

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

TABLE R602.7.5

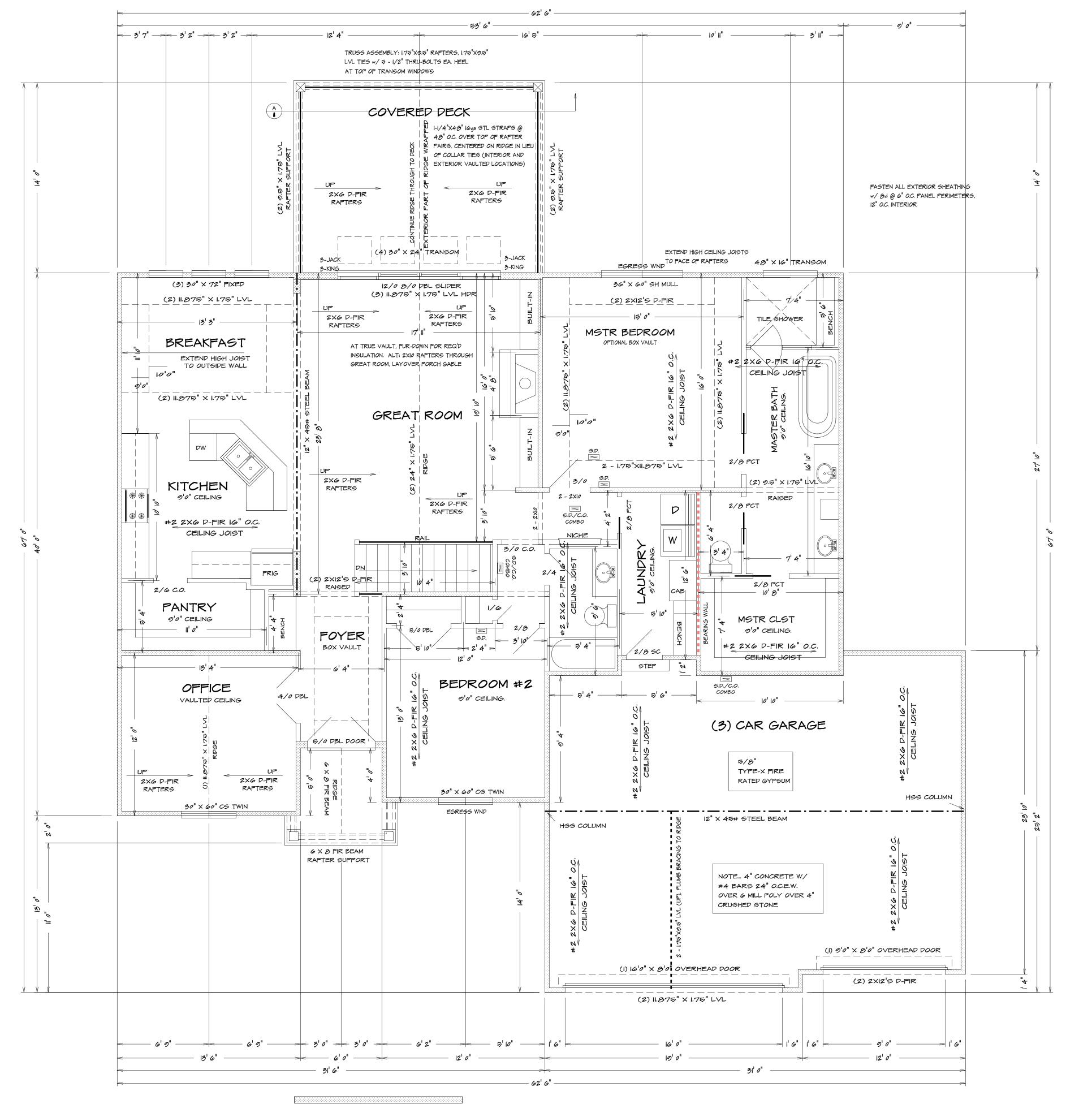
MINIMUM NUMBER OF FULL-HEIGHT STUDS

AT EACH END OF HEADERS IN EXTERIOR WALLS ^a			
MAXIMUM	ULTIMATE DESIGN WIND SPEED AND EXPOSURE CATEGORY		
HEADER SPAN (feet)	< 140 mph, Exposure B or < 130 mph, Exposure C	≤ 115 mph, Exposure B ^b	
4	1	1	
6	2	1	
8	2	1	
10	3	2	
12	3	2	
14	3	2	
16	4	2	
18	4	2	

For SI: 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s.

a. For header spans between those given, use the minimum number of full-height studs associated with the larger header span.

b. The tabulated minimum number of full-height studs is applicable where jack studs are provided to support the header at each end in accordance with Table R602.7(1). Where a framing anchor is used to support the header in lieu of a jack stud in accordance with Note d of Table R602.7(1), the minimum number of full-height studs at each end of a header shall be in accordance with requirements for wind speed < 140 mph, Exposure B.



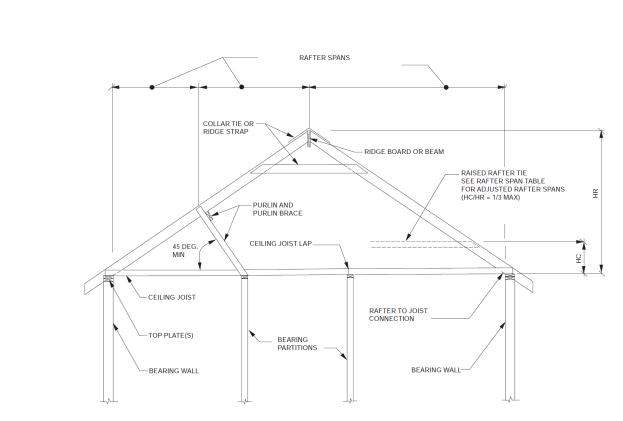
BEARING WALL LINES

FIRST FLOOR PLAN

1/4" = 1'0"

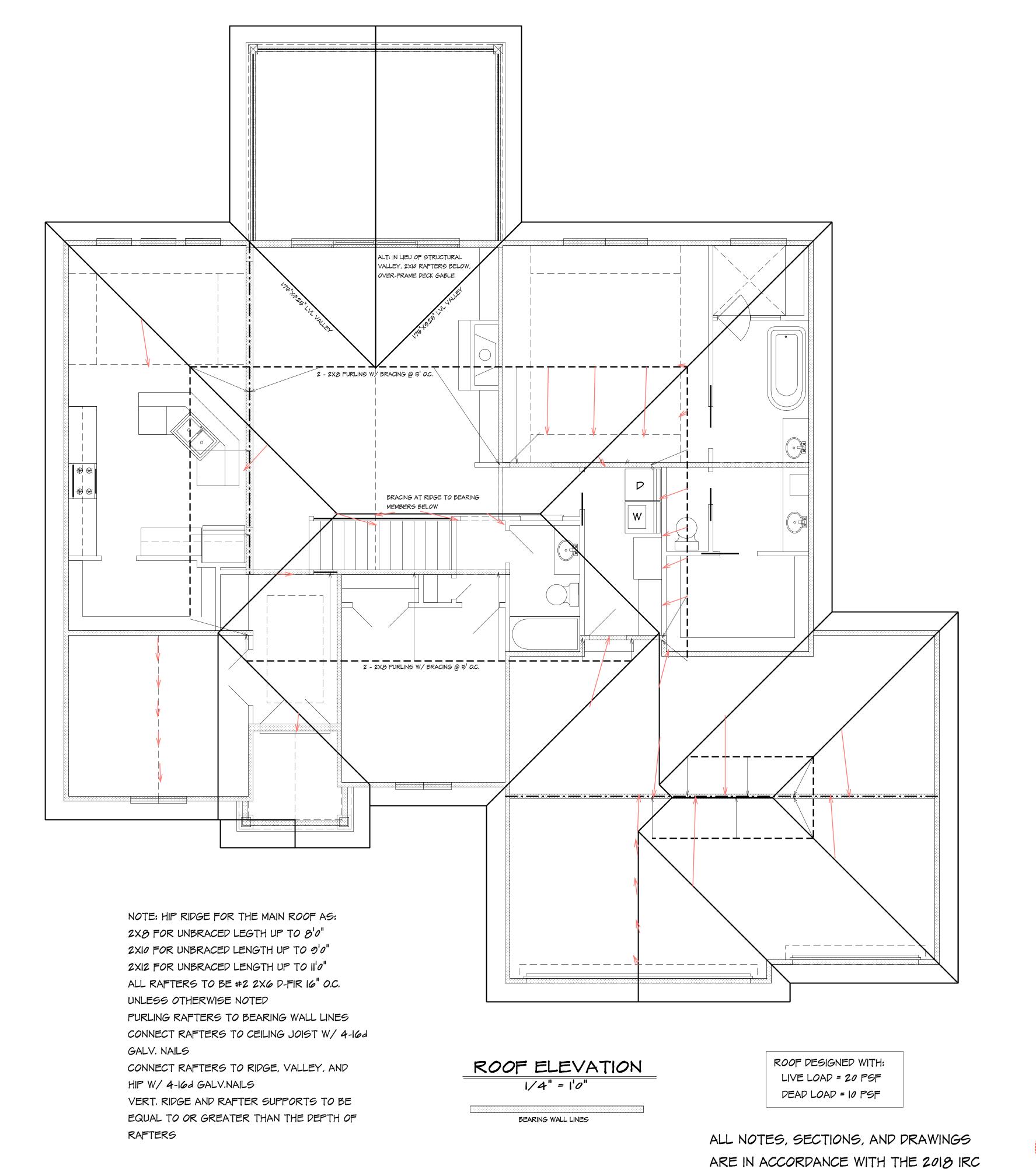
ALL NOTES, SECTIONS, AND DRAWINGS ARE IN ACCORDANCE WITH THE 2018 IRC



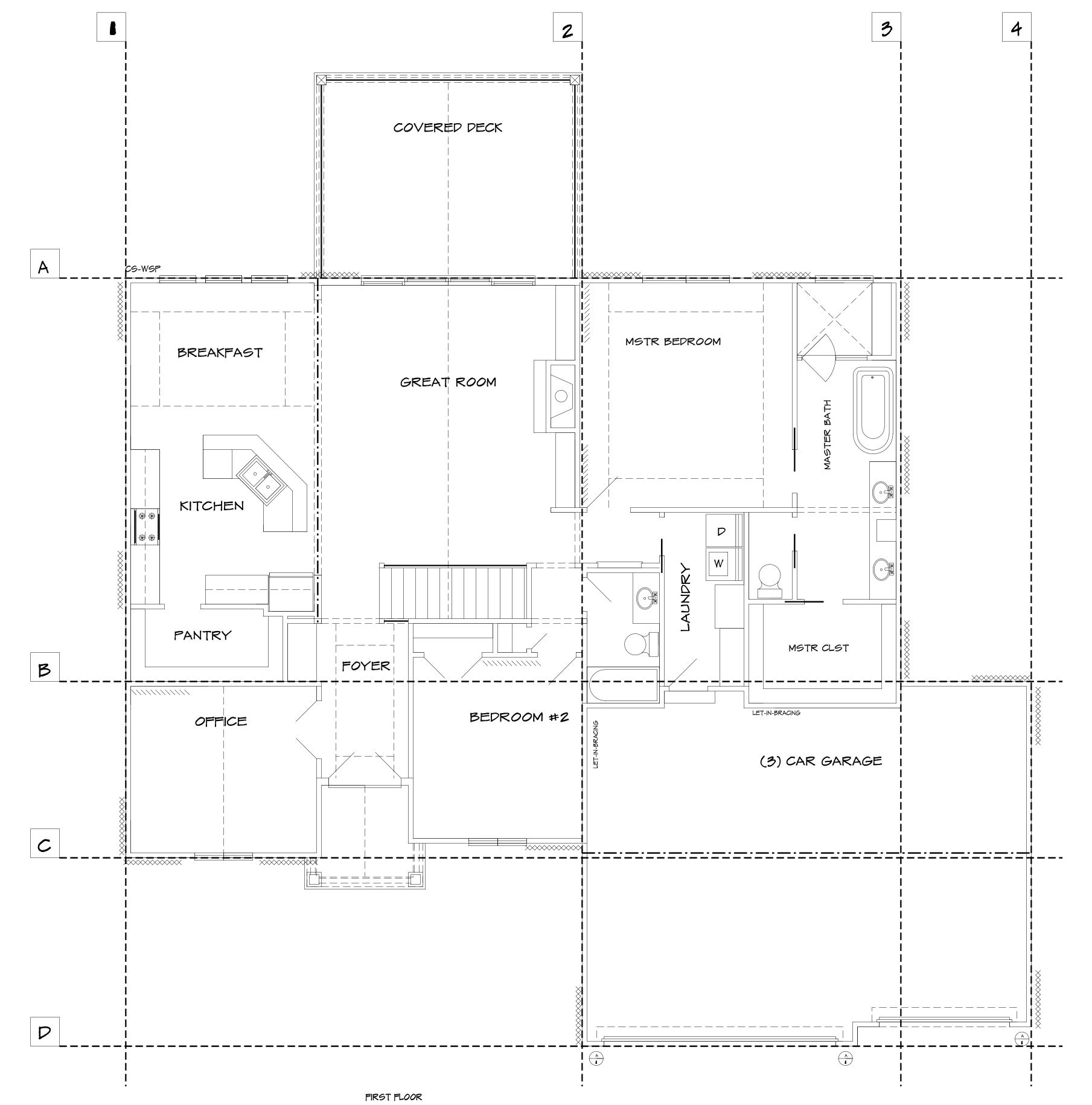


For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 degree = 0.018 rad. H_C = Height of ceiling joists or rafter ties measured vertically above the top of rafter support walls. H_R = Height of roof ridge measured vertically above the top of the rafter support walls.

FIGURE R802.4.5 BRACED RAFTER CONSTRUCTION







WALL	SPACING	TYPE	REQ'D	PROVIDED
ı	15' 0"	WSP	6'6"	12' 0"
2	26' 9"	LI B/GB	9'6"	16' 0"
3	15'6"	WSP	6'6"	12' 0"
4	4' 6"	WSP	3' 6"	8'0"
Α	14' 0"	WSP/CS-WSP	6'6"	14' 0"
В	20' 0"	LI B/GB	9'6"	16'0"
С	12' 6"	LIB	6'6"	12' 0"
P	6'6"	PFH	2' 0"	6'0"
				· · · · · · · · · · · · · · · · · · ·

BRACED WALL LINES

WSP - WOOD STRUCTURAL PANEL, 7/16" WSP FASTENED w/ 8d @ 6" O.C. PERIMETER, 12" O.C. INTERIOR FOR MIN. 48" WHERE LOCATED

CS-WSP CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL, 7/16'' WSP w/ 84 @ 6'' O.C. PERIMETER, 12'' O.C. INTERIOR

LIB - LET-IN-BRACING PER CODE OR ALTERNATE MANUFACTURER RATED STEEL STRAP INSTALLED PER MANUFACTURER'S REQUIREMENTS

GB - GYPUSM BOARD, I/2" GYP. BOARD WITH FASTENERS AT 7" O.C. THROUGHOUT

PFH - PORTAL FRAME WITH HOLD-DOWNS PER CODE DETAIL

WALL BRACE PLAN

1/4" = 1'0"



GENERAL NOTES

WINDOW SIZES SHOWN ARE APPROXIMATE. THE BUILDER SHALL SELECT WINDOWS TO MEET BUILDING CODE REQUIREMENTS AND TO FIT IN THE AVAILABLE SPACE. OVERALL ROUGH OPENINGS FOR MULLED UNITS WILL VARY BY WINDOW/ DOOR MANUFACTURER.

EXTERIOR WALLS ARE 2x4 STUDS AT 16" O.C. UNLESS OTHERWISE

THE GARAGE FLOOR SHALL BE SLOPED TOWARD GARAGE DOORS DOORS BETWEEN GARAGE AND DWELLING - MIN 13/8" SOILD CORE OR HONEY COMBED STEEL DOOR OR 20 MIN. RATED. GARAGE TO HAVE 5/8" TYPE X GYPSUM THROUGHTOUT THE H-FRAM SHALL CONSIST OF 2X6 FRAMING

GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN 2018 IRC 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 WALKING SURFACE WITH IN 36"

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 ALL OUTLETS TO BE TAMPER RESISTANT

CARBON MONOXIDE ALARMS

CARBON MONOXIDE ALARMS FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSOIDE 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 GARAGE.

CARBON MONOXIDE DETECTION SYSTEMS CARBON MONOXIDE DETECTION SYSTEMS THAT INCLUDE CARBON MONOXIDE DETECTORS AND AUDIBLE NOTIFICATION APPLIANCES, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THIS SECTION FOR CARBON MONOXIDE ALAMS 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.

GUARD OPENING LIMITATIONS

REQUIRED GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOOR AREA, BALONIES, AND PORCHES SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES THAT DO NOT ALLOW PASSAGE OF A SPHERE 4" OR MORE IN DIAMETER.

OPENING PROTECTION

OPENING 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 I 3/8" IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOOR NOT LESS THAN I 3/8" THICK, OR 20 MINUTE FIRE-RATED DOORS, EQUIPPED WITH A SELF-CLOSING DEVICE.

SMOKE ALARMS

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.

FRAMING NOTE

ALL LUMBER SIZES ARE FOR #2 D-FIR-LARCH ALL HEADERS TO BE MIN. (2) #2-2XIO BLOCK CANTILEVERS, DOOR JAMBS, AND OVER BEAMS ALL HEADRS TO BEAR ON MIN. OF (2) 2X4 STUDS JOIST UNDER BEARING PARTITIONS SHALL BE DOUBLED AND COMPLY WITH 2018 IRC

WATER-RESISTIVE BARRIER SHALL BE PROVIDED OVER ALL EXTERIOR WALLS PER 2018 IRC ROOF PLAN NOTES

ALL ROOF RAFTERS NOT CALLED OUT ARE TO BE 2x6 SPF #1/#2@16"c ALL CEILING JOISTS NOT CALLED OUT ARE TO BE 2x6 SPF

ALL VAULTS TO BE FURRED DOWN w/2x MATERIAL TO PROVIDE FOR R-38 INSULATION

ALL EXTERIOR AND LOAD BEARING WINDOW AND DOOR HEADERS TO BE (2) 2x10 D.FIR #2 UNLESS NOTED OTHERWISE ON PLANS ALL RIDGES, HIPS, AND VALLEYS NOT MARKED SHALL BE (I) NOMINAL SIZE LARGER THAN THE INTERSECTING RAFTERS CEILING JOISTS AND RAFTERS SHALL BE NAILED TO EACH OTHER WITH (3) 16d COM (3 1/2"x0.162") NAILS AND THE RAFTER SHALL BE NAILED TO THE TOP WALL PLATE WITH (3) 8d COM (2 1/2"x0.131") NAILS. CEILING JOISTS SHALL BE CONTINUOUS OR SECURELY JOINED WITH (3) 16d COM (3 1/2"x0.162") NAILS WHERE THEY MEET OVER INTERIOR PARTITIONS AND ARE NAILED TO ADJACENT RAFTERS TO PROVIDE A CONTINUOUS TIE ACROSS THE BUILDING WHEN SUCH JOISTS ARE PARALLEL TO THE RAFTERS. WHERE CEILING JOISTS ARE NOT CONNECTED TO THE RAFTERS AT THE TOP WALL PLATE (or AT LOCATIONS WHERE C.J. ARE PERPENDICULAR TO RAFTERS), INSTALL 2x4 RAFTER TIES, IN THE LOWER 1/3 OF ATTIC SPACE @ 16" WITH (3) 16d COM (3 1/2"x0.162") NAILS EA END.

COLLAR TIES SHALL BE PROVIDED IN THE ATTIC SPACE IN THE UPPER 1/3 OF ATTIC

RAFTER CONNECTIONS DESIGNED TO RESIST UPLIFT FORCES PER 2018 IRC TABLE 802.11. ROOF HEADERS DO NOT HAVE NOTABLE UPLIFT TO REQUIRE HOLD DOWNS. PROVIDE METAL FLASHING AT ALL ROOF VALLEYS. ROOF AND SOFFIT VENTS PER LOCAL CODES. WHERE POSSIBLE, PROVIDE ROOF VENTING ON BACK SIDE OF ROOF. EXACT GUTTER AND DOWNSPOUT LOCATION BY GUTTER INSTALLER.

MIN 20 YR. ASPHALT SHINGLES 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 2018 IRC

ROOF IS DESIGNED FOR 20 P.S.F. ROOF SNOW LOAD (MIN.)

ROOF PURLING TO BE PLACED APPROXIMATELY WHERE SHOWN ON ROOF PURLINS, USE 2x6 STUD GRADE PURLIN PLACED PERPENDICULAR TO RAFTERS (UNLESS NOTED OTHERWISE ON

RIDGE, HIP, VALLEY, AND PURLIN BRACE STRUTS TO BE PLACED AS SHOWN ON PLANS. STRUTS TO BE 2x4 STUD GRADE w/ MAXIMUM UNBRACED LENGTH OF 8'-0" AND AT A 45° ANGLE w/ HORIZONTALOR GREATER (VERTICAL WHERE POSSIBLE) BRACES LONGER THAN 8'-0" SHALL BE 2x4 STRONG BACK BRACES

WINDOWS WHOSE OPENING WILL NOT ALLOW A 4" DIAMETER SPHERE TO PASS THROUGH THE OPENING WHEN THE OPENING IS IN ITS LARGEST OPENED POSITION. OPENINGS THAT ARE PROVIDED WITH WINDOW FALL PREVENTION DEVICES, WHICH COMPLY WITH ASTM F 2000.

WINDOWS THAT ARE PROVIDED WITH WINDOW OPENING CONTROL DEVICES THAT COMPLY WITH SECTION R312.2.2.

EXHAUST AIR

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 OPERABLE

THE GLAZED AREAS SHALL NOT BE REQUIRED WHERE ARTIFICIAL LIGHT AND A LOCAL EXHAUST SYSTEM ARE PROVIDED. THE MINIMUM LOCAL EXHAUST RATE SHALL BE DETERMINED IN ACCORDANCE WITH SECTION MIGOT. EXHUAST AIR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS

JOISTS EXCEEDING A NOMINAL 2" X 12" SHALL BE SUPPOTED LATERALLY BY SOLID BLOCKING, DIAGONAL BRIDGING (WOOD OR METAL), OR A CONTINUOUS I" X 3" STRIP NAILED ACROSS THE BOTTEM OF THE JOIST PERPENDICULAR TO JOIST AT INTERVALS NOT EXCEEDING & FEET

WINDOW AND DOOR NOTES

I. ALL WINDOWS ARE SHOWN IN FEET (I.E. 3050 IS A 3'0"x5'0" WINDOW). ALL DOORS SHOWN IN FEET AND INCHES (I.E. 2868 DOOR IS A 2'-8"x6'-8" DOOR). CONTRACTOR/INSTALLER TO VERIFY R.O. DIMENSIONS WITH BUILDER SUPPLIED CUT SHEET PRIOR TO FRAMING. 2. ALL WINDOWS TO BE LOW-E GLASS TO MEET ALL LOCAL ENERGY CODE REQUIREMENTS.

3. PROVIDE EGRESS WINDOW IN ALL SLEEPING ROOMS. WINDOWS SHALL COMPLY WITH THE FOLLOWING: A. MINIMUM OPEN AREA 5.7 SQ.FT.

B. MINIMUM OPENING HEIGHT 24 INCHES C. MINIMUM OPENING WIDTH 20 INCHES D. SILL HEIGHT 44" MAX ABOVE FLOOR 4. ALL WINDOW SILLS ARE TO BE 24" MIN ABOVE FINISH FLOOR,

OR SHALL BE FIXED/INOPERABLE 5. ALL WINDOWS AND GLAZED DOORS SHALL COMPLY WITH IRC SECTION R308.4: GLAZING IN HAZARDOUS LOCATIONS SHALL

BE OF APPROVED SAFETY GLAZING MATERIALS. GLASS IN STORM DOORS, INDIVIDUAL FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS WITHIN 60" OF THE FLOOR, WALLS ENCLOSING STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTOM OF STAIR, ENCLOSURES FOR TUBS, SHOWERS AND WHIRLPOOLS, GLAZING IN FIXED OR OPERABLE PANELS EXCEEDING O SF AND WHOSE BOTTOM EDGE

IS LESS THAN 18" ABOVE THE FLOOR OR WALKING SURFACE 6. ALL OPERABLE WINDOWS SHALL HAVE FALL PROTECTION PER

7. ALL GLAZING IN WINDOWS AND DOORS SHALL COMPLY WITH THE TEST CRITERIA FOR CATEGORY II IN ACCORDANCE WITH CPSC

8. WINDOW MANUFACTURER TO CONFIRM EXACT SAFTEY AND EGRESS WINDOW LOCATIONS PER LOCAL CODES.

GENERAL PLAN REQUIREMENTS

I. ALL STUD WALL FRAMING SHALL BE CONTINUOUS FROM THE FLOOR TO ROOF OR CEILING DIAPHRAGM, U.N.O. ALL WALLS OVER 10'-0" ARE TO BE 2x6 @ 16"c U.N.O. 2. PROVIDE WATER-RESISTANT EXTERIOR WALL COVERING ON ALL FRAMED WALLS TO COMPLY WITH IRC SECTION 802.3. 3. PROVIDE GFCI ELECTRICAL OUTLETS ON EXTERIOR, IN UNFINISHED BASEMENT, IN BATHROOMS, ABOVE KITCHEN COUNTERS, IN GARAGE, AND WITHIN 6'-0" OF ANY SINK. 4. ALL EXTERIOR DOORS SERVED BY LANDING. 6. INSTALL CARBON MONOXIDE DETECTORS PER IRC SECTION 315 OUTSIDE OF EACH SLEEPING AREA. 6. INSTALL SMOKE DETECTORS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING AREA, WITH A MINIMUM OF ONE ON EACH FLOOR PER IRC SECTION 314. 7. PROVIDE A "UFER" GROUND PER IRC 3608.1.

8. REFER TO WALL BRACE SHEET FOR ALL WALL BRACING DETAILS AND/OR CALCULATIONS. 9. INSTALL BLOCKING FOR TP HOLDERS, TOWEL BARS, AND TRIM BEAMS.

10. GARAGE DOOR H-FRAME: THE H-FRAME FOR ATTACHMENT OF THE GARAGE DOOR TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING: 2x6 VERTICAL JAMBS RUNNING FROM FLOOR TO CELING ATTACHED WITH 3 1/4"x.120 NAILS @ 7" a STAGGERED WITH (7) 3 1/4x.120 NAILS THRU JAMB INTO HEADER, MINIMUM

2x8 HEADER FOR ATTACHMENT OF COUNTER BALANCE SYSTEM. II. OVERHEAD GARAGE DOORS TO MEET 90 MPH WIND LOAD RESISTANCE REQUIREMENTS OF DASMA 108-5 AND ASTM E 330-02 PER IRC SECTION R 612.4. 12. MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT EXCEED 73/4" MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT

EXCEED 7 3/4" AND THE TREADS SHALL PROVIDE A MINIMUM TREAD DEPTH OF 10". 13. ALL EXTERIOR AND LOAD BEARING WINDOW AND DOOR HEADERS TO BE (2) 2x10 D.FIR #2 UNLESS NOTED

OTHERWISE ON PLANS 14. ALL HEADER BEARINGS (OTHER THAN WINDOWS) TO BE (2) 2×4 STUDS UNLESS NOTED OTHERWISE. WINDOW HEADER BEARING TO BE (1) 2x4 EA END UNLESS NOTED OTHERWISE.

GENERAL FOUNDATION REQUIRMENTS

I. ALL FOOTINGS ARE TO BE E.XTENDED TO MIN 36" BELOW

FINISHED GRADE. 2. ALL INTERIOR FOOTINGS FOR LOAD BEARING WALLS AND COLUMNS SHALL BE ISOLATED FROM THE BASEMENT FLOOR SLAB.

3. FOR ALL CONC WALL OPENINGS, FOOTING & WALL STEPS, PROVIDE ONE #4 BAR, 48" LONG DIAGONALLY AS CLOSE AS PRACTICAL TO CORNER.

4. ALL REINFORCEMENT SHALL BE LAPPED A MIN OF 24" AT ENDS SPLICES AND AROUND CORNERS.

5. ANCHOR BOLTS ARE TO BE SPACED @ 36" WITH 7" MIN EMBED. A BOLT SHALL BE PLACED WITHIN IZ" OF THE END OF EACH PLATE SECTION.

6. FASTEN JOISTS TO SILL PLATES WITH (3) 8d COM NAILS. 7. WHERE JOIST IS PARALLEL TO FOUNDATION, PROVIDE SOLID BLOCKING @ 32" FOR (3) JST SPACES. FASTEN TO SILL PLATE

8. VAPOR BARRIER: 6 MIL PE VAPOR RETARDER WITH JOINTS LAPPED A MIN OF 6" BETWEEN SLAB & BASE. 9. DAMP PROOFING: ONE COAT (MIN) OF DAMP PROOFING OR EQUIVALENT FOUNDATION MEMBRANE SHALL BE APPLIED TO

EXTERIOR WALL SURFACES BELOW GRADE. SEAL TIE HOLES,

VOIDS BEFORE APPLICATION. 10. FOUNDATION DRAIN: INSTALL CONT 4"~ PERFORATED PVC DRAIN TILE. DRAIN TILE TO BE EXTENDED TO SQUARE SUMP PIT WHICH EXTENDS A MIN 24" BELOW BASEMENT FLOOR. II. ALL FRAMING MEMBERS IN CONTACT WITH CONCRETE SHALL

BE ACQ TREATED LUMBER. 12. ALL STEEL FASTENERS (INCLUDING FOUND. ANCHOR BOLTS) ON ACQ TO BE (DOUBLE HOT-DIPPED) GALVANIZED.

13. PROVIDE A "UFER" GROUND PER IRC 3608.1 PROVIDE A "UFER" GROUND PER IRC 3608.1 14. EGRESS WELL REQUIREMENTS: A. IF THE VERTICAL DISTANCE FROM THE WINDOW SILL TO ADJACENT GRADE IS GREATER THAN 44", PROVIDE A LADDER.

B. ADD DRAIN TO DAYLIGHT OR SUMP PUMP.

ENERGY REQUIRMENTS

ENERGY RATING SYSTEM. IN LIEU OF AN ENERGY AUDIT, THE FOLLOWING PRESCRIPTIVE REQUIREMENTS MAY BE A. ALL DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING ALL DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING CAVITIES TO BE SEALED PER IRC SECTION NII03.2. B. THE BUILDING THERMAL ENVELOPE IS REQUIRED TO BE

CONTRACTOR TO PROVIDE ENERGY AUDIT USING THE HERS

SEALED THE BUILDING THERMAL ENVELOPE IS REQUIRED TO BE SEALED PER IRC SECTION NII02.4. C. CONTRACTOR TO SUBMIT "MANUAL J" AND "MANUAL D" CALCULATIONS FOR THE HVAC SYSTEM D. INSULATION TO COMPLY WITH IECC AS FOLLOWS:

CEILING (FLAT) R-40 CEILING (VAULTED) (NOTE: VAULTED AREA NOT TO 50059 ft OR 20% OF ROOF

INSULATION TO COMPLY WITH IECC AS FOLLOWS:

FLOORS OVER UNCONDITIONED SPACE CRAWL SPACE WALLS BASEMENT WALLS SLABS DUCTWORK

R-13 (or R-10 CONTINUOUS) R-13 (or R-10 CONTINUOUS) N/R R-8

R-10

AREA, WHICHEVER IS LESS)

WINDOWS U-FACTOR SHGC SKYLIGHTS U-FACTOR

SHGC

U 0.35 (MAX) 0.40 (MAX) U 0.55 (MAX)

0.40 (MAX)

tim joist to top plate, toe nail 8d (21/2" 6" o.c. 6" o.c. each joist, face nail

4 staples 13

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

ITEM DESCRIPTION OF BUILDING TYPE OF

4 Collar tie to rafter, face nail or 3-10d (3" × 11/4" × 20 gage ridge strap 0.128")

hip rafters: toe nail face nail 3-16d (31/2"

Continuous header to stud, toe \mid 4-8d (2 $^1/_2$ "

3 Double top plates, face nail 10d (3" × 0.128")

Sole plate to joist or blocking, 16d (31/2"

Top or sole plate to stud, end 2-16d (31/2"

3-10d

10d (3" × 0.128")

3-16d box nails (3¹/₂" × 0.135") or 3-10d common opposite side of each

nails (3" × 0.148") rafter or trussi

16d ($3^{1}/_{2}$ " × 16" o.c. along each

16" o.c. along each

16" o.c.

16" o.c.

Ceiling joists to plate, toe nail

Rafter or roof truss to plate,

Ceiling joists not attached parallel rafter, laps over

Built-up studs-face nail

Abutting studs at intersecting

Built-up header, two pieces

10 Continued header, two pieces

inch offset of end joints,

Sole plate to joist or blocking at braced wall panels

Stud to sole plate, toe nail

intersections, face nail

plate, face nail

bearing, face nail

bearing, face nail

1" brace to each stud and

1" × 6" sheathing to each

" × 8" sheathing to each

Wider than 1" × 8" sheathing

24 Joist to sill or girder, toe nail 3-8d (21/2")

to each bearing, face nail

2 Double studs, face nail

face nail in lapped area

at each bearing Built-up girders and beams, at each splice.

1 Ledger strip supporting joists or rafter or rafters $3-16d (3^1/2^m \times 0.135^m)$ At each joist or rafter

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

BUILI	IDECCRIPTION ST	DESCRIPTION OF FASTENER ^{b, c, e}	SPACING OF FASTENERS		
	DESCRIPTION OF BUILDING MATERIALS		Edges (inches) ⁱ	Intermediate supports ^{c, e} (inches)	
W	ood structural panels, su	sheathing to fr		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 she	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 stri	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	1 ¹ /8" - 1 ¹ /4"	10d common (3" × 0.148") nail or 8d deformed (2 ¹ / ₂ " × 0.120") nail	6	12	

Foundation Wall Reinforcement Schedule - Table 2

Concrete strength/Grade	8 inch	thick	wall	10 inc	h thic	k 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	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

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. 10-inch wall - Minimum 6.75 inches from the outside face Extend bars to within 8 inches of the top of the wall.

Reinforcement clearances: a) Concrete exposed to earth - minimum 1-1/2 inches Not exposed to weather (interior side of walls) - minimum 3/4 inch.

Concrete exposed to weather (top clearance in garage and driveway slabs)- 1-1/2 inches. a) One bar shall be placed within 12 inches of the top of the wall.

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 Reinforcement shall be lapped a minimum 24 inches at ends, splices, and around corners. 3) 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

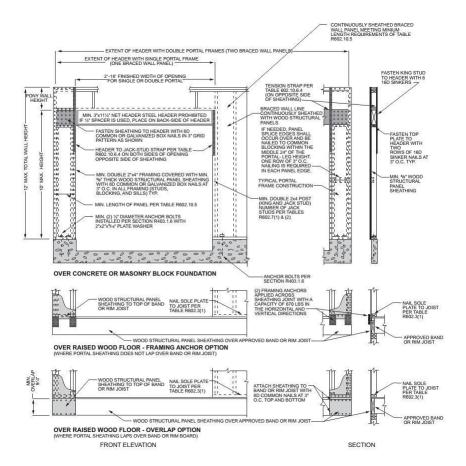
Straight walls more than 5 feet tall and more than 16 feet long shall be provided with exterior braced return walls. Wall length shall be measured using inside the shortest dimension between intersecting walls (See 7/S2).

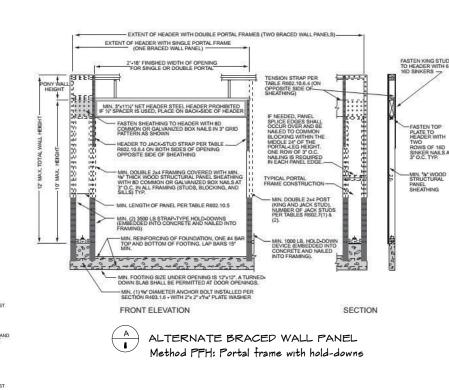
than 4 inches provide #4 bars at maximum 24 inches on center to within 8 inches of the top of

BRACED WALL LINE CONTINUOUSLY SHEATHED 1111111111111111 BRACED WALL LINE HOLD-BRACED WALL PANEL AT BRACED WALL PANEL AT END OF BRACED WALL LINE END OF BRACED WALL LINE **END CONDITION 1 END CONDITION 2** CONTINUOUSLY SHEATHED ONTINUOUSLY SHEATHED BRACED WALL LINE BRACED WALL LINE 48" MINIMUM BRACED WALL PANEL AT END OF BRACED WALL LINE - FIRST BRACED * SEE REQUIREMENTS **END CONDITION 3 END CONDITION 4** BRACED WALL LINE REQUIREMENTS Return panel: 24" for braced wall lines sheathed with wood structural panels 32" for braced wall lines sheathed with structural fiberboard Distance D: 24" for braced wall lines sheathed with wood structural panels 32" for braced wall lines sheathed with structural fiberboard

Hold-down 800 lbs capacity fastened to the edge of the HOLD-DOWN — - FIRST BRACED device: braced wall panel closest to the corner and to the foundation or floor framing below **END CONDITION 5**

GENERAL HEADER SPECIFICATIONS:		
REQUIRED AREAS NEEDING HEADERS:	HEADER DESCRIPTIONS:	
WINDOWS/DOORS UP TO 38" R.O.	(2) #2 D-FIR 2X10'S	
WINDOWS/DOORS 38" UP TO 72" R.O.	(2) #2 D-FIR 2X10'S W/1/2" 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) 11 7/8" L.V.L.	
16'0" GARAGE DOOR W/NO SECOND FLOOR	(2) 11 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.		





Method PFG: at garage door openings Seismic Design Categories A, B and C ALTERNATE BRACED WALL PANEL Method ABW: Alternate braced wall panels A ALTERNATE BRACED WALL PANEL . Method CS-PF: Continuously sheathed portal fram 2. PROVIDE SOLID BLOCKING ABOVE AND BELOW OR BELOW RUNG PERPENDICULAR TO THE BRACIN THE BRACED WALL SOLE PLATE AND TOP PLATE SHALL BE FASTENED TO BLOCKING (RO PARALLEL FRAMING MEMBER WHERE PROVIDED) WITH (3) IGA 3. SIMPSON STHD-14 HOLD-DOWN STRAPS MAY BE SUBSTITUTED WITH SIMPSON PHD2 HOLD-DOWNS AND A 5/8" ANCHOR ROD DRILLED AND EPOXIED A MIN. 7" INTO THE FOUNDATION

BRACED WALLS:

METHOD WSP OR LB (2018 IRC):
MIN. 5/16" APA RATED WITH 8d
NAILS @ 6" AND 12"

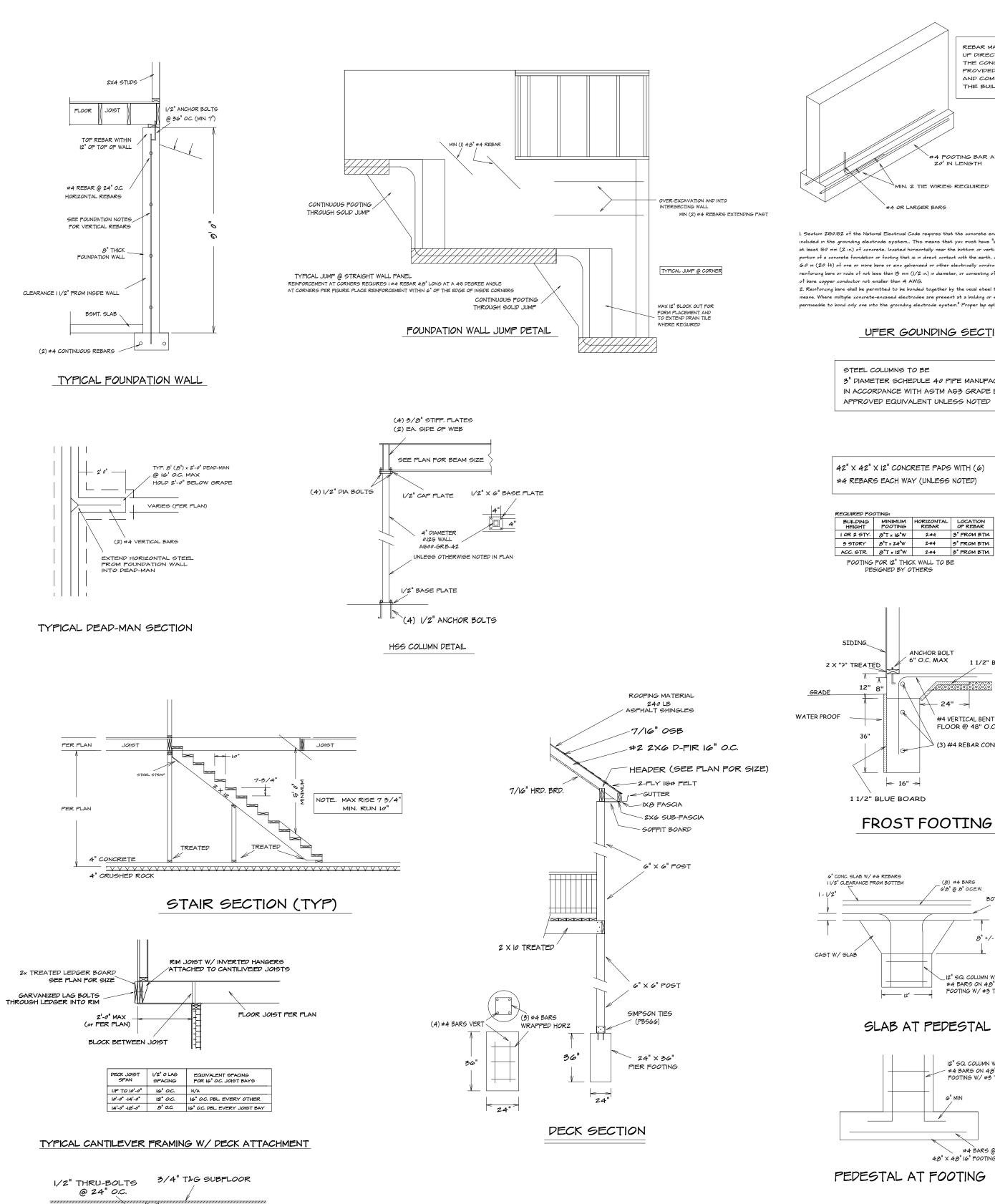
ALTERNATE BRACED WALL PANEL
Method PEH: Portol frame with hold-downs

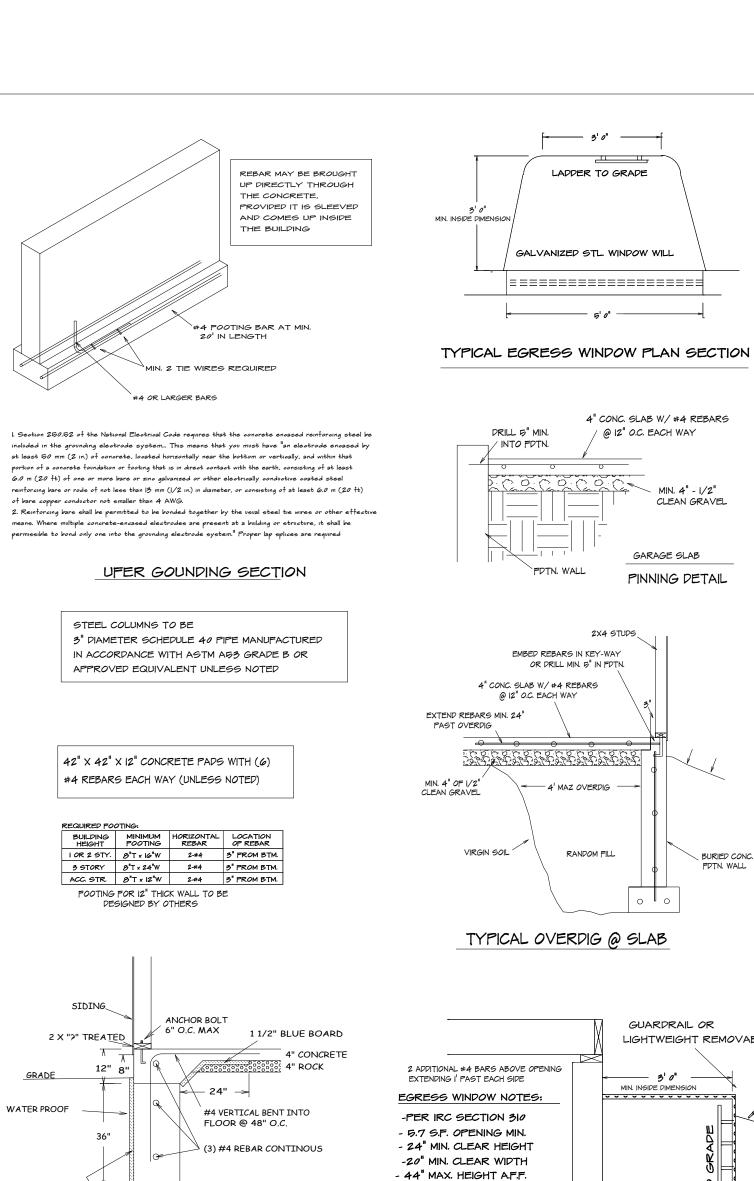
A ALTERNATE BRACED WALL PANEL

METHOD GB (2018 IRC) :

ALTERNATE BRACED WALL PANEL

Method CS-PF: Continuously sheathed portal frame





(8) #4 BARS 6'8" @ 8" O.C.E.W.

|2" 5Q. COLUMN W/(8) #4 BARS ON 48" X 48" 16" FOOTING W/#3 TIES @ 12" O.C.

#4 BARS @ 8" O.C.E.W.

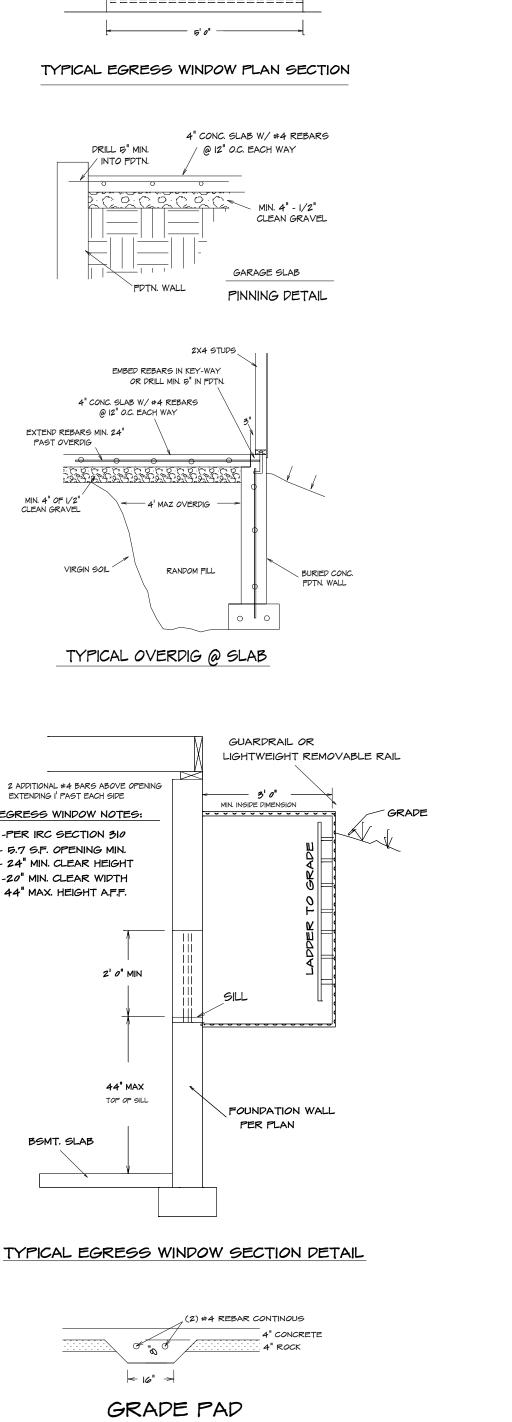
48" X 48" 16" FOOTING

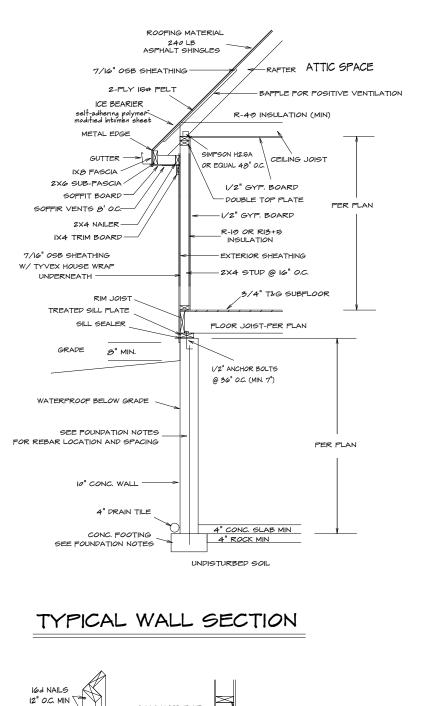
2' 0" MIN

44" MAX TOP OF SILL

1/2" = 10"

BSMT. SLAB





48" O.C. SPACING

EXTERIOR TALL WALL SECTION 10' TRU 18' TALL WALLS UNINTERRUPTED

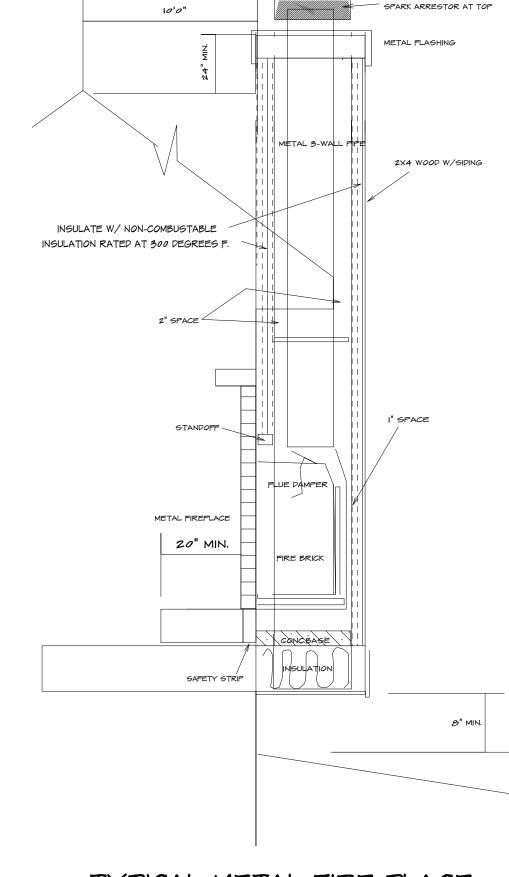
TO BE CONSTRUCTED WITH

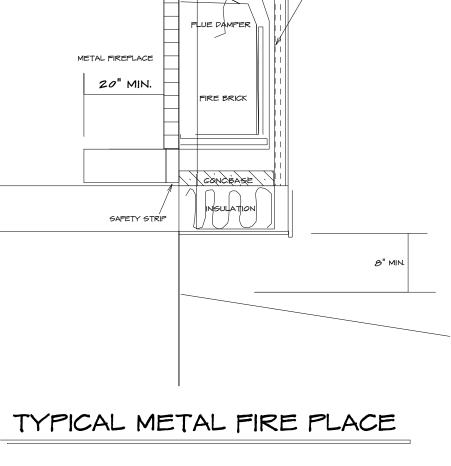
STIFF BACK EVERY 48" O.C.

TYPICAL F.P. FRONT

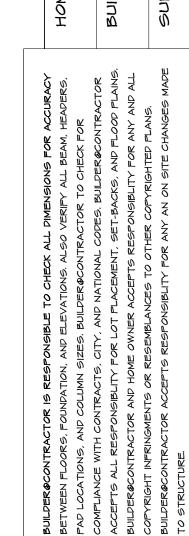
2X6 STUDS 16" O.C. WITH

2X6 STUD











JOIST PER PLAN

JOIST HANGER PER MANUFACTURER SPECS JOIST PER PLAN

(PER PLAN)

UPSET STEEL BEAM/JOIST CONNECTION