

GENERAL NOTES:

ALL CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING BUILDING CODES AND AMENDMENTS PER THEIR ADOPTING ORDINANCES:

2018 WASHINGTON STATE AMENDMENTS INCLUSIVE OF:

2018 INTERNATIONAL RESIDENTIAL CODE (IRC)

2018 INTERNATIONAL MECHANICAL CODE (IMC)

2018 INTERNATIONAL PLUMBING CODE (IPC)

2018 INTERNATIONAL ELECTRICAL CODE

2018 INTERNATIONAL FIRE CODE

2018 WASHINGTON STATE ENERGY CODE (WSEC), RESIDENTIAL PROVISIONS

REQUIRED ADDITIONAL SUBMITTAL FROM MANUFACTURERS AT TIME OF PERMIT SUBMITTAL:

- 1. MANUFACTURED FLOOR JOIST/ TRUSS DESIGN AND LAYOUT
- 2. MANUFACTURED ROOF TRUSS DESIGN AND LAYOUT.

SITE WORK:

- 1. FOUNDATION DESIGN IS BASED ON AN ASSUMED AVERAGE SOIL BEARING OF 1500 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 COMPACTED.

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 R302.101 THROUGH R302.103.

R302.101 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 ACCOMPANYING SMOKE-DEVELOPED INDEX NOT TO EXCEED 450 WHERE TESTED IN ACCORDANCE WITH ASTM E 84 OR UL T23.

- 1. WHERE SUCH MATERIALS ARE IN CONCEALED SPACES, THE FLAME SPREAD INDEX AND SMOKE-DEVELOPED INDEX LIMITATIONS 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.
- 2. CELLULOSE FIBER LOOSE-FILL INSULATION THAT IS NOT SPRAY APPLIED, COMPLYING WITH THE REQUIREMENTS OF SECTION R302.103, SHALL NOT BE REQUIRED TO MEET THE SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450 WHERE TESTED IN ACCORDANCE WITH CANULC 5102.2.
- 3. FOAM PLASTIC INSULATION SHALL COMPLY WITH SECTION R316.

R302.102 LOOSE-FILL INSULATION
LOOSE-FILL INSULATION MATERIALS THAT CANNOT BE MOUNTED IN THE ASTM E 84 OR UL T23 APPARATUS WITHOUT A SCREEN OR ARTIFICIAL SUPPORTS SHALL COMPLY WITH THE FLAME SPREAD AND SMOKE-DEVELOPED LIMITS OF SECTION R302.101 WHERE TESTED IN ACCORDANCE WITH CANULC 5102.2.

EXCEPTION: CELLULOSE FIBER LOOSE-FILL INSULATION SHALL NOT BE REQUIRED TO BE TESTED IN ACCORDANCE WITH CANULC 5102.2 PROVIDED SUCH INSULATION COMPLIES WITH THE REQUIREMENTS OF SECTIONS R302.101 AND R302.103.

R302.103 CELLULOSE FIBER LOOSE-FILL INSULATION
CELLULOSE 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.

R302.102 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.

R302.105 TESTING
TESTS FOR CRITICAL RADIANT FLUX SHALL BE MADE IN ACCORDANCE WITH ASTM E 910. INFILTRATION:
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
CLASSES I OR II VAPOR RETARDERS ARE REQUIRED ON THE INTERIOR SIDE OF FRAME WALLS IN CLIMATE ZONES 5, 6, 7, 8, AND MARINE 4.

EXCEPTIONS:

- 1. BASEMENT WALLS.
- 2. BELOW-GRADE PORTION OF ANY WALL.
- 3. CONSTRUCTION WHERE MOISTURE OR ITS FREEZING WILL NOT DAMAGE THE MATERIALS.

R102.11 CLASS III VAPOR RETARDER CLASS
CLASS III VAPOR RETARDERS SHALL BE PERMITTED WHERE ANY ONE OF THE CONDITIONS IN TABLE R102.11 IS MET.

R102.12 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 BATT.
- CLASS III: LATEX OR ENAMEL PAINT.

R102.13 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 PERMITTED.

- 1. VINYL LAP OR HORIZONTAL ALUMINUM SIDING APPLIED OVER A WEATHER-RESISTIVE BARRIER AS SPECIFIED IN TABLE R103.3(1).
- 2. BRICK VENEER WITH A CLEAR AIRSPACE AS SPECIFIED IN TABLE R103.3.4
- 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.

R402.4.12 TESTING
THE BUILDING OR DUELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE NOT EXCEEDING 5 AIR EXCHANGES PER HOUR.

DRAFTSTOPPING:
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 1000 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 MEMBRANE BELOW.

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.

R302.121 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 LOCATIONS:

- 1. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROIS OF STUDS OR STAGGERED STUDS, AS FOLLOWS:
 - 11. VERTICALLY AT THE CEILING AND FLOOR LEVELS.
 - 12. 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 R302.1(1/2) GUB.)
- 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 R1003.13.
- 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 302.1(1).

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 711. 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: 1) THE PENETRATION MANUFACTURE'S INSTALLATION AND FLASHING INSTRUCTIONS, OR FOR APPLICATIONS NOT ADDRESSED IN THE PENETRATION 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. 12. IN ACCORDANCE WITH THE FLASHING DESIGN OR METHOD OF A REGISTERED DESIGN PROFESSIONAL. 13. 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: R103.2 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 R103.11.

EXTERIOR DOORS, WINDOWS AND SKYLIGHTS PER 2018 WASHINGTON STATE ENERGY CODE

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

R301.1 EMERGENCY ESCAPE AND RESCUE OPENINGS
SECTION R310-EMERGENCY ESCAPE AND RESCUE OPENINGS

R301.1 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 PUBLIC WAY.

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. R3102.3.

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

- 1. GLAZING IN DOORS, SLIDING WINDOW DOORS, SLIDING GLASS DOORS AND PANELS IN SLIDING, 4-BUILD DOORS 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 IS 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 R308.4.5.
- 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.

FULL SIZED LEDGIBLE COLOR PLANS ARE REQUIRED TO BE PROVIDED BY THE PERMITTEE ON SITE FOR ALL INSPECTIONS (MIN. PLAN SIZE 24" X 36")

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 CERTIFICATE SHALL LIST THE PREDOMINANT R-VALUES OF THE INSULATION INSTALLED IN OR ON CEILING/ROOF, WALLS, FOUNDATION (GLASS, BELOW-GRADE WALL, AND/OR FLOOR) AND DUCTS OUTSIDE CONDITIONED SPACES; U-FACTORS FOR PENETRATION AND THE SOLAR HEAT GAIN COEFFICIENT (SHGC) OF PENETRATION, 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 EFFICIENCY 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 W8U RS-33, USING THE MAXIMUM DUCT LEAKAGE RATE 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 OFFICIAL.

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.

ROOF GENERAL NOTES:

- A. CONTRACTOR SHALL PROVIDE ATTIC VENTILATION AS PER CODE.
- B. PROVIDE FLASHING AT ALL VALLEYS, FITCH 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 DFP, UNO.
- F. PROVIDE DOUBLE FELT UNDERLAYMENT FOR COMPOSITION ROOFING (TYP.) FOR SLOPES UNDER 4:12.
- 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 SHALL BE OFFSET BY 6 FEET.

VENTILATION CALCULATIONS AND REQUIREMENTS

R606.2: THE TOTAL NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 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.
- NOTE:
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 1/50 OF THE AREA OF THE SPACE VENTILATED, EXCEPT THAT THE AREA MAY BE 1/200 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 1" 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 (47132 SQ. INCHES)

UPPER ROOF VENTING PROVIDED BY AF50 ROOF VENTS (50 SQ. IN. PER VENT)
47132 SQ. IN. x 50% = 23616 SQ. IN. REQUIRED.
PROVIDE (5) AF50 ROOF VENTS = 250 SQ. IN.

LOWER ROOF VENTING PROVIDED BY BIRDBLOCKING: (4) 2" DIA HOLES (314" EA) = (125 SQ. INCHES) AND WITH AF50 ROOF VENTS (50 SQ. IN. PER VENT)
47132 SQ. IN. x 50% = 23616 SQ. IN. REQUIRED.
PROVIDE (18) BIRDBLOCKS = 2315 SQ. IN. • FRONT 4 REAR OF HOUSE AND NOT WITHIN 2' OF THE SIDES.

LOW ROOF/ GARAGE ROOF CALCULATIONS

632 SQ. FT. ATTIC AREA / 300 = 210 SQ. FT. OF VENTILATION REQUIRED (30336 SQ. INCHES)

UPPER ROOF VENTING PROVIDED BY AF50 ROOF VENTS (50 SQ. IN. PER VENT)
30336 SQ. IN. x 50% = 15168 SQ. IN. REQUIRED.
PROVIDE (4) AF50 ROOF VENTS = 200 SQ. IN.

LOWER ROOF VENTING PROVIDED BY BIRDBLOCKING: (4) 2" DIA HOLES (314" EA) = (125 SQ. INCHES) AND WITH AF50 ROOF VENTS (50 SQ. IN. PER VENT)
30336 SQ. IN. x 50% = 15168 SQ. IN. REQUIRED.
PROVIDE (13) BIRDBLOCKS = 1625 SQ. IN. • FRONT 4 REAR OF HOUSE AND NOT WITHIN 2' OF THE SIDES OR 5' SETBACKS.

SEE E-1 FOR WSEC CALCULATIONS

HEATING OPTION 2 - 10 CREDITS
HEAT PUMP

EFFICIENT BUILDING ENVELOPE 13 - 05 CREDITS

PRESCRIPTIVE COMPLIANCE IS BASED ON TABLE R402.11 WITH THE FOLLOWING MODIFICATIONS:
VERTICAL FENESTRATION U = 0.28
FLOOR R-38

AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION 21 - 05 CREDITS

COMPLIANCE BASED ON R402.412: 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 R402.412: REDUCE THE TESTED AIR LEAKAGE TO 0.3 CFM/SF MAXIMUM AT 50 PASCALS AND ALL WHOLE HOUSE VENTILATION REQUIREMENTS AS DETERMINED BY SECTION M501.3 OF THE INTERNATIONAL RESIDENTIAL CODE OR SECTION 403.8 OF THE INTERNATIONAL MECHANICAL CODE SHALL BE MET WITH A HIGH EFFICIENCY FAN(S) (MAXIMUM 0.35 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 - 10 CREDITS

AIR-SOURCE CENTRALLY DUCTED HEAT PUMP WITH MINIMUM HSPFF 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 HVAC DISTRIBUTION SYSTEM 42 - 10 CREDITS

HVAC EQUIPMENT AND ASSOCIATED DUCT SYSTEM(S) INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R403.3.1.
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 HEATING AND COOLING EQUIPMENT AND ALL THE DUCTWORK.

EFFICIENT WATER HEATING 55 - 20 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.

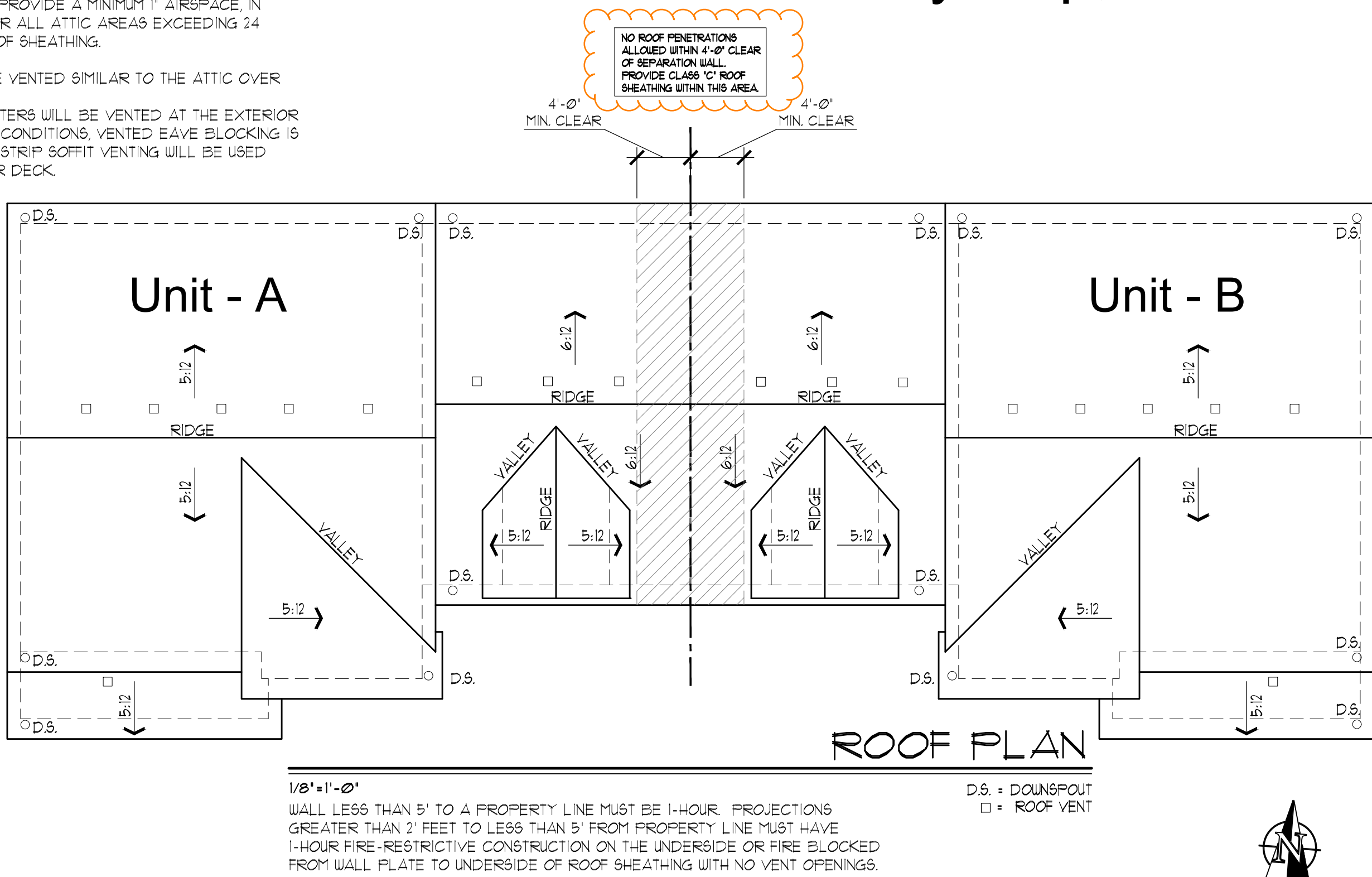
WALL LESS THAN 5' TO A PROPERTY LINE MUST BE 1-HOUR. PROJECTIONS GREATER THAN 2' FEET TO LESS THAN 5' FROM PROPERTY LINE MUST HAVE 1-HOUR FIRE-RESTRICTIVE CONSTRUCTION ON THE UNDERSIDE OR FIRE BLOCKED FROM WALL PLATE TO UNDERSIDE OF ROOF SHEATHING WITH NO VENT OPENINGS.

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

JOB SITE MUST BE POSTED WITH ADDRESSES AND PERMIT NUMBER VISIBLE FROM THE STREET. THE APPROVED PLANS MUST BE KEPT ON THE JOB SITE 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: 0419095003
Site Address:
433 43rd Ave. SW Puyallup, WA. 98373



Plan: 1864-1864
HC HOMES DUPLEX
Date: 04/11/23
Revision Date: 09/20/23
Drawn by: SM/BP
Phone: (253) 297-8040

[A-0]

City of Puyallup

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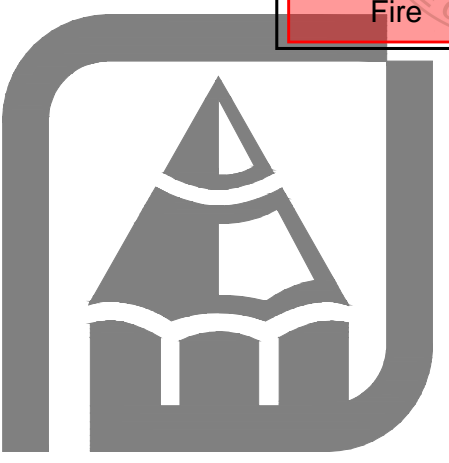
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[A-0]



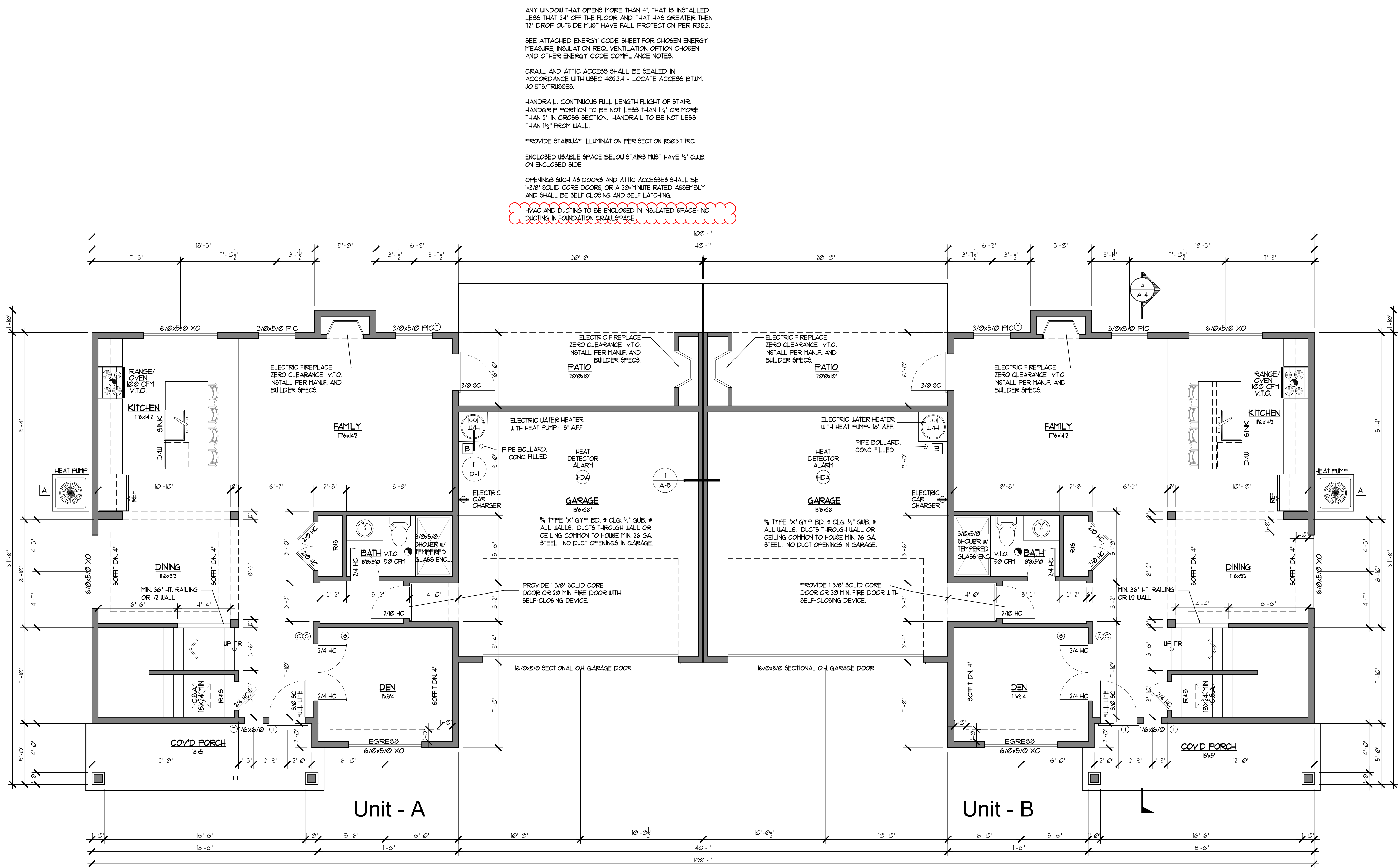
CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF THE PLANS AND FOR ANY VIOLATIONS OF THE CITY OF PUYALLUP ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF THE PLANS AND FOR ANY VIOLATIONS OF THE CITY OF PUYALLUP ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF THE PLANS AND FOR ANY VIOLATIONS OF THE CITY OF PUYALLUP ORDINANCES.

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1/4" = 1'-0"

FLOOR PLAN CALCULATIONS	
MAIN FLOOR:	971 SF.
UPPER FLOOR:	893 SF.
TOTAL # FTG (HEATED):	1864 SF.
GARAGE:	420 SF.

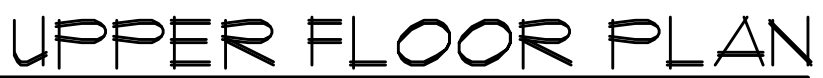
MAXIMUM TESTED BUILDING AIR LEAKAGE TO 3.0 AIR PER HOUR.
ALL SHOWERS REQUIRE SHOWER PAN INSPECTION.

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- HYVAC AND WATER HEATER
- A HYVAC UNIT TO BE MODEL XXXX, MIN. HSPF OF 9.5. HEAT PUMP TO BE MODEL XXXX.
 - B ELECTRIC WATER HEATER WITH INTEGRATED HEAT PUMP, TIER III NEAA SPEC, MODEL XXXXXX.

FLOOR PLAN CALCULATIONS	
MAIN FLOOR:	971 SF.
UPPER FLOOR:	893 SF.
TOTAL # FTG (HEATED):	1864 SF.
GARAGE:	420 SF.

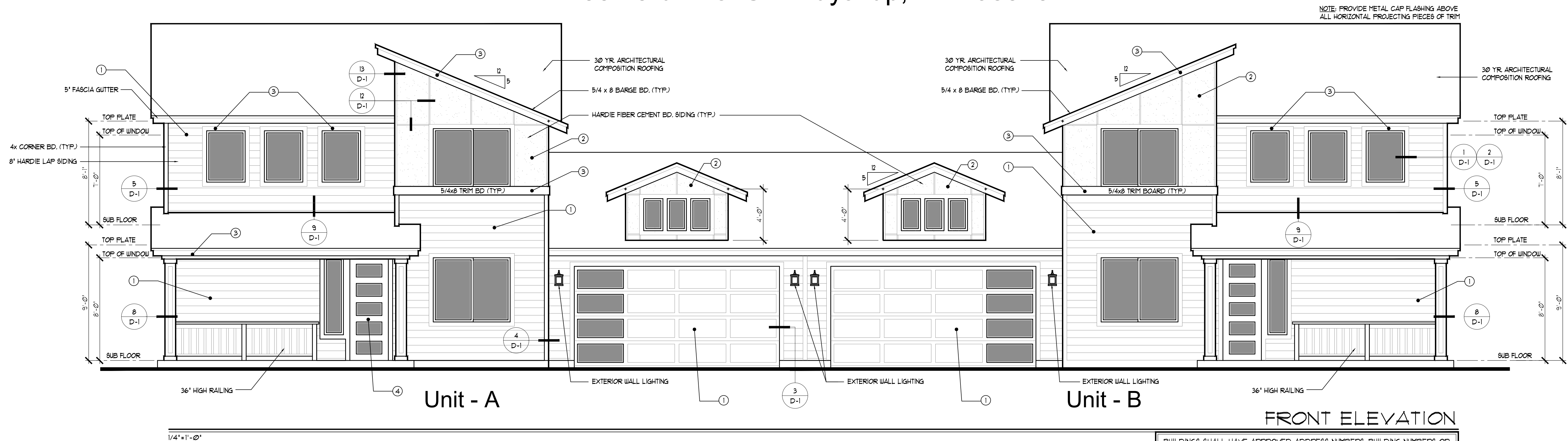
PRRNSF20230919



- 5 MIN. AIR EXCHANGE CEILING FANS PER PLAN (C)
110 VOLT SMOKE DETECTOR HARD WIRED (S)
INTERCONNECTED WITH BATTERY BACK-UP (C)
CARBON MONOXIDE DETECTOR (T)
TEMPERED/SAFETY GLASS (*)
PROVIDE 1' UNDERCUT ON ALL BEDROOM DOORS

Parcel number: 0419095003
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433 43rd Ave. SW Puyallup, WA. 98373

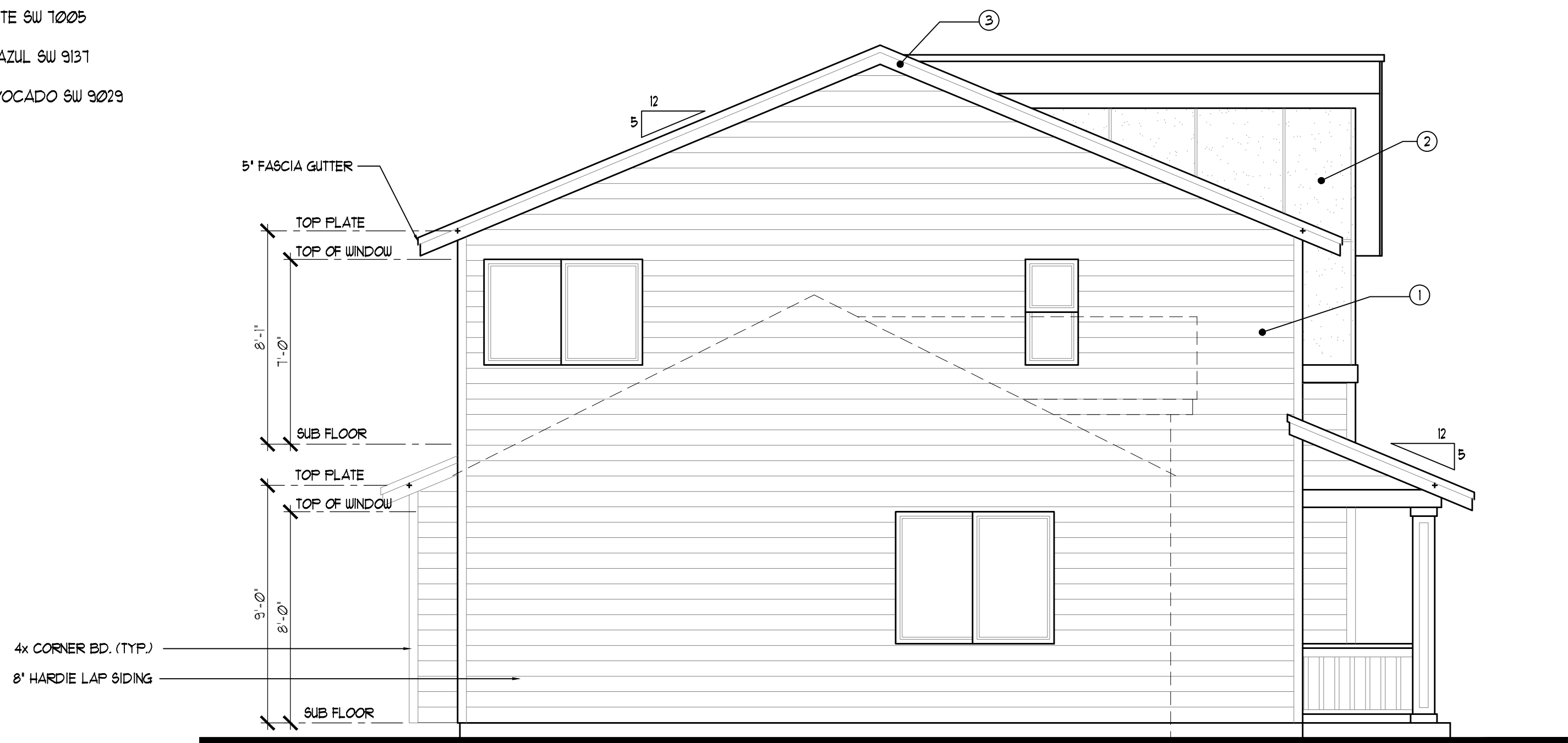
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GARAGE DOOR AREA: 124 SQ. FT.
FRONT WINDOWS AREA PER UNIT: 123.25 SQ. FT.

EXTERIOR PAINT COLOR LEGEND:

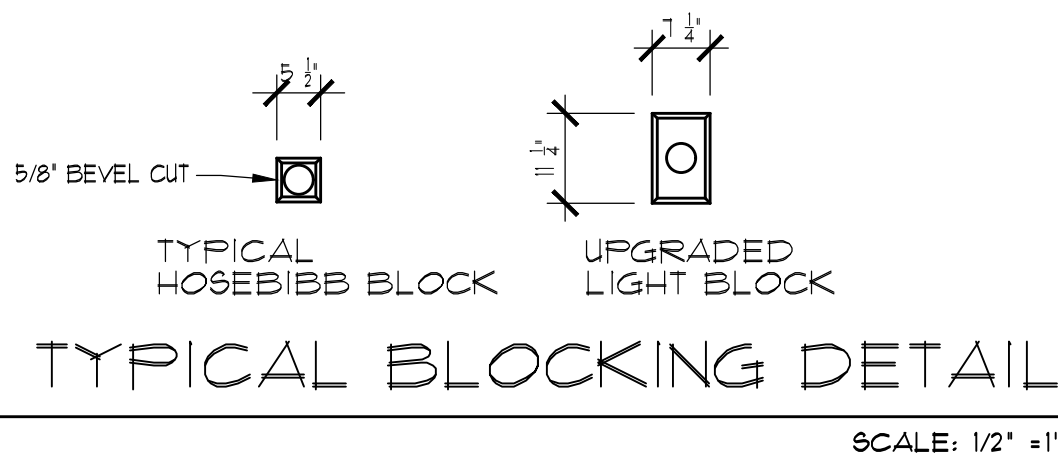
- ① ACIER SW 9170
- ② PEPPERCORN SW 1614
- ③ PURE WHITE SW 1005
- ④ NUBLA AZUL SW 9131
- ⑤ COOL AVOCADO SW 9029



RIGHT ELEVATION

BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. THESE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND. ADDRESS NUMBERS SHALL BE ARABIC NUMBERS OR ALPHABETICAL LETTERS. NUMBERS SHALL BE A MIN. OF 4 INCHES HIGH WITH A MIN. STROKE WIDTH OF 1/2 INCH PER IRC R319.1

R909.2.2.5 DRIP EDGE:
A DRIP EDGE SHALL BE PROVIDED AT EAVES AND GABLES OF SHINGLE ROOFS. ADJACENT PIECES OF DRIP EDGE SHALL BE OVERLAPPED A MINIMUM OF 2 INCHES (51 mm). DRIP EDGES SHALL EXTEND A MINIMUM OF 0.25 INCH (6.4 mm) BELOW THE ROOF SHEATHING AND EXTEND UP THE ROOF DECK A MINIMUM OF 2 INCHES (51 mm). DRIP EDGES SHALL BE MECHANICALLY FASTENED TO THE ROOF DECK AT A MAXIMUM OF 12 INCHES (305 mm) O.C. WITH FASTENERS AS SPECIFIED IN SECTION R909.2.3. UNDERLAYMENT SHALL BE INSTALLED OVER THE DRIP EDGE ALONG EAVES AND UNDER THE UNDERLAYMENT ON GABLES. UNLESS SPECIFIED DIFFERENTLY BY THE SHINGLE MANUFACTURER, SHINGLES ARE PERMITTED TO BE FLUSH WITH THE DRIP EDGE.



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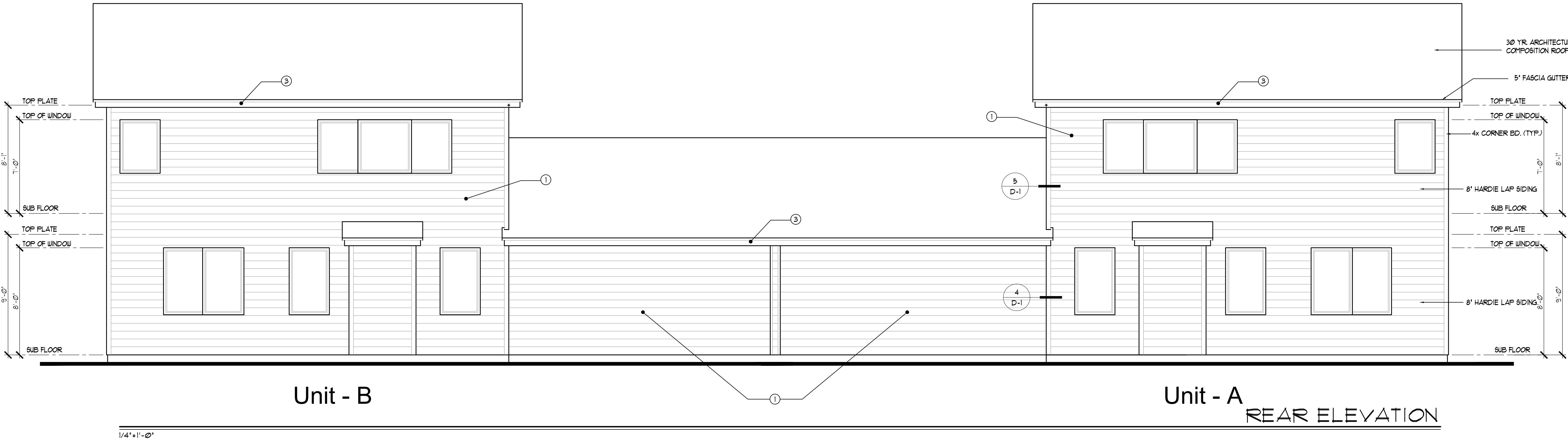
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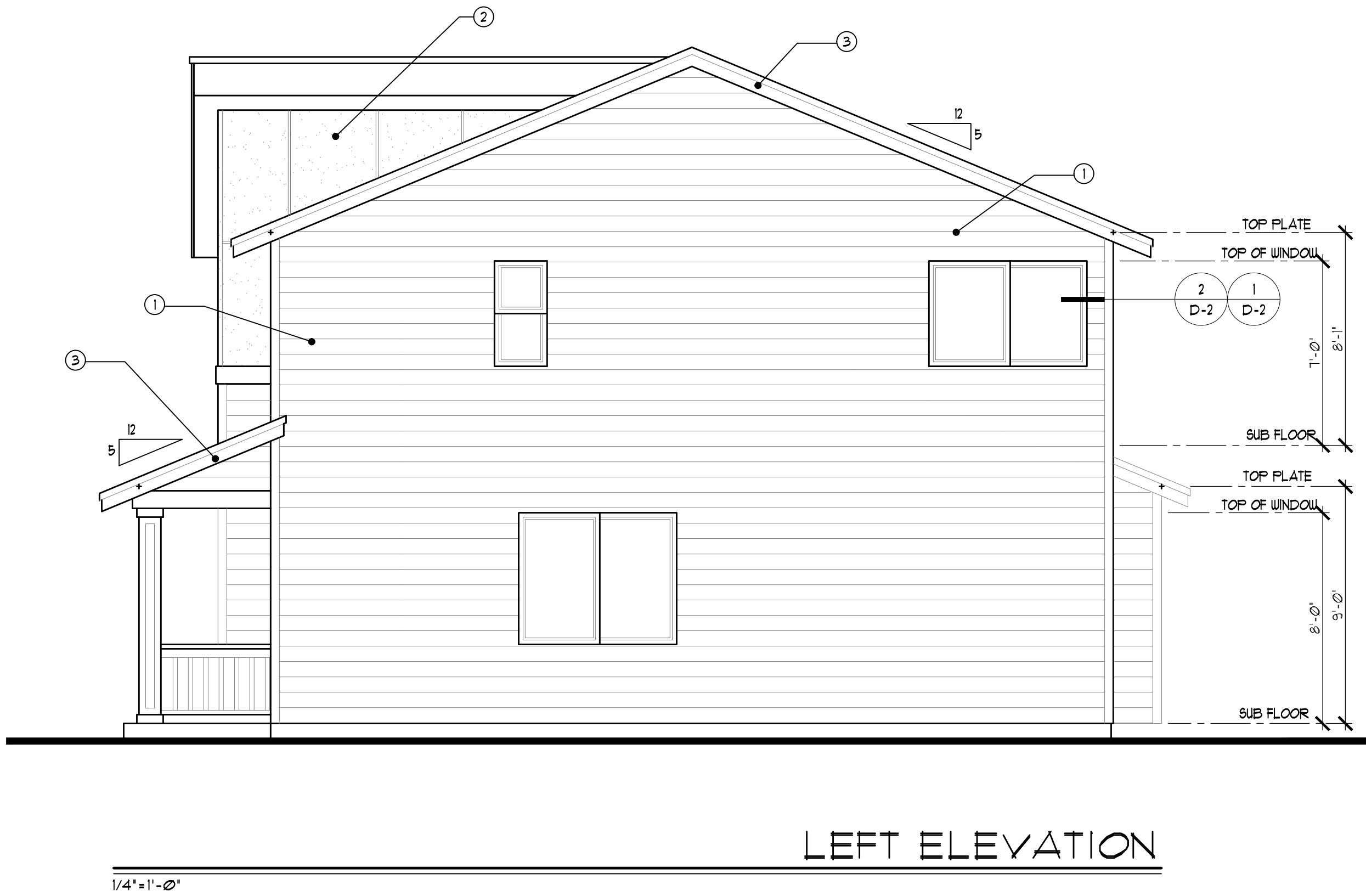
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- EXTERIOR PAINT COLOR LEGEND:
- ① ACIER SW 9110
 - ② PEPPERCORN SW 1614
 - ③ PURE WHITE SW 1005
 - ④ NUEBLA AZUL SW 9131
 - ⑤ COOL AVOCADO SW 9029



- ELEVATION NOTES:
1. CONTRACTOR SHALL VERIFY ALL NOTES, MATERIALS AND CONDITIONS PRIOR TO CONSTRUCTION.
 2. CAULK ALL EXTERIOR JOINTS AND PENETRATIONS.
 3. PROVIDE GALVANIZED OR ANODIZED SHEET METAL FLASHING AND COUNTERFLASHING AT ALL ROOF PENETRATIONS, CHIMNEYS, AND SKYLIGHTS.
 4. PROVIDE CONTINUOUS GUTTERS AND DOWNSPOUTS AT ALL EAVES, TYP.
 5. PROVIDE HEADER FLASHING AT ALL DOORS, WINDOWS, AND SHUTTERS PER DETAIL.
 6. ALL PAPER AND TAPE TO LAP FROM TOP DOWN.
 7. HOLD ALL SIDING MATERIAL 1 1/2" OFF ROOF.
 8. HOLD ALL SIDING MATERIAL 6" OFF FINISHED GRADE.
 9. SOFFIT ALL FLAT AREAS W/ 1 1/2" OVERHANG AT HORIZONTAL EDGES.
 10. METAL FLASHING AT ALL TRIM AND HORIZONTAL SIDING BREAKS.
 11. 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 1/2".
 15. GUTTERS TO LAP UNDER DRIP EDGE AT GABLE ENDS, HOLD 1 1/4" 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 TRIM WORK).

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City of Puyallup

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STAIR AND GUARDRAIL NOTES:

ILLUMINATION NOTES: PER IRC SECTION 303.6, ILLUMINATE 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. FT. 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 1/4" MIN. 1 3/4" 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 1 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 (102 MM) AND NOT GREATER THAN 6 1/4 INCHES (160 MM) WITH A MAXIMUM CROSS SECTION OF DIMENSION OF 2 1/4 INCHES (51 MM).

NOSE MIN. 3/4" MAX 1 1/4" REQUIRED ON STAIRS w/ SOLID RISERS

1/4" PLYWOOD FLR SHEATHING

JOIST

2x6 CRIPPLE STUDS @ 16" o/c

1/2" 2x12 STRINGERS (MIN.)

1/4" TREAD AND RISER

STAIR AT FLOOR CONNECTIONS

3/4" TREAD AND RISER

(3) 2x12 STRINGERS (MIN.)

1/4" PLYWOOD LANDING SHTG

DBL. JOIST

JST. @ 16" o/c

STAIR AT LANDING CONN.

4" MIN. LEADROOF

4" SPHERE SHALL NOT PASS THROUGH

36" MIN.

1/4" MAX RISER HT.

10" MIN. TREAD DEPTH

6" SPHERE UNABLE TO PASS THROUGH OPENING

GUARD & STAIR REQUIREMENTS

3/4" TREAD AND RISER

(3) 2x12 STRINGERS (MIN.)

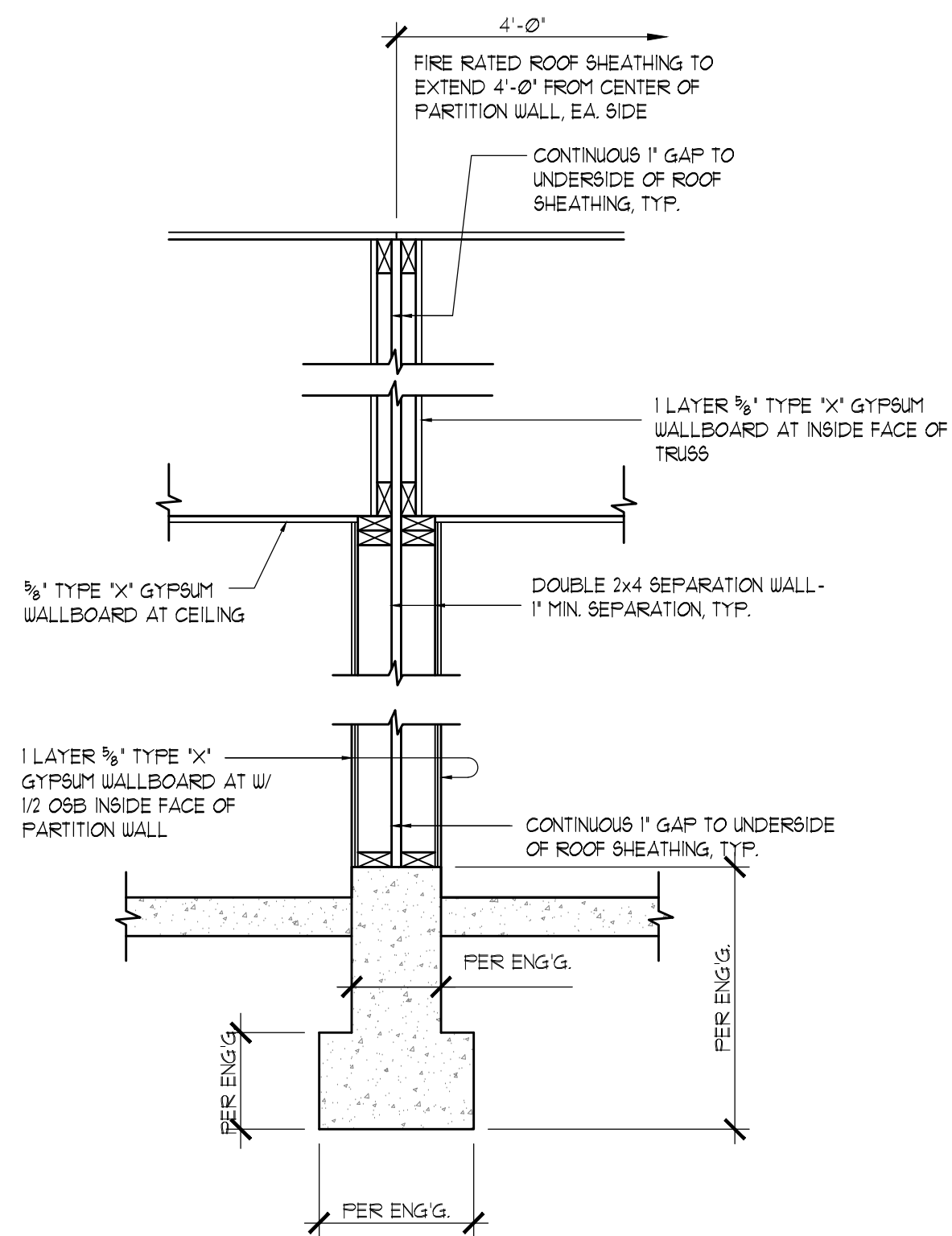
2x4 NAILER

3/4" FLOOR SHTG

JOIST OR BLK'G

JOISTS @ 16" o/c

STAIR AT WOOD FLOOR CONN.



1 HOUR RATED PARTITION WALL ASSEMBLY

SCALE: N.T.S.

GA FILE NO. UP 5512

GA FILE NO. UP 5512

GENERIC

1 HOUR FIRE

45 TO 49 STC SOUND

GYPSUM WALLBOARD, WOOD STUDS

ONE LAYER 5/8" 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, 1 1/8" LONG, 0.095" SHANK, 1/4" HEADS, 1' O.C.

JOINTS STAGGERED 16" ON OPPOSITE SIDES. HORIZONTAL BRACING REQUIRED AT MID-HEIGHT. (LOAD BEARING)

THICKNESS: 5/8"

APPROX. WEIGHT: 8 PSF

FIRE TEST: SEE UP 3605

UL R319-4, -6, 6-11-52

UL R2111-39, 1-20-66

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

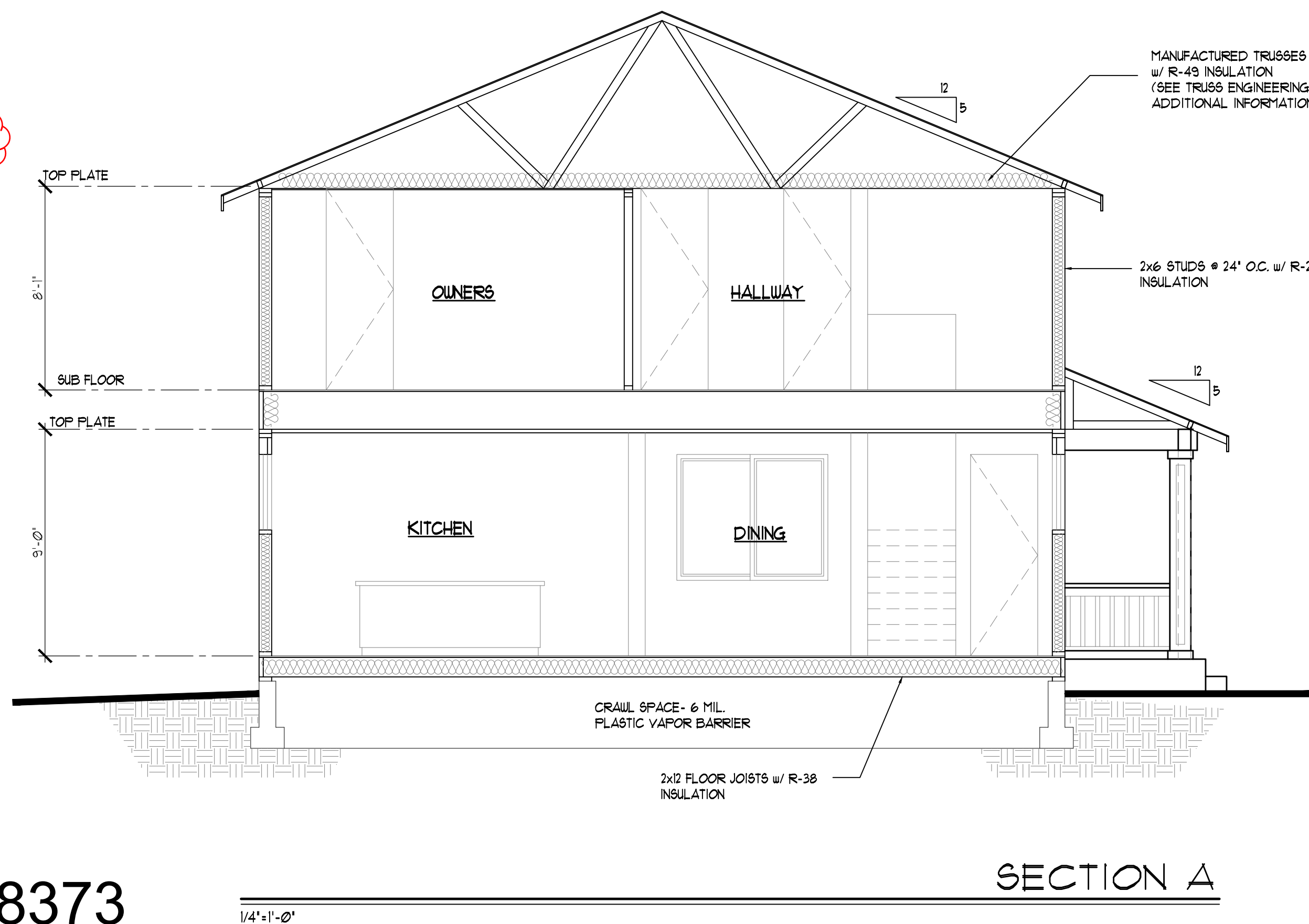
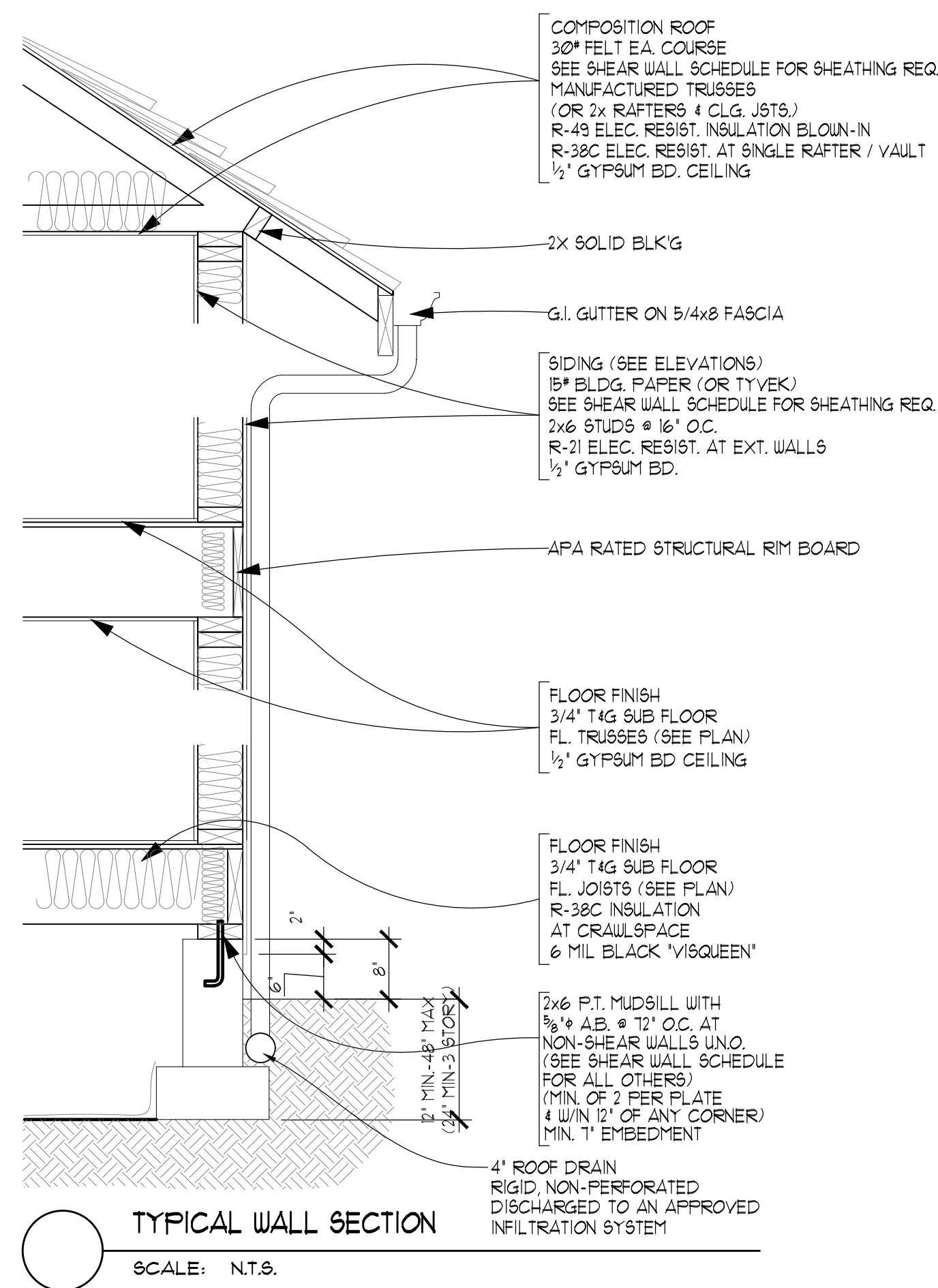
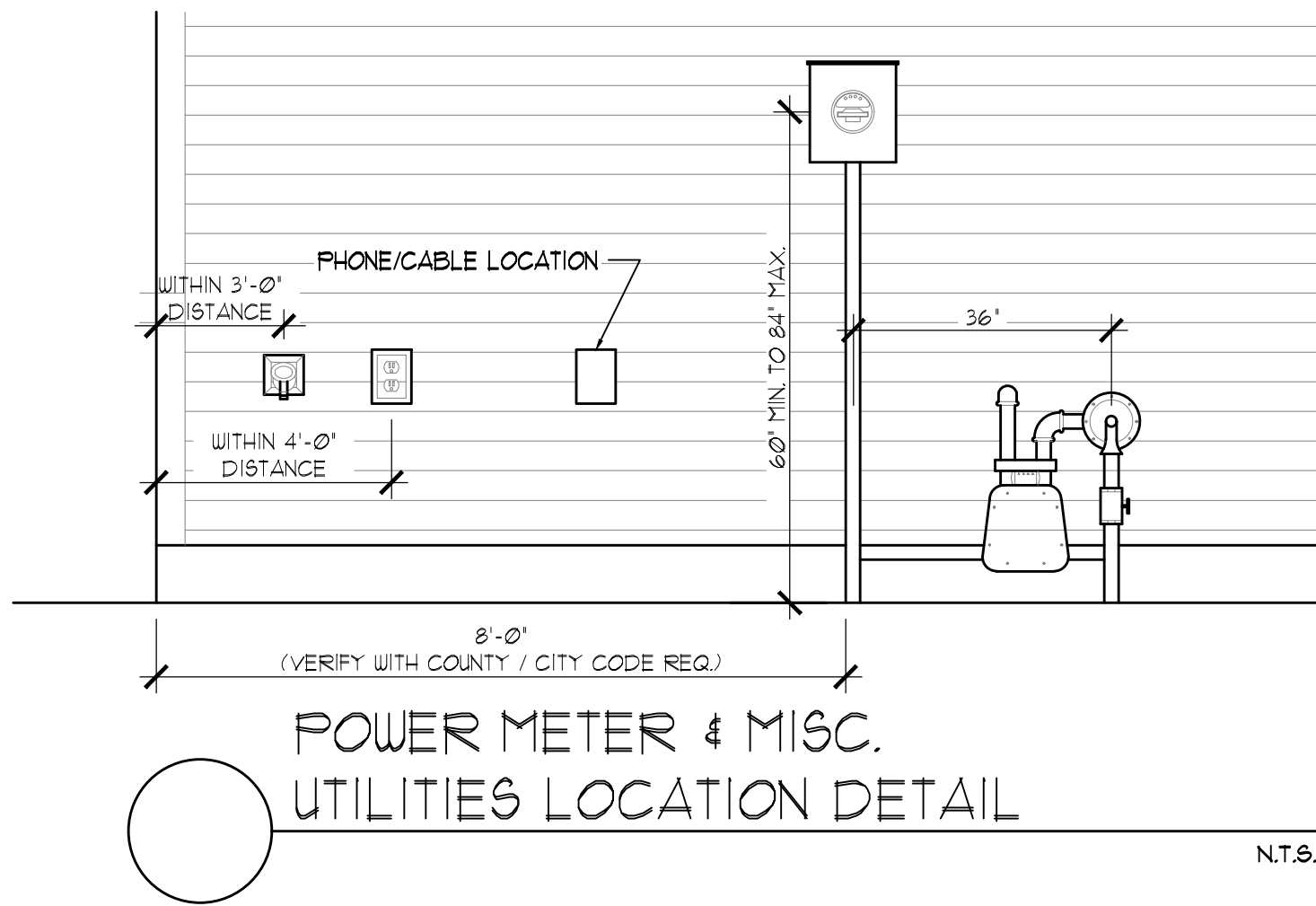
ULC DESIGN U3011

UL R4024, 10-31-68

SOUND TEST: NRCC TL-33-261

IRC-IR-161, 3/38

NOTE: HORIZONTAL BRACING REQUIRED AT WALL MID-HEIGHT, TYP.



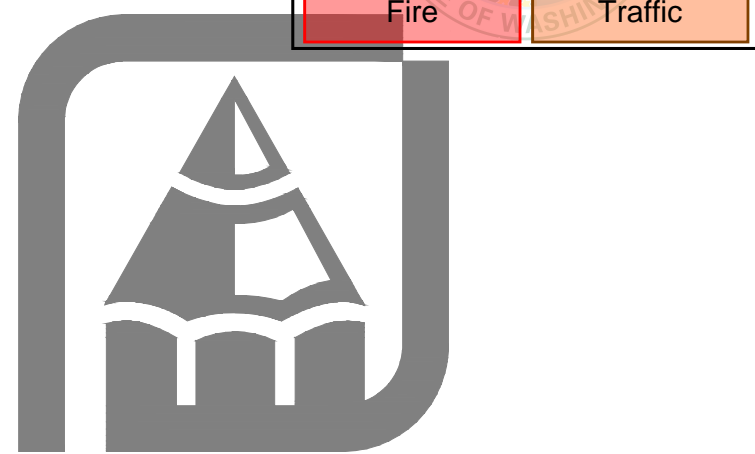
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



















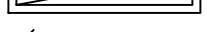


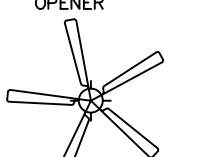



Rueppell Home Design

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.

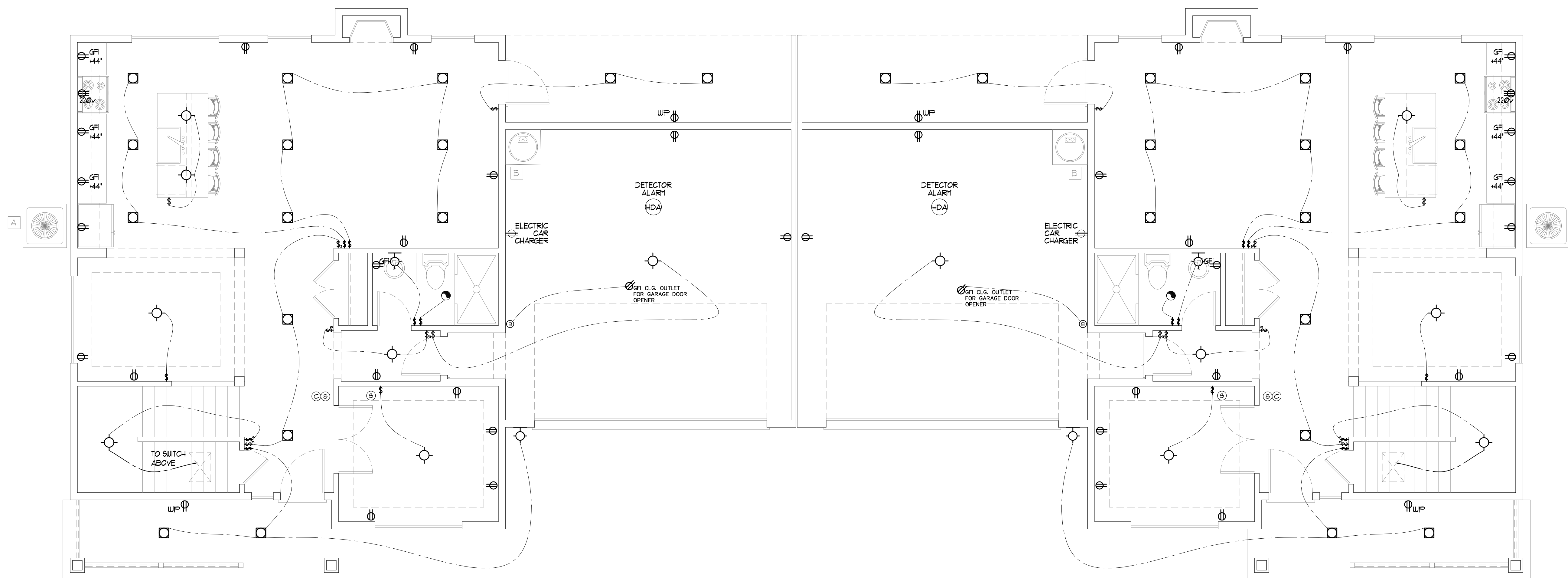
ONE ADDITIONAL #4 BAR, 20-FEET LONG IN FOOTING AT ELECTRICAL METER LOCATION FOR UFFER GROUND.

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

ELECTRICAL LEGEND

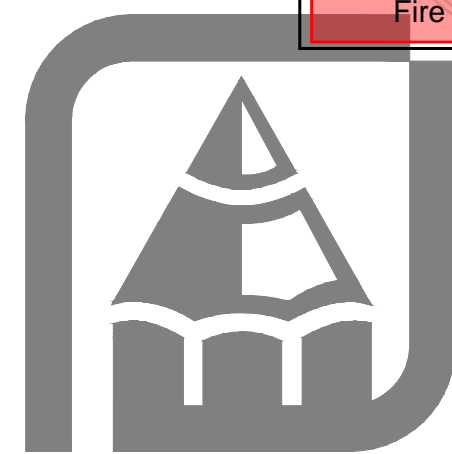
\$	SINGLE POLE SWITCH		STANDARD CEILING MOUNT LIGHT OUTLET
3	3 POLE SWITCH		PORCELAIN SOCKET FIXTURE
4	4 POLE SWITCH		FLUORESCENT CEILING MOUNT LIGHT OUTLET
OS	SINGLE POLE OCCUPANCY SENSOR		WALL MOUNTED STANDARD LIGHT FIXTURE
N	SINGLE POLE SWITCH W/ MOTION SENSOR		WALL MOUNTED FLUORESCENT LIGHT FIXTURE
T	TIMER SWITCH		RECESSED CFL CAN LIGHT
LV	LOW VOLTAGE SWITCH		RECESSED FLUORESCENT CAN LIGHT
	DUPLEX RECEPTACLE OUTLET		RECESSED DIRECTIONAL CAN LIGHT
	SPLIT WIRE DUPLEX OUTLET		KICK LIGHT
	GROUND FAULT INTERCEPT OUTLET		EXHAUST FAN
30	30 AMP 220 VOLT ELECTRIC CAR OUTLET		COMBINATION RECESSED CAN & EXHAUST FAN
220v	220v OUTLET		THERMOSTAT
	A/C DISCONNECT		JUNCTION BOX
	FLOOR RECEPTACLE		LOW VOLTAGE ADDRESS LIGHT
	PUSH BUTTON		BOX FLUORESCENT, REFER TO PLAN FOR SIZE
DB	CHIMES		GARAGE DOOR OUTLET
	TELEPHONE		CEILING FAN OUTLET (BLOCKED)
	TELEVISION ANTENNA (STRUCTURED WIRING INSTALLED AT TELEVISION LOCATION)		
	SMOKE DETECTOR - PERMANENTLY WIRED AND INTERCONNECTED		
	COMBO CARBON MONOXIDE / SMOKE DETECTOR		

V.T.O. = VENT TO OUTSIDE; K.H.F. = INHOLE HOUSE FAN; VP = VAPOR PROOF;
NPF = WATER PROOF; CH = CHANDELIER; P = PENDANT



MAIN FLOOR ELECTRICAL PLAN

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

[illegible]

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




















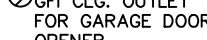

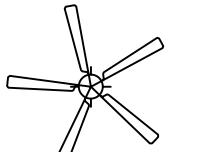



PRRNSF20230919

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.

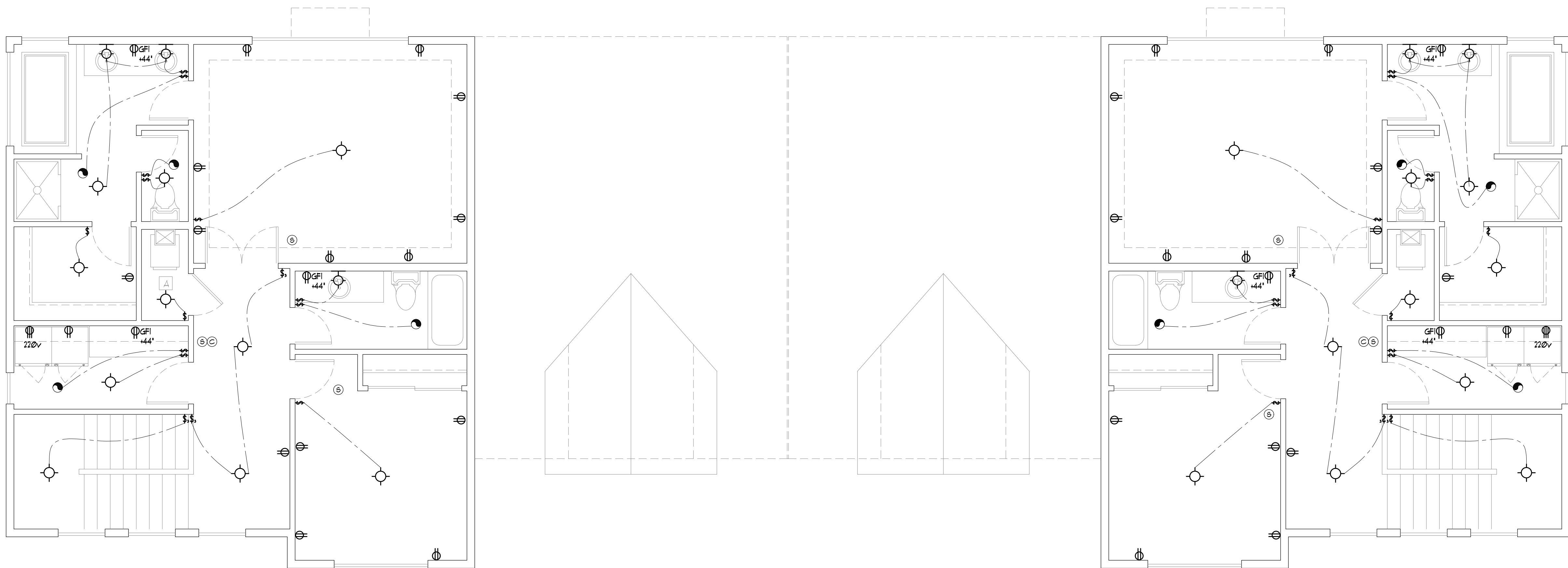
ONE ADDITIONAL 4" BAR, 20-FOOT LONG IN FOOTING AT ELECTRICAL METER LOCATION FOR UFFER GROUND.

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

ELECTRICAL LEGEND

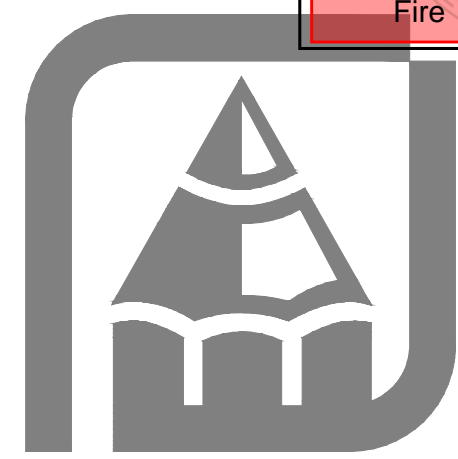
\$	SINGLE POLE SWITCH		STANDARD CEILING MOUNT LIGHT OUTLET
3	3 POLE SWITCH		PORCELAIN SOCKET FIXTURE
4	4 POLE SWITCH		FLUORESCENT CEILING MOUNT LIGHT OUTLET
OS	SINGLE POLE OCCUPANCY SENSOR		WALL MOUNTED STANDARD LIGHT FIXTURE
N	SINGLE POLE SWITCH W/ MOTION SENSOR		WALL MOUNTED FLUORESCENT LIGHT FIXTURE
T	TIMER SWITCH		RECESSED CFL CAN LIGHT
LV	LOW VOLTAGE SWITCH		RECESSED FLUORESCENT CAN LIGHT
	DUPLEX RECEPTACLE OUTLET		RECESSED DIRECTIONAL CAN LIGHT
	SPLIT WIRE DUPLEX OUTLET		KICK LIGHT
	GROUND FAULT INTERCEPT OUTLET		EXHAUST FAN
30	30 AMP 220 VOLT ELECTRIC CAR OUTLET		COMBINATION RECESSED CAN & EXHAUST FAN
220v	220v OUTLET		THERMOSTAT
	A/C DISCONNECT		JUNCTION BOX
	FLOOR RECEPTACLE		LOW VOLTAGE ADDRESS LIGHT
	PUSH BUTTON		BOX FLUORESCENT, REFER TO PLAN FOR SIZE
DB	CHIMES		GARAGE DOOR OUTLET
	TELEPHONE		CEILING FAN OUTLET (BLOCKED)
	TELEVISION ANTENNA (STRUCTURED WIRING INSTALLED AT TELEVISION LOCATION)		
	SMOKE DETECTOR - PERMANENTLY WIRED AND INTERCONNECTED		
	COMBO CARBON MONOXIDE / SMOKE DETECTOR		

V.T.O. = VENT TO OUTSIDE; K.H.F. = INHOLE HOUSE FAN; VP = VAPOR PROOF;
NPF = WATER PROOF; CH = CHANDELIER; P = PENDANT



UPPER FLOOR ELECTRICAL PLAN

5 MIN. AIR EXCHANGE CEILING FANS PER PLAN ☯
110 VOLT SMOKE DETECTOR HARD WIRED (S)
INTERCONNECTED WITH BATTERY BACK-UP

[illegible]

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City of Puyallup
Development & Permitting Services

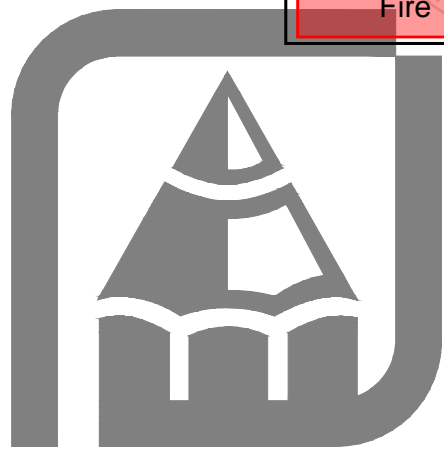
ISSUED PERMIT

- Building
- Planning
- Engineering
- Public Works
- Fire
- Traffic

Plan: 1864-1864
HC HOMES DUPLEX
Date: 04/11/23
Revision Date: 09/20/23
Drawn by: SM/BP
Phone: (253) 297-8040

[A-7]

PRRNSF20230919

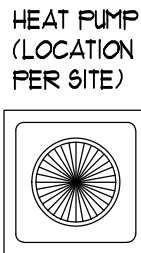


OF THE LICENSED PROFESSIONAL ENGINEER, THE CONTRACTOR, THEREFORE, MUST CAREFULLY INSPECT ALL DIMENSIONS AND DETAILS IN THE PLANS FOR
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A GENERAL NOTE AND SPECIFICATIONS SHEET IS ALWAYS AN INTEGRAL PART OF THESE DRAWINGS AND GENERALLY THE LAST SHEET OF THE SET.

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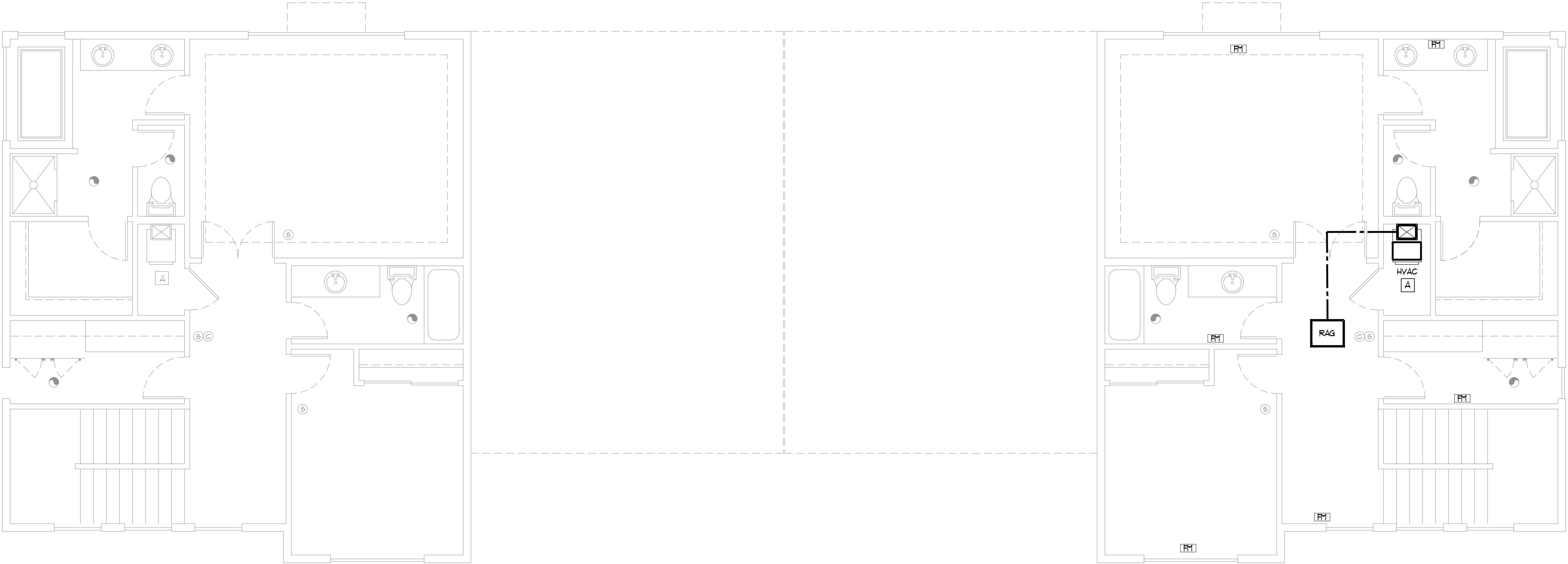
Rueppell
Home Design

Plan: 1864-1864
HC HOMES DUPLEX
Date: 04/11/23
Revision Date: 09/20/23
Drawn by: SM/BP
Phone: (253) 297-8040



HEAT PUMP
(LOCATION
PER SITE)

[A-8]



UPPER FLOOR HVAC PLAN



MAIN FLOOR HVAC PLAN

HVAC AND WATER HEATER

- A HVAC UNIT TO BE:
MODEL: AE48C
MIN. HSPF OF 9.5
HEAT PUMP TO BE:
MODEL: YORK YH124B126
- B ELECTRIC WATER HEATER WITH INTEGRATED
HEAT PUMP, TIER III NEAA 9FEC,
MODEL: RUUD PRO46512

MAIN FLOOR CEILING REGISTERS
UPPER FLOOR REGISTERS



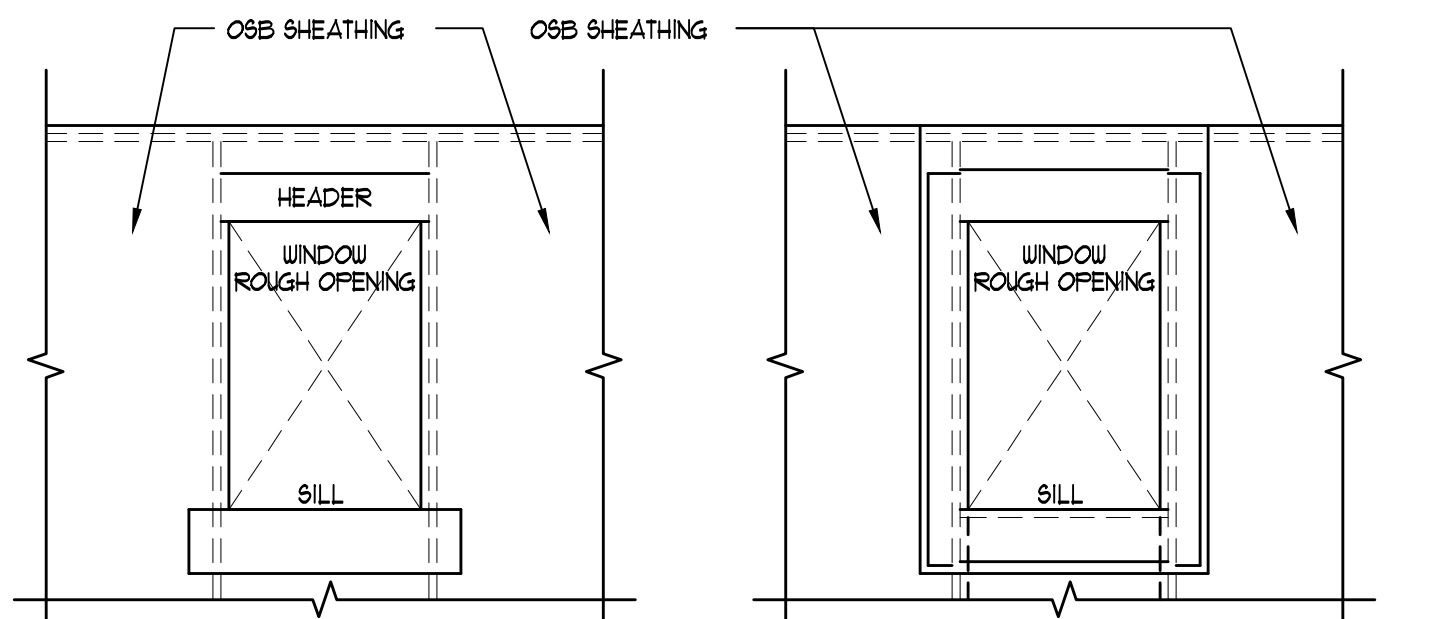
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LIABILITIES THAT INCLUDE PENALTIES OF UP TO \$5000 PER WORK VIOLATION, AND UP TO \$100,000 PER WORK VIOLATION WILLFULLY.
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Rueppell
Home Design

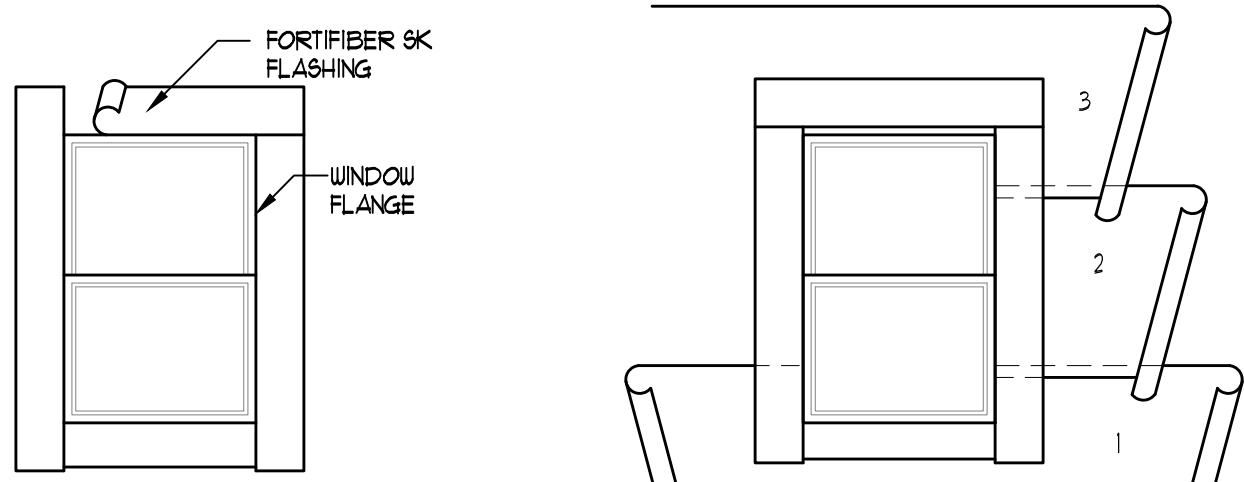
Plan: 1864-1864
HC HOMES DUPLEX
Date: 04/11/23
Revision Date: 09/20/23
Drawn by: SM/BP
Phone: (253) 297-8040

[D-1]



ATTACH A SILL STRIP OF FLASHING MATERIAL AT LEAST 12" WIDE WITH THE TOP EDGE EVEN WITH THE TOP EDGE OF THE ROUGH SILL. EXTEND THIS SILL STRIP AT LEAST 12" BEYOND THE EDGE OF THE ROUGH OPENING FOR WINDOW. ATTACH FLASHING WITH GALVANIZED ROOFING NAILS OR RUST-RESISTANT STAPLES.

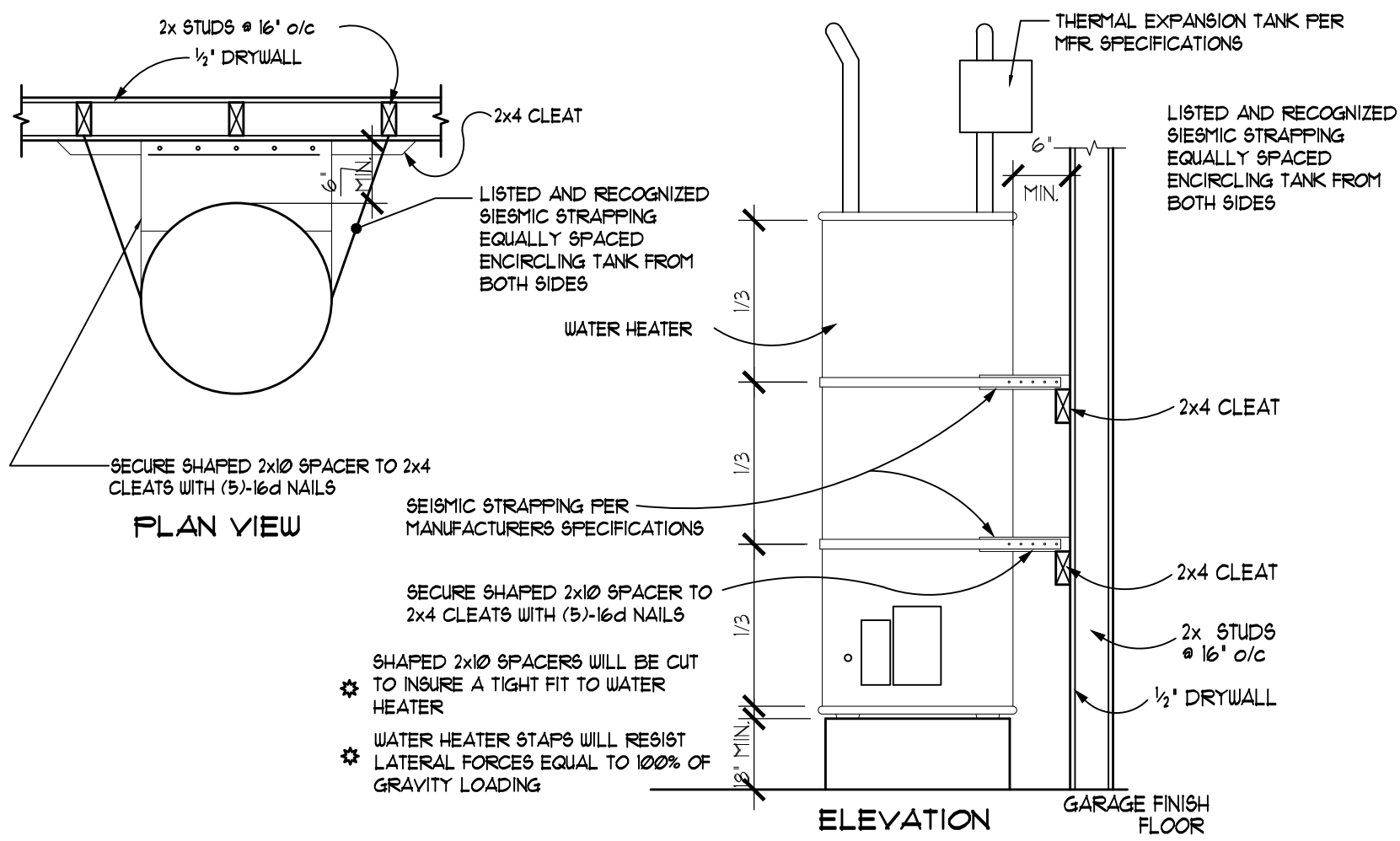
AFTER SILL STRIP IS IN PLACE, ATTACH JAMB STRIPS INSIDE OF OPENING AT LEAST 12" WIDE WITH INSIDE EDGE OF FLASHING EVEN WITH EDGE OF WINDOW OPENING. START JAMB STRIPS 1" BELOW THE SILL STRIP AND EXTEND JAMB STRIPS 6" ABOVE THE LOWER EDGE OF THE HEADER TOP OF WINDOW OPENINGS.



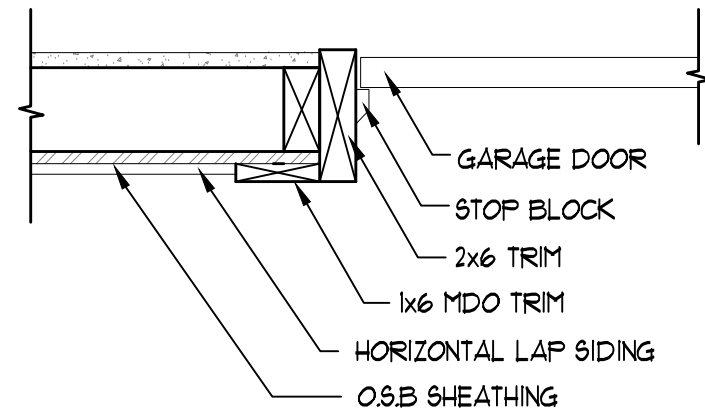
APPLY A BEAD OF CAULKING TO THE BACK SURFACES OF THE WINDOW, THEN PLACE THE WINDOW INTO THE ROUGH OPENING WITH FLANGES OVER THE INSTALLED FLASHING STRIPS. AFTER WINDOW IS PLACED, INSTALL THE HEAD FLASHING OVER THE WINDOW FLANGE. THIS IS ANOTHER STRIP OF FLASHING AT LEAST 12" WIDE.

STARTING AT THE BOTTOM OF THE WALL (SOLE PLATE), LAY WATER RESISTANT PAPER UNDER THE SILL STRIP. CUT ANY EXCESS WATER RESISTANT PAPER THAT MAY EXTEND ABOVE THE SILL FLANGE ON EACH SIDE OF THE OPENING (SHOWN IN DIAGRAM AS SHORT DASHED LINES). INSTALL SUCCEEDING COURSES OF WATER RESISTANT PAPER OVER JAMB AND HEAD FLANGES IN SHINGLE-BOARD FASHION.

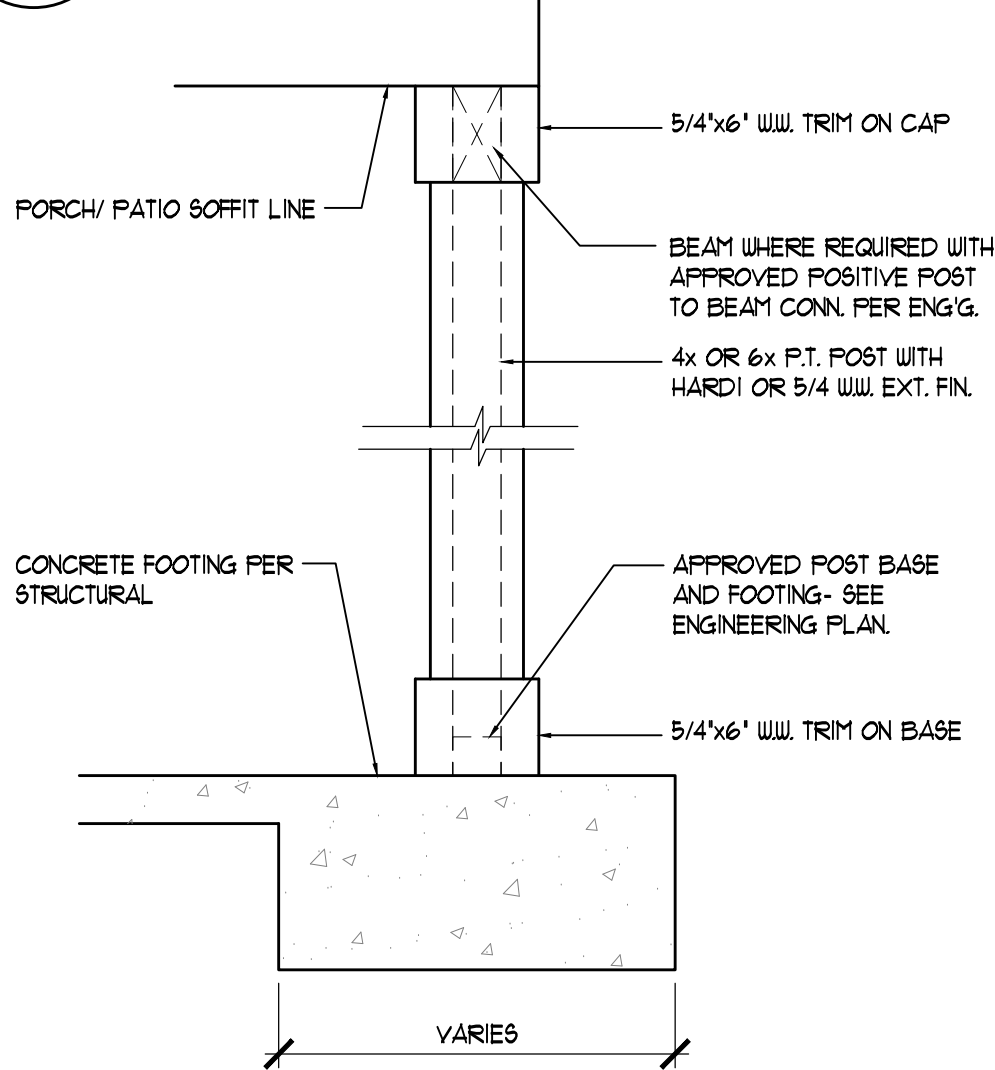
1 WINDOW FLASHING DETAIL N.T.S.



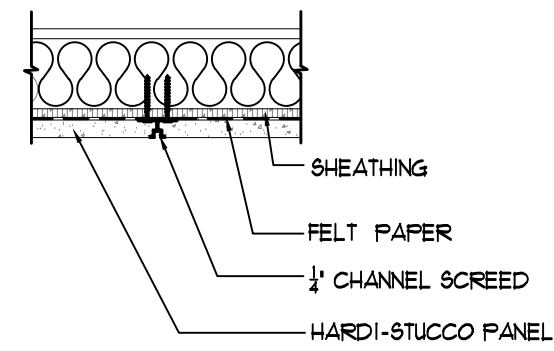
11 WATER HEATER SEISMIC STRAPPING N.T.S.



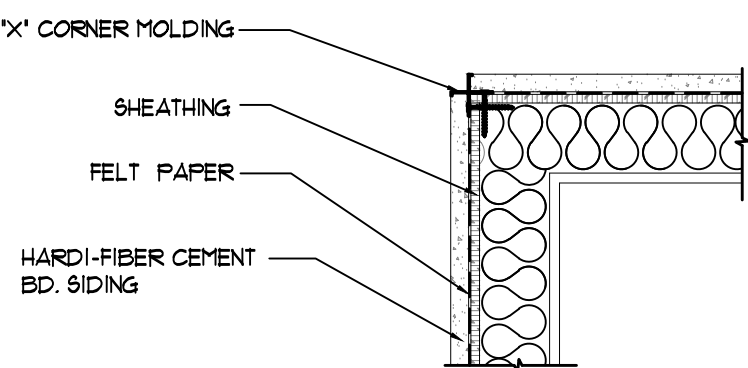
3 GARAGE DOOR TRIM DETAIL N.T.S.



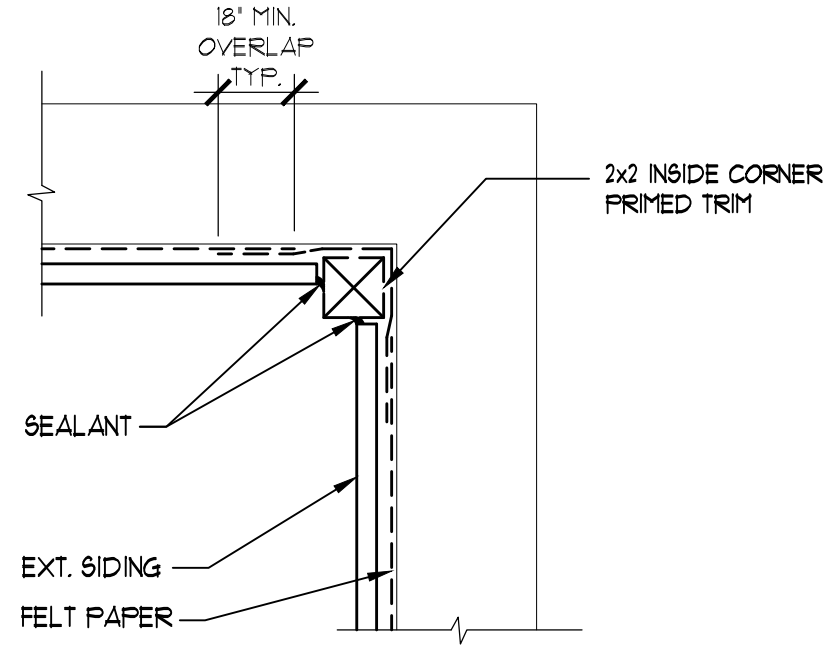
8 WRAP POST DETAIL N.T.S.



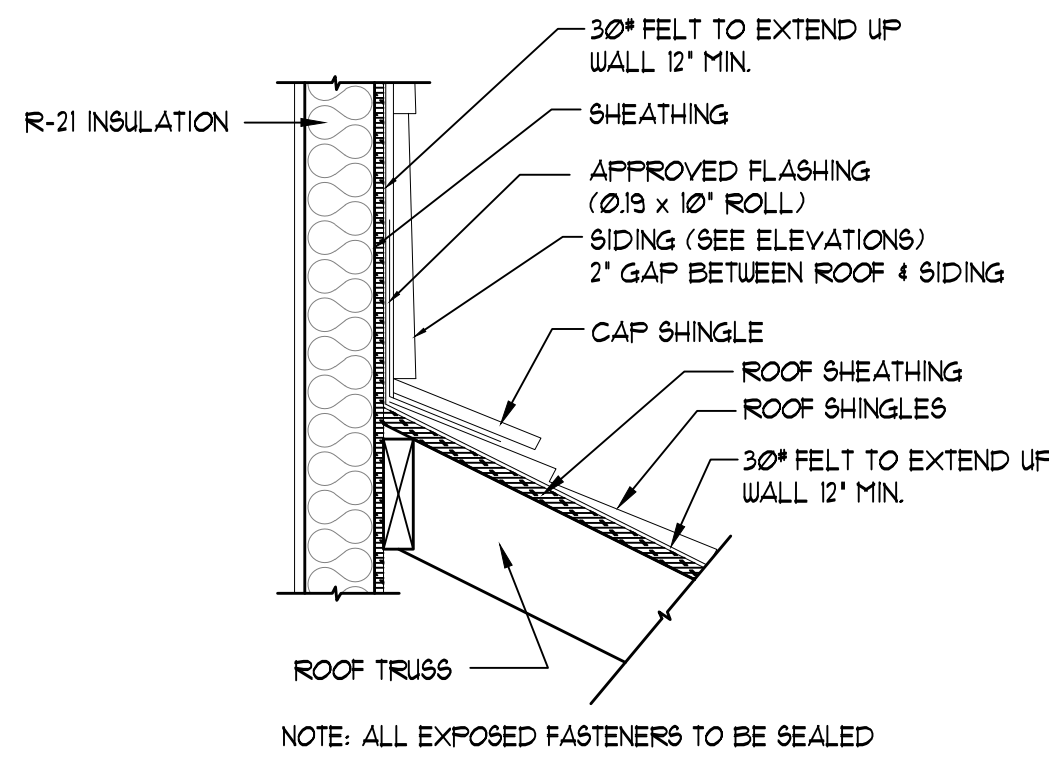
12 1/4 CHANNEL SCREED N.T.S.



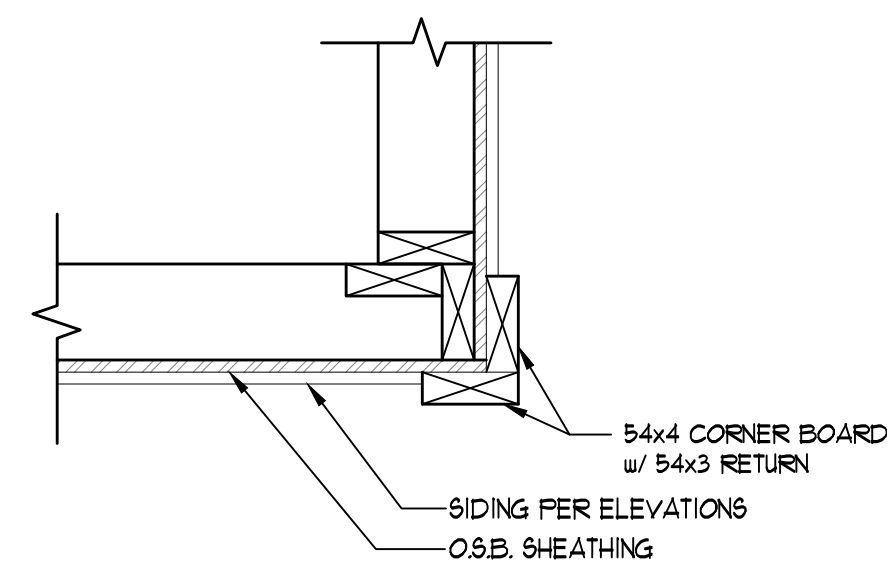
13 "X" CORNER MOLDING DETAIL N.T.S.



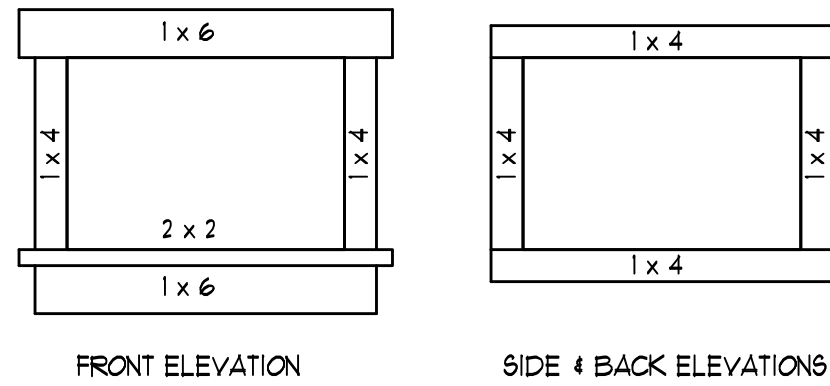
4 INSIDE CORNER TRIM DETAIL N.T.S.



9 ROOF/WALL FLASHING DETAIL N.T.S.



5 CORNER TRIM DETAIL N.T.S.



10 WINDOW TRIM DETAIL N.T.S.

Units - A&B

Window, Skylight and Door Schedule												
Project Information						Contact Information						
Plan 1864						Rueppell, Inc						
HC Homes Duplex						253.251 2501						
		Ref	U-factor			Qt	Width Feet ^{inch}	Height Feet ^{inch}			Area	UA
Exempt Swinging Door (24 sq. ft. max.)											0.0	0.00
Exempt Glazed Fenestration (15 sq. ft. max.)											0.0	0.00
Vertical Fenestration (Windows and doors)												
Component Description		Ref	U-factor			Qt	Width Feet ^{inch}	Height Feet ^{inch}			Area	UA
FOYER			0.28			1	1	6			9.0	2.52
DEN			0.28			1	6	5			30.0	8.40
DINING			0.28			1	6	5			30.0	8.40
KITCHEN			0.28			1	6	5			30.0	8.40
FAMILY			0.28			2	3	5			30.0	8.40
ENTRY			0.28			1	3	8			24.0	6.72
HALLWAY			0.28			1	2	8			16.0	4.48
											0.0	0.00
BEDROOM			0.28			1	6	4			24.0	6.72
STAIR			0.28			3	3	4			36.0	10.08
UTILITY			0.28			1	2	4			8.0	2.24
BATH			0.28			1	6	4			24.0	6.72
BATH			0.28			1	3	4			12.0	3.36
OWNER'S SUITE			0.28			1	10	4			40.0	11.20
FAMILY			0.28			1	3	8			24.0	6.72
											0.0	0.00
											0.0	0.00
											0.0	0.00
											0.0	0.00
											0.0	0.00
											0.0	0.00
											0.0	0.00
											0.0	0.00
											0.0	0.00

									0.0	0.00
									0.0	0.00
									0.0	0.00
									0.0	0.00
									0.0	0.00
									0.0	0.00
									0.0	0.00
									0.0	0.00
Sum of Vertical Fenestration Area and UA									337.0	94.36
Vertical Fenestration Area Weighted U = UA/Area										0.28
Overhead Glazing (Skylights)										
Component						Width	Height			
Description	Ref.	U-factor				Qt	Feet ^{inch}	Feet ^{inch}	Area	UA
									0.0	0.00
									0.0	0.00
									0.0	0.00
									0.0	0.00
									0.0	0.00
									0.0	0.00
									0.0	0.00
Sum of Overhead Glazing Area and UA									0.0	0.00
Overhead Glazing Area Weighted U = UA/Area										0.00
Total Sum of Fenestration Area and UA (for heating system sizing calculations)										
									337.0	94.36

Units - A&B

Simple Heating System Size: Washington State

This heating system sizing calculator is based on the Prescriptive Requirements of the 2018 Washington State Energy Code (WSEC) and ACCA Manual J and S. This tool will calculate heating loads only. ACCA procedures for sizing cooling systems should be used to determine cooling loads.

Please complete the green drop-downs and boxes that are applicable to your project. As you make selections in the drop-downs for each section, some values will be calculated for you. If you do not see the selection you need in the drop-down options, please contact the WSU Energy Program at energycode@energy.wsu.edu or (800) 866-2042 for assistance.

Project Information

Plan 1864

HC Homes Duplex

Contact Information

Shuppell Homes Design

(253)297-8040

Heating System Type:

☐ All Other Systems

☒ Heat Pump

To see detailed instructions for each section, place your cursor on the word "Instructions"

Design Temperature

Instructions

Psychlog

Design Temperature Difference (ΔT)

ΔT = Indoor (75 degrees) - Outdoor Design Temp

51

Area of Building

Conditioned Floor Area

Instructions

Conditioned Floor Area (sq ft)

1,864

Average Ceiling Height

Instructions

Average Ceiling Height (ft)

9.0

Conditioned Volume

16,776

Glazing and Doors

Instructions

U-0.28

U-Factor X Area = UA

0.280

337

94.36

U-Factor X Area = UA

0.50

...

...

Skylights

Instructions

Insulation

Attic

Instructions

R-49

U-Factor X Area = UA

0.026

971

25.25

Single Rafter or Joist Vaulted Ceilings

Instructions

Select R-value

U-Factor X Area = UA

No selection

...

...

Above Grade Walls (see Figure 1)

Instructions

R-21 Intermediate

U-Factor X Area = UA

0.056

1,527

85.51

Floors

Instructions

R-38

U-Factor X Area = UA

0.025

971

24.28

Below Grade Walls (see Figure 1)

Instructions

Select R-value

U-Factor X Area = UA

No selection

...

...

Slab Below Grade (see Figure 1)

Instructions

Select conditioning

F-Factor X Length = UA

No selection

...

...

Slab on Grade (see Figure 1)

Instructions

Select R-value

F-Factor X Length = UA

No selection

...

...

Location of Ducts

Instructions

2018 Washington State Energy Code – Residential

Prescriptive Energy Code Compliance for All Climate Zones in Washington

Single Family – New & Additions (effective February 1, 2021)

These requirements apply to all IRC building types, including detached one- and two-family dwellings and multiple single-family dwellings (townhouses).

Project Information
14C Homes Duplex

Contact Information
Ruesspell Homes Design
(253-297-6804)

Instructions: This single-family project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. Based on the size of the structure, the appropriate number of additional credits are checked as shown by the permit applicant.

Provide all information from the following tables as building permit drawings: Table R402.1 - Insulation and Fenestration Requirements by Component, Table R406.2 - Fuel Normalization Credits and 406.3 - Energy Credits.

Authorized Representative
Benny Pascual

Digitally signed by Benny Pascual
Date: 2022.05.10 07:55:28 -0800

Date
03/18/2021

All Climate Zones (Table R402.1.1)		
	R-Value *	U-Factor *
Fenestration U-Factor ^b	n/a	0.30
Skylight U-Factor ^a	n/a	0.50
Glazed Fenestration SHGC ^{b,c}	n/a	n/a
Ceiling ^a	49 ¹	0.026
Wood Frame Wall ^{a,b}	21 int	0.056
Floor	30	0.029
Below Grade Wall ^{c,h}	10/15/21 int + TB	0.042
Slab ^{d,f} R-Value & Depth	10, 2 ft	n/a

Units - A&B

**2018 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective February 1, 2021)**

Each dwelling unit **in a residential building** shall comply with sufficient options from Table R406.2 (fuel normalization credits) and Table 406.3 (energy credits) to achieve the following minimum number of credits. To claim this credit, the building permit drawings shall specify the option selected and the maximum tested building air leakage, and show the qualifying ventilation system and its control sequence of operation.

- Small Dwelling Unit: 3 credits**
Dwelling units less than 1,500 sf in conditioned floor area with less than 300 sf of fenestration area. Additions to existing building that are greater than 500 sf of heated floor area but less than 1,500 sf.
- Medium Dwelling Unit: 6 credits**
All dwelling units that are not included in #1 or #3
- Large Dwelling Unit: 7 credits**
Dwelling units exceeding 5,000 sf of conditioned floor area
- Additions less than 500 square feet: 1.5 credits**
All other additions shall meet 1-3 above

Before selecting your credits on this Summary table, review the details in Table 406.3 (Single Family), on page 4.

Summary of Table R406.2			
Heating Options	Fuel Normalization Descriptions	Credits - select ONE heating option	User Notes
1	Combustion heating minimum NAECA ^b	0.0	<input type="checkbox"/>
2	Heat pump ^c	1.0	<input checked="" type="checkbox"/>
3	Electric resistance heat only - furnace or zonal	-1.0	<input type="checkbox"/>
4	DHP with zonal electric resistance per option 3.4	0.5	<input type="checkbox"/>
5	All other heating systems	-1.0	<input type="checkbox"/>
Energy Options	Energy Credit Option Descriptions	Credits - select ONE energy option from each category ^d	User Notes
1.1	Efficient Building Envelope	0.5	<input type="checkbox"/>
1.2	Efficient Building Envelope	1.0	<input type="checkbox"/>
1.3	Efficient Building Envelope	0.5	<input checked="" type="checkbox"/>
1.4	Efficient Building Envelope	1.0	<input type="checkbox"/>
1.5	Efficient Building Envelope	2.0	<input type="checkbox"/>
1.6	Efficient Building Envelope	3.0	<input type="checkbox"/>
1.7	Efficient Building Envelope	0.5	<input type="checkbox"/>
2.1	Air Leakage Control and Efficient Ventilation	0.5	<input checked="" type="checkbox"/>
2.2	Air Leakage Control and Efficient Ventilation	1.0	<input type="checkbox"/>
2.3	Air Leakage Control and Efficient Ventilation	1.5	<input type="checkbox"/>
2.4	Air Leakage Control and Efficient Ventilation	2.0	<input type="checkbox"/>
3.1 ^a	High Efficiency HVAC	1.0	<input type="checkbox"/>
3.2	High Efficiency HVAC	1.0	<input checked="" type="checkbox"/>
3.3 ^a	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.4	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.5	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.6 ^a	High Efficiency HVAC	2.0	<input type="checkbox"/>
4.1	High Efficiency HVAC Distribution System	0.5	<input type="checkbox"/>
4.2	High Efficiency HVAC Distribution System	1.0	<input checked="" type="checkbox"/>

Prescriptive Path – Single Family
2018 Washington State Energy Code-R
2

**2018 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective February 1, 2021)**

Summary of Table R406.2 (cont.)			
Energy Options	Energy Credit Option Descriptions (cont.)	Credits - select ONE energy option from each category ^d	User Notes
5.1 ^a	Efficient Water Heating	0.5	<input type="checkbox"/>
5.2	Efficient Water Heating	0.5	<input type="checkbox"/>
5.3	Efficient Water Heating	1.0	<input type="checkbox"/>
5.4	Efficient Water Heating	1.5	<input type="checkbox"/>
5.5	Efficient Water Heating	2.0	<input checked="" type="checkbox"/>
5.6	Efficient Water Heating	2.5	<input type="checkbox"/>
6.1 ^a	Renewable Electric Energy (3 credits max)	1.0	<input type="checkbox"/>
7.1	Appliance Package	0.5	<input type="checkbox"/>
Total Credits		6.0	CLEAR FORM

- An alternative heating source sized at a maximum of 0.5 W/sf (equivalent) of heated floor area or 500 W, whichever is bigger, may be installed in the dwelling unit.
- Equipment listed in Table C403.3.2(4) or C403.3.2(5)
- Equipment listed in Table C403.3.2(1) or C403.3.2(2)
- You cannot select more than one option from any category EXCEPT in category 5. Option 5.1 may be combined with options 5.2 through 5.6. See Table 406.3.
- 1.0 credit for each 1,200 kWh of electrical generation provided annually, up to 3 credits max.
See the complete Table R406.2 for all requirements and option descriptions.

Please print only pages 1 through 3 of this worksheet for submission to your building official.

Prescriptive Path – Single Family
2018 Washington State Energy Code-R
3

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. LIQUID PETROLEUM GAS-BURNING APPLIANCES SHALL NOT BE INSTALLED IN A PIT, BASEMENT OR SIMILAR LOCATION WHERE HEAVIER THAN AIR GAS MIGHT ACCUMULATE. GAS-BURNING APPLIANCES 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.

TEMPERATURE 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)

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:

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 SHALL BE PROVIDED WITH MAKE UP AIR WHERE A CLOSET IS DESIGNED FOR THE INSTALLATION OF A CLOTHES DRYER. IF THE EXHAUST DUCT AREA IS NOT LESS THAN 100 SQ. INCHES FOR MAKE UP AIR SHALL BE PROVIDED IN THE CLOSET ENCLOSURE, OR MAKE UP AIR SHALL BE PROVIDED BY OTHER APPROPRIATE MEANS.
 - 100 SQ INCH TRANSFER GRILL PER IRC G4239.4 (614.6)

MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS					
FLOOR AREA (SQ. FT.)	NUMBER OF BEDROOMS				
	1	2	3	4	>5
	AIRFLOW IN CFM				
< 500	30	30	35	45	50
500 - 1000	30	35	40	50	55
1000 - 1500	30	40	45	55	60
1500 - 2000	35	45	50	60	65
2000 - 2500	40	50	55	65	70
2500 - 3000	45	55	60	70	75
3000 - 3500	50	60	65	75	80
3500 - 4000	55	65	70	80	85
4000 - 4500	60	70	75	85	90
4500 - 5000	65	75	80	90	95

INTERMITTENT SINGLE-HOUSE MECHANICAL VENTILATION RATE FACTORS					
RUN-TIME % EACH 4-HOUR SEGMENT	FLOOR AREA				
	4	3	2	1.5	1.0
25%	25%	33%	50%	66%	75%
100%	100%	100%	100%	100%	100%

MINIMUM REQUIRED EXHAUST RATES	
AREA TO BE VENTED	EXHAUST RATES
KITCHENS	100 CFM INTERMITTENT OR 25 CFM CONTINUOUSLY
BATHROOM / LAUNDRY / SLEEPING AREAS	50 CFM INTERMITTENT OR 20 CFM CONTINUOUSLY

The image shows a logo for 'Rueppell Home Design' with the word 'Rueppell' in a large, bold, sans-serif font and 'Home Design' in a smaller, regular font to its right. Below the logo, there is a table for 'City of Yuallup Development & Permitting Services ISSUED PERMIT'. The table has two rows and two columns. The first row contains 'Building' and 'Planning'. The second row contains 'Engineering' and 'Public Works'. Below the table, there is a large, stylized letter 'U' that incorporates a house silhouette. To the right of the 'U' is a copyright notice: 'Copyright © 2021, Rueppell, Inc.'.