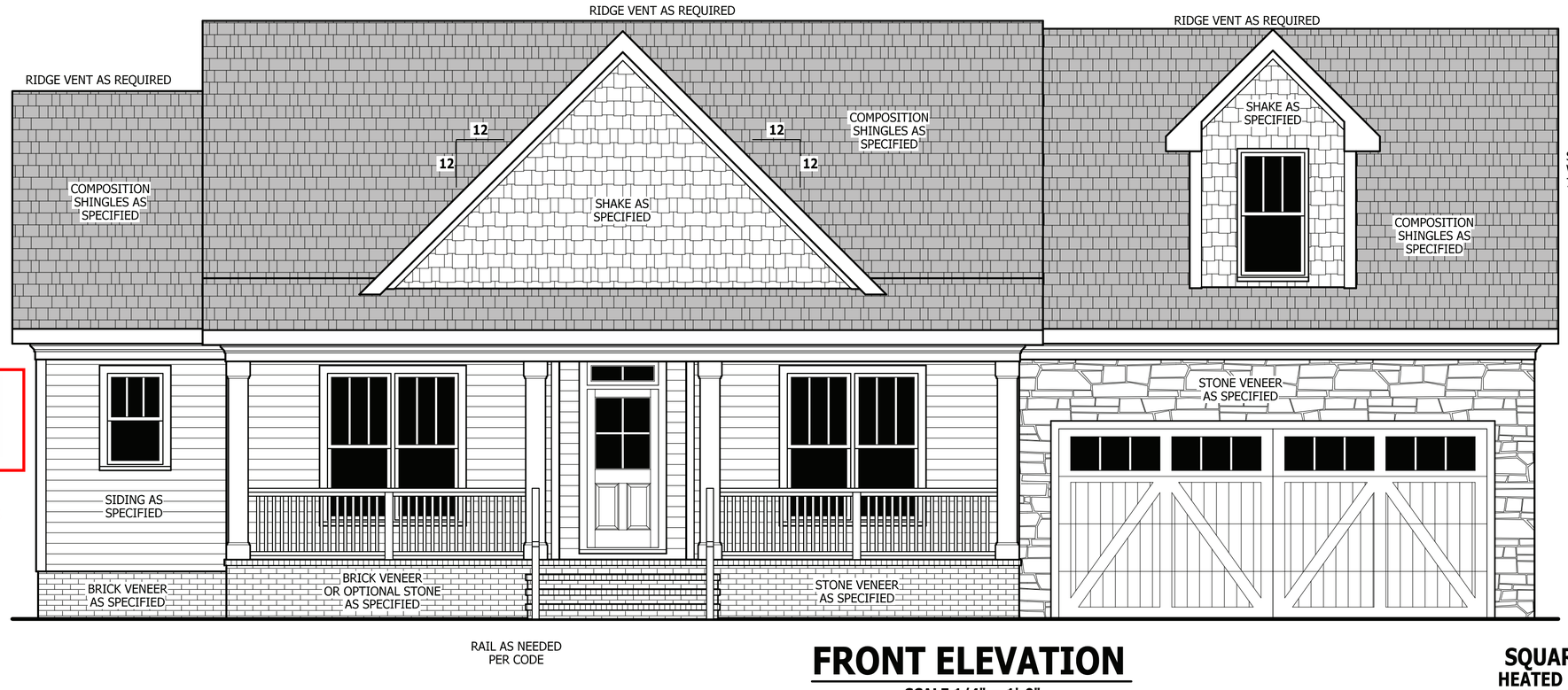


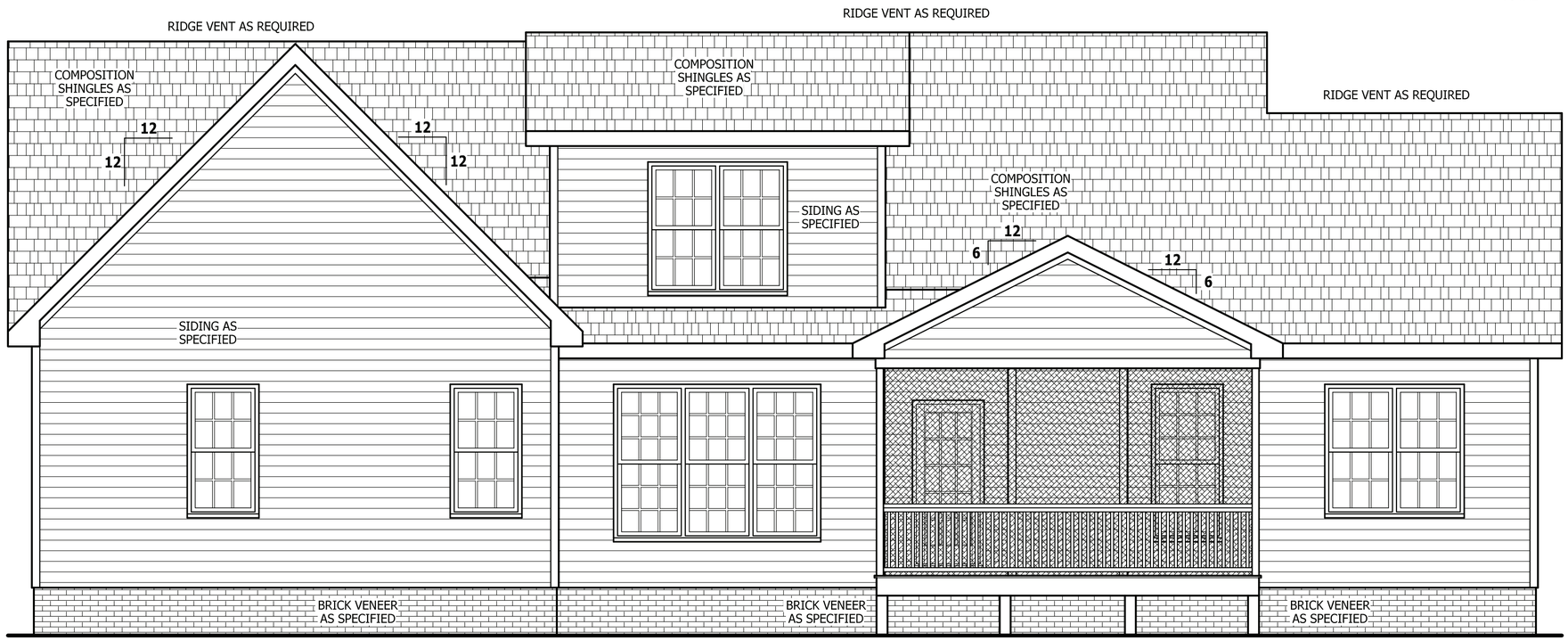
NOTICE TO CONTRACTOR:
All construction must comply with current NC Building Codes and is subject to field inspection and verification.
APPROVED
Limited building only review
Permit holder responsible for full compliance with the code
09/26/2022
Harnett COUNTY NORTH CAROLINA

SEE NOTES ON LADDER FRAMING BETWEEN TRUSSES

FRONT ELEVATION

SCALE 1/4" = 1'-0"

PLANS DESIGNED TO THE 2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE



REAR ELEVATION

SCALE 1/4" = 1'-0"

SQUARE FOOTAGE

HEATED	
FIRST FLOOR	1868 SQ.FT.
SECOND FLOOR	704 SQ.FT.
TOTAL	2572 SQ.FT.
UNHEATED	
GARAGE	469 SQ.FT.
FRONT PORCH	211 SQ.FT.
SCREENED PORCH	180 SQ.FT.
DECK	93 SQ.FT.
STORAGE	161 SQ.FT.
TOTAL	1114 SQ.FT.

FRONT & REAR ELEVATIONS

Newport

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Gloverdesignbuild@gmail.com
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STORAGE 161 SQ.FT.
TOTAL 1114 SQ.FT.

8/9/2022

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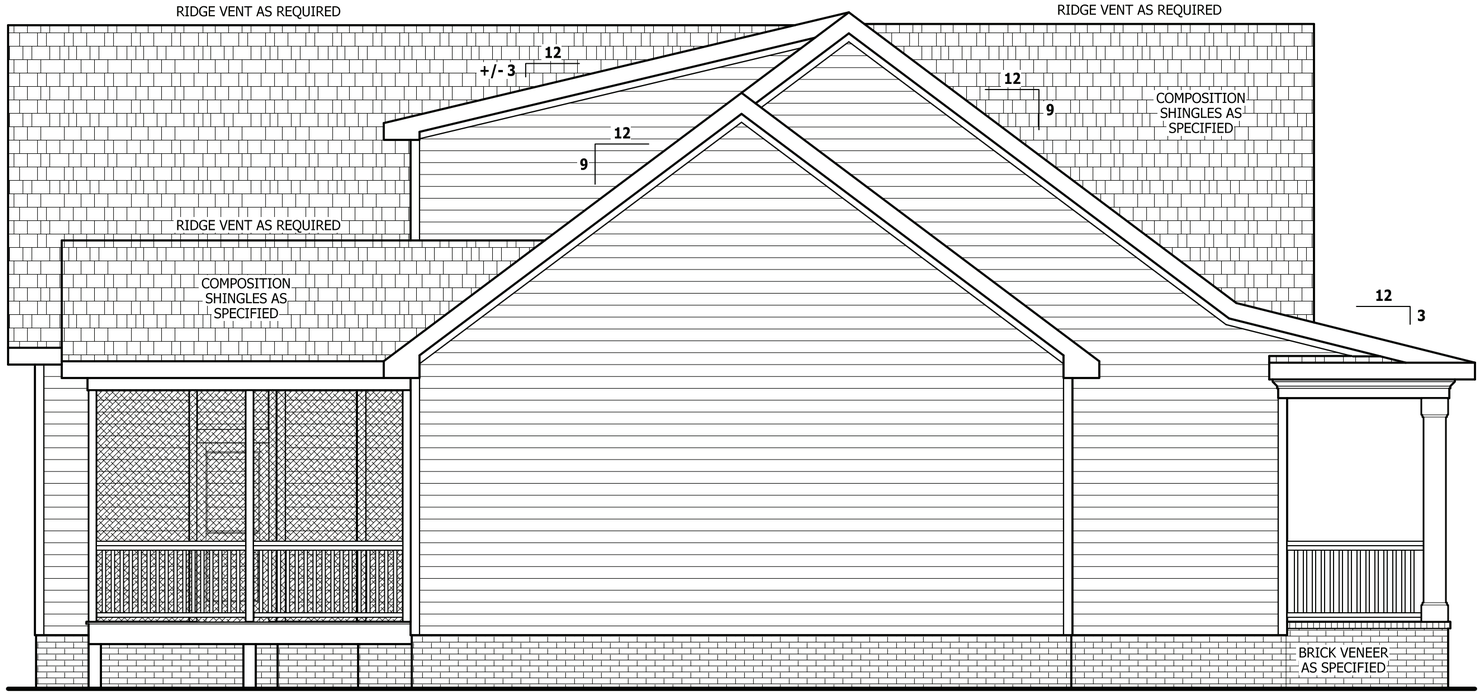
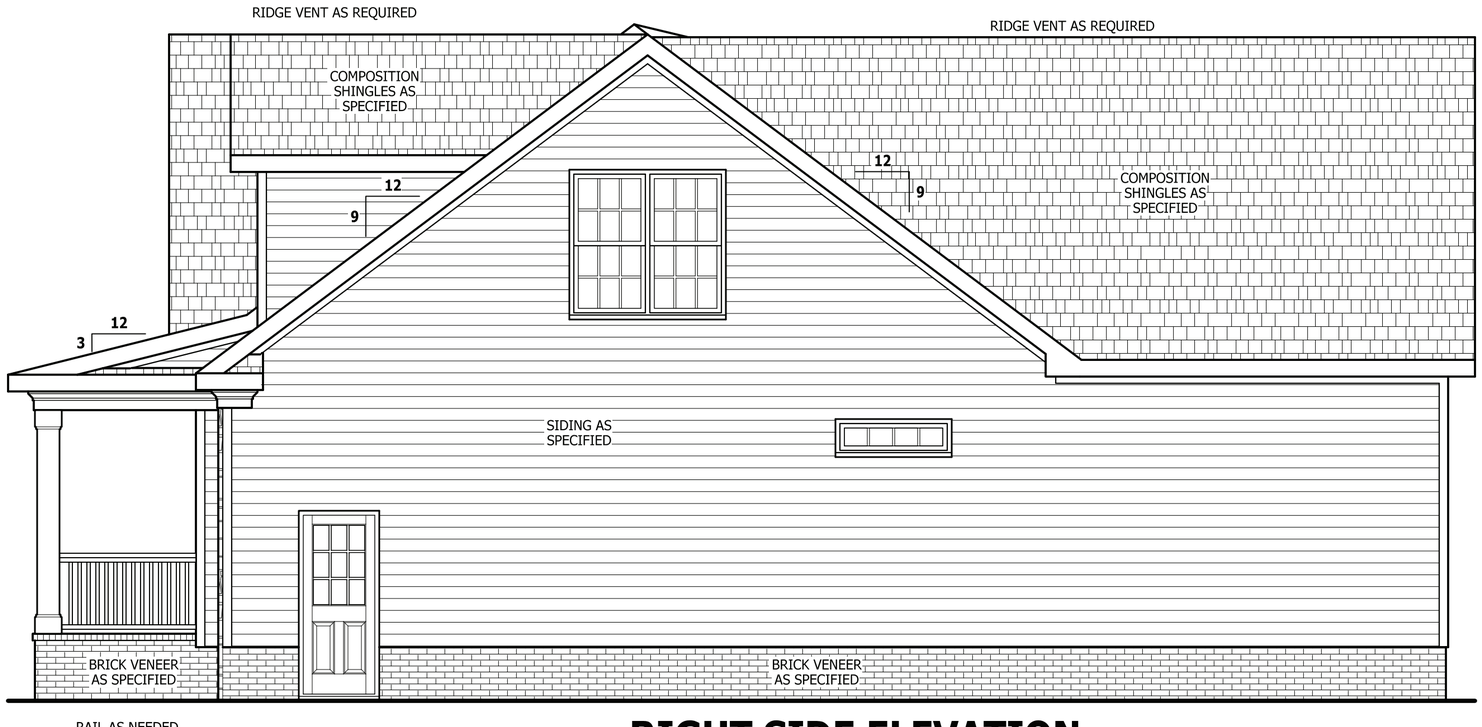


LEFT SIDE ELEVATION

SCALE 1/4" = 1'-0"



RIGHT SIDE ELEVATION

SCALE 1/4" = 1'-0"

SIDE ELEVATIONS

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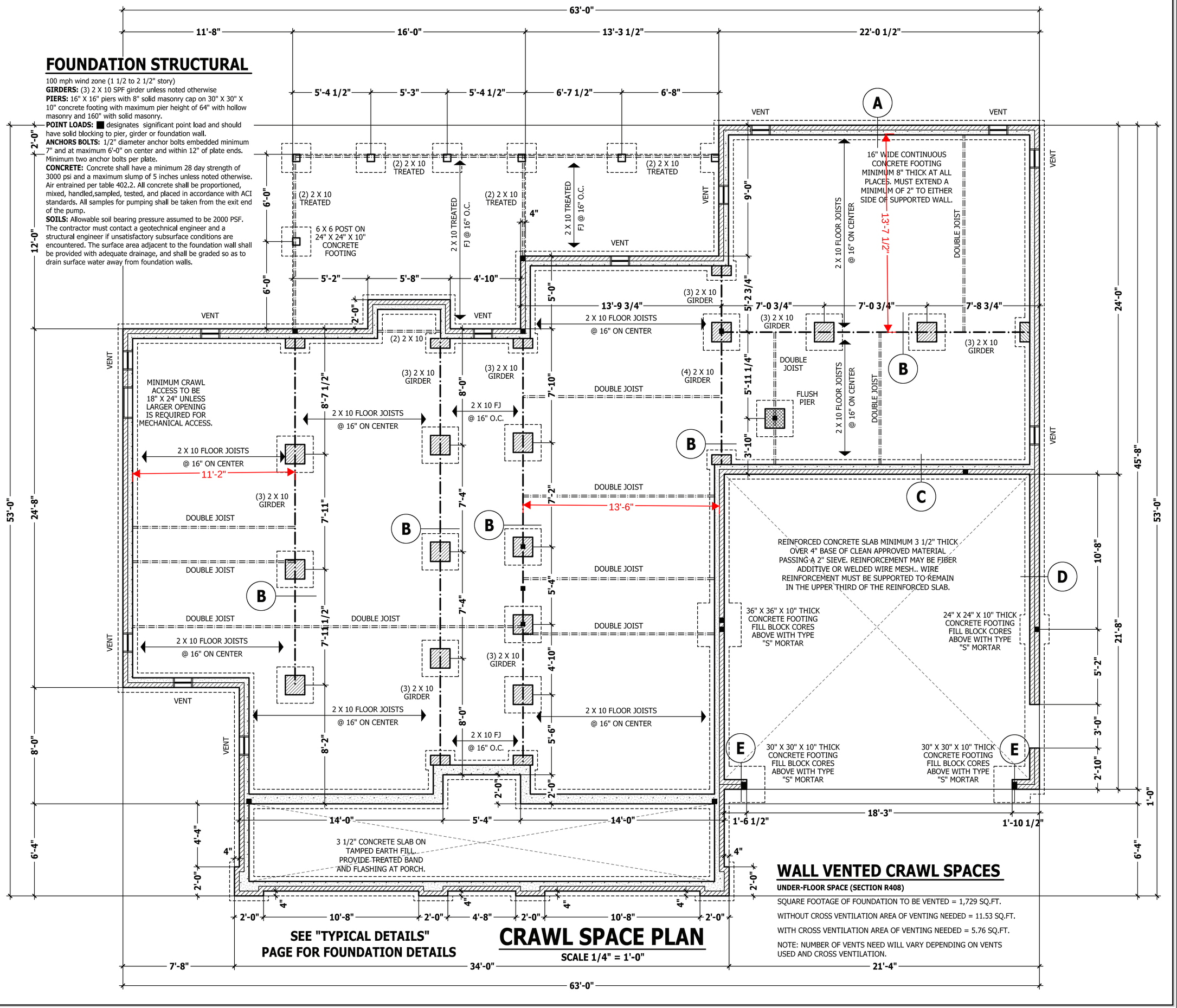
FOUNDATION STRUCTURAL

100 mph wind zone (1 1/2 to 2 1/2" story)
GIRDERS: (3) 2 X 10 SPF 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.
ANCHORS BOLTS: 1/2" diameter anchor bolts embedded minimum 7" and at maximum 6'-0" on center and within 12" of plate ends. Minimum two anchor bolts per plate.
CONCRETE: Concrete shall have a minimum 28 day strength of 3000 psi and a maximum slump of 5 inches unless noted otherwise. Air entrained per table 402.2. All concrete shall be proportioned, mixed, handled,sampled, tested, and placed 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.



SEE "TYPICAL DETAILS" PAGE FOR FOUNDATION DETAILS

CRAWL SPACE PLAN

SCALE 1/4" = 1'-0"

WALL VENTED CRAWL SPACES

UNDER-FLOOR SPACE (SECTION R408)

SQUARE FOOTAGE OF FOUNDATION TO BE VENTED = 1,729 SQ.FT.

WITHOUT CROSS VENTILATION AREA OF VENTING NEEDED = 11.53 SQ.FT.

WITH CROSS VENTILATION AREA OF VENTING NEEDED = 5.76 SQ.FT.

NOTE: NUMBER OF VENTS NEED WILL VARY DEPENDING ON VENTS USED AND CROSS VENTILATION.

CRAWL SPACE PLAN

Newport

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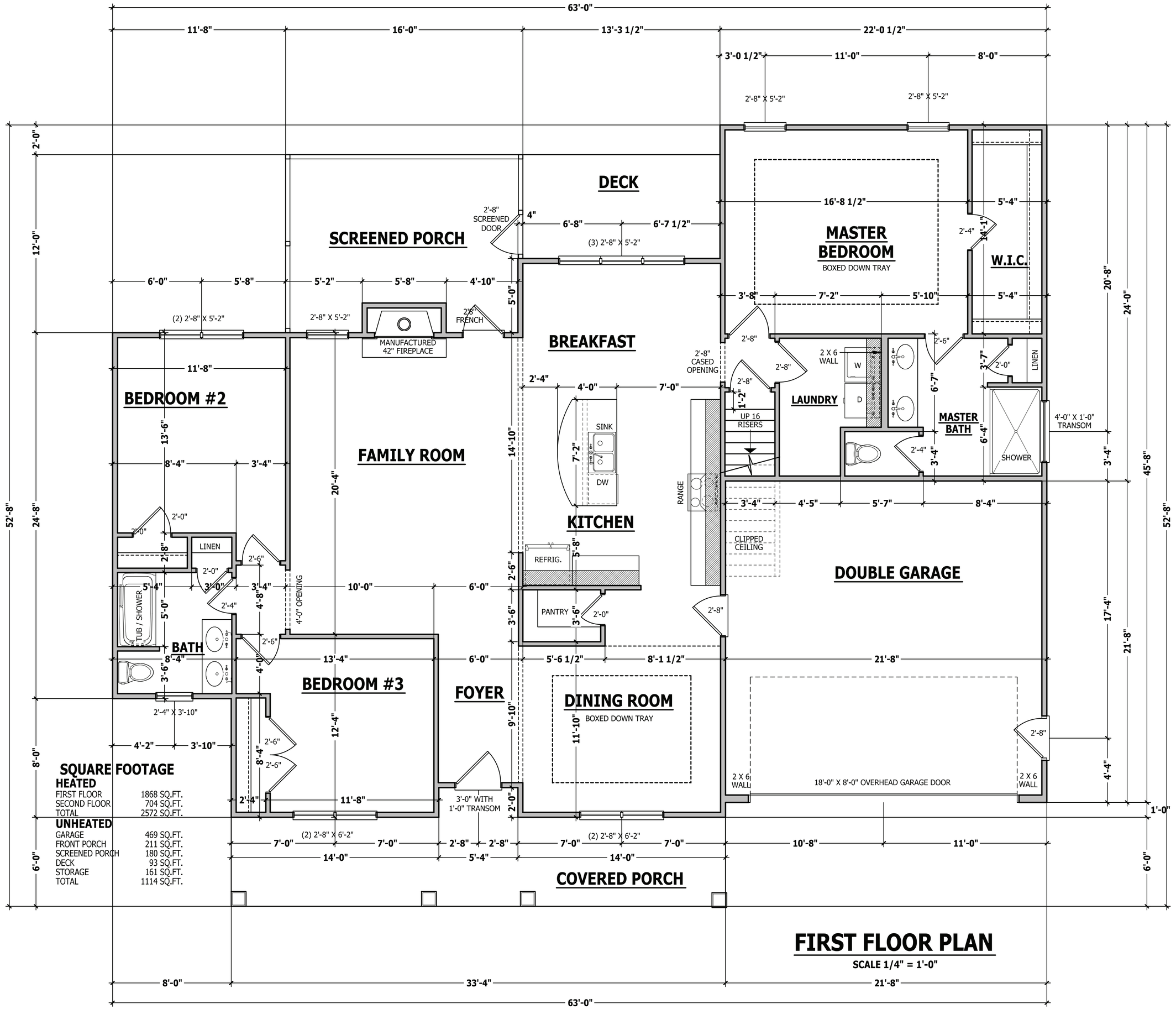
FIRST FLOOR PLAN

Newport



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FIRST FLOOR PLAN

SCALE 1/4" = 1'-0"

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8/9/2022

220504B

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

CONCRETE AND SOILS: See foundation notes.

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

ROOF TRUSS REQUIREMENTS

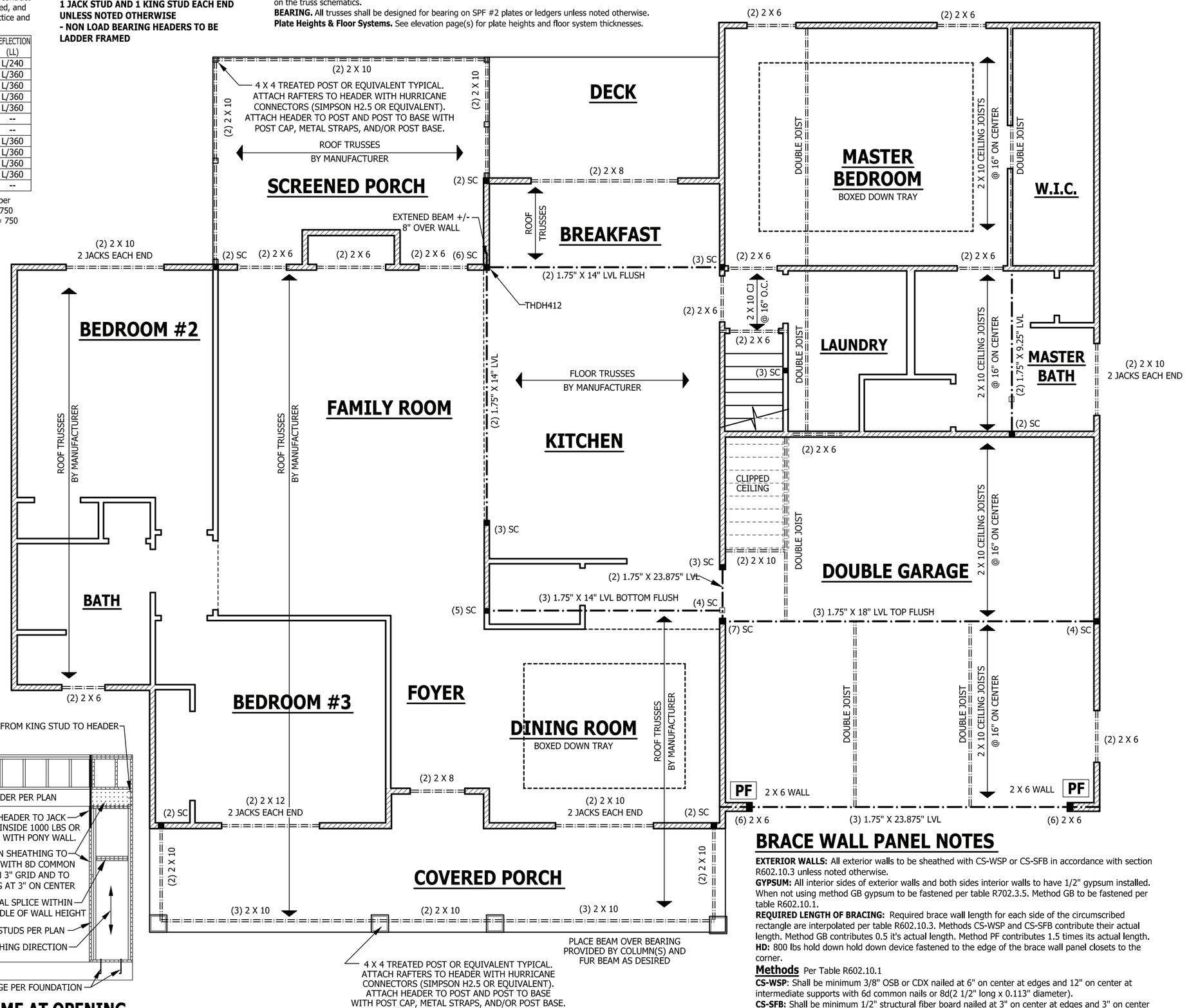
TRUSS DESIGN. Trusses to be designed and engineered in accordance with these drawings. Any variation with these drawings must be brought to Haynes Home Plan, Inc. attention before construction begins.

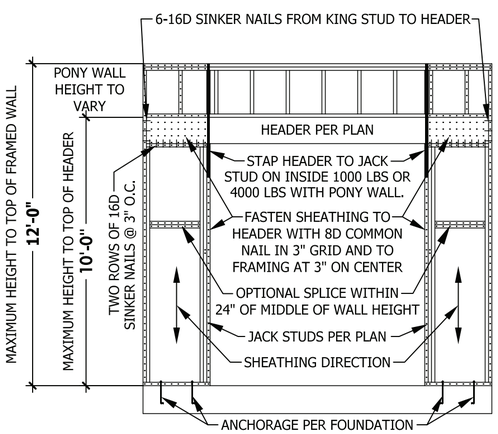
KNEE WALL AND CEILING HEIGHTS. All finished knee wall heights and ceiling heights are shown furred down 10" from roof decking for insulation. If for any reason the truss manufacturer fails to meet or exceed designated heel heights, finished knee wall heights, or finished ceiling heights shown on these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





PF **PORTAL FRAME AT OPENING**
(METHOD PF PER FIGURE AND SECTION R602.10.1)
SCALE 1/4" = 1'-0"

FIRST FLOOR STRUCTURAL

SCALE 1/4" = 1'-0"

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 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

FIRST FLOOR STRUCTURAL

Newport

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P.O. Box 702, WAKE FOREST, NC 27588 919-435-6180 FAX 1-866-491-0396

SQUARE FOOTAGE

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TOTAL	1114 SQ.FT.

8/9/2022

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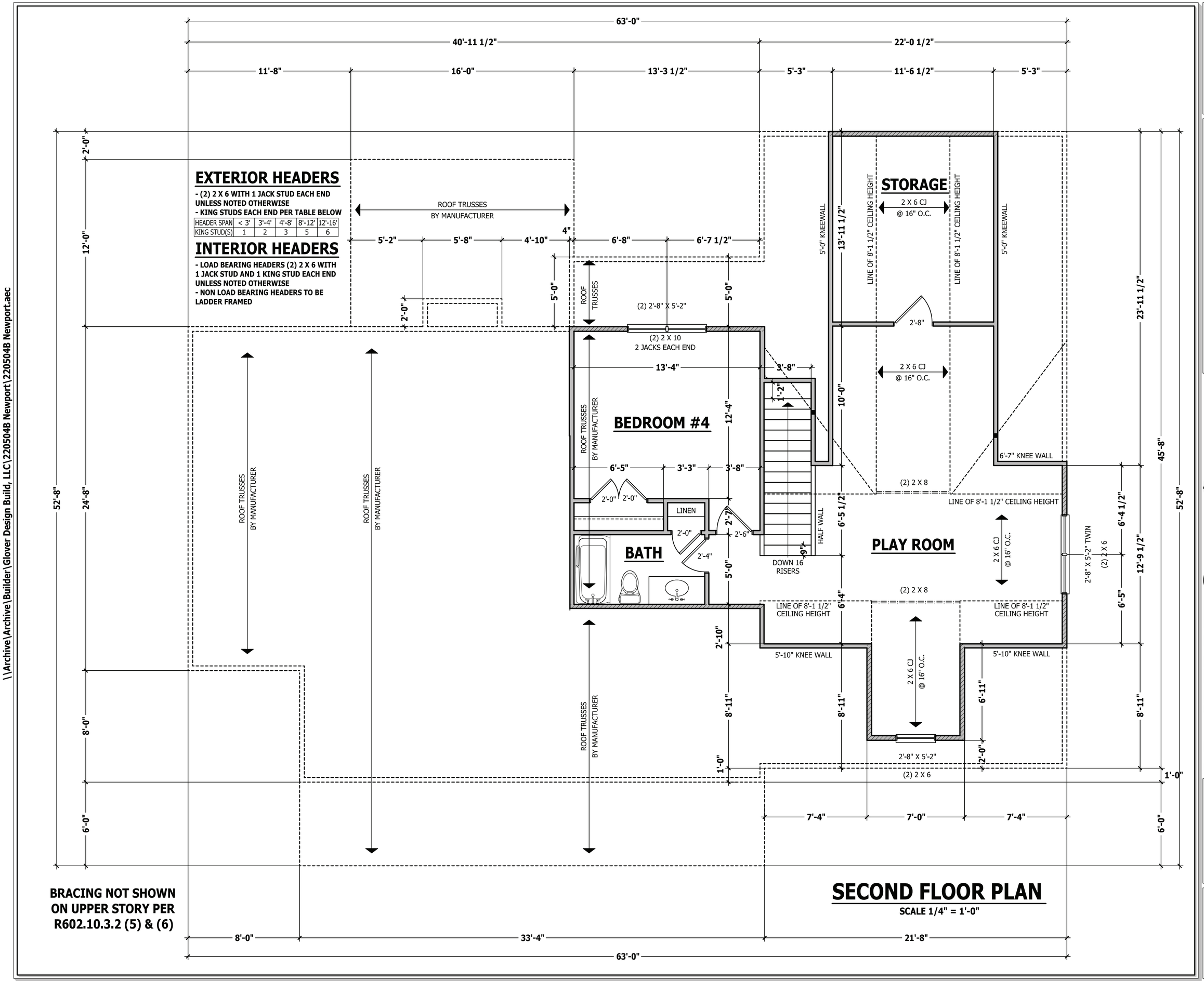

BRACING NOT SHOWN ON UPPER STORY PER R602.10.3.2 (5) & (6)

SECOND FLOOR PLAN

SCALE 1/4" = 1'-0"

PURCHASER MUST VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE CONSTRUCTION BEGINS.

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

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

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

SECOND FLOOR PLAN

Newport

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8/9/2022

220504B

ROOF TRUSS REQUIREMENTS

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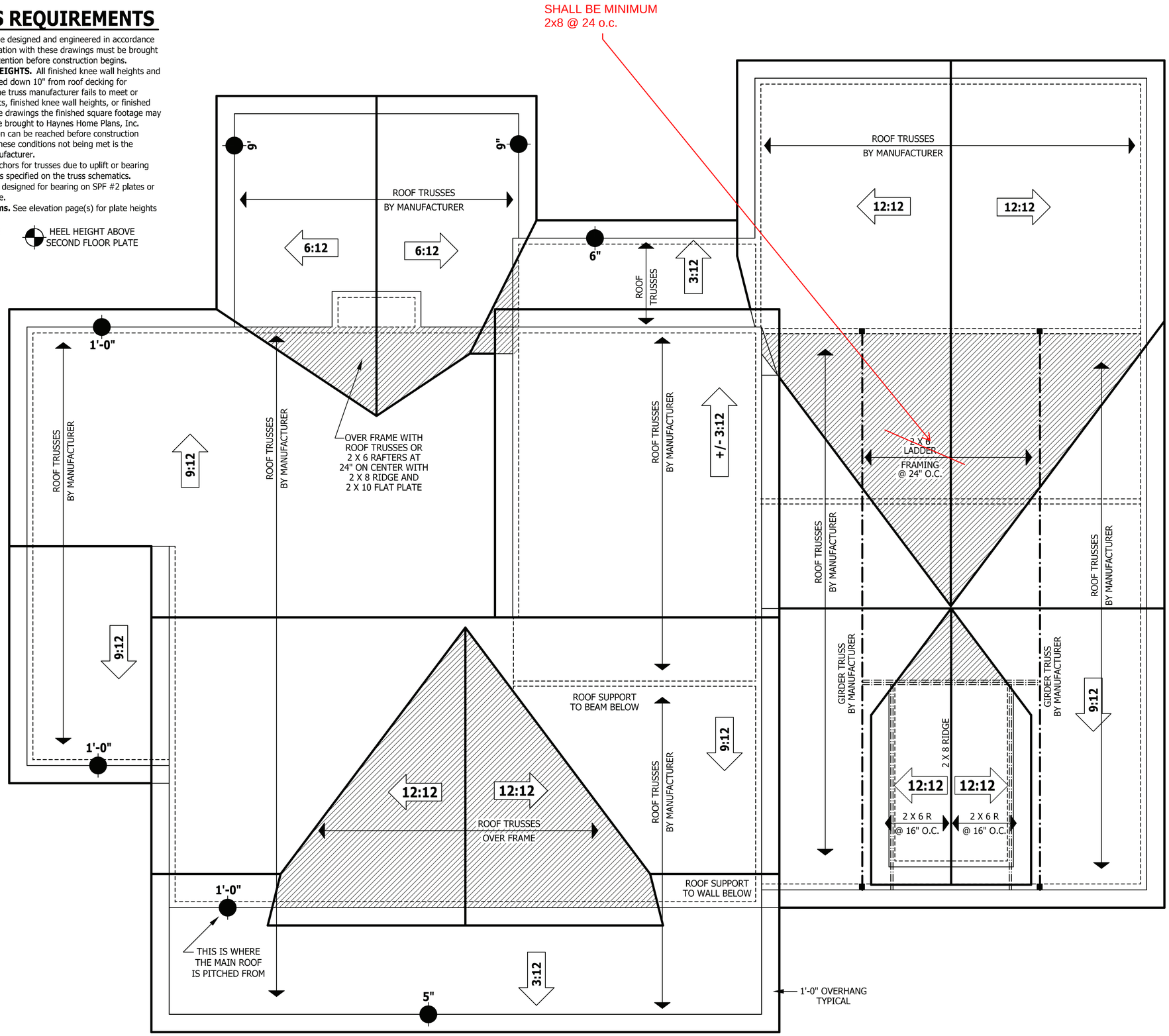
ANCHORAGE. All required anchors for trusses due to uplift or bearing shall meet the requirements as specified on the truss schematics.

BEARING. All trusses shall be designed for bearing on SPF #2 plates or ledgers unless noted otherwise.

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

● HEEL HEIGHT ABOVE FIRST FLOOR PLATE

⊕ HEEL HEIGHT ABOVE SECOND FLOOR PLATE



ROOF PLAN

SCALE 1/4" = 1'-0"

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ROOF PLAN — **Newport**

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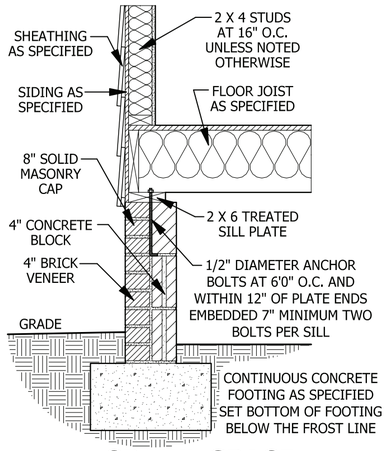
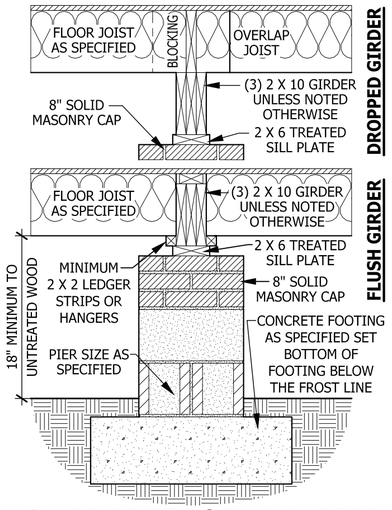


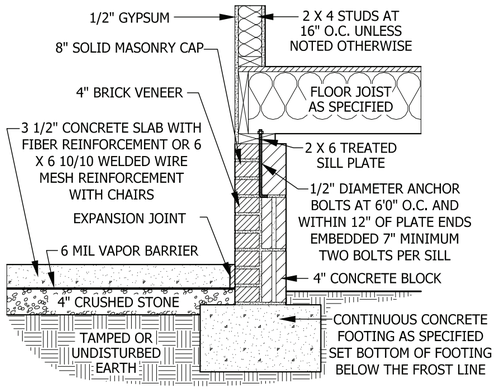
A CRAWL SPACE FOUNDATION WALL

SCALE 3/4" = 1'-0"



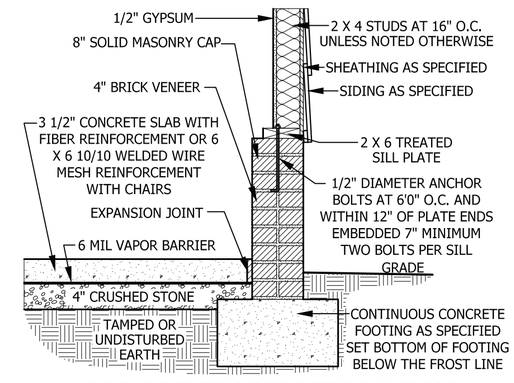
B DROPPED/ FLUSH PIER

SCALE 3/4" = 1'-0"



C CRAWL SPACE FOUNDATION WALL AT GARAGE SLAB

SCALE 3/4" = 1'-0"



D GARAGE FOUNDATION WALL

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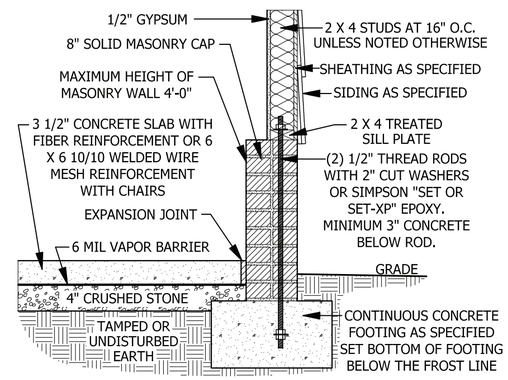


E 48" OR LESS GARAGE WING WALL

SCALE 3/4" = 1'-0"

CARBON MONOXIDE ALARMS

SECTION R315

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 315.1.

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.

SMOKE ALARMS

SECTION R314

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 an individual *dwelling* unit the alarm devices shall be interconnected 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 commercial source, and when primary power is interrupted, shall 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.

EXTERIOR WINDOWS AND DOORS

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

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.

STAIRWAY NOTES

R311.7

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 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).

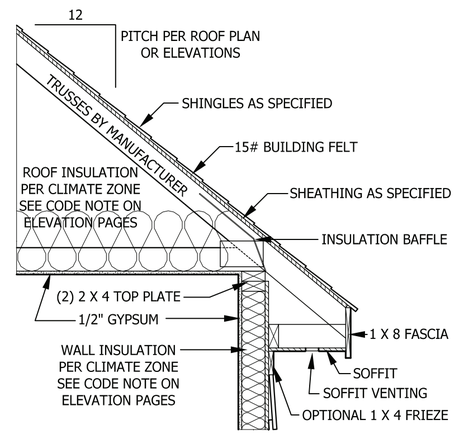
Exceptions:

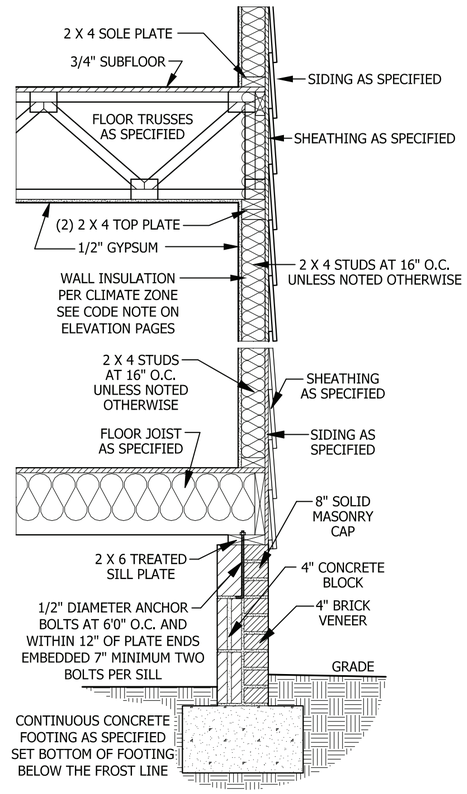
1. The use of a volute, turnout or starting easing shall be allowed over the lowest tread.
2. When handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings 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 adjacent to a wall shall have a space of not less than 11/2 inch (38 mm) between the wall and the handrails.

Exceptions:

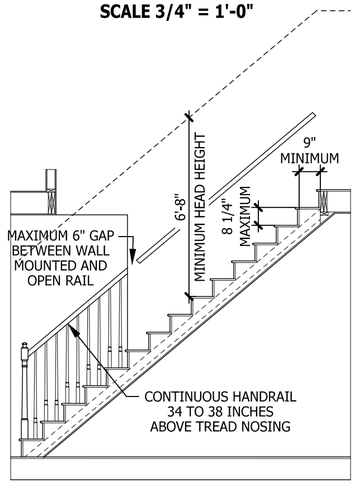
1. Handrails shall be permitted to be interrupted by a newel post.
2. The use of a volute, turnout, starting easing or starting newel shall be allowed over the lowest tread.
3. Two or more separate rails shall be considered continuous if the termination of the rails occurs within 6 inches (152 mm) of each other. If transitioning between a wall-mounted handrail and a guardrail/handrail, the wall-mounted rail must return into the wall.





TYPICAL WALL SECTION

SCALE 3/4" = 1'-0"



TYPICAL STAIR DETAIL

SCALE 1/4" = 1'-0"

TYPICAL DETAILS

Newport

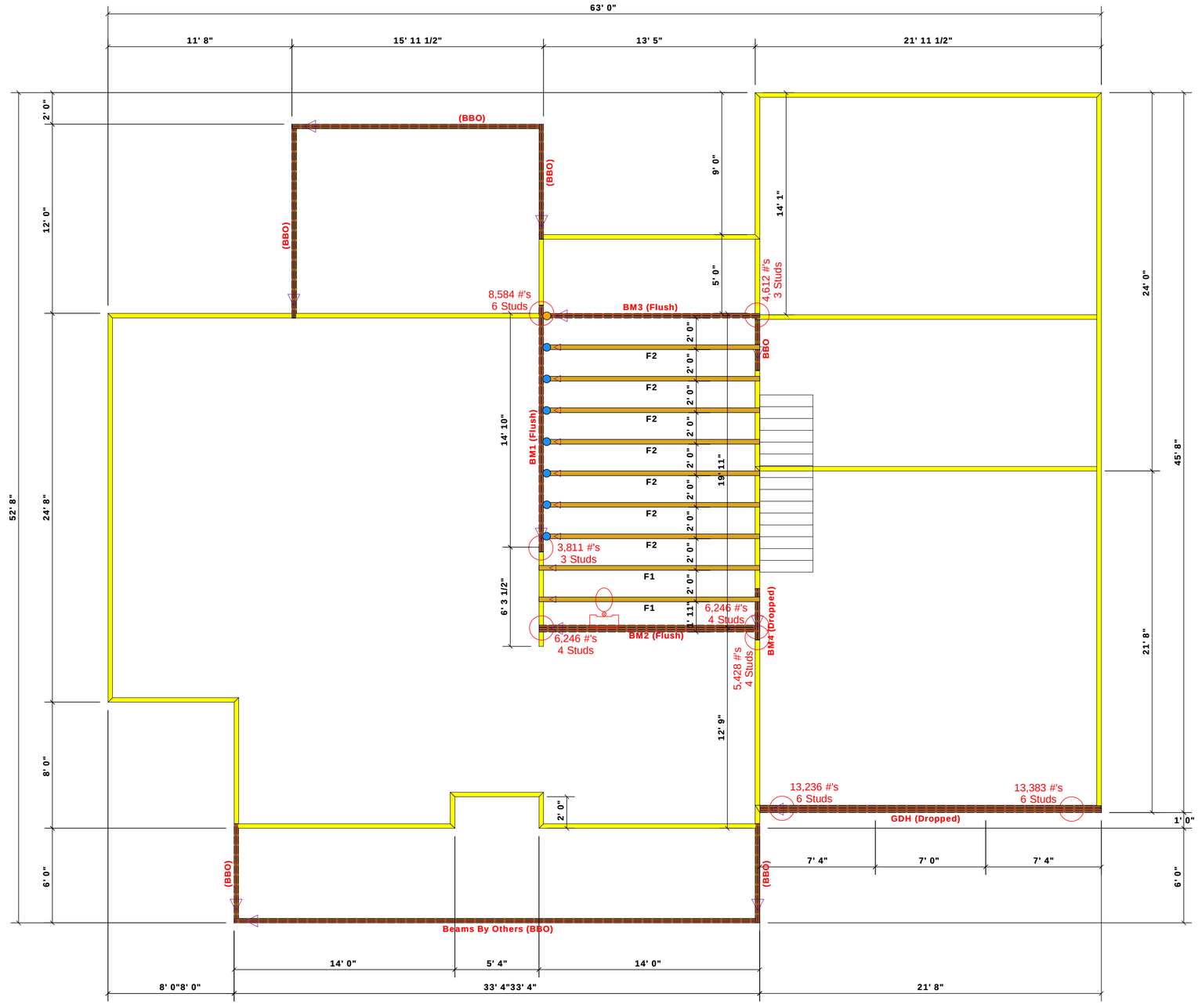
Glover Design Build
Gloverdesignbuild@gmail.com
HAYNES HOME PLANS, INC.
P.O. Box 702, Wake Forest, NC 27588 919-435-6180 Fax 1-866-491-0396

SQUARE FOOTAGE

HEATED	
FIRST FLOOR	1868 SQ.FT.
SECOND FLOOR	704 SQ.FT.
TOTAL	2572 SQ.FT.
UNHEATED	
GARAGE	469 SQ.FT.
FRONT PORCH	211 SQ.FT.
SCREENED PORCH	180 SQ.FT.
DECK	93 SQ.FT.
STORAGE	161 SQ.FT.
TOTAL	1114 SQ.FT.

8/9/2022

220504B



Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	HUS410	USP	7	NA	16d/3-1/2"	16d/3-1/2"
●	THDH412	USP	1	NA	16d /3-1/2"	16d /3-1/2"

Products				
PlotID	Length	Product	Plies	Net Qty
BM1 (Flush)	16' 0"	1-3/4"x 14" LVL Kerto-S	2	2
BM3 (Flush)	14' 0"	1-3/4"x 14" LVL Kerto-S	2	2
BM2 (Flush)	14' 0"	1-3/4"x 14" LVL Kerto-S	3	3
GDH (Dropped)	22' 0"	1-3/4"x 23-7/8" LVL Kerto-S	3	3
BM4 (Dropped)	4' 0"	1-3/4"x 23-7/8" LVL Kerto-S	2	2

Truss Placement Plan
SCALE: 3/16" = 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

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

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#.

Signature Christine Shivy

Christine Shivy

LOAD CHART FOR JACK STUDS

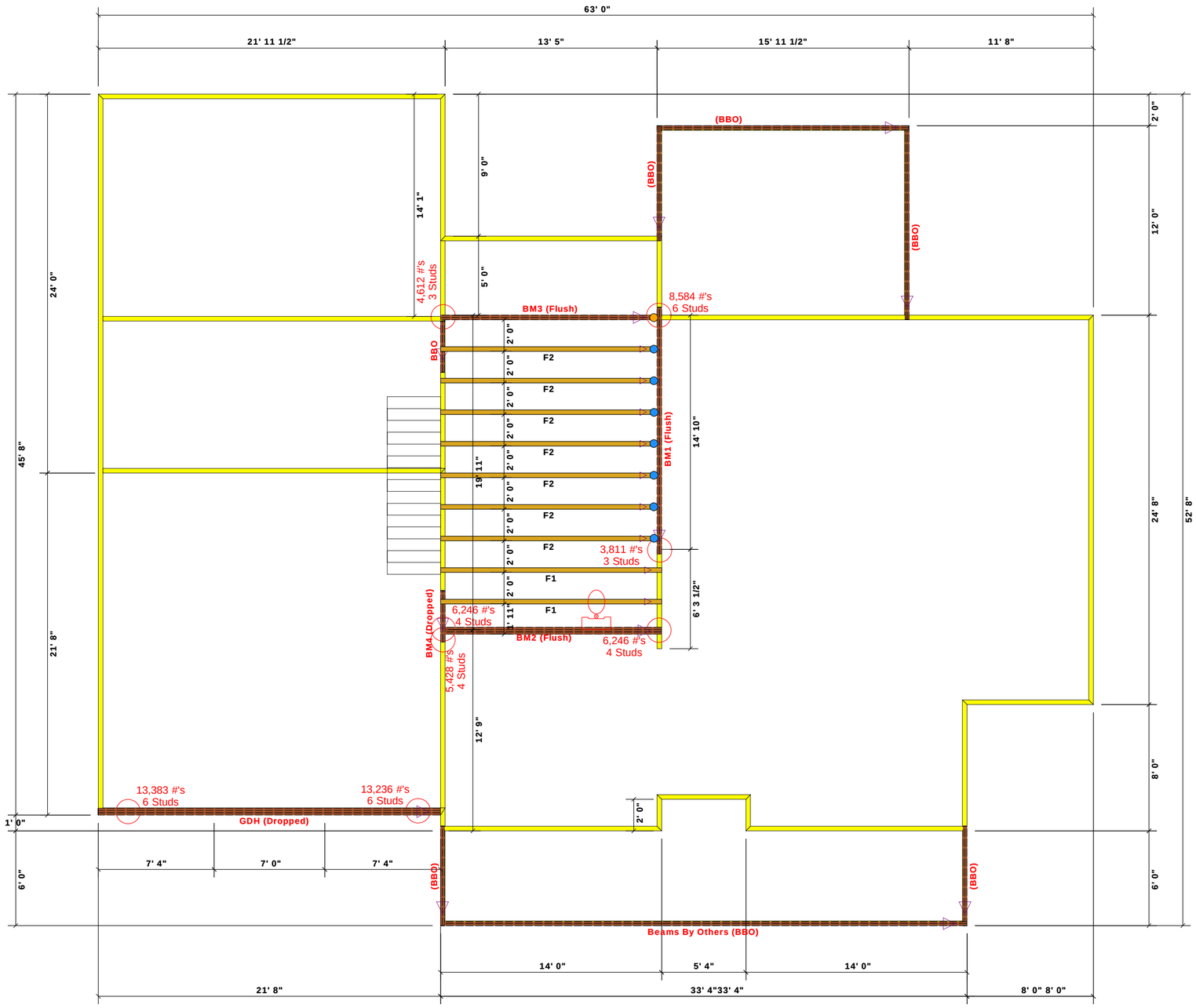
BASED ON TABLES R502.5(1) & (2)

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

END REACTION (LBS)	REQ'D STUDS FOR (2) 1-1/2" HEADER	END REACTION (LBS)	REQ'D STUDS FOR (3) 1-1/2" HEADER	END REACTION (LBS)	REQ'D STUDS FOR (4) 1-1/2" HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

BUILDER	Glover Design
JOB NAME	Lot 12 Purfoy Place
PLAN	Newport (220504B)
SEAL DATE	Seal Date
QUOTE #	Quote #
JOB #	J0722-3669
CITY / CO.	Harnett Co. / Harnett
ADDRESS	272 Lambert Lane
MODEL	Floor
DATE REV.	/ /
DRAWN BY	Christine Shivy
SALES REP.	Lenny Norris

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



Connector Information					Nail Information	
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	THDH412	USP	1	NA	16d /3-1/2"	16d /3-1/2"

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PlotID	Length	Product	Plies	Net Qty
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SCALE: 3/16" = 1'-0"

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(Reference Engineered Truss Drawing)

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Reaction / # of Studs

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8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

BUILDER	Glover Design
JOB NAME	Lot 12 Purfoy Place
PLAN	Newport (220504B)
SEAL DATE	Seal Date
QUOTE #	Quote #
JOB #	J0722-3669
CITY / CO.	Harnett Co. / Harnett
ADDRESS	272 Lambert Lane
MODEL	Floor
DATE REV.	/ /
DRAWN BY	Christine Shivy
SALES REP.	Lenny Norris

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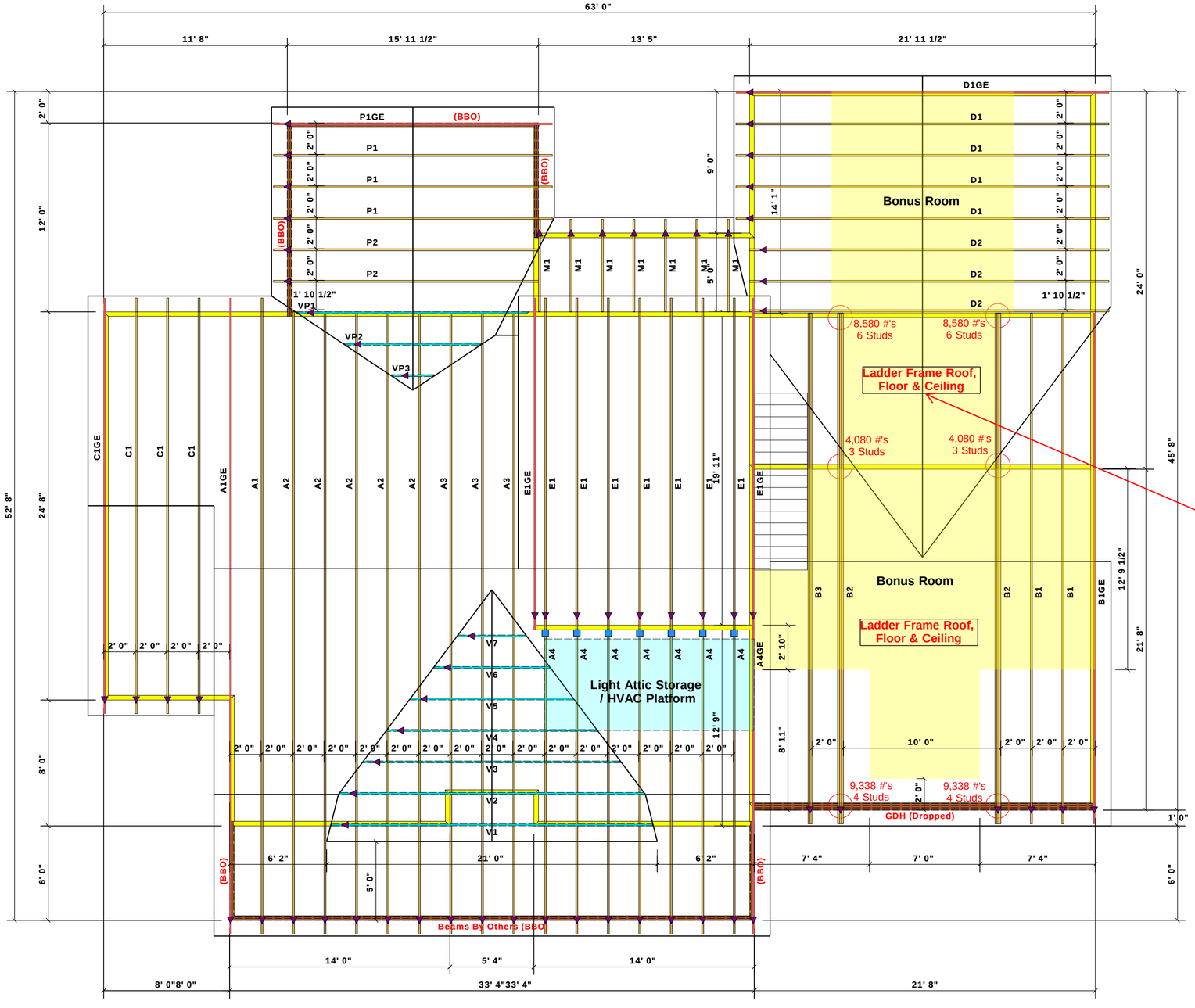

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
■	HUS26	USP	7	NA	16d/3-1/2"	16d/3-1/2"

Truss Placement Plan
SCALE: 3/16" = 1'-0"

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(Reference Engineered Truss Drawing)

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ROOF & FLOOR TRUSSES & BEAMS
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Fayetteville, N.C. 28309
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Fax: (910) 864-4444

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10200	6	15300	6		
11900	7				
13600	8				
15300	9				

BUILDER	Glover Design
JOB NAME	Lot 12 Purfoy Place
PLAN	Newport (220504B)
SEAL DATE	Seal Date
QUOTE #	Quote #
JOB #	J0722-3668
CITY / CO.	Harnett Co. / Harnett
ADDRESS	272 Lambert Lane
MODEL	Roof
DATE REV.	/ /
DRAWN BY	Christine Shivy
SALES REP.	Lenny Norris

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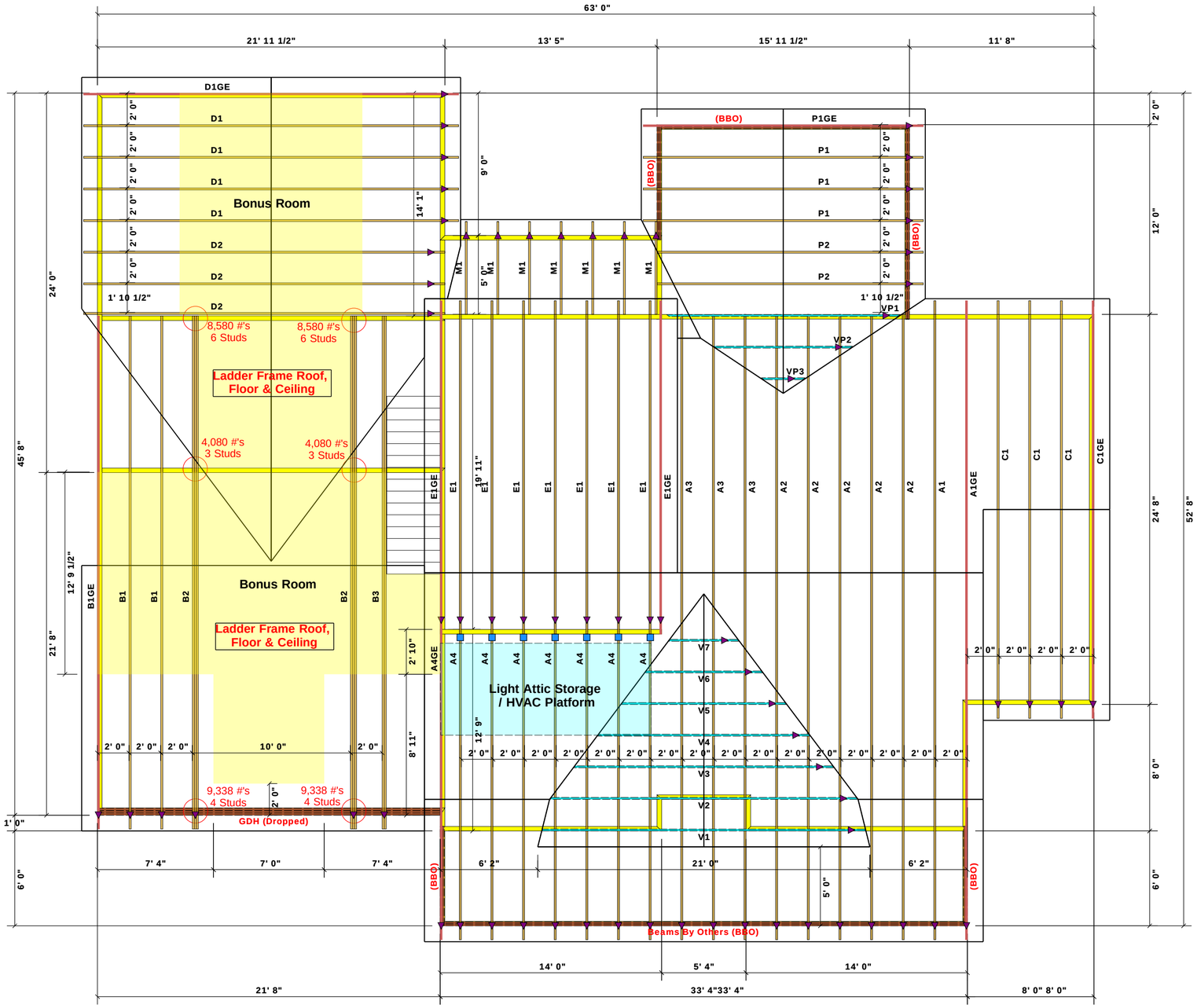

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
■	HUS26	USP	7	NA	16d/3-1/2"	16d/3-1/2"

Truss Placement Plan
SCALE: 3/16" = 1'-0"

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(Reference Engineered Truss Drawing)

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Fayetteville, N.C. 28309
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Signature Christine Shivy

Christine Shivy

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(BASED ON TABLES R502.5(1) & (3))

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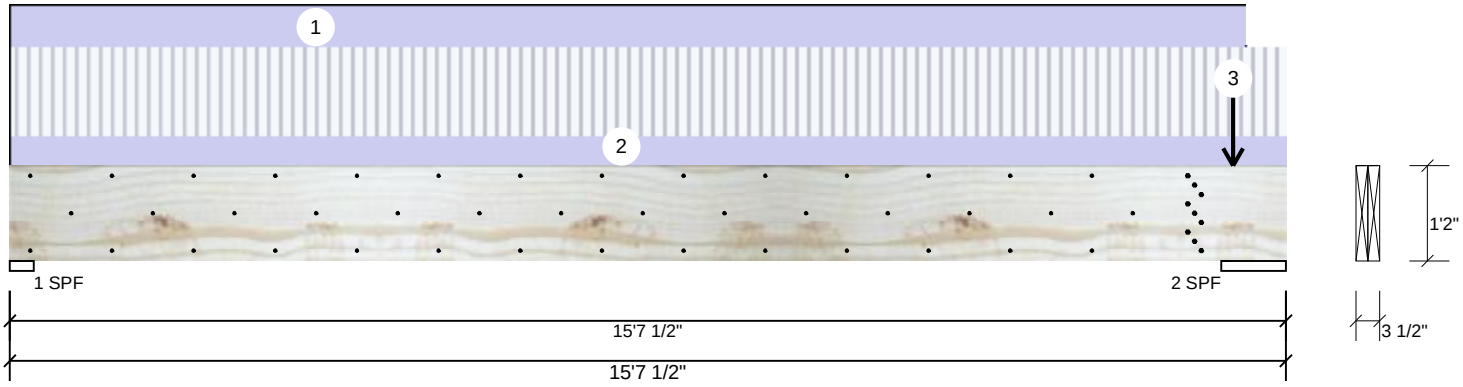
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

BUILDER	Glover Design
JOB NAME	Lot 12 Purfoy Place
PLAN	Newport (220504B)
SEAL DATE	Seal Date
QUOTE #	Quote #
JOB #	J0722-3668
CITY / CO.	Harnett Co. / Harnett
ADDRESS	272 Lambert Lane
MODEL	Roof
DATE REV.	/ /
DRAWN BY	Christine Shivy
SALES REP.	Lenny Norris

Client:	Glover	Date:	7/29/2022
Project:	Newport	Input by:	Christine Shivy
Address:	Newport	Job Name:	Newport
		Project #:	

BM1 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	2087	1723	0	0	0
2	Vertical	5663	2921	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	73%	1723 / 2087	3811	L	D+L
2 - SPF	9.500"	Vert	61%	2921 / 5663	8584	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13549 ft-lb	7'6 3/4"	26999 ft-lb	0.502 (50%)	D+L	L
Unbraced	13549 ft-lb	7'6 3/4"	13579 ft-lb	0.998 (100%)	D+L	L
Shear	3518 lb	13'8"	10453 lb	0.337 (34%)	D+L	L
LL Defl inch	0.197 (L/894)	7'6 13/16"	0.367 (L/480)	0.537 (54%)	L	L
TL Defl inch	0.360 (L/489)	7'6 13/16"	0.489 (L/360)	0.736 (74%)	D+L	L

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3. Refer to last page of calculations for fasteners required for specified loads.
4. Concentrated load fastener specification is in addition to hanger fasteners if a hanger is present.
5. Simpson fasteners applied from a single side of the member use tip values where published.
6. Girders are designed to be supported on the bottom edge only.
7. Top loads must be supported equally by all plies.
8. Top must be laterally braced at a maximum of 7'6 1/16" o.c.
9. Bottom must be laterally braced at end bearings.
10. Lateral slenderness ratio based on single ply width.

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.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL 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
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

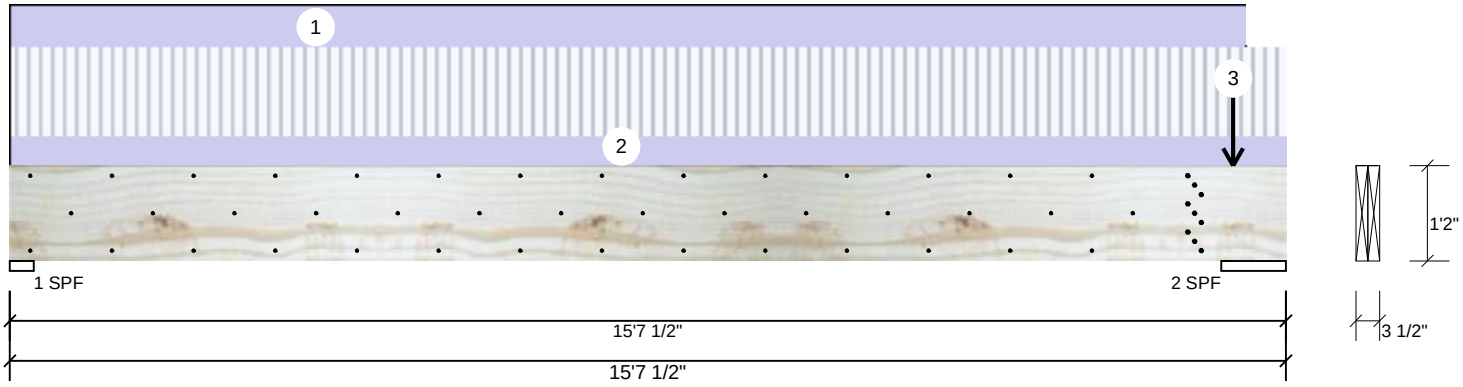
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

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

Client:	Glover	Date:	7/29/2022
Project:	Newport	Input by:	Christine Shivy
Address:	Newport	Job Name:	Newport
		Project #:	

BM1 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Part. Uniform	0-0-0 to 15-1-8		Top	125 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Exterior Wall
2	Uniform			Near Face	92 PLF	276 PLF	0 PLF	0 PLF	0 PLF	F2
3	Point	14-11-12		Near Face	1146 lb	3438 lb	0 lb	0 lb	0 lb	BM3
	Self Weight				11 PLF					

Notes

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Client:	Glover	Date:	7/29/2022
Project:	Newport	Input by:	Christine Shivy
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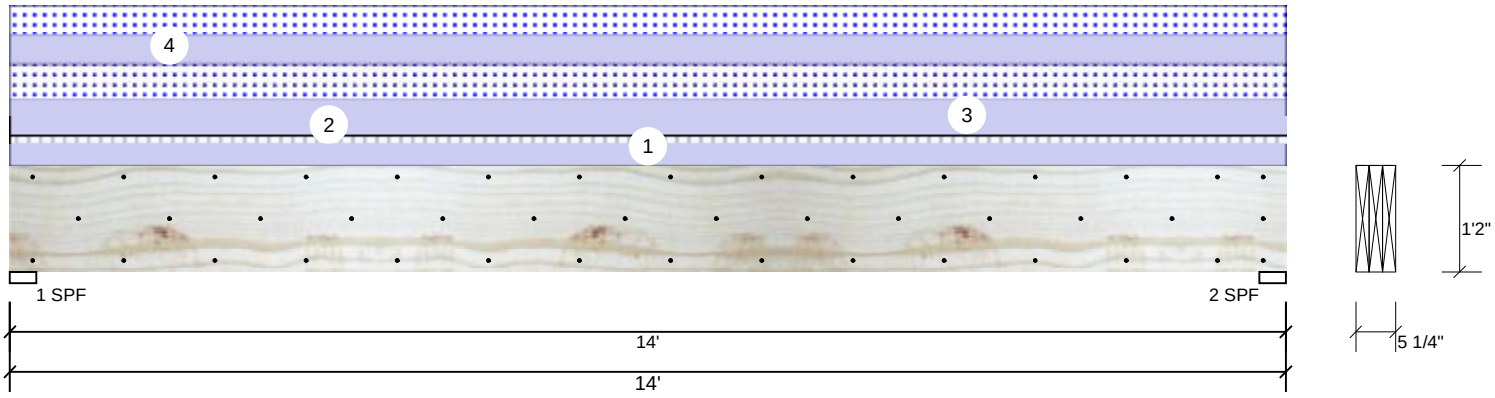
BM2 Kerto-S LVL 1.750" X 14.000" 3-Ply - PASSED

Level: Level



Member Information

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Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	280	3670	2576	0	0
2	Vertical	280	3670	2576	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	80%	3670 / 2576	6246	L	D+S
2 - SPF	3.500"	Vert	80%	3670 / 2576	6246	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	20454 ft-lb	7'	48437 ft-lb	0.422 (42%)	D+S	L
Unbraced	20454 ft-lb	7'	20467 ft-lb	0.999 (100%)	D+S	L
Shear	5376 lb	12'6 1/2"	18032 lb	0.298 (30%)	D+S	L
LL Defl inch	0.129 (L/1258)	7' 1/16"	0.339 (L/480)	0.382 (38%)	S	L
TL Defl inch	0.313 (L/519)	7' 1/16"	0.451 (L/360)	0.694 (69%)	D+S	L

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	125 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Load
2	Uniform			Far Face	15 PLF	40 PLF	0 PLF	0 PLF	0 PLF	Floor Load
3	Uniform			Top	199 PLF	0 PLF	199 PLF	0 PLF	0 PLF	E1
4	Uniform			Near Face	169 PLF	0 PLF	169 PLF	0 PLF	0 PLF	A4
	Self Weight				16 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.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL 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
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

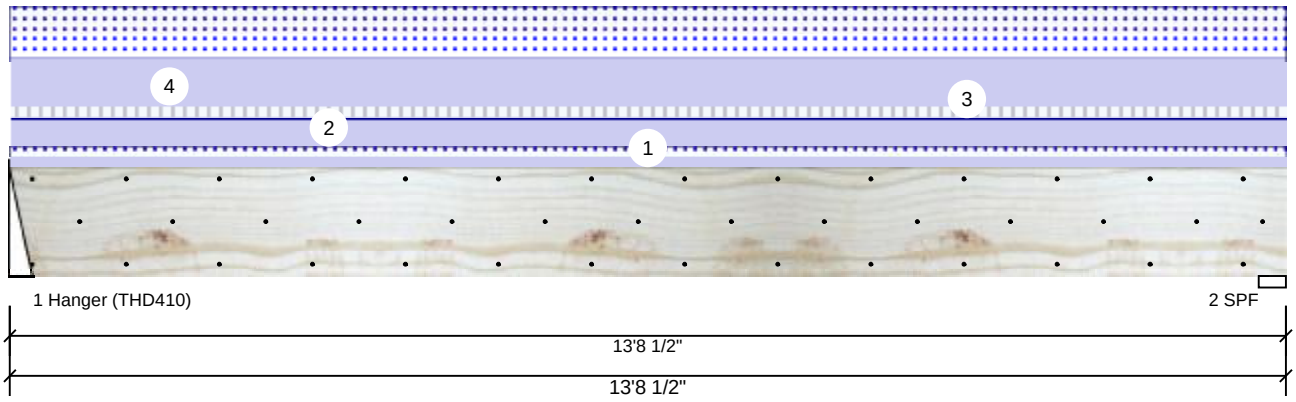
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

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

Client:	Glover	Date:	7/29/2022
Project:	Newport	Input by:	Christine Shivy
Address:	Newport	Job Name:	Newport
		Project #:	

BM3 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	273	2808	1777	0	0
2	Vertical	275	2825	1788	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	Vert	52%	2808 / 1777	4584	L	D+S
2 - SPF	3.500"	Vert	89%	2825 / 1788	4612	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	14816 ft-lb	6'10"	31049 ft-lb	0.477 (48%)	D+S	L
Unbraced	14816 ft-lb	6'10"	14824 ft-lb	0.999 (100%)	D+S	L
Shear	3769 lb	1'5"	12021 lb	0.314 (31%)	D+S	L
LL Defl inch	0.128 (L/1250)	6'10"	0.332 (L/480)	0.384 (38%)	S	L
TL Defl inch	0.329 (L/485)	6'10"	0.443 (L/360)	0.743 (74%)	D+S	L

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3. Refer to last page of calculations for fasteners required for specified loads.
4. Fill all hanger nailing holes.
5. Girders are designed to be supported on the bottom edge only.
6. Top loads must be supported equally by all plies.
7. Top must be laterally braced at a maximum of 6'10 7/8" o.c.
8. Bottom must be laterally braced at end bearings.
9. 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			Far Face	45 PLF	0 PLF	45 PLF	0 PLF	0 PLF	M1
2	Uniform			Top	125 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Exterior Wall
3	Uniform			Far Face	15 PLF	40 PLF	0 PLF	0 PLF	0 PLF	Floor Load
4	Uniform			Top	215 PLF	0 PLF	215 PLF	0 PLF	0 PLF	E1
	Self Weight				11 PLF					

Notes

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Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL 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
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

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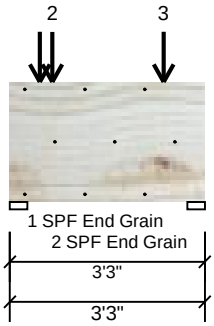
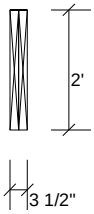
Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS

Client:	Glover	Date:	7/29/2022
Project:	Newport	Input by:	Christine Shivy
Address:	Newport	Job Name:	Newport
		Project #:	

BM4 Kerto-S LVL 1.750" X 24.000" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	3963	1464	0	0	0
2	Vertical	1285	471	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	53%	1464 / 3963	5428	L	D+L
2 - SPF End Grain	3.500"	Vert	17%	471 / 1285	1756	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2627 ft-lb	8 1/2"	73185 ft-lb	0.036 (4%)	D+L	L
Unbraced	2627 ft-lb	8 1/2"	57918 ft-lb	0.045 (5%)	D+L	L
Shear	1148 lb	11 1/2"	17920 lb	0.064 (6%)	D+L	L
LL Defl inch	0.003 (L/11939)	8 1/2"	0.070 (L/480)	0.040 (4%)	L	L
TL Defl inch	0.004 (L/8816)	8 1/2"	0.094 (L/360)	0.041 (4%)	D+L	L

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Point	0-6-0		Top	125 lb	0 lb	0 lb	0 lb	0 lb	Wall Load
	Bearing Length	0-3-8								
2	Point	0-8-8		Top	1562 lb	4685 lb	0 lb	0 lb	0 lb	BM2
	Bearing Length	0-3-8								

Continued on page 2...

Notes

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Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL 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
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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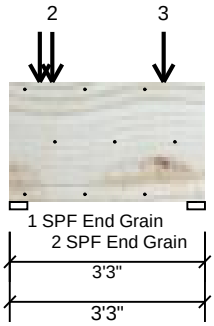
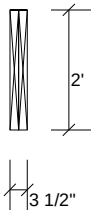
910-864-TRUS

Client:	Glover	Date:	7/29/2022
Project:	Newport	Input by:	Christine Shivy
Address:	Newport	Job Name:	Newport
		Project #:	

BM4 Kerto-S LVL 1.750" X 24.000" 2-Ply - PASSED

Level: Level





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ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
3	Point	2-6-12		Top	188 lb	563 lb	0 lb	0 lb	0 lb	F1
	Bearing Length	0-3-8								
	Self Weight				19 PLF					

Notes

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Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL 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
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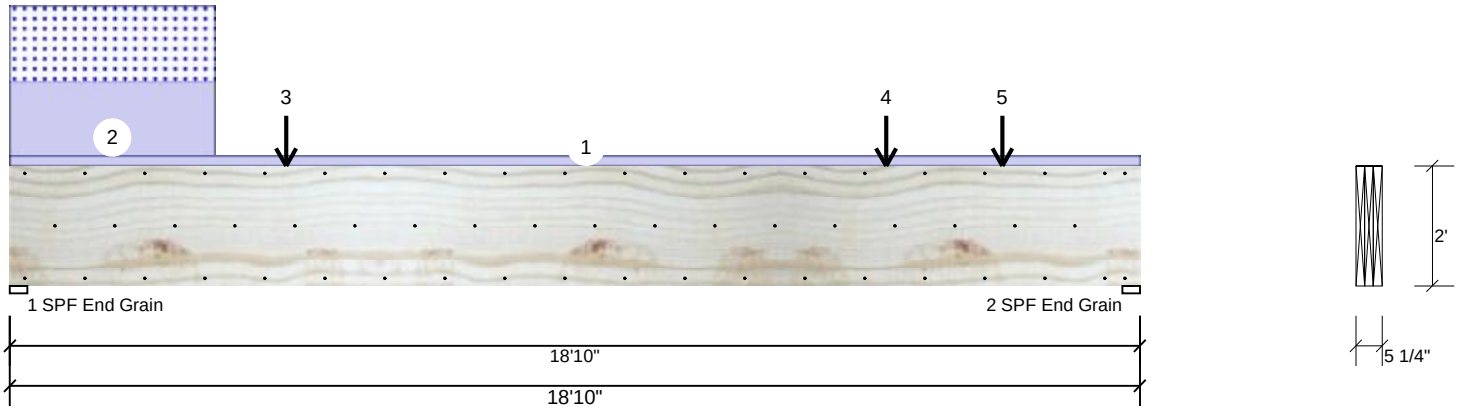
Client:	Glover	Date:	7/29/2022
Project:	Newport	Input by:	Christine Shivy
Address:	Newport	Job Name:	Newport
		Project #:	

GDH Kerto-S LVL 1.750" X 24.000" 3-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	3	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	Yes
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	7106	6277	0	0
2	Vertical	0	7033	6204	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	87%	7106 / 6277	13383	L	D+S
2 - SPF End Grain	3.500"	Vert	86%	7033 / 6204	13236	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	48572 ft-lb	7'11 1/16"	131295 ft-lb	0.370 (37%)	D+S	L
Unbraced	48572 ft-lb	7'11 1/16"	48751 ft-lb	0.996 (100%)	D+S	L
Shear	13091 lb	16'6 1/2"	30912 lb	0.423 (42%)	D+S	L
LL Defl inch	0.147 (L/1501)	9'4 11/16"	0.460 (L/480)	0.320 (32%)	S	L
TL Defl inch	0.316 (L/698)	9'4 13/16"	0.613 (L/360)	0.516 (52%)	D+S	L

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3. Refer to last page of calculations for fasteners required for specified loads.
4. Girders are designed to be supported on the bottom edge only.
5. Top loads must be supported equally by all plies.
6. Top must be laterally braced at a maximum of 5'5 15/16" o.c.
7. Bottom must be laterally braced at end bearings.
8. Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Exterior Load
2	Part. Uniform	0-0-0 to 3-5-0		Top	490 PLF	0 PLF	490 PLF	0 PLF	0 PLF	B1
3	Point	4-7-4		Top	4669 lb	0 lb	4669 lb	0 lb	0 lb	B2
	Bearing Length	0-3-8								

Continued on page 2...

Notes

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Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL 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
6. For flat roofs provide proper drainage to prevent ponding

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Project:	Newport	Input by:	Christine Shivy
Address:	Newport	Job Name:	Newport
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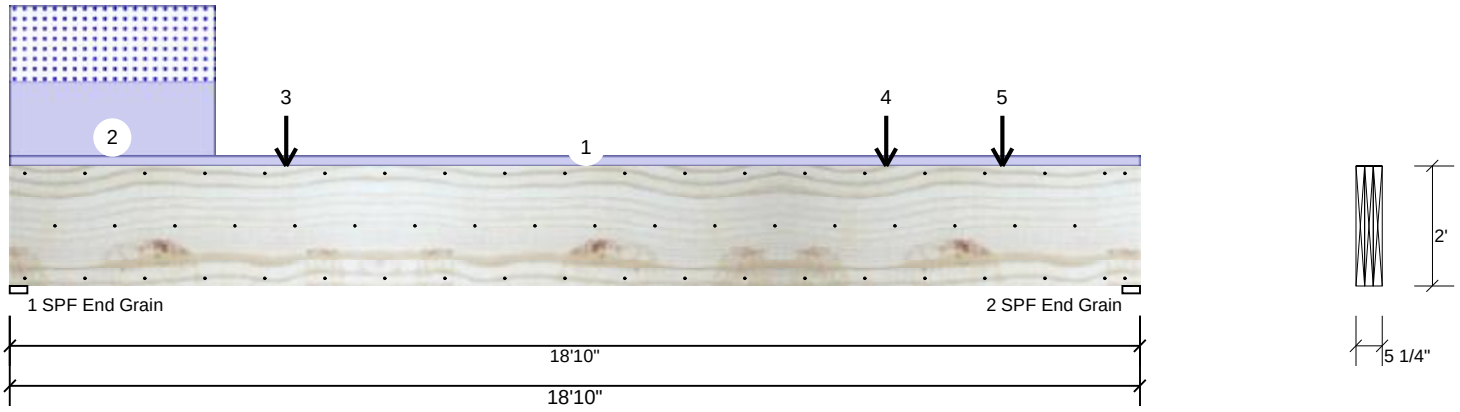
GDH Kerto-S LVL 1.750" X 24.000" 3-Ply - PASSED

Level: Level



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ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
4	Point	14-7-4		Top	4669 lb	0 lb	4669 lb	0 lb	0 lb	B2
	Bearing Length	0-3-8								
5	Point	16-6-8		Top	1469 lb	0 lb	1469 lb	0 lb	0 lb	B3
	Bearing Length	0-3-8								
	Self Weight				28 PLF					

Notes

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Lumber

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Handling & Installation

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