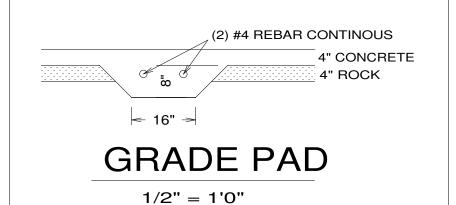


TYPICAL DEAD-MAN SECTION



SEE ELEVATION FOR WALL HEIGHTS

NOTE... ELECTRICAL SERVICE TO BE 200 AMP.

NOTE... DOUBLE JOIST UNDER
ALL PARALLEL WALLS
ABOVE UNLESS NOTED

S.D. = SMOKE DETECTOR

REQUIRED FOOTING:						
BUILDING HEIGHT	MINIMUM FOOTING	HORIZONTAL REBAR	LOCATION OF REBAR			
I OR 2 STY.	8"T × 16"W	2-#4	3" FROM BTM.			
3 STORY	8"T × 24"W	2-#4	3" FROM BTM.			
ACC. STR.	8"T × 12"W	2-#4	3" FROM BTM.			

REBAR MAY BE BROUGHT
UP DIRECTLY THROUGH
THE CONCRETE,
PROVIDED IT IS SLEEVED
AND COMES UP INSIDE
THE BUILDING

#4 FOOTING BAR AT MIN.
20' IN LENGTH

MIN. 2 TIE WIRES REQUIRED

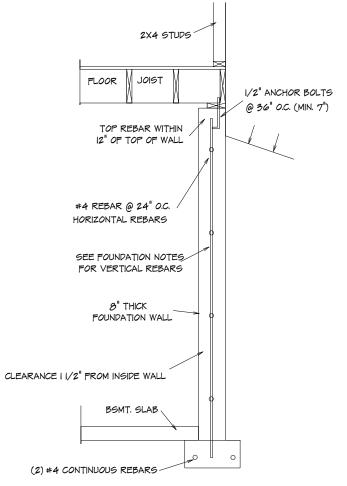
1. Section 250.52 of the National Electrical Code requires that the concrete encased reinforcing steel be included in the grounding electrode system... This means that you must have "an electrode encased by at least 50 mm (2 in.) of concrete, located horizontally near the bottom or vertically, and within that portion of a concrete foundation or footing that is in direct contact with the earth, consisting of at least 6.0 m (20 ft) of one or more bare or zinc galvanized or other electrically conductive coated steel reinforcing bars or rods of not less than 13 mm (1/2 in.) in diameter, or consisting of at least 6.0 m (20 ft) of bare copper conductor not smaller than 4 AWG.

2. Reinforcing bars shall be permitted to be bonded together by the usual steel tie wires or other effective means. Where multiple concrete-encased electrodes are present at a building or structure, it shall be permissible to bond only one into the grounding electrode system." Proper lap splices are required

# UFER GOUNDING SECTION

STEEL COLUMNS TO BE
3" DIAMETER SCHEDULE 40 PIPE MANUFACTURED
IN ACCORDANCE WITH ASTM A53 GRADE B OR
APPROVED EQUIVALENT UNLESS NOTED

Note...Bridging. Joists exceeding a nominal 2 inches by 12 inches shall be supported laterally by solid blocking, diagonal bridging (wood or metal), or a continuous 1-inch-by-3-inch strip nailed across the bottom of joists perpendicular to joists at intervals not exceeding 8 feet. (R502.7.1)



TYPICAL FOUNDATION WALL

42" X 42" X I2" CONCRETE PADS WITH (6) #4 REBARS EACH WAY (UNLESS NOTED)



ALL NOTES, SECTIONS, AND DRAWINGS

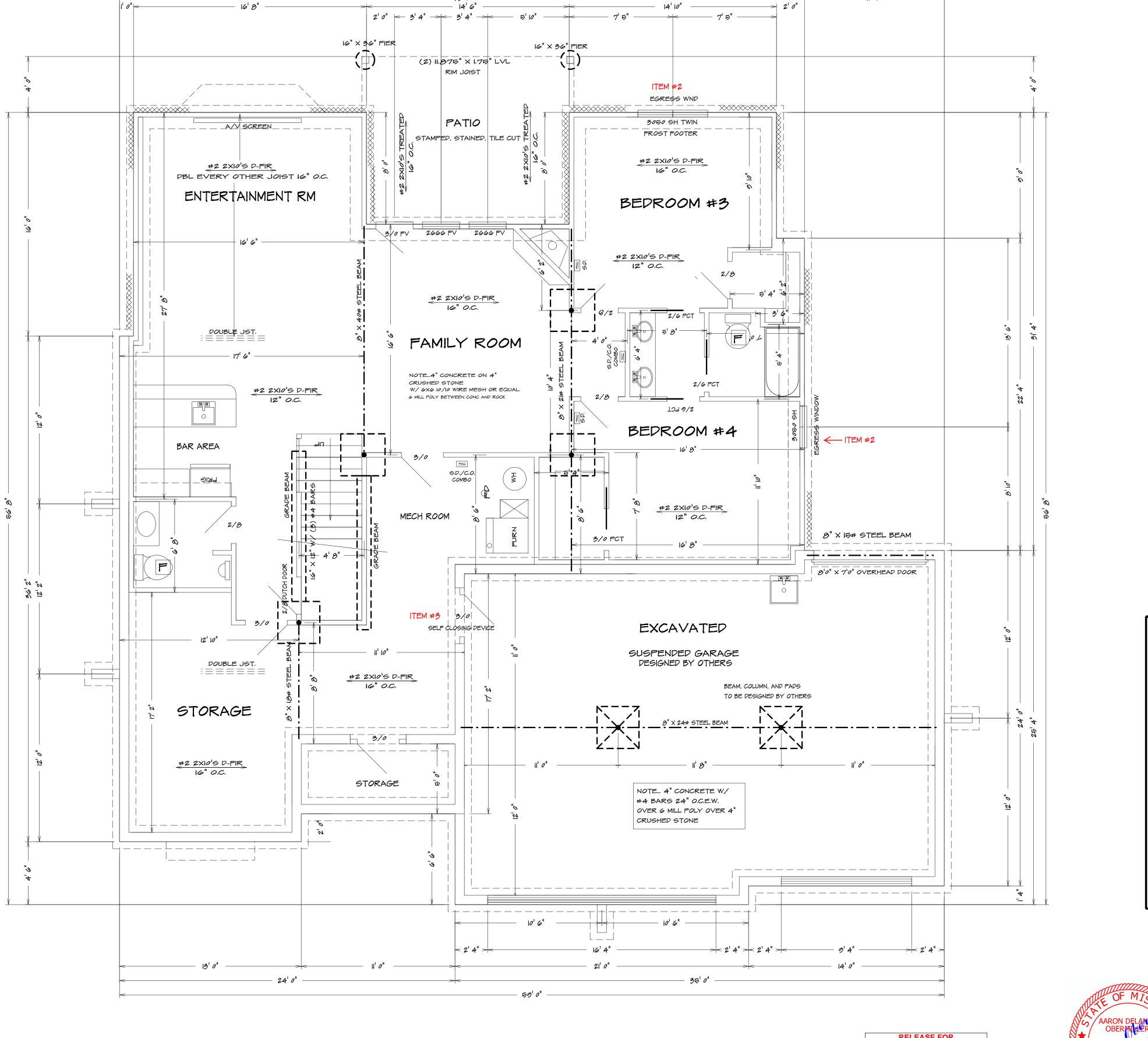
ARE IN ACCORDANCE WITH THE 2018 IRC

CONSTRUCTION

**AS NOTED ON PLANS REVIEW** 

LEE'S SUMMIT, MISSOURI

12/28/2020



SEE ELEVATION FOR WALL HEIGHTS

NOTE... ELECTRICAL SERVICE TO BE 200 AMP.

NOTE... DOUBLE JOIST UNDER
ALL PARALLEL WALLS
ABOVE UNLESS NOTED

9.D. = 9

= SMOKE DETECTOR

GENERAL HEADER SPECIFICATIONS:				
REQUIRED 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 D-FIR 2XI0'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.			
ΙΘ'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.

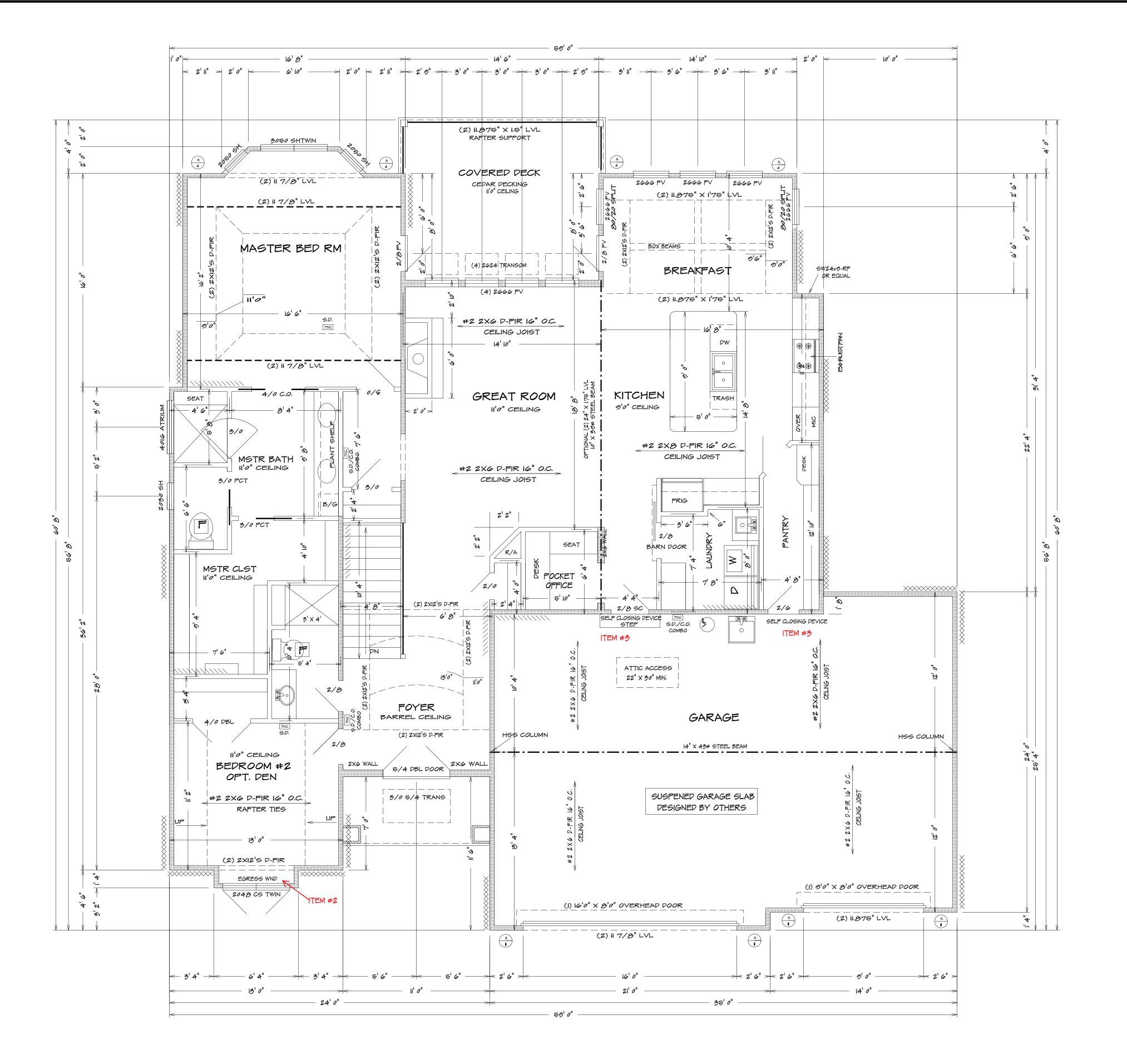
Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet, one-half of which must be openable.

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

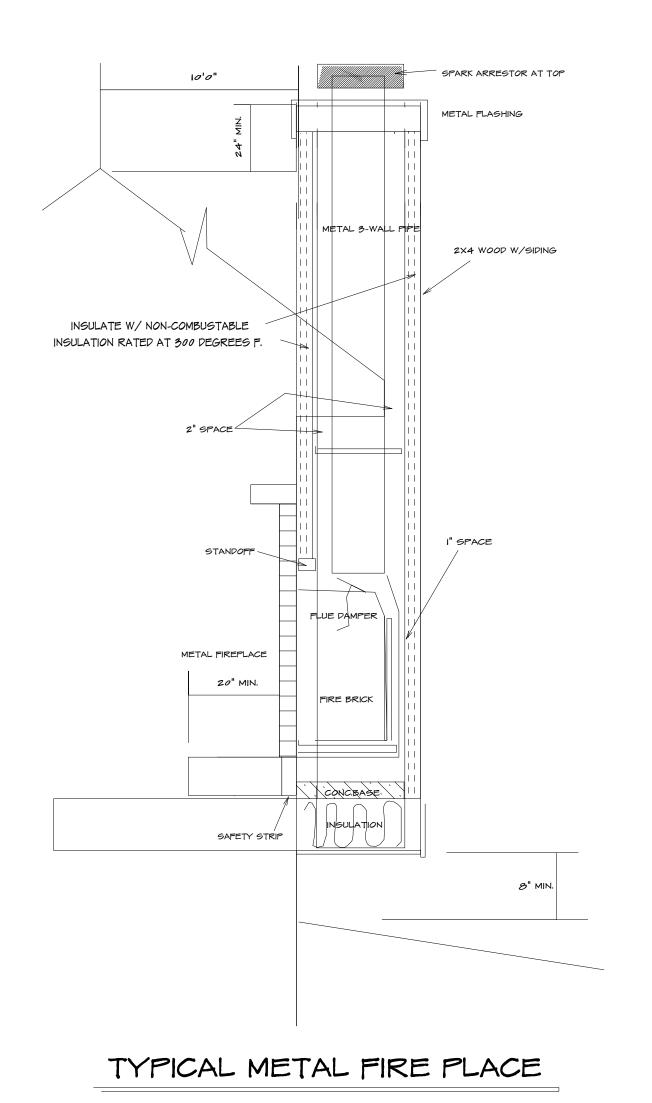
FIRST FLOOR PLAN

1/4" = 1'0"

BEARING WALL LINES









GARAGE

GLAZING

EMERGENCY EGREGS

ELECTRICAL OUTLETS

HEIGHT OF 24" AND WIDTH OD 21"

2. ALL OUTLETS TO BE TAMPER RESISTANT

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

GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC SECTION R308.4 SHALL

BE APPROVED SAFTY GLAZING MATERIALS: GLASS IN STORM DOORS, INDIVIDUAL

EDGE IS WITHIN 60" OF THE FLOOR: WALLS ENCLOSED STAIRWAYS AND LANDINGS

PROVIDE ONE WINDOW FROM EACH BEDROOM THAT HAS A

MIN. OPENABLE AREA OF 5.7 SR. FT. WITH A MIN. OPENABLE

. 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

FIXED OR OPENABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL

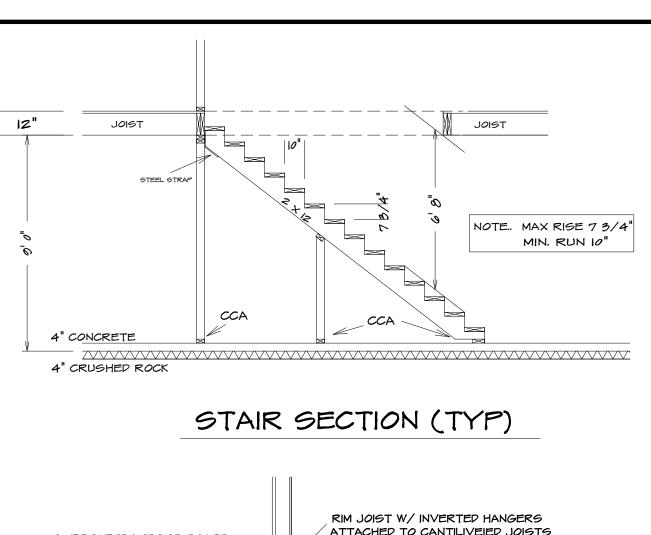
EDGE IS WITHIN A 24" ARCH OF THE DOOR IN CLOSED POSITION AND WHOSE BOTTEM

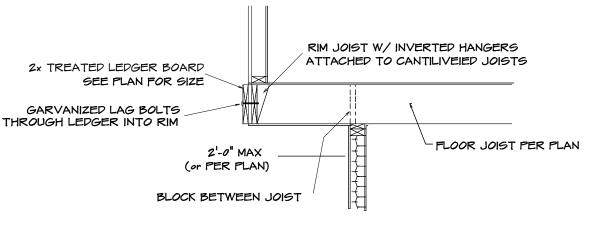
WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTEM OF THE STAIR: ENCLOSURES

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

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





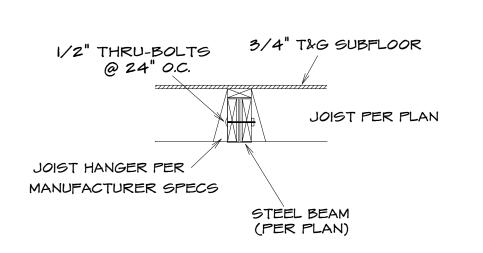
# TYPICAL CANTILEVER FRAMING W/ DECK ATTACHMENT

UP TO 101-0" 16" O.C. N/A

PECK JOIST 1/2" O LAG EQUIVALENT SPACING SPAN SPACING FOR 16" O.C. JOIST BAYS

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 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

6" CONC. SLAB W/#4 BARS @

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

# 12" O.C. BOTH-WAYS W/I" 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 PER PLAN

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

# SUSPENDED PORCH STOOP DETAIL OPTIONAL

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.

Openings from a private garage directly

into a room used for sleeping purposes

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

doors, equipped with a self-closing device.

PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE OF EACH

DWELLING. (SECTION R314.5)

than 13/8 inches thick, or 20-minute fire-rated

Opening protection.

shall not be permitted.

SMOKE ALARMS:

UPSET STEEL BEAM/JOIST CONNECTION

For new construction, an approved carbon monoxide 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

CARBON MONOXIDE ALARMS

Carbon monoxide alarms.

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 supervising station.

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

- 2. ALL HEADERS TO BE MIN. (2) #2-2X10
- 4. ALL HEADRS TO BEAR ON MIN. OF (2) 2X4 STUDS
- 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
- THE UPPER 1/3 OF ATTIC
- 0. MIN 20 YR. ASPHALT SHINGLES II. RAFTER TIES SHALL NOT BE REQUIED WHEN A STRUCTURAL RIDGE HAS BEEN PROVIDED AND ADEQUATELY DESIGNED (AS IN A FULLY VAULTED ROOM) SUCH SHALL BE NOTED AS

"STRUCTURAL" ON THE PLAN. PER IRC SEC. 802.3

# FRAMING NOTE

- SLEEPING ROOM AND ON EACH FLOOR, INCLUDING BASEMENT. 3. BLOCK CANTILEVERS, DOOR JAMBS, AND OVER BEAMS ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE
- 5. JOIST UNDER BEARING PARTITIONS SHALL BE DOUBLED ACTIVATION OF ONE ALARM WILL AND COMPLY WITH IRC SEC. R502.4 ACTIVATE ALL OF THE ALARMS IN THE
- INSULATION NOTES: RAFTER TIES SHALL BE INSTALLED IN THE LOWER 1/3 OF ATTIC SPACE MIN. INSULATION SHALL BE PROVIDED 8. COLLAR TIES SHALL BE PROVIDED IN THE ATTIC SPACE IN ADJACENT TO HABITABLE AREAS AS
- 9. ROOF IS DESIGNED FOR 20 P.S.F. ROOF SNOW LOAD (MIN.)
  - EXTERIOR FRAMED WALLS (RIO OR RI3+5) FLOOR OVER HEATED SPACE RID FLOOR OVER OUTSIDE AIR RIO ATTIC - BLOWN IN R40 CATHEDRAL CEILING

# FOUNDATION WALL PER PLAN

# FORMWORK OPTIONS:

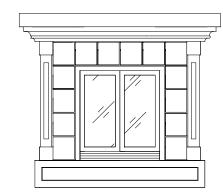
- 2. PLYWOOD FORMS WITH EXPANDABLE BAR JOIST

# LADDER TO GRADE MIN. INSIDE DIMENSI GALVANIZED STL. WINDOW WILL

# TYPICAL EGRESS WINDOW PLAN SECTION

# PORCH SLAB (6'SPAN OR LESS)

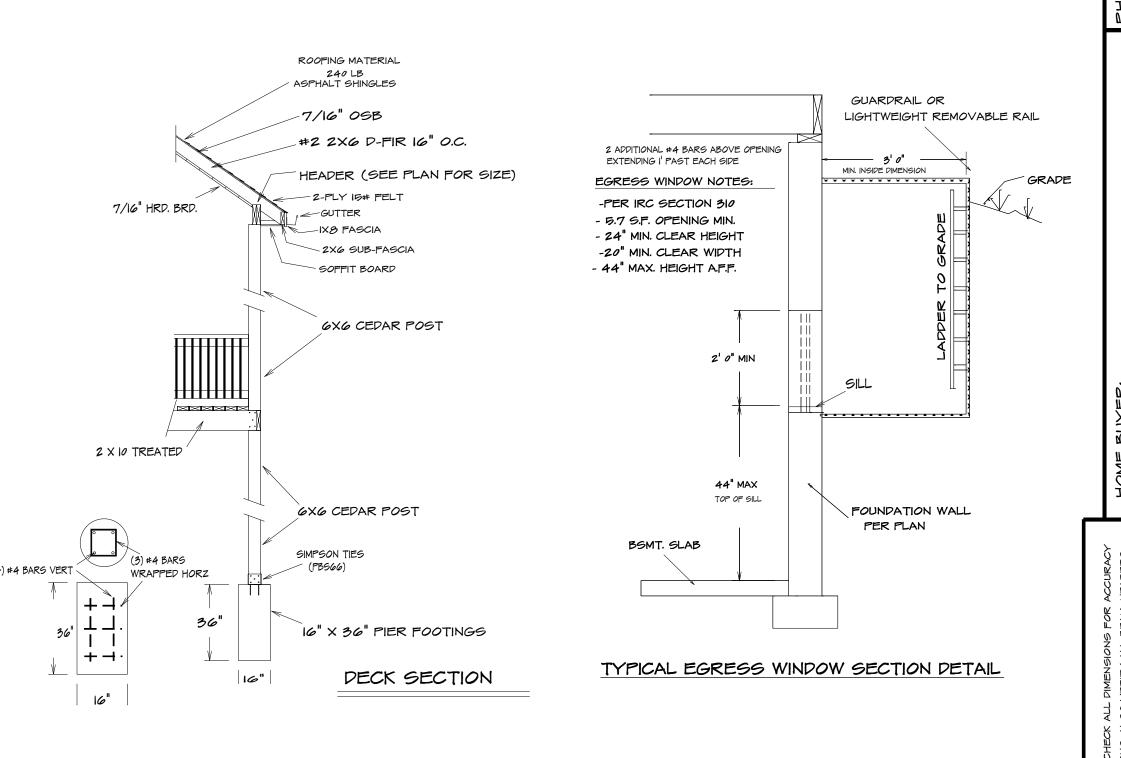
- . MAXIMUM SPAN = 6' 2. MINIMUM 6" THICKNESS 3. #4 REBARS AT 12" O.C. EACH WAY 4. MIN. 1-1/2" OF CONTINUIUS BEARING
- AT THE EDGES OF SLAB 5. PORCH SLAB GREATER THEN 6' SHALL BE TREATED AS AN ELEVATED GARAGE SLAB

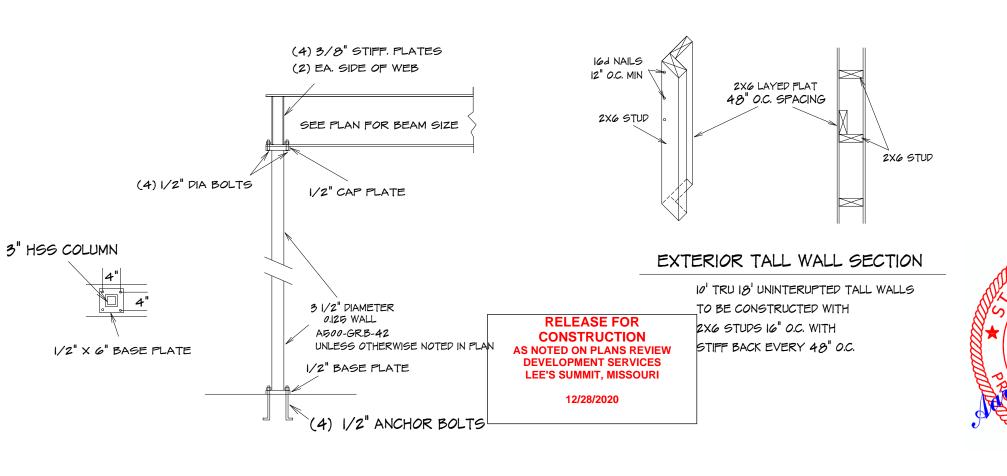


TYPICAL F.P. FRONT

### EXTENT OF HEADER WITH DOUBLE PORTAL FRAMES (TO BRACED WALL PANELS) BRACED WALLS: (ONE BRACED WALL PANEL) METHOD WSP (R602.10.4 2018 IRC): \_ 2'-18' FINISHED WIDTH OF OPENING MIN. 5/16" APA RATED WITH 8d NAILS @ 6" AND IZ" FOR SINGLE OR DOUBLE PORTAL METHOD GB (R602.10.4 2018 IRC) : TENSION STRAP PER MIN. I/2" GYPSUM BOARD WITH NO. 6 I-I/4" TYE W OR S SCREWS @ 7" O.C. EDGES AND WALL (4'-0" LONG, BOTH FACES OF WALL TABLE R602.10.5.4 ON OPPOSITE SIDES OF SHEATING TO HEADER WITH 2 MIN. 3" X II I/4" NET HEADER ALTERNATE BRACED WALL PANEL ROWS OF 16D Method PFH: Portal frame with hold-downs SINKER NAILS AT 3" SPLICE EDGES SHALL O.C. TYP FASTEN SHEATHING TO HEADER WITH 8D COMMON OR OCCURE OVER AND ALTERNATE BRACED WALL PANEL GALVANIZED BOX NAILS IN 3" GRID PATTERN AS SHOWN BE NAILED TO Method PFG: at garage door openings in COMMON BLOCKING MIN. 3/8" WOOD Seismic Design Categories A, B and C HEADER TO JACK-STUD STAP PER TABLE R602.10.6.4 ON WITHIN MIDDLE 24" -STRUCTURAL PANEL A ALTERNATE BRACED WALL PANEL OF WALL MID-HEIGH SHEATHING ONE ROW OF 3" O.C. MIN. DOUBLE 2X4 FRAMING COVERED WITH MIN. 3/8" Method ABW: Alternate braced wall panels NAILING IS REQUIRED THICK WOOD STRUCTURAL PANEL SHEATHING WITH $\delta D$ $\left( egin{array}{c} A \ A \end{array} ight)$ ALTERNATE BRACED WALL PANEL . IN EACH PANEL EDGE COMMON OR GALVANIZED BOX NAILS AT 3" O.C. IN ALL Method CS-PF: Continuously sheathed portal frame FRAMING (STUDS, BLOCKING, AND SILLS) TYP. 2. PROVIDE SOLID BLOCKING ABOVE AND BELOW TYPICAL PORTAL ALL BRACED WALL LINES WHERE FRAMING ABOVE -MIN. LENGTH OF PANEL PER TABLE R602.10.5 FRAMING CONNECTION OR BELOW RUNS PERPENDICULAR TO THE BRACING. MIN. DOUBLE 2X4 POST MIN. (2) 4200 LB STRAP TYPE HOLD DOWND EMBEDDED THE BRACED WALL SOLE PLATE AND TOP PLATE (KING AND JACK STUD) NTO CONCRETE AND NAILED INTO FRAMING SHALL BE FASTENED TO BLOCKING (RO PARALLEL NUMBER OF JACK FRAMING MEMBER WHERE PROVIDED) WITH (3) 164 STUDS PER TABLES R502.5(1)&(2) NAILS @ 16" O.C. MIN. REINFORCING OF FOUNDATION, ONE #4 BAR TOP AND BOTTOM OF FOOTING. LAP 15" MIM. 3. SIMPSON STHD-14 HOLD-DOWN STRAPS MAY BE MIN. 1000 LB. HOLD-DOWN DEVICE SUBSTITUTED WITH SIMPSON PHD2 HOLD-DOWNS EMBEDED INTO AND A 5/8" ANCHOR ROD DRILLED AND EPOXIED A CONCRETE & NAILED MIN. 7" INTO THE FOUNDATION INTO FRAMING. MIN. FOOTING SIZE UNDER IS 12" X 12" A TURNED DOWN SLAB SHALL BE PERMITTED AT DOOR OPENINGS MIN. (1) 5/8" DIAMETER ANCHOR BOLT INSTALLED PER R403.1.6- WITH 2" X 2" X 3/16" PLATE ALTERNATE BRACED WALL PANEL Method PFH: Portal frame with hold-downs

# BRACED WALL SECTION





HSS COLUMN DETAIL

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

### Foundation Wall Reinforcement Schedule - Table 2

Concrete strength/Grade	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	ıum Gr	ade 40	steel	#4 I	oar
One bar 12" from top of wall; maximum spacing 24" o.c.	4-#4	5-#4	6-#4	4-#4	5-#4	6-#4

### Footnotes:

- 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.
- 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.
   4) 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 inside corners
- Reinforcement shall be lapped a minimum 24 inches at ends, splices, and around corners.
   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.
- 7) 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

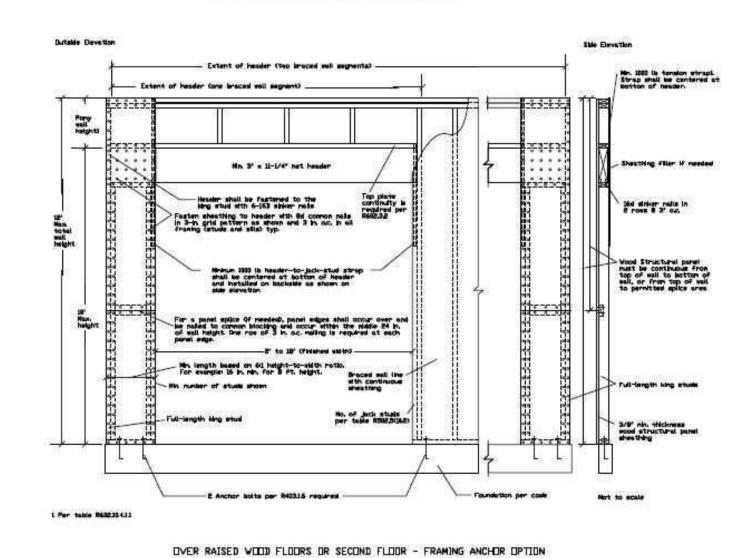
2 112	DECEMENTION OF	DESCRIPTION OF FASTENER <sup>b, c, e</sup>	SPACING OF FASTENERS		
	BUILDING MATERIALS		Edges (inches) <sup>i</sup>	Intermediate supports <sup>c, e</sup> (inches)	
W	ood structural panels, su	sheathing to fr	ll sheathing to aming	framing and particleboard wall	
32	3/8" - 1/2"	6d common (2" × 0.113") nail (subfloor wall) <sup>j</sup> 8d common (2 <sup>1</sup> / <sub>2</sub> " × 0.131") nail (roof) <sup>f</sup>	6	12 <sup>9</sup>	
33	19/32" - 1"	8d common nail (2 <sup>1</sup> / <sub>2</sub> " × 0.131")	6	129	
34	11/8" - 11/4"	10d common (3" × 0.148") nail or 8d (2 <sup>1</sup> / <sub>2</sub> " × 0.131") deformed nail	6	12	
	8	Other wall she	athing <sup>h</sup>		
35	<sup>1</sup> / <sub>2</sub> " structural cellulosic fiberboard sheathing	1 <sup>1</sup> / <sub>2</sub> " galvanized roofing nail, <sup>7</sup> / <sub>16</sub> " crown or 1" crown staple 16 ga., 1 <sup>1</sup> / <sub>4</sub> " long	3	6 **	
36	<sup>25</sup> / <sub>32</sub> " structural cellulosic fiberboard sheathing	1 <sup>3</sup> / <sub>4</sub> " galvanized roofing nail, <sup>7</sup> / <sub>16</sub> " crown or 1" crown staple 16 ga., 1 <sup>1</sup> / <sub>2</sub> " long	3	6	
37	<sup>1</sup> / <sub>2</sub> " gypsum sheathing <sup>d</sup>	$1^1/2$ " galvanized roofing nail; staple galvanized, $1^1/2$ " long; $1^1/4$ screws, Type W or S	7	7	
38	<sup>5</sup> /8" gypsum sheathing <sup>d</sup>	1 <sup>3</sup> /4" galvanized roofing nail; staple galvanized, 1 <sup>5</sup> /8" long; 1 <sup>5</sup> /8" screws, Type W or S	7	7	
Â	Wood stru	ictural panels, combination	subfloor unde	rlayment to framing	
39	<sup>3</sup> /4" and less	6d deformed (2" × 0.120") nail or 8d common (2 <sup>1</sup> / <sub>2</sub> " × 0.131") nail	6	12	
40	<sup>7</sup> /8" - 1"	8d common (2 <sup>1</sup> / <sub>2</sub> " × 0.131") nail or 8d deformed (2 <sup>1</sup> / <sub>2</sub> " × 0.120") nail	6	12	
41	1 <sup>1</sup> /8" - 1 <sup>1</sup> /4"	10d common (3" × 0.148") nail or 8d deformed (2 <sup>1</sup> / <sub>2</sub> " × 0.120") nail	6	12	

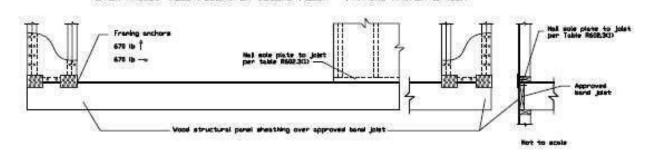
For SI: 1 inch = 25.4 mm. 1 foot = 304.8 mm. 1 mile per hour = 0.447 m/s: 1 Ksi = 6.895 MPa.

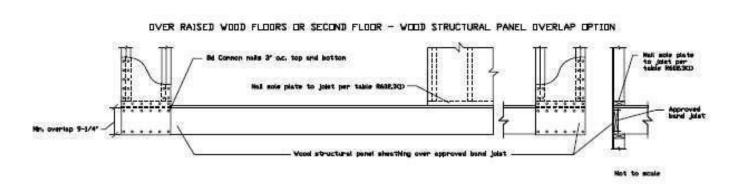
### TABLE R602.3(1) FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER <sup>a, b, c</sup>	SPACING OF FASTENERS	
Total Control	Blocking between joists or	Roof 3-8d (2 <sup>1</sup> / <sub>2</sub> " ×		
1	rafters to top plate, toe nail	0.113")	W=	
2	Ceiling joists to plate, toe nail	3-8d (2 <sup>1</sup> / <sub>2</sub> " × 0.113")	80 <del></del>	
3	Ceiling joists not attached to parallel rafter, laps over partitions, face nail	3-10d	S=	
4	Collar tie to rafter, face pail or 3-104 (		B-	
5	Rafter or roof truss to plate, toe nail	3-16d box nails (3 <sup>1</sup> / <sub>2</sub> " × 0.135") or 3-10d common nails (3" × 0.148")	2 toe nails on one side and 1 toe nail on opposite side of each rafter or trussi	
6	Roof rafters to ridge, valley or hip rafters: toe nail face nail	4-16d (3 <sup>1</sup> / <sub>2</sub> " × 0.135") 3-16d (3 <sup>1</sup> / <sub>2</sub> " × 0.135")	8-	
-	D.::114	Wall	248	
7	Built-up studs-face nail Abutting studs at intersecting	10d (3" × 0.128") 16d (3 <sup>1</sup> / <sub>2</sub> " ×	24" o.c.	
8	wall corners, face nail Built-up header, two pieces	0.135") 16d (3 <sup>1</sup> / <sub>2</sub> " ×	12" o.c. 16" o.c. along each	
9	with 1/2" spacer	0.135")	edge	
10	Continued header, two pieces	16d (3 <sup>1</sup> / <sub>2</sub> " × 0.135")	16" o.c. along each edge	
11	Continuous header to stud, toe nail	4-8d (2 <sup>1</sup> / <sub>2</sub> " × 0.113")	s <del>-</del>	
12	Double studs, face nail	10d (3" × 0.128")	24" o.c.	
13	Double top plates, face nail	10d (3" × 0.128")	24" o.c.	
14	Double top plates, minimum 24-inch offset of end joints, face nail in lapped area	8-16d (3 <sup>1</sup> / <sub>2</sub> " × 0.135")	89—	
15	Sole plate to joist or blocking, face nail	16d (3 <sup>1</sup> / <sub>2</sub> " × 0.135")	16" o.c.	
16	Sole plate to joist or blocking at braced wall panels	3-16d (3 <sup>1</sup> / <sub>2</sub> " × 0.135")	16" o.c.	
17	Stud to sole plate, toe nail	3-8d (2 <sup>1</sup> / <sub>2</sub> " × 0.113") or 2-16d (3 <sup>1</sup> / <sub>2</sub> " × 0.135")	X-1-5	
18	Top or sole plate to stud, end nail	2-16d (3 <sup>1</sup> / <sub>2</sub> " × 0,135")	82—	
19	Top plates, laps at corners and intersections, face nail	2-10d (3" × 0.128")	19_	
20	1" brace to each stud and plate, face nail	2-8d (2 <sup>1</sup> / <sub>2</sub> " × 0.113") 2 staples 1 <sup>3</sup> / <sub>4</sub> " ×	%_T <u>55</u>	
21	1" × 6" sheathing to each bearing, face nail	2-8d (2 <sup>1</sup> / <sub>2</sub> " × 0.113") 2 staples 1 <sup>3</sup> / <sub>4</sub> "	9 <del>-52</del>	
22	1" × 8" sheathing to each bearing, face nail	2-8d (2 <sup>1</sup> / <sub>2</sub> " × 0.113") 3 staples 1 <sup>3</sup> / <sub>4</sub>	N-15	
23	Wider than 1" × 8" sheathing to each bearing, face nail	3-8d (2 <sup>1</sup> / <sub>2</sub> " × 0.113") 4 staples 1 <sup>3</sup> / <sub>4</sub> "	72	
		Floor		
24	Joist to sill or girder, toe nail	3-8d (2 <sup>1</sup> / <sub>2</sub> " × 0.113")	8 <del>-</del>	
25	Rim joist to top plate, toe nail (roof applications also)	8d (2 <sup>1</sup> / <sub>2</sub> " × 0.113")	6″ o.c.	
26	Rim joist or blocking to sill plate, toe nail	8d (2 <sup>1</sup> / <sub>2</sub> " × 0.113")	6″ o.c.	
27	$1'' \times 6''$ subfloor or less to each joist, face nail $2-8d (2^1/2'' \times 0.113'')$ $2 \text{ staples } 1^3/4''$		N_122	
28	2" subfloor to joist or girder, blind and face nail	2-16d (3 <sup>1</sup> / <sub>2</sub> " × 0.135")	852	
29	2" planks (plank & beam - 2-16d (3 <sup>1</sup> / floor & roof) 2-16d (3 <sup>1</sup> /		at each bearing	
30	Built-up girders and beams, 2-inch lumber layers	10d (3" × 0.128")	Nail each layer as follows: 32" o.c. at to and bottom and staggered. Two nails at ends and at each splice.	
	Ledger strip supporting joists	3-16d (3 <sup>1</sup> / <sub>2</sub> " ×	At each joist or rafte	

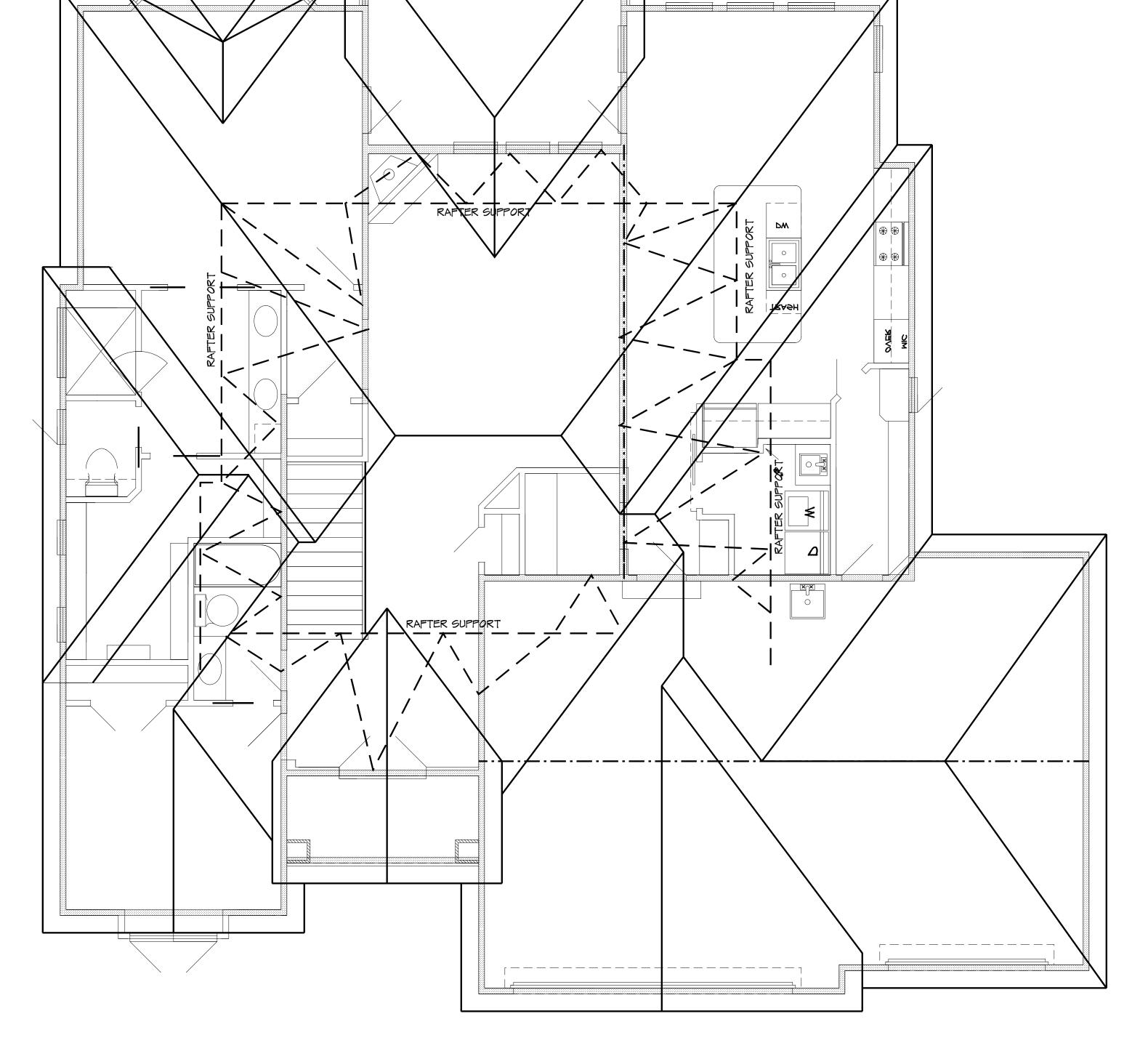
# OVER CONCRETE OR MASONRY BLOCK FOUNDATION







CF-PF WALL BRACING SECTION



ROOF ELEVATION

BEARING WALL LINES

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"

THAN THE DEPTH OF RAFTERS

2XIO FOR UNBRACED LENGTH UP TO 10'0"
2XI2 FOR UNBRACED LENGTH UP TO 12'0"

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) IGA GALV. NAILS

CONNECT RAFTERS TO RIDGE, VALLEY, AND HIP RIDGE
WITH (4) IGG GALV. NAILS
VERT. RIDGE AND RAFTER SUPPORTS TO BE EQUAL TO OR GREATER





26 25 CR8