PLANS DESIGNED TO THE 2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE

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

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
* II10/12 MEANC D 10 CHEATHING INC	III ATION OD D 12 C	AV/ITY INCLUATION	

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

** INSULATION DEPTH WITH MONOLITHIC SLAB 24" OR FROM INSPECTION GAP TO BOTTOM OF

FOOTING; INSUL	ATION DE	PTH WITH	H STEM W	ALL SLAB	24" OR TO	BOTTOM	OF FOUN	DATION W	
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	LOADS	
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	
DESIGNED FOR WIN	ID SPEED	OF 130 MF	H, 3 SECO	OND GUST	(101 FAS	TEST MILE	E) EXPOSU	IRE "B"	
COMPONENT	& CLA	DDING	DESIG	NED FO	R THE	FOLLO	WING	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			-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	



R806.1 Ventilation required. Enclosed *attics* and enclosed rafter spaces

formed where ceilings are applied directly to the underside of roof rafters

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

screening, hardware cloth, or similar material with openings having a least

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

ventilators located in the upper portion of the space to be ventilated at least

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

1. Enclosed attic/rafter spaces requiring less than 1 square foot (0.0929 m2)

3 feet (914 mm) above the eave or cornice vents with the balance of the

1/4 inch (6.4 mm) shall be provided with corrosion-resistant wire cloth

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

more than 80 percent of the required ventilating area is provided by

vapor retarder is installed on the warm-in-winter side of the ceiling.

of ventilation may be vented with continuous soffit ventilation only.

shall have cross ventilation for each separate space by ventilating openings

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

stairs, porches, balconies or landings, shall be not less than 36 inches (914

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

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

2. Guards on the open sides of stairs shall not have openings which allow passage of a sphere 4 3/8 inches (111 mm) in diameter.

SHAKE AS

SIDING AS-SPECIFIED-

FRONT ELEVATION - A

COMPOSITION-SHINGLES AS

SPECIFIED

-(3) 2'-0" X 3'-0"₋ FIXED

COMPOSITION

SHINGLES AS ↓ SPECIFIED →

1 X 4 TRIM AROUND WINDOW

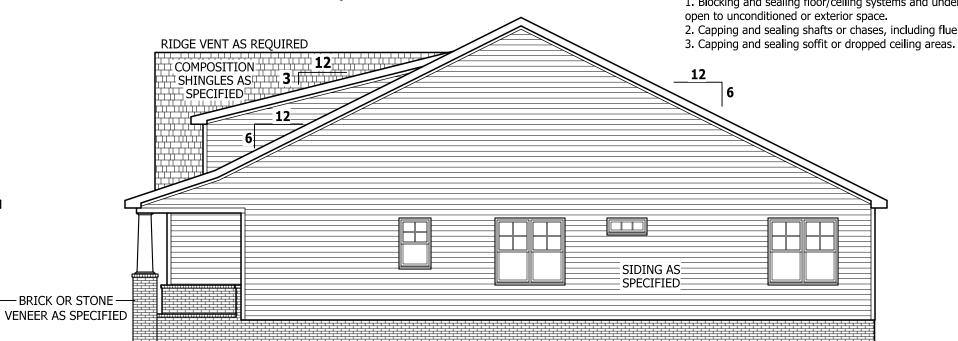
RAIL AS NEEDED

∃BRICK OR STONE‡ ▶ VENEER AS SPECIFIED

SCALE 1/4" = 1'-0"RIDGE VENT AS REQUIRED COMPOSITION SHINGLES AS SIDING AS SPECIFIED

REAR ELEVATION

SCALE 1/8" = 1'-0"



SCALE 1/8" = 1'-0"

HEATED FIRST FLOOR 1791 SQ FT. TOTAL

SQUARE FOOTAGE

TOP OF PLATE

SUB FLOOR

WINDOW HEIGHT

9'-1 1/2"

FIRST FLOOR PLATE H

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

UNHEATED OPTIONAL SCREENED PORCH 160 SQ.FT.

108 SQ.FT. 268 SQ.FT.

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.

RIGHT SIDE ELEVATION

H \triangleleft

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

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DESIGNER, ARCHITECT OR NGINEER SHOULD BE CONSULTED BEFORE CONSTRUCTION. THESE DRAWING ARE

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

Lauren **ELEVATION** The

SQUARE FOOTAGE
HEATED
FIRST FLOOR 1791 SQ.FT. UNHEATED TOTAL 65/ SQ.F
UNHEATED OPTIONAL

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11/7/2018 181046B

PAGE 1 OF 6

2. Enclosed attic/rafter spaces over unconditioned space may be vented with continuous soffit vent only. SQUARE FOOTAGE OF ROOF TO BE VENTED = 2,477 SQ.FT. NET FREE CROSS VENTILATION NEEDED: WITHOUT 50% TO 80% OF VENTING 3'-0" ABOVE EAVE = 16.51 SQ.FT. WITH 50% TO 80% OF VENTING 3'-0" ABOVE EAVE: OR WITH CLASS I OR II VAPOR RETARDER ON WARM-IN-WINTER SIDE OF CEILING = 8.26 SQ.FT.

ROOF VENTILATION

requirements of Section R802.7.

LEFT SIDE ELEVATION

SCALE 1/8" = 1'-0"

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

SIDING AS:

SPECIFIED=

RIDGE VENT AS REQUIRED

COMPOSITION

SHINGLES AS

 $_{\scriptscriptstyle
m I}$ SPECIFIED $_{\scriptscriptstyle
m T}^{\scriptscriptstyle \sqcup}$

- BRICK OR STONE -

-OPTIONAL

DOOR

GUARD RAIL NOTES SECTION R312

screening shall not be considered as a *guard*.

R312.2 Height. Required *guards* at open-sided walking surfaces, including

mm) high measured vertically above the adjacent walking surface, adjacent fixed seating or the line connecting the leading edges of the treads. **Exceptions:**

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

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

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
WILLOWS MEANING DAG CHEATHING THO	III ATTONI OD D 42 O	ALCITY TAICHH ATTOM	

* "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; INSUL	ATION DE	EPTH WITH	1 Stem W	ALL SLAB	24" OR TO) Bottom	OF FOUN	DATION V	
DESIGNED FOR WIN	D SPEED	OF 120 MF	H, 3 SECO	OND GUST	(93 FAST	EST MILE)	EXPOSUR	RE "B"	
COMPONENT	& CLA	DDING	DESIG	NED FO	R THE	FOLLO	WING I	LOADS	
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	
DESIGNED FOR WIND SPEED OF 130 MPH, 3 SECOND GUST (101 FASTEST MILE) EXPOSURE "B"									
COMPONENT	& CLA	DDING	DESIG	NED FO	R THE	FOLLO	WING I	LOADS	
MEAN ROOF	UP T	O 30'	30'-1"	TO 35'	35'-1"	TO 40'	40'-1"	TO 45'	
70NF 1	16.7	-18.0	17 5	-189	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

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.

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

NET FREE CROSS VENTILATION NEEDED:

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

GUARD RAIL NOTES

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

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

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

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

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

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

SIDING AS:

SPECIFIED=

COMPOSITION SHINGLES AS

; SPECIFIED∰

- BRICK OR STONE -

VENEER AS SPECIFIED

-OPTIONAL

DOOR

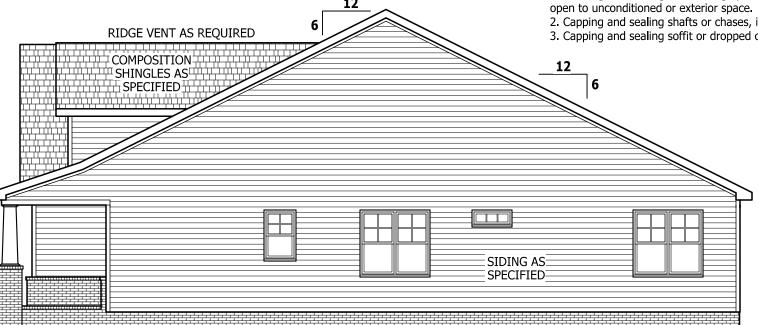
2. Guards on the open sides of stairs shall not have openings which allow

SCALE 1/4" = 1'-0"SHINGLES AS⊞

SIDING AS SPECIFIED

REAR ELEVATION

SCALE 1/8" = 1'-0"



RIGHT SIDE ELEVATION

SCALE 1/8" = 1'-0"

RAIL AS NEEDED **FRONT ELEVATION - B**

RIDGE VENT AS REQUIRED

HEATED FIRST FLOOR 1791 SQ FT. UNHEATED

SQUARE FOOTAGE

TOP OF PLATE

SUB FLOOR

WINDOW HEIGHT

9'-1 1/2"

FIRST FLOOR PLATE H

188 SQ.FT. 469 SQ.FT. 657 SQ.FT. FRONT PORCH GARAGE **UNHEATED OPTIONAL**

SCREENED PORCH 160 SQ.FT.

108 SQ.FT. 268 SQ.FT.

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

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

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UNHEATED

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SQUARE FOOTAGE
HEATED
FIRST FLOOR 1791 SQ.FT.

TOTAL 65/ SQ.F
UNHEATED OPTIONAL

181046B

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 $\mathbf{\Omega}$

ELEVATION

III

Lauren

The

PAGE 1 OF 6

the leading edges of the treads. inches (102 mm)in diameter. **Exceptions:** SQUARE FOOTAGE OF ROOF TO BE VENTED = 2,477 SQ.FT. passage of a sphere 4 3/8 inches (111 mm) in diameter. RIDGE VENT AS REQUIRED

> **LEFT SIDE ELEVATION** SCALE 1/8" = 1'-0"

PLANS DESIGNED TO THE 2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE

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

CLIMATE ZONE	ZONE 3A	ZONE 4A	ZONE 5A
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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
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** SLAB R-VALUE	0	10	10
* CRAWL SPACE WALL R-VALUE	5/13	10/15	10/19
* #40/43# MEANC D 40 CHEATHING INC	III ATTONI OD D 12 C	AV/ITY INCLUATION	

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

** INSULATION DEPTH WITH MONOLITHIC SLAB 24" OR FROM INSPECTION GAP TO BOTTOM OF

FOOTING; INSUL	ATION DE	PTH WITH	H STEM W	ALL SLAB	24" OR TO	BOTTOM	OF FOUN	DATION W
DESIGNED FOR WIN	D SPEED	OF 120 MF	H, 3 SECO	OND GUST	(93 FAST	EST MILE)	EXPOSUR	RE "B"
COMPONENT	& CLA	DDING	DESIG	NED FO	R THE	FOLLO	WING I	LOADS
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		-16.4		-16.8
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ZONE 3	14.2	-18.0	14.9	-18.9	15.5	-19.6	15.9	-20.2
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DESIGNED FOR WIN	D SPEED	OF 130 MF	H, 3 SECO	OND GUST	(101 FAS	TEST MILE	E) EXPOSU	IRE "B"
COMPONENT	& CLA	DDING	DESIG	NED FO	R THE	FOLLO	WING I	LOADS
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ZONE 1	16.7	-18.0	17.5	-18.9	18.2	-19.6	18.7	-20.2
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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

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.

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

SQUARE FOOTAGE OF ROOF TO BE VENTED = 2,477 SQ.FT.

NET FREE CROSS VENTILATION NEEDED:

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

12

GUARD RAIL NOTES

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

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

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

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

Exceptions:

COMPOSITION

SHINGLES AS

SPECIFIED

LEFT SIDE ELEVATION

SCALE 1/8" = 1'-0"

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

RIDGE VENT

SIDING AS:

SPECIFIED=

RIDGE VENT AS REQUIRED

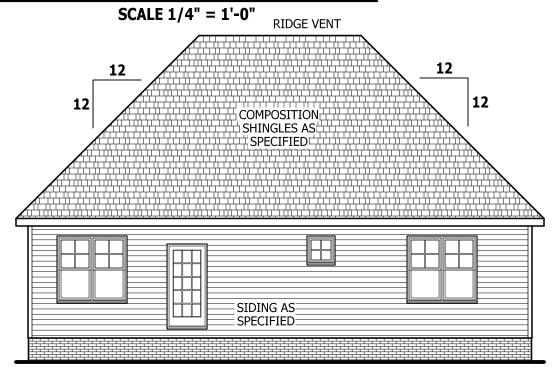
COMPOSITION

SHINGLES AS $\mathsf{SPECIFIED}^{\perp}_{\perp}$

DOOR

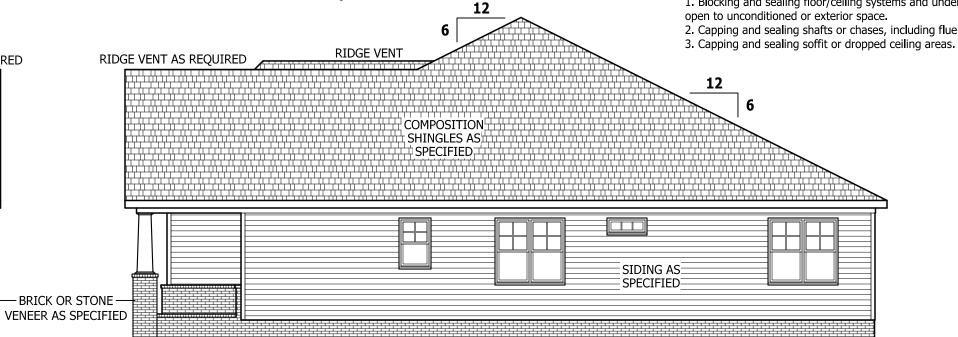
2. Guards on the open sides of stairs shall not have openings which allow passage of a sphere 4 3/8 inches (111 mm) in diameter.

RAIL AS NEEDED **FRONT ELEVATION - C**



REAR ELEVATION

SCALE 1/8" = 1'-0"



RIGHT SIDE ELEVATION

SCALE 1/8" = 1'-0"

SQUARE FOOTAGE HEATED

1791 SQ.FT. 1791 SQ.FT. FIRST FLOOR **UNHEATED** 188 SQ.FT. 469 SQ.FT. 657 SQ.FT. FRONT PORCH

UNHEATED OPTIONAL

SCREENED PORCH 160 SQ.FT. 108 SQ.FT. 268 SQ.FT.

AIR LEAKAGE

Section N1102.4

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- 1. Blocking and sealing floor/ceiling systems and under knee walls
- 2. Capping and sealing shafts or chases, including flue shafts.

SQUARE FOOTAGE
HEATED
FIRST FLOOR 1791 SQ.FT. UNHEATED

TOTAL 65/ SQ.F

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ELEVATION

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PLAN

Lauren **ONOLITHI**

SQUARE FOOTAGE
HEATED
FIRST FLOOR 1791 SQ.FT. UNHEATED TOTAL 65/ SQ.F
UNHEATED OPTIONAL

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PAGE 2 OF 6

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PLAN

SLAB Lauren WALL O STEM

SQUARE FOOTAGE

HEATED UNHEATED TOTAL 65/ SQ.F
UNHEATED OPTIONAL

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181046B PAGE 2 OF 6

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SRAWL SPACE PLAN

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PLAN PLAN

FIRST FLOOR PLA

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HOME S

910.630.2100 919.606.4696

EQUIABLE EQUIAGE

 SQUARE FOOTAGE

 HEATED
 1791 SQ.FT.

 FIRST FLOOR
 1791 SQ.FT.

 TOTAL
 1791 SQ.FT.

 UNHEATED
 FRONT PORCH
 188 SQ.FT.

 GARAGE
 469 SQ.FT.

 TOTAL
 657 SQ.FT.

 UNHEATED OPTIONAL
 57 SQ.FT.

FRONT PORCH 188 SQ.FT.
GARAGE 469 SQ.FT.
TOTAL 657 SQ.FT.
UNHEATED OPTIONAL
SCREENED PORCH 160 SQ.FT.
DECK 108 SQ.FT.
TOTAL 268 SQ.FT.

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PAGE 3 OF 6

HEADER SCHEDULE

COMMON LOAD BEARING HEADERS

CONTINUIT EOND DEMINING HENDERS								
	SIZE:	COLUMNS:						
H-1	(2) 2 X 4	1 JACK 1 KING						
H-2	(2) 2 X 6	1 JACK 1 KING						
H-3	(2) 2 X 8	1 JACK 1 KING						
H-4	(2) 2 X 10	2 JACKS 1 KING						
H-5	(2) 2 X 12	2 JACKS 1 KING						
H-6	(2) 1.75" X 9.25" LVL	2 JACKS 1 KING						

- ALL NON LOAD BEARING HEADERS TO BE LADDER FRAMED OR (2) 2 X 4 WITH 1 JACK AND 1 KING STUD UNLESS NOTED OTHERWISE.

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	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

CONCRETE AND SOILS: See foundation notes.

ROOF TRUSS REQUIREMENTS

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

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

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

BRACE WALL PANEL NOTES

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

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

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

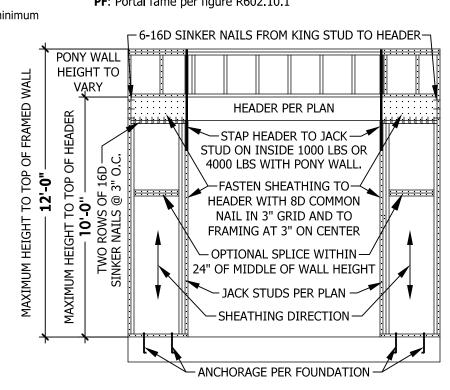
HD: 800 lbs hold down hold down device fastened to the edge of the brace wall panel closets to the corner.

Methods Per Table R602.10.1

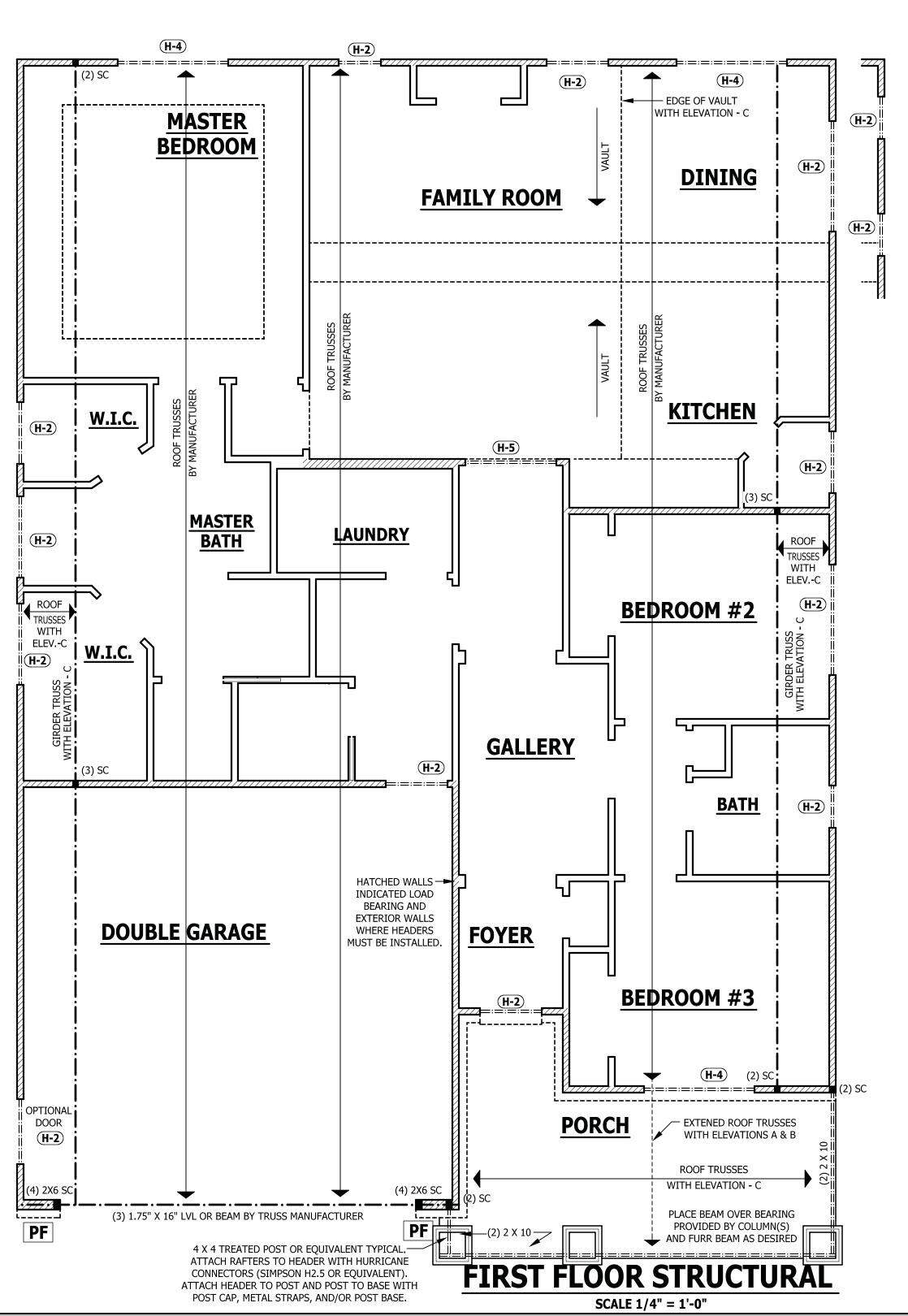
CS-WSP: Shall be minimum 3/8" OSB or CDX nailed at 6" on center at edges and 12" on center at intermediate supports with 6d common nails or 8d(2 1/2" long x 0.113" diameter). **CS-SFB:** Shall be minimum 1/2" structural fiber board nailed at 3" on center at edges and 3" on center at intermediate supports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

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



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STRUCTURAL H Lauren

FLOOR The **FIRST**

SQUARE FOOTAGE
HEATED
FIRST FLOOR 1791 SQ.FT. UNHEATED FRONT PORCH 188 SQ.F GARAGE 469 SQ.F TOTAL 657 SQ.F UNHEATED OPTIONAL

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PAGE 4 OF 6

ROOF TRUSS REQUIREMENTS

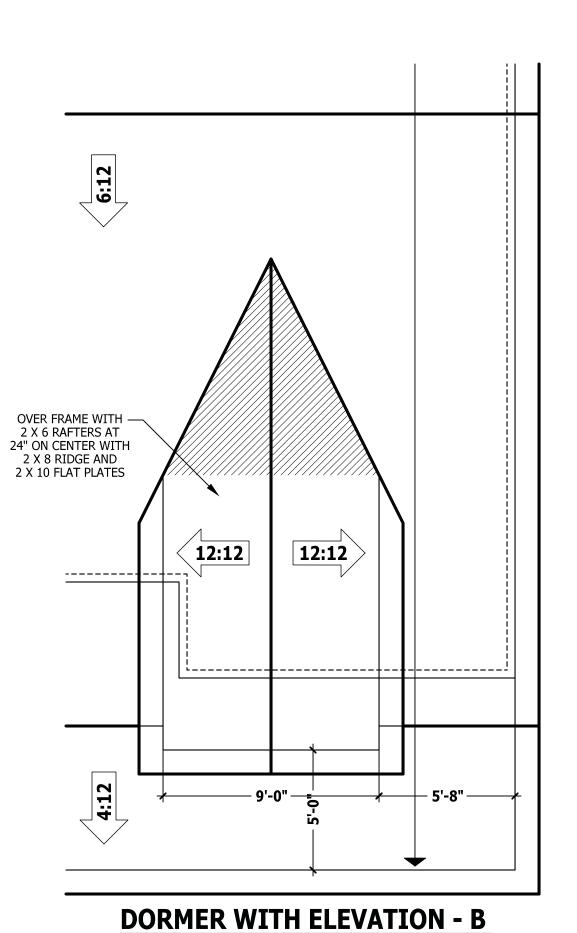
TRUSS DESIGN. Trusses to be designed and engineered in accordance with these drawings. Any variation with these drawings must be brought to Haynes Home Plan, Inc. attention before construction begins. KNEE WALL AND CEILING HEIGHTS. All finished knee wall heights and ceiling heights are shown furred down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

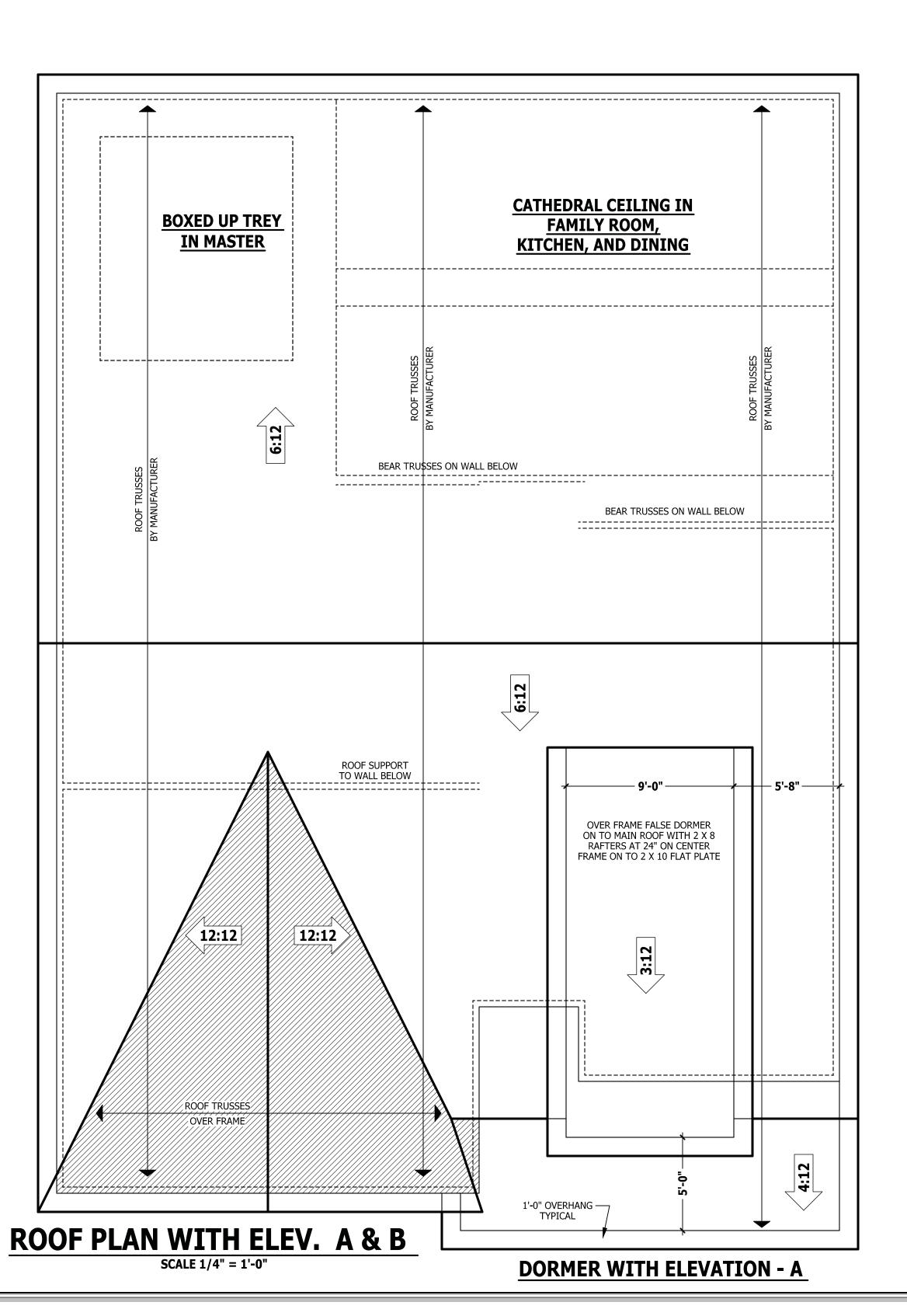
ANCHORAGE. All required anchors for trusses due to uplift or bearing shall meet the requirements as specified on the truss schematics. **BEARING.** All trusses shall be designed for bearing on SPF #2 plates or ledgers unless noted otherwise.

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

HEEL HEIGHT ABOVE FIRST FLOOR PLATE

HEEL HEIGHT ABOVE SECOND FLOOR PLATE





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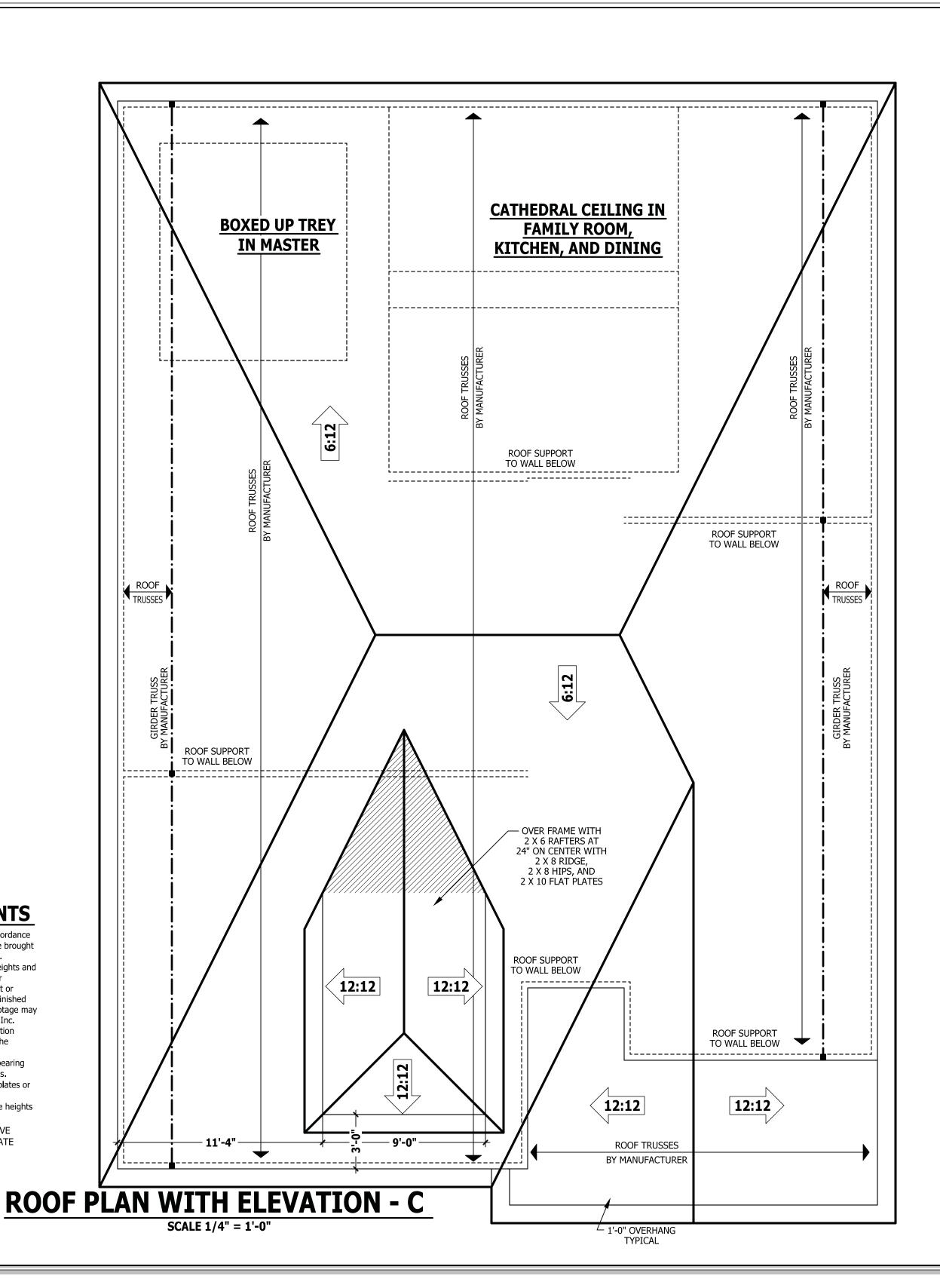
ROOF PLAN WITH ELEVATIONS Lauren

SQUARE FOOTAGE
HEATED
FIRST FLOOR 1791 SQ.FT.
TOTAL 1791 SQ.FT.
UNHEATED
FRONT PORCH 188 SQ.FT.

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ROOF TRUSS REQUIREMENTS

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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

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ROOF PLAN WITH ELEVATION-C Ħ

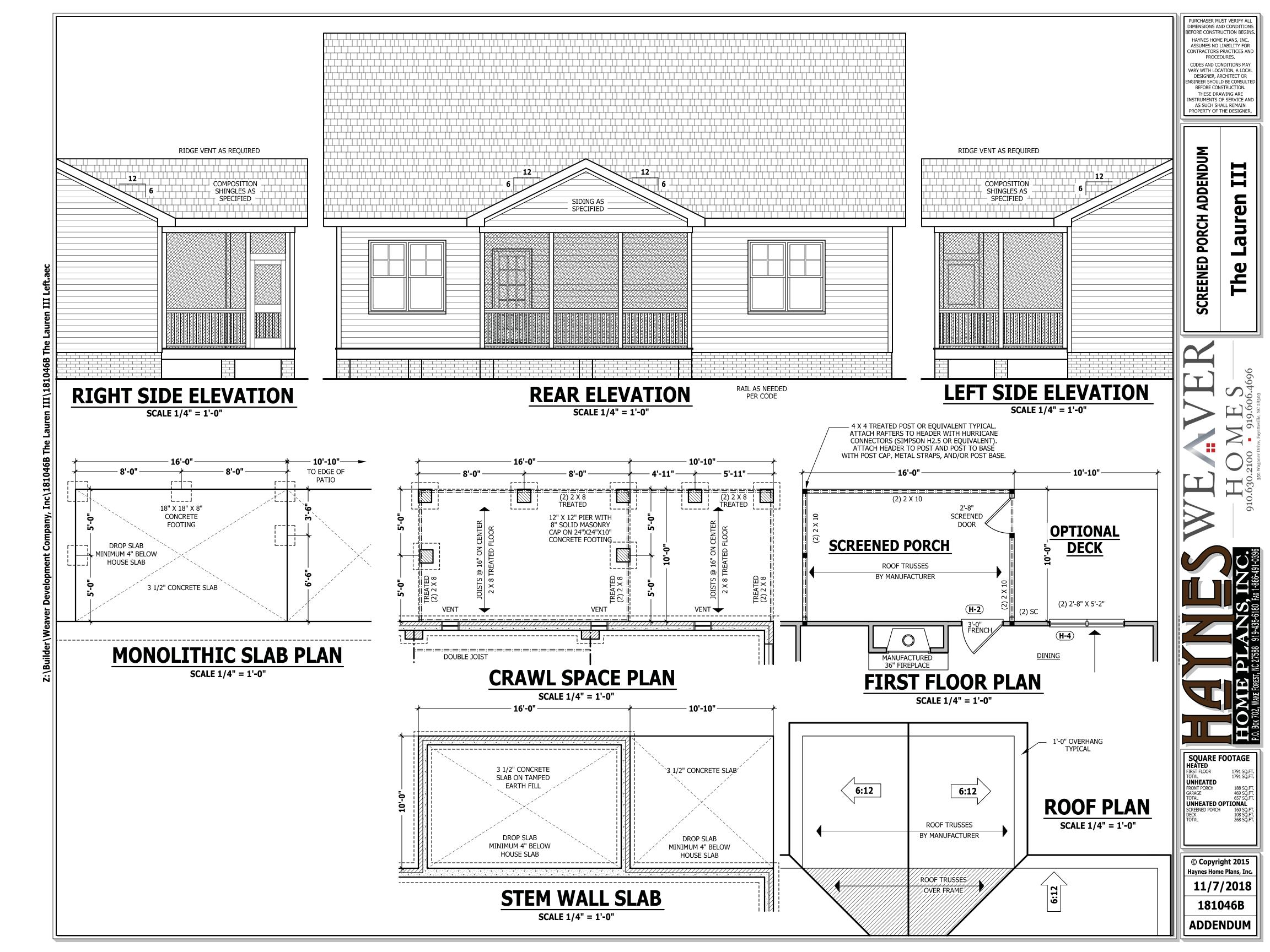
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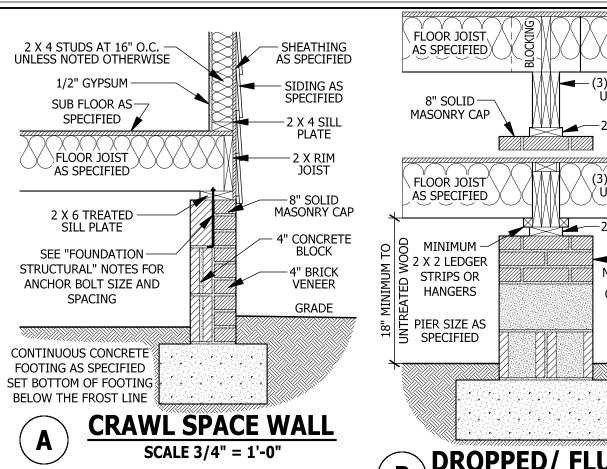
SQUARE FOOTAGE
HEATED
FIRST FLOOR 1791 SQ.FT. UNHEATED

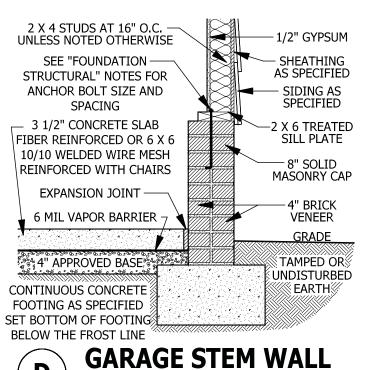
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DECK STAIR NOTES

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

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

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

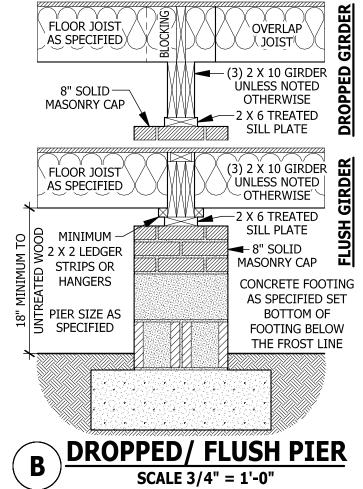
AM109.1.2. 4 x 4 wood knee braces may be provided on each column in both directions. The knee braces shall attach to each post at a point not less than 1/3 of the post length from the top of the post, and the braces shall be angled between 45 degrees and 60 degrees from the horizontal. Knee braces shall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

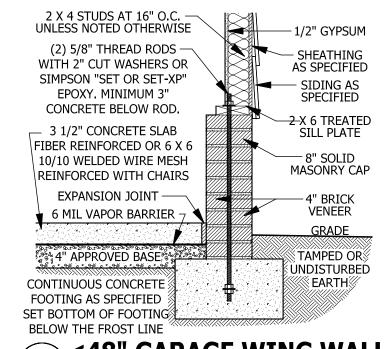
AM109.1.3. For freestanding decks without knee braces or diagonal bracing, lateral stability may be provided by embedding the post in accordance with Figure AM109.2

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

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

AM109.1.5. For embedment of piles in Coastal Regions, see Chapter 45.





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

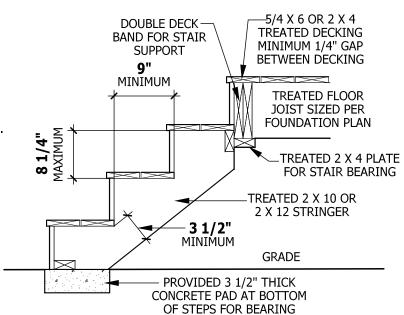


FIGURE AM110 TYPICAL DECK STAIR DETAIL

SHEATHING +

AS SPECIFIED

LATH-

SEE FOUNDATION

FOR FOUNDATION

DETAILS

WEEP SCREED

SCALE 3/4" = 1'-0"

SCALE 3/4" = 1'-0"

STONE VEENER

AS SPECIFIED

VAPOR BARRIER

-WEEP SCREED

MINIMUM 4" TO

GROUND OR 2"

-TO PAVEMENT

GRADE

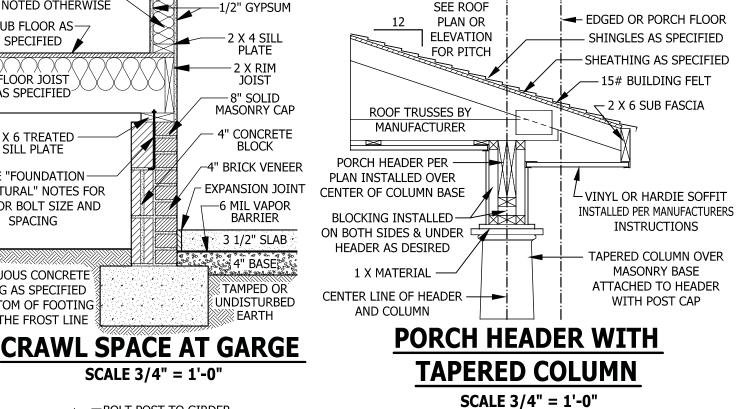
WEEP SCREEDS

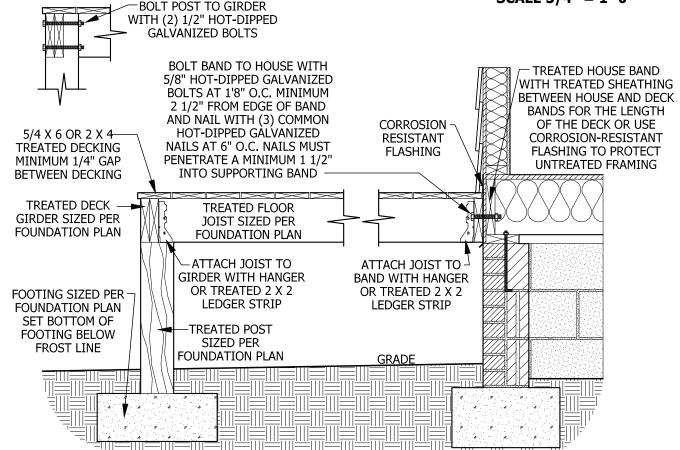
All weep screeds and stone veneer to be installed per manufactures instructions and per the 2012 North Carolina Residential

Building code. **R703.6.2.1 -** A minimum 0.019-inch (0.5 mm) (No. 26 galvanized sheet gage), corrosion-resistant weep screed or plastic weep screed, with a minimum vertical 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

attachment flange of the weep screed.

shall cover and terminate on the





DECK ATTACHMENT DETAIL TO FRAMED WALL

SCALE 3/4" TO 1'-0"

SMOKE ALARMS

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[®]

FOOTING AS SPECIFIED

SET BOTTOM OF FOOTING

BELOW THE FROST LINE

R314.1 Smoke detection and notification. All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with the provisions of this code and the household fire warning

equipment provisions of NFPA 72. **R314.2 Smoke detection systems.** Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notification device installed as required by this section for smoke alarms, shall be 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 using a combination of smoke detector and audible notification device(s), it shall become a permanent fixture of the occupancy and owned by the homeowner. The system shall be monitored by an approved supervising station and be maintained in accordance with

NFPA 72. **Exception:** Where smoke alarms are provided meeting the requirements of Section R314.4.

R314.3 Location. Smoke alarms shall be installed in the following 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 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 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 building. The weather-resistant barrier shall commercial source, and when primary power is interrupted, shall lap the attachment flange. The exterior lath receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke alarms shall be interconnected.

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.

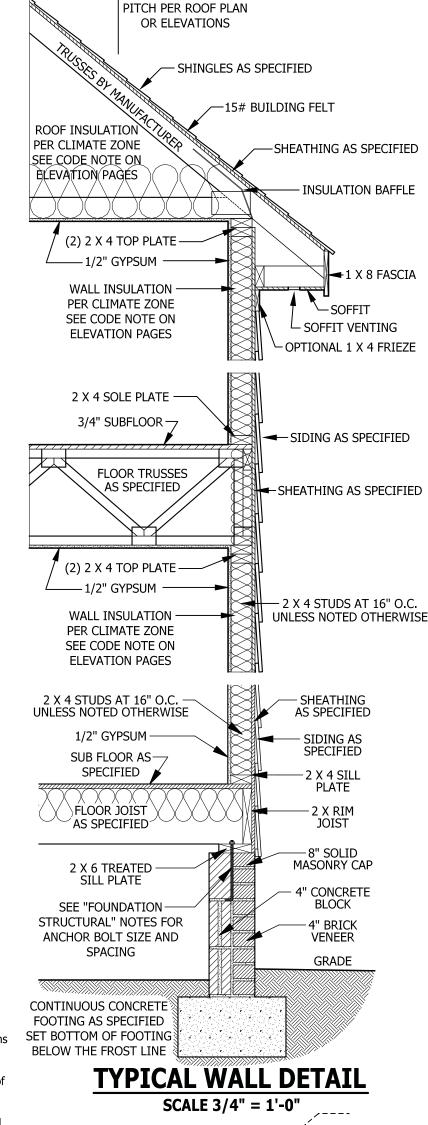
2. When handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maximum height.

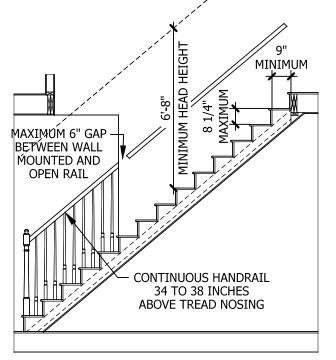
R311.7.7.2 Continuity. Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. 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.





TYPICAL STAIR DETAIL

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TYPICAL

NSTRUMENTS OF SERVICE AND

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IGINEER SHOULD BE CONSULTED

UNHEATED UNHEATED OPTIONAL



Client: Southern Touch Homes

Project: Address:

Date: 8/13/2020 Input by: Curtis Quick

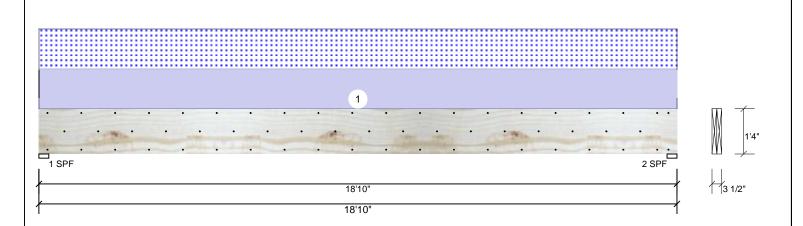
Job Name: The Lauren III Beams

Page 1 of 1

Project #:

1.750" X 16.000" **Kerto-S LVL** 2-Ply - PASSED **GDH**

Level: Level



Member Inforr	nation	Reactio	Reactions UNPATTERNED lb (Uplift)						
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	Wind	Const
Plies:	2	Design Method:	ASD	1	0	1840	1723	0	0
Moisture Condition	: Dry	Building Code:	IBC 2012	2	0	1840	1723	0	0
Deflection LL:	480	Load Sharing:	No						
Deflection TL:	360	Deck:	Not Checked						
Importance:	Normal								
Temperature:	Temp <= 100°F								
				Bearing	gs				
				Bearing	g Length	Cap. Read	ct D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF	3.500"	68% 184	10 / 1723	3564 L	D+S
				2 - SPF	3.500"	68% 184	40 / 1723	3564 L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	16009 ft-lb	9'5"	39750 ft-lb	0.403 (40%)	D+S	L
Unbraced	16009 ft-lb	9'5"	16016 ft-lb	1.000 (100%)	D+S	L
Shear	2976 lb	17'3 3/8"	13739 lb	0.217 (22%)	D+S	L
LL Defl inch	0.213 (L/1035)	9'5 1/16"	0.460 (L/480)	0.460 (46%)	S	L
TL Defl inch	0.441 (L/501)	9'5 1/16"	0.613 (L/360)	0.720 (72%)	D+S	L

Design Notes

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 7'4 1/2" o.c.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	183 PLF	0 PLF	183 PLF	0 PLF	0 PLF	"A" Trusses
	Self Weight				12 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
- Handling & Installation
- Handling & Installation

 1. IVI beams must not be out or drilled

 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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 ICC-ES: ESR-3633

Manufacturer Info

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



This design is valid until 2/26/2023



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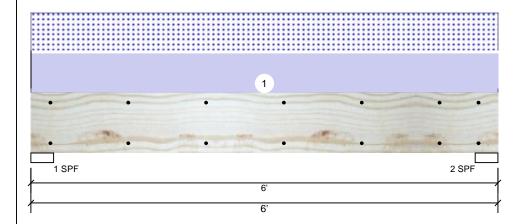
Client: Southern Touch Homes

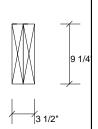
Project: Address: Date: 8/13/2020 Input by: Curtis Quick

> Job Name: The Lauren III Beams Project #:

Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level





Page 1 of 1

Member Infor	mation			Reactio	ns UNPAT	TERNED Ib	(Uplift)		
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	Wind	Const
Plies:	2	Design Method:	ASD	1	0	1930	1908	0	0
Moisture Conditio	n: Dry	Building Code:	IBC 2012	2	0	1930	1908	0	0
Deflection LL:	480	Load Sharing:	No						
Deflection TL:	360	Deck:	Not Checked						
Importance:	Normal								
Temperature:	Temp <= 100°F								
				Bearing	js				
				Bearing	Length	Cap. Rea	ct D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF	3.500"	74% 193	30 / 1908	3838 L	D+S
				2 - SPF	3.500"	74% 193	30 / 1908	3838 L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4911 ft-lb	3'	14423 ft-lb	0.340 (34%)	D+S	L
Unbraced	4911 ft-lb	3'	11027 ft-lb	0.445 (45%)	D+S	L
Shear	2558 lb	5'	7943 lb	0.322 (32%)	D+S	L
LL Defl inch	0.038 (L/1754)	3'	0.139 (L/480)	0.270 (27%)	S	L
TL Defl inch	0.076 (L/872)	3'	0.185 (L/360)	0.410 (41%)	D+S	L

Design Notes

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Uniform			Тор	636 PLF	0 PLF	636 PLF	0 PLF	0 PLF	A2	
	Self Weight				7 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
- Handling & Installation
- Handling & Installation

 1. UVI beams must not be out or drilled

 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

- For flat roofs provide proper drainage to prevent ponding

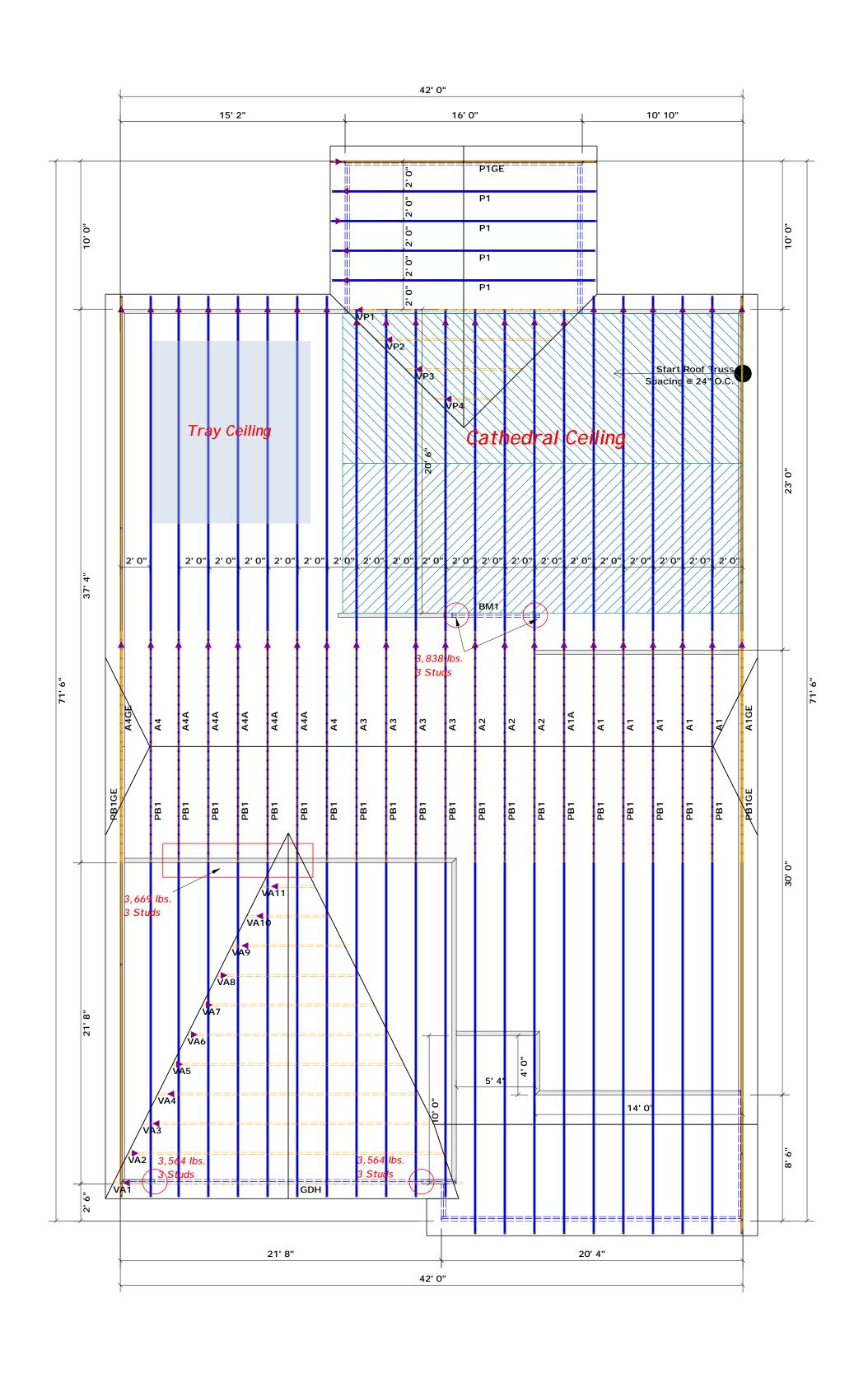
Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

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



This design is valid until 2/26/2023



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

NOTE STATE OF THE STATE OF THE

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10200 4 12750 5 15300 6

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

-- Denotes Reaction Greater than 3,000 lbs.

Beam Legend Plies Net Qty PlotID Product Length 6' 0" 1-3/4"x 9-1/4" LVL Kerto-S 2 2 BM1 23' 0" 2 **GDH** 2 1-3/4"x 16" LVL Kerto-S

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ROOF & FLOOR

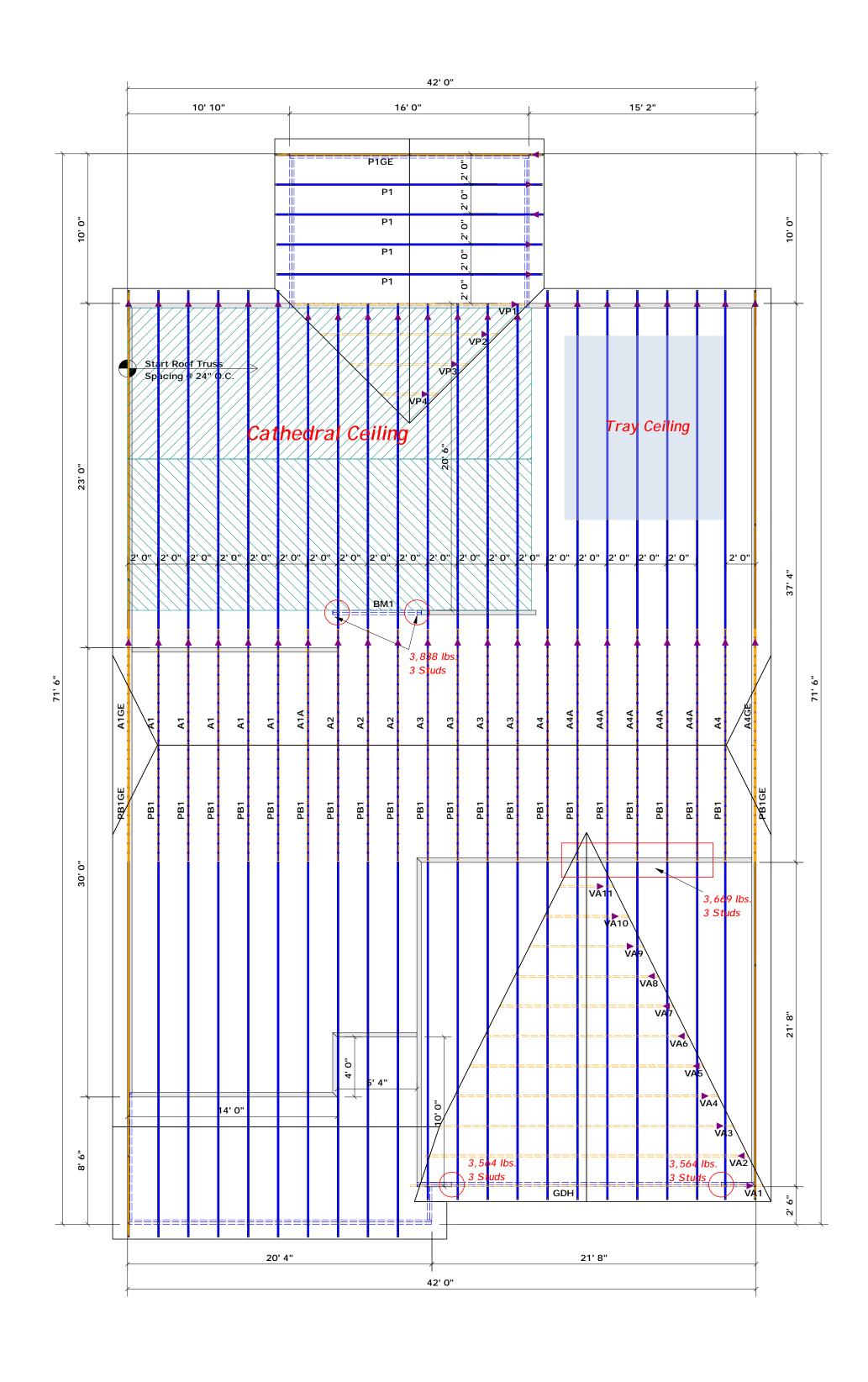
TRUSSES & BEAMS

Reilly Road Industrial Park

Fayetteville, N.C. 28309

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

ses Backwards			Truss Placement Plan SCALE: 3/16" = 1'	23' 0" 1-3/4"x 16" LVL Kerto-S		
BUILDER	Southern Touch Homes	CITY / CO.	Johnston Co. / Johnston	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		
JOB NAME	Lot 26 Mitchell Manor	ADDRESS	Lot 26 Mitchell Manor	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 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		
PLAN	Lauren III / Elev. A / CP	MODEL	Model			
SEAL DATE	11/7/18	DATE REV.	08/12/20	(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		
QUOTE #	Quote #	DRAWN BY	Curtis Quick	specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#. Curtis Quick		
JOB #	J0820-3650 SALES REP.		Lenny Norris	Signature Curtis Quick		



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

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10200 4 12750 5 15300 6

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

-- Denotes Reaction Greater than 3,000 lbs.

Truss Placement Plan SCALE: 3/16" = 1'

	Beam Legend							
PlotID	Length	Product	Plies	Net Qty				
BM1	6' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2				
GDH	23' 0"	1-3/4"x 16" LVL Kerto-S	2	2				

BUILDER	Southern Touch Homes	CITY / CO.	Johnston Co. / Johnston	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
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JOB #	J0820-3650	SALES REP.	Lenny Norris	SignatureCurtis Quick



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