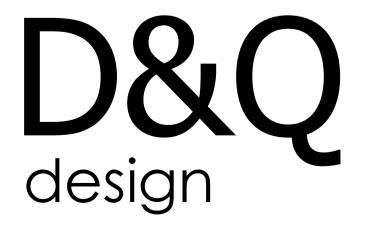


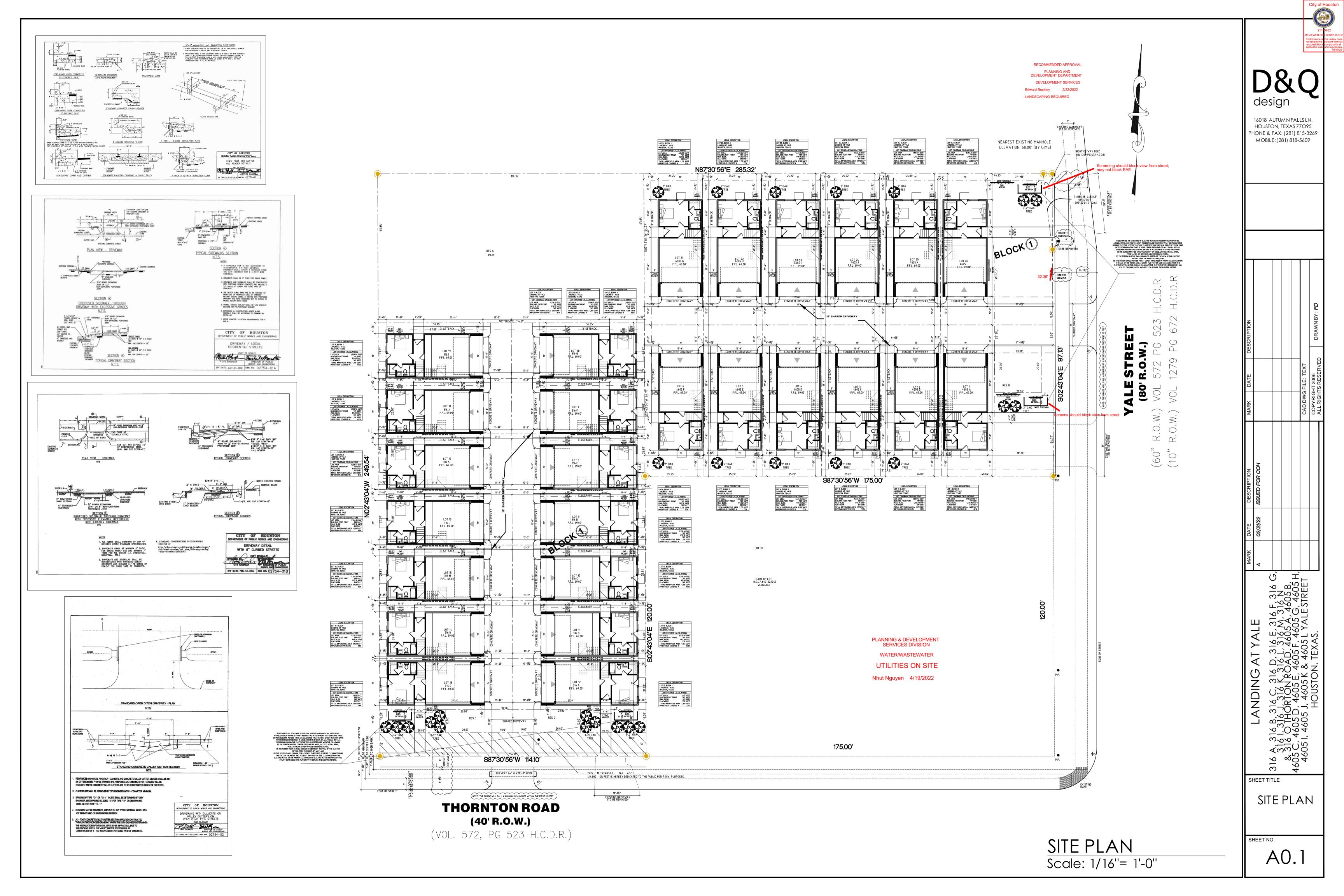


# LANDING AT YALE

316 A, 316 B, 316 C, 316 D, 316 E, 316 F, 316 G, 316 I, 316 J, 316 K, 316 L, 316 M, 316 N & 316 O THORTON ROAD 4605 A, 4605 B, 4605 C, 4605 D, 4605 E, 4605 F, 4605 G, 4605 H, 4605 I, 4605 J, 4605 K & 4605 L YALE STREET HOUSTON, TEXAS



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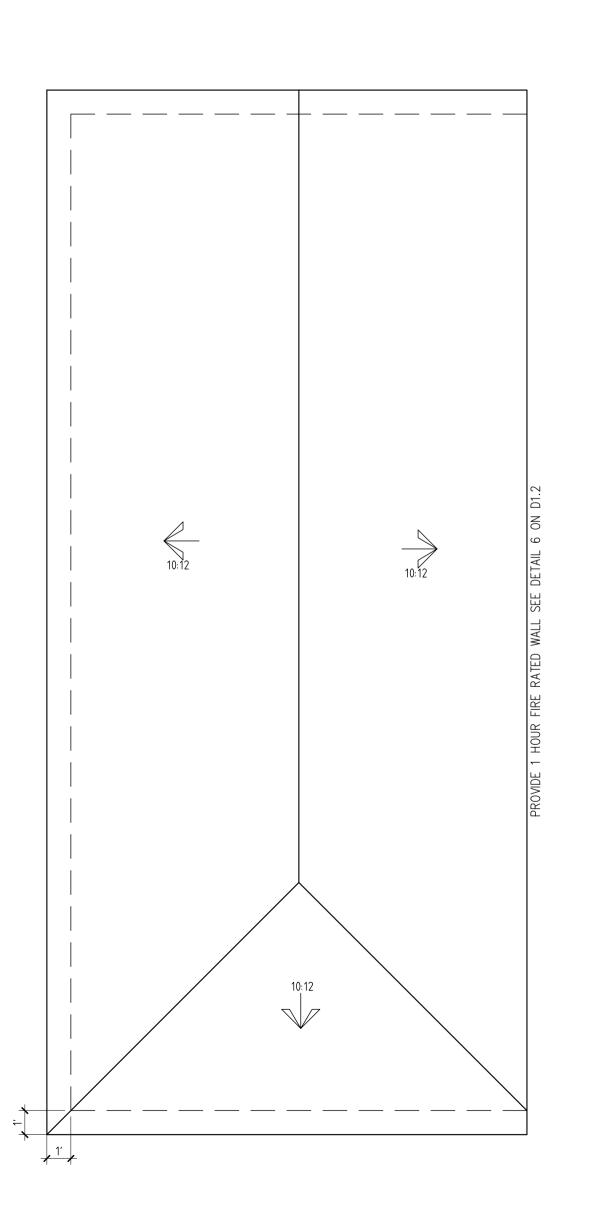
AREA CALCULATIONS			DOOR SCHEDULE						
FIRST FLOOR: 299 SQ. FT.			QTY.	WIDTH	HEIGHT	DESCRIPTION			
SECOND FLOOR:	713 SQ. FT. 789 SQ. FT. 1,801 SQ. FT	NO. (1)	1	3'-0''	8'-0''	EXTERIOR FRONT DOOR			
THIRD FLOOR:		(2)	1	2'-8"	6'-8"	20 MIN. FIRE RATED/SELF CLOSING DOOR AT GARAGE			
TOTAL LIVING:		3	6	2'-4"	6'-8"	INTERIOR DOOR			
GARAGE	371 SQ. FT. 76 SQ. FT. 105 SQ. FT. 14 SQ. FT.	4	1	2'-4"	8'-0"	INTERIOR DOOR			
BALCONY CARPOT PORCH		5	1	2'-8"	6'-8"	EXTERIOR DOOR			
			1	2-2'-6"	6'-8"	DOUBLE INTERIOR DOOR			
TOTAL OOVEDED ADEA	0.707.00.57	7	3	2'-8"	6'-8"	INTERIOR DOOR			
TOTAL COVERED AREA	2,367 SQ. FT.	8	1	3'-0"	8'-0''	EXTERIOR DOOR			
		9	2	2'-0''	6'-8"	INTERIOR DOOR			
		(10)	1	16'-0''	7'-0''	OVERHEAD GARAGE DOOR			

	WINDOW SCHEDULE								
MARK	MARK QTY WIDTH HEIGHT DESCRIPTION								
$\langle A \rangle$	SINGLE HUNG WINDOW								
$\langle B \rangle$	B) 3 3'-0" 6'-0" SINGLE HUNG WINDOW								
	1	3'-0''	5'-0''	SINGLE HUNG WINDOW					
$\langle D \rangle$	2	2'-0''	6'-0''	SINGLE HUNG WINDOW					
$\langle E \rangle$	2	4'-0''	4'-0''	SINGLE HUNG WINDOW					

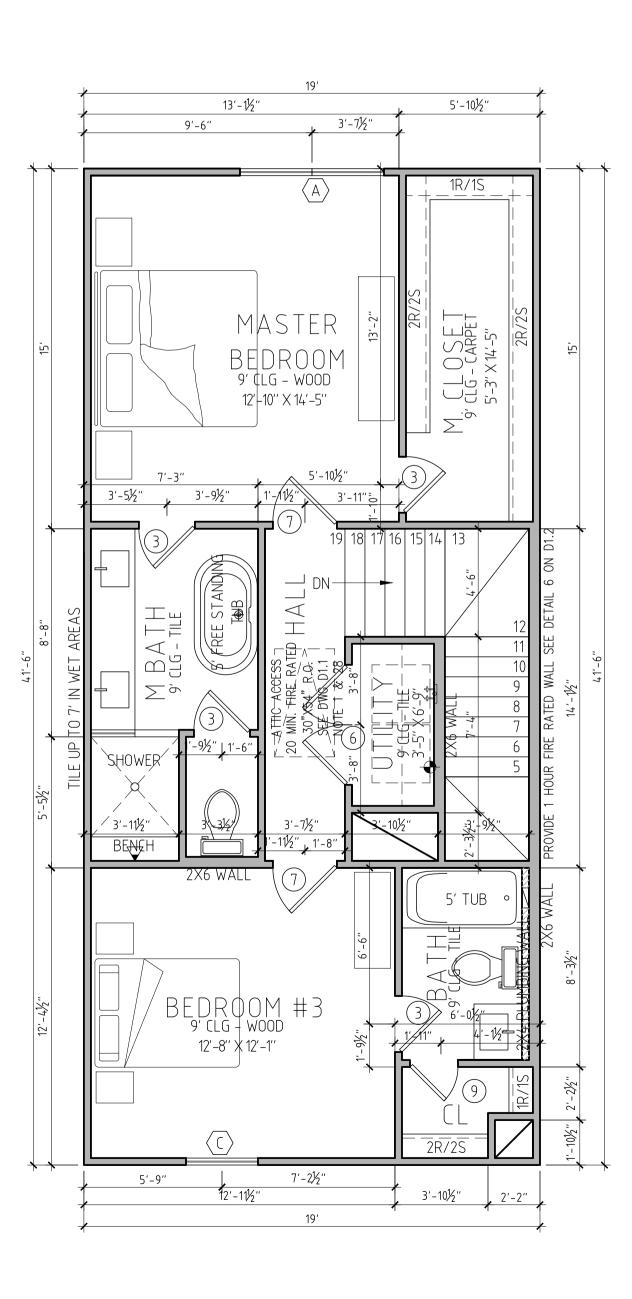
# ×RECESS SUB-FLOOR FOR ALL TILED AREAS

NOTE.

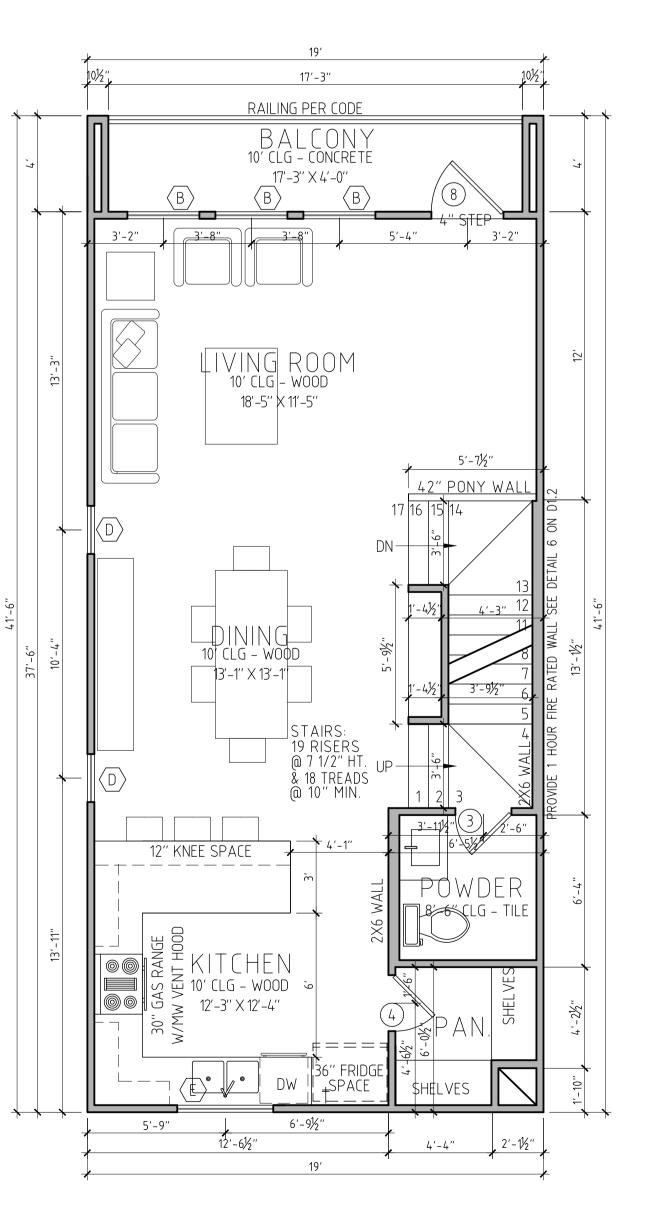
- VERIFY WITH WINDOW MANUFACTURER FOR TRUE ROUGH OPENING SIZES.
- 2. DOORS AND WINDOWS SELECTION BY BUILDER/OWNER.
- 3. ALL WALL DIMENSIONS ARE TO FACE OF FRAMING.
- 4. ALL DIMENSIONS TO DOORS AND WINDOWS ARE TO THE CENTER OF OPENING.
- 5. 2X6 FRAMING AT PLUMBING WALLS.
- 6. DBL 2X4 OR 2X6 WALLS REQUIRED FOR CEILING HEIGHTS OVER 10'-0".
- 7. ALL WALLS WITH 5/8 TYPE X SHEETROCK
- 8. RETURN AIR: PROPERLY SEALED. LOCAL AMENDMENT REQUIRES THAT R/A FILTERS BE WITHIN 24 INCHES OF THE FLOOR OR HAVE INSTALLED AT THE EQUIPMENT A MEDIA-TYPE OR ELECTROSTATIC-TYPE AIR FILTER
- ALL GLAZING SHALL HAVE A .4 U-FACTOR & .25 SHGC OR BETTER.



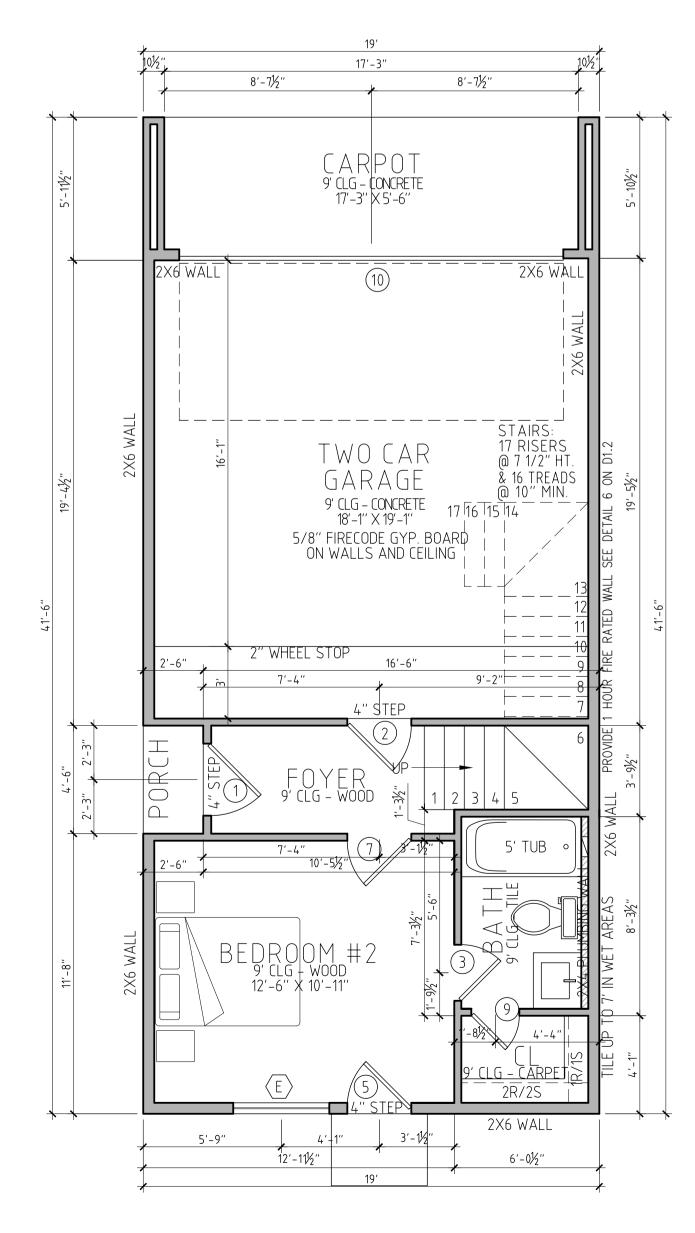




THIRD FLOOR PLAN
Scale: 1/4"= 1'-0"



SECOND FLOOR PLAN
Scale: 1/4"= 1'-0"



FIRST FLOOR PLAN
Scale: 1/4"= 1'-0"

D&Q design

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DESCRIPTION					DRAWNBY: <b>FD</b>
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DATE	11/24/21				
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LANDING AI YALE
316 I, 316 J, 316 K, 316 L, 316
316 N THORNTON ROAD
, 4605 C, 4605 D, 4605 E, 4605
4605 L YALE STREET

SHEET TITLE
FLOOR
PLANS

SHEET NO.

A1.

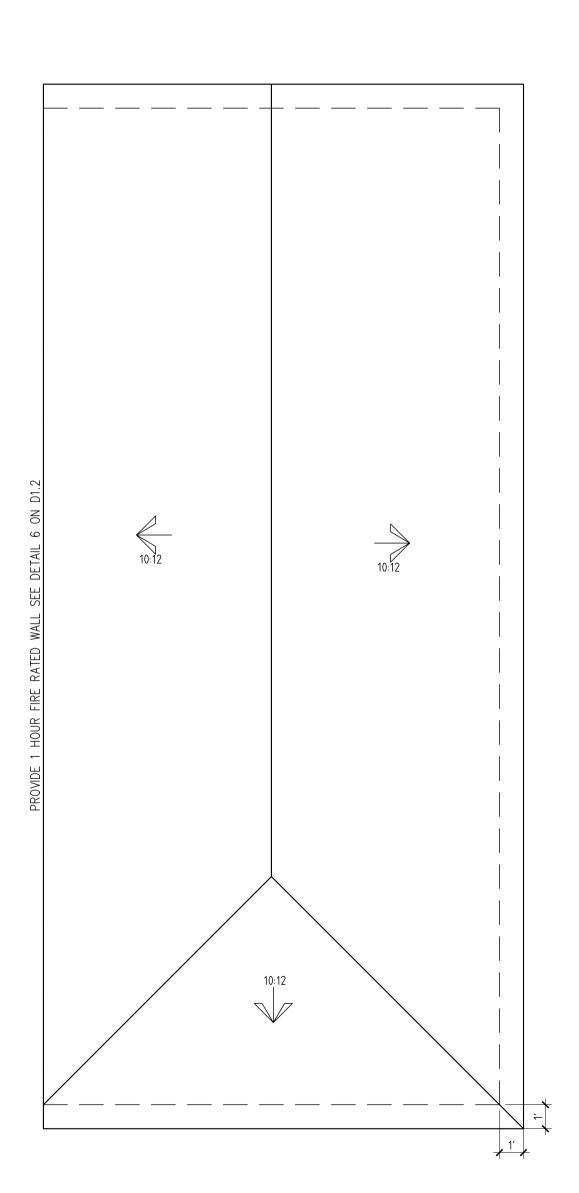
AREA CALCULATIONS		DOOR SCHEDULE						
FIRST FLOOR:	RST FLOOR: 299 SQ. FT.		. WIDTH	HEIGHT	DESCRIPTION			
SECOND FLOOR:	713 SQ. FT.	NO. Q11	3'-0"	8'-0"	EXTERIOR FRONT DOOR			
THIRD FLOOR:	789 SQ. FT.	(2) 1	2'-8"	6'-8"	20 MIN. FIRE RATED/SELF CLOSING DOOR AT GARAGE			
TOTAL LIVING:	1,801 SQ. FT	(3) 6	2'-4"	6'-8"	INTERIOR DOOR			
GARAGE	371 SQ. FT. 76 SQ. FT.	(4) 1	2'-4"	8'-0''	INTERIOR DOOR			
BALCONY		(5) 1	2'-8"	6'-8"	EXTERIOR DOOR			
CARPOT PORCH	105 SQ. FT. 14 SQ. FT.	6 1	2-2'-6"	6'-8''	DOUBLE INTERIOR DOOR			
TOTAL COVEDED ADEA	·	7 3	2'-8"	6'-8''	INTERIOR DOOR			
TOTAL COVERED AREA	2,367 SQ. FT.	8 1	3'-0"	8'-0"	EXTERIOR DOOR			
		9 2	2'-0"	6'-8''	INTERIOR DOOR			
		(10) 1	16'-0''	7'-0''	OVERHEAD GARAGE DOOR			

	WINDOW SCHEDULE								
MARK	MARK QTY WIDTH HEIGHT DESCRIPTION								
$\langle A \rangle$	SINGLE HUNG WINDOW								
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$\langle E \rangle$	2	4'-0''	4'-0''	SINGLE HUNG WINDOW					

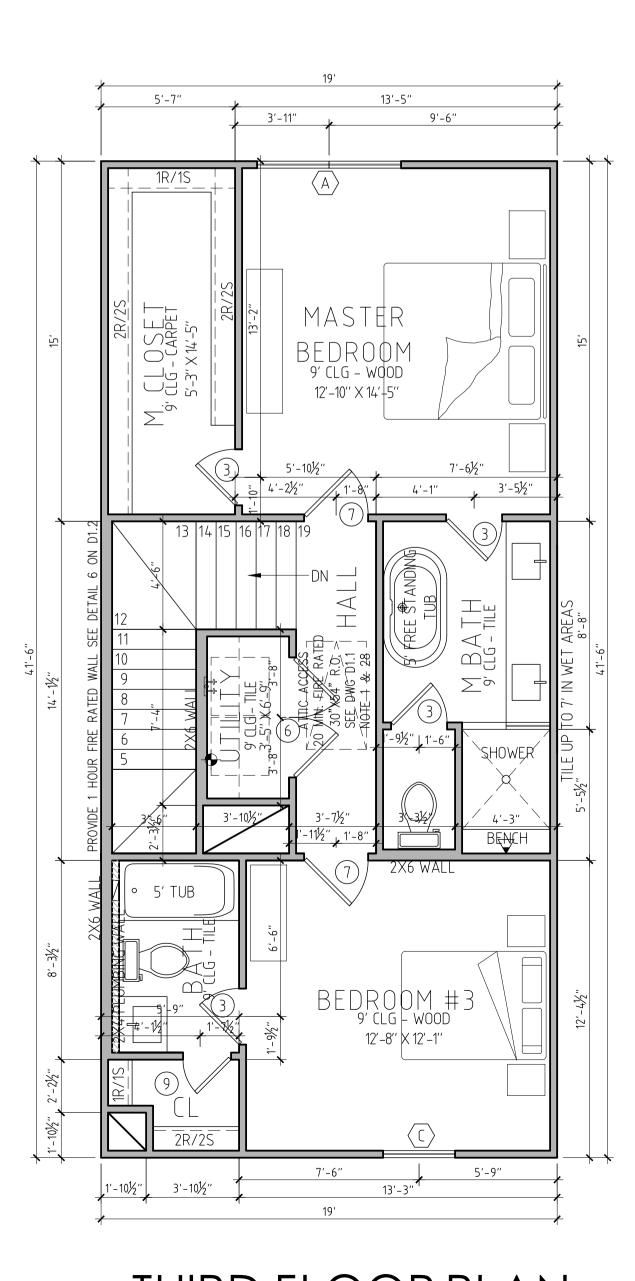
## ×RECESS SUB-FLOOR FOR ALL TILED AREAS

NUTE:

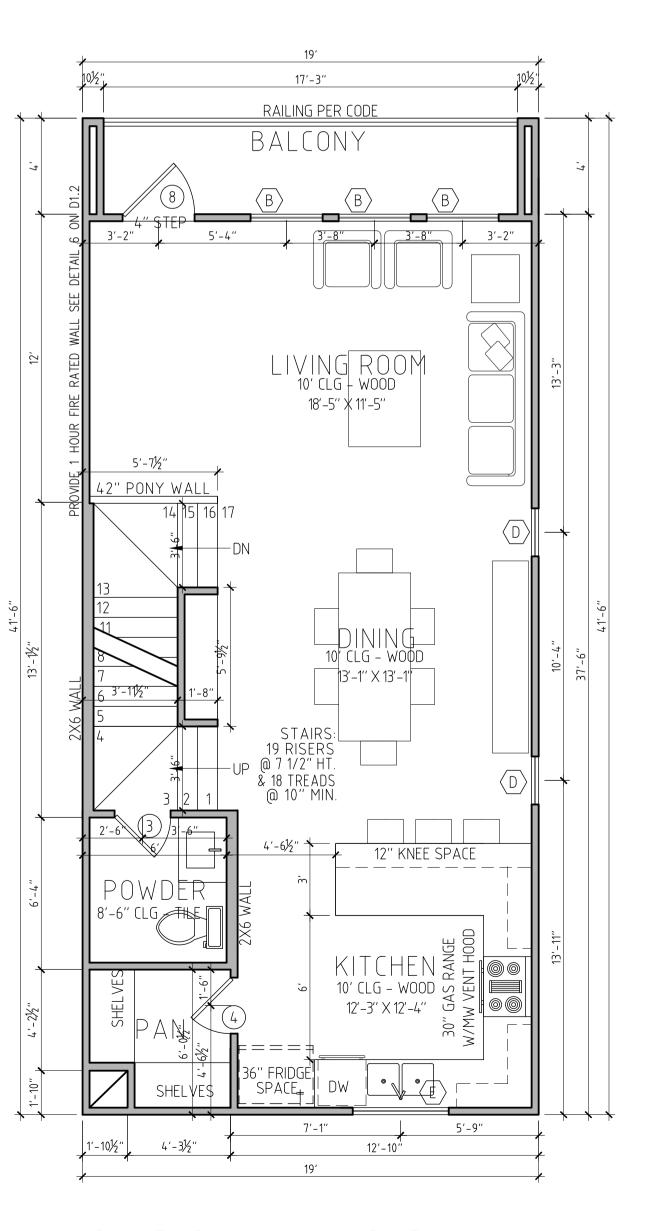
- VERIFY WITH WINDOW MANUFACTURER FOR TRUE ROUGH OPENING SIZES.
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- ALL GLAZING SHALL HAVE A .4 U-FACTOR & .25 SHGC OR BETTER.



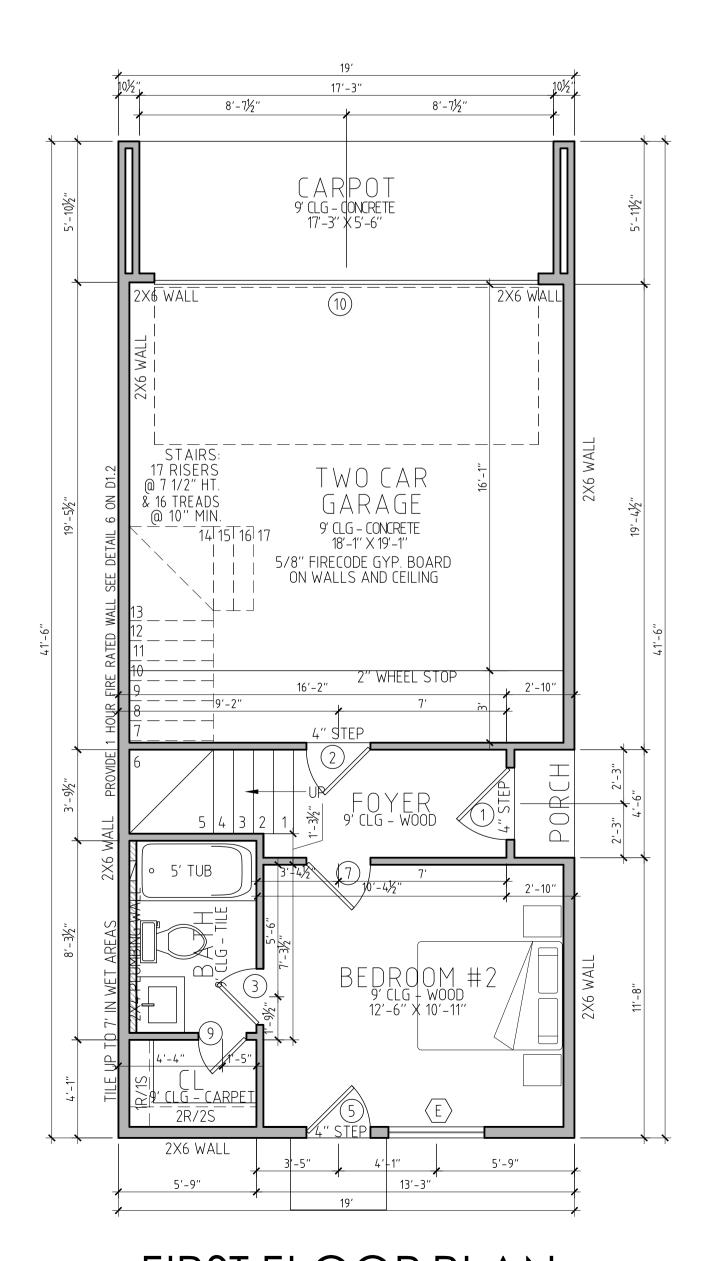




THIRD FLOOR PLAN
Scale: 1/4"= 1'-0"



SECOND FLOOR PLAN Scale: 1/4"= 1'-0"



FIRST FLOOR PLAN
Scale: 1/4"= 1'-0"



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DESCRIPTION					DRAWNBY: <b>FD</b>
DATE				CAD DWG FILE: TEXT	COPYRIGHT 2006
MARK				CAD DW	COPYRIC
DESCRIPTION	ISSUED FOR COH				
DATE	11/24/21				
MARK	٧				

LANDING AI YALE
316 C, 316 D, 316 E, 316 F, 316 C
316 O THORNTON ROAD
4605 G, 4605 H, 46051, 4605 J
4605 K YALE STREET

FLOOR PLANS

SHEET NO.

A1.2





2. R302.5 DWELLING/GARAGE OPENING/PENETRATION PROTECTION. OPENINGS AND PENÉTRATIONS THROUGH THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE IN ACCORDANCE WITH SECTIONS R302.5.1 THROUGH R302.5.3.

R302.5.1 OPENING PROTECTION. OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 13/8 INCHES (35 MM) IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOORS NOT LESS THAN 13/8 INCHES (35 MM) THICK, OR 20-MINUTE FIRE-RATED DOORS, EQUIPPED WITH A SELF-CLOSING DEVICE. R302.5.2 DUCT PENETRATION.

DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAGE (0.48 MM) SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS INTO THE GARAGE.

R302.5.3 OTHER PENETRATIONS. PENETRATIONS THROUGH THE SEPARATION REQUIRED IN SECTION R302.6 SHALL BE PROTECTED AS REQUIRED BY SECTION R302.11. ITEM 4.

R302.6 DWELLING/GARAGE FIRE SEPARATION THE GARAGE SHALL BE SEPARATED AS REQUIRED BY TABLE R302.6. OPENINGS IN GARAGE WALLS SHALL COMPLY WITH SECTION R302.5. THIS PROVISION DOES NOT APPLY TO GARAGE WALLS THAT ARE PERPENDICULAR TO THE ADJACENT DWELLING UNIT WALL.

TABLE R302.6 DWELLING/GARAGE SEPARATION

SEPERATION BETWEEN THE RESIDENCE AND THE GARAGE SHALL BE MAINTAINED BY THE INSTALLATION OF 1/2" GYPSUM BOARD ON ALL COMMON WALLS AND 5/8" ON CEILING ON THE GARAGE SIDE. TYPE 'X' GYPSUM BOARD FOR THE GARAGE CEILINGS BENEATH HABITABLE ROOMS SHALL BE INSTALLED PERPENDICULAR TO THE CEILING FRAMING AND SHALL BE FASTENED AT MAXIMUM 6 INCHES ON CENTER BY MINIMUM 1-7/8" 6d COATED NAILS OR EQUIVALENT DRYWALL SCREWS. (R702.3.5)

3. R302.5.1 OPENING PROTECTION. OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 13/8 INCHES (35 MM) IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOORS NOT LESS THAN 13/8 INCHES (35 MM) THICK, OR 20-MINUTE FIRE-RATED DOORS, EQUIPPED WITH A SELF-CLOSING DEVICE.

4. R312.2.1 WINDOW SILLS. IN DWELLING UNITS, WHERE THE OPENING OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72 INCHES (1829 MM) ABOVE THE FINISHED GRADE OR SURFACE BELOW, THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE A MINIMUM OF 24 INCHES (610 MM) ABOVE THE FININSHED 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.

5. R302.7 UNDER-STAIR PROTECTION. ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER-STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2-INCH (12.7 MM) GYPSUM BOARD.

6. R806.1 VENTILATION REQUIRED. ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16 INCH (1.6 MM) MINIMUM AND 1/4 INCH (6.4 MM) MAXIMUM. VENTILATION OPENINGS HAVING A LEAST DIMENSION LARGER THAN 1/4 INCH (6.4 MM) SHALL BE PROVIDED WITH CORROSION—RESISTANT WIRE CLOTH SCREENING, HARDWARE CLOTH, OR SIMILAR MATERIAL WITH OPENINGS HAVING A LEAST DIMENSION OF 1/16 INCH (1.6 MM) MINIMUM AND 1/4 INCH (6.4 MM) MAXIMUM. OPENINGS IN ROOF FRAMING MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF SECTION R802.7. REQUIRED VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTSIDE AIR.

7. WOOD TO BE THIN SET ON APPROPRIATE BACKER BOARD.

8. GUTTERS AND DOWNSPOUTS AS REQUIRED

9. R702.3.8 WATER-RESISTANT GYPSUM BACKING BOARD. GYPSUM BOARD USED AS THE BASE OR BACKER FOR ADHESIVE APPLICATION OF CERAMIC TILE OR OTHER REQUIRED NONABSORBENT FINISH MATERIAL SHALL CONFORM TO ASTM C 1396, C 1178 OR C1278. USE OF WATER-RESISTANT GYPSUM BACKING BOARD SHALL BE PERMITTED ON CEILINGS WHERE FRAMING SPACING DOES NOT EXCEED 12 INCHES (305 MM) ON CENTER FOR 1/2-INCH-THICK (12.7 MM) OR 16 INCHES (406 MM) FOR 5/8-INCH-THICK (16 MM) GYPSUM BOARD. WATER-RESISTÁNT GYPSUM BOARD SHALL NOT BE INSTALLED OVER A CLASS I OR II VAPOR RETARDER IN A SHOWER OR TUB COMPARTMENT. CUT OR EXPOSED EDGES, INCLUDING THOSE AT WALL INTERSECTIONS, SHALL BE SEALED AS RECOMMENDED BY

R702.4.2 FIBER-CEMENT, FIBER-MAT REINFORCED CEMENTITIOUS BACKER UNITS, GLASS MAT GYPSUM BACKERS OR FIBER-REINFORCED GYPSUM BACKERS IN COMPLIANCE WITH ASTM C 1288, C 1325, C 1178 OR C 1278. RESPECTIVELY. AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS SHALL BE USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS.

10. R602.3 DESIGN AND CONSTRUCTION. EXTERIOR WALLS OF WOOD-FRAME CONSTRUCTION SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CHAPTER AND FIGURES R602.3(1)

11. A LEVEL SERVICE SPACE A MIN. 30" DEEP AND 30" WIDE SHALL BE PRESENT ALONG ALL SIDES OF APPLIANCE(S) IN ATTIC WHERE ACCESS IS REQUIRED. PROVIDE AN UNOBSTRUCTED PASSAGEWAY LARGE ENOUGH TO ALLOW REMOVAL OF THE LARGEST APPLIANCE, BUT NOT LESS THAN 30" HIGH AND 22" WIDE AND NOT MORE THAN 20' IN LENGTH WHEN MEASURED ALONG THE CENTER LINE OF PASSAGEWAY FROM THE OPENING TO THE APPLIANCE. THE PASSAGEWAY SHALL HAVE CONTINUOUS SOLID FLOORING IN ACCORDANCE WITH R501.1 AND M130.5 OF IRC 2012.

12. EVERY DWELLING UNIT TO HAVE KITCHEN & BATHROOM WITH HOT & COLD RUNNING WATER.

13. EVERY DWELLING UNIT TO HAVE HEATING FACILITIES

14. CROSS VENTILATION AT ENCLOSED ATTICS

15. THE SIZE, HEIGHT AND SPACING OF STUDS SHALL BE IN ACCORDANCE WITH TABLE R602.3(5) IRC 2012

16. WATER HEATERS AND STORAGE TANKS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION M1305 AND SHALL BE LOCATED AND CONNECTED TO PROVIDE ACCESS FOR OBSERVATION, MAINTENANCE, SERVICING AND REPLACEMENT.

17. R312.1.1 GUARDS SHALL BE LOCATED ALONG OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, RAMPS AND LANDINGS, THAT ARE LOCATED MORE THAN 30 INCHES (762 MM) MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT WITHIN 36 INCHES (914 MM) HORIZONTALLY TO THE EDGE OF THE OPEN SIDE. INSECT SCREENING SHALL NOT BE CONSIDERED R312.1.2 HEIGHT.

REQUIRED GUARDS AT OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, PORCHES, BALCONIES OR LANDINGS, SHALL BE NOT LESS THAN 36 INCHES (914 MM) HIGH MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE, ADJACENT FIXED SEATING OR THE LINE CONNECTING THE LEADING EDGES OF THE TREADS.

. GUARDS ON THE OPEN SIDES OF STAIRS SHALL HAVE A HEIGHT NOT LESS THAN 34 INCHES (864 MM) MEASURED VERTICALLY FROM A LINE CONNECTING THE LEADING EDGES OF THE TREADS. 2. WHERE THE TOP OF THE GUARD ALSO SERVES AS A HANDRAIL ON THE OPEN SIDES OF STAIRS, THE TOP OF THE GUARD SHALL NOT BE LESS THAN 34 INCHES (864 MM) AND NOT MORE THAN 38 INCHES (965 MM) MEASURED VERTICALLY FROM A LINE CONNECTING THE LEADING EDGES OF THE TREADS.

R312.1.3 OPENING LIMITATIONS REQUIRED GUARDS SHALL NOT HAVE OPENINGS FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT WHICH ALLOW PASSAGE OF A SPHERE 4 INCHES (102 MM) IN DIAMETER.

18. KITCHEN SINK WITH DISPOSAL.

19. R602.10 WALL BRACING. BUILDINGS SHALL BE BRACED IN ACCORDANCE WITH THIS SECTION OR, WHEN APPLICABLE, SECTION R602.12. WHERE A BUILDING, OR PORTION THEREOF, DOES NOT COMPLY WITH ONE OR MORE OF THE BRACING REQUIREMENTS IN THIS SECTION, THOSE PORTIONS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH SECTION

20. R602.11 WALL ANCHORAGE. BRACED WALL LINE SILLS SHALL BE ANCHORED TO CONCRETE OR MASONRY FOUNDATIONS IN ACCORDANCE WITH SECTIONS R403.1.6 AND R602.11.1.

21. R302.11 FIREBLOCKING. IN COMBUSTIBLE CONSTRUCTION, FIREBLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE.

FIREBLOCKING SHALL BE PROVIDED IN WOOD-FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:

. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS: 1.1. VERTICALLY AT THE CEILING AND FLOOR LEVELS.

1.2. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET (3048 MM). 2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICÀL AND HÓRIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS 3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN. ENCLOSED SPACES UNDER

STAIRS SHALL COMPLY WITH SECTION R302.7. 4. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION. THE MATERIAL FILLING THIS ANNULAR SPACE SHALL NOT BE REQUIRED TO MEET THE ASTM E 136 REQUIREMENTS.

5. FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES, SEE SECTION R1003.19. 6. FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPARATION. 22. R310.1 EMERGENCY ESCAPE AND RESCUE REQUIRED.

BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING. WHERE BASEMENTS CONTAIN ONE OR MORE SLEEPING ROOMS, EMERGENCY EGRESS AND RESCUE OPENINGS SHALL BE REQUIRED IN EACH SLEEPING ROOM. WHERE EMERGENCY ESCAPE AND RESCUE OPENINGS ARE PROVIDED THEY SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES (1118 MM) MEASURED FROM THE FINISHED FLOOR TO THE BOTTOM OF THE CLEAR OPENING. WHERE A DOOR OPENING HAVING A THRESHOLD BELOW THE ADJACENT GROUND ELEVATION SERVES AS AN EMERGENCY ESCAPE AND RESCUE OPENING AND IS PROVIDED WITH A BULKHEAD ENCLOSURE, THE BULKHEAD ENCLOSURE SHALL COMPLY WITH SECTION R310.3. THE NET CLEAR OPENING DIMENSIONS REQUIRED BY THIS SECTION SHALL BE OBTAINED

BY THE NORMAL OPERATION OF THE EMERGENCY ESCAPE AND RESCUE OPENING FROM THE INSIDE. EMERGENCY ESCAPE AND RESCUE OPENINGS WITH A FINISHED SILL HEIGHT BELOW THE ADJACENT GROUND ELEVATION SHALL BE PROVIDED WITH A WINDOW WELL IN ACCORDANCE WITH SECTION R310.2. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY INTO A PUBLIC WAY, OR TO A YARD OR COURT THAT OPENS TO A PUBLIC WAY.

EXCEPTION: BASEMENTS USED ONLY TO HOUSE MECHANICAL EQUIPMENT AND NOT EXCEEDING TOTAL FLOOR AREA OF 200 SQUARE FEET (18.58 M2). R310.1.1 MINIMUM OPENING AREA.

ALL EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET (0.530 EXCEPTION: GRADE FLOOR OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5 SQUARE FEET (0.465 M2). R310.1.2 MINIMUM OPENING HEIGHT

THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 24 INCHES (610 MM). R310.1.3 MINIMUM OPENING WIDTH.

THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20 INCHES (508 MM). R310.1.4 OPERATIONAL CONSTRAINTS.

EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS, TOOLS OR SPECIAL KNOWLEDGE.

R311.2 FGRESS DOOR

AT LEAST ONE EGRESS DOOR SHALL BE PROVIDED FOR EACH DWELLING UNIT. THE EGRESS DOOR SHALL BE SIDE-HINGED, AND SHALL PROVIDE A MINIMUM CLEAR WIDTH OF 32 INCHES (813 MM) WHEN MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES (1.57 RAD). THE MINIMUM CLEAR HEIGHT OF THE DOOR OPENING SHALL NOT BE LESS THAN 78 INCHES (1981 MM) IN HEIGHT MEASURED FROM THE TOP OF THE THRESHOLD TO THE BOTTOM OF THE STOP. OTHER DOORS SHALL NOT BE REQUIRED TO COMPLY WITH THESE MINIMUM DIMENSIONS. EGRESS DOORS SHALL BE READILY OPENABLE FROM INSIDE THE DWELLING WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

R311.3 FLOORS AND LANDINGS AT EXTERIOR DOORS. THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL NOT BE LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A MINIMUM DIMENSION OF 36 INCHES (914 MM) MEASURED IN THE DIRECTION OF TRAVEL. EXTERIOR LANDINGS SHALL BE PERMITTED TO HAVE A SLOPE NOT TO EXCEED 1/4 UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT).

HOUSEHOLD FIRE ALARM SYSTEMS INSTALLED IN ACCORDANCE WITH NFPA 72 THAT INCLUDE SMOKE ALARMS. OR A COMBINATION OF SMOKE DETECTOR AND AUDIBLE NOTIFICATION DEVICE INSTALLED AS REQUIRED BY THIS SECTION FOR SMOKE ALARMS, SHALL BE PERMITTED. THE HOUSEHOLD FIRE ALARM SYSTEM SHALL PROVIDE THE SAME LEVEL OF SMOKE DETECTION AND ALARM AS REQUIRED BY THIS SECTION FOR SMOKE ALARMS. WHERE A HOUSEHOLD FIRE WARNING SYSTEM IS INSTALLED USING A COMBINATION OF SMOKE DETECTOR AND AUDIBLE NOTIFICATION DEVICE(S), IT SHALL BECOME A PERMANENT FIXTURE OF THE OCCUPANCY AND OWNED BY THE HOMEOWNER. THE SYSTEM SHALL BÈ MONITORED BY AN APPROVED SUPERVISING STATION AND BE MAINTAINED IN ACCORDANCE WITH NFPA 72.

SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS: 1. IN EACH SLEEPING ROOM.

2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS. 3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND HABITABLE ATTICS BUT NOT INCLUDING CRAWL SPACES AND UNINHABITABLE ATTICS. IN DWELLINGS OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BUT NOT EXTEND BELOW, LATH, PAPER AND SCREED. BETWEEN THE ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.

24. R315.2 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 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.

EXCEPTION: WHERE CARBON MONOXIDE ALARMS ARE INSTALLED MEETING THE REQUIREMENTS OF SECTION R315.1, COMPLIANCE WITH SECTION 315.2 IS NOT REQUIRED.

R315.3 WHERE REQUIRED IN EXISTING DWELLINGS. WHERE WORK REQUIRING A PERMIT OCCURS IN EXISTING DWELLINGS THAT HAVE ATTACHED GARAGES OR IN EXISTING DWELLINGS

WITHIN WHICH FUEL-FIRED APPLIANCES EXIST, CARBON MONOXIDE ALARMS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION

SINGLE—STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH UL 2034 AND SHALL BE INSTALLED IN ACCORDANCE WITH THIS CODE AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

25. R311.7 STAIRWAYS.

R315.4 ALARM REQUIREMENTS

STAIRWAYS SHALL NOT BE LESS THAN 36 INCHES (914 MM) IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQUIRED HEADROOM HEIGHT. HANDRAILS SHALL NOT PROJECT MORE THAN 4.5 INCHES (114 MM) ON EITHER SIDE OF THE STAIRWAY AND THE MINIMUM CLEAR WIDTH OF THE STAIRWAY AT AND BELOW THE HANDRAIL HEIGHT, INCLUDING TREADS AND LANDINGS, SHALL NOT BE LESS THAN 311/2 INCHES (787 MM) WHERE A HANDRAIL IS INSTALLED ON ONE SIDE AND 27 INCHES (698 MM) WHERE HANDRAILS ARE PROVIDED ON BOTH SIDES.

THE MINIMUM HEADROOM IN ALL PARTS OF THE STAIRWAY SHALL NOT BE LESS THAN 6 FEET 8 INCHES (2032 MM) MEASURED VERTICALLY FROM THE SLOPED LINE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM ON THAT PORTION OF THE STAIRWAY.

R311.7.3 VERTICAL RISE. A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 12 FEET (3658 MM) BETWEEN FLOOR LEVELS OR LANDINGS. R311.7.4 THE WALKLINE ACROSS WINDER TREADS SHALL BE CONCENTRIC TO THE CURVED DIRECTION OF TRAVEL THROUGH THE TURN AND LOCATED 12 INCHES (305 MM) FROM THE SIDE WHERE THE WINDERS ARE NARROWER. THE 12-INCH (305 MM) DIMENSION SHALL BE MEASURED`FROM THE WIDEST POINT OF THE CLEAR STAIR WIDTH AT THE WALKING SURFACE OF THE WINDER. IF WINDERS ARE ADJACENT WITHIN THE FLIGHT, THE POINT OF THE WIDEST CLEAR STAIR WIDTH OF THE ADJACENT

WINDERS SHALL BE USED. R311.7.5 STAIR TREADS AND RISERS SHALL MEET THE REQUIREMENTS OF THIS SECTION. FOR THE PURPOSES OF THIS SECTION ALL DIMENSIONS AND DIMENSIONED SURFACES SHALL BE EXCLUSIVE OF CARPETS, RUGS OR RUNNERS. R311.7.5.1 THE MAXIMUM RISER HEIGHT SHALL BE 73/4 INCHES (196 MM). THE RISER SHALL BE MEASURED VERTICALLY BETWEEN LEADING EDGES OF THE ADJACENT TREADS. THE GREATEST RISER HEIGHT WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH (9.5 MM). RISERS SHALL BE VERTICAL OR SLOPED FROM THE UNDERSIDE OF THE NOSING OF THE TREAD ABOVE AT AN ANGLE NOT MORE THAN 30 DEGREES (0.51 RAD) FROM THE VERTICAL. OPEN RISERS ARE PERMITTED PROVIDED THAT THE OPENING BETWEEN TREADS DOES NOT PERMIT THE PASSAGE OF A 4-INCH-DIAMETER (102 3) CONTRACTOR SHALL COORDINATE THE NECESSARY ROUGH OPENING DIMENSIONS FOR MM) SPHERE.

R311.7.5.2 THE MINIMUM TREAD DEPTH SHALL BE 10 INCHES (254 MM). THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH (9.5 MM).

R311.7.5.2.1 WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 10 INCHES (254 MM) MEASURED BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AT THE INTERSECTIONS WITH THE WALKLINE. WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 6 INCHES (152 MM) AT ANY POINT WITHIN THE CLEAR WIDTH OF THE STAIR. WITHIN ANY FLIGHT OF STAIRS. THE LARGEST WINDER TREAD DEPTH AT THE WALKLINE SHALL NOT EXCEED THE SMALLE. WINDER TREAD BY MORE THAN 3/8 INCH (9.5 MM). CONSISTENTLY SHAPED WINDERS AT THE WALKLINE SHALL BE ALLOWED WITHIN THE SAME FLIGHT OF STAIRS AS RECTANGULAR TREADS AND DO NOT HAVE TO BE WITHIN 3/8 INCH (9.5 MM) OF THE RECTANGULAR TREAD DEPTH

R311.7.5.3 NOSINGS. THE RADIUS OF CURVATURE AT THE NOSING SHALL BE NO GREATER THAN 9/16 INCH (14 MM). A NOSING NOT LESS THAN 3/4 INCH (19 MM) BUT NOT MORE THAN 11/4 INCHES (32 MM) SHALL BE PROVIDED ON STAIRWAYS WITH SOLID RISERS. THE GREATEST NOSING PROJECTION SHALL NOT EXCEED THE SMALLEST NOSING PROJECTION BY MORE THAN 3/8 INCH (9.5 MM) BETWEEN TWO STORIES, INCLUDING THE NOSING AT THE LEVEL OF FLOORS AND LANDINGS. BEVELING OF NOSINGS SHALL NOT EXCEED 1/2 INCH (12.7 MM).

R311.7.6 THERE SHALL BE A FLOOR OR LANDING AT THE TOP AND BOTTOM OF EACH STAIRWAY. THE MINIMUM WIDTH PERPENDICULAR TO THE DIRECTION OF TRAVEL SHALL BE NO LESS THAN THE WIDTH OF THE FLIGHT SERVED. LANDINGS OF SHAPES OTHER THAN SQUARE OR RECTANGULAR SHALL BE PERMITTED PROVIDED THE DEPTH AT THE WALK LINE AND THE TOTAL AREA IS NOT LESS THAN THAT OF A QUARTER CIRCLE WITH A RADIUS EQUAL TO THE REQUIRED LANDING WIDTH. WHERE THE STAIRWAY HAS A STRAIGHT RUN, THE MINIMUM DEPTH IN THE DIRECTION OF TRAVEL SHALL BE NOT LESS THAN 36 INCHES

R311.7.7 THE WALKING SURFACE OF TREADS AND LANDINGS OF STAIRWAYS SHALL BE SLOPED NO STEEPER THAN ONE UNIT VERTICAL IN 48 INCHES HORIZONTAL (2-PERCENT SLOPE). R311.7.8 HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH FOUR OR MORE RISERS. R311.7.8.1 HANDRAIL HEIGHT, MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING, OR FINISH SURFACE OF RAMP SLOPE, SHALL BE NOT LESS THAN 34 INCHES (864 MM) AND NOT MORE THAN 38 INCHES (965 MM).

R311.7.8.2 HANDRAILS FOR STAIRWAYS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE FLIGHT, FROM A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER OF THE FLIGHT. HANDRAIL ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 11/2 INCH (38 MM) BETWEEN THE WALL AND THE HANDRAILS.

R311.7.8.3 GRIP—SIZE. ALL REQUIRED HANDRAILS SHALL BE OF ONE OF THE FOLLOWING TYPES OR PROVIDE EQUIVALENT GRASPABILITY.

1. TYPE I. HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 11/4 INCHES (32 MM) AND NOT GREATER THAN 2 INCHES (51 MM). IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER DIMENSION OF AT LEAST 4 INCHES (102 MM) AND NOT GREATER THAN 61/4 INCHES (160 MM) WITH A MAXIMUM CROSS SECTION OF DIMENSION OF 21/4 INCHES (57 MM). EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCH (0.25 MM). 2. TYPE II. HANDRAILS WITH A PERIMETER GREATER THAN 61/4 INCHES (160 MM) SHALL HAVE A GRASPABLE FINGER RECESS AREA ON BOTH SIDES OF THE PROFILE. THE FINGER RECESS SHALL BEGIN WITHIN A DISTANCE OF 3/4 INCH (19 MM) MEASURED VERTICALLY FROM THE TALLEST PORTION OF THE PROFILE AND ACHIEVE A DEPTH OF AT LEAST 5/16 INCH (8 MM) WITHIN 7/8 INCH (22 MM) BELOW THE WIDEST PORTION OF THE PROFILE. THIS REQUIRED DEPTH SHALL CONTINUE FOR AT LEAST 3/8 INCH (10 MM) TO A LEVEL THAT IS NOT LESS THAN 13/4 INCHES (45 MM) BELOW THE TALLEST PORTION OF THE PROFILÉ. THE MINIMUM WIDTH OF THE HANDRAIL ABOVE THE RECESS SHALL BE 11/4 INCHES (32 MM) TO A MAXIMUM OF 23/4 INCHES (70 MM). EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCH (0.25 MM).

R311.7.8.4 EXTERIOR WOOD/PLASTIC COMPOSITE HANDRAILS SHALL COMPLY WITH THE PROVISIONS OF SECTION R507.3.

R311.7.9 ILLUMINATION. ALL STAIRS SHALL BE PROVIDED WITH ILLUMINATION IN ACCORDANCE WITH SECTION R303.6. R311.7.10.1 SPIRAL STAIRWAYS ARE PERMITTED, PROVIDED THE MINIMUM CLEAR WIDTH AT AND BELOW THE HANDRAIL SHALL BE 26 INCHES (660 MM) WITH EACH TREAD HAVING A 71/2-INCH (190 MM) MINIMUM TREAD DEPTH AT 12 INCHES (914 MM) FROM THE NARROWER EDGE. ALL TREADS SHALL BE IDENTICAL, AND THE RISE SHALL BE NO MORE THAN 91/2 INCHES (241 MM). A MINIMUM HEADROOM OF 6 FEET 6 INCHES (1982 MM) SHALL BE PROVIDED.

R311.7.10.2 BULKHEAD ENCLOSURE STAIRWAYS. STAIRWAYS SERVING BULKHEAD ENCLOSURES, NOT PART OF THE REQUIRED BUILDING EGRESS, PROVIDING ACCESS FROM THE OUTSIDE GRADE LEVEL TO THE BASEMENT SHALL BE EXEMPT FROM THE REQUIREMENTS OF SECTIONS R311.3 AND R311.7 WHERE THE MAXIMUM HEIGHT FROM THE BASEMENT FINISHED FLOOR LEVEL TO GRADE ADJACENT TO THE STAIRWAY DOES NOT EXCEED 8 FEET (2438 MM) AND THE GRADE LEVEL OPENING TO THE STAIRWAY IS COVERED BY A BULKHEAD ENCLOSURE WITH HINGED DOORS OR OTHER APPROVED MEANS.

26. INTERIOR WALL COVERING. R702.3.1 MATERIALS. ALL GYPSUM BOARD MATERIALS AND ACCESSORIES SHALL CONFORM TO ASTM C 22, C 475, C 514, C 1002, C 1047, C 1177, C 1178, C 1278, C 1396 OR C 1658 AND SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION. ADHESIVES FOR THE INSTALLATION OF GYPSUM BOARD SHALL CONFORM TO ASTM C 557.

R702.3.2 WOOD FRAMING WOOD FRAMING SUPPORTING GYPSUM BOARD SHALL NOT BE LESS THAN 2 INCHES (51 MM) NOMINAL THICKNESS IN THE LEAST DIMENSION EXCEPT THAT WOOD FURRING STRIPS NOT LESS THAN 1-INCH BY 2-INCH (25 MM BY 51 MM) NOMINAL DIMENSION MAY BE USED OVER SOLID BACKING OR FRAMING SPACED NOT MORE THAN 24 INCHES (610 MM) ON CENTER.

27. R703.6 EXTERIOR PLASTER. INSTALLATION OF THESE MATERIALS SHALL BE IN COMPLIANCE WITH ASTM C 926 AND ASTM C 1063 AND THE PROVISIONS OF

28. R807.1 ATTIC ACCESS. BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREAS THAT HAVE A VERTICAL HEIGHT OF 30 INCHES (762 MM) OR GREATER OVER AN AREA OF NOT LESS THAN 30 SQUARE FEET. THE VERTICAL HEIGHT SHALL BE MEASURED FROM THE TÓP OF THE CEILING FRAMING MEMBERS OR ANY PERMANENT OBSTRUCTION TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS OR ANY PERMANENT OBSTRUCTION. THE ROUGH-FRAMED OPENING SHALL NOT BE LESS THAN 22 INCHES BY 30 INCHES (559 MM BY 762 MM) AND SHALL BE LOCATED IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. WHEN LOCATED IN A WALL, THE OPENING SHALL BE A MINIMUM OF 22 INCHES WIDE BY 30 INCHES HIGH (559 MM WIDE BY 762 MM HIGH). WHEN THE ACCESS IS LOCATED IN A CEILING, MINIMUM UNOBSTRUCTED HEADROOM IN THE ATTIC SPACE SHALL BE 30 INCHES (762 MM) AT SOME POINT ABOVE THE ACCESS MEASURED VERTICALLY FROM THE BOTTOM OF CEILING FRAMING MEMBERS. SEE  $\dot{}$ SECTION M1305.1.3 FOR ACCESS REQUIREMENTS WHERE MECHANICAL EQUIPMENT IS LOCATED IN ATTICS.

29. R70.3.6.1 LATH. ALL LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION—RESISTANT MATERIALS. EXPANDED METAL OR WOVEN WIRE LATH SHALL BE ATTACHED WITH 11/2-INCH-LONG (38 MM), 11 GAGE NAILS HAVING A 7/16-INCH (11.1 MM) HEAD, OR 7/8-INCH-LONG (22.2 MM), 16 GAGE STAPLES, SPACED AT NO MORE THAN 6 INCHES (152 MM), OR AS OTHERWISE

PLASTERING WITH PORTLAND CEMENT PLASTER SHALL BE NOT LESS THAN THREE COATS WHEN APPLIED OVER METAL LATH OR WIRE LATH AND SHALL BE NOT LESS THAN TWO COATS WHEN APPLIED OVER MASONRY, CONCRETE, PRESSURE-PRESERVATIVE TREATED WOOD OR DECAY-RESISTANT WOOD AS SPECIFIED IN SECTION R317.1 OR GYPSUM BACKING. IF THE PLASTER SURFACE IS COMPLETELY COVERED BY VENEER OR OTHER FACING MATERIAL OR IS COMPLETELY CONCEALED, PLASTER APPLICATION NEED BE ONLY TWO COATS, PROVIDED THE TOTAL THICKNESS IS AS SET FORTH IN TABLE R702.1(1).

ON WOOD-FRAME CONSTRUCTION WITH AN ON-GRADE FLOOR SLAB SYSTEM, EXTERIOR PLASTER SHALL BE APPLIED TO COVER,

THE PROPORTION OF AGGREGATE TO CEMENTITIOUS MATERIALS SHALL BE AS SET FORTH IN TABLE R702.1(3).

R703.6.2.1 WEEP SCREEDS. A MINIMUM 0.019-INCH (0.5 MM) (NO. 26 GALVANIZED SHEET GAGE), CORROSION-RESISTANT WEEP SCREED OR PLASTIC WEEP SCREED. WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 31/2 INCHES (89 MM) SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH ASTM C 926. THE WEEP SCREED SHALL BE PLACED A MINIMUM OF 4 INCHES (102 MM) ABOVE THE EARTH OR 2 INCHES (51 MM) ABOVE PAVED AREAS AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATÉR TO DRAIN TO THE EXTERIOR OF THE BUÍLDING. THE WEATHER—RESISTANT BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP

WATER-RESISTIVE BARRIERS SHALL BE INSTALLED AS REQUIRED IN SECTION R703.2 AND, WHERE APPLIED OVER WOOD-BASED SHEATHING, SHALL INCLUDE A WATER-RESISTIVE VAPOR-PERMEABLE BARRIER WITH A PERFORMANCE AT LEAST EQUIVALENT TO TWO LAYERS OF GRADE D PAPER. THE INDIVIDUAL LAYERS SHALL BE INSTALLED INDEPENDENTLY SUCH THAT EACH LAYER PROVIDES A SEPARATE CONTINUOUS PLANE AND ANY FLASHING (INSTALLED IN ACCORDANCE WITH SECTION R703.8) INTENDED TO DRAIN TO THE WATER-RESISTIVE BARRIER IS DIRECTED BETWEEN THE LAYERS.

R703.6.3 WATER-RESISTIVE BARRIERS.

R703.7.4.1.1 VENEER TIES AROUND WALL OPENINGS. ADDITIONAL METAL TIES SHALL BE PROVIDED AROUND ALL WALL OPENINGS GREATER THAN 16 INCHES (406 MM) IN EITHER DIMENSION. METAL TIES AROUND THE PERIMETER OF OPENINGS SHALL BE SPACED NOT MORE THAN 3 FEET (9144 MM) ON CENTER AND PLACED WITHIN 12 INCHES (305 MM) OF THE WALL OPENING.

R703.7.4.2 GROUT FILL AS AN ALTERNATIVE TO THE AIR SPACE REQUIRED BY TABLE R703.7.4, GROUT SHALL BE PERMITTED TO FILL THE AIR SPACE. WHEN THE AIR SPACE IS FILLED WITH GROUT, A WATER-RESISTIVE BARRIER IS REQUIRED OVER STUDS OR SHEATHING. WHEN FILLING THE AIR SPACE, REPLACING THE SHEATHING AND WATER—RESISTIVE BARRIER WITH A WIRE MESH AND APPROVED WATER-RESISTIVE BARRIER OR AN APPROVED WATER-RESISTIVE BARRIER-BACKED REINFORCEMENT ATTACHED DIRECTLY TO THE STUDS IS PERMITTED. R703.7.5 FLASHING.

FLASHING SHALL BE LOCATED BENEATH THE FIRST COURSE OF MASONRY ABOVE FINISHED GROUND LEVEL ABOVE THE FOUNDATION WALL OR SLAB AND AT OTHER POINTS OF SUPPORT, INCLUDING STRUCTURAL FLOORS, SHELF ANGLES AND LINTELS WHEN MASONRY VENEERS ARE DESIGNED IN ACCORDANCE WITH SECTION R703.7. SEE SECTION R703.8 FOR ADDITIONAL REQUIREMENTS.

WEEPHOLES SHALL BE PROVIDED IN THE OUTSIDE WYTHE OF MASONRY WALLS AT A MAXIMUM SPACING OF 33 INCHES (838 MM) ON CENTER. WEEPHOLES SHALL NOT BE LESS THAN 3/16 INCH (5 MM) IN DIAMETER. WEEPHOLES SHALL BE LOCATED IMMEDIATELY ABOVE THE FLASHING.

#### WINDOW AND DOOR NOTES:

- 1) CONTRACTOR SHALL REVIEW ALL DOOR AND WINDOW TRIM AND INSTALLATION DETAILS AND CONDITIONS PRIOR TO ROUGH FRAMING AND CUTTING OPENING.
- 2) CONTRACTOR SHALL NOTIFY AN DESIGN DESIGN LLC OF ANY FIELD CONDITIONS THAT DO NOT PERMIT THE INSTALLATION OF ANY DOOR OR WINDOW UNIT DUE TO ANY CONFLICTS.
- THE SPECIFIC WALL ASSEMBLY AND THE DOOR AND WINDOW UNIT FOR INSTALLATION.
- 5) CONTRACTOR SHALL COORDINATE INSTALLATION OF FINISH HARDWARE WITH DOOR MANUFACTURER

4) ALL GLAZING SHALL BE 5/8 INCH THICK INSULATED WITH MULTI-LAYER LOW-E COATED GLAZE.

6) ALL GLASS AND GLAZING SHALL CONFORM TO ALL APPLICABLE CODES

### <u> 'RUSS SPECIFICATIONS:</u>

- A. INSTALLING, SECURING, BRACING ETC., OF TRUSSES AS PER "TCPIA". R. ALL TRUSS SHOP DRAWINGS AND LAYOUTS TO BE APPROVED BY ENGINEER OF RECORD. MANUFACTURER'S NAME SHALL BE VISIBLE ON EACH TRUSS
- FABRICATED TRUSSES IN JIGS WITH MEMBERS ACCURATELY CUT TO PROVIDE FULL CONTACT AT JOINTS
- E. TRUSS FABRICATOR SHALL HAVE HIS PLANT INSPECTED FOUR TIMES PER YEAR BY AN INDEPENDENT TESTING LABORATORY IN ACCORDANCE WITH TPI REGULATIONS AND COPIES OF INSPECTIONS MADE AVAILABLE TO OWNERS UPON REQUEST.

## . VENEER TIES SHALL NOT BE LESS THAN NO.9 GAGE WIRE AND SHALL HAVE A HOOK EMBEDDED IN THE MORTAR JOINT. EACH

TIE SHALL BE SPACED NOT MORE THAN 24 IN. O.C. HORIZONTALLY AND VERTICALLY AND SHALL SUPPORT NOT MORE THAN 2.67 B. THE VENEER SHALL BE SEPARATED FROM THE SHEATHING BY AIR SPACE OF MINIMUM 1 IN. AND NO MORE THAN 4 IN. . WEEPHOLES SHALL BE PROVIDED AT MAXIMUM SPACING OF 33 IN. SHOULD NOT BE LESS THAN 3/16 IN. IN DIAMETER AND SHALL BE LOCATED ABOVE THE FLASHING

A. WEEP SCREEDS. A MINIMUM OF NO. 26 GALVANIZED SHEET GAGE, CORROSION-RESISTANT WEEP SCREEDS, WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2 IN. SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUDS WALL. THE WEEP SCREED SHALL BE PLACE A MINIMUM OF 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAVED AREAS AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. THE WEATHER RESISTANCE BARRIER SHALL LAP THE ATTACHMENT FLANGE OF THE WEEP SCREED.

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**DETAILS &** NOTES

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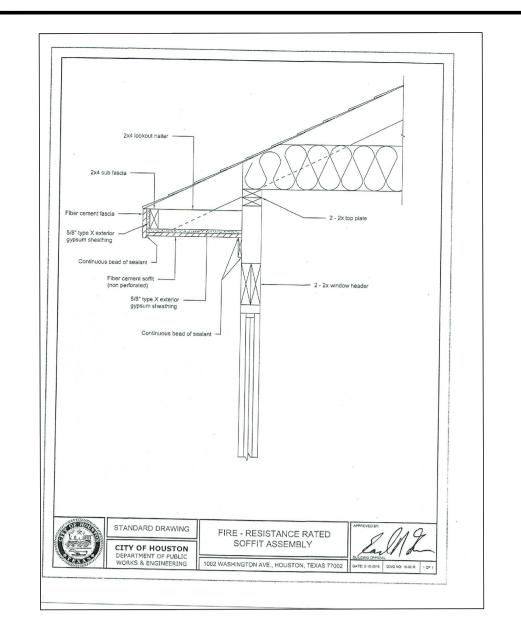
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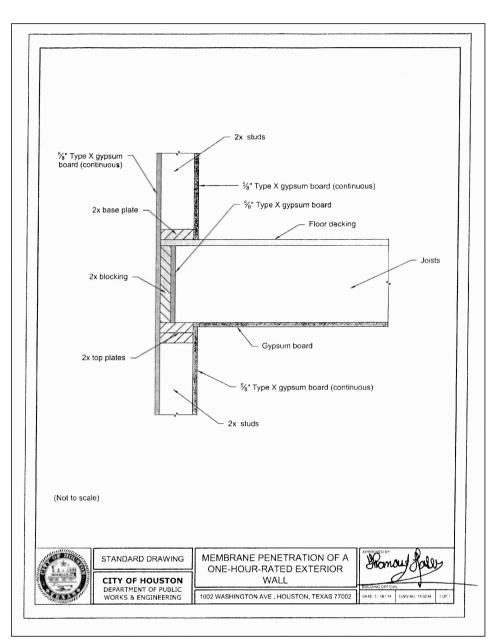
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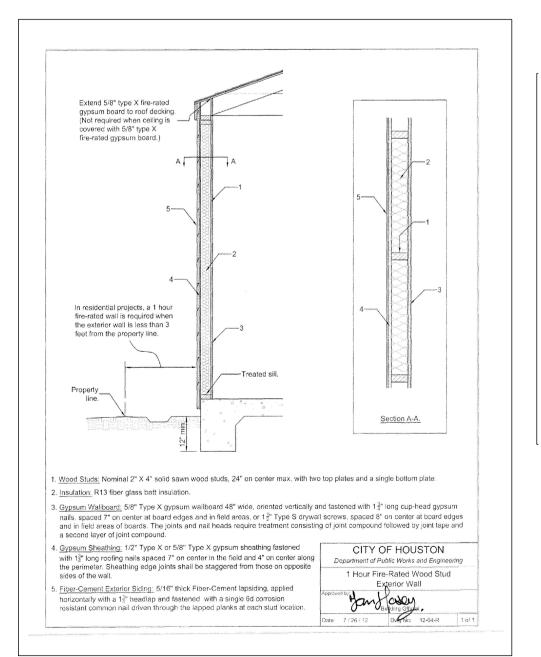
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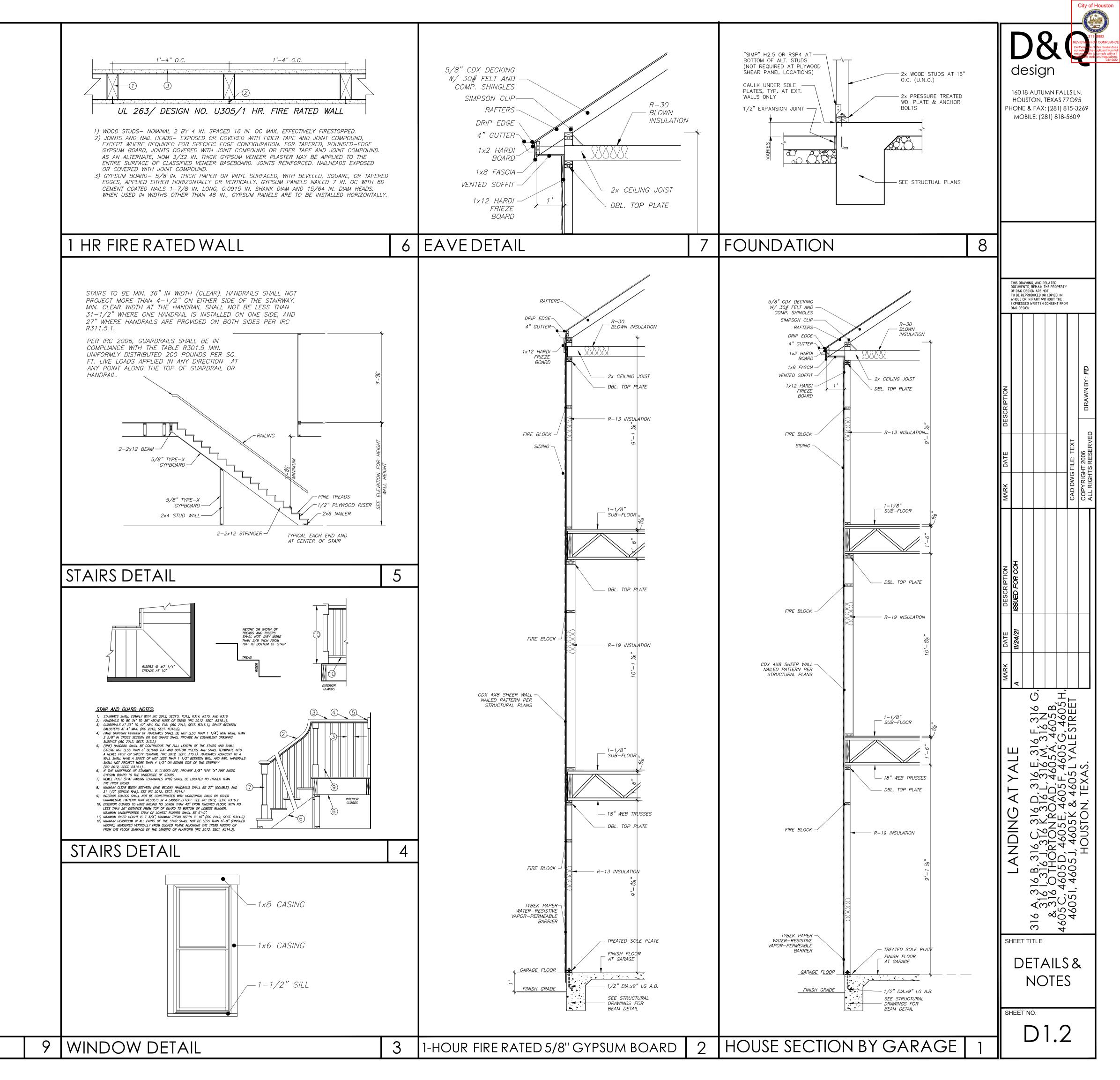




- WALL/FLOOR INSULATION INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND
- IN SUBSTANTIAL CONTACT WITH THE UNDERSIDE OF THE SUBFLOOR.

   CEILING INSULATION INSTALLED PER MANUFACTURER'S INSTRUCTIONS. BLOWN INSULATION MARKED EVERY 300 FT<sup>2</sup>. (SHEET D1.2)
- VENTED ATTICS WITH AIR PERMEABLE INSULATION INCLUDE BAFFLE ADJACENT TO SOFFIT AND EAVE VENTS THAT EXTENDS OVER INSULATION. (SHEET D1.2)
   ATTIC ACCESS HATCH AND DOOR INSULATION ≥R-30 OF THE ADJACENT ASSEMBLY. (SHEET D1.2)

CITY DETAILS



NOTE: SEE LANDSCAPE PLAN FOR OUTSIDE OUTLETS

BLOCK-OUT ALL *SWITCHES* FOR 1x8 TRIM

2) HARD WIRE HOUSE FOR SECURITY SYSTEM. SECURITY SYSTEM TO BE SELECTED BY OWNER 3) SECURITY SYSTEM WILL BE INSTALLED PRIOR TO APPLICATION OF DRY WALL AND ACCORDING TO MANUFACTURERS SPECS. AS NEGOTIATED BY OWNER UNDER SEPARATE CONTRACT.

4) SMOKE DETECTORS TO BE HARDWIRED INTER—CONNECTED WITH BATTERY BACK—UP AS REQUIRED BY THE IRC. 5) MIN. 2 LIGHTS IN EACH ATTIC AREA.

ELECTRICAL NOTES 1) GAS WATER HEATER

> ₩P WATERPROOF RECEPTACLE  $\phi_{\mathit{FLR}}$  in floor GFI 110 VOLT W/ GROUND FAULT INTERRUPTER \$\int 220V 220 VOLT RECEPTACLE

110 VOLT RECEPTACLE

—<del>○</del> CABLE GAS OUTLET TELEPHONE OUTLET ☐ JAMB SWITCH FLOODS ON PHOTO CELL ⊢ UNDER CAB. STRIP LIGHT ——□ HDMI CABLE

ELECTRICAL LEGEND

SINGLE POLE SWITCH THREE WAY SWITCH FOUR WAY SWITCH DIMMER SWITCH PENDANT LIGHT EXHAUST FAN O LV LOW VOLTAGE

HANGING LIGHT 4" RECESSED CAN LIGHT WP WATERPROOF RECESSED CAN LIGHT SMOKE DETECTOR CARBON MONOXIDE DETECTOR HANGING GAS LIGHT

CEILING MOUNT FIXTURE EXHAUST FAN W/ LIGHT KIT WALL MOUNTED LIGHT

WALL MOUNTED PHOTO CELL LIGHT <sup>‡</sup> HB HOSE BIB FLUORESCENT FLOURESCENT FIXTRE T THERMOSTAT

IC-RATED RECESSED LIGHTING FIXTURES SHALL BE RATED WITH A LEAKAGE RATE OF LOWER THAN ≤2.0 CFM AT 75 PA.

AUTOMATIC OR GRAVITY DAMPERS TO BE INSTALLED ON ALL OUTDOOR AIR INTAKES AND EXHAUSTS. THE DWELLING UNIT SHALL HAVE A BLOWER DOOR TEST. THE BLOWER DOOR TEST

@ 50 PA. SHALL BE <=5 ACH. ÀLL HVAC SUPPLY AND RETURN AIR SHALL BE DUCTED. SUPPLY AND RETURN DUCTS IN ATTICS INSULATED >= R-8. SUPPLY AND RETURN DUCTS IN OTHER PORTIONS OF THE BUILDING INSULATED >= R-6. PROVIDE DUCT TIGHTNESS TEST FOR HVAC SYSTEMS.

PROGRAMMABLE THERMOSTATS INSTALLED FOR CONTROL OF PRIMARY HEATING

AND COOLING SYSTEMS. CIRCULATING SERVICE HOT WATER SYSTEMS HAVE AUTOMATIC OR ACCESSIBLE MANUAL CONTROLS.

EXHAUST AND RANGE HOODS SHALL MEET THE EFFICACY REQUIREMENTS OF Table R403.6.1 of the IECC. HVAC SYSTEM SHALL BE SIZED PER ACCA MANUAL J OR OTHER APPLICABLE

HEATED WATER CIRCULATION SYSTEMS SHALL BE PROVIDED IN ACCORDANCE

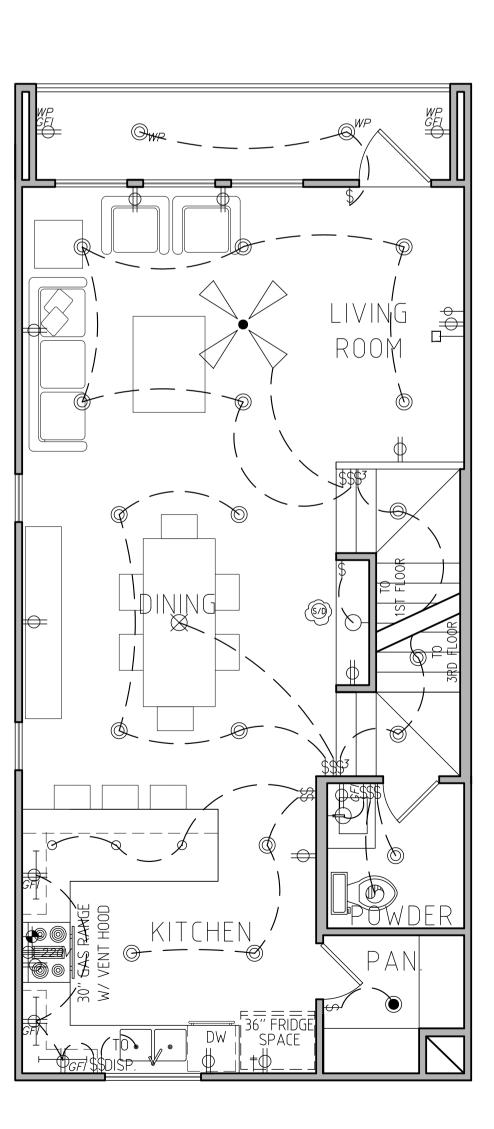
WITH SECTION R403.5.1.1, AUTOMATIC CONTROLS AND BE PROVIDED WITH A CIRCULATION PUMP. THE RECIRCULATION PUMP CONTROL SHALL LIMIT THE TEMPERATURE OF THE WATER ENTERING THE COLD WATER PIPING TO 104ºF. HVAC PIPING CONVEYING FLUIDS ABOVE 105 ºF OR CHILLED FLUIDS BELOW 55 ºF ARE INSULATED TO ≥R-3. THE INSULATION SHALL BE PROTECTED PER SECTION

403.4.1 OF THE IECC. HOT WATER PIPES ARE INSULATED TO ≥R-3. - 75% OF LAMPS IN PERMANENT FIXTURES OR 75% OF PERMANENT FIXTURES HAVE

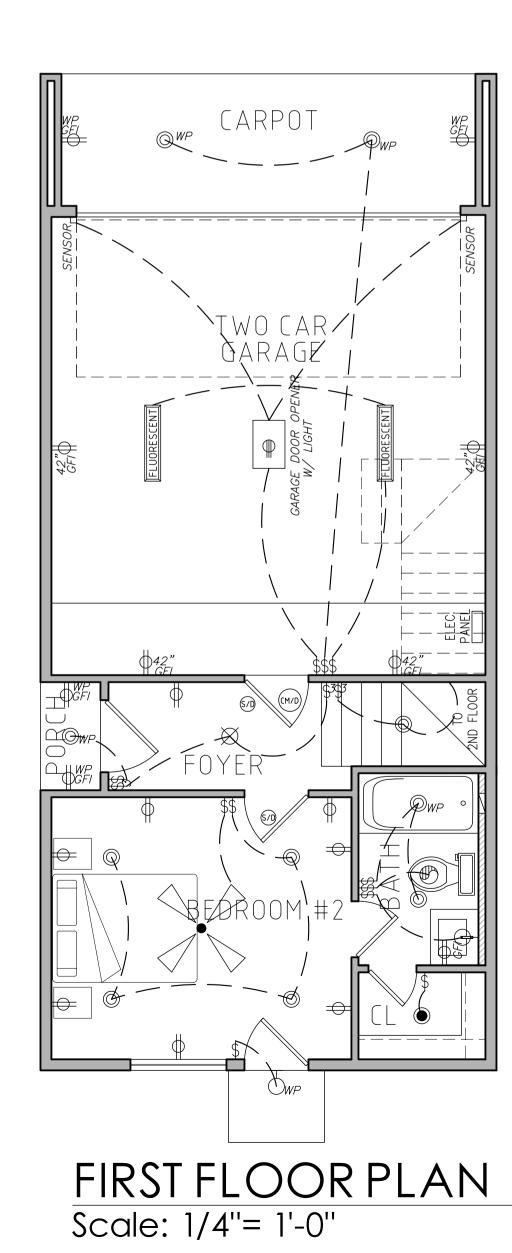
HIGH EFFICACY LAMPS PER SECTION 404.1 OF THE IECC. - FUEL GAS LIGHTING SYSTEMS HAVE NO CONTINUOUS PILOT LIGHT.

- MEP CONTRACTORS TO PROVIDE CONSTRUCTION DOCUMENTS IN COMPLIANCE WITH

THIRD FLOOR PLAN Scale: 1/4"= 1'-0"

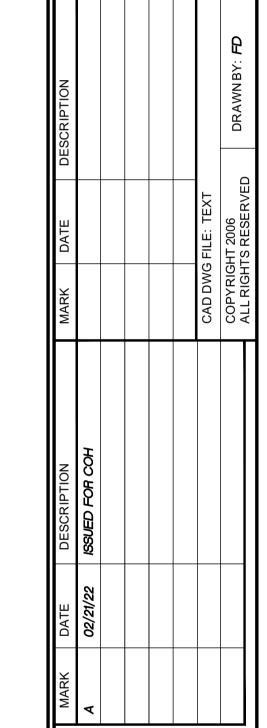


SECOND FLOOR PLAN Scale: 1/4"= 1'-0"





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ELECTRICAL PLANS

NOTE: SEE LANDSCAPE PLAN FOR OUTSIDE OUTLETS

BLOCK-OUT ALL SWITCHES FOR 1x8 TRIM

1) GAS WATER HEATER 2) HARD WIRE HOUSE FOR SECURITY SYSTEM. SECURITY SYSTEM TO BE SELECTED BY OWNER 3) SECURITY SYSTEM WILL BE INSTALLED PRIOR TO APPLICATION OF DRY WALL AND ACCORDING TO MANUFACTURERS SPECS. AS NEGOTIATED BY OWNER UNDER SEPARATE CONTRACT. 4) SMOKE DETECTORS TO BE HARDWIRED

INTER—CONNECTED WITH BATTERY BACK—UP AS REQUIRED BY THE IRC. 5) MIN. 2 LIGHTS IN EACH ATTIC AREA.

ELECTRICAL NOTES

₩P WATERPROOF RECEPTACLE  $\phi_{\mathit{FLR}}$  in floor GFI 110 VOLT W/ GROUND FAULT INTERRUPTER \$\int 220V 220 VOLT RECEPTACLE —<del>○</del> CABLE

110 VOLT RECEPTACLE

GAS OUTLET TELEPHONE OUTLET ☐ JAMB SWITCH FLOODS ON PHOTO CELL ⊢ UNDER CAB. STRIP LIGHT ——□ HDMI CABLE

ELECTRICAL LEGEND SINGLE POLE SWITCH

THREE WAY SWITCH FOUR WAY SWITCH DIMMER SWITCH CEILING MOUNT FIXTURE PENDANT LIGHT EXHAUST FAN O LV LOW VOLTAGE

HANGING LIGHT 4" RECESSED CAN LIGHT WP WATERPROOF RECESSED CAN LIGHT SMOKE DETECTOR CARBON MONOXIDE DETECTOR HANGING GAS LIGHT

EXHAUST FAN W/ LIGHT KIT

WALL MOUNTED LIGHT WALL MOUNTED PHOTO CELL LIGHT <sup>‡</sup> HB HOSE BIB FLUORESCENT FLOURESCENT FIXTRE T THERMOSTAT

IC-RATED RECESSED LIGHTING FIXTURES SHALL BE RATED WITH A LEAKAGE RATE OF LOWER THAN ≤2.0 CFM AT 75 PA.

AUTOMATIC OR GRAVITY DAMPERS TO BE INSTALLED ON ALL OUTDOOR AIR INTAKES AND EXHAUSTS. THE DWELLING UNIT SHALL HAVE A BLOWER DOOR TEST. THE BLOWER DOOR TEST

@ 50 PA. SHALL BE <=5 ACH. ALL HVAC SUPPLY AND RETURN AIR SHALL BE DUCTED. SUPPLY AND RETURN DUCTS IN ATTICS INSULATED >= R-8. SUPPLY AND RETURN DUCTS IN OTHER PORTIONS OF THE BUILDING INSULATED >= R-6.

PROVIDE DUCT TIGHTNESS TEST FOR HVAC SYSTEMS. PROGRAMMABLE THERMOSTATS INSTALLED FOR CONTROL OF PRIMARY HEATING AND COOLING SYSTEMS.

CIRCULATING SERVICE HOT WATER SYSTEMS HAVE AUTOMATIC OR ACCESSIBLE MANUAL CONTROLS.

EXHAUST AND RANGE HOODS SHALL MEET THE EFFICACY REQUIREMENTS OF Table R403.6.1 of the IECC. HVAC SYSTEM SHALL BE SIZED PER ACCA MANUAL J OR OTHER APPLICABLE

HEATED WATER CIRCULATION SYSTEMS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION R403.5.1.1, AUTOMATIC CONTROLS AND BE PROVIDED WITH A CIRCULATION PUMP. THE RECIRCULATION PUMP CONTROL SHALL LIMIT THE TEMPERATURE OF THE WATER ENTERING THE COLD WATER PIPING TO 104ºF.

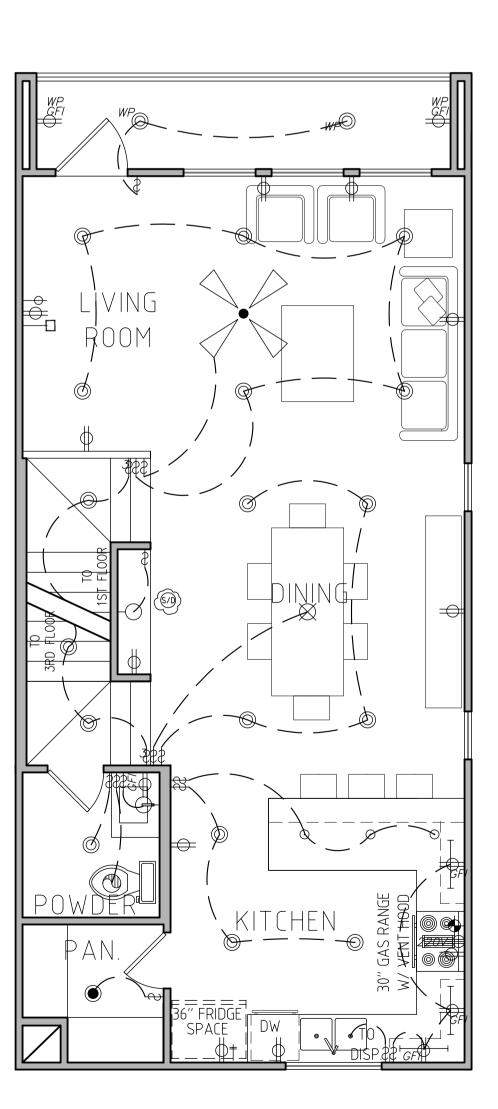
HVAC PIPING CONVEYING FLUIDS ABOVE 105 ºF OR CHILLED FLUIDS BELOW 55 ºF ARE INSULATED TO ≥R-3. THE INSULATION SHALL BE PROTECTED PER SECTION 403.4.1 OF THE IECC.

HOT WATER PIPES ARE INSULATED TO ≥R-3. - 75% OF LAMPS IN PERMANENT FIXTURES OR 75% OF PERMANENT FIXTURES HAVE

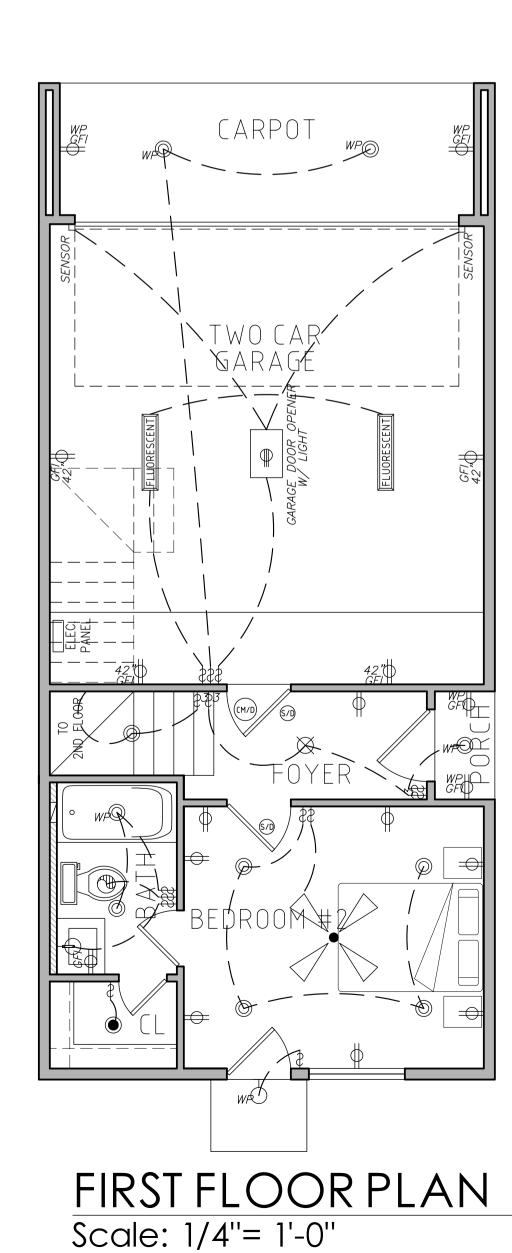
HIGH EFFICACY LAMPS PER SECTION 404.1 OF THE IECC. - FUEL GAS LIGHTING SYSTEMS HAVE NO CONTINUOUS PILOT LIGHT.

- MEP CONTRACTORS TO PROVIDE CONSTRUCTION DOCUMENTS IN COMPLIANCE WITH

THIRD FLOOR PLAN Scale: 1/4"= 1'-0"



SECOND FLOOR PLAN Scale: 1/4"= 1'-0"



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ELECTRICAL PLANS