

SEE ELEVATION FOR WALL HEIGHTS

NOTE... ELECTRICAL SERVICE TO BE 200 AMP.

NOTE... POUBLE JOIST UNDER

ALL PARALLEL WALLS

ABOVE UNLESS NOTED

9.V. = 9

= SMOKE DETECTOR

GENERAL HEADER SPECIFICATIONS:					
REQUIRED AREAS NEEDING HEADERS:	RED AREAS NEEDING HEADERS: HEADER DESCRIPTIONS:				
WINDOWS/DOORS UP TO 38" R.O.	(2) #2 D-FIR 2XIO'S				
WINDOWS/DOORS 38" UP TO 72" R.O.	(2) #2 P-FIR 2XIO'S W/I/2" GLUE PLY				
WINDOWS/DOORS 72" UP TO 96" R.O.	(2) 9 1/2" L.V.L.				
8'0" GARAGE DOORS W/CEILING & ROOF LOAD	(2) 9 1/2" L.V.L.				
9'0" GARAGE DOORS W/CEILING & ROOF LOAD	(2) 9 1/2" L.V.L.				
8'0" GARAGE DOORS W/SECOND FLOOR	(2) 9 1/2" L.V.L.				
9'0" GARAGE DOORS W/SECOND FLOOR	(2) 7/8" L.V.L.				
16'0" GARAGE DOOR W/NO SECOND FLOOR	(2) 7/8" L.V.L.				
16'0" GARAGE DOORS W/SECOND FLOOR	(2) 14" L.V.L.				

USE HEADERS FOR OPENINGS ABOVE UNLESS SPECIFIED OTHERWISE.

R312.2.1 Window sills.

In dwelling units, where the opening of an operable window is located more than 72 inches (1820 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-diameter (102 mm) sphere where such openings are located within 24 inches (610 mm) of the finished floor.

Exceptio

- I. 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 ASTM F 2090.
- 3. Windows that are provided with window opening control devices that comply with Section R312.2.2.

R312.2.2 Window opening control devices.

Window opening control devices shall comply with ASTM F 2000. The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section R310.1.1.

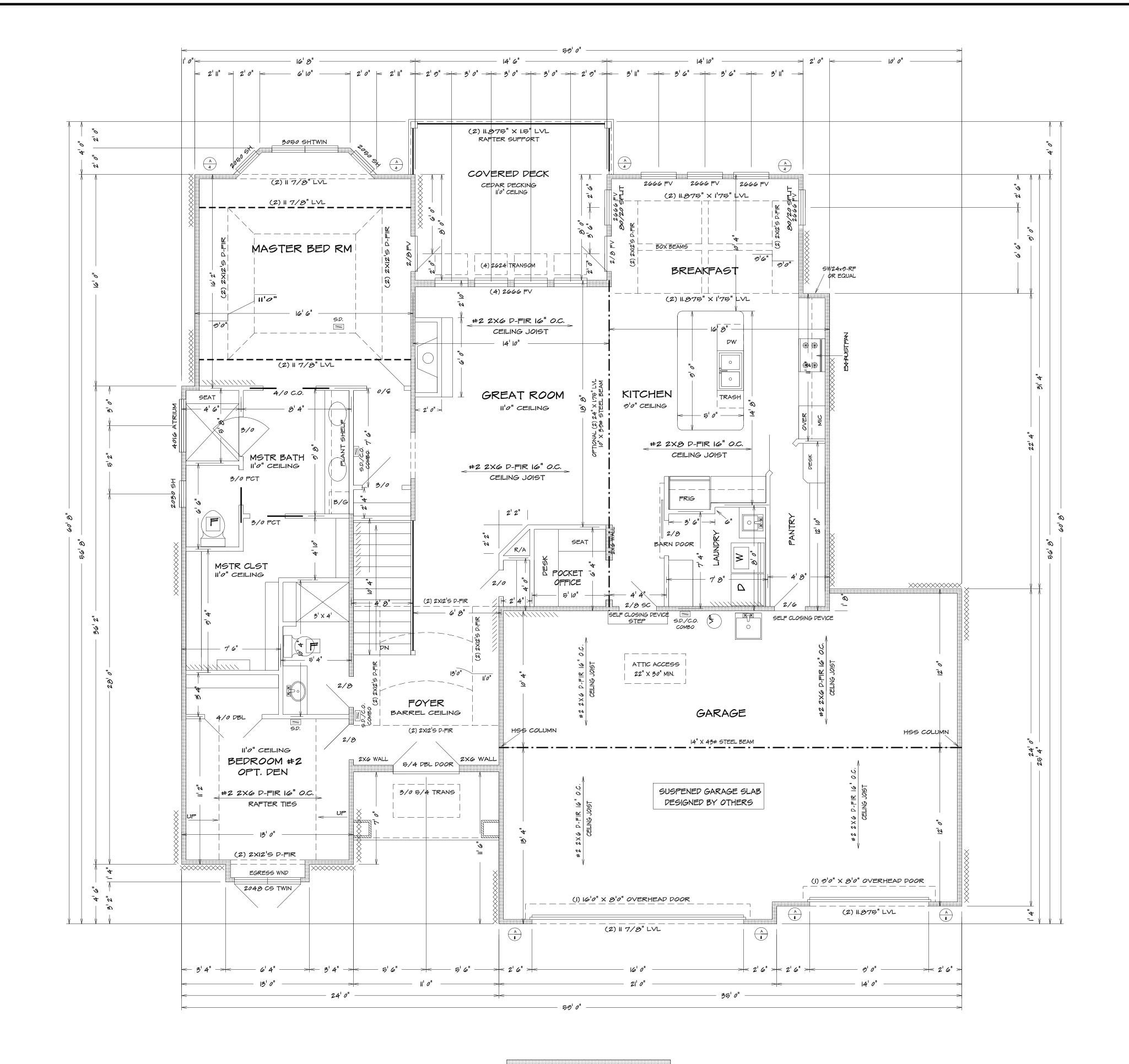
Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet, one-half of which must be openable.

Exception:

The glazed areas shall not be required where artificial light and a local exhaust system are provided.

The minimum local exhaust rates shall be determined in accordance with Section MI507.

Exhaust air from the space shall be exhausted directly to the outdoors.



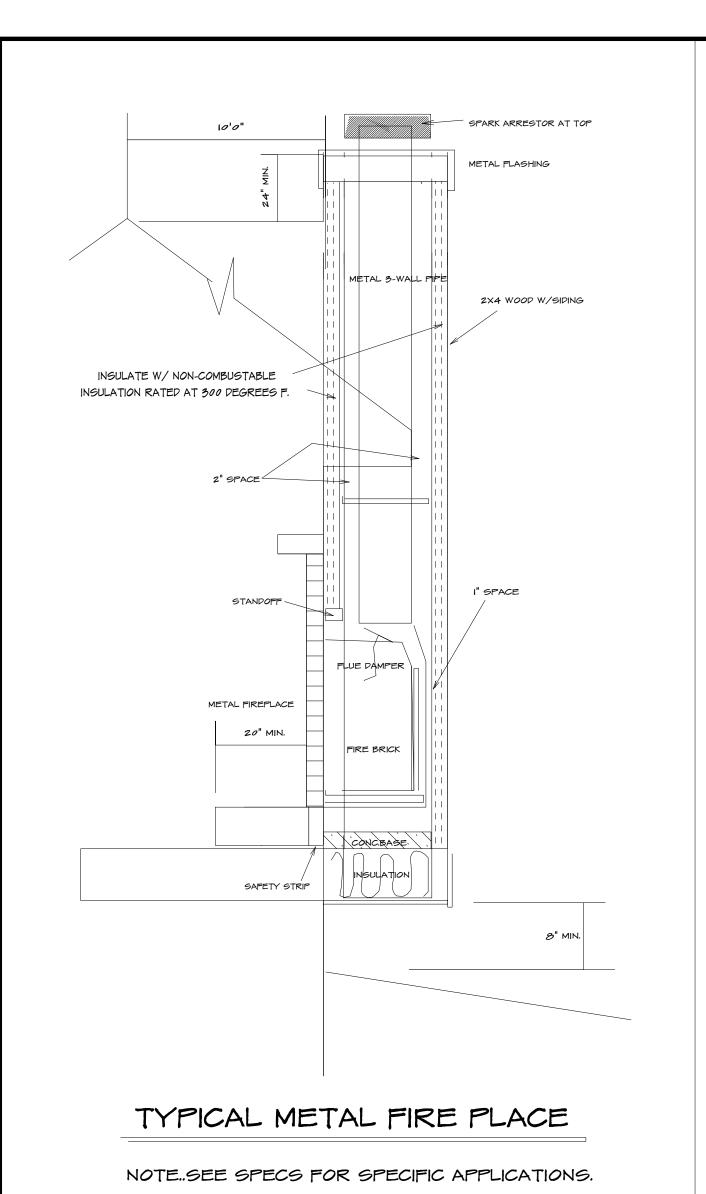
ALL NOTES, SECTIONS, AND DRAWINGS ARE IN ACCORDANCE WITH THE 2018 IRC

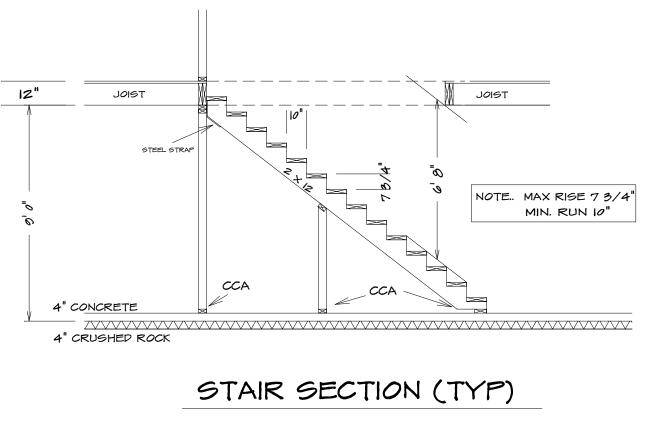
FIRST FLOOR PLAN

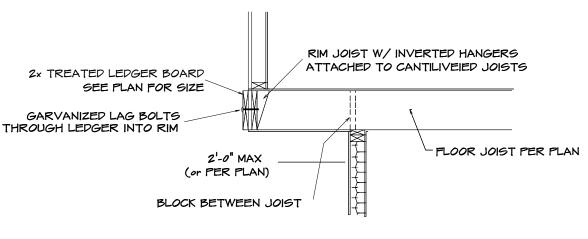
1/4" = 1'0"

BEARING WALL LINES



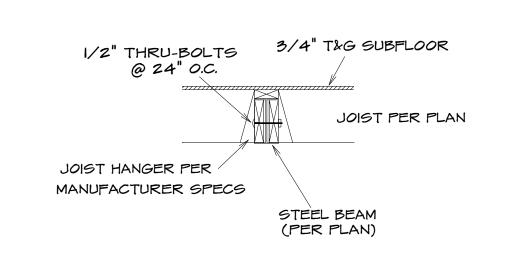






DECK JOIST SPAN	1/2" O LAG SPACING	EQUIVALENT SPACING FOR IG" O.C. JOIST BAYS	
UP TO 10'-0"	16" O.C.	N/A	
10'-0" -14'-0"	12" O.C.	16" O.C. DBL. EVERY OTHER	
14'-0" -18'-0"	8" o.c.	16" O.C. DBL. EVERY JOIST BAY	

TYPICAL CANTILEVER FRAMING W/ DECK ATTACHMENT



TYPICAL WALL SECTION

ROOFING MATERIAL 240 LB ASPHALT SHINGLES

7/16" OSB SHEATHING

2-PLY 15# FELT

ICE BEARIER

self-adhering polymer

METAL EDGE

GUTTER -

IX8 FASCIA

SOFFIT BOARD -

2X4 NAILER-

IX4 TRIM BOARD —

2X6 SUB-FASCIA

SOFFIR VENTS 8' O.C.

7/16" OSB SHEATHING

W/ TYVEX HOUSE WRAP

7/16" OSB SHEATHING

UNDERNEATH

RIM JOIST

8" MIN.

TREATED SILL PLATE

WATERPROOF BELOW GRADE

FOR REBAR LOCATION AND SPACING

SEE FOUNDATION NOTES

8" CONC. WALL -

4" DRAIN TILE

CONC. FOOTING

SEE FOUNDATION NOTES

GRADE

SILL SEALER

W/ TYVEX HOUSE WRAP

UNDERNEATH

FAFTER ATTIC SPACE

R-40 INSULATION (MIN)

CEILING JOIST

1/2" GYP. BOARD

-1/2" GYP. BOARD

R-10 OR R13+5

INSULATION

- DOUBLE TOP PLATE

EXTERIOR SHEATHING

-2X4 STUD @ 16" O.C.

FLOOR JOIST-PER PLAN

<−− 1/2" GYP. BOARD

INSULATION

R-10 OR R13+5

- EXTERIOR SHEATHING

— 2X4 STUD @ 16" O.C.

FLOOR JOIST-PER PLAN

1/2" ANCHOR BOLTS

@ 36" O.C. (MIN. 7")

4" CONC. SLAB MIN

4" ROCK MIN

UNDISTURBED SOIL

3/4" T&G SUBFLOOR

PER PLAN

3/4" T&G SUBFLOOR

- BAFFLE FOR POSITIVE VENTILATION

PER PLAN

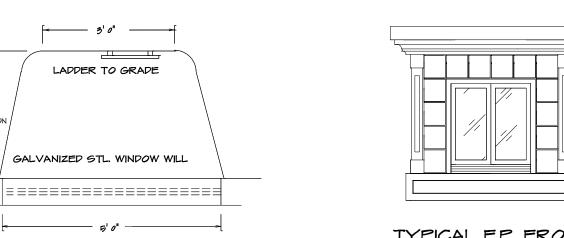
6" CONC. SLAB W/#4 BARS @ 12" O.C. BOTH-WAYS W/1" TO I-I/2" BOTTOM CLEARANCE METAL FLASHING OVER EPDM SLOPE SLAB 1/8"-1/4" PER FT. CAULKING - SEALANT LAYER DRILL/EMBED MIN. 5" INTO FOUNDATION #4 REBARS CONTINUOUS AROUND PERIMETER FOUNDATION WALL OF SUSPENDED SLAB FOUNDATION WALL PER PLAN PER PLAN

FORMWORK OPTIONS:

MIN. INSIDE DIMENSI

- I. PROVIDE VULCRAFT 2VLI (OR EQUAL CORRUGATED DECKING (SHORE AT MID-SPAN DURING CONSTRUCTION) or
- 2. PLYWOOD FORMS WITH EXPANDABLE BAR JOIST OR TEMPORARY FRAMED WALLS BY CONTRACTOR

SUSPENDED PORCH STOOP DETAIL OPTIONAL



PORCH SLAB (6'SPAN OR LESS)

3. #4 REBARS AT 12" O.C. EACH WAY

4. MIN. I-I/2" OF CONTINUIUS BEARING

5. PORCH SLAB GREATER THEN 6' SHALL BE

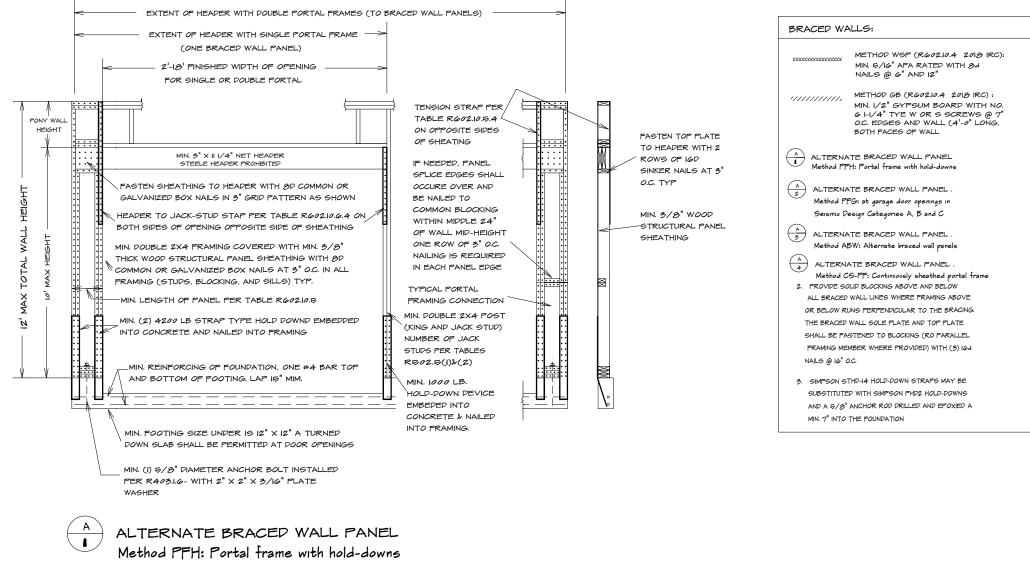
TREATED AS AN ELEVATED GARAGE SLAB

. MAXIMUM SPAN = 6'

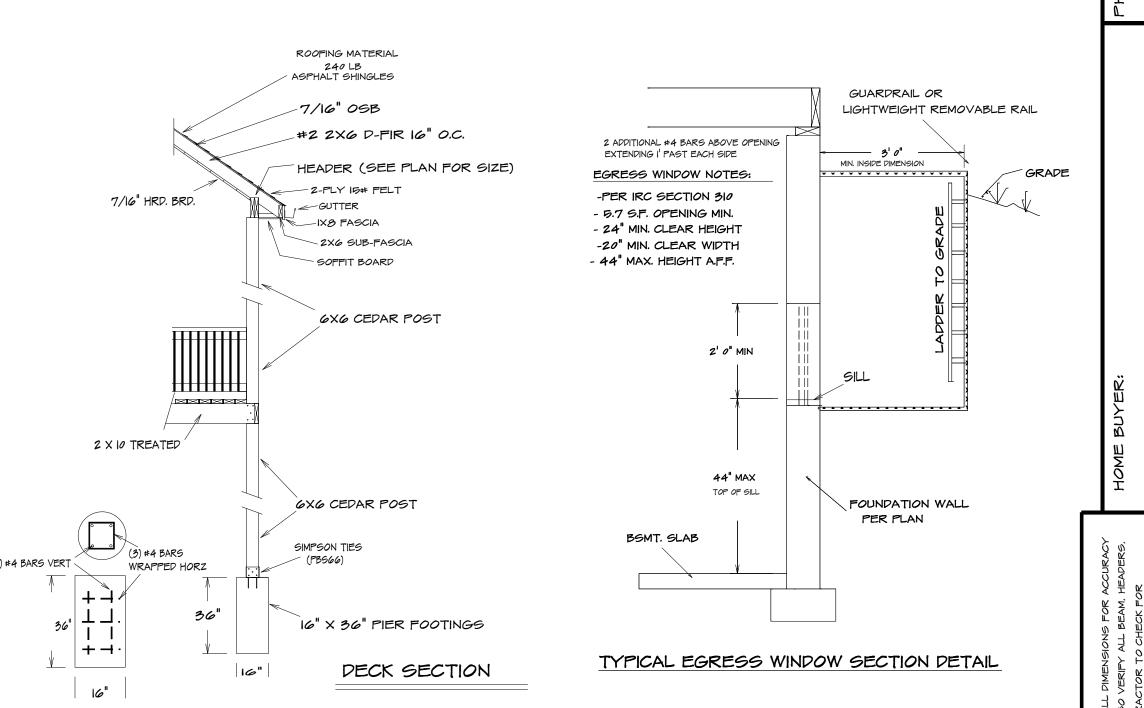
2. MINIMUM 6" THICKNESS

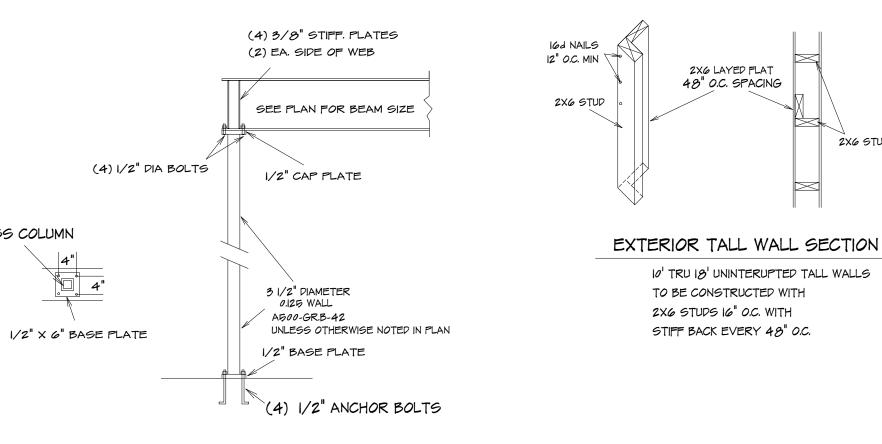
AT THE EDGES OF SLAB

TYPICAL F.P. FRONT



BRACED WALL SECTION





ALL NOTES, SECTIONS, AND DRAWINGS ARE IN ACCORDANCE WITH THE 2018 IRC

2X6 STUD

GARAGE

I. THE GARAGE FLOOR SHALL BE SLOPED TOWARD GARAGE DOORS 2. DOORS BETWEEN GARAGE AND DWELLING - MIN | 3/3" SOILD CORE OR HONEY COMBED STEEL DOOR OR 20 MIN. RATED 3. GARAGE TO HAVE 5/8" TYPE X GYPSUM THROUGHTOUT

4. THE H-FRAM SHALL CONSIST OF 2X6 FRAMING

GLAZING

GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC SECTION R308.4 SHALL BE APPROVED SAFTY GLAZING MATERIALS: GLASS IN STORM DOORS, INDIVIDUAL FIXED OR OPENABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARCH OF THE DOOR IN CLOSED POSITION AND WHOSE BOTTEM EDGE IS WITHIN 60" OF THE FLOOR: WALLS ENCLOSED STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTEM OF THE STAIR: ENCLOSURES FOR SPAS, TUBS, SHOWERS, AND WHIRLPOOLS: GLAZING IN FIXED OR OPENABLE PANELS EXCEEDING 9 SQ. FT. AND WHOSE BOTTEM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR

EMERGENCY EGRESS

PROVIDE ONE WINDOW FROM EACH BEDROOM THAT HAS A MIN. OPENABLE AREA OF 5.7 SR. FT. WITH A MIN. OPENABLE HEIGHT OF 24" AND WIDTH OD 21"

ELECTRICAL OUTLETS

. ALL OUTLETS TO BE ARC FAULT CIRCUIT-INTERRUPTER OR GROUND FAULT CIRCUIT-INTERRUPTER PROTECTED EXCEPT.. REFRIGERATOR, SINGLE OUTLET FOR SUMP PUMP AND SINGLE OUTLET IN GARAGE FOR A FREEZER

2. ALL OUTLETS TO BE TAMPER RESISTANT

CARBON MONOXIDE ALARMS

Carbon monoxide alarms. For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in

dwelling units that have attached garages. Carbon monoxide detection systems that include carbon

monoxide detectors and audible notification appliances, i nstalled and maintained in accordance with this section for carbon monoxide alarms and NFPA 720, shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075. Where a household carbon monoxide detection system is installed, it shall become a permanent fixture of the occupancy, owned by the homeowner and shall be monitored by an approved

FRAMING NOTE

supervising station.

I. ALL LUMBER SIZES ARE FOR #2 D-FIR-LARCH

- 2. ALL HEADERS TO BE MIN. (2) #2-2XI0 3. BLOCK CANTILEVERS, DOOR JAMBS, AND OVER BEAMS
- 4. ALL HEADRS TO BEAR ON MIN. OF (2) 2X4 STUDS 5. JOIST UNDER BEARING PARTITIONS SHALL BE DOUBLED AND COMPLY WITH IRC SEC. R502.4
- 6. WATER-RESISTIVE BARRIER SHALL BE PROVIDED OVER ALL EXTERIOR WALL PER IRC SEC. R703
- 7. WHERE CEILING JOIST ARE NOT INSTALLED CONNECTED TO THE RAFTERS AT THE TOP PLATE AND/OR WHERE CEILING JOIST ARE NOT INSTALLED IN THE LOWER 1/3 OF ATTIC SPACE RAFTER TIES SHALL BE INSTALLED IN THE LOWER 1/3 OF ATTIC SPACE
- 8. COLLAR TIES SHALL BE PROVIDED IN THE ATTIC SPACE IN THE UPPER 1/3 OF ATTIC
- 9. ROOF IS DESIGNED FOR 20 P.S.F. ROOF SNOW LOAD (MIN.) 0. MIN 20 YR. ASPHALT SHINGLES
- II. RAFTER TIES SHALL NOT BE REQUIED WHEN A STRUCTURAL FLOOR OVER HEATED SPACE RIO RIDGE HAS BEEN PROVIDED AND ADEQUATELY DESIGNED FLOOR OVER OUTSIDE AIR RIO ATTIC - BLOWN IN R40 (AS IN A FULLY VAULTED ROOM) SUCH SHALL BE NOTED AS CATHEDRAL CEILING "STRUCTURAL" ON THE PLAN. PER IRC SEC. 802.3

Guard opening limitations. Required guards on open sides of stairways, raised floor areas, balconies, and porches shall have intermediate rails or ornamental closures that do not allow passage of a sphere 4" or more in diameter.

UPSET STEEL BEAM/JOIST CONNECTION

Opening protection. Openings from a private garage directly

into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches in thickness, solid or honeycomb-core steel doors not less than 13/8 inches thick, or 20-minute fire-rated

doors, equipped with a self-closing device.

SMOKE ALARMS:

2018 IRC. PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING ROOM AND ON EACH FLOOR, INCLUDING BASEMENT. ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE DWELLING. (SECTION R314.5)

INSULATION NOTES:

MIN. INSULATION SHALL BE PROVIDED ADJACENT TO HABITABLE AREAS AS EXTERIOR FRAMED WALLS (RIO OR RI3+5)

TYPICAL EGRESS WINDOW PLAN SECTION

LADDER TO GRADE

3" HSS COLUMN

HSS COLUMN DETAIL

Foundation Wall Reinforcement Schedule - Table 2

Concrete strength/Grade	acing 60 psf soil 8 inch thick wall			10 inch thick wall		
Reinforcement #4 bar	8'	9'	10'	8'	9'	10'
3,000 psi / Grade 40	16	12	NP	24	16	12
3,500 psi / Grade 40	16	12	NP	24	24	12
3,000 psi / Grade 60	24	16	NP	24	20	16
3,500 psi / Grade 60	24	16	NP	24	24	16
Horizontal reinforcement -	- Minim	num Gr	ade 40	steel	#4	bar
One bar 12" from top of wall; maximum spacing 24" o.c.	4-#4	5-#4	6-#4	4-#4	5-#4	6-#4

- 1) Wall height is measured from the top of the wall to the top of the floor slab.
- 2) Vertical reinforcement for concrete walls that are not full height and for reinforcement spaced 24 inch on center may be placed in the middle of the wall. Other walls shall have vertical reinforcement place as follows:
- a) 8-inch wall Minimum 5 inches from the outside face.
- b) 10-inch wall Minimum 6.75 inches from the outside face. c) Extend bars to within 8 inches of the top of the wall.
- 3) Reinforcement clearances:
- a) Concrete exposed to earth minimum 1-1/2 inches.
- b) Not exposed to weather (interior side of walls) minimum 3/4 inch.
- c) Concrete exposed to weather (top clearance in garage and driveway slabs)- 1-1/2 inches. Horizontal reinforcement:
- a) One bar shall be placed within 12 inches of the top of the wall.
- b) Other bars shall be equally spaced with spacing not to exceed 24 inches on center.
- c) Horizontal bars should be as close to the tension face as possible (interior) and behind the vertical reinforcement (i.e.2" towards the inside).
- d) Supplemental reinforcement at corners Place 1 #4 bar 48 inches long at 45 degree angle at corners of openings per Figure 4a. Place reinforcement within 6" of the edge of
- 5) Reinforcement shall be lapped a minimum 24 inches at ends, splices, and around corners. 6) At masonry ledges the minimum wall thickness shall be 3-1/2 inches. Ledges shall not
- exceed a depth of more than 24 inches below the top of the wall. For wall thicknesses less than 4 inches provide #4 bars at maximum 24 inches on center to within 8 inches of the top of the wall.
- Straight walls more than 5 feet tall and more than 16 feet long shall be provided with exterior braced return walls. Wall length shall be measured using inside the shortest dimension between intersecting walls (See 7/S2).

TABLE R602.3(1)—continued FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

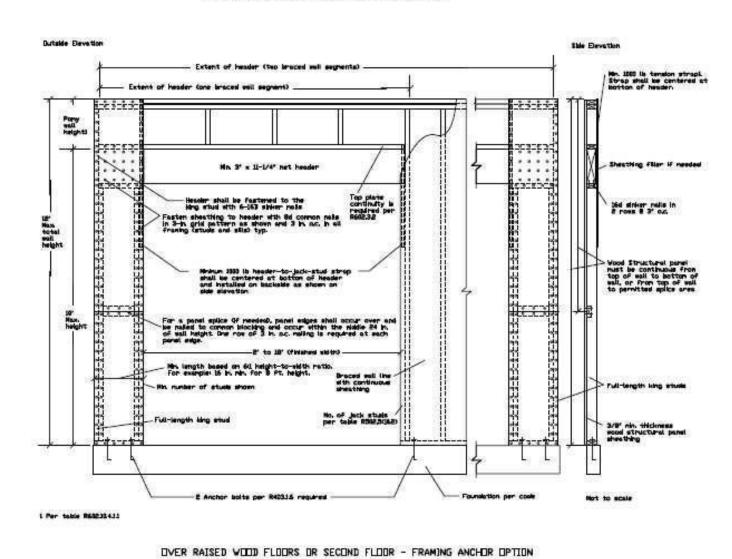
5 0000	DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER ^{b, c, e}	SPACING OF FASTENERS		
ITEM			Edges (inches) ⁱ	Intermediate supports ^{c, e} (inches)	
Wo	ood structural panels, su	sheathing to fr	ll sheathing to aming	framing and particleboard wall	
32	3/8" - 1/2"	6d common (2" × 0.113") nail (subfloor wall) ^j 8d common (2 ¹ / ₂ " × 0.131") nail (roof) ^f	6	12 ⁹	
33	19/32" - 1"	8d common nail (2 ¹ / ₂ " × 0.131")	6	12 ⁹	
34	11/8" - 11/4"	10d common (3" × 0.148") nail or 8d (2 ¹ / ₂ " × 0.131") deformed nail	6	12	
		Other wall shea	athing ^h	,	
35	¹ / ₂ " structural cellulosic fiberboard sheathing	$1^1/_2$ " galvanized roofing nail, $^7/_{16}$ " crown or 1" crown staple 16 ga., $1^1/_4$ " long	3	6	
36	²⁵ / ₃₂ " structural cellulosic fiberboard sheathing	1 ³ /4" galvanized roofing nail, ⁷ / ₁₆ " crown or 1" crown staple 16 ga., 1 ¹ / ₂ " long	3	6	
37	¹ / ₂ " gypsum sheathing ^d	1 ¹ / ₂ " galvanized roofing nail; staple galvanized, 1 ¹ / ₂ " long; 1 ¹ / ₄ screws, Type W or S	7	7	
38	⁵ /8" gypsum sheathing ^d	1 ³ /4" galvanized roofing nail; staple galvanized, 1 ⁵ /8" long; 1 ⁵ /8" screws, Type W or S	7	7	
Â	Wood stru	ctural panels, combination	subfloor unde	rlayment to framing	
39	³ /4" and less	6d deformed (2" × 0.120") nail or 8d common (2 ¹ / ₂ " × 0.131") nail	6	12	
40	⁷ /8" - 1"	8d common (2 ¹ / ₂ " × 0.131") nail or 8d deformed (2 ¹ / ₂ " × 0.120") nail	6	12	
41	11/8" - 11/4"	10d common (3" × 0.148") nail or 8d deformed (2 ¹ / ₂ " × 0.120") nail	6	12	

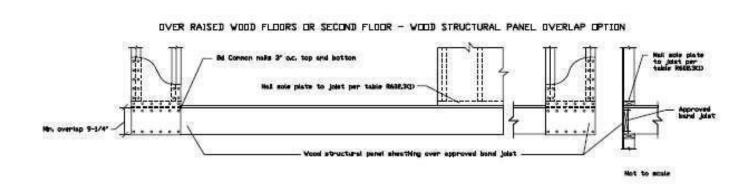
For SI: 1 inch = 25.4 mm. 1 foot = 304.8 mm. 1 mile per hour = 0.447 m/s: 1 Ksi = 6.895 MPa.

TABLE R602.3(1) FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{a, b, c}	SPACING OF FASTENERS		
South	Blocking between joists or	Roof 3-8d (2 ¹ / ₂ " ×			
1	rafters to top plate, toe nail	0.113")	897		
2	Ceiling joists to plate, toe nail	3-8d (2 ¹ /2" × 0.113")	80-		
3	Ceiling joists not attached to parallel rafter, laps over 3-10d partitions, face nail				
4	Collar tie to rafter, face nail or 1 ¹ / ₄ " × 20 gage ridge strap	3-10d (3" × 0.128")	16—		
5	Rafter or roof truss to plate, toe nail (31/2" × 0.135") or 3-10d common		2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss ^j		
6	3-16d (3 ¹ / ₂ " × 0.135")		8-		
7	Built-up studs-face nail	Wall 10d (3" × 0.128")	24" o.c.		
8	Abutting studs at intersecting	16d (3 ¹ / ₂ " ×	12" o.c.		
-	wall corners, face nail Built-up header, two pieces	0.135") 16d (3 ¹ / ₂ " ×	12 o.c.		
9	with ¹ / ₂ " spacer	0.135″)	edge		
10	Continued header, two pieces	16d (3 ¹ / ₂ " × 0.135")	16" o.c. along each edge		
11	Continuous header to stud, toe nail	4-8d (2 ¹ / ₂ " × 0.113")	8 -		
12	Double studs, face nail	10d (3" × 0.128")	24" o.c.		
13	Double top plates, face nail Double top plates, minimum	10d (3" × 0.128")	24" o.c.		
14	24-inch offset of end joints, face nail in lapped area	8-16d (3 ¹ / ₂ " × 0.135")	99—		
15	Sole plate to joist or blocking, face nail	16d (3 ¹ / ₂ " × 0.135")	16" o.c.		
16	Sole plate to joist or blocking at braced wall panels	3-16d (3 ¹ / ₂ " × 0.135")	16" o.c.		
17	Stud to sole plate, toe nail	3-8d (2 ¹ / ₂ " × 0.113") or 2-16d (3 ¹ / ₂ " × 0.135")	XT-175		
18	Top or sole plate to stud, end nail	2-16d (3 ¹ / ₂ " × 0.135")	25-		
19	Top plates, laps at corners and intersections, face nail	2-10d (3" × 0.128")	11-		
20	1" brace to each stud and plate, face nail	2-8d (2 ¹ / ₂ " × 0.113") 2 staples 1 ³ / ₄ " ×	74_725		
21	1" × 6" sheathing to each bearing, face nail	2-8d (2 ¹ / ₂ " × 0.113") 2 staples 1 ³ / ₄ "	8-1-2		
22	1" × 8" sheathing to each bearing, face nail	2-8d (2 ¹ / ₂ " × 0.113") 3 staples 1 ³ / ₄	VT-250		
23	Wider than 1" × 8" sheathing to each bearing, face nail	3-8d (2 ¹ / ₂ " × 0.113") 4 staples 1 ³ / ₄ "	12-2		
		Floor	I		
24	Joist to sill or girder, toe nail	3-8d (2 ¹ / ₂ " × 0.113")	8 -		
25	Rim joist to top plate, toe nail (roof applications also)	8d (2 ¹ / ₂ " × 0.113")	6" o.c.		
26	Rim joist or blocking to sill plate, toe nail	8d (2 ¹ / ₂ " × 0.113")	6″ o.c.		
27	1" × 6" subfloor or less to each joist, face nail	2-8d (2 ¹ / ₂ " × 0.113") 2 staples 1 ³ / ₄ "	* <u>-</u> -		
28	2" subfloor to joist or girder, blind and face nail	2-16d (3 ¹ / ₂ " × 0.135")	85		
29	2" planks (plank & beam - floor & roof)	2-16d (3 ¹ / ₂ " × 0.135")	at each bearing		
30	Built-up girders and beams, 2-inch lumber layers		Nail each layer as follows: 32" o.c. at to and bottom and staggered. Two nails at ends and at each splice.		
	E	ē 2			

OVER CONCRETE OR HASONRY BLOCK FOUNDATION





CF-PF WALL BRACING SECTION

BEARING WALL LINES ROOF ELEVATION 1/4" = 10"

ROOF DESIGNED WITH: LIVE LOAD = 20 PSF DEAD LOAD = 10 PSF

NOTE ... HIP RIDGE FOR THE MAIN ROOF AS:

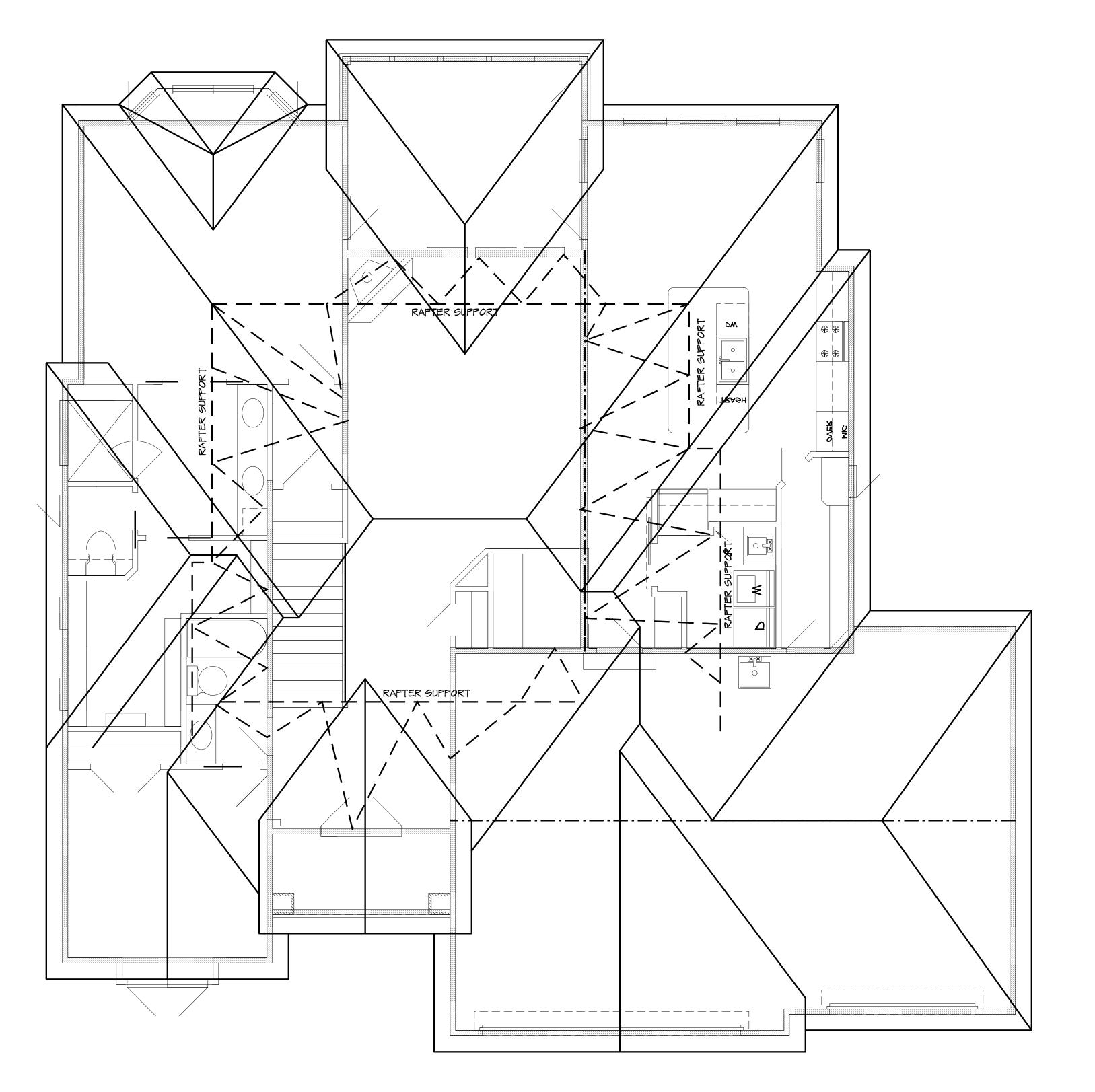
2X8 FOR UNBRACED LENGTH UP TO 9'0" 2XIO FOR UNBRACED LENGTH UP TO 10'0"

ALL RAFTERS TO BE #2 2X6 D-FIR 16" O.C. UNLESS OTHER WISE NOTED

PURLING RAFTERS TO BEARING WALL LINES CONNECT RAFTERS TO CEILING JOIST W (4) 16d GALV. NAILS

CONNECT RAFTERS TO RIDGE, VALLEY, AND HIP RIDGE WITH (4) 16d GALV. NAILS

VERT. RIDGE AND RAFTER SUPPORTS TO BE EQUAL TO OR GREATER





2XIZ FOR UNBRACED LENGTH UP TO 12'0"



THAN THE DEPTH OF RAFTERS