PLANS DESIGNED TO THE 2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE

MEAN ROOF HEIGHT: 17'-2	IDGE: 25'-6"		
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 WIND SPEED OF 120 MPH, 3 SECOND GUST (93 FASTEST MILE) EXPOSURE "B"											
COMPONENT	& CLA	DDING	DESIG	NED FO	R THE	FOLLO	WING I	OADS			
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			
ZONE 2	14.2	-18.0	14.9	-18.9	15.5	-19.6	15.9	-20.			
ZONE 3	14.2	-18.0	14.9	-18.9	15.5	-19.6	15.9	-20.			
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.			

DESIGNED FOR WIND SPEED OF 130 MPH, 3 SECOND GUST (101 FASTEST MILE) EXPOSURE "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		

ROOF VENTILATION

SECTION R806

SQUARE FOOTAGE OF ROOF TO BE VENTED = 2,111 SQ.FT. NET FREE CROSS VENTILATION NEEDED:

WITHOUT 50% TO 80% OF VENTING 3'-0" ABOVE EAVE = 14.07 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 = 7.04 SQ.FT.

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 *quard* shall not be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting

R312.3 Opening limitations. Required *guards* shall not have openings from the walking surface to the required *quard* 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

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

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:

1. Blocking and sealing floor/ceiling systems and under knee walls open to unconditioned or exterior space.

2. Capping and sealing shafts or chases, including flue shafts. 3. Capping and sealing soffit or dropped ceiling areas.



RIDGE VENT AS REQUIRED

RAIL AS NEEDED PER CODE

FRONT ELEVATION

SCALE 1/4" = 1'-0"



RAIL AS NEEDED

PER CODE

RIDGE VENT AS REQUIRED RIDGE VENT AS REQUIRED [⊥]COMPOSITION ¬ SHINGLES AS - SIDING AS-- SPECIFIED-SIDING AS-SPECIFIED--SIDING AS-SPECIFIED-

REAR ELEVATION

SCALE 1/4" = 1'-0"

SQUARE FOOTAGE HEATED

TOP OF PLATE

SUB FLOOR

SUB FLOOR

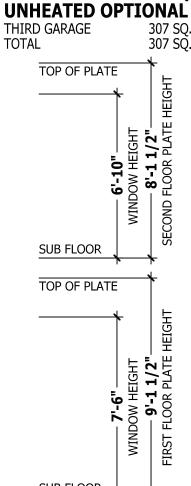
TOP OF PLATE

FIRST FLOOR 1351 SQ.FT. PLAYROOM 221 SQ.FT. 1572 SQ.FT.

HEATED OPTIONAL 28 SQ.FT. 28 SQ.FT. HALF BATH

UNHEATED 134 SQ.FT. 447 SQ.FT. FRONT PORCH GARAGE **REAR PORCH** 113 SQ.FT. 694 SQ.FT.

THIRD GARAGE 307 SQ.FT. 307 SQ.FT. TOTAL



SUB FLOOR

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PAGE 1 OF 8

ELEVATIONS

PURCHASER MUST VERIFY ALL IMENSIONS AND CONDITIONS

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SINCLAIR REAR **∞ FRONT**

FRONT PORCH GARAGE REAR PORCH UNHEATED OPTIONAL © Copyright 2019 Haynes Home Plans, Inc.

SQUARE FOOTAGE HEATED

HEATED OPTIONAL

FIRST FLOOR PLAYROOM

UNHEATED

3/6/2020

SCALE 1/4" = 1'-0"

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ELEVATIONS

SINCLAIR **RIGHT** 8

 SQUARE FOOTAGE

 HEATED
 1351 SQ.FT.

 FIRST FLOOR
 221 SQ.FT.

 PLAYROOM
 221 SQ.FT.

 TOTAL
 1572 SQ.FT.

 HEATED OPTIONAL
 HALF BATH

 HALF BATH
 28 SQ.FT.

 UNHEATED
 FRONT PORCH

 FRONT PORCH
 134 SQ.FT.

 GARAGE
 447 SQ.FT.

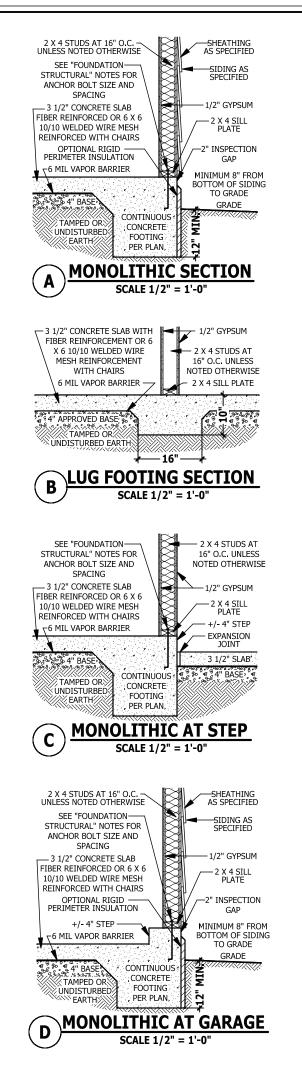
 REAR PORCH
 113 SQ.FT.

 TOTAL
 694 SQ.FT.

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PAGE 2 OF 8



FOUNDATION STRUCTURAL

115 to 130 mph wind zone (1 1/2 to 2 1/2 story)

CONTINUOUS FOOTING: 16" wide and 8" thick minimum. 20" wide minimum at brick veneer. Must extended 2" to either side of supported wall. GIRDERS: (3) 2 X 10 girder unless noted otherwise.

PIERS: 16" X 16" piers with 8" solid masonry cap on 30" X 30" X 10" concrete footing with maximum pier height of 64" with hollow masonry and 160" with solid masonry.

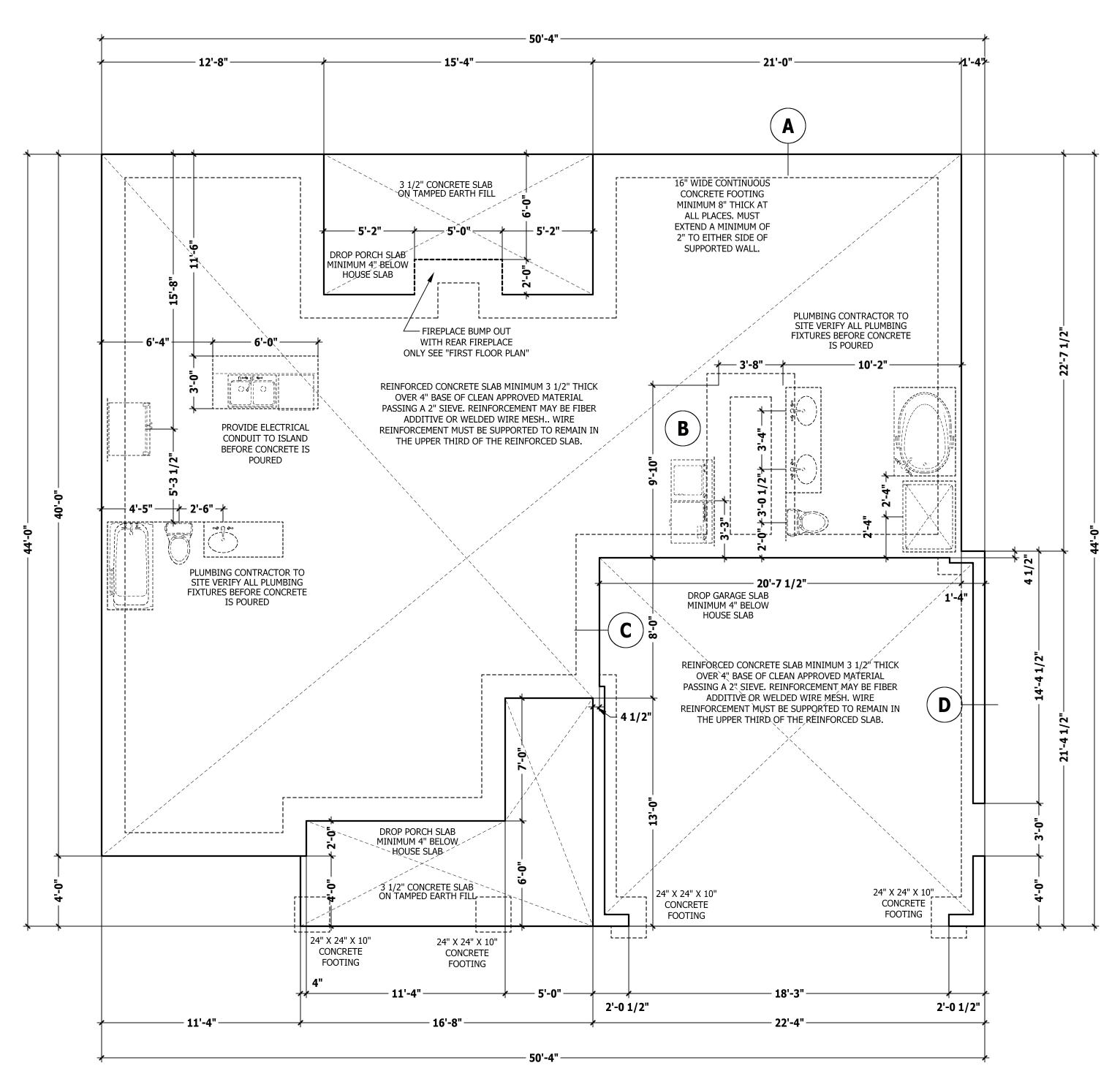
POINT LOADS: designates significant point load and should have solid blocking to pier, girder or foundation wall.

115 and **120** MPH ANCHORS BOLTS: 1/2" diameter anchor bolts embedded minimum 7", maximum 6'-0" on center, within 12" of plate ends, and minimum two anchor bolts per plate.

130 MPH ANCHORS BOLTS: 1/2" diameter anchor bolts embedded minimum 15", maximum 4'-0" on center, within 12" of plate ends, and minimum two anchor bolts per plate.

CONCRETE: Concrete shall have a minimum 28 day strength of 3000 psi and a maximum 5" slump. Air entrained per table 402.2. All concrete shall be in accordance with ACI standards. All samples for pumping shall be taken from the exit end of the pump.

SOILS: Allowable soil bearing pressure assumed to be 2000 PSF. The contractor must contact a geotechnical engineer and a structural engineer if unsatisfactory subsurface conditions are encountered. The surface area adjacent to the foundation wall shall be provided with adequate drainage, and shall be graded so as to drain surface water away from foundation walls.



MONOLITHIC SLAB PLAN

SCALE 1/4" = 1'-0"

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_ SLAB

AIR SINCL/ ONOLITHIC

SQUARE FOOTAGE HEATED FIRST FLOOR 1351 SQ.FT.
PLAYROOM 221 SQ.FT.
TOTAL 1572 SQ.FT.
HEATED OPTIONAL UNHEATED Garage Rear Porch UNHEATED OPTIONAL

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PERTY OF THE DESIGN

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SQUARE FOOTAGE

SQUARE FORTAGE

 SQUARE FOOTAGE

 HEATED
 1351 SQ.FT.

 FIRST FLOOR
 1351 SQ.FT.

 PLAYROOM
 221 SQ.FT.

 TOTAL
 1572 SQ.FT.

 HEATED OPTIONAL
 HALF BATH
 28 SQ.FT.

 HALF BATH
 28 SQ.FT.
 UNHEATED

 FRONT PORCH
 134 SQ.FT.
 GARAGE

 REAR PORCH
 113 SQ.FT.
 TREAR PORCH

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UNHEATED OPTIONAL

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SCALE 1/4" = 1'-0"

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THESE DRAWING ARE

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N PLAN

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SQUARE FOOTAGE
HEATED

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SQUARE FOOTAGE

SQUARE FOOTAGE

SQUARE FOOTAGE

SQUARE FOOTAGE

 SQUARE FOOTAGE

 HEATED

 FIRST FLOOR
 1351 SQ.FT.

 PLAYROOM
 221 SQ.FT.

 TOTAL
 1572 SQ.FT.

 HEATED OPTIONAL
 HALF BATH
 28 SQ.FT.

 TOTAL
 28 SQ.FT.
 UNHEATED

 FRONT PORCH
 134 SQ.FT.

HALF BATH 28 SQ.F TOTAL 28 SQ.F UNHEATED FRONT PORCH 134 SQ.F GARAGE 447 SQ.F REAR PORCH 113 SQ.F TOTAL 694 SQ.F UNHEATED OPTIONAL THIRD GARAGE 307 SQ.F

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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 3/8" thick for 16" on center rafters and 7/16" for 24" on center rafters. **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.

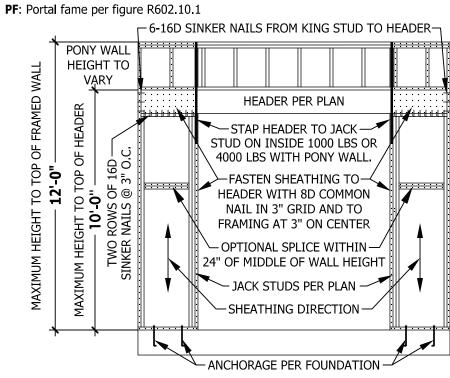
Method PF contributes 1.5 times its actual length. **HD:** 800 lbs hold down hold down device fastened to the edge of the brace wall panel closets to the corner.

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



PORTAL FRAME AT OPENING

SCALE 1/4" = 1'-0"

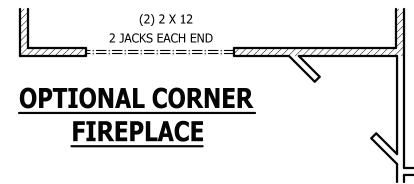
- (2) 2 X 6 WITH 1 JACK STUD EACH END **UNLESS NOTED OTHERWISE** - KING STUDS EACH END PER TABLE BELOW

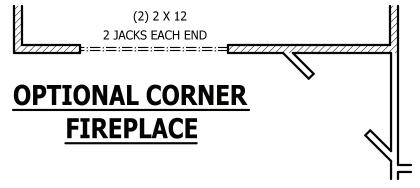
EXTERIOR HEADERS

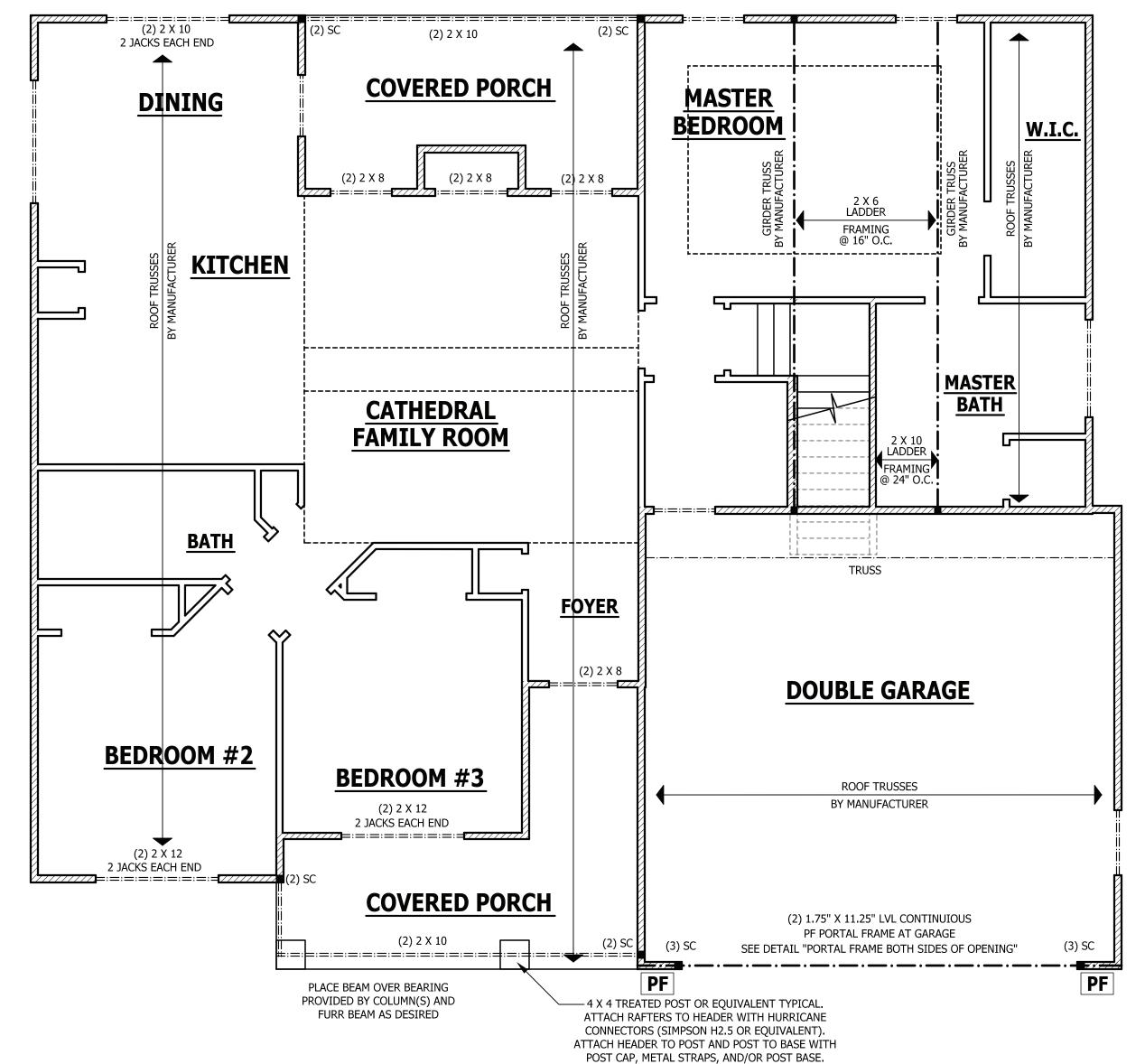
HEADER SPAN < 3' 3'-4' 4'-8' 8'-12' 12'-16' KING STUD(S) 1 2 3 5 6

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"

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.

SQUARE FOOTAGE HEATED FIRST FLOOR PLAYROOM HEATED OPTIONAL UNHEATED Garage Rear Porch UNHEATED OPTIONAL © Copyright 2019

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PAGE 5 OF 8

JOB SITE PRACTICES AND SAFETY: Haynes Home Plans, Inc. assumes no liability for contractors practices and procedures or safety program. Havnes 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 3/8" thick for 16" on center rafters and 7/16" for 24" on center rafters. **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.

EXTERIOR HEADERS

- (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

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 in attics.

Exceptions:

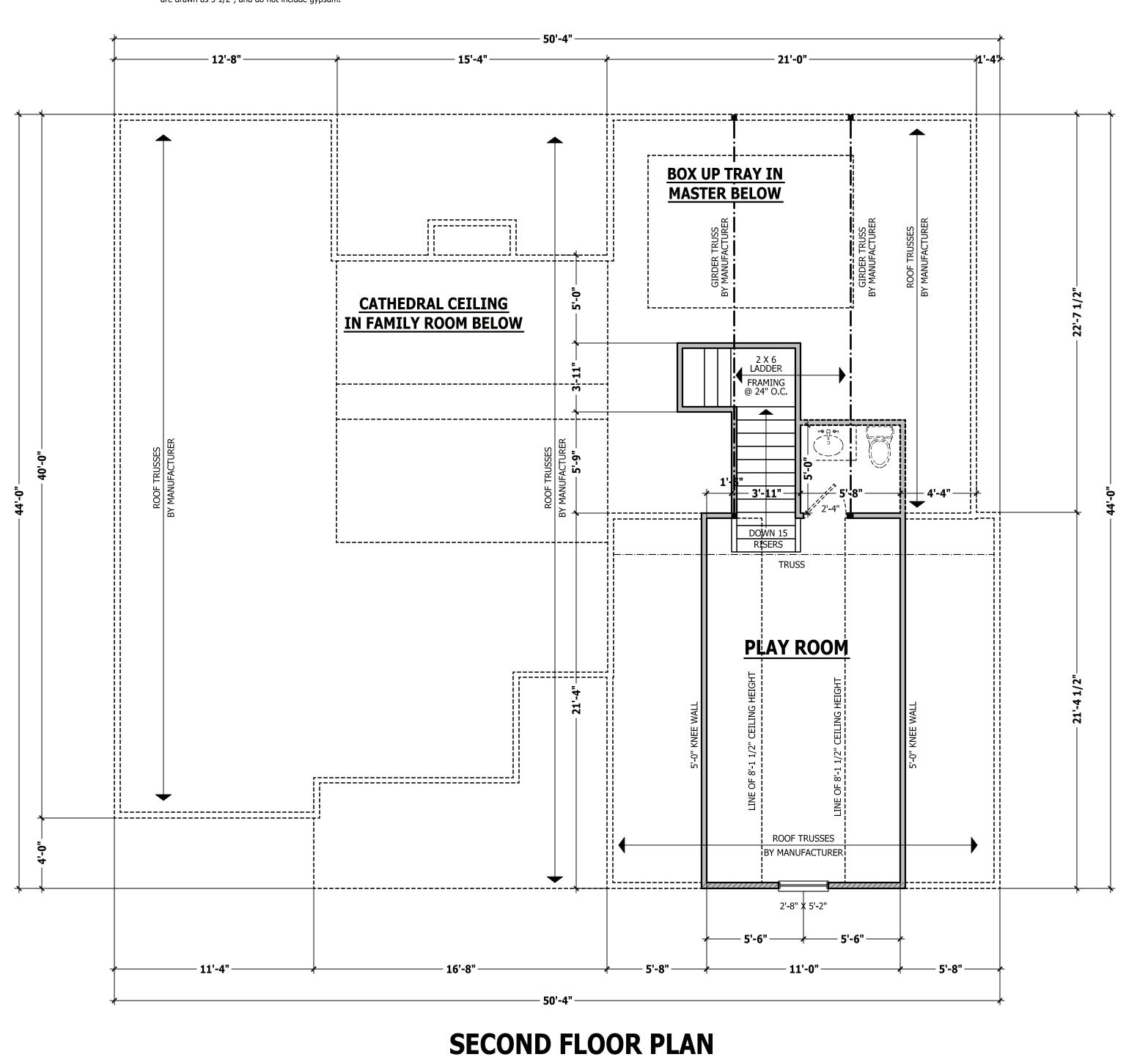
1. Concealed areas not located over the main structure including porches, areas behind knee walls, dormers, bay windows, etc. are not required to have access.

2. Pull down stair treads, stringers, handrails, and hardware may protrude into the net clear opening.

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 stud face.

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.



SCALE 1/4" = 1'-0"

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PLAN

SINCLAIR FLOOR SECOND

SQUARE FOOTAGE HEATED FIRST FLOOR 1351 SQ.FT.
PLAYROOM 221 SQ.FT.
TOTAL 1572 SQ.FT.
HEATED OPTIONAL UNHEATED Garage Rear Porch UNHEATED OPTIONAL

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3/6/2020

190320B

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.

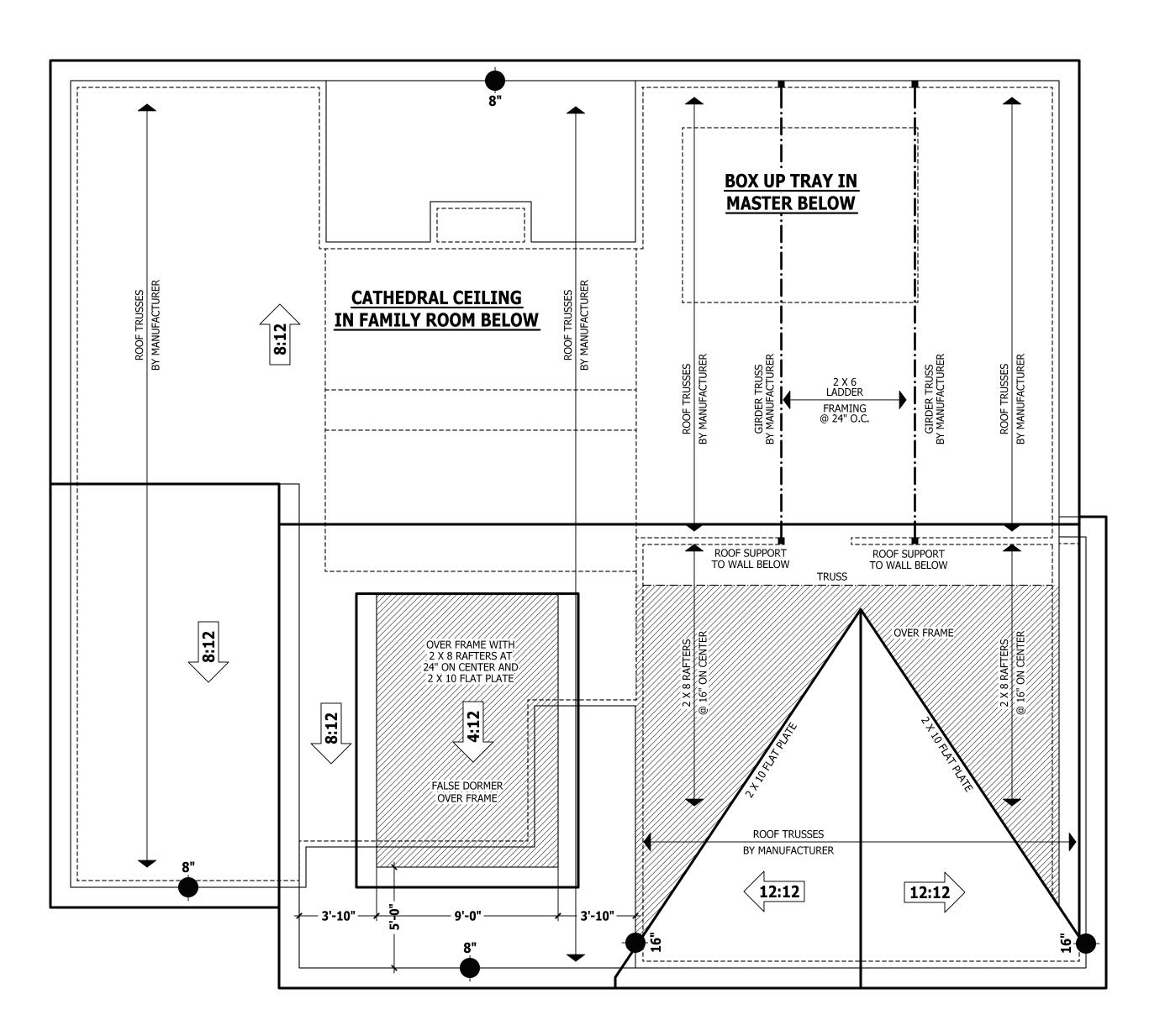
KNEE WALL AND CEILING HEIGHTS. All finished knee wall heights and ceiling heights are shown furred down 10" from roof decking for insulation. If for any reason the truss manufacturer fails to meet or exceed designated heel heights, finished knee wall heights, or finished ceiling heights shown on these 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





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

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

ROOF PLAN

SINCLAIR

HOME S

910.630.2100 • 919.606.4696
350 Wagoner Drive, Fayetteville, NC 28303

 SQUARE FOOTAGE

 HEATED
 1351 SQ,FT.

 FIRST FLOOR
 1351 SQ,FT.

 PLAYROOM
 221 SQ,FT.

 TOTAL
 1572 SQ,FT.

 HEATED OPTIONAL
 48 SQ,FT.

 HALF BATH
 28 SQ,FT.

 UNHEATED
 FRONT PORCH
 134 SQ,FT.

 GARAGE
 447 SQ,FT.

 TOTAL
 694 SQ,FT.

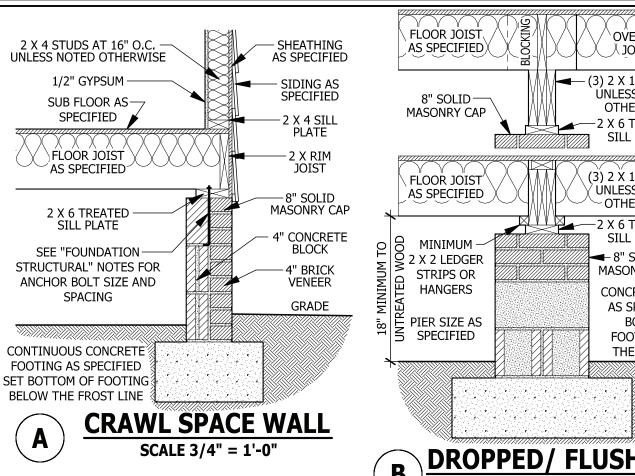
 UNHEATED OPTIONAL
 THIRD GARAGE
 307 SQ,FT.

 TOTAL
 307 SQ,FT.
 307 SQ,FT.

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3/6/2020

190320B PAGE 7 OF 8



2 X 4 STUDS AT 16" O.C. 1/2" GYPSUM **UNLESS NOTED OTHERWISE** SEE "FOUNDATION SHEATHING AS SPECIFIED STRUCTURAL" NOTES FOR ANCHOR BOLT SIZE AND SIDING AS **SPACING** 3 1/2" CONCRETE SLAB 2 X 6 TREATED FIBER REINFORCED OR 6 X 6 SILL PLATE 10/10 WELDED WIRE MESH 8" SOLID REINFORCED WITH CHAIRS MASONRY CAP EXPANSION JOINT 4" BRICK 6 MIL VAPOR BARRIER VENEER GRADE ్డ్ 4" APPROVED BASE శ్రీ క్లో TAMPED OR UNDISTURBED CONTINUOUS CONCRETE **≬EARTH**∭ FOOTING AS SPECIFIED SET BOTTOM OF FOOTING BELOW THE FROST LINE

GARAGE STEM WALL D

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.

SCALE 3/4" = 1'-0"

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.

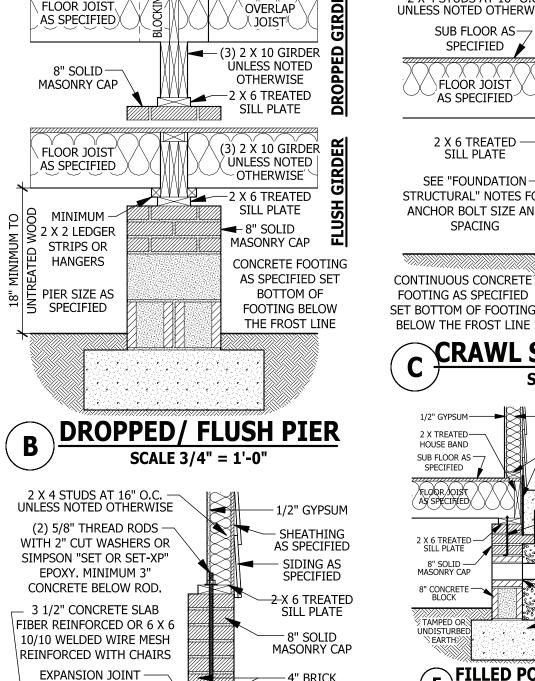
AM109.1.2. 4 x 4 wood knee braces may be provided on each column in both directions. The knee braces shall attach to each post at a point not less than 1/3 of the post length from the top of the post, and the braces shall be angled between 45 degrees and 60 degrees from the horizontal. Knee braces shall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

POST SIZE	MÁX 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"				
AM400 4 4 2 ·· C dispensal continuo anno lauration anno								

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

2 X TREATED— HOUSE BAND

SUB FLOOR AS -

SPECIFIED

FLOOR JOIST AS SPECIFIED

8" CONCRETE BLOCK

TAMPED OR

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.

requirements of Section R314.4.

NFPA 72.

locations:

the bedrooms.

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

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

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 a disconnecting switch other than those required for

overcurrent protection. Smoke alarms shall be interconnected.

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

FESTER TOURDATED TO THE STRUCTURAL NOTES FOR STRUCTURAL NOTES FOR STRUCTURAL NOTES AND STRUCT

COBBLED BRICK

FOR SLAB SUPPORT

Matreated Girder

TREATED POST

GRADE

ROWLOCK

- 8 X 16 VEN

GRADE

SET BOTTOM OF FOOTING BELOW THE FROST LINE <48" GARAGE WING WALL E SCALE 3/4" = 1'-0"

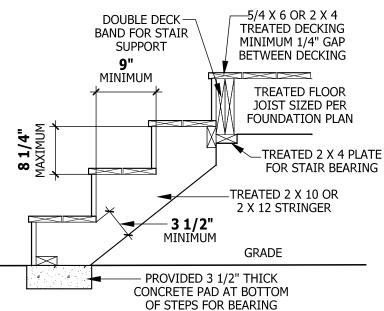


FIGURE AM110 TYPICAL DECK STAIR DETAIL

SCALE 3/4" = 1'-0"

WEEP SCREEDS

VENEER

GRADE

TAMPED OR

JNDISTURBED

EARTH

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

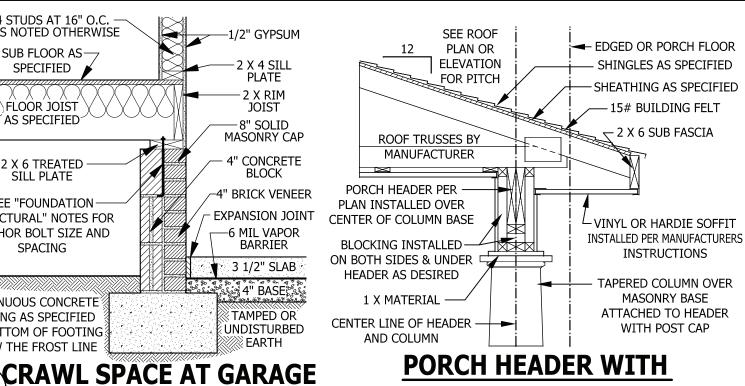
Building code. **R703.6.2.1 -** A minimum 0.019-inch (0.5 mm) (No. 26 galvanized sheet gage), corrosion-resistant weep screed or plastic weep screed, with a minimum vertical attachment flange of 31/2 inches (89 mm) shall be provided at or below the foundation plate line on exterior stud walls in accordance 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 shall be of a type that will allow trapped water to drain to the exterior of the building. The weather-resistant barrier shall commercial source, and when primary power is interrupted, shall

shall cover and terminate on the

attachment flange of the weep screed.

1. In each sleeping room. 3. On each additional story of the dwelling, including basements

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 in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. **R314.4 Power source.** Smoke alarms shall receive their primary power from the building wiring when such wiring is served from a lap the attachment flange. The exterior lath receive power from a battery. Wiring shall be permanent and



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.

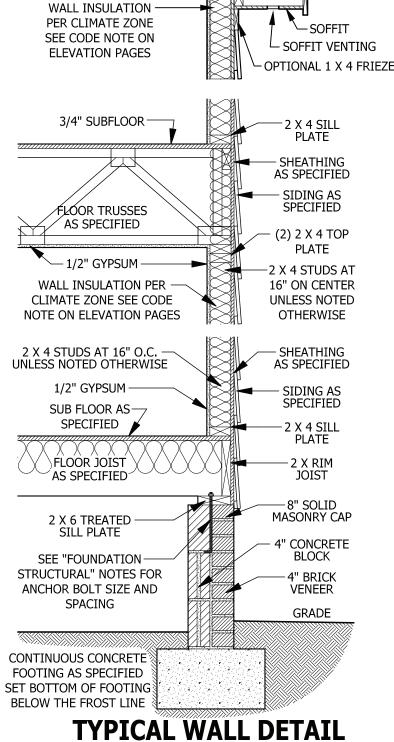
2. When handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maximum height.

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.



SCALE 3/4" = 1'-0"

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 HEĂTED FIRST FLOOR 1351 SQ.FT.
PLAYROOM 221 SQ.FT.
TOTAL 1572 SQ.FT.
HEATED OPTIONAL UNHEATED Garage Rear Porch UNHEATED OPTIONAL

PURCHASER MUST VERIFY ALL

EFORE CONSTRUCTION BEGINS

HAYNES HOME PLANS, INC.

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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.

AIR

SINCL,

AIL

DET,

TYPICAL

ARY WITH LOCATION. A LOCAL

IGINEER SHOULD BE CONSULTED

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PAGE 8 OF 8

3/6/2020 190320B

6 MIL VAPOR BARRIER

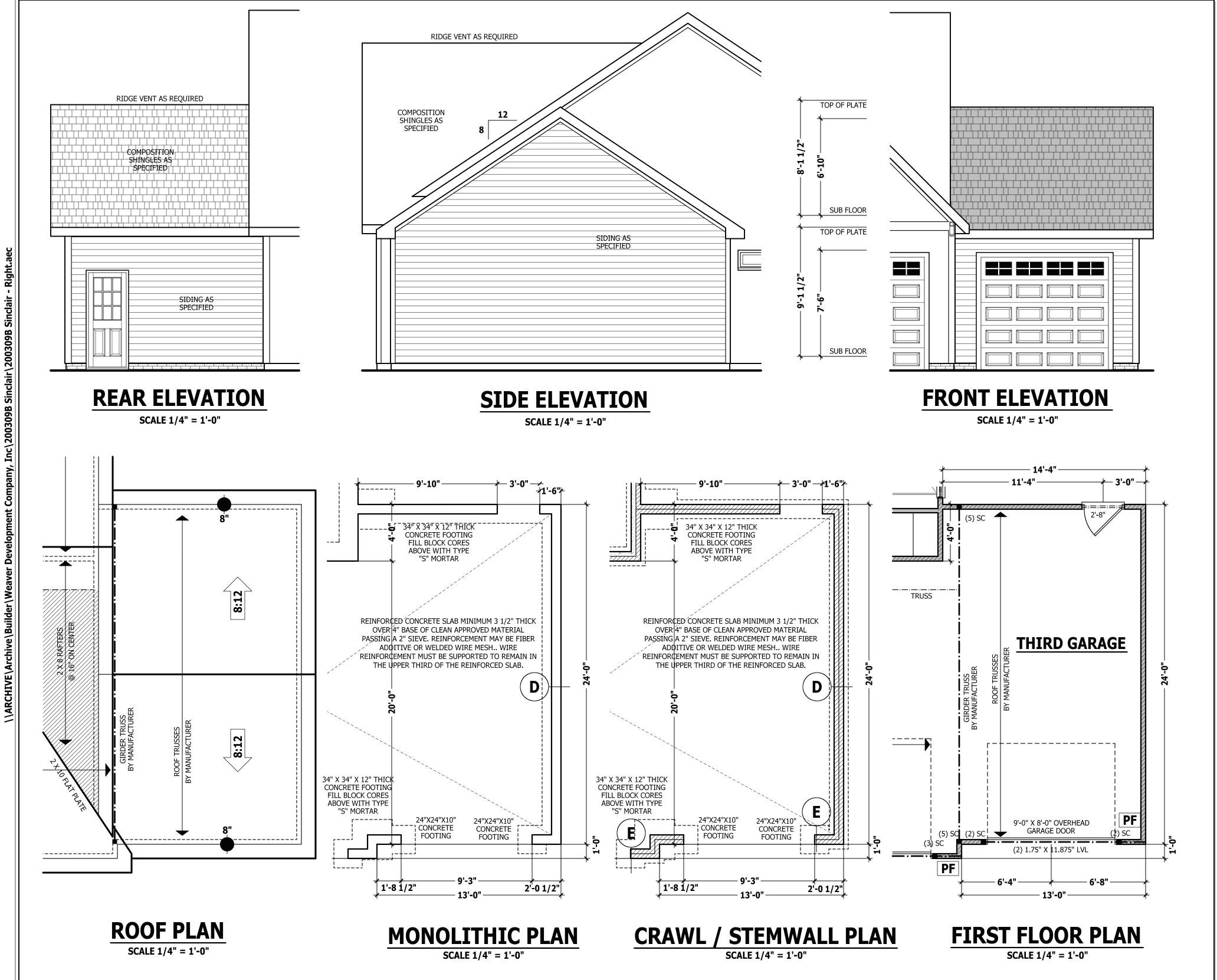
្ត្រីទីទី 4" APPROVED BASE ្ទី

CONTINUOUS CONCRETE

FOOTING AS SPECIFIED

SHEATHING -STONE VEENER AS SPECIFIED AS SPECIFIED LATH-VAPOR BARRIER -WEEP SCREED MINIMUM 4" TO GROUND OR 2" -TO PAVEMENT SEE FOUNDATION FOR FOUNDATION GRADE **DETAILS**

WEEP SCREED SCALE 3/4" = 1'-0"



PURCHASER MUST VERIFY ALL SEFORE CONSTRUCTION BEGINS HAYNES HOME PLANS, INC. 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.

GARAGE SINCLAIR CAR

THIRD

 SQUARE FOOTAGE

 HEATED
 1351 SQ.FT.

 FIRST FLOOR
 221 SQ.FT.

 TOTAL
 1572 SQ.FT.

 HEATED OPTIONAL
 48 SQ.FT.

 HALF BATH
 28 SQ.FT.

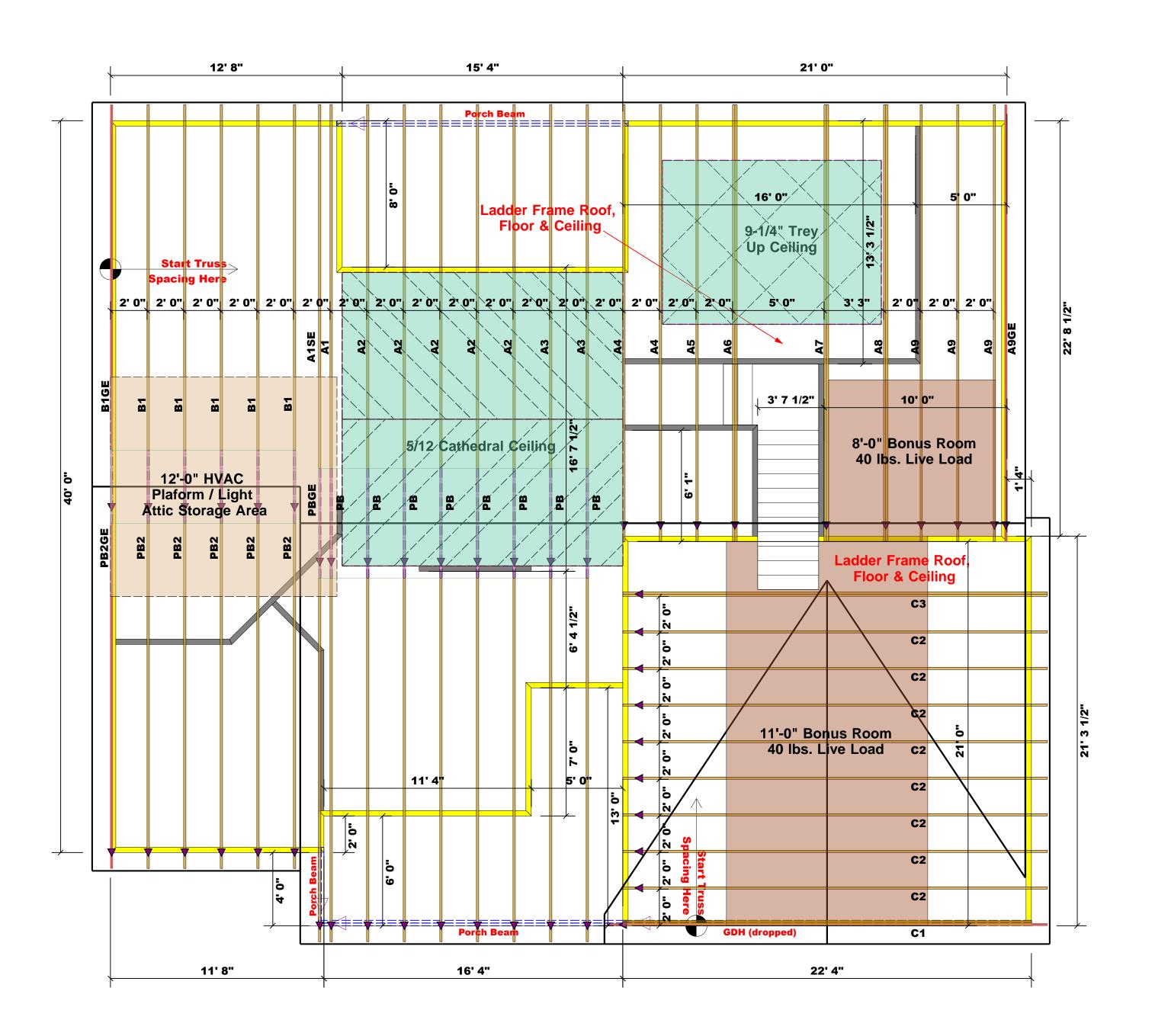
 TOTAL
 28 SQ.FT.

TOTAL
UNHEATED
FRONT PORCH
GARAGE
REAR PORCH REAK PONCH TOTAL 694 SQ.FI. UNHEATED OPTIONAL THIRD GARAGE 307 SQ.FT. TOTAL 307 SQ.FT

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190320B

ADDENDUM



Estimation									
Name	Selection	Formula	Calculation						
Roof Area	1st Floor	Roof Area	2863.59						
Roof Decking	1st Floor	Roof Decking	98						

Products									
PlotID	Length	Product	Plies	Net Qty	Fab Type				
GDH (dropped)	23-00-00	1-3/4"x 14" LVL Kerto-S	2	2	FF				

Truss Placement Plan SCALE: 1/4" = 1'0"

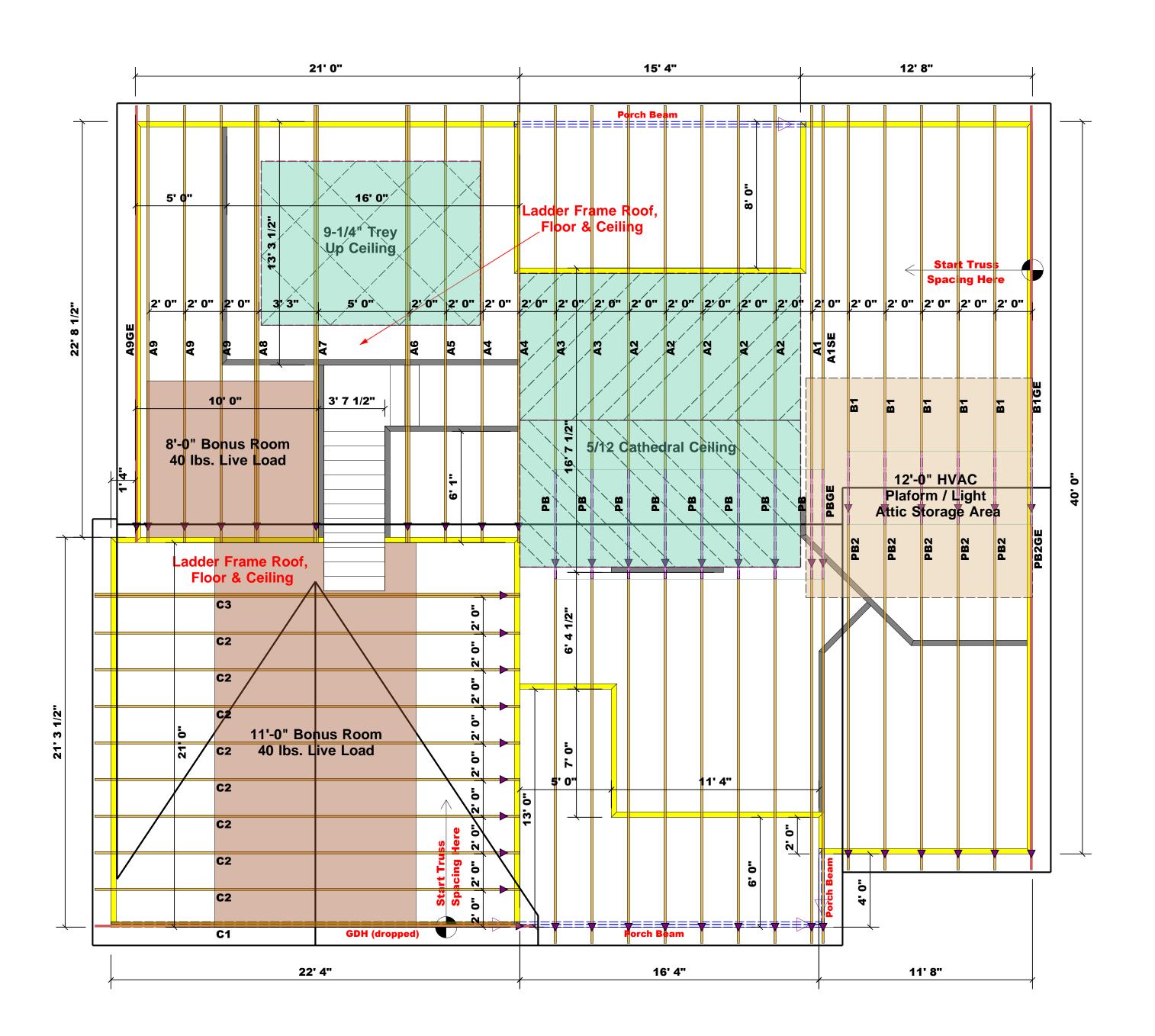
▲= Denotes Left End of Truss (Reference Engineered Truss Drawing)

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

-- Denotes Reaction Greater than 3,000 lbs. Reaction / # of Studs

L	00	m	те	CH					
	ROOF & FLOOR TRUSSES & BEAMS								
Re	eilly R	oad Ir	ndustr	ial Par	k				
	Phon	e: (910	0) 864						
Possing			864-4	444 nal to 3000)# oro				
deemed requiren attached Code refoundati required but not professi	to comp ments. The d Tables quirement ion size d to supp greater to	oly with the contra (derived nts) to d and numl port react than 1500 all be reta	he prescr ctor shall from the etermine ber of wo ions grea 0#. A reg ined to d	iptive Cod refer to to prescript the minin	de the tive num 6000# esign				
those sp registere	pecified ed desig the supp	in the atta n profess	ached Tal sional sha	bles. A all be reta reactions	ined to				
Si	gnature_	Long	w Na	nnia					
1.04	D CH4		NO TAC	K STU	INS				
	(BASED	ON TABLE	S R502.5(1 REQUIRED) & (b))					
1700 3400 5100 6800 8500 10200 11900 13600	700 1 2550 1 3400 1 1400 2 5100 2 6800 2 1400 3 7650 3 10200 3 13600 4 10200 4 13600 4 13600 5 12750 5 17000 5 1200 6 15300 6								
Harnett	Wendywood Dr.	Model	//	DRAWN BY Lenny Norris	SALESMAN Lenny Norris				
COUNTY	ADDRESS	MODEL	DATE REV. //	DRAWN BY	SALESMAN				

Southern Touch Homes	Lot 22 West Preserve	Sinclair (190320B) 3Car	Seal Date	Quote#	J0523-2757	
BUILDER	JOB NAME	PLAN	SEAL DATE	QUOTE#	JOB #	
THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com						



Estimation									
Name	Selection	Formula	Calculation						
Roof Area	1st Floor	Roof Area	2863.59						
Roof Decking	1st Floor	Roof Decking	98						

Products								
PlotID	Length	Product	Plies	Net Qty	Fab Type			
GDH (dropped)	23' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF			

Truss Placement Plan SCALE: 1/4" = 1'0"

▲= Denotes Left End of Truss (Reference Engineered Truss Drawing)

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

-- Denotes Reaction Greater than 3,000 lbs. Reaction / # of Studs

BUILDER	Southern Touch Homes	KINNO2	Harnett	1700 3400 5100 6800 8500 10200 11900 13600 15300
JOB NAME	JOB NAME Lot 22 West Preserve	ADDRESS	Wendywood Dr.	1 2 3 4 5 6 7 8
PLAN	Sinclair (190320B) 3Car	MODEL	Model	2550 5100 7650 10200 12750
SEAL DATE Seal Date	Seal Date	DATE REV.	//	2 3 0 4 0 5
фпоте #	Quote #	DRAWN BY	Lenny Norris	340 680 1020 1360 1700
JOB #	J0523-2757	SALESMAN	SALESMAN Lenny Norris	00 2 00 3 00 4

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.

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COMTECH

ROOF & FLOOR TRUSSES & BEAMS

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

Lenny Norris

LOAD CHART FOR JACK STUDS (BASED ON TABLES R502.5(1) & (b))

NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER



Client: Project: Address:

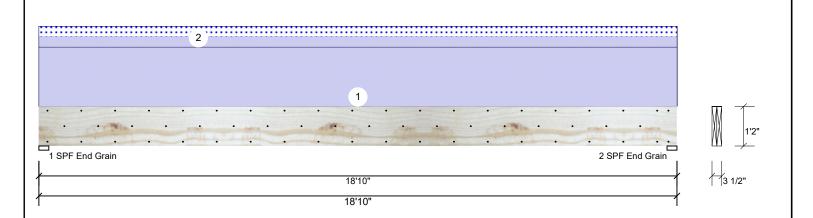
Weaver Development Sinclair (190320B) Sinclair (190320B) Date: 5/29/2023 Input by:

Lenny Norris Job Name:

Project #

2-Ply - PASSED **Kerto-S LVL** 1.750" X 14.000" **GDH**

Level: Level



Bearings

Grain

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	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	2598	377	0	0
2	Vertical	0	2598	377	0	0

Page 1 of 2

Analysis Results Location Allowed Analysis Actual Comb. Case Capacity Moment 9'5" 24299 ft-lb 11644 ft-lb 0.479 (48%) D Uniform Unbraced 13332 ft-lb 9'5" 13362 ft-lb 0.998 L (100%)2208 lb 1'5 1/2" 9408 lb 0.235 (23%) D Uniform Shear LL Defl inch 0.068 (L/3239) 9'5 1/16" 0.459 (L/480) 0.148 (15%) S TL Defl inch 0.538 (L/410) 9'5 1/16" 0.612 (L/360) 0.878 (88%) D+S

Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 3.500" Vert 2598 / 377 2975 I D+S End Grain D+S 2 - SPF 3.500" Vert 29% 2598 / 377 2975 L End

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 a maximum of 7'8 9/16" o.c.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width

0 Late	iai sicriacificss fallo basca off a	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	225 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Exterior Siding / Plywood	
2	Uniform			Тор	40 PLF	0 PLF	40 PLF	0 PLF	0 PLF	2'0" Roof Load	
	Self Weight				11 PLF						

Notes

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

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

Handling & Installation

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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







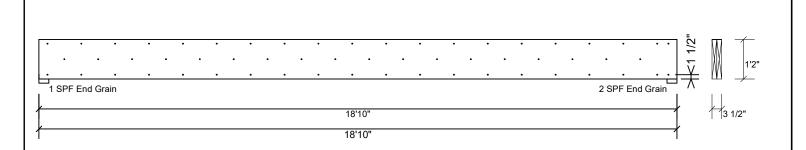
Client: Project: Address:

Weaver Development Sinclair (190320B) Sinclair (190320B) Date: 5/29/2023 Input by: Lenny Norris Job Name: GDH

Project #:

Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED **GDH**

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

rasterrain pines asing 5 for	vs or roa box rians (.reoxs) at
Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

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

- 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

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