PLANS DESIGNED TO THE 2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE

HEIGHT TO RIDGE: 27'-5" MEAN ROOF HEIGHT: 19'-9"

CLIMATE ZONE	ZONE 3A	ZONE 4A	ZONE 5A
FENESTRATION U-FACTOR	0.35	0.35	0.35
SKYLIGHT U-FACTOR	0.55	0.55	0.55
GLAZED FENESTRATION SHGC	0.30	0.30	0.30
CEILING R-VALUE	38 or 30ci	38 or 30ci	38 or 30ci
WALL R-VALUE	15	15	19
FLOOR R-VALUE	19	19	30
* BASEMENT WALL R-VALUE	5/13	10/15	10/15
** SLAB R-VALUE	0	10	10
* CRAWL SPACE WALL R-VALUE	5/13	10/15	10/19
* "10/12" MEANC D 10 CHEATHING INC	II ATTON OD D 12 C	AV/ITV INCLUATION	

* "10/13" MEANS R-10 SHEATHING INSULATION OR R-13 CAVITY INSULATION

** INSULATION DEPTH WITH MONOLITHIC SLAB 24" OR FROM INSPECTION GAP TO BOTTOM OF FOOTING; INSULATION DEPTH WITH STEM WALL SLAB 24" OR TO BOTTOM OF FOUNDATION WALL DESIGNED FOR WIND SPEED OF 120 MPH 3 SECOND GUST (93 FASTEST MILE) EXPOSURE "R"

DESIGNED FOR WIN	וט ארבבט	OF 120 MF	n, a sect	וכטט עווע	(32 LY21	EST MITTE	EXPUSUR	(E D		
COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS										
MEAN ROOF										
ZONE 1	14.2	-15.0	14.9	-15.8	15.5	-16.4	15.9	-16.8		
ZONE 2	14.2	-18.0	14.9	-18.9	15.5	-19.6	15.9	-20.2		
ZONE 3	14.2	-18.0	14.9	-18.9	15.5	-19.6	15.9	-20.2		
ZONE 4	15.5	-16.0	16.3	-16.8	16.9	-17.4	17.4	-17.9		
ZONE 5	15.5	-20.0	16.3	-21.0	16.9	-21.8	17.4	-22.4		
								"-"		

DESIGNED FOR WIN	D SPEED	OF 130 MF	PH, 3 SECO	OND GUST	(101 FAS	TEST MILE	E) Exposu	JRE "B"	
COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS									
MEAN ROOF	UP T	O 30'	30'-1"	TO 35'	35'-1"	TO 40'	40'-1"	TO 45'	
ZONE 1	16.7	-18.0	17.5	-18.9	18.2	-19.6	18.7	-20.2	
ZONE 2	16.7	-21.0	17.5	-22.1	18.2	-22.9	18.7	-23.5	
ZONE 3	16.7	-21.0	17.5	-22.1	18.2	-22.9	18.7	-23.5	
ZONE 4	18.2	-19.0	19.1	-20.0	19.8	-20.7	20.4	-21.3	
ZONE 5	18.2	-24.0	19.1	-25.2	19.8	-26.2	20.4	-26.9	

GUARD RAIL NOTES

R312.1 Where required. Guards shall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a guard.

R312.2 Height. Required guards at open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than 36 inches (914 mm) high measured vertically above the adjacent walking surface, adjacent fixed seating or the line connecting the leading edges of the treads. **Exceptions:**

1. *Guards* on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the

2. Where the top of the *guard* also serves as a handrail on the open sides of stairs, the top of the *guard* shall not be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.

R312.3 Opening limitations. Required *guards* shall not have openings from the walking surface to the required guard height which allow passage of a sphere 4 inches (102 mm)in diameter

Exceptions:

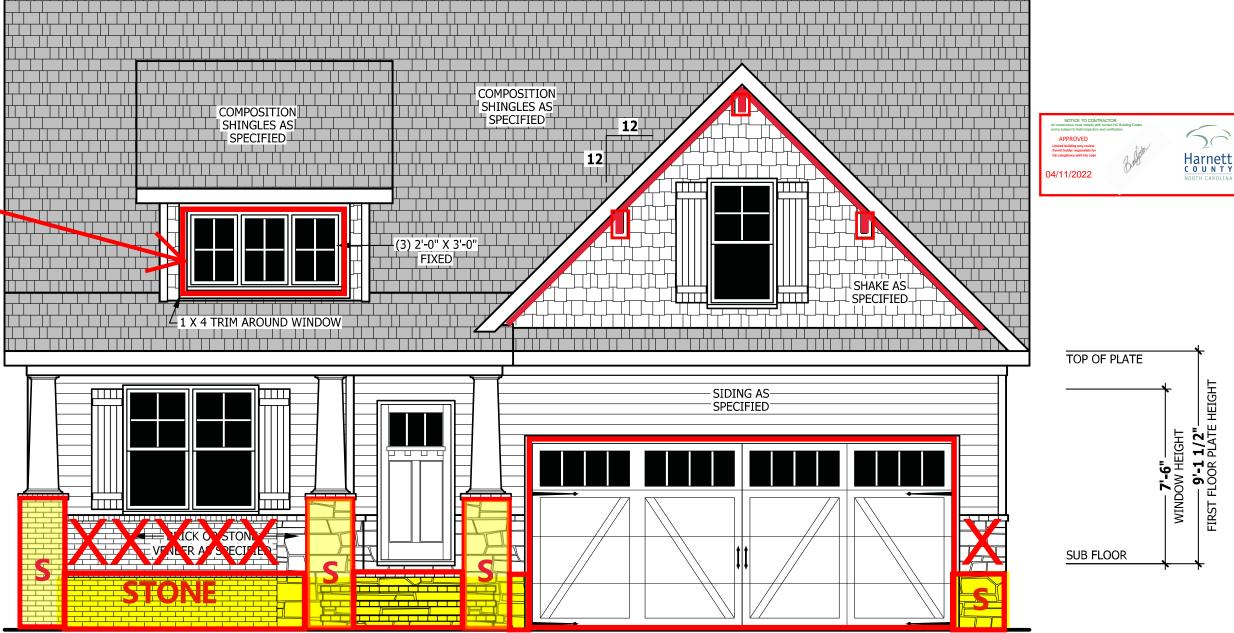
- 1. The triangular openings at the open side of a stair, formed by the riser, tread and bottom rail of a *guard*, shall not allow passage of a sphere 6 inches (153 mm) in diameter.
- 2. Guards on the open sides of stairs shall not have openings which allow passage of a sphere 4 3/8 inches (111 mm) in diameter.

ROOF VENTILATION

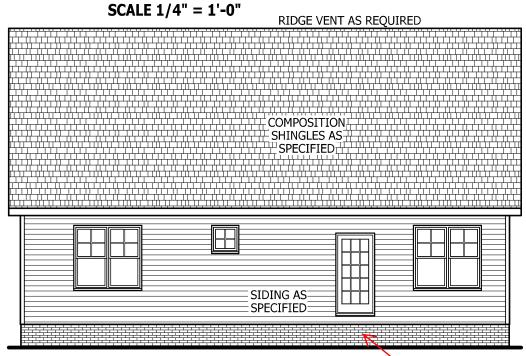
SQUARE FOOTAGE OF ROOF TO BE VENTED = 2,477 SQ.FT. NET FREE CROSS VENTILATION NEEDED:

WITHOUT 50% TO 80% OF VENTING 3'-0" ABOVE EAVE = 16.51 SQ.FT. WITH 50% TO 80% OF VENTING 3'-0" ABOVE EAVE; OR WITH CLASS I OR II VAPOR RETARDER ON WARM-IN-WINTER SIDE OF CEILING = 8.26 SQ.FT.

HEIGHT



FRONT ELEVATION - A



WINDOWS WITH SIDE LOAD

SCALE 1/8" = 1'-0"

REAR ELEVATION





N1102.4.1 Building thermal envelope. The building thermal envelope shall be durably sealed with an air barrier system to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. For all homes, where present, the following shall be caulked, gasketed, stripped or otherwise sealed with an air barrier material or solid material consistent with Appendix E-2.4 of this code: 1. Blocking and sealing floor/ceiling systems and under knee walls open to unconditioned or exterior space.

SQUARE FOOTAGE

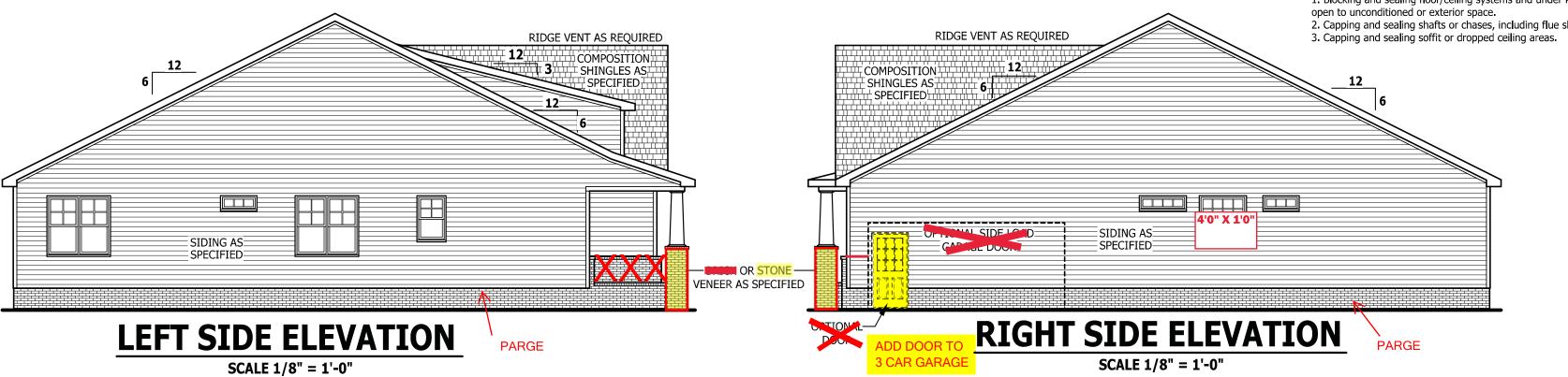
HEATED OPTIONAL

1791 SQ.FT.

HEĂTED

FIRST FLOOR

2. Capping and sealing shafts or chases, including flue shafts.



IMENSIONS AND CONDITION HAYNES HOME PLANS, INC. CONTRACTORS PRACTICES AND

LOT 14 MITCHELL MANOR

TBD WENDYWOOD DRIVE

ANGIER, NC 27501

3 CAR GARAGE

PROCEDURES. CODES AND CONDITIONS MAY VARY WITH LOCATION. A LOCAL DESIGNER, ARCHITECT OR GINEER SHOULD BE CONSULT

BEFORE CONSTRUCTION. THESE DRAWING ARE ISTRUMENTS OF SERVICE ANI AS SUCH SHALL REMAIN PROPERTY OF THE DESIGNER.

ELEVATION The

Lauren

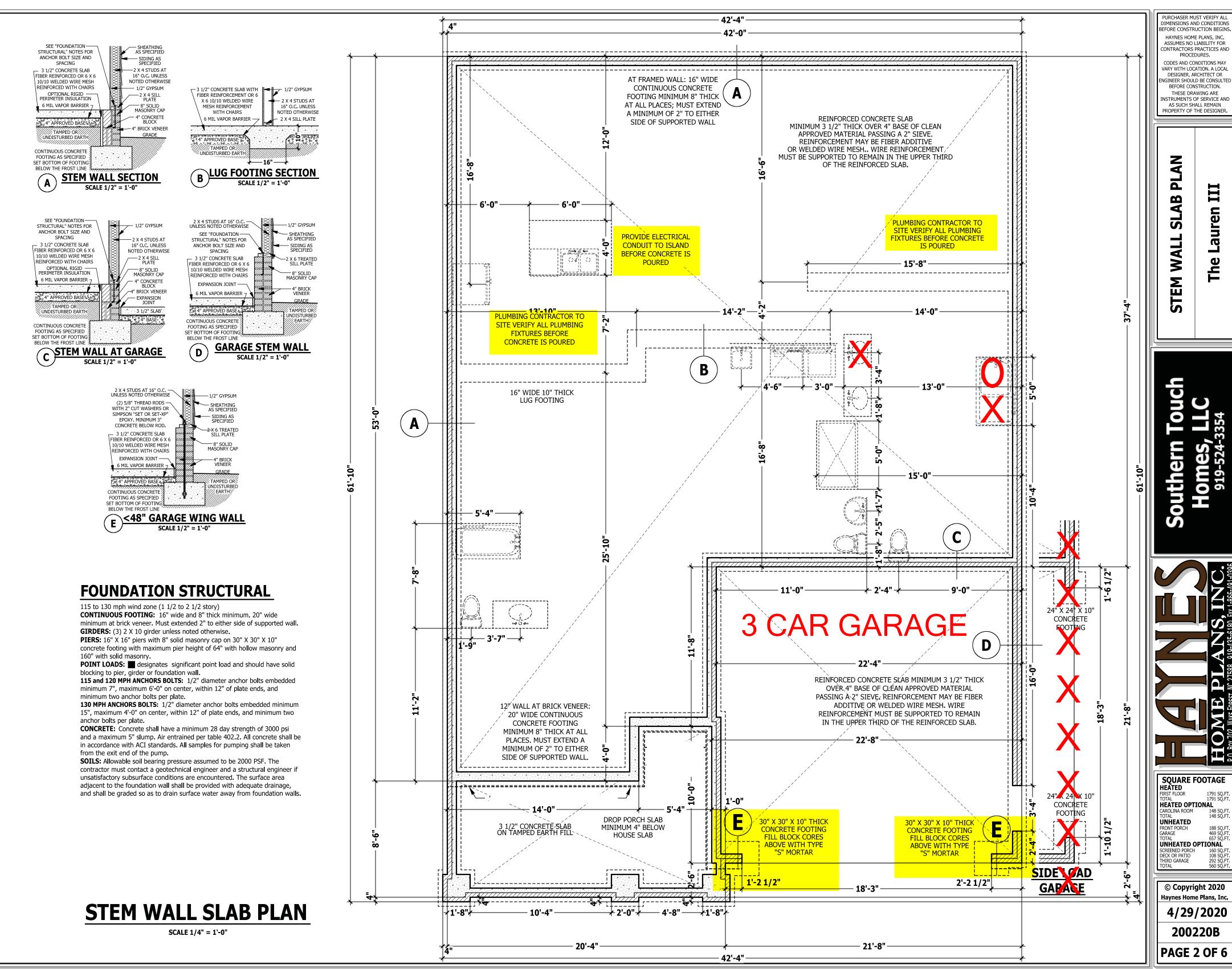


TOTAL 1791 SQ.FT. UNHEATED FRONT PORCH UNHEATED OPTIONAL

© Copyright 2020

4/29/2020 200220B

PAGE 1 OF 6



PURCHASER MUST VERIFY ALL SEFORE CONSTRUCTION BEGINS HAYNES HOME PLANS, INC. ASSUMES NO LIABILITY FOR CONTRACTORS PRACTICES AND

CODES AND CONDITIONS MAY ARY WITH LOCATION. A LOCAL DESIGNER, ARCHITECT OR IGINEER SHOULD BE CONSULTED

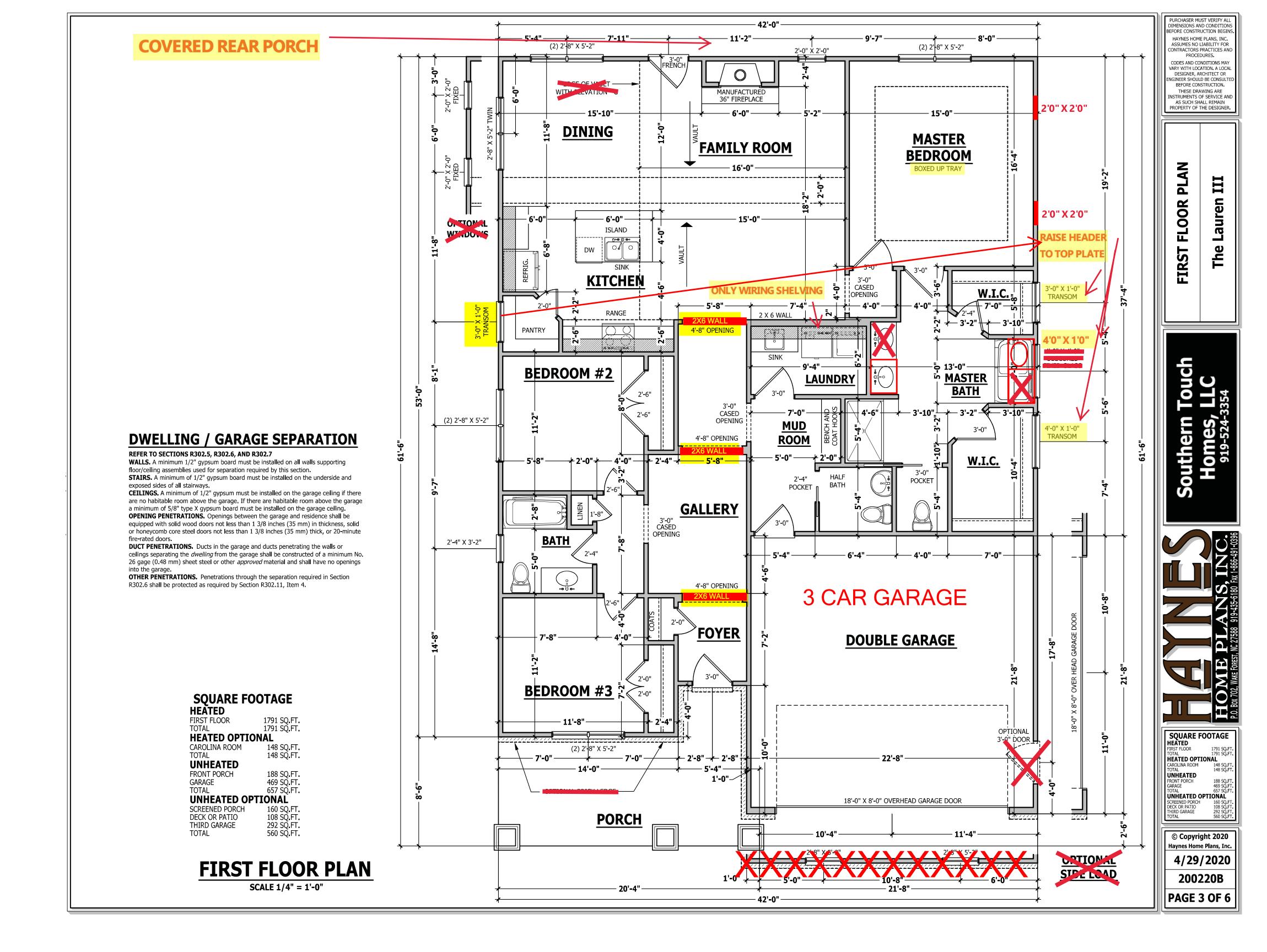
BEFORE CONSTRUCTION. THESE DRAWING ARE NSTRUMENTS OF SERVICE AND AS SUCH SHALL REMAIN
PROPERTY OF THE DESIGNER.

PLAN SLAB WALL EΜ

SQUARE FOOTAGE HEATED FIRST FLOOR 1791 SQ.FT. TOTAL 1791 SQ.FT. **HEATED OPTIONAL** UNHEATED UNHEATED OPTIONAL

SCREENED PORCH DECK OR PATIO THIRD GARAGE © Copyright 2020 Haynes Home Plans, Inc.

4/29/2020 200220B



STRUCTURAL NOTES

All construction shall conform to the latest requirements of the 2018 North Carolina Residential Building Code, plus all local codes and regulations. This document in no way shall be construed to supersede the code.

JOB SITE PRACTICES AND SAFETY: Haynes Home Plans, Inc. assumes no liability for contractors practices and procedures or safety program. Haynes Home Plans, Inc. takes no responsibility for the contractor's failure to carry out the construction work in accordance with the contract documents. All members shall be framed, anchored, and braced in accordance with good construction practice and the building code.

LIVE LOAD	DEAD LOAD	DEFLECTION
(PSF)	(PSF)	(LL)
10	10	L/240
20	10	L/360
40	10	L/360
40	10	L/360
40	10	L/360
200		
50		
50	10	L/360
40	10	L/360
30	10	L/360
40		L/360
	(PSF) 10 20 40 40 40 200 50 50 40 30	(PSF) (PSF) 10 10 20 10 40 10 40 10 200 50 50 10 40 10

FRAMING LUMBER: All non treated framing lumber shall be SPF #2 (Fb = 875 PSI) or SYP #2 (Fb = 750 PSI) and all treated lumber shall be SYP #2 (Fb = 750 PSI) unless

20 -- --

ENGINEERED WOOD BEAMS:

Laminated veneer lumber (LVL) = Fb=2600 PSI, Fv=285 PSI, E=1.9x106 PSI Parallel strand lumber (PSL) = Fb=2900 PSI, Fv=290 PSI, E=2.0x106 PSI Laminated strand lumber (LSL) Fb=2250 PSI, Fv=400 PSI, E=1.55x106 PSI Install all connections per manufacturers instructions.

TRUSS AND I-JOIST MEMBERS: All roof truss and I-joist layouts shall be prepared in accordance with this document. 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 Haynes Homes Plans, Inc. **LINTELS:** Brick lintels shall be 3 1/2" x 3 1/2" x 1/4" steel angle for up to 6'-0" span. 6" x 4" x 5/16" steel angle with 6" leg vertical for spans up to 9'-0" unless noted otherwise. 3 1/2" x 3 1/2" x 1/4" steel angle with 1/2" bolts at 2'-0" on center for spans up to 18'-0" unless noted otherwise. FLOOR SHEATHING: OSB or CDX floor sheathing minimum 1/2" thick for 16" on center joist spacing, minimum 5/8" thick for 19.2" on center joist spacing, and minimum 3/4" minimum 5d cooler nails or #6 screws. thick for 24" on center joist spacing.

ROOF SHEATHING: OSB or CDX roof sheathing minimum

CONCRETE AND SOILS: See foundation notes.

ROOF TRUSS REQUIREMENTS

TRUSS DESIGN. Trusses to be designed and engineered in accordance with these drawings. Any variation with these drawings must be brought to Haynes Home Plan, Inc. attention before construction begins. KNEE WALL AND CEILING HEIGHTS. All finished knee wall heights and ceiling heights are shown furred down 10" from roof decking for insulation. If for any reason the truss manufacturer fails to meet or exceed designated heel heights, finished knee wall heights, or finished ceiling heights shown on these drawings the finished square footage may vary. Any discrepancy must be brought to Haynes Home Plans, Inc. attention, so a suitable solution can be reached before construction begins. Any variation due to these conditions not being met is the reasonability of the truss manufacturer.

ANCHORAGE. All required anchors for trusses due to uplift or bearing shall meet the requirements as specified on the truss schematics. **BEARING.** All trusses shall be designed for bearing on SPF #2 plates or ledgers unless noted otherwise.

Plate Heights & Floor Systems. See elevation page(s) for plate heights and floor system thicknesses.

BRACE WALL PANEL NOTES

EXTERIOR WALLS: All exterior walls to be sheathed with CS-WSP or CS-SFB in accordance with section R602.10.3 unless noted otherwise.

GYPSUM: All interior sides of exterior walls and both sides interior walls to have 1/2" gypsum installed. When not using method GB gypsum to be fastened per table R702.3.5. Method GB to be fastened per table R602.10.1.

REQUIRED LENGTH OF BRACING: Required brace wall length for each side of the circumscribed rectangle are interpolated per table R602.10.3. Methods CS-WSP and CS-SFB contribute their actual length. Method GB contributes 0.5 it's actual length. Method PF contributes 1.5 times its actual length.

HD: 800 lbs hold down hold down device fastened to the edge of the brace wall panel closets to the corner.

Methods Per Table R602.10.1

CS-WSP: Shall be minimum 3/8" OSB or CDX nailed at 6" on center at edges and 12" on center at intermediate supports with 6d common nails or 8d(2 1/2" long x 0.113" diameter). **CS-SFB:** Shall be minimum 1/2" structural fiber board nailed at 3" on center at edges and 3" on center at intermediate supports with 1 1/2" long x 0.12" diameter galvanized roofing

GB: Interior walls show as GB are to have minimum 1/2" gypsum board on both sides of the wall fastened at 7" on center at edges and 7" on center at intermediate supports with

PF: Portal fame per figure R602.10.1

- 6-16D SINKER NAILS FROM KING STUD TO HEADER-PONY WALL **HEIGHT TO** VARY HEADER PER PLAN -STAP HEADER TO JACK — STUD ON INSIDE 1000 LBS OR 4000 LBS WITH PONY WALL. -FASTEN SHEATHING TO \prec HEADER WITH 8D COMMON NAIL IN 3" GRID AND TO FRAMING AT 3" ON CENTER OPTIONAL SPLICE WITHIN-4" OF MIDDLE OF WALL HEIGHT - JACK STUDS PER PLAN --SHEATHING DIRECTION - ANCHORAGE PER FOUNDATION -

PF PORTAL FRAME AT OPENING (METHOD PF PER FIGURE AND SECTION R602.10.1)

EXTERIOR HEADERS

SCALE 1/4" = 1'-0"

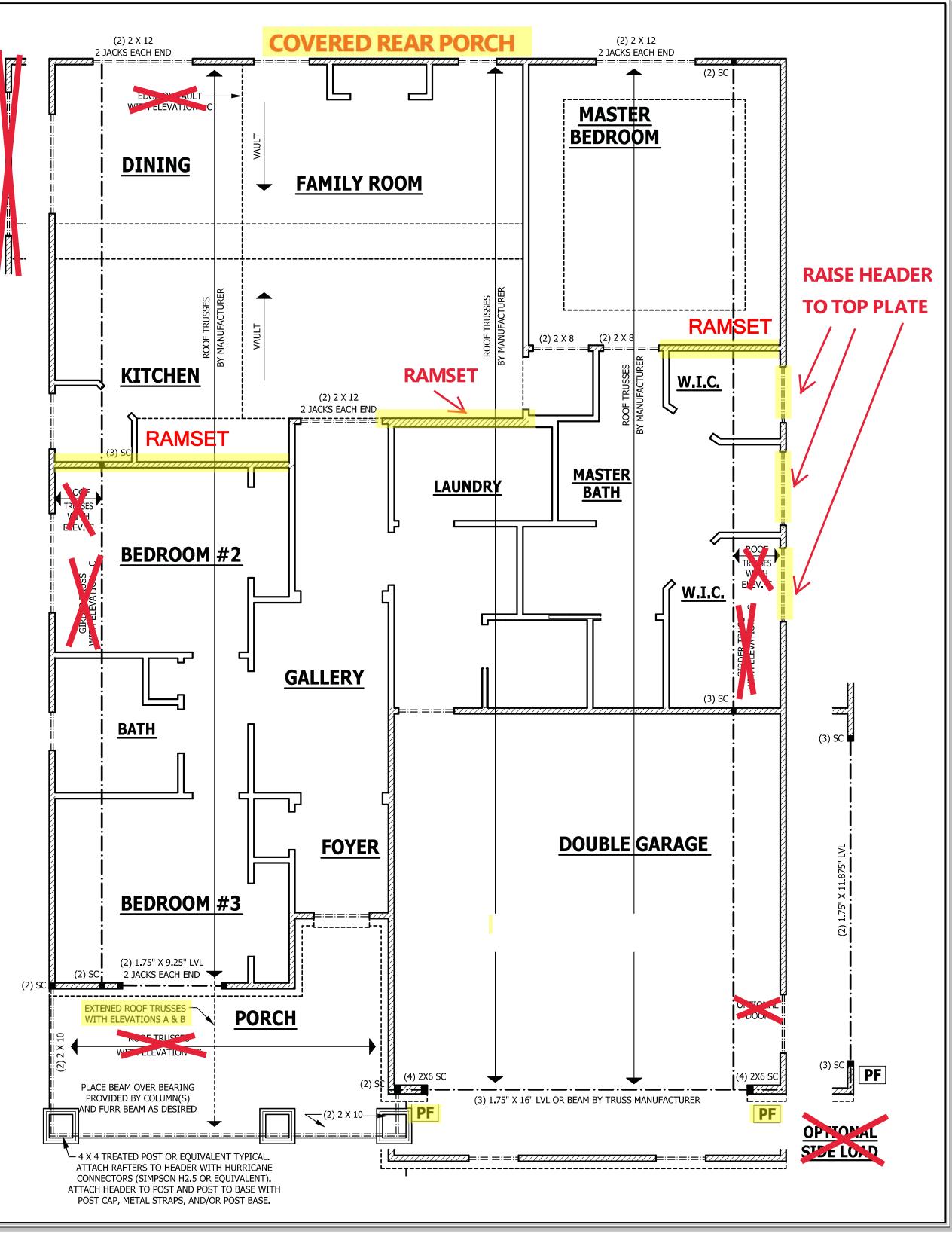
- (2) 2 X 6 WITH 1 JACK STUD EACH END **UNLESS NOTED OTHERWISE**
- KING STUDS EACH END PER TABLE BELOW HEADER SPAN < 3' | 3'-4' | 4'-8' | 8'-12' | 12'-16'

KING STUD(S) 1 2 3 5 6 **INTERIOR HEADERS**

- LOAD BEARING HEADERS (2) 2 X 6 WITH 1 JACK STUD AND 1 KING STUD EACH END **UNLESS NOTED OTHERWISE**
- NON LOAD BEARING HEADERS TO BE LADDER FRAMED

FIRST FLOOR STRUCTURAL

SCALE 1/4" = 1'-0"



HAYNES HOME PLANS, INC. ASSUMES NO LIABILITY FOR CONTRACTORS PRACTICES AND PROCEDURES.

CODES AND CONDITIONS MAY DESIGNER, ARCHITECT OR GINEER SHOULD BE CONSULT

BEFORE CONSTRUCTION. THESE DRAWING ARE ISTRUMENTS OF SERVICE ANI AS SUCH SHALL REMAIN PROPERTY OF THE DESIGNER

> STRUCTURAL The Lauren FLOOR **FIRST**

SQUARE FOOTAGE HEATED HEATED OPTIONAL UNHEATED UNHEATED OPTIONAL

© Copyright 2020

4/29/2020 200220B

PAGE 4 OF 6

ROOF TRUSS REQUIREMENTS

TRUSS DESIGN. Trusses to be designed and engineered in accordance with these drawings. Any variation with these drawings must be brought to Haynes Home Plan, Inc. attention before construction begins.

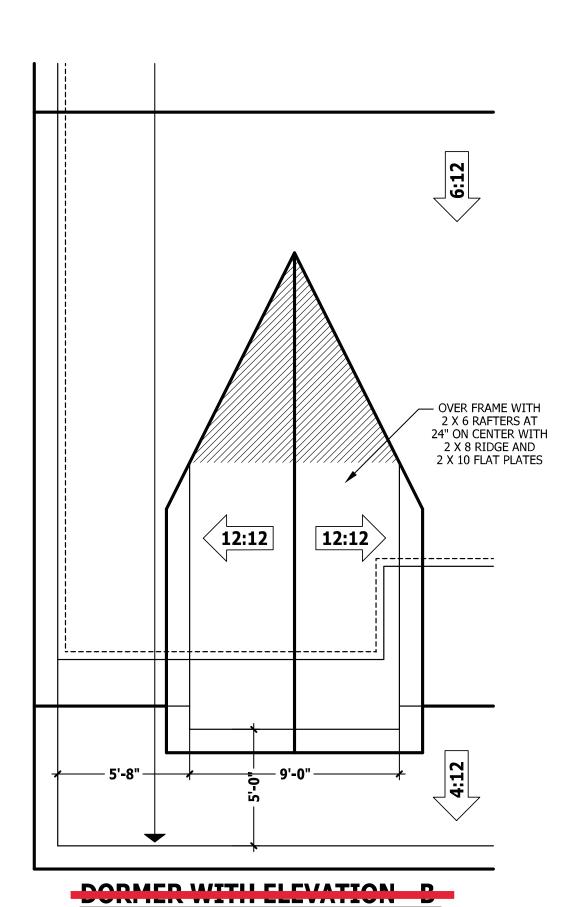
KNEE WALL AND CEILING HEIGHTS. All finished knee wall heights and ceiling heights are shown furred down 10" from roof decking for insulation. If for any reason the truss manufacturer fails to meet or exceed designated heel heights, finished knee wall heights, or finished ceiling heights shown on these drawings the finished square footage may vary. Any discrepancy must be brought to Haynes Home Plans, Inc. attention, so a suitable solution can be reached before construction begins. Any variation due to these conditions not being met is the reasonability of the truss manufacturer.

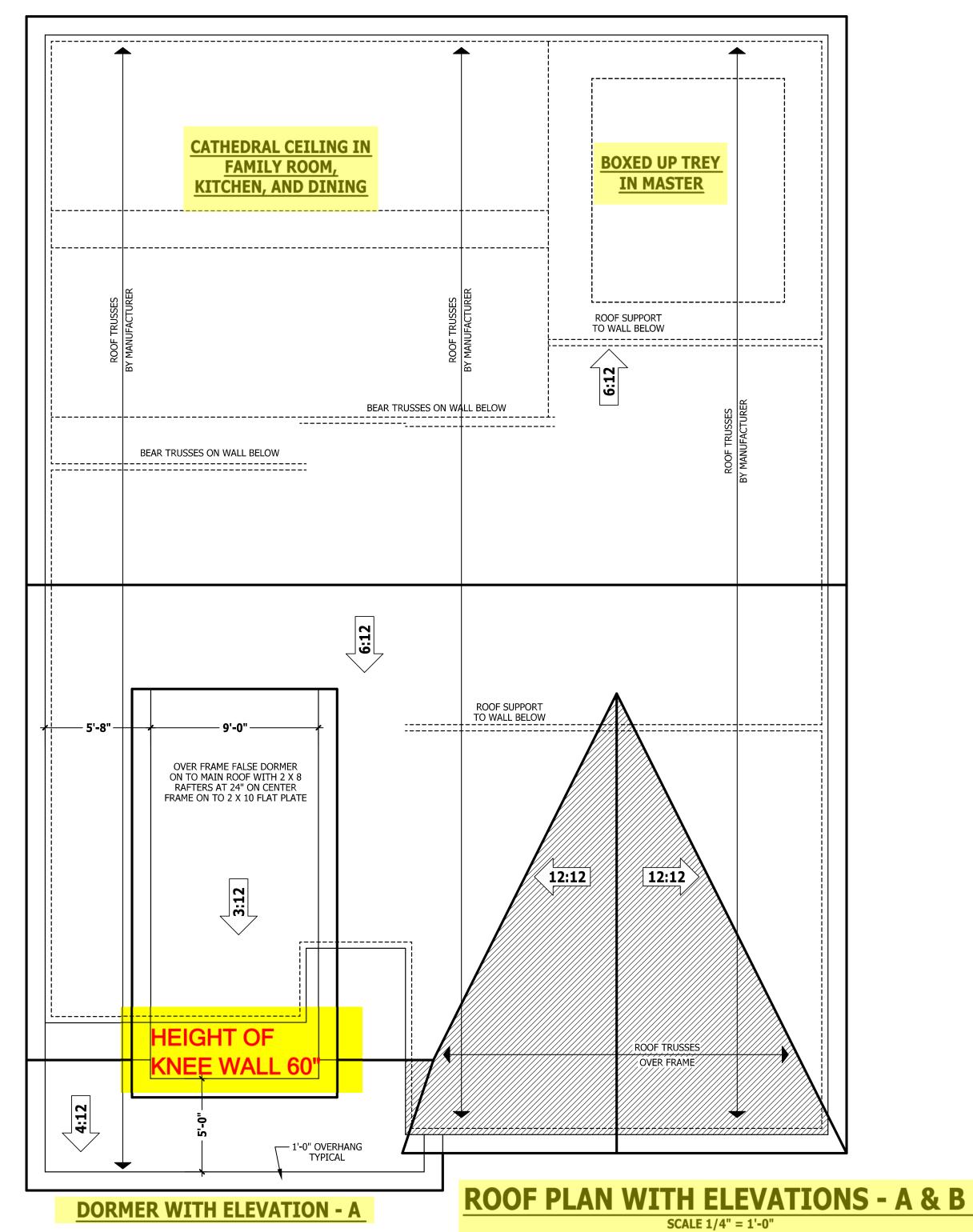
ANCHORAGE. All required anchors for trusses due to uplift or bearing shall meet the requirements as specified on the truss schematics. **BEARING.** All trusses shall be designed for bearing on SPF #2 plates or ledgers unless noted otherwise.

Plate Heights & Floor Systems. See elevation page(s) for plate heights and floor system thicknesses.

HEEL HEIGHT ABOVE FIRST FLOOR PLATE

HEEL HEIGHT ABOVE SECOND FLOOR PLATE





HAYNES HOME PLANS, INC. ASSUMES NO LIABILITY FOR CONTRACTORS PRACTICES AND PROCEDURES.

CODES AND CONDITIONS MAY DESIGNER, ARCHITECT OR BEFORE CONSTRUCTION.

THESE DRAWING ARE AS SUCH SHALL REMAIN PROPERTY OF THE DESIGNER.

ROOF PLAN ELEVATIONS



SQUARE FOOTAGE HEATED FIRST FLOOR 1791 SQ.FT.
TOTAL 1791 SQ.FT.
HEATED OPTIONAL
CAROLINA ROOM 148 SQ.FT.
TOTAL 148 SQ.FT.

UNHEATED FRONT PORCH

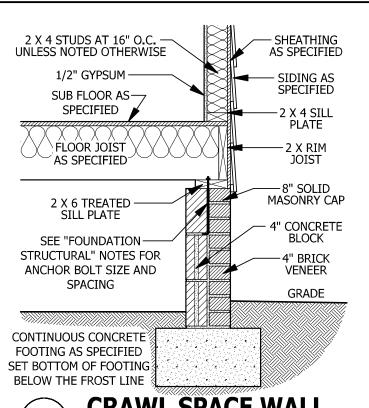
FRONT PORCH 188 SQ.FT.
GARAGE 469 SQ.FT.
TOTAL 657 SQ.FT.

UNHEATED OPTIONAL
SCREENED PORCH 160 SQ.FT.
DECK OR PATIO 108 SQ.FT.
THIRD GARAGE 292 SQ.FT.
TOTAL 560 SQ.FT.

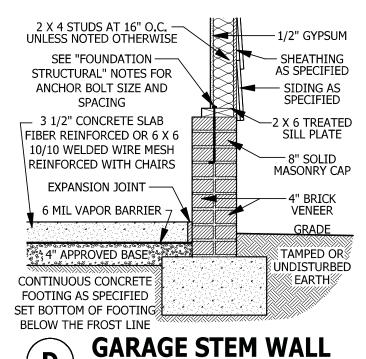
© Copyright 2020

4/29/2020 200220B

PAGE 5 OF 6



CRAWL SPACE WALL A SCALE 3/4" = 1'-0"



D SCALE 3/4" = 1'-0"

DECK STAIR NOTES

SECTION AM110

AM110.1 Stairs shall be constructed per Figure AM110. Stringer spans shall be no greater than 7 foot span between supports. Spacing between stringers shall be based upon decking material used per AM107.1. Each Stringer shall have minimum 3 1/2 inches between step cut and back of stringer. If used, suspended headers shall shall be attached with 3/8 inch galvanized bolts with nuts and washers to securely support stringers at the top.

DECK BRACING

SECTION AM109

AM109.1 Deck bracing. Decks shall be braced to provide lateral stability. The following are acceptable means to provide lateral stability.

AM109.1.1. When the deck floor height is less than 4'-0" above finished grade per Figure AM109 and the deck is attached to the structure in accordance with Section AM104, lateral bracing is not required.

AM109.1.2. 4 x 4 wood knee braces may be provided on each column in both directions. The knee braces shall attach to each post at a point not less than 1/3 of the post length from the top of the post, and the braces shall be angled between 45 degrees and 60 degrees from the horizontal. Knee braces shall be bolted to the post and the girder/double band with one 5/8 inch hot dipped galvanized bolt with nut and washer at both ends of the brace per Figure AM109.1

AM109.1.3. For freestanding decks without knee braces or diagonal bracing, lateral stability may be provided by embedding the post in accordance with Figure AM109.2

and the i	ollowing:			
POST SIZE	MAX TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER
4 X 4	48 SF	4'-0"	2'-6"	1'-0"
6 X 6	120 SF	6'-0"	3'-6"	1'-8"

AM109.1.4. 2 x 6 diagonal vertical cross bracing may be provided in two perpendicular directions for freestanding decks or parallel to the structure at the exterior column line for attached decks. The 2 x 6's shall be attached to the posts with one 5/8 inch hot dipped galvanized bolt with nut and washer at each end of each bracing member per Figure AM109.3.

AM109.1.5. For embedment of piles in Coastal Regions,

FLOOR JOIST OVERLAP AS SPECIFIED) JOIST (3) 2 X 10 GIRDER **UNLESS NOTED** 8" SOLID -OTHERWISE MASONRY CAP -2 X 6 TREATED SILL PLATE FLOOR JOIST (3) 2 X 10 GIRDER 🖀 UNLESS NOTED AS SPECIFIED OTHERWISE -2 X 6 TREATED SILL PLATE MINIMUM ⊢8" SOLID 2 X 2 LEDGER MASONRY CAP STRIPS OR HANGERS CONCRETE FOOTING AS SPECIFIED SET PIER SIZE AS **BOTTOM OF** SPECIFIED FOOTING BELOW THE FROST LINE

2 X 4 STUDS AT 16" O.C. -

UNLESS NOTED OTHERWISE

SPECIFIED

FLOOR JOIST

AS SPECIFIED

2 X 6 TREATED

SILL PLATE

SEE "FOUNDATION

STRUCTURAL" NOTES FOR

ANCHOR BOLT SIZE AND

SPACING

CONTINUOUS CONCRETE

FOOTING AS SPECIFIED

BELOW THE FROST LINE

SCALE 3/4'' = 1'-0''

SMOKE ALARMS

equipment provisions of NFPA 72.

requirements of Section R314.4.

1. In each sleeping room.

below the upper level.

the alarms in the individual unit.

NFPA 72.

locations

the bedrooms.

R314.1 Smoke detection and notification. All smoke alarms shall be

listed in accordance with UL 217 and installed in accordance with

R314.2 Smoke detection systems. Household fire alarm systems

a combination of smoke detector and audible notification device

permitted. The household fire alarm system shall provide the same

level of smoke detection and alarm as required by this section for

smoke alarms. Where a household fire warning system is installed

device(s), it shall become a permanent fixture of the occupancy and

approved supervising station and be maintained in accordance with

using a combination of smoke detector and audible notification

owned by the homeowner. The system shall be monitored by an

R314.3 Location. Smoke alarms shall be installed in the following

2. Outside each separate sleeping area in the immediate vicinity of

3. On each additional *story* of the *dwelling*, including *basements*

and habitable attics (finished) but not including crawl spaces,

uninhabitable (unfinished) attics and uninhabitable (unfinished)

attic-stories. In *dwellings* or *dwelling units* with split levels and

alarm installed on the upper level shall suffice for the adjacent

without an intervening door between the adjacent levels, a smoke

lower level provided that the lower level is less than one full *story*

When more than one smoke alarm is required to be installed within

R314.4 Power source. Smoke alarms shall receive their primary

power from the building wiring when such wiring is served from a

commercial source, and when primary power is interrupted, shall

without a disconnecting switch other than those required for

overcurrent protection. Smoke alarms shall be interconnected.

Exception: Where smoke alarms are provided meeting the

installed as required by this section for smoke alarms, shall be

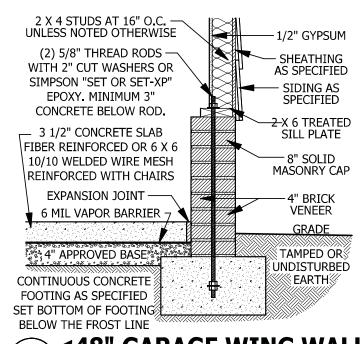
installed in accordance with NFPA 72 that include smoke alarms, or

the provisions of this code and the household fire warning

SET BOTTOM OF FOOTING

SUB FLOOR AS-

DROPPED/FLUSH PIER B SCALE 3/4" = 1'-0"



<48" GARAGE WING WALL SCALE 3/4" = 1'-0"

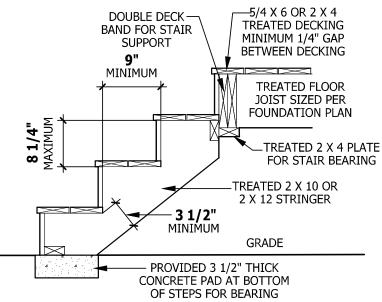


FIGURE AM110 TYPICAL DECK STAIR DETAIL

SCALE 3/4" = 1'-0"

STONE VEENER

AS SPECIFIED

VAPOR BARRIER

WEEP SCREED

MINIMUM 4" TO

GROUND OR 2"

TO PAVEMENT

GRADE

SHEATHING SHECTETED

AS SPECIFIED

SEE FOUNDATION

FOR FOUNDATION

DETAILS

WEEP SCREED

SCALE 3/4" = 1'-0"

WEEP SCREEDS

All weep screeds and stone veneer to be installed per manufactures instructions and per the 2012 North Carolina Residential Building code.

R703.6.2.1 - A minimum 0.019-inch (0.5 mm) (No. 26 galvanized sheet gage), corrosion-resistant weep screed or plastic weep screed, with a minimum vertical shall be provided at or below the screed shall be placed a minimum of 4 inches (102 mm) above the earth or 2 inches (51 mm) above paved areas and shall be of a type that will allow trapped water to drain to the exterior of the building. The weather-resistant barrier shall lap the attachment flange. The exterior lath receive power from a battery. Wiring shall be permanent and

shall cover and terminate on the

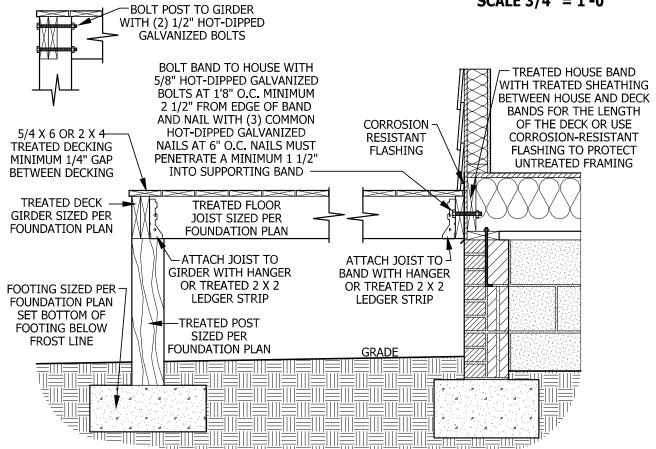
attachment flange of the weep screed.

attachment flange of 31/2 inches (89 mm) foundation plate line on exterior stud walls in accordance with ASTM C 926. The weep

SEE ROOF -1/2" GYPSUM EDGED OR PORCH FLOOR PLAN OR **ELEVATION** SHINGLES AS SPECIFIED PLATE FOR PITCH -SHEATHING AS SPECIFIED 2 X RIM **JOIST** — 15# BUILDING FELT -8" SOLID MASONRY CAP **ROOF TRUSSES BY MANUFACTURER** 4" CONCRETE BLOCK PORCH HEADER PER -4" BRICK VENEER PLAN INSTALLED OVER - EXPANSION JOINT CENTER OF COLUMN BASE - VINYL OR HARDIE SOFFIT -6 MIL VAPOR INSTALLED PER MANUFACTURERS BLOCKING INSTALLED-BARRIER INSTRUCTIONS ON BOTH SIDES & UNDER 3 1/2" SLAB HEADER AS DESIRED TAPERED COLUMN OVER g 4" BASE; 1 X MATERIAL MASONRY BASE ATTACHED TO HEADER TAMPED OR CENTER LINE OF HEADER WITH POST CAP UNDISTURBED AND COLUMN **⊗** EARTH CRAWL SPACE AT GARGE

PORCH HEADER WITH TAPERED COLUMN

SCALE 3/4" = 1'-0"



DECK ATTACHMENT DETAIL TO FRAMED WALL

SCALE 3/4" TO 1'-0"

STAIRWAY NOTES

R311.7.2 Headroom. The minimum headroom in all parts of the stairway shall not be less than 6 feet 8 inches (2032 mm) measured vertically from the sloped line adjoining the tread nosing or from the floor surface of the landing or platform on that portion of the stairway.

R311.7.4 Stair treads and risers. Stair treads and risers shall meet the requirements of this section. For the purposes of this section all dimensions and dimensioned surfaces shall be exclusive of carpets, rugs or runners. **R311.7.4.1 Riser height.** The maximum riser height shall be 8 1/4 inches (210 mm). The riser shall be measured vertically between leading edges of

the adjacent treads. R311.7.4.2 Tread depth. The minimum tread depth shall be 9 inches (229 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. Winder treads shall have a minimum tread depth of 9 inches (229 mm) measured as above at a point 12 inches (305 from the side where the treads are narrower. Winder treads shall have a minimum tread depth of 4 inches (102 mm) at any point.

R311.7.4.3 Profile. The radius of curvature at the nosing shall be no greater than 9/16 inch (14 mm). A nosing not less than 3/4 inch (19 mm) but not more than 1 1/4 inches (32 mm) shall be provided on stairways with solid

R311.7.7 Handrails. Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers. R311.7.7.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be

1. The use of a volute, turnout or starting easing shall be allowed over the lowest tread

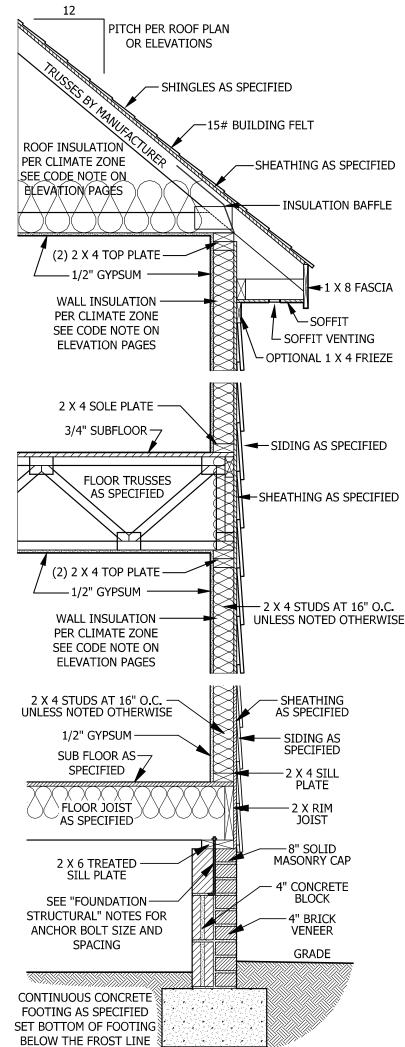
not less than 34 inches (864 mm)and not more than 38 inches (965 mm).

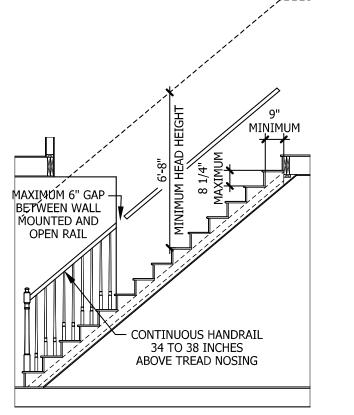
2. When handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maximum height.

R311.7.7.2 Continuity. Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 11/2 inch (38 mm) an individual *dwelling* unit the alarm devices shall be interconnected between the wall and the handrails. in such a manner that the actuation of one alarm will activate all of Exceptions:

1. Handrails shall be permitted to be interrupted by a newel post. 2. The use of a volute, turnout, starting easing or starting newel shall be allowed over the lowest tread.

3. Two or more separate rails shall be considered continuous if the termination of the rails occurs within 6 inches (152 mm) of each other. If transitioning between a wall-mounted handrail and a guardrail/handrail, the wall-mounted rail must return into the wall.





TYPICAL WALL DETAIL

SCALE 3/4" = 1'-0"

TYPICAL STAIR DETAIL

PAGE 6 OF 6

IMENSIONS AND CONDITION

HAYNES HOME PLANS, INC.

SSUMES NO LIABILITY FOR

ONTRACTORS PRACTICES AND

PROCEDURES.

DESIGNER, ARCHITECT OR

BEFORE CONSTRUCTION.

THESE DRAWING ARE

STRUMENTS OF SERVICE AN

AS SUCH SHALL REMAIN

PROPERTY OF THE DESIGNER

DETAIL

TYPICAL

ouch

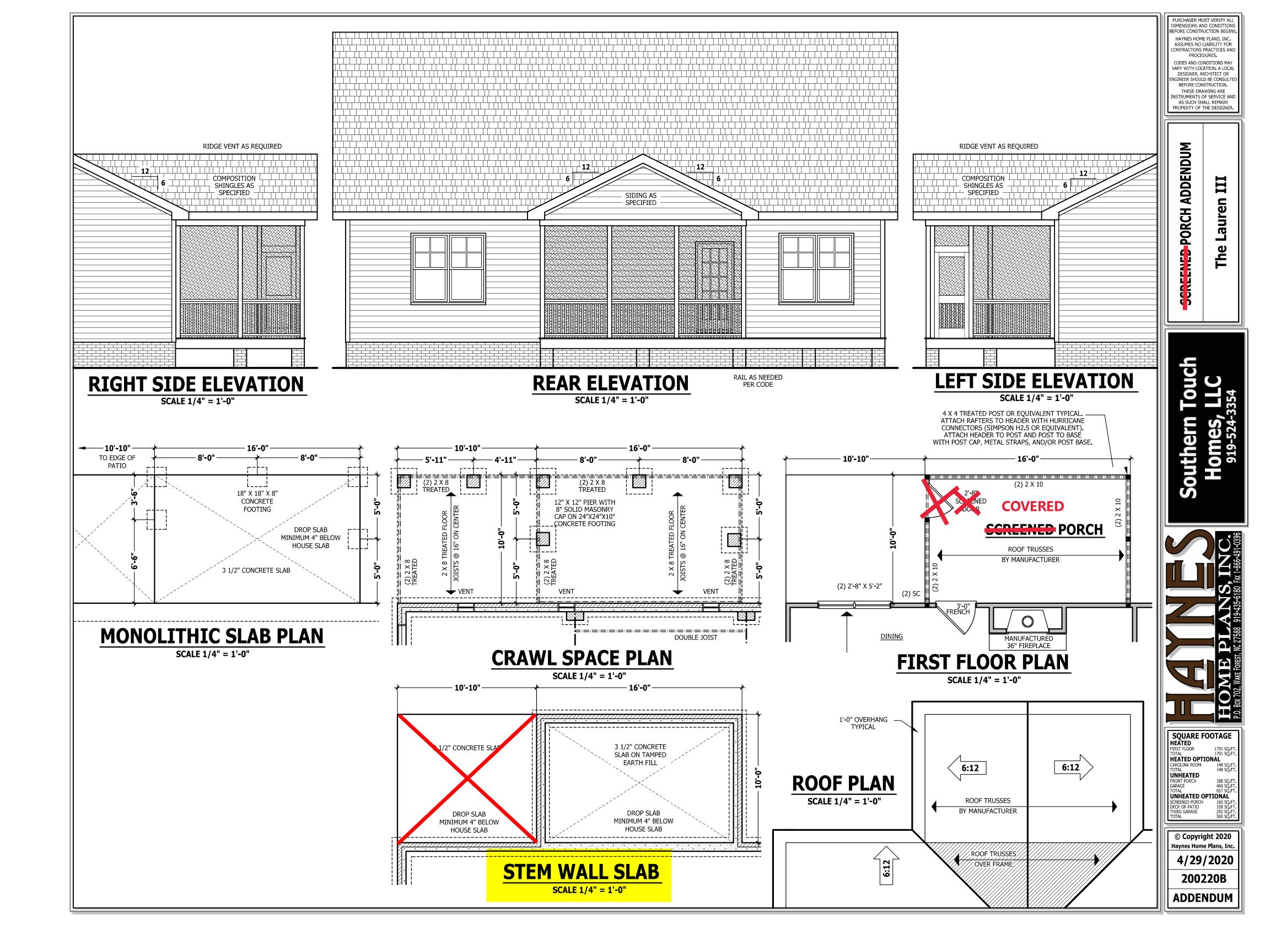
The

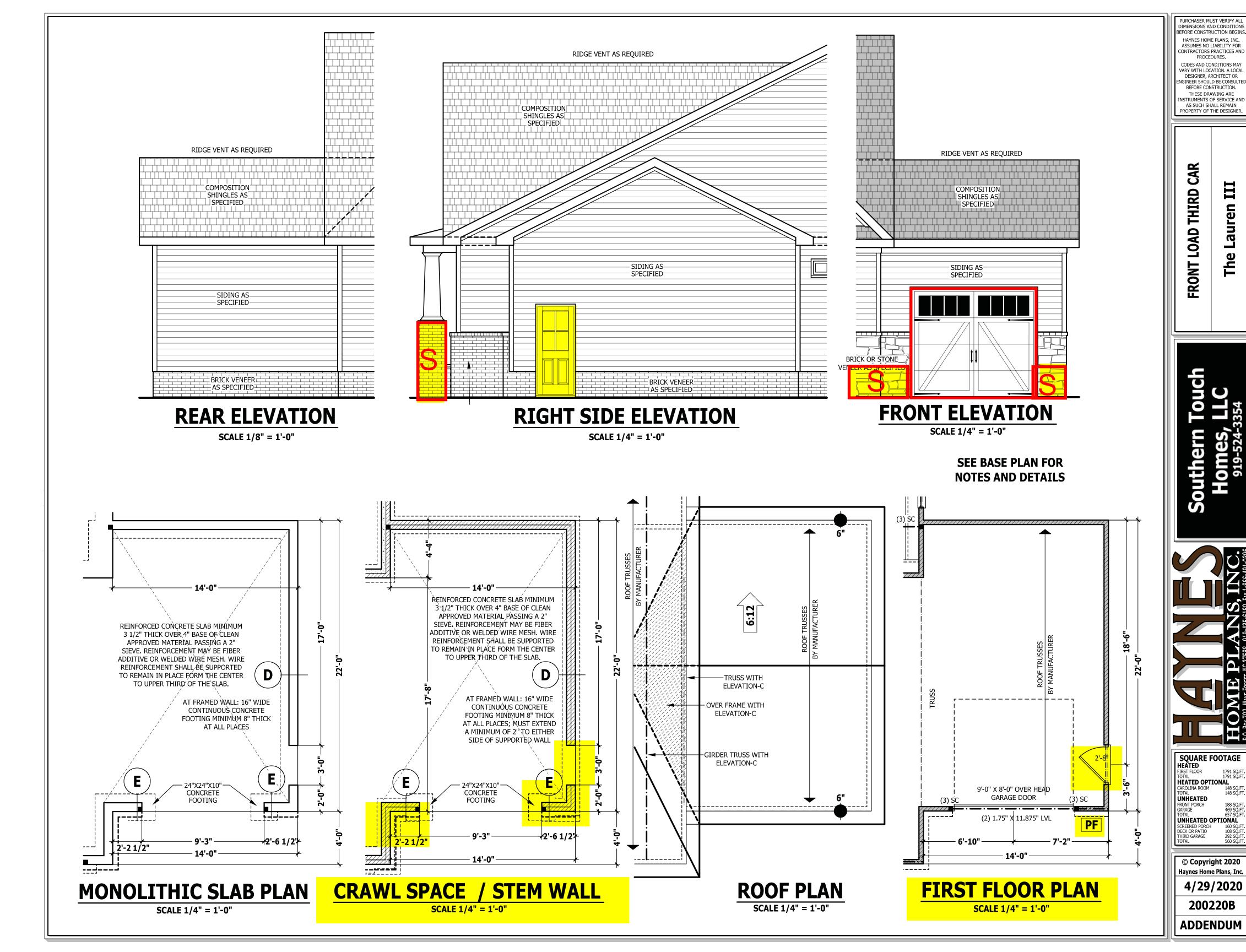
CODES AND CONDITIONS MA

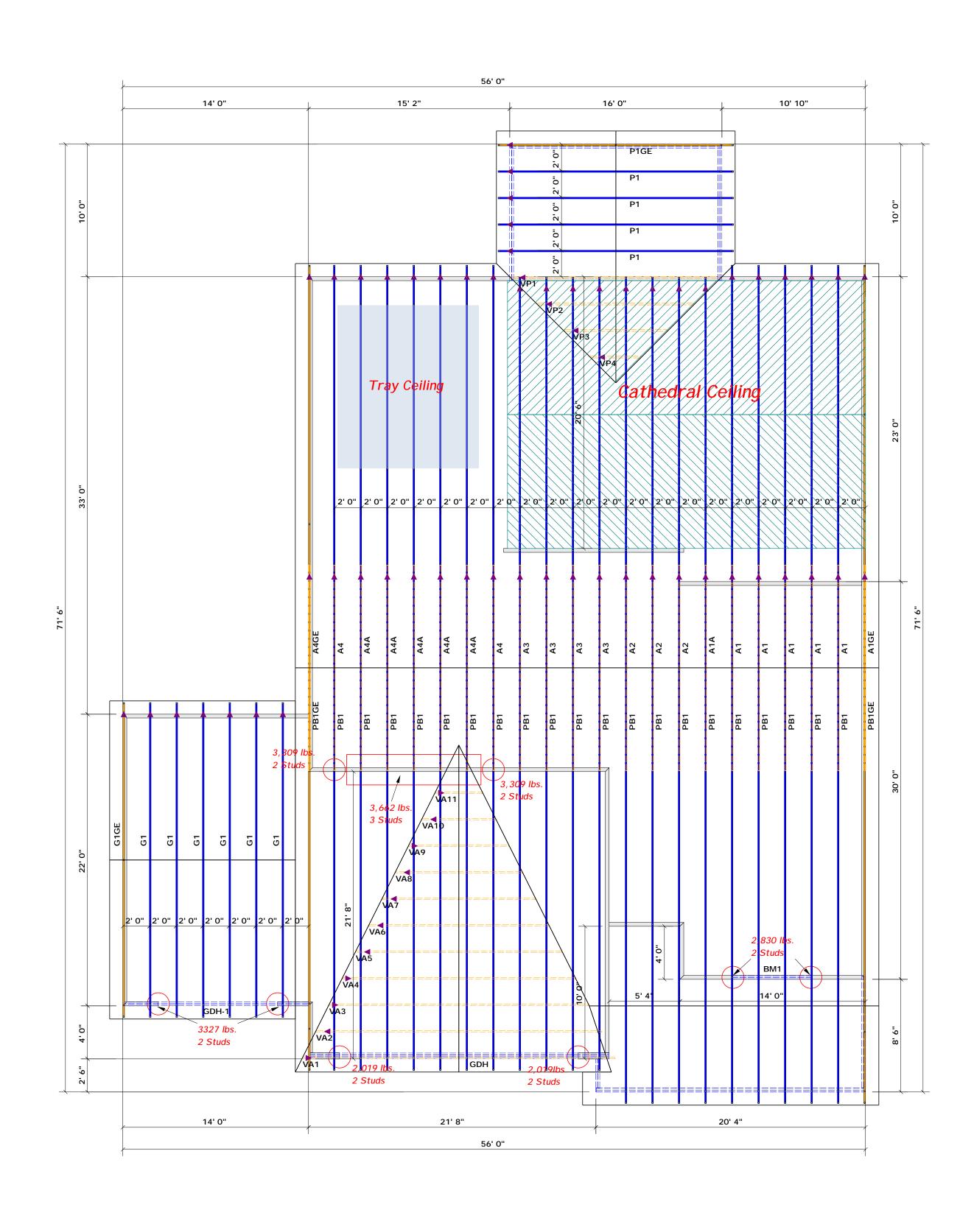
SQUARE FOOTAGE HEATED OPTIONAL 148 SQ.FT 148 SQ.FT JNHEATED UNHEATED OPTIONAL

© Copyright 2020 Haynes Home Plans, Inc 4/29/2020

200220B







▲ = Denotes Left End of Truss(Reference Engineered Truss Drawing)Do Not Erect Trusses Backwards

6800 2

10200 3

13600 4

17000 5

LOAD CHART FOR JACK STUDS

(BANFO ON 1 MBERS (2502-51)) & (b)()
NUMBER OF JACK STUDG REQUIRE(DIR) (A CND OF FEADER/STEGER

SACTOR OF STORY OF ST

2550 1 5100 2

7650 3

10200 4 12750 5 15300 6

All Truss Reactions are Less than 3,000 lbs. Unless Noted Otherwise.

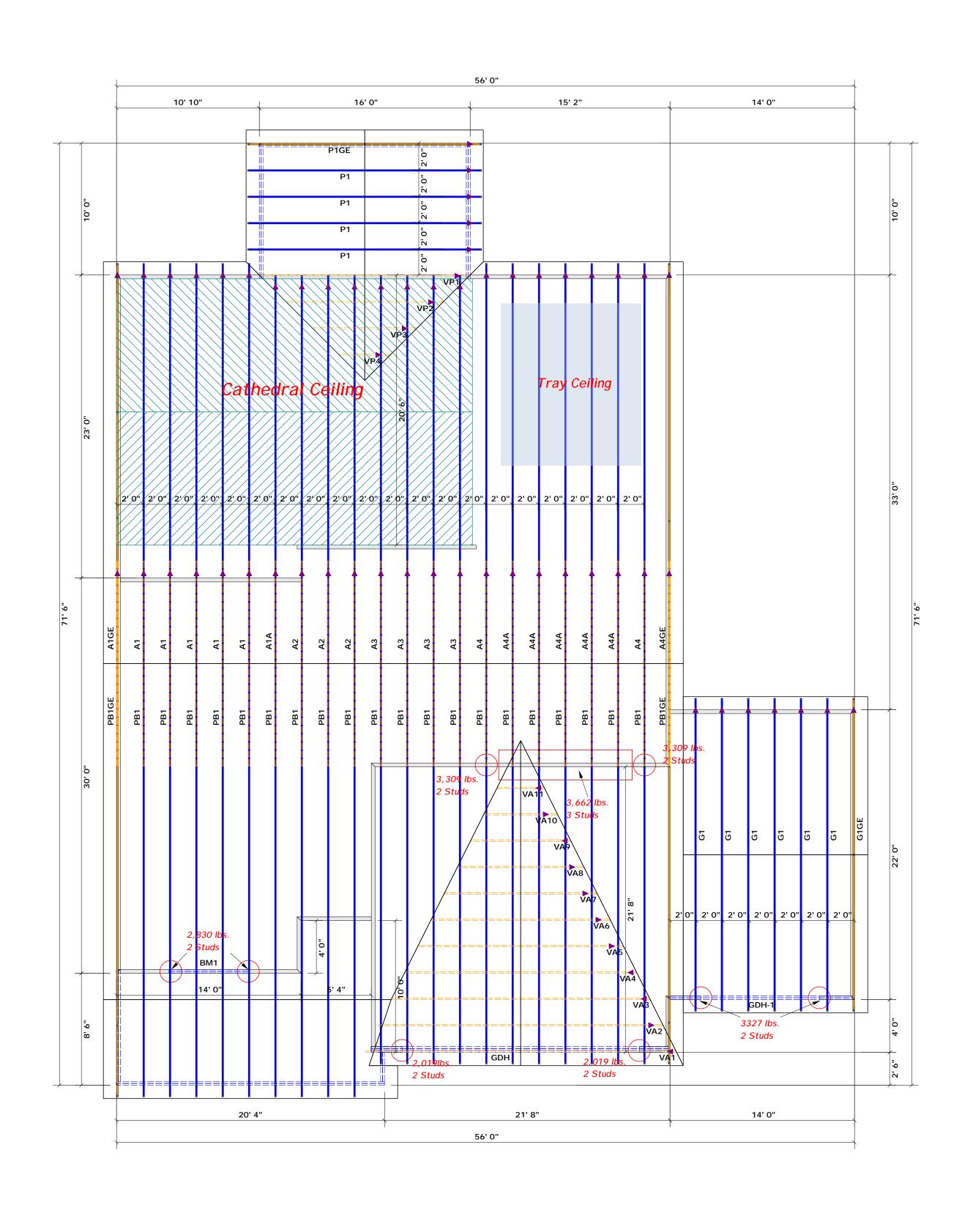
-- Denotes Reaction Greater than 3,000 lbs.

Beam Legend **Net Qty** Fab Type PlotID Plies Length **Product** 7' 0" 2 FF BM1 1-3/4"x 9-1/4" LVL Kerto-S 2 2 2 FF GDH-1 14' 0" 1-3/4"x 11-7/8" LVL Kerto-S Truss Placement Plan 3 3 **GDH** 23' 0" 1-3/4"x 16" LVL Kerto-S FF

es Backwards			SCALE: 3/16" = 1'	GDH	23' 0"	1-3/4"x 16" LVL Kerto-S 3
BUILDER	Southern Touch Homes	CITY / CO.	Angier / Harnett		Th the	HIS IS A TRUSS PLACEMENT DIAGRAM ONLY. sees trusses are designed as individual building components to be incorporated into building designer. See individual designer building designer see individual designer sets for each truss design identified on the placement drawing. The building designer
JOB NAME	Lot 14 Mitchell Manor	ADDRESS	Wendywood Drive		is r the wa reg	responsible for temporary and permanent bracing of the roof and floor system and for overall structure. The design of the truss support structure including headers, beams, Ils, and columns is the responsibility of the building designer. For general guidance parding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package
PLAN	Lauren III / Elev. A / 3 Car / CP	MODEL	Roof		Be	online @ sbcindustry.com aring reactions less than or equal to 3000# are deemed to comply with the sscriptive Code requirements. The contractor shall refer to the attached Tables
SEAL DATE	4/29/20	DATE REV.	03/28/22		fou tha be	erived from the prescriptive Code requirements) to determine the minimum indation size and number of wood studs required to support reactions greater in 3000# but not greater than 15000#. A registered design professional shall retained to design the support system for any reaction that exceeds those
QUOTE #	Quote #	DRAWN BY	Curtis Quick		ret	ecified in the attached Tables. A registered design professional shall be ained to design the support system for all reactions that exceed 15000#. Curtis Quick
JOB #	J0322-1383	SALES REP.	Lenny Norris			Curtis Quick



Phone: (910) 864-8787 Fax: (910) 864-4444



▲ = Denotes Left End of Truss(Reference Engineered Truss Drawing)Do Not Erect Trusses Backwards

3400 1

6600 2

10200 3

13600 4

17000 5

LOAD CHART FOR JACK STUDS

(BASES ON HABES 850250) A (6)

MANUS OF JACK STUDS ACCURAGE & CA CAS OF FEADORY 675025

BYD DEACTION (LP TO) (ACT STUDS FOR

2550 1 5100 2

7650 3

10200 4

12750 5

15300 6

1700 1 3400 2

5100 3

All Truss Reactions are Less than 3,000 lbs. Unless Noted Otherwise.

-- Denotes Reaction Greater than 3,000 lbs.

Beam Legend Plies PlotID Length Product **Net Qty** Fab Type FF BM1 7' 0" 1-3/4"x 9-1/4" LVL Kerto-S 2 2 FF 2 2 GDH-1 14' 0" 1-3/4"x 11-7/8" LVL Kerto-S **Truss Placement Plan** 3 3 FF 1-3/4"x 16" LVL Kerto-S

se	s Backwards			SCALE: 3/16" = 1' GDH 23' ()" 1
	BUILDER	Southern Touch Homes	CITY / CO.	Angier / Harnett	THIS IS A These truss the building sheets for ea
	JOB NAME	Lot 14 Mitchell Manor	ADDRESS	Wendywood Drive	is responsib the overall s walls, and co regarding br
	PLAN	Lauren III / Elev. A / 3 Car / CP	MODEL	Roof	or online @ Bearing rea prescriptive
	SEAL DATE	4/29/20	DATE REV.	03/28/22	(derived fro foundation than 3000# be retained
	QUOTE #	Quote #	DRAWN BY	Curtis Quick	specified in retained to
-	JOB #	J0322-1383	SALES REP.	Lenny Norris	Signatu

HIS IS A TRUSS PLACEMENT DIAGRAM ONLY.

hese trusses are designed as individual building components to be incorporated into a building design at the specification of the building designer. See individual design eets for each truss design identified on the placement drawing. The building designer responsible for temporary and permanent bracing of the roof and floor system and for a overall structure. The design of the truss support structure including headers, beams, alls, and columns is the responsibility of the building designer. For general guidance garding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package online @ sbcindustry.com

arining reactions less than or equal to 3000# are deemed to comply with the escriptive Code requirements. The contractor shall refer to the attached Tables lerived from the prescriptive Code requirements to determine the minimum undation size and number of wood studs required to support reactions greater an 3000# but not greater than 15000#. A registered design professional shall

Curtis Quick

Curtis Quick

ROOF & FLOOR TRUSSES & BEAMS

Reilly Road Industrial Park Fayetteville, N.C. 28309 Phone: (910) 864-8787 Fax: (910) 864-4444



Client:

Project: Address: Weaver Development

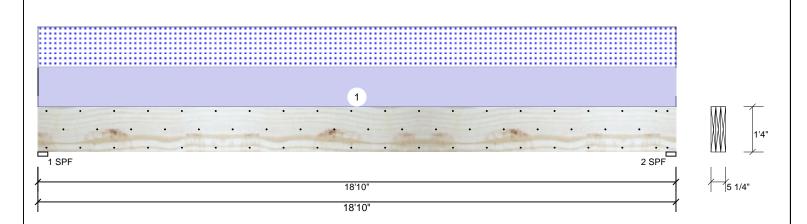
Date: 4/6/2022

Input by: Curtis Quick Job Name: The Lauren III Beams Page 1 of 1

Project #:

1.750" X 16.000" **Kerto-S LVL** 3-Ply - PASSED GDH

Level: Level



Member Infor	Nember Information					Reactions UNPATTERNED Ib (Uplift)							
Type:	Girder	Application:	Floor	Brg	Direction	Live)	Dead	Snow	Wind	Const		
Plies:	3	Design Method:	ASD	1	Vertical	C)	1127	951	0	0		
Moisture Condition	on: Dry	Building Code:	IBC 2012	2	Vertical	C)	1127	951	0	0		
Deflection LL:	480	Load Sharing:	Yes										
Deflection TL:	360	Deck:	Not Checked										
Importance:	Normal - II												
Temperature:	Temp <= 100°F												
				Bear	rings								
				Bea	aring Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.		
				1 -	SPF 3.500"	Vert	27%	1127 / 951	2078	L	D+S		
					SPF 3.500"	Vert	27%	1127 / 951	2078	L	D+S		

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	9334 ft-lb	9'5"	62010 ft-lb	0.151 (15%)	D+S	L
Unbraced	9334 ft-lb	9'5"	10990 ft-lb	0.849 (85%)	D+S	L
Shear	1744 lb	17'2 1/2"	20608 lb	0.085 (8%)	D+S	L
LL Defl inch	0.078 (L/2813)	9'5 1/16"	0.460 (L/480)	0.171 (17%)	S	L
TL Defl inch	0.171 (L/1288)	9'5 1/16"	0.613 (L/360)	0.280 (28%)	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 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 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			Тор	101 PLF	0 PLF	101 PLF	0 PLF	0 PLF	A4A
	Self Weight				10 DI F					

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.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- Handling & Installation

 1. IVI 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

- For flat roofs provide proper drainage to prevent ponding

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

Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS



This design is valid until 11/3/2024



Client: Weaver Development

Project: Address:

Date: 4/6/2022

Input by: Curtis Quick Job Name: The Lauren III Beams Page 1 of 1

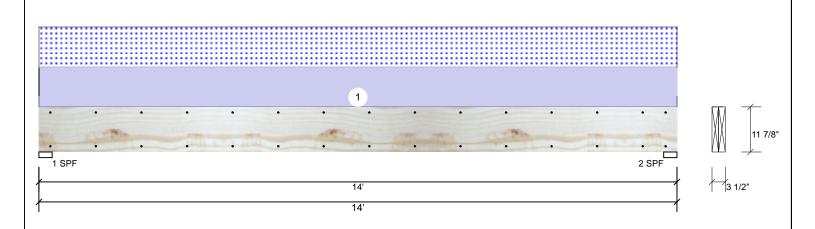
Project #:

Kerto-S LVL GDH-1

1.750" X 11.875"

2-Ply - PASSED

Level: Level



Member Infor	rmation			Rea	ctions UNP	ATTERN	IED Ib (Uplift)			
Type:	Girder	Application:	Floor	Brg	Direction	Live	Dead	Snow	Wind	Const
Plies:	2	Design Method:	ASD	1	Vertical	0	1696	1631	0	0
Moisture Condition	n: Dry	Building Code:	IBC 2012	2	Vertical	0	1696	1631	0	0
Deflection LL:	480	Load Sharing:	No							
Deflection TL:	360	Deck:	Not Checked							
Importance:	Normal - II									
Temperature:	Temp <= 100°F									
				Bea	rings					
				Bea	aring Length	Dir.	Cap. React D/L II	o Total	Ld. Case	Ld. Comb.
				1 -	SPF 3.500"	Vert	64% 1696 / 163	1 3327	L	D+S
				2 -	SPF 3.500"	Vert	64% 1696 / 163	1 3327	L	D+S

Analysis Results

_						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	10893 ft-lb	7'	22897 ft-lb	0.476 (48%)	D+S	L
Unbraced	10893 ft-lb	7'	10904 ft-lb	0.999 (100%)	D+S	L
Shear	2727 lb	12'8 5/8"	10197 lb	0.267 (27%)	D+S	L
LL Defl inch	0.195 (L/832)	7' 1/16"	0.339 (L/480)	0.577 (58%)	S	L
TL Defl inch	0.398 (L/408)	7' 1/16"	0.451 (L/360)	0.882 (88%)	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 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 8'2 11/16" o.c.
- 7 Bottom must be laterally braced at end bearings.
- 8 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			Тор	233 PLF	0 PLF	233 PLF	0 PLF	0 PLF	G1
	Self Weight				9 PLF					

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.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- Handling & Installation

 1. UVI beams must not be out 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

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

Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS



This design is valid until 11/3/2024 CSD |



Client: Weaver Development

Project: Address:

4/6/2022 Input by:

Curtis Quick Job Name: The Lauren III Beams

Project #:

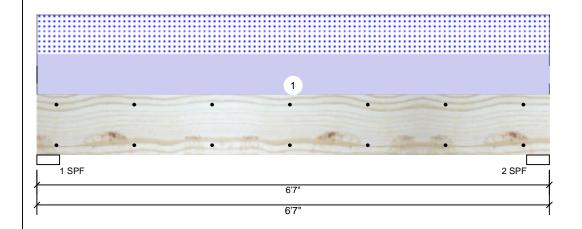
Date:

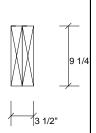
Kerto-S LVL BM₁

1.750" X 9.250"

2-Ply - PASSED

Level: Level





Page 1 of 1

Member Information

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal - II
Temperature:	Temp <= 100°F

Application: Floor Design Method: ASD **Building Code:** IBC 2012 Load Sharing: No Deck: Not Checked **Reactions UNPATTERNED Ib (Uplift)** Brg Live Snow Wind Const Direction Dead Vertical 0 1564 1541 0 0 1 O 1564 O 2 Vertical 1541 0

Bearings

Bearing	Length	Dir.	Cap. I	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	60%	1564 / 1541	3105	L	D+S
2 - SPF	3.500"	Vert	60%	1564 / 1541	3105	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4423 ft-lb	3'3 1/2"	14423 ft-lb	0.307 (31%)	D+S	L
Unbraced	4423 ft-lb	3'3 1/2"	10451 ft-lb	0.423 (42%)	D+S	L
Shear	2108 lb	1' 3/4"	7943 lb	0.265 (27%)	D+S	L
LL Defl inch	0.040 (L/1842)	3'3 1/2"	0.153 (L/480)	0.261 (26%)	S	L
TL Defl inch	0.080 (L/914)	3'3 1/2"	0.204 (L/360)	0.394 (39%)	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 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.

Version 21.80.417 Powered by iStruct™ Dataset: 21072801.1545 (embedded)

- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 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			Тор	468 PLF	0 PLF	468 PLF	0 PLF	0 PLF	A1
	Self Weight				7 DI E					

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.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- L. UVL beams must not be cut or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
 Damaged Beams must not be used

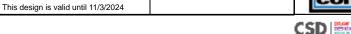
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

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

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS





Manufacturer Info