PLANS DESIGNED TO THE 2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE

MEAN ROOF HEIGHT: 27'-0)"	HEIGHT TO F	RIDGE: 32'-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

DES	DESIGNED FOR WIND SPEED OF 115 MPH, 3 SECOND GUST (89 FASTEST MILE) EXPOSURE "B"								
0	COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS								
M	EAN ROOF	UP T	O 30'	30'-1"	TO 35'	35'-1"	TO 40'	40'-1"	TO 45'
	ZONE 1	13.1	-14.0	13.8	-14.7	14.3	-15.3	14.7	-15.7
	ZONE 2	13.0	-13.0	13.7	-13.7	14.2	-14.2	14.6	-14.6
	ZONE 3	13.1	-16.0	13.8	-16.8	14.3	-17.4	14.7	-17.9
	ZONE 4	14.3	-15.0	15.0	-15.8	15.6	-16.4	16.0	-16.8
	ZONE 5	14.3	-19.0	15.0	-20.0	15.6	-20.7	16.0	-21.3

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 doth screening, hardware doth, 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 = 1,366 SQ.FT.

NET FREE CROSS VENTILATION NEEDED:

WITHOUT 50% TO 80% OF VENTING 3'-0" ABOVE EAVE = 9.11 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 = 4.55 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 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 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: 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.

REAR ELEVATION

SCALE 1/4" = 1'-0"









and shall be graded so as to drain surface water away from foundation walls.



<48" GARAGE WING WALL E SCALE 1/2" = 1'-0"



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.

UNDER-FLOOR SPACE (SECTION R408) SQUARE FOOTAGE OF FOUNDATION TO BE VENTED = 716 SQ.FT. WITHOUT CROSS VENTILATION AREA OF VENTING NEEDED = 4.77 SQ.FT. WITH CROSS VENTILATION AREA OF VENTING NEEDED = 0.477 SQ.FT. NOTE: NUMBER OF VENTS NEED WILL VARY DEPENDING ON VENTS USED AND CROSS VENTILATION.

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Haynes Home Plans, Inc.



Exterior walls and walls adjacent to a garage area are drawn as 4" or as noted 2 X 6 are drawn as 6" to

WALL THICKNESSES

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.

DWELLING / GARAGE SEPARATION

REFER TO SECTIONS R302.5, R302.6, AND R302.7

WALLS. A minimum 1/2" gypsum board must be installed on all walls supporting floor/ceiling assemblies used for separation required by this section. **STAIRS.** A minimum of 1/2" gypsum board must be installed on the underside and exposed sides of all stairways.

CEILINGS. A minimum of 1/2" gypsum must be installed on the garage ceiling if there are no habitable room above the garage. If there are habitable room above the garage a minimum of 5/8" type X gypsum board must be installed on the garage ceiling. **OPENING PENETRATIONS.** Openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors.

DUCT PENETRATIONS. Ducts in the garage and ducts penetrating the walls or ceilings separating the *dwelling* from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other *approved* material and shall have no openings into the garage.

OTHER PENETRATIONS. Penetrations through the separation required in Section R302.6 shall be protected as required by Section R302.11, Item 4.

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. 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 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.

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 $8d(2 1/2" \log x 0.113" diameter)$. **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 nails.

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





SCALE 1/4" = 1'-0"

NSTRUMENTS OF SERVICE AND AS SUCH SHALL REMAIN PROPERTY OF THE DESIGNER. O 9 **CLARK** SQUARE FOOTAGE HEĂTED 854 SQ.FT 904 SQ.FT 202 SQ.FT 1960 SQ.FT FIRST FLOOR SECOND FLOOR PLAYROOM UNHEATED 439 SQ.FI 73 SQ.FI 159 SQ.FI 671 SQ.FI GARAGE FRONT PORCH REAR PORCH © Copyright 2015 Haynes Home Plans, Inc. 2/16/2015 170328B 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 $1/2" \times 3 1/2" \times 1/4"$ 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 $1/2" \times 3 1/2" \times 1/4"$ 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. **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.

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.







SECTION R612

R612.1 General. This section prescribes performance and construction requirements for exterior windows and doors installed in walls. Windows and doors shall be installed and flashed in accordance with the fenestration manufacturer's written installation instructions. Window and door openings shall be flashed in accordance with Section R703.8. Written installation instructions shall be provided by the fenestration manufacturer for each window or door

R612.2 Window sills. In *dwelling* units, where the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches (610 mm) above the finished floor of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4 inch (102 mm) diameter sphere where such openings are located within 24 inches (610 mm) of the finished floor. Exceptions:

1. Windows whose openings will not allow a 4-inch diameter (102 mm) sphere to pass through the opening when the opening is in its largest opened position. 2. Openings that are provided with window fall prevention devices that comply with Section R612.3.

3. Openings that are provided with fall prevention devices that comply with ASTM F 2090. 4. Windows that are provided with opening limiting devices that comply with Section R612.4. R612.3 Window fall prevention devices. Window fall prevention devices and window guards, where provided, shall comply with the requirements of ASTM F 2090.

DWELLING / GARAGE SEPARATION

exposed sides of all stairways. fire-rated doors. into the garage

R311.7

of the stairway. rugs or runners Exceptions: heiaht. handrails. Exceptions

EXTERIOR WINDOWS AND DOORS

REFER TO SECTIONS R302.5, R302.6, AND R302.7 WALLS. A minimum 1/2" gypsum board must be installed on all walls supporting floor/ceiling assemblies used for separation required by this section. **STAIRS.** A minimum of 1/2" gypsum board must be installed on the underside and

CEILINGS. A minimum of 1/2" gypsum must be installed on the garage ceiling if there are no habitable room above the garage. If there are habitable room above the garage a minimum of 5/8" type X gypsum board must be installed on the garage ceiling. **OPENING PENETRATIONS.** Openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute

DUCT PENETRATIONS. Ducts in the garage and ducts penetrating the walls or ceilings separating the *dwelling* from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other *approved* material and shall have no openings

OTHER PENETRATIONS. Penetrations through the separation required in Section R302.6 shall be protected as required by Section R302.11, Item 4,

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

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,

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 risers.

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).

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

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) between the wall and the

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.



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. S O DETAIL 9 Ō -ARK TYPICAL C SQUARE FOOTAGE HEĂTED 854 SQ.FT 904 SQ.FT 202 SQ.FT 1960 SQ.FT FIRST FLOOR SECOND FLOOR PLAYROOM UNHEATED 439 SQ FT 73 SQ FT 159 SQ FT 671 SQ FT GARAGE FRONT PORCH REAR PORCH © Copyright 2015 Haynes Home Plans, Inc. 2/16/2015 170328B PAGE 8 OF 8

<u>Truss</u> <u>Placement</u> <u>Plan</u> SCALE: 1/4" = 1'

	CO		те						
ROOF & FLOOR TRUSSES & BEAMS Reilly Road Industrial Park Fayetteville, N.C. 28309									
	Fayetteville, N.C. 28309 Phone: (910) 864-8787 Fax: (910) 864-4444								
Bearin deeme require attache Code r founda require but no profes: support those : registe design exceed	Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.								
LOA	A AD CHA	nthoi	ny W DR JAG	CK STL	I <mark>S</mark> IDS				
NUM		OON TABLE	ES R502.5(1 REQUIRED /GIRDER	l) & (b)) 9 @ EA END 2	O OF				
CUP TO)	REQ'D STUDS (2) PLY HEAU	CUP TO)	REQ'D STUDS (3) PLY HEA(END REACT	COL 10) REQ'D STUDS (4) PLY HEAI				
3400 5100 6800 8500 10200	1 2 3 4 5 6 7	5100 7650 10200 12750 15300	2 3 2 4 5 5 6	680 1020 1360 1700	10 1 10 2 10 3 10 3 10 4 10 5				
13600 13600 15300	9								
Harnett County	Lot 8 Williams Farm / Erwin, NC	Floor	5/29/23	Anthony Williams	Anthony Williams				
COUNTY	ADDRESS	MODEL	DATE REV.	DRAWN BY	SALESMAN				
Signature Home Builders	Lot 8 Williams Farms	Clark 1960 / 170328B	2/16/15	NA	J0523-2746				
BUILDER	JOB NAME	PLAN	SEAL DATE	QUOTE #	JOB #				
THIS IS These to comport design See ind identifie designe perman for the support and col designe consult truss de	A TRUSS russes ar nents to b at the spo ividual de ed on the er is respo ent braci overall st t structur umns is t r. For ge BCSI-B1 elivery pa	S PLACEN re designo e incorpo- cification asign she placemeno onsible for onsible for onsi	IENT DIA ed as ind orated int of the b ets for ea the drawin or tempor roof and The desig g header nsibility of lance reg I-B3 prov online @	GRAM ON ividual buo o the buil uilding de ach truss g. The bu ary and floor sys ² n of the t s, beams of the buil arding by rided with	ILY. iilding ding esigner. design ilding tem and russ , walls, ding acing, the stry.com				

<u>Truss</u> <u>Placement</u> <u>Plan</u> SCALE: 1/4" = 1'

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

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.

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Client: Signature Home Builders	Date: 5/29/2023 Page 2 of 6
Project: isDesign Address: Lot 8 Williams Farms	Input by: Anthony Williams Job Name: The Clark 1960
	Project #: J0523-2745 & 2746
BM1 Kerto-S LVL 1.750" X 16.000" 2-Plv	- PASSED
• • • • • • • •	
	· · · · · · · · · · · · · · · · · · ·
	<u> </u>
13'5 1/2"	3 1/2"
13'5 1/2"	1
Multi-Ply Analysis	
Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c Maxin	ium end distance not to exceed 6".
Load 203.5 PLF	
Yield Limit per Foot 245.6 PLF	
Yield Mode IV	
Edge Distance 1 1/2" Min End Distance 3"	
Load Combination D+L	
Duration Factor 1.00	
Notes chemicals 6. For flat roofs p	ovide proper drainage to prevent Manufacturer Info Comtech, Inc. 1001 S. Reilly Road. Suite #839
Calculated Structured Designs is responsible only of the structural adequacy of this component based on the 1. LVL beams must not be cut or drilled	Metsä Wood 301 Merritt 7 Building. 2nd Floor
design criteria and loadings shown. It is the 2. Refer to manufacturer's product information responsibility of the customer and/or the contractor to ensure the component suitability of the intended feature detaile beam the detail the set of the state of the set	Norwalk, CT 06851 28314 (800) 622-5850 28314
application, and to verify the dimensions and loads. Lumber approvals approvals approvals approvals approvals	www.metsawood.com/us
 Design assumes top edge is laterally restrained 	

	/	Client:	Signature Home Bu	uilders	D)ate:	5/29/2023	Page 4 of 6
1	isDesign	Project: Address	Lot 8 Williams F	arms	lr .l	nput by: ob Name [.]	Anthony Williams The Clark 1960	
-	130 631311	Address.		anns	P	Project #:	J0523-2745 & 2746	
BM2	Kerto-S LVL	. 1.750")	(24.000"	2-Ply -	PASSE	D	evel: Level	
				,				
•			• •	••••		•	• • • •	
•	• • •	• • •	• • •	• •	• •	•	• • • • •	· [1] 2'
•			• •			•		
1 SPF	End Grain						2 SPF End	Grain /
				21'3"				3 1/2"
 				21'3"				
Multi-Ply	y Analysis							
Fasten all	plies using 3 rows o	of 10d Box nails (.128x3") at 12"	o.c Maximi	um end dista	ance no	t to exceed 6".	
Capacity	0	.0 %						
Load Yield Limit pe	er Foot 2	.0 PLF 45.6 PLF						
Yield Limit p	er Fastener 8	1.9 lb.						
Yield Mode	re 1	√ 1/2"						
Min. End Dis	stance 3	"						
Load Combin	nation							
Duration Fac	ctor 1	.00						
							Manufacturer Info	Comtech, Inc.
Notes Calculated Struc	ctured Designs is responsible only of the	chemicals Handling & Installation	on	 For flat roofs prov ponding 	vide proper drainage to	prevent	Metsä Wood	1001 S. Reilly Road, Suite #639 Fayetteville, NC
structural adequi design criteria	and loadings shown. It is the	 1. LVL beams must not be c 2. Refer to manufacture 	It or drilled r's product information				301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851	USA 28314 910-864-TRUS
ensure the co application, and	to verify the dimensions and loads.	 regarding installation fastening details, beam approvals 	requirements, multi-ply strength values, and code				(800) 622-5850 www.metsawood.com/us	
Lumber	conditions, unless noted otherwise	 Damaged Beams must no Design assumes top edge 	t be used is laterally restrained					
2. LVL not to be	e treated with fire retardant or corrosive	 Provide lateral support a lateral displacement and r 	a bearing points to avoid otation	This design is	valid until 11/3/202	24		соттесн

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	-			Client:	Signature Home B	uilders	Da	ite:	5/29/2023		Page 6 of 6
	isDesig	gn		Address:	Lot 8 Williams I	Farms	Jol	but by: b Name: piect #:	: The Clark 1960		
GE	DH Kerto	o-S	LVL	1.750"	X 11.875"	2-Ply	- PASSEC) L	evel: Level		
											E .
	• •		• •	•	• • •	• •	• •	•	• • •	•	
	• •		•	•	• •		• •	٠	• • •	SPE End Grain	<u>+</u> ₩
						17'3"					3 1/2"
						17'3"					,
Mult Faste	ti-Ply Analysis	s na 2 ra	ows of 1	0d Box nails	(128x3") at 12"	o.c. Maxim	um end distar	nce no	it to exceed 6"		
Capac	ity	19 2 10	0.0 %		(.120X3) dt 12						
Yield L	imit per Foot		163.7								
Yield N	Mode		IV	D.							
Eage I Min. E	nd Distance		3"								
Load (Duratio	Combination on Factor		1.00								
<u> </u>									Manufacture Inf	0	Inc
Notes Calcula	S Ited Structured Designs is re	esponsible o	only of the Ha	chemicals andling & Installa	ation	For flat roofs prov ponding	vide proper drainage to p	prevent	Metsä Wood	Comtech 1001 S. I Fayettevi	, mo. Reilly Road, Suite #639 ille, NC
design respons ensure	criteria and loadings sibility of the customer and the component suitabilit	shown. If d/or the cor ty of the	t is the 2. htractor to intended	LVL beams must not be Refer to manufacture garding installation fastening details beam	e cut or drilled urer's product information n requirements, multi-ply m strength values and code				301 Merritt 7 Building, 2nd Norwalk, CT 06851 (800) 622-5850	FIOOR 28314 910-864-	TRUS
applicat	tion, and to verify the dimension	sions and lo	oads. 3. 4.	approvals Damaged Beams must Design assumes top ed	t not be used dge is laterally restrained				www.metsawood.com/us		
2. LVL	. not to be treated with fire r	retardant or	corrosive 5.	Provide lateral suppor lateral displacement an	rt at bearing points to avoid nd rotation	This design is	valid until 11/3/2024				ютесн

