SP M 31 and C-C Exterior (2) zone; cantilever left and right **BOT CHORD** 2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 exposed; end vertical left and right exposed; C-C for SP M 31 members and forces & MWFRS for reactions shown; **WEBS** 2x4 SP No.2 Lumber DOL=1.60 plate grip DOL=1.33 WEDGE Left: 2x6 SP No.2 Right: 2x6 SP No.2 All plates are MT20 plates unless otherwise indicated. This truss has been designed for a 10.0 psf bottom BRACING chord live load nonconcurrent with any other live loads. TOP CHORD Structural wood sheathing directly applied or * This truss has been designed for a live load of 20.0psf 4-6-4 oc purlins. on the bottom chord in all areas where a rectangle **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc 3-06-00 tall by 2-00-00 wide will fit between the bottom bracing. chord and any other members, with BCDL = 10.0psf. REACTIONS (lb/size) 1=1175/0-3-8, 9=1075/0-3-8, Provide mechanical connection (by others) of truss to 12=310/0-3-8 bearing plate capable of withstanding 52 lb uplift at joint Max Horiz 1=-105 (LC 11) 1 and 64 lb uplift at joint 9. Max Uplift 1=-52 (LC 10), 9=-64 (LC 11) LOAD CASE(S) Standard 1=1175 (LC 1), 9=1075 (LC 1), Max Grav 12=325 (LC 3) (lb) - Maximum Compression/Maximum **FORCES** Tension 1-2=-1699/272, 2-4=-1625/256 TOP CHORD 4-5=-1294/293, 5-6=-1172/299, ORT 6-8=-1413/266, 8-9=-1502/281 **BOT CHORD** 1-16=-196/1414, 14-16=-135/1350, 13-14=-11/923, 12-13=-142/1210, 10-12=-142/1210, 9-10=-202/1263 5-14=-62/573, 4-14=-463/172, 4-16=0/225, WEBS 2-16=-42/116, 6-13=-420/174, 6-10=-24/114, 8-10=-104/108, 5-13=-95/221 NOTES 1) Unbalanced roof live loads have been considered for this design. MAGID

August 2,2021



Truss Type Qty Ply 2861338 Job Truss T24885360 Common 5 2861338 A3 Job Reference (optional) Run: 8.43 S. Jul 16 2021 Print: 8.430 S. Jul 16 2021 MiTek Industries, Inc. Mon Aug 02 10:58:00 Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557 Page: 1 ID:gam9sHBu1PnDaeVbRMbYC1z_7W3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 16-0-0 22-2-0 3-6-15 9-10-0 28-5-1 3-6-15 3-6-15 6-3-1 6-2-0 6-2-0 6-3-1 5x6 5 612 4x5 4 3x4 a 6 2×4 4 6x8 II 15 27 12 11 13 26 10 4x5= 4x12 u 4x5= 3x6 = 4x5= 5x6 = 5x6 4x5= 4x12 i 1-0-0 32-0-0 11-6-0 18-2-0 23-0-0 31-0-0 5-8-7 13-10-15 26-2-0 4-10-0 1-0-0 4-8-7 5-9-9 2-4-15 4-3-1 3-2-0 4-10-0 1-0-0 Scale = 1:61.9 Plate Offsets (X, Y): [1:0-1-12,Edge], [1:0-0-5,0-10-15], [9:0-1-12,Edge], [9:0-0-9,0-10-15], [13:0-7-8,0-2-0] 2-0-0 CSI (loc) I/defi L/d **PLATES** Spacing Loading (psf) Plate Grip DOL 1.00 TC Vert(LL) -0.10 10-12 >999 240 0.51 MT20 244/190 TCLL (roof 20.0 Vert(CT) 0.49 -0.24TCDL 10.0 Lumber DOL 1.15 BC 10-12 >999 180 BCLL 0.0* Rep Stress Incr YES WB 0.33 Horz(CT) 0.05 9 n/a n/a IRC2015/TPI2014 Weight: 192 lb FT = 20% BCDL 10.0 Matrix-MS Wind: ASCE 7-10; Vult=115mph (3-second gust) LUMBER Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. TOP CHORD 2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 II; Exp B; Enclosed; MWFRS (envelope) exterior zone SP M 31 and C-C Exterior (2) zone; cantilever left and right **BOT CHORD** 2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 exposed; end vertical left and right exposed; C-C for SP M 31 *Except* 15-13:2x6 SP 2400F 2.0E members and forces & MWFRS for reactions shown; or 2x6 SP DSS or 2x6 SP M 31 Lumber DOL=1.60 plate grip DOL=1.33 WEBS 2x4 SP No.2 This truss has been designed for a 10.0 psf bottom Left: 2x6 SP No.2 WEDGE Right: 2x6 SP No.2 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 TOP CHORD Structural wood sheathing directly applied or 3-06-00 tall by 2-00-00 wide will fit between the bottom 4-1-10 oc purlins chord and any other members, with BCDL = 10.0psf. Rigid ceiling directly applied or 10-0-0 oc

BRACING

BOT CHORD

bracing.

1=1280/0-3-8, 9=1280/0-3-8 REACTIONS (lb/size)

Max Horiz 1=-105 (LC 11)

Max Uplift 1=-37 (LC 10), 9=-37 (LC 11)

FORCES

(lb) - Maximum Compression/Maximum

Tension

1-2=-1952/279, 2-4=-1893/257 TOP CHORD 4-5=-1536/289, 5-6=-1506/283,

6-8=-1814/248, 8-9=-1873/264

BOT CHORD 1-15=-200/1629, 13-15=-136/1583, 12-13=-5/1146, 10-12=-127/1535,

9-10=-189/1558

4-15=0/232, 2-15=-21/127, 4-13=-471/175, WEBS

5-13=-76/542, 6-12=-457/173, 6-10=0/199,

8-10=-17/136, 5-12=-57/484

NOTES

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

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 1 and 37 lb uplift at joint 9.

LOAD CASE(S) Standard

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Design valid for use only with MTeke 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 properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANS/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



818 Soundside Road Edenton, NC 27932

Qty Ply 2861338 Job Truss Type Truss T24885361 20 2861338 Common Job Reference (optional) Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557 Run: 8.43 S Jul 16 2021 Print: 8.430 S Jul 16 2021 MiTek Industries, Inc. Mon Aug 02 10:58:00 Page: 1 ID:K7vpGeKwdBfHvZl1eLBRFyz_7O8-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC 3-6-15 9-10-0 16-0-0 22-2-0 28-5-1 32-0-0 3-6-15 6-3-1 6-2-0 6-2-0 6-3-1 3-6-15 5x6= 5 612 4x5 ≠ 3x4 a 3x4 4 4×5 × 6 2x4 a 2x4 4 2 6x8 II 6x8 04-2 15 14 13 26 27 12 11 10 4x5= 3x6= 4x5= 4×5= 3x6= 4x5= 5x6= 5x6 = 1-0-0 32-0-0 5-10-0 13-10-0 18-2-0 26-2-0 1-0-0 4-10-0 8-0-0 4-4-0 8-0-0 -10-0 1-0-0 1-0-0 Scale = 1:57.2 Plate Offsets (X, Y): [1:0-1-12,Edge], [1:0-0-9,0-10-15], [9:0-1-12,Edge], [9:0-0-9,0-10-15] Loading Spacing 2-0-0 CSI DEFL (loc) I/defl Ld PLATES GRIP (psf) 20.0 Plate Grip DOL 1.00 TC 0.51 Vert(LL) -0.11 13-15 >999 240 MT20 244/190 TCLL (roof) TCDL 10.0 Lumber DOL 1.15 BC 0.40 Vert(CT) -0.26 13-15 >999 180 YES WB 0.05 Rep Stress Incr 0.33 Horz(CT) BCLL 0.0 n/a n/a IRC2015/TPI2014 Weight: 174 lb FT = 20% BCDL 10.0 Code Matrix-MS This truss has been designed for a 10.0 psf bottom LUMBER TOP CHORD 2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 chord live load nonconcurrent with any other live loads * This truss has been designed for a live load of 20.0psf SP M 31 2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 on the bottom chord in all areas where a rectangle BOT CHORD 3-06-00 tall by 2-00-00 wide will fit between the bottom SP M 31 chord and any other members, with BCDL = 10.0psf. WEBS 2x4 SP No.2 Provide mechanical connection (by others) of truss to WEDGE Left: 2x6 SP No.2 bearing plate capable of withstanding 37 lb uplift at joint Right: 2x6 SP No.2 1 and 37 lb uplift at joint 9. BRACING LOAD CASE(S) Standard Structural wood sheathing directly applied or TOP CHORD 4-2-4 oc purlins. Rigid ceiling directly applied or 10-0-0 oc **BOT CHORD** bracing 1=1280/0-3-8, 9=1280/0-3-8 REACTIONS (lb/size) Max Horiz 1=-105 (LC 11) Max Uplift 1=-37 (LC 10), 9=-37 (LC 11) **FORCES** (lb) - Maximum Compression/Maximum Tension 1-2=-1875/264, 2-4=-1816/247, TOP CHORD 4-5=-1503/284, 5-6=-1503/284, 6-8=-1816/247, 8-9=-1875/264 1-15=-189/1559, 13-15=-127/1534, **BOT CHORD** 12-13=-2/1132, 10-12=-127/1534, 9-10=-189/1559 5-13=-65/507, 4-13=-459/172, 4-15=0/206, WEBS 2-15=-15/139, 6-12=-459/172, 6-10=0/206, 8-10=-15/139, 5-12=-65/507 NOTES Unbalanced roof live loads have been considered for 1) this design Wind: ASCE 7-10; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone MICHA and C-C Exterior (2) zone; cantilever left and right MAGID exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33 August 2,2021





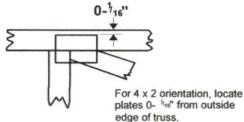
sters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

PLATE SIZE

 4×4

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

LATERAL BRACING LOCATION



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

BEARING



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

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.

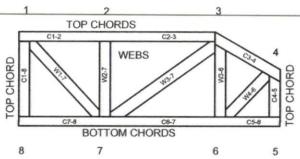
DSB-89: BCSI:

Design Standard for Bracing. Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate

Connected Wood Trusses.

Numbering System





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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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