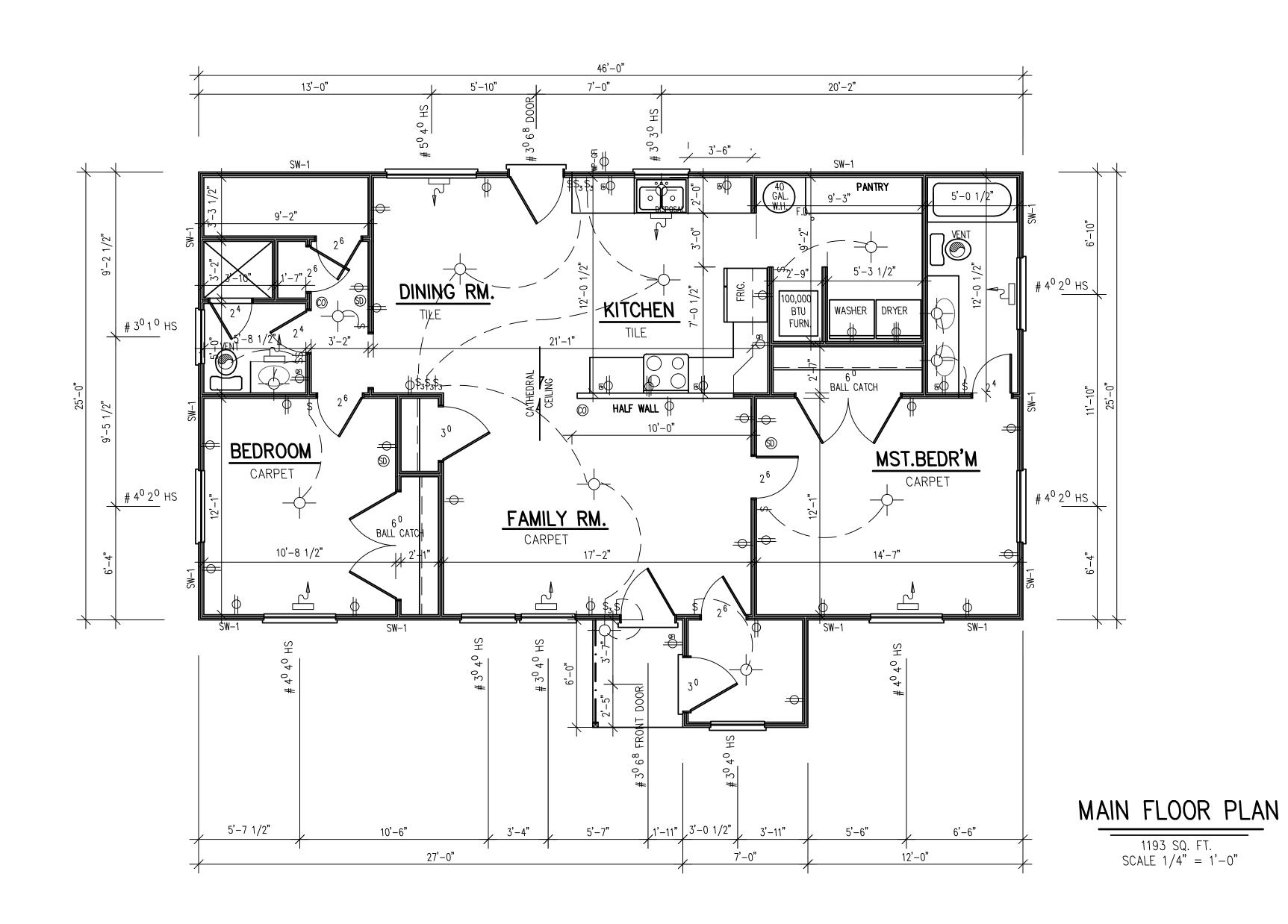
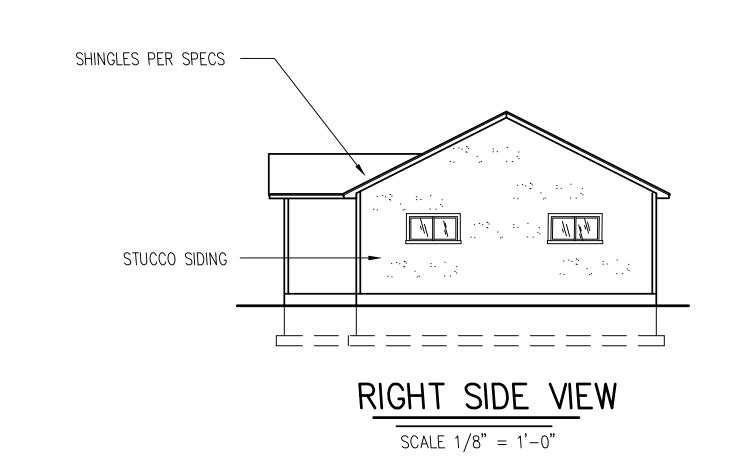
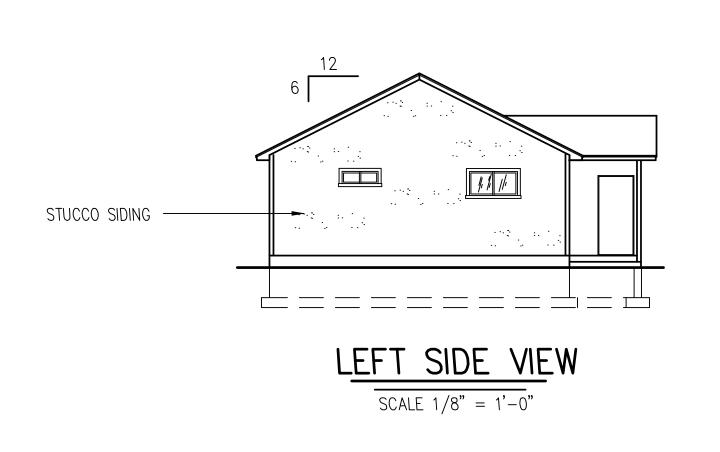


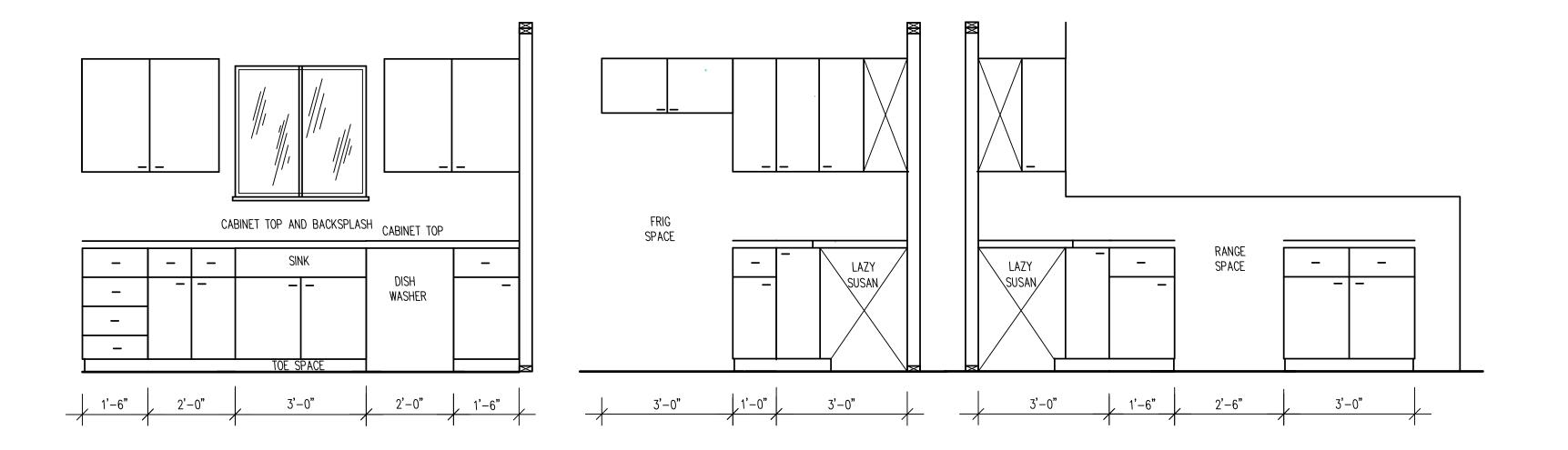
SCALE 1/4" = 1'-0"







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FRAMING AND SHEATHING

ALL STUDS TO BE MAX. 16" O.C. FLOOR SHEATHING SHALL BE 3/4" T&G APA RATED 40/20 CDX SHEATHING NAILED WITH 8d NAILS 6" O.C. AT ALL PANEL EDGES, SUPPORTED EDGES, AND ALL BLOCKING. USE 8d NAILS 10" O.C. IN FIELD. NAILS SHALL BE MIN. 1/2" FROM EDGE OF PANEL. LAY SHEATHING WITH FACE GRAIN AT RIGHT ANGLES TO FRAMING AND GLUE WITH GLUE CONFORMING TO APA SPECS. FLOOR JOISTS SHALL BE BLOCKED AT ALL BEARING POINTS. BLOCK ALL HORIZ. EDGES OF WALL SHEATHING WITH 2 X 4 BLOCKING. USE 8d NAILS 6" O.C. EDGES & 10" O.C. FIELD. EXTEND SHEATHING OVER RIM JOIST AND NAIL TO WALL PLATES ABOVE AND BELOW. EXTEND SHEATHING DOWN TO SILL PLATE AND NAIL PER SHEAR WALL SCHEDULE.

TYPICAL ROOF SHEATHING SHALL BE 7/16" RATED OSB SHEATHING NAILED WITH 8d NAILS 6" O.C. AT PANEL EDGES, SUPPORTED EDGES, AND ALL BLOCKING WITH 8d NAILS, 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS. UNLESS OTHERWISE NOTED USE 2:2X10 WITH PLY FILLER FOR BEARING HEADEAR

EXCEPT WHERE OTHERWISE NOTED, CONNECT ALL WOOD TO CONCRETE, WOOD TO STEEL WITH SIMPSON CONNECTORS. ALL WOOD TO WOOD CONNECTIONS TO CONFORM TO NAILING SCHEDULE IN CURRENT IRC. USE STRAPS AND CONNECTORS AS REQUIRED. SOLID 2" NOMINAL BLOCKING SHALL BE PROVIDED AT ENDS OR POINTS OF SUPPORT OF ALL WOOD JOISTS AND TRUSSES. INSTALL JOIST, RAFTER, AND BEAM HANGERS & POST CAPS PER MAUFACTURERS SPECIFICATIONS.

MINIMUM NAILING SHALL BE AS PER 25-Q UNIFORM BUILDING CODE. STAPLES CAN BE SUBSTITUTED FOR NAILS AT A RATE EQUAL TO LOAD VALUES PROVIDED BY 2006 IRC STANDARD OR ENGINEER APPROVAL. PROVIDE SOLID BEARING THROUGH FLOOR SYSTEMS AND POSTS DOWN TO CONC. FTG.

CONTRACTOR AND ALL SUB-CONTRACTORS SHALL FOLLOW ALL STANDARD BUILDING CODES, PRACTICES, AND REQUIREMENTS AS LISTED IN THE 2006 IRC.

USE BALOON FRAMING METHOD TO CONNECT FLOOR SYSTEMS IN SPLIT LEVEL DESIGNS. USE DOUBLE FLOOR JOIST UNDER EA. END OF SHEAR WALLS OVER CANT. FLOOR SECTIONS.

INSTALL JOIST AND RAFTER HANGERS AS PER MANUFACTURERS SPECIFICATIONS. UNLESS OTHERWISE NOTED CONNECT ALL HEADER TO STUD/POST, POST TO FLOOR, BEAM TO BEAM, RAFTER TO WALL

CONNECT EACH RAFTER OR TRUSS TO BEARING WALLS USING SIMPSON H2.5 OR EQUIV. CONNECTORS CONNECT EACH CANT. FLOOR JOIST TO BEARING WALLS USING SIMPSON A35 OR EQUIV.

FOOTING, FOUNDATION AND CONCRETE

ALL FOOTINGS ARE BASED ON ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF. FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR ENGINEERED GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY. NO FOOT-INGS SHALL BE PLACED IN WATER OR FROZEN GROUND. ALL FOOTINGS MIN. 30" BELOW GRADE, CONTINUOUS AND MONOLITHIC POUR. CHANGES IN ELEV. SHALL BE STEPPED WITH STEP HEIGHT NOT HIGHER THAN 1/2 THE STEP LENGTH AND NOT GREATER THAN 4 FT. MIN. 6" THICKNESS ON VERT. STEP. FOOTINGS TO HAVE 2 #4 BAR CONTINUOUS. NOTIFY ENGINEER IF GRADE DROPS OVER 8 FEET IN 24 FEET (G.T. 1 TO 3 SLOPE) SO THAT APPROPRIATE DESIGN CHANGES MAY BE MADE TO FOUNDATION AND FOOTINGS. THIS ENGINEERING ASSUMES THAT THE SITE IS DRY AND STABLE AND DOES NOT PROVIDE ANY WARANTY OF ANY KIND AGAINST SITE STABILITY OR PERFORMANCE. BUILDER SHALL ENSURE THAT THE REQUIREMENTS LISTED IN FIGURE R403.1.7.1 2000 IRC, ARE MET, OR NOTIFY ENGINEER SO APPROPRIATE SOLUTION CAN BE DEVELOPED PRIOR TO START.

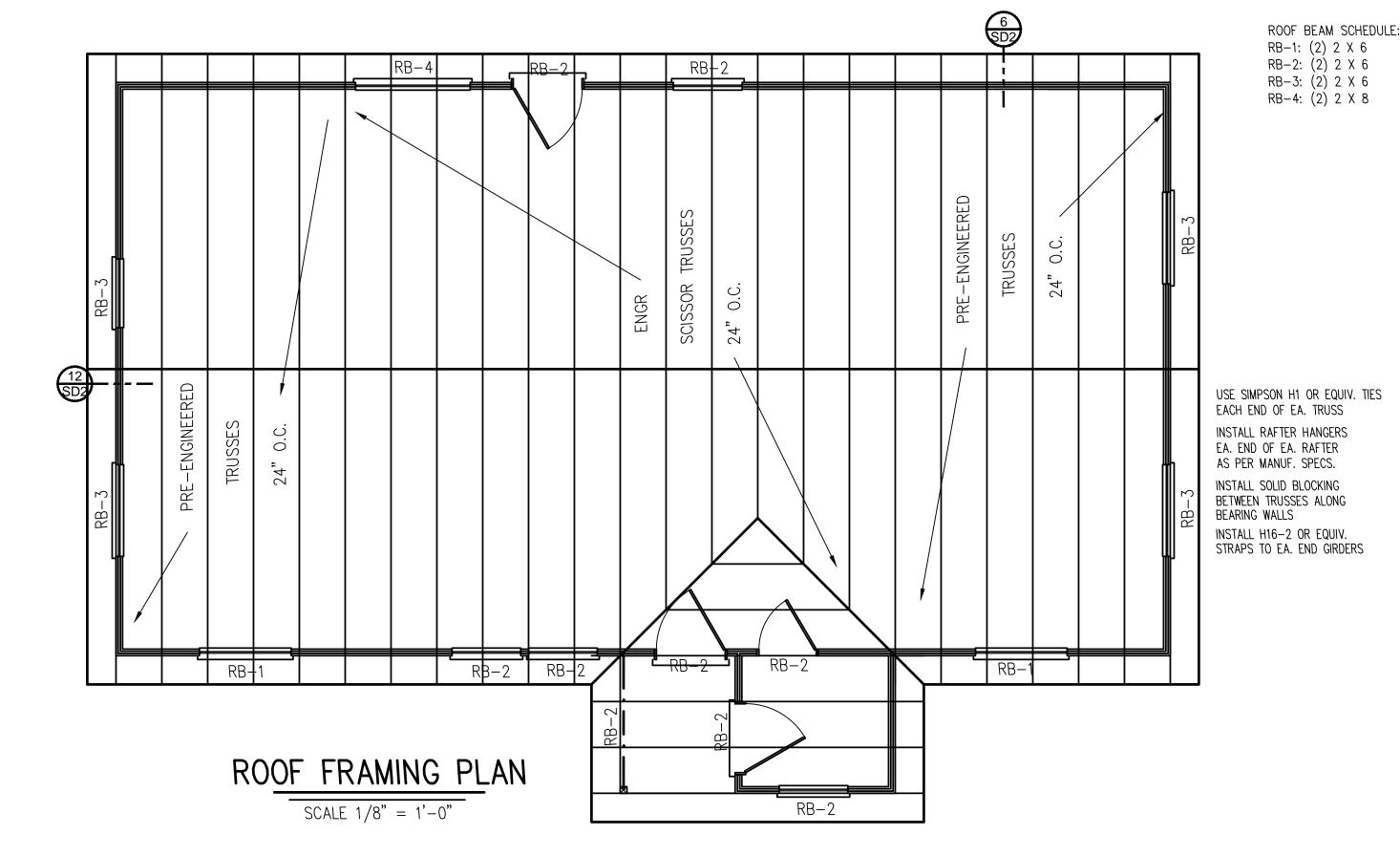
ALL FOOTINGS, FOUNDATIONS, AND INTERIOR SLABS SHALL BE NORMAL WT. CONCRETE WITH A COMPRESSIVE STRENGTH EQUAL TO AT LEAST 3,000 PSI WITHIN 28 DAYS AFTER POURING. THE WATER/CEMENT RATIO SHALL BE NO GREATER THAN .50 AND SLUMP SHALL BE 3" OR LESS. MIN. CEMENT CONTENT SHALL BE 504 LBS. PER CUBIC YARD. ALL CONC WORK SHALL BE PLACED, CURED, STRIPPED, AND PROTECTED AS DIRECTED BY THE SPECIFICATIONS AND ACI STANDARDS AND PRACTICES.

ALL REINFORCING SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI DETAILING MANUAL 315-77 AND ACI STANDARD 318-83. REINFORCEMENT SHALL BE FREE FROM MUD AND OIL AND OTHER NON-METALLIC COATINGS THAT HAMPER BONDING CAPACITY. ALL SPLICES IN CONTINUOUS REINFORCING SHALL LAP 36" AND SHALL BE MADE IN AN AREA OF COMPRESSION.

VERT & HORZ. #4 BAR (GRADE 60) AS PER UTAH STATE AMENDMENT OPENINGS TO HÄVE 1 VERT. #4 BAR EA. SIDE OF OPENING TIED TO HORIZ. BAR. 2 #4 BAR ABOVE AND BELOW EA. WINDOW OPENING EXTENDING 36" BEYOND OPENING. BUILDER SHALL ENSURE THAT ALL CONDITIONS AND REQUIREMENTS FOR THE FOUNDATION AMENDMENT ARE FOLLOWED.

USE 1/2" X 10" ANCHOR BOLTS 32" O.C. USE SIMPSON HOLD DOWN STRAPS AS NOTED ON DRAWING OWNER\CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS LISTED ON THE DRAWING VERIFICATION OF ALL SITE CONDITIONS INCLUDING SITE STABILITY IS THE RESPONSIBILITY OF OTHERS

ALL SPLICES IN REINFORCEMENT SHALL LAP A MINIMUM OF 30 BAR DIAMETERS. UNLESS OTHERWISE NOTED ALL CONSTRUCTION JOINTS SHALL BE KEYED WITH A KEY 1- 1/2" DEEP AND A WIDTH OF 1/2 THE MEMBER. PLACE FOUND. REBAR WITHIN 2 1/2" FROM INTERIOR WALL SURFACE. ALLOW 14 DAYS FOR CONCRETE TO CURE



CAB TOP & BACK

6'-6"

MST. BATH

SINK

SINK

CAB TOP & BACK SINK

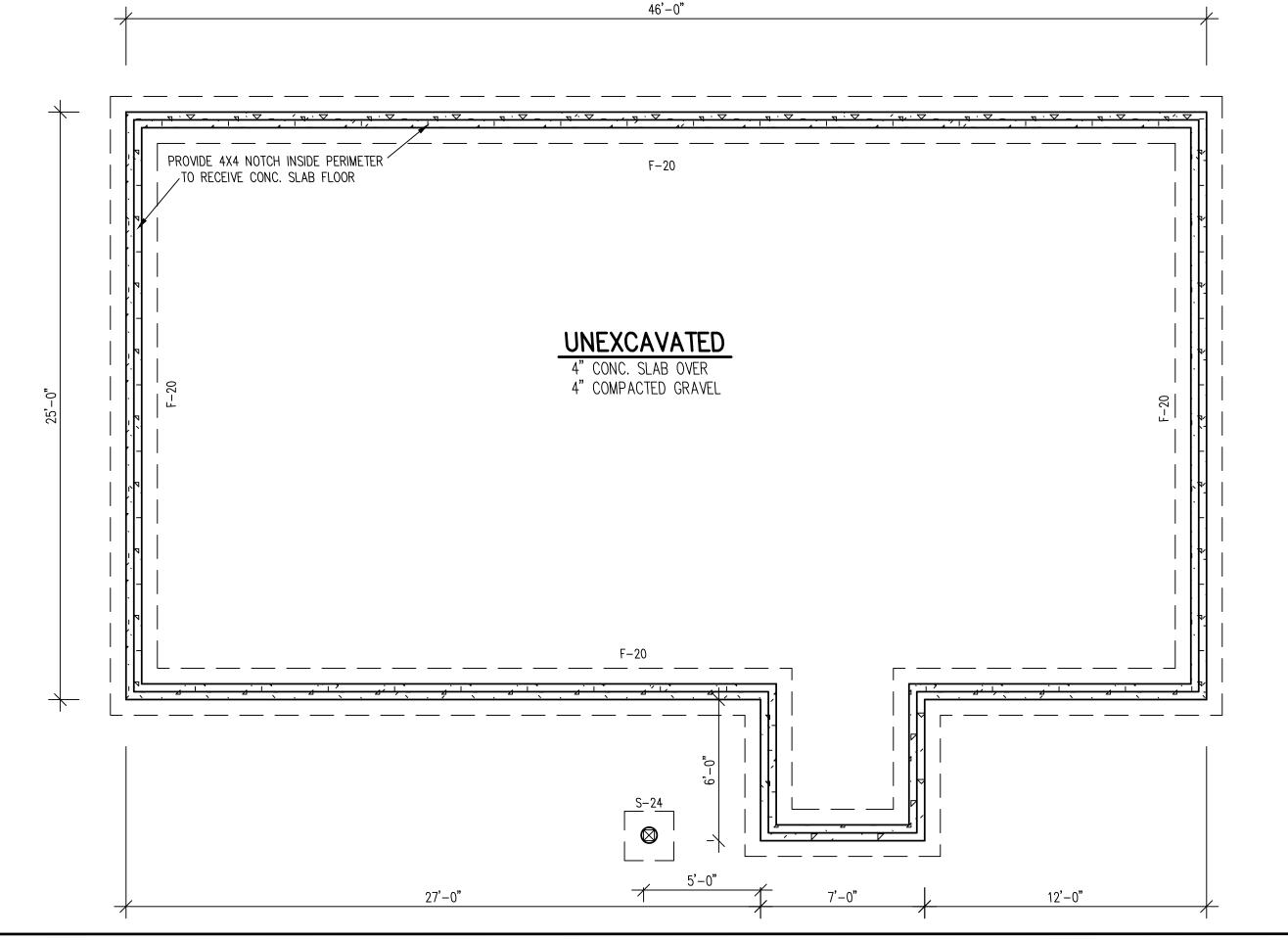
3/4 BATH

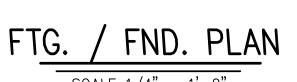
SHEAR WALL NOTES

ALL EXTERIOR WALLS AND VERTICAL SURFACES AT STEPS IN ROOF SHALL BE SHEATHED WITH 15/32" APA RATED 24/0 OR BETTER STRUCTURAL WOOD PANELS. BLOCK ALL HORIZ EDGES WITH 2" NOM. OR WIDER. 2" OR WIDER FRAMING AT ADJOINING PANEL EDGES AND NAILS SHALL BE STAGGERED WHERE 10d NAILS ARE SPACED 3" O.C. OR LESS. SHEATHING SHALL EXTEND CONTINUOUS FROM FLOOR TO TO TOP PLATE FRAMING ON UPPER EXT. WALLS. NAILS SHALL BE PLACED NOT LESS THAN 1/2" FROM EDGE OF PANEL AND DRIVEN FLUSH BUT SHALL NOT FRACTURE THE SURFACE OF THE SHEATHING. EXTEND SHEATHING OVER RIM AND NAIL TO RIM AND WALL PLATES 4" O.C.

	SHEAR WALL	SCHE	DULE		
TYPE	SHEATHING		NAILING		ANCHOR BOLTS
		NAIL	EDGE	FIELD	
TYPICAL		8d	6" O.C.	10" O.C.	1/2" 32" O.C.
SW-1	7/16" ONE SIDE	8d	4" O.C.	10" O.C.	1/2" 32" O.C.
SW-2	7/16" BOTH SIDES	8d	4" O.C.	10" O.C.	1/2" 32" O.C.
SW-3	5/8" ONE SIDE	10d	4" O.C.	10" O.C.	1/2" 32" O.C.
SW-4	7/16" ONE SIDE, NAIL/SCREW DRYWALL	8d	4" O.C.	10" O.C.	1/2" 32" O.C.
PSW	PERFORATED SHEAR WALL (SEE DETAIL)				

BRACED WALLS; GLUE AND NAIL SHEETROCK 7" O.C. BOTH SIDES NOTE: STAPLES MAY BE SUBSTITUTED FOR 8d NAILS AT 1/2 SPACING NOTE: SCREWS MAY BE SUBSTITUTED FOR NAILS IN DRYWALL





3,000 PSI CONCRETE FOUN		NDATION SCHEDULE							Ξ	60,000 PSI STEEL							
MAXIMUM WALL HEIGHT FROM T.O. FOOTING	TOP EDGE SUPPORT	MIN. WALL WIDTH	VERTICAL WALL REINF.		HORIZONTAL WALL REINF.		ADDITIONAL REINF. FOR OPENINGS						MAX. LINTEL	MIN. Lintel	ADDITIONAL FTG. SIZE AND REINF.		FOUNDATION BOLTS
			SIZE	SPACING	SIZE	SIZE SPACING		OVE SIZE i)es Size		LOW SIZE	LENGTH	DEPTH	WIDTH		(MIN. 7" EMBEDMENT)
2'-0" TO 5'-0"	NONE	8"	#4	24" O.C.	#4	18" O.C.	2	#4	1	#4	1	#4	2'	6"	SEE	FTG. SCHED.	1/2" X 10" @ 32" O.C.
5'-1" TO 6'-0"	NONE	8"	#4	18" O.C.	#4	18" O.C.	2	#4	1	#4	1	#4	3'	6"	36"	4 #4 x CONT	1/2" X 10" @ 32" O.C.
6'-1" TO 7'-0"	NONE	8"	#4	12" O.C.	#4	18" O.C.	2	#4	1	#4	1	#4	4'	8"	42"	5 #4 x CONT	1/2" X 10" @ 32" O.C.
7'-10" TO 8'-0"	FLOOR	8"	#4	24" O.C.	#4	18" O.C.	2	#4	1	#4	1	#4	5'	10"	SEE	FTG. SCHED.	1/2" X 10" @ 32" O.C.
8'-1" TO 9'-0"	FLOOR	8"	#4	16" O.C.	#4	18" O.C.	2	#4	1	#4	1	#4	6'	12"	SEE	FTG. SCHED.	1/2" X 10" @ 32" O.C.
9'-1" TO 10'-0"	FLOOR	8"	#4	11" O.C.	#4	11" O.C.	2	#4	1	#4	1	#4	6'	12"	24"	2 #4 x CONT	5/8" X 10" @ 24" O.C.
> 10'-0"+	REQ. ENG.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	REQ. ENG.

. MINIMUM STRENGTH REQUIRES 2,500 PSI CONCRETE; HOWEVER, AS PER IRC 402.2 3,000 PSI CONCRETE SHALL BE USED

1. REBAR TO BE PLACED IN THE CENTER OF THE WALL AND EXTEND FROM THE FOOTING TO WITHIN 3" OF THE TOP OF THE WALL.

2. #4 FOOTING DOWELS SHALL EXTEND 24" INTO THE FOUNDATION AND MATCH VERTICAL STEEL.

3. ONE BAR SHALL BE LOCATED IN THE TOP 3" AND ONE BAR IN THE BOTTOM 3" OF THE FOUNDATION WALL.

(THE REMAINING EQUALLY SPACED BETWEEN)

4. BARS SHALL BE PLACED WITHIN 2" OF THE OPENING AND EXTEND 24" BEYOND THE EDGE OF THE OPENING.

5. THIS TABLE ASSUMES A MINIMUM OF 1500 PSF BEARING CAPACITY, 38 PSF EQUIVALENT FLUID PRESSURE AND A GLOBALLY STABLE SITE

6. ALL FOUNDATION STEPS SHALL BE 2"-0" MINIMUM.

7. USE 3" X 3" X 1/4" WASHERS, IF SLOTTED WASHER IS USED, ADD CUT WASHER.

8. J-BOLTS MAY BE REPLACED WITH #4 BARS © 12" O.C. EXTENDING 24" OUT OF FIND CAST INTO SUSPENDED SLAB

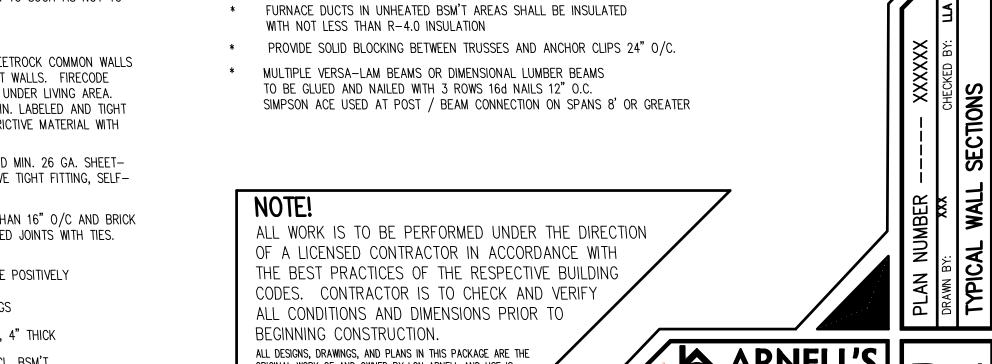
9. LARGER FOOTINGS SPECIFIED ON 5'-1" TO 7'-0" WALLS MAY BE REDUCED TO SIZE SPECIFIED ON THE FOOTING SCHEDULE, AND VERTICAL REBAR SPACING OF 24" O.C. FOR FOUNDATION WALLS MAY BE USED PROVIDED THE FOLLOWING CONDITIONS EXIST.

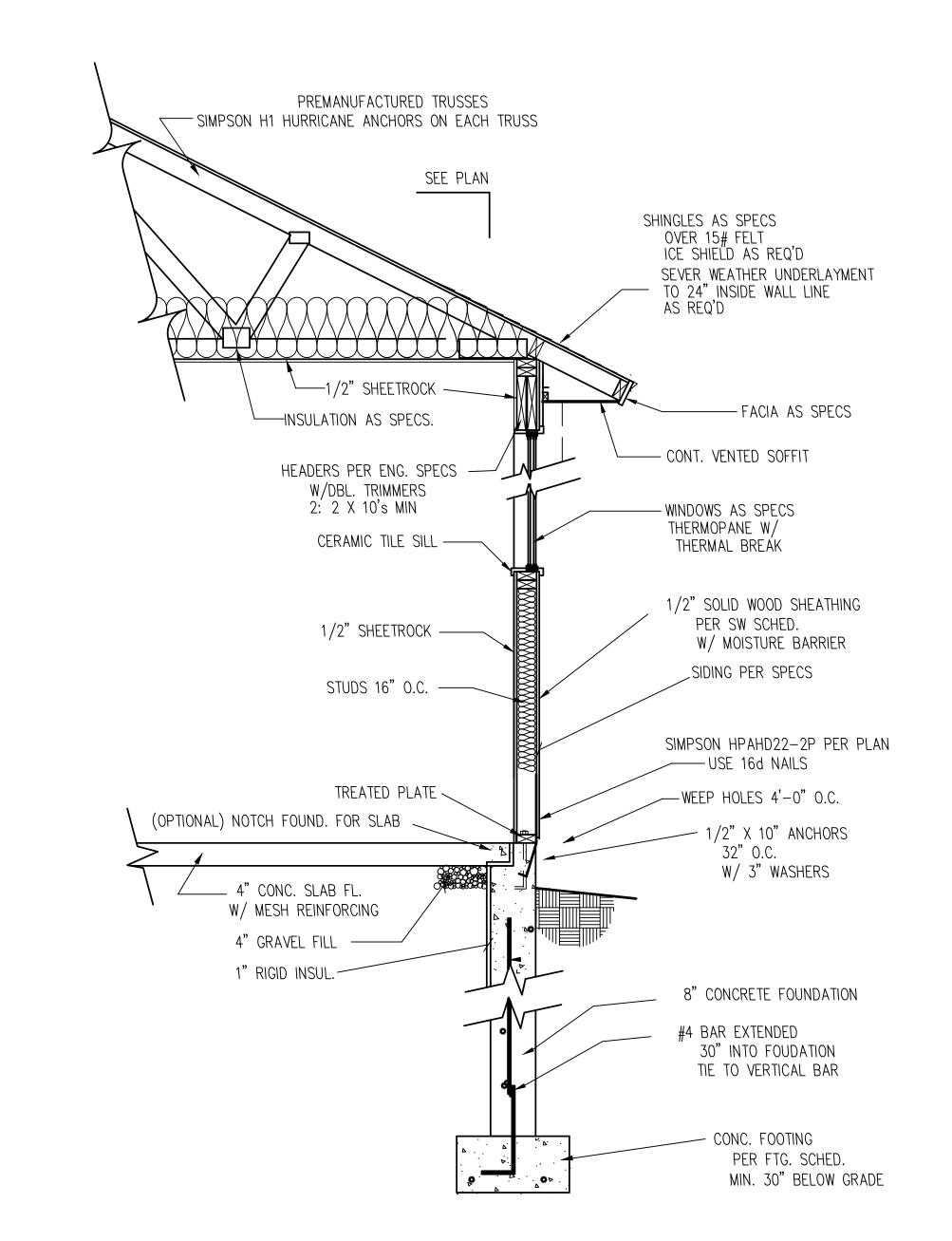
A. 5'-1" TO 7'-0" WALL LENGTH NOT TO EXCEED 10'-0". A. 5'-1" TO 7'-0" WALL LENGTH NOT TO EXCEED 10'-0". B. UNBALANCED BACKFILL DOES NOT EXCEED 4'

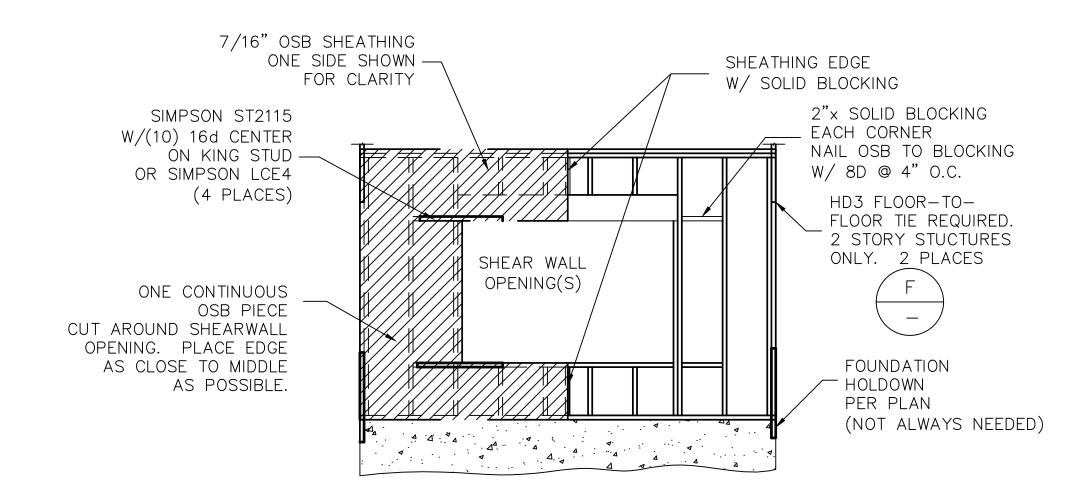
BATH VANITY DETAILS

SCALE 1/2" = 1' - 0"









FORCE TRANSFER SHEAR WALL (NTS)

TYP. WALL SECTION

SCALE 3/4" = 1' - 0"

SLIDING GLASS DOOR ALUM. THRESHOLD CONCRETE SILL — #4 BAR 24" O/C TO SUPPORT PORCH

TYP. PATIO ENTRANCE

SCALE 3/4" = 1'-0"

PREMANUFACTURED TRUSSES

SEE PLAN

1/2" PLYWOOD SHEATHING OR 7/16" WAFER BD.

5/8" W/ 50+ # -

SŃOW LÓADS

BLOCKING —

TRUSS RIBBON -

METAL DRIP-

FACIA AS SPECS -

CONT. VENTED SOFFIT

WINDOWS AS SPECS

THERMOPANE W/

THERMAL BREAK

PER SW SCHED.

FACE BRICK W/ 22 GA.

BRICK TIES 16" O.C.

1" AIR SPACE AT

BRICK AREAS

WEEP HOLES 4'-0" O.C. -

W/ 3" WASHERS

HORIZ. & VERT.

PER AMENDMENT-

8" CONCRETE FOUNDATION

30" INTO FOUDATION

TIE TO VERTICAL BAR

MIN. 30" BELOW GRADE

SEE SCHEDULE

#4 BAR EXTENDED

CONC. FOOTING

PER FTG. SCHED.

1/2" X 10" ANCHORS

32" O.C.

GRADE 60 #4 BAR

1/2" SOLID WOOD SHEATHING

W/ MOISTURE BARRIER

SIMPSON HPAHD22-2P PER PLAN

USE 16d NAILS ---

SIMPSON H1 HURRICANE ANCHORS ON EACH TRUSS —

INSULATION AS SPECS. ——

HEADERS PER ENG. SPECS

W/DBL. TRIMMERS

2: 2 X 10's MIN

R15 / 2 X 4 WALLS

R19 / 2 X 6 WALLS

_NOTCH FOUND. FOR SLAB — (OPTIONAL)

- CERAMIC TILE SILL

- INSUL. PER SPECS

——1/2" SHEETROCK

— STUDS 16" O.C.

- TREATED PLATE

4" CONC. SLAB FL.

∖4" GRAVEL FILL

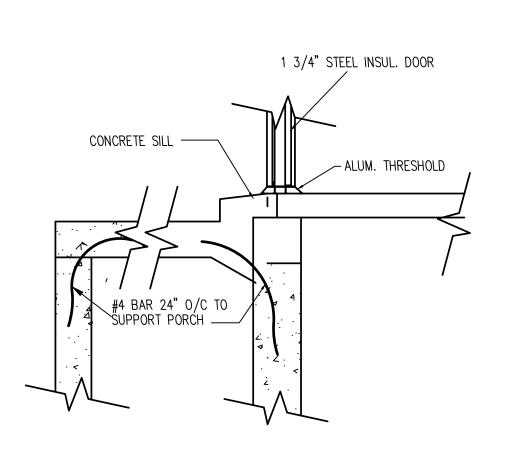
- 1" RIGID INSUL.

W/ MESH REINFORCING

-1/2"SHEETROCK ---

TYP. WALL SECTION

SCALE 3/4" = 1' - 0"



TYP. FRONT ENTRANCE

SPECS

* ALL PREFAB. ITEMS TO BE MANUFACTURED BY APPROVED FABRICATORS

* PROVIDE GFI PROTECTION ON ALL OUTLETS WITHIN 6' OF SINKS, IN GARAGE AREA, AT OUTLET BY FURNACE AND WATER PROOF GFI'S ALL EXTERIOR OUTLETS PROVIDE TAMPERPROOF OUTLETS IN ALL BEDROOMS

- * ALL EXHAUST FANS TO BE VENTED TO OUTSIDE
- * ALL HOSE BIBBS TO HAVE ANTI-SYPHON DEVICES.
- * PROVIDE ATTIC VENTS AT THE RATE OF 1/300 SQ. FT. WITH VENTED SOFFITS, WITH MIN. 50% IN UPPER PORTION AND REMAINDER IN SOFFIT. VENTS AS REQ'D. PROVIDE INSUL. DAM TO MAINTAIN FREE AIR CIRCULATION THRU SOFFIT VENTS.
- * ALL GLAZING IN DOORS & SIDELIGHTS AND ANY WINDOW LESS THAN 18" ABOVE FLOOR OR WITHIN 24" IN ANY ADJOINING PLANE TO BE TEMPERED GLASS. WINDOWS ABOVE TUBS & SHOWERS TO BE TEMPERED GLASS IF LESS THAN 60"ABOVE FLOOR
- ALL HALF WALLS AND RAILINGS TO BE MIN. 36" IN HEIGHT AND RAILINGS CONSTRUCTED SUCH THAT A 4" SPHERE CANNOT PASS THRU. THE TRIANGULAR PORTION BETWEEN BOTTOM RAIL AND TREAD AND RISER TO SUCH AS NOT TO ALLOW A 6" SPHERE TO PASS THRU.
- * MIN. 2% SLOPE 10 FEET AWAY FROM HOUSE.
- * OCCUPANCY SEPERATION SHALL BE 5/8" FIRECODE SHEETROCK COMMON WALLS AND CEILING CONNECTED 6" O/C AT CLG. & 7" O/C AT WALLS. FIRECODE SHEETROCK AT ALL WALLS AND CLG. WHEN GARAGE IS UNDER LIVING AREA. DOORS SHALL BE SELF-CLOSING, SOLID CORE OR 20 MIN. LABELED AND TIGHT FITTING. ATTIC ACCESS DOOR TO BE 1 HR. FIRE RESTRICTIVE MATERIAL WITH HINGE AND POSITIVE LATCH.
- * CLOTHES CHUTES SHALL BE LINED WITH SHEETROCK AND MIN. 26 GA. SHEET-METAL HAVING LOCKLAPPED JOINTS. OPENINGS TO HAVE TIGHT FITTING, SELF-
- * STUDS AT BRICK VENEER AREAS SHALL BE NO MORE THAN 16" O/C AND BRICK TIES SHALL BE 22 GA. AT 16" O/C WITH #9 WIRE IN BED JOINTS WITH TIES. USE 15# FELT UNDER ALL BRICK APPLICATIONS
- * ALL EXTERIOR DECKS, BALCONIES AND STAIRS SHALL BE POSITIVELY ANCHORED TO THE DWELLING. 3' LANDINGS AT ABOVE GRADE EXTERIOR DOOR OPENINGS
- * GARAGE FL. 6 BAG MIX, 4" THICK. BSM'T 5-1/2 BAG, 4" THICK
- SMOKE DETECTOR TO BE INSTALLED AT ALL LEVELS INCL. BSM'T AND IN ALL SLEEPING ROOMS. DETECTORS SHALL BE 110V. WIRED TOGETHER IN SERIES WITH BATTERY BACK-UP.

SPECS

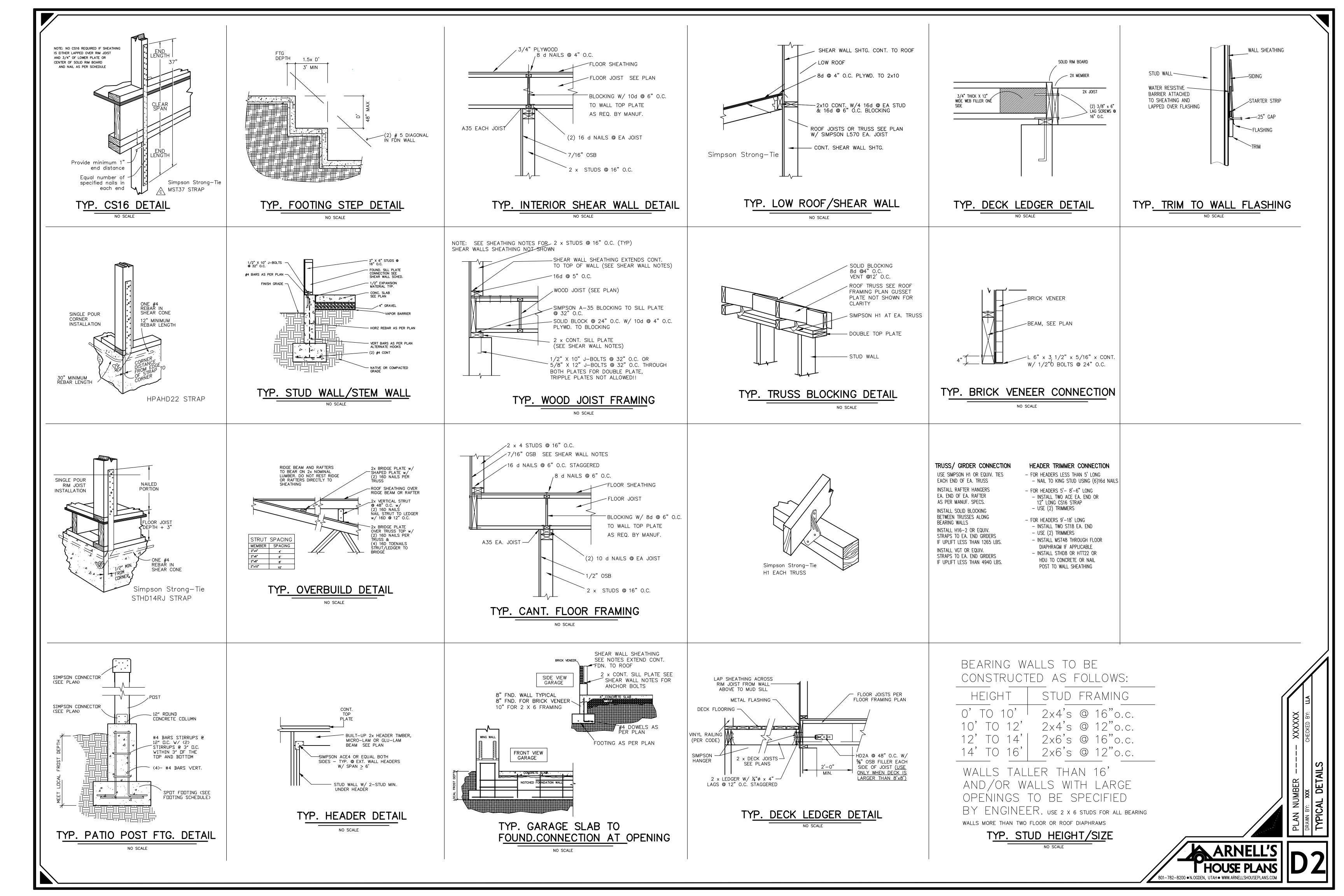
- ALL BRACED WALLS TO USE 4' X 8', 1/2" SHEETROCK GLUED AND FASTENED. FASTENERS TO BE 11 GUAGE NAILS OR SCREWS 7" O.C.
- BLOCK EXT. STUD WALLS 4' UP AT SHEETROCK EDGE ON UNBRACED WALL SECTIONS IN EXCESS OF 34' IN LENGTH.
- * BSM'T AREA COMBUSTION AIR IS TO BE PROVIDED TO THE FURNACE AND W.H. WITH 2 VERTICAL VENTS EA. HAVING 1 SQ. IN. / 4000 BTU INPUT OF APPLIANCES.
- * INSULATE FLOORS AND/OR WALLS BETWEEN HEATED AND UNHEATED
- AREAS. OR PROVIDE 3-1/2" FURRING AND INSUL. AT BSM'T WALLS. * HANDRAILS ON STAIRS MORE THAN 2 RISERS TO BE 34"-38" ABOVE TREAD NOSE AND HAVE 1-1/4" - 2-5/8" CROSS SECTIONAL AREA. STAIRWAY TO HAVE

MIN. 6'-8" HEADROOM CLEARANCE AND 5/8" SHEETROCK UNDER RUNS.

- * ALL OVERHANGING FLOORS SHALL HAVE INSUL. WITH THERMAL TRANSMITTANCE VALUE GREATER THAN .044 UO. FLOOR JOIST SYSTEM SHALL BE ATTACHED TO BEARING WALL USING
- SIMPSON H4 CLIPS EVERY OTHER JOIST

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CONTRACTOR AND ALL SUBCONTRACTORS SHALL PERFORM THEIR TRADES AND DUTIES IN A MANNER CONFORMING TO THE PROCEDURES AND REQ. OF THE ADOPTED CODES AND PRACTICES OF THE COMMUNITY OR AREA IN WHICH THE CONSTRUCTION SHALL TAKE PLACE.

FOOTINGS, FOUNDATIONS AND SLAB ON GRADE

PREP. OF THE SITE WILL CONSIST OF REMOVAL OF ALL SURFACE VEGETATION. TOPSOIL, NON-ENGINEERED FILL, AND OTHER MATERIALS FROM ALL AREAS WHICH WILL ULTIMATELY BE STRUCTURALLY LOADED.

ALL FOOTINGS ARE BASED ON THE ALLOWABLE SOIL BEARING PRESSURE INDICATED IN DESIGN CRITERIA. ANY SOIL CONDITIONS ENCOUNTERED DURING EXCAVATION THAT IS CONTRARY TO THOSE USED FOR DESIGN OF FOOTINGS AS OUTLINED IN WORKING DRAWINGS SHALL BE BROUGHT TO THE ATTENT. OF THE ENG. BEFORE PROCEEDING.

ALL FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE SOIL OR ENGINEERED GRANULAR FILL COMPACTED TO 95% OF MAX DENSITY, BASED ON ASTM D1557 METHOD OF COMPACTION. FILL SHALL BE COMPACTED UNDER ALL CONCRETE WORK ON THE SITE.

NO FOOTINGS SHALL BE INSTALLED UPON LOOSE OR DISTURBED SOILS, SOD, RUBBISH, CONSTRUCTION DEBRIS. NON-ENGINEERED FILL. FROZEN SOIL. IN WATER, OR OTHER DELETERIOUS MATERIALS. IF SUITABLE FILL BECOMES LOOSE OR DISTURBED, THEY MUST BE COMPACTED TO THE REQ. STATED ABOVE.

ALL EXCAVATION ADJACENT TO AND BELOW FOOTING ELEV. FOR OTHER TRADES SHALL BE ACCOMPLISHED PRIOR TO POURING ANY FOOTING.

ALL EXTERIOR WALL FOOTINGS SHALL BE CONTINUOUS AND POURED MONOLITHIC. ALL CHANGES IN VERT. ELEV. SHALL BE STEPPED. STEP HEIGHT SHALL NOT BE HIGHER THAN 2/3 OF THE STEP LENGTH, BUT IN NO CASE SHALL THE STEP HEIGHT BE GREATER THAN 2'-6". THE MINIMUM THICKNESS OF THE VERT. STEP SHALL BE 10".

ALL FOOTINGS SHALL BE PLACED 12" MIN. BELOW UNDISTURBED EARTH NO FOOTINGS SHALL HAVE LESS THAN 30", OR LOCAL FROST DEPTH, BETWEEN THE FINISHED GRADE AND THE BOTTOM OF THE FOOTING.

ALL FOOTING REINFORCEMENT AND WALL COLUMN DOWELS SHALL BE SECURELY TIED IN PLACE PRIOR TO POURING CONCRETE. PROVIDE DOWELS IN FOOTINGS AND FOUND. TO MATCH ALL VERT. BARS IN WALLS AND COLUMNS ABOVE, UNLESS NOTED OTHERWISE.

ALL SLABS ON GRADE SHALL BE IMMEDIATELY UNDERLAIN BY 4" OF FREE DRAINING GRANULAR MATERIAL, SUCH AS "PEA" GRAVEL OR THREE QUARTERS OF 1" MINUS CLEAN GAP-GRADED GRAVEL. GRAVEL MAY BE PLACED UPON PROPERLY PREPARED SUITABLE NATURAL SOILS, AND/OR STRUCTURAL FILL EXTENDING TO SUITABLE NATURAL SOILS.

FOUNDATION WATER PROOFING SHALL BE ASPHALT EMULSION.

ANCHOR BOLTS SHALL BE EMBEDDED IN AT LEAST 7" OF CONCRETE @ 32" O.C. (MAX) AND WITHIN 12" OF EACH END AND SPLICE OF SILL PLATE (MIN. 2 BOLTS PER WALL SECTION). SEE SHEAR WALL SCHEDULE FOR SIZE AND SPACING.

TOPS OF FOUNDATIONS SHALL BE 6" MIN. ABOVE FINISH GRADE. FINISH GRADE SHALL HAVE A SLOPE AWAY FROM THE BUILDING OF 6" MIN. FOR THE FIRST 10' AND A 2% SLOPE THEREAFTER. ALL DRAINAGE FROM THE LOT SHALL DRAIN INTO APPROVED

STABILITY OF SLOPED SITES SHALL BE VERIFIED BY SOIL ENGINEER OR OTHER QUALIFIED PROFESSIONAL

ALL FTGS, FOUND, AND INT. SLABS SHALL BE NORMAL WEIGHT CONCRETE WITH A COMPRESSIVE EQUAL TO AT LEAST 3,000 PSI WITHIN 28 DAYS AFTER POURING. THE WATER/CEMENT RATIO SHALL BE NO GREATER THAN 0.50 AND SLUMP SHALL BE 3" OR LESS. MIN. CONCRETE CONTENT SHALL BE 504 LBS. PER CU. YD.

ALL CONCRETE WORK SHALL BE PLACED, CURED, STRIPPED, AND PROTECTED AS DIRECTED BY THE SPECS AND ACL STANDARDS AND PRACTICES.

BEFORE CONC. IS POURED CHECK WITH ALL TRADES TO INSURE PROPER PLACEMENT OF ALL OPENINGS, SLEEVES, CONDUITS, BOLTS, INSERTS, ETC.

SITE SPECIFIC SOILS REPORTS SHALL BE GIVEN PRECEDENCE OVER THE SPECS LISTED

CONCRETE REINFORCING

ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI DETAILING MANUAL 315-77 AND ACI STANDARD 318-83.

ALL METAL REINFORCEMENT SHALL BE DEFORMED TYPE BARS (EXCEPT #2 BARS) AND SHALL CONFORM TO THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS" A.S.T.M. A615

ALL SPLICES IN CONTINUOUS CONCRETE REINFORCING BARS SHALL LAP 36 BAR DIA. ALL SUCH SPLICES SHALL BE MADE IN A REGION OF COMPRESSION UNLESS OTHERWISE SHOWN. ALL CONTINUOUS REINFORCEMENT SHALL TERMINATE WITH A 90 DEGREE TURN OR

REINFORCEMENT SHALL BE FREE OF MUD, OIL, OR OTHER NON-METALLIC COATINGS THAT ADVERSELY AFFECT BONDING CAPACITY.

ALL OPENINGS IN CONCRETE WALLS SHALL BE REINFORCED WITH 2 #5 BARS EXTENDING 2'-0" MIN. BEYOND THE EDGE OF THE OPENING AT EACH FACE OF OPENING PLUS 2 # 4 X 3 '-0". AT EACH CORNER PLACED 45 DEG. TO THE HORIZ.

HOLDDOWN NOTES

EMBEDDED HOLDOWN ANCHORS ARE REQ. TO RESIST LATERAL OVERTURNING FORCES. HOLDOWN SIZE AND LOCATIONS ARE INDICATED ON THE FOOTING AND FOUND. PLAN AND OR IN THE HOLDOWN NOTES.

ANCHORS SHALL BE INSTALLED FOLLOWING MANUFACT. SPECS. ALL FASTENERS SHALL BE INSTALLED AND MINIMUM EDGE/CORNER DISTANCES SHALL BE MET.

PORCHES - WALKS - DRIVEWAYS - PATIOS

EXT. DOORS TO HAVE MIN. 36" X 36" LANDING - WITH STEPS AS REQ. BY GRADE.

MIN. THICKNESS SHALL BE 4". NORMAL WGT. CONC , COMPRESSIVE STRENGTH EQUAL TO AT LEAST 4000 PSI WITHIN 28 DAYS. WATER/CEMENT RATIO NO GREATER THAN 0.50 AND SLUMP 3" OR LESS. MIN. CEMENT TO BE 575 LBS PER CU. YD.

MASONRY

MASONRY AND STONE VENEER NOT EXCEEDING 5" IN THICKNESS MAY BE ANCHORED DIRECTLY TO STRUCTURAL STUDS.

WALL TIES SHALL BE CORROSION RESISTANT, AND IF MADE OF SHEET METAL, SHALL HAVE A MINIMUM THICKNESS OF 0.030 INCH (NO. 22 GALVANIZED SHEET GAGE) BY 3/4" OR, IF OF WIRE, SHALL HAVE A MIN. DIAMETER OF 0.148 INCH (NO. 9 B.W. GAGE). WALL TIES SHALL BE SPACED SO AS TO SUPPORT NOT MORE THAN 2 SQ. FT. OF WALL AREA BUT SHALL NOT BE MORE THAN 24" IN CENTER HORIZ.

IN SEISMIC ZONES 3 AND 4, WALL TIES SHALL HAVE A LIP OR HOOK ON THE EXTENDING LEG THAT WILL ENGAGE OR ENCLOSE A HORIZ. JOINT REINFORCEMENT WIRE HAVING A DIAMETER OF 0.148 INCH (NO 9 B.W. GAGE) OR EQUIVALENT. THE JOINT REINFORCEMENT SHALL BE CONTINUOUS WITH BUTT SPLICES BETWEEN TIES PERMITTED.

STUDS SHALL BE SPACED A MAX. OF 16" O.C. AND APPROVED PAPER SHALL FIRST BE APPLIED OVER THE SHEATHING OR WIRES BETWEEN STUDS EXCEPT AS OTHERWISE PROVIDED IN SECTION 1402, AND MORTAR SHALL BE SLUCHED INTO THE 1" SPACE

PROVIDE FLASHING AT WALL AND ROOF, OR ROOF AND CHIMNEY. SECTION 607-4.8 FIREPLACE CHIMNEYS SHALL EXTEND AT LEAST 2'-0" ABOVE THE ROOF OPENING OR ANY PART OF THE BUILDING WITHIN 10'-0".

FACTORY BUILT CHIMNEYS AND FIREPLACES

EXACT ACCORDANCE WITH THE TERMS OF THEIR LISTINGS AND THE MANUFACTURERS INSTRUCT. SPECIFIC APPROVAL NUMBERS AND INSTALLATION STANDARDS MUST BE MADE AVAILABLE TO THE BLDG. OFFICIAL.

HEARTH EXT. OF LISTED FACTORY BUILT FIREPLACES SHALL CONFORM TO THE CONDITIONS OF LISTING AND MANUFACTURERS INSTALLATION INSTRUCTIONS.

FACTORY BUILT CHIMNEYS AND FIREPLACES SHALL BE LISTED BY AN APPROVED

TESTING AGENCY AND HAVE AN ICBO APPROVAL NUMBER. THEY SHALL BE INSTALLED IN

MASONRY AND CONCRETE FIREPLACES

UNLESS A SPECIFIC DESIGN IS PROVIDED, EVERY MASONRY OR CONCRETE CHIMNEY IN SEISMIC 70NES 2. 3 AND 4 SHALL BE REINFORCED WITH NOT LESS THAN #4 STEEL REINFORCING BARS CONFORMING TO THE PROVISIONS OF U.B.C. CHAPTER 19 OR 21. THE BARS SHALL EXTEND THE FULL HEIGHT OF THE CHIMNEY AND SHALL BE SPLICED IN ACCORDANCE WITH THE APPLICABLE REQ. OF U.B.C. CHAPTER 19 OR 21. IN MASONRY CHIMNEYS THE VERT. BARS SHALL HAVE A MIN. COVER OF 1/2" OF GROUT OR MORTAR TEMPERED TO A POURING CONSISTENCY. THE BARS SHALL BE TIED HORIZ. AT 18" INTERVALS WITH NOT LESS THAN 1/4" DIAMETER STEEL TIES. THE SLOPE OF THE INCLINED PORTION OF THE OFFSET IN VERT. BARS SHALL NOT EXCEED 2 UNITS VERT. IN 1 UNIT HORIZ. TWO TIES SHALL ALSO BE PLACED AT EACH BEND IN VERT. BARS. WHERE THE WIDTH OF THE CHIMNEY EXCEEDS 40", TWO ADDITIONAL #4 VERTICAL BARS SHALL BE PROVIDED FOR EACH ADDITIONAL FLUE INCORPORATED IN THE CHIMNEY OR FOR EACH ADDITIONAL 40" IN WIDTH OR FRACTION THEREOF.

IN SEISMIC ZONES 2, 3 AND 4, ALL MASONRY AND CONCRETE CHIMNEYS SHALL BE ANCHORED AT EACH FLOOR OR CEILING LINE MORE THAN 6' ABOVE GRADE, EXCEPT WHEN CONSTRUCTED COMPLETLY WITHIN THE EXT. WALLS OF THE RIDG. ANCHORAGE SHALL CONSIST OF 2: 3/16" BY 1" STEEL STRAPS CAST AT LEAST 12" INTO THE CHIMNEY WITH A 80 - DEGREE BEND WITH A 6" EXTENSION AROUND THE VERTICAL REINFORCING BARS IN THE OUTER FACE OF THE CHIMNEY.

EACH STRAP SHALL BE FASTENED TO THE STRUCTURAL FRAMEWORK OF THE BLDG. WITH TWO 1/2" DIAMTER BOLTS PER STRAP. WHERE THE JOISTS DO NOT HEAD INTO THE CHIMNEY, THE ANCHOR STRAP SHALL BE CONNECTED TO 2" X 4" TIES CROSSING A MIN. OF 4 JOISTS. THE TIES SHALL BE CONNECTED TO EACH JOIST WITH TWO 16D NAILS. AS AN ALTERNATIVE TO THE 2" BY 4" TIES, EACH ANCHOR STRAP SHALL BE CONNECTED TO THE STRUCTURAL FRAMEWORK BY TWO 1/2" DIAMETER BOLTS IN AN APPROVED MANNER.

TWO OR MORE FLUES IN A CHIMNEY SHALL BE SEPARATED BY MASONRY NOT LESS THAN 4" INCHES THICK BONDED INTO THE MASONRY WALL OF THE CHIMNEY.

MASONRY WALLS OF FIREPLACES SHALL NOT BE LESS THAN 8" IN THICKNESS. WALLS OF FIREBOXES SHALL NOT BE LESS THAN 10" IN THICKNESS, EXCEPT THAT WHERE A LINING OF FIREBRICK IS USED, SUCH WALLS SHALL NOT BE LESS THAN A TOTAL OF 8" IN THICKNESS. THE FIREBOX SHALL BE AT LEAST 20" IN DEPTH. JOINTS IN FIREBRICK

COMBUSTIBLE MATERIALS SHALL NOT BE PLACED WITHIN 6" OF THE FIREPLACE OPENING. NO SUCH COMPUSTIBLE MATERIAL WITHIN 12" OF THE OPENING SHALL PROJECT MORE THAN 1/8" FOR EACH 1" CLEARANCE FROM SUCH OPENING.

THE HEARTH SHALL EXTEND AT LEAST 16" FROM THE FRONT OF AND AT LEAST 8" BEYOND EACH SIDE OF THE FIREPLACE OPENING. WHERE THE FIREPLACE OPENING IS 6 SQ. FT. OR LARGER, THE HEARTH EXTENSION SHALL EXTEND AT LEAST 20" IN FRONT OF, AND AT LEAST 12" BEYOND EACH SIDE OF THE FIREPLACE OPENING.

EXCEPT FOR FIREPLACES WHICH OPEN TO THE EXTERIOR OF THE BUILDING, THE HEARTH SLAB SHALL BE READILY DISTINGUISHABLE FROM THE SURROUNDING OR ADJACENT

MASONRY FIREPLACES AND CHIMNEYS SHALL HAVE AT LEAST 2" OF CLEARANCE TO

ANY INT. COMBUSTIBLE CONSTRUCTION. CLEARANCE TO EXT. COMBUSTIBLE CONSTRUCTIONS

)	JOISTS
_	POST DOUG FIR #1 BTR STUDS NON-BEARING WALLS DOUG FIR STUD GRADE BTR STUDS BEARING WALLS DOUG FIR #2 BTR
_	PRE-FAB TRUSSES/JOISTS

ALL MULTIPLE PLATES AND LEDGERS SHALL BE NAILED TOGETHER WITH 16D NAILS AT

STUD WALLS SHALL RUN CONTINUOUS BETWEEN POINTS OR HORIZ. SUPPORT. PROVIDE BRACING WHERE OTHERWISE.

(PRESSURE TREATED FOR MOISTURE PROTECTION)

POINTS UNLESS NOTED OTHERWISE.

RESPONSIBLE TO PROVIDE ICBO NUMBER.

EXTERIOR WALLS

BLOCK ALL HORIZ. EDGES OF PLYWOOD WALL SHEATHING WITH 2" NOMINAL BLOCKING.

BLOCK EDGES OF PLYWOOD ON FLOORS AND ROOF AS DIRECTED ON DRAWINGS. PLACE 2 STUDS MINIMUM AT ALL BEAMS, HEADERS, AND GIRDER TRUSS BEARING

SIDING: PER OWNER & SUBDIVISION COVENANTS STUCCO: SYNTHETIC STUCCO PRODUCT (SEE PLAN - CHECK WITH OWNER) MASONRY VENEER: FACE BRICK OR ROCK (SEE PLAN - CHECK WITH OWNER) EXTERIOR PAINTING: PENETRATING STAIN OR OIL BASE ENAMEL

WOOD MEMBERS SHALL NOT BE USED TO PERMANENTLY SUPPORT THE DEAD LOAD OF ANY MASONRY EXCEPT; NONSTRUCTURAL FLOOR OR ROOF SURFACING NOT MORE THAN 4" THICK. OR INTERIOR WALL FINISH OF MASONRY VENEER, WHEN ROOF SUPPORTING MEMBERS ARE DESIGNED TO SUPPORT THE ADDITIONAL LOAD AND TO LIMIT THE DEFLECTION AND SHRINKAGE TO 1/500 OF THE SPAN.

BRICK TIES SHALL BE 22 GA. AT 16" O.C. EACH WAY WITH NO. 9 WIRE BED JOINTS WITH TIES. PROVIDE 1" AIR SPACE BETWEEN BRICK AND SHEATHING.

ALL WOOD SHEATHING SURFACES SHALL HAVE A TYVEK OR EQUIV. MOISTURE BARRIER WALL COVERING. BARRIER MATERIAL SHALL BE FREE FROM HOLES AND BREAKS OTHER THAN THOSE CREATED BY FASTENERS AND CONSTRUCTION SYSTEM DUE TO ATTACHING OF THE BARRIER, AND SHALL BE APPLIED OVER THE SHEATHING OF ALL EXTERIOR WALLS. SUCH BARRIER MATERIAL SHALL BE APPLIED HORIZ, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2". WHERE VERT. JOINTS OCCUR, BARRIER SHALL BE LAPPED NOT LESS THAN 6". BARRIER SHALL EXTEND ABOVE SOFFIT AND FASCIA TO TOP PLATE (PROVIDE 2 LAYERS BEHIND STUCCO SURFACES). ALSO PROVIDE METAL OR EQUAL FLASHING AT FOUND. AND BRICK VENEER OR STONE HALF WALLS WHERE WATER FROM WEATHER BARRIER COULD ENTER DWELLING.

STUCCO SYSTEM SHALL BE AN APPROVED SYSTEM WITH ICBO EVAL. SERVICE NUMBER. ALL "SYSTEMS" MUST BE APPLIED IN STRICT COMPLIANCE WITH THE MANUFACTURERS' RECOMMENDATIONS INCLUDING REQUIREMENTS FOR SELF-FURRING LATH. FLASHINGS. CORNER TREATMENT AND EXPANSION CONTROL JOINTS. CONTRACTOR WILL BE

PROVIDE COUNTERFLASHING AND CAULKING OF ALL EXTERIOR DOORS AND WINDOWS.

SHEAR WALL NOTES

ALL EXTRIOR WALLS, INTERIOR WALLS INDICATED ON THE PLANS, AND VERT. SURFACES AT STEPS IN ROOF SHALL BE SHEATHED WITH APA RATED 24/0 (OR BTR.) CDX STRUCTURAL II PANEL SIDING OR OTHER GRADES COVERED IN CURRENT BLDG. CODE. TYPICAL NAILING SHALL BE INDICATED IN THE SHEAR WALL SCHEDULE.

BLOCK ALL HORIZ. PANEL EDGES WITH 2" NOMINAL OR WIDER FRAMING. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED WHERE NAILS ARE SPACED 3" OR LESS O.C.

STAPLES OR T-NAILS MAY BE USED IN PLACE OF NAILS FOR SHEATHING PROVIDED THE PROPER EQUIVALENT SIZE AND SPACING ARE USED (SEE TABLE OF EQUIVALENT

SHEATHING SHALL EXTEND CONTINUOUS FROM THE FLOOR FRAMING TO HIGH ROOF FRAMING ON UPPER LEVEL EXT. WALLS (VERT. SURFACES AT STEPS IN ROOF).

NAILS SHALL BE SPACED NOT LESS THAN 3/8" FROM THE EDGES AND ENDS OF

SHEATHING AND SHALL BE DRIVEN FLUSH BUT SHALL NOT FRACTURE THE SURFACE OF THE ALL SHEATHING SHALL EXTEND CONTINUOUS FROM SILL PLATE TO ROOF OR FLOOR

PARTITION FRAMING

JOISTS UNDER AND PARALLEL TO BEARING PARTITIONS SHALL BE DOUBLED. JOISTS UNDER AND PARALLEL TO ALL OTHER PARTITIONS SHALL BE DOUBLED WHEN THE LENGTH OF SUCH WALL EXCEEDS 1/3 THE LENGTH OF JOISTS 12' AND LONGER.

FIREBLOCK STUD SPACES OVER 10' IN HEIGHT, FURRED SPACES, SOFFITS, DROPPED CEILINGS, COVE CEILINGS, STAIRS STRINGERS AT TOP AND BOTTOM OF STAIRS, BEARING WALLS, AND CEILING JOIST LINES, ETC. FIRESTOPPING SHALL CONSIST OF 2" NOMINAL

FIREBLOCK OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, AND FIREPLACES AT CEILING AND FLOOR LEVELS WITH APPROVED NONCOMBUSTIBLE MATERIALS.

ROOF FRAMING & TRUSS NOTES

TRUSSES AND GIRDER LOADS SHALL BE DESIGNED FOR ALL TRIBUTARY LOADING. ROOF TRUSSES SHALL BE DESIGNED FOR UNBALANCED SNOW LOADS, EAVE LOADS, DRIFT,

TRUSSES AND GIRDER LOADS SHALL BE DESIGNED TO SUPPORT ALL MECHANICAL LOADS FROM APPLICABLE HVAC EQUIPMENT

DESIGN TRUSSES TO LIMIT DEFLECTION TO THE SPAN.

CHECK DIMENSIONS WITH DRAWINGS AND FIELD VERIFY WITH CONTRACTOR. TRUSS MANUFACTURER IS RESPONSIBLE TO PROVIDE WEB AND CHORD MEMBERS TO SATISFY LOADING AND CONNECTION REQUIREMENTS.

ALTHOUGH SUGGESTED CONNECTION HANGER SIZES MAY BE INDICATED ON THE PLANS, ALL TRUSS HANGER CONNECTIONS (I.E. TRUSS TO BEAM, TRUSS TO GRIDER TRUSS, AND GRIDER TRUSS TO GRIDER TRUSS) SHALL BE DESIGNED BY THE TRUSS SUPPLIER/MANUFACTURER. CONNECTION HANGER SIZE AND ENGINEERING SHALL BE INCLUDED WITH THE SHOP DRAWINGS.

TRUSS PRE-ENGINEERED JOINT CONNECTORS SHALL HAVE I.C.B.O. CERT.

OVERBUILD SHALL BE CONSTRUCTED USING 2 X 6 MINIMUM SPACED AT LEAST 24" O.C. WITH 8'-0" MAX. SPAN. SUPPORT OVERBUILD JOISTS AT PANEL POINTS OF TRUSSES. SEE OVERBUILD DETAIL.

PROVIDE ATTIC ACCESS WITH MIN. 22" X 30" OPENING FOR EACH ROOF. SEE PLAN FOR LOCATION.

DECKS - HANDRAILS - GUARDRAILS

DECKS SHALL BE CONSTRUCTED TO PROVIDE ADEQUATE SUPPORT FOR APPLICABLE HORIZ. AND VERT. LOADING INC. MIN. 60 PSF LIVE LOAD.

DECK AND BALCONY RAILINGS AND GUARDRAILS SHALL BE CAPABLE OF SUPPORTING A MINIMUM OF 20 PLF APPLIED HORIZONTALLY AT RIGHT ANGLES TO THE RAIL THE MOUNTING OF HANDRAILS SHALL BE SUCH THAT THE COMPLETED HANDRAIL AND SUPPORTING STRUCTURE ARE CAPABLE OF WITHSTANDING A LOAD APPLIED IN ANY

DIRECTION OF AT LEAST 200 LBS.

ENTRY DOOR: STEEL INSULATED OTHER EXTERIOR DOORS: STEEL INSULATED ADDITIONAL INFORMATION: KEY ALL EXTERIOR DOORS ALIKE INTERIOR DOORS: 6-PANEL (SEE PLAN FOR SIZES - ALL DOORS ARE 6'-8" IN HEIGHT UNLESS NOTED OTHERWISE) CASINGS: COLONIAL TYPE

BASE: COLONIAL TYPE SPECIALTY MOLDINGS: SEE PLAN FOR APPLICATION - CHECK WITH OWNER FOR SIZE AND ADDITIONAL INFORMATION: DOORS TO BE PAINT GRADE UNLESS SPECIFIED BY OWNER

TREADS: 3/4" FIR OR PARTICLE BOARD - ATTACH WITH ADHESIVE NAILS RISERS: 3/4" PINE OR EQUAL

STRINGERS: 2" X 12" FIR HANDRAIL: TO MEET LOCAL BUILDING CODES (CHECK WITH OWNER FOR STYLE AND

RUN OR RISER WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE WINDERS IN WINDING STAIRWAYS NEED A MIN. 6" DIMENSION TREAD ON THE INSIDE OF THE STEP WITH A 9" TREAD REQUIRED AT A POINT 12" FROM THE NARROW SIDE.

SHALL BE 9" (LENGTH OF TREAD MEASURED FROM NOSE TO NOSE). THE LARGEST TREAD

STAIRWAYS SHALL HAVE A MAX. RISE OF 8" AND A MIN. RISE OF 4". THE MIN. RUN

STAIRWAYS IN HOMES SHALL NOT BE LESS THAN 36" IN WIDTH.

EVERY STAIRWAY SHALL HAVE A LANDING WITH A DIMENSION EQUAL TO THE WIDTH OF THE STAIR MEASURED IN THE DIRECTION OF TRAVEL (NEED NOT EXCEED 44").

STAIRWAYS WITH 4 OR MORE RISERS SHALL HAVE AT LEAST ONE HANDRAIL (EXCEPT THE STAIRWAYS OPEN ON ONE OR BOTH SIDES SHALL HAVE HANDRAILS PROVIDED ON OPEN SIDE OR SIDES). HANDRAILS SHALL BE PLACED 34"-38" ABOVE THE NOSE OF THE TREADS VERT. TO THE TOP OF THE RAIL. THEY SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS. THE HANDGRIP PORTION SHALL BE NOT LESS THAN 1 1/4" NOR MORE THAN 2" IN CROSS-SECTIONAL DIMENSIONS. HANDRAILS PROJECTING FROM A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2" BETWEEN THE WALL AND THE HANDRAIL. ENDS SHALL BE RETURNED TO THE WALL OR TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS.

EVERY STAIRWAY SHALL HAVE A HEADROOM CLEARANCE OF NOT LESS THAN 6'-8". SUCH CLEARANCE SHALL BE MEASURED VERT. FROM A LINE ALONG THE TREAD NOSING TO THE SOFFIT ABOVE AT ALL POINTS.

ENCLOSED USABLE SPACE UNDER STAIRS SHALL HAVE THE WALLS AND SOFFITS PROTECTED ON THE ENCLOSED SIDE AS REQUIRED FOR ONE-HOUR FIRE RESISTIVE

GUARDRAILS SHALL BE PROVIDED TO PROTECT UNENCLOSED SIDES OF ROOMS, CORRIDORS, STAIRS, RAMPS, ETC. WHICH ARE MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW. THE GUARDRAIL SHALL BE AT LEAST 36" HIGH AND SHALL HAVE INTERMEDIATE RAILS OR AN ORNAMENTAL PATTERN SUCH THAT A SPERE 4" IN DIAMETER CANNOT PASS THROUGH. THE TRIANGULAR SPACE CREATED BY THE STAIR AND A BOTTOM RAIL MAY BE CONSTRUCTED SO A 6" SPHERE WILL NOT PASS THROUGH.

STAIRS, LANDINGS, AND BALCONIES SHALL BE POSITIVELY ANCHORED TO THE HOUSE.

CRAWL SPACES

WOOD GIRDERS SHALL BE LOCATED NO LESS THAN 12" ABOVE EXPOSED GROUND.

CRAWL SPACES SHALL BE PROVIDED WITH AN 18" X 24" ACCESS HOLE. IF A FURNACE IS LOCATED IN THE CRAWL SPACE THE MIN. ACCESS HOLE SHALL NOT BE LESS THAN 30" X 30", OR SIZE OF THE EQUIPTMENT IF LARGER.

> CRAWL SPACE VENTILATION SHALL BE PROVIDED BY OPENINGS IN THE EXTERIOR FOUNDATION WALLS. SUCH OPENINGS SHALL HAVE A NET AREA OF NOT LESS THAN 1 SQ. FT. FOR EACH 150 SQ. FT. OF UNDER FLOOR AREA. OPENINGS SHALL BE LOCATED AS CLOSE TO THE CORNERS AS POSSIBLE AND SHALL PROVIDE CROSS VENTILATION. OPENINGS ARE TO BE PROVIDED WITH A 1/4" CORROSION RESISTANT MESH. WHERE GROUND WATER IS NOT A PROBLEM. THE BUILDING OFFICIAL MAY ALLOW OPERABLE LOUVERS AND MAY ALLOW VENT OPENINGS TO BE REDUCED 10% OF THE REQUIREMENT, PROVIDED THE UNDER-FLOOR GROUND SURFACE IS COVERED WITH AN APPROVED VAPOR

NOTE: SEE PLAN FOR APPLICATION.

OCCUPANCY SEPARATION

FIRE SEPARATION IS REQUIRED BETWEEN A RESIDENCE AND AN ATTACHED GARAGE. IN THIS CASE FIRE RESISTIVE CONSTRUCTION MAY BE LIMITED TO MATERIALS APPROVED FOR ONE-HOUR CONSTRUCTION ON THE GARAGE SIDE.

FIRE-RESISTIVE PROTECTION OF SEPARATION SHALL BE VERT. AND/OR HORIZ. PROTECTION MUST EXTEND UNINTERRUPTED FROM CONCRETE TO EXTERIOR SHEATHING. WALLS COMMON TO HOUSE AND GARAGE MUST BE COMPLETELY PROTECTED. ALL STRUCTURAL MEMBERS SUPPORTING THE FIRE SEPARATION, SUCH AS, BEARING WALLS, COLUMNS AND BEAMS MUST ALSO BE PROTECTED.

TYPICAL GARAGE WALLS AND CEILINGS SHALL BE: USE (2) 1/2" TYPE "X" GYP. BD. ON CEILING & (1) 5/8" TYPE "X" GYP. BD. ON ALL WALLS. PROVIDE 2 LAYERS OF 5/8" TYPE "X" GYP. BD. WHERE I-JOISTS OR RAFTERS FORM PART OF THE GARAGE FIRE SEPARATION PROVIDE FULL INSUL IN ALL AREAS BORDERING HOME

ANY DOOR BETWEEN THE HOUSE AND GARAGE SHALL BE A SELF CLOSING, TIGHT FITTING SOLID WOOD DOOR, 1 3/8" THICK OR A 20 MINUTE LABELED DOOR.

ATTIC ACCESS DOORS LOCATED IN GARAGES SHALL BE OF ONE-HOUR FIRE-RESISTIVE CONSTRUCTION AND HAVE A POSITIVE LATCH AND HINGE. THE SUPPORT MEMBERS SHALL BE OF 2" NOMINAL MATERIALS: ALL FASTENERS SHALL BE SCREWED INTO A SOLID MEMBER (NO SCREWING HINGES AND LATCHES INTO SHEETROCK ONLY).

DUCT PENETRATIONS SHALL BE A MIN. 26 GAUGE SHEET METAL, WITH ANY OPENINGS INTO THE GARAGE PROTECTED BY FIRE DAMPERS.

NO WINDOWS ARE PERMITTED IN GARAGE FIRE WALL OR IN DOOR BETWEEN THE HOUSE AND GARAGE

FIRE-RESISTIVE WALLS AND PARTITIONS MAY HAVE OPENINGS FOR STEEL ELECTRICAL OUTLET BOXES NOT EXCEEDING 16 SQ. INCHES IN AREA, PROVIDED THE AGGREGATE AREA OF SUCH OPENINGS IS NOT MORE THAN 100 SQ. INCHES FOR ANY 100 SQ. FT. OF WALL OR PARTITION AREA. OUTLET BOXES ON OPPOSITE SIDES OF WALLS AND PARTITIONS SHALL BE SEPARATED BY A HORIZ. DISTANCE OF AT LEAST 24". ELECTRICAL BOXES IN WALL BETWEEN HOUSE AND GARAGE SHALL BE STEEL OR RATED FOR AT LEAST 1-HOUR CONTRUCTION BY AN APPROVED TESTING AGENCY.

FIRE SEPARATION NEED NOT BE PROVIDED BETWEEN A HOUSE AND A CARPORT HAVING NO ENCLOSED USES ABOVE, PROVIDED THE CARPORT IS ENTIRELY OPEN ON TWO OR MORE SIDES.

UNDER NO CIRCUMSTANCES SHALL A GARAGE HAVE ANY OPENING INTO A ROOM USED FOR SLEEPING PURPOSES.

INSULATION (REFER TO RESCHECK FOR EXACT REQUIREMENTS.)

CEILING: R-38 MIN. BLOWN IN CELLULOSE. WALLS: R-13 MIN. 2X4 WALLS OR R-19 MIN 2X6 WALLS BLOWN IN CELLULOSE. BASEMENT WALLS: R-13 MIN. 2X4 WALLS OR R-19 MIN. 2X6 WALLS BLOWN IN CELLULOSE WHERE APPLICABLE. (TO MEET LOCAL BUILDING CODES). RIM JOISTS: R-11 MIN. FIBERGLASS BAT VAPOR BARRIER: MIN. OF 4 MIL. POLYETHYLENE TO BE INSTALLED OVER INSULATION ON COLD WALL APPLICATIONS AND UN-VENTED CEILINGS.

EXPANDING FOAM TO BE USED AROUND ALL WINDOWS, DOORS AND OTHER EXTERIOR OPENINGS.

PROVIDE INSULATION BAFFLES IN ATTIC SPACE -CONTRACTOR TO VERIFY. THE INSULATION AROUND THE PERIMETER OF A SLAB ON GRADE FLOOR SHALL EXTEND DOWNWARD FROM THE TOP OF THE SLAB FOR A MIN. OF 24" OR DOWNWARD TO THE BOTTOM OF THE SLAB AND THEN HORIZ. BENEATH THE SLAB FOR A MIN. DISTANCE OF

DUCTS, PLENUMS, AND ENCLOSURES INSTALLED IN CRAWL SPACE, GARAGE. UN-INSULATED BASEMENT, ATTIC, OR OTHER UN-INSULATED SPACE SHALL BE THERMALLY INSULATED WITH INSULATION HAVING A THERMAL RESISTANCE (R) VALUE OF NOT LESS

TYVEK OR EQUIV. WEATHER BARRIER ON SHEATHING BETWEEN SHEATHING AND

CEILINGS, ROOM DIMENSIONS, ETC.

CEILING HEIGHT IS REQ. TO A MIN. OF 7'-6" IN ALL HABITABLE ROOMS. KITCHENS, HALLS AND BATHROOMS MAY HAVE A CEILING OF 7'-0". THE BOTTOM OF EXPOSED BEAMS SPACED 48" OR MORE O.C. MAY BE ALSO 7'-0". A FURRED CEILING MAY BE AS LOW AS 7'-0", BUT 2/3 OF THE ROOM MUST HAVE A CEILING HEIGHT OF 7'-6" OR MORE. A SLOPED CEILING REQ. THE PRESCRIBED CEILING HEIGHT IN AT LEAST 1/2 OF THE ROOM: NO PORTION OF THE ROOM MAY BE USED TO COMPUTE MIN. AREA WHERE THE CEILING IS

HOUSES SHALL HAVE AT LEAST ONE ROOM WHICH SHALL HAVE NOT LESS THAN 120 SQ. FT. OF FLOOR AREA. OTHER HABITABLE ROOMS, EXCEPT KITCHENS, SHALL HAVE AN

AREA OF NOT LESS THAN 70 SQ. FT. HABITABLE ROOMS OTHER THAN A KITCHEN SHALL BE NOT LESS THAN 7' IN ANY

HALLWAYS SHALL NOT BE LESS THAN 36" WIDE. HALLWAYS SHALL HAVE A CLEAR CEILING HEIGHT OF NOT LESS THAN 7' MEASURED TO THE LOWEST PROJECTION. CLOTHES CHUTES WHICH PASS THROUGH MORE THAN ONE FLOOR CANNOT EXCEED 9

SQ. FT. AND SHALL BE LINED WITH SHEETROCK COVERED WITH 26 GA. SHEET METAL

HAVING LOCKLAPPED JOINTS. ALL OPENINGS INTO THE ENCLOSURE SHALL HAVE TIGHT

FITTING, SELF-CLOSING DOORS AN ATTIC ACCESS OPENING, NOT LESS THAN 22" X 30", SHALL BE PROVIDED AT ROOF/CEILING AREAS. THERE SHALL BE 30" OF HEADROOM OVER THE OPENING. IF THERE IS LESS THAN 30" MAX. HEIGHT IN THE ATTIC. ACCESS NEED NOT BE PROVIDED. THE OPENING SHALL BE LOCATED IN THE HALLWAY OR OTHER READILY ACCESSIBLE AREA. SEE "OCCUPANCY SEPARATION" FOR ATTIC ACCESS LOCATED IN GARAGE AREAS.

ROOFING, GUTTERS & DOWNSPOUTS

GUTTERS & DOWNSPOUTS: ALUMINUM

SHEATHING: (SEE ROOF SHEATHING NOTES) SHINGLES: 240# 25 YEAR ASPHALT SHINGLES. SEE PLAN FOR ITEM USED. UNDERLAYMENT: ONE (1) LAYER 15# FELT BUILT-UP ROOFING: FELT FROM EAVE TO 12" INSIDE WALL. METAL EDGING: ALUMINUM "D" DRIP METAL EDGING FLASHING: GALVANIZED METAL OR ALUMINUM

STEP FLASHING SHALL BE USED WHERE THE ROOF MEETS A VERT SURFACE. COUNTER FLASHING SHALL BE INSTALLED AT ROOF AND WALL JUNCTURES.

PROVIDE ICE AND WATER SHEILD CONSISTING OF TWO LAYERS OF NONPERFORATED TYPE 15 FELT APPLIED SHINGLE FASHION. STARTING WITH A 18" WIDE SHEET AND A 36" WIDE SHEET OVER IT AT THE FAVES. SUCH SUBSEQUENT SHEET SHALL BE LAPPED 19" HORIZ., ADDITIONAL THE 2 LAYERS SHALL BE SOLID MOPPED TOGETHER WITH APPROVED CEMENTING MATERIAL BETWEEN THE PLIES EXTENDING FROM THE EAVE UP THE ROOF TO A POINT 24" INSIDE THE EXTERIOR WALL LINE OF THE BUILDING, OR USE APPROVED ICE AND WATER SHIELD. (CONTARTOR TO VERIFY).

WINDOWS: WOOD OR VINYL: DBL. PANE (SEE PLAN-CHECK WITH OWNER) CASINGS: IF WOOD WINDOWS ARE USED, CASINGS TO MATCH DOOR CASINGS. IF ALUMINUM OF HOLLOW VINYL WINDOWS ARE USED, THEN DRYWALL TO BE RETURNED TO WINDOW WITH A CERAMIC TILE OR WOOD SILL INSTALLED (CHECK WITH OWNER).

PROVIDE SCREENS ON ALL OPENABLE WINDOWS AND DOORS.

UNLESS OTHERWISE SPECIFIED, ALL BASEMENT WINDOWS NOT FULLY 8" ABOVE FINISHED GRADE SHALL BE PROTECTED BY GALVANIZED OR CONCRETE WINDOW WELLS. WINDOW WELLS WILL BE DUG OUT TO A DEPTH BELOW THE WINDOW SILL TO ALLOW 10" OF 1" DIAMETER GRAVEL TO BE AT A MIN. OF 6" BELOW THE WINDOW SILL.

GLASS IN DOORS SHALL BE SAFETY GLAZED.

GLAZING IN FIXED OR OPERABLE PANELS ADJACENT TO DOOR WHERE THE NEAREST EXPOSED EDGE IS WITHIN A 24" ARC OF EITHER VERT. EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EDGE IS WITHIN 60" OF THE FLOOR OR WALKING SURFACE MUST BE SAFETY GLAZED.

OR WALKING SURFACE SHALL BE SAFETY GLAZED. IN LIEU OF SAFETY GLAZING, GLASS MAY BE PROTECTED BY A HORIZ. MEMBER AT LEAST 1 1/2" IN HEIGHT. CAPABLE OF RESISTING 50 LBS. PER LINEAR FOOT, LOCATED BETWEEN 34" AND 38" ABOVE WALKING

GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM

ROOMS, SHOWER AND BATHTUBS SHALL BE SAFETY GLAZED. GLAZING IN ANY PORTION OF

SURFACE AND DRAIN INLET, INCLUDING ANY WALLS, WINDOWS IN WALLS AND DOORS SHALL

GLAZING PANELS LARGER THAN 9 SQ. FT. LOCATED LESS THAN 18" FROM THE FLOOR

GLAZING IN WALLS ENCLOSING STAIRWAY LANDINGS OR WITHIN 5' OF THE BOTTOM AND TOP OF STAIRWAYS WHERE THE BOTTOM EDGE IS LESS THAN 60" ABOVE A WALKING

A BUILDING WALL FNCLOSING SUCH COMPARTMENTS WITHIN 60" ABOVE A STANDING

SUFACE MUST BE SAFETY GLAZED.

WALLS AND CEILINGS: 1/2" GYPSUM BOARD JOINT TREATMENT: PERFA-TAPE & 3 COATS JOINT COMPOUND (PROVIDE WATERPROOF GYPSUM BOARD AT ALL SPLASH AREAS. GARAGE WALLS AND CEILINGS: USE (2) 1/2" TYPE "X" GYP. BD. ON CEILING AND (1) 5/8" TYPE "X" GYP. BD. ON ALL WALLS. PROVIDE 2 LAYERS OF 5/8" TYPE "X" GYP. BD.

WHERE I-JOISTS OR RAFTERS FORM PART OF THE GARAGE FIRE SEPARATION. PROVIDE

FULL INSUL. IN ALL AREAS BORDERING HOME.

PAINT: 2 COATS OIL BASE ENAMEL (SEMI-GLOSS) (CHECK WITH OWNER). PRIMER PAINT: PVA PRIMER

KITCHEN CABINETS: OAK - OR OTHER HARDWOOD - PER OWNER BATHROOM VANITIES: OAK - OR OTHER HARDWOOD - PER OWNER COUNTER TOPS: LAMINATE - OR OTHER - PER OWNER EDGING: LAMINATE - OR OTHER - PER OWNER

FLOOR COVERINGS

FACING, HEARTH, MANTLE PER OWNER

CONTRACTOR WILL PROVIDE 3/8" PARTICLE BOARD UNDERLAYMENT IN ALL AREAS WHERE LINOLEUM OR VINYL FLOOR COVERINGS ARE TO BE USED. CHECK WITH OWNER FOR

APPLIANCES: PROVIDE OVEN AND/OR RANGE, RANGE HOOD, DISHWASHER, AND DISPOSAL (SFF CABINET MAKER FOR LOCATION — CHECK WITH OWNER

WIRE AND PLUMB FOR WASHER AND DRYER (VENT DRYER TO OUTSIDE) WIRE OVEN AND/OR RANGE AS REQUIRED BY CODE

TYPE: GAS DIRECT VENT, UNLESS OTHERWISE SPECIFIED

EXIT FACILITIES

ALL HOUSES SHALL HAVE AT LEAST ONE 3'-0" X 6'-8" SWINGING TYPE EXIT DOOR TO THE EXTERIOR. HOUSES EXCEEDING 3,000 SQ. FT. SHALL HAVE TWO COMPLYING EXIT LANDINGS ARE REQUIRED ON BOTH SIDES OF EXTERIOR DOORS. DOOR MAY OPEN AT

A LANDING THAT IS NOT MORE THAN 8" LOWER THAN THE FLOOR LEVEL. PROVIDED THE

DOOR DOES NOT SWING OVER THE LANDING. LANDING SHALL BE EQUAL TO THE DOOR OR

STAIRWAY WIDTH AND SHALL BE AT LEAST 36" DEEP. STAIRS AND LANDINGS SHALL BE

POSITIVLEY ANCHORED TO THE HOUSE. EVERY SLEEPING ROOM AND BASEMENT SHALL HAVE AT LEAST ONE OPERABLE, FXTFRIOR WINDOW OR EXTERIOR DOOR APPROVED FOR EMERGENCY ESCAPE OR RESCUE.

THE UNITS SHALL BE OPERABLE FROM THE INSIDE TO PROVIDE A FULL CLEAR OPENING

(WINDOW OPENING ONLY 20" WIDE MUST BE AT LEAST 41.1" HIGH)

WITHOUT THE USE OF SEPARATE TOOLS.

MIN. EGRESS REQUIREMENTS WILL BE AS FOLLOWS: 1. MIN. NET CLEAR OPENING OF 5.7 SQ. FT

2. MIN. NET CLEAR OPENING HEIGHT DIMENSION OF 24" (WINDOW OPENING ONLY 24" HIGH MUST BE AT LEAST 34.2" WIDE) MIN. NET CLEAR OPENING WIDTH DIMENSION OF 20"

4. MAX. FINISHED SILL HEIGHT OF NOT MORE THAN 44" ABOVE THE FLOOR ESCAPE AND RESCUE WINDOWS WITH A FINISHED SILL HEIGHT BELOW THE ADJACENT GROUND FLEVATIONS SHALL HAVE A WINDOW WELL. WINDOW WELLS AS ESCAPE OR

RESCUE WINDOWS SHALL COMPLY WITH THE FOLLOWING: 1. THE CLEAR HORIZ. DIMENSIONS SHALL ALLOW THE WINDOW TO BE FULLY OPENED AND PROVIDE A MIN. ACCESSIBLE NET CLEAR OPENING OF 9 SQ. FT, WITH MIN. DIMENSIONS 2. WINDOW WELLS WITH A VERTICAL DEPTH OF MORE THAN 44" SHALL BE EQUIPPED

THE WINDOW IN THE FULLY OPENED POSITION. THE LADDER OR STAIRS SHALL NOT

ENCROACH INTO THE DIMENSIONS OF THE WINDOW WELL BY MORE THAN 6".

WITH AN APPROVED PERMANENTLY AFFIXED LADDER OR STAIRS THAT ARE ACCESSIBLE WITH

LIGHT, VENTILATION & SANITATION

ALL HABIATBLE ROOMS (BEDROOMS, LIVING ROOMS, KITCHENS, DINING ROOMS, FAMILY ROOMS, ETC.) SHALL BE PROVIDED WITH NATURAL LIGHT BY MEANS OF EXTERIOR GLAZED OPENINGS WITH AN AREA OF NOT LESS THAN 1/10TH OF THE FLOOR AREA OF SUCH ROOMS WITH A MIN. OF 10 SQ. FT. KITCHENS MAY BE PROVIDED WITH ARTIFICIAL LIGHT.

ALL HABITABLE ROOMS SHALL BE PROVIDED WITH NATURAL VENTILATION BY MEANS OF OPENABLE EXTERIOR OPENINGS WITH AN AREA NOT LESS THAN 1/20TH OF THE FLOOR AREA OF SUCH ROOMS WITH A MIN. OF 5 SO. FT. IN LIFLL OF RED. EXTERIOR OPENINGS. FOR NATURAL VENTILATION, A MECHANICAL VENTILATING SYSTEM MAY BE PROVIDED. SUCH SYSTEM SHALL BE CAPABLE OF PROVIDING TWO AIR CHANGES PER HOUR WITH A MIN. OF 15 CUBIC FT. PER MINUTE OF OUTSIDE AIR PER OCCUPANT DURING SUCH TIME AS THE BUILDING IS OCCUPIED.

FOR THE PURPOSE OF LIGHT AND VENTILATION, A ROOM MAY BE CONSIDERED AS A PORTION OF AN ADJOINING ROOM WHEN 1/2 OF THE AREA OF THE COMMON WALL IS OPEN AND UNOBSTRUCTED AND PROVIDES AN OPENING OF NOT LESS THAN 1/10TH OF THE FLOOR AREA OF THE INTERIOR ROOM, OR 25 SQ. FT. WHICH EVER IS GREATER.

LIGHT, VENTILATION & SANITATION (CONT.)

ALL BATHROOMS, WATER CLOSET COMPARTMENTS, LAUNDRY ROOMS AND SIMILIAR ROOMS SHALL BE PROVIDED WITH NATURAL VENTILATION BY MEANS OF OPENABLE EXTERIOR OPENINGS WITH AN AREA OF NOT LESS THAN 1/20TH OF THE FLOOR AREA OF SUCH ROOMS WITH A MIN. OF 1 1/2 SQ. FT. A FAN CONNECTED DIRECTLY TO THE OUTSIDE CAPABLE OF PROVIDING 5 AIR CHANGES PER HOUR MAY BE SUBSTITUTED. FAN MUST DISCHARGE AT LEAST 3' FROM ANY OPENING INTO THE ROOM. BATHROOMS WHICH CONTAIN ONLY A WATER CLOSET OR LAVATORY OR BOTH, MAY BE VENTILATED WITH AN APPROVED MECHANICAL RECIRCULATING FAN.

EVERY HOUSE SHALL HAVE AT LEAST ONE WATER CLOSET, LAVATORY, BATHTUB OR SHOWER, AND KITCHEN SINK EQUIPPED WITH HOT AND COLD RUNNING WATER NECESSARY FOR NORMAL OPERATION.

DRYER, BATHROOM, LAUNDRY ROOM AND KITCHEN RANGE VENTILATION SHALL TERMINATE OUTSIDE THE BUILDING AND SHALL BE EQUIPPED WITH BACK DRAFT DAMPERS.

ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. THE NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150TH OF THE AREA OF THE SPACE VENTILATED, EXCEPT THAT THE AREA MAY BE 1/300TH, PROVIDED THAT AT LEAST 50% OF THE REQ. VENTILATING AREA IS LOCATED IN THE UPPER 3' OF THE ATTIC AND THE REMAINDER IS PROVIDED BY SOFFIT VENTS. WHERE SOFFIT VENTS ARE USED, AN INSULATION DAM MUST BE PROVIDED. ATTIC VENTILATION MAY ALSO BE 1/300TH WHEN A VAPOR BARRIER IS USED AT THE WARM SIDE OF THE CEILING. OPENINGS SHALL BE COVERED WITH 1/4" MESH.

ELECTRICAL

SMOKE DETECTORS

PROVIDE U-FER GROUND AS REQ'D.

SERVICE: 100 AMPS MINIMUM (ELECTRICIAN TO VERIFY) SPECIAL OUTLETS: DRYER, RANGE AND/OR OVEN - 220 VOLT EACH SERVICE TO BE IN 2" CONDUIT, 18" DEEP, WITHIN 1" OF PEDESTAL

ELECTRICAL PANELS SHALL COMPLY WITH N.E.C. AND SHALL HAVE A CLEAR WORKING SPACE 30" WIDE, 36" DEEP AND 6'-6" HIGH IN FRONT. ELECTRICAL PANELS CANNOT BE LOCATED IN BATHROOMS.

PROVIDE A SECONDARY GROUNDING SYSTEM WHEN USING THE WATER SERVICES AS THE PRIMARY GROUND. PROVIDE A SEPARATE 20 AMP CIRCUIT BREAKER FOR BATHROOM OUTLETS. ELECTRICIAN TO VERIFY.

BUILDING WIRING AND BE FOUIPPED WITH A BATTERY BACKUP, WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN THOSE REQ. FOR OVERCURRENT PROTECTION.

SMOKE DETECTORS SHALL BE LOCATED AS FOLLOWS: 1. MOUNTED ON THE CEILING OR ON THE WALL, NOT MORE THAN 12" FROM THE CEILING. AT A POINT CENTRALLY LOCATED IN THE CORRIDOR OR AREA GIVING ACCESS TO EACH SEPARATE SLEEPING AREA AND IN EVERY BEDROOM. 2. WHEN THE DWELLING HAS MORE THAN 1 STORY, AND IN DWELLINGS WITH

REQUIRED SMOKE DETECTORS SHALL RECIEVE THEIR PRIMARY POWER FROM THE

INCLUDING THE BASEMENT 3. WHERE THE CEILING HEIGHT OF A ROOM OPEN TO THE HALLWAY SERVING THE BEDROOMS EXCEEDS THAT OF THE HALLWAY BY 24" OR MORE, SMOKE DETECTORS SHALL BE INSTALLED IN THE HALLWAY AND IN THE ADJACENT ROOM. 4. DETECTORS SHALL BE WIRED IN SERIES SO THAT AN AUDIBLE ALARM SOUNDS IN

ALL SLEEPING AREAS AT THE SAME TIME. (SEE PLAN FOR LOCATION OF SMOKE

BASEMENTS, OR MULTILEVEL HOMES A DETECTOR SHALL BE INSTALLED ON EACH LEVEL

DETECTORS.)

LIGHTING OUTLETS

AT LEAST ONE WALL SWITCH CONTROLLED LIGHTING OUTLET SHALL BE INSTALLED IN EACH HABITABLE ROOM, BATHROOMS, HALLWAYS, STAIRWAYS, ATTACHED AND DETACHED GARAGES WITH FLECTRICAL POWER AND AT OUTDOOR ENTRANCES (NOT INCLUDING GARAGE OVERHEAD OR VEHICLE DOORS). IN HABITABLE ROOMS, OTHER THAN KITCHENS AND BATHROOMS, RECEPTACLES CONTROLLED BY A WALL SWITCH IS PERMITTED IN LIEU OF

AT LEAST ONE SWITCH CONTROLLED LIGHTING OUTLET IS REQ. AT THE ENTRY TO THE ATTIC, CRAWL SPACE, UTILITY ROOM, AND BASEMENT. A LIGHTING OUTLET SHALL BE

LIGHTING OUTLETS AT STAIRS SHALL BE SWITCHED AT EACH FLOOR LEVEL WHERE THE

DIFFERENCE BETWEEN FLOOR LEVELS IS SIX STEPS OR MORE. FIXTURES IN CLOSETS SHALL BE A MIN. OF 12" FROM ANY SHELF EDGE, MEASURED HORIZ. THE DIMENSION FOR SHELVES LESS THAN 12" WIDE WILL CONSIDER THE EDGE OF THE SHELF 12" FROM THE WALL. FIXTURES OVER BATHTUBS AND SHOWERS SHALL BE THE TYPE MARKED "SUITABLE FOR WET OR DAMP LOCATIONS". SWITCHES SHALL NOT BE

INSTALLED IN TUB OR SHOWER SPACES.

AIR CONDITIONING EQUIPMENT FOR SERVICE AND MAINTENANCE.

SHALL BE ONE OUTLET AT EACH EXIT FROM DWELLING.

INSTALLED IN EACH BASEMENT NEAR FURNACE LOCATION.

PROVIDED AT OR NEAR EQUIPTMENT REQ. SERVICING.

CEILING FANS REQ. APPROVED BOXES AND ADDITIONAL SUPPORT. ALL HABITABLE ROOMS SHALL HAVE RECEPTACLE OUTLETS INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IN MORE THAN 6' HORIZ. FROM AN OUTLET. THE WALL SPACE AFFORDED BY FIXED ROOM DIVIDERS, SUCH AS, FREE STANDING COUNTERS OR RAILINGS SHALL BE INCLUDED IN THE 6' MEASUREMENT. ANY WALL OR SPACE 2' OR MORE IN WIDTH SHALL BE CONSIDERED SEPARATLEY FROM OTHER WALL

KITCHEN AND DINING AREA COUNTER TOPS SHALL HAVE GCFI RECEPTACLE OUTLETS AT EACH COUNTER SPACE WIDER THAN 12". RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE, ISLAND COUNTER, OR PENINSULAR COUNTER IS MORE THAN 24" HORIZ. FROM A RECEPTACLE OUTLET. ONE OUTLET WILL BE REQ. FOR EACH

COUNTER TOP. RECEPTACLES SHALL NOT BE INSTALLED IN A FACE UP POSITION. A 120 VOLT GFI RECEPTACLE SHALL BE LOCATED WITHIN 10' OF THE FURNACE AND

ISLAND OR PENINSULAR COUNTER TOPS INSTALLED ABOVE OR WITHIN 12" BELOW THE

GCFI OUTLETS SHALL BE INSTALLED IN BATHROOMS ADJACENT TO EA. BASIN LOC. ALL EXTERIOR MOUNTED OUTLETS SHALL BE WATERPROOF GFCI RECEPTACLES. THERE

AT LEAST ONE GFCI SEPARATE CIRCUIT RECEPTACLE OUTLET INSTALLED FOR THE

AT LEAST ONE OUTLET, IN ADDITION TO ANY PROVIDED FOR LAUNDRY, SHALL BE

PROVIDE 4 WIRE GROUNDED 220V OUTLET FOR ALL OVENS AND STOVES.

FOR HALLWAYS 10' OR MORE LONG, ONE OUTLET SHALL BE INSTALLED.

OUTLETS SHALL NOT BE INSTALLED IN GARAGES WITHIN 18" OF THE FLOOR. APPLIANCE OUTLETS SHALL BE INSTALLED WITHIN 6' OF THE INTENDED LOCATION OF

GROUND FAULT CIRCUIT INTERRUPTERS

4. RECEPTACLES IN CRAWL SPACES & UNFIN. BSMT. (EXCEPT DEDICATED)

2. RECEPTACLES IN GARAGES (EXCEPT CEILING AND DEDICATED)

. ALL KITCHEN RECEPTACLES SERVING COUNTERTOP LOCATIONS.

TUBS. PERMANENT ACCESS MUST BE PROVIDED TO ALL EQUIPMENT REQ. SERVICE

ALL RECEPTACLES OUTDOORS (INCLUDING SOFFIT MOUNT).

GROUND FAULT CIRCUIT INTERRUPTERS (GFCI) ARE REQ. IN THE FOLLOWING 1. ALL RECEPTACLES IN BATHROOMS

THE APPLIANCE.

6. RECEPTACLES WITHIN 10' OF HOT TUBS AND WIRLPOOL TUBS AND LIGHT FIXTURES OVER THEM OUTLETS AND SWITCHES ARE NOT PERMITTED WITHIN 5' OF HOT TUBS OR WHIRLPOOL

ARC-FAULT CIRCUIT INTERRUPTORS AT BEDROOM LOCATIONS PER LOCAL OFFICIALS. (SEE PLAN FOR LAYOUT. CONTRACTOR & ELECTRICIAN TO VERIFY FINAL OUTLET PLACEMENT WITH OWNER.

(PROVIDE ACCESS LOCATION TO JETTED TUB MOTORS IF APPLICABLE).

PLUMBING AND MECHANICAL

EACH WATER CLOSET STOOL SHALL BE LOCATED IN A CLEAR SPACE NOT LESS THAN 30" IN WIDTH (15" FROM CENTER TO ANY OBSTRUCTION) AND HAVE A CLEAR SPACE IN

A SHOWER MUST BE A MIN. OF 1024 SQ. IN. IN FLOOR AREA WITH DIMENSIONS SUCH THAT A 30" CIRCLE CAN BE ENCOMPASSED WITHIN THE COMPARTMENT FROM THE TOP OF THE THRESHOLD TO 70" ABOVE THE DRAIN. PROVIDE A 22" WIDE (MIN.) SHOWER DOOR.

PROVIDE ANTI-SCALE SHOWER VALVES ON ALL SHOWER AND TUB-SHOWER

WHEN GYPSUM IS USED AS A BASE FOR TILE AND WALL PANELS FOR TUB. SHOWER OR WATER CLOSET COMPARTMENT WALLS WATER RESISTANT GYPSLIM BACKING BOARD SHALL BE USED. WATER RESISTANT GYPSUM BOARD SHALL NOT BE USED IN THE

1. OVER A VAPOR BARRIER 2. IN AREAS SUBJECT TO CONTINUOUS HIGH HUMIDITY.

PROVIDE NON-FREEZE TYPE BACK FLOW PREVENTER HOSE BIBBS.

BACKWATER VALVES ON FIXTURES AS REQ'D PER IRC P3008.1

ALL APPLIANCES (WATER HEATER, BOILER, STEAM GENERATOR, ETC.) WHICH REQUIRE

GAS FIRED FURNACES AND WATER HEATERS SHALL NOT BE LOCATED IN THE BEDROOM, BATHROOM, CLOSET OR IN ANY ENCLOSED SPACE WITH ACCESS ONLY THROUGH

A WARM AIR FURNACE SHALL NOT BE INSTALLED UNDER A STAIRWAY.

JOINTS FOR RESIDENTIAL HEATING DUCTS SHALL BE MECHANICALLY FASTENED BY MEANS OF AT LEAST 3 SHEET METAL SCREWS EVENLY SPACED. SUPPORT DUCTS WITH

NO CLOTH TYPE DUCT TAPE IS ALLOWED. METALLIC OR FOIL TAPE MUST BE USED.

PROPERLY SEALED WITH TAPE OR MASTIC. GAS LINES SHALL NOT PASS THROUGH OR PENETRATE ANY DUCT OR PLENUM.

ELEMENTS AND SWITCHES AT LEAST 18" ABOVE THE FLOOR LEVEL.

BE DAMAGED SHALL BE SUITABLY GUARDED.

VAPORS ARE LIKELY TO BE PRESENT

DRAFT DAMPERS.

MUST BE USED.

WITH A CONTINUOUS PASSAGEWAY AT LEAST 2' IN WIDTH AND LARGE ENOUGH TO PERMIT REMOVAL OF THE LARGEST EQUIPMENT IN THE ROOM. PROVIDED IMMEDIATELY IN FRONT OF THE FIREBOX ACCESS OPENING OF THE WATER

COMBUSTION AIR FOR ALL FUEL BURNING APPLIANCES SHALL BE OBTAINED FROM THE OUTDOORS OR FROM SPACES FREELY COMMUNICATING WITH THE OUTDOORS. 1/2 OF THE REQ. COMBUSTION AIR OPENING SHALL BE LOCATED WITHIN THE UPPER 12" OF THE AREA AND 1/2 WITHIN THE LOWER 12". COMBUSTION AIR OPENINGS SHALL NOT BE DAMPERED. TWO VERT. OPENINGS, EACH WITH 1 SQ. IN. PER 4,000 BTU/H OR HORIZ. OPENINGS, EACH WITH 1 SQ. IN. PER 2,000 BTU/H OF THE TOTAL INPUT RATING OF ALL APPLIANCES SHALL

GRILLES WILL HAVE 60%-75% FREE AREA. A FURNACE SHALL NOT BE INSTALLED IN A CLOSET OR ALCOVE LESS THAN 1:

WIDER THAN THE FURNACE AND SHALL PROVIDE A MIN. WORKING SPACE OF 3" ALONG THE

A FURNACE SHALL NOT BE INSTALLED WITH A CLEARANCE OF LESS THAN 6" ALONG THE COMBUSTION CHAMBER OPENING SIDE. GAS APPLIANCES SHALL NOT BE INSTALLED IN ANY LOCATION WHERE FLAMMABLE

MAX. LENGTH OF A DRYER DUCT IS 14' WITH 2 ELBOWS. DEDUCT 2' OF LENGTH FOR EACH ADDITIONAL ELBOW.

AN EVAPOATIVE COOLER MUST BE LOCATED A MIN. OF 10' FROM ALL VENTS, FLUES, AND EXHAUST TERMINATIONS. FLUES MAY BE EXTENDED 3' ABOVE INTAKE OPENINGS OF EVAPORATIVE COOLER IN LIEU OF 10' HORIZ. SEPARATION.

OR DEEP SEAL DESIGN. ALL PLUMBING PENETRATIONS THROUGH GARAGE FIRE WALL MUST BE WITH METAL PIPING. THIS INCLUDES WASTE LINES, VACUUM LINES, ETC. AN APPROVED FIRE STOP

CONTRACTOR AND PLUMBER WILL VERIFY ACCESS TO JETTED TUB MOTOR PRIOR TO INSTALLATION AND ADJUST AS REQUIRED.

PLUMBING PENETRATIONS THROUGH GARAGE WALL MUST BE WITH METAL PIPING.

THIS INCLUDES WASTE LINES, VACUUM LINES, ETC. AN APPROVED FIRE STOP MATERIAL

GAS LOG APPLIANCES WITHOUT A FLAME SAFEGUARD

DEVICE SHALL NOT BE PERMITTED.

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FRONT OF NOT LESS THAN 24". WATER CLOSETS SHALL HAVE A MAX. FLOW RATE OF 1.6

COMBINATION INSTALLATIONS.

FOLLOWING LOCATIONS:

SHOWER HEADS SHALL HAVE A MAX. FLOW RATE OF 2.5 G.P.M.

3. ON CEILINGS WHERE FRAME SPACING EXCEEDS 12" O.C.

ALL PLUMBING VENTS THRU ROOF TO BE MIN. 2" PIPE (CONTR. TO VERIFY)

PRESSURE RELIEF VALVES SHALL BE PROVIDED WITH A FULL SIZED DRAIN WHICH SHALL EXTEND FROM THE VALVE TO THE FLOOR DRAIN OR OTHER APPROVED LOCATION.

SUCH A ROOM OR SPACE.

APPROVED METAL SUPPORTS. DUCTS IN GARAGE AREAS MUST BE A MIN. OF 26 GAGE

ALL JOINTS, TRANSVERSE AND LONGITUDINAL SEAMS AND CONNECTIONS MUST BE

GLOW, SPARK, OR FLAME SHALL BE INSTALLED WITH THE PILOTS, BURNERS, OR HEATING WATER HEATERS OR HEATING APPLIANCES INSTALLED IN GARAGES WHERE THEY MAY

WATER HEATERS OR HEATING APPLIANCES LOCATED IN GARAGES WHICH GENERATE A

THE WATER HEATER SPACE AND FURNACE ROOM SHALL HAVE AN OPENING OR DOOR

AN UNOBSTRUCTED WORKING SPACE AT LEAST 30" DEEP AND 36" WIDE SHALL BE HEATER. AN UNOBSTRUCTED WORKING SPACE AT LEAST 30" DEEP AND THE HEIGHT OF THE FURNACE (30" MIN.) SHALL BE PROVIDED ALONG THE ENTIRE FRONT OR FIREBOX SIDE

BE PROVIDED. (WHEN CALCULATING FREE AREA OF LOUVERS AND GRILLES. IT MAY BE ASSUMED THAT WOOD LOUVERS WILL HAVE 20%-25% FREE AREA AND METAL LOUVERS AND

SIDES, BACK, AND TOP.

DUCTS USED FOR KITCHEN RANGE, DRYER, BATHROOM, AND LAUNDRY ROOM VENTILATION SHALL HAVE A SMOOTH, NON-COMBUSTIBLE, NON-ABSORBANT SURFACE. DUCTS SHALL TERMINATE OUTSIDE THE BUILDING AND SHALL BE EQUIPPED WITH BACK

NO UNPROTECTED COMBUSTIBLE SURFACE SHALL BE LOCATED WITHIN 30" OF A RANGE TOP AND COOKING SURFACE.

WATER HEATERS LOCATED ON WOOD FLOORS SHALL BE PROVIDED WITH AN APPROVED METAL PAN AND MIN. 1-1/2" DRAIN TO AN APPROVED RECEPTOR. PROVIDE PRIMER TRAP

PLUMBER WILL PROVIDE SEISMIC ANCHORAGE TO ALL WATER HEATERS. CONTRACTOR TO VERIFY. STRAP TO TOP AND BOTTOM 1/3.

SLIP JOINT PLUMBING CONNECTIONS ARE NOT ALLOWED IN CONCEALED CONSTRUCTION AREAS.