

City of Puyallup

#### **Planning Division**

333 S. Meridian, Puyallup, WA 98371 (253) 864-4165 www.cityofpuyallup.org

# Downtown Design Review Decision

CITY USE ONLY

Case Number: PLDDG20240023

DRHPB Meeting Date: April 04, 2024

NAME OF PROJECT: 43rd AVE SW DUPLEXES

PROJECT DESCRIPTION: Design Review two duplexes on abutting lots at 409 and 433 43<sup>rd</sup>

Ave SW

Date

$\boxtimes$	APPROVED. Issue the building permit as proposed.
	<b>APPROVED WITH CONDITIONS.</b> Issue the building permit in accordance with conditions.
	<b>DENIED.</b> Do not issue the building permit or allow work.
/	Stomann
DRH	PB Representative Signature
4/9/20	024

**EXPIRATION:** In accordance with PMC 20.26.050, any design review decision granted by the DRHPB shall become null and void if not exercised within one year of the date of approval: 09 Apr 2025. If such design review decision is associated with a land use application, the one-year approval timeframe shall start from the date of land use permit approval. A design review decision shall be deemed exercised and remain in full force and effect when a complete building permit application, which is related to the board's decision, has been submitted.

**APPEALS:** In accordance with PMC 2.29.080, appeals of board decisions shall be to the hearing examiner. Appeals shall be filed with the city clerk within 10 calendar days after the date of the board's decision. A notice of appeal shall be in writing, signed by the appellant, accompanied by the required appeal fee (\$570), and shall contain the following information:

- (a) Appellant's name, address and phone number;
- (b) A description of standing, as the applicant or applicant's representative authorized to appeal;
- (c) Identification of the application and decision which is the subject of the appeal;
- (d) A brief statement of grounds for appeal; and
- (e) A statement of the relief sought.

## Downtown Design Review Determination 43rd AVE SW DUPLEXES

April 04, 2024

#### ATTACHMENT(S):

- Appendix A: Architectural Elevations for both duplexes
- Appendix B: Site Plan

#### FINDINGS OF FACT:

- 1) The proposal is subject to Design Review and Historic Preservation Board (DRHPB) review due to the age of the building (constructed prior to 1949) and the CBD-Core zoning designation, consistent with 2.29.070 (1)(a)(ii).
- 2) The project is subject to the following sections of the City of Puyallup Downtown Design Guidelines, as applicable to the proposal:

☑ Part 1: Introduction
 ☑ Part 2: Significant Buildings
 ☑ Part 3: Building Design – Form & Massing
 ☑ Part 4: Building Design – Façade
 ☑ Part 5: Pedestrian Experience

- 3) The DRHPB hereby finds the proposal consistent with the Downtown Design Guidelines regarding the applicable sections as outlined in the staff report to the Board, given the following conditions, if any:
- a. No Conditions; Approved as proposed

2018 WASHINGTON STATE AMENDMENTS INCLUSIVE OF: 2018 INTERNATIONAL RESIDENTIAL CODE (IRC)

2018 INTERNATIONAL MECHANICAL CODE (IAPMO)

2018 UNIFORM PLUMBING CODE (IAPMO)

2020 NATIONAL ELECTRICAL CODE 2018 INTERNATIONAL FIRE CODE

2018 WASHINGTON STATE ENERGY CODE (WSEC), RESIDENTIAL PROVISIONS

### REQUIRED ADDITIONAL SUBMITTAL FROM MANUFACTURERS

AT TIME OF PERMIT SUBMITTAL

I. MANUFACTURED FLOOR JOIST/ TRUSS DESIGN AND LAYOUT 2. MANUFACTURED ROOF TRUSS DESIGN AND LAYOUT.

### SITE WORK:

I. FOUNDATION DESIGN IS BASED ON AN ASSUMED AVERAGE SOIL BEARING OF 1,500 PSF, UNLESS A SOILS INVESTIGATION BY A QUALIFIED SOILS ENGINEER IS PROVIDED. 2. EXTERIOR FOOTING SHALL BEAR 18" (MIN.) BELOW FINISHED GRADE.

3. FOOTINGS TO BEAR ON FIRM UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS. 4. BACKFILL MATERIALS TO BE THOROUGHLY COMPTACTED.

### INSULATION AND MOISTURE PROTECTION

R302.10 FLAME SPREAD INDEX AND SMOKE-DEVELOPED INDEX FOR INSULATION FLAME SPREAD AND SMOKE-DEVELOPED INDEX FOR INSULATION SHALL BE IN ACCORDANCE WITH SECTIONS R302,10,1 THROUGH R302,10,5. R302.10.1 INSULATION

INSULATION MATERIALS, INCLUDING FACINGS, SUCH AS VAPOR RETARDERS AND VAPO-PERMEABLE MEMBRANES INSTALLED WITHIN FLOOR-CEILING ASSEMBLIES. ROOF-CEILING ASSEMBLIES, WALL ASSEMBLIES, CRAWL SPACES, AND ATTICS SHALL HAVE A FLAME SPREAD INDEX NOT TO EXCEED 25 WITH AN ACCOMPLISHING SMOKE-DEVELOPED INDEX NOT TO EXCEED 450 WHERE TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 123.

EXCEPTIONS: WHERE SUCH MATERIALS AREW INSTALLED IN CONCEALED SPACES, THE FLAME SPREAD INDEX AND SMOKE-DEVELOPED INDEX LIMIATATIONS DO NOT APPLY TO THE FACINGS, PROVIDED THAT THE FACING IS INSTALLED IN SUBSTANTIAL CONTACT WITH THE UNEXPOSED SURFACE OF THE CEILING, FLOOR OR WALL FINISH

CELLULOSE FIBER LOOSE-FILL INSULATION, THAT IS NOT SPRAY APPLIED, COMPLYING WITH THE REQUIREMENTS OF SECTION R302.10.3, SHALL NOT BE REQUIRED TO MEET THE SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450 WHERE TESTED IN ACCORDANCE WITH CAN/ULC SIØ2.2.

3. FOAM PLASTIC INSULATION SHALL COMPLY WITH SECTION R316.

R302.10.2 LOOSE-FILL INSULATION LOOSE-FILL INSULATION MATERIALS THAT CANNOT BE MOUNTED IN THE ASTM E 84 OR UL 123 APPARATUS WITHOUT A SCREEN OR ARTIFICIAL SUPPORTS SHALL COMPLY WITH THE FLAME SPREAD AND SMOKE-DEVELOPED LIMITS OF SECTION R302.10.1 WHERE TESTED IN ACCORDANCE WITH CAN/ULC 5102.2.

EXCEPTION: CELLULOSIC FIBER LOOSE-FILL INSULATION SHALL NOT BE REQUIRED TO BE TESTED IN ACCORDANCE WITH CANJULC SIØ2.2 PROVIDED SUCH INSULATION COMPLIES WITH THE REQUIREMENTS OF SECTIONS R302.10.1 AND R302.10.3.

R302.10.3 CELLULOSIC FIBER LOOSE-FILL INSULATION CELLULOSIC FIBER LOOSE-FILL INSULATION SHALL COMPLY WITH CPSC 16 CFR, PARTS 1209 AND 1404. EACH PACKAGE OF SUCH INSULATING MATERIAL SHALL BE CLEARLY LABELED IN ACCORDANCE WITH CPSC 16 CFR, PARTS 1209 AND 1404.

R302.10.1 EXPOSED ATTIC INSULATION EXPOSED INSULATION MATERIALS INSTALLED ON ATTIC FLOORS SHALL HAVE A CRITICAL

RADIANT FLUX NOT LESS THAN Ø.12 WATT PER SQUARE CENTIMETER. R302.10.5 TESTING TESTS FOR CRITICAL RADIANT FLUX SHALL BE MADE IN ACCORDANCE WITH ASTM E 970.

CONTROL EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, PENETRATIONS IN FLOORS, ROOFS AND WALLS AND ALL SIMILAR OPENINGS SHALL BE SEALED, CAULKED, GASKETED OR WEATHERSTRIPPED TO LIMIT AIR LEAKAGE.

R102.1 VAPOR RETARDERS CLASS | OR || VAPOR RETARDERS ARE REQUIRED ON THE INTERIOR SIDE OF FRAME WALLS IN CLIMATE ZONES 5, 6, 1, 8, AND MARINE 4. EXCEPTIONS:

BASEMENT WALLS

BELOW-GRADE PORTRION OF ANY WALL CONSTRUCTION WHERE MOISTURE OR ITS FREEZING WILL NOT DAMAGE THE MATERIALS.

R702.7.1 CLASS III VAPOR RETARDER CLASS CLASS III VAPOR RETARDERS SHALL BE PERMITTED WHERE ANY ONE OF THE CONDITIONS IN TABLE RTØ2.7.1 IS MET

R102.1.2 MATERIAL VAPOR RETARDER CLASS. THE VAPOR RETARDER CLASS SHALL BE BASED ON THE MANUFACTURER'S CERTIFIED TESTING OR TESTED ASSEMBLY. THE FOLLOWING SHALL BE DEEMED TO MEET THE CLASS

SPECIFIED: CLASS 1: SHEET POLYETHYLENE, UNPERFORATED ALUMINUM FOIL CLASS II: KRAFT-FACED FIBERGLASS BATTS.

CLASS III: LATEX OR ENAMEL PAINT. R102.1.3 MINIMUM CLEAR AIRSPACES AND VENTED OPENINGS FOR VENTED CLADDING. FOR THE PURPOSES OF THIS SECTION, VENTED CLADDING SHALL INCLUDE THE FOLLOWING MINIMUM CLEAR AIRSPACES, OTHER OPENING WITH THE EQUIVALENT VENT AREA SHALL BE

I. VINYL LAP OR HIRIZONTAL ALUMINUM SIDING APPLIED OVER A WEATHER-RESISTIVE BARRIER AS SPECIFIED IN TABLE RT03.3(1.).

2. BRICK VENEER WITH A CLEAR AIRSPACE AS SPECIFIED IN TABLE R703.8.4 3. OTHER APPROVED VENTED CLADDINGS.

WSEC R402.4 AIR LEAKAGE (MANDATORY) THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS OF R402.4.1 THROUGH R402.4.4.

THE BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE NOT EXCEEDING 5 AIR EXCHANGES PER HOUR.

IN COMBUSTIBLE CONSTRUCTION WHERE THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR/CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1,000 SQUARE FEET. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS. WHERE THE ASSEMBLY IS ENCLOSED BY A FLOOR MEMBRANE ABOVE AND A CEILING

DRAFTSTOPPING SHALL BE PROVIDED IN FLOOR/CEILING ASSEMBLIES UNDER THE FOLLOWING CIRCUMSTANCES:

1. CEILING IS SUSPENDED UNDER THE FLOOR FRAMING

2. FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN-WEB OR PERFORATED MEMBERS.

R302.12.1 MATERIALS.DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN 1/2" GYPSUM BOARD, 3/8" WOOD STRUCTURAL PANELS OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED. DRAFTSTOPPING SHALL BE INSTALLED PARALLEL TO THE FLOOR FRAMING MEMBER UNLESS OTHERWISE APPROVED BY THE BUILDING OFFICIAL. THE INTEGRITY OF THE DRAFTSTOPS SHALL BE MAINTAINED.

# Appendix A: Design Review Approval only, separate building permit approval required (see separate building permit submittal #PRRNSF20230918 and #PRRNSF20230919)

### FIREBLOCKING:

IN COMBUSTIBLE CONSTRUCTION, FIREBLOCKING SHALL BE PROVIDED TO CUT OFF BOTH VERTICAL AND HORIZONTAL CONCEALED DRAFT OPENINGS 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

1. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS:

.1 VERTICALLY AT THE CEILING AND FLOOR LEVELS. 1.2. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FT. 2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL 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.(1/2" GWB) 4. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES 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 RID03.19. 6. FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPARATION. FIREBLOCKING SHALL CONSIST OF MATERIALS LISTED IN IRC

LOOSE FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIREBLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED.

### FLASHING.

APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE-FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. SELF-ADHERED T MEMBRANES USED AS FLASHING SHALL COMPLY WITH AAMA 1111. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH, APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS:

I. EXTERIOR WINDOW AND DOOR OPENINGS, FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL BE INSTALLED IN ACCORDANCE WITH ONE OR MORE OF THE FOLLOWING. I.I THE FENESTRATION MANUFACTURE'S INSTALLATION AND FLASHING INSTRUCTIONS, OR FOR APPLICATIONS NOT ADDRESSED IN THE FENESTRATION MANUFACTURERS INSTRUCTIONS, WHERE FLASHING INSTRUCTIONS OR DETAILS ARE NOT PROVIDED, PAN FLASHING SHALL BE INSTALLED AT THE STILL OF EXTERIOR WINDOW AND DOOR OPENINGS. PAN FLASHING SHALL BE SEALED OR SLOPED IN SUCH A MANNER AS TO DIRECT WATER TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE. OPENINGS USING PAN FLASHING SHALL ALSO INCORPORATE FLASHING OR PROTECTION AT THE HEAD AND SIDES. 1.2 IN ACCORDANCE WITH THE FLASHING DESIGN OR METHOD OF A REGISTERED DESIGN PROFESSIONAL. 1.3. IN ACCORDANCE WITH OTHER APPROVED METHODS.

2. At the intersection of Chimneys or other Masonry CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS

3. UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS 4. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM.

5. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION. 6. AT WALL AND ROOF INTERSECTIONS.

7. AT BUILT-IN GUTTERS.

WEATHER RESISTIVE SHEATHING PAPER: RT03.2 WATER-RESISTIVE BARRIER, ONE LAYER OF NO. 15 ASPHALT FELT, FREE FROM HOLES AND BREAKS, COMPLYING WITH ASTM D 226 FOR TYPE I FELT OR OTHER APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES (51 MM). WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6 INCHES (152 MM). THE FELT OR OTHER APPROVED MATERIAL SHALL BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES IN A MANNER TO MEET THE REQUIREMENTS OF THE EXTERIOR WALL ENVELOPE AS DESCRIBED IN SECTION RTØ3.1.1

### EXTERIOR DOORS, WINDOWS AND SKYLIGHTS

### PER 2018 WIASHINGTON STATE ENERGY CODE

WINDOWS SHALL BE INSTALLED AND FINISHED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, WRITTEN INSTALLATION INSTRUCTIONS SHALL BE PROVIDED BY THE MANUFACTURER FOR EACH WINDOW. ALL SKYLIGHTS AND SKY WALLS TO BE LAMINATED GLASS UNLESS NOTED OTHERWISE SECTION R310-EMERGENCY ESCAPE AND RESCUE OPENINGS

### R310.1 EMERGENCY ESCAPE AND RESCUE OPENING REQUIRED.

BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE NOT LESS THAN ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING, WHERE BASEMENTS CONTAIN MORE THAN ONE SLEEPING ROOMS, AN EMERGENCY ESCAPE AND RESCUE OPENING SHALL BE REQUIRED IN EACH SLEEPING ROOM. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY TO A PUBLIC WAY, OR TO A YARD OR COURT THAT OPENS TO A

EXCEPTION: STORM SHELTERS OR BASEMENTS USED ONLY TO HOUSE MECHANICAL EQUIPMENT NOT EXCEEDING A TOTAL FLOOR AREA OF 200 SQ FT.

MINIMUM OPENING AREA: ALL THE EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MIN. NET CLEAR OPENING OF 5.7 SQ. FT. EXCEPTION: GRADE FLOOR OPENINGS SHALL HAVE A MIN. 5.0 SQ. FT.

MINIMUM OPENING HEIGHT: THE MIN. NET CLEAR OPENINGS HEIGHT SHALL BE 24 INCHES. MINIMUM OPENING WIDTH: THE MIN NET CLEAR OPENING WIDTH SHALL BE 20 INCHES.1/2 MAXIMUM SILL HEIGHT: WHERE A WINDOW IS PROVIDED AS THE EMERGENCY ESCAPE AND RESCUE OPENING, IT SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44" ABOVE THE FLOOR, WHERE THE SILL HEIGHT IS BELOW GRADE, IT SHALL BE PROVIDED WITH HA WINDOW WELL IN ACCORDANCE WITH SEC. R310.2.3.

SAFETY GLAZING SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS OR AS OTHERWISE REQUIRED PER IRC SECTION R308.4

1. GLAZING IN DOORS - SIDE HINGED DOORS, SLIDING GLASS DOORS AND PANELS IN SLIDING, & BIFOLD DOOR ASSEMBLIES PER IRC SECTION R308.4.1. 2. GLAZING ADJACENT TO DOORS - PANELS WITHIN THE 24" OF EITHER SIDE OF THE DOOR IN CLOSED POSITION PER IRC SECTION R308.4.2

3. GLAZING IN WINDOWS - THE PANE IS LARGER THAN 9 SQ. FT., THE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR, THE TOP EDGE 15 MORE THAN 36" ABOVE THE FLOOR, AND ONE OR MORE WALKING SURFACES, ARE WITHIN 36", MEASURED HORIZONTALLY AND IN A STRAIGHT LINE OF THE GLAZING PER IRC SECTION R308.4.4. 4. GLAZING IN GUARDS AND RAILS PER IRC SECTION R308.4.4.

5. GLAZING IN WET SURFACES - WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS, AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE IS LESS THAN 60" MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE PER IRC SECTION

6. GLAZING ADJACENT TO STAIRS AND RAMPS - WHERE THE BOTTOM EXPOSED EDGE IS LESS THAN 36" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDING BETWEEN FLIGHTS OF STAIRS AND RAMPS PER IRC SECTION R308.4.6. 7. GLAZING ADJACENT TO THE BOTTOM STAIR LANDING - WHERE THE GLAZING IS LESS THAN 36" ABOVE THE LANDING AND WITHIN A 60" HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING PER IRC SECTION R308.4.7.

### INSPECTIONS AND ENFORCEMENT POSTING OF CERTIFICATE WSEC R401.3

A PERMANENT CERTIFICATE SHALL BE COMPLETED BY THE BUILDER OR REGISTERED DESIGN PROFESSIONAL AND POSTED ON A WALL IN THE SPACE WHERE THE FURNACE IS LOCATED, A UTILITY ROOM, OR AN APPROVED LOCATION INSIDE THE BUILDING, WHEN LOCATED ON AN ELECTRICAL PANEL, THE CERTIFICATE SHALL NOT COVER OBSTRUCT THE VISIBILITY OF THE CIRCUIT DIRECTORY LABEL, SERVICE DISCONNECT LABEL, OR OTHER REQUIRED LABELS. THE CERTIFICATES SHALL LIST THE PREDOMINANT R-VALUES OF THE INSULATION INSTALLED IN OR ON CEILING/ROOF, WALLS, FOUNDATION (SLAB, BELOW-GRADE WALL, AND/OR FLOOR) AND DUCTS OUTSIDE CONDITIONED SPACES: U-FACTORS FOR FENESTRATION AND THE SOLAR HEAT GAIN COEFFICIENT (SHGC) OF FENESTRATION, AND THE RESULTS FROM ANY REQUIRED DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE DONE ON THE BUILDING. WHERE THERE IS MORE THAN ONE VALUE FOR EACH COMPONENT, THE CERTIFICATES SHALL LIST THE VALUE COVERING THE LARGEST AREA. THE CERTIFICATES SHALL LIST "GAS-FIRED UNVENTED ROOM HEATER," "ELECTRIC FURNACE" OR "BASEBOARD ELECTRIC HEATER," AS APPROPRIATE AN EFFICIANCY SHALL NOT BE LISTED FOR GAS-FIRED UNVENTED ROOM HEATERS, ELECTRIC FURNACES OR ELECTRIC BASEBOARD HEATERS.

### DUCT LEAKAGE TESTING:

DUCTS SHALL BE LEAK TESTED IN ACCORDANCE WITH WSU RS-33, USING THE MAXIMUM DUCT LEAKAGE RATES SPECIFIED IN 2018 WSEC SEC. R403.3.3. A WRITTEN REPORT OF THE RESULTS SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE

### BUILDING AIR LEAKAGE TESTING 2018 WSEC SEC. R402.4

THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.4.1 THROUGH R402.4.4.

A. CONTRACTOR SHALL PROVIDE ATTIC VENTILATION AS PER CODE. B. PROVIDE FLASHING AT ALL VALLEYS, PITCH CHANGES, AND AT VERTICAL PLANES. C. PROVIDE FLASHING AND COUNTER FLASHING AT CHIMNEYS A MIN. OF 8" ABOVE ROOF SHEATHING AND CRICKETS AS SHOWN.

D. RAFTERS WILL BEAR DIRECTLY ON TRUSSES OR BLOCKING BETWEEN THE TRUSSES E. HEADERS TO BE A MIN. 4x8 DF#2, U.N.O. F. PROVIDE DOUBLE FELT UNDERLAYMENT FOR COMPOSITION ROOFING (TYP.) FOR SLOPES

G. UNDERLAYMENT SHALL BE APPLIED IN SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2", FASTENED SUFFICIENTLY TO HOLD IN PLACE. END LAPS

### VENTILATION CALCULATIONS AND REQUIREMENTS

R806.2: THE TOTAL NET FREE VENTILATING AREA SHALL NOT BE LESS THAN \$\frac{1}{50}\$ OF THE AREA OF THE SPACE VENTILATED EXCEPT THAT REDUCTION OF THE TOTAL AREA TO 300 IS PERMITTED PROVIDED THAT AT LEAST 50% AND NOT MORE THAN 80% OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE THE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS.

VENTILATION GENERAL NOTES:

A. ROOFS TALLER THAN 3' WILL USE BIRD BLOCKING AND AF50 VENTS. B. ROOFS SHORTER THAN 3' WILL USE BIRD BLOCKING AS REQUIRED.

RAKES ON GABLE ENDS MUST EXTEND A MIN. OF 2 INCHES (2") FROM THE SURFACE OF EXTERIOR SIDING MATERIALS.

ENCLOSED ATTIC SPACES AND ENCLOSED RAFTER SPACES OVER ENCLOSED AREAS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN. THE NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED, EXCEPT THAT THE AREA MAY BE 1/300 PROVIDED AT LEAST 40 PERCENT AND NOT MORE THAN 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE ATTIC OR RAFTER SPACE. UPPER VENTILATORS SHALL BE LOCATED NO MORE THAN 3 FEET (914 MM) BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE, MEASURED VERTICALLY, WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. WHERE THE LOCATION OF WALL OR ROOF FRAMING MEMBERS CONFLICTS WITH THE INSTALLATION OF UPPER VENTILATORS, INSTALLATION MORE THAN 3 FEET (914 MM) BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE SHALL BE PERMITTED

BAFFLES ARE INSTALLED BEHIND EAVE VENTS TO PROVIDE A MINIMUM I" AIRSPACE, IN INSULATED AREAS PROVIDE ATTIC VENTILATION FOR ALL ATTIC AREAS EXCEEDING 24 INCHES IN HEIGHT FROM TOP OF INSULATION TO ROOF SHEATHING.

PATIO COVERS CONSTRUCTED OF TRUSSES WILL BE VENTED SIMILAR TO THE ATTIC OVER THE ENCLOSED AREAS. PATIO COVERS AND DECKS CONSTRUCTED OF RAFTERS WILL BE VENTED AT THE EXTERIOR END WITH VENTED EAVE BLOCKING. FOR PARAPET CONDITIONS, VENTED EAVE BLOCKING IS

NOT POSSIBLE AND THEREFORE A SINGLE LINE OF STRIP SOFFIT VENTING WILL BE USED NEAR THE EXTERIOR END OF THE PATIO COVER OR DECK.

#### MAIN ROOF CALCULATIONS 984 SQ. FT ATTIC AREA / 300 = 328 SQ. FT. OF VENTILATION REQUIRED (472.32 SQ. INCHES)

PROVIDE (5) AF50 ROOF VENTS = 250 SQ. IN.

UPPER ROOF VENTING PROVIDED BY AF50 ROOF VENTS (50 SQ. IN. PER VENT) 472.32 SQ. IN x 50% = 236.16 SQ. IN. REQUIRED.

LOWER ROOF VENTING PROVIDED BY BIRDBLOCKING: (4) 2" DIA. HOLES (3.14" E.A.) = (12.5 SQ. INCHES.) AND WITH AF50 ROOF VENTS (50 SQ. IN. PER VENT) 472.32 SQ. IN. x 50% = 236.16 SQ. IN. REQUIRED. PROVIDE (19) BIRDBLOCKS = 237.5 SQ. IN. @ FRONT & REAR OF HOUSE AND NOT WITHIN 2' OF THE SIDES.

LOW ROOF/ GARAGE ROOF CALCULATIONS 632 SQ. FT ATTIC AREA / 300 = 2.10 SQ. FT.

OF VENTILATION REQUIRED (303.36 SQ. INCHES)

UPPER ROOF VENTING PROVIDED BY AF50 ROOF VENTS (50 SQ. IN. PER VENT) 303.36 SQ. IN x 50% = 151.68 SQ. IN. RQUIRED. PROVIDE (4) AF50 ROOF VENTS = 200 SQ. IN.

LOWER ROOF VENTING PROVIDED BY BIRDBLOCKING: (4) 2' DIA. HOLES (3.14' EA.) = (12.5 SQ. INCHES.) AND WITH AF50 ROOF VENTS (50 SQ. IN. PER VENT) 303.36 SQ. IN. x 50% = 151.68 SQ. IN. REQUIRED. PROVIDE (13) BIRDBLOCKS = 1625 SQ. IN. @ FRONT &

HOUSE AND NOT WITHIN 2' OF THE SIDES OR 5' SETBACKS.

## \*SEE E-1 FOR WSEC CALCULATIONS\*

### HEATING OPTION 2 - 1.0 CREDITS

### EFFICIENT BUILDING ENVELOPE 13 - 05 CREDITS

PRESCRIPTIVE COMPLIANCE IS BASED ON TABLE R402.1.1 WITH THE FOLLOWING MODIFICATIONS: VERTICAL FENESTRATION U = 0.28 FLOOR R-38

#^^^^^^^ AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION 2.1 - Ø5 CREDITS

COMPLIANCE BASED ON R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 3.0 AIR CHANGES PER HOUR, MAXIMUM AT 50 PASCALS OR

FOR R-2 OCCUPANCIES, OPTIONAL COMPLIANCE BASED ON SECTION R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 0.3 CFM/SF MAXIMUM AT 50 PASCALS AND ALL WHOLE HOUSE VENTILATION REQUIREMENTS AS DETERMINED BY SECTION MI501.3 OF THE INTERNATIONAL RESIDENTIAL CODE OR SECTION 403.8 OF THE INTERNATIONAL MECHANICAL CODE SHALL BE MET WITH A HIGH EFFICIENCY FAN(S) (MAXIMUM Ø.35 WATTS/CFM), NOT INTERLOCKED WITH THE FURNACE FAN (IF PRESENT). VENTILATION SYSTEMS USING A FURNACE INCLUDING AN ECM MOTOR ARE ALLOWED, PROVIDED THAT THEY ARE CONTROLLED TO OPERATE AT LOW SPEED IN VENTILATION ONLY MODE.

TO QUALIFY TO CLAIM THIS CREDIT, THE BUILDING PERMIT DRAWINGS SHALL SPECIFY THE OPTION BEING SELECTED AND THE MAXIMUM TESTED BUILDING AIR LEAKAGE, AND SHALL SHOW THE QUALIFYING VENTILATION SYSTEM AND ITS CONTROL SEQUENCE OF OPERATION.

#### HIGH EFFICIENCY HVAC 32 - 1.0 CREDITS

AIR-SOURCE CENTRALLY DUCTED HEAT PUMP WITH MINIMUM HSPF OF 9.5. TO QUALIFY TO CLAIM THIS CREDIT, THE BUILDING PERMIT DRAWINGS SHALL SPECIFY THE OPTION BEING SELECTED AND SHALL SPECIFY THE HEATING EQUIPMENT TYPE AND THE MINIMUM EQUIPMENT EFFICIENCY.

#### HIGH EFFICIENCY HYAC DISTRIBUTION SYSTEM 42 - 10 CREDITS HYAC EQUIPMENT AND ASSOCIATED DUCT SYSTEM(S) INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS

OF SECTION R403.3.7. LOCATING SYSTEM COMPONENTS IN CONDITIONED CRAWL SPACES IS NOT PERMITTED UNDER THIS OPTION. ELECTRIC RESISTANCE HEAT AND DUCTLESS HEAT PUMPS ARE NOT PERMITTED UNDER THIS OPTION. DIRECT COMBUSTION HEATING EQUIPMENT WITH AFUE LESS THAN 80% IS NOT PERMITTED UNDER THIS OPTION. TO QUALIFY TO CLAIM THIS CREDIT, THE BUILDING PERMIT DRAWINGS SHALL SPECIFY THE OPTION BEING SELECTED AND SHALL SPECIFY THE HEATING EQUIPMENT TYPE AND SHALL SHOW THE LOCATION OF THE

### EFFICIENT WATER HEATING 5.5 - 2.0 CREDITS

HEATING AND COOLING EQUIPMENT AND ALL THE DUCTWORK.

WATER HEATING SYSTEM SHALL INCLUDE ONE OF THE FOLLOWING: ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER III OF NEEA'S ADVANCED WATER HEATING SPECIFICATION OR FOR R-2 OCCUPANCY, ELECTRIC HEAT PUMP WATER HEATER(S), MEETING THE STANDARDS FOR TIER III OF NEEA'S ADVANCED WATER HEATING SPECIFICATION, SHALL SUPPLY DOMESTIC HOT WATER TO ALL UNITS. IF ONE WATER HEATER IS SERVING MORE THAN ONE DWELLING UNIT, ALL HOT WATER SUPPLY AND RECIRCULATION PIPING SHALL BE INSULATED WITH R-8 MINIMUM PIPE INSULATION.

WALL LESS THAN 5' TO A PROPERTY LINE MUST BE 1-HOUR. PROJECTIONS GREATER THAN 2' FEET TO LESS THAN 5' FROM PROPERTY LINE MUST HAVE 1-HOUR FIRE-RESTRICTIVE CONSTRUCTION ON THE UNDERSIDE OR FIRE BLOCKED FROM WALL PLATE TO UNDERSIDE OF ROOF SHEATHING WITH NO VENT OPENINGS.

SETBACKS TO PROPERTY LINES SHALL BE MARKED AT FOOTING INSPECTION. THE CONTRACTOR OF RECORD IS RESPONSIBLE FOR ESTABLISHING THE CORRECT PROPERTY MARKERS AND SETBACKS.

JOBSITE MUST BE POSTED WITH ADDRESSES AND PERMIT NUMBER VISIBLE FROM THE STREET. THE APPROVED PLANS MUST BE KEPT ON THE JOBSITE IN SUCH A WAY THAT THEY ARE EASILY LOCATED AND PROTECTED FROM WATER AND OTHER DAMAGE.

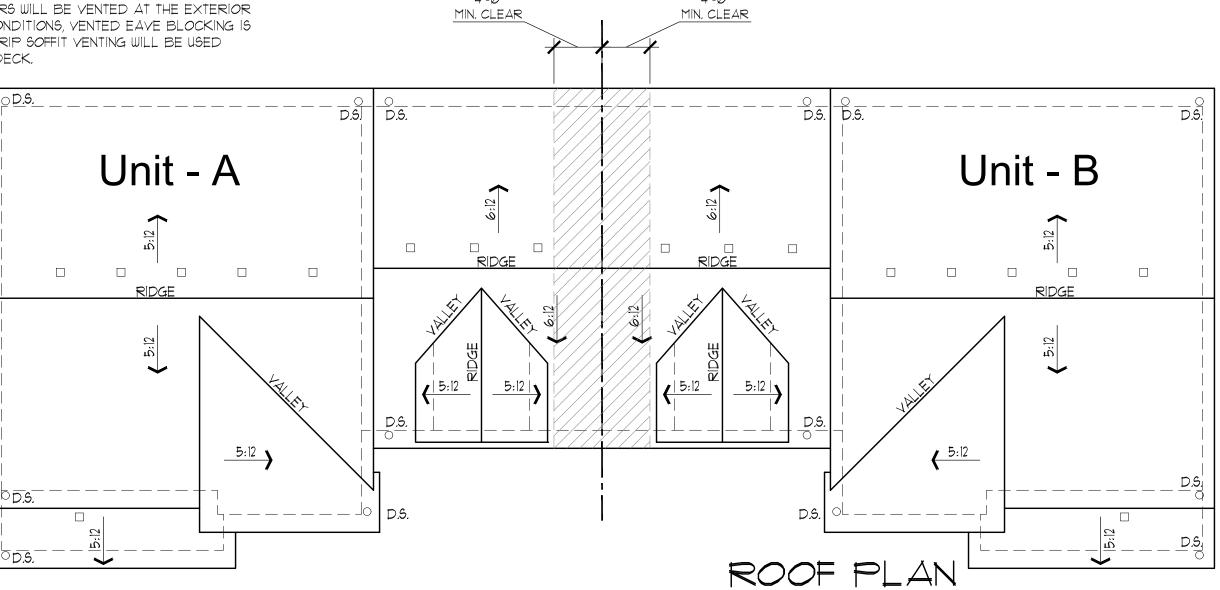
APPROVED PLANS SHALL BE ON SITE AND ACCESSIBLE AT INSPECTION.

# Parcel number: 0419095022 Site Address: 409 43rd Ave. SW Puyallup, WA. 98373

ALLOWED WITHIN 4'-0" CLEAR

SHEATHING WITHIN THIS AREA.

OF SEPARATION WALL. PROVIDE CLASS 'C' ROOF



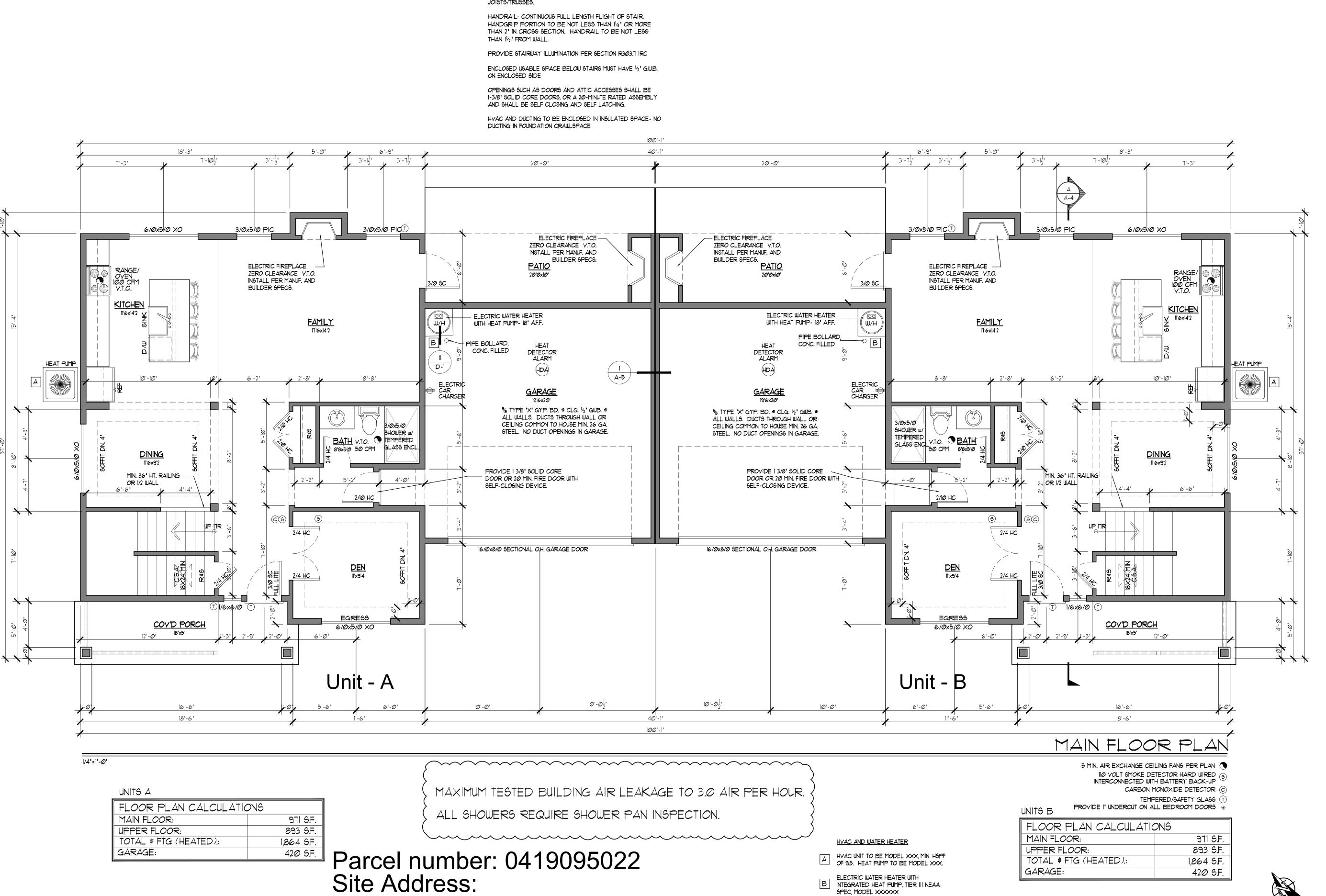
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 $\infty$  > S 94

ate

D.S. = DOWNSPOUT

□ = ROOF VENT



ANY WINDOW THAT OPENS MORE THAN 4", THAT IS INSTALLED LESS THAT 24" OFF THE FLOOR AND THAT HAS GREATER THEN 12" DROP OUTSIDE MUST HAVE FALL PROTECTION PER R312.2.

SEE ATTACHED ENERGY CODE SHEET FOR CHOSEN ENERGY MEASURE, INSULATION REQ., VENTILATION OPTION CHOSEN

ACCORDANCE WITH WSEC 402.2.4 - LOCATE ACCESS BTWM.

AND OTHER ENERGY CODE COMPLIANCE NOTES.

CRAWL AND ATTIC ACCESS SHALL BE SEALED IN

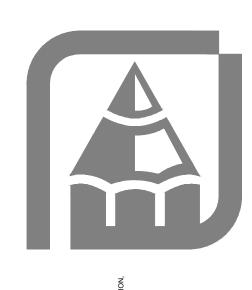
409 43rd Ave. SW Puyallup, WA. 98373

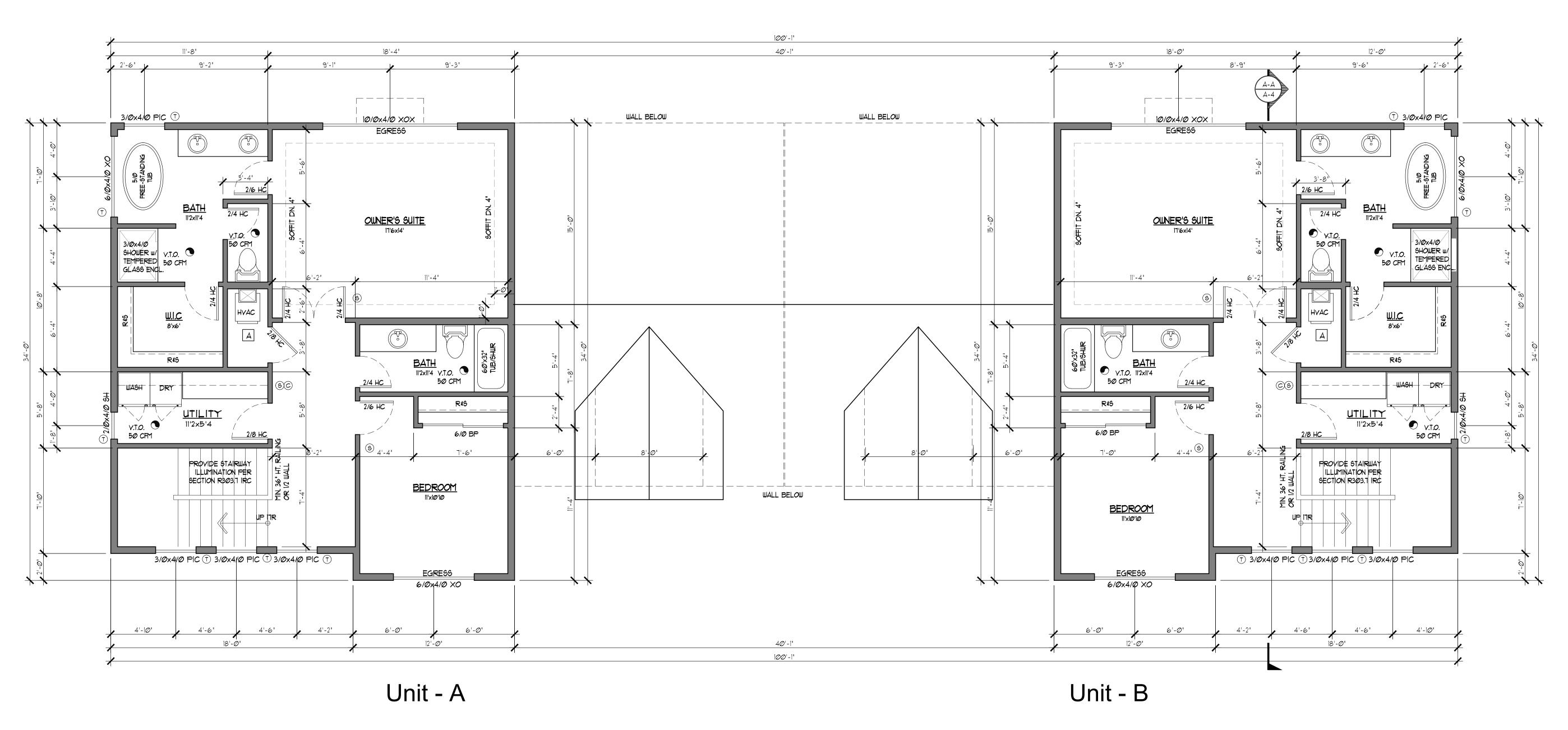
CONDITIONS OF LICENSE ACCEPTED BY THE CUSTOMER. USE OF ANY PART OF THE PLANS BY ANY PARTY OTHER THAN THE CUSTOMER, EXCONDITIONS OF LICENSE ACCEPTED BY THE CUSTOMER IN USING THE PLANS, SUCH AS CONTRACTORS AND SUBGONIFACTORS, IS STROTLY PROHIBITED. THE PLANS MAY NOT BE REJUSED ON COPIED, IN WHOLE OR IN PART, WITHOUT WRITTEN PER FROM RUEPPELL, INC. WHICH RETAINS COPYRIGHTS TO, & OWNERSHIP OF THE PLANS.

RUEPPELL, INC. PREPARES ITS PLANS CARFFULLY FOR THE USE OF ITS CUSTOMERS. HOWEVER, ADAPTATION OF THE PLANS TO MEET SPECIFIC STATE AND LOCAL BULLING CODES AND REGULATIONS, AND SPECIFIC CONDITIONS, IS THE RESPONSIBILITY OF THE CONTRACTOR RUEPPELL, INC. WILL NOT BE RESPONSIBLE FOR ANY DAMAGES RELATING TO THE ACCURACY AND OVERALL INTEGRITY OF THE PLANS IN EXOFTHE LICENSE PAID FOR THEIR USE. THE CONTRACTOR, THEREFORE, MUST CAREFULLY INSPECTALL DIMENSIONS AND DETAILS IN THE PLERS OF THE LICENSE PAID FOR THEIR USE.

Plan: 1864-1864 HC HOMES DUPLEX Date: 04/11/23

[ A-1





UPPER FLOOR PLAN

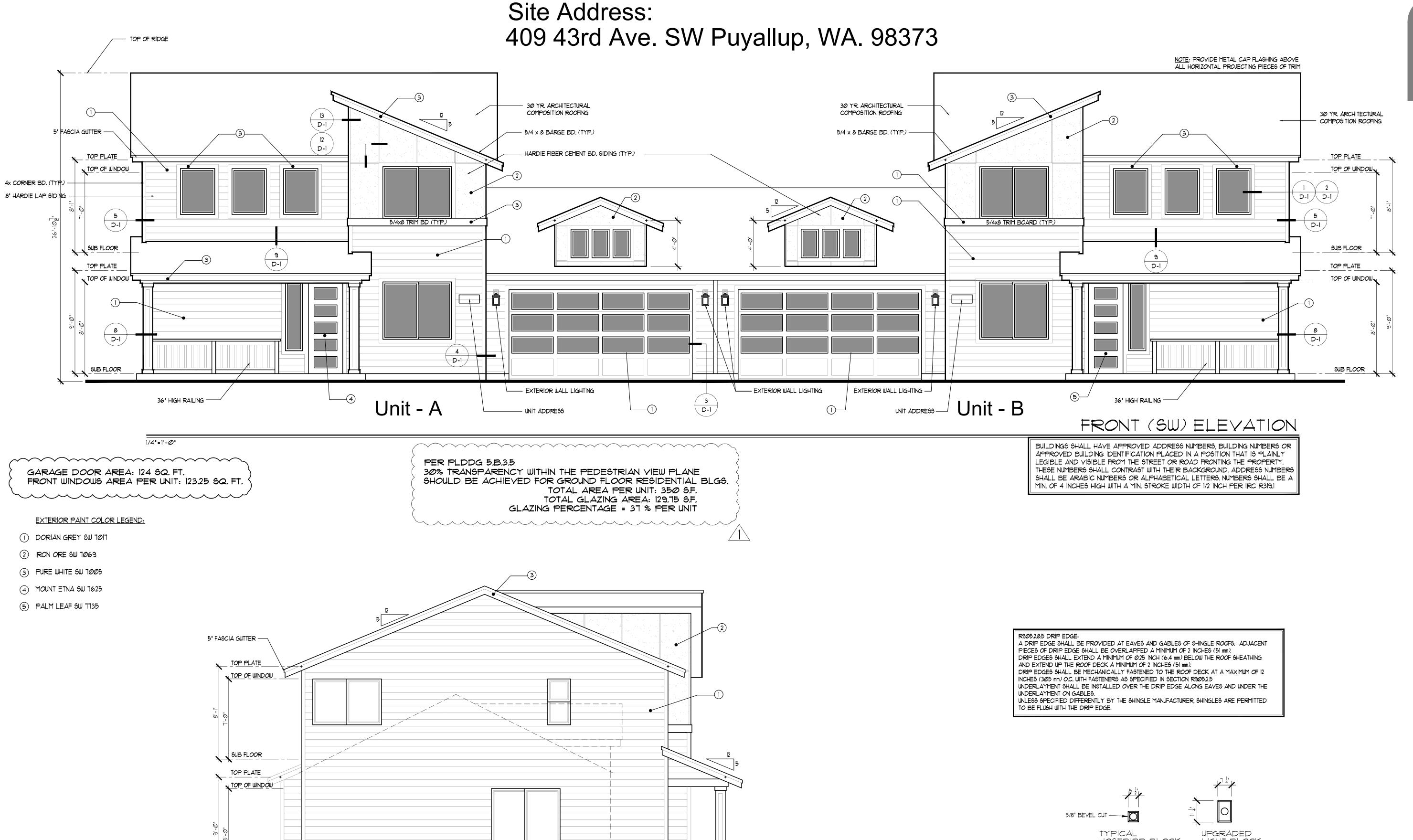
5 MIN. AIR EXCHANGE CEILING FANS PER PLAN III VOLT SMOKE DETECTOR HARD WIRED INTERCONNECTED WITH BATTERY BACK-UP CARBON MONOXIDE DETECTOR

Parcel number: 0419095022

Site Address:

1/4"=1'-0"

409 43rd Ave. SW Puyallup, WA. 98373



Parcel number: 0419095022

TYPICAL BLOCKING DETAIL

SCALE: 1/2" =1'

SUB FLOOR

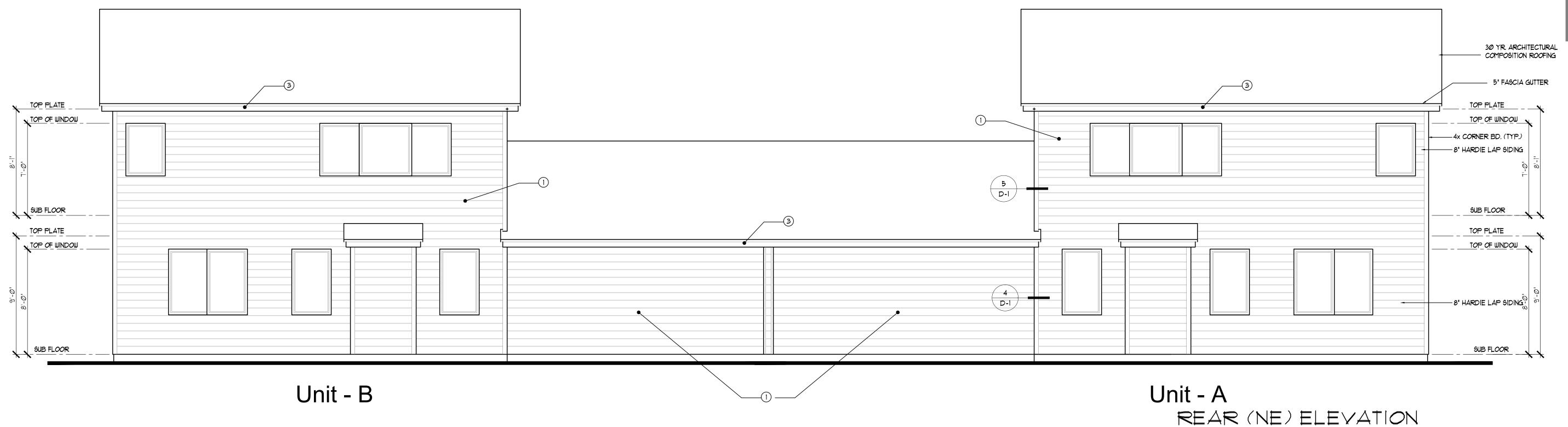
4x CORNER BD. (TYP.)

8" HARDIE LAP SIDING

Parcel number: 0419095022

Site Address:

409 43rd Ave. SW Puyallup, WA. 98373

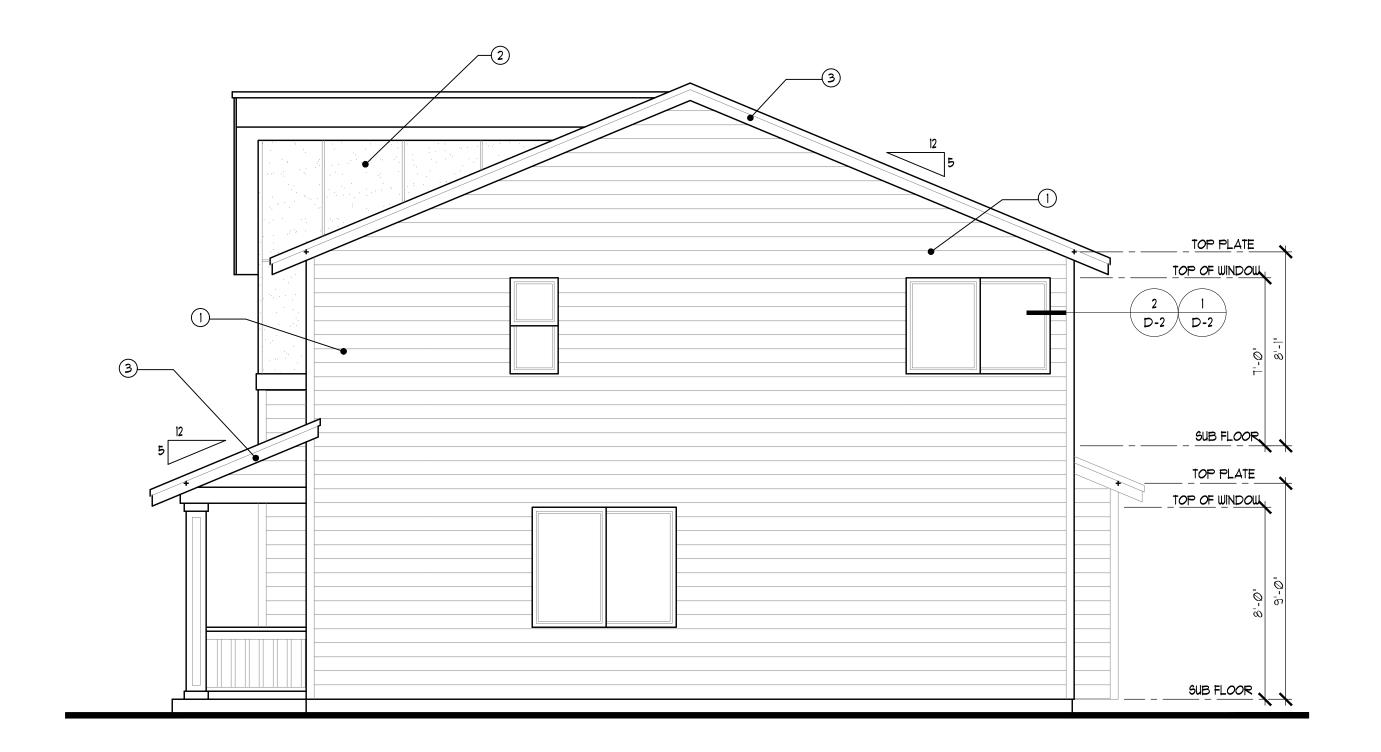


EXTERIOR PAINT COLOR LEGEND:

- 1) DORIAN GREY SW 7017
- 2) IRON ORE SW 1069
- 3) PURE WHITE SW 1005

(4) MOUNT ETNA SW 7625

5) PALM LEAF SW 1135



CAULK ALL EXTERIOR JOINTS AND PENETRATIONS.

PROVIDE GALVANIZED OR ANODIZED SHEET METAL FLASHING AND COUNTERFLASHING AT ALL ROOF PENETRATIONS, CHIMNEYS, AND SKYLIGHTS.

PROVIDE CONTINUOUS GUTTERS AND DOWNSPOUTS AT ALL EAVES, TYP. PROVIDE HEADER FLASHING AT ALL DOORS, WINDOWS, AND SHUTTERS PER DETAIL 6. ALL PAPER AND TAPE TO LAP FROM TOP DOWN. HOLD ALL SIDING MATERIAL 1  $\frac{1}{2}$ " OFF ROOF. 8. HOLD ALL SIDING MATERIAL 6' OFF FINISHED GRADE. 9. SOFFIT ALL FLAT AREAS W/  $1\frac{1}{2}$ " OFERHANG AT HORIZONTAL EDGES. 10. METAL FLASHING AT ALL TRIM AND HORIZONTAL SIDING BREAKS. II. RUN SECOND LAYER OF TAR PAPER VERTICAL AT INTERIOR AND EXTERIOR CORNERS

ELEVATION NOTES:

1. CONTRACTOR SHALL VERIFY ALL NOTES, MATERIALS AND CONDITIONS PRIOR TO

CONSTRUCTION

UNLESS TAR PAPER IS CONTINUOUS. 12. FOUNDATION VENTS TO BE SPACED PER PLAN.
13. ALL FOUNDATION VENTS ON STREET SIDE OF HOUSE I.E. FRONT AND/OR SIDE AND GABLE END AND GARAGE FRESH AIR VENTS TO BE LOUVERED.

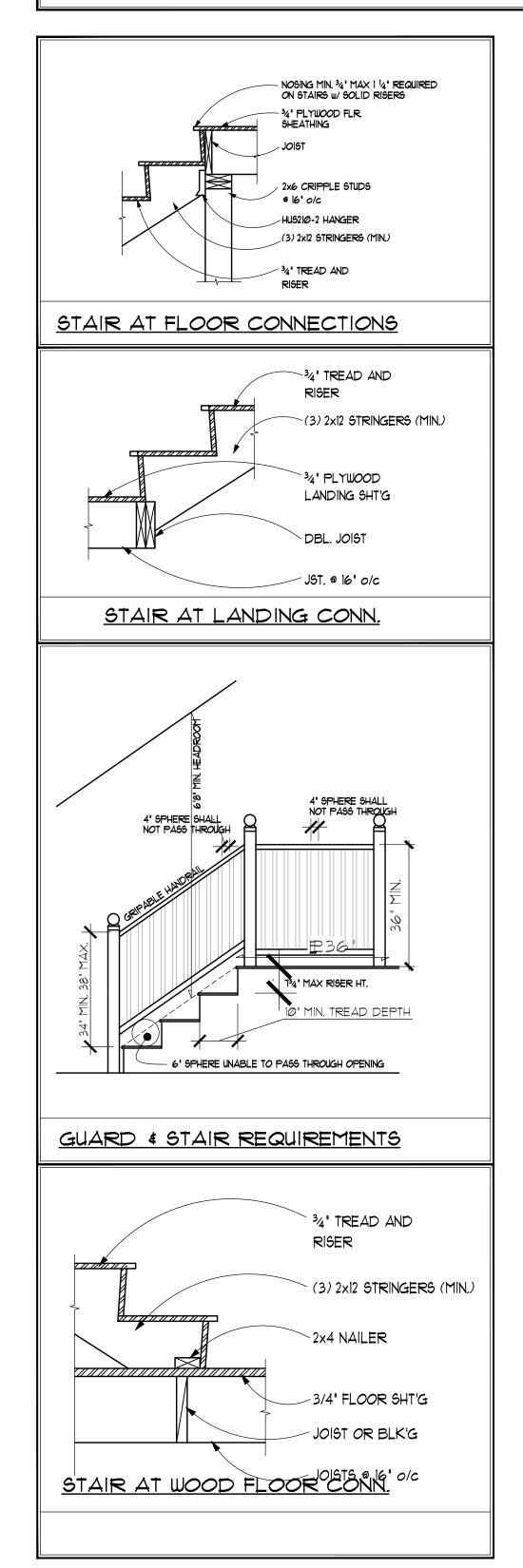
14. ALL LIGHT BLOCKS ON FACADE TO BE FURRED OUT AN ADDITIONAL  $1\frac{1}{2}$ ". 15. GUTTERS TO LAP UNDER DRIP EDGE AT GABLE ENDS, HOLD 1/2" DRIP EDGE CUT 1/4" AWAY FROM FASCIA TO EXCEPT GUTTERS TO LAP UNDERNEATH.

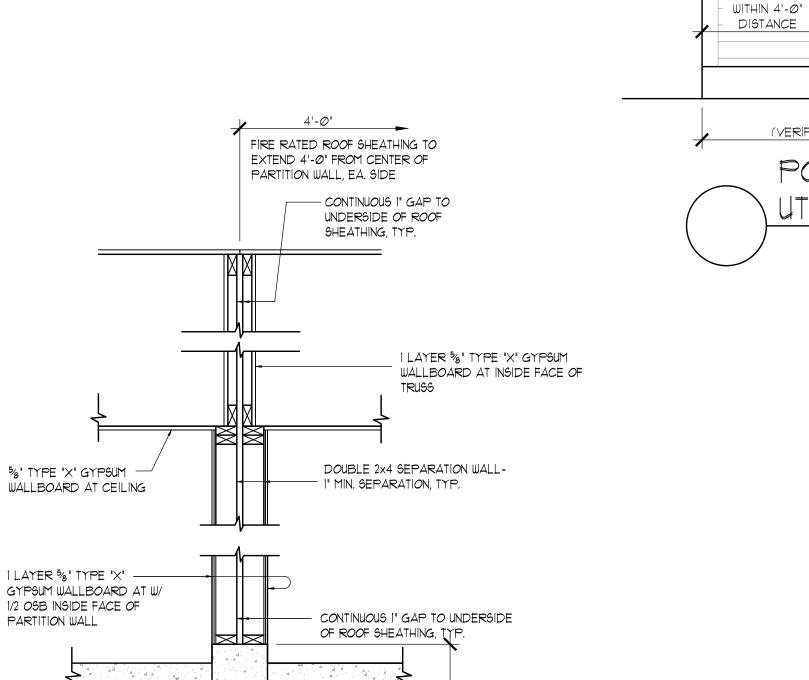
16. ALL TRIM WORK TO BE APPLIED PRIOR TO SIDING MATERIALS (SIDING TO BUTT UP TO

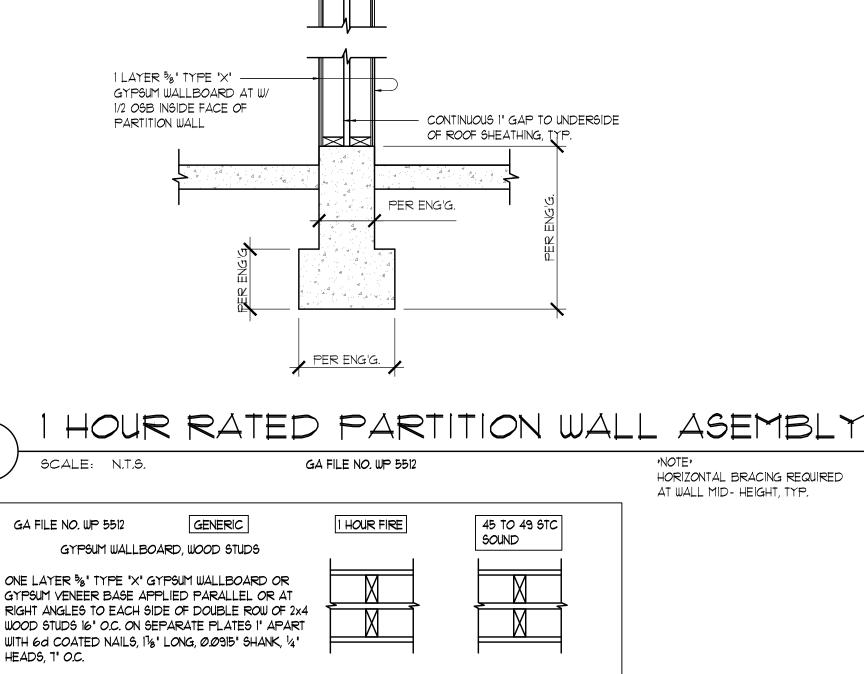
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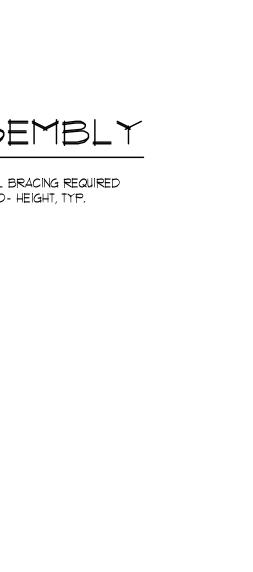
ILLUMINATION NOTES: PER IRC SECTION 303.6, R3115.7 ALL INTERIOR AND EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE LANDING OF THE STAIRWAY. EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH A LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE TOP OF THE LANDING OF THE STAIRWAY. LIGHTING CONTROLS SHALL BE ACCESSIBLE AT THE TOP AND BOTTOM OF EACH STAIRWAY WITHOUT TRAVERSING ANY STEPS.

4 OR MORE RISERS TO HAVE AT LEAST ONE HANDRAIL RUNNING CONTINUOUSLY THROUGH THE FULL LENGTH OF STAIR. 34" MIN. HT., 38" MAX. HT. END SHALL RETURN TO WALL OR NEWEL POST OR VOLUTE. HANDRAIL MUST BE STRONG ENOUGH TO RESIST A 200 LB. PT. LOAD IN ANY DIRECTION. HANDRAIL TO BE PRESENT ON AT LEAST ONE SIDE OF STAIR. HANDGRIP PORTION OF HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION OF 1/4" MIN. 4  $2^34$ " MAX. EDGES SHALL HAVE A MIN. RADIUS OF 1/8". ALL REQ. GUARDRAILS TO BE 36" MIN. IN HEIGHT. HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1/4 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 (1/6/4 INCHES (1/6/









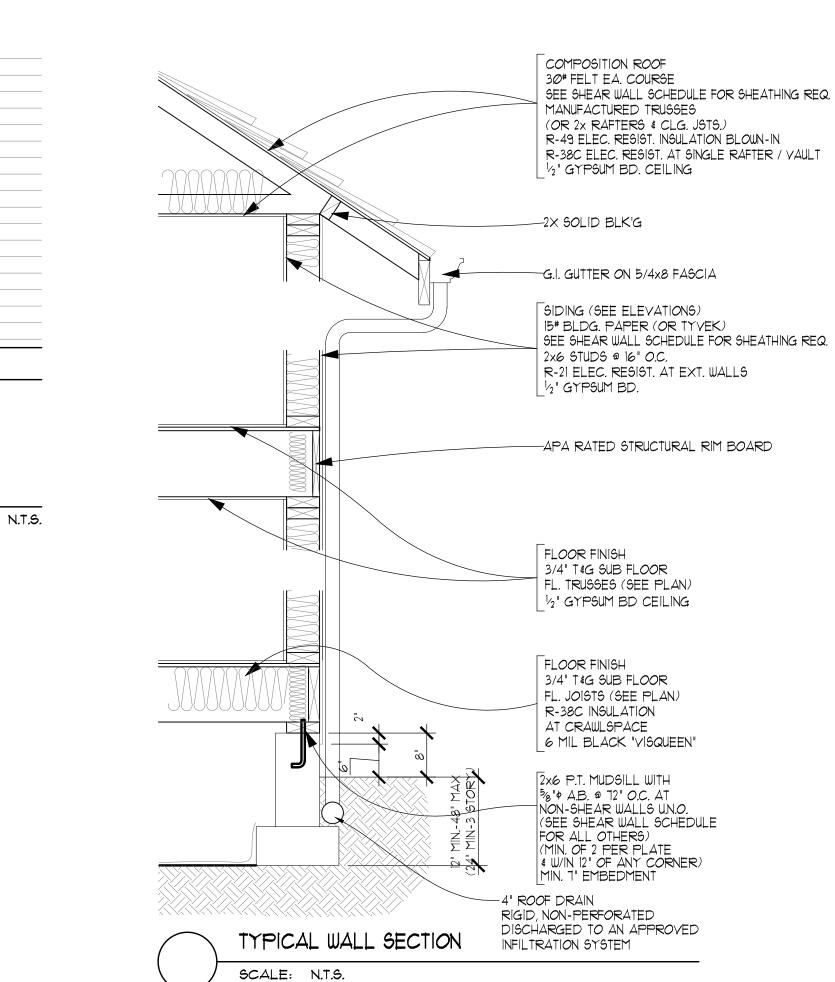
DISTANCE

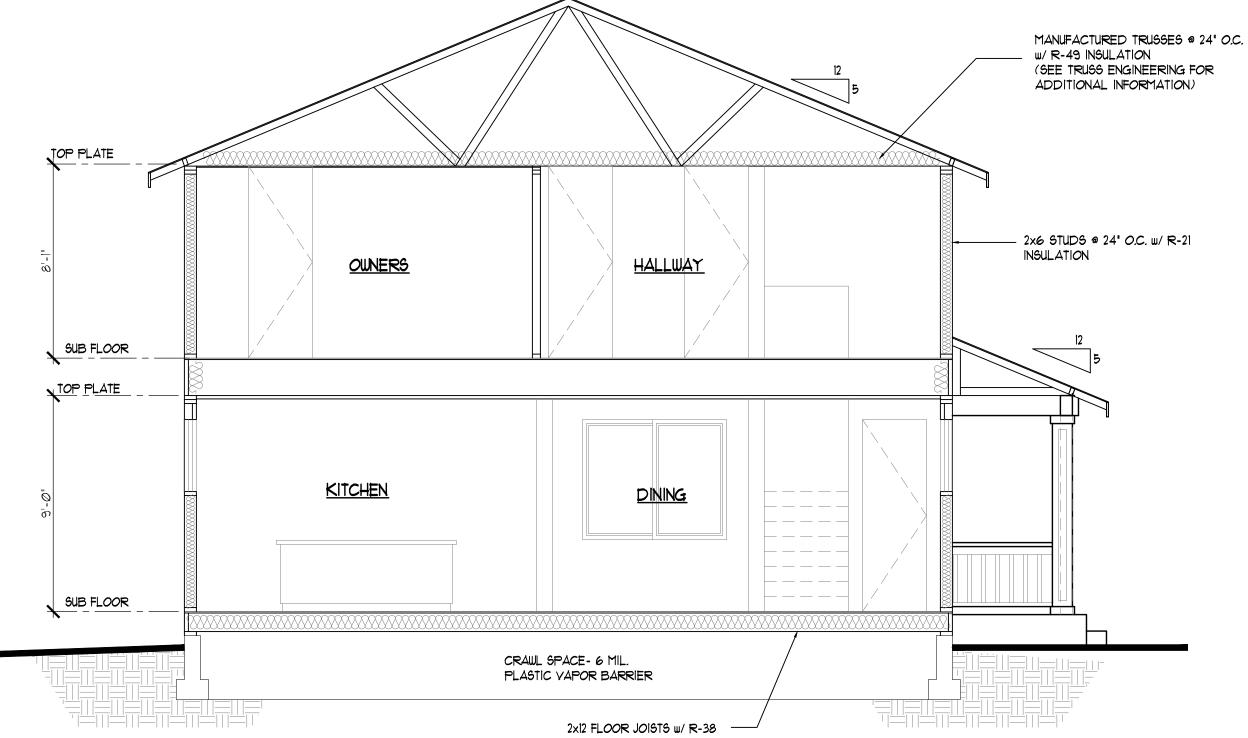
(VERIFY WITH COUNTY / CITY CODE REQ.)

POWER METER & MISC.

UTILITIES LOCATION DETAIL

1/4"=1'-0"





Parcel number: 0419095022

THICKNESS: 91/4" APPROX. WEIGHT: 8 PSF

SEE WP 3605

UL R1319-4, -6, 6-17-52 UL R2717-39, 1-20-66

ULC DESIGN W3Ø1) UL R4Ø24, 1Ø-31-68

UL R3501-52, 3-15-66, UL DESIGN U305

SOUND TEST: NRCC TL-93-261, IRC-IR-761, 3/98

Site Address:

JOINTS STAGGERED 16" ON OPPOSITE SIDES.

HORIZONTAL BRACING REQUIRED AT MID-HEIGHT.

409 43rd Ave. SW Puyallup, WA. 98373

SECTION A

C. PREPARES ITS PLANS CAREFULLY FOR THE USE OF ITS CUSTOMERS. HOWEVER, ADAPTATION OF THE PLANS TO MEET FE AND LOCAL BUILDING CODES AND REGULATIONS, AND SPECIFIC CONDITIONS, IS THE RESPONSIBILITY OF THE CONTRACTOR. S. WILL NOT BE RESPONSIBLE FOR ANY DAMAGES RELATING TO THE ACCURACY AND OVERALL INTEGRITY OF THE PLANS IN EXC SEP PAD FOR THEIR USE. THE CONTRACTOR, THEREFORE, MUST CAREFULLY INSPECTALL DIMENSIONS AND DETAILS IN THE PLANS IN THE PLANS OF THESE PLANS, OR THE DESIGN THEY DEPICT, INFRINGES RIGHTS UNDER THE COPYRIGHT ACT. INFRINGED STILL DIMENSIONS AND THESE PLANS, OR THE DESIGN THEY DEPICT, INFRINGES RIGHTS UNDER THE COPYRIGHT ACT. INFRINGED WILLFULLY. AT INCLUDE PENALTIES OF UP TO \$20,000 PER WORK INFRINGES, AND UP TO \$100,000 PER WORK INFRINGED WILLFULLY.

THE AND SPECIFICATIONS SHEET IS ALWAYS AN INTEGRAL PART OF THESE DRAWINGS AND GENERALLY THE LAST SHEET OF TH

CODVIIGHT (C) RUNGE OF THESE TAWNS, OR THE DESIGN THEY DEFINE, INTERNACES MUCH SOURCE THEY THE STATEMENT OF THE SECRET OF THE SE

HC HOMES DUPLEX
Date: 04/11/23
Revision Date: 09/20/23
Drawn by: SM/BP

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ALL WORK SHALL BE IN ACCORDANCE WITH ALL CODES, RULES AND REGULATIONS OF GOVERNING AGENCIES AND SHALL COMPLY WITH THE REQUIREMENTS OF THE POWER SERVING AND TELEPHONE COMPANIES.

ALL EQUIPMENT INSTALLED OUTDOORS AND EXPOSED TO WEATHER SHALL BE "WEATHER-PROOF".

RECEPTACLES IN KITCHEN AND BATHROOMS SHALL BE INSTALLED ABOVE COUNTER TOP U.N.O. IN THE DRAWINGS.

PROVIDE MINIMUM TWO (2) 20 AMPERE SMALL APPLIANCE CIRCUITS AT THE KITCHEN, DINING ROOM AND/OR BREAKFAST AREAS.

PROVIDE GFI PROTECTION AT BATHROOMS, POWDER ROOMS, OUTDOOR RECEPTACLES, GARAGES AND WITHIN 6 FEET OF THE KITCHEN SINK.

RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY UNBROKEN WALL SPACE IS MORE THAN 6 FEET, MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE. A WALL SPACE SHALL INCLUDE ANY SPACE 2 FEET OR MORE IN WIDTH (INCLUDING SPACE MEASURED AROUND CORNERS) AND UNBROKEN ALONG THE FLOOR LINE BY DOORWAYS, FIREPLACES, AND SIMILAR OPENINGS.

IN KITCHEN AND DINING AREAS AT LEAST ONE RECEPTACLE SHALL BE INSTALLED AT EACH ISLAND OR PENINSULAR COUNTER SPACE WITH A LONG DIMENSION OF 24" OR GREATER AND A SHORT DIMENSION OF 12

A RECEPTACLE SHALL BE INSTALLED IN USABLE WALL SPACE 2 FEET OR MORE IN WIDTH.

RECEPTACLES AND SWITCHES BACK TO BACK IN FIRE SEPARATION WALLS MUST MAINTAIN SEPARATE BAYS.

ALL EQUIPMENT AND MATERIALS FURNISHED AND INSTALLED UNDER THIS SECTION, SHALL BE GUARANTEED BY THE TRADE PARTNER FOR A PERIOD OF TWO YEARS FROM THE DATE OF ACCEPTANCE OF THE WORK.

PROVIDE TWO METHODS OF GROUNDING CLAMP AT HOSEBIBB

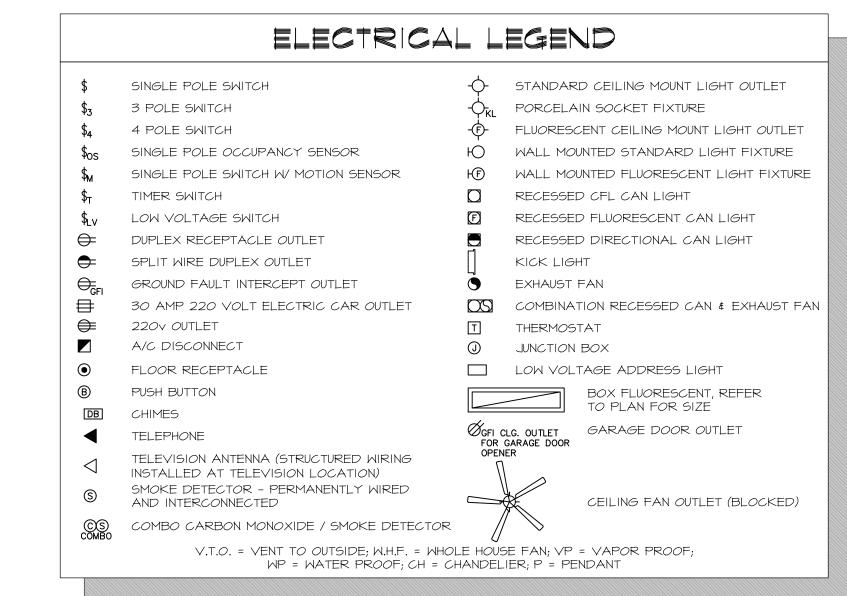
ONE ADDITIONAL #4 BAR, 20-FEET LONG IN FOOTING AT ELECTRICAL METER LOCATION FOR UFFER GROUND.

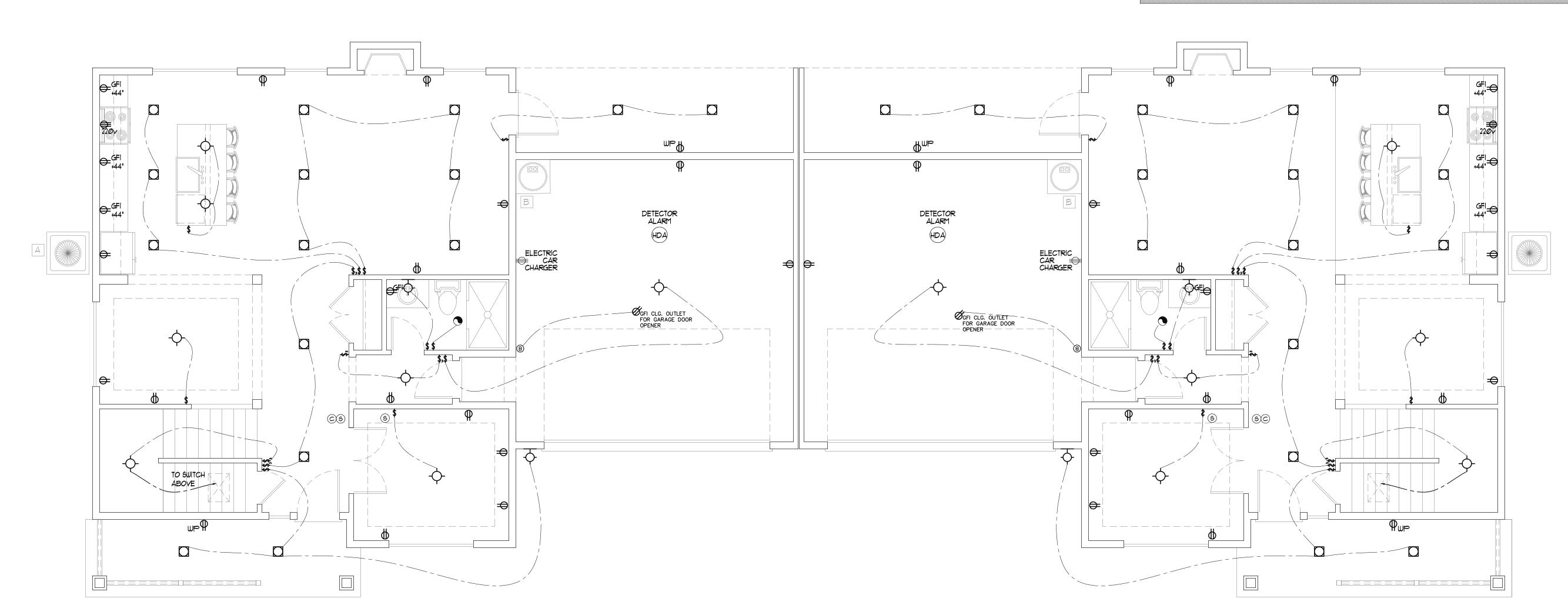
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PROVIDE A MIN. OF TWO 20-AMPERE-RATED BRANCH CIRCUITS FOR RECEPTACLES LOCATED IN THE KITCHEN, PANTRY, BREAKFAST, AND DINING AREAS, A SEPARATE 20-AMPERE-RATED BRANCH CIRCUIT TO THE LAUNDRY, AND A SPEARATE 20-AMPERE-RATED BRANCH CIRCUIT FOR BATHROOM RECEPTACLE(6).

PER IRC E3902.16, ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE PHASE 15 OR 20 AMPEREE OUTLETS INSTALLED IN DWELLING SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER.

PANEL AND CIRCUIT BREAKERS SHALL BE INSPECTED. 2--5 NEC 210-12, (a) AND (b), ARC-FAULT CIRCUIT INTERRUPTER PROTECTION.





MAIN FLOOR ELECTRICAL PLAN

5 MIN. AIR EXCHANGE CEILING FANS PER PLAN (1) 10 VOLT SMOKE DETECTOR HARD WIRED (6) INTERCONNECTED WITH BATTERY BACK-UP

TE AND LOCAL BUILDING CODES AND REGULATIONS, AND SPECIFIC CONDITIONS, IS THE RESPONSIBILITY OF THE CONTRACT OF THE PLANS
C. WILL NOT BE RESPONSIBLE FOR ANY DAMAGES RELATING TO THE ACCURACY AND OVERALL INTEGRITY OF THE PLANS
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MISSIONS.
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ATT INCLUDE PENALTIES OF UP TO \$20,000 PER WORK INFRINGES. AND UP TO \$100,000 PER WORK INFRINGED WILLFULLY.

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1/4"=1'-0"

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PROVIDE TWO METHODS OF GROUNDING CLAMP AT HOSEBIBB

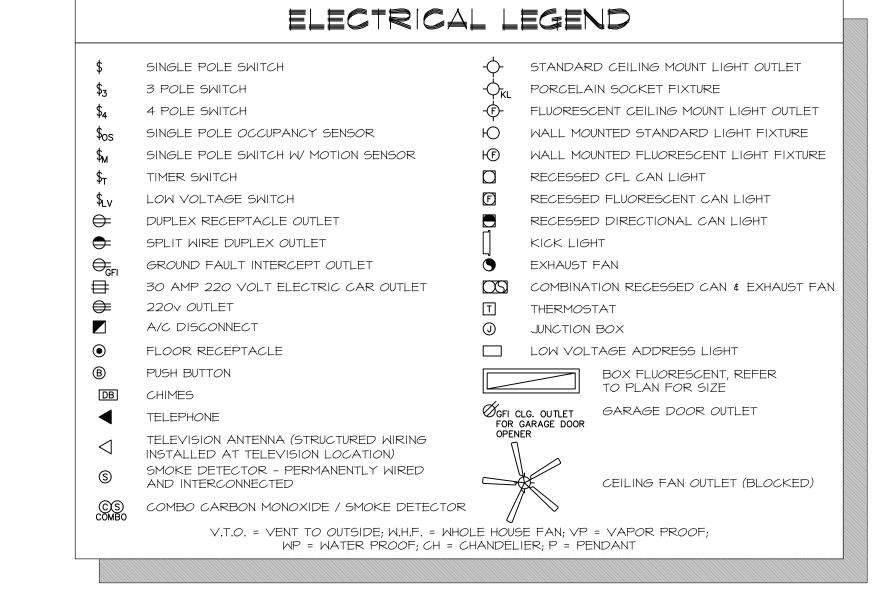
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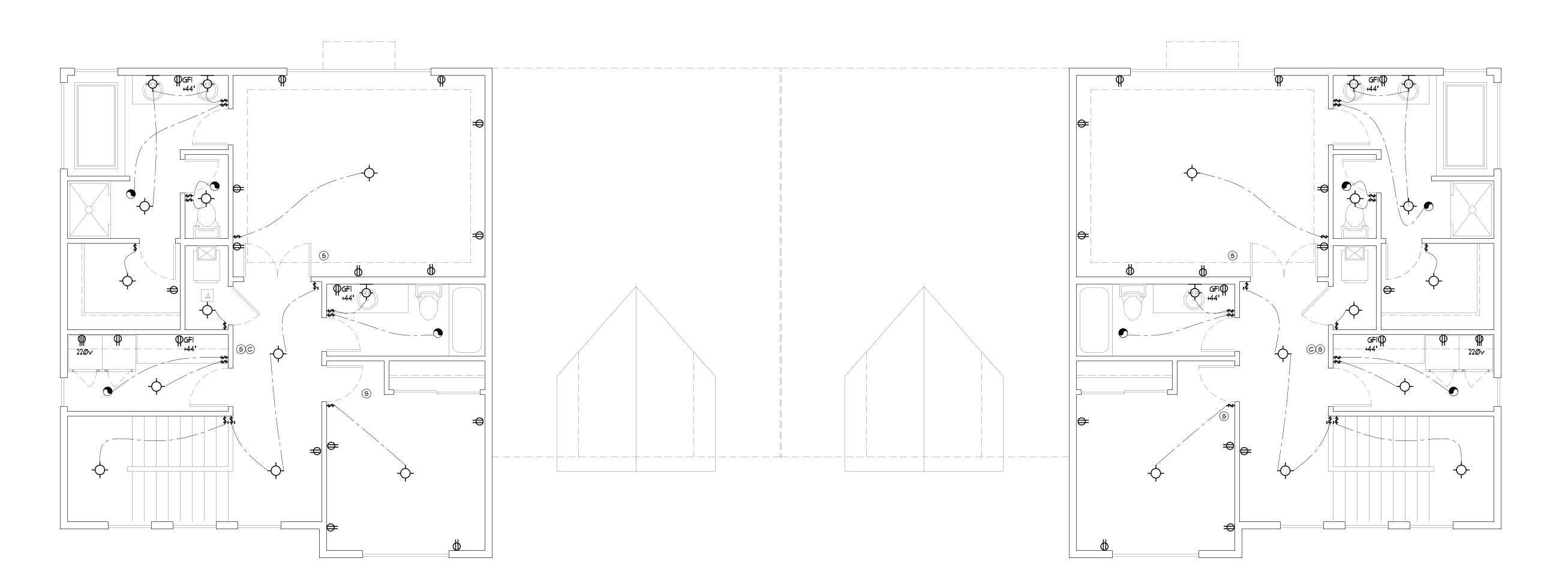
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PANEL AND CIRCUIT BREAKERS SHALL BE INSPECTED. 2--5 NEC 210-12, (a) AND (b), ARC-FAULT CIRCUIT INTERRUPTER PROTECTION.





UPPER FLOOR ELECTRICAL PLAN

5 MIN. AIR EXCHANGE CEILING FANS PER PLAN (1)
110 YOLT SMOKE DETECTOR HARD WIRED (6)
INTERCONNECTED WITH BATTERY BACK-UP

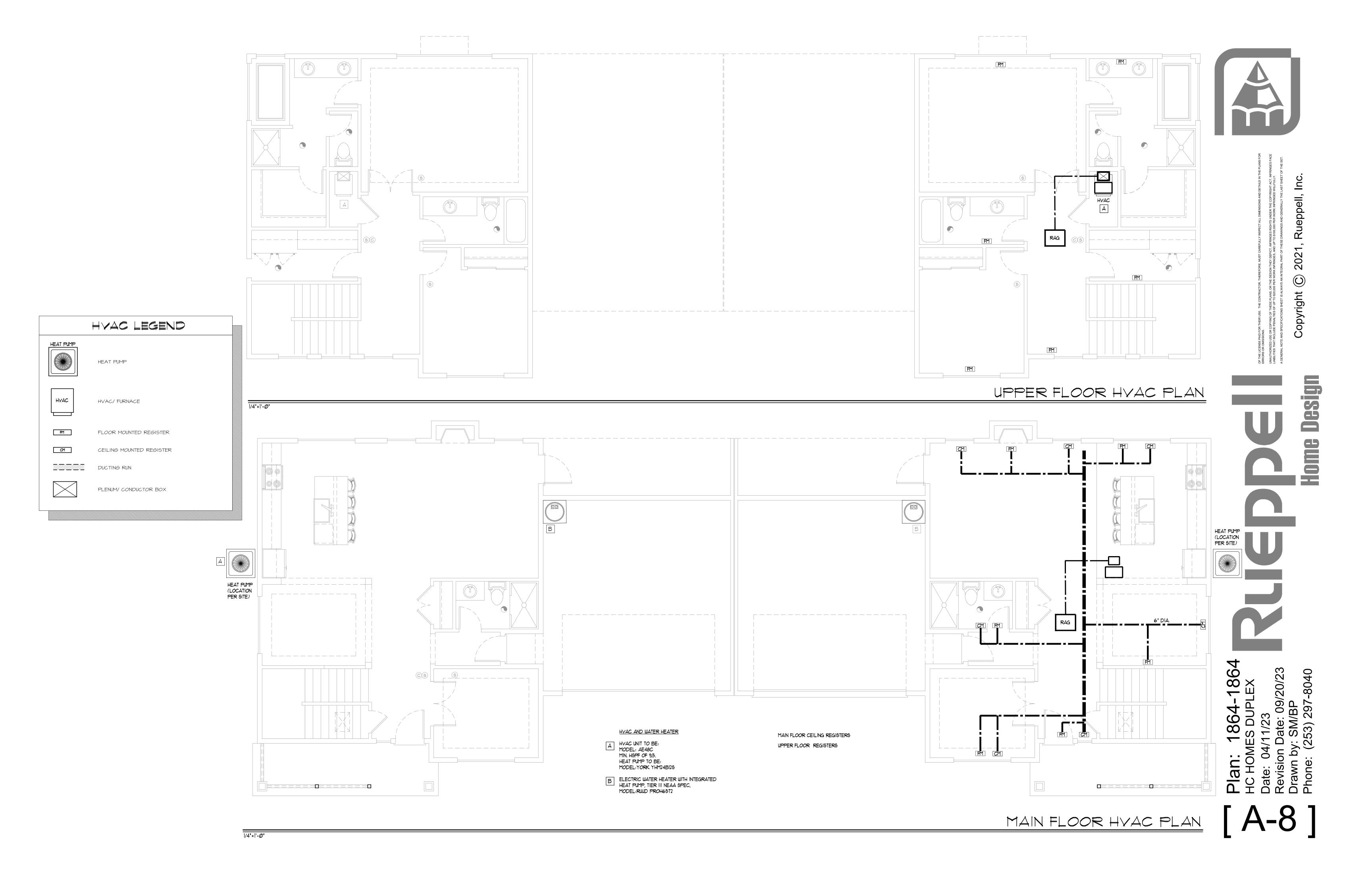


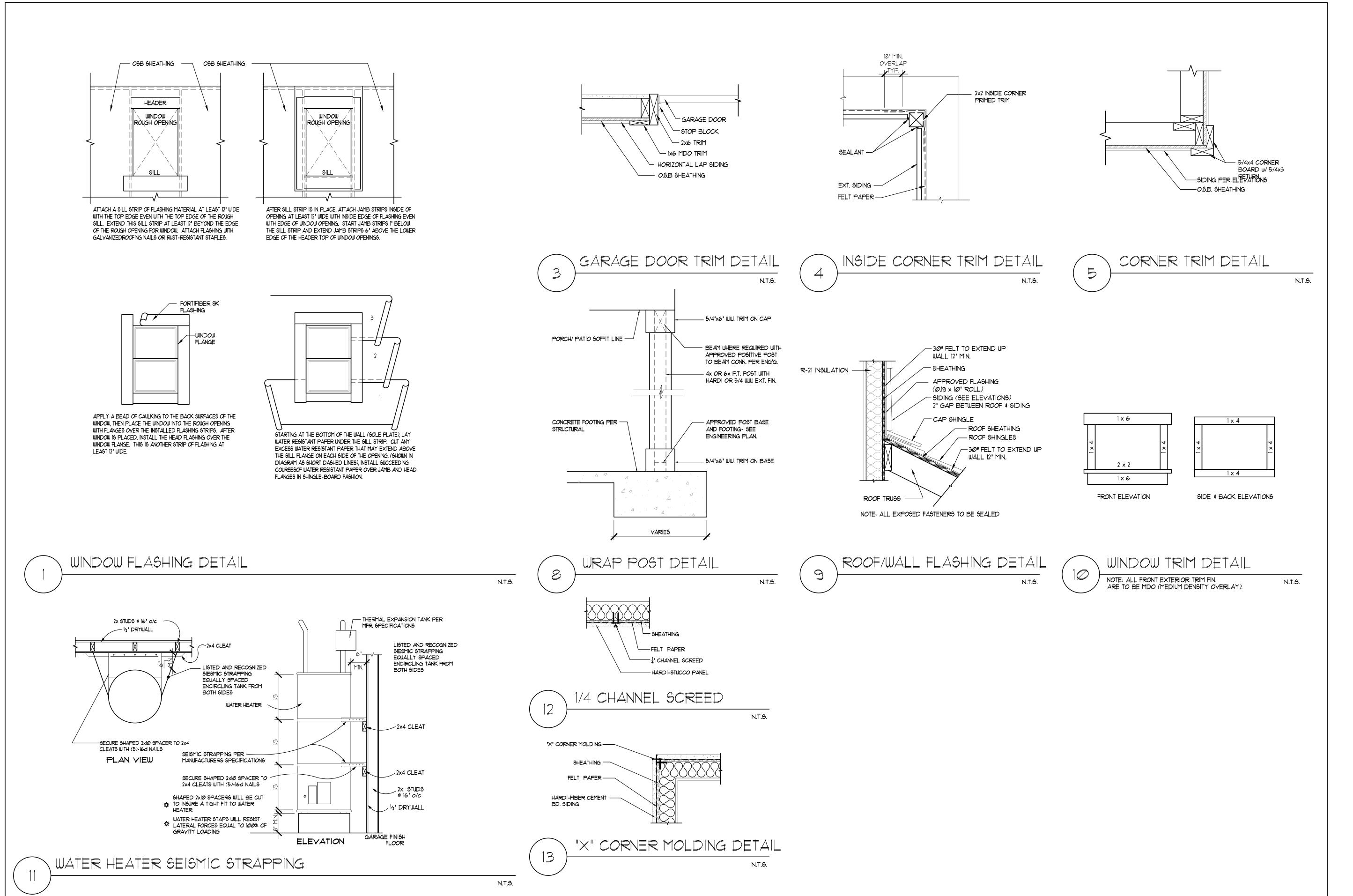
UNAUTHORIZED IN THE CONTINGENT OF THESE PLANDARY NOT BE REJUSED OR COPIED, IN WHOLE OR IN PART, WITHOUT WRITTEN PER FROM RUEPPELL, INC. WHICH RETAINS COPPRIGHTS TO, & OWNERSHIP OF THE PLANS.

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Date: 04/11/23
Revision Date: 09/20/23
Drawn by: SM/BP
Phone: (253) 297-8040

A-7

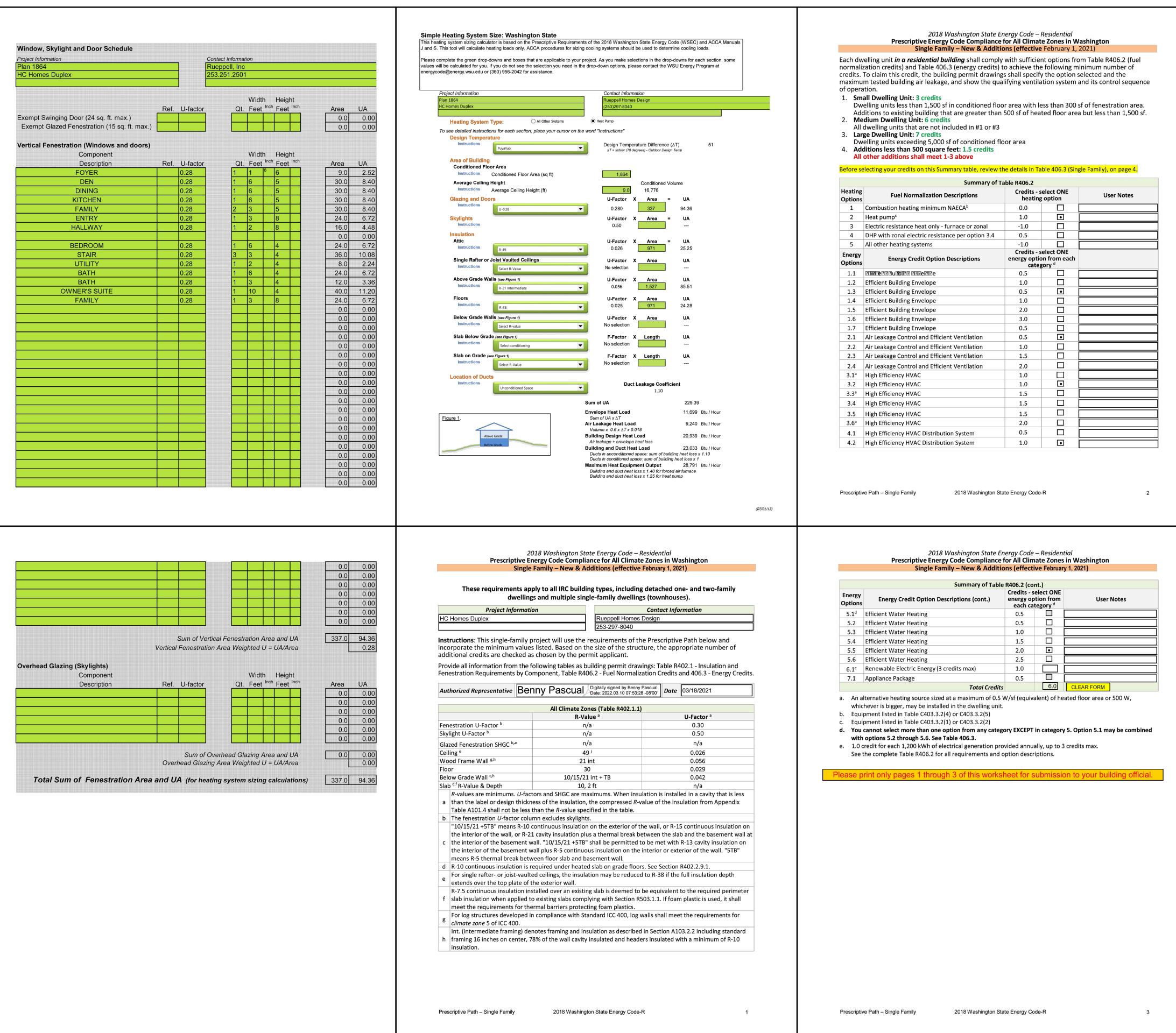






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MECHANICAL

HEATING EQUIPMENT ALL WARM-AIR FURNACES SHALL BE LISTED AND LABELED BY AN APPROVED AGENCY AND INSTALLED TO LISTED SPECIFICATIONS. NO WARM-AIR FURNACES SHALL BE INSTALLED IN A ROOM USED OR DESIGNED TO BE USED AS A BEDROOM, BATHROOM, CLOSET OR IN ANY ENCLOSED SPACE WITH ACCESS ONLY THROUGH SUCH ROOM OR SPACE, EXCEPT DIRECT VENT FURNACE, ENCLOSED FURNACES AND ELECTRIC HEATING FURNACES.

LIQUIFIED PETROLEUM GAS-BURNING APPLIANCES SHALL NOT BE INSTALLED IN A PIT, BASEMENT OR SIMILAR LOCATION WHERE HEAVIER THAN AIR GAS MIGHT COLLECT. APPLIANCES SO FUELED SHALL NOT BE INSTALLED IN AN ABOVE GRADE UNDER FLOOR SPACE OR BASEMENT UNLESS SUCH LOCATION IS PROVIDED WITH AN APPROVED MEANS FOR REMOVAL OF UNBURNED GAS.

HEATING AND COOLING EQUIPMENT LOCATED IN A GARAGE WHICH GENERATES A GLOW, SPARK OR FLAME CAPABLE OF IGNITING FLAMMABLE VAPORS SHALL BE INSTALLED WITH THE PILOTS AND BURNERS FOR HEATING ELEMENTS AND SWITCHES AT LEAST 18" ABOVE THE FLOOR LEVEL.

TEMPERATUERE CONTROL THE PRIMARY SPACE CONDITIONING SYSTEM WITHIN EACH DWELLING UNIT SHALL BE PROVIDED WITH AT LEAST ONE PROGRAMMABLE THERMOSTAT FOR THE REGULATION OF TEMPERATURE WSEC SEC.403.1.1

VENTILATION EVERY FACTORY BUILT CHIMNEY, TYPE L VENT, TYPE B GAS VENT OR TYPE BW GAS VENT SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF ITS LISTING. MFR'S INSTALLATION INSTRUCTIONS AND APPLICABLE CODE REQUIREMENTS. A TYPE L VENTING SYSTEM SHALL TERMINATE NOT LESS THAN 2 FEET ABOVE THE HIGHEST POINT WHERE THE VENT PASSES THROUGH THE ROOF OF THE BUILDING AND AT LEAST 2' HIGHER THAN ANY PORTION OF THE BUILDING WITHIN 10' OF THE VENT.

#### UTILITY ROOM NOTES/MAKE UP AIR:

AREA TO BE VENTED

BATHROOM / LAUNDRY / SIMILAR

KITCHENS

1. WHERE THE EXHAUST DUCT IS CONCEALED WITHIN THE BUILDING CONSTRUCTION. THE EQUIVALENT LENGTH OF THE EXHAUST DUCT SHALL BE IDENTIFIED ON A PERMANENT LABEL OR TAG. THE LABEL OR TAG SHALL BE LOCATED WITHIN 6 FEET OF THE EXHAUST DUCT CONNECTION.

2. INSTALLATIONS EXHAUSTING MORE THAN 200 CFM CHALL BE PROVIDED WITH MAKE UP AIR WHERE A CLOSET IS DESIGNED FOR THE INSTALLATION OF A CLOTHES DRYER, AN OPENING HAVING AN AREA OF NOT LESS THAN 100 SQ. INCHES FOR MAKE UP AIR SHALL BE PROVIDED IN THE CLOSET ENCLOSURE, OR MAKE UP AIR SHALL BE PROVEDED BY OTHER APPR. MEANS.

• 100 SQ INCH TRANSFER GRILL PER IRC G2439.4 (614.6)

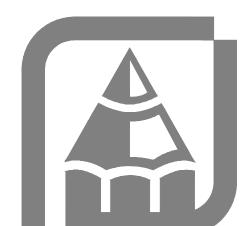
### CONTINUOUS WHOLE-HOUSE

		NUMBER OF BEDROOMS							
FLOOR AREA (SQ. FT.)	1	2		3	4		> 5		
		AIRFLOW IN CFM							
< 500	3Ø	3Ø		35	45		5Ø		
500 - 1000	3Ø	35		40	50		55		
1001 - 1500	3Ø	40		45	55		60		
1501 - 2000	35	45		50			65		
2001 - 2500	40	50		55			TØ		
25Ø1 - 3ØØØ	45	55		60			75		
3001 - 3500	50	60		65			80		
3501 - 4000	55	65		7Ø			85		
4001 - 4500	60	7Ø		75			30		
4501 - 5000	65	75	80		9Ø		95		
ERMITTENT WHOLE-HOUS	SE MECHANICAL YEN	ITILATION RATI	E FACTORS	<del></del>					
RUN-TIME % IN 4-HOUR SEGN	25%	33%	50%	66%	75%	100%			
FACTOR	4	3	2	1,5	1.3	1.0			

EXHAUST RATES

100 CFM INTERMITTENT OR 25 CFM CONTINUOUSLY

50 CFM INTERMITTENT OR 20 CFM CONTINUOUSLY



ite: 09/20/23 M/BP 04/1

- 2018 WASHINGTON STATE AMENDMENTS INCLUSIVE OF:
- 2018 INTERNATIONAL RESIDENTIAL CODE (IRC)
- 2018 INTERNATIONAL MECHANICAL CODE (IAPMO)
- 2018 UNIFORM PLUMBING CODE (IAPMO)
- 2020 NATIONAL ELECTRICAL CODE
- 2018 INTERNATIONAL FIRE CODE
- 2018 WASHINGTON STATE ENERGY CODE (WSEC), RESIDENTIAL PROVISIONS

### REQUIRED ADDITIONAL SUBMITTAL FROM MANUFACTURERS

I. MANUFACTURED FLOOR JOIST/ TRUSS DESIGN AND LAYOUT 2. MANUFACTURED ROOF TRUSS DESIGN AND LAYOUT.

### SITE WORK:

I. FOUNDATION DESIGN IS BASED ON AN ASSUMED AVERAGE SOIL BEARING OF 1,500 PSF, UNLESS A SOILS INVESTIGATION BY A QUALIFIED SOILS ENGINEER IS PROVIDED. 2. EXTERIOR FOOTING SHALL BEAR 18" (MIN.) BELOW FINISHED GRADE.

3. FOOTINGS TO BEAR ON FIRM UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS. 4. BACKFILL MATERIALS TO BE THOROUGHLY COMPTACTED.

### INSULATION AND MOISTURE PROTECTION

R302.10 FLAME SPREAD INDEX AND SMOKE-DEVELOPED INDEX FOR INSULATION FLAME SPREAD AND SMOKE-DEVELOPED INDEX FOR INSULATION SHALL BE IN ACCORDANCE WITH SECTIONS R302.10.1 THROUGH R302.10.5. R302.10.1 INSULATION

INSULATION MATERIALS, INCLUDING FACINGS, SUCH AS VAPOR RETARDERS AND VAPO-PERMEABLE MEMBRANES INSTALLED WITHIN FLOOR-CEILING ASSEMBLIES, ROOF-CEILING ASSEMBLIES, WALL ASSEMBLIES, CRAWL SPACES, AND ATTICS SHALL HAVE A FLAME SPREAD INDEX NOT TO EXCEED 25 WITH AN ACCOMPLISHING SMOKE-DEVELOPED INDEX NOT TO EXCEED 450 WHERE TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 123. EXCEPTIONS:

WHERE SUCH MATERIALS AREW INSTALLED IN CONCEALED SPACES, THE FLAME SPREAD INDEX AND SMOKE-DEVELOPED INDEX LIMIATATIONS DO NOT APPLY TO THE FACINGS, PROVIDED THAT THE FACING IS INSTALLED IN SUBSTANTIAL CONTACT WITH THE UNEXPOSED SURFACE OF THE CEILING, FLOOR OR WALL FINISH

CELLULOSE FIBER LOOSE-FILL INSULATION, THAT IS NOT SPRAY APPLIED, COMPLYING WITH THE REQUIREMENTS OF SECTION R302.10.3, SHALL NOT BE REQUIRED TO MEET THE SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450 WHERE TESTED IN ACCORDANCE WITH CAN/ULC SIØ2.2.

3. FOAM PLASTIC INSULATION SHALL COMPLY WITH SECTION R316.

R302.10.2 LOOSE-FILL INSULATION LOOSE-FILL INSULATION MATERIALS THAT CANNOT BE MOUNTED IN THE ASTM E 84 OR UL 123 APPARATUS WITHOUT A SCREEN OR ARTIFICIAL SUPPORTS SHALL COMPLY WITH THE FLAME SPREAD AND SMOKE-DEVELOPED LIMITS OF SECTION R3/02.10.1 WHERE TESTED IN ACCORDANCE WITH CAN/ULC 5102.2.

EXCEPTION: CELLULOSIC FIBER LOOSE-FILL INSULATION SHALL NOT BE REQUIRED TO BE TESTED IN ACCORDANCE WITH CAN/ULC SIØ2.2 PROVIDED SUCH INSULATION COMPLIES WITH THE REQUIREMENTS OF SECTIONS R302.10.1 AND R302.10.3.

R302.10.3 CELLULOSIC FIBER LOOSE-FILL INSULATION CELLULOSIC FIBER LOOSE-FILL INSULATION SHALL COMPLY WITH CPSC 16 CFR, PARTS 1209 AND 1404. EACH PACKAGE OF SUCH INSULATING MATERIAL SHALL BE CLEARLY LABELED IN ACCORDANCE WITH CPSC 16 CFR, PARTS 1209 AND 1404.

R302.10.1 EXPOSED ATTIC INSULATION EXPOSED INSULATION MATERIALS INSTALLED ON ATTIC FLOORS SHALL HAVE A CRITICAL

RADIANT FLUX NOT LESS THAN 0.12 WATT PER SQUARE CENTIMETER. R302.10.5 TESTING TESTS FOR CRITICAL RADIANT FLUX SHALL BE MADE IN ACCORDANCE WITH ASTM E 970.

CONTROL EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, PENETRATIONS IN FLOORS, ROOFS AND WALLS AND ALL SIMILAR OPENINGS SHALL BE SEALED, CAULKED, GASKETED OR WEATHERSTRIPPED TO LIMIT AIR LEAKAGE. R102.1 VAPOR RETARDERS

CLASS I OR II VAPOR RETARDERS ARE REQUIRED ON THE INTERIOR SIDE OF FRAME WALLS IN CLIMATE ZONES 5, 6, 1, 8, AND MARINE 4. EXCEPTIONS:

BASEMENT WALLS

BELOW-GRADE PORTRION OF ANY WALL CONSTRUCTION WHERE MOISTURE OR ITS FREEZING WILL NOT DAMAGE THE MATERIALS.

R702.7.1 CLASS III VAPOR RETARDER CLASS CLASS III VAPOR RETARDERS SHALL BE PERMITTED WHERE ANY ONE OF THE CONDITIONS IN TABLE RTØ2.7.1 IS MET

R102.1.2 MATERIAL VAPOR RETARDER CLASS. THE VAPOR RETARDER CLASS SHALL BE BASED ON THE MANUFACTURER'S CERTIFIED TESTING OR TESTED ASSEMBLY. THE FOLLOWING SHALL BE DEEMED TO MEET THE CLASS

SPECIFIED: CLASS I: SHEET POLYETHYLENE, UNPERFORATED ALUMINUM FOIL CLASS II: KRAFT-FACED FIBERGLASS BATTS.

CLASS III: LATEX OR ENAMEL PAINT. R102.1.3 MINIMUM CLEAR AIRSPACES AND VENTED OPENINGS FOR VENTED CLADDING. FOR THE PURPOSES OF THIS SECTION, VENTED CLADDING SHALL INCLUDE THE FOLLOWING MINIMUM CLEAR AIRSPACES, OTHER OPENING WITH THE EQUIVALENT VENT AREA SHALL BE

I. VINYL LAP OR HIRIZONTAL ALUMINUM SIDING APPLIED OVER A WEATHER-RESISTIVE BARRIER AS SPECIFIED IN TABLE RT03.3(1.).

2. BRICK VENEER WITH A CLEAR AIRSPACE AS SPECIFIED IN TABLE R703.8.4

3. OTHER APPROVED VENTED CLADDINGS. WSEC R402.4 AIR LEAKAGE (MANDATORY) THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN

ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS OF R402.4.1 THROUGH R402.4.4. THE BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR

### LEAKAGE RATE NOT EXCEEDING 5 AIR EXCHANGES PER HOUR.

IN COMBUSTIBLE CONSTRUCTION WHERE THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR/CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1,000 SQUARE FEET. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS. WHERE THE ASSEMBLY IS ENCLOSED BY A FLOOR MEMBRANE ABOVE AND A CEILING

DRAFTSTOPPING SHALL BE PROVIDED IN FLOOR/CEILING ASSEMBLIES UNDER THE FOLLOWING CIRCUMSTANCES:

1. CEILING IS SUSPENDED UNDER THE FLOOR FRAMING

2. FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN-WEB OR PERFORATED MEMBERS.

R302.12.1 MATERIALS.DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN 1/2" GYPSUM BOARD, 3/8" WOOD STRUCTURAL PANELS OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED. DRAFTSTOPPING SHALL BE INSTALLED PARALLEL TO THE FLOOR FRAMING MEMBER UNLESS OTHERWISE APPROVED BY THE BUILDING OFFICIAL. THE INTEGRITY OF THE DRAFTSTOPS SHALL BE MAINTAINED.

### FIREBLOCKING:

IN COMBUSTIBLE CONSTRUCTION, FIREBLOCKING SHALL BE PROVIDED TO CUT OFF BOTH VERTICAL AND HORIZONTAL CONCEALED DRAFT OPENINGS 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

1. 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 FT.

2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL 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.(1/2" GWB) 4. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES 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 RID03.19. 6. FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPARATION. FIREBLOCKING SHALL CONSIST OF MATERIALS LISTED IN IRC

SECTION R 302.11.1 LOOSE FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIREBLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED.

APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE-FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. SELF-ADHERED T MEMBRANES USED AS FLASHING SHALL COMPLY WITH AAMA 1111. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS:

1. EXTERIOR WINDOW AND DOOR OPENINGS. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL BE INSTALLED IN ACCORDANCE WITH ONE OR MORE OF THE FOLLOWING. I.I THE FENESTRATION MANUFACTURE'S INSTALLATION AND FLASHING INSTRUCTIONS, OR FOR APPLICATIONS NOT ADDRESSED IN THE FENESTRATION MANUFACTURERS INSTRUCTIONS. WHERE FLASHING INSTRUCTIONS OR DETAILS ARE NOT PROVIDED, PAN FLASHING SHALL BE INSTALLED AT THE STILL OF EXTERIOR WINDOW AND DOOR OPENINGS. PAN FLASHING SHALL BE SEALED OR SLOPED IN SUCH A MANNER AS TO DIRECT WATER TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE. OPENINGS USING PAN FLASHING SHALL ALSO INCORPORATE FLASHING OR PROTECTION AT THE HEAD AND SIDES. 1.2 IN ACCORDANCE WITH THE FLASHING DESIGN OR METHOD OF A REGISTERED DESIGN PROFESSIONAL. 1.3. IN ACCORDANCE WITH OTHER APPROVED METHODS.

2. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES

UNDER STUCCO COPINGS. 3. UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.

4. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM. 5. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION.

6. AT WALL AND ROOF INTERSECTIONS. 7. AT BUILT-IN GUTTERS.

WEATHER RESISTIVE SHEATHING PAPER: R703.2 WATER-RESISTIVE BARRIER, ONE LAYER OF NO. 15 ASPHALT FELT, FREE FROM HOLES AND BREAKS, COMPLYING WITH ASTM D 226 FOR TYPE I FELT OR OTHER APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES (51 MM). WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6 INCHES (152 MM). THE FELT OR OTHER APPROVED MATERIAL SHALL BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES IN A MANNER TO MEET THE REQUIREMENTS OF THE EXTERIOR WALL ENVELOPE AS DESCRIBED IN SECTION RTØ3.1.1

### EXTERIOR DOORS, WINDOWS AND SKYLIGHTS

## PER 2018 WIASHINGTON STATE ENERGY CODE

WINDOWS SHALL BE INSTALLED AND FINISHED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, WRITTEN INSTALLATION INSTRUCTIONS SHALL BE PROVIDED BY THE MANUFACTURER FOR EACH WINDOW. ALL SKYLIGHTS AND SKY WALLS TO BE LAMINATED GLASS UNLESS NOTED OTHERWISE SECTION R310-EMERGENCY ESCAPE AND RESCUE OPENINGS

### R310.1 EMERGENCY ESCAPE AND RESCUE OPENING REQUIRED.

BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE NOT LESS THAN ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING, WHERE BASEMENTS CONTAIN MORE THAN ONE SLEEPING ROOMS, AN EMERGENCY ESCAPE AND RESCUE OPENING SHALL BE REQUIRED IN EACH SLEEPING ROOM. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY TO A PUBLIC WAY, OR TO A YARD OR COURT THAT OPENS TO A

EXCEPTION: STORM SHELTERS OR BASEMENTS USED ONLY TO HOUSE MECHANICAL EQUIPMENT NOT EXCEEDING A TOTAL FLOOR AREA OF 200 SQ FT.

MINIMUM OPENING AREA: ALL THE EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MIN. NET CLEAR OPENING OF 5.7 SQ. FT. EXCEPTION: GRADE FLOOR OPENINGS SHALL HAVE A MIN. 5.0 SQ. FT.

MINIMUM OPENING HEIGHT: THE MIN. NET CLEAR OPENINGS HEIGHT SHALL BE 24 INCHES. MINIMUM OPENING WIDTH: THE MIN NET CLEAR OPENING WIDTH SHALL BE 20 INCHES.1/2 MAXIMUM SILL HEIGHT: WHERE A WINDOW IS PROVIDED AS THE EMERGENCY ESCAPE AND RESCUE OPENING, IT SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44" ABOVE THE FLOOR, WHERE THE SILL HEIGHT IS BELOW GRADE, IT SHALL BE PROVIDED WITH HA WINDOW WELL IN ACCORDANCE WITH SEC. R310.2.3.

SAFETY GLAZING SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS OR AS OTHERWISE REQUIRED PER IRC SECTION R308.4

1. GLAZING IN DOORS - SIDE HINGED DOORS, SLIDING GLASS DOORS AND PANELS IN SLIDING, & BIFOLD DOOR ASSEMBLIES PER IRC SECTION R308.4.1. 2. GLAZING ADJACENT TO DOORS - PANELS WITHIN THE 24" OF EITHER SIDE OF THE DOOR IN CLOSED POSITION PER IRC SECTION R308.4.2

3. GLAZING IN WINDOWS - THE PANE IS LARGER THAN 9 SQ. FT., THE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR, THE TOP EDGE 15 MORE THAN 36" ABOVE THE FLOOR, AND ONE OR MORE WALKING SURFACES, ARE WITHIN 36", MEASURED HORIZONTALLY AND IN A STRAIGHT LINE OF THE GLAZING PER IRC SECTION R308.4.4.

4. GLAZING IN GUARDS AND RAILS PER IRC SECTION R308.4.4. 5. GLAZING IN WET SURFACES - WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS, AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE IS LESS THAN 60" MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE PER IRC SECTION

6. GLAZING ADJACENT TO STAIRS AND RAMPS - WHERE THE BOTTOM EXPOSED EDGE IS LESS THAN 36" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDING BETWEEN FLIGHTS OF STAIRS AND RAMPS PER IRC SECTION R308.4.6. 7. GLAZING ADJACENT TO THE BOTTOM STAIR LANDING - WHERE THE GLAZING IS LESS THAN 36" ABOVE THE LANDING AND WITHIN A 60" HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING PER IRC SECTION R308.4.7.

### INSPECTIONS AND ENFORCEMENT

A PERMANENT CERTIFICATE SHALL BE COMPLETED BY THE BUILDER OR REGISTERED DESIGN PROFESSIONAL AND POSTED ON A WALL IN THE SPACE WHERE THE FURNACE IS LOCATED, A UTILITY ROOM, OR AN APPROVED LOCATION INSIDE THE BUILDING. WHEN LOCATED ON AN ELECTRICAL PANEL, THE CERTIFICATE SHALL NOT COVER OBSTRUCT THE VISIBILITY OF THE CIRCUIT DIRECTORY LABEL, SERVICE DISCONNECT LABEL, OR OTHER REQUIRED LABELS. THE CERTIFICATES SHALL LIST THE PREDOMINANT R-VALUES OF THE INSULATION INSTALLED IN OR ON CEILING/ROOF, WALLS, FOUNDATION (SLAB, BELOW-GRADE WALL, AND/OR FLOOR) AND DUCTS OUTSIDE CONDITIONED SPACES: U-FACTORS FOR FENESTRATION AND THE SOLAR HEAT GAIN COEFFICIENT (SHGC) OF FENESTRATION, AND THE RESULTS FROM ANY REQUIRED DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE DONE ON THE BUILDING, WHERE THERE IS MORE THAN ONE VALUE FOR EACH COMPONENT, THE CERTIFICATES SHALL LIST THE VALUE COVERING THE LARGEST AREA. THE CERTIFICATES SHALL LIST "GAS-FIRED UNVENTED ROOM HEATER," "ELECTRIC FURNACE" OR "BASEBOARD ELECTRIC HEATER," AS APPROPRIATE AN EFFICIANCY SHALL NOT BE LISTED FOR GAS-FIRED UNVENTED ROOM HEATERS, ELECTRIC FURNACES OR ELECTRIC BASEBOARD HEATERS.

### DUCT LEAKAGE TESTING:

DUCTS SHALL BE LEAK TESTED IN ACCORDANCE WITH WGU RS-33, USING THE MAXIMUM DUCT LEAKAGE RATES SPECIFIED IN 2018 WSEC SEC. R403.3.3. A WRITTEN REPORT OF THE RESULTS SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE

### BUILDING AIR LEAKAGE TESTING 2018 WSEC SEC. R402.4

THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.4.1 THROUGH R402.4.4.

A. CONTRACTOR SHALL PROVIDE ATTIC VENTILATION AS PER CODE. B. PROVIDE FLASHING AT ALL VALLEYS, PITCH CHANGES, AND AT VERTICAL PLANES. C. PROVIDE FLASHING AND COUNTER FLASHING AT CHIMNEYS A MIN. OF 8" ABOVE ROOF SHEATHING AND CRICKETS AS SHOWN.

D. RAFTERS WILL BEAR DIRECTLY ON TRUSSES OR BLOCKING BETWEEN THE TRUSSES. E. HEADERS TO BE A MIN. 4x8 DF#2, U.N.O. F. PROVIDE DOUBLE FELT UNDERLAYMENT FOR COMPOSITION ROOFING (TYP.) FOR SLOPES

G. UNDERLAYMENT SHALL BE APPLIED IN SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2", FASTENED SUFFICIENTLY TO HOLD IN PLACE. END LAPS

### VENTILATION CALCULATIONS AND REQUIREMENTS

R806.2: THE TOTAL NET FREE VENTILATING AREA SHALL NOT BE LESS THAN \$\frac{1}{50}\$ OF THE AREA OF THE SPACE VENTILATED EXCEPT THAT REDUCTION OF THE TOTAL AREA TO 300 IS PERMITTED PROVIDED THAT AT LEAST 50% AND NOT MORE THAN 80% OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE THE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS.

VENTILATION GENERAL NOTES:

A. ROOFS TALLER THAN 3' WILL USE BIRD BLOCKING AND AF50 VENTS. B. ROOFS SHORTER THAN 3' WILL USE BIRD BLOCKING AS REQUIRED.

RAKES ON GABLE ENDS MUST EXTEND A MIN. OF 2 INCHES (2") FROM THE SURFACE OF EXTERIOR SIDING MATERIALS.

ENCLOSED ATTIC SPACES AND ENCLOSED RAFTER SPACES OVER ENCLOSED AREAS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN. THE NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED, EXCEPT THAT THE AREA MAY BE 1/300 PROVIDED AT LEAST 40 PERCENT AND NOT MORE THAN 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE ATTIC OR RAFTER SPACE. UPPER VENTILATORS SHALL BE LOCATED NO MORE THAN 3 FEET (914 MM) BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE, MEASURED VERTICALLY, WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. WHERE THE LOCATION OF WALL OR ROOF FRAMING MEMBERS CONFLICTS WITH THE INSTALLATION OF UPPER VENTILATORS, INSTALLATION MORE THAN 3 FEET (914 MM) BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE SHALL BE PERMITTED

BAFFLES ARE INSTALLED BEHIND EAVE VENTS TO PROVIDE A MINIMUM I" AIRSPACE, IN INSULATED AREAS PROVIDE ATTIC VENTILATION FOR ALL ATTIC AREAS EXCEEDING 24 INCHES IN HEIGHT FROM TOP OF INSULATION TO ROOF SHEATHING.

PATIO COVERS CONSTRUCTED OF TRUSSES WILL BE VENTED SIMILAR TO THE ATTIC OVER THE ENCLOSED AREAS.

PATIO COVERS AND DECKS CONSTRUCTED OF RAFTERS WILL BE VENTED AT THE EXTERIOR END WITH VENTED EAVE BLOCKING. FOR PARAPET CONDITIONS, VENTED EAVE BLOCKING IS NOT POSSIBLE AND THEREFORE A SINGLE LINE OF STRIP SOFFIT VENTING WILL BE USED NEAR THE EXTERIOR END OF THE PATIO COVER OR DECK.

#### MAIN ROOF CALCULATIONS 984 SQ. FT ATTIC AREA / 300 = 328 SQ. FT. OF VENTILATION REQUIRED (472.32 SQ. INCHES)

UPPER ROOF VENTING PROVIDED BY AF50 ROOF VENTS (50 SQ. IN. PER VENT) 472.32 SQ. IN x 50% = 236.16 SQ. IN. REQUIRED.

LOWER ROOF VENTING PROVIDED BY BIRDBLOCKING: (4) 2" DIA. HOLES (3.14" E.A.) = (12.5 SQ. INCHES.) AND WITH AF50 ROOF VENTS (50 SQ. IN. PER VENT) 472.32 SQ. IN. x 50% = 236.16 SQ. IN. REQUIRED. PROVIDE (19) BIRDBLOCKS = 237.5 SQ. IN. @ FRONT & REAR OF HOUSE AND NOT WITHIN 2' OF THE SIDES.

PROVIDE (5) AF50 ROOF VENTS = 250 SQ. IN.

LOW ROOF/ GARAGE ROOF CALCULATIONS 632 SQ. FT ATTIC AREA / 300 = 2.10 SQ. FT. OF VENTILATION REQUIRED (303.36 SQ. INCHES)

UPPER ROOF VENTING PROVIDED BY AF50 ROOF VENTS (50 SQ. IN. PER VENT) 303.36 SQ. IN x 50% = 151.68 SQ. IN. RQUIRED. PROVIDE (4) AF50 ROOF VENTS = 200 SQ. IN.

LOWER ROOF VENTING PROVIDED BY BIRDBLOCKING: (4) 2' DIA. HOLES (3.14' EA.) = (12.5 SQ. INCHES.) AND WITH AF50 ROOF VENTS (50 SQ. IN. PER VENT) 303.36 SQ. IN. x 50% = 151.68 SQ. IN. REQUIRED. PROVIDE (13) BIRDBLOCKS = 1625 SQ. IN. @ FRONT &

HOUSE AND NOT WITHIN 2' OF THE SIDES OR 5' SETBACKS.

## \*SEE E-1 FOR WSEC CALCULATIONS\*

### HEATING OPTION 2 - 1.0 CREDITS

#### HEAL FULLY EFFICIENT BUILDING ENVELOPE 13 - 05 CREDITS

PRESCRIPTIVE COMPLIANCE IS BASED ON TABLE R402.1.1 WITH THE FOLLOWING MODIFICATIONS: VERTICAL FENESTRATION U = 0.28 FLOOR R-38

### AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION 2.1 - Ø.5 CREDITS

COMPLIANCE BASED ON R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 3.0 AIR CHANGES PER HOUR, MAXIMUM AT 50 PASCALS OR:

FOR R-2 OCCUPANCIES, OPTIONAL COMPLIANCE BASED ON SECTION R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 0.3 CFM/SF MAXIMUM AT 50 PASCALS AND ALL WHOLE HOUSE VENTILATION REQUIREMENTS AS DETERMINED BY SECTION MI507.3 OF THE INTERNATIONAL RESIDENTIAL CODE OR SECTION 403.8 OF THE INTERNATIONAL MECHANICAL CODE SHALL BE MET WITH A HIGH EFFICIENCY FAN(S) (MAXIMUM Ø.35 WATTS/CFM), NOT INTERLOCKED WITH THE FURNACE FAN (IF PRESENT). VENTILATION SYSTEMS USING A FURNACE INCLUDING AN ECM MOTOR ARE ALLOWED, PROVIDED THAT THEY ARE CONTROLLED TO OPERATE AT LOW SPEED IN VENTILATION ONLY MODE.

TO QUALIFY TO CLAIM THIS CREDIT, THE BUILDING PERMIT DRAWINGS SHALL SPECIFY THE OPTION BEING SELECTED AND THE MAXIMUM TESTED BUILDING AIR LEAKAGE, AND SHALL SHOW THE QUALIFYING VENTILATION SYSTEM AND ITS CONTROL SEQUENCE OF OPERATION.

#### HIGH EFFICIENCY HVAC 32 - 1.0 CREDITS

HIGH EFFICIENCY HYAC DISTRIBUTION SYSTEM 42 - 10 CREDITS

HEATING AND COOLING EQUIPMENT AND ALL THE DUCTWORK.

AIR-SOURCE CENTRALLY DUCTED HEAT PUMP WITH MINIMUM HSPF OF 9.5. TO QUALIFY TO CLAIM THIS CREDIT, THE BUILDING PERMIT DRAWINGS SHALL SPECIFY THE OPTION BEING SELECTED AND SHALL SPECIFY THE HEATING EQUIPMENT TYPE AND THE MINIMUM EQUIPMENT EFFICIENCY.

OF SECTION R403.3.7. LOCATING SYSTEM COMPONENTS IN CONDITIONED CRAWL SPACES IS NOT PERMITTED UNDER THIS OPTION. ELECTRIC RESISTANCE HEAT AND DUCTLESS HEAT PUMPS ARE NOT PERMITTED UNDER THIS OPTION. DIRECT COMBUSTION HEATING EQUIPMENT WITH AFUE LESS THAN 80% IS NOT PERMITTED UNDER THIS OPTION. TO QUALIFY TO CLAIM THIS CREDIT, THE BUILDING PERMIT DRAWINGS SHALL SPECIFY THE OPTION BEING SELECTED AND SHALL SPECIFY THE HEATING EQUIPMENT TYPE AND SHALL SHOW THE LOCATION OF THE

HYAC EQUIPMENT AND ASSOCIATED DUCT SYSTEM(S) INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS

### EFFICIENT WATER HEATING 5.5 - 2.0 CREDITS

WATER HEATING SYSTEM SHALL INCLUDE ONE OF THE FOLLOWING: ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER III OF NEEA'S ADVANCED WATER HEATING SPECIFICATION OR FOR R-2 OCCUPANCY, ELECTRIC HEAT PUMP WATER HEATER(S), MEETING THE STANDARDS FOR TIER III OF NEEA'S ADVANCED WATER HEATING SPECIFICATION, SHALL SUPPLY DOMESTIC HOT WATER TO ALL UNITS. IF ONE WATER HEATER IS SERVING MORE THAN ONE DWELLING UNIT, ALL HOT WATER SUPPLY AND RECIRCULATION PIPING SHALL BE INSULATED WITH R-8 MINIMUM PIPE INSULATION.

WALL LESS THAN 5' TO A PROPERTY LINE MUST BE 1-HOUR. PROJECTIONS GREATER THAN 2' FEET TO LESS THAN 5' FROM PROPERTY LINE MUST HAVE 1-HOUR FIRE-RESTRICTIVE CONSTRUCTION ON THE UNDERSIDE OR FIRE BLOCKED FROM WALL PLATE TO UNDERSIDE OF ROOF SHEATHING WITH NO VENT OPENINGS.

SETBACKS TO PROPERTY LINES SHALL BE MARKED AT FOOTING INSPECTION. THE CONTRACTOR OF RECORD IS RESPONSIBLE FOR ESTABLISHING THE CORRECT PROPERTY MARKERS AND SETBACKS.

JOBSITE MUST BE POSTED WITH ADDRESSES AND PERMIT NUMBER VISIBLE FROM THE STREET. THE APPROVED PLANS MUST BE KEPT ON THE JOBSITE IN SUCH A WAY THAT THEY ARE EASILY LOCATED AND PROTECTED FROM WATER AND OTHER DAMAGE.

APPROVED PLANS SHALL BE ON SITE AND ACCESSIBLE AT INSPECTION.

ALLOWED WITHIN 4'-0" CLEAR

SHEATHING WITHIN THIS AREA.

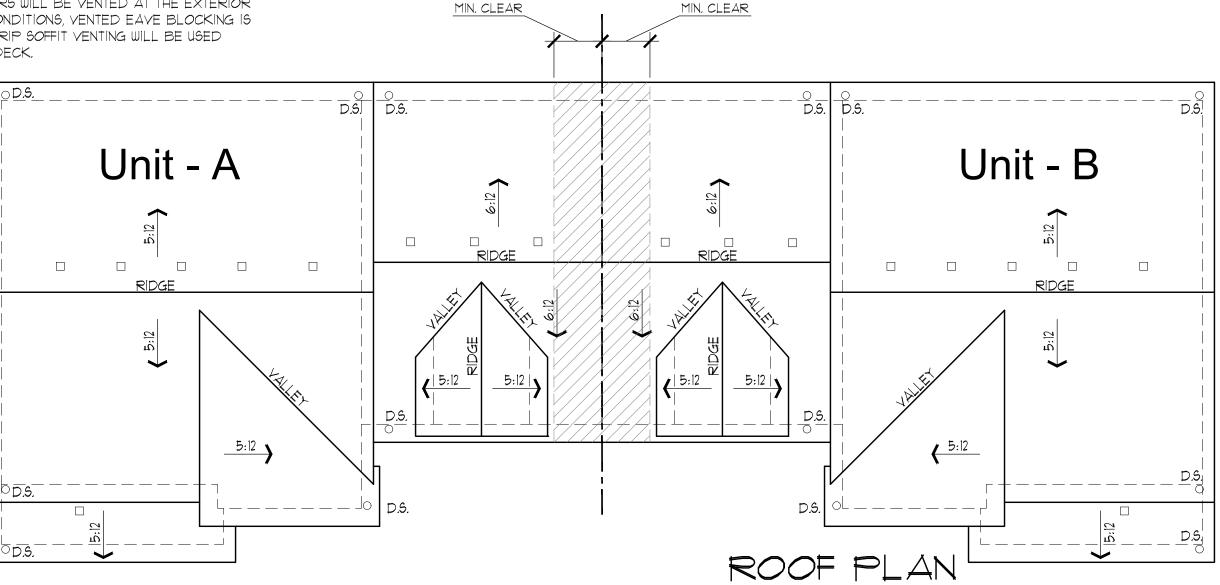
OF SEPARATION WALL. PROVIDE CLASS 'C' ROOF

# Parcel number: 0419095003 Site Address:

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D.S. = DOWNSPOUT

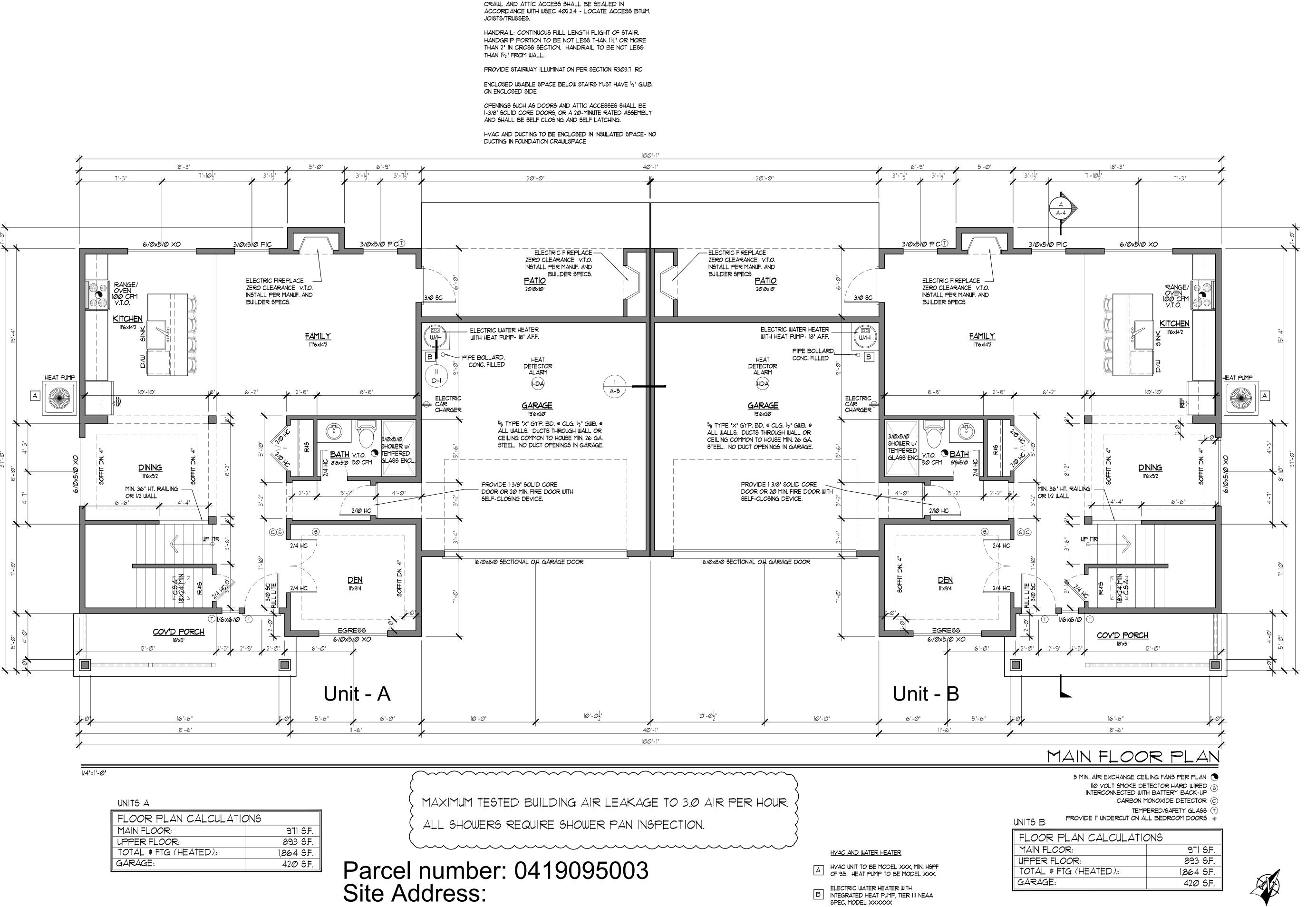
□ = ROOF VENT



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 $\infty$  >

S 94 ate



ANY WINDOW THAT OPENS MORE THAN 4", THAT IS INSTALLED LESS THAT 24" OFF THE FLOOR AND THAT HAS GREATER THEN 12" DROP OUTSIDE MUST HAVE FALL PROTECTION PER R312.2.

SEE ATTACHED ENERGY CODE SHEET FOR CHOSEN ENERGY MEASURE, INSULATION REQ., VENTILATION OPTION CHOSEN

AND OTHER ENERGY CODE COMPLIANCE NOTES.

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CONDITIONS OF LICENSE ACCEPTED BY THE CUSTOMER. USE OF ANY PART OF THE PLANS BY ANY PARTY OTHER THAN THE CUSTOME ON LOAN BY THE CUSTOMER TO THIRD PARTIES NECESSARY TO ASSIST THE CUSTOMER IN USING THE PLANS, SUCH AS CONTRACTOR SUBCONTRACTORS, IS STRICTLY PROHIBITED. THE PLANS MAY NOT BE REJUSED OR COPIED, IN WHOLE OR IN PART, WITHOUT WRITTER FROM RUEPPELL, INC. WHICH RETAINS COPYRIGHTS TO, & OWNERSHIP OF THE PLANS.

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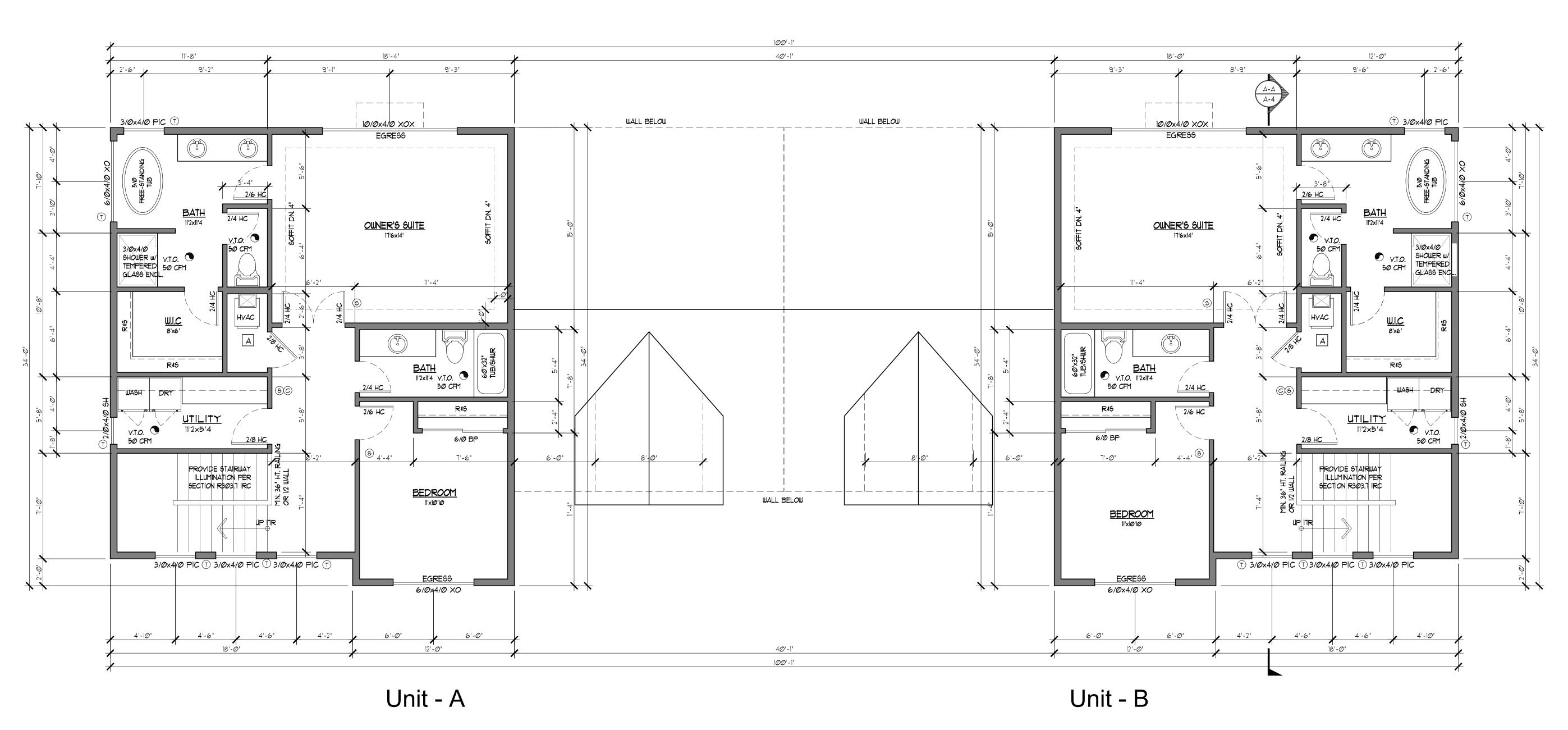
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UNAUTHORIZED USE OR COPYING OF THESE PLANS, OR THE DESIGN THEY DEPICT, INFRINGES RIGHTS UNDER THE COPYRIGHT ACT. IN LABILITIES THAT INCLUDE PENALTIES OF UP TO \$20,000 PER WORK INFRINGES, AND UP TO \$100,000 PER WORK INFRINGED WILL LLY.

**Plan:** 1864-1864 HC HOMES DUPLEX

[ A-1





UPPER FLOOR PLAN

5 MIN. AIR EXCHANGE CEILING FANS PER PLAN

IIØ VOLT SMOKE DETECTOR HARD WIRED (S)
INTERCONNECTED WITH BATTERY BACK-UP

CARBON MONOXIDE DETECTOR (C)

TEMPERED/SAFETY GLASS (T)

PROVIDE I' UNDERCUT ON ALL BEDROOM DOORS \*\*

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1/4"=1'-0"

433 43rd Ave. SW Puyallup, WA. 98373

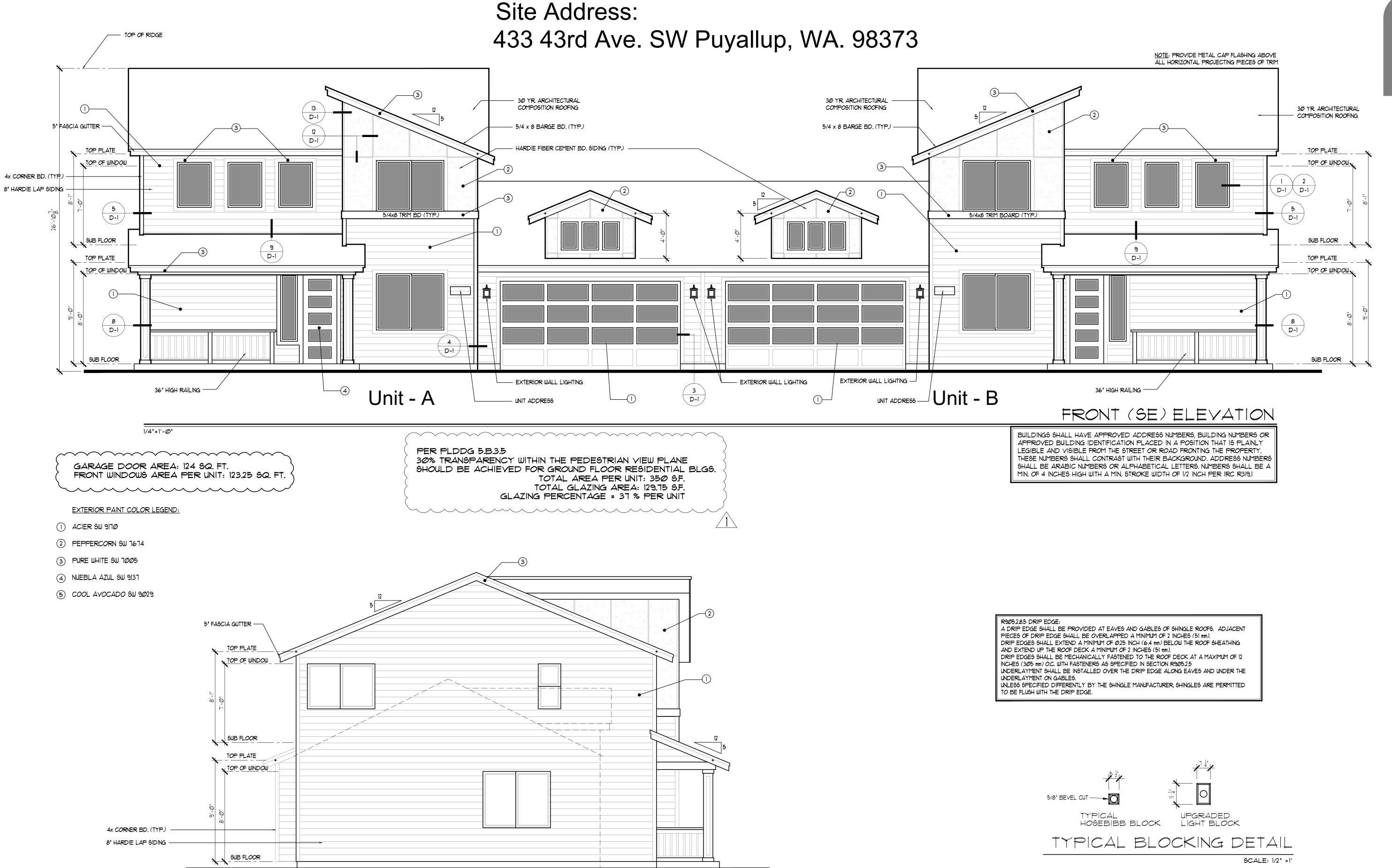
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A GENERAL NOTE AND SPECIFICATIONS SHEET IS ALWAYS AN INTEGRAL PART OF THESE DRAWINGS AND GENERALL

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RIGHT (NE) ELEVATION

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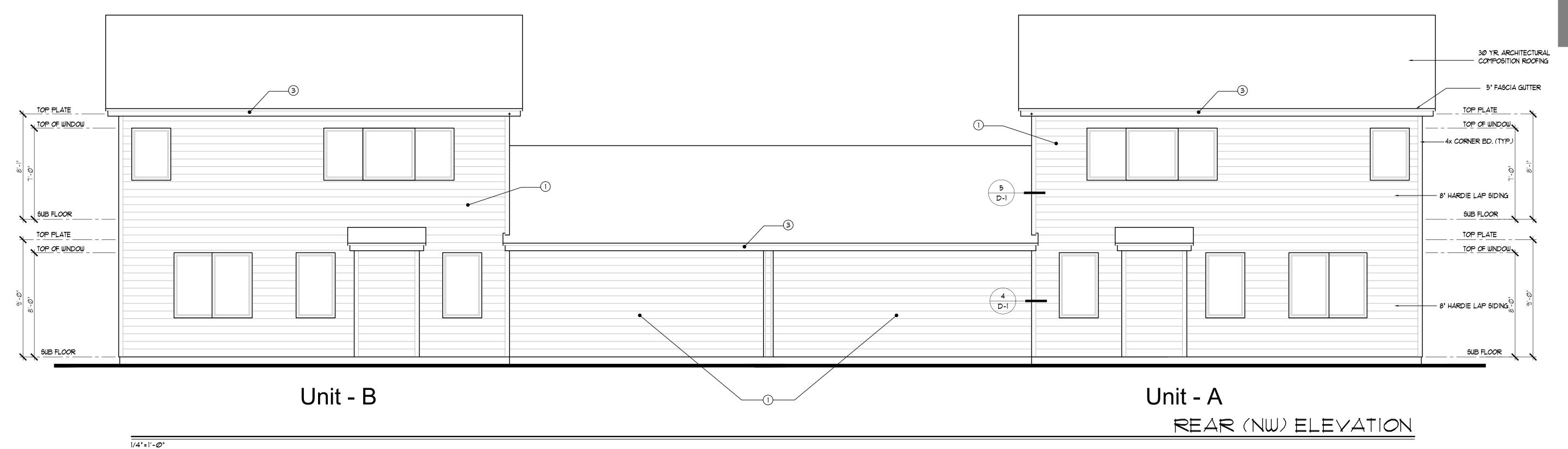
MES DUPLEX
04/11/23
In Date: 03/25/24

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Parcel number: 0419095003

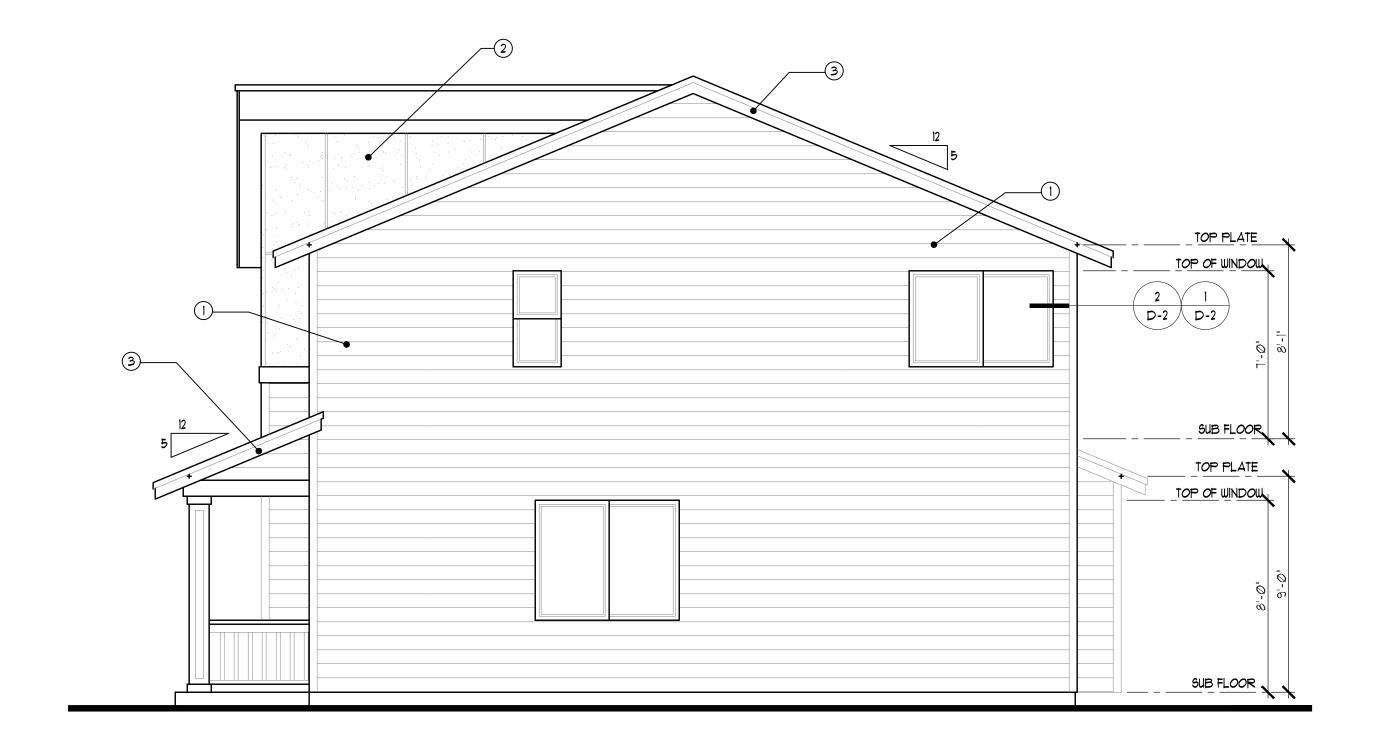
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### EXTERIOR PAINT COLOR LEGEND:

- 1 ACIER SW 9170
- 2 PEPPERCORN SW 1614
- (3) PURE WHITE SW 1005
- (4) NUEBLA AZUL SW 9137 5 COOL AVOCADO SW 9029



ELEVATION NOTES:

1. CONTRACTOR SHALL VERIFY ALL NOTES, MATERIALS AND CONDITIONS PRIOR TO

CONSTRUCTION

CAULK ALL EXTERIOR JOINTS AND PENETRATIONS.

PROVIDE GALVANIZED OR ANODIZED SHEET METAL FLASHING AND COUNTERFLASHING AT ALL ROOF PENETRATIONS, CHIMNEYS, AND SKYLIGHTS.

PROVIDE CONTINUOUS GUTTERS AND DOWNSPOUTS AT ALL EAVES, TYP.

PROVIDE HEADER FLASHING AT ALL DOORS, WINDOWS, AND SHUTTERS PER DETAIL 6. ALL PAPER AND TAPE TO LAP FROM TOP DOWN.

HOLD ALL SIDING MATERIAL 1  $\frac{1}{2}$ " OFF ROOF. 8. HOLD ALL SIDING MATERIAL 6' OFF FINISHED GRADE.

9. SOFFIT ALL FLAT AREAS W/  $1\frac{1}{2}$  OFERHANG AT HORIZONTAL EDGES. 10. METAL FLASHING AT ALL TRIM AND HORIZONTAL SIDING BREAKS.

II. RUN SECOND LAYER OF TAR PAPER VERTICAL AT INTERIOR AND EXTERIOR CORNERS UNLESS TAR PAPER IS CONTINUOUS.

12. FOUNDATION VENTS TO BE SPACED PER PLAN.
13. ALL FOUNDATION VENTS ON STREET SIDE OF HOUSE I.E. FRONT AND/OR SIDE AND GABLE END AND GARAGE FRESH AIR VENTS TO BE LOUVERED.

14. ALL LIGHT BLOCKS ON FACADE TO BE FURRED OUT AN ADDITIONAL  $1\frac{1}{2}$ ".

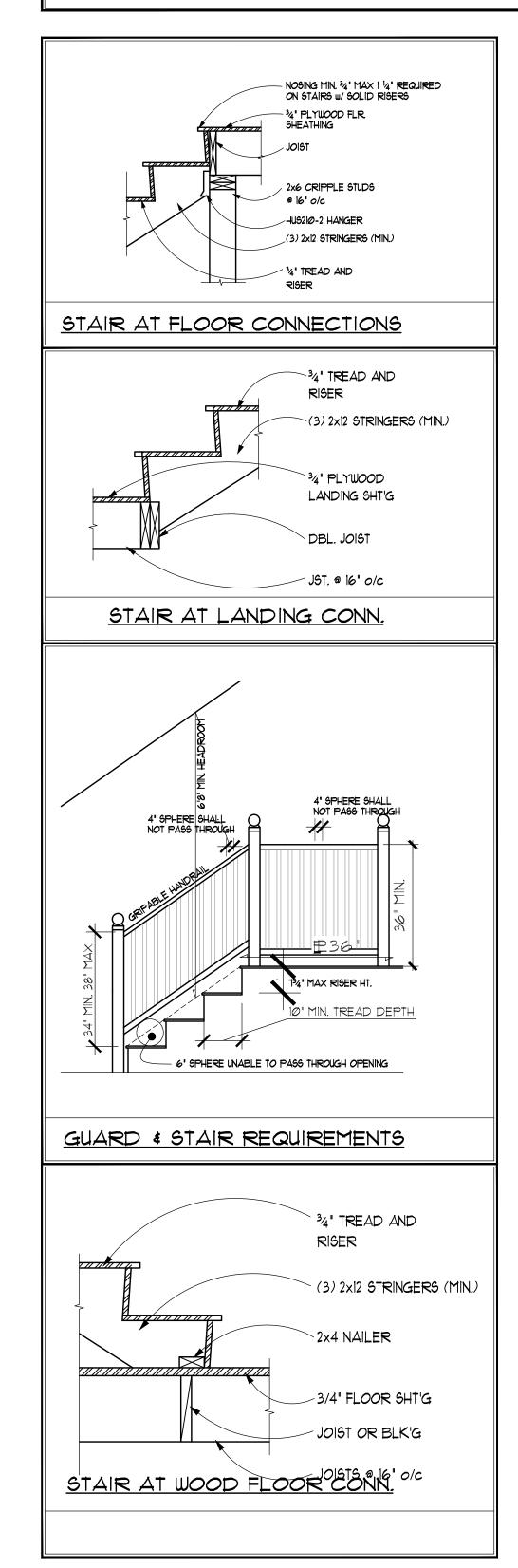
15. GUTTERS TO LAP UNDER DRIP EDGE AT GABLE ENDS, HOLD 1/2" DRIP EDGE CUT 1/4" AWAY

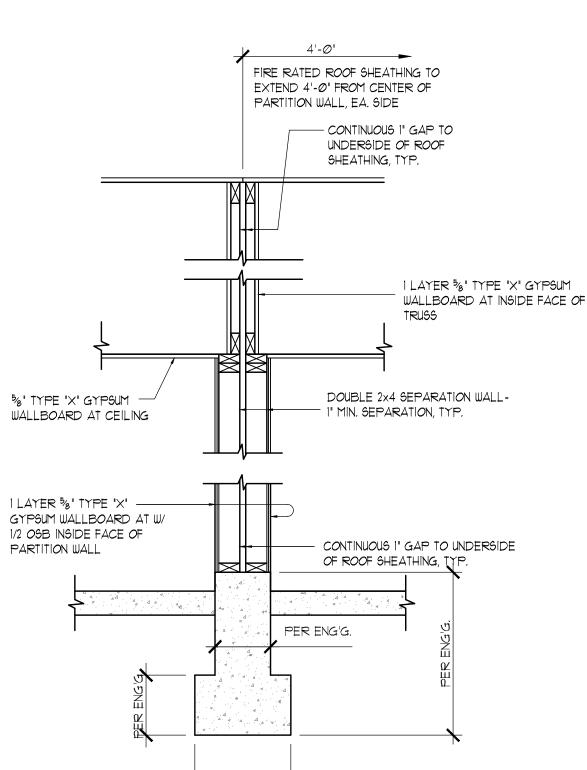
FROM FASCIA TO EXCEPT GUTTERS TO LAP UNDERNEATH. 16. ALL TRIM WORK TO BE APPLIED PRIOR TO SIDING MATERIALS (SIDING TO BUTT UP TO

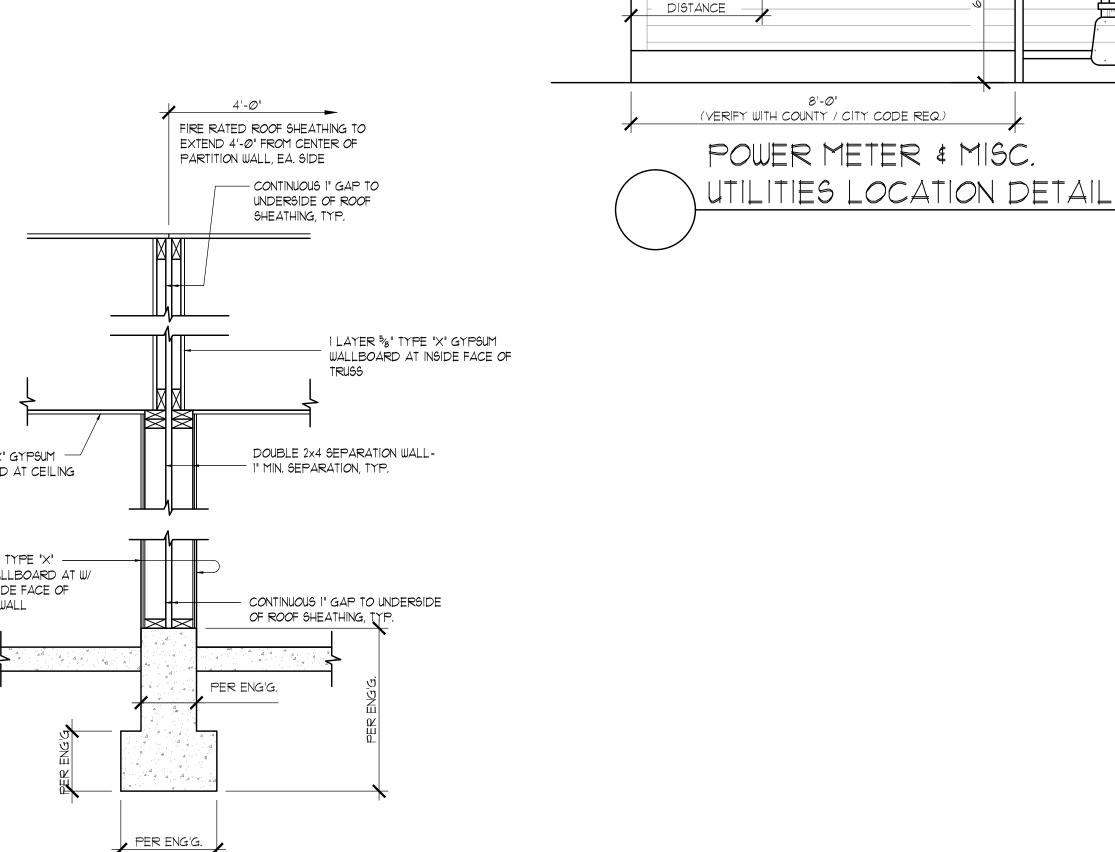
LEFT (SW) ELEVATION

ILLUMINATION NOTES: PER IRC SECTION 303.6, R311.5.7 ALL INTERIOR AND EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE LANDING OF THE STAIRWAY. EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH A LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE TOP OF THE LANDING OF THE STAIRWAY. LIGHTING CONTROLS SHALL BE ACCESSIBLE AT THE TOP AND BOTTOM OF EACH STAIRWAY WITHOUT TRAVERSING ANY STEPS.

4 OR MORE RISERS TO HAVE AT LEAST ONE HANDRAIL RUNNING CONTINUOUSLY THROUGH THE FULL LENGTH OF STAIR. 34" MIN. HT., 38" MAX. HT. END SHALL RETURN TO WALL OR NEWEL POST OR VOLUTE. HANDRAIL MUST BE STRONG ENOUGH TO RESIST A 200 LB. PT. LOAD IN ANY DIRECTION. HANDRAIL TO BE PRESENT ON AT LEAST ONE SIDE OF STAIR. HANDGRIP PORTION OF HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION OF 11/4" MIN. \$ 23/4" MAX. EDGES SHALL HAVE A MIN. RADIUS OF 1/8". ALL REQ. GUARDRAILS TO BE 36" MIN. IN HEIGHT. 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  $2^{1}/4$ INCHES (57 MM).

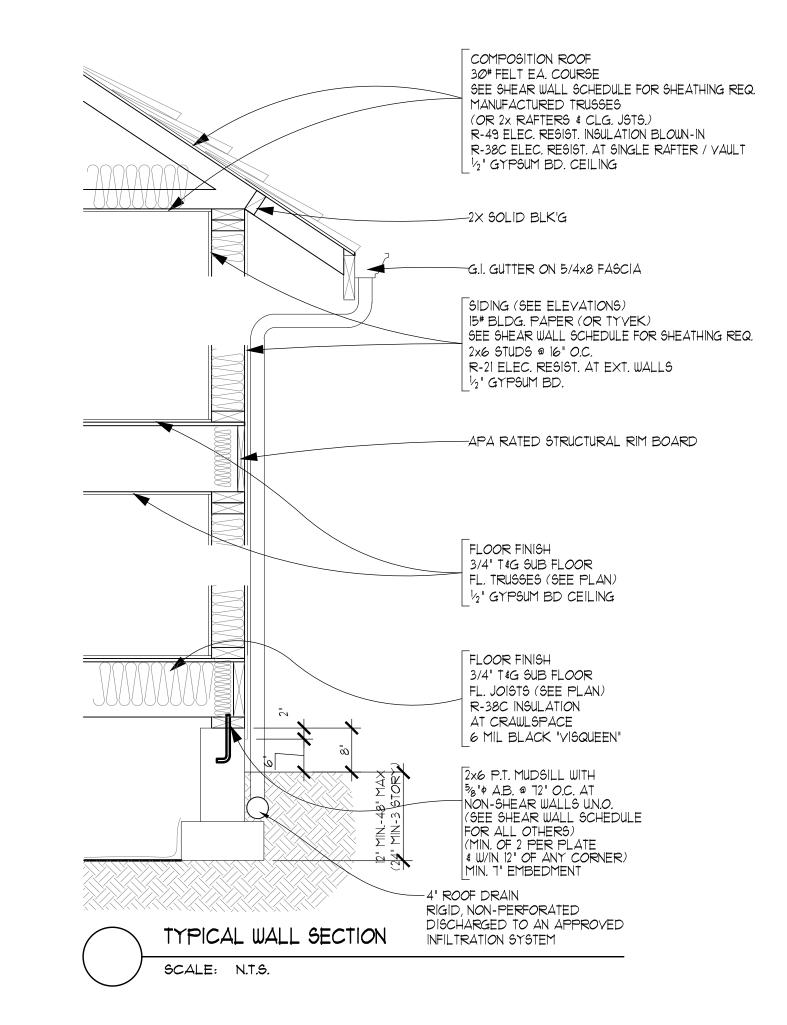


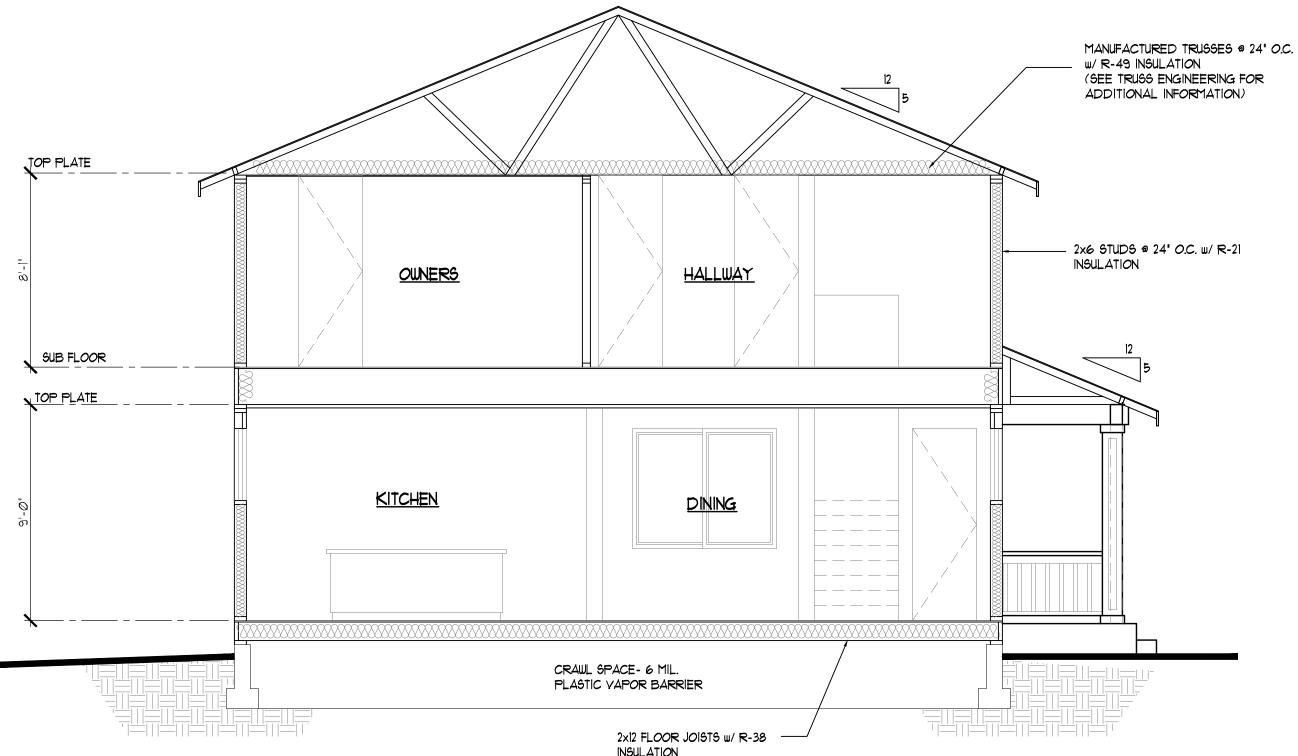




DISTANCE

WITHIN 4'-0"





N.T.S.



SOUND GYPSUM WALLBOARD, WOOD STUDS ONE LAYER %" TYPE "X" GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF DOUBLE ROW OF 2x4 WOOD STUDS 16" O.C. ON SEPARATE PLATES 1" APART WITH 6d COATED NAILS, 11/2" LONG, 0.0915" SHANK, 1/4" JOINTS STAGGERED 16" ON OPPOSITE SIDES. THICKNESS: 91/4" APPROX. WEIGHT: 8 PSF HORIZONTAL BRACING REQUIRED AT MID-HEIGHT. SEE WP 3605 UL R1319-4, -6, 6-17-52 UL R2717-39, 1-20-66 UL R3501-52, 3-15-66, UL DESIGN U305 ULC DESIGN W3Ø1) UL R4024, 10-31-68 SOUND TEST: NRCC TL-93-261, IRC-IR-761, 3/98

Parcel number: 0419095003

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SECTION A

ALL WORK SHALL BE IN ACCORDANCE WITH ALL CODES, RULES AND REGULATIONS OF GOVERNING AGENCIES AND SHALL COMPLY WITH THE REQUIREMENTS OF THE POWER SERVING AND TELEPHONE COMPANIES.

ALL EQUIPMENT INSTALLED OUTDOORS AND EXPOSED TO WEATHER SHALL BE "WEATHER-PROOF".

RECEPTACLES IN KITCHEN AND BATHROOMS SHALL BE INSTALLED ABOVE COUNTER TOP U.N.O. IN THE DRAWINGS.

PROVIDE MINIMUM TWO (2) 20 AMPERE SMALL APPLIANCE CIRCUITS AT THE KITCHEN, DINING ROOM AND/OR BREAKFAST AREAS.

PROVIDE GFI PROTECTION AT BATHROOMS, POWDER ROOMS, OUTDOOR RECEPTACLES, GARAGES AND WITHIN 6 FEET OF THE KITCHEN SINK.

RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY UNBROKEN WALL SPACE IS MORE THAN 6 FEET, MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE. A WALL SPACE SHALL INCLUDE ANY SPACE 2 FEET OR MORE IN WIDTH (INCLUDING SPACE MEASURED AROUND CORNERS) AND UNBROKEN ALONG THE FLOOR LINE BY DOORWAYS, FIREPLACES, AND SIMILAR OPENINGS.

IN KITCHEN AND DINING AREAS AT LEAST ONE RECEPTACLE SHALL BE INSTALLED AT EACH ISLAND OR PENINSULAR COUNTER SPACE WITH A LONG DIMENSION OF 24" OR GREATER AND A SHORT DIMENSION OF 12

A RECEPTACLE SHALL BE INSTALLED IN USABLE WALL SPACE 2 FEET OR MORE IN WIDTH.

RECEPTACLES AND SWITCHES BACK TO BACK IN FIRE SEPARATION WALLS MUST MAINTAIN SEPARATE BAYS.

ALL EQUIPMENT AND MATERIALS FURNISHED AND INSTALLED UNDER THIS SECTION, SHALL BE GUARANTEED BY THE TRADE PARTNER FOR A PERIOD OF TWO YEARS FROM THE DATE OF ACCEPTANCE OF THE WORK.

PROVIDE TWO METHODS OF GROUNDING CLAMP AT HOSEBIBB

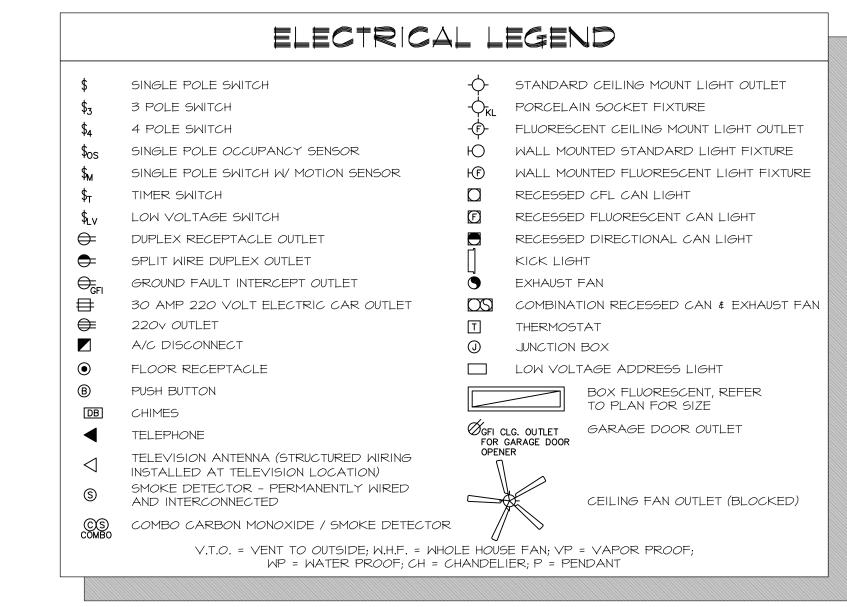
ONE ADDITIONAL #4 BAR, 20-FEET LONG IN FOOTING AT ELECTRICAL METER LOCATION FOR UFFER GROUND.

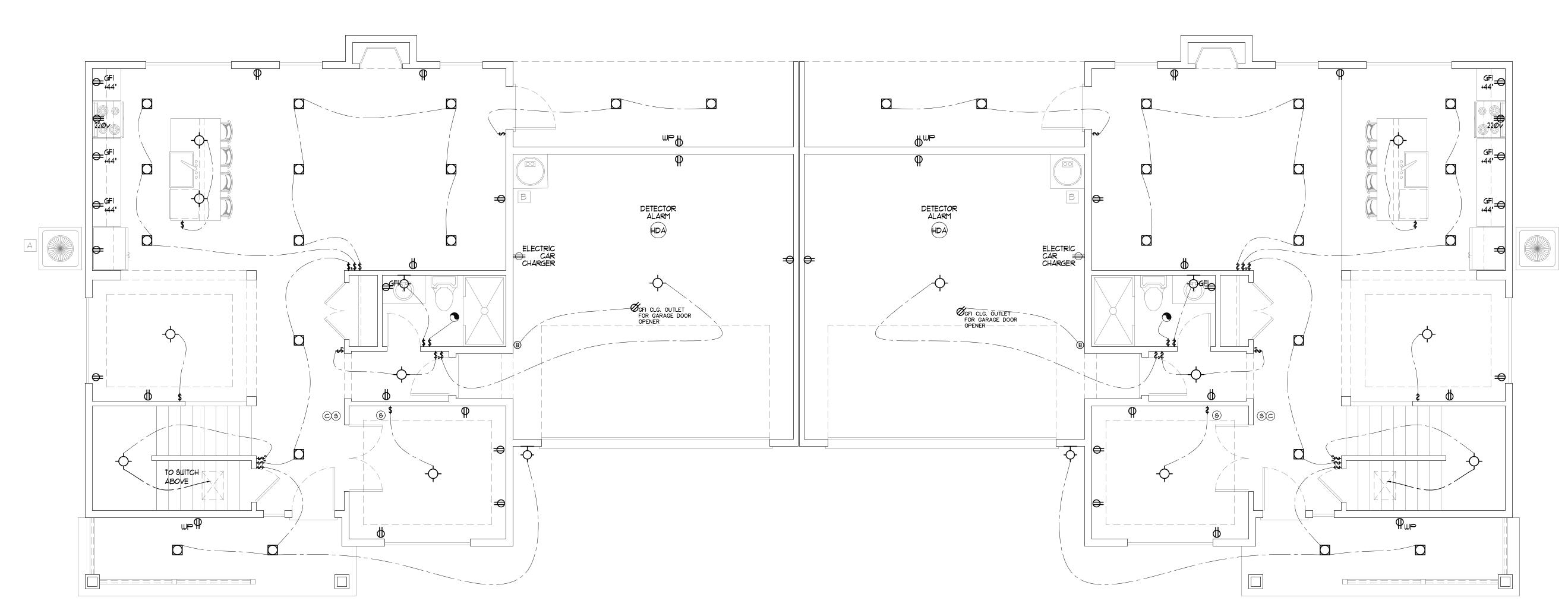
RECEPTACLE OUTLETS FOR RANGES AND CLOTHES DRYERS SHALL BE A 3-POLE WITH GROUND TYPE. FOURWIRE, GROUNDING-TYPE FLEXIBLE CORDS WILL BE REQUIRED FOR CONNECTION OF RANGES AND CLOTHES DRYERS. THE BONDING JUMPER SHALL NOT BE CONNECTED BETWEEN THE NEUTRAL TERMINAL AND THE FRAME OF THE APPLIANCE.

PROVIDE A MIN. OF TWO 20-AMPERE-RATED BRANCH CIRCUITS FOR RECEPTACLES LOCATED IN THE KITCHEN, PANTRY, BREAKFAST, AND DINING AREAS, A SEPARATE 20-AMPERE-RATED BRANCH CIRCUIT TO THE LAUNDRY, AND A SPEARATE 20-AMPERE-RATED BRANCH CIRCUIT FOR BATHROOM RECEPTACLE(S).

PER IRC E3902.16, ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE PHASE 15 OR 20 AMPEREE OUTLETS INSTALLED IN DWELLING SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER.

PANEL AND CIRCUIT BREAKERS SHALL BE INSPECTED. 2--5 NEC 210-12, (a) AND (b), ARC-FAULT CIRCUIT INTERRUPTER PROTECTION.





MAIN FLOOR ELECTRICAL PLAN

5 MIN. AIR EXCHANGE CEILING FANS PER PLAN (1) 10 VOLT SMOKE DETECTOR HARD WIRED (6) INTERCONNECTED WITH BATTERY BACK-UP

No.

PREPARES ITS PLANS CAREFULLY FOR THE USE OF ITS CUSTOMERS. HOWEVER, ADAPTATION OF THE PLANS TO MEET EAND COAL BUILDING CODES AND REGULATIONS, AND SPECIFIC CONDITIONS, IS THE RESPONSIBILITY OF THE CONTRA WILL NOT BE RESPONSIBILITY OF THE CONTRA THE ACCURACY AND OVERALL INTEGRITY OF THE PLANS E PAID FOR THEIR USE. THE CONTRACTOR, THEREFORE, MUST CAREFULLY INSPECT ALL DIMENSIONS AND DETAILS IN THIS SIONS.

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C HOMES DUPLEX ate: 04/11/23 evision Date: 09/20/23

A-6

ALL WORK SHALL BE IN ACCORDANCE WITH ALL CODES, RULES AND REGULATIONS OF GOVERNING AGENCIES AND SHALL COMPLY WITH THE REQUIREMENTS OF THE POWER SERVING AND TELEPHONE COMPANIES.

ALL EQUIPMENT INSTALLED OUTDOORS AND EXPOSED TO WEATHER SHALL BE "WEATHER-PROOF".

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PROVIDE TWO METHODS OF GROUNDING CLAMP AT HOSEBIBB

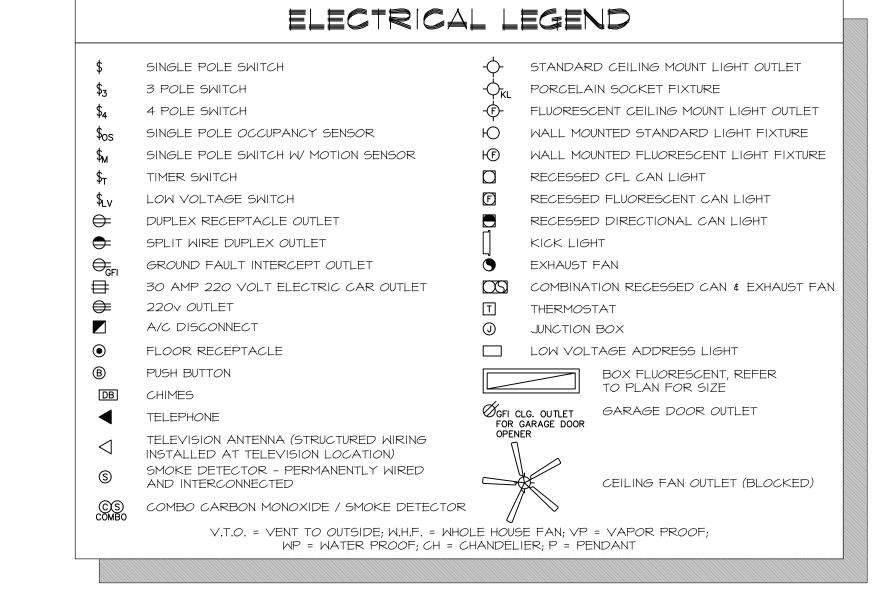
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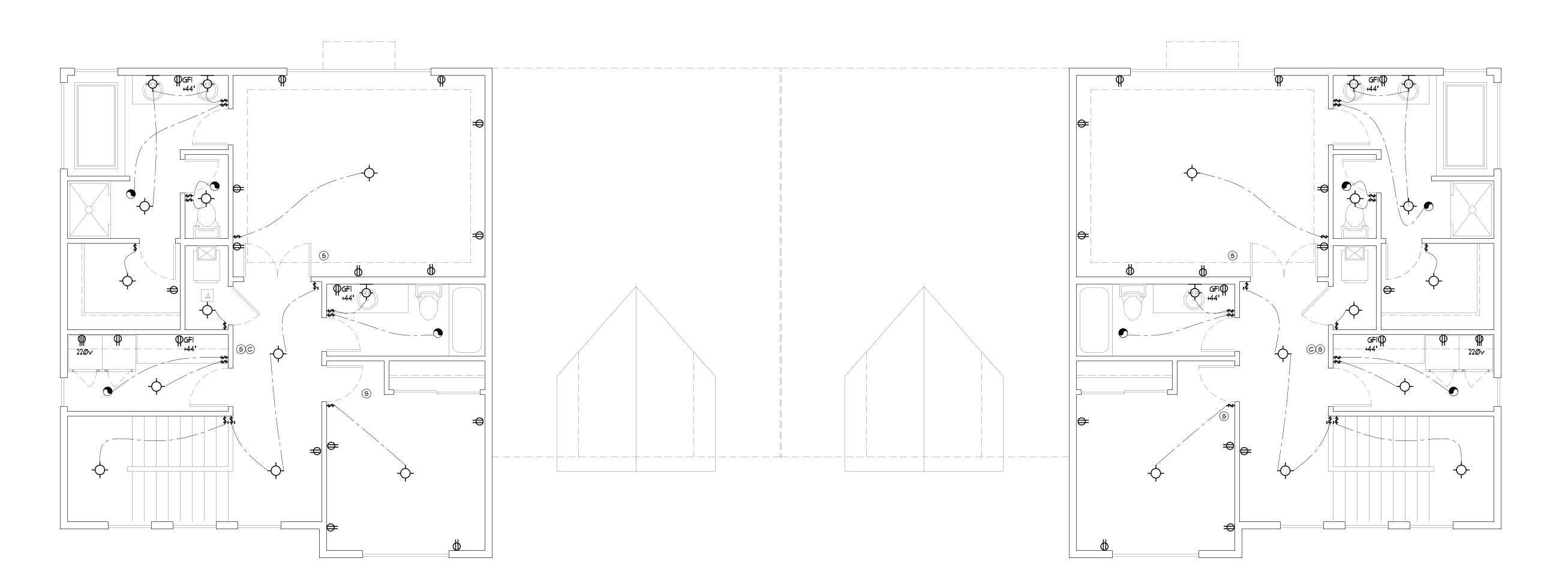
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UPPER FLOOR ELECTRICAL PLAN

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110 YOLT SMOKE DETECTOR HARD WIRED (6)
INTERCONNECTED WITH BATTERY BACK-UP

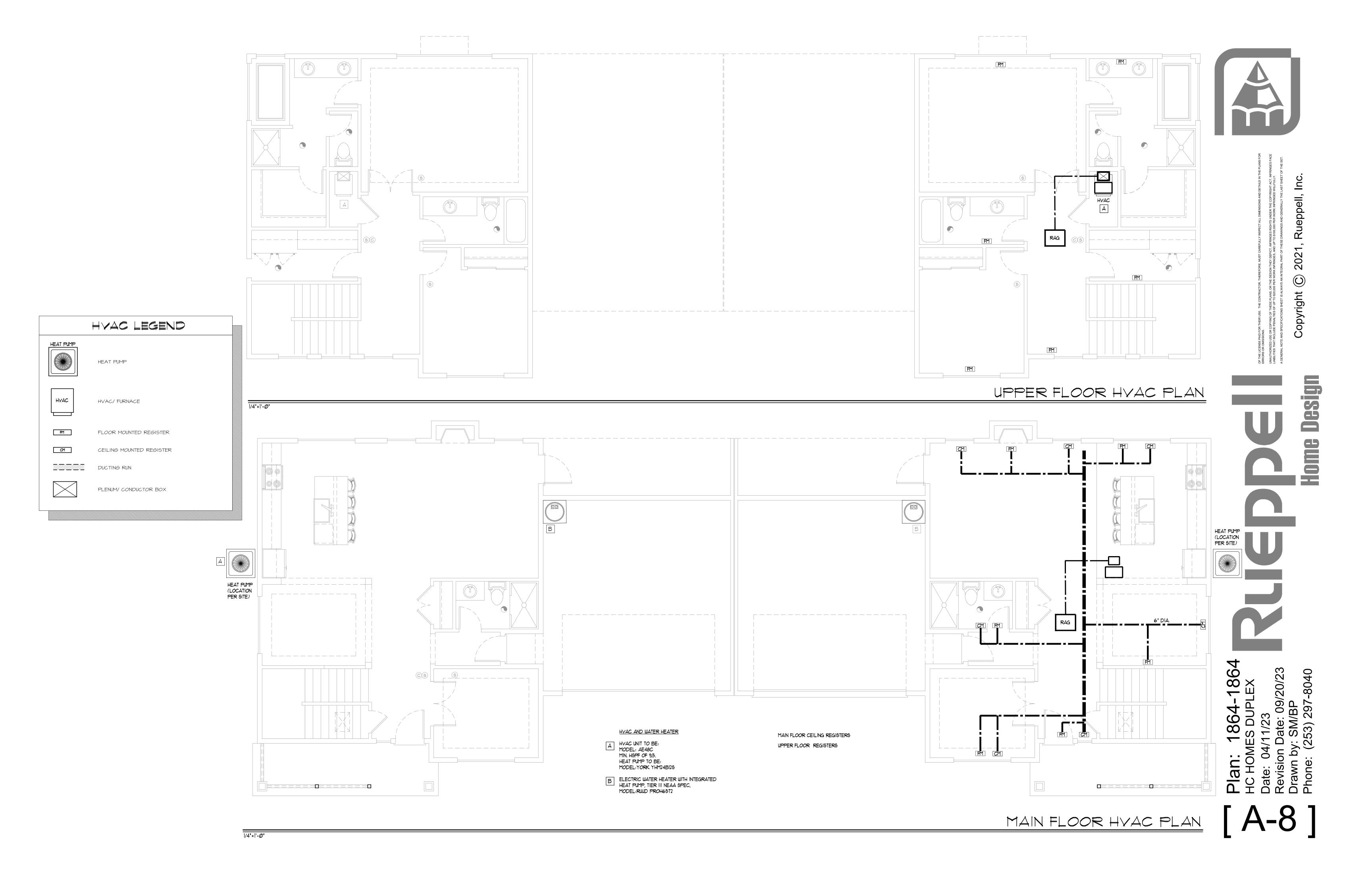


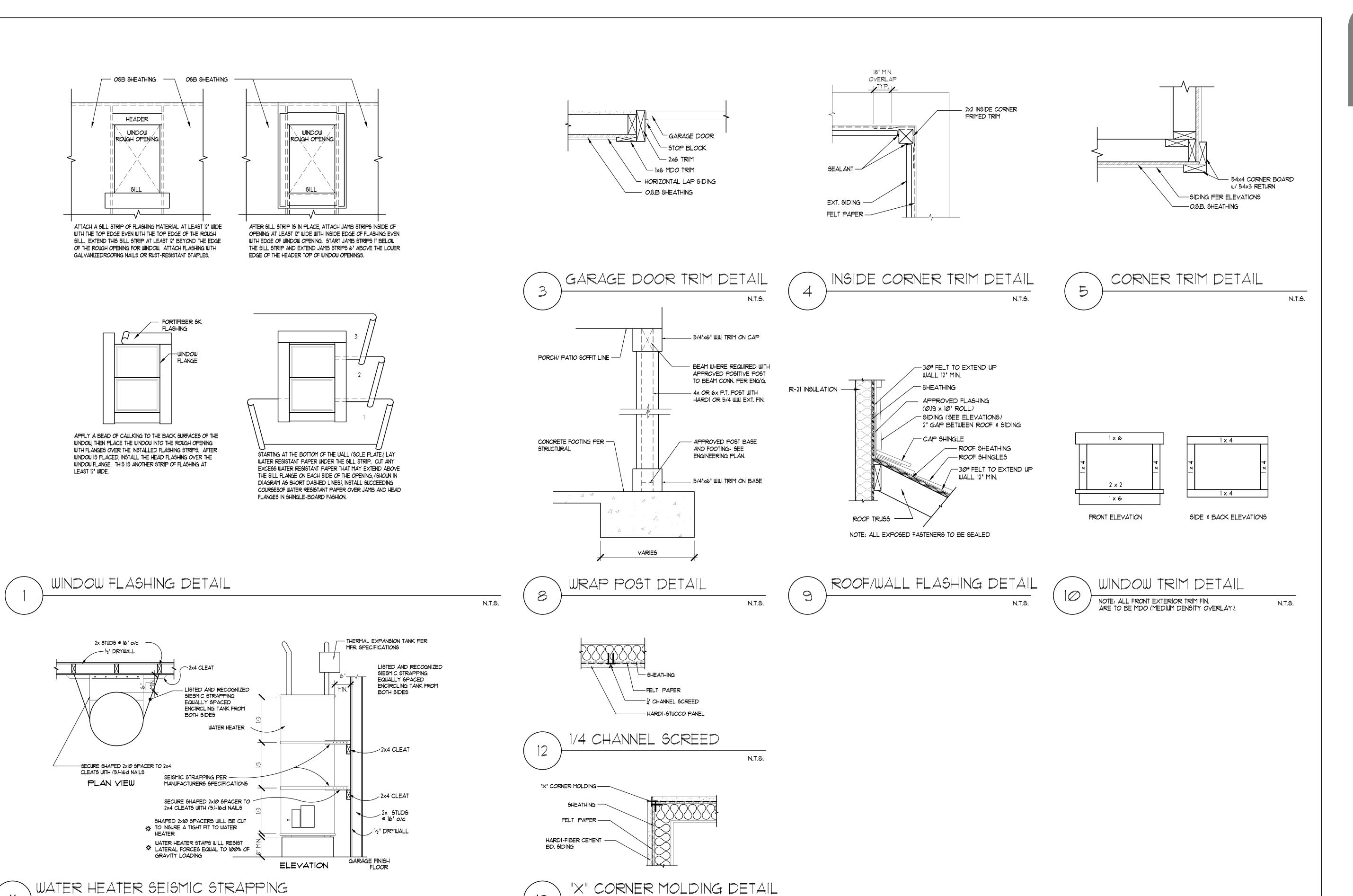
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Revision Date: 09/20/23
Drawn by: SM/BP
Phone: (253) 297-8040

A-7



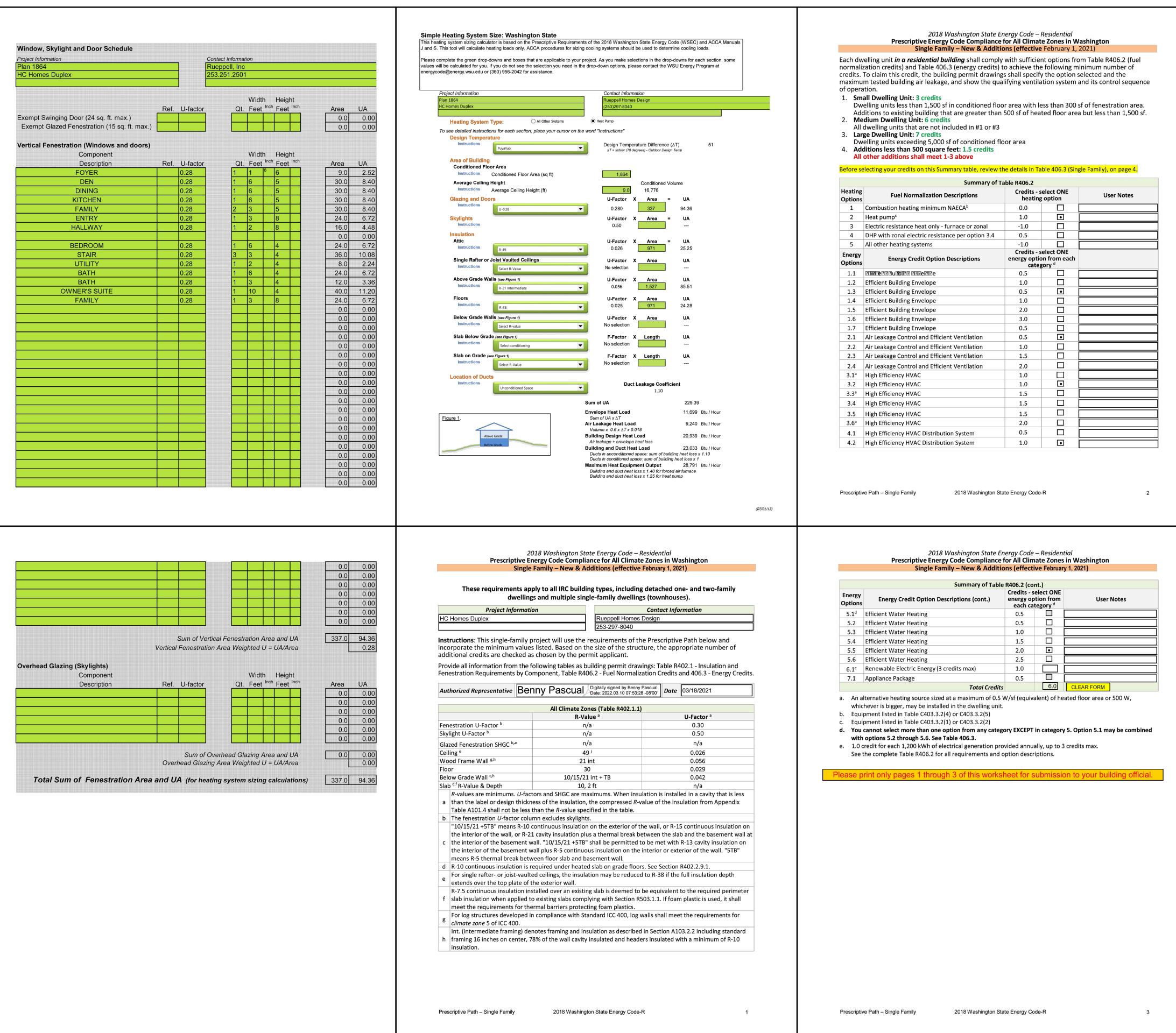


N.T.S.

N.T.S.

HC HOMES DUPLEX
Date: 04/11/23
Revision Date: 09/20/23
Drawn by: SM/BP
Phone: (253) 297-8040

864 :×



MECHANICAL

HEATING EQUIPMENT ALL WARM-AIR FURNACES SHALL BE LISTED AND LABELED BY AN APPROVED AGENCY AND INSTALLED TO LISTED SPECIFICATIONS. NO WARM-AIR FURNACES SHALL BE INSTALLED IN A ROOM USED OR DESIGNED TO BE USED AS A BEDROOM, BATHROOM, CLOSET OR IN ANY ENCLOSED SPACE WITH ACCESS ONLY THROUGH SUCH ROOM OR SPACE, EXCEPT DIRECT VENT FURNACE, ENCLOSED FURNACES AND ELECTRIC HEATING FURNACES.

LIQUIFIED PETROLEUM GAS-BURNING APPLIANCES SHALL NOT BE INSTALLED IN A PIT, BASEMENT OR SIMILAR LOCATION WHERE HEAVIER THAN AIR GAS MIGHT COLLECT. APPLIANCES SO FUELED SHALL NOT BE INSTALLED IN AN ABOVE GRADE UNDER FLOOR SPACE OR BASEMENT UNLESS SUCH LOCATION IS PROVIDED WITH AN APPROVED MEANS FOR REMOVAL OF UNBURNED GAS.

HEATING AND COOLING EQUIPMENT LOCATED IN A GARAGE WHICH GENERATES A GLOW, SPARK OR FLAME CAPABLE OF IGNITING FLAMMABLE VAPORS SHALL BE INSTALLED WITH THE PILOTS AND BURNERS FOR HEATING ELEMENTS AND SWITCHES AT LEAST 18" ABOVE THE FLOOR LEVEL.

TEMPERATUERE CONTROL THE PRIMARY SPACE CONDITIONING SYSTEM WITHIN EACH DWELLING UNIT SHALL BE PROVIDED WITH AT LEAST ONE PROGRAMMABLE THERMOSTAT FOR THE REGULATION OF TEMPERATURE WSEC SEC.403.1.1

VENTILATION EVERY FACTORY BUILT CHIMNEY, TYPE L VENT, TYPE B GAS VENT OR TYPE BW GAS VENT SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF ITS LISTING. MFR'S INSTALLATION INSTRUCTIONS AND APPLICABLE CODE REQUIREMENTS. A TYPE L VENTING SYSTEM SHALL TERMINATE NOT LESS THAN 2 FEET ABOVE THE HIGHEST POINT WHERE THE VENT PASSES THROUGH THE ROOF OF THE BUILDING AND AT LEAST 2' HIGHER THAN ANY PORTION OF THE BUILDING WITHIN 10' OF THE VENT.

#### UTILITY ROOM NOTES/MAKE UP AIR:

AREA TO BE VENTED

BATHROOM / LAUNDRY / SIMILAR

KITCHENS

1. WHERE THE EXHAUST DUCT IS CONCEALED WITHIN THE BUILDING CONSTRUCTION. THE EQUIVALENT LENGTH OF THE EXHAUST DUCT SHALL BE IDENTIFIED ON A PERMANENT LABEL OR TAG. THE LABEL OR TAG SHALL BE LOCATED WITHIN 6 FEET OF THE EXHAUST DUCT CONNECTION.

2. INSTALLATIONS EXHAUSTING MORE THAN 200 CFM CHALL BE PROVIDED WITH MAKE UP AIR WHERE A CLOSET IS DESIGNED FOR THE INSTALLATION OF A CLOTHES DRYER, AN OPENING HAVING AN AREA OF NOT LESS THAN 100 SQ. INCHES FOR MAKE UP AIR SHALL BE PROVIDED IN THE CLOSET ENCLOSURE, OR MAKE UP AIR SHALL BE PROVEDED BY OTHER APPR. MEANS.

• 100 SQ INCH TRANSFER GRILL PER IRC G2439.4 (614.6)

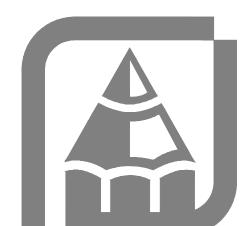
### CONTINUOUS WHOLE-HOUSE

		NUMBER OF BEDROOMS							
FLOOR AREA (SQ. FT.)	1	2		3	4		> 5		
		AIRFLOW IN CFM							
< 500	3Ø	3Ø		35	45		5Ø		
500 - 1000	3Ø	35		40	50		55		
1001 - 1500	3Ø	40		45	55		60		
1501 - 2000	35	45		50			65		
2001 - 2500	40	50		55			TØ		
25Ø1 - 3ØØØ	45	55		60			75		
3001 - 3500	50	60		65			80		
3501 - 4000	55	65		7Ø			85		
4001 - 4500	60	7Ø		75			30		
4501 - 5000	65	75	80		9Ø		95		
ERMITTENT WHOLE-HOUS	SE MECHANICAL YEN	ITILATION RATI	E FACTORS	<del></del>					
RUN-TIME % IN 4-HOUR SEGN	25%	33%	50%	66%	75%	100%			
FACTOR	4	3	2	1,5	1.3	1.0			

EXHAUST RATES

100 CFM INTERMITTENT OR 25 CFM CONTINUOUSLY

50 CFM INTERMITTENT OR 20 CFM CONTINUOUSLY



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