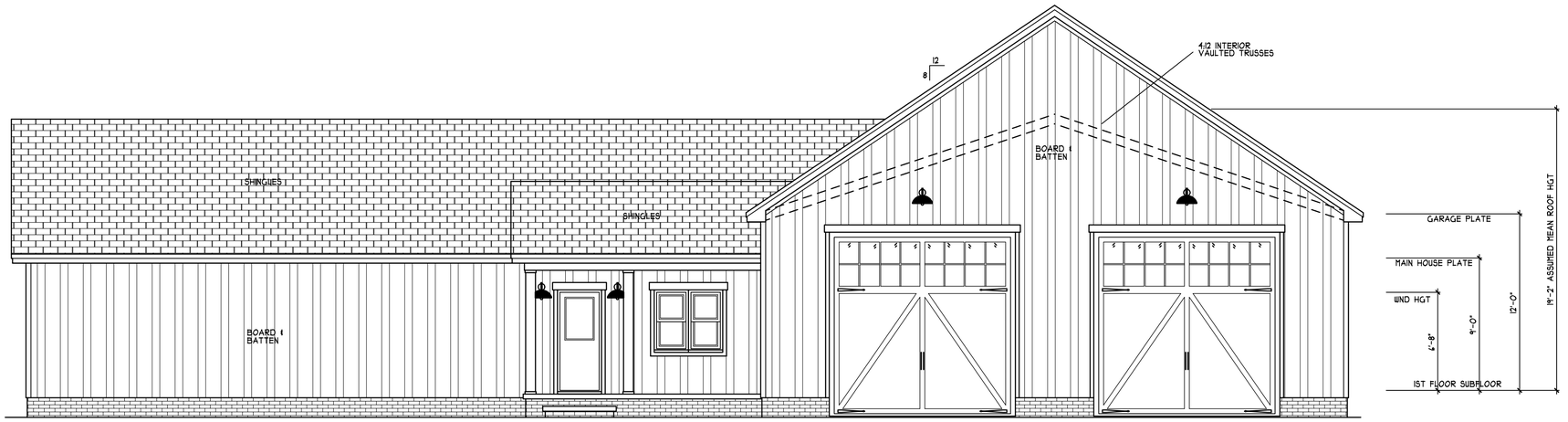


FRONT ELEVATION
SCALE 3/16" = 1'-0"

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.

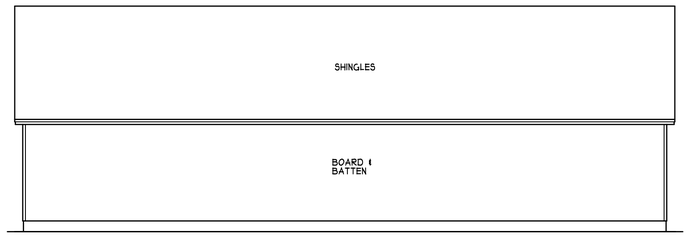
GROSS ATTIC AREA TO BE VENTILATED 5428 SQ.FT.

5428/150 = 36.18 SQ.FT. NET FREE AREA

ENERGY COMPLIANCE

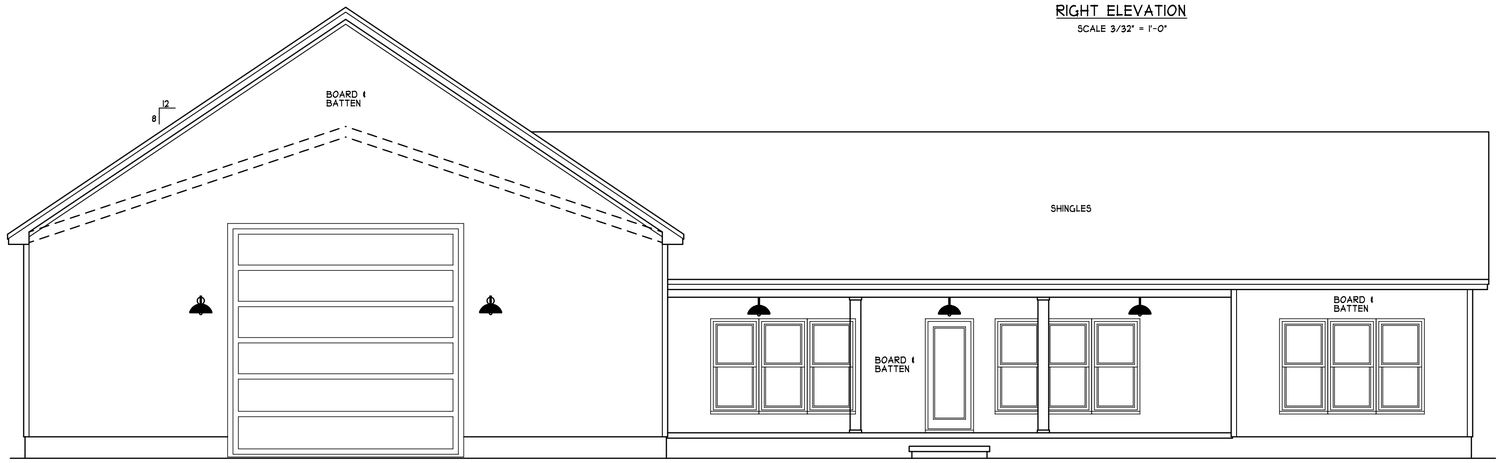
ZONE 3 = MAX. GLAZING U-FACTOR .35
R-VALUE = CEILING R38, WALLS R15, FLOORS R19
FOR JOHNSTON, SAMPSON, WAYNE COUNTY

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

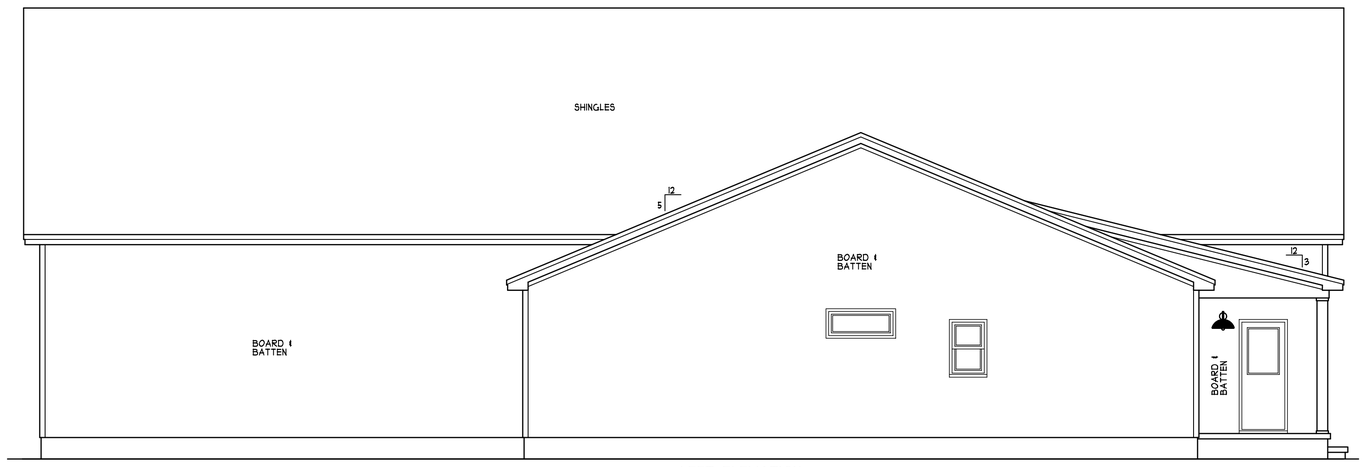


RIGHT ELEVATION
SCALE 3/32" = 1'-0"

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
12/10/2021
Harnett COUNTY NORTH CAROLINA



REAR ELEVATION
SCALE 3/16" = 1'-0"



LEFT ELEVATION
SCALE 3/16" = 1'-0"

MELISSA JOHNSON &
ERIC COLE RESIDENCE

HEATED FOOTAGE: #1695

SQUARE FOOTAGE:
FIRST FLOOR = 1695
FRONT PORCH = 128
COVERED PORCH = 420
GARAGE = 3185

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

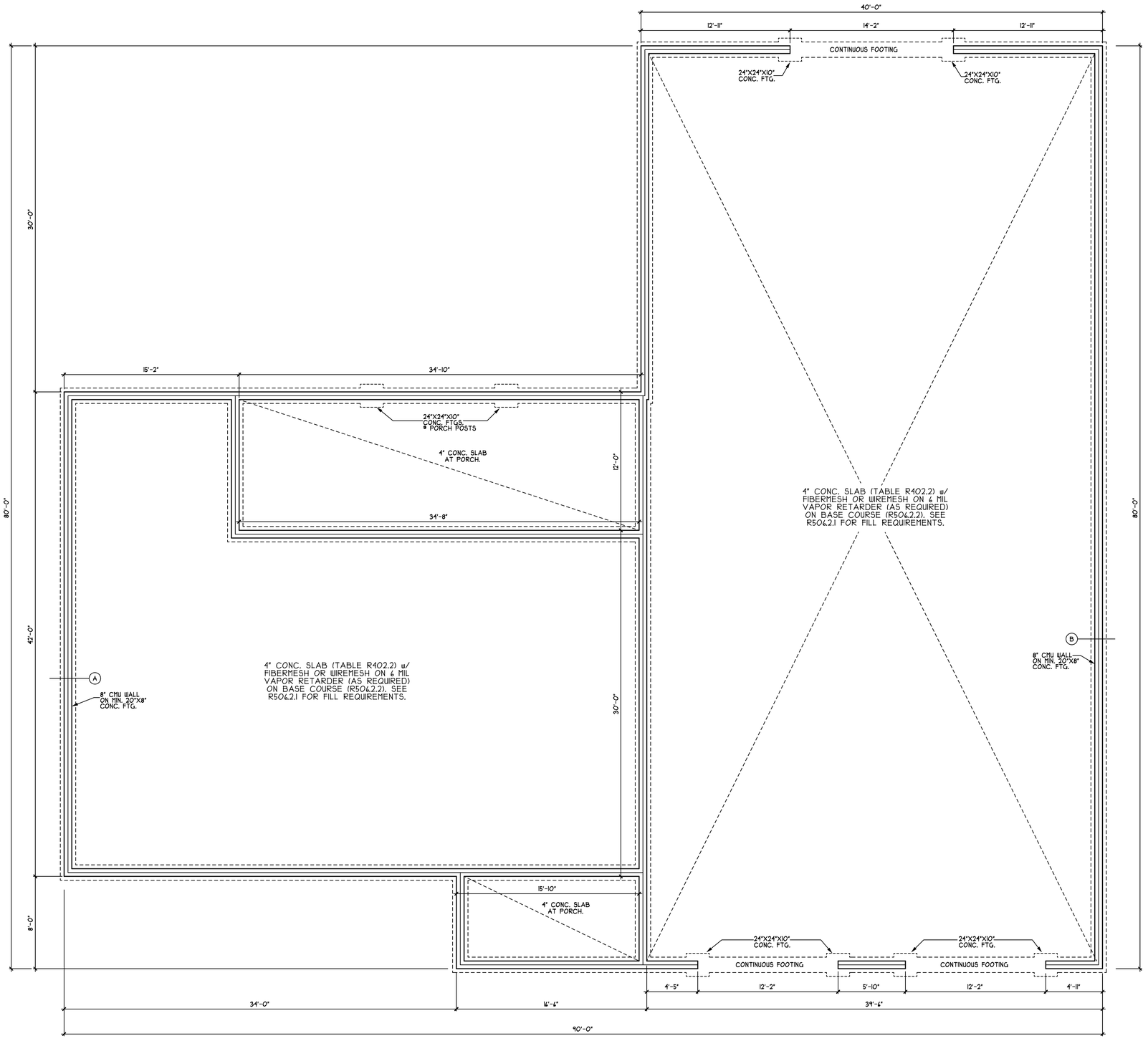
H SQUARED HOME DESIGN, INC.

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

DATE: 11/24/21

1 STORY

FILE: 103621



NOTE: FOR FOUNDATION WALL HEIGHT, THICKNESS, AND BACKFILL REQUIREMENTS, REFER TO TABLE R404.1.1 (1 THRU 4)

NOTE ASSUMED SOIL BEARING CAPACITY = 2000 PSF CONTRACTOR MUST VERIFY SITE CONDITIONS AND CONTACT SOILS ENGINEER IF MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED

ANCHOR BOLTS

ANCHOR BOLTS TO BE PLACED WITHIN 12" OF EVERY CORNER AND FROM EVERY SPLICE AND AT 6'-0" O.C. WITH 1" MIN. IN CONC.

DAMP PROOFING

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

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

STEM WALL SLAB FOUNDATION PLAN

SCALE 3/16" = 1'-0"

MELISSA JOHNSON &
ERIC COLE RESIDENCE

HEATED FOOTAGE: #1695

SQUARE FOOTAGE:

FIRST FLOOR	= 1695
FRONT PORCH	= 128
COVERED PORCH	= 420
GARAGE	= 3185

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

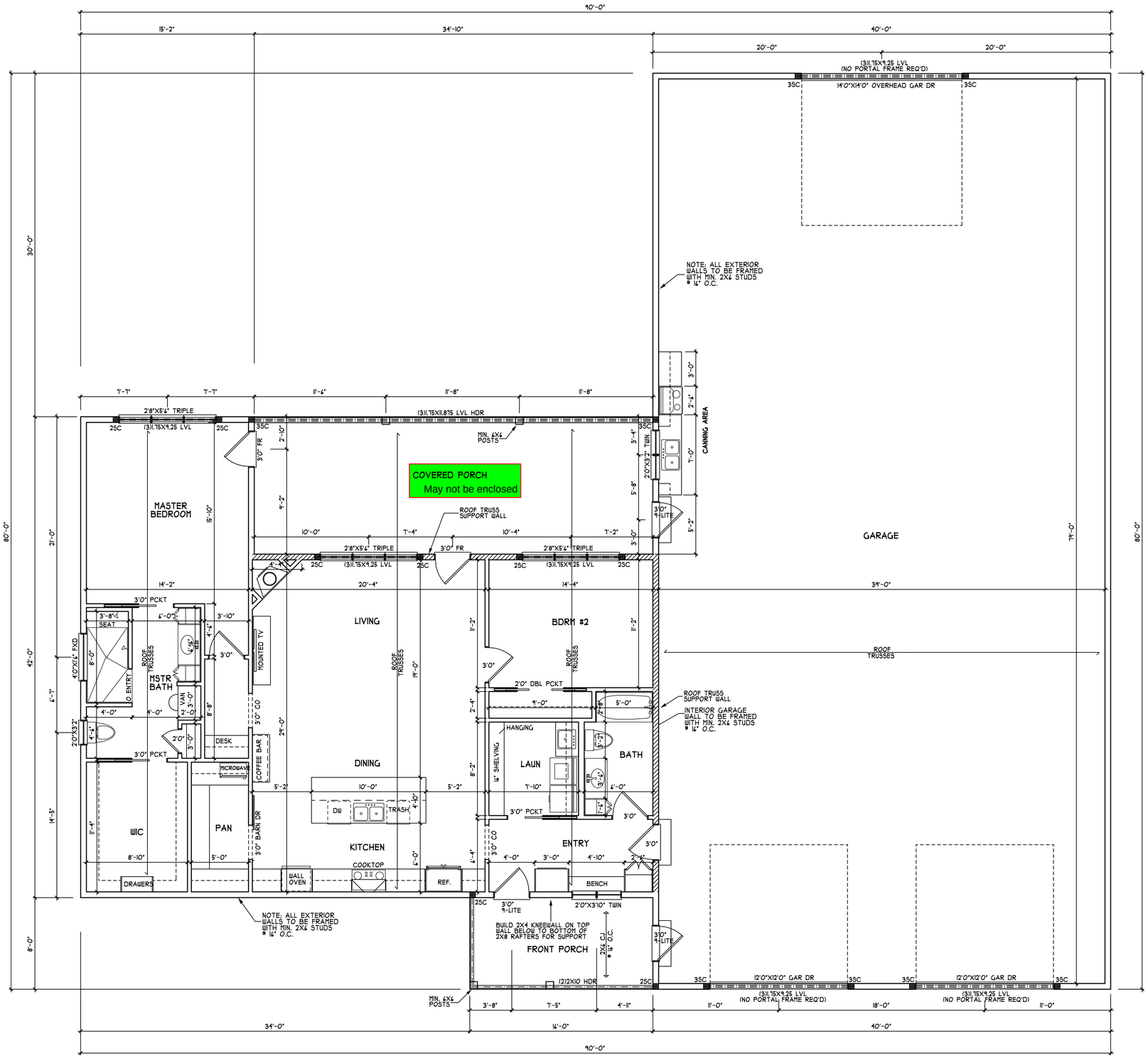
H SQUARED HOME DESIGN, INC.

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

DATE: 11/24/21

1 STORY

FILE: 103621



TRUSS SYSTEM REQUIREMENTS

NC (2018 NCRC): Wind: 115-120 MPH

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.

HEADER/BEAM & COLUMN NOTES

1. ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2X10 (4" WALL) OR (3) 2X6 (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 "2" 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) KINGS STUDS
- OVER 11' SPAN: (4) KING STUDS

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

FIRST FLOOR PLAN

SCALE 3/16" = 1'-0"

MELISSA JOHNSON &
ERIC COLE RESIDENCE

HEATED FOOTAGE: #1695

SQUARE FOOTAGE:

FIRST FLOOR	= 1695
FRONT PORCH	= 128
COVERED PORCH	= 420
GARAGE	= 3185

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

H SQUARED HOME DESIGN, INC.

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

DATE: 11/24/21

1 STORY

FILE: 103621

TRUSS SYSTEM REQUIREMENTS
NC 2018 NCRC21; WIND: 115-120 MPH

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.

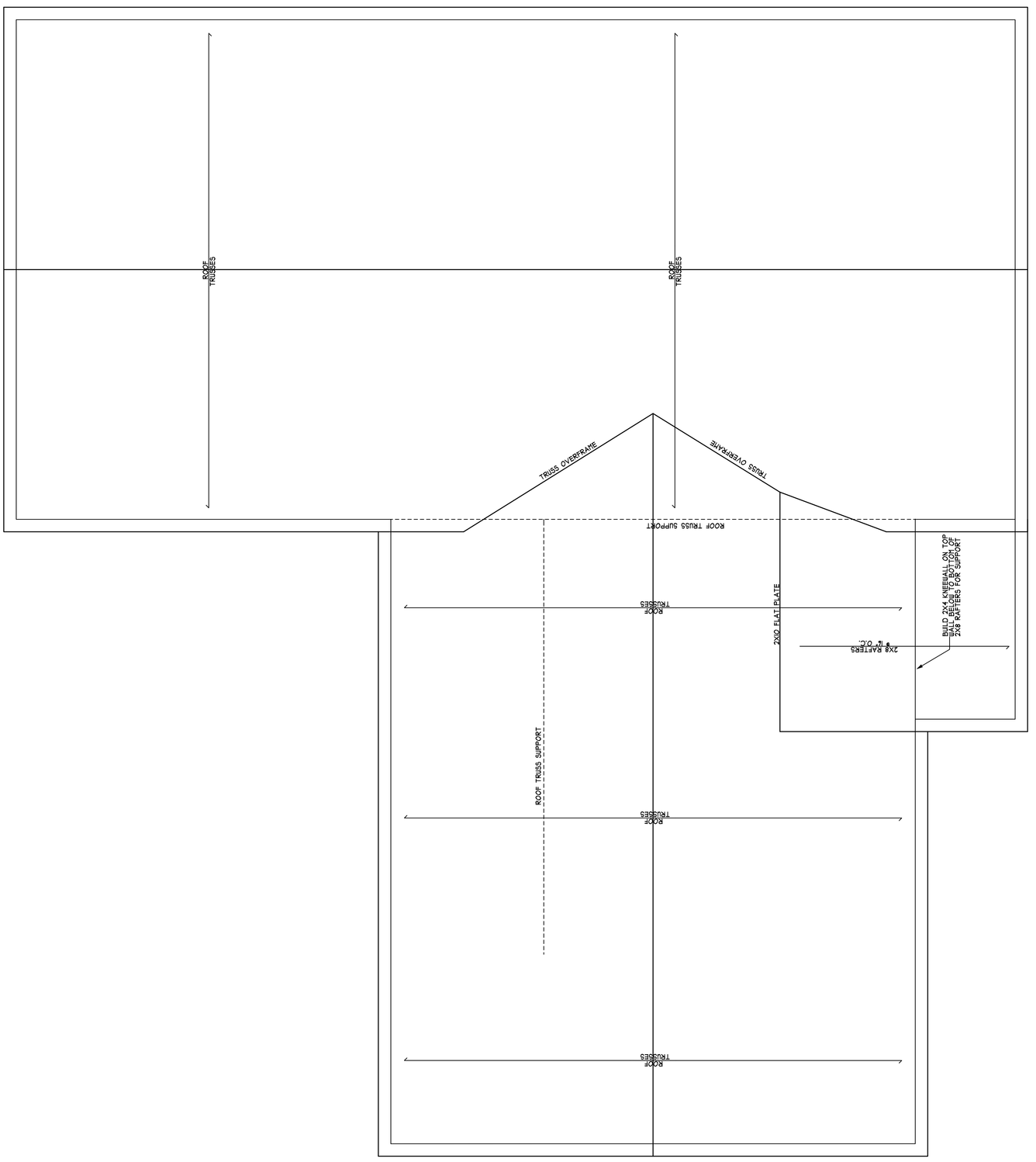
3. ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON 2X4 #2 OR #3 PLATES OR LEDGERS (UNO).

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 3/16" = 1'-0"



STRUCTURAL NOTES

1) 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.

2) 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	40	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)

3) 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.

4) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINED 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.

5) ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTUAL 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 DRAINSURFACE WATER AWAY FROM FOUNDATION WALLS.

6) ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP # 2 (Fb=975 PSI). PLATE MATERIAL MAY BE SPF # 3 OR SYP #3 (Fc(perp) = 425 PSI - MIN).

7) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (1) 2x4 STUD COLUMN FOR 6'-0" MAX. BEAM SPAN (UNO), (2) 2X4 STUDS FOR BEAM SPAN GREATER THAN 6'-0" (UNO).

8) L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2400 PSI, Fv=285 PSI, E=1.9x10 PSI.
P.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2900 PSI, Fv=290 PSI, E=2.0x10 PSI.
L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1.55x10 PSI.
INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.

9) 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 MANUFACTURE'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH DESIGNER OR ENGINEER.

10) 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.

11) REBAR SHALL BE DEFORMED STEEL, ASTM615, GRADE 60.

12) 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.

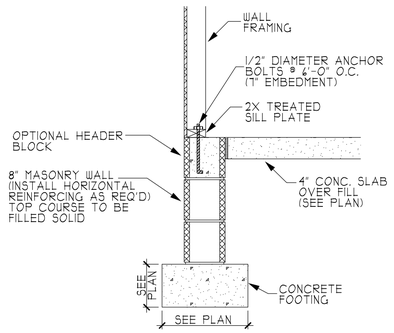
13) BRICK LINTELS SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 6'-0" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-0" (UNO).

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

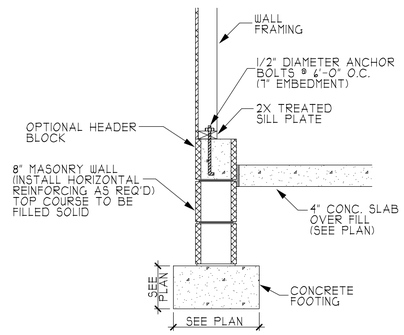
15) THE POSITIVE AND NEGATIVE DESIGN PRESSURES REQUIRED FOR ANY ROOF OR WALL CLADDING APPLICATION NOT SPECIFICALLY ADDRESSED IN THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION SHALL BE AS FOLLOWS:

ROOF:
45.4 PSF - 2.25:12 PITCH OR LESS
34.8 PSF - 2.25:12 TO 7:12 PITCH
21 PSF - 7:12 TO 12:12 PITCH

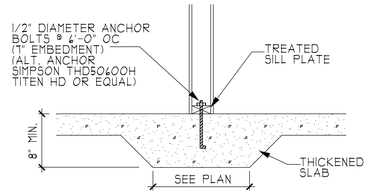
WALLS:
24.1 PSF - WALLS



A STEM WALL FOOTING



B GARAGE WALL FOOTING



C THICKENED SLAB
(INTERIOR BEARING WALL)

TRUSS SYSTEM REQUIREMENTS

NC (2018 NCRC): Wind: 115-120 MPH

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).

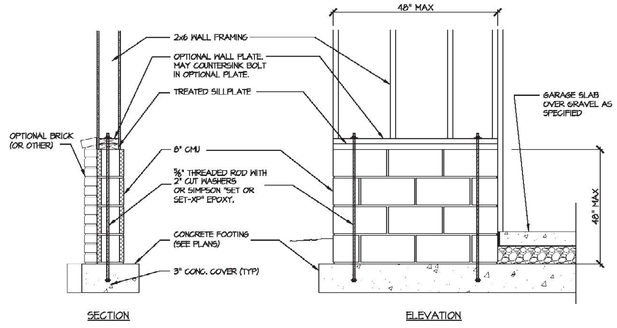
4. ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATICS.

HEADER/BEAM & COLUMN NOTES

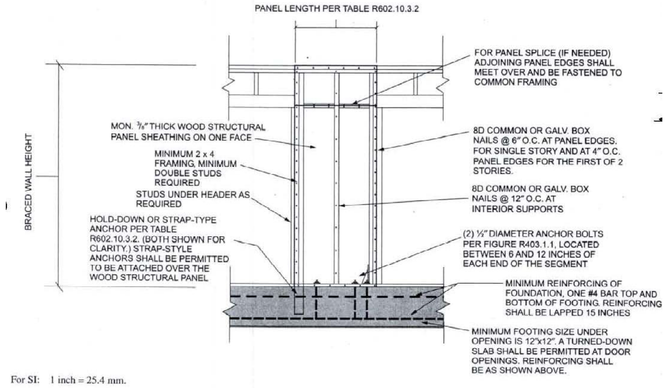
1. ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2x10 (4" WALL) OR (3) 2x10 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.

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 11' SPAN: (3) KINGS STUDS
- OVER 11' SPAN: (4) KING STUDS

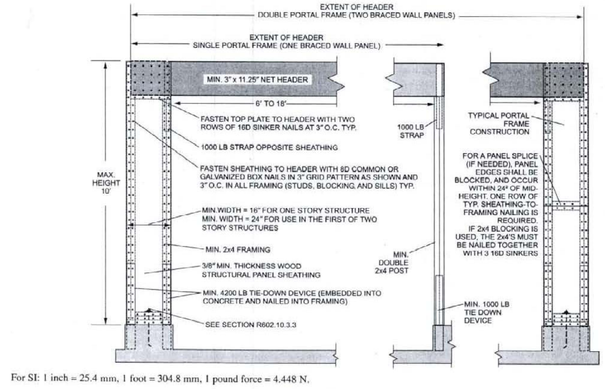


GARAGE 'WING WALL' REINFORCING
PER IRC FIGURE R602.10.4.3



For SI: 1 inch = 25.4 mm.

FIGURE R602.10.3.2
ALTERNATE BRACED WALL PANEL



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

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

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.

DATE:

FILE:

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 25735
BRANDON LEE/COLE

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

Pages or sheets covered by this seal: I48147190 thru I48147201

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

North Carolina COA: C-0844

September 30,2021

Sevier, Scott

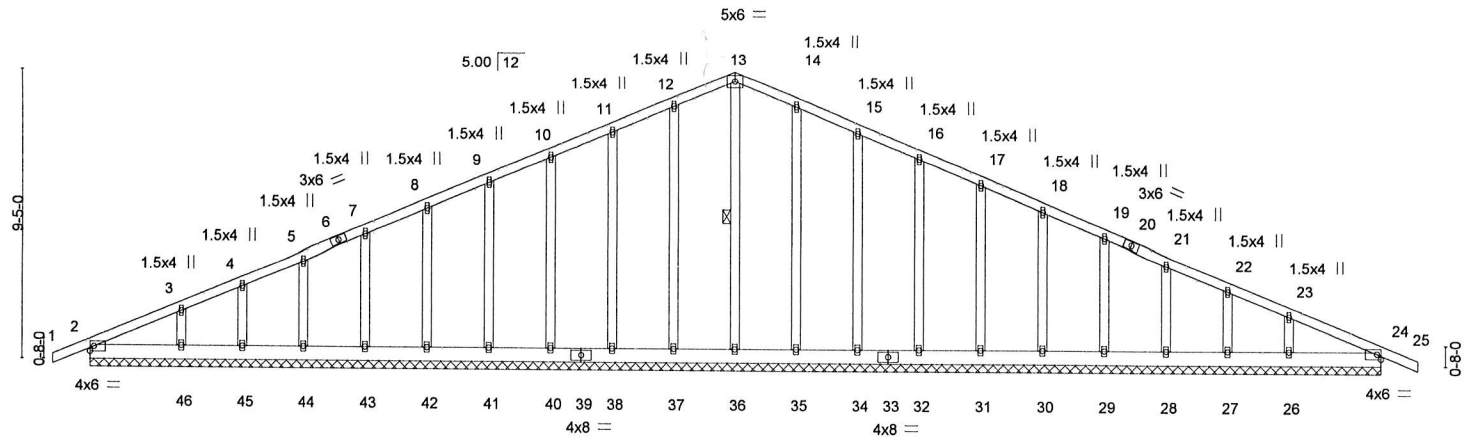
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE	I48147190
25735	G1	GABLE	1	1	Job Reference (optional)	

C&R Truss, Autryville, NC - 28318, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:37 2021 Page 1
ID:pFJVHx?bQQurmNPxZvS0ORyE18p-xB_yjTLrAwdszSxsNDQy?KvT9MU85TWgiWlXHYyYjsC

1-2-8 | 21-0-0 | 42-0-0 | 43-2-8
1-2-8 | 21-0-0 | 21-0-0 | 1-2-8

Scale = 1:71.9



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	25	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	25	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	24	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 304 lb	FT = 20%

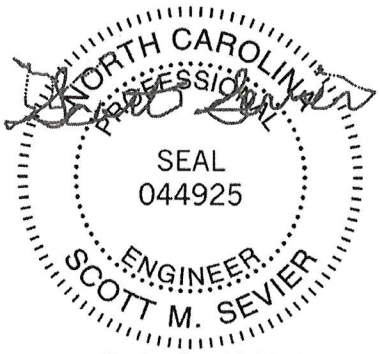
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 13-36

REACTIONS. All bearings 42-0-0.
(lb) - Max Horz 2=180(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 2, 24, 37, 38, 40, 41, 42, 43, 44, 45, 46, 35, 34, 32, 31, 30, 29, 28, 27, 26
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 35, 34, 32, 31, 30, 29, 28, 27, 26

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=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=42ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 24, 37, 38, 40, 41, 42, 43, 44, 45, 46, 35, 34, 32, 31, 30, 29, 28, 27, 26.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 30,2021

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

Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE
25735	PB1	Piggyback	2	1	I48147191

C&R Truss, Autryville, NC - 28318, Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:38 2021 Page 1
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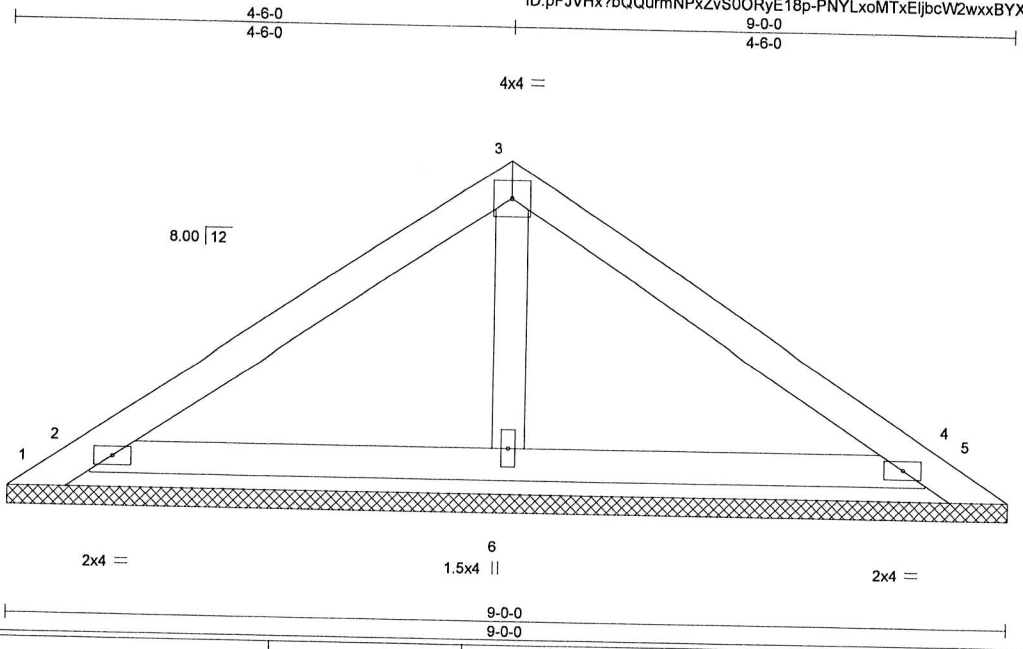


Scale = 1:19.9

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 31 lb	FT = 20%

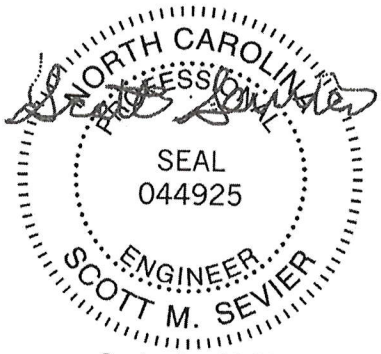
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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

REACTIONS. All bearings 9-0-0.
(lb) - Max Horz 1=-63(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-213(LC 13), 5=-186(LC 14), 2=-148(LC 8), 4=-148(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=419(LC 13), 4=403(LC 14)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 213 lb uplift at joint 1, 186 lb uplift at joint 5, 148 lb uplift at joint 2 and 148 lb uplift at joint 4.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 30,2021

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

Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE	
25735	PB2	Piggyback	39	1	Job Reference (optional)	I48147192

C&R Truss, Autryville, NC - 28318, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:39 2021 Page 1
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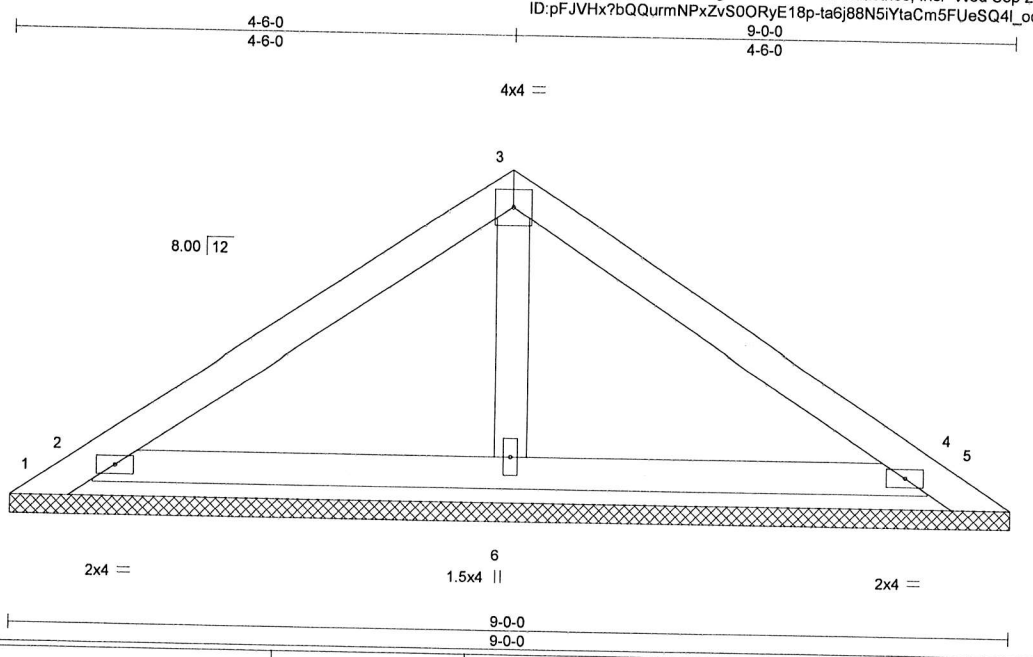


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 31 lb	FT = 20%

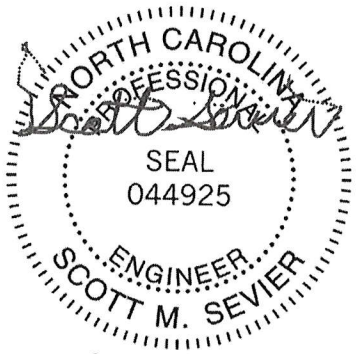
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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

REACTIONS. All bearings 9-0-0.
(lb) - Max Horz 1=-63(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-213(LC 13), 5=-186(LC 14), 2=-148(LC 8), 4=-148(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=419(LC 13), 4=403(LC 14)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 213 lb uplift at joint 1, 186 lb uplift at joint 5, 148 lb uplift at joint 2 and 148 lb uplift at joint 4.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 30,2021

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

Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE	I48147193
25735	T1	GABLE	1	1	Job Reference (optional)	

C&R Truss, Autryville, NC - 28318, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:41 2021 Page 1
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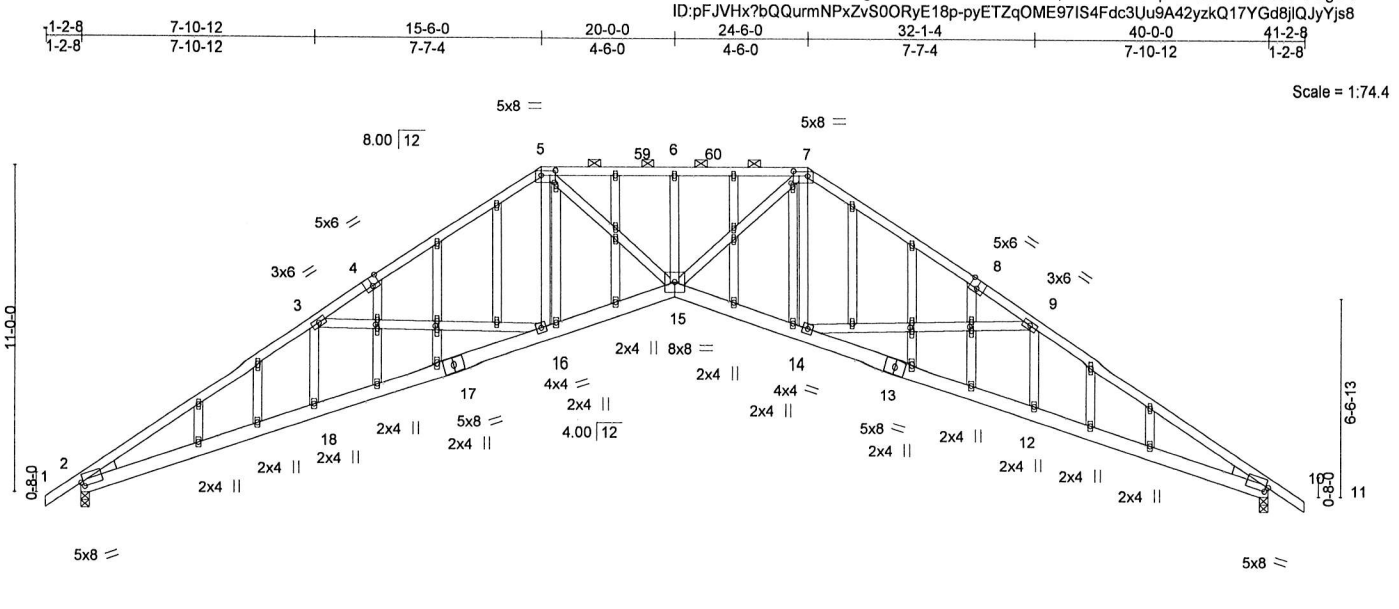


Plate Offsets (X,Y)-- [2:0-1-1,0-1-14], [4:0-3-0,Edge], [5:0-5-12,0-2-0], [7:0-5-12,0-2-0], [8:0-3-0,Edge], [10:0-1-1,0-1-14], [23:0-1-11,0-0-12], [26:0-1-8,0-0-12], [29:0-1-8,0-0-12], [40:0-1-11,0-0-12], [45:0-1-8,0-0-12], [48:0-1-8,0-0-12]

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	0.50	Vert(LL)	-0.30	15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.59	15	>807	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.50	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.19	15	>999	240	Weight: 313 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

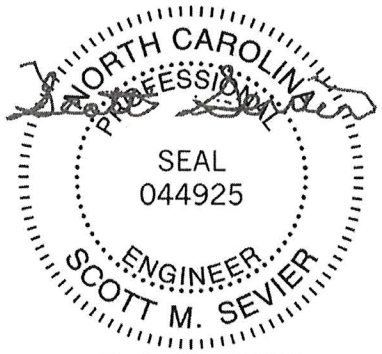
BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-11-15 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=265(LC 7)
Max Uplift 2=-165(LC 8), 10=-165(LC 8)
Max Grav 2=1673(LC 1), 10=1673(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4208/262, 3-5=-3490/177, 5-6=-3912/151, 6-7=-3912/151, 7-9=-3490/177, 9-10=-4208/262
BOT CHORD 2-18=-100/3571, 16-18=-100/3623, 15-16=0/2943, 14-15=0/2943, 12-14=-100/3608, 10-12=-100/3551
WEBS 3-16=-669/234, 5-16=-10/522, 5-15=0/1491, 7-15=0/1497, 7-14=-10/522, 9-14=-692/234

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=40ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Bearing at joint(s) 2, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 165 lb uplift at joint 2 and 165 lb uplift at joint 10.
11) 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.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Continued on page 2



September 30,2021

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

Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE	
25735	T1	GABLE	1	1	Job Reference (optional)	I48147193

C&R Truss, Autryville, NC - 28318, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:41 2021 Page 2
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NOTES-

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

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

Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE	I48147194
25735	T2	PIGGYBACK BASE	23	1	Job Reference (optional)	

C&R Truss, Autryville, NC - 28318,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:42 2021 Page 1
ID:pFJVHx?bQQurmNPxZvS0ORyE18p-H8ormAP__TF93Dqp9m?7iNcDiN4fmaoPsoSIzmyYjs7

1-2-8	7-10-12	15-6-0	20-0-0	24-6-0	32-1-4	40-0-0	41-2-8
1-2-8	7-10-12	7-7-4	4-6-0	4-6-0	7-7-4	7-10-12	1-2-8

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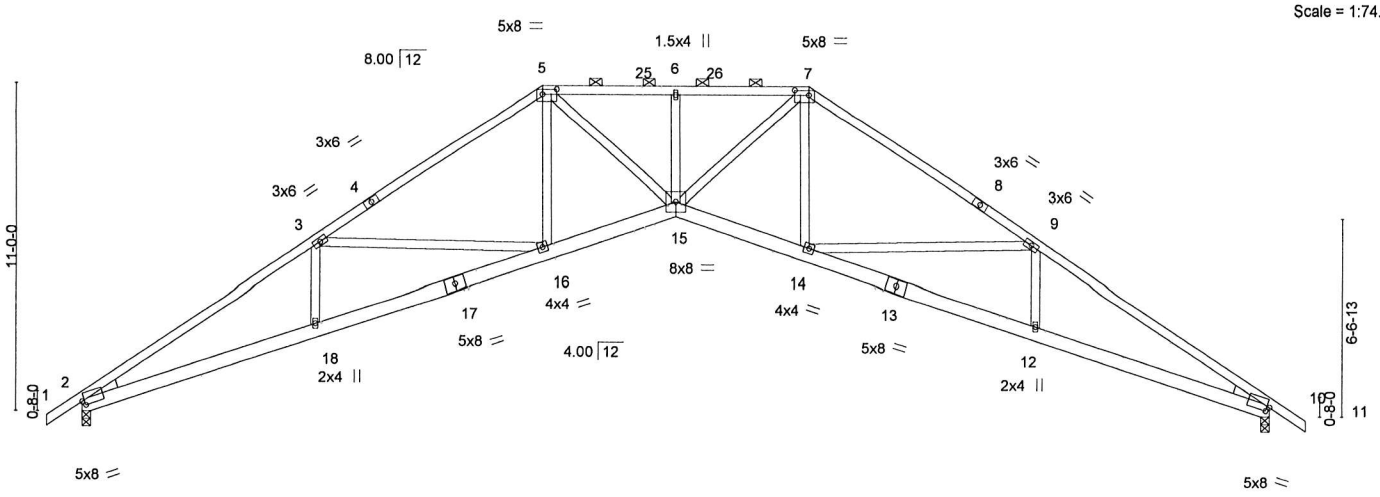


7-10-12	15-6-0	20-0-0	24-6-0	32-1-4	40-0-0
7-10-12	7-7-4	4-6-0	4-6-0	7-7-4	7-10-12

Plate Offsets (X,Y)-- [2:0-1-1,0-1-14], [5:0-5-12,0-2-0], [7:0-5-12,0-2-0], [10:0-1-1,0-1-14]

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	0.50	Vert(LL)	-0.30	15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.59	15	>807	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.50	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.19	15	>999	240	Weight: 243 lb	FT = 20%

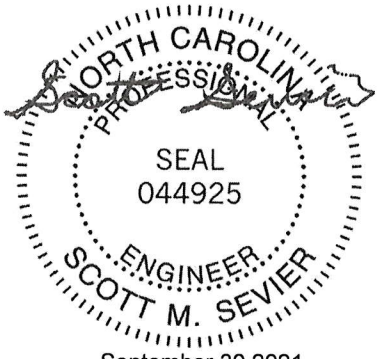
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-11-15 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=265(LC 7)
Max Uplift 2=-165(LC 8), 10=-165(LC 8)
Max Grav 2=1673(LC 1), 10=1673(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4208/262, 3-5=-3490/177, 5-6=-3912/151, 6-7=-3912/151, 7-9=-3490/177, 9-10=-4208/262
BOT CHORD 2-18=-100/3571, 16-18=-100/3623, 15-16=0/2943, 14-15=0/2943, 12-14=-100/3608, 10-12=-100/3551
WEBS 3-16=-669/234, 5-16=-10/522, 5-15=0/1491, 7-15=0/1497, 7-14=-10/522, 9-14=-692/234

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=40ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Bearing at joint(s) 2, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 165 lb uplift at joint 2 and 165 lb uplift at joint 10.
8) 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.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 30,2021

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

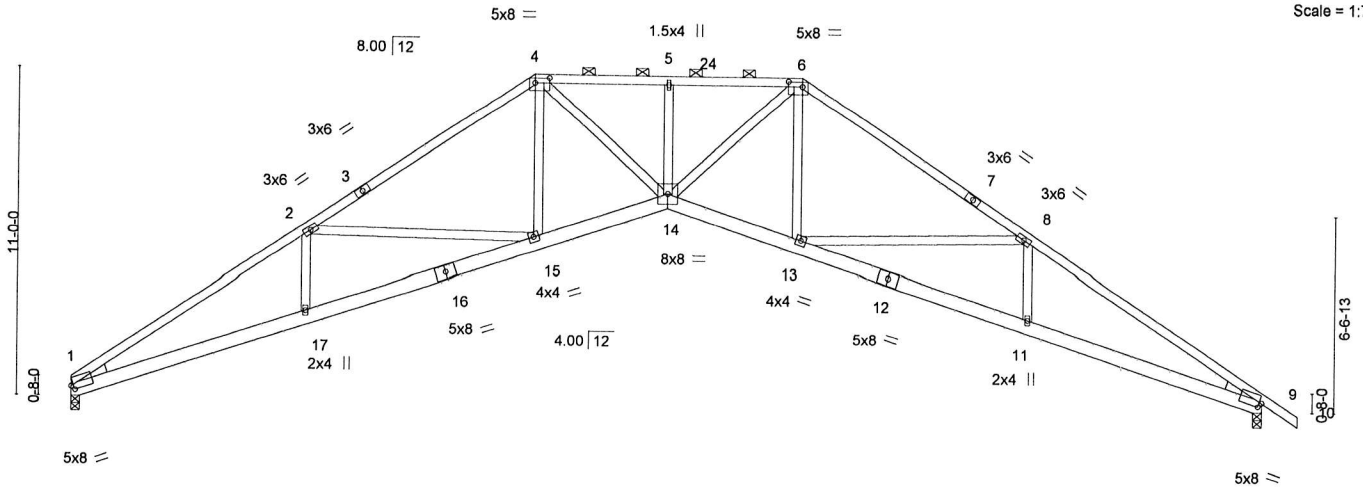
Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE	
25735	T3	PIGGYBACK BASE	16	1		I48147195
					Job Reference (optional)	

C&R Truss, Autryville, NC - 28318,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:44 2021 Page 1
ID:pFJVHx?bQQurmNPxZvS0ORyE18p-EXvcBsREW4VsJX_CHB2bnoiYBAm6ETHiJ6xP1eyYjs5

7-10-12	15-6-0	20-0-0	24-6-0	32-1-4	40-0-0	41-2-8
7-10-12	7-7-4	4-6-0	4-6-0	7-7-4	7-10-12	1-2-8

Scale = 1:74.2



7-10-12	15-6-0	20-0-0	24-6-0	32-1-4	40-0-0
7-10-12	7-7-4	4-6-0	4-6-0	7-7-4	7-10-12

Plate Offsets (X,Y)-- [1:0-1-1,0-1-14], [4:0-5-12,0-2-0], [6:0-5-12,0-2-0], [9:0-1-1,0-1-14]

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	0.51	Vert(LL)	-0.30	14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.59	14	>807	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.50	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.19	14	>999	240	Weight: 241 lb	FT = 20%

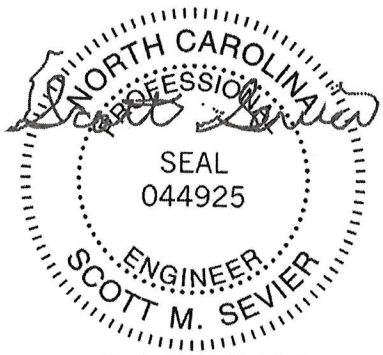
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-11-15 max.): 4-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-3-8, 9=0-3-8
Max Horz 1=-259(LC 6)
Max Uplift 1=-123(LC 8), 9=-165(LC 8)
Max Grav 1=1599(LC 1), 9=1674(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4225/273, 2-4=-3495/180, 4-5=-3918/154, 5-6=-3918/154, 6-8=-3493/179, 8-9=-4211/264
BOT CHORD 1-17=-111/3588, 15-17=-110/3638, 14-15=0/2948, 13-14=0/2947, 11-13=-102/3611, 9-11=-102/3554
WEBS 2-15=-680/241, 4-15=-11/523, 4-14=0/1493, 6-14=0/1500, 6-13=-10/522, 8-13=-692/234

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=40ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Bearing at joint(s) 1, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 1 and 165 lb uplift at joint 9.
8) 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.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 30,2021

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

Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE	I48147196
25735	T4	GABLE	1	1	Job Reference (optional)	

C&R Truss, Autryville, NC - 28318, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:46 2021 Page 1
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1-2-8	7-10-12	15-6-0	20-0-0	24-6-0	32-1-4	40-0-0	41-2-8
1-2-8	7-10-12	7-7-4	4-6-0	4-6-0	7-7-4	7-10-12	1-2-8

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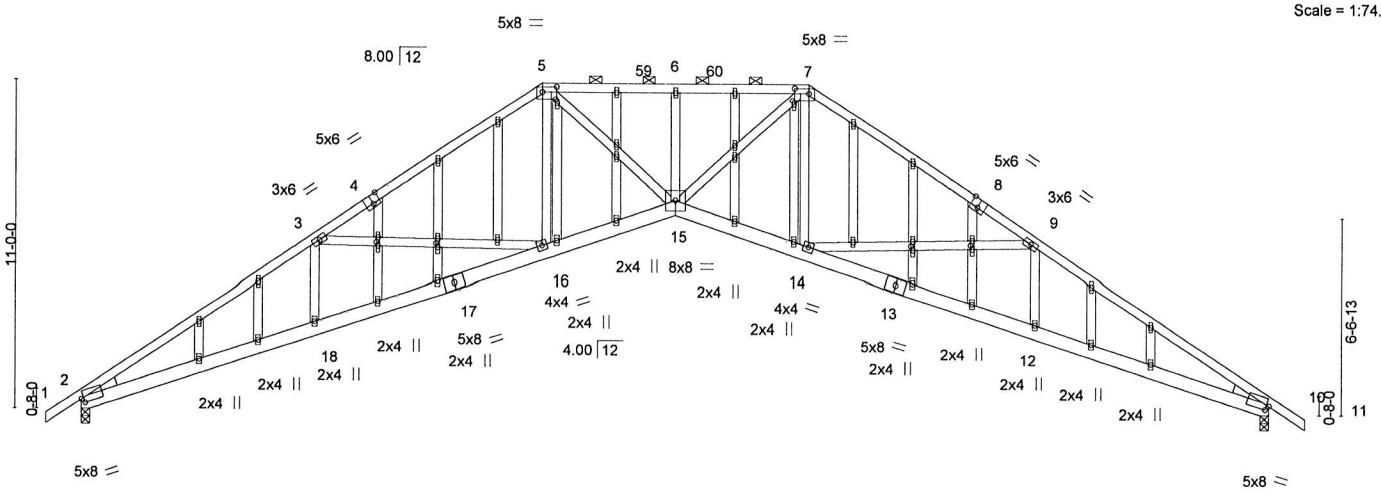


7-10-12	15-6-0	20-0-0	24-6-0	32-1-4	40-0-0
7-10-12	7-7-4	4-6-0	4-6-0	7-7-4	7-10-12

Plate Offsets (X,Y)-- [2:0-1-1,0-1-14], [4:0-3-0,Edge], [5:0-5-12,0-2-0], [7:0-5-12,0-2-0], [8:0-3-0,Edge], [10:0-1-1,0-1-14], [23:0-1-11,0-0-12], [26:0-1-8,0-0-12], [29:0-1-8,0-0-12], [40:0-1-11,0-0-12], [45:0-1-8,0-0-12], [48:0-1-8,0-0-12]

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	0.50	Vert(LL)	-0.30	15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.59	15	>807	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.50	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.19	15	>999	240	Weight: 313 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

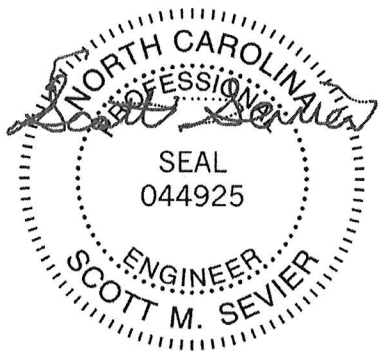
BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-11-15 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=265(LC 7)
Max Uplift 2=-165(LC 8), 10=-165(LC 8)
Max Grav 2=1673(LC 1), 10=1673(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4208/262, 3-5=-3490/177, 5-6=-3912/151, 6-7=-3912/151, 7-9=-3490/177, 9-10=-4208/262
BOT CHORD 2-18=-100/3571, 16-18=-100/3623, 15-16=0/2943, 14-15=0/2943, 12-14=-100/3608, 10-12=-100/3551
WEBS 3-16=-669/234, 5-16=-10/522, 5-15=0/1491, 7-15=0/1497, 7-14=-10/522, 9-14=-692/234

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=40ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Bearing at joint(s) 2, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 165 lb uplift at joint 2 and 165 lb uplift at joint 10.
11) 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.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Continued on page 2



September 30,2021

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

Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE	
25735	T4	GABLE	1	1	Job Reference (optional)	I48147196

C&R Truss, Autryville, NC - 28318, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:46 2021 Page 2
ID:pFJVHx?bQQurmNPxZvS0ORyE18p-Aw1McXSU2hlaYr7bOc43sDnuh_RbiNn?mQQW6XyYjs3

NOTES-

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

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

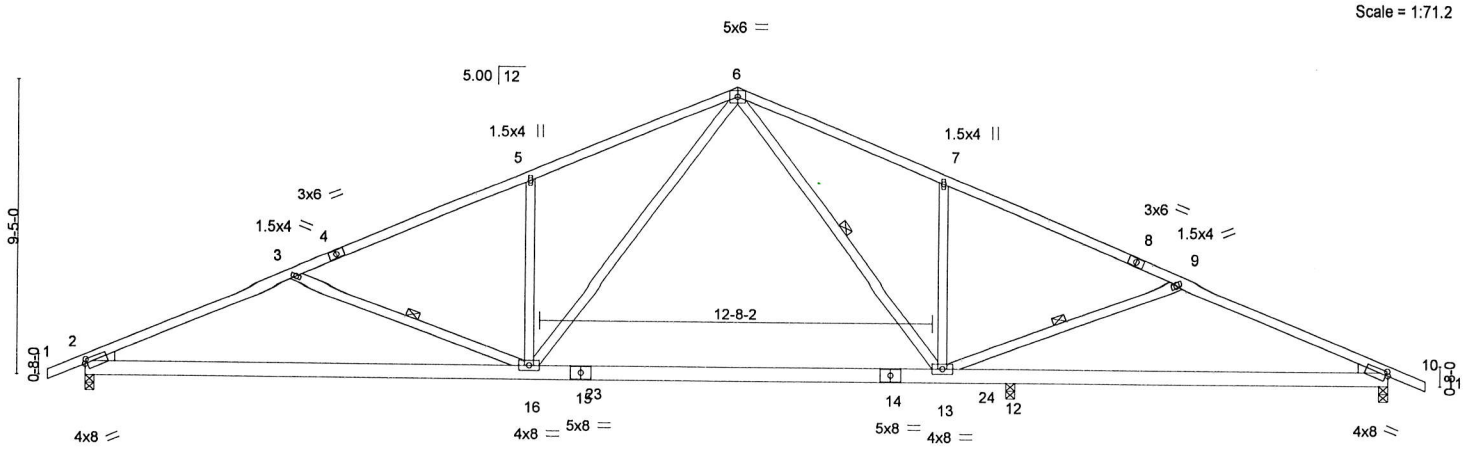
Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE	
25735	T5	COMMON	24	1		I48147197
					Job Reference (optional)	

C&R Truss, Autryville, NC - 28318,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:47 2021 Page 1
ID:pFJVHx?bQQurmNPxZvS0ORyE18p-e6bkqtT7p?tRA?inyKbIPRK4COnlRu_8?4A3ezyYjs2

1-2-8	6-10-1	14-4-0	21-0-0	27-8-0	35-1-15	42-0-0	43-2-8
1-2-8	6-10-1	7-5-15	6-8-0	6-8-0	7-5-15	6-10-1	1-2-8

Scale = 1:71.2



14-4-0	27-8-0	30-0-0	42-0-0
14-4-0	13-4-0	2-4-0	12-0-0

Plate Offsets (X,Y)-- [2:0-0-13,0-1-8], [10:0-0-13,0-1-8]

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	0.39	Vert(LL)	-0.55	13-16	>655	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.83	13-16	>431	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.21	13-16	>999	240	Weight: 246 lb	FT = 20%

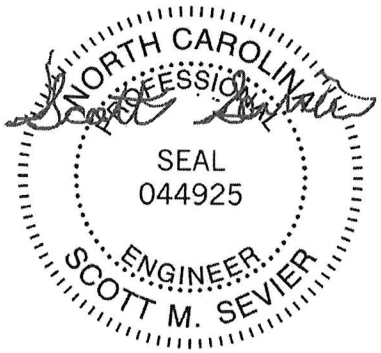
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-13, 9-13, 3-16

REACTIONS. (size) 2=0-3-8, 10=0-3-8, 12=0-3-8
Max Horz 2=-180(LC 6)
Max Uplift 2=-171(LC 8), 10=-170(LC 8), 12=-1(LC 8)
Max Grav 2=1614(LC 13), 10=1366(LC 14), 12=713(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3176/355, 3-5=-2713/254, 5-6=-2740/356, 6-7=-2246/355, 7-9=-2218/253, 9-10=-2660/354
BOT CHORD 2-16=-242/2987, 13-16=-7/1696, 12-13=-241/2370, 10-12=-241/2370
WEBS 6-13=-96/702, 7-13=-477/184, 9-13=-509/190, 6-16=-98/1432, 5-16=-470/184, 3-16=-536/190

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 171 lb uplift at joint 2, 170 lb uplift at joint 10 and 1 lb uplift at joint 12.
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.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 30,2021

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

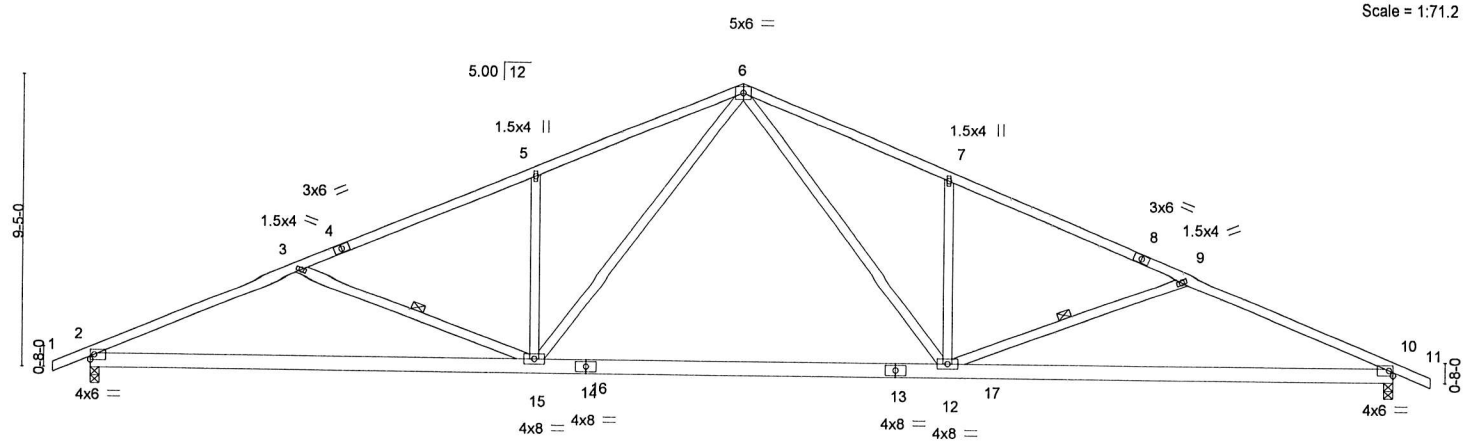
Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE	
25735	T6	GABLE	1	1		I48147198
					Job Reference (optional)	

C&R Truss, Autryville, NC - 28318,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:48 2021 Page 1
ID:pFJVHx?bQQurmNPxZvS0ORyE18p-6l961DUlaJ?In8HzW16XyesD8n8aALflEkvcAPyYjs1

1-2-8	6-10-1	14-4-0	21-0-0	27-8-0	35-1-15	42-0-0	43-2-8
1-2-8	6-10-1	7-5-15	6-8-0	6-8-0	7-5-15	6-10-1	1-2-8

Scale = 1:71.2



14-4-0	27-8-0	42-0-0
14-4-0	13-4-0	14-4-0

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	0.57	Vert(LL)	-0.44	12-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.60	12-15	>829	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.12	12-15	>999	240	Weight: 244 lb	FT = 20%

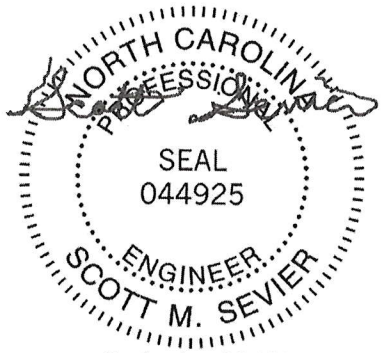
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-12, 3-15

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=180(LC 7)
Max Uplift 2=-175(LC 8), 10=-175(LC 8)
Max Grav 2=1771(LC 13), 10=1771(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3462/353, 3-5=-3068/252, 5-6=-3089/353, 6-7=-3089/353, 7-9=-3068/252, 9-10=-3462/353
BOT CHORD 2-15=-247/3207, 12-15=-9/2066, 10-12=-247/3072
WEBS 6-12=-98/1350, 7-12=-462/182, 9-12=-435/193, 6-15=-98/1350, 5-15=-462/182, 3-15=-435/193

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 175 lb uplift at joint 2 and 175 lb uplift at joint 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.



September 30,2021

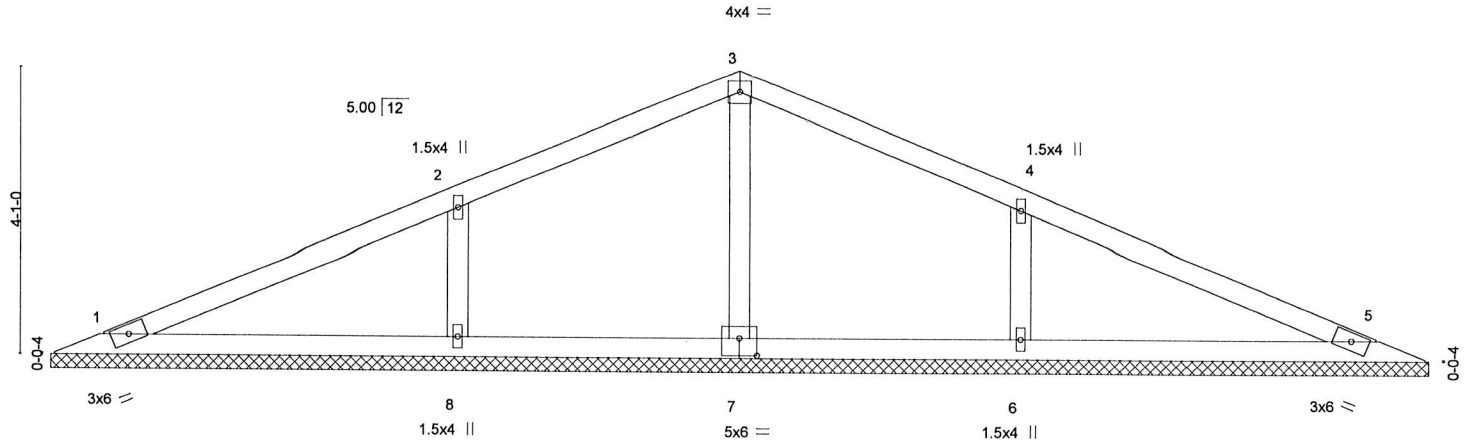
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE	
25735	V1	Valley	1	1		I48147199
					Job Reference (optional)	

C&R Truss, Autryville, NC - 28318, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:49 2021 Page 1
ID:pFJVHx?bQQurmNPxZvS0ORyE18p-aVjVEZUNLc79PIsA4ldmUsPSxBX_vwKRTOfAisyYjs0

9-9-10 / 9-9-10 | 19-7-3 / 9-9-10

Scale = 1:31.4



19-7-3 / 19-7-3

Plate Offsets (X,Y)-- [7:0-3-0,0-3-0]

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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 69 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 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 10-0-0 oc bracing.

REACTIONS. All bearings 19-7-3.
(lb) - Max Horz 1=59(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=446(LC 17), 6=446(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-328/123, 4-6=-328/123

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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, 5, 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.

September 30,2021

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

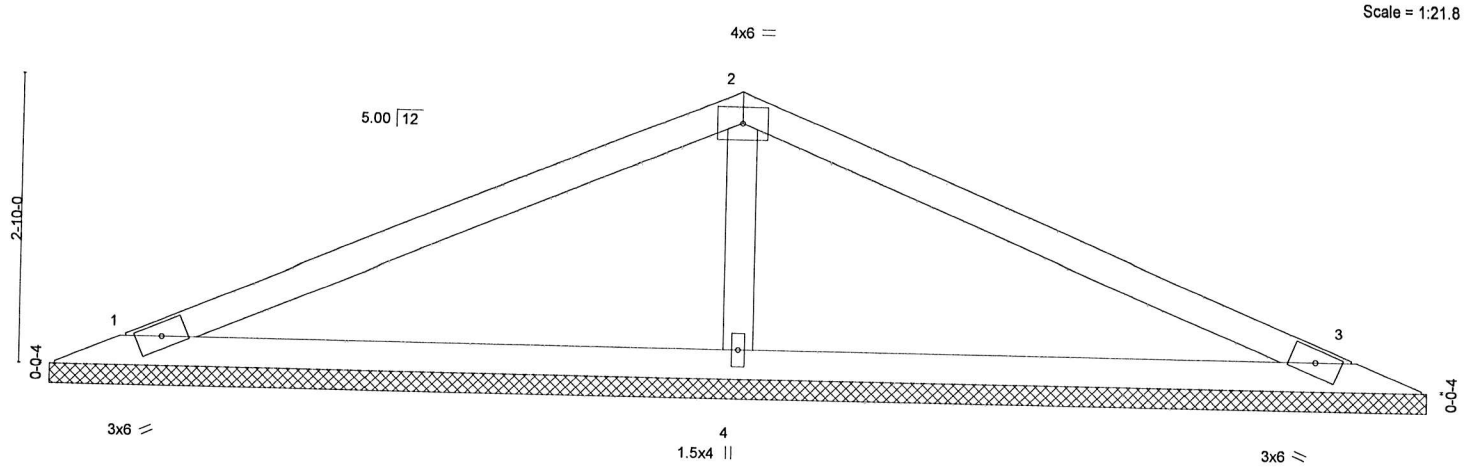
Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE
25735	V2	Valley	1	1	I48147200

C&R Truss, Autryville, NC - 28318, Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:49 2021 Page 1
ID:pFJVHx?bQQurmNPxZvS0ORyE18p-aVjVEZUNLc79PIsA4ldmUsPOQBVVvw9RTOfAisyYjs0

6-9-10
6-9-10
13-7-3
6-9-10

Scale = 1:21.8



13-7-3
13-7-3

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	0.54	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 43 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 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 10-0-0 oc bracing.

REACTIONS. (size) 1=13-7-3, 3=13-7-3, 4=13-7-3
Max Horz 1=-40(LC 6)
Max Uplift 1=-27(LC 8), 3=-27(LC 8), 4=-21(LC 8)
Max Grav 1=217(LC 17), 3=217(LC 18), 4=543(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-366/95

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
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.

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

September 30,2021

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

Job	Truss	Truss Type	Qty	Ply	BRANDON LEE/COLE
25735	V3	Valley	1	1	I48147201

C&R Truss, Autryville, NC - 28318, Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 29 15:45:50 2021 Page 1
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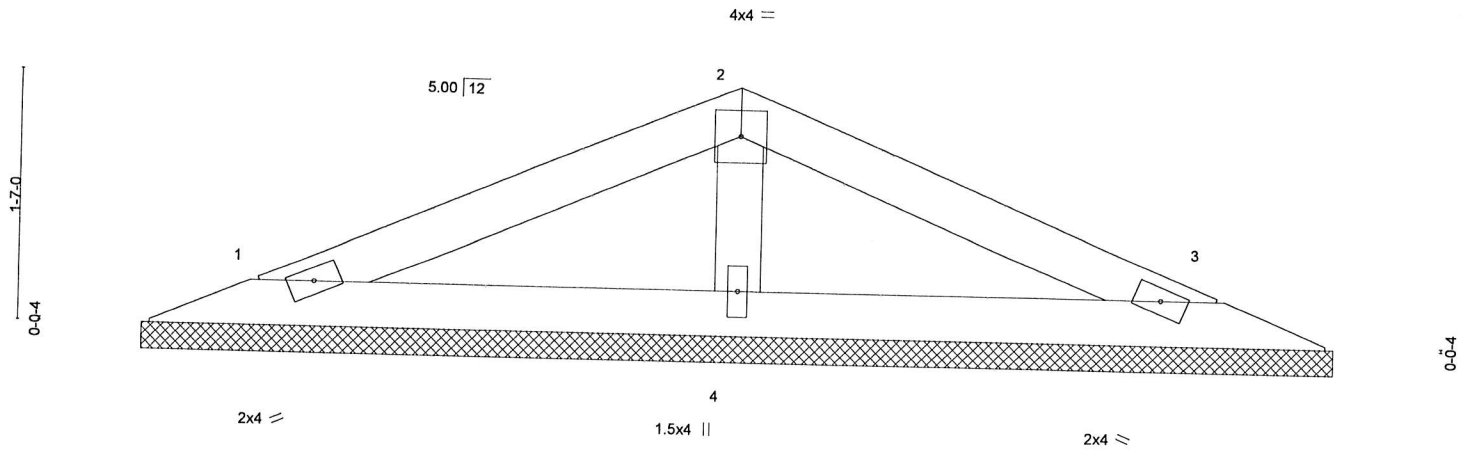
3-9-10 / 3-9-10 — 7-7-3 / 3-9-10

Scale = 1:14.1



7-7-3 / 7-7-3

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 22 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 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 10-0-0 oc bracing.

REACTIONS. (size) 1=7-7-3, 3=7-7-3, 4=7-7-3
Max Horz 1=-20(LC 6)
Max Uplift 1=-19(LC 8), 3=-19(LC 8)
Max Grav 1=120(LC 1), 3=120(LC 1), 4=248(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
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.

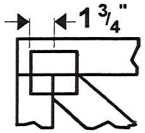
NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

September 30,2021

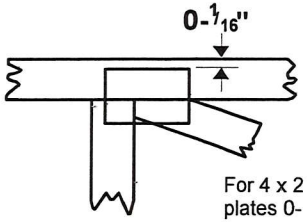
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

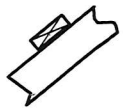
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

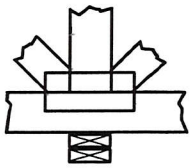
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

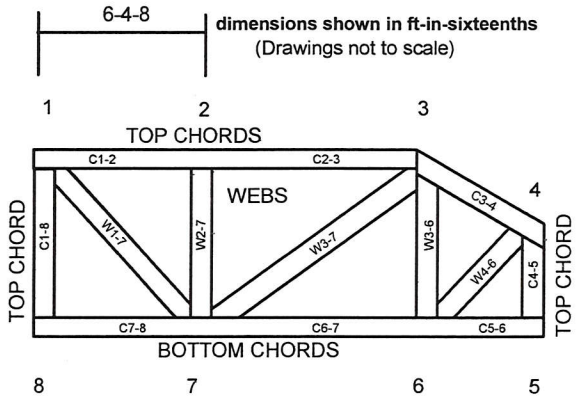


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: 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 THE LEFT.

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek

ENGINEERING BY TRENCO
A MiTek Affiliate

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.