# PLANS DESIGNED TO THE 2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE

MEAN ROOF HEIGHT: 19'-8	8" HEIGHT TO RIDGE:27'-8"		
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

\* "10/13" 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 WIN	ID SPEED	OF 120 MF	H, 3 SECC	JND GUST	(93 FAST	EST MILE)	EXPUSUR	KE "B"
COMPONENT								
MEAN ROOF	UP T	O 30'	30'-1"	TO 35'	35'-1"	TO 40'	40'-1"	TO 45'
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

## **ROOF VENTILATION**

#### SECTION R806

**R806.1 Ventilation required.** Enclosed *attics* and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow. Ventilation openings shall have a least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Ventilation openings having a least dimension larger than 1/4 inch (6.4 mm) shall be provided with corrosion-resistant wire cloth screening, hardware cloth, or similar material with openings having a least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Openings in roof framing members shall conform to the requirements of Section R802.7.

**R806.2** Minimum area. The total net free ventilating area shall not be less than 1/150 of the area of the space ventilated except that reduction of the total area to 1/300 is permitted provided that at least 50 percent and not more than 80 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 (914 mm) above the eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents. As an alternative, the net free cross-ventilation area may be reduced to 1/300 when a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling. **Exceptions:** 

Enclosed attic/rafter spaces requiring less than 1 square foot (0.0929 m2) of ventilation may be vented with continuous soffit ventilation only.
 Enclosed attic/rafter spaces over unconditioned space may be vented with continuous soffit vent only.

SQUARE FOOTAGE OF ROOF TO BE VENTED = 2,128 SQ.FT.

NET FREE CROSS VENTILATION NEEDED:

WITHOUT 50% TO 80% OF VENTING 3'-0" ABOVE EAVE = 14.18 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 = 7.09 SQ.FT.

## **GUARD RAIL NOTES**

#### SECTION R312

**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 treads.

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

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.

not more than 38 inches (965 mm) measured vertically from a line connecting

#### 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 43/8 inches (111 mm) in diameter.

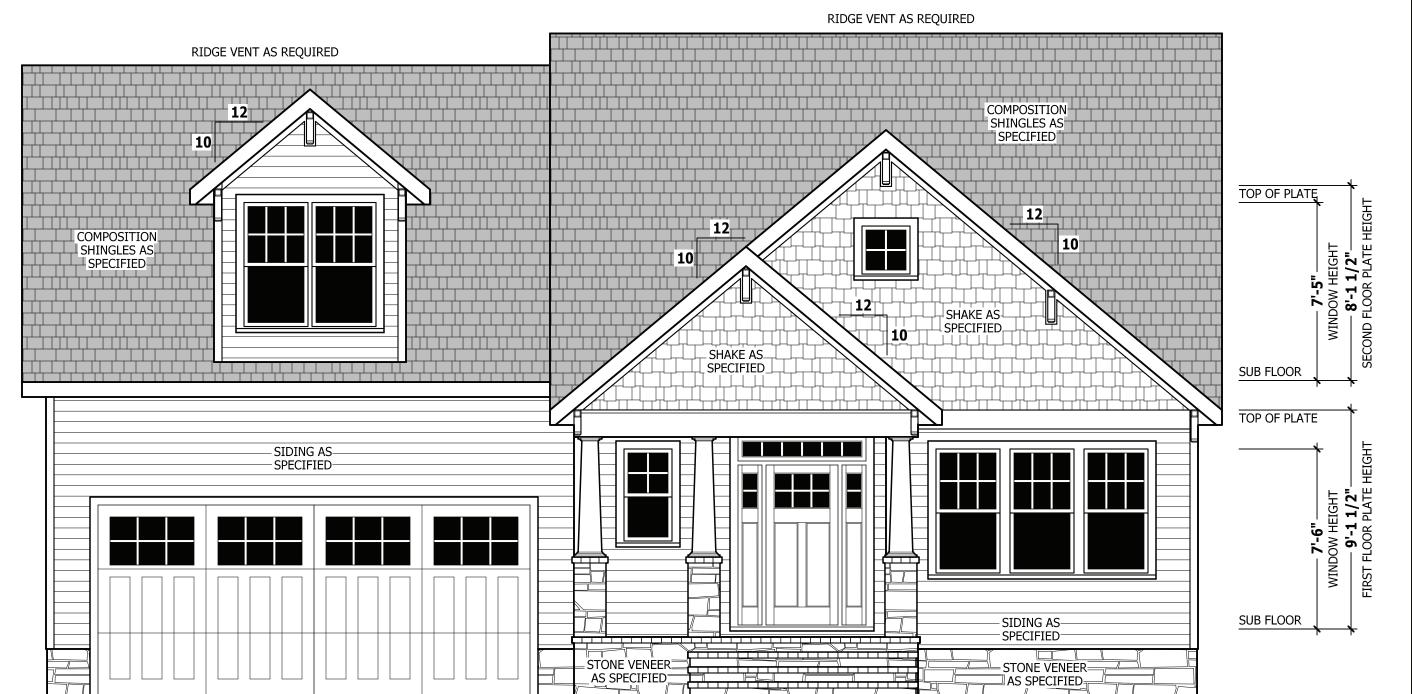
## **AIR LEAKAGE**

#### Section N1102.4

**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, weather stripped or otherwise sealed with an air barrier material or solid material consistent with Appendix E-2.4 of this code:

 Blocking and sealing floor/ceiling systems and under knee walls open to unconditioned or exterior space.
 Capping and sealing shafts or chases, including flue shafts.

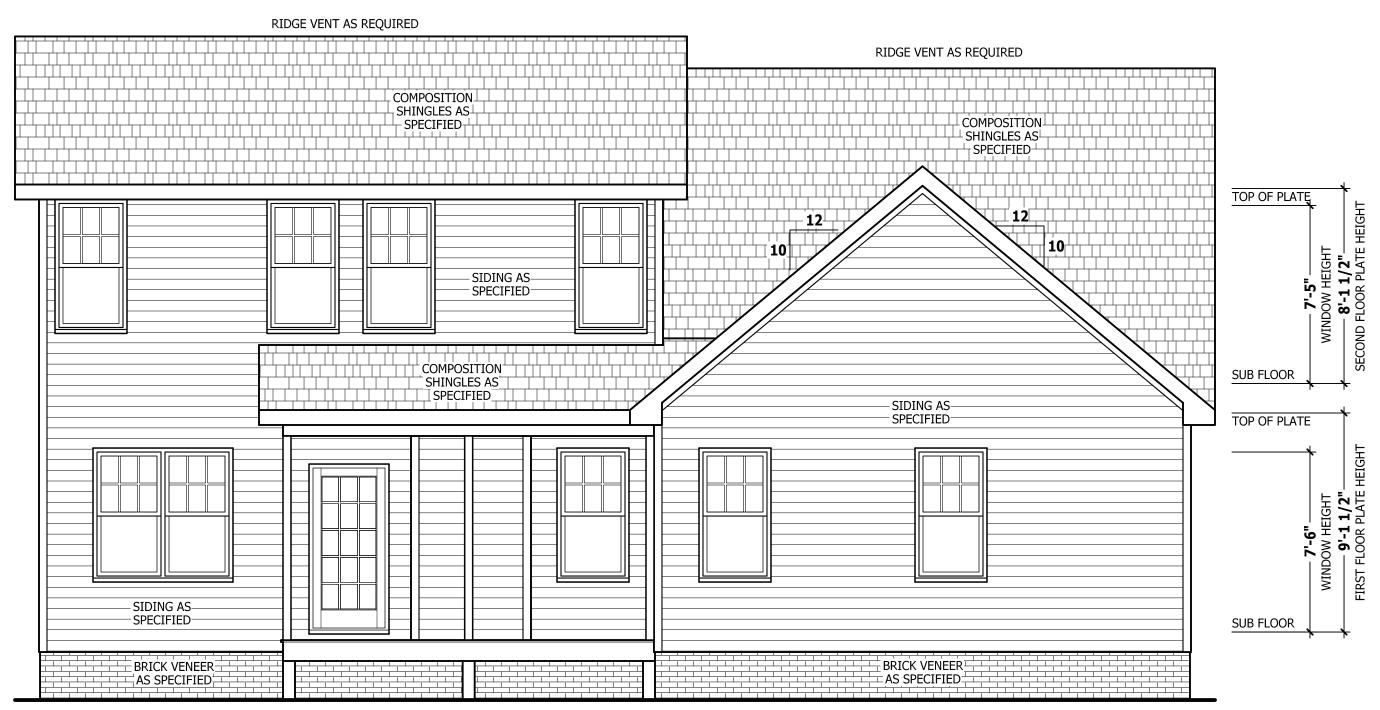
3. Capping and sealing soffit or dropped ceiling areas.



# **FRONT ELEVATION**

RAIL AS NEEDED

SCALE 1/4" = 1'-0"



RAIL AS NEEDED PER CODE **REAR ELEVATION** 

**SCALE 1/4" = 1'-0"** 

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

CONTRACTORS PRACTICES AND PROCEDURES.

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

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

ELEVATIONS

MAGNOLIA

REAR

**∞** 

**FRONT** 

SIGNATIURE HOME BUILDERS, INC.

ED BOY 702, WARE FOREST NG 27588 919-435-6180 Fax 1-866-491-0396

 SQUARE FOOTAGE

 HEATED
 1354 SQ.FT.

 FIRST FLOOR
 1354 SQ.FT.

 SECOND FLOOR
 589 SQ.FT.

 TOTAL
 2316 SQ.FT.

 UNHEATED
 FRONT PORCH
 94 SQ.FT.

 GARAGE
 491 SQ.FT.

 SCREENED PORCH
 178 SQ.FT.

 TOTAL
 763 SQ.FT.

© Copyright 2022
Haynes Home Plans, Inc.
2/25/2022

220213B

PAGE 1 OF 8

PURCHASER MUST VERIFY ALL BEFORE CONSTRUCTION BEGINS ASSUMES NO LIABILITY FOR CONTRACTORS PRACTICES AND

CODES AND CONDITIONS MAY /ARY WITH LOCATION. A LOCAL DESIGNER, ARCHITECT OR NGINEER SHOULD BE CONSULTED BEFORE CONSTRUCTION,

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

**ELEVATION RIGHT** 

**MAGNOLIA ∞** LEFT

 SQUARE FOOTAGE

 HEATED
 1354 SQ.FT.

 FIRST FLOOR
 589 SQ.FT.

 SECOND FLOOR
 589 SQ.FT.

 PLAYROOM
 373 SQ.FT.

 TOTAL
 2316 SQ.FT.

 UNHEATED
 FRONT PORCH
 94 SQ.FT.

 GARAGE
 491 SQ.FT.

 SCREENED PORCH
 178 SQ.FT.

 TOTAL
 763 SQ.FT.

© Copyright 2022

Haynes Home Plans, Inc. 2/25/2022

220213B

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

PROCEDURES.

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

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

INSTRUMENTS OF SERVICE AND
AS SUCH SHALL REMAIN
PROPERTY OF THE DESIGNER.

SLAB PLAN

MAGNOLIA

STEMWALL

SIGNATURE HOME BUILDERS, INC.

 SQUARE FOOTAGE

 HEATED
 1354 SQ.FT

 FIRST FLOOR
 1354 SQ.FT

 SECOND FLOOR
 589 SQ.FT

 PLAYROOM
 373 SQ.FT

 TOTAL
 2316 SQ.FT

 UNHEATED
 94 SQ.FT

FRONT PORCH GARAGE SCREENED PORCH TOTAL

© Copyright 2022 Haynes Home Plans, Inc.

2/25/2022

220213B

PAGE 3 OF 8

PURCHASER MUST VERIFY ALL
DIMENSIONS AND CONDITIONS
BEFORE CONSTRUCTION BEGINS.
HAYNES HOME PLANS, INC.
ASSUMES NO LIABILITY FOR
CONTRACTORS PRACTICES AND
PROCEDURES

PROCEDURES.

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

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

SPACE PLAN

CRAWL SPACE MAGNOLI

SIGNATURE HOME BUILDERS, INC.

HOME PLANS, INC.

 SQUARE FOOTAGE

 HEATED
 FIRST FLOOR
 1354 SQ.FT.

 FICOND FLOOR
 589 SQ.FT.

 PLAYROOM
 373 SQ.FT.

 TOTAL
 2316 SQ.FT.

 UNHEATED

GARAGE 49 SCREENED PORCH 17 TOTAL 76

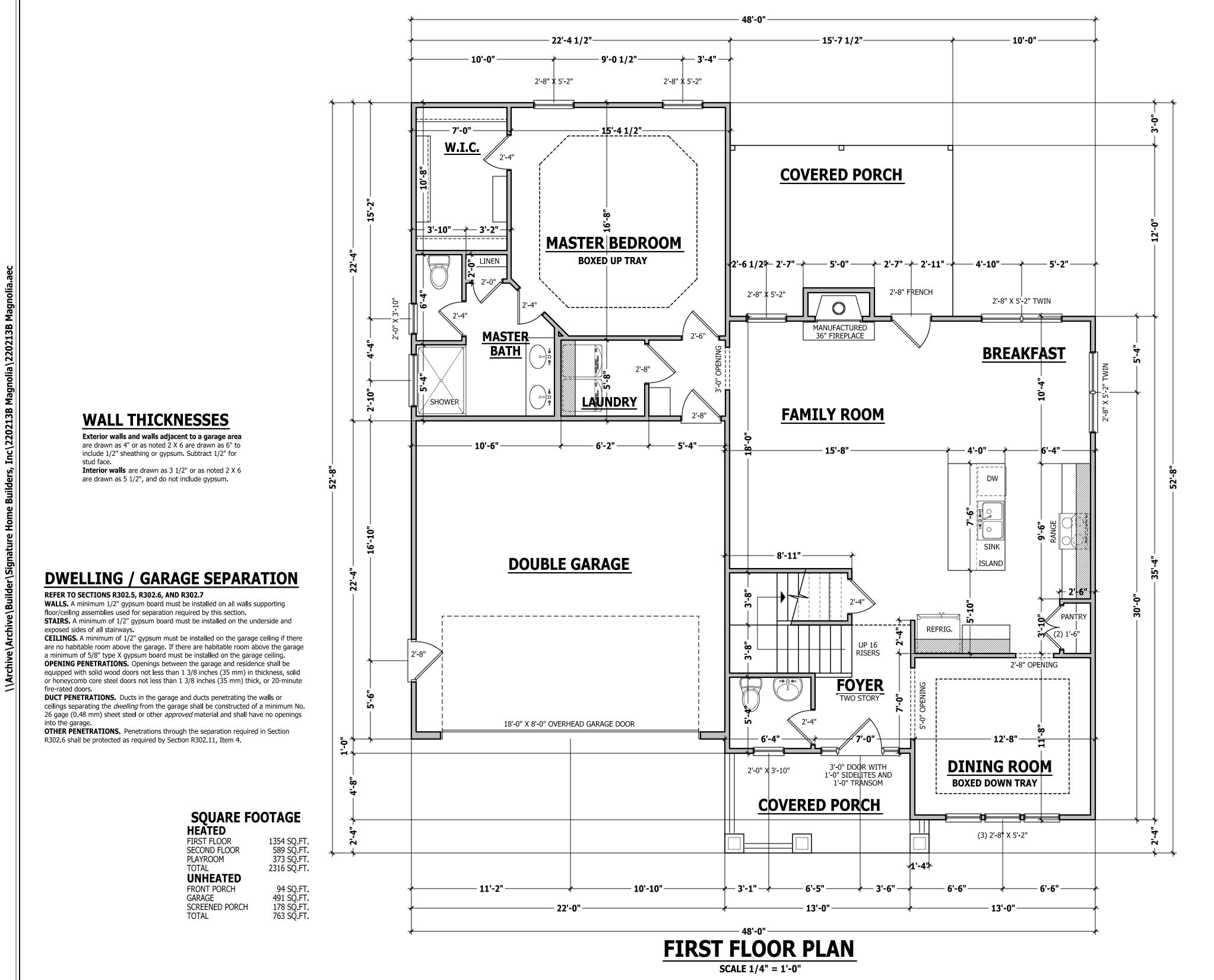
© Copyright 2022 Haynes Home Plans, Inc.

2/25/2022

220213B

PAGE 3 OF 8

SCALE 1/4" = 1'-0"



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

PROCEDURES.

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

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

MAGNOLIA

FIRST FLOOR PLAN

SIGNATURE HOME BUILDERS, INC.

 SQUARE FOOTAGE

 HEATED
 1354 SQ.FT.

 FIRST FLOOR
 1354 SQ.FT.

 SECOND FLOOR
 589 SQ.FT.

 PLAYROOM
 373 SQ.FT.

 TOTAL
 2316 SQ.FT.

 UNHEATED
 FRONT PORCH
 94 SQ.FT.

FRONT PORCH GARAGE SCREENED PORCH TOTAL

© Copyright 2022 Haynes Home Plans, Inc.

2/25/2022

220213B

PAGE 4 OF 8

## **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.

DESIGN LOADS	LIVE LOAD	DEAD LOAD	DEFLECTION
USE	(PSF)	(PSF)	(LL)
Attics without storage	10		L/240
Attics with limited storage	20	10	L/360
Attics with fixed stairs	40	10	L/360
Balconies and decks	40	10	L/360
Fire escapes	40	10	L/360
Guardrails and handrails	200		
Guardrail in-fill components	50		
Passenger vehicle garages	50	10	L/360
Rooms other than sleeping	40	10	L/360
Sleeping rooms	30	10	L/360
Stairs	40		L/360
Snow	20		

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 noted other wise.

#### **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" thick for 24" on center joist spacing. ROOF SHEATHING: OSB or CDX roof sheathing minimum 7/16" thick. **CONCRETE AND SOILS:** See foundation notes.

#### **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

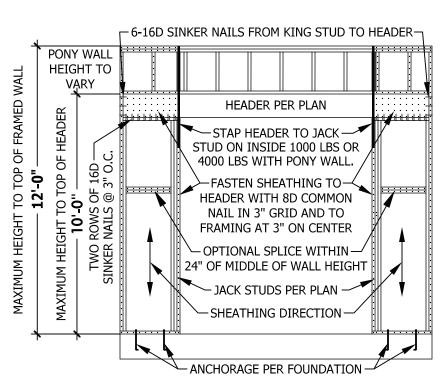
of the brace wall panel closets to the corner.

#### **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

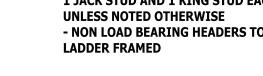
**GB:** Interior walls show as GB are to have minimum 1/2" gypsum board on both sides of the wall fastened at 7" on center at edges and 7" on center at intermediate supports with

minimum 5d cooler nails or #6 screws. **PF**: Portal fame per figure R602.10.1



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

SCALE 1/4" = 1'-0"

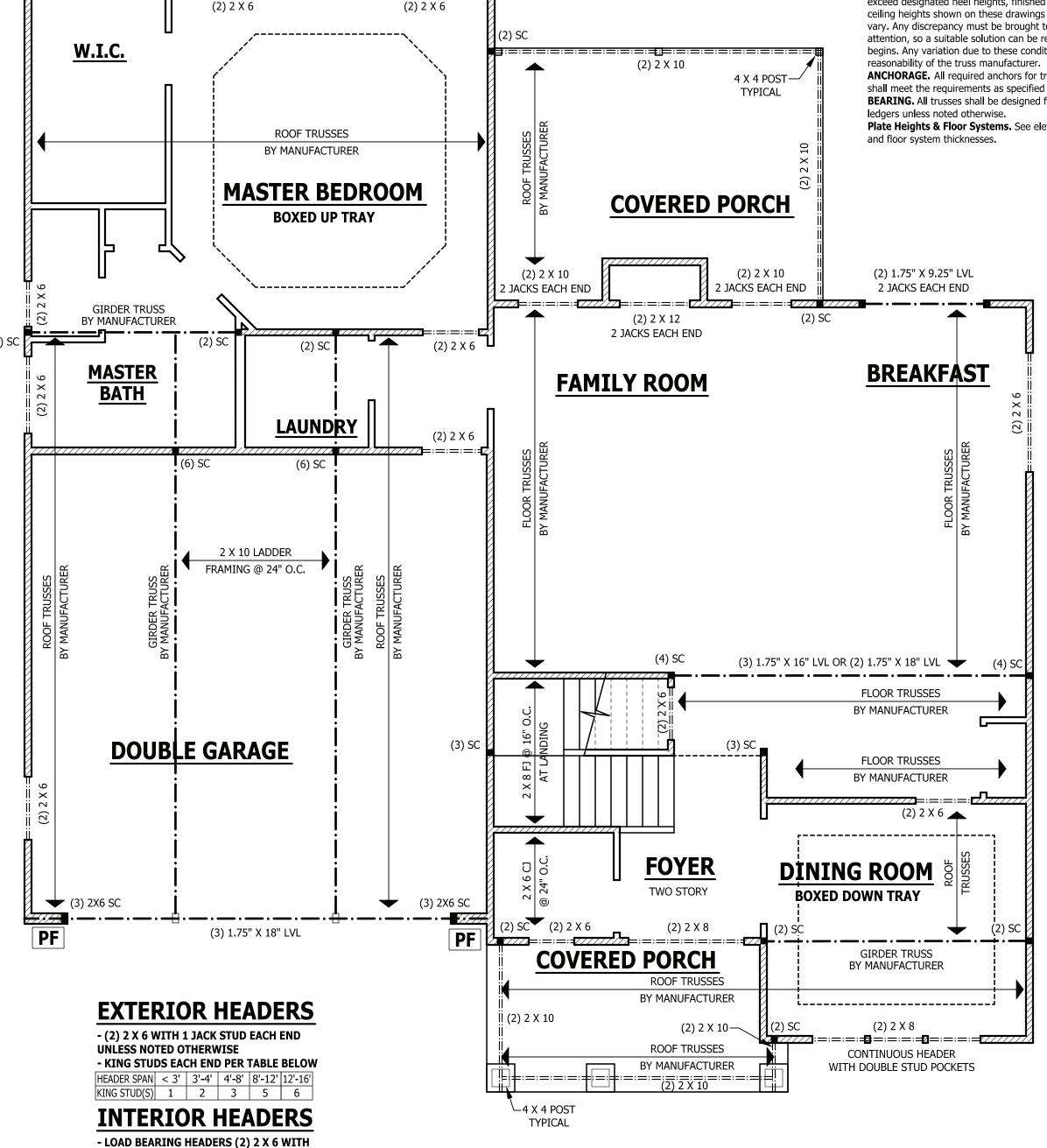




**TRUSS DESIGN.** Trusses to be designed and engineered in accordance with these drawings. Any variation with these drawings must be brought to Haynes Home Plan, Inc. attention before construction begins. KNEE WALL AND CEILING HEIGHTS. All finished knee wall heights and ceiling heights are shown furred 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

Plate Heights & Floor Systems. See elevation page(s) for plate heights



1 JACK STUD AND 1 KING STUD EACH END - NON LOAD BEARING HEADERS TO BE

FIRST FLOOR STRUCTURAL

SCALE 1/4" = 1'-0"

EFORE CONSTRUCTION BEGINS HAYNES HOME PLANS, INC. ASSUMES NO LIABILITY FOR CONTRACTORS PRACTICES AND PROCEDURES. CODES AND CONDITIONS MAY ARY WITH LOCATION. A LOCAL DESIGNER, ARCHITECT OR BEFORE CONSTRUCTION,

PURCHASER MUST VERIFY ALL

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

STRUCTURAL MAGNOLIA FLOOR

**FIRST** 



SQUARE FOOTAGE HEATED FIRST FLOOR SECOND FLOOR PLAYROOM TOTAL UNHEATED FRONT PORCH GARAGE SCREENED PORCH TOTAL

© Copyright 2022 Haynes Home Plans, Inc.

2/25/2022 220213B

PAGE 5 OF 8

## **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.

DESIGN LOADS	LIVE LOAD	DEAD LOAD	DEFLECTION
USE	(PSF)	(PSF)	(LL)
Attics without storage	10		L/240
Attics with limited storage	20	10	L/360
Attics with fixed stairs	40	10	L/360
Balconies and decks	40	10	L/360
Fire escapes	40	10	L/360
Guardrails and handrails	200		
Guardrail in-fill components	50		
Passenger vehicle garages	50	10	L/360
Rooms other than sleeping	40	10	L/360
Sleeping rooms	30	10	L/360
Stairs	40		L/360
Snow	20		

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 noted other wise.

#### **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" thick for 24" on center joist spacing. **ROOF SHEATHING:** OSB or CDX roof sheathing minimum 7/16" thick. **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.

#### **WALL THICKNESSES**

Exterior walls and walls adjacent to a garage area are drawn as 4" or as noted 2 X 6 are drawn as 6" to include 1/2" sheathing or gypsum. Subtract 1/2" for

**Interior walls** are drawn as 3 1/2" or as noted 2 X 6 are drawn as 5 1/2", and do not include gypsum.

## **ATTIC ACCESS**

#### **SECTION R807**

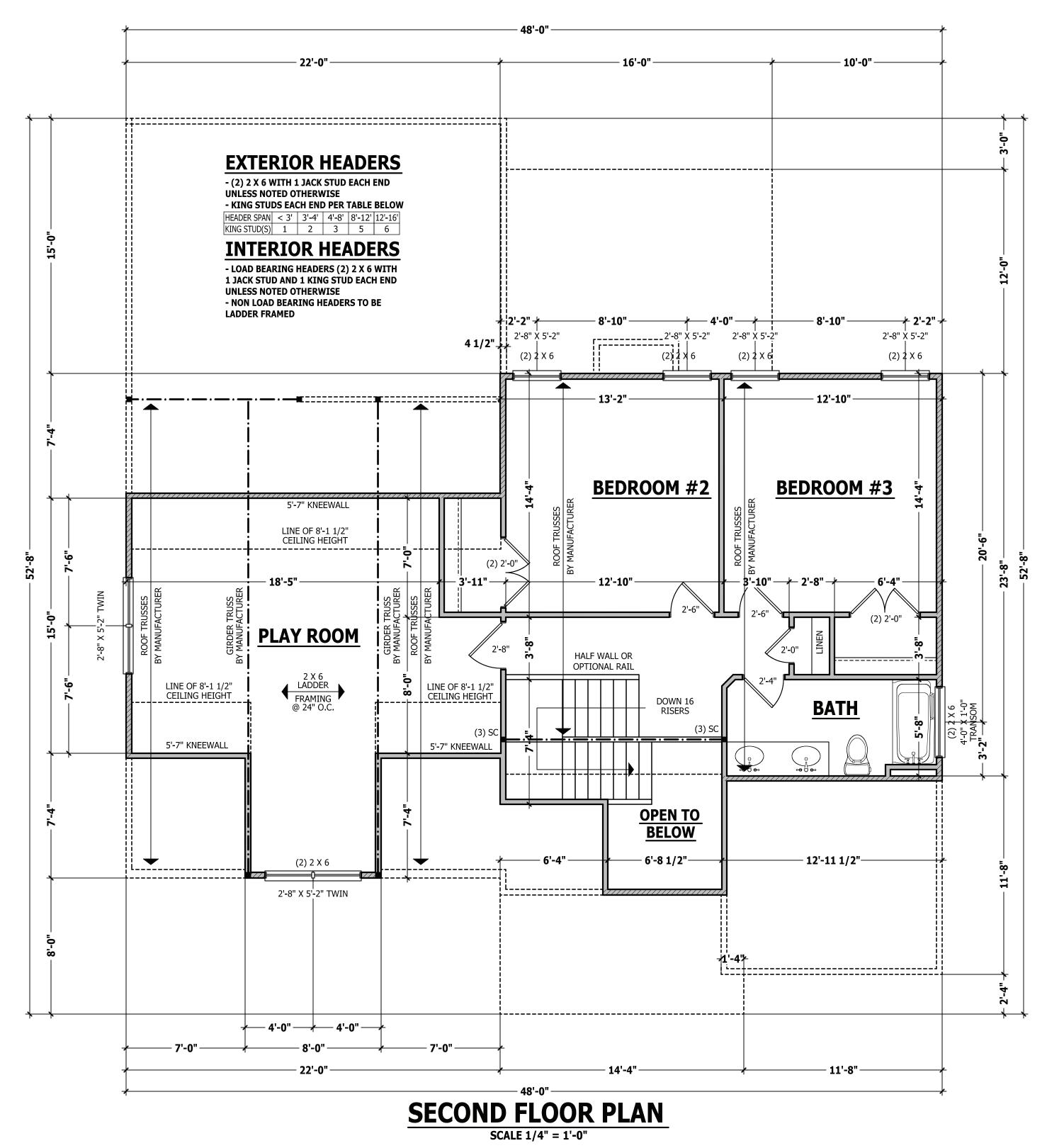
**R807.1 Attic access.** An attic access opening shall be provided to attic areas that exceed 400 square feet (37.16 m2) and have a vertical height of 60 inches (1524 mm) or greater. The net clear opening shall not be less than 20 inches by 30 inches (508 mm by 762 mm) and shall be located in a hallway or other readily accessible location. A 30-inch (762 mm) minimum unobstructed headroom in the attic space shall be provided at some point above the access opening. See Section M1305.1.3 for access requirements where mechanical equipment is located

#### **Exceptions:**

1. Concealed areas not located over the main structure including porches, areas behind knee walls, dormers, bay windows, etc. are not required to have access.

2. Pull down stair treads, stringers, handrails, and hardware may

protrude into the net clear opening.



PURCHASER MUST VERIFY ALL IMENSIONS AND CONDITIONS EFORE CONSTRUCTION BEGINS HAYNES HOME PLANS, INC. ASSUMES NO LIABILITY FOR CONTRACTORS PRACTICES AND PROCEDURES.

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

FLOOR

COND

Ш

MAGNOLI

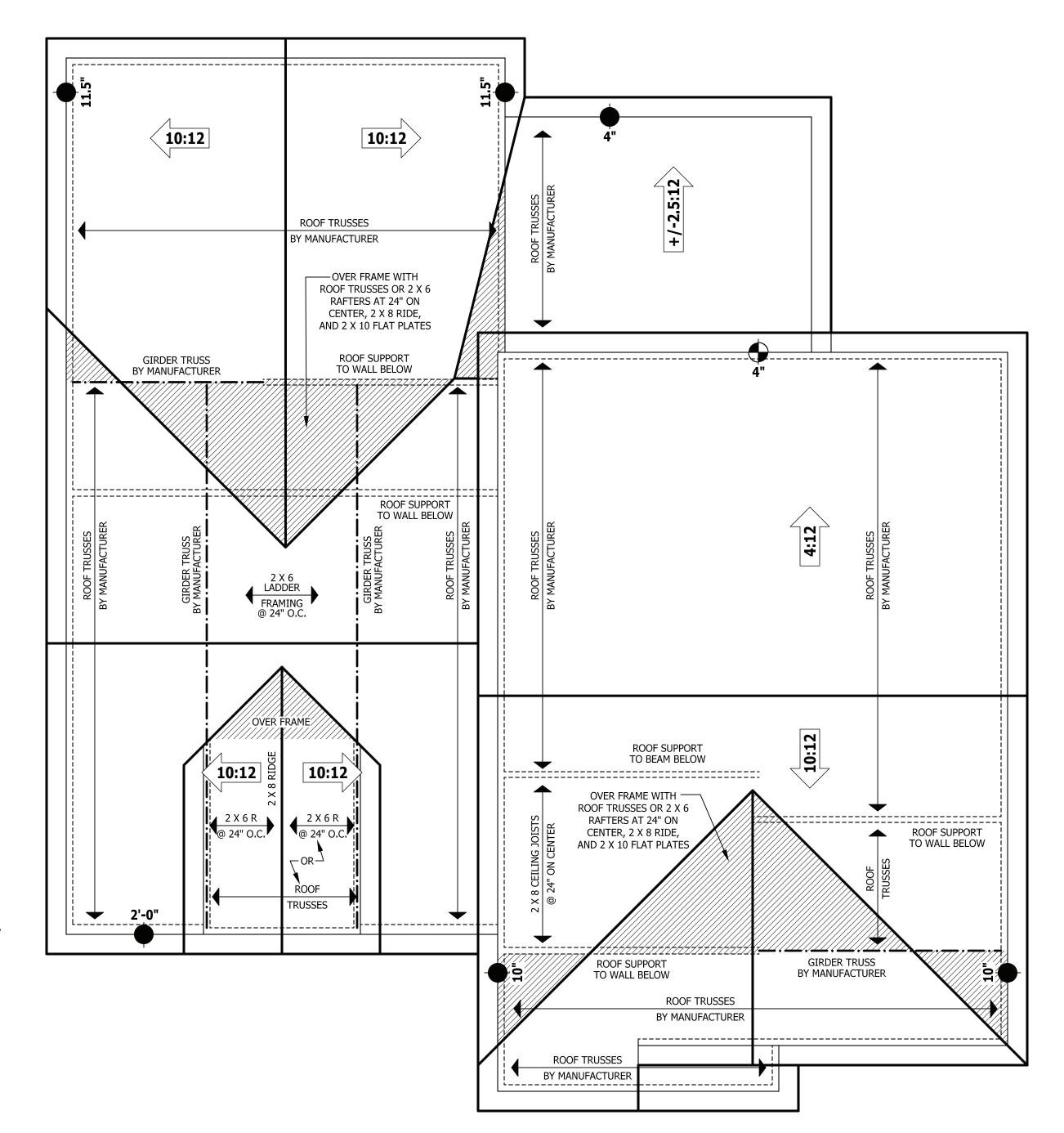
SQUARE FOOTAGE HEATED FIRST FLOOR SECOND FLOOR PLAYROOM TOTAL UNHEATED GARAGE SCREENED PORCH TOTAL

© Copyright 2022

Haynes Home Plans, Inc. 2/25/2022

220213B

PAGE 6 OF 8



# **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

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

PURCHASER MUST VERIFY ALL BEFORE CONSTRUCTION BEGINS ASSUMES NO LIABILITY FOR CONTRACTORS PRACTICES AND

CODES AND CONDITIONS MAY DESIGNER, ARCHITECT OR IGINEER SHOULD BE CONSULTED BEFORE CONSTRUCTION. THESE DRAWING ARE NSTRUMENTS OF SERVICE AND

AS SUCH SHALL REMAIN PROPERTY OF THE DESIGNER.

**ROOF PLAN** MAGNOLIA

 SQUARE FOOTAGE

 HEATED
 1354 SQ.FT.

 FIRST FLOOR
 1354 SQ.FT.

 SECOND FLOOR
 589 SQ.FT.

 PLAYROOM
 373 SQ.FT.

 TOTAL
 2316 SQ.FT.

 UNHEATED
 FRONT PORCH

 GARAGE
 491 SQ.FT.

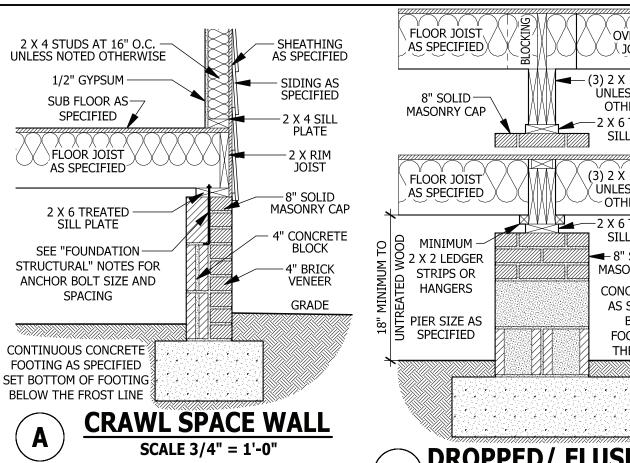
 SCREENED PORCH
 178 SQ.FT.

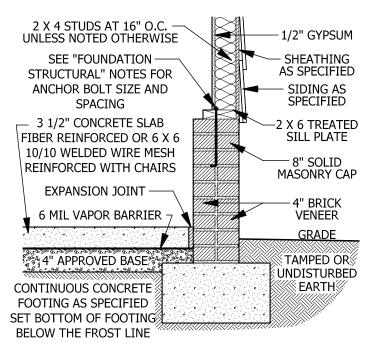
 TOTAL
 763 SQ.FT.

© Copyright 2022 Haynes Home Plans, Inc.

2/25/2022 220213B

PAGE 7 OF 8







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

**GARAGE STEM WALL** 

## **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.

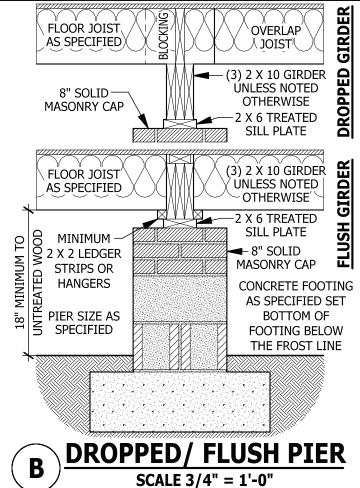
**AM109.1.2.** 4 x 4 wood knee braces may be provided on each column in both directions. The knee braces shall attach to each post at a point not less than 1/3 of the post length from the top of the post, and the braces shall be angled between 45 degrees and 60 degrees from the horizontal. Knee braces 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

DOCT	MAX	MAX. POST	EMBEDMENT	CONCRETE
POST SIZE	TRIBÜTARY AREA	HEIGHT	DEPTH	DIAMETER
4 X 4	48 SF	4'-0"	2'-6"	1'-0"
6 X 6	120 SF	6'-0"	3'-6"	1'-8"
ANALOG 4 4 2 C dispensal continuo successive a mani-				

**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, see Chapter 45.



2 X 4 STUDS AT 16" O.C.

**UNLESS NOTED OTHERWISE** 

SUB FLOOR AS—

SPECIFIED

FLOOR JOIST

AS SPECIFIED

2 X 6 TREATED SILL PLATE

SEE "FOUNDATION

STRUCTURAL" NOTES FOR

ANCHOR BOLT SIZE AND

SPACING

CONTINUOUS CONCRETE<sup>®</sup>

FOOTING AS SPECIFIED

SET BOTTOM OF FOOTING

BELOW THE FROST LINE

2 X TREATED— HOUSE BAND

SUB FLOOR AS -

SPECIFIED

FLOOR JOIST AS SPECIFIED

8" CONCRETE BLOCK

TAMPED OR

—1/2" GYPSUM

- 2 X 4 SILL

- 2 X RIM

JOIST

-8" SOLID

MASONRY CAP

4" CONCRETE

BLOCK

-4" BRICK VENEER

- EXPANSION JOINT

-6 MIL VAPOR

BARRIER

3 1/2" SLAB

4" BASE

TAMPED OR

UNDISTURBED

COBBLED BRICK

FOR SLAB SUPPORT

M-TREATED GIRDER

TREATED POST

AS SPECIFIED

GRADE

ROWLOCK

- 8 X 16 VEN

GRADE

**CRAWL SPACE AT GARGE** 

SCALE 3/4" = 1'-0"

- 2 X 4 SOLE PLATE

FLASHING MINIMUM 16" WIDE

3 1/2" CONCRETE SLAB

(2) 4" CORRUGATED PIPES

CONTINUOUS CONCRETE

SET BOTTOM OF FOOTING

FILLED PORCH SECTION WITH VENT

WITH (2) 1/2" HOT-DIPPED

5/4 X 6 OR 2 X 4 TREATED ¬

GAP BETWEEN DECKING

FOUNDATION PLAN

ATTACH JOIST WITH HANGERS -

5/8" HOT-DIPPED GALVANIZED

BOLTS AT 1'-8" O.C. MINIMUM 2

1/2" FROM EDGE WITH (3) 12d

COMMON HOT-DIPPED

GALVANIZED NAILS AT 6" O.O

SET BOTTOM OF

FOOTING BELOW:

**SMOKE ALARMS** 

equipment provisions of NFPA 72.

NFPA 72.

DECK ATTACHMENT

SCALE 1/2" = 1'-0"

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

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

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

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

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

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

**Exception:** Where smoke alarms are provided meeting the

using a combination of smoke detector and audible notification

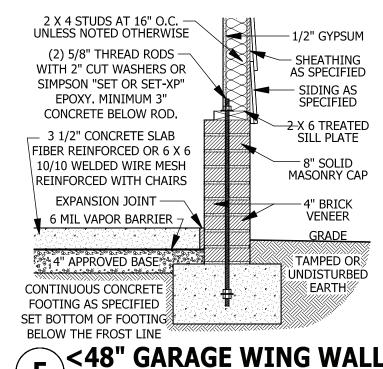
the provisions of this code and the household fire warning

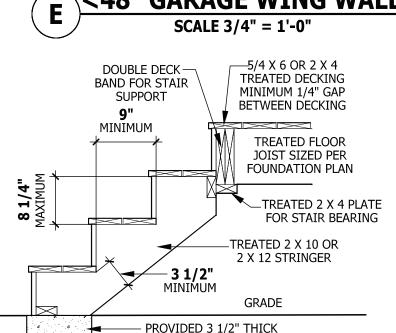
OR TREATED 2 X 2 LEDGER

-FLASHING

GALVANIZED BOLTS

PLATE





CONCRETE PAD AT BOTTOM

OF STEPS FOR BEARING

AS SPECIFIED

VAPOR BARRIER

-WEEP SCREED

MINIMUM 4" TO

GROUND OR 2"

-TO PAVEMENT

GRADE

# FIGURE AM110 **TYPICAL DECK STAIR DETAIL**

AS SPECIFIED

LATH-

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

attachment flange of 31/2 inches (89 mm) shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM C 926. The weep screed shall be placed a minimum of 4 inches (102 mm) above the earth or 2 inches (51 mm) above paved areas and

water to drain to the exterior of the shall cover and terminate on the attachment flange of the weep screed.

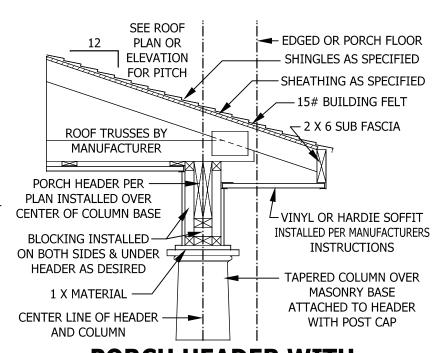
locations: 1. In each sleeping room. 2. Outside each separate sleeping area in the immediate vicinity of the bedrooms. 3. On each additional story of the dwelling, including basements

requirements of Section R314.4.

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 without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

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 without a disconnecting switch other than those required for



# **PORCH HEADER WITH TAPERED COLUMN**

SCALE 3/4" = 1'-0"

## CARBON MONOXIDE ALARMS

R315.1 Carbon monoxide alarms. In new construction, dwelling units shall be provided with an approved carbon monoxide alarm installed outside of each separate sleeping area in the immediate vicinity of the bedroom(s) as directed by the alarm manufacturer

**R315.2 Where required in existing dwellings.** In existing dwellings, where interior alterations, repairs, fuel-fired appliance replacements, or additions requiring a permit occurs, or where one or more sleeping rooms are added or created, carbon monoxide alarms shall be provided in accordance with Section

R315.3 Alarm requirements. The required carbon monoxide alarms shall be audible in all bedrooms over background noise levels with all intervening doors closed. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.

# **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 mm) 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 not less than 34 inches (864 mm)and not more than 38 inches (965 mm). **Exceptions:** 

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

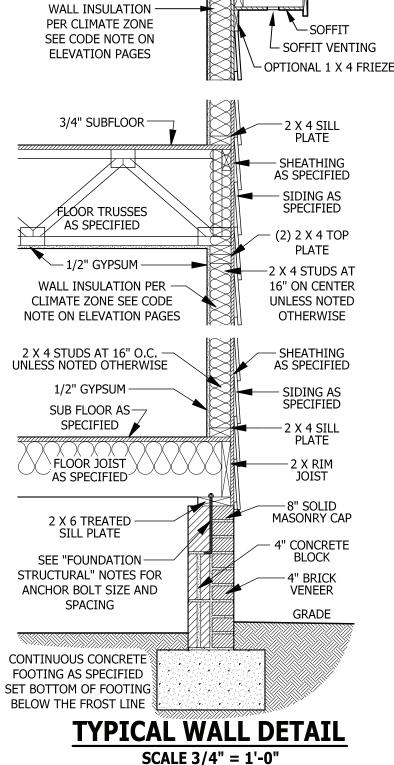
2. When handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maximum height.

**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 an individual *dwelling* unit the alarm devices shall be interconnected adjacent to a wall shall have a space of not less than 11/2 inch (38 mm) between the wall and the handrails.

#### 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.



PITCH PER ROOF PLAN

OR ELEVATIONS

ROOF INSULATION

(2) 2 X 4 TOP PLATE

- 1/2" GYPSUM

PER CLIMATE ZONE

SEE CODE NOTE ON

ELEVATION PAGES

- SHINGLES AS SPECIFIED

-15# BUILDING FELT

-SHEATHING AS SPECIFIED

INSULATION BAFFLE

1 X 8 FASCIA

TYPICAL STAIR DETAIL

CONTINUOUS HANDRAIL

34 TO 38 INCHES

ABOVE TREAD NOSING

MAXIMUM 6" GAP

BETWEEN WALL

MOUNTED AND

OPEN RAIL

SQUARE FOOTAGE HEATED FIRST FLOOR SECOND FLOOR PLAYROOM TOTAL UNHEATED FRONT PORCH GARAGE SCREENED PORCH

PURCHASER MUST VERIFY ALL

EFORE CONSTRUCTION BEGINS

HAYNES HOME PLANS, INC.

ASSUMES NO LIABILITY FOR CONTRACTORS PRACTICES AND

PROCEDURES.

CODES AND CONDITIONS MAY

DESIGNER, ARCHITECT OR

BEFORE CONSTRUCTION.

THESE DRAWING ARE

NSTRUMENTS OF SERVICE AND

AS SUCH SHALL REMAIN

PROPERTY OF THE DESIGNER.

AIL.

DET

**TYPICAL** 

MAGNOLI

IGINEER SHOULD BE CONSULTED

© Copyright 2022 Haynes Home Plans, Inc. 2/25/2022

220213B

PAGE 8 OF 8

## SCALE 3/4" = 1'-0" SHEATHING + STONE VEENER

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 of a type that will allow trapped

lap the attachment flange. The exterior lath receive power from a battery. Wiring shall be permanent and overcurrent protection. Smoke alarms shall be interconnected.

in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

building. The weather-resistant barrier shall commercial source, and when primary power is interrupted, shall