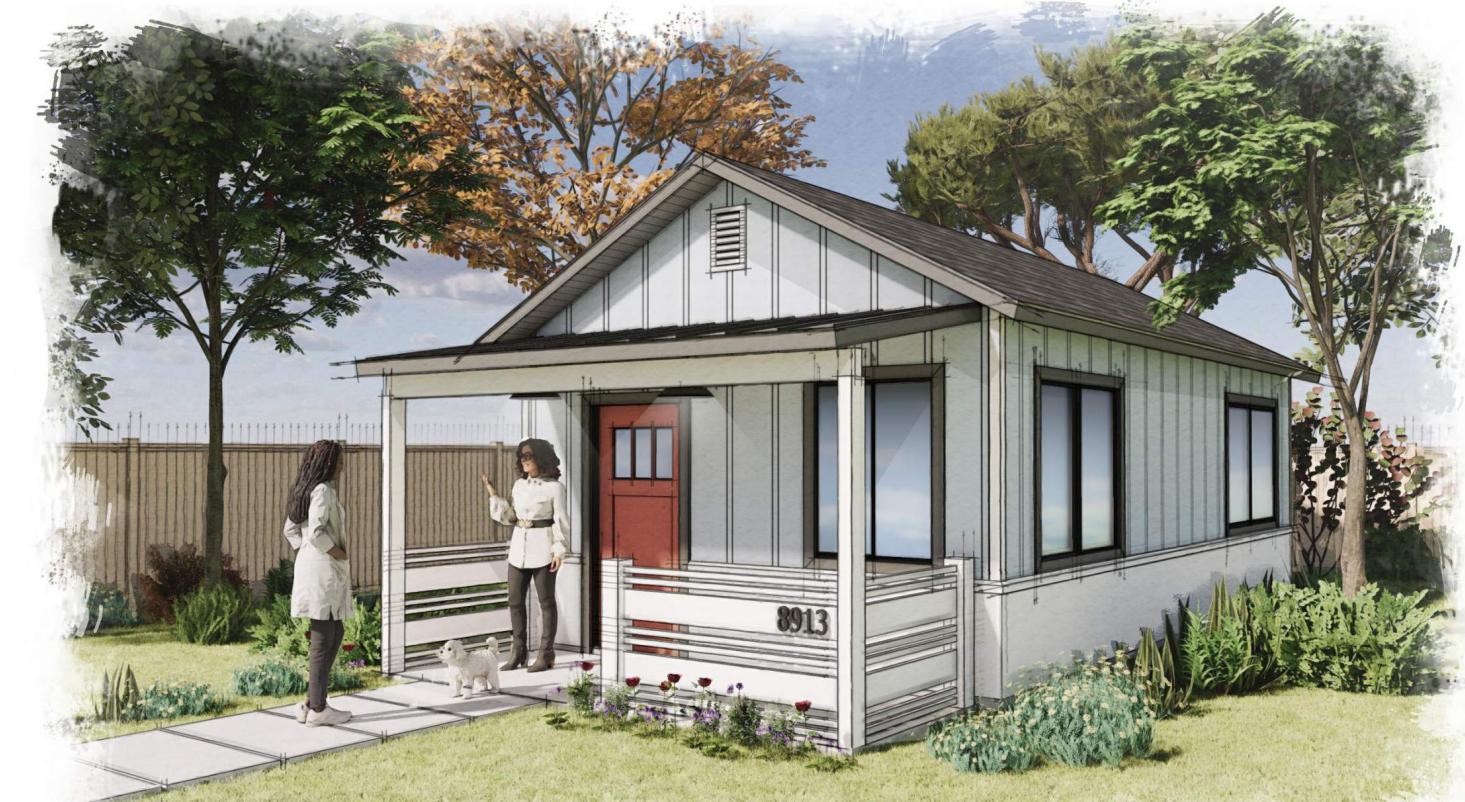


LAGUNA NIGUEL PRE-APPROVED ADU - PLAN 1



CALIFORNIA RANCH



MODERN FARMHOUSE



MEDITERRANEAN

ALL PLAN USERS MUST SUBMIT A COMPLETED
USER LICENSE AGREEMENT AT THE TIME OF
APPLICATION SUBMITTAL.

STAFF INITIALS: _____

PROJECT ADDRESS:

(TO BE PROVIDED BY OWNER / APPLICANT)

PROJECT DIRECTORY

(TO BE PROVIDED BY OWNER / APPLICANT)

APPLICANT:

ADDRESS: _____

PHONE: _____

EMAIL: _____

CONTACT: _____

OWNER:

ADDRESS: _____

PHONE: _____

EMAIL: _____

CONTACT: _____

ARCHITECT

RRM DESIGN GROUP

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UTILITIES

OWNER / APPLICANT TO LIST SERVICE PROVIDERS IN SPACES BELOW (SEE SITE PLAN, SHEET AS101 FOR INFORMATION AND LOCATIONS OF ALL UTILITIES)

WATER AND SEWER SERVICE

ELECTRICAL SERVICE

GAS SERVICE

SEWER SERVICE

GARBAGE SERVICE

CABLE SERVICE

WASTE WATER

(SELECTIONS TO BE PROVIDED BY APPLICANT OR OWNER)

THE ADU AND PRIMARY DWELLING UNIT SHALL HAVE SEPARATE, INDEPENDENT WATER SUPPLY AND SANITARY SEWER SYSTEMS.

NOTE: A NEW SEPTIC SYSTEM IS ONLY PERMITTED WHEN NO PUBLIC SEWER IS DEEMED AVAILABLE; A PERCOLATION REPORT AND SEPTIC DESIGN ARE REQ.

NO NEW SEPTIC SYSTEM.

NEW SEPTIC SYSTEM; PROVIDE STAMPED DEH EXHIBIT.

IF NO, SELECT ONE OF THE FOLLOWING:

NEW SEWER LINES CONNECTED DIRECTLY TO PUBLIC RIGHT OF WAY.

NEW SEWER LINES BRANCHED OFF EXISTING MAIN LINES ON THE PROPERTY.

NOTE: SEE SITE PLAN CHECKLIST ON AS-101 AND SITEPLAN ON AS-102 FOR MORE INFORMATION AND LOCATIONS.

WATER SUPPLY

(SELECTIONS TO BE PROVIDED BY APPLICANT OR OWNER)

NEW WATER SUPPLY CONNECTED DIRECTLY TO PUBLIC RIGHT OF WAY.

NEW WATER SUPPLY BRANCHED OFF EXISTING MAIN LINES ON THE PROPERTY.

NOTE: ADU AND PRIMARY DWELLING UNIT SHALL HAVE SEPARATE, INDEPENDENT WATER SUPPLY SEE SITE PLAN CHECKLIST ON AS-101 AND SITEPLAN ON AS-102 FOR MORE INFORMATION AND LOCATIONS.

ELECTRICAL PANEL

ELECTRICAL PANEL (SEE PLANS & SITE PLAN FOR LOCATION)

NOTE: SPECIFY THE ADU WILL HAVE ITS OWN SEPARATE CITY SERVICE INSTALLED OR IF THE ADU WILL BE CONNECTED TO EXISTING ADEQUATE SERVICE. PROVIDE COMPLETE ELECTRICAL LOAD CALCULATIONS FOR REVIEW. IF SUB-FED, PLEASE PROVIDE A SECOND AND SEPARATE LOAD CALCULATION OF THE EXISTING SERVICE TO JUSTIFY IT IS ADEQUATE FOR THE ADDITIONAL LOADS.

(A) NEW ELEC. MAIN PANEL 200 AMP WITH 225 AMP MIN. BUSBAR RATING

(B) A NEW ELEC. SUBPANEL CONNECTS TO THE ELEC. MAIN PANEL OF 220 AMP ON THE PRIMARY HOME WITH A 225 AMP MIN. BUSBAR RATING

(C) NEW ELEC. MAIN PANEL MIN. 400 AMP DUAL METER AT PRIMARY HOUSE WITH A NEW ELEC. SUB-PANEL AT ADU THAT CONNECTS TO THE MAIN PANEL

HERS QII REQUIRED

STAFF INITIALS

SEE SHEET S-103 FOR REQUIRED SPECIAL INSPECTIONS

A REGISTERED DESIGN PROFESSIONAL SHALL COMPLETE THE CITY OF LAGUNA NIGUEL STATEMENT OF REQUIRED SPECIAL INSPECTIONS CERTIFICATE (FORM PLG-240) PRIOR TO PERMIT ISSUANCE. IDENTIFY THE TYPE OF WORK REQUIRING SPECIAL INSPECTIONS IN THE PLANS AND THE INDIVIDUALS OR FIRMS RESPONSIBLE FOR THE SPECIAL INSPECTION ELEMENT(S). FOR FURTHER INSTRUCTIONS SEE S-103.

OWNER/APPLICANT HAS COMPLETED SPECIAL INSPECTION FORM

OWNER/APPLICANT SIGNATURE: _____

HERS VCHP: HERS RATER WILL NEED TO FOLLOW THE VERIFICATION AND TESTING PROTOCOL FOR THE MAXIMUM CAPACITY HEAT PUMP CREDIT REQUIREMENTS, INCLUDING BUT NOT LIMITED TO: VERIFIED REFRIGERANT CHARGE, VERIFIED MINIMUM HSPF AND EER/SEER, AND CAPACITY: DUCTLESS INDOOR UNITS AND THE COMPONENTS ARE WITHIN THE CONDITIONED ENVELOPE; AND AIRFLOW PROVIDED TO ALL HABITABLE SPACES (BEDROOMS AND LIVING SPACE).

THE FOLLOWING IS A SUMMARY OF THE FEATURES THAT MUST BE FIELD-VERIFIED BY A CERTIFIED HERS RATER AS A CONDITION FOR MEETING THE MODELED ENERGY PERFORMANCE OF THIS COMPUTER ANALYSIS. REGISTERED CF2RS AND CF3RS ARE REQUIRED TO BE COMPLETED IN THE HERS REGISTRY.

- INDOOR AIR QUALITY VENTILATION
- KITCHEN RANGE HOOD TABLE 150.0-G160
- REFRIGERATOR EER2
- VERIFIED SEER /SEER2
- AIRFLOW IN HABITABLE ROOMS (SC3.14.1.7)
- VERIFIED HSPF
- VERIFIED HEAT PUMP RATED HEATING CAPACITY
- WALL-MOUNTED THERMOSTAT IN ZONES GREATER THAN 150 FT2 (SC3.4.5)
- DUCTLESS INDOOR UNITS LOCATED ENTIRELY IN CONDITIONED SPACE (SC3.14.1.8)
- BATHROOM, KITCHEN, AND WHOLE HOUSE VENTILATION

OWNER/APPLICANT SIGNATURE: _____

1. ANY PROPOSED ENERGY STORAGE SYSTEM (ESS) SHALL FOLLOW **SINGLE-FAMILY RESIDENTIAL MANDATORY REQ. SUMMARY SECTION 150.0(s)** AND WILL REQUIRE A SEPARATE PERMIT TO BE PULLED BY APPLICANT.
2. VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION (VERIFICATION DETAILS FROM VCHP STAFF REPORT, APPENDIX B, AND RA3) (PER TITLE 24).

3. THIS PLAN IS INTENDED FOR FLAT LOTS (SLOPING LESS THAN 10° ACROSS THE LONGEST BUILDING DIMENSION), WITHOUT HIGHLY EXPANSIVE OR LIQUEFAC- TIVE SOILS. WHERE THE MAIN DWELLING UNIT IS SUPPORTED ON SHALLOW FOOTINGS WITH LABOR, ON GRADE CONSTRUCTION. IF THE PROJECT SITE DEVIATES FROM ANY OF THE AFOREMENTIONED QUALITIES, AS DETERMINED BY THE BUILDING OFFICIAL, THERE PRE-APPROVED ADU FOUNDATION PLANS AND DETAILS ARE NOT APPLICABLE.
4. SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

5. COMPLIANCE WITH THE DOCUMENTATION REQUIREMENTS OF THE 2022 ENERGY EFFICIENCY STANDARDS IS NECESSARY FOR THIS PROJECT. REGISTERED, SIGNED, AND DATED COPIES OF THE APPROPRIATE CF1R, CF2R, AND CF3R FORMS SHALL BE MADE AVAILABLE AT NECESSARY INTERVALS FOR BUILDING INSPECTOR REVIEW. FINAL COMPLETED FORMS WILL BE AVAILABLE FOR THE BUILDING OWNER.

PROJECT INFORMATION

STAFF INITIALS

*FOR BUILDING DEPARTMENT REVIEW, INITIAL WHEN SECTION HAS BEEN REVIEWED

PROJECT SCOPE:

1. CONSTRUCTION OF A NEW DETACHED 1 STORY 350 SF ACCESSORY DWELLING UNIT WITH 1 BEDROOM AND 1 BATH.
2. ALL THE WORK SHOWN IN THE DRAWINGS AND SPECIFICATIONS.

BUILDING INFORMATION:

NUMBER OF STORIES:	1	OCCUPANCY GROUP:	R-3
CONSTRUCTION TYPE:	VB	SPRINKLERED: (SEE FIRE SPRINKLER SECTION ON THIS SHEET)	
ZONING:			
MAX HEIGHT ALLOWED:	16' - 0"	PROPOSED HEIGHT:	

SITE INFORMATION:

(TO BE PROVIDED BY APPLICANT OR OWNER)

APN:

LAND USE:

EXISTING USE:

PROPOSED USE:

LOT COVERAGE

SETBACKS

MIN. REQUIRED: _____

PROPOSED: _____

FRONT: _____

REAR: 4' - 0"

SIDES: 4' - 0"

BETWEEN STRUCTURES: _____

FLOOR AREA RATIO: _____

STRUCTURES: _____

SETBACK RESTRICTIONS - FIRE RATINGS:

IS THE ADU 5' - 0" OR LESS TO ANY PROPERTY LINE AND/OR IS THE ADU 10' - 0" OR LESS FROM ANY ADJACENT BUILDING OR STRUCTURE?

NO

YES; IF YES, FIRE RATED WALL & PROJECTIONS REQUIRED PER 2022 CRC SECTION R302.1. FIRE RATED WALL DETAIL: 42/A-901

IF YES, FIREBLOCKING IS REQUIRED IN PROJECTIONS, RAKES AND EAVES. SEE DETAILS: 31/A-911, 32/A-911, 31/A-912, 32/A-912

DEFERRED SUBMITTAL(S)

(TO BE PROVIDED BY APPLICANT OR OWNER, CITY OF LAGUNA NIGUEL TO CHECK OFF BOXES WHEN COMPLETE)

STAFF INITIALS: _____

TRUSS CALCULATIONS

FIRE SPRINKLER (IF APPLICABLE, SEE FIRE SPRINKLERS SECTION.)

PHOTOVOLTAIC SYSTEM (PV) (DEFERRED SUBMITTAL)

YES, PV SYSTEM REQUIRED

STAFF INITIALS

NO, PV NOT REQUIRED (FOR ADUS 728SF OR SMALLER) PER CALIFORNIA ENERGY CODE SECTION 150.1(C)14 EXCEPTION (IF NO, OWNER/APPLICANT REQ. TO SELECT ONE):

1) FOR STEEP SLOPE ROOFS, WITH NORTHERLY AZIMUTH THAT LIES BETWEEN 300 DEGREES AND 90 DEGREES FROM TRUE NORTH. IF THE SARA IS LESS THAN 80 CONTIGUOUS SQUARE FEET.

2) PV SYSTEM SIZE DETERMINED BY SECTION 150.1(C)14 IS LESS THAN 1.8 KWDC.

3) BUILDING IS APPROVED ROOF DESIGNS WHERE THE ENFORCEMENT AUTHORITY DETERMINES IT IS NOT POSSIBLE FOR THE PV SYSTEM.

4) FOR BUILDINGS THAT ARE APPROVED BY THE LOCAL PLANNING DEPARTMENT PRIOR TO JANUARY 1, 2020 WITH MANDATORY CONDITIONS FOR APPROVAL.

5) PV SYSTEM SIZES DETERMINED USING EQUATION 150.1-C MAY BE REDUCED BY 25 PERCENT IF INSTALLED IN CONJUNCTION WITH A QUALIFYING BATTERY STORAGE SYSTEM.

OTHER, (REQ. APPROVAL) SPECIFY: _____

SOLAR READY REQUIREMENTS SHALL BE IMPLEMENTED. FOR MORE INFORMATION SEE "SOLAR READY NOTES" ON SHEET G-101.

UTILITY, GRADING, & DRAINAGE

(PLANS TO BE PROVIDED BY OTHERS)

IS GRADING NECESSARY TO CREATE PAD AND FOUNDATION?

NO YES IF YES, A CIVIL ENGINEER WILL BE REQUIRED TO PROVIDE PLANS.

USER LICENSE AGREEMENT

OWNER/APPLICANT TO SIGN & SUBMIT SEPARATE SUPPORTING DOCUMENT "USER LICENSE AGREEMENT" IN ADDITION TO SIGNING THIS USER AGREEMENT BELOW:

BY USING THESE PERMIT READY ACCESSORY DWELLING UNIT CONSTRUCTION DOCUMENTS, THE USER AGREES TO RELEASE, HOLD HARMLESS, AND INDEMNIFY THE CITY OF LAGUNA NIGUEL, ITS ELECTED OFFICIALS AND EMPLOYEES, RRM DESIGN GROUP, AND THE ARCHITECT OR ENGINEER WHO PREPARED THESE CONSTRUCTION DOCUMENTS FROM ANY AND ALL CLAIMS, LIABILITIES, SUITS AND DEMANDS ON ACCOUNT OF ANY INJURY, DAMAGE OR LOSS TO PERSONS OR PROPERTY, INCLUDING INJURY OR DEATH, OR ECONOMIC LOSSES, ARISING OUT OF THE USE OF THESE CONSTRUCTION DOCUMENTS.

THE PLANS ATTACHED HERE ARE APPROVED ONLY FOR USE IN CITY OF LAGUNA NIGUEL. NO DEVIATIONS, ALTERATIONS, OR OPTIONS BEYOND THOSE SPECIFICALLY INDICATED IN THE PLANS ARE ALLOWED WITHOUT PRIOR APPROVAL BY THE BUILDING JURISDICTION AND CHIEF BUILDING OFFICIAL. ANY UNAPPROVED PLAN MODIFICATIONS MAY BE DEVELOPED THROUGH RRM DESIGN GROUP AND THE APPROVING JURISDICTION IF REQUIRED. THIS SET OF PLANS SHALL NOT BE USED FOR A PUBLIC HOUSING PROJECT.

SIGNATURE _____ DATE _____

OPTION SELECTIONS (ALL STYLES)

*OWNER/APPLICANT REQ. TO SELECT ONE OF THE FOLLOWING STYLES AND ANY SUBSEQUENT OPTIONS. CROSS OUT NON-APPLICABLE OPTIONS & VIEWS THROUGHOUT SET.

COVERED FRONT PORCH OPTION

(A) YES

(B) NO, SEE VIEW: 2/A-101

BATH TUB / SHOWER

(A) BATHTUB (AS SHOWN IN PRIMARY VIEW)

(B) WALK-IN SHOWER, SEE DETAIL: 23/A-901

FLOOR PLAN NOTES

- WEATHER BARRIERS.**
 - NOT FEWER THAN ONE-LAYER WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS CONTINUOUSLY FROM THE FLOOR TO THE ROOF, AND TERMINATED AT PENETRATIONS AND OTHER APPENDAGES WITH FLASHING, MINIMUM NO. 15 FELT COMPLYING WITH ASTM D226, TYPE 1.
 - PROVIDE (2) LAYERS OF GRADE D PAPER OR EQUAL WHEN PLASTER IS INSTALLED OVER WOOD-BASED SHEATHING. (2022 CRC R703.7.3)
- DOMESTIC RANGE VENTILATION DUCTS** SHALL HAVE SMOOTH INTERIOR SURFACES. (2022 CMC 504.3)
- CLOTHES DRYER VENTILATION** EXHAUST DUCTS SHALL TERMINATE OUTSIDE THE BUILDING AND HAVE A BACK-DRAFT DAMPER. EXHAUST DUCT IS LIMITED TO 14" W/TWELVE ELBOWS, THIS SHALL BE REDUCED 2" FOR EVERY ELBOW IN EXCESS OF TWO. MIN. DIA. 4". SMOOTH, METAL DUCT. (2022 CMC 504.4)
- ALL MANUFACTURED EQUIPMENT** SHALL BE INSTALLED AS PER MANUFACTURER'S SPECIFICATION AND DIMENSIONS VERIFIED WITH INSTALLATION DRAWINGS. ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE ON FILE.
- SHOWERS** AND TUB-SHOE COMBINATIONS, CONTROL VALVES MUST BE PRESSURE BALANCED OR THERMOSTATIC MIXING VALVES. (2022 CPC 417.0)
- WET-ROOM GLAZING**, PROVIDE TEMPERED GLAZING IN DOORS AND ENCLOSURES FOR SHOWERS, BATHTUBS, SAUNAS, STEAM ROOMS, HOT TUBS & SIMILAR USES WHERE THE BOTTOM EXPOSED EDGE IS LESS THAN 60-INCHES ABOVE A STANDING SURFACE. (2022 CRC R302.4.5)
- HEATING AND AIR CONDITIONING SYSTEM DESIGN** SHALL CONFORM TO CALGREEN SEC 4.507, ENVIRONMENTAL COMFORT.
- WATER CLOSETS.**
 - CLEARANCES: 24" MIN. FRONT, 30" MIN COMPARTMENT WIDTH.
 - PROVIDE A MIN 3" SF WINDOW, 1/2 OF WHICH SHALL BE OPENABLE OR AN EXHAUST FAN 50 CFM FOR 10 MINUTES OR 20 CFM FOR CONTINUOUS.
 - DUCTS, DUCTS OUTSIDE THE ATTIC DAMPER. (2022 CRC R303.3)
 - NEW WATER CLOSETS AND ASSOCIATED FLUSHING VALVES, MAY SHALL USE NO MORE THAN 1.28 GALLONS PER FLUSH AND SHALL MEET PERFORMANCE STANDARDS ESTABLISHED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS STANDARD A12.19.2. H & S CODE, SECTION 17921.3(B).
- BATH ACCESSORIES:** PROVIDE MINIMUM 1 TOILET PAPER HOLDER AND 1 TOWEL BAR PER BATHROOM. PROVIDE NECESSARY BLOCKING FOR TOILET PAPER HOLDER AND TOWEL BARS.
- WHOLE-BUILDING MECHANICAL VENTILATION SYSTEM** PER ASHRAE STANDARDS 62.2. PROVIDE THE INSPECTOR WITH THE FOLLOWING INFORMATION AT OR BEFORE THE TIME OF INSPECTION:
 - CALCULATIONS FOR REQUIRED VENTING RATES.
 - CALCULATION AND ALLOWANCE FOR PERMITTED SYSTEMS IF APPLICABLE.
 - DIA OF SYSTEM USED AND MAXIMUM DUCT LENGTH PER ASHRAE 62.2 TABLE 7.1.
 - TYPE OF SYSTEM USED AND PROVIDED. COMPLETED CF-6R-MECH-05 FORM.
 - FANS SHALL BE A MAXIMUM OF 1" SONE.
 - FANS SHALL BE PROVIDED A COVER OF R-4.2 WHEN OFF.
- ATTIC ACCESS:**
 - WHERE REQUIRED, PROVIDE 30" MIN HEADROOM IN THE ATTIC SPACE (2022 CRC R807.1).
 - BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREAS THAT EXCEED 30 SQUARE FEET AND HAVE A VERTICAL HEIGHT OF 30-INCHES OR GREATER. THE VERTICAL HEIGHT SHALL BE MEASURED FROM TOP OF THE CEILING FRAMING MEMBERS TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS.
 - THE COUGH-FRAMED OPENING SHALL NOT BE LESS THAN 22" X 30" AND SHALL BE LOCATED NOT OVER 20 FEET FROM THE EQUIPMENT. (2022 CRC R807.1).
 - IN ATTIC, PROVIDE LIGHT AND SWITCH, AND ALL NECESSARY ELECTRICAL. PROVIDE UNBLOCKED PASSAGEWAY 24" WIDE OF SOLID CONTINUOUS FLOORING FROM ACCESS TO EQUIPMENT AND IT'S CONTROLS. ALSO PROVIDE UNBLOCKED WORK SPACE IN FRONT OF EQUIPMENT 30" DEPTH MINIMUM. PROVIDE COMBUSTION AIR AND CONDENSATE LINE TO OUTSIDE OR AN APPROVED DRAIN FOR OPTIONAL AIR CONDITIONING.
 - PROVIDE A 120V RECEPTACLE AND A LIGHT NEAR THE EQUIPMENT WITH LIGHT SWITCH LOCATED AT THE ATTIC ACCESS.
- BATHTUB AND SHOWER DOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR PER 2022 CRC, SECTION R307.2.**

PLUMBING NOTES

- CONFORM WITH CURRENT CPC AND LOCAL REQUIREMENTS.
- DOMESTIC WATER (WITHIN BUILDING):** COPPER OR PEX PIPE OR APPROVED EQUAL.
- AIR CHAMBERS:** 12" LONG CAPPED NIPPLE AT END OF EACH BRANCH TO EACH FIXTURE.
- DIELCTRIC UNIONS "F.P.C.O."** REQUIREMENT AT ALL DISSIMILAR MATERIAL CONNECTIONS.
- WHEN "OPTIONAL" SOFT-WATER LOOP INSTALLED, PROVIDE WITH 2 GATE VALVE.
- WATER SERVICE PIPE** SHALL BE PER CIVIL PLANS OR AS REQUIRED BY THE JURISDICTION.
- WATER METER** PER WATER DISTRICT (REFER SIZE W/ FIRE SPRINKLER PLANS IF APPLICABLE).
- SHOWER HEADS AND FAUCETS:** FLOW RATES PER 2022 CGBC SECTION 4.303.
- WATER HEATER** (REFER TO BUILDING ENERGY ANALYSIS REPORT):
 - ALL DOMESTIC HOT WATER PIPING SHALL BE INSULATED. (2022 CPC 609.12)
 - PIPES UP TO 2 INCHES IN DIAMETER: INSULATION WALL THICKNESS NOT LESS THAN DIAMETER OF PIPE. (2022 CPC 609.12.2)
 - PIPES GREATER THAN 2 INCHES IN DIAMETER: INSULATION WALL THICKNESS NOT LESS THAN 2 INCHES. (2022 CPC 609.12.2)
- EXCEPTIONS:**
 - PIPING THAT PENETRATES FRAMING MEMBERS SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION FOR THE DISTANCE OF THE FRAMING PENETRATION. (2022 CPC 609.12.2)
 - HOT WATER PIPING BETWEEN THE FIXTURE CONTROL VALVE OR SUPPLY STOP AND THE FIXTURE OR APPLIANCE SHALL NOT BE REQUIRED TO BE INSULATED. (2022 CPC 609.12.2)
- PROVIDE A TEMPERATURE AND PRESSURE RELIEF VALVE** WITH A FULL SIZE, DRAIN OF GALVANIZED STEEL OR HARD DRAWN COPPER TO THE OUTSIDE OF THE BUILDING WITH THE END OF THE PIPE PROTRUDING 6" MINIMUM @ 2' MAX. ABOVE GRADE POINTING DOWNWARD TO THE TERMINATION - UNTHREADED.
- COMBUSTION AIR PER MANUFACTURER REQUIREMENTS.**
- CLEARANCES PER MANUFACTURER REQUIREMENTS.**
- PLUMBING INSULATION** PER 2022 CEC 150.0 (J) AND CBC 609.11
- A. DOMESTIC HOT WATER PIPING** SHALL BE INSULATED.
- B. HOT WATER PIPING** SHALL HAVE A MINIMUM WALL THICKNESS EQUAL TO THE DIAMETER OF THE PIPE FOR A PIPE UP TO 2 INCHES (50 MM) IN DIAMETER. INSULATION WALL THICKNESS SHALL BE NOT LESS THAN 2 INCHES (51 MM) FOR A PIPE OF 2 INCHES (50 MM) OR MORE IN DIAMETER.
1. PIPING THAT PENETRATES FRAMING MEMBERS SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION FOR THE DISTANCE OF THE FRAMING PENETRATION.
2. HOT WATER PIPING BETWEEN THE FIXTURE CONTROL VALVE OR SUPPLY STOP AND THE FIXTURE OR APPLIANCE SHALL NOT BE REQUIRED TO BE INSULATED.
- C. SERVICE WATER HEATING SYSTEMS PIPING TO INCLUDE:**
 - RECIRCULATING SYSTEM PIPING, INCLUDING THE SUPPLY AND RETURN PIPING TO THE WATER HEATER.
 - THE FIRST 8 FEET OF HOT AND COLD OUTLET PIPING, INCLUDING THE COLD WATER TANK, HOT WATER TANK AND A HEAT TRAP, FOR A NON-RECIRCULATING STORAGE SYSTEM.
 - PIPES THAT ARE EXTERNALLY HEATED. SHALL BE INSULATED AS FOLLOWS: UP TO 1" PIPE DIAMETER TO HAVE 1.0 MIN THICKNESS OR R7.7 RATING PER CEN TABLE 120.3A
- EXCEPTIONS:**
 - FACTORY-INSTALLED PIPING WITHIN SPACE-CONDITIONING EQUIPMENT CERTIFIED UNDER SECTION 110.1 OR 110.2.

PLUMBING NOTES CONTINUED.

- 2. PIPING THAT PENETRATES FRAMING MEMBERS** SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION FOR THE DISTANCE OF THE FRAMING PENETRATION. METAL PIPING THAT PENETRATES METAL FRAMING SHALL USE GROMMETS, PLUGS, WRAPPING OR OTHER INSULATING MATERIAL TO ASSURE THAT NO CONTACT IS MADE WITH THE METAL FRAMING.
- 3. PIPING INSTALLED IN INTERIOR OR EXTERIOR WALLS** SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION IF ALL OF THE REQUIREMENTS OF THE METAL OR PLASTIC INSULATION ARE MET AND THE INSULATION IS TIGHTLY WRAPPED WITH QUALITY INSULATION. INSTALLATION QM1 AS SPECIFIED IN THE REFERENCE RESIDENTIAL APPENDIX RA5.
- 4. PIPING SURROUNDED WITH A MINIMUM OF 1 INCH OF WALL INSULATION**, 2 INCHES OF CRAWLSPACE INSULATION, OR 4 INCHES OF ATTIC INSULATION SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION.
- 11. INSULATION PROTECTION**, PIPE INSULATION SHALL BE PROTECTED FROM DAMAGE DUE TO SUNLIGHT, MOISTURE, EQUIPMENT MAINTENANCE AND WIND. PROTECTION SHALL, AT MINIMUM, INCLUDE THE FOLLOWING (2022 CEC SECTION 120.3(B)):
 - A. PIPE INSULATION** EXPOSED TO WEATHER SHALL BE PROTECTED BY A COVER SURFACE FOR OUTDOOR SERVICE. THE COVER SHALL BE WATER PROOF AND PROVIDE SHADING FROM SOLAR RADIATION THAT CAN CAUSE DEGRADATION OF THE MATTER. ADHESIVE TAPE SHALL NOT BE USED TO PROVIDE THIS PROTECTION.
 - B. PIPE INSULATION** COVERING CHILLED WATER PIPING AND REFRIGERANT SUCTION PIPING LOCATED OUTSIDE THE CONDITIONED SPACE SHALL INCLUDE, OR BE PROTECTED BY, A CLASS I OR CLASS II VAPOR RETARDER. ALL PENETRATIONS AND JOINTS SHALL BE SEALED.
 - C. PIPE INSULATION** BURIED BELOW GRADE MUST BE INSTALLED IN A WATER PROOF AND NONCRUSHABLE CASING OR SLEEVE.
- 12. PIPE INSULATION**: REFER TO TITLE 24 - MANDATORY MEASURES - "SPACE CONDITIONING, WATER HEATING & PLUMBING SYSTEM MEASURES".
- 13. STRAPS AND HANGERS**: PROVIDE AS NECESSARY TO INSURE A STABLE INSTALLATION. SEE TITLE 24 FOR WATER HEATER REQUIREMENTS.
- 14. ALL HOSE BIBS** SHALL HAVE APPROVED BACK FLOW PREVENTION DEVICES.
- 15. PLUMBING FIXTURES (WATER CLOSETS) AND FITTINGS (FAUCETS AND SHOWERHEADS)** SHALL MEET THE STANDARDS REFERENCED IN CALGREEN TABLE 4.303.3.
- 16. WATER HEATER** SHALL BE PROVIDED WITH A TEMPERATURE AND PRESSURE RELIEF VALVE. (PER 2022 CPC 505.2) THE RELIEF VALVE SHALL BE PROVIDED WITH A DRAIN LINE WHICH EXTENDS FROM THE VALVES TO THE OUTSIDE OF THE BUILDING. (PER 2022 608.5 CPC)
- 17. PER 2022 CPC 603.5.7 OUTLETS WITH HOSE ATTACHMENTS**, POTABLE WATER OUTLETS WITH HOSE ATTACHMENTS, OTHER THAN WATER HEATER DRAINS, BOILER DRAINS, AND CLOTHES WASHER CONNECTIONS, SHALL BE PROTECTED BY A NONREMOVABLE HOSE BIBB TYPE BACKFLOW PREVENTER, A NONREMOVABLE HOSE BIBB TYPE VACUUM BREAKER, OR BY AN ATMOSPHERE VACUUM BREAKER INSTALLED NOT LESS THAN 6 INCHES ABOVE THE HIGHEST POINT OF USAGE LOCATED ON THE DISCHARGE SIDE OF THE LAST VALVE. IN CLIMATES WHERE FREEZING TEMPERATURES OCCUR, A LISTED SELF DRAINING FROST-PROOF HOSE BIBB WITH AN INTEGRAL BACKFLOW PREVENTER OR VACUUM BREAKER SHALL BE USED.

ELECTRICAL NOTES

- CONFORM WITH CURRENT CPC AND LOCAL REQUIREMENTS.
- ELECTRICAL SYSTEM GROUPS TO BE PROVIDED FOR NEC ARTICLE 250-8.
- ALL MATERIALS TO BE UL LABELED.
- METER: "SQUARE D" 120 VOLT/240 VOLT, 1 AND 3 WIRE GROUND OR EQUAL.
- ELECTRICAL PANEL: FLUSH MOUNT, 30" CLEARANCE. SEE COVER SHEET FOR SELECTION. SEE SITE PLAN FOR ELECTRICAL PANEL LOCATION.
- CONDUCTORS: TW, THW, COPPER, MINIMUM 14 AT LIGHTING, 12 AT OTHER CIRCUITS.
- ALL LUMINARIES SHALL COMPLY WITH 2022 CEC SECTION 150.0 (K) AND TABLE 150.0-A AS REFERENCED ENERGY NOTES, LUMINAIRE REQUIREMENTS SHEET G-10.
- ALL ELECTRICAL OUTLETS INSTALLED IN BATHROOMS, GARAGES, BASEMENT, CLOSETS, SPACES OUTDOORS, KITCHEN COUNTERS, AND AT WET BAR SINKS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION IN COMPLIANCE WITH NEC Art 210.8, CONSISTING OF 125 VOLT, SINGLE-PHASE, 15- AND 20- AMPERE RECEPTACLES.
- ALL BATHROOM RECEPTACLE OUTLETS SHALL BE SUPPLIED BY A MINIMUM OF ONE 120-VOLT, 20-AMPERE BRANCH CIRCUIT. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS. THIS DEDICATED CIRCUIT MAY SERVE MORE THAN ONE BATHROOM. (2022 CEC 210.11(C))
10. THERMOSTAT SHALL BE A PROGRAMMABLE TYPE, HONEYWELL TH8320 OR EQUAL.
- CEILING-SUSPENDED (PADDLE) FANS SHALL BE SUPPORTED INDEPENDENTLY OF AN OUTLET BOX OR BY LISTED OUTLET BOX OR OUTLET BOX ADAPTER LISTED FOR THE FAN AND INSTALLED IN ACCORDANCE WITH 2022 CEC 314.27(C) (2022 CEC 422.1).
- ALL LUMINARIES, LAMP-HOLDERS, AND RETROFIT KITS SHALL BE LISTED (2022 CEC 416.0).
- ALL 120-VOLT, SINGLE PHASE 15- AND 20- AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, LIVING ROOMS, DINING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED AFCI-CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION ON THE BRANCH CIRCUIT. (2022 CEC 210-12(A)).
- ALL NON-LOCKING TYPE 125-VOLT, 15- AND 20- AMPERE RECEPTACLES IN DWELLING UNITS SHALL BE LISTED FOR RESIDENTIAL RECEPTACLES. EXCEPT: (1) RECEPTACLES THAT ARE MORE THAN 60" ABOVE THE FLOOR, (2) RECEPTACLES PART OF A LUMINAIRE OR APPLIANCE, (3) A SINGLE RECEPTACLE OR A DUPLEX RECEPTACLE FOR TWO APPLIANCES THAT ARE NOT EASILY MOVED AND LOCATED WITHIN DEDICATED SPACE AND ARE CHORD-AND-PLUG CONNECTED AS PER CEC 400.10, AND (4) NON-GROUNDING RECEPTACLES USED FOR REPLACEMENTS AS PERMITTED IN CEC 405.4(D)(2)(A).
- ALL DIMMING CONTROLS, LIGHTING IN HABITABLE SPACES, INCLUDING BUT NOT LIMITED TO LIVING ROOMS, DINING ROOMS, KITCHENS AND BEDROOMS, SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED DIMMING CONTROLS THAT ALLOW THE LIGHTING TO BE MANUALLY TURNED ON AND OFF.
- EXCEPT: CEILING FANS MAY PROVIDE CONTROL OF INTEGRATED LIGHTING VIA A REMOTE CONTROL.**
- NO CONTROLS SHALL BYPASS A DIMMER, OCCUPANT SENSOR OR VACANCY SENSOR FUNCTION WHERE THAT DIMMER OR SENSOR HAS BEEN INSTALLED TO COMPAT WITH SECTION 150.0(K).
- LAUNDRY DRYER VENT TO EXTERIOR TO BE 14' FEET MAXIMUM, LESS 2 FEET PER 90 DEGREE TURN PER CMC 504.3.2.2. IF VENT IS OVER 14' AN APPROVED POWER ASSISTED DEVICE IS REQUIRED. DRYER EXHAUST DUCT POWER VENTILATORS SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 705 AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PER 2022 CMC, SECTION 504.2.3. SEE NOTE BELOW.
- BATHROOM EXHAUST FANS (BATHROOM APPLIES TO ROOMS CONTAINING BATHTUB, SHOWER, OR TUB/SHOWER COMBINATION) WHICH EXHAUST DIRECTLY FROM BATHROOMS SHALL COMPLY WITH THE FOLLOWING: (PER 2022 CEC 423.4).
- FANS SHALL BE ENERGY STAR® COMPLIANT AND BE DUCTED TO TERMINATE OUTSIDE THE BUILDING MIN 3' FROM OPENINGS.
- UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENTILATION SYSTEM, FANS MUST BE CONTROLLED BY A HUMIDITY CONTROL.
- HUMIDITY CONTROLS SHALL BE CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF ≤ 50 PERCENT TO A MAXIMUM OF 80 PERCENT. A HUMIDITY CONTROL MAY UTILIZE MANUAL OR AUTOMATIC MEANS OF ADJUSTMENT.
- A HUMIDITY CONTROL MAY BE A SEPARATE COMPONENT TO EXHAUST FAN AND IS NOT REQUIRED TO BE INTEGRAL (E.G. INLET).
- BATHROOM EXHAUST FANS SHALL PROVIDE MINIMUM 50 CFM EXHAUST RATE (2022 CMC TABLE 403.7).
- KITCHEN EXHAUST FANS SHALL PROVIDE MINIMUM 100 CFM EXHAUST RATE (2022 CMC TABLE 403.7)

ENERGY NOTES

- 1. THE BUILDER** MUST PROVIDE NEW HOMEOWNERS WITH A LUMINAIRE SCHEDULE THAT INCLUDES A LIST OF INSTALLED LAMPS AND LUMINARIES.
- LUMINAIRE REQUIREMENTS** (2022 CEC 150.0(K))
A. LUMINAIRE EFFICACY: ALL INSTALLED LUMINARIES SHALL MEET THE REQUIREMENTS IN TABLE 150.0-A.
EXCEPT: INTEGRATED DEVICE LIGHTING, LIGHTING INTEGRAL TO EXHAUST FANS, KITCHEN RANGE HOODS, BATH VENT MIRRORS AND GARAGE DOOR OPENERS; NAVIGATION LIGHTING: SUCH AS NIGHT LIGHTS, STEP LIGHTS, AND PATH LIGHTS LESS THAN 5 WATTS; CABINET LIGHTING; LIGHTING INTERNAL TO DRAWERS, CABINETRY AND LINEN CLOSETS WITH AN EFFICACY OF 45 LUMENS PER WATT OR GREATER.
- THE FOLLOWING ARE HIGH-EFFICACY LIGHT SOURCES PER TABLE 150.0-A:**
THE FOLLOWING LIGHT SOURCES, OTHER THAN THOSE INSTALLED IN CEILING RECESSED DOWNLIGHT LUMINARIES, ARE NOT REQUIRED TO COMPLY WITH REFERENCE JOINT APPENDIX JA8:
1. LED LIGHT SOURCES INSTALLED OUTDOORS.
2. INSEPARABLE LIGHT SOURCE INTEGRATING (SSL) LUMINARIES CONTAINING COLORED LIGHT SOURCES THAT ARE INSTALLED TO PROVIDE DECORATIVE LIGHTING.
3. PIN-BASED LINEAR FLUORESCENT OR COMPACT FLUORESCENT LIGHT SOURCES USING ELECTRONIC BALLASTS.
4. HIGH INTENSITY DISCHARGE (HID) LIGHT SOURCES INCLUDING PULSE START METAL HALIDE AND HIGH PRESSURE SODIUM LIGHT SOURCES.
5. LUMINARIES WITH HARDWIRED HIGH FREQUENCY GENERATOR AND INDUCTION LAMP.
6. CEILING FAIR LIGHT KITS SUBJECT TO FEDERAL APPLIANCE REGULATIONS.
- 11. INSULATION PROTECTION**, PIPE INSULATION SHALL BE PROTECTED FROM DAMAGE DUE TO SUNLIGHT, MOISTURE, EQUIPMENT MAINTENANCE AND WIND. PROTECTION SHALL, AT MINIMUM, INCLUDE THE FOLLOWING (2022 CEC SECTION 120.3(B)):
A. PIPE INSULATION EXPOSED TO WEATHER SHALL BE PROTECTED BY A COVER SURFACE FOR OUTDOOR SERVICE. THE COVER SHALL BE WATER PROOF AND PROVIDE SHADING FROM SOLAR RADIATION THAT CAN CAUSE DEGRADATION OF THE MATTER. ADHESIVE TAPE SHALL NOT BE USED TO PROVIDE THIS PROTECTION.
- 12. PIPE INSULATION**: REFER TO TITLE 24 - MANDATORY MEASURES - "SPACE CONDITIONING, WATER HEATING & PLUMBING SYSTEM MEASURES".
- 13. STRAPS AND HANGERS**: PROVIDE AS NECESSARY TO INSURE A STABLE INSTALLATION. SEE TITLE 24 FOR WATER HEATER REQUIREMENTS.
- 14. ALL HOSE BIBS** SHALL HAVE APPROVED BACK FLOW PREVENTION DEVICES.
- 15. PLUMBING FIXTURES (WATER CLOSETS) AND FITTINGS (FAUCETS AND SHOWERHEADS)** SHALL MEET THE STANDARDS REFERENCED IN CALGREEN TABLE 4.303.3.
- 16. WATER HEATER** SHALL BE PROVIDED WITH A TEMPERATURE AND PRESSURE RELIEF VALVE. (PER 2022 CPC 505.2) THE RELIEF VALVE SHALL BE PROVIDED WITH A DRAIN LINE WHICH EXTENDS FROM THE VALVES TO THE OUTSIDE OF THE BUILDING. (PER 2022 608.5 CPC)
- 17. PER 2022 CPC 603.5.7 OUTLETS WITH HOSE ATTACHMENTS**, POTABLE WATER OUTLETS WITH HOSE ATTACHMENTS, OTHER THAN WATER HEATER DRAINS, BOILER DRAINS, AND CLOTHES WASHER CONNECTIONS, SHALL BE PROTECTED BY A NONREMOVABLE HOSE BIBB TYPE BACKFLOW PREVENTER, A NONREMOVABLE HOSE BIBB TYPE VACUUM BREAKER, OR BY AN ATMOSPHERE VACUUM BREAKER INSTALLED NOT LESS THAN 6 INCHES ABOVE THE HIGHEST POINT OF USAGE LOCATED ON THE DISCHARGE SIDE OF THE LAST VALVE. IN CLIMATES WHERE FREEZING TEMPERATURES OCCUR, A LISTED SELF DRAINING FROST-PROOF HOSE BIBB WITH AN INTEGRAL BACKFLOW PREVENTER OR VACUUM BREAKER SHALL BE USED.

ENERGY STORAGE READINESS

- 1. ENERGY STORAGE SYSTEM (ESS) REQUIREMENTS:**
 - SINGLE-FAMILY RESIDENTIAL BUILDINGS THAT INCLUDE ONE OR TWO DWELLINGS, EACH DWELLING UNIT SHALL BE PROVIDED WITH DEDICATED RACEWAYS, DESIGNATED BRANCH CIRCUITS AND ISOLATION DEVICES FOR ENERGY STORAGE SYSTEMS AS SPECIFIED IN CALIFORNIA ENERGY CODE SECTION 150.0(S). ADDITIONALLY, THE PANELBOARDS SHALL BE PROVIDED WITH THE MINIMUM BUSBAR RATING AS SPECIFIED IN CALIFORNIA ENERGY CODE SECTION 150.0(S). (2022 CEC SECTION 706.10)

CALIFORNIA ENERGY CODE SECTION 150.0(S)

- AT LEAST ONE OF THE FOLLOWING SHALL BE PROVIDED:
 - E. ESS READY RECONNECTION EQUIPMENT WITH A MINIMUM BACK-UP CAPACITY OF 60 AMPS AND A MINIMUM OF FOUR ESS-SUPPLIED BRANCH CIRCUITS, OR
 - B. A DEDICATED RACEWAY FROM THE MAIN SERVICE TO A PANELBOARD (SUBPANEL) THAT SUPPLIES THE BRANCH CIRCUITS AS SECTION 150.0(S). (2) ALL BRANCH CIRCUITS ARE PERMITTED TO BE SUPPLIED BY THE MAIN SERVICE PANEL PRIOR TO THE INSTALLATION OF AN ESS. THE TRADE SIZE OF THE RACEWAY SHALL BE NOT LESS THAN 1 INCH. THE PANELBOARD THAT SUPPLIES THE BRANCH CIRCUITS (SUBPANEL) MUST BE LABELED "SUBPANEL SHALL INCLUDE ALL BACKUP LOAD CIRCUITS."
- A MINIMUM OF FOUR BRANCH CIRCUITS SHALL BE IDENTIFIED AND HAVE THEIR SOURCE OF SUPPLY COLLOCATED AT A SINGLE PANELBOARD SUITABLE TO BE SUPPLIED BY THE ESS. AT LEAST ONE CIRCUIT SHALL SUPPLY THE REFRIGERATOR. ONE LIGHTING CIRCUIT SHALL BE LOCATED NEAR THE PRIMARY EGRESS AND AT LEAST ONE CIRCUIT SHALL SUPPLY A SLEEPING ROOM RECEPTACLE OUTLET.
- THE MAIN PANELBOARD SHALL HAVE A MINIMUM BUSBAR RATING OF 225 AMPS.
- SUFFICIENT SPACE SHALL BE RESERVED TO ALLOW FUTURE INSTALLATION OF A SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH WITHIN 3 FEET OF THE MAIN PANELBOARD. RACEWAYS SHALL BE INSTALLED BETWEEN THE PANELBOARD AND THE SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH LOCATION TO ALLOW THE CONNECTION OF BACKUP POWER SOURCE.

PROJECT GENERAL NOTES

- APPLICABLE CODES AND STANDARDS:
 - 2022 CALIFORNIA RESIDENTIAL CODE AND STANDARDS.
 - 2022 CALIFORNIA PLUMBING CODE AND STANDARDS.
 - 2022 CALIFORNIA MECHANICAL CODE AND STANDARDS.
 - 2022 CALIFORNIA FIRE CODE AND STANDARDS.
 - 2022 CALIFORNIA ELECTRICAL CODE AND STANDARDS.
 - 2022 CALIFORNIA ENERGY CODE AND STANDARDS.
 - 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE AND STANDARDS.
 - CITY OF LAGUNA NIGUEL MUNICIPAL CODE
 - ALL WORK DESCRIBED IN THE DRAWINGS SHALL BE VERIFIED FOR DIMENSION, GRADE, EXTENT AND COMPATIBILITY WITH EXISTING SITE CONDITIONS



ABBREVIATIONS

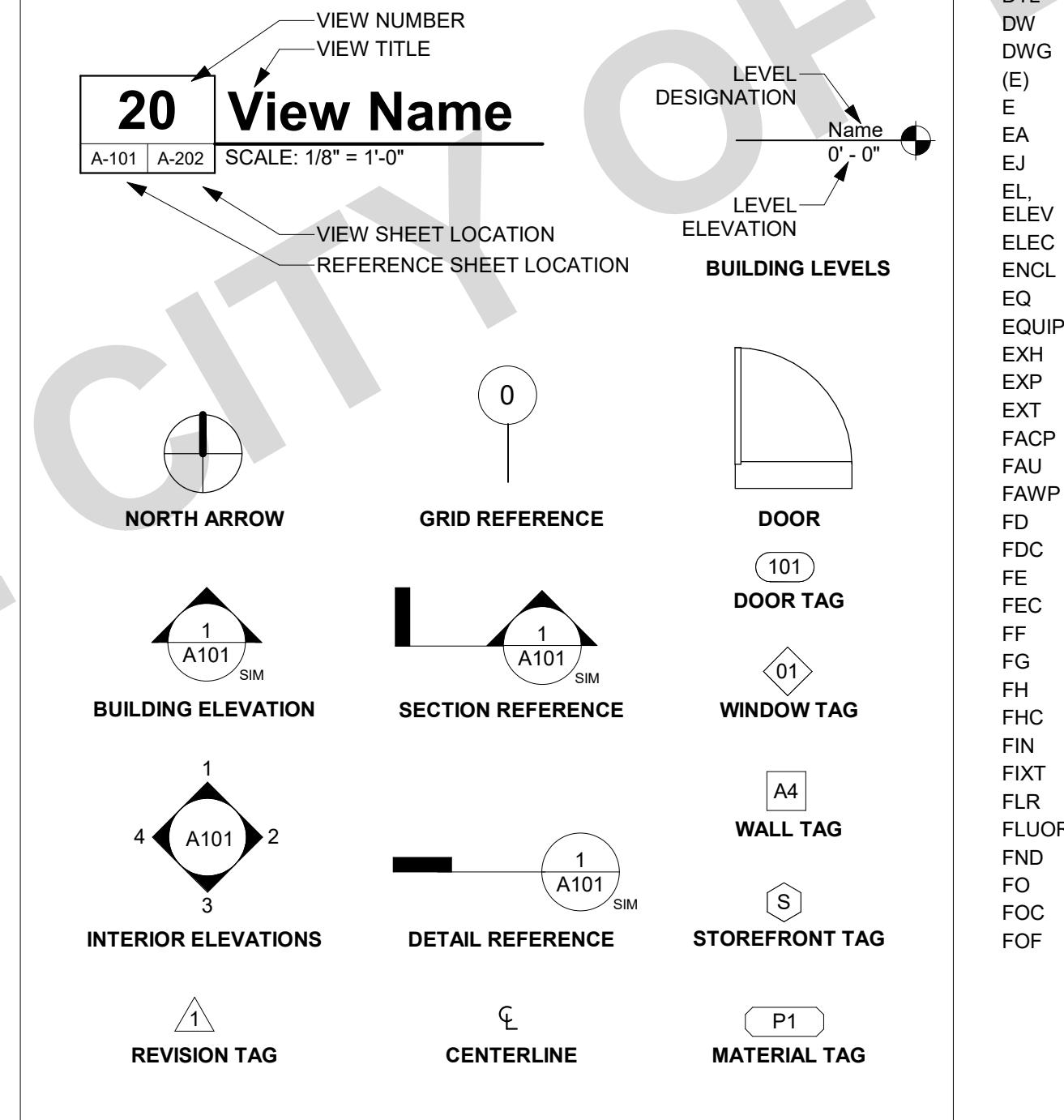
A/C	AIR CONDITIONING	FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR	PV	PHOTO VOLTAIC
ABV	ABOVE	FOM	FACE OF MASONRY	PVC	POLYVINYL CHLORIDE
ACOUS	ACOUSTICAL	FOS	FACE OF STUD	PVMT	PAVEMENT
ACT	ACOUSTICAL CEILING TILE	FRP	FIBERGLASS REINFORCED PANELS	QTY	QUANTITY
ADA	AMERICANS WITH DISABILITIES ACT	FT	FOOT OR FEET	R	RADIUS, RISER
AFCI	ARC FAULT CIRCUIT INTERRUPTER	FTG	FOOTING	RB	RUBBER BASE
AFF	ABOVE FINISH FLOOR	GA	GAUGE, GAGE	RCP	REFLECTED CEILING PLAN
AL	ALUMINUM	GALV	GALVANIZED	RD	ROOF DRAIN
ALT	ALTERNATE	GB	GRAB BAR	REF	REFRIGERATOR
ARCH	ARCHITECT(URAL)	GC	GENERAL CONTRACTOR	REINF	REINFORCED
BD	BOARD	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	REQD	REQUIRED
BDRM	BEDROOM	GWB	GYPSUM BOARD	RH	RIGHT HAND
BET	BETWEEN	GYP	GYPSUM	RM	ROOM
BIT	BITUMINOUS	HB	HOSE BIBB	RO	ROUGH OPENING
BLDG	BUILDING	HC	HOLLOW CORE	RTU	ROOF TOP UNIT (MECH)
BLKG	BLOCKING	HDWD	HARDWOOD	S	SOUTH
BLW	BELOW	HWDR	HARDWARE	SAFB	SOUND ATTENUATION FIBER BATT
BM	BEAM	HGT	HEIGHT	SAWP	SELF ADHESIVE WATERPROOFING
BOT	BOTTOM	HM	HOLLOW METAL	SC	SCUPPER/SOLID CORE
BUR	BUILT UP ROOF	HORIZ	HORIZONTAL	SCHED	SCHEDULE
CB	CATCH BASIN	HVAC	HEATING, VENTILATION, A/C	SEAL	SEALANT
CBC	CALIFORNIA BUILDING CODE	ID	INSIDE DIAMETER	SECT	SECTION
CEM	CEMENT	IIC	IMPACT INSULATION CLASS	SF	SQUARE FOOT
CFM	CUBIC FEET PER MINUTE	IN	INCH	SHT	SHEET
CIP	CAST IN PLACE	INCAND	INCANDESCENT	SHTHG	SHEATHING
CJ	CONTROL JOINT	INSUL	INSULATION, INSULATED	SIM	SIMILAR
CL	CENTER LINE	INT	INTERIOR	SM	SHEET METAL
CLG	CEILING	JC	JANITOR'S CLOSET	SPEC	SPECIFICATION
CLO	CLOSET	JT	JOINT	SQ	SQUARE
CLR	CLEAR	LAM	LAMINATE	SSTL	STAINLESS STEEL
CMU	CONCRETE MASONRY UNIT	LAV	LAVATORY	STC	SOUND TRANSMISSION CLASS
CO	CLEAN OUT	LBS	POUNDS	STD	STANDARD
COL	COLUMN	LEED	LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN	STL	STEEL
CONC	CONCRETE	LF	LINEAR FEET	STOR	STORAGE
CONST	CONSTRUCTION	LIN	LINEN CLOSET	STRUCT	STRUCTURAL
CONT	CONTINUOUS	LINO	LINOLEUM	SUSP	SUSPENDED
CONTR	CONTRACTOR	LTG(G)	LIGHT(ING)	SV	SHEET VINYL
CPT	CARPET	LVL	LAMINATED VENEER LUMBER	SYM	SYMMETRICAL
CT	CERAMIC TILE	LVT	LUXURY VINYL TILE	T	TREAD
CTR	CENTER	LW	LIGHTWEIGHT	T&G	TONGUE & GROOVE
DBL	DOUBLE	MAX	MAXIMUM	TEL	TELEPHONE
DF	DRINKING FOUNTAIN	MDF	MEDIUM DENSITY FIBERBOARD	TEMP	TEMPERED
DIA	DIA	MECH	MECHANICAL	TER	TERRAZZO
DIM	DIMENSION	MEMB	MEMBRANE	THK	THICK
DN	DOWN	MEP	MECHANICAL, ELECTRICAL, PLUMBING	THR	THRESHOLD
DR	DOOR	MFR	MANUFACTURER	TJI	TRUSS JOIST I-JOIST
DS	DOWN SPOUT	MIN	MINIMUM	TO	TOP OF
DTL	DETAIL	MIS	MISCELLANEOUS	TOS	TOP OF SLAB
DW	DISHWASHER	MOS	MASONRY OPENING	TRANS	TRANSFORMER
DWG	DRAWING	MTD	MOUNTED	TV	TELEVISION
(E)	EXISTING	MTL	METAL	Typ	Typical
E	EAST	N	NORTH	UFAS	UNIFORM FEDERAL ACCESSIBILITY STANDARDS
EA	EACH	NIC	NOT IN CONTRACT	UG	UNDERGROUND
EJ	EXPANSION JOINT	NO	NUMBER	UNFIN	UNFINISHED
EL	ELEVATION	NOM	NOMINAL	UNO	UNLESS NOTED OTHERWISE
ELEV		NTS	NOT TO SCALE	UV	UV
ELEC	ELECTRIC	O.P.	OVERFLOW PIPE	VCT	VINYL COMPOSITION TILE
ENCL	ENCLOSURE	OC	ON CENTER	VERT	VERTICAL
EQ	EQUAL	OD	OVERFLOW DRAIN	VIF	VERIFY IN FIELD
EQUIP	EQUIPMENT	OFF	OFFICE	VTR	VENT TERMINATION PIPE
EXH	EXHAUST	OH	OPPOSITE HAND	WVC	VINYL WALL COVERING
EXP	EXPANSION	OPG	OPENING	W	WEST
EXT	EXTERIOR	OPP	OPPOSITE	W/	WITH
FACP	FIRE ALARM CONTROL PANEL	(P)	PROPOSED	W/D	WASHER DRYER
FAU	FORCED AIR UNIT	PERM	PERIMETER	W/O	WITHOUT
FAWP	FLUID APPLIED WATERPROOFING	PERP	PERPENDICULAR	WC	WATERCLOSET
FD	FLOOR DRAIN	PG	PAINT GRADE	WD	WOOD
FDC	FIRE DEPARTMENT CONNECTION	PL	PLATE, PROPERTY LINE	WDW	WINDOW
FE	FIRE EXTINGUISHER	PLAM	PLASTIC LAMINATE	WH	WATER HEATER
FEC	FIRE EXTINGUISHER CABINET	PLBG	PLUMBING	WI	WROUGHT IRON
FF	FINISHED FLOOR ELEVATION	PLYWD	PLYWOOD	WIN	WINDOW
FG	FINISHED GRADE	PNL	PANEL	WP	WATERPROOF(ING)
FH	FIRE HYDRANT	PP	POWER POLE	WR	WEATHER RESISTIVE
FHC	FIRE HOSE CABINET	PR	PAIR	WRB	WATER RESISTIVE BARRIER
FIN	FINISH	PRTN	PARTITION	WSCT	WAISNCOT
FIXT	FIXTURE	PSF	POUNDS PER SQUARE FOOT	WT	WEIGHT
FLR	FLOOR	PSI	POUNDS PER SQUARE INCH	WWF	WELDED WIRE FABRIC
FLUOR	FLUORESCENT	PSL	PARALLEL STRAND LUMBER	YD	YARD
FND	FOUNDATION	PT	PRESSURE TREATED		
FO	FACE OF	PTD	PAINTED		
FOC	FACE OF CONCRETE				
FOF	FACE OF FINISH				

PRE-APPROVED ADU

CITY OF LAGUNA NIGUEL

ABBREVIATIONS & SYMBOLS

SYMBOLS



THESE PLANS ARE PROVIDED BY THE CITY OF LAGUNA NIGUEL AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN, THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONSTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES (SHEET 1)

CHAPTER 1 - ADMINISTRATION

SECTION 101 GENERAL

101.1 TITLE.

THESE REGULATIONS SHALL BE KNOWN AS THE CALIFORNIA GREEN BUILDING STANDARDS CODE AND MAY BE CITED AS SUCH AND WILL BE REFERRED TO HEREIN AS "THIS CODE." IT IS INTENDED THAT IT SHALL ALSO BE KNOWN AS THE CALGREEN CODE. THE CALIFORNIA GREEN BUILDING STANDARDS CODE IS PART 11 OF THIRTEEN PARTS OF THE OFFICIAL COMPILATION AND PUBLICATION OF THE ADOPTION, AMENDMENT AND REPEAL OF BUILDING REGULATIONS TO THE CALIFORNIA CODE OF REGULATIONS, TITLE 24, ALSO REFERRED TO AS THE CALIFORNIA BUILDING STANDARDS CODE.

101.2 PURPOSE.

THE PURPOSE OF THIS CODE IS TO IMPROVE PUBLIC HEALTH, SAFETY, AND GENERAL WELFARE BY ENHANCING THE DESIGN AND CONSTRUCTION OF BUILDINGS THROUGH THE USE OF BUILDING CONCEPTS HAVING A REDUCED NEGATIVE IMPACT OR POSITIVE ENVIRONMENTAL IMPACT AND ENCOURAGING SUSTAINABLE CONSTRUCTION PRACTICES IN THE FOLLOWING CATEGORIES:

1. PLANNING AND DESIGN.
2. ENERGY EFFICIENCY.
3. WATER EFFICIENCY AND CONSERVATION.
4. MATERIAL CONSERVATION AND RESOURCE EFFICIENCY.
5. ENVIRONMENTAL QUALITY.

101.3 SCOPE.

THE PROVISIONS OF THIS CODE SHALL APPLY TO THE PLANNING, DESIGN, OPERATION, CONSTRUCTION, USE AND OCCUPANCY OF EVERY NEWLY CONSTRUCTED BUILDING OR STRUCTURE, UNLESS OTHERWISE INDICATED IN THIS CODE, THROUGHOUT THE STATE OF CALIFORNIA.

IT IS NOT THE INTENT THAT THIS CODE SUBSTITUTE OR BE IDENTIFIED AS MEETING THE CERTIFICATION REQUIREMENTS OF ANY GREEN BUILDING PROGRAM.

SECTION 102 CONSTRUCTION DOCUMENTS AND INSTALLATION VERIFICATION

102.1 SUBMITTAL DOCUMENTS.

CONSTRUCTION DOCUMENTS AND OTHER DATA SHALL BE SUBMITTED IN ONE OR MORE SETS WITH EACH APPLICATION FOR A PERMIT, WHERE SPECIAL CONDITIONS EXIST, THE ENFORCING AGENCY IS AUTHORIZED TO REQUIRE ADDITIONAL CONSTRUCTION DOCUMENTS TO BE PREPARED BY A LICENSED DESIGN PROFESSIONAL AND MAY BE SUBMITTED SEPARATELY.

EXCEPTION: THE ENFORCING AGENCY IS AUTHORIZED TO WAIVE THE SUBMISSION OF CONSTRUCTION DOCUMENTS AND OTHER DATA NOT REQUIRED TO BE PREPARED BY A LICENSED DESIGN PROFESSIONAL.

102.2 INFORMATION ON CONSTRUCTION DOCUMENTS.

CONSTRUCTION DOCUMENTS SHALL INDICATE THE LOCATION, NATURE AND SCOPE OF THE PROPOSED GREEN BUILDING FEATURE AND SHOW THAT IT WILL CONFORM TO THE PROVISIONS OF THIS CODE, THE CALIFORNIA BUILDING STANDARDS CODE AND OTHER RELEVANT LAWS, ORDINANCES, RULES AND REGULATIONS AS DETERMINED BY THE ENFORCING AGENCY.

102.3 VERIFICATION.

DOCUMENTATION OF CONFORMANCE FOR APPLICABLE GREEN BUILDING MEASURES SHALL BE PROVIDED TO THE ENFORCING AGENCY. ALTERNATE METHODS OF DOCUMENTATION SHALL BE ACCEPTABLE WHEN THE ENFORCING AGENCY FINDS THAT THE PROPOSED ALTERNATE DOCUMENTATION IS SATISFACTORY TO DEMONSTRATE SUBSTANTIAL CONFORMANCE WITH THE INTENT OF THE PROPOSED GREEN BUILDING MEASURE.

CHAPTER 3 - GREEN BUILDING

SECTION 301 GENERAL

301.1 SCOPE.

BUILDINGS SHALL BE DESIGNED TO INCLUDE THE GREEN BUILDING MEASURES SPECIFIED AS MANDATORY IN THE APPLICATION CHECKLISTS CONTAINED IN THIS CODE. VOLUNTARY GREEN BUILDING MEASURES ARE ALSO INCLUDED IN THE APPLICATION CHECKLISTS AND MAY BE INCLUDED IN THE DESIGN AND CONSTRUCTION OF STRUCTURES COVERED BY THIS CODE, BUT ARE NOT REQUIRED UNLESS ADOPTED BY A CITY, COUNTY, OR CITY AND COUNTY AS SPECIFIED IN SECTION 101.

301.1.1 ADDITIONS AND ALTERATIONS. [HCD] THE MANDATORY PROVISIONS OF CHAPTER 4 SHALL BE APPLIED TO ADDITIONS OR ALTERATIONS OF EXISTING RESIDENTIAL BUILDINGS WHERE THE ADDITION OR ALTERATION INCREASES THE BUILDING'S CONDITIONED AREA, VOLUME, OR SIZE. THE REQUIREMENTS SHALL APPLY TO AND/OR WITHIN THE SPECIFIC AREA OF THE ADDITION OR ALTERATION.

THE MANDATORY PROVISIONS OF SECTION 4.106.4.2 MAY APPLY TO ADDITIONS OR ALTERATIONS OF EXISTING PARKING FACILITIES OR THE ADDITION OF NEW PARKING FACILITIES SERVING EXISTING MULTIFAMILY BUILDINGS. SEE SECTION 4.106.4.3 FOR APPLICATION.

NOTE: REPAIRS INCLUDING, BUT NOT LIMITED TO, RESURFACING, RESTRIPPING, AND REPAIRING OR MAINTAINING EXISTING LIGHTING FIXTURES ARE NOT CONSIDERED ALTERATIONS FOR THE PURPOSE OF THIS SECTION.

301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS [HCD].

THE PROVISIONS OF INDIVIDUAL SECTIONS OF CALGREEN MAY APPLY TO EITHER LOW-RISE RESIDENTIAL BUILDINGS, HIGH-RISE RESIDENTIAL BUILDINGS, OR BOTH. INDIVIDUAL SECTIONS WILL BE DESIGNATED BY BANNERS TO INDICATE WHERE THE SECTION APPLIES SPECIFICALLY TO LOW-RISE ONLY (LR) OR HIGH-RISE ONLY (HR). WHEN THE SECTION APPLIES TO BOTH LOW-RISE AND HIGH-RISE BUILDINGS, NO BANNER WILL BE USED.

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS.

IN MIXED OCCUPANCY BUILDINGS, EACH PORTION OF A BUILDING SHALL COMPLY WITH THE SPECIFIC GREEN BUILDING MEASURES APPLICABLE TO EACH SPECIFIC OCCUPANCY.

CHAPTER 4 - RESIDENTIAL MANDATORY MEASURES

DIVISION 4.1 PLANNING AND DESIGN

4.106.1 GENERAL.

PRESERVATION AND USE OF AVAILABLE NATURAL RESOURCES SHALL BE ACCOMPLISHED THROUGH EVALUATION AND CAREFUL PLANNING TO MINIMIZE NEGATIVE EFFECTS ON THE SITE AND ADJACENT AREAS. PRESERVATION SLOPES, MANAGEMENT OF STORM WATER DRAINAGE AND EROSION CONTROLS SHALL COMPLY WITH THIS SECTION.

4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION PROJECTS WHICH DISTURB LESS THAN ONE ACRE OF SOIL AND ARE NOT PART OF A LARGER COMMON PLAN OF DEVELOPMENT WHICH IN TOTAL DISTURBS ONE ACRE OR MORE, SHALL MANAGE STORM WATER DRAINAGE DURING CONSTRUCTION, IN ORDER TO MANAGE STORM WATER DRAINAGE DURING CONSTRUCTION, ONE OR MORE OF THE FOLLOWING MEASURES SHALL BE IMPLEMENTED TO PREVENT FLOODING OF ADJACENT PROPERTY, PREVENT EROSION AND RETAIN SOIL RUNOFF ON THE SITE.

1. RETENTION BASINS: SUFFICIENT SIZE SHALL BE UTILIZED TO RETAIN STORM WATER ON THE SITE.
2. WHERE STORM WATER IS CONVEYED TO A PUBLIC DRAINAGE SYSTEM, COLLECTION POINT, GUTTER OR SIMILAR DISPOSAL METHOD, WATER SHALL BE FILTERED BY USE OF A BARRIER SYSTEM, WATTE, OR OTHER METHOD APPROVED BY THE ENFORCING AGENCY.
3. COMPLIANCE WITH A LAWFULLY ENACTED STORM WATER MANAGEMENT ORDINANCE.

4.106.3 GRADING AND PAVING

CONSTRUCTION PLANS SHALL INDICATE HOW THE SITE GRADING OR DRAINAGE SYSTEM WILL MANAGE ALL SURFACE WATER FLOWS TO KEEP WATER FROM ENTERING BUILDINGS. EXAMPLES OF METHODS TO MANAGE SURFACE WATER INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

1. SWALES
2. WATER COLLECTION AND DISPOSAL SYSTEMS
3. FRENCH DRAINS
4. WATER RETENTION GARDENS
5. OTHER WATER MEASURES WHICH KEEP SURFACE WATER AWAY FROM BUILDINGS AND AID IN GROUNDWATER RECHARGE.

EXCEPTIONS: ADDITIONS AND ALTERATIONS NOT ALTERING THE DRAINAGE PATH.

4.106.4 ELECTRIC VEHICLE (EV) CHARGING FOR NEW CONSTRUCTION

NEW CONSTRUCTION SHALL COMPLY WITH SECTION 4.106.4.1, 4.106.4.2, OR 4.106.4.3, TO FACILITATE FUTURE INSTALLATION AND USE OF EV CHARGERS. ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE, ARTICLE 625.

EXCEPTIONS:

1. ON A CASE-BY-CASE BASIS, WHERE THE LOCAL ENFORCING AGENCY HAS DETERMINED EV CHARGING AND INFRASTRUCTURE ARE NOT FEASIBLE BASED UPON ONE OR MORE OF THE FOLLOWING CONDITIONS: 1.1. WHERE THERE IS NO LOCAL UTILITY POWER SUPPLY OR THE LOCAL UTILITY IS UNABLE TO SUPPLY ADEQUATE POWER.
- 1.2. WHERE THERE IS EVIDENCE SUITABLE TO THE LOCAL ENFORCING AGENCY SUBSTANTIATING THAT ADDITIONAL LOCAL UTILITY INFRASTRUCTURE DESIGN REQUIREMENTS, DIRECTLY RELATED TO THE IMPLEMENTATION OF SECTION 4.106.4, MAY ADVERSELY IMPACT THE CONSTRUCTION COST OF THE PROJECT.
2. ACCESSORY DWELLING UNITS (ADU) AND JUNIOR ACCESSORY DWELLING UNITS (JADU) WITHOUT ADDITIONAL PARKING FACILITIES.

4.106.4.1 NEW ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOMES WITH ATTACHED PRIVATE GARAGES

FOR EACH DWELLING UNIT, INSTALL A LISTED RACEWAY TO ACCOMMODATE A 208/240-VOLT BRANCH CIRCUIT. THE RACEWAY SHALL NOT BE LESS THAN TRADE SIZE 1 (NOMINAL 1-INCH INSIDE DIAMETER). THE RACEWAY SHALL ORIGINATE AT THE MAIN SERVICE OR SUBPANEL AND SHALL TERMINATE INTO A LISTED CABINET, BOX OR ENCLOSURE IN CLOSE PROXIMITY TO THE LOCATION OR THE PROPOSED LOCATION OF THE EV SPACE. CONSTRUCTION DOCUMENTS SHALL IDENTIFY THE RACEWAY TERMINATION POINT, RECEPTACLE OR CHARGER LOCATION, AS WELL AS THE SERVICE PANEL AND/OR SUBPANEL SIZE. HAVE A 40-AMPERE MINIMUM DEDICATED BRANCH CIRCUIT, INCLUDING BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE (INSTALLED, OR SPACE(S) RESERVED TO PERMIT INSTALLATION OF A BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE).

4.106.4.1.1 IDENTIFICATION

THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE(S) RESERVED FOR FUTURE EV CHARGING AS "EV CAPABLE." THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENTLY AND VISIBLELY MARKED AS "EV CAPABLE".

4.106.4.2 NEW MULTIFAMILY DWELLINGS, HOTELS AND MOTELS AND NEW RESIDENTIAL PARKING FACILITIES

WHEN PARKING IS PROVIDED, PARKING SPACES FOR NEW MULTIFAMILY DWELLINGS, HOTELS AND MOTELS SHALL MEET THE REQUIREMENTS OF SECTIONS 4.106.4.2.1 AND 4.106.4.2.2. CALCULATIONS FOR SPACES SHALL BE ROUNDED UP TO THE NEAREST WHOLE NUMBER. A PARKING SPACE SHALL BE PROVIDED FOR EACH VEHICLE. EQUIPMENT DESIGNED AS A FUTURE EV CHARGING SPACE SHALL COUNT AS AT LEAST ONE STANDARD AUTOMATIC PARKING SPACE ONLY FOR THE PURPOSE OF COMPLYING WITH ANY APPLICABLE MINIMUM PARKING SPACE REQUIREMENTS ESTABLISHED BY A LOCAL JURISDICTION. SEE VEHICLE CODE SECTION 2251.2 FOR FURTHER DETAILS.

4.106.4.2.1 MULTIFAMILY DEVELOPMENT PROJECTS WITH LESS THAN 20 DWELLING UNITS; AND HOTELS AND MOTELS WITH LESS THAN 20 SLEEPING UNITS OR GUEST ROOMS

THE NUMBER OF DWELLING UNITS, SLEEPING UNITS OR GUEST ROOMS SHALL BE BASED ON ALL BUILDINGS ON A PROJECT SITE SUBJECT TO THIS SECTION.

1. EV CAPABLE.

TEN (10) PERCENT OF THE TOTAL NUMBER OF PARKING SPACES ON A BUILDING SITE PROVIDED FOR ALL TYPES OF PARKING FACILITIES, SHALL BE ELECTRIC VEHICLE CHARGING SPACES (EV SPACES) CAPABLE OF SUPPORTING FUTURE LEVEL 2 EVSE. ELECTRICAL LOAD CALCULATIONS SHALL DEMONSTRATE THAT THE ELECTRICAL PANEL, SERVICE CAPACITY AND ELECTRICAL SYSTEM, INCLUDING ANY ON-SITE DISTRIBUTION TRANSFORMER(S), HAVE SUFFICIENT CAPACITY TO SIMULTANEOUSLY CHARGE ALL EVS AT ALL REQUIRED EV SPACES AT A MINIMUM OF 40 AMPERES.

THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

EXCEPTIONS:

1. WHEN EV CHARGERS (LEVEL 2 EVSE) ARE INSTALLED IN A NUMBER EQUAL TO OR GREATER THAN THE REQUIRED NUMBER OF EV CAPABLE SPACES.
2. WHEN EV CHARGERS (LEVEL 2 EVSE) ARE INSTALLED IN A NUMBER LESS THAN THE REQUIRED NUMBER OF EV CAPABLE SPACES, THE NUMBER OF EV CAPABLE SPACES REQUIRED MAY BE REDUCED BY A NUMBER EQUAL TO THE NUMBER OF EV CHARGERS INSTALLED.

NOTES:

- a. CONSTRUCTION DOCUMENTS ARE INTENDED TO DEMONSTRATE THE PROJECT'S CAPABILITY AND CAPACITY FOR FACILITATING FUTURE EV CHARGING.
- b. THERE IS NO REQUIREMENT FOR EV SPACES TO BE CONSTRUCTED OR AVAILABLE UNTIL RECEPTACLES FOR EV CHARGING OR EV CHARGERS ARE INSTALLED FOR USE.

2. **EV READY.** TWENTY-FIVE (25) PERCENT OF THE TOTAL NUMBER OF PARKING SPACES SHALL BE EQUIPPED WITH LOW POWER LEVEL 2 EV CHARGING RECEPTACLES. FOR MULTIFAMILY PARKING FACILITIES, NO MORE THAN ONE RECEPTACLE IS REQUIRED PER DWELLING UNIT WHEN MORE THAN ONE PARKING SPACE IS PROVIDED FOR USE BY A SINGLE DWELLING UNIT.

EXCEPTION: AREA OF PARKING FACILITIES SERVED BY PARKING LIFTS.

4.106.4.2.2 MULTIFAMILY DEVELOPMENT PROJECTS WITH 20 OR MORE DWELLING UNITS, HOTELS AND MOTELS WITH 20 OR MORE SLEEPING UNITS OR GUEST ROOMS

THE NUMBER OF DWELLING UNITS, SLEEPING UNITS OR GUEST ROOMS SHALL BE BASED ON ALL BUILDINGS ON A PROJECT SITE SUBJECT TO THIS SECTION.

1. EV CAPABLE.

TEN (10) PERCENT OF THE TOTAL NUMBER OF PARKING SPACES ON A BUILDING SITE, PROVIDED FOR ALL TYPES OF PARKING FACILITIES, SHALL BE ELECTRIC VEHICLE CHARGING SPACES (EV SPACES) CAPABLE OF SUPPORTING FUTURE LEVEL 2 EVSE. ELECTRICAL LOAD CALCULATIONS SHALL DEMONSTRATE THAT THE ELECTRICAL PANEL, SERVICE CAPACITY AND ELECTRICAL SYSTEM, INCLUDING ANY ON-SITE DISTRIBUTION TRANSFORMER(S), HAVE SUFFICIENT CAPACITY TO SIMULTANEOUSLY CHARGE ALL EVS AT ALL REQUIRED EV SPACES AT A MINIMUM OF 40 AMPERES.

THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

EXCEPTION: A RACEWAY IS NOT REQUIRED IF A MINIMUM 40-AMPERE 208/240-VOLT DEDICATED BRANCH CIRCUIT IS INSTALLED IN CLOSE PROXIMITY TO THE LOCATION OR THE PROPOSED LOCATION OF THE EV SPACE AT THE TIME OF ORIGINAL CONSTRUCTION IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

4.106.4.2.4.1 IDENTIFICATION

THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

EXCEPTION: A RACEWAY IS NOT REQUIRED IF A MINIMUM 40-AMPERE 208/240-VOLT DEDICATED BRANCH CIRCUIT IS INSTALLED IN CLOSE PROXIMITY TO THE LOCATION OR THE PROPOSED LOCATION OF THE EV SPACE AT THE TIME OF ORIGINAL CONSTRUCTION IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

4.106.4.2.4.2 IDENTIFICATION

THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

EXCEPTION: A RACEWAY IS NOT REQUIRED IF A MINIMUM 40-AMPERE 208/240-VOLT DEDICATED BRANCH CIRCUIT IS INSTALLED IN CLOSE PROXIMITY TO THE LOCATION OR THE PROPOSED LOCATION OF THE EV SPACE AT THE TIME OF ORIGINAL CONSTRUCTION IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

4.106.4.2.4.3 IDENTIFICATION

THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

EXCEPTION: A RACEWAY IS NOT REQUIRED IF A MINIMUM 40-AMPERE 208/240-VOLT DEDICATED BRANCH CIRCUIT IS INSTALLED IN CLOSE PROXIMITY TO THE LOCATION OR THE PROPOSED LOCATION OF THE EV SPACE AT THE TIME OF ORIGINAL CONSTRUCTION IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

4.106.4.2.4.4 IDENTIFICATION

THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

EXCEPTION: A RACEWAY IS NOT REQUIRED IF A MINIMUM 40-AMPERE 208/240-VOLT DEDICATED BRANCH CIRCUIT IS INSTALLED IN CLOSE PROXIMITY TO THE LOCATION OR THE PROPOSED LOCATION OF THE EV SPACE AT THE TIME OF ORIGINAL CONSTRUCTION IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

4.106.4.2.4.5 IDENTIFICATION

THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

EXCEPTION: A RACEWAY IS NOT REQUIRED IF A MINIMUM 40-AMPERE 208/240-VOLT DEDICATED BRANCH CIRCUIT IS INSTALLED IN CLOSE PROXIMITY TO THE LOCATION OR THE PROPOSED LOCATION OF THE EV SPACE AT THE TIME OF ORIGINAL CONSTRUCTION IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

4.106.4.2.4.6 IDENTIFICATION

THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

EXCEPTION: A RACEWAY IS NOT REQUIRED IF A MINIMUM 40-AMPERE 208/240-VOLT DEDICATED BRANCH CIRCUIT IS INSTALLED IN CLOSE PROXIMITY TO THE LOCATION OR THE PROPOSED LOCATION OF THE EV SPACE AT THE TIME OF ORIGINAL CONSTRUCTION IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

4.106.4.2.4.7 IDENTIFICATION

THE SERVICE PANEL

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES (SHEET 2)



4.410 BUILDING MAINTENANCE AND OPERATION

4.410.1 OPERATION AND MAINTENANCE MANUAL
AT THE TIME OF FINAL INSPECTION, A MANUAL, COMPACT DISC, WEB-BASED REFERENCE OR OTHER MEDIA ACCEPTABLE TO THE ENFORCING AGENCY WHICH INCLUDES ALL OF THE FOLLOWING SHALL BE PLACED IN THE BUILDING:

1. DIRECTIONS TO THE OWNER OR OCCUPANT THAT THE MANUAL SHALL REMAIN WITH THE BUILDING THROUGHOUT THE LIFE CYCLE OF THE STRUCTURE.
2. OPERATION AND MAINTENANCE INSTRUCTIONS FOR THE FOLLOWING:
 - a. EQUIPMENT AND APPLIANCES, INCLUDING WATER-SAVING DEVICES AND SYSTEMS, HVAC SYSTEMS, PHOTOVOLTAIC SYSTEMS AND OTHER MAJOR APPLIANCES AND EQUIPMENT.
 - b. ROOF AND YARD DRAINAGE, INCLUDING GUTTERS AND DOWNSPOUTS.
 - c. SPACE CONDITIONING SYSTEMS, INCLUDING CONDENSERS AND AIR FILTERS.
 - d. LANDSCAPE IRRIGATION SYSTEMS.
 - e. WATER REUSE SYSTEMS.
3. INFORMATION FROM LOCAL UTILITY, WATER AND WASTE RECOVERY PROVIDERS ON METHODS TO FURTHER REDUCE RESOURCE CONSUMPTION, INCLUDING RECYCLE PROGRAMS AND LOCATIONS.
4. PUBLIC TRANSPORTATION AND/OR CARPOOL OPTIONS AVAILABLE IN THE PROJECT AREA.
5. EDUCATIONAL MATERIAL ON THE POSITIVE IMPACTS OF AN INTERIOR RELATIVE HUMIDITY BETWEEN 30-60 PERCENT AND WHAT METHODS AN OCCUPANT MAY USE TO MAINTAIN THE RELATIVE HUMIDITY LEVEL IN THAT RANGE.
6. INFORMATION ABOUT WATER-CONSERVING LANDSCAPE AND IRRIGATION DESIGN AND CONTROLLERS WHICH CONSERVE WATER.
7. INSTRUCTIONS FOR MAINTAINING GUTTERS AND DOWNSPOUTS AND THE IMPORTANCE OF DIVERTING WATER AT LEAST 5 FEET AWAY FROM THE FOUNDATION.
8. INFORMATION ON REQUIRED ROUTINE MAINTENANCE MEASURES, INCLUDING, BUT NOT LIMITED TO, CAULKING, PAINTING, GRADING AROUND THE BUILDING, ETC.
9. INFORMATION ABOUT STATE SOLAR ENERGY AND INCENTIVE PROGRAMS AVAILABLE.
10. A COPY OF ALL SPECIAL INSPECTION VERIFICATIONS REQUIRED BY THE ENFORCING AGENCY OR THIS CODE.
11. INFORMATION FROM CAL FIRE ON MAINTENANCE OF DEFENSIBLE SPACE AROUND RESIDENTIAL STRUCTURES.
12. INFORMATION AND/OR DRAWINGS IDENTIFYING THE LOCATION OF GRAB BAR REINFORCEMENTS.

4.410.2 RECYCLING BY OCCUPANTS.

WHERE 5 OR MORE MULTIFAMILY DWELLING UNITS ARE CONSTRUCTED ON A BUILDING SITE, PROVIDED A VACUUM ACCESSIBLE AREA(S) THAT SERVES ALL BUILDING OWNERSHIP AND IS IDENTIFIED FOR USE DEPOSITING, STORAGE AND COLLECTION OF NON-HAZARDOUS MATERIALS FOR RECYCLING, INCLUDING (AT A MINIMUM) PAPER, CORRUGATED CARDBOARD, GLASS, PLASTICS, ORGANIC WASTE, AND METALS, OR MEET A LAWFULLY ENACTED LOCAL RECYCLING ORDINANCE, IF MORE RESTRICTIVE.

EXCEPTION:
RURAL JURISDICTIONS THAT MEET AND APPLY FOR THE EXEMPTION IN PUBLIC RESOURCES CODE SECTION 42649.82 (A)(2)(A) ET SEQ. ARE NOT REQUIRED TO COMPLY WITH THE ORGANIC WASTE PORTION OF THIS SECTION.

DIVISION 4.5 ENVIRONMENTAL QUALITY

4.501 GENERAL

4.501.1 SCOPE
THE PROVISIONS OF THIS CHAPTER SHALL OUTLINE MEANS OF REDUCING THE QUANTITY OF AIR CONTAMINANTS THAT ARE ODOROUS, IRRITATING AND/OR HARMFUL TO THE COMFORT AND WELL-BEING OF A BUILDING'S INSTALLERS, OCCUPANTS AND NEIGHBORS.

4.503 FIREPLACES

4.503.1 GENERAL
ANY INSTALLED GAS FIREPLACE SHALL BE A DIRECT-VENT SEALED-COMBUSTION TYPE. ANY INSTALLED WOODSTOVE OR PELLET STOVE SHALL COMPLY WITH U.S. EPA NEW SOURCE PERFORMANCE STANDARDS (NSPS) EMISSION LIMITS AS APPLICABLE, AND SHALL HAVE A PERFORMANCE LABEL INDICATING THEY ARE CERTIFIED TO MEET THE EMISSION LIMITS. WOODSTOVES, PELLET STOVES AND FIREPLACES SHALL ALSO COMPLY WITH APPLICABLE LOCAL ORDINANCES.

4.504 POLLUTANT CONTROL

4.504.1 COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION

AT THE TIME OF ROUGH INSTALLATION, DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEETMETAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF WATER, DUST AND DEBRIS, WHICH MAY ENTER THE SYSTEM.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL

FINISH MATERIALS SHALL COMPLY WITH THIS SECTION.

4.504.2.1 ADHESIVES, SEALANTS AND CAULKS

ADHESIVES, SEALANTS AND CAULKS USED ON THE PROJECT SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS UNLESS MORE STRINGENT LOCAL OR REGIONAL AIR POLLUTION OR AIR QUALITY MANAGEMENT DISTRICT RULES APPLY:

1. ADHESIVES, ADHESIVE BONDING PRIMERS, ADHESIVE PRIMERS, SEALANTS, SEALANT PRIMERS, AND CAULKS SHALL COMPLY WITH LOCAL OR REGIONAL AIR POLLUTION CONTROL OR AIR QUALITY MANAGEMENT DISTRICT RULES WHERE APPLICABLE OR SCAQMD RULE 1168 VOC LIMITS, AS SHOWN IN TABLE 4.504.1 OR 4.504.2.1. THESE PRODUCTS ALSO SHALL COMPLY WITH THE RULE 1168 PROHIBITION ON THE USE OF CERTAIN TOXIC COMPOUNDS (CHLOROFORM, ETHYLENE DICHLORIDE, METHYLENE CHLORIDE, PERCHLOROETHYLENE AND TRICHLOROETHYLENE), EXCEPT FOR AEROSOL PRODUCTS, AS SPECIFIED IN SUBSECTION 2 BELOW.
2. AEROSOL ADHESIVES, AND SMALLER UNIT SIZES OF ADHESIVES, AND SEALANT OR CAULKING COMPOUNDS (IN UNITS OF PRODUCT, LESS PACKAGING, WHICH DO NOT WEIGH MORE THAN 1 POUND AND DO NOT CONSIST OF MORE THAN 16 FLUID OUNCES) SHALL COMPLY WITH STATEWIDE VOC STANDARDS AND OTHER REQUIREMENTS, INCLUDING PROHIBITIONS ON USE OF CERTAIN TOXIC COMPOUNDS, OF CALIFORNIA CODE OF REGULATIONS, TITLE 17, COMMENCING WITH SECTION 94507.

4.504.2.2 PAINTS AND COATINGS

ARCHITECTURAL PAINTS AND COATINGS SHALL COMPLY WITH VOC LIMITS IN TABLE 1 OF THE AIR ARCHITECTURAL SUGGESTED CONTROL MEASURE, AS SHOWN IN TABLE 4.504.3, UNLESS MORE STRINGENT LOCAL LIMITS APPLY. THE VOC CONTENT LIMIT FOR COATINGS THAT DO NOT MEET THE DEFINITIONS FOR THE SPECIALTY COATINGS CATEGORIES LISTED IN TABLE 4.504.3 SHALL BE DETERMINED BY CLASSIFYING THE COATING AS A FLAT, NONFLAT OR NONFLAT-HIGH GLOSS COATING, BASED ON ITS GLOSS, AS DEFINED IN SUBSECTIONS 4.21, 4.36, AND 4.37 OF THE 2007 CALIFORNIA AIR RESOURCES BOARD, SUGGESTED CONTROL MEASURE, AND THE CORRESPONDING FLAT, NONFLAT OR NONFLAT-HIGH GLOSS VOC LIMIT IN TABLE 4.504.3 SHALL APPLY.

4.504.2.3 AEROSOL PAINTS AND COATINGS

AEROSOL PAINTS AND COATINGS SHALL MEET THE PRODUCT-WEIGHTED VOC LIMITS FOR VOC IN SECTION 9452(A)(2) AND OTHER REQUIREMENTS, INCLUDING PROHIBITIONS ON USE OF CERTAIN TOXIC COMPOUNDS AND OZONE DEPLETING SUBSTANCES, IN SECTIONS 9452(E)(1) AND (F)(1) OF CALIFORNIA CODE OF REGULATIONS, TITLE 17, COMMENCING WITH SECTION 94520; AND IN AREAS UNDER THE JURISDICTION OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT ADDITIONALLY COMPLY WITH THE PERCENT VOC BY WEIGHT OF PRODUCT LIMITS OF REGULATION 8, RULE 49.

4.504.2.4 VERIFICATION

VERIFICATION OF COMPLIANCE WITH THIS SECTION SHALL BE PROVIDED AT THE REQUEST OF THE ENFORCING AGENCY. DOCUMENTATION MAY INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:

1. MANUFACTURER'S PRODUCT SPECIFICATION.
2. FIELD VERIFICATION OF ON-SITE PRODUCT CONTAINERS.

4.504.3 CARPET SYSTEMS

4.504.3.1 CARPET CUSHION
A CARPET CUSHION INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS," VERSION 1.2, JANUARY 2017 (EMISSION TESTING METHOD FOR CALIFORNIA SPECIFICATION 01350).

SEE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S WEBSITE FOR CERTIFICATION PROGRAMS AND TESTING LABS.

[HTTPS://WWW.CDPB.CA.GOV/PROGRAMS/CCDPHP/DEODC/EHLB/IAQ/PAG_ES/VOC.aspx](https://www.cdpb.ca.gov/programs/CCDPHP/DEODC/EHLB/IAQ/PAG_ES/VOC.aspx)

4.504.3.2 CARPET ADHESIVE

ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE 4.504.1.

4.504.4 RESILIENT FLOORING SYSTEMS

WHERE RESILIENT FLOORING IS INSTALLED, AT LEAST 80 PERCENT OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL MEET THE REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS," VERSION 1.2, JANUARY 2017 (EMISSION TESTING METHOD FOR CALIFORNIA SPECIFICATION 01350).

SEE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S WEBSITE FOR CERTIFICATION PROGRAMS AND TESTING LABS.

[HTTPS://WWW.CDPB.CA.GOV/PROGRAMS/CCDPHP/DEODC/EHLB/IAQ/PAG_ES/VOC.aspx](https://www.cdpb.ca.gov/programs/CCDPHP/DEODC/EHLB/IAQ/PAG_ES/VOC.aspx)

4.504.5 COMPOSITE WOOD PRODUCTS

HARDWOOD PLYWOOD, PARTICLEBOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE BUILDING SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED IN ARB'S AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD (17 CCR 93120 ET SEQ.).

4.504.5.1 DOCUMENTATION
VERIFICATION OF COMPLIANCE WITH THIS SECTION SHALL BE PROVIDED AS REQUESTED BY THE ENFORCING AGENCY. DOCUMENTATION SHALL INCLUDE AT LEAST ONE OF THE FOLLOWING:

1. PRODUCT CERTIFICATIONS AND SPECIFICATIONS.
2. CHAIN OF CUSTODY CERTIFICATIONS.
3. PRODUCT LABELED AND INVOICED AS MEETING THE COMPOSITE WOOD PRODUCTS REGULATION (SEE CCR, TITLE 17, SECTION 93120, ET SEQ.).
4. EXTERIOR GRADE PRODUCTS MARKED AS MEETING THE PS-1 OR PS-2 STANDARDS OF THE ENGINEERED WOOD ASSOCIATION, THE AUSTRALIAN AS/NZS 2269, EUROPEAN EN36 35, AND CANADIAN CSA O121, CSA O151, CSA O153 AND CSA O325 STANDARDS.
5. OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY.

REQUISITE PENETRATING SEALERS

RECYCLED COATINGS

ROOF COATINGS

RUST PREVENTATIVE COATINGS

SHELLACCS

CLEAR

OPAQUE

SPECIALTY PRIMERS, SEALERS AND UNDERCOATERS

STAINS

STONE CONSOLIDANTS

SWIMMING POOL COATINGS

TRAFFIC MARKING COATINGS

TUB AND TILE REFINISH COATINGS

WATERPROOFING MEMBRANES

WOOD COATINGS

WOOD PRESERVATIVES

ZINC-RICH PRIMERS

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER AND INCLUDING EXEMPT COMPOUNDS.

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEBRUARY 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

TABLE 4.504.5 - FORMALDEHYDE LIMITS¹

(MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION)

PRODUCT CURRENT VOC LIMIT

HARDWOOD PLYWOOD VENEER CORE 0.05

HARDWOOD PLYWOOD COMPOSITE CORE 0.05

PARTICLEBOARD 0.09

MEDIUM DENSITY FIBERBOARD 0.11

THIN MEDIUM DENSITY FIBERBOARD² 0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E1333. FOR ADDITIONAL INFORMATION, SEE CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCH (8MM).

TABLE 4.504.2 - SEALANT VOC LIMIT
(LESS WATER AND LESS EXEMPT COMPOUNDS IN GRAMS PER LITER)

SEALANTS	CURRENT VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	CURRENT VOC LIMIT
ARCHITECTURAL	250
POROUS	250
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

DIVISION 4.5 ENVIRONMENTAL QUALITY CONTINUED

4.505 INTERIOR MOISTURE CONTROL

4.505.1 GENERAL
BUILDINGS SHALL MEET OR EXCEED THE PROVISIONS OF THE CALIFORNIA BUILDING STANDARDS CODE.

4.505.2 CONCRETE SLAB FOUNDATIONS

CONCRETE SLAB FOUNDATIONS REQUIRED TO HAVE A VAPOR RETARDER BY THE CALIFORNIA BUILDING CODE CHAPTER 19 OR CONCRETE SLAB-ON-GROUND FLOORS REQUIRED TO HAVE A VAPOR RETARDER BY THE CALIFORNIA RESIDENTIAL CODE, CHAPTER 5, SHALL ALSO COMPLY WITH THIS SECTION.

4.505.2.1 CAPILLARY BREAK

A CAPILLARY BREAK SHALL BE INSTALLED IN COMPLIANCE WITH AT LEAST ONE OF THE FOLLOWING:

1. A COUCHING (10 MM) BASE OF 1/2 INCH (12.7 MM) OR LARGER CLEAN AGGREGATE SHALL BE PROVIDED WITH A VAPOR RETARDER IN DIRECT CONTACT WITH CONCRETE AND A CONCRETE MIX DESIGN, WHICH WILL ADDRESS BLEEDING, SHRINKAGE, AND CURLING, SHALL BE USED. FOR ADDITIONAL INFORMATION, SEE AMERICAN CONCRETE INSTITUTE, ACI 302.2R-06.
2. OTHER EQUIVALENT METHODS APPROVED BY THE ENFORCING AGENCY.
3. A SLAB DESIGN SPECIFIED BY A LICENSED DESIGN PROFESSIONAL.

4.505.3 MOISTURE CONTENT OF A BUILDING

BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE INSTALLED. WALL AND FLOOR FRAMING SHALL NOT BE ENCLOSED WHEN THE FRAMING MEMBERS EXCEED 19-PERCENT MOISTURE CONTENT. MOISTURE CONTENT SHALL BE VERIFIED IN COMPLIANCE WITH THE FOLLOWING:

1. MOISTURE CONTENT SHALL BE DETERMINED WITH EITHER A PROBE-THROUGH OR CONTACT-TYPE MOISTURE METER. EQUIVALENT MOISTURE VERIFICATION METHODS MAY BE APPROVED BY THE ENFORCING AGENCY AND SHALL SATISFY REQUIREMENTS FOUND IN SECTION 101.8 OF THIS CODE.
2. MOISTURE READINGS SHALL BE TAKEN AT A POINT 2 FEET (610 MM) TO 4 FEET (1219 MM) FROM THE GRADE STAMPED END OF EACH PIECE TO BE VERIFIED.
3. AT LEAST THREE RANDOM MOISTURE READINGS SHALL BE PERFORMED ON WALL AND FLOOR FRAMING WITH DOCUMENTATION ACCEPTABLE TO THE ENFORCING AGENCY PROVIDED AT THE TIME OF APPROVAL TO ENCLOSE THE WALL AND FLOOR FRAMING.

INSULATION PRODUCTS WHICH ARE VISIBLY WET OR HAVE A HIGH MOISTURE CONTENT SHALL BE REPLACED OR ALLOWED TO DRY PRIOR TO ENCLOSURE IN WALL OR FLOOR CAVITIES. WET-APPLIED INSULATION PRODUCTS SHALL FOLLOW THE MANUFACTURER'S DRYING RECOMMENDATIONS PRIOR TO ENCLOSURE.

4.506 INDOOR AIR QUALITY AND EXHAUST

4.506.1 BATHROOM EXHAUST FANS

EACH BATHROOM SHALL BE MECHANICALLY VENTILATED AND



PRE-APPROVED ADU

CITY OF LAGUNA NIGUEL

ENERGY COMPLIANCE - PLAN 1

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD											
Project Name: Laguna Niguel ADU Plan 1											
Calculation Date/Time: 2025-01-04T08:10:23-08:00											
Input File Name: Laguna Niguel ADU Plan 1.ribd22x											
CF1R-PRF-01-E (Page 1 of 12)											
GENERAL INFORMATION											
01	Project Name: Laguna Niguel ADU Plan 1										
02	Run Title: Title 24 Analysis										
03	Project Location										
04	City: Laguna Niguel	05	Standards Version: 2022	06	Zip code: 92677	07	Software Version: EnergyPro 9.3	08	Climate Zone: 6	09	Front Orientation (deg/ Cardinal): All orientations
10	Building Type: Single family	11	Number of Dwelling Units: 1	12	Project Scope: Newly Constructed	13	Number of Bedrooms: 1	14	Number of Stories: 1	15	Number of Stories: 1
16	Addition Cond. Floor Area (ft ²): 0	17	Penetration Average U-factor: 0.3	18	Total Cond. Floor Area (ft ²): 350	19	Glazing Percentage (%): 19.86%	20	ADU Bedroom Count: n/a	21	ADU Conditioned Floor Area: n/a
22	Fuel Type: All electric	23	No Dwelling Unit: No								
COMPLIANCE RESULTS											
01	Building Complies with Computer Performance										
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.										
03	This building incorporates one or more Special Features shown below										
Registration Number: 425-P010038168A-000-000-000000-0000 NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible and cannot guarantee the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0000 Schema Version: rev 20220901											
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BUILDING ENERGY ANALYSIS REPORT											
PROJECT: Laguna Niguel ADU Plan 1 Laguna Niguel, CA											
Project Designer: RRM Design Group											
Report Prepared by: Timothy Carsairs, CEA, HERS, GPR Carsairs Energy Inc. 2238 Bayview Heights Drive, Suite E Los Osos, CA 93402 805-904-9048											
Job Number: 25-01046 Date: 2/5/2025											

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Cover Page Table of Contents Form CF1R-PRF-01-E Certificate of Compliance Form RMS-1 Residential Measures Summary Form MFR-Mandatory Measures Summary Room Load Summary											

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THESE PLANS ARE PROVIDED BY THE CITY OF LAGUNA NIGUEL AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN. THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION IS COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONSTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.											
The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. The program has been approved and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2022 Building Energy Standards.											
This program developed by EnergySoft, LLC - www.energysoft.com.											

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ENERGY USE SUMMARY											
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft ² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)					
Space Heating	0.15	1.03	0.21	1.51	-0.06	-0.48					
Space Cooling	1.22	33.63	0.94	26.19	0.28	7.44					
IAQ Ventilation	0.56	5.99	0.56	5.99	0	0					
Water Heating	10.5	125.03	10.5	125.03	0	0					
Self Utilization/Flexibility Credit			0	0	0	0					
South Facing Efficiency Compliance Total	12.43	165.68	12.21	158.72	0.22	6.96					
Space Heating	0.15	1.03	0.13	1	0.02	0.03					
Space Cooling	1.22	33.63	0.92	25.73	0.3	7.9					
IAQ Ventilation	0.56	5.99	0.56	5.99	0	0					
Water Heating	10.5	125.03	10.5	125.03	0	0					
Self Utilization/Flexibility Credit			0	0	0	0					
West Facing Efficiency Compliance Total	12.43	165.68	12.11	157.75	0.32	7.93					

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD											
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ENERGY USE SUMMARY											
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft ² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)					
Space Heating	0.15	1.03	0.21	1.51	-0.06	-0.48					
Space Cooling	1.22	33.63	0.94	26.19	0.28	7.44					
IAQ Ventilation	0.56	5.99	0.56	5.99	0	0					
Water Heating	10.5	125.03	10.5	125.03	0	0					
Self Utilization/Flexibility Credit			0	0	0	0					
North Facing Efficiency Compliance Total	12.43	165.68	12.21	158.72	0.22	6.96					
Space Heating	0.15	1.03	0.13	1	0.02	0.03					
Space Cooling	1.22	33.63	0.92	25.73	0.3	7.9					
IAQ Ventilation	0.56	5.99	0.56	5.99	0	0					
Water Heating	10.5	125.03	10.5	125.03	0	0					
Self Utilization/Flexibility Credit			0	0	0	0					
East Facing Efficiency Compliance Total	12.43	165.68	12.11	157.75	0.32	7.93					

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD											
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Input File Name: Laguna Niguel ADU Plan 1.ribd22x											
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ENERGY DESIGN RATINGS											
	Energy Design Ratings						Compliance Margins				
	Source Energy (EDR1)	Efficiency ¹ EDR (EDR2efficiency)	Total ² EDR (EDR2total)	Source Energy (EDR1)	Efficiency ¹ EDR (EDR2efficiency)	Total ² EDR (EDR2total)					
Standard Design	44.8	53.5	66.9								
Proposed Design											
North Facing	44.8	52.1	66.1	0	1.4	0.8					
East Facing	44.4	50.3	65.2	0.4	3.2	1.7					
South Facing	44.5	51.2	65.7	0.3	2.3	1.2					
West Facing	44.4	50.9	65.6	0.4	2.6	1.3					
RESULT ³ : PASS											
¹ Efficiency EDR includes improvements like a better building envelope and more efficient equipment											
² Total EDR includes efficiency and demand response measures such as photovoltaic (PV) system and batteries											
³ Building complies when source energy, efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded											
• Standard Design PV Capacity: 0.00 kWdc • Proposed PV Capacity Scaling: North (0.00 kWdc) East (0.00 kWdc) South (0.00 kWdc) West (0.00 kWdc)											

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD											
Project Name: Laguna Niguel ADU Plan 1											
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ENERGY USE INTENSITY											
Zone	Standard Design (kBtu/ft ² -yr)	Proposed Design (kBtu/ft ² -yr)	Margin (kBtu/ft ² -yr)	Margin Percentage							
North Facing											
Gross EUI ¹	49.36	49.05	0.31	0.63							
Net EUI ²	49.36	49.05	0.31	0.63							
East Facing											
Gross EUI ¹	49.36	48.48	0.88	1.78							
Net EUI ²	49.36	48.48	0.88	1.78							
South Facing											
Gross EUI ¹	49.36	48.98	0.38	0.77							
Net EUI ²	49.36	48.98	0.38	0.77							
West Facing											
Gross EUI ¹	49.36	48.78	0.58	1.18							
Net EUI ²	49.36	48.78	0.58	1.18							

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD
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WATER HEATING - HERS VERIFICATION										
01	02	03	04	05	06	07	08	09	0	
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery				
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required				

SPACE CONDITIONING SYSTEMS									
01	02	03	04	05	06	07	08	09	0
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type	
HVAC System 1	Heat pump heating cooling	Heat Pump System 1	1	Heat Pump System 1	1	n/a	n/a	Setback	

HVAC - HEAT PUMPS													
01	02	03	04	05	06	07	08	09	010	11	12	13	
Name	System Type	Number of Units	Heating			Cooling			Zonally Controlled	Compressor Type	HERS Verification		Hers Pump System 1
			Heating Efficiency Type	HSPF/HS PFZ/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/SE ER2			EER/EEC 2/CEER		
Heat Pump System 1	VCHP-ductless	1	HSPF 8.8	12000	11400	EERER 15	12.2	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump			

HVAC HEAT PUMPS - HERS VERIFICATION												
01	02	03	04	05	06	07	08	09	010	11	12	13
Name	Verified Airflow	Airflow Target	Verified EER/ER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17	Verified Heating Cap 47	Verified Heating Cap 17	Verified Heating Cap 17	Verified Heating Cap 17
Heat Pump System 1	Not Required	0	Not Required	Not Required	Yes	Not Required	No	Yes	Yes	Yes	Yes	Yes

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OPAQUE SURFACE CONSTRUCTIONS										
01	02	03	04	05	06	07	08	09	0	
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers			
R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board			

BUILDING ENVELOPE - HERS VERIFICATION									
01	02	03	04	05	06	07	08	09	0
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50	CFM50					
Not Required	Not Required	N/A	n/a	n/a					

WATER HEATING SYSTEMS									
01	02	03	04	05	06	07	08	09	0
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (H)	
DHW Sys 1	Domestic Hot Water (DHW)	Point of Use	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)	

WATER HEATERS												
01	02	03	04	05	06	07	08	09	010	11	12	13
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Rated Input Type	Input Rating or Pilot	Tank Insulation R-value or Recovery Eff	Standby Loss or Flow Rate	1st Hr. Rating or Flow Rate	Tank Location	
DHW Heater 1	Electric Resistance	Consumer Instantaneou	1	0	UEF	0.98	kW	12	0	99	8	

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FENESTRATION / GLAZING													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Total Cavity R-value	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
04	Window	Right Wall	Right	270			1	24	0.3	NFRC	0.23	NFRC	Bug Screen
05	Window	Right Wall	Right	270			1	20	0.3	NFRC	0.23	NFRC	Bug Screen

OPAQUE DOORS													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Side of Building												
101	Front Wall												

SLAB FLOORS													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Zone	Area (ft ²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated						
Slab	Living Area	350	78	none	0	80%	No						

OPAQUE SURFACE CONSTRUCTIONS														
01	02	03	04	05	06	07	08	09	10	11	12	13	14	
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers							
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.069	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: 3 coat Stucco							
Attic Roof/Living Area	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing decking Cavity / Frame: no insul. / 2x4							

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VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION - HERS VERIFICATION												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Certified Low-Static VCHP System	Airflow to Habitable Rooms	Ductless Units in Conditioned Space	Wall Mount Thermostat	Air Filter Sliding Bamp; Pressure Drop Rating	Low Leakage Ducts in Conditioned Space	Minimum Airflow per RA3.3 and SC3.3.4.1	Certified non-continuous Fan	Indoor Fan not Running Continuously			
Heat Pump System 1	Not required	Required	Required	Required	Required	Not required	Not required	Not required	Not required			

INDOOR AIR QUALITY (IAQ) FANS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE/ASRE	Includes Fault Indicator Display?	HERS Verification	Status				
Sfm IAQvntRpt	25	0.35	Exhaust	No	n/a / n/a	No	Yes					

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ROOM LOAD SUMMARY
Project Name: Laguna Niguel ADU Plan 1
System Name: H/VAC System
Room Load Summary

Zone Name	Room Name	Multi.	Room Cooling Peak CFM	Sensible Latent (151)	COIL Htg. Peak CFM	Sensible Latent (151)	CFM	CFM	CFM	CFM	CFM	CFM	CFM
Living Area	1st Floor	1	163	3,451	151	151	122	5,173	151	151	151	151	151

PAGE TOTAL * 163 3,451 151 151 151 151 151 5,173

* Total includes ventilation load for zonal systems.

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PUBLIC SET

PRE-APPROVED ADU

CITY OF LAGUNA NIGUEL

ENERGY COMPLIANCE - PLAN 1

DATE 02/05/2025
SHEET
T24-102



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<p>CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: Laguna Niguel ADU Plan 1 Reverse Calculation Date/Time: 2025-01-04T08:13:24-08:00 Input File Name: Laguna Niguel ADU Plan 1 Reverse.rbd22x</p> <p>GENERAL INFORMATION</p> <table border="1"> <tr><td>01</td><td colspan="2">Project Name</td><td colspan="9">Laguna Niguel ADU Plan 1 Reverse</td></tr> <tr><td>02</td><td colspan="2">Run Title</td><td colspan="9">Title 24 Analysis</td></tr> <tr><td>03</td><td colspan="2">Project Location</td><td colspan="9"></td></tr> <tr><td>04</td><td>City</td><td colspan="2">Laguna Niguel</td><td>05</td><td>Standards Version</td><td colspan="2">2022</td><td>06</td><td>Software Version</td><td colspan="2">EnergyPro 9.3</td></tr> <tr><td>07</td><td>Zip code</td><td colspan="2"></td><td>08</td><td>Front Orientation (deg/ Cardinal)</td><td colspan="2">All orientations</td><td>09</td><td>Glazing Percentage (%)</td><td colspan="2">19.86%</td></tr> <tr><td>10</td><td>Building Type</td><td colspan="2">Single family</td><td>11</td><td>Number of Dwelling Units</td><td colspan="2">1</td><td>12</td><td>Number of Bedrooms</td><td colspan="2">1</td></tr> <tr><td>13</td><td>Project Scope</td><td colspan="2">Newly Constructed</td><td>14</td><td>Number of Stories</td><td colspan="2">1</td><td>15</td><td>Number of Stories</td><td colspan="2">1</td></tr> <tr><td>16</td><td>Addition Cond. Floor Area (ft²)</td><td colspan="2">0</td><td>17</td><td>Penetration Average U-factor</td><td colspan="2">0.3</td><td>18</td><td>Total Cond. Floor Area (ft²)</td><td colspan="2">350</td></tr> <tr><td>19</td><td>Existing Cond. Floor Area (ft²)</td><td colspan="2">n/a</td><td>20</td><td>ADU Bedroom Count</td><td colspan="2">n/a</td><td>21</td><td>ADU Conditioned Floor Area</td><td colspan="2">n/a</td></tr> <tr><td>22</td><td>Fuel Type</td><td colspan="2">All electric</td><td>23</td><td>No Dwelling Unit</td><td colspan="2">No</td><td></td><td></td><td colspan="2"></td></tr> </table> <p>COMPLIANCE RESULTS</p> <table border="1"> <tr><td>01</td><td colspan="11">Building Complies with Computer Performance</td></tr> <tr><td>02</td><td colspan="11">This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.</td></tr> <tr><td>03</td><td colspan="11">This building incorporates one or more Special Features shown below</td></tr> </table>												01	Project Name		Laguna Niguel ADU Plan 1 Reverse									02	Run Title		Title 24 Analysis									03	Project Location											04	City	Laguna Niguel		05	Standards Version	2022		06	Software Version	EnergyPro 9.3		07	Zip code			08	Front Orientation (deg/ Cardinal)	All orientations		09	Glazing Percentage (%)	19.86%		10	Building Type	Single family		11	Number of Dwelling Units	1		12	Number of Bedrooms	1		13	Project Scope	Newly Constructed		14	Number of Stories	1		15	Number of Stories	1		16	Addition Cond. Floor Area (ft ²)	0		17	Penetration Average U-factor	0.3		18	Total Cond. Floor Area (ft ²)	350		19	Existing Cond. Floor Area (ft ²)	n/a		20	ADU Bedroom Count	n/a		21	ADU Conditioned Floor Area	n/a		22	Fuel Type	All electric		23	No Dwelling Unit	No						01	Building Complies with Computer Performance											02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.											03	This building incorporates one or more Special Features shown below										
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01	Window	Front Wall	Front	0	1	12	0.3	NFRC	0.23	NFRC	Bug Screen																																																																																																																																																																																		
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05	Window	Left Wall	Left	90	1	20	0.3	NFRC	0.23	NFRC	Bug Screen																																																																																																																																																																																		
PAGE-09																																																																																																																																																																																													

<p>CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: Laguna Niguel ADU Plan 1 Reverse Calculation Date/Time: 2025-01-04T08:13:24-08:00 Input File Name: Laguna Niguel ADU Plan 1 Reverse.rbd22x</p> <p>ENERGY USE INTENSITY</p> <table border="1"> <tr><th></th><th>Standard Design (kBtu/ft²·yr)</th><th>Proposed Design (kBtu/ft²·yr)</th><th>Margin (kBtu/ft²·yr)</th><th>Margin Percentage</th></tr> <tr><td>North Facing</td><td></td><td></td><td></td><td></td></tr> <tr><td>Gross EUI¹</td><td>49.36</td><td>48.9</td><td>0.46</td><td>0.93</td></tr> <tr><td>Net EUI²</td><td>49.36</td><td>48.9</td><td>0.46</td><td>0.93</td></tr> <tr><td>East Facing</td><td></td><td></td><td></td><td></td></tr> <tr><td>Gross EUI¹</td><td>49.36</td><td>48.76</td><td>0.6</td><td>1.22</td></tr> <tr><td>Net EUI²</td><td>49.36</td><td>48.76</td><td>0.6</td><td>1.22</td></tr> <tr><td>South Facing</td><td></td><td></td><td></td><td></td></tr> <tr><td>Gross EUI¹</td><td>49.36</td><td>49.12</td><td>0.24</td><td>0.49</td></tr> <tr><td>Net EUI²</td><td>49.36</td><td>49.12</td><td>0.24</td><td>0.49</td></tr> <tr><td>West Facing</td><td></td><td></td><td></td><td></td></tr> <tr><td>Gross EUI¹</td><td>49.36</td><td>48.51</td><td>0.85</td><td>1.72</td></tr> <tr><td>Net EUI²</td><td>49.36</td><td>48.51</td><td>0.85</td><td>1.72</td></tr> </table> <p>Notes</p> <ol style="list-style-type: none"> 1. Gross EUI is Energy Use Total (not including PV) / Total Building Area. 2. Net EUI is Energy Use Total (including PV) / Total Building Area. 													Standard Design (kBtu/ft ² ·yr)	Proposed Design (kBtu/ft ² ·yr)	Margin (kBtu/ft ² ·yr)	Margin Percentage	North Facing					Gross EUI ¹	49.36	48.9	0.46	0.93	Net EUI ²	49.36	48.9	0.46	0.93	East Facing					Gross EUI ¹	49.36	48.76	0.6	1.22	Net EUI ²	49.36	48.76	0.6	1.22	South Facing					Gross EUI ¹	49.36	49.12	0.24	0.49	Net EUI ²	49.36	49.12	0.24	0.49	West Facing					Gross EUI ¹	49.36	48.51	0.85	1.72	Net EUI ²	49.36	48.51	0.85	1.72
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Input File Name: Laguna Niguel ADU Plan 1 Reverse.rbd22x

WATER HEATING - HERS VERIFICATION							
01	02	03	04	05	06	07	08
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery	
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required	

SPACE CONDITIONING SYSTEMS									
01	02	03	04	05	06	07	08	09	09
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type	
HVAC System1	Heat pump heating cooling	Heat Pump System 1	1	Heat Pump System 1	1	n/a	n/a	Setback	

HVAC - HEAT PUMPS													
01	02	03	04	05	06	07	08	09	10	11	12	13	
Name	System Type	Number of Units	Heating			Cooling			Zonally Controlled	Compressor Type	HERS Verification		HERS Verification
			Heating Efficiency Type	HSPF/HS P2Z/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/SE ER2			EER/EE R2/CEER		
Heat Pump System 1	VCHP-ductless	1	HSPF 8.8	12000	11400	EER/SEER 15	12.2	Not Zonal	Single Speed	Heat Pump System 1-herc-hpump			

HVAC HEAT PUMPS - HERS VERIFICATION												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Verified Airflow	Airflow Target	Verified EER/EEER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17	Verified Heating Cap 47	Verified Heating Cap 17		
Heat Pump System 1-herc-hpump	Not Required	0	Not Required	Not Required	Yes		No	Yes	Yes	Yes		

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OPAQUE SURFACE CONSTRUCTIONS										
01	02	03	04	05	06	07	08			
Construction Name	Surface Type	Construction Type	Framing			Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers	
R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.			R-30	None / None	0.032	Over Ceiling Joists: R-20 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board	

BUILDING ENVELOPE - HERS VERIFICATION					
01	02	03	04	05	06
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50	CFM50	
Not Required	Not Required	N/A	n/a	n/a	

WATER HEATING SYSTEMS									
01	02	03	04	05	06	07	08	09	09
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (H)	
DHW Sys 1	Domestic Hot Water (DHW)	Point of Use	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)	

WATER HEATERS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Rated Input Type	Input Rating or Pilot	Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	Tank Location	
DHW Heater 1	Electric Resistance	Consumer Instantaneou s	1	1	UEF	0.98	kW	12	0	99	8	

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FENESTRATION / GLAZING													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Total Cavity R-value	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
03	Window	Rear Wall	Back	180				1	6	0.3	NFRC	0.23	NFRC
02	Window	Right Wall	Right	270				1	7.5	0.3	NFRC	0.23	NFRC

OPAQUE DOORS									
01	02	03	04	05	06	07	08	09	09
Name	Side of Building				Area (ft ²)			U-factor	
101	Front Wall				20			0.2	

SLAB FLOORS									
01	02	03	04	05	06	07	08	09	09
Name	Zone	Area (ft ²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated		
Slab	Living Area	350	78	none	0	80%	No		

OPAQUE SURFACE CONSTRUCTIONS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Construction Name	Surface Type	Construction Type	Framing			Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers			
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.			R-21	None / None	0.069	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Stucco			
Attic RoofLiving Area	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.			R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing decking Cavity / Frame: no insul. / 2x4			

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VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION - HERS VERIFICATION												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Certified Low-Static VCHP System	Airflow to Habitable Rooms	Ductless Units in Conditioned Space	Wall Mount Thermostat	Air Filter Rating Bamp; Pressure Drop Rating	Low Leakage Ducts in Conditioned Space	Minimum Airflow per RA3.3 and SC3.3.4.1	Certified non-continuous Fan	Indoor Fan not Running Continuously			
Heat Pump System 1	Not required	Required	Required	Required	Required	Not required	Not required	Not required	Not required			

INDOOR AIR QUALITY (IAQ) FANS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE/ASRE	Includes Fault Indicator Display?	HERS Verification	Status				
Shm IAQVentRpt	25	0.35	Exhaust	No	n/a / n/a	No	Yes					

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ROOM LOAD SUMMARY
Project Name: Laguna Niguel ADU Plan 1 Reverse
System Name: H/VAC System
Room Name: 1st Floor

Zone Name	Room Name	Multi.	Room Cooling Peak	Coil Cooling Peak	Coil HTG Peak	CFM	Sensible Latent	CFM	Sensible Latent	CFM	Sensible Latent	CFM
Living Area	1st Floor	1	163	3,451	151	132	5,173					

PAGE TOTAL * 163 3,451 151 132 5,173

*Total includes ventilation load for zonal systems.

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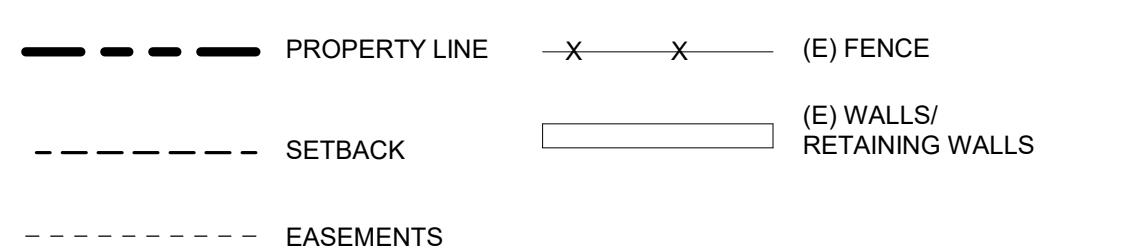


SITE PLAN GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS
2. REFER TO STRUCTURAL PLANS FOR FURTHER INFORMATION
3. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY INTO A PUBLIC WAY PER 2022 CRC, SECTION 310.1.
4. NOT LESS THAN 30" OF CLEARANCE IN WIDTH, DEPTH, & HEIGHT SHALL BE PROVIDED TO ACCESS EXTERIOR MECHANICAL EQUIPMENT. SHOW LOCATION ON SITE PLAN & LABEL (2022 CMC SECTION 304.1 & 2022 CPC 504.3).
5. PROPOSED ADU IS TO BE FULLY ELECTRIC. INSTALLATION OF A GAS LINE TO THE PROPOSED ADU WILL NOT BE PERMITTED.
6. **CALL BEFORE YOU DIG!** CONTACT UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600 AT LEAST 2 WORKING DAYS BEFORE EXCAVATING.
7. UNLESS OTHERWISE NOTED ON THE PLANS, FINISHED GROUND SURFACES SHALL BE GRADED TO DRAIN THE FINISHED SITE PROPERLY WITHIN 10-FEET OF ANY BUILDING FOUNDATION WITH A SLOPE OF 5% AWAY FROM ANY BUILDING OR STRUCTURE. ALL EXTERIOR HARDSCAPE WITHIN 10-FEET OF A BUILDING FOUNDATION SHALL BE INSTALLED WITH A 2% MINIMUM SLOPE AWAY FROM ANY BUILDING OR STRUCTURE. DRAINAGE SWALES SHALL BE A 1.5% MINIMUM SLOPE. ALL GRADED SLOPES SHALL HAVE A MAXIMUM SLOPE OF 3H TO 1V (33%), UNLESS SHOWN OTHERWISE ON THE PLANS.
8. LOT GRADING SHALL CONFORM AT THE PROPERTY LINES AND SHALL NOT SLOPE TOWARD PROPERTY LINES IN A MANNER WHICH WOULD CAUSE STORM WATER TO FLOW ONTO NEIGHBORING PROPERTY. HISTORIC DRAINAGE PATTERNS SHALL NOT BE ALTERED IN A MANNER TO CAUSE DRAINAGE PROBLEMS TO NEIGHBORING PROPERTY.
9. NEW RAINWATER DOWNSPOUTS SHALL BE DISCONNECTED AND DIRECT RUNOFF TO A LANDSCAPED AREA. DOWNSPOUTS MAY BE CONNECTED TO A POP-UP DRAINAGE Emitter IN THE LANDSCAPED AREA OR MAY DRAIN TO SPLASH BLOCKS OR COBBLESTONES THAT DIRECT WATER AWAY FROM THE BUILDING.
10. CONTRACTOR TO FIELD VERIFY EXISTING DRAINAGE. IF THE EXISTING DRAINAGE SYSTEM IS DAMAGED DURING EXCAVATION, CONTRACTOR SHALL REPAIR AND/OR REROUTE DRAINAGE SYSTEM AND CONNECT TO EXISTING DRAINAGE FACILITY AS NECESSARY.
11. EXISTING PUBLIC IMPROVEMENTS THAT ARE DAMAGED BY THE PROJECT CONSTRUCTION SHALL BE REPAIRED OR REPLACED. EXISTING DAMAGED PUBLIC IMPROVEMENTS WITHIN THE PROJECT LIMITS SHALL BE REPAIRED OR REPLACED EVEN IF THE DAMAGE OCCURRED PRIOR TO THE START OF CONSTRUCTION.
12. EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE INSTALLED PRIOR TO OCTOBER 1 AND SHALL BE MAINTAINED DAILY UNTIL APRIL 30. THESE FACILITIES SHALL CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND PROVIDE FOR THE SAFE DISCHARGE OF SILT-FREE STORM WATERS INTO EXISTING STORM DRAIN FACILITIES. EROSION AND SEDIMENT CONTROL SUPPLIES MUST BE KEPT ON-SITE DURING THE DRY SEASON AND EMPLOYED, AS NECESSARY PRIOR TO AND DURING RAIN EVENTS.
13. SEASONALLY APPROPRIATE BEST MANAGEMENT PRACTICES FOR THE FOLLOWING SITE MANAGEMENT CATEGORIES MUST BE IMPLEMENTED YEAR-ROUND: 1) EROSION CONTROL; 2) RUN-ON AND RUN-OFF CONTROL; 3) SEDIMENT CONTROL; 4) GOOD SITE MANAGEMENT; AND 5) NON-STORMWATER MANAGEMENT.
14. AN ENCROACHMENT PERMIT WILL BE REQUIRED FOR ANY CONSTRUCTION ACTIVITY WITHIN A PUBLIC STREET RIGHT OF WAY THAT HAS BEEN ACCEPTED BY THE CITY.

SE PLANS ARE PROVIDED BY THE CITY OF LAGUNA
GUEL AS PART OF THE PRE-APPROVED ADU
OGRAM AND ARE PUBLIC DOMAIN. THERE
NNOT BE A CHARGE TO PROVIDE THESE PLANS.
ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL
TERATIONS MUST BE DONE UNDER A SEPARATE
RMIT ONCE THE BUILDING PERMIT FOR THE ADU
S BEEN ISSUED AND FINAL INSPECTION
OMPLETED. IF YOU DO NOT HAVE THE
NSTRUCTION KNOWLEDGE AND EXPERIENCE TO
NSTRUCT THESE PLANS WITHOUT FURTHER DETAILS,
S RECOMMENDED YOU HIRE A CONTRACTOR TO
THE CONSTRUCTION. THE CITY WILL NOT
OVIDE FURTHER INFORMATION OR DETAILS AND
LDING INSPECTORS WILL NOT PROVIDE STEP BY
P INSTRUCTIONS IN THE FIELD.

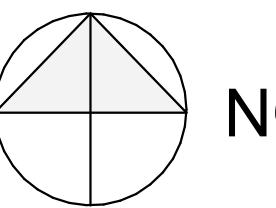
SITE PLAN LEGEND



EXAMPLE SITE PLAN

NOTE: THIS IS AN EXAMPLE SITE PLAN FOR AN INTERIOR LOT. EXACT LAYOUT, DIMENSIONS, AND BEARINGS SHALL BE PROVIDED BY OWNER/APPLICANT.

SCALE: $1/10"$ = 1' - 0"



SITE PLAN CHECKLIST

(FOR PLANNING STAFF ONLY) INITIAL WHEN THIS SHEET HAS BEEN REVIEWED. STAFF INITIALS: _____

- TOPOGRAPHY - SHOW 1 FT CONTOURS ON SITE AND 20 FT OFFSITE.**
(REQUIREMENT MAY BE WAIVED AT BUILDING OFFICIALS DISCRETION.)
- PROPERTY LINES**
SHOW OUTLINE OF PROPERTY USING DASHED LINE IN LEGEND. INDICATE THE BEARING AND DISTANCE OF THE PROPERTY LINE.
- DIMENSION BUILDING SEPARATION**
DIMENSION THE DISTANCE BETWEEN THE PROPOSED ADU AND ANY EXISTING STRUCTURES
- PROVIDE THE EXACT LOCATION AND LABEL ALL OF THE EXISTING & PROPOSED UTILITIES ON THE SITE PLAN**
A. THIS INCLUDES BUT IS NOT LIMITED TO UTILITIES, POLE, SEPTICS, SEWER, DRAINS, ELECTRICAL, GAS METERS, LINES, AND ANY OTHER CONNECTION.
B. INDICATE ELEVATION OF LATERAL AND MAIN CONNECTION.
IF ON SEPTIC SYSTEM, PROVIDE DEPARTMENT OF ENVIRONMENTAL HEALTH (DEH) EXHIBIT WITH EACH LINES SHOWN AND AREA FOR NEW LINES.
SEWER MAIN EXTENSION MAY BE REQUIRED. INCLUDE LOCATIONS AND ALL ELEVATION OF PROPOSED SEPTIC/ SEWER/ LINES. PROVIDE INVERT ELEVATION AT CLEANOUT, SEWER MAIN CONNECTION, ADU CONNECTION, AND AT ANY OTHER CONNECTION POINTS.
C. PLEASE SPECIFY ON THE PLAN IF THE ADU WILL HAVE NEW INDEPENDENT SERVICES DIRECTLY FROM THE PUBLIC RIGHT OF WAY CONNECTION OR IF THE SERVICES WILL BE BRANCHED OFF THE EXISTING MAIN LINES ON THE PROPERTY.
D. JUSTIFY PIPE SIZES SHOWN ON THE PLAN ARE EQUIVALENT FOR THE PROPOSED ADU SERVICES. IF THESE SERVICES ARE CONNECTED TO THE EXISTING MAIN SERVICES, THEN PROVIDE JUSTIFICATION THAT THE EXISTING MAINS CAN HANDLE THE NEW INCREASED FLOWS OF THE ADU FOR WATER SUPPLY AND SANITARY SEWER SYSTEMS. PLEASE USE CPTABLE 610.3, TABLE 610.4, AND SECTION 610.5 FOR JUSTIFICATION. NOTE, IF USING APPENDIX A SIZING CRITERIA, PLEASE INCLUDE THE CPTA APPENDIX A CHART ON THE PLAN.
- FOOTPRINT OF ALL EXISTING AND PROPOSED BUILDINGS - PLOT THE PROPOSED ADU BUILDING FOOTPRINT ALONG WITH ANY OTHER EXISTING BUILDINGS ONSITE. THIS INCLUDES ALL STRUCTURES / PORCHES / GAZEBOS. PLOT ANY OPTIONAL COVERED PATIOS (WHEN SELECTED).**
- LOT COVERAGE CALCULATION - TOTAL FOOTPRINT AREA FOR STRUCTURES ON SITE / LOT AREA**
- LABEL YARDS**
LABEL FRONT, REAR, SIDE YARDS, AS WELL AS DRIVEWAYS, PATHWAYS AND ANY OTHER HARDSCAPE.
- SWIMMING POOLS - ALL EXISTING SWIMMING POOLS SHALL BE SHOWN ON THE SITE PLAN AND SHALL HAVE 10' MINIMUM SETBACK TO THE NEW ADU STRUCTURE.**
- SETBACKS**
DIMENSION THE DISTANCE BETWEEN BUILDINGS AND PROPERTY LINES, AS WELL AS BUILDINGS TO OTHER STRUCTURES. SETBACKS TO SIDE AND REAR PROPERTY SIDE SHALL BE A MINIMUM OF (4' - 0").
- EASEMENTS**
REFER TO LEGEND. MUST INCLUDE ALL APPLICABLE EASEMENTS. PROPOSED STRUCTURE SHALL COMPLY WITH EASEMENT REQUIREMENTS.
- LOCATION OF RAIN WATER LEADERS - THE ROOF DRAINS SHOULD DRAIN AWAY FROM THE PROPERTY LINES AND INTO THE LANDSCAPE AREA.**
- DRIVEWAY / PAVED ACCESS**
SHOW THE PROPOSED (OR EXISTING) DRIVEWAY / PAVED ACCESS TO THE PROPOSED ADU.
- LOCATION OF FIRE HYDRANTS**
INDICATE THE LOCATION OF ALL FIRE HYDRANTS WITHIN 500 FEET OF THE PROPERTY.
- LABEL STREETS & SIDEWALKS**
- SHOW ALL EV CHARGING AND ALL ASSOCIATED CIRCUITS FOR NEW AND EXISTING LOCATIONS.**
- LOCATION OF ELECTRICAL PANEL**
SEE COVER SHEET FOR PANEL OPTION AND MAXIMUM AMPERAGE FOR THE PROPOSED ADU. SEE TITLE SHEET UNDER OPTION SELECTIONS FOR REQ. ADDITIONAL CALCULATIONS BASED ON CHOSEN ELECTRICAL PANEL.
- PORCHES - THERE SHALL BE NO MORE THAN 30 INCHES MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW (INCLUDING FLOORS, STAIRS, RAMPS, AND LANDINGS) ANYWHERE MEASURED LESS THAN 36 INCHES HORIZONTALLY TO THE EDGE OF THE PORCH/SLAB/SURFACE OF THE RAIL. INSECT SCREENING SHALL NOT BE CONSIDERED AS A GUARD.**

1-HR FIRE CONSTRUCTION

**IS (N) ADU LESS THAN 5' - 0" TO ANY PROPERTY LINE
AND/OR IS (N) ADU 10' - 0" OR LESS FROM ANY
ADJACENT BUILDING OR STRUCTURE:**

- NO
- YES; IF YES, FIRE RATED WALL REQUIRED PER 2022 CRC SECTION R302.1. FIRE RATED WALL DETAIL: **42/A-901**

IF YES, ***FIREBLOCKING** IS REQUIRED IN PROJECTIONS, RAKES AND EAVES. SEE DETAILS ON: **A-911, A-912.**

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5/2025

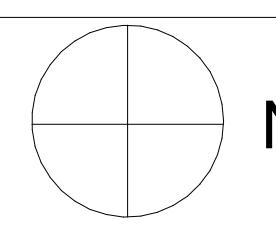
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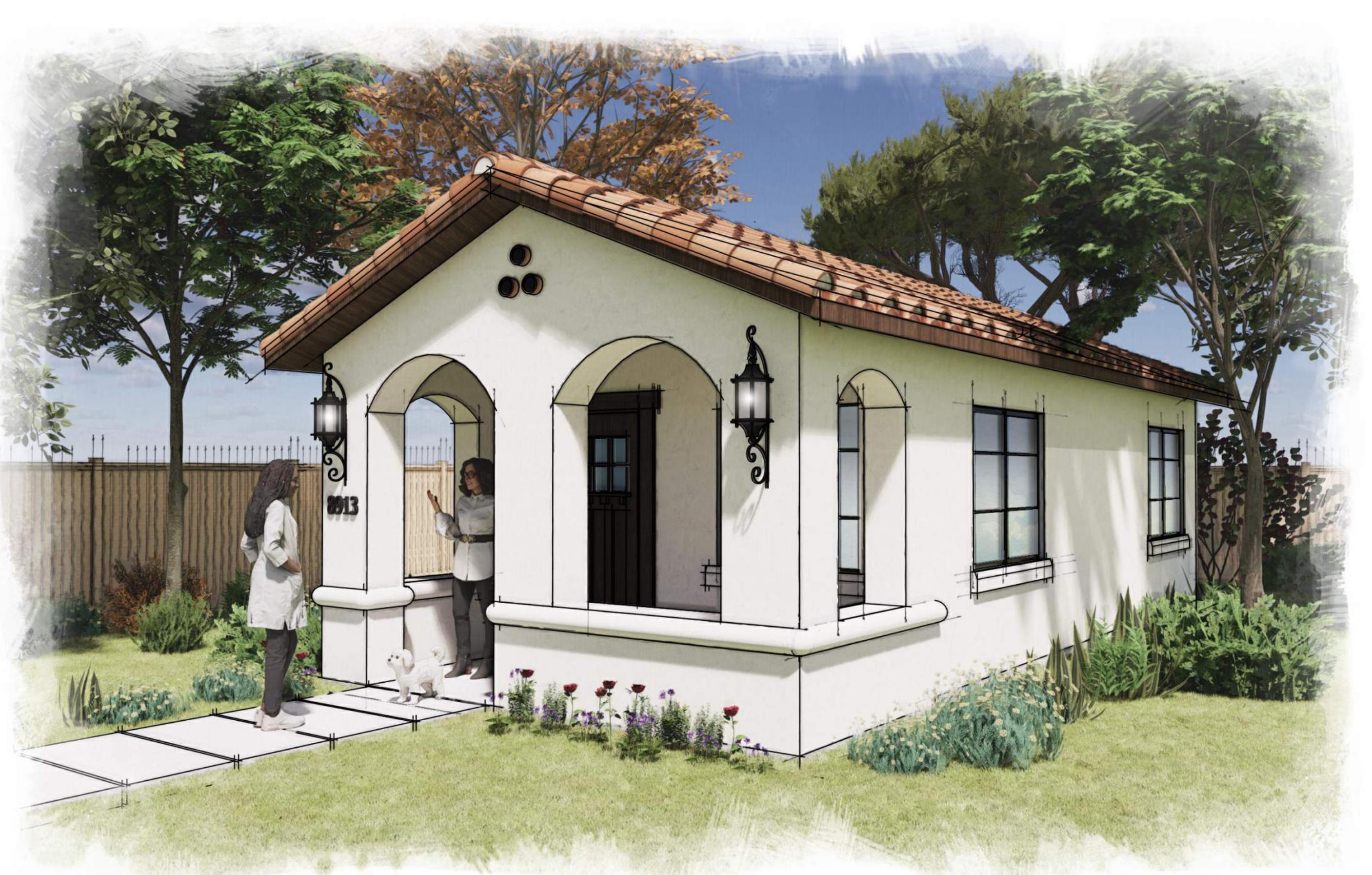
SITE PLAN TO BE PROVIDED BY APPLICANT

REFER TO AS101 FOR EXAMPLE SITE PLAN



THESE PLANS ARE PROVIDED BY THE CITY OF LAGUNA NIGUEL AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN, THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONSTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.





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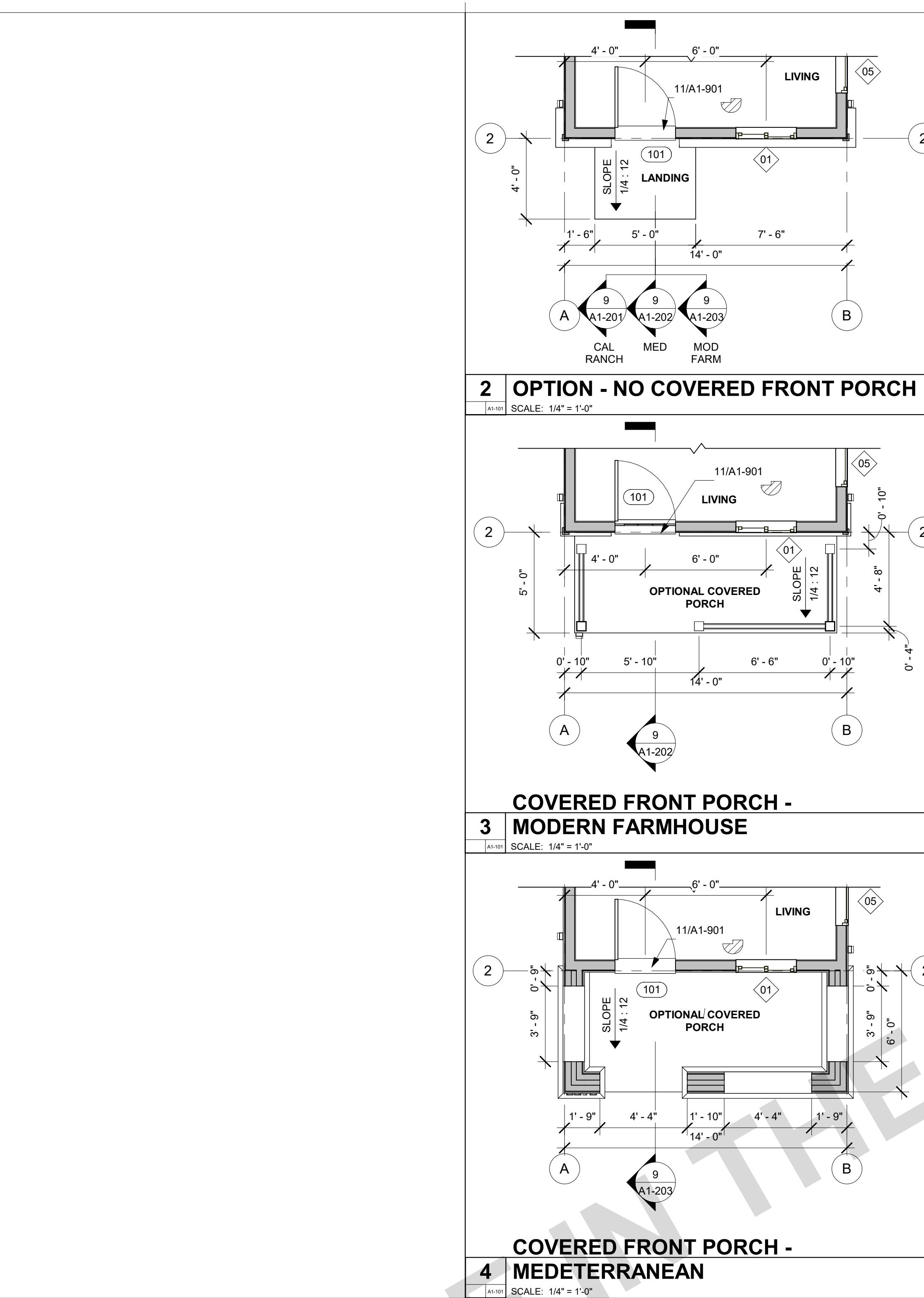
CALIFORNIA RANCH



MODERN FARMHOUSE



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DOOR LEGEND

FRONT DOOR (TYPE A) STYLE/LOOK PER OWNER/APPLICANT		
TYPE A (EXAMPLE) SOLID CORE WOOD ENTRY DOOR EXTERIOR	TYPE B HOLLOW CORE WOOD INTERIOR	TYPE C HOLLOW CORE WOOD VENTED (min. 100 in opening) INTERIOR

DOOR REMARKS

- EXTERIOR DOOR.
- GLAZING PER DOOR TYPES. REFER TO GENERAL DOOR NOTE #1.
- REQUIRED OPENING OF NOT LESS THAN 100 IN² FOR MAKEUP AIR SHALL BE PROVIDED IN THE DOOR OR BY APPROVED MEANS. [CMC SEC. R504.4.1]

DOOR SCHEDULE

NO.	TYPE	DOOR		DOOR DETAIL REFERENCES
		WIDTH	HEIGHT	
101	A	3'-0"	6'-8"	1, 2 21/A-921
102	C	3'-0"	6'-8"	3 21/A-922
103	B	2'-10"	8'-0"	21/A-923
104	B	2'-6"	6'-8"	11/A-901 12/A-901

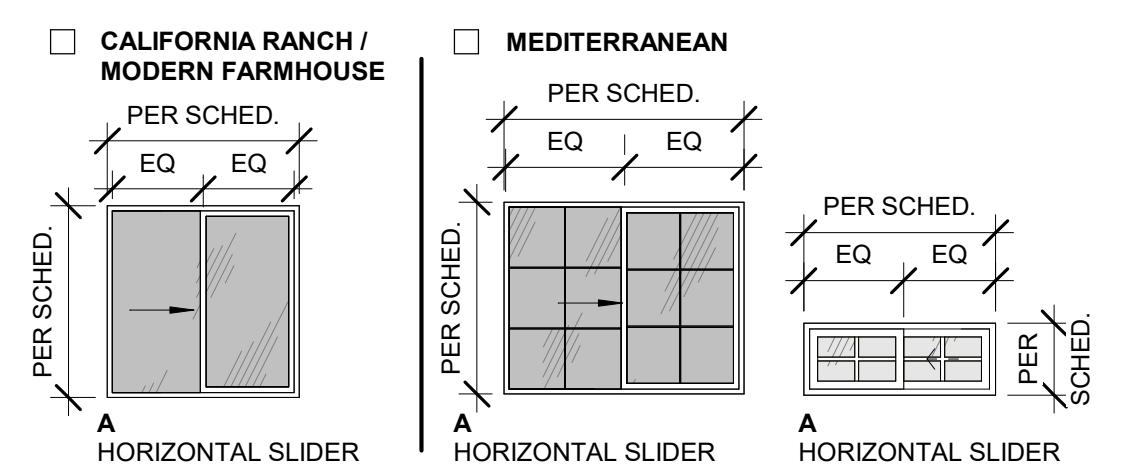
DOOR GENERAL NOTES

- GLAZING IN DOORS SHALL BE TEMPERED PER SECTION R308.4.1. PANES INDICATED IN DOOR LEGEND WITH (T).
- REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
- REFER TO PLANS FOR LOCATION OF DOORS.
- VERIFY ROUGH OPENING SIZE WITH DOOR MANUFACTURER SPECIFICATIONS PRIOR TO CONSTRUCTION.
- CONTRACTOR TO VERIFY ACTUAL DOOR SIZE TO FIT FINISH OPENING PRIOR TO FABRICATION OF DOOR AND FINISH OPENING.
- FIRE RATED DOORS SHALL BE SOLID WOOD OR SOLID HONEYCOMB CORE STEEL DOOR 1-3/8" THICK OR COMPLIANT WITH CRC SECTION R302.5.1. DOORS SHALL BE SELF-CLOSING AND SELF-LATCHING WITH WEATHER STRIPPING.
- EXTERIOR DOORS SHALL EITHER HAVE A FIRE-RESISTANCE RATING OF NOT THAT COMPLIES WITH THE FOLLOWING REQUIREMENTS:
 - STILES AND RAILS SHALL NOT BE LESS THAN 1-1/4" THICK.
 - PANELS SHALL NOT BE LESS THAN 1-3/8" THICK, EXCEPT FOR THE EXTERIOR PERIMETER OF THE PANEL SHALL BE PERMITTED TO TAPER TO A TONGUE OF NOT LESS THAN 3/8" THICK.

WINDOW SCHEDULE

NO.	TYPE	SIZE		HEAD	JAMB	REMARKS	WINDOW DETAIL REFERENCES
		WIDTH	HEIGHT				
01	A	3'-0"	4'-0"	6'-8"	2		11/A-921
02	A	2'-6"	3'-0"	6'-8"	2		11/A-922
03	A	4'-0"	1'-6"	6'-8"	2, 3		11/A-922
04	A	6'-0"	4'-0"	6'-8"	1		11/A-923
05	A	5'-0"	4'-0"	6'-8"			31/A-902

WINDOW TYPE



WINDOW REMARKS

- REQUIRED EGRESS WINDOW. REFER TO WINDOW GENERAL NOTE #5 FOR ADDITIONAL INFORMATION.
- WINDOW INCLUDES BOTH PANES TEMPERED GLAZING.
- REQUIRED TO PROVIDE OBSCURE / PRIVACY GLASS.

WINDOW GENERAL NOTES

- REFER TO FLOOR PLANS FOR WINDOW LOCATIONS.
- CONTRACTOR TO VERIFY EXACT ROUGH OPENING SIZES PRIOR TO FABRICATION OF ROUGH OPENINGS.
- REFER TO ENERGY COMPLIANCE REPORTS TO VERIFY U-FACTOR, SHGC AND ADDITIONAL WINDOW REQUIREMENTS. ALL OPENINGS TO BE U-FACTOR = (.3), SHGC = (.23). BUG SCREEN REQUIRED (PER TITLE 24).
- ALL GLAZING IS DOUBLE PANE UNLESS OTHERWISE NOTED.
- EGRESS WINDOWS SHALL HAVE A CLEAR OPENING WITH THE BOTTOM OF THE CLEAR OPENING NOT GREATER THAN 44" AFF. MIN. NET CLEAR OPENING FOR EMERGENCY ESCAPE SHALL BE 5.75 F. EXCEPT: 5.5 F. MIN. AT GROUND FLOOR. MINIMUM NET CLEAR OPENING DIMENSIONS: HEIGHT: 24", WIDTH: 20". [CRC SEC. R310.1.1] EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY INTO A PUBLIC WAY PER CPC 2022, SECTION 311.1.1.
- GLAZING IN WALLS ADJACENT TO BATH TUB / SHOWER WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE SHALL BE SAFETY GLAZING. [CRC SEC. R308.4.5]
- IF STRUCTURE IS IN A WUI ZONE, WINDOW MUST COMPLY WITH R337.8.

FLOOR PLAN GENERAL NOTES

- REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
- REFER TO STRUCTURAL PLANS FOR FURTHER INFORMATION.
- REFER TO ELECTRICAL PLANS FOR FURTHER INFORMATION IF PROVIDED.
- REFER TO MECHANICAL PLANS, DRAWINGS OR REPORTS FOR FURTHER INFORMATION.
- ALL FURNITURE AND EQUIPMENT IS BY OWNER AND IS SHOWN FOR COORDINATION PURPOSES ONLY.
- DIMENSIONS ARE TO FACE OF FRAMING UNLESS SPECIFICALLY NOTED OTHERWISE.
- PROVIDE ADEQUATE BLOCKING IN WALLS FOR CABINETS AND OTHER WALL MOUNTED ACCESSORIES INCLUDING BUT NOT LIMITED TO HANDRAILS, SHELVING AND BATHROOM FIXTURES.
- DOOR AND WINDOW DIMENSIONS ARE CENTERED AT OPENINGS.
- WHERE DOOR IS LOCATED WITHOUT DIMENSION AT THE CORNER OF A ROOM IT SHALL BE 4" FROM FACE OF FRAMING OF ADJACENT WALL TO ROUGH DOOR OPENING.
- WHERE RECESSED FIXTURES OCCUR IN WALLS OR HORIZONTAL ASSEMBLIES, THE FIRE RATING OF THOSE ASSEMBLIES SHALL BE MAINTAINED.
- AT ALL PENETRATIONS AND INTERSECTIONS OF FIRE-RATED PARTITIONS, PROVIDE FIRE SEALANT AND/OR FIRE STOPPING TO MAINTAIN CONTINUITY OF PARTITION RATING.
- PER CRC R311.3 FLOORS OR LANDINGS AT EXTERIOR DOORS SHALL BE AT LEAST AS WIDE AS DOOR SERVED AND SHALL PROVIDE A LENGTH IN THE DIRECTION OF TRAVEL EQUAL TO 36 INCHES MINIMUM. SLOPE OF EXTERIOR LANDINGS SHALL NOT EXCEED 1/4" PER FOOT (2% SLOPE).
- PER CRC 327.1.1 REINFORCEMENT FOR GRAB BARS SHALL BE PROVIDED IN AT LEAST ONE BATHROOM. 1. REINFORCEMENT SHALL BE SOLID LUMBER OR OTHER CONSTRUCTION MATERIAL APPROVED BY THE REINFORCING AGENT. 2. REINFORCEMENT SHALL NOT BE LESS THAN 2X8 INCHES OF LUMBER OR OTHER MATERIAL PROVIDING EQ. HT. AND CAPACITY. REINFORCEMENT ABOVE THE FINISHED FLOOR FLUSH WITH THE WALL FRAMING. 3. WATER CLOSET REINFORCEMENT SHALL BE INSTALLED ON BOTH SIDE WALLS OF THE FIXTURE, OR ONE SIDE WALL AND THE BACK WALL. 4. SHOWER REINFORCEMENT SHALL BE CONTINUOUS WHERE WALL FRAMING IS PROVIDED. 5. BATH/TUB AND COMBINATION BATH/TUB/SHOWER REINFORCEMENT SHALL BE CONTINUOUS ON EACH END OF THE BATH/TUB AND THE BACK WALL. ADDITIONALLY, BACK WALL REINFORCEMENT FOR A LOWER GRAB BAR SHALL BE PROVIDED WITH THE BOTTOM EDGE LOCATED NO MORE THAN 6 INCHES ABOVE THE BATHTUB RIM. REFER TO SHEET A-903 FOR MORE INFORMATION.



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WALL LEGEND

- EXTERIOR - 5 1/2" WOOD STUD W/ PLYWOOD SHEATHING AND FINISH, SEE ELEV. FOR (EXT.) FINISH. ONE LAYER GYP. WALL BOARD INT. SEE T24 FOR INSULATION. SEE DETAIL: 42/A-101 FOR 1-HR WALL ASSEMBLY WHEN REQUIRED
- EXTERIOR - DOUBLE 3 1/2" WOOD STUD W/ PLYWOOD SHEATHING (WITH 2" AIR SPACE) AND FINISH ON BOTH SIDES, SEE ELEV. FOR (EXT.) FINISH.
- INTERIOR - 3 1/2" WOOD STUD W/ ONE LAYER GYP. WALL BOARD EACH SIDE.
- ADD BLOCKING AS NEEDED IN THESE LOCATIONS PER DETAIL(S): 14/A-903

NOTE: SEE MANUFACTURER LISTINGS FOR IMPROVED ACOUSTIC, MOISTURE, MOLD, & MILDEW-RESISTANT PERFORMANCE PRODUCTS.

NOTE: 5/8" GYP ATTACHED DIRECTLY TO STUDS IS ASSUMED U.N.O. VERIFY PRODUCT SELECTIONS & REQUIREMENTS, THICKNESS, AND LOCATIONS ON PLANS WITH CONTRACTOR BEFORE CONSTRUCTION. ANY INCREASE IN WALL THICKNESS IS NOT PERMITTED WHERE MIN. CLEARANCES ARE REQUIRED. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

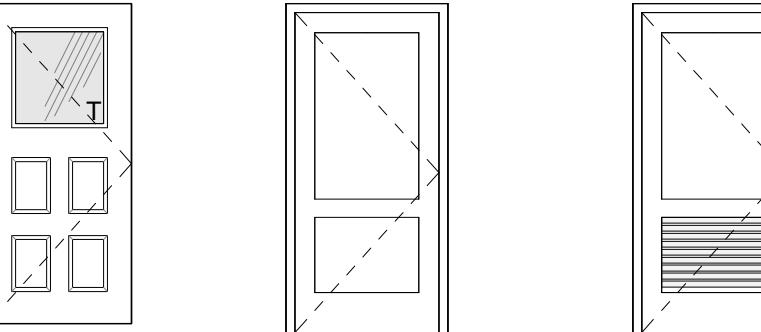
NOTE: SEE GYPSUM ORG FOR MORE INFORMATION. POTENTIAL PRODUCTS CAN BE FOUND (BUT ARE NOT LIMITED TO) THE FOLLOWING MANUFACTURERS: CERTAINTEED.COM, PABCOGYPSUM.COM, GOLDBONDBUILDING.COM.

KEYNOTES

A03 30" WIDE FREE STANDING ELECTRIC RANGE OVEN. VENT TO EXTERIOR, STAINLESS STEEL.
 A04 30" WIDE BUILT-IN MICROWAVE WITH RANGE VENT, STAINLESS STEEL.
 A05 REFRIGERATOR LOCATION. PROVIDE 42" SPACE WITH ROUGH PLUMBING FOR ICE MAKER (RECESS IN WALL).
 A06 24" WIDE FRONT CONTROL UNDERCOUNTER DISHWASHER.
 A07 STACKED WASHER/DRYER MACHINE LOCATION. PROVIDE WASTE AND WATER IN RECESSED WALL BOX. PROVIDE DRYER VENT. VENT TO OUTSIDE AIR.
 B01 20" SINGLE COMPARTMENT UNDER-MOUNT KITCHEN SINK W/ GARBAGE DISPOSAL. REFER TO WATER EFFICIENCY REQUIREMENTS ON CALGREEN CODE NOTES SHEET.
 B06 32" x 60" x 72" TUB AND SHOWER COMBINATION. MODEL BY BUILDER. PROVIDE SHOWER ROD.
 B12 WATER CLOSET. REFER TO WATER EFFICIENCY REQUIREMENTS ON CALGREEN CODE NOTES SHEET. WATER CLOSET SHALL NOT BE SET CLOSER THAN 15' FROM ITS CENTER TO A SIDE WALL OR OBSTRUCTION PER CPC, SECTION 402.5.
 B16 ELECTRIC PANEL LOCATION. PROVIDE PROTECTION PER CPC 507.25 & CMC 305.1.1. SEE GENERAL MEP NOTES 7 & 8 ON SHEET A-111 FOR MORE INFO.
 B17 MULTI-ZONE HEAT PUMP CONDENSER UNIT. REFER TO PLANS FOR LOCATION OF INDOOR FAN COIL UNITS. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION. PROVIDE CONCRETE PAD MIN. 6" LARGER THAN UNIT IN EACH DIRECTION. 3" MIN. ABOVE GRADE. PROVIDE PROTECTION PER CPC 507.25 & CMC 305.1.1. SEE GENERAL MEP NOTES 7 & 8 ON SHEET A-111 FOR MORE INFO. SEE DETAIL 53/A-902.
 B18 FAN COIL @ 80" A.F. TO BOTTOM OF UNIT. PROVIDE DEDICATED WALL OUTLET, INSTALL PER MANUFACTURER'S SPECIFICATIONS. REFER TO PLANS FOR LOCATION OF OUTDOOR CONDENSING UNIT. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION.
 C01 SINGLE WOOD SHELF AND POLE.
 C04 36" HIGH BASE CABINET AND COUNTERTOP.
 C08 24" DEEP UPPER CABINET.
 C12 22" DEEP VANITY.
 K08 BRICK VENEER WAINTSCOT. SEE SHEET A-913 FOR DETAILS AND SEE MATERIALS LEGEND FOR MORE INFORMATION.
 M02 DOWNSPOUT TO SPLASH BLOCK BELOW. SEE DETAIL 43/A-904.
 P01 DECORATIVE PORCH RAILING. HEIGHT OF 24" MIN. TO 48" MAX. REQUIRED FOR WOOD. PRIMER & 2 COATS OF EXTERIOR GRADE PAINT. REQUIRED: 30 INCHES MAX VERTICAL DROP IS PROHIBITED WITHIN 36 INCHES (HORIZONTALLY) OF THE PORCH. SEE DETAIL FOR MORE INFORMATION.
 T12 WOOD POST. SEE STRUCTURAL - REQUIRED: PRIMER & 2 COATS OF EXTERIOR GRADE PAINT.

DOOR LEGEND

FRONT DOOR (TYPE A) STYLE/LOOK PER OWNER/APPLICANT

TYPE A (EXAMPLE)
SOLID CORE WOOD
ENTRY DOOR
EXTERIORTYPE B
HOLLOW CORE WOOD
INTERIORTYPE C
HOLLOW CORE WOOD
VENTED (MIN. 100 IN
OPENING)
INTERIOR

DOOR SCHEDULE

NO.	TYPE	WIDTH	HEIGHT	REMARKS
101	A	3'-0"	6'-8"	1, 2
102	C	3'-0"	6'-8"	3
103	B	2'-10"	8'-0"	
104	B	2'-6"	6'-8"	

OPTIONAL EXTERIOR DOORS

NO.	TYPE	WIDTH	HEIGHT	REMARKS
102	C	3'-0"	6'-8"	3
111	F	5'-0"	6'-8"	3
112	F	5'-0"	6'-8"	3
113	F	5'-0"	6'-8"	3
114	F	5'-0"	6'-8"	3

DOOR DETAIL REFERENCES

BOARD & BAT	HEAD	JAMB
LAP SIDING	21/A-921	
BOARD & BAT	21/A-922	
STUCCO	21/A-923	

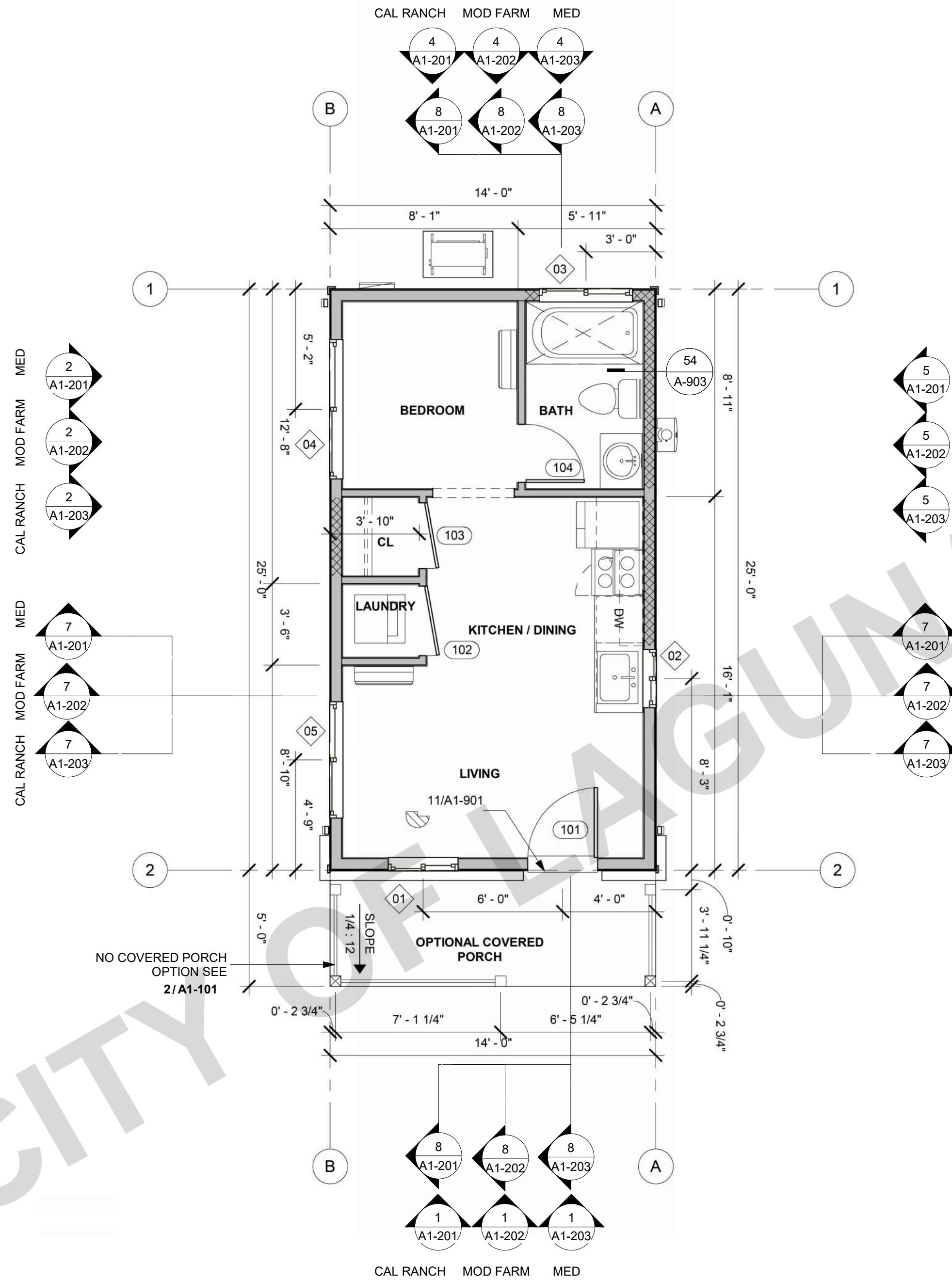
THRESHOLD	TYPE	REMARKS
	11/A-901	
	12/A-901	

DOOR REMARKS

- EXTERIOR DOOR.
- GLAZING PER DOOR TYPES, REFER TO GENERAL DOOR NOTE #1
- OPTIONAL DOOR, WHEN NOT USED, STRIKE OFF DOOR MARKER ON PLANS AND STRIKE OFF DOOR IN SCHEDULE.
- REQUIRED OPENING OF NOT LESS THAN 100 IN² FOR MAKEUP AIR SHALL BE PROVIDED IN THE DOOR OR BY APPROVED MEANS. [CMC SEC. R504.4.1]
- VENT DOOR AS REQUIRED PER WATER HEATER MANUFACTURER REQUIREMENTS / SPECIFICATIONS

DOOR GENERAL NOTES

- GLAZING IN DOORS SHALL BE TEMPERED PER SECTION R308.4.1. PANES INDICATED IN DOOR LEGEND WITH (T).
- REFER TO GENERAL NOTE SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
- REFER TO PLANS FOR LOCATION OF DOORS.
- VERIFY ROUGH OPENING SIZE WITH DOOR MANUFACTURER SPECIFICATIONS PRIOR TO CONSTRUCTION.
- CONTRACTOR TO VERIFY ACTUAL DOOR SIZE TO FIT FINISH OPENING PRIOR TO FABRICATION OF DOOR AND FINISH OPENING.
- FIRE RATED DOORS SHALL BE SOLID WOOD OR SOLID HONEYCOMB CORE STEEL DOOR 1-3/8" THICK OR COMPLIANT WITH CRC SECTION R302.5.1. DOORS SHALL BE SELF-CLOSING AND SELF-LATCHING WITH WEATHER STRIPPING TO BE TIGHT FITTING.
- EXTERIOR DOORS SHALL EITHER HAVE A FIRE-RESISTANCE RATING OF NOT THINER THAN 1-HOUR OR MEET THE FOLLOWING REQUIREMENTS:
 - STILES AND RAILS SHALL NOT BE LESS THAN 1-3/8" THICK.
 - PANELS SHALL NOT BE LESS THAN 1-1/4" THICK, EXCEPT FOR THE EXTERIOR PERIMETER OF THE PANEL SHALL BE PERMITTED TO TAPER TO A TONGUE OF NOT LESS THAN 3/8" THICK.

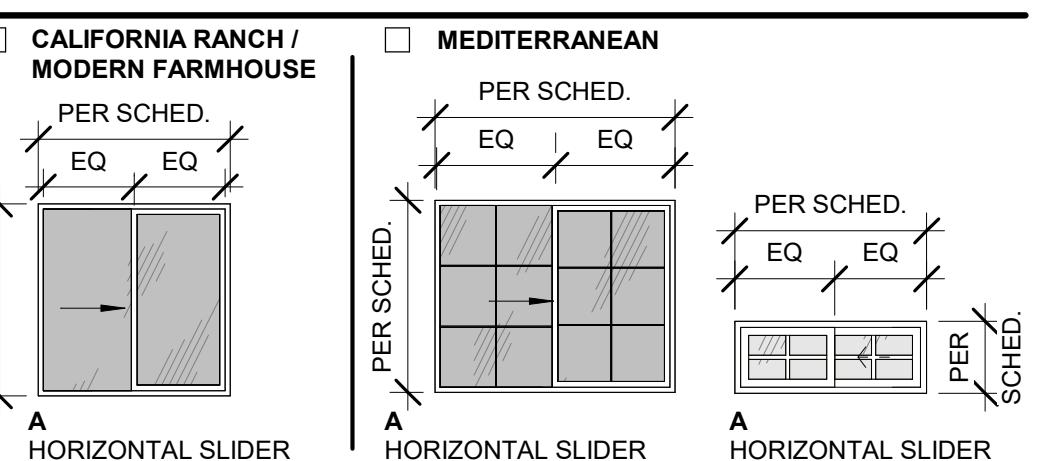


1 REVERSE FLOOR PLAN (CALIFORNIA RANCH PORCH SHOWN)

A1-101R

SCALE: 1/4" = 1'-0"

WINDOW TYPE



WINDOW SCHEDULE

NO.	TYPE	SIZE	HEAD HEIGHT	REMARKS
01	A	3'-0" x 4'-0"	6'-8"	
02	A	2'-6" x 3'-0"	6'-8"	2
03	A	4'-0" x 1'-6"	6'-8"	2, 3
04	A	6'-0" x 4'-0"	6'-8"	1
05	A	5'-0" x 4'-0"	6'-8"	

WINDOW DETAIL REFERENCES	HEAD	JAMB	SILL
LAP SIDING	11/A-921		
BOARD & BATTEN	11/A-922		
STUCCO	11/A-923		
FLASHING	31/A-902		

WINDOW REMARKS

- REQUIRED EGRESS WINDOW. REFER TO WINDOW GENERAL NOTE #5 FOR ADDITIONAL INFORMATION.
- WINDOW INCLUDES BOTH PANES TEMPERED GLAZING.
- OPTIONAL WINDOW, CROSS THROUGH ON SCHEDULE AND FLOOR PLAN IF NOT USED. AT LEAST ONE EGRESS OPENING REQUIRED AT ALL BEDROOMS. SEE GENERAL WINDOW NOTE #5 FOR EGRESS REQUIREMENTS.
- REQUIRED TO PROVIDE OBSCURE / PRIVACY GLASS.

WINDOW GENERAL NOTES

- REFER TO FLOOR PLANS FOR WINDOW LOCATIONS.
- CONTRACTOR TO VERIFY EXACT ROUGH OPENING SIZES PRIOR TO FABRICATION OF ROUGH OPENINGS.
- REFER TO ENERGY COMPLIANCE REPORTS TO VERIFY U-FACTOR, SHGC AND ADDITIONAL WINDOW REQUIREMENTS. ALL OPENINGS TO BE U-FACTOR = (.3). SHGC = (.23). BUG SCREEN REQUIRED (PER TITLE 24).
- ALL GLAZING IS DOUBLE PANE UNLESS OTHERWISE NOTED.
- EGRESS WINDOWS SHALL HAVE A CLEAR OPENING WITH THE BOTTOM OF THE CLEAR OPENING NOT GREATER THAN 44" AFF. MIN. NET CLEAR OPENING FOR EMERGENCY ESCAPE SHALL BE 5.7 S.F. EXCEPT: 5.5 S.F. MIN. AT GROUND FLOOR. MINIMUM NET CLEAR OPENING DIMENSIONS: HEIGHT: 24", WIDTH: 20". [CRC SEC. R310.2] EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY INTO A PUBLIC WAY PER CRC 2022, SECTION 310.1.
- GLAZING IN A WINDOW ADJACENT TO BATHTUB / SHOWER WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 6" MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE SHALL BE SAFETY GLAZING. [CRC SEC. R308.4.5]
- IF STRUCTURE IS IN A WUI ZONE, WINDOW MUST COMPLY WITH R337.8.

FLOOR PLAN GENERAL NOTES

- REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
- REFER TO STRUCTURAL PLANS FOR FURTHER INFORMATION.
- REFER TO ELECTRICAL PLANS FOR FURTHER INFORMATION IF PROVIDED.
- REFER TO MECHANICAL PLANS, DRAWINGS OR REPORTS FOR FURTHER INFORMATION.
- ALL FURNITURE AND EQUIPMENT IS BY OWNER AND IS SHOWN FOR COORDINATION PURPOSES ONLY.
- DIMENSIONS ARE TO FACE OF FRAMING UNLESS SPECIFICALLY NOTED OTHERWISE.
- DOOR AND WINDOW DIMENSIONS ARE CENTERED AT OPENINGS.
- WHERE DOOR IS LOCATED WITHOUT DIMENSION AT THE CORNER OF A ROOM IT SHALL BE 4" FROM FACE OF FRAMING OF ADJACENT WALL TO ROUGH DOOR OPENING.
- WHERE RECESSED FIXTURES OCCUR IN WALLS OR HORIZONTAL ASSEMBLIES, THE FIRE RATING OF THOSE ASSEMBLIES SHALL BE MAINTAINED.
- AT ALL PENETRATIONS AND INTERSECTIONS OF FIRE-RATED PARTITIONS, PROVIDE FIRE SEALANT AND/OR FIRE STOPPING TO MAINTAIN CONTINUITY OF PARTITION RATING.
- PER CRC R311.3 FLOORS OR LANDINGS AT EXTERIOR DOORS SHALL BE AT LEAST AS WIDE AS DOOR SERVED AND SHALL PROVIDE A LENGTH IN THE DIRECTION OF TRAVEL EQUAL TO 36 INCHES MINIMUM. SLOPE OF EXTERIOR LANDINGS SHALL NOT EXCEED 1/4" PER FOOT (2% SLOPE).
- PER CRC 327.1.1 REINFORCEMENT FOR GRAB BARS SHALL BE PROVIDED IN AT LEAST ONE BATHROOM. 1. REINFORCEMENT SHALL BE SOLID LUMBER OR OTHER CONSTRUCTION MATERIAL APPROVED AS A REINFORCING AGENT. 2. REINFORCEMENT SHALL NOT BE LESS THAN 2X8 INCHES SOLID LUMBER OR OTHER MATERIAL PROVIDING EQ. HT. AND CAPACITY. REINFORCEMENT ABOVE THE FINISHED FLOOR FLUSH WITH THE WALL FRAMING. 3. WATER CLOSET REINFORCEMENT SHALL BE INSTALLED ON BOTH SIDE WALLS OF THE FIXTURE, OR ONE SIDE WALL AND THE BACK WALL. 4. SHOWER REINFORCEMENT SHALL BE CONTINUOUS WHERE WALL FRAMING IS PROVIDED. 5. BATHTUB AND COMBINATION BATHTUB/SHOWER REINFORCEMENT SHALL BE CONTINUOUS ON EACH END OF THE BATHTUB AND THE BACK WALL. ADDITIONALLY, BACK WALL REINFORCEMENT FOR A LOWER GRAB BAR SHALL BE PROVIDED WITH THE BOTTOM EDGE LOCATED NO MORE THAN 6 INCHES ABOVE THE BATHTUB RIM. REFER TO SHEET A-903 FOR MORE INFORMATION.



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WALL LEGEND

EXTERIOR - 5 1/2" WOOD STUD W/ PLYWOOD SHEATHING AND FINISH, SEE ELEV. FOR (EXT.) FINISH. ONE LAYER GYP. WALL BOARD INT. SEE T24 FOR INSULATION. SEE DETAIL: 42/A-901 FOR 1-HR WALL ASSEMBLY WHEN REQUIRED

EXTERIOR - DOUBLE 3 1/2" WOOD STUD W/ PLYWOOD SHEATHING (WITH 2" AIR SPACE) AND FINISH ON BOTH SIDES, SEE ELEV. FOR (EXT.) FINISH.

INTERIOR - 3 1/2" WOOD STUD W/ ONE LAYER GYP. WALL BOARD EACH SIDE.

ADD BLOCKING AS NEEDED IN THESE LOCATIONS PER DETAIL(S): 14/A-903

NOTE: SEE MANUFACTURER LISTINGS FOR IMPROVED ACOUSTIC, MOISTURE, MOLD, & MILDEW-RESISTANT PERFORMANCE PRODUCTS.

NOTE: 5/8" GYP ATTACHED DIRECTLY TO STUDS IS ASSUMED U.N.O. VERIFY PRODUCT SELECTIONS & REQUIREMENTS, THICKNESS, AND LOCATIONS ON PLANS WITH CONTRACTOR BEFORE CONSTRUCTION. ANY INCREASE IN WALL THICKNESS IS NOT PERMITTED WHERE MIN. CLEARANCES ARE REQUIRED. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

NOTE: SEE GYPSUM.ORG FOR MORE INFORMATION. POTENTIAL PRODUCTS CAN BE FOUND (BUT ARE NOT LIMITED TO) THE FOLLOWING MANUFACTURERS: CERTAINTEED.COM, PABCOGYPSUM.COM, GOLDBONDBUILDING.COM.

PRE-APPROVED ADU

CITY OF LAGUNA NIGUEL

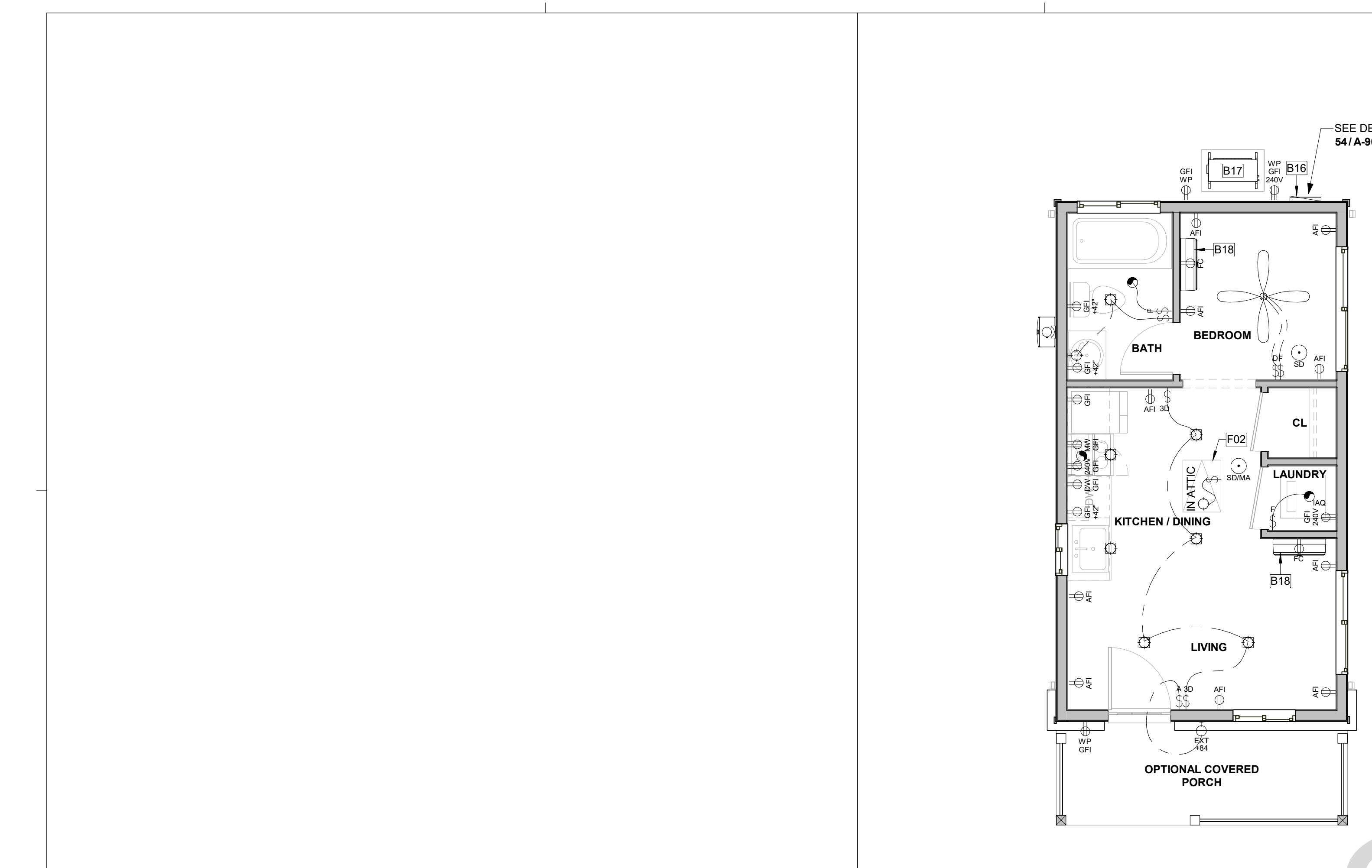
A1-101R

PLAN 1 - REVERSE

PUBLIC SET

DATE
02/05/2025

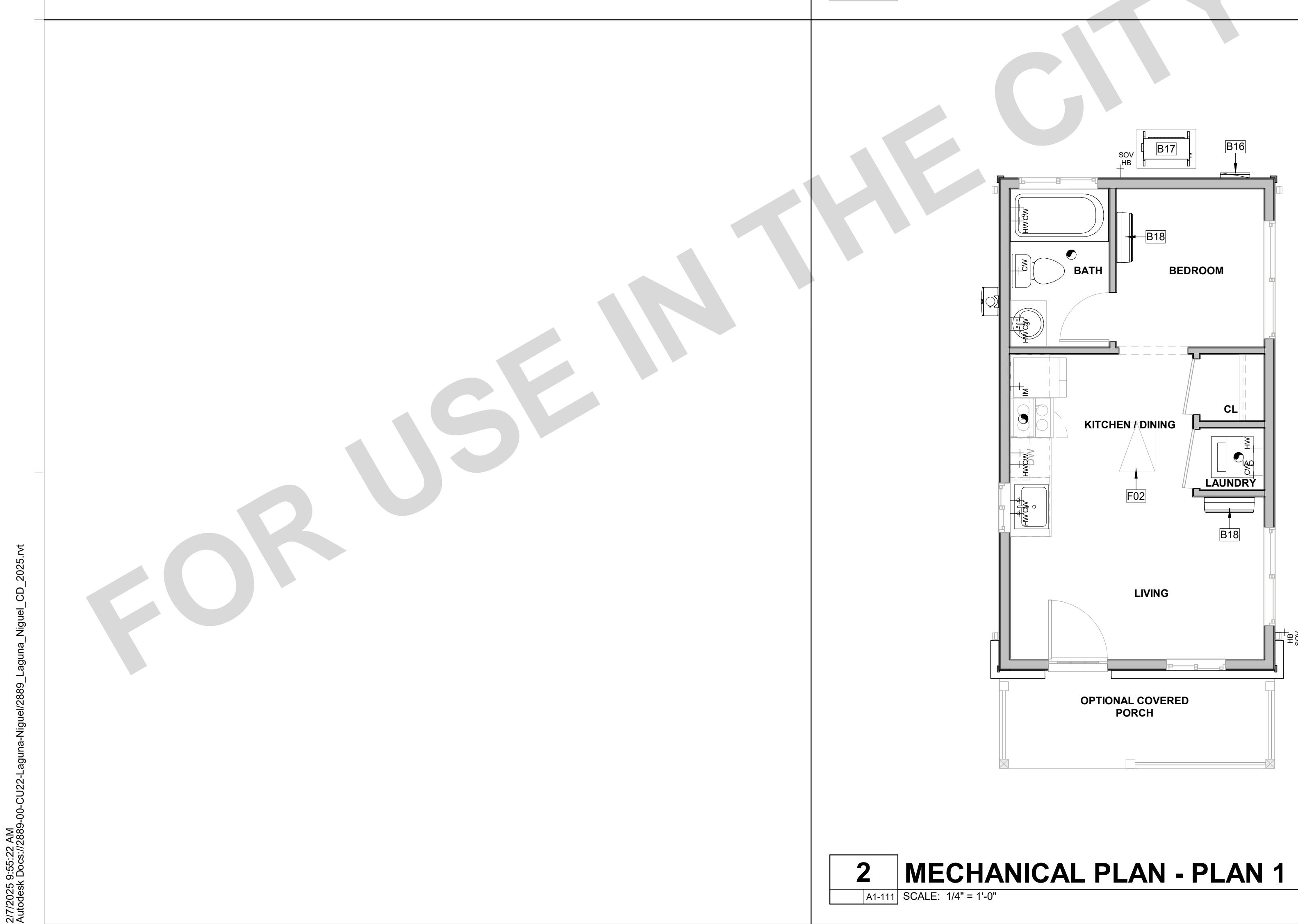
SHEET



1 ELECTRICAL PLAN - PLAN 1

A1-111

SCALE: 1/4" = 1'-0"



2 MECHANICAL PLAN - PLAN 1

A1-111

SCALE: 1/4" = 1'-0"

LEGEND

ELECTRICAL SWITCH	NOTE: IONIZATION SMOKE DETECTOR 10' MINIMUM FROM STOVE, ALL OTHERS 20'MIN CLEARANCE	AFI	DUPLEX OUTLET ARC-FAULT CIRCUIT INTERRUPTER
ELECTRICAL SWITCH-THREE WAY-DIMMER		GFI 240V	DUPLEX OUTLET 240 VOLTS
ELECTRICAL SWITCH-VACANCY SENSOR	SD	GFI	DUPLEX OUTLET GROUND FAULT INTERRUPTER
ELECTRICAL SWITCH-DIMMER	SD/MA	GFI	COMBINATION SMOKE/CARBON MONOXIDE
ELECTRICAL SWITCH-FAN		GFI	DUPLEX OUTLET WATERPROOF GROUND FAULT INTERRUPTER
ASTRONOMICAL TIME OR MOTION SENSOR SWITCH (AT LEAST 1 REQ.)		GFI	DUPLEX OUTLET AFCI-HALF HOT
EXHAUST FAN		GFI MW	DUPLEX OUTLET MICROWAVE GROUND FAULT INTERRUPTER
INDOOR AIR QUALITY FAN		GFI DW	DUPLEX OUTLET DISH WASHER GROUND FAULT INTERRUPTER
PENDANT LIGHT HIGH-EFFICACY		GFI	DUPLEX OUTLET COLD WATER STUB OUT
WALL MOUNTED HIGH-EFFICACY LIGHT		HW	HOT WATER STUB OUT
EXTERIOR WALL MOUNTED HIGH-EFFICACY LIGHT W/ PHOTO SENSOR		HB	WATER HOSE BIBB
RECESSED HIGH-EFFICACY DOWNLIGHT		SOV HB	WATER HOSE BIBB WITH SHUT OFF VALVE
RECESSED HIGH-EFFICACY DOWNLIGHT-VAPOR PROOF		FC	FAN COIL UNIT +80° TO BOTTOM OF UNIT PROVIDE DEDICATED OUTLET
			22'X30' MIN. ATTIC ACCESS PANEL (WHERE REQ.)
			NOTE: IONIZATION SMOKE DETECTOR 10' MINIMUM FROM STOVE, ALL OTHERS 20'MIN CLEARANCE

KEYNOTES

B16 ELECTRIC PANEL LOCATION, PROVIDE PROTECTION PER CPC 507.25 & CMC 305.1, SEE GENERAL MEP NOTES 7 & 8 ON SHEET A-111 FOR MORE INFO.
 B17 MULTI-ZONE HEAT PUMP CONDENSER UNIT, REFER TO PLANS FOR LOCATION OF INDOOR FAN COIL UNITS, REFER TO TITLE 24 FOR ADDITIONAL INFORMATION, PROVIDE CONCRETE PAD MIN. 6" LARGER THAN UNIT IN EACH DIRECTION, 3" MIN. ABOVE GRADE, PROVIDE PROTECTION PER CPC 507.25 & CMC 305.1.1, SEE GENERAL MEP NOTES 7 & 8 ON SHEET A-111 FOR MORE INFO, SEE DETAIL 53A-902.
 B18 FAN COIL @ 80' A.F.F. TO BOTTOM OF UNIT, PROVIDE DEDICATED WALL OUTLET, INSTALL PER MANUFACTURER'S SPECIFICATIONS, REFER TO PLANS FOR LOCATION OF OUTDOOR CONDENSING UNIT, REFER TO TITLE 24 FOR ADDITIONAL INFORMATION.
 F02 22' X 30' MINIMUM ATTIC ACCESS, PROVIDED SWITCH AND OUTLET AT ATTIC, THERE IS NO HVAC EQUIPMENT (SUCH AS FURNACE, HEAT PUMP, OR FAU) IN THE ATTIC, PERMANENTLY ATTACH R-38 OR GREATER INSULATION TO ATTIC ACCESS DOOR USING ADHESIVE OR MECHANICAL FASTENERS CEC 150.0 (a1). PROVIDE GASKETED ATTIC ACCESS TO PREVENT AIR LEAKAGE CEC 150.0 (a1)."

VENTILATION SUMMARIES

1 LOCAL EXHAUST VENTILATION		REFER TO T-24 FOR IAQ VENTILATION	
BATHROOM		OPTION A	OPTION B
BATHROOM FAN FLOW (cfm)	50 CFM	50 CFM	
DUCT TYPE	FLEX DUCT	SMOOTH DUCT	
DUCT SIZE (in)	4"	4"	
MAX. ALLOWABLE DUCT LENGTH (ft)	70'	105'	
THIS EXHAUST FAN IS REQUIRED TO BE RATED FOR SOUND AT A MAX. OF 3 SONES.			
KITCHEN		OPTION A	OPTION B
KITCHEN FAN FLOW (cfm)	280 CFM	280 CFM	
DUCT TYPE	FLEX DUCT	SMOOTH DUCT	
DUCT SIZE (in)	7"	9"	
MAX. ALLOWABLE DUCT LENGTH (ft)	20'	20'	
THIS EXHAUST FAN IS REQUIRED TO BE RATED FOR SOUND AT A MAX. OF 3 SONES.			
2) WHOLE BUILDING VENTILATION		OPTION A	OPTION B
PER ASHRAE STANDARD 62.2, CEC EQUATION 150.0-B			
BUILDING FAN FLOW (cfm)	50 CFM	50 CFM	
DUCT TYPE	FLEX DUCT	SMOOTH DUCT	
DUCT SIZE (in)	4"	4"	
MAX. ALLOWABLE DUCT LENGTH (ft)	70'	105'	
THIS EXHAUST FAN IS REQUIRED TO BE RATED FOR SOUND AT A MAX. OF 1 SONE.			
THIS EXHAUST FAN IS REQUIRED TO OPERATE CONTINUOUSLY TO ENSURE CONTINUOUSLY TO ENSURE INDOOR AIR QUALITY.			

WHOLE DWELLING UNIT MECHANICAL VENTILATION
 PER SECTION 150.0(O)(C)(i) [ASHRAE 62.2-4.1.2]
 1 BED - MINIMUM CUBIC FEET PER MINUTE (CFM) (Equation 150.0-B)
 $Q_{tot} = 0.03A_{floor} + 7.5(N_{hr} + 1) \cdot 0.0350 \text{ SF} + 7.5 (2) = 25.5 \text{ CFM} < 50 \text{ CFM}$
 NOTE: KITCHEN RANGE HOOD (CEC 2022) PER TABLE 150.0-G AIRFLOW RATES (CFM)
 AND ASTM E3087 -750 = 85% CE OR 280 CFM

EFFECTIVE ANNUAL AVERAGE INFILTRATION RATE PER SECTION 150.0(O)(C)(ii)
 a. 1. (Equation 150.0-C) $Q_{50} = V_{du} \cdot \phi \cdot 2.4CH_{50} / 60 \text{ minutes}$
 a. 2. (Equation 150.0-D) $Q_{50} = V_{du} \cdot \phi \cdot \text{Verified } ACH_{50} / 60 \text{ minutes}$
 b. (Equation 150.0-E) $Q_{tot} = 0.052 (x) Q_{50} \times wsf \times [H/H]^2 \cdot [ASHRAE 62.2-4.1.2]$

REQUIRED MECHANICAL VENTILATION RATE PER 150.0(O)(C)(iii) [ASHRAE 62.2-4.1.2]
 (Equation 150.0-F) $Q_{fan} = Q_{tot} \cdot \phi \cdot Q_{inf} (x) A_{ext}$

GENERAL MEP NOTES

1. REFER TO ELECTRICAL NOTES ON SHEET G-101.
2. REFER TO MECHANICAL NOTES ON SHEET G-101.
3. REFER TO PLUMBING NOTES ON SHEET G-101.
4. REFER TO TITLE 24 COMPLIANCE NOTES ON SHEET G-101.
5. EXTERNALLY MOUNTED HEATING/COOLING UNITS SHALL BE SCREENED IF THEY ARE VISIBLE FROM A PUBLIC STREET.
6. ENVIRONMENTAL AIR DUCT EXHAUST SHALL TERMINATE NOT LESS THAN 3 FT FROM WALL OPENINGS. CMC 502.2.2.1
7. APPLIANCES NOT LISTED FOR OUTDOOR INSTALLATION BUT INSTALLED OUTDOORS SHALL BE PROVIDED WITH PROTECTION TO THE DEGREE THAT THE MANUFACTURER RECOMMENDS. APPLIANCES LISTED FOR OUTDOOR INSTALLATION SHALL BE PERMITTED TO BE INSTALLED WITHOUT PROTECTION IN ACCORDANCE WITH THE PROVISIONS OF ITS LISTING AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PER CPC 507.25 PROTECTION OF OUTDOOR APPLIANCES.
8. APPLIANCES INSTALLED IN GARAGES, WAREHOUSES, OR OTHER AREAS SUBJECT TO MECHANICAL DAMAGE SHALL BE AT LEAST 18" ABOVE THE FLOOR AND GUARDED AGAINST SUCH DAMAGE BY BEING INSTALLED BEHIND PROTECTIVE BARRIERS OR BY BEING ELEVATED OR LOCATED OUT OF THE NORMAL PATH OF VEHICLES PER CMC 305.1.1 PHYSICAL DAMAGE.
9. INSTALLED AIR CONDITIONER AND HEAT PUMP SYSTEMS SHALL HAVE A CLEARANCE OF AT LEAST FIVE (5) FEET FROM THE OUTLET OF ANY DRYER VENT. CEC 2022 150.0 (H) 3.
10. INSTALLED AIR CONDITIONER AND HEAT PUMP SYSTEMS SHALL BE EQUIPPED WITH LIQUID LINE SHUT-OFFS IF REQUIRED, AS SPECIFIED BY MANUFACTURER'S INSTRUCTIONS CEC 2022 150.0 (H) 3. SEE DETAIL 53A-502.
11. ASSEMBLIES AT EXTERIOR WINDOW AND DOOR HEADERS IN 2X6 EXTERIOR WALLS SHALL BE R-5 MINIMUM PER 2022 SINGLE-FAMILY RESIDENTIAL MANDATORY REQUIREMENTS
12. FOR HEAT PUMP COMPLIANCE INFORMATION SEE TITLE 24 REPORT: VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION (VERIFICATION DETAILS FROM VCHP STAFF REPORT, APPENDIX B, AND RA3).

ELECTRICAL NOTES

1. CONFORM WITH CURRENT CEC, NFPA, MFR'S, AND LOCAL REQUIREMENTS.
2. ELECTRICAL SYSTEM GROUND TO BE PROVIDED PER NEC ARTICLE 250-81.
3. ALL MATERIALS TO BE UL LABELED.
4. METER: "SQUARE D", 120 VOLT/240 VOLT, 3 AND 4 WIRE GROUND OR EQUAL.
5. ELECTRICAL SUB PANEL: FLUSH MOUNT, 30" CLEARANCE, 100 AMP.
6. CONDUCTORS: TW, THW, COPPER, MINIMUM 14 AT LIGHTING, 12 AT OTHER CIRCUITS.
7. ALL LUMINARIES SHALL COMPLY WITH 2022 CEC SECTION 150.0 (K) AND TABLE 150.0-A, REFERENCED ENERGY NOTES, LUMINAIRE REQUIREMENTS SHEET G-101.
8. ALL ELECTRICAL OUTLETS INSTALLED IN BATHROOMS, GARAGES, BASEMENTS, CRAWL SPACES, OUTDOORS, KITCHEN COUNTERS, AND AT WET-BAR SINKS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION IN COMPLIANCE WITH NEC Art. 210-8, CONSISTING OF 125 VOLT, SINGLE-PHASE, 15- AND 20- AMPERE RECEPTACLES.
9. ALL BATHROOM RECEPTACLE OUTLETS SHALL BE SUPPLIED BY A MINIMUM OF ONE 120-VOLT, 20-AMPERE BRANCH CIRCUIT. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS. THIS DEDICATED CIRCUIT MAY SERVE MORE THAN ONE BATHROOM. (2022 CEC 210.11(C))
10. THERMOSTAT SHALL BE A PROGRAMMABLE TYPE, HONEYWELL TH8320 OR EQUAL.
11. CEILING SUSPENDED (PADDLE) FANS SHALL BE SUPPORTED INDEPENDENTLY OF AN OUTLET BOX OR BY LISTED OUTLET BOX OR OUTLET BOX SYSTEMS IDENTIFIED FOR THE USE AND INSTALLED IN ACCORDANCE WITH 2022 CEC 314.27(C) (2022 CEC 422.18).
12. ALL LUMINARIES, LAMPHOLDERS, AND RETROFIT KITS SHALL BE LISTED (2022 CEC 410.6).
13. ALL 120-VOLT, SINGLE PHASE 15- AND 20- AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, LIVING ROOMS, DINING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. (2022 CEC 210.21)
14. ALL NON-LOMING TYPE 125 VOLT 15 AND 20 AMPERE RECEPTACLES IN A DWELLING UNIT SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES. EXCEPTIONS: (1) RECEPTACLES MORE THAN 5'6" ABOVE THE FLOOR, (2) RECEPTACLES PART OF A LUMINAIRE OR APPLIANCE, (3) A SINGLE RECEPTACLE OR A DUPLEX RECEPTACLE FOR TWO APPLIANCES THAT ARE NOT EASILY MOVED AND LOCATED WITHIN DEDICATED SPACE AND ARE CHORD-AND-PLUG CONNECTED AS PER CEC 400.10, AND (4) NON-GROUNDING RECEPTACLES USED FOR REPLACEMENTS AS PERMITTED IN CEC 406.4(D)(2)(A).
15. HIGH EFFICACY LUMINARIES OTHER THAN OUTDOOR HID LIGHTING CONTAIN ONLY HIGH EFFICACY LAMPS AS OUTLINED IN TABLE 150-C OF THE RESIDENTIAL ENERGY CODE AND NOT CONTAIN A MEDIUM SCREW BASE SOCKET.
16. BALLAST FOR LAMPS 13 WATTS OR GREATER SHALL BE ELECTRONIC AND HAVE AN OUTPUT FREQUENCY NO LESS THAN 2 kHz.
17. SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND PROVIDED WITH A BATTERY BACK-UP. ALL SMOKE DETECTORS SHALL BE INTERCONNECTED. ALL SMOKE DETECTORS SHALL MAINTAIN A MINIMUM 3 FOOT CLEARANCE TO HVAC SUPPLY OR RETURN AIR REGISTERS.
18. CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND PROVIDED WITH A BATTERY BACK-UP. ALL CARBON MONOXIDE ALARMS SHALL BE INTERCONNECTED.
19. EXHAUST FANS SHALL BE CONTROLLED BY A HUMIDISTAT. THE GREEN BUILDING STANDARD CODE SECTION 150.0(A) EXHAUST FANS MUST BE SWITCHED SEPARATELY FROM LIGHTS. (2022 CEC 150.0/1/2)
20. IN ADDITION TO THE NUMBER OF BRANCH CIRCUITS REQUIRED BY OTHER PARTS OF THE CODE, TWO OR MORE 20-AMPERE SMALL-APPLIANCE BRANCH CIRCUITS SHALL BE PROVIDED FOR ALL RECEPTACLE OUTLETS IN THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREA PER 2022 CEC, ARTICLE 210.11 (C)(1). THE CIRCUITS SHALL HAVE NO OTHER OUTLETS PER 2022 CEC, ARTICLE 210.52(B).
21. IN ADDITION TO THE NUMBER OF BRANCH CIRCUITS REQUIRED BY OTHER PARTS OF THE CODE, AT LEAST ONE ADDITIONAL 20-AMPERE BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY THE LAUNDRY RECEPTACLE OUTLET(S) REQUIRED BY 2022 CEC, ARTICLE 210.52 (F). THIS CIRCUIT SHALL HAVE NO OTHER OUTLETS PER 2022 CEC, ARTICLE 210.11(C)(2).

PLUMBING NOTES

1. WATER HEATER
 REFER TO T-24 ENERGY REPORT FOR REQUIRED PRODUCT. SEE SHEET A-930 FOR PRODUCT REFERENCE SHEETS.
 WATER HEATER SHALL FOLLOW FIRST HOUR RATINGS REQUIRED IN TABLE PER 2022 CPC TABLE 501.12.
 - A. ALL DOMESTIC HOT WATER PIPING SHALL BE INSULATED. (2022 CPC 609.12.1)
 - PIPES UP TO 2 INCHES IN DIAMETER: INSULATION WALL THICKNESS NOT LESS THAN DIAMETER OF PIPE. (2022 CPC 609.12.2)
 - PIPES GREATER THAN 2 INCHES IN DIAMETER: INSULATION WALL THICKNESS NOT LESS THAN 2 INCHES. (2022 CPC 609.12.2)
 - EXCEPTIONS:
 1. PIPING THAT PENETRATES FRAMING MEMBERS SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION FOR THE DISTANCE OF THE FRAMING PENETRATION. (2022 CPC 609.12.2)
 2. HOT WATER PIPING BETWEEN THE FIXTURE CONTROL VALVE OR SUPPLY STOP AND THE FIXTURE OR APPLIANCE SHALL NOT BE REQUIRED TO BE INSULATED. (2022 CPC 609.12.2)
 - PROVIDE A CHECK VALVE OR PRESSURE RELIEF VALVE WITH A FULL SIZE DRAIN OR GALVANIZED STEEL OR HARD DRAWN COPPER TO THE OUTSIDE OF THE BUILDING WITH THE END OF THE PIPE PROTRUDING 6" MINIMUM @ 2 MAX. ABOVE GRADE POINTING DOWNWARD TO THE TERMINATION - UNTHREADED.
 - COMBUSTION AIR PER MANUFACTURE REQUIREMENTS.
 - CLEARANCES PER MANUFACTURE REQUIREMENTS.

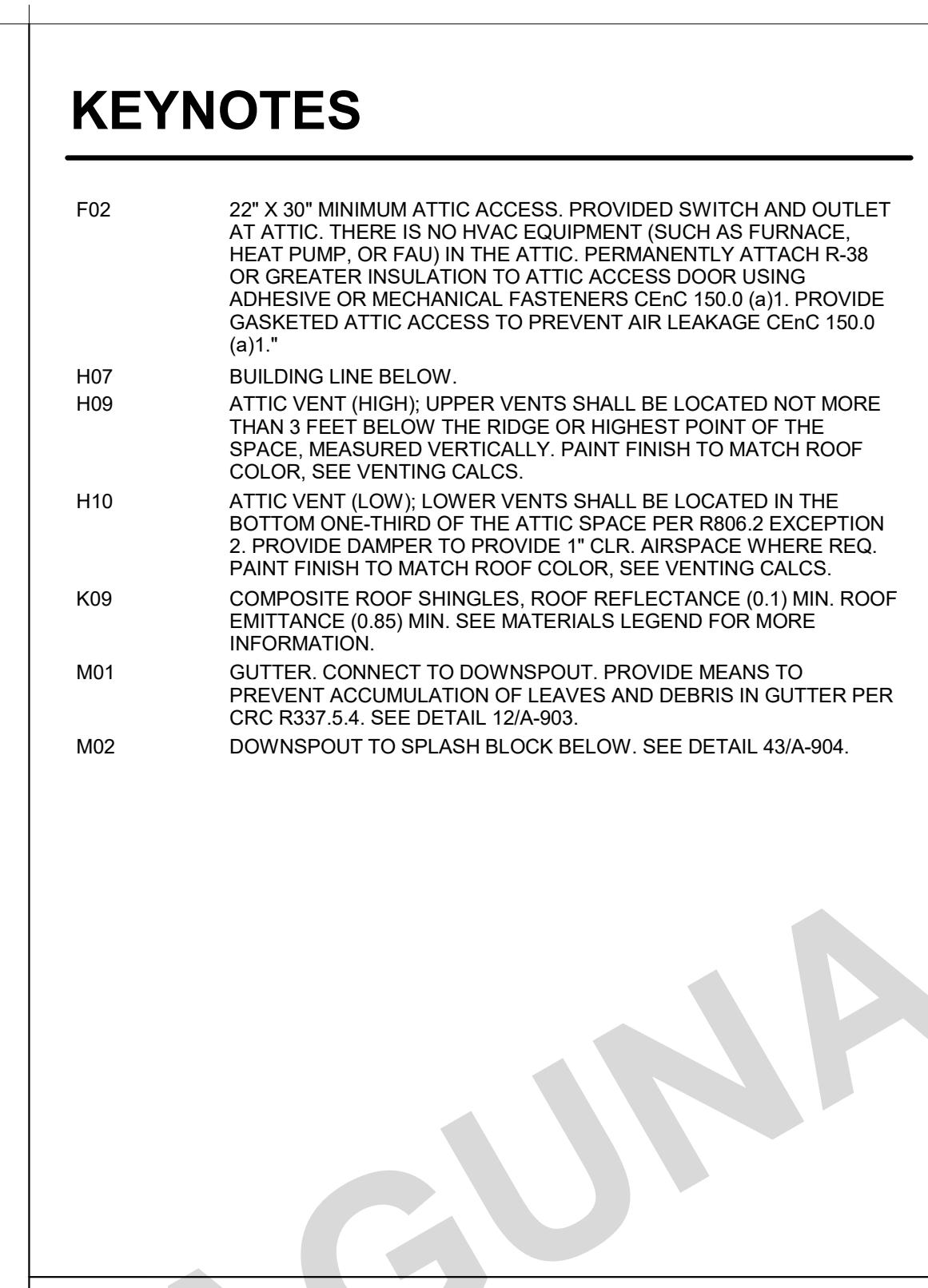
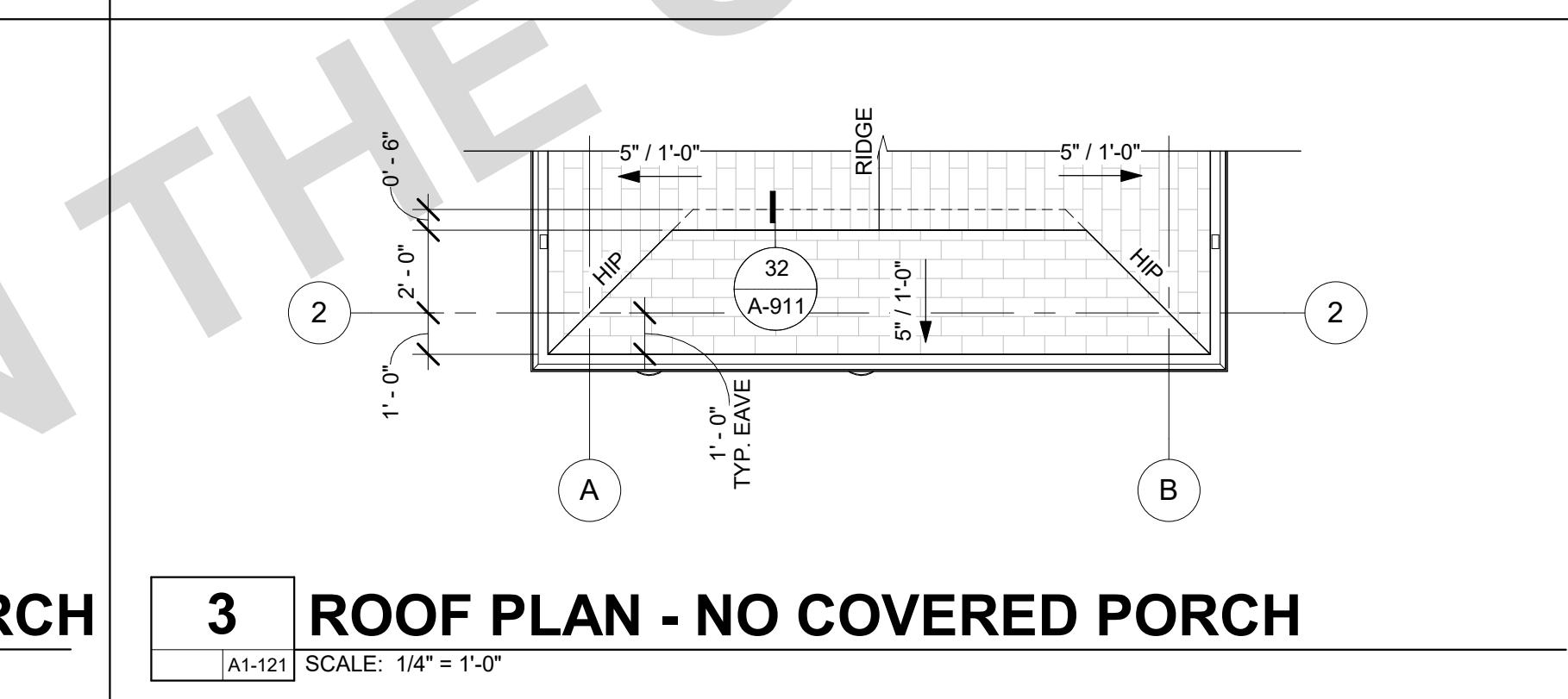
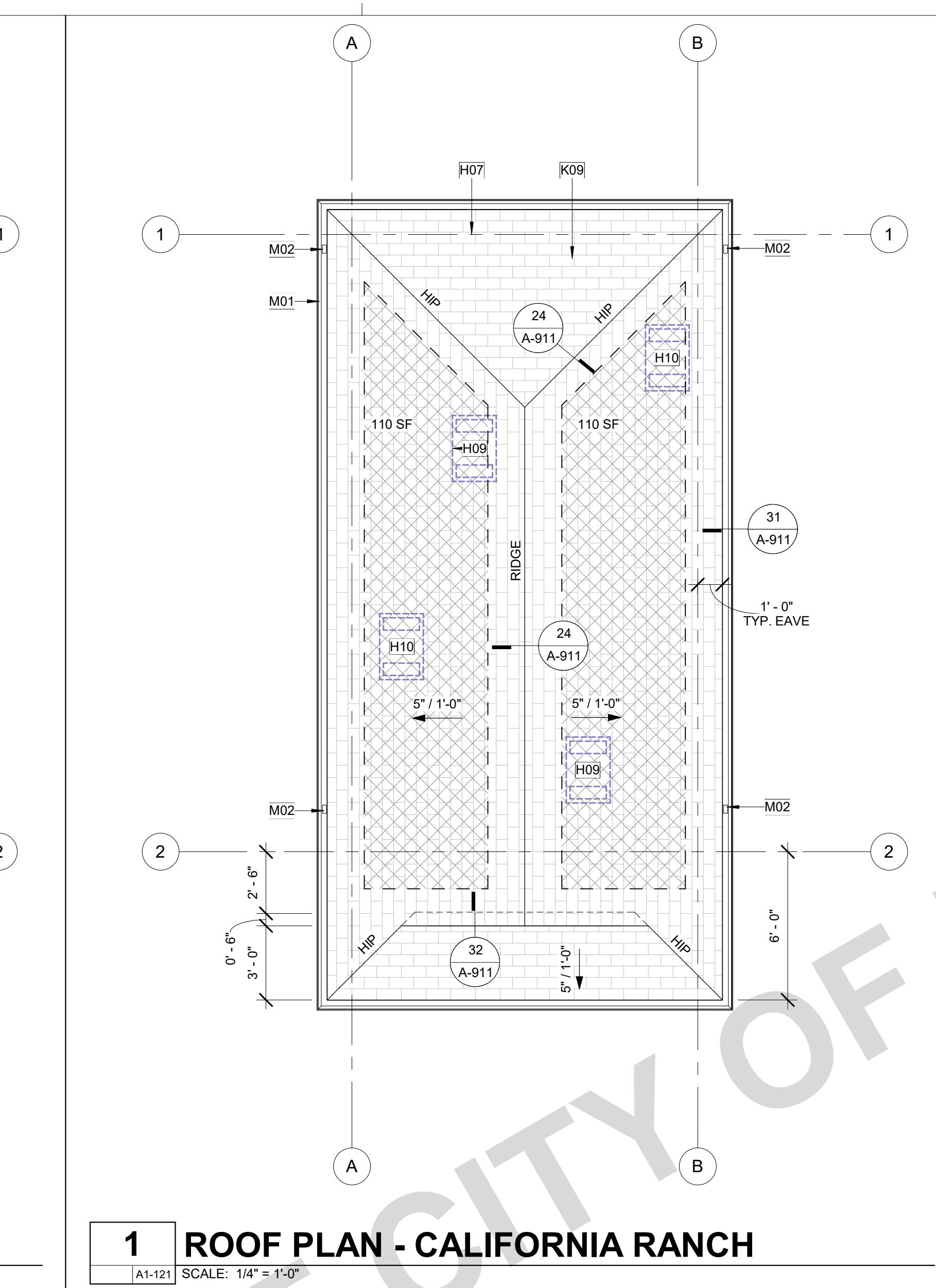
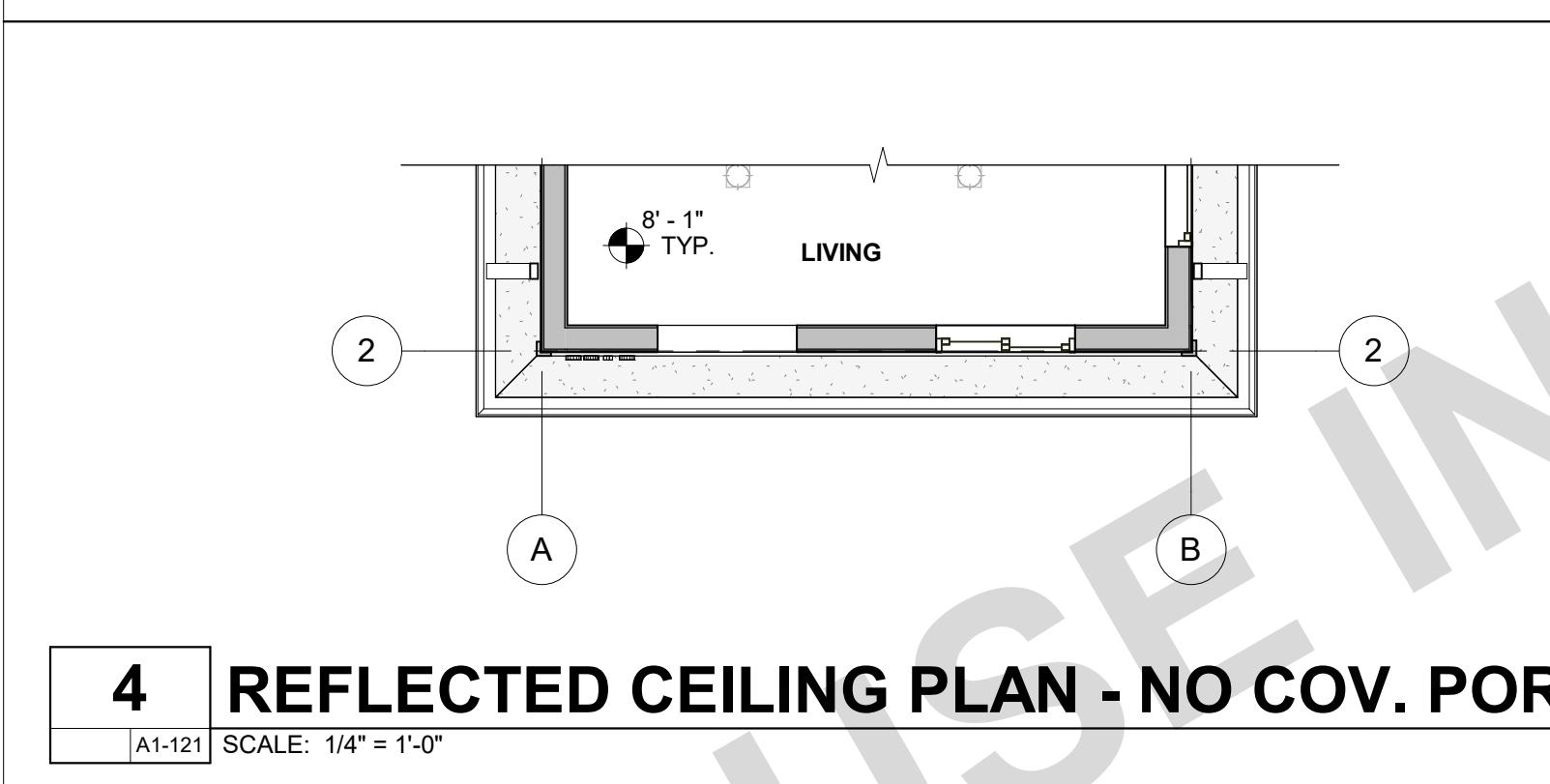
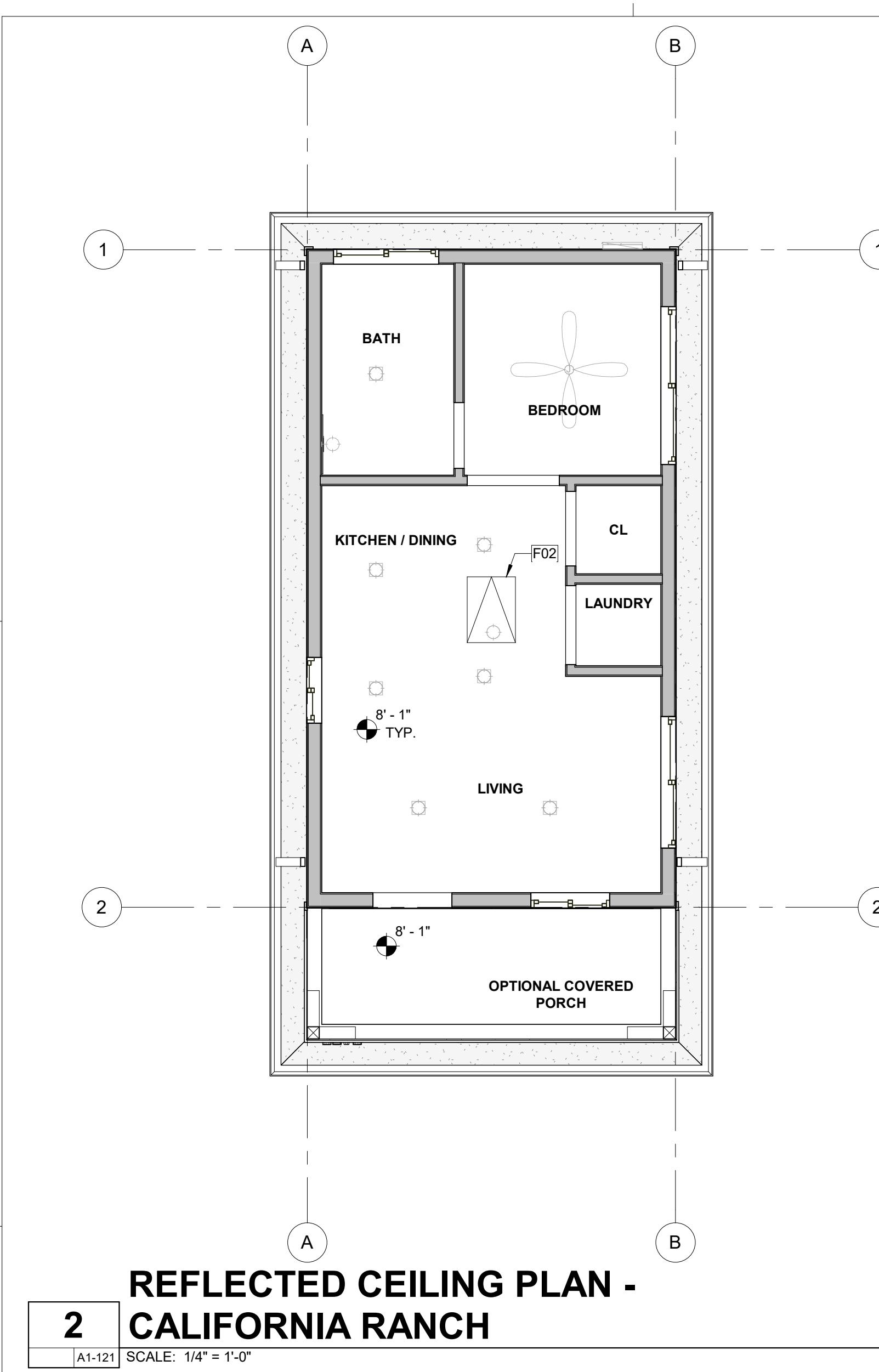
PUBLIC SET

DATE
02/05/2025
SHEET
A1-111

PRE-APPROVED ADU

CITY OF LAGUNA NIGUEL
MECHANICAL, & ELECTRICAL PLANS

THESE PLANS ARE PROVIDED BY THE CITY OF LAGUNA NIGUEL AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN, THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONSTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.



ROOF PLAN GENERAL NOTES

- REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
- REFER TO STRUCTURAL PLANS FOR ROOF FRAMING INFORMATION INCLUDING MEMBER SIZES AND CONNECTION HARDWARE.
- PROVIDE A MINIMUM OF 1 INCH OF AIRSPACE BETWEEN THE INSULATION AND ROOF SHEATHING.
- WHERE THE ROOF PROFILE ALLOWS A SPACE BETWEEN THE ROOF COVERING AND DECKING, THE SPACES SHALL BE CONSTRUCTED TO PREVENT THE INTRUSION OF FLAMES AND EMBERS. BE FIRESTOPPED WITH APPROVED MATERIALS OR HAVE ONE LAYER OF MINIMUM 72 POUND APPROVED MATERIALS OR HAVE ONE LAYER OF NONPERFORATED CAP SHEET OVER THE COMBUSTIBLE DECKING.
- ALL ROOFING MATERIALS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- OVERHANG DIMENSIONS ARE FROM FACE OF EXTERIOR WALL FRAMING TO ROOF EDGE.
- ROOF COVERINGS SHALL BE APPLIED IN ACCORDANCE WITH (CRC R905), AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. ROOF COVERINGS SHALL BE INSTALLED TO RESIST THE COMPONENT AND CLADDING LOADS SPECIFIED IN R301.2.1(1), AND ADJUSTED FOR HEIGHT AND EXPOSURE IN ACCORDANCE WITH TABLE R301.2.1(2).
- ROOF UNDERLAYMENTS SHALL BE IN ACCORDANCE WITH SECTION R906.1.1. (TABER TEST) R906.1.1(1).
- ROOF VENTS SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATIONS. FURNISHED DIMENSIONS FOR VENTS ARE GUIDES ONLY. INSTALL PER MANUFACTURER'S SPECIFICATIONS AND ADJUST TO ACCOMMODATE TRUSS LOCATIONS, PLUMBING VENTS, AND SOLAR COLLECTORS.
- ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16 INCH (1.6 MM) MINIMUM AND 1/4 INCH (6.4 MM) MAXIMUM. VENTILATION OPENINGS HAVING A LEAST DIMENSION LARGER THAN 1/4 INCH (6.4 MM) SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE CLOTH. VENTILATING OPENINGS PROTECTED FROM VENTILATING ROOF FRAMING MATERIAL WITH OPENINGS HAVING A LEAST DIMENSION OF 1/4 INCH (6.4 MM) MINIMUM AND 1/4 INCH (6.4 MM) MAXIMUM. OPENINGS IN ROOF FRAMING MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF SECTION R802.7. REQUIRED VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTSIDE AIR AND SHALL BE PROTECTED TO PREVENT THE ENTRY OF BIRDS, RODENTS, SNAKES AND OTHER SIMILAR CREATURES (CRC R806).
- THE MINIMUM NET FREE VENTILATING AREA SHALL COMPLY WITH CRC R806.2.
- IN THE INSTANCE OF UPPER VENTS, VENTS SHALL BE LOCATED NO MORE THAN 3 FT BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE, MEASURED VERTICALLY. CRC R806.2.

THESE PLANS ARE PROVIDED BY THE CITY OF LAGUNA NIGUEL AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN, THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONSTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

ROOF VENTING CALCULATIONS

OWNER/APPLICANT REQ. TO SELECT ONE THE FOLLOWING
WUI REQUIRED? (SEE G-001) A) YES B) NO

UPPER & LOWER VENTS:

CALIFORNIA RANCH & MODERN FARMHOUSE STYLE:

A) O'HAGIN TAPERED LOW PROFILE COMPOSITION SHINGLE: 72.0 SQ. IN. OF AIR MOVEMENT PER VENT = 72. SQ. IN. / 144 = .5 SF (SEE 42/A-913 FOR PRODUCT REFERENCE)

B) ALTERNATIVE PRODUCT, MUST BE EQUAL TO PRODUCT ABOVE, AND PROVIDE GREATER THAN OR EQUAL AIR MOVEMENT.

MEDITERRANEAN STYLE:

A) O'HAGIN TAPERED LOW PROFILE COMPOSITION S-TILE OR CLAY: 97.5 SQ. IN. OF AIR MOVEMENT PER VENT = 75. SQ. IN. / 144 = .68 SF (SEE 34/A-913 FOR PRODUCT REFERENCE)

B) ALTERNATIVE PRODUCT, MUST BE EQUAL TO PRODUCT ABOVE, AND PROVIDE GREATER THAN OR EQUAL AIR MOVEMENT.

"UPPER VENTS PROVIDED" = (TOTAL ATTIC AREA/300) * (0.5) / (0.5 SF)

"LOWER VENTS PROVIDED" = (TOTAL ATTIC AREA/300) * (0.5) / (0.5 SF)

1) ROOF VENTING SHALL COMPLY WITH CRC R806 & CBC 701A.

2) ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16 INCH MINIMUM AND 1/4 INCH MAXIMUM. OPENINGS IN ROOF FRAMING MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF SECTION R802.7. REQUIRED VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTSIDE AIR AND SHALL BE PROTECTED TO PREVENT THE ENTRY OF BIRDS, RODENTS, SNAKES AND OTHER SIMILAR CREATURES.

3) THE MINIMUM NET FREE VENTILATING AREA SHALL COMPLY WITH CRC R806.2.

VENTING NEEDED: 1.04 SF

ATTIC	AREA	REQUIRED ATTIC VENTING (NFA)	UPPER VENTING REQUIRED (NFA)	LOWER VENTING REQUIRED (NFA)
PLAN 1	312 SF	1.04 SF	0.52 SF	0.52 SF

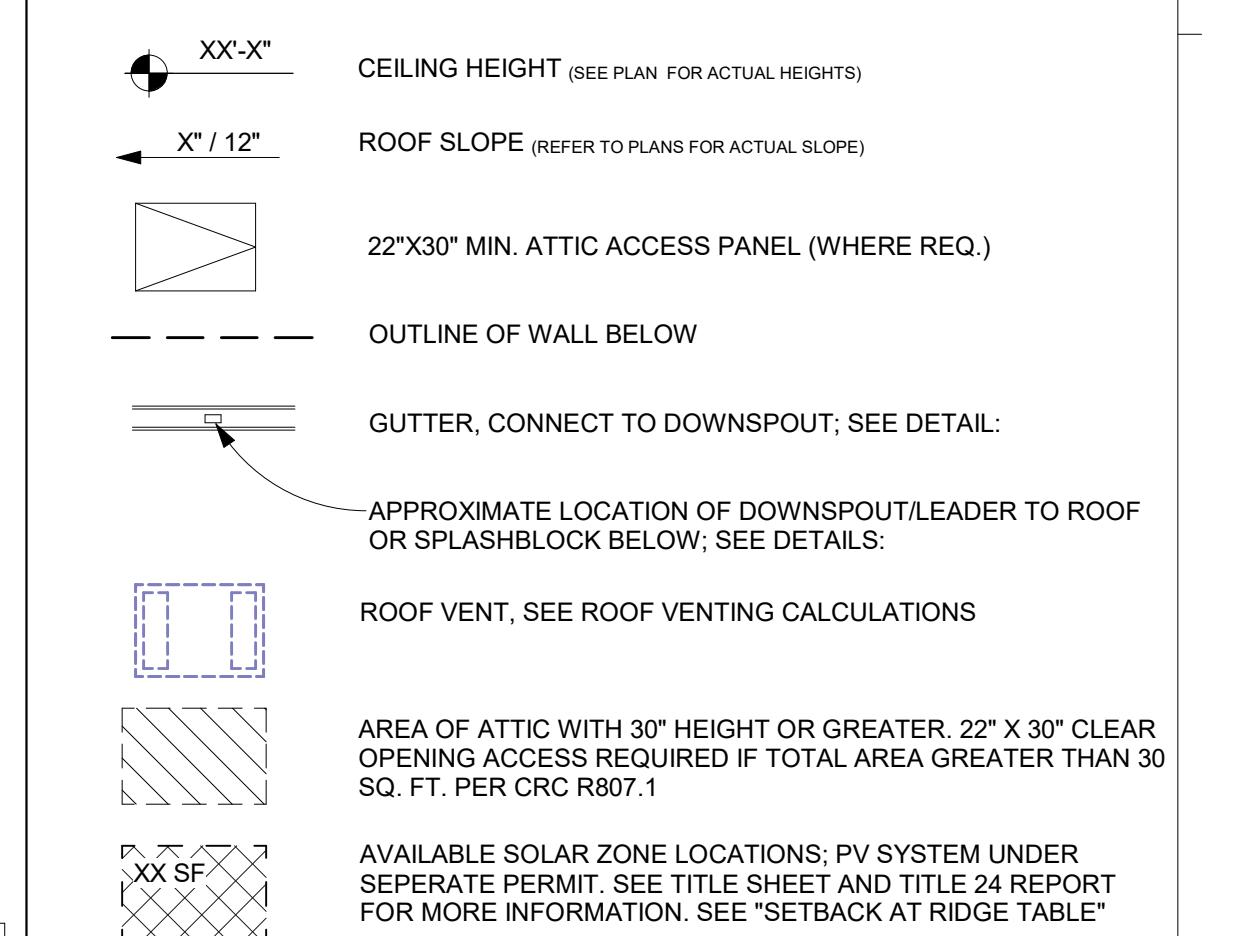
VENTING PROVIDED - ASPHALT SHINGLE

VENT TYPE	COUNT	VENT LENGTH	NET FREE AREA PER VENT	PROVIDED NET FREE AREA
LOWER	0	0	0.00 SF	0.00 SF
O'HAGIN SHINGLE ROOF VENT (LOWER)	2	2' - 8"	0.50 SF	1.00 SF
UPPER	0	0	0.00 SF	0.00 SF
O'HAGIN SHINGLE ROOF VENT (UPPER)	2	2' - 8"	0.50 SF	1.00 SF
				2.00 SF

RCP GENERAL NOTES

- REFER TO GENERAL NOTES SHEET G-102 FOR ADDITIONAL REQUIREMENTS. HEIGHT OF CEILINGS SHALL BE MEASURED FROM TOP OF SLAB OR FLOOR TO FINISH FACE OF GWB, U.N.O.
- REFER TO DETAILS FOR FLOOR/CEILING ASSEMBLIES.
- REFER TO ELEC. PLANS FOR LIGHT FIXTURE AND EXHAUST LOCATIONS.
- DIMENSIONS ARE TO THE FACE OF FRAMING UNLESS OTHERWISE NOTED.
- SOFFITS ARE TO BE HELD TIGHT TO UNDERSIDE OF MECHANICAL EQUIP.

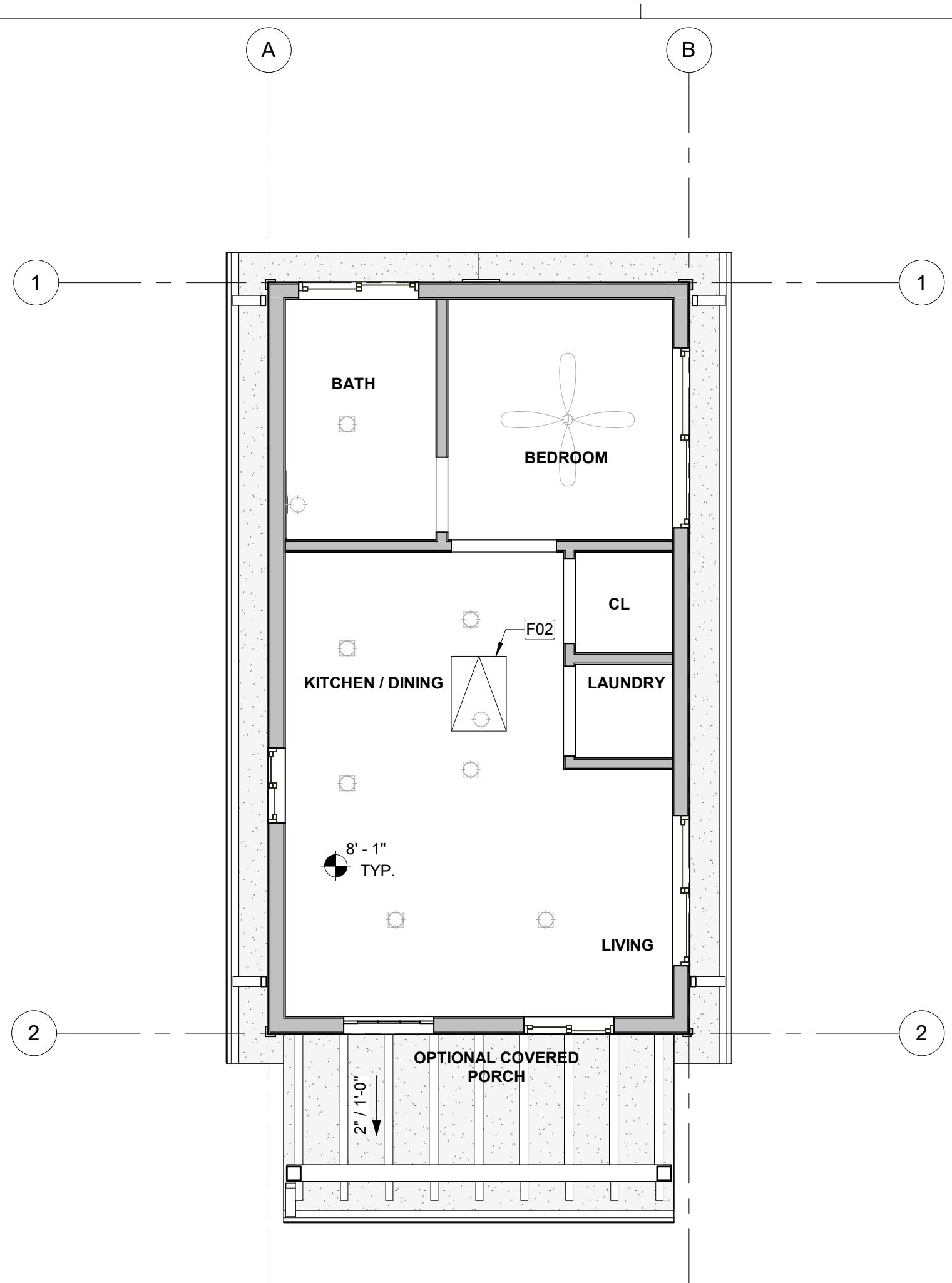
ROOF PLAN & RCP LEGEND



X: SETBACK AT RIDGE TABLE

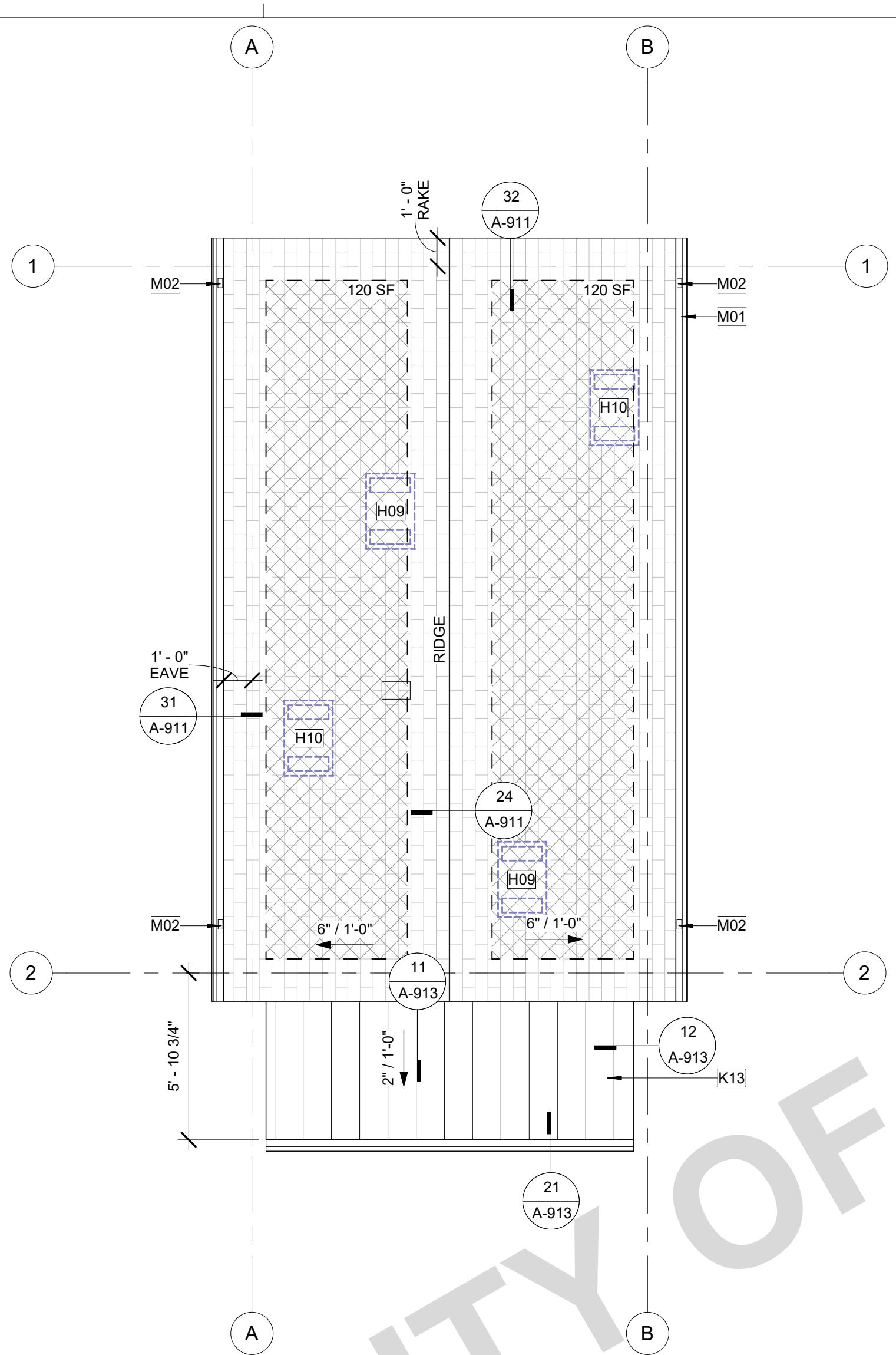
PV ARRAYS PERCENT OF THE PLAN VIEW TOTAL ROOF AREA	(X) HORIZONTAL RIDGE SETBACK
≤33%	18" BOTH SIDES OF RIDGE
>33%	36" BOTH SIDES OF RIDGE
≤66% + 130 SPRINKLER	18" BOTH SIDES OF RIDGE
>66% + 12D SPRINKLER	36" BOTH SIDES OF RIDGE





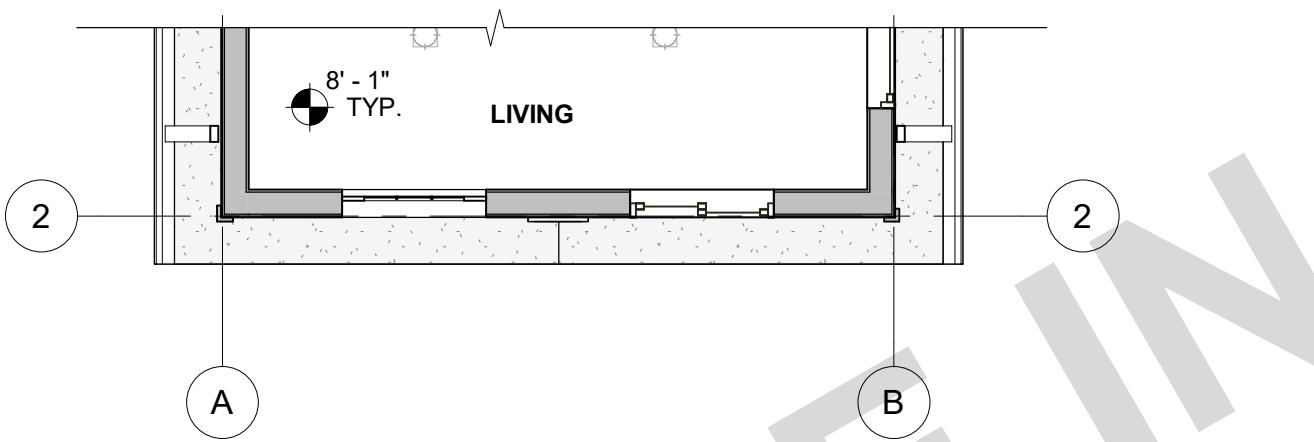
**REFLECTED CEILING PLAN -
2 MODERN FARMHOUSE**

A1-122 SCALE: 1/4" = 1'-0"



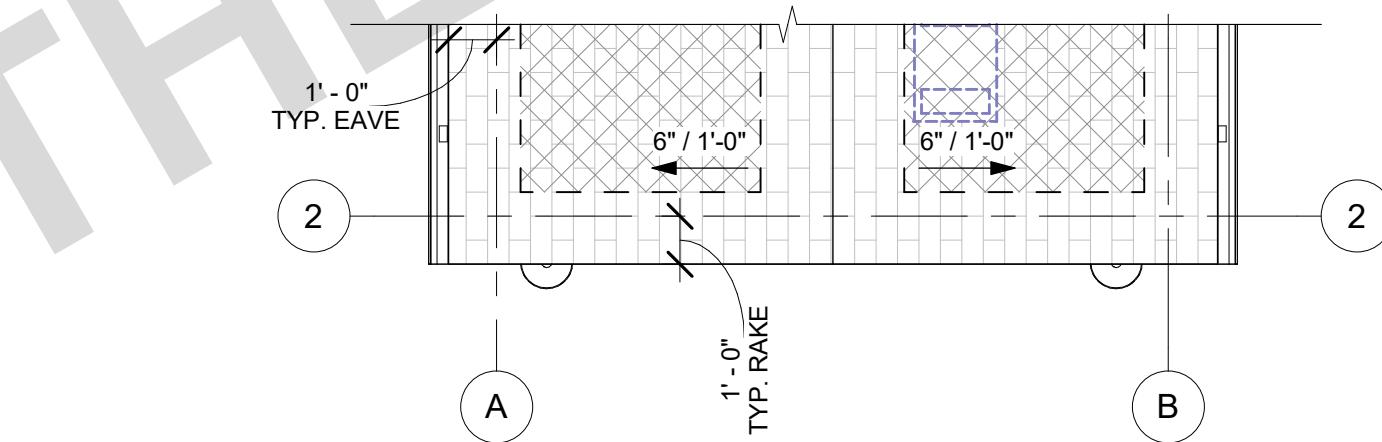
1 ROOF PLAN - MODERN FARMHOUSE

A1-122 SCALE: 1/4" = 1'-0"



4 REFLECTED CEILING PLAN - NO COV. PORCH

A1-122 SCALE: 1/4" = 1'-0"



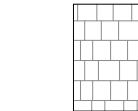
3 ROOF PLAN - NO COVERED PORCH

A1-122 SCALE: 1/4" = 1'-0"

MATERIALS LEGEND

GRAPHICS LEGEND:

ROOFING: SEE G-001 FOR SELECTION & MATERIALS LEGEND ON ELEVATION SHEET FOR MORE INFORMATION.



ASPHALT SHINGLE ROOF; ROOF REFLECTANCE (0.1) MIN. ROOF EMMITTANCE (0.85) MIN. SEE MATERIALS LEGEND ON ELEVATION SHEET FOR MORE INFORMATION.

INTERIOR CEILING FINISH, TYP. 5/8" GYP.
INSTALL PER MFR RECOMMENDATIONS
IMPROVED SOUND
MOISTURE/MOLD/ MILDEW-RESISTANT PERFORMANCE PRODUCTS.
NOTE: VISIT GYPSUM.ORG FOR MORE INFORMATION.

NOTES:
1. SOFFIT MATERIALS TO MEET REQ. OF CRC 327 & CRC 704.
2. INSTALL ALL MATERIALS, FASTENERS, & COMPONENTS PER MANUFACTURER'S SPECIFICATIONS & RECOMMENDATIONS
3. INSTALL ADDITIONAL BLOCKING AS NEEDED TO MEET ATTACHMENT REQUIREMENTS PER CRC TABLE R702.3.5
4. A PROJECT SITE WITHIN THE WILDLAND-URBAN INTERFACE FIRE AREA SHALL COMPLY WITH THE CRC SECTION R337.

OWNER/APP. TO PROVIDE MANUFACTURER, COLOR/FINISH SPECIFICATIONS, & WUI (WHEN REQ.)

EXTERIOR SOFFITS, RAKES, & EAVES; SEE G-001 FOR MATERIAL SELECTION AND CORRESPONDING DETAILS FOR MORE INFORMATION.
A) TOUNGE & GROOVE (SOLID SAWN LUMBER)
B) EXT. GRADE FIRE RETARDANT TREATED SHEATHING (LABEL SELECTION ON REFLECTED CEILING PLAN)

KEYNOTES

F02 22" X 30" MINIMUM ATTIC ACCESS. PROVIDED SWITCH AND OUTLET AT ATTIC. THERE IS NO HVAC EQUIPMENT (SUCH AS FURNACE, HEAT PUMP, OR FAU) IN THE ATTIC. PERMANENTLY ATTACH R-38 OR GREATER INSULATION TO ATTIC ACCESS DOOR USING ADJUSTIVE OR MECHANICAL FASTENERS CERC 150.0 (a). PROVIDE GASKETED ATTIC ACCESS TO PREVENT AIR LEAKAGE CERC 150.0 (a).
H09 ATTIC VENT (HIGH): UPPER VENTS SHALL BE LOCATED NOT MORE THAN 3 FEET BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE, MEASURED VERTICALLY. PAINT FINISH TO MATCH ROOF COLOR. SEE VENTING CALCS.
H10 ATTIC VENT (LOW): LOWER VENTS SHALL BE LOCATED IN THE BOTTOM ONE-THIRD OF THE ATTIC SPACE PER R806.2. PROVIDE DAMPER TO PROVIDE 1" CLR. AIRSPACE WHERE REQ. PAINT FINISH TO MATCH ROOF COLOR. SEE VENTING CALCS.
K13 STANDING SEAM METAL ROOF. SEE MATERIALS LEGEND FOR MORE INFORMATION.
M01 GUTTER: CONNECT TO DOWNSPOUT. PROVIDE MEANS TO PREVENT ACCUMULATION OF LEAVES AND DEBRIS IN GUTTER PER CRC R337.5.4. SEE DETAIL 12A-903.
M02 DOWNSPOUT TO SPLASH BLOCK BELOW. SEE DETAIL 43/A-904.

ROOF PLAN GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
2. REFER TO STRUCTURAL PLANS FOR ROOF FRAMING INFORMATION INCLUDING MEMBER SIZES AND CONNECTION HARDWARE.
3. PROVIDE A MINIMUM OF 1 INCH OF AIRSPACE BETWEEN THE INSULATION AND ROOF SHEATHING.
4. WHERE THE ROOF PROFILE ALLOWS A SPACE BETWEEN THE ROOF COVERING AND DECKING, THE SPACES SHALL BE CONSTRUCTED TO PREVENT THE INTRUSION OF FLAMES AND EMBERS. BE FIRESTOPPED WITH APPROVED MATERIALS OR HAVE ONE LAYER OF MINIMUM 72 POUND APPROVED MATERIAL.
5. ALL ROOFING MATERIALS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
6. OVERHANG DIMENSIONS ARE FROM FACE OF EXTERIOR WALL FRAMING TO ROOF EDGE.
7. ROOF COVERINGS SHALL BE APPLIED IN ACCORDANCE WITH (CRC R905), AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. ROOF COVERINGS SHALL BE INSTALLED TO RESIST THE COMPONENT AND CLADDING LOADS SPECIFIED IN R301.2.1(1), AND ADJUSTED FOR HEIGHT AND EXPOSURE IN ACCORDANCE WITH R301.2.1(2).
8. ROOF UNDERLAYMENTS SHALL BE IN ACCORDANCE WITH SECTION R906.1.1. TABBED ROOFING.
9. ROOF VENTS SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATIONS. FURNISHED DIMENSIONS FOR VENTS ARE GUIDES ONLY. INSTALL PER MANUFACTURER'S SPECIFICATIONS AND ADJUST TO ACCOMMODATE TRUSS LOCATIONS, PLUMBING VENTS, AND SOLAR COLLECTORS.
ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16 INCH (1.6 MM) MINIMUM AND 1/4 INCH (6.4 MM) MAXIMUM. VENTILATION OPENINGS HAVING A LEAST DIMENSION LARGER THAN 1/4 INCH (6.4 MM) SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE CLOTH. VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW SHALL CONFORM TO THE REQUIREMENTS OF SECTION R802.7. REQUIRED VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTSIDE AIR AND SHALL BE PROTECTED TO PREVENT THE ENTRY OF BIRDS, RODENTS, SNAKES AND OTHER SIMILAR CREATURES (CRC R806).
10. THE MINIMUM NET FREE VENTILATING AREA SHALL COMPLY WITH CRC R806.2.
11. IN THE INSTANCE OF UPPER VENTS, VENTS SHALL BE LOCATED NO MORE THAN 3 FT BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE, MEASURED VERTICALLY. CRC R806.2.



THESE PLANS ARE PROVIDED BY THE CITY OF LAGUNA NIGUEL AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN. THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONSTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

ROOF VENTING CALCULATIONS

OWNER/APPLICANT REQ. TO SELECT ONE THE FOLLOWING
WUI REQUIRED? (SEE G-001) A) YES B) NO

UPPER & LOWER VENTS:

CALIFORNIA RANCH & MODERN FARMHOUSE STYLE:

A) O'HAGIN TAPERED LOW PROFILE COMPOSITION SHINGLE. 72.0 SQ. IN. OF AIR MOVEMENT PER VENT = 72. SQ. IN. / 144 = .5 SF (SEE 42/A-913 FOR PRODUCT REFERENCE)
 B) ALTERNATIVE PRODUCT. MUST BE EQUAL TO PRODUCT ABOVE, AND PROVIDE GREATER THAN OR EQUAL AIR MOVEMENT.

MEDITERRANEAN STYLE:

A) O'HAGIN TAPERED LOW PROFILE COMPOSITION S-TILE OR CLAY. 97.5 SQ. IN. OF AIR MOVEMENT PER VENT = 97.5 SQ. IN. / 144 = .68 SF (SEE 34/A-913 FOR PRODUCT REFERENCE)
 B) ALTERNATIVE PRODUCT. MUST BE EQUAL TO PRODUCT ABOVE, AND PROVIDE GREATER THAN OR EQUAL AIR MOVEMENT.

"UPPER VENTS PROVIDED" = (TOTAL ATTIC AREA/300) * (0.5) / (0.5 SF)

"LOWER VENTS PROVIDED" = (TOTAL ATTIC AREA/300) * (0.5) / (0.5 SF)

1) ROOF VENTING SHALL COMPLY WITH CRC R806 & CBC 701A.

2) ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16 INCH MINIMUM AND 1/4 INCH MAXIMUM. OPENINGS IN ROOF FRAMING MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF SECTION R802.7. REQUIRED VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTSIDE AIR AND SHALL BE PROTECTED TO PREVENT THE ENTRY OF BIRDS, RODENTS, SNAKES AND OTHER SIMILAR CREATURES.

3) THE MINIMUM NET FREE VENTILATING AREA SHALL COMPLY WITH CRC R806.2.

VENTING NEEDED: 1.04 SF

ATTIC	AREA	REQUIRED ATTIC VENTING (NFA)	UPPER VENTING REQUIRED (NFA)	LOWER VENTING REQUIRED (NFA)
PLAN 1	312 SF	1.04 SF	0.52 SF	0.52 SF

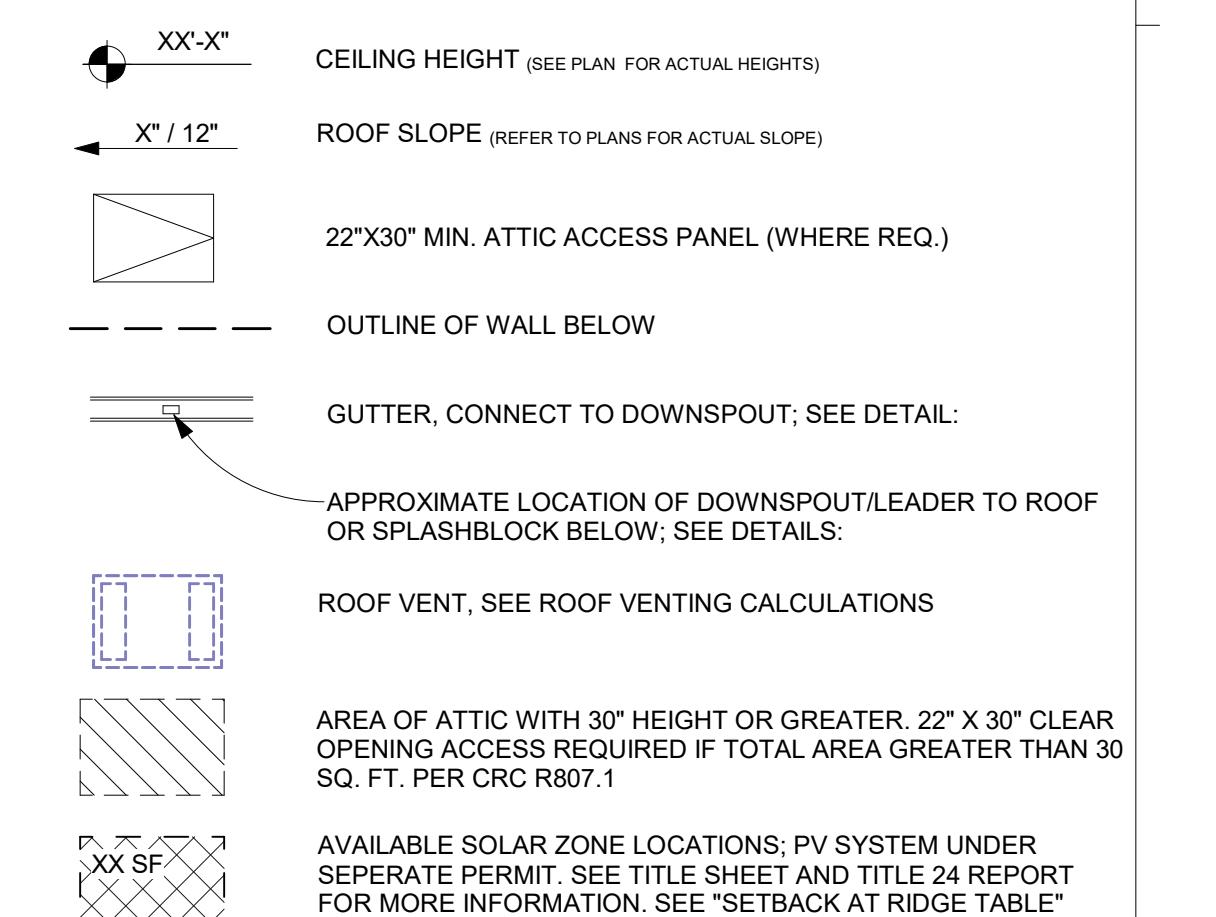
VENTING PROVIDED - ASPHALT SHINGLE

VENT TYPE	COUNT	VENT LENGTH	NET FREE AREA PER VENT	PROVIDED NET FREE AREA
LOWER O'HAGIN SHINGLE ROOF VENT (LOWER)	2	2' - 8"	0.50 SF	1.00 SF
UPPER O'HAGIN SHINGLE ROOF VENT (UPPER)	2	2' - 8"	0.50 SF	2.00 SF

RCP GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET G-102 FOR ADDITIONAL REQUIREMENTS.
2. HEIGHT OF CEILINGS SHALL BE MEASURED FROM TOP OF SLAB OR FLOOR TO FINISH FACE OF GWB, U.N.O.
3. REFER TO DETAILS FOR FLOOR/CEILING ASSEMBLIES.
4. REFER TO ELEC. PLANS FOR LIGHT FIXTURE AND EXHAUST LOCATIONS.
5. DIMENSIONS ARE TO THE FACE OF FRAMING UNLESS OTHERWISE NOTED.
6. SOFFITS ARE TO BE HELD TIGHT TO UNDERSIDE OF MECHANICAL EQUIP.

ROOF PLAN & RCP LEGEND



X: SETBACK AT RIDGE TABLE

PV ARRAYS PERCENT OF THE PLAN VIEW TOTAL ROOF AREA	(X) HORIZONTAL RIDGE SETBACK
≤33%	18' BOTH SIDES OF RIDGE
>33%	36' BOTH SIDES OF RIDGE
≤66% + 130 SPRINKLER	18' BOTH SIDES OF RIDGE
>66% + 120 SPRINKLER	36' BOTH SIDES OF RIDGE

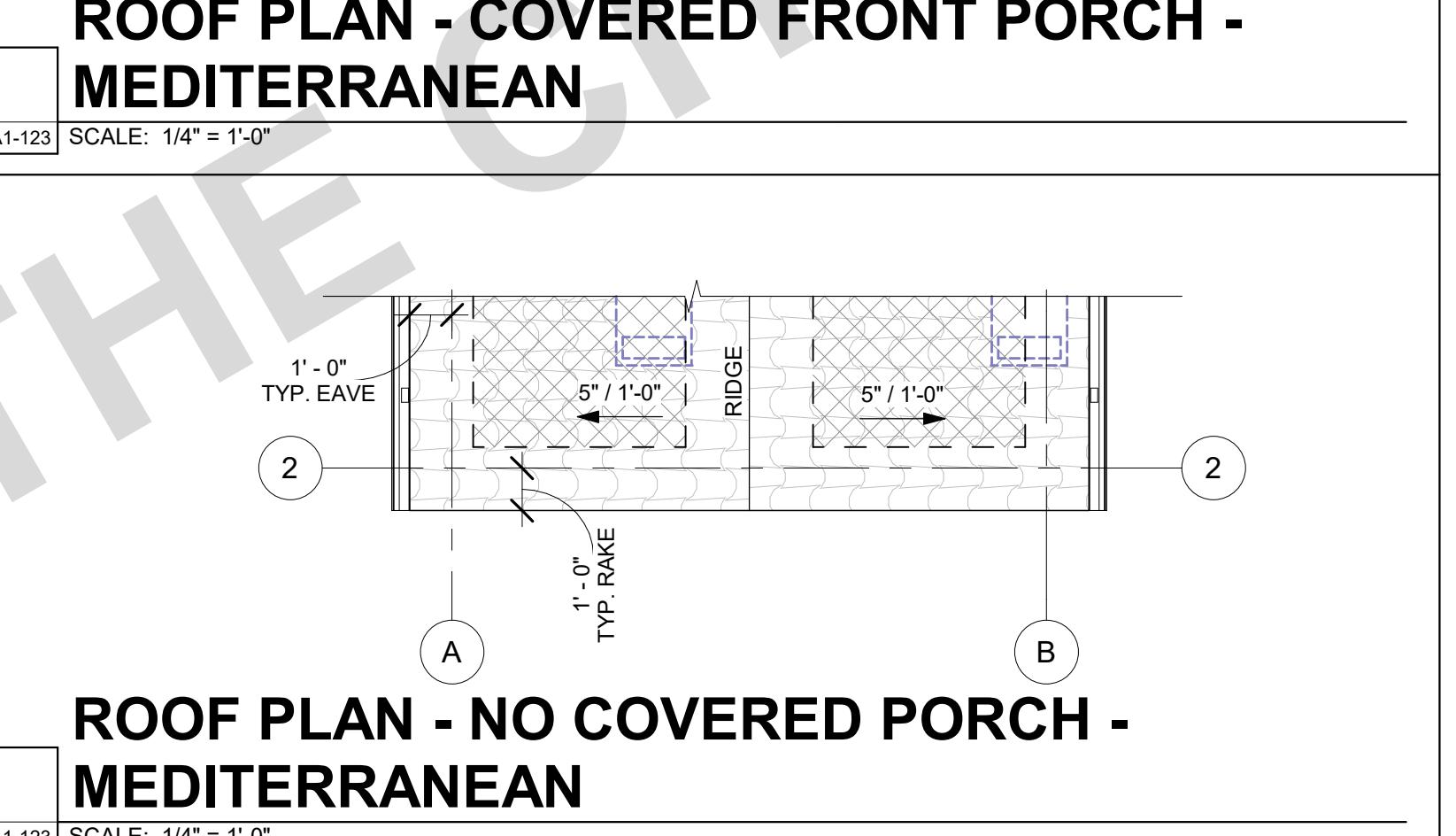
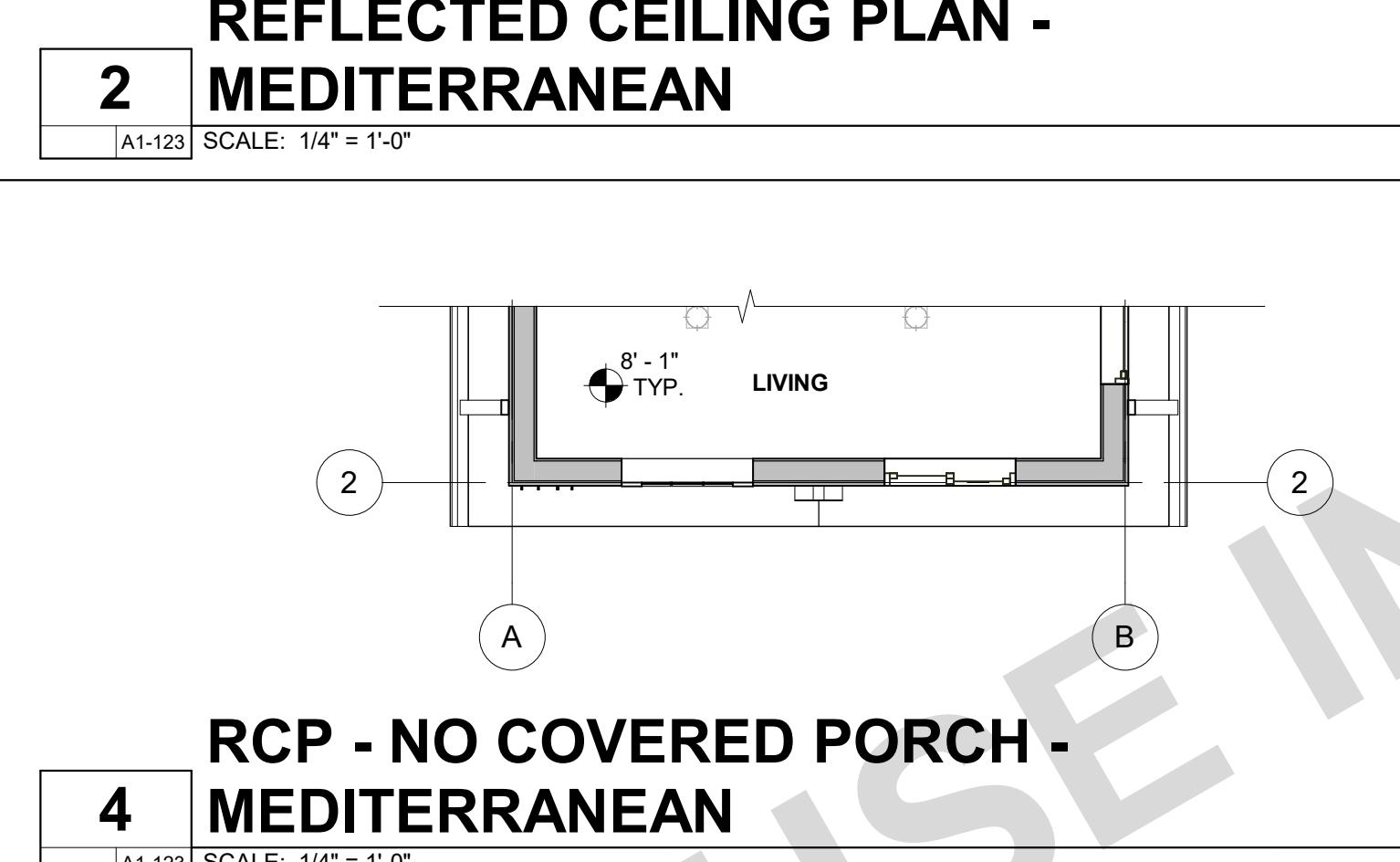
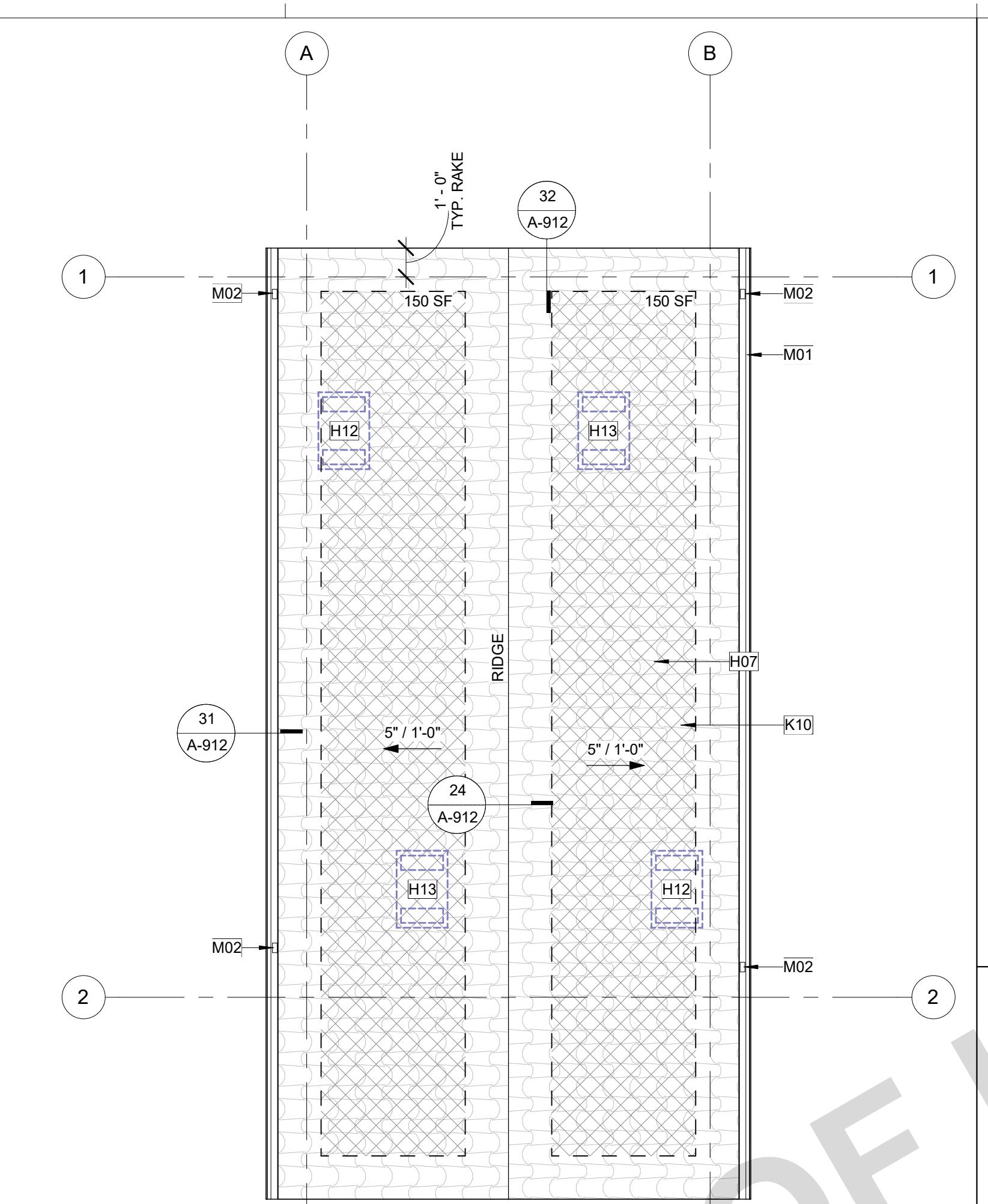
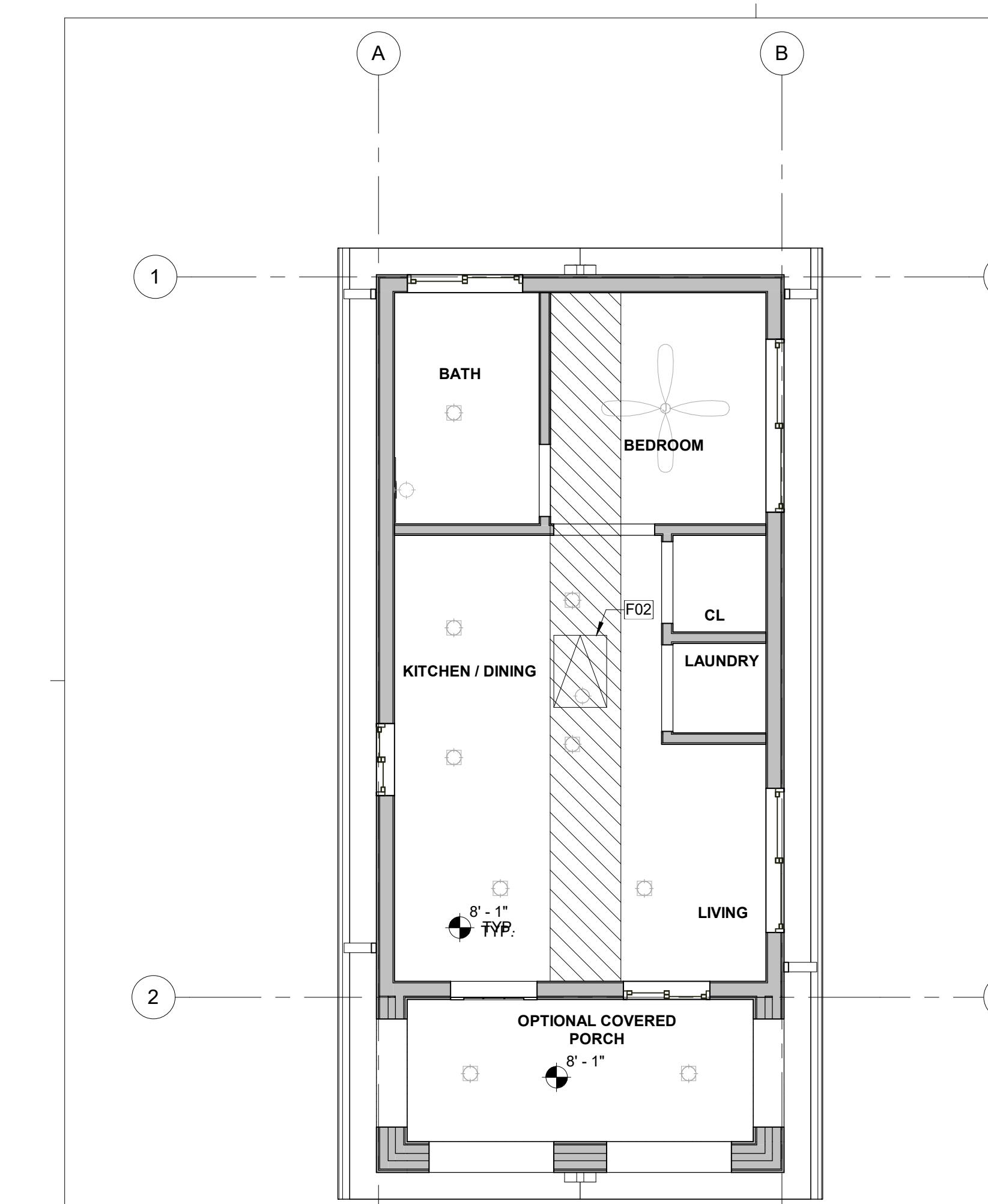
PUBLIC SET

PRE-APPROVED ADU

ROOF PLAN & REFLECTED CEILING PLAN - MODERN FARMHOUSE

CITY OF LAGUNA NIGUEL

A1-122



KEYNOTES

F02 22" X 30" MINIMUM ATTIC ACCESS. PROVIDED SWITCH AND OUTLET AT ATTIC. THERE IS NO HVAC EQUIPMENT (SUCH AS FURNACE, HEAT PUMP, OR FAULT) IN THE ATTIC. PERMANENTLY ATTACH R-38 OR GREATER INSULATION TO ATTIC ACCESS DOOR USING ADHESIVE OR MECHANICAL FASTENERS CEC 150.0 (a).1. PROVIDE GASKETED ATTIC ACCESS TO PREVENT AIR LEAKAGE CEC 150.0 (a).1.

H07 BUILDING LINE BELOW.

H12 ATTIC VENT (HIGH), ATTIC VENTING OPTION B. STRIKE THROUGH IF NOT USED. SEE VENTING CALCS.

H13 ATTIC VENT (LOW), ATTIC VENTING OPTION B. STRIKE THROUGH IF NOT USED. SEE VENTING CALCS.

K10 S-TYPE CLAY ROOF TILE, ROOF REFLECTANCE (0.1) MIN. ROOF EMMITTANCE (0.85) MIN. SEE MATERIALS LEGEND FOR MORE INFORMATION.

M01 GUTTER, CONNECT TO DOWNSPOUT. PROVIDE MEANS TO PREVENT ACCUMULATION OF LEAVES AND DEBRIS IN GUTTER PER CRC R337.5.4. SEE DETAIL 12/A-903.

M02 DOWNSPOUT TO SPLASH BLOCK BELOW. SEE DETAIL 43/A-904.

ROOF PLAN GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
2. REFER TO STRUCTURAL PLANS FOR ROOF FRAMING INFORMATION INCLUDING MEMBER SIZES AND CONNECTION HARDWARE.
3. PROVIDE A MINIMUM OF 1 INCH OF AIRSPACE BETWEEN THE INSULATION AND ROOF SHEATHING.
4. WHERE THE ROOF PROFILE ALLOWS A SPACE BETWEEN THE ROOF COVERING AND DECKING, THE SPACES SHALL BE CONSTRUCTED TO PREVENT THE INTRUSION OF FLAMES AND EMBERS. BE FIRESTOPPED WITH APPROVED MATERIALS OR HAVE ONE LAYER OF MINIMUM 72 POUND APPROVED MATERIALS OR HAVE ONE LAYER OF NONPERFORATED CAP SHEET OVER THE COMBUSTIBLE DECKING.
5. ALL ROOFING MATERIALS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
6. OVERHANG DIMENSIONS ARE FROM FACE OF EXTERIOR WALL FRAMING TO ROOF EDGE.
7. ROOF COVERINGS SHALL BE APPLIED IN ACCORDANCE WITH (CRC R905), AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. ROOF COVERINGS SHALL BE INSTALLED TO RESIST THE COMPONENT AND CLADDING LOADS SPECIFIED IN R301.2.1(1), AND ADJUSTED FOR HEIGHT AND EXPOSURE IN ACCORDANCE WITH TABLE R301.2.1(2).
8. ROOF UNDERLAYMENTS SHALL BE IN ACCORDANCE WITH SECTION R901.1.1. TABBED ROOFING SHEETS ARE NOT ALLOWED.
9. ROOF VENTS SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATIONS. FURNISHED DIMENSIONS FOR VENTS ARE GUIDES ONLY. INSTALL PER MANUFACTURER'S SPECIFICATIONS AND ADJUST TO ACCOMMODATE TRUSS LOCATIONS, PLUMBING VENTS, AND SOLAR COLLECTORS.
10. ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16 INCH (1.6 MM) MINIMUM AND 1/4 INCH (6.4 MM) MAXIMUM. VENTILATION OPENINGS HAVING A LEAST DIMENSION LARGER THAN 1/4 INCH (6.4 MM) SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE CLOTH. VENTILATING OPENINGS SHALL NOT BE PERFORATED VINYL OR PLASTIC MATERIAL WITH OPENINGS HAVING A LEAST DIMENSION OF 1/4 INCH (6.4 MM) MINIMUM AND 1/4 INCH (6.4 MM) MAXIMUM. OPENINGS IN ROOF FRAMING MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF SECTION R802.7. REQUIRED VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTSIDE AIR AND SHALL BE PROTECTED TO PREVENT THE ENTRY OF BIRDS, RODENTS, SNAKES AND OTHER SIMILAR CREATURES (CRC R806.2).
11. IN THE INSTANCE OF UPPER VENTS, VENTS SHALL BE LOCATED NO MORE THAN 3 FT BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE, MEASURED VERTICALLY. CRC R806.2.



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ROOF VENTING CALCULATIONS

OWNER/APPLICANT REQ. TO SELECT ONE THE FOLLOWING
WUI REQUIRED? (SEE G-001) A) YES B) NO

UPPER & LOWER VENTS:

CALIFORNIA RANCH & MODERN FARMHOUSE STYLE:

A) O'HAGIN TAPERED LOW PROFILE COMPOSITION SHINGLE. 72.0 SQ. IN. OF AIR MOVEMENT PER VENT = 72. SQ. IN. / 144 = 0.5 SF (SEE 34/A-912 FOR PRODUCT REFERENCE)

B) ALTERNATIVE PRODUCT, MUST BE EQUAL TO PRODUCT ABOVE, AND PROVIDE GREATER THAN OR EQUAL AIR MOVEMENT.

MEDITERRANEAN STYLE:

A) O'HAGIN TAPERED LOW PROFILE COMPOSITION S-TILE OR CLAY. 97.5 SQ. IN. OF AIR MOVEMENT PER VENT = 97.5 SQ. IN. / 144 = .68 SF (SEE 34/A-913 FOR PRODUCT REFERENCE)

B) ALTERNATIVE PRODUCT, MUST BE EQUAL TO PRODUCT ABOVE, AND PROVIDE GREATER THAN OR EQUAL AIR MOVEMENT.

"UPPER VENTS PROVIDED" = (TOTAL ATTIC AREA/300) * (0.5) / (0.5 SF)

"LOWER VENTS PROVIDED" = (TOTAL ATTIC AREA/300) * (0.5) / (0.5 SF)

1) ROOF VENTING SHALL COMPLY WITH CRC R806 & CBC 701A.

2) ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16 INCH MINIMUM AND 1/4 INCH MAXIMUM. OPENINGS IN ROOF FRAMING MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF SECTION R802.7. REQUIRED VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTSIDE AIR AND SHALL BE PROTECTED TO PREVENT THE ENTRY OF BIRDS, RODENTS, SNAKES AND OTHER SIMILAR CREATURES.

3) THE MINIMUM NET FREE VENTILATING AREA SHALL COMPLY WITH CRC R806.2.

VENTING NEEDED: 1.04 SF

ATTIC	AREA	REQUIRED ATTIC VENTING (NFA)	UPPER VENTING REQUIRED (NFA)	LOWER VENTING REQUIRED (NFA)
PLAN 1	312 SF	1.04 SF	0.52 SF	0.52 SF

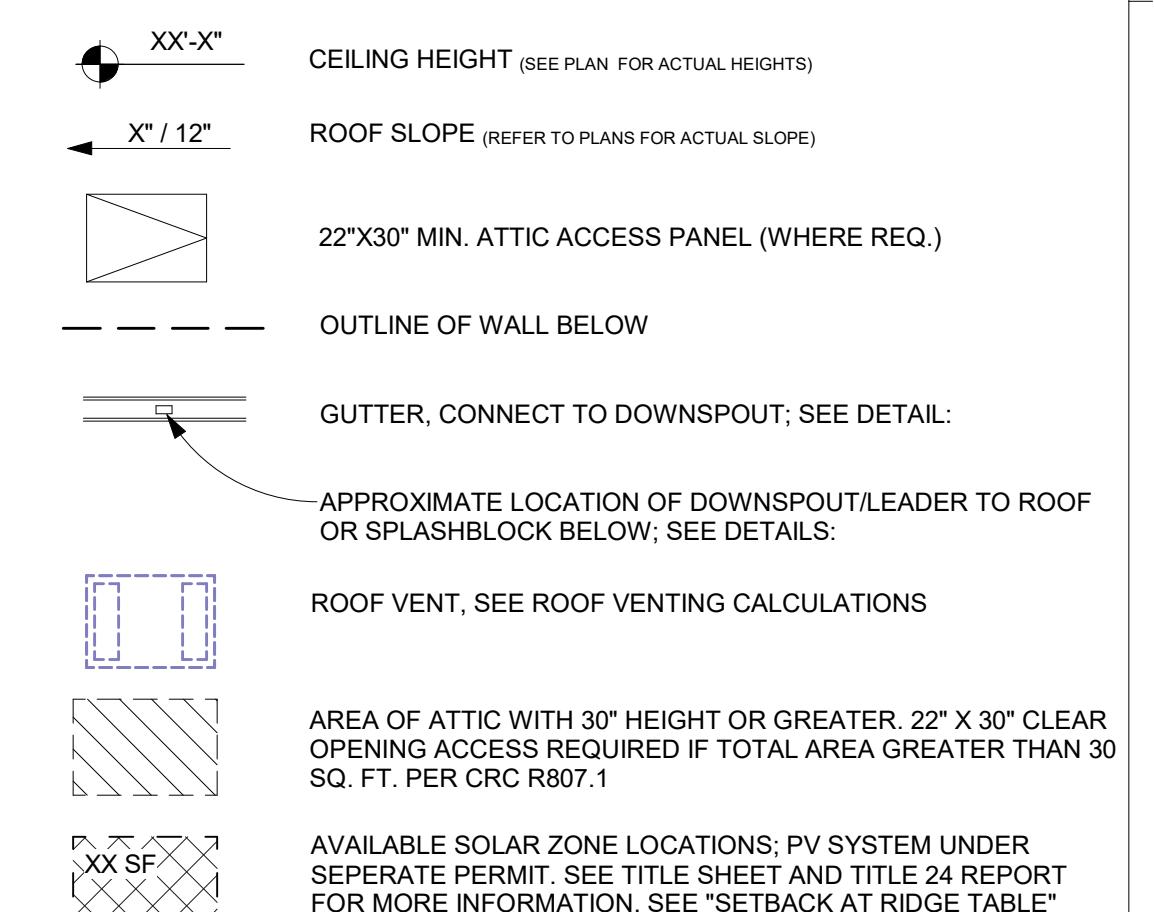
VENTING PROVIDED - S-TILE

VENT TYPE	VENT COUNT	VENT LENGTH	NET FREE AREA PER VENT	PROVIDED NET FREE AREA
LOWER				
O'HAGIN S-TILE ROOF VENT (LOWER)	2	2'-8"	0.68 SF	1.35 SF
O'HAGIN S-TILE ROOF VENT (UPPER)	2	2'-8"	0.68 SF	1.35 SF
				2.71 SF

RCP GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET G-102 FOR ADDITIONAL REQUIREMENTS.
2. HEIGHT OF CEILINGS SHALL BE MEASURED FROM TOP OF SLAB OR FLOOR TO FINISH FACE OF GWB, U.N.O.
3. REFER TO DETAILS FOR FLOOR/CEILING ASSEMBLIES.
4. REFER TO ELECT. PLANS FOR LIGHT FIXTURE AND EXHAUST LOCATIONS.
5. DIMENSIONS ARE TO THE FACE OF FRAMING UNLESS OTHERWISE NOTED.
6. SOFFITS ARE TO BE HELD TIGHT TO UNDERSIDE OF MECHANICAL EQUIP.

ROOF PLAN & RCP LEGEND



MATERIALS LEGEND

OWNER/APP. TO PROVIDE MANUFACTURER, COLOR/FINISH SPECIFICATIONS, & WUI (WHEN REQ.)

GRAPHICS LEGEND:

ROOFING; SEE G-001 FOR SELECTION & MATERIALS LEGEND ON ELEVATION SHEET FOR MORE INFORMATION.

S-TILE MASONRY ROOF TILE, ROOF REFLECTANCE (0.1) MIN. ROOF EMMITTANCE (0.85) MIN. SEE MATERIALS LEGEND ON ELEVATION SHEET FOR MORE INFORMATION.

INTERIOR CEILING FINISH, TYP. 5/8" GYP. INSTALL PER MFR RECOMMENDATIONS IMPROVED SOUND MOISTURE/MOLD/MILDEW-RESISTANT PERFORMANCE PRODUCTS. NOTE: VISIT GYPSUM.ORG FOR MORE INFORMATION.

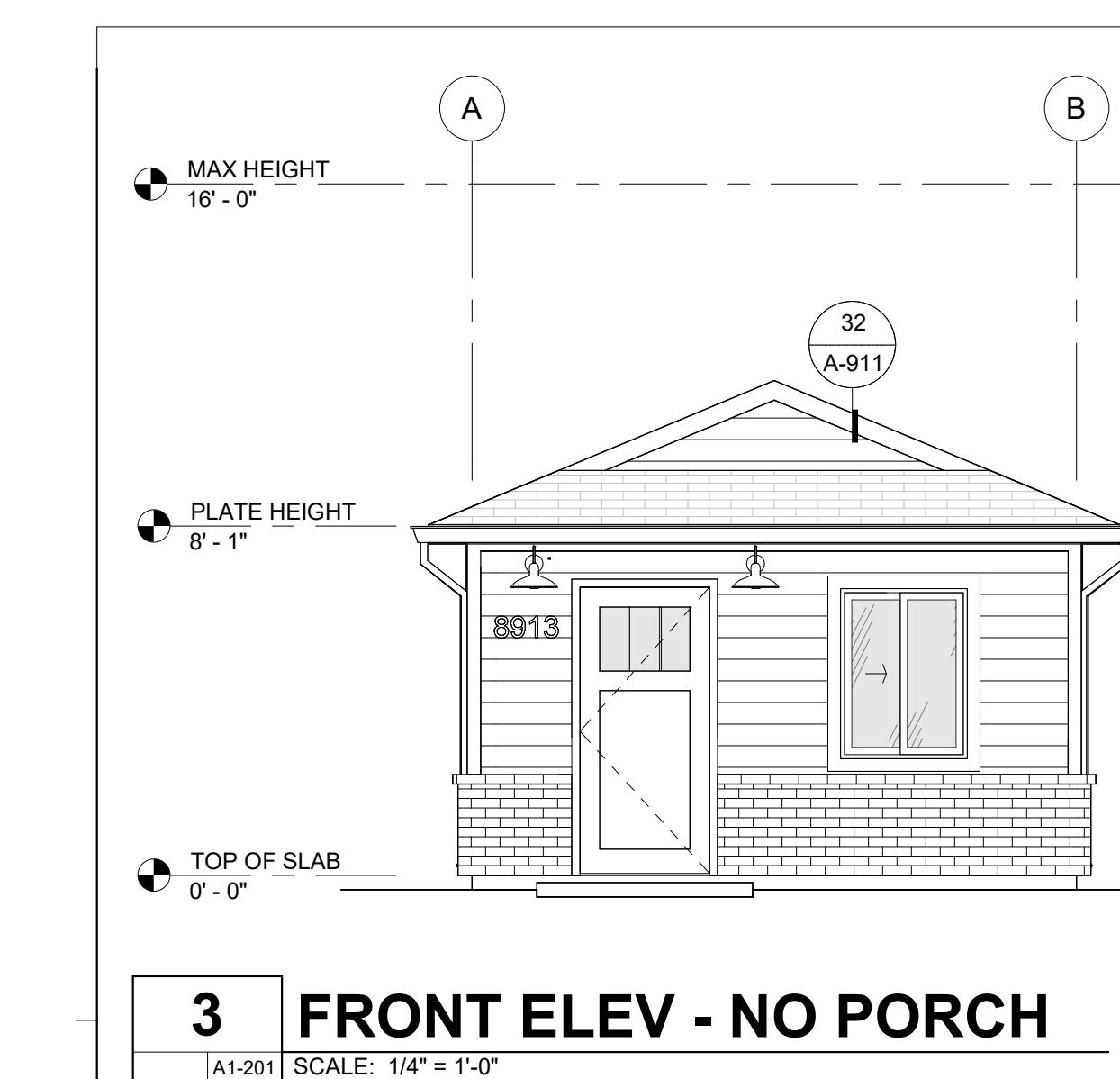
EXTERIOR SOFFITS, RAKES, & EAVES; SEE G-001 FOR MATERIAL SELECTION AND CORRESPONDING DETAILS FOR MORE INFORMATION.

A) TONGUE & GROOVE (SOLID SAWN LUMBER)
B) EXT. GRADE FIRE RETARDANT TREATED SHEATHING (LABEL SELECTION ON REFLECTED CEILING PLAN)

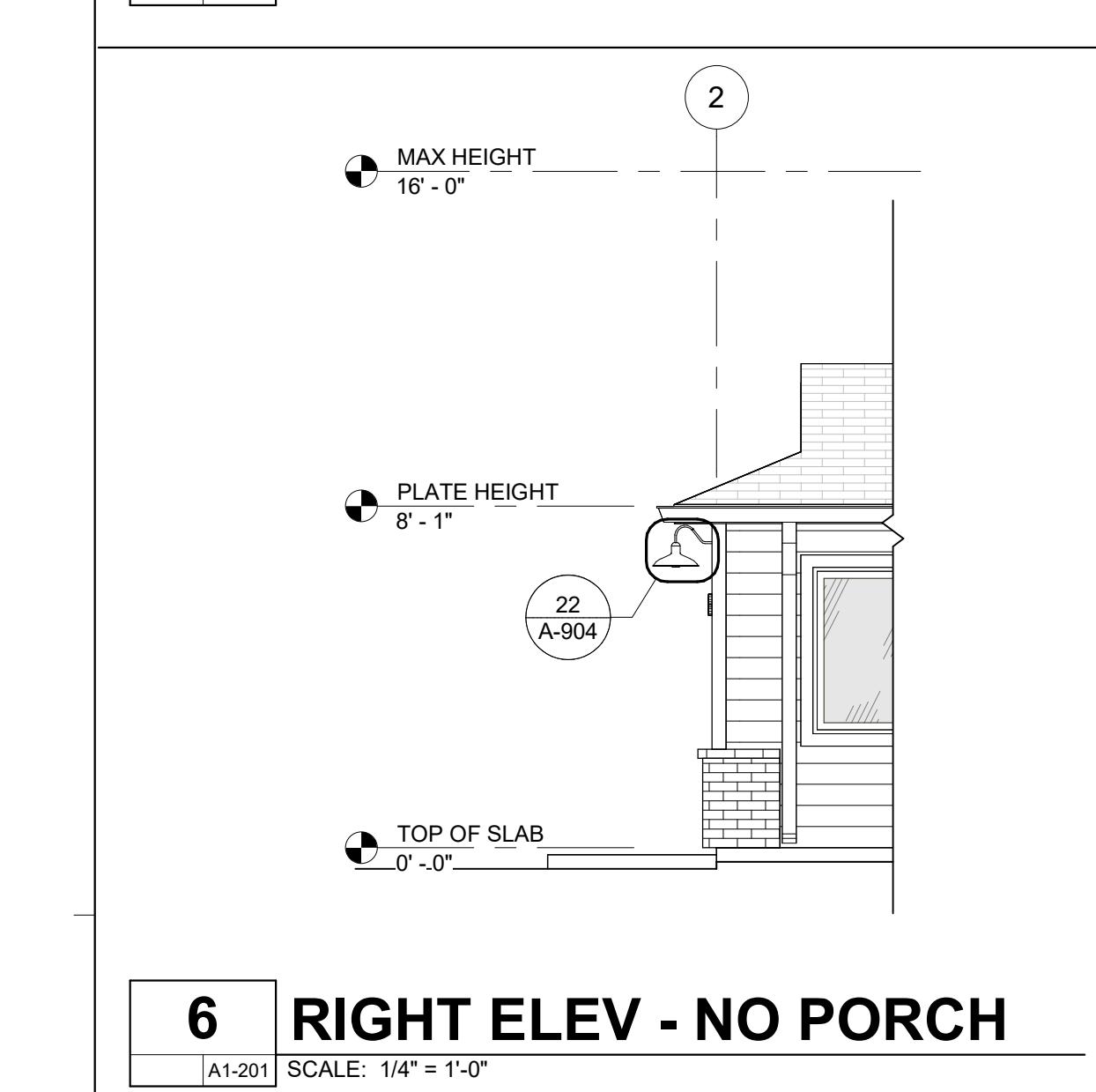
NOTES:
1. SOFFIT MATERIALS TO MEET REQ. OF CRC 327 & CRC 704.
2. INSTALL ALL MATERIALS, FASTENERS, & COMPONENTS PER MANUFACTURER'S SPECIFICATIONS & RECOMMENDATIONS
3. INSTALL ADDITIONAL BLOCKING AS NEEDED TO MEET ATTACHMENT REQUIREMENTS PER CRC TABLE R702.3.5
4. A PROJECT SITE WITHIN THE WILDLAND-URBAN INTERFACE FIRE AREA SHALL COMPLY WITH THE CRC SECTION R337.

X: SETBACK AT RIDGE TABLE

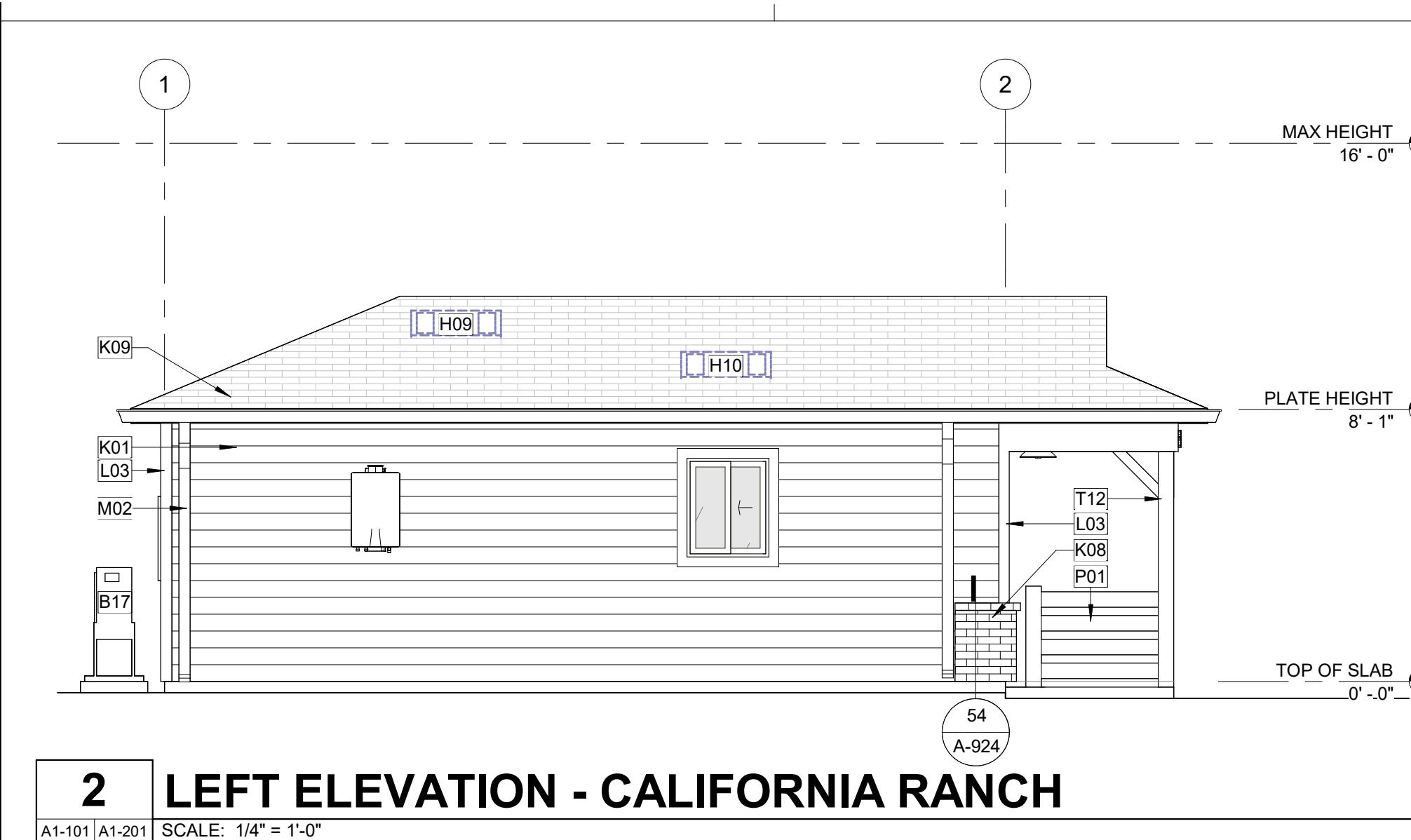
PV ARRAYS PERCENT OF THE PLAN VIEW TOTAL ROOF AREA	(X) HORIZONTAL RIDGE SETBACK
≤33%	18° BOTH SIDES OF RIDGE
>33%	36° BOTH SIDES OF RIDGE
≤66% + 13D SPRINKLER	18° BOTH SIDES OF RIDGE
>66% + 12D SPRINKLER	36° BOTH SIDES OF RIDGE



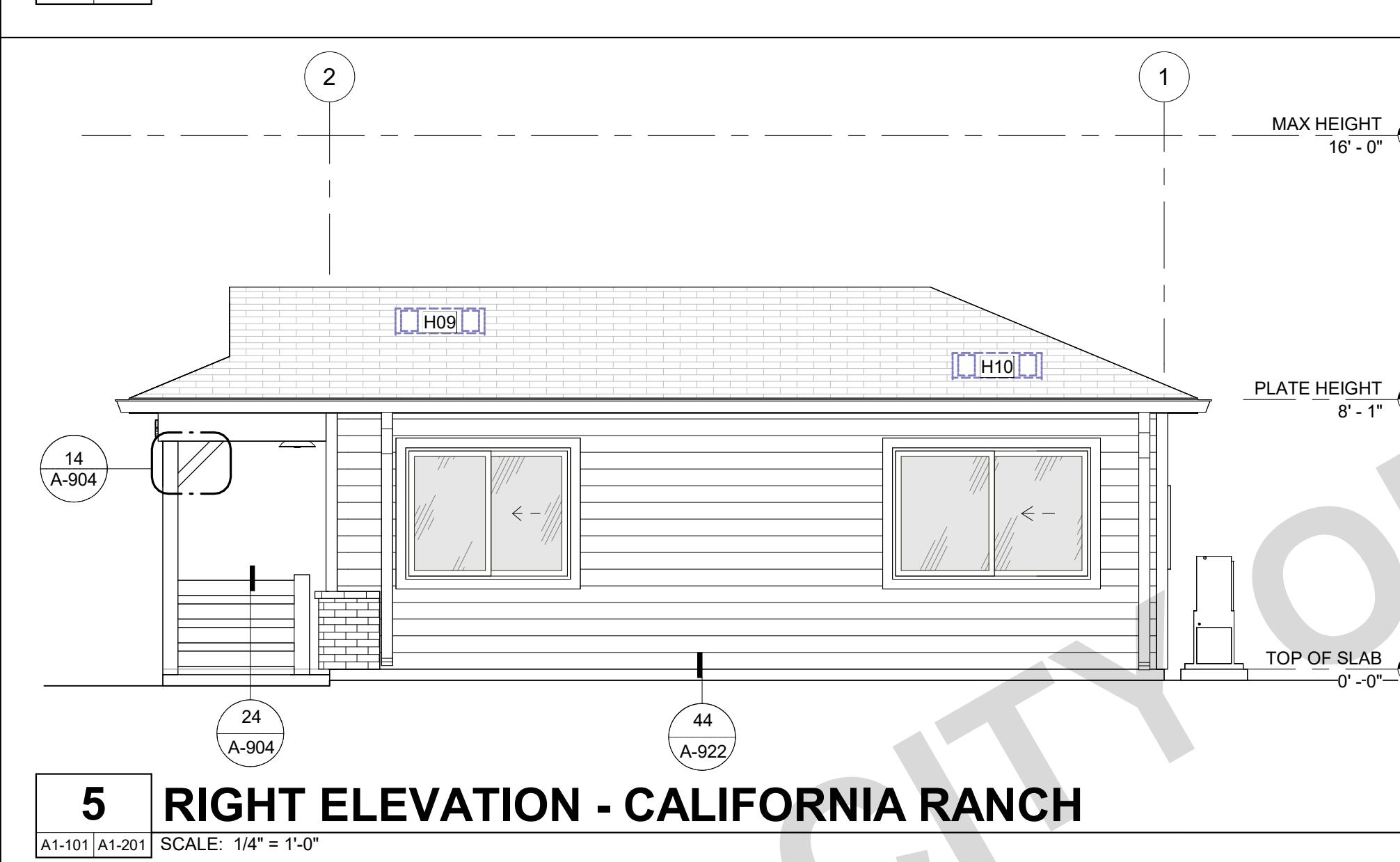
3 FRONT ELEV - NO PORCH



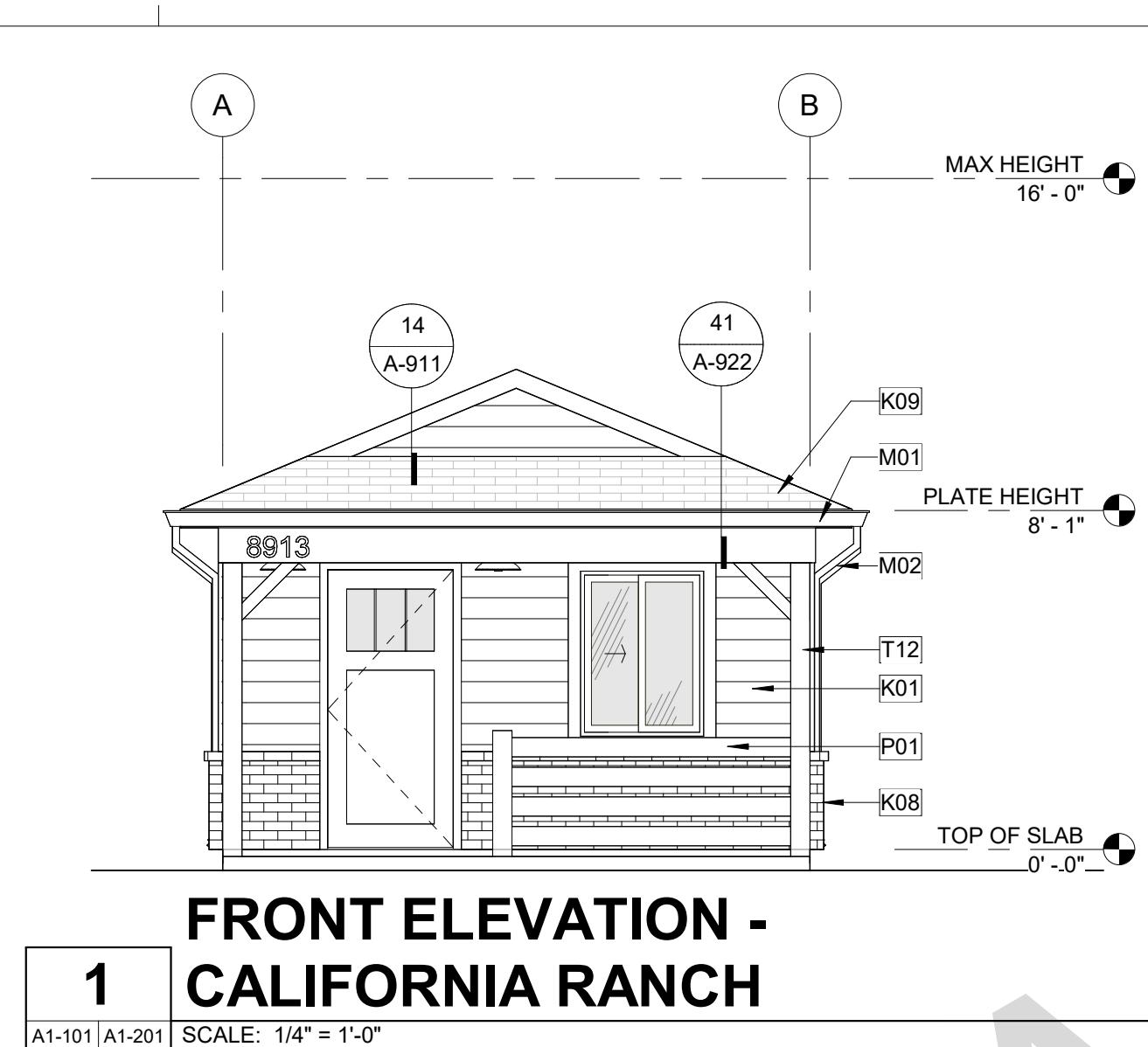
6 RIGHT ELEV - NO PORCH



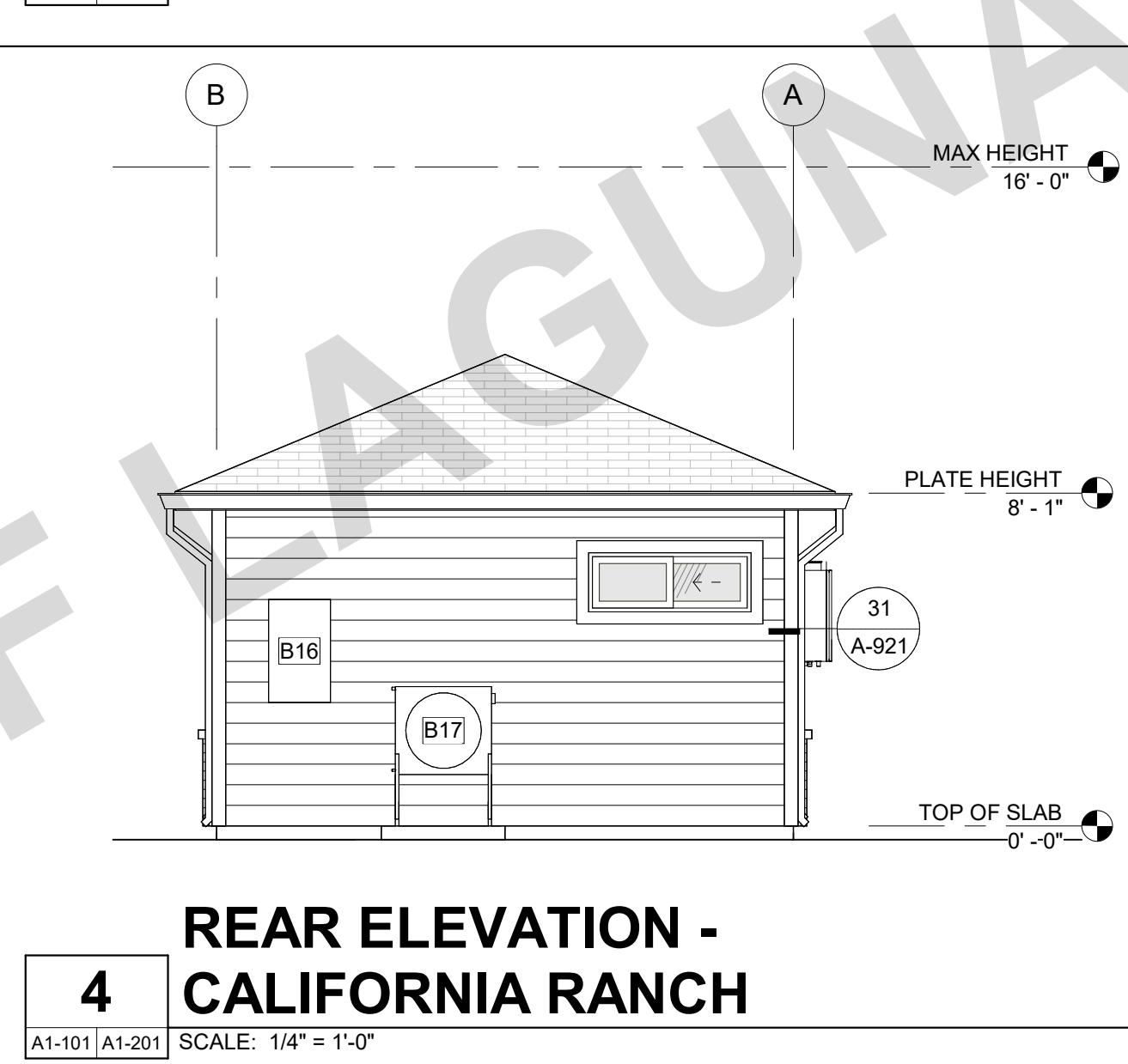
2 LEFT ELEVATION - CALIFORNIA RANCH



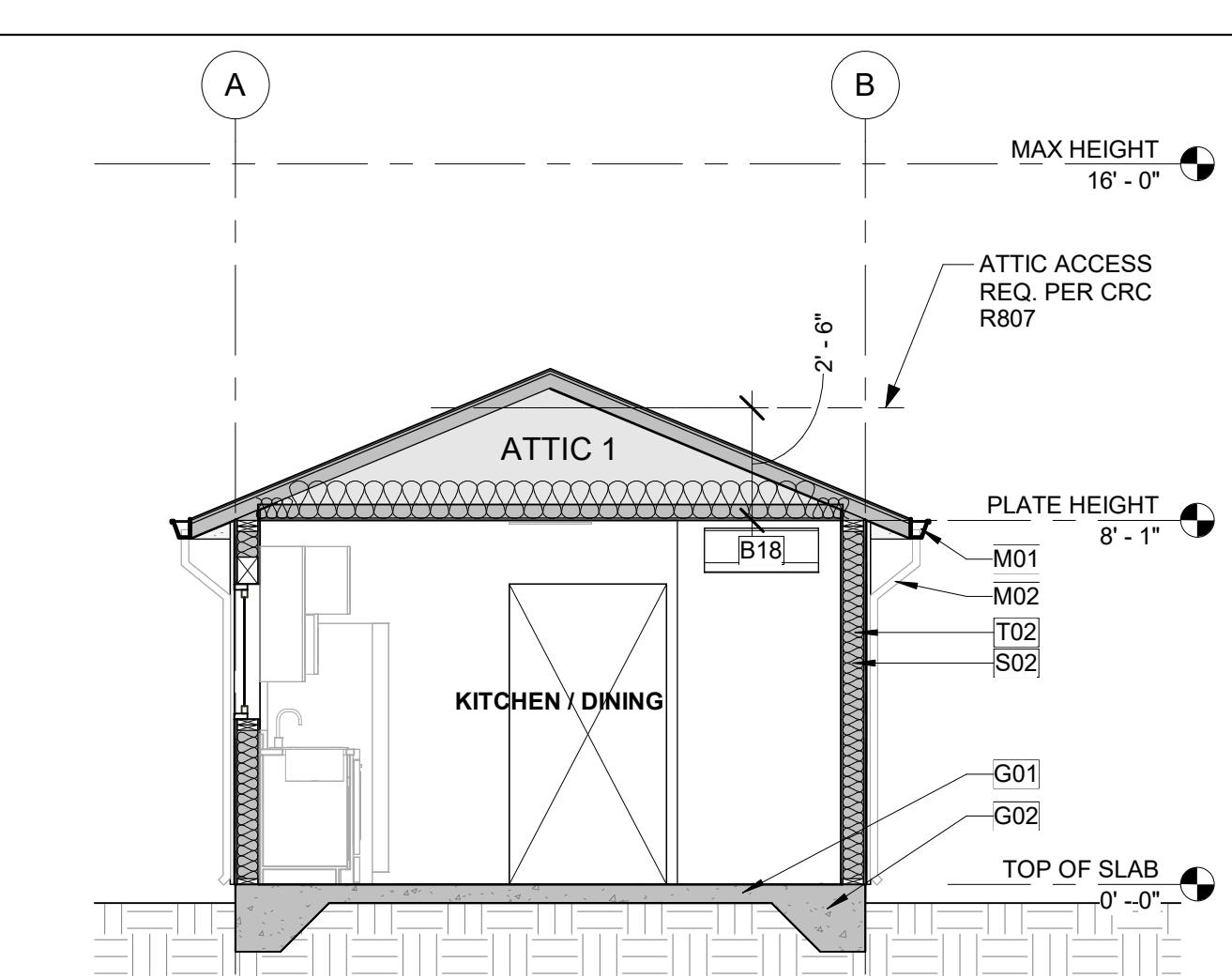
5 RIGHT ELEVATION - CALIFORNIA RANCH



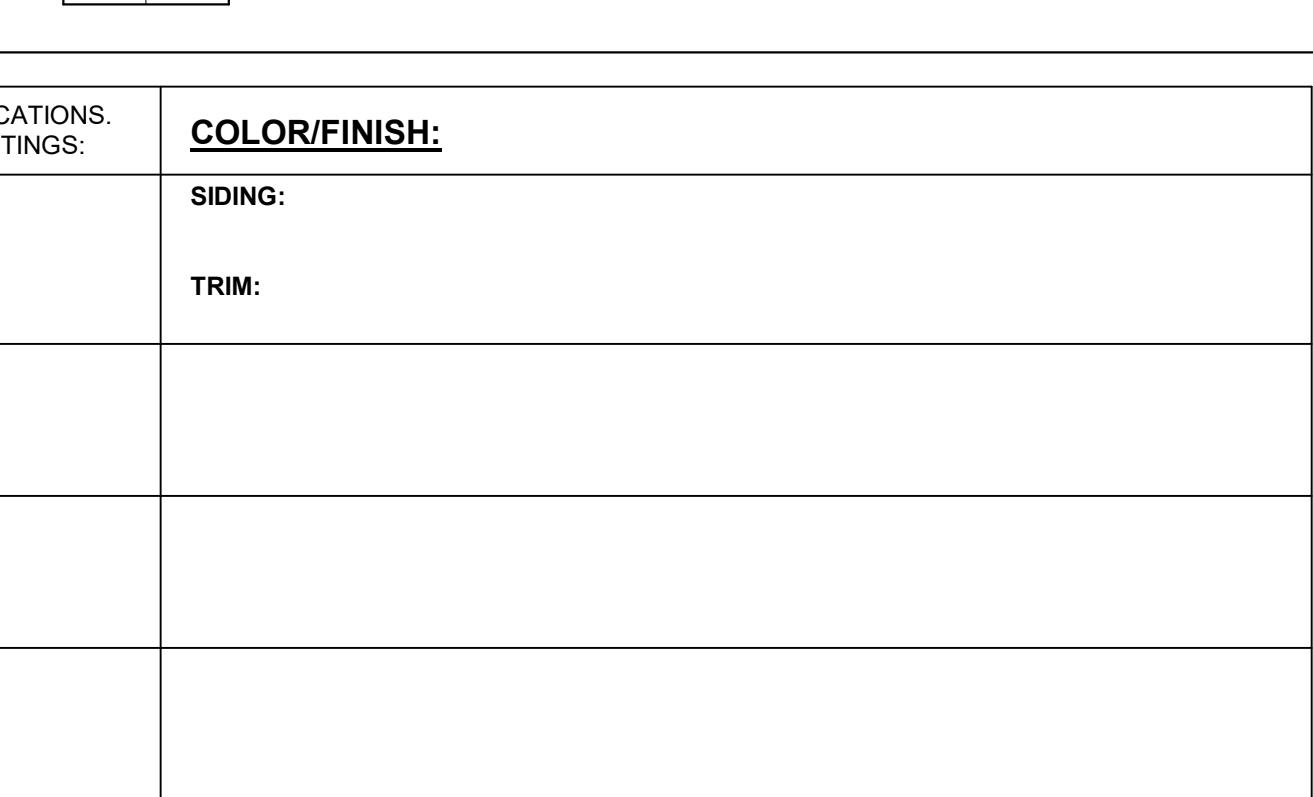
1 FRONT ELEVATION - CALIFORNIA RANCH



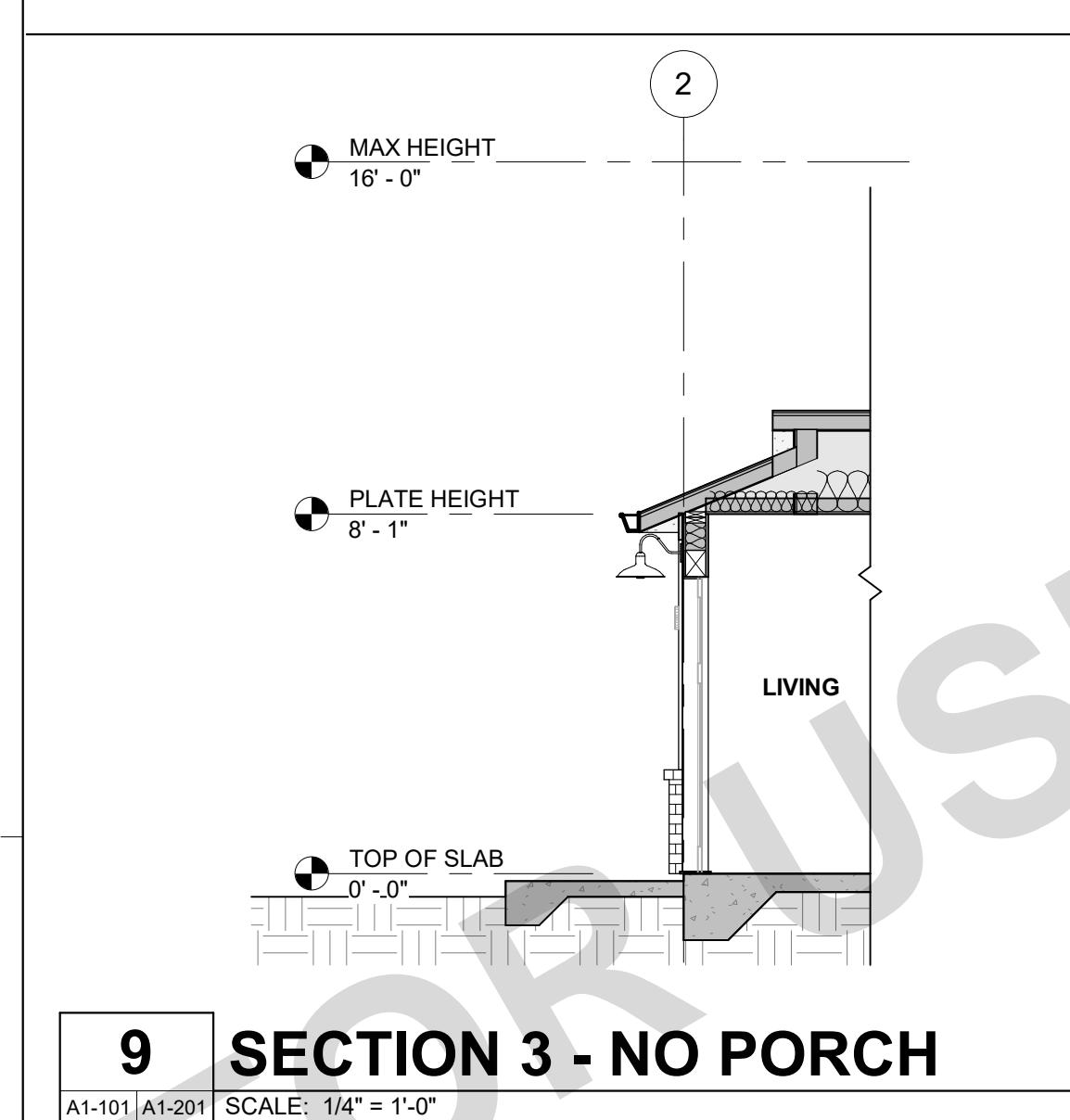
4 REAR ELEVATION - CALIFORNIA RANCH



7 SECTION 1 - CALIFORNIA RANCH



8 SECTION 2 - CALIFORNIA RANCH



9 SECTION 3 - NO PORCH

GRAPHICS LEGEND: (SEE TITLE SHEET; STRIKE THROUGH NON-USED OPTIONS)	OWNER/APP. TO PROVIDE SIZE, MFR, COLOR/FINISH SPECIFICATIONS. *WHEN WUI IS REQUIRED (SEE G-001) PROVIDE PRODUCT LISTINGS:	COLOR/FINISH:
HORIZONTAL SIDING 4" MIN. TO 12" MAX. BOARD EXPOSURE OPTION A: FIBER CEMENT (PER CRC R703.10) OPTION B: WOOD SIDING (PER CRC 703.5.3)		SIDING:
BRICK WAINSCOT MASONRY		TRIM:
ASPHALT COMPOSITE ROOF SHINGLES - CLASS C MIN. REQ. ROOF REFLECTANCE (0.1) MIN. ROOF EMITTANCE (0.85) MIN. (SHALL COMPLY WITH CRC R905.2.4, CRC R905.1, TABLE R905.1.1(1), TABLE R905.1.1(2) & ASTM D3462)		
EAVES, RAKES, & EXT. SOFFIT MATERIAL (SEE REFLECTED CEILING PLAN & DETAILS) A) EXT. T&G B) EXT. GRADE FIRE RATED PLYWOOD		

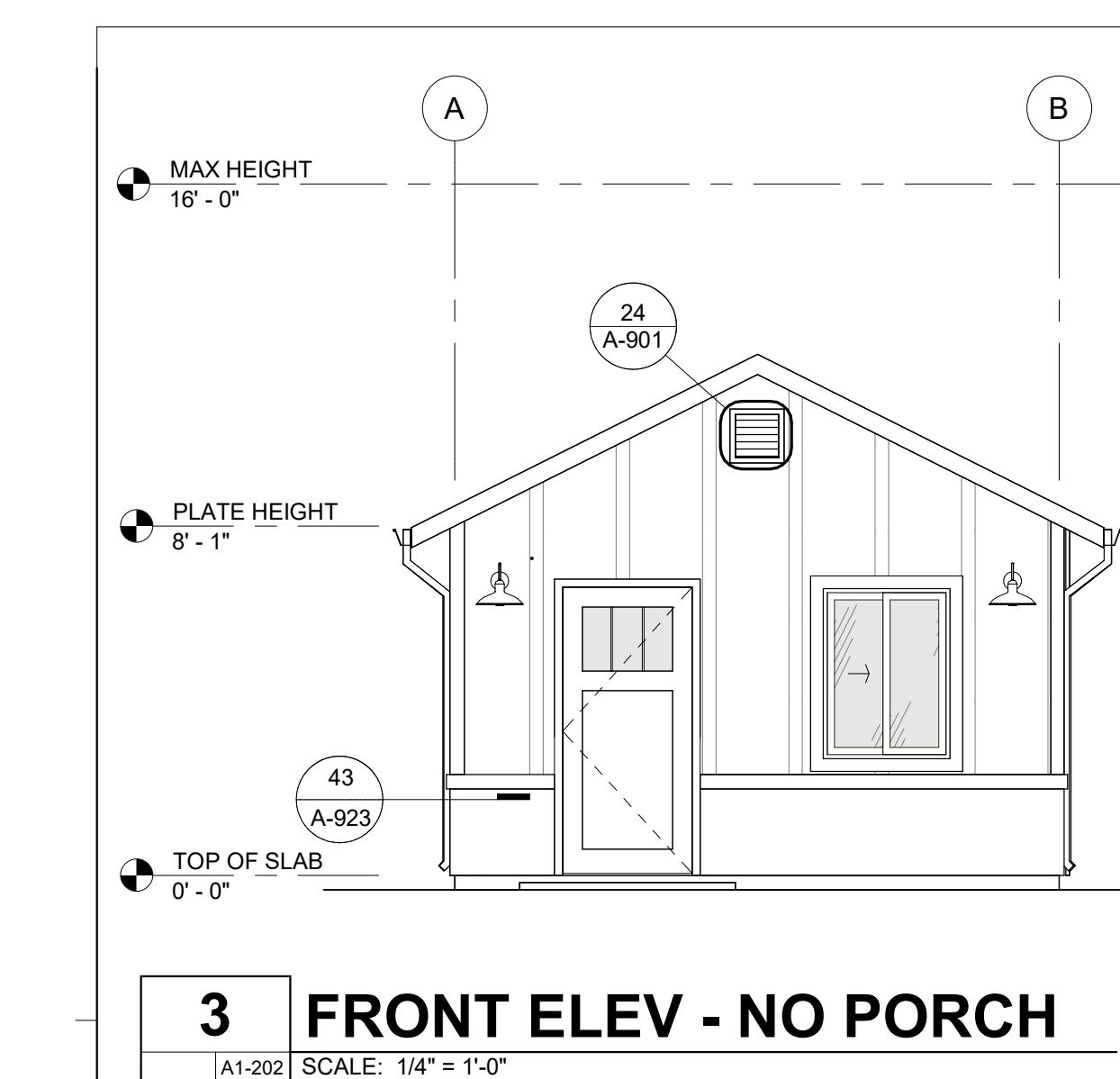
SECTIONS GENERAL NOTES

- THE PURPOSE OF THESE DRAWINGS IS TO SHOW CONSTRUCTION MATERIALS/ASSEMBLIES. FOR SPECIFIC SIZES AND DETAILS REFER TO ARCHITECTURAL PLANS, ELEVATIONS, DETAILS, AND STRUCTURAL PLANS. *KEYNOTES ONLY APPLY IF REFERENCED ON PLANS.
- WALL ASSEMBLIES TO BE PER FLOOR PLAN.
- DOORS AND WINDOWS TO BE PER APPLICABLE SCHEDULE. REFER TO FLOOR PLANS FOR IDENTIFICATION.
- INSULATION: REFER TO TITLE 24 REPORT AND "INSULATION" NOTES ON SHEET FOR ADDITIONAL RATINGS, REQUIREMENTS, AND INFORMATION.
- SECTION R302.1.1:

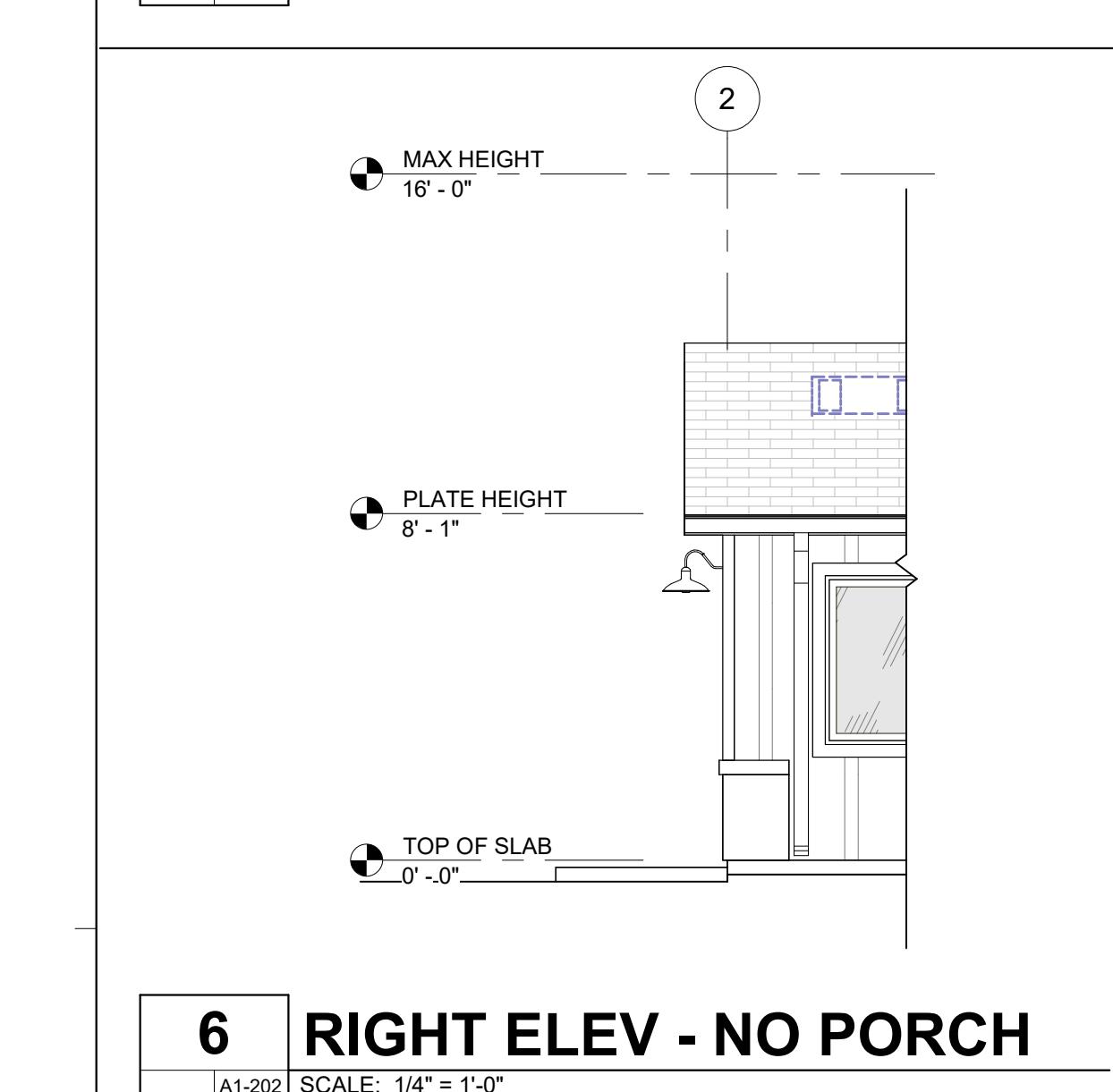
 1. FIREBLOCKING SHALL BE PROVIDED IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS:
 1. VERTICALLY AT CEILING AND FLOOR LEVELS
 2. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET.
 2. AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS SOFFITS, DROP CEILINGS AND COVE CEILINGS.
 3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN, ENCLOSED SPACES UNDER STAIRS SHALL COMPLY WITH SECTION R302.7.
 4. AT OPENINGS AND VENTS, DUCTS, DUCTS, CABLES AND WIRES AT CEILINGS AND FLOOR LEVELS WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME PRODUCTS OF COMBUSTION. THE MATERIAL FILLING THIS ANNUAL SPACE SHALL NOT BE REQUIRED TO MEET THE ASTM E136 REQUIREMENTS.
 5. FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES, SEE SECTION R103.19.
 6. FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING-UNIT SEPARATION. IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

THESE PLANS ARE PROVIDED BY THE CITY OF LAGUNA NIGUEL AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN. THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONSTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

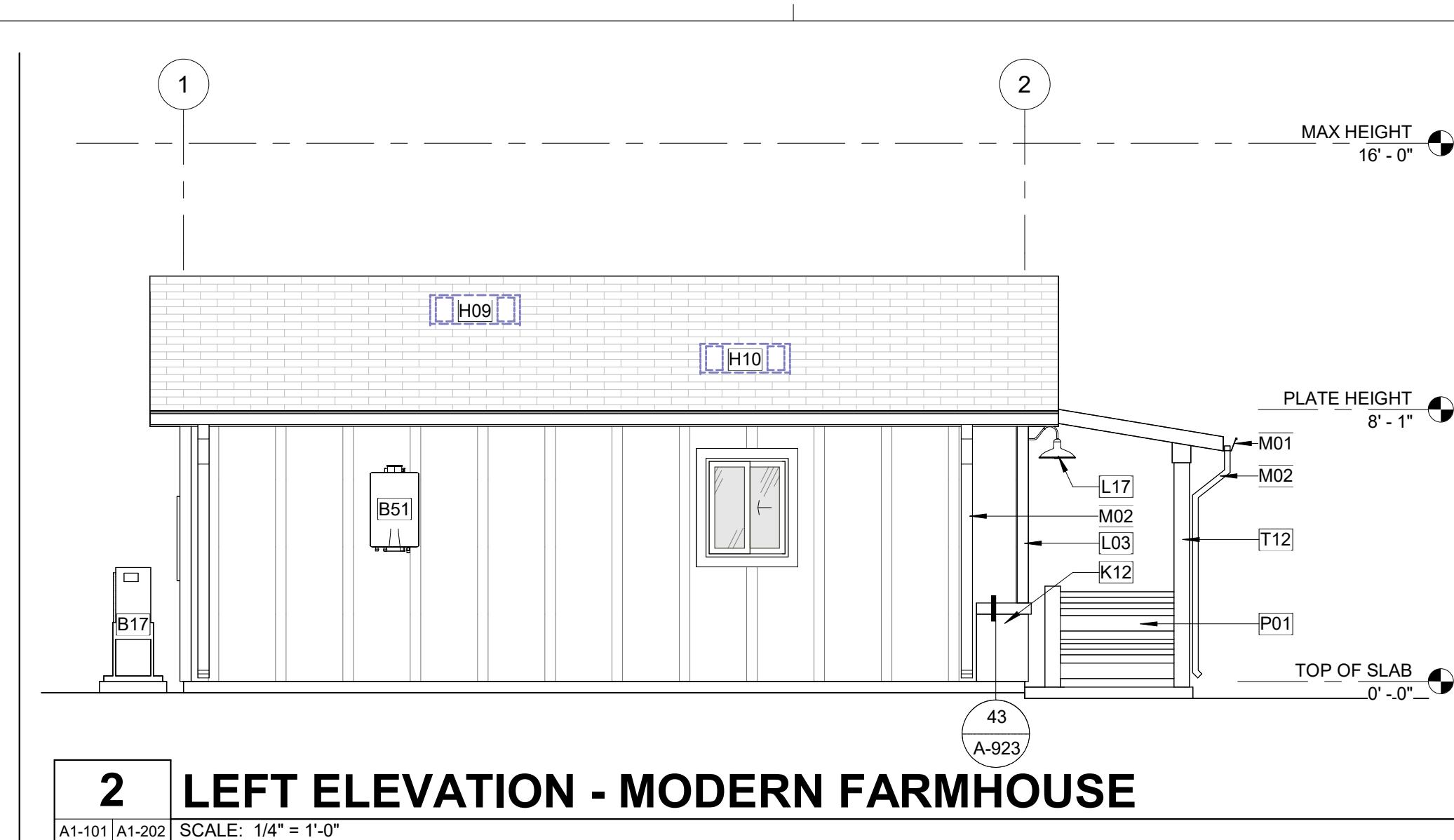




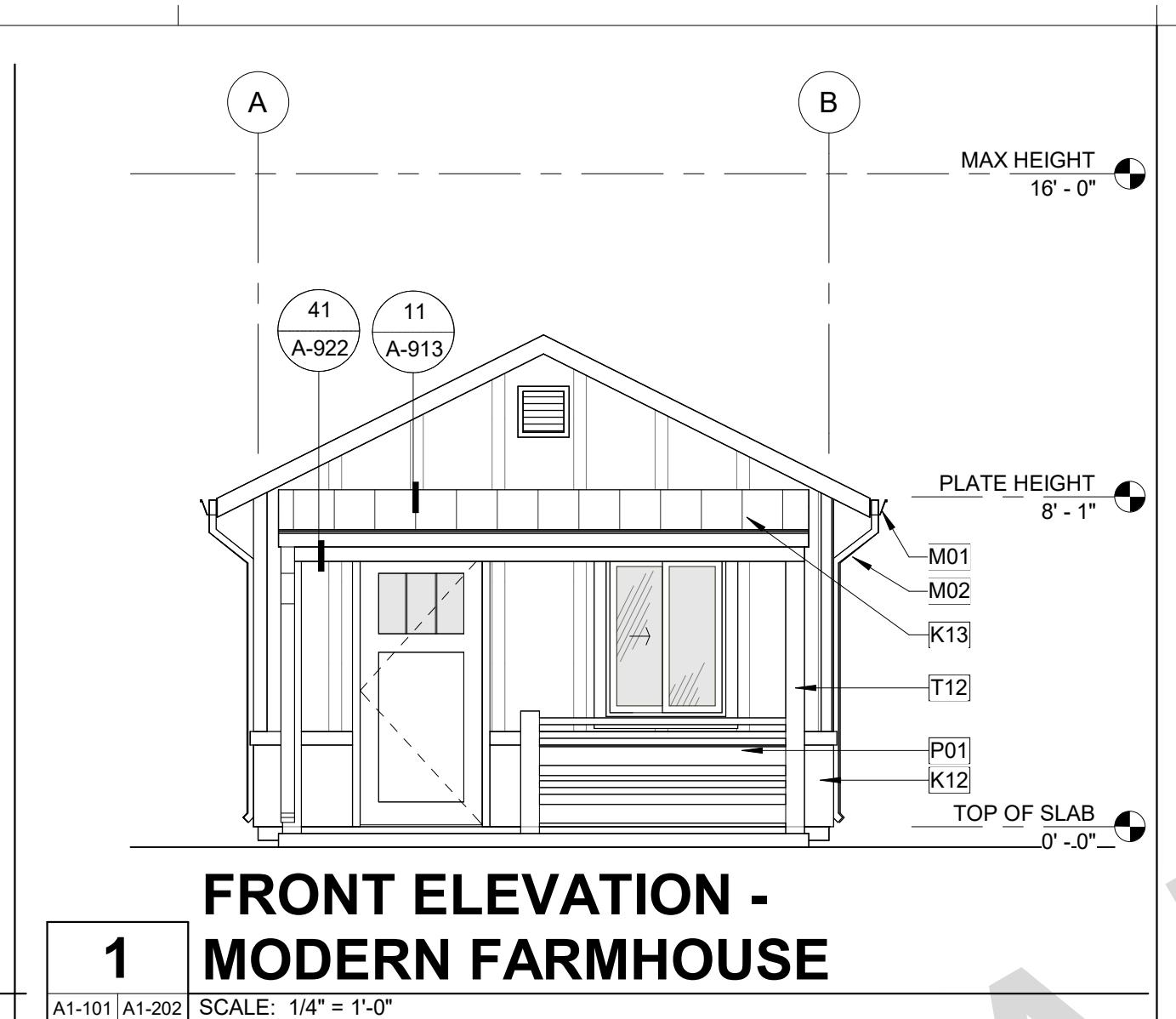
3 FRONT ELEV - NO PORCH



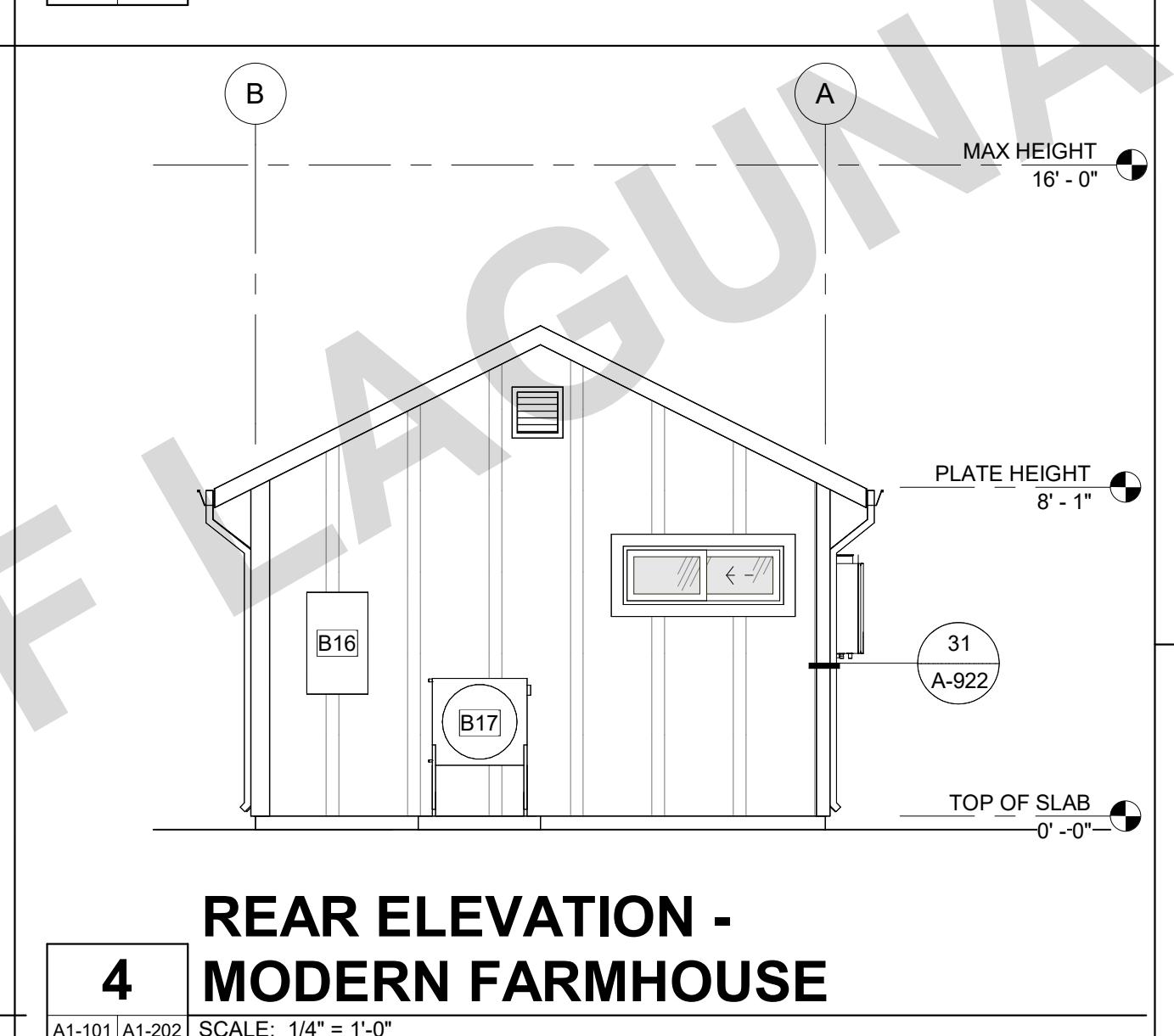
6 RIGHT ELEV - NO PORCH



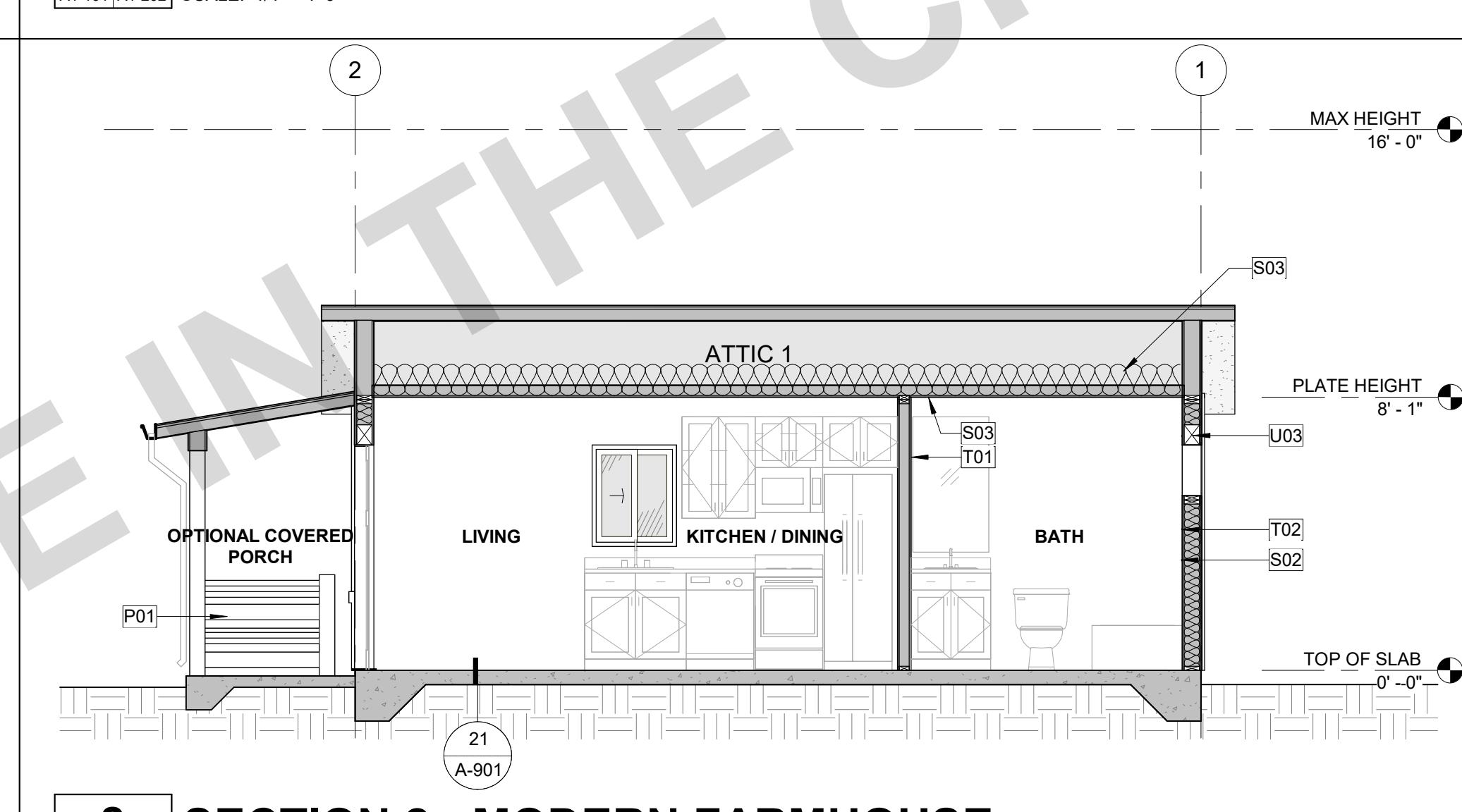
2 LEFT ELEVATION - MODERN FARMHOUSE



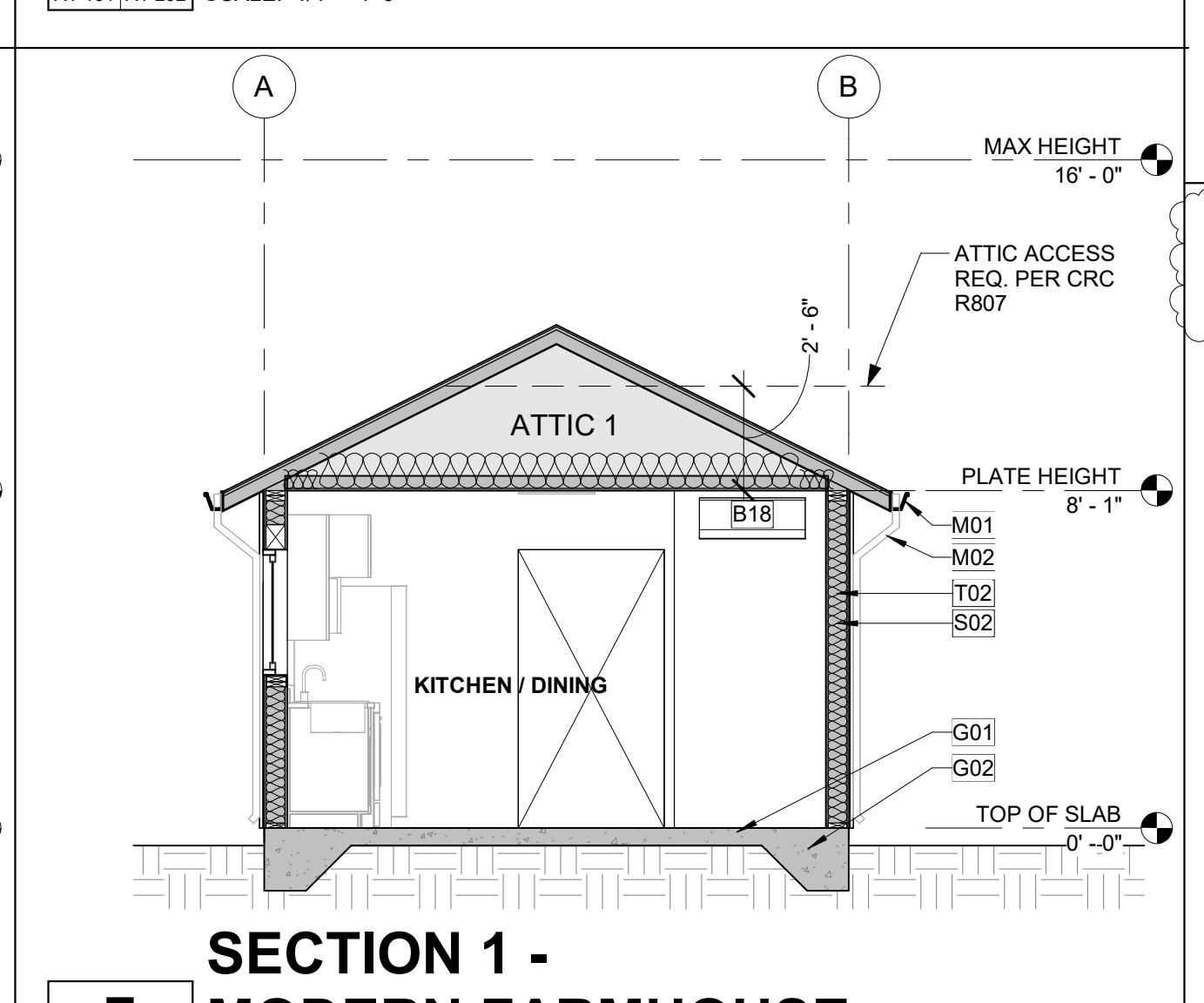
1 FRONT ELEVATION - MODERN FARMHOUSE



4 REAR ELEVATION - MODERN FARMHOUSE



9 SECTION 3 - NO PORCH



7 SECTION 1 - MODERN FARMHOUSE

GRAPHICS LEGEND: (SEE TITLE SHEET; STRIKE THROUGH NON-USED OPTIONS)		OWNER/APP. TO PROVIDE SIZE, MFR, COLOR/FINISH SPECIFICATIONS. *WHEN WUI IS REQUIRED (SEE G-001) PROVIDE PRODUCT LISTINGS.	COLOR/FINISH:	
	BOARD & BATTEN SIDING 4" MIN. TO 15" MAX. BOARD EXPOSURE A) FIBER CEMENT (PER CRC R703.10) B) WOOD SIDING (PER CRC 703.53)		SIDING:	
	STUCCO WAINSCTO LATH & PLASTER		TRIM:	
	ASPHALT COMPOSITE ROOF SHINGLES - CLASS C MIN. REQ. - CLASS A REQ FOR WUI ROOF REFLECTANCE (0.1) MIN. ROOF EMITTANCE (0.85) MIN. (SHALL COMPLY WITH CRC R905.2.4, CRC R905.1.1(1), TABLE R905.1.1(2) & ASTM D3462)			
	EAVES, RAKES, & EXT. SOFFIT MATERIAL (SEE REFLECTED CEILING PLAN & DETAILS) A) EXT. T&G (NOTE: 1X T&G REQUIRES TYPE X GYP. FOR WUI COMPLIANCE) B) FIBER CEMENT C) EXT. GRADE FIRE RATED PLYWOOD			

MATERIALS LEGEND BOARD & BATTEN

NOTES:

- SEE TITLE SHEET FOR MATERIAL SELECTIONS. APPLICANT OR OWNER TO PROVIDE SIZES, MANUFACTURER, AND COLOR/FINISH SPECIFICATIONS.
- ALL MATERIALS SELECTIONS SHALL COMPLY WITH CRC SECTION R703.
- A PROJECT SITE LOCATED WITHIN WUI SHALL COMPLY WITH THE CRC SECTION R337. IF WUI APPROVED PRODUCTS ARE REQUIRED, PROVIDE SELECTED PRODUCT LISTINGS IN THE SPACES PROVIDED.
- ALL PRODUCT LISTINGS CAN BE FOUND IN THE (CURRENT) CAL-FIRE STATE FIRE MARSHAL LISTED WILDLAND URBAN INTERFACE WUI PRODUCT HANDBOOK.
- (ALTERNATIVELY, IF PROJECT SITE REQUIRES WUI COMPLIANCE, AND THE PRODUCT SELECTIONS ARE NOT BML LISTED, NOR IN THE HANDBOOK, MATERIALS SHALL COMPLY WITH THE PRESCRIPTIVE STANDARDS OF CHAPTER 7A. INDICATE IN THE MATERIALS LEGEND WHEN THIS OCCURS AND PROVIDE DOCUMENTATION OF COMPLIANCE FOR APPROVAL.)

SECTIONS GENERAL NOTES

- THE PURPOSE OF THESE DRAWINGS IS TO SHOW CONSTRUCTION MATERIALS/ASSEMBLIES. FOR SPECIFIC SIZES AND DETAILS REFER TO ARCHITECTURAL PLANS, ELEVATIONS, DETAILS, AND STRUCTURAL PLANS. KEYNOTES ONLY APPLY IF REFERENCED ON PLANS.
- WALL ASSEMBLIES TO BE PER FLOOR PLAN.
- DOORS AND WINDOWS TO BE PER APPLICABLE SCHEDULE. REFER TO FLOOR PLANS FOR IDENTIFICATION.
- INSULATION: REFER TO TITLE 24 REPORT AND "INSULATION" NOTES ON SHEET FOR ADDITIONAL RATINGS, REQUIREMENTS, AND INFORMATION.
- SECTION LOCATIONS TO BE LOCATED PER CRC SECTION R302.11:
 1. FIREBLOCKING SHALL BE PROVIDED IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS:
 1. VERTICALLY AT CEILING AND FLOOR LEVELS.
 2. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET.
 2. AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS SOFFITS, DROP CEILINGS AND COVE CEILINGS.
 3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND CLOSET SPACES UNDER STAIRS SHALL COMPLY WITH SECTION R302.7.
 4. AT OPENINGS AND TRENCHES, DUCTS, CABLES, WIRES AT CEILINGS AND FLOOR LEVELS WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME PRODUCTS OF COMBUSTION. THE MATERIAL FILLING THIS ANNULAR SPACE SHALL NOT BE REQUIRED TO MEET THE ASTM E136 REQUIREMENTS.
 5. FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES, SEE SECTION R1003.19.
 6. FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING-UNIT SEPARATION.
- SECTION R302.11. FIREBLOCKING MATERIALS SHALL CONSIST OF FOLLOWING MATERIALS:
 1. TWO-INCH NOMINAL LUMBER.
 2. TWO THICKNESSES OF ONE-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS.
 3. THE THICKNESS OF 0.719-INCH WOOD STRUCTURAL PANELS WITH JOINTS BACKED BY 0.719-INCH WOOD STRUCTURAL PANELS.
 4. THE THICKNESS OF 0.75-INCH PARTICLE BOARD WITH JOINTS BACKED BY 0.75-INCH PARTICLE BOARD.
 5. ONE-HALF-INCH GYPSUM BOARD.
 6. ONE-FOURTH-INCH CEMENT-BASED MILLBOARD.
 7. BATTs OR BLANKETS OF MINERAL WOOL, MINERAL FIBER OR OTHER APPROVED MATERIAL INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE.
 8. CELLULOSE INSULATION INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E139 OR UL 263, FOR THE SPECIFIC APPLICATION.
- PER CRC SECTION R317.11, EXTERIOR WALLS, ROOF, OR MASONRY SURFACES THAT IS IN DIRECT CONTACT WITH GROUND, UNLESS SEPARATED BY AN IMPERVIOUS MOISTURE BARRIER SHALL BE NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD IN ACCORDANCE WITH AWPA U1.
- REFER TO RCP'S FOR SOFFIT DIMENSIONS AND FURTHER INFORMATION.
- PROVIDE BLOCKING FOR ALL WALLS WHERE WALL HUNG EQUIPMENT AND FIXTURES OCCUR.
- ALL WALL AND CEILING FINISHES SHALL COMPLY WITH CRC 803.13 FOR MAXIMUM FLAME SPREAD AND SMOKE DENSITY.



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GENERAL ELEVATION NOTES

- REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS. SEE DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- REFER TO ROOF PLAN FOR OVERHANGS, FASCIA PER DETAILS. PROVIDE ALUMINUM GUTTER. SEE ROOF PLAN FOR APPROXIMATE DOWNSPOUT LOCATIONS, U.N.O.
- REFER TO DOOR AND WINDOW SCHEDULES AND TYPES FOR DOOR AND WINDOW INFORMATION.
- THE NOMINAL THICKNESS AND ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE IN ACCORDANCE WITH CRC TABLE R703.3(1).
- GYPSUM SHEATHING SHALL BE ATTACHED TO EXTERIOR WALLS IN ACCORDANCE WITH CRC TABLE R603.1.
- CLADDING ATTACHMENT OVER FOAM SHEATHING TO WOOD FRAMING IN ACCORDANCE WITH CRC R703.15. REFER TO CRC R703.8 FOR ANCHORED MASONRY OR STONE VENEER INSTALLED OVER FOAM SHEATHING.

KEYNOTES

B16 ELECTRIC PANEL LOCATION. PROVIDE PROTECTION PER CPC 507.25 & CMC 305.1.1, SEE GENERAL MEP NOTES 7 & 8 ON SHEET A-111 FOR MORE INFO.

B17 MULTI-ZONE HEAT PUMP CONDENSER UNIT. REFER TO PLANS FOR LOCATION OF INDOOR FAN CON UNITS. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION. PROVIDE CONCRETE PAD MIN. 6" LARGE ENOUGH IN EACH DIRECTION, 3" MIN. ABOVE GRADE. PROVIDE PROTECTION PER CPC 507.25 & CMC 305.1.1. SEE GENERAL MEP NOTES 7 & 8 ON SHEET A-111 FOR MORE INFO. SEE DETAIL 53/A-902.

B18 FAN COIL @ 80' A.F.F. TO BOTTOM OF UNIT. PROVIDE DEDICATED WALL OUTLET, INSTALL PER MANUFACTURER'S SPECIFICATIONS. REFER TO PLANS FOR LOCATION OF OUTDOOR CONDENSING UNIT. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION.

B51 TANKLESS WATER HEATER.

G01 4" CONCRETE SLAB ON GRADE. REFER TO STRUCTURAL PLANS CONCRETE FOOTING, REFER TO STRUCTURAL PLANS

G02 ATTIC VENT (HIGH): VENTILENTS SHALL BE LOCATED NOT MORE THAN 3 FEET FROM THE PEAK OR HIGHEST POINT OF THE SPACE, MEASURED VERTICALLY. PAINT FINISH TO MATCH ROOF COLOR. SEE VENTING CALCS.

H09 ATTIC VENT (LOW): LOWER VENTS SHALL BE LOCATED IN THE BOTTOM ONE-THIRD OF THE ATTIC SPACE PER R906.2 EXCEPTION 2. PROVIDE DAMPER TO PROVIDE 1" CLR. AIRSPACE WHERE REQ. PAINT FINISH TO MATCH ROOF COLOR. SEE VENTING CALCS.

H10 STUCCO VENEER WAINTSCOT, SEE DETAIL XX & XXA/XXX FOR DETAILS AND SEE MATERIALS LEGEND FOR MORE INFORMATION.

K12 STANDING SEAM METAL ROOF. SEE MATERIALS LEGEND FOR MORE INFORMATION.

L03 HORIZONTAL TRIM. SEE DETAILS FOR MORE INFORMATION.

L17 EXTERIOR LIGHT. SEE DETAILS FOR MORE INFORMATION.

M01 GUTTER. CONNECT TO DOWNSPOUT. PROVIDE MEANS TO PREVENT ACCUMULATION OF LEAVES AND DEBRIS IN GUTTER PER CRC R337.5.4. SEE DETAIL 12/A-903.

M02 DOWNSPOUT TO SPLASH BLOCK BELOW. SEE DETAIL 43/A-904.

P01 DECORATIVE PORCH RAILING. HEIGHT OF 24" MIN. TO 48" MAX. REQUIRE FOR WOOD, PRIMER & 2 COATS OF EXTERIOR GRADE PAINT. REQUIRED 30 INCHES MAX VERTICAL DROP IS PROHIBITED WITHIN 36 INCHES (HORIZONTALLY) OF THE PORCH. SEE DETAIL FOR MORE INFORMATION.

S02 EXTERIOR WALL INSULATION. REFER TO TITLE 24 (R-21 MIN.) R-30 MIN ROOF INSULATION. RADIANT BARRIER REQUIRED (VERIFY WITH TITLE 24 REPORT).

S03 2X4 WOOD STUD WALL. REFER TO STRUCTURAL.

T01 2X6 WOOD STUD WALL. REFER TO STRUCTURAL.

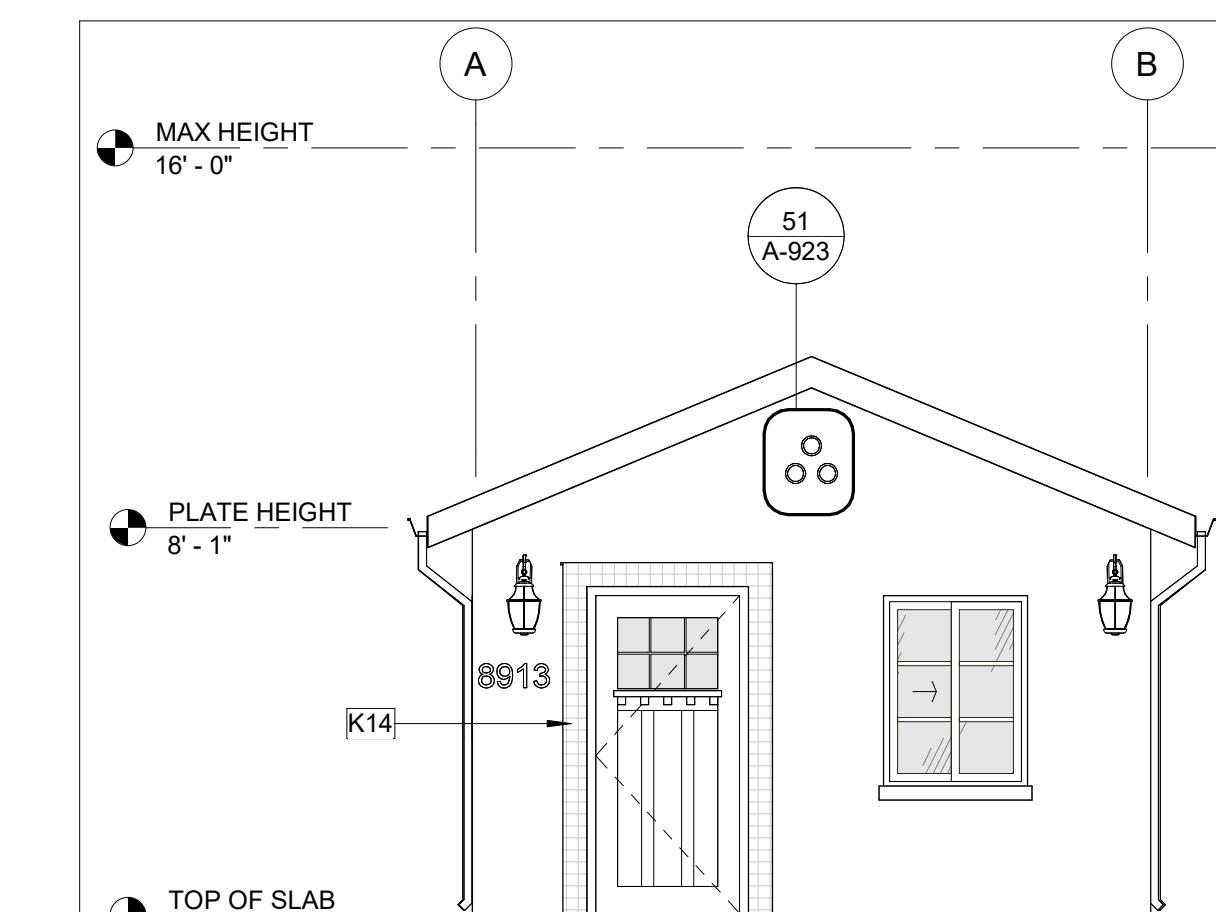
T02 WOOD POST. SEE STRUCTURAL - REQUIRED: PRIMER & 2 COATS OF EXTERIOR GRADE PAINT.

T12 WOOD BEAM / HEADER. REFER TO STRUCTURAL.

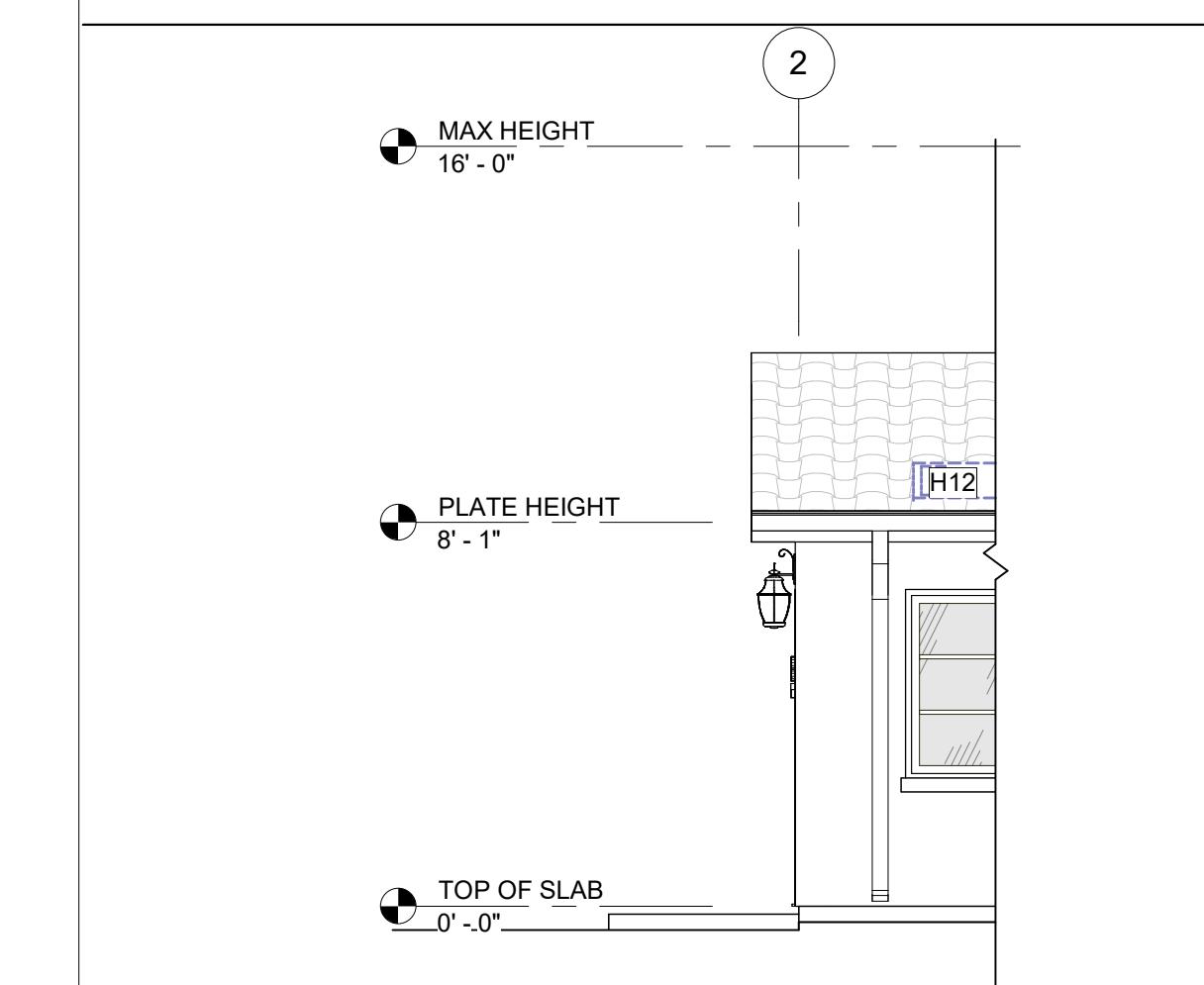
U03

PRE-APPROVED ADU
CITY OF LAGUNA NIGUEL
ELEVATIONS & SECTIONS -
MODERN FARMHOUSE

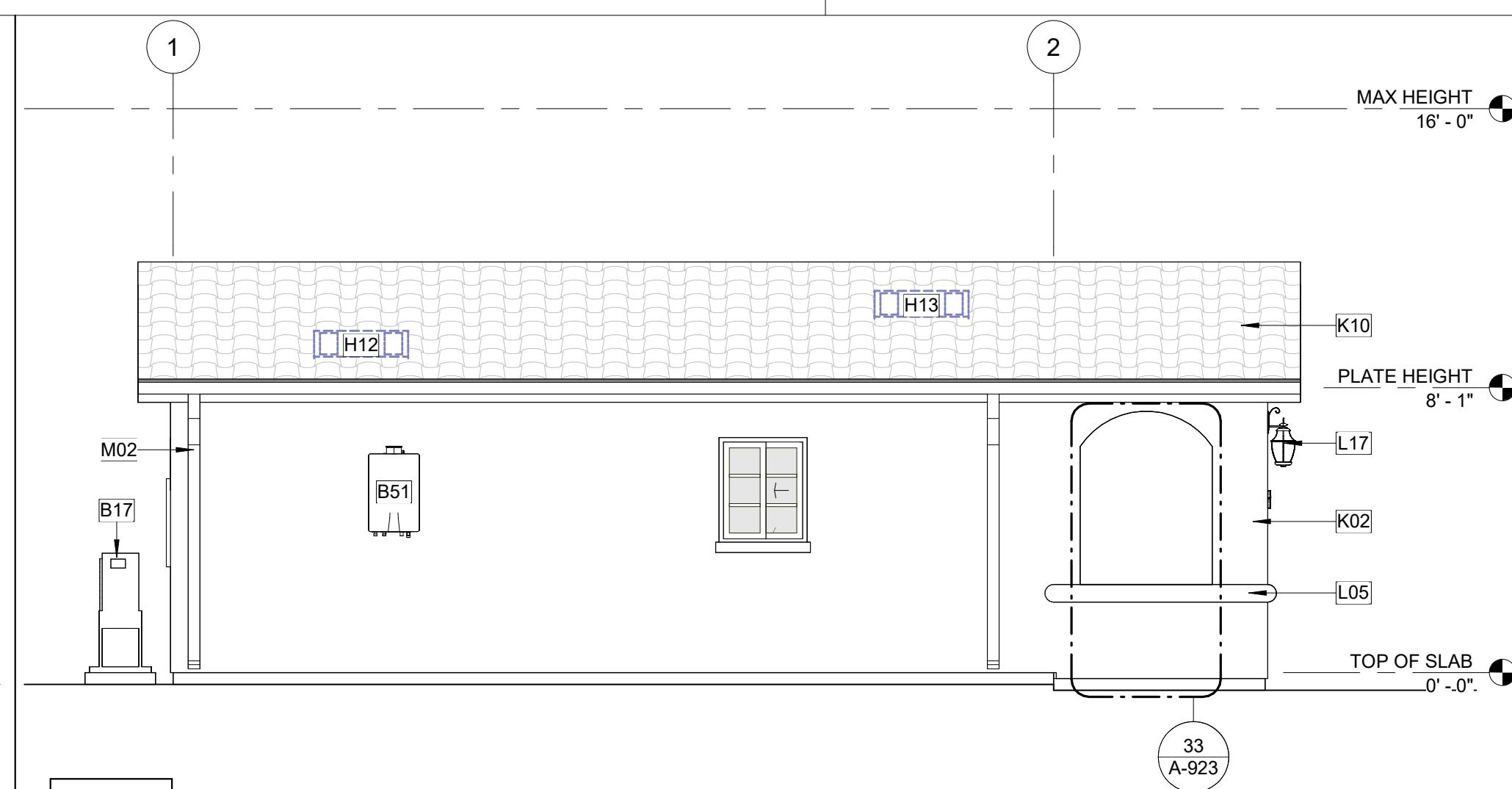
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DATE 02/05/2025
SHEET A1-202



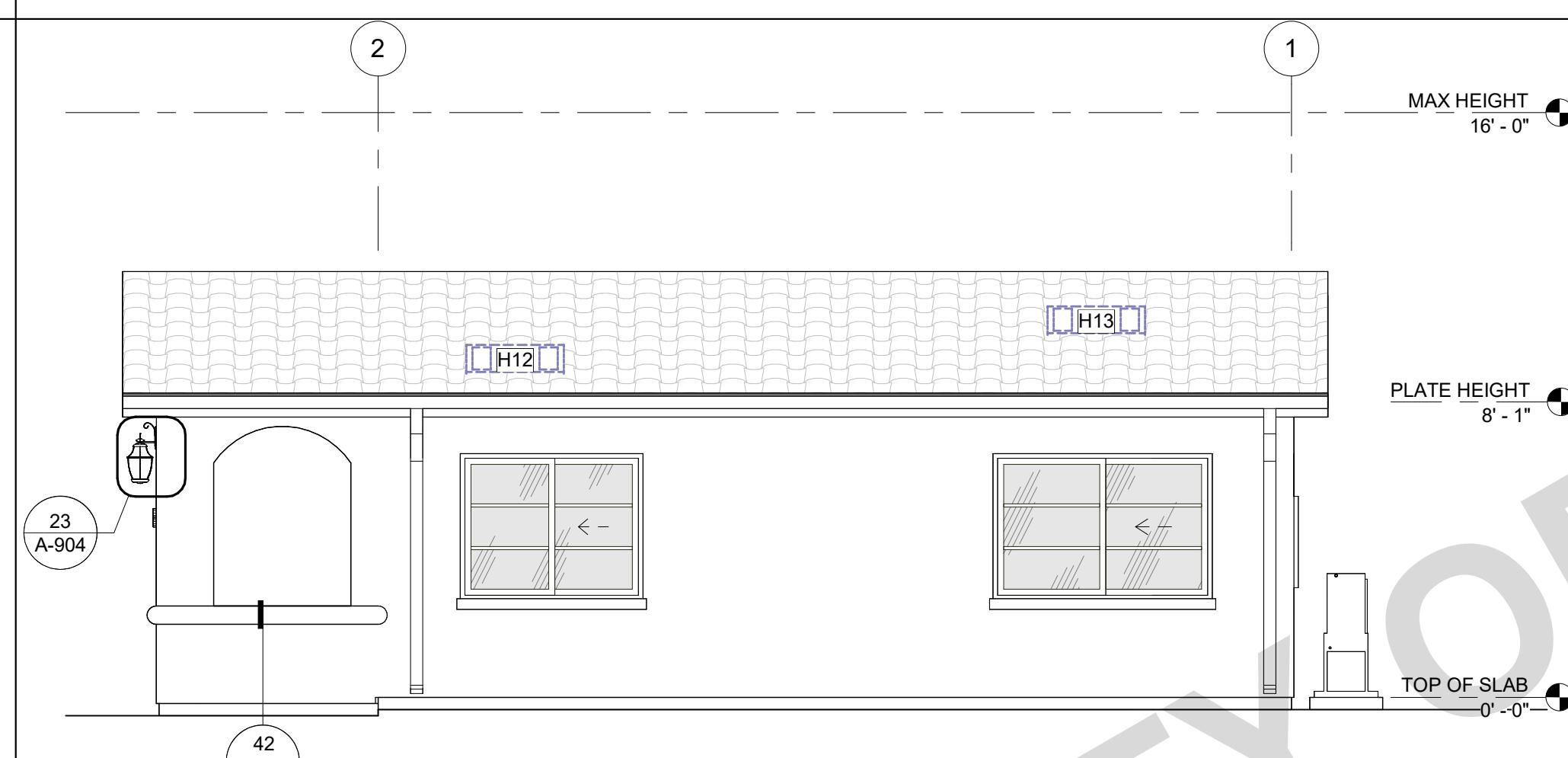
3 FRONT ELEV - NO PORCH



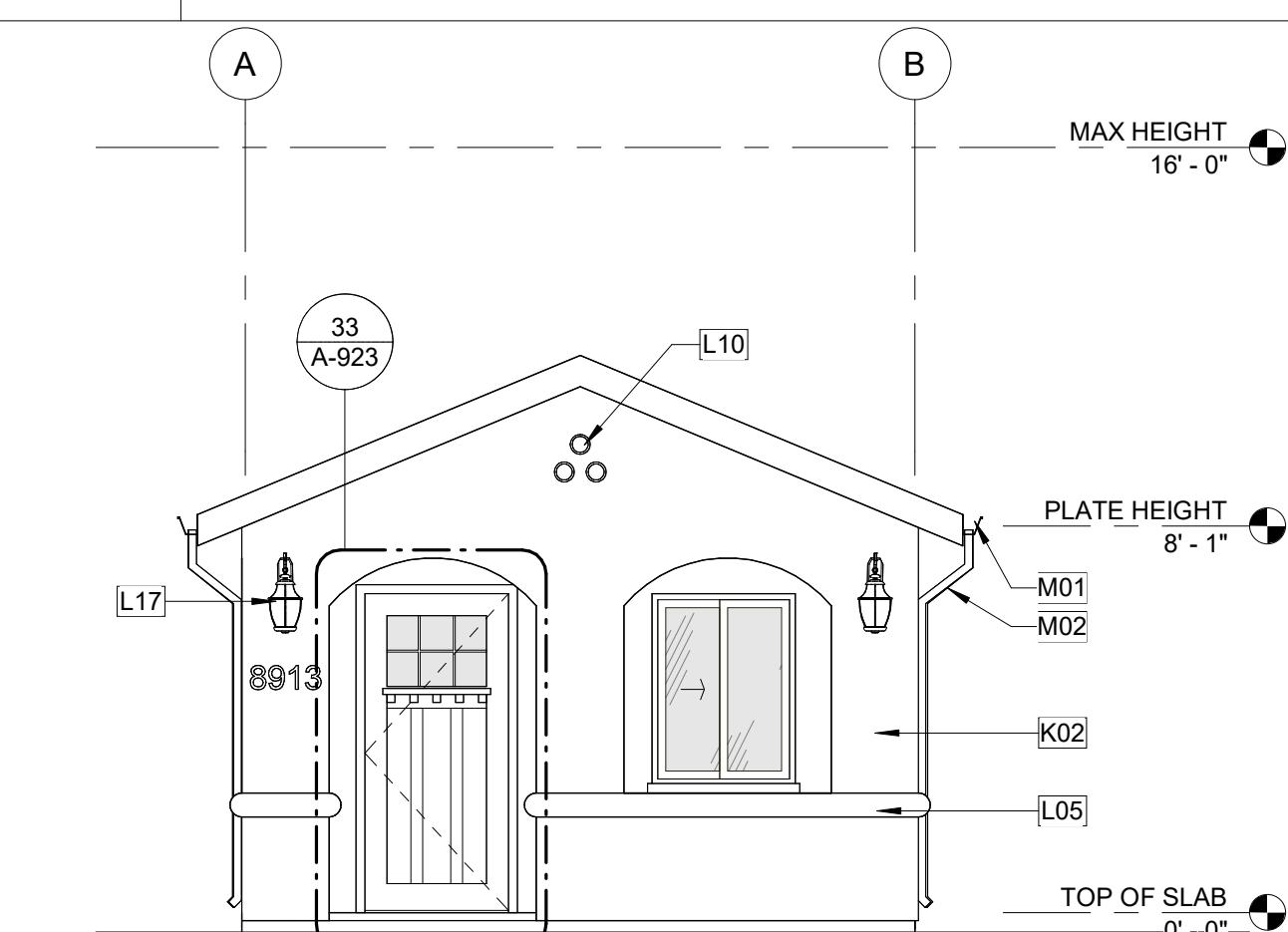
6 RIGHT ELEV - NO PORCH



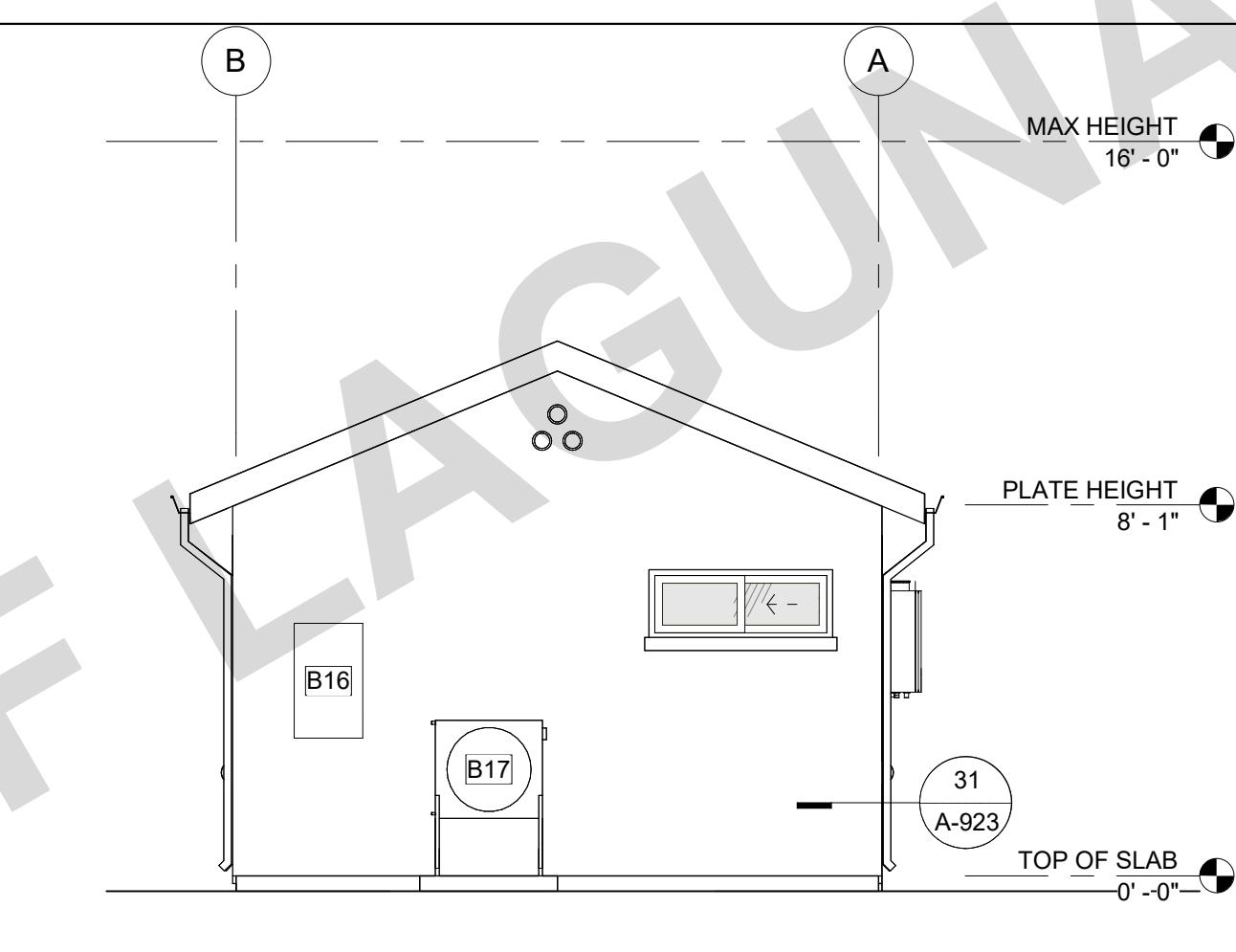
2 LEFT ELEVATION - MEDITERRANEAN



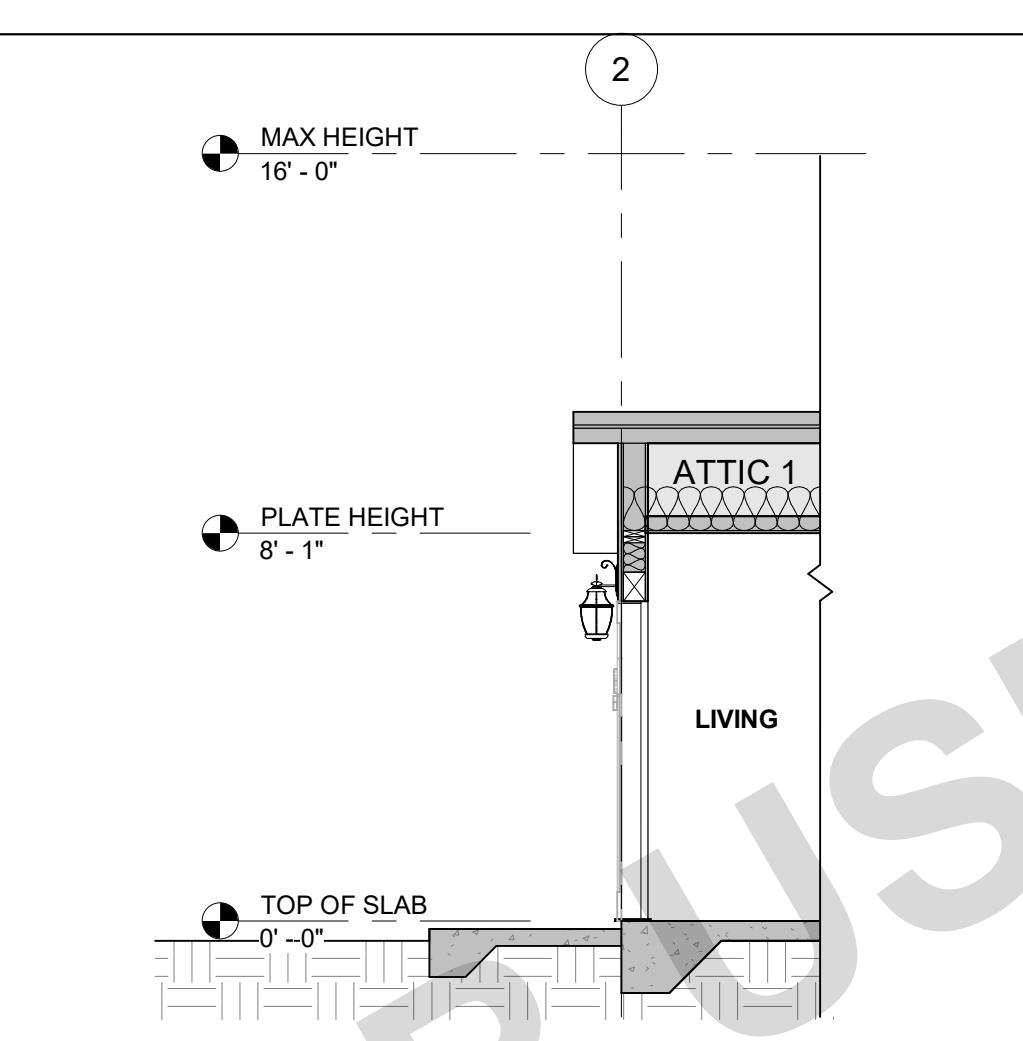
5 RIGHT ELEVATION - MEDITERRANEAN



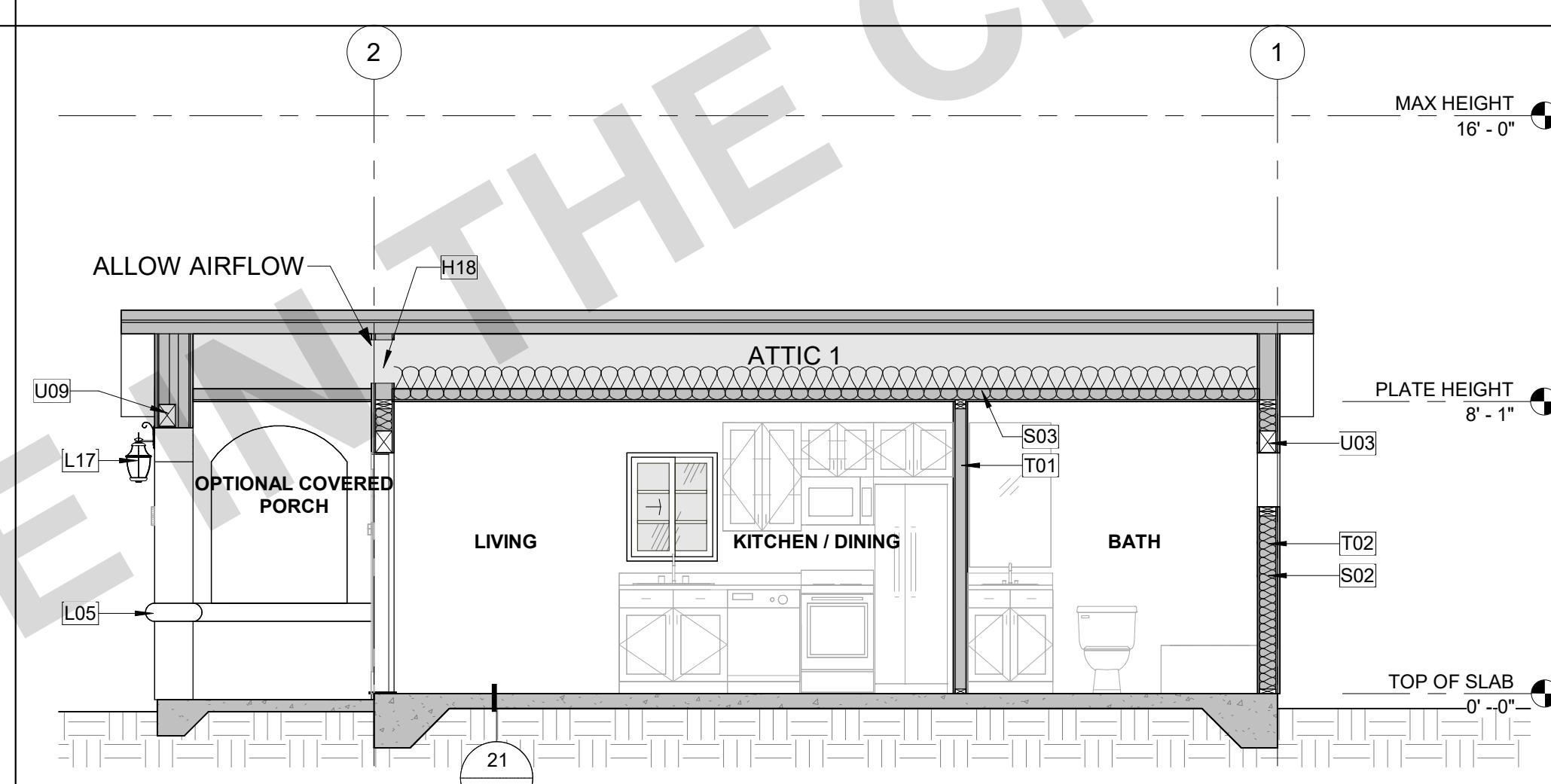
1 FRONT ELEVATION - MEDITERRANEAN



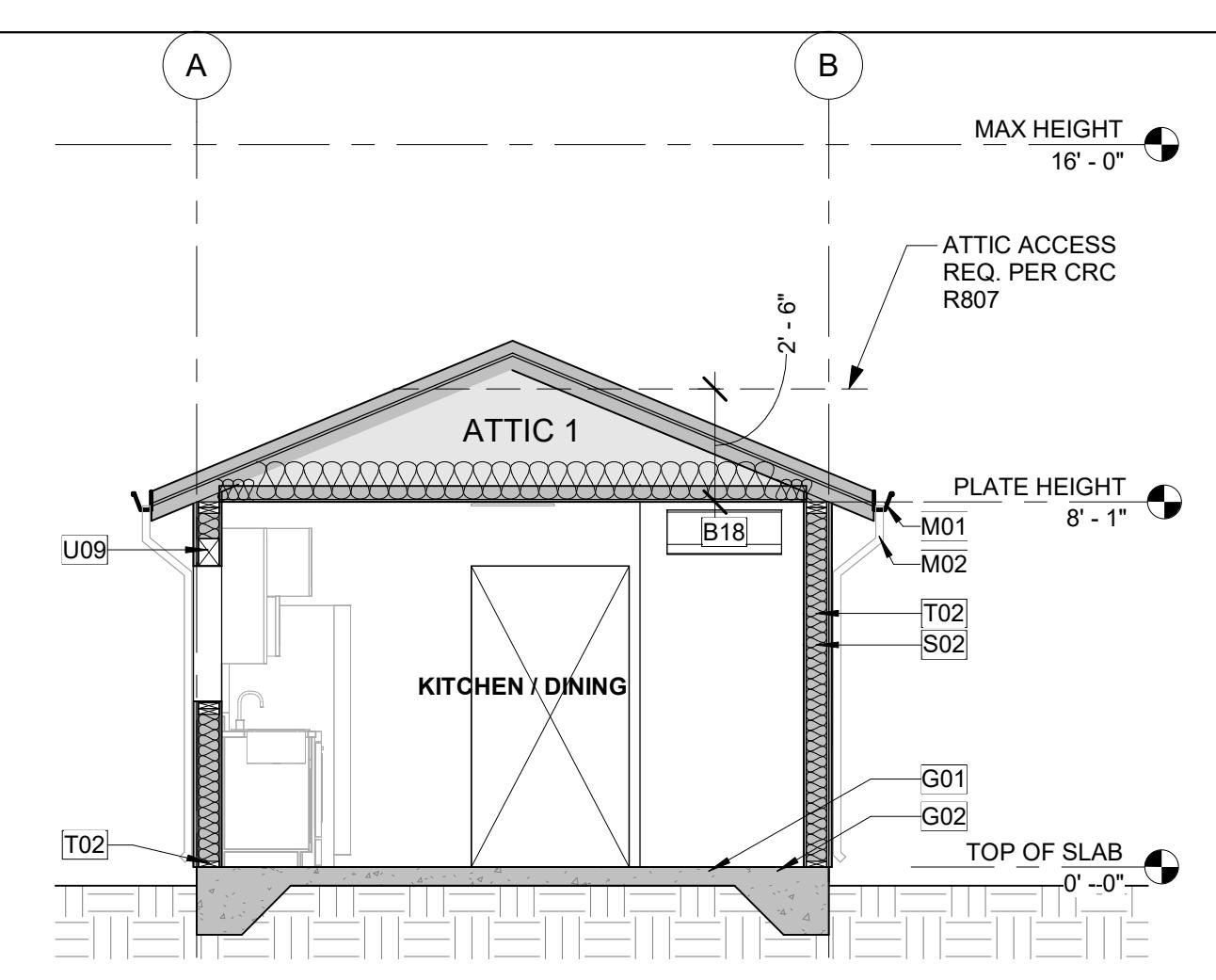
4 REAR ELEVATION - MEDITERRANEAN



9 SECTION 3 - NO PORCH



8 SECTION 2 - MEDITERRANEAN



7 SECTION 1 - MEDITERRANEAN

MATERIALS LEGEND MEDITERRANEAN

NOTES:

- SEE TITLE SHEET FOR MATERIAL SELECTIONS. APPLICANT OR OWNER TO PROVIDE SIZES, MANUFACTURER, AND COLOR/FINISH SPECIFICATIONS.
- ALL MATERIAL SELECTIONS SHALL COMPLY WITH CRC SECTION R703.
- ALL MATERIAL SELECTIONS IN THIS PLAN SHALL COMPLY WITH THE CRC SECTION R307. IF WUI APPROVED PRODUCTS ARE REQUIRED, PROVIDE SELECTED PRODUCT LISTINGS IN THE SPACES PROVIDED.
- APPROVED PRODUCT LISTINGS CAN BE FOUND IN THE (CURRENT) CAL-FIRE STATE FIRE MARSHAL LISTED WILDLAND URBAN INTERFACE WUI PRODUCT HANDBOOK.
- (ALTERNATIVELY), IF PROJECT SITE REQUIRES WUI COMPLIANCE, AND THE PRODUCT SELECTIONS ARE NOT BML LISTED, NOR IN THE HANDBOOK, MATERIALS SHALL COMPLY WITH THE PRESCRIPTIVE STANDARDS OF CHAPTER 7A. INDICATE IN THE MATERIALS LEGEND WHEN THIS OCCURS AND PROVIDE DOCUMENTATION OF COMPLIANCE FOR APPROVAL.

GRAPHICS LEGEND: (SEE TITLE SHEET; STRIKE THROUGH NON-USED OPTIONS)	OWNER/APP. TO PROVIDE SIZE, MFR, COLOR/FINISH SPECIFICATIONS. *WHEN WUI IS REQUIRED (SEE G-001) PROVIDE PRODUCT LISTINGS:	COLOR/FINISH:
	CEMENT PLASTER STUCCO SIDING (PER CRC R703.7)	SIDING: TRIM:
	S-TILE ROOF - CLASS C MIN. REQ. MAXIMUM WEIGHT 10 PSF. ROOF REFLECTANCE (.01) MIN. ROOF EMITTANCE (.05) MIN. (SHALL COMPLY WITH CRC R905.1, CRC R905.3)	
	SOFFIT MATERIAL (SEE REFLECTED CEILING PLAN & DETAILS) A) EXT. T&G (NOTE: 1X T&G REQUIRES TYPE X GYP. FOR WUI COMPLIANCE) B) EXT. GRADE FIRE RATED PLYWOOD	

SECTIONS GENERAL NOTES

- THE PURPOSE OF THESE DRAWINGS IS TO SHOW CONSTRUCTION MATERIALS/ASSEMBLIES. FOR SPECIFIC SIZES AND DETAILS REFER TO ARCHITECTURAL PLANS, ELEVATIONS, DETAILS, AND STRUCTURAL PLANS. *KEYNOTES ONLY APPLY IF REFERENCED ON PLANS.
- WALL ASSEMBLIES TO BE PER FLOOR PLAN.
- DOORS AND WINDOWS TO BE PER APPLICABLE SCHEDULE. REFER TO FLOOR PLANS FOR IDENTIFICATION.
- INSULATION: REFER TO TITLE 24 REPORT AND *INSULATION* NOTES ON SHEET FOR ADDITIONAL RATINGS, REQUIREMENTS, AND INFORMATION.
- SECTION R302.11:

1. FIREBLOCKING SHALL BE PROVIDED IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS:
1. VERTICALLY AT CEILING AND FLOOR LEVELS
2. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET.
2. AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS SOFFITS, DROP CEILINGS AND COVE CEILINGS.
3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN ENCLOSED SPACES UNDER STAIRS SHALL COMPLY WITH SECTION R302.7.
4. AT OPENINGS AND DENTILS, DRAINS, DUCTS, CABLES AND WIRES AT CEILINGS AND FLOOR LEVELS WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME PRODUCTS OF COMBUSTION. THE MATERIAL FILLING THIS ANNULAR SPACE SHALL NOT BE REQUIRED TO MEET THE ASTM E136 REQUIREMENTS.
5. FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES, SEE SECTION R1003.19.
6. FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING-UNIT SEPARATION.

- B. SECTION R302.11.1: FIREBLOCKING MATERIALS SHALL CONSIST OF FOLLOWING MATERIALS:
1. TWO-INCH NOMINAL LUMBER
2. TWO-INCHES OF ONE-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS
3. THE THICKNESS OF 0.719-INCH WOOD STRUCTURAL PANELS WITH JOINTS BACKED BY 0.719-INCH WOOD STRUCTURAL PANELS
4. THE THICKNESS OF 0.75-INCH PARTICLE BOARD WITH JOINTS BACKED BY 0.75-INCH PARTICLE BOARD
5. ONE-HALF-INCH GYPSUM BOARD
6. ONE-FOURTH-INCH CEMENT-BASED MILLBOARD
7. Batts or blankets of mineral wool, mineral fiber or other approved material installed in such a manner as to be securely retained in place
8. CELLULOSE INSULATION INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E19 OR UL 263, FOR THE SPECIFIC APPLICATION.

6. PER CRC R302.11.1, EXTERIOR WALLS, ROOF, OR MASONRY SURFACES THAT IS IN DIRECT CONTACT WITH GROUND, UNLESS SEPARATED BY AN IMPERVIOUS MOISTURE BARRIER SHALL BE NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD IN ACCORDANCE WITH AWPA U1.
7. REFER TO RCP5 FOR SOFFIT DIMENSIONS AND FURTHER INFORMATION.
8. PROVIDE BLOCKING FOR ALL WALLS WHERE WALL HUNG EQUIPMENT AND FIXTURES OCCUR.
9. ALL WALL AND CEILING FINISHES SHALL COMPLY WITH CRC 803.13 FOR MAXIMUM FLAME SPREAD AND SMOKE DENSITY.



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GENERAL ELEVATION NOTES

- REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
- REF. DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- REFER TO ROOF PLAN FOR OVERHANGS, FASCIA PER DETAILS. PROVIDE ALUMINUM GUTTER. SEE ROOF PLAN FOR APPROXIMATE DOWNSPOUT LOCATIONS, U.N.C.
- REFER TO DOOR AND WINDOW SCHEDULES AND TYPES FOR DOOR AND WINDOW INFORMATION.
- THE NOMINAL THICKNESS AND ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE IN ACCORDANCE WITH CRC TABLE R703.3(1).
- GYPSUM SHEATHING SHALL BE ATTACHED TO EXTERIOR WALLS IN ACCORDANCE WITH CRC TABLE R602.3.
- CLADDING ATTACHMENT OVER FOAM SHEATHING TO WOOD FRAMING IN ACCORDANCE WITH CRC R703.15. REFER TO CRC R703.8 FOR ANCHORED MASONRY OR STONE VENEER INSTALLED OVER FOAM SHEATHING.

KEYNOTES

B16 ELECTRIC PANEL LOCATION. PROVIDE PROTECTION PER CPC 507.25 & CMC 305.1.1, SEE GENERAL MEP NOTES 7 & 8 ON SHEET A-111 FOR MORE INFO.

B17 MULTI-ZONE HEAT PUMP CONDENSER UNIT. REFER TO PLANS FOR LOCATION OF INDOOR FAN CON UNITS. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION. PROVIDE CONCRETE PAD MIN. 6" LARGER THAN UNIT IN EACH DIRECTION, 3" MIN. ABOVE GRADE. PROVIDE PROTECTION PER CPC 507.25 & CMC 305.1.1, SEE GENERAL MEP NOTES 7 & 8 ON SHEET A-111 FOR MORE INFO. SEE DETAIL 53/A-902.

B18 FAN COIL @ 80° A.F.F. TO BOTTOM OF UNIT. PROVIDE DEDICATED WALL COAT. INSTALL PER MANUFACTURER'S SPECIFICATIONS. REFER TO PLANS FOR LOCATION OF OUTDOOR CONDENSING UNIT. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION.

B51 TANKLESS WATER HEATER.

G01 4" CONCRETE SLAB ON GRADE. REFER TO STRUCTURAL PLANS.

G02 CONCRETE FOOTING. REFER TO STRUCTURAL PLANS.

H12 ATTIC VENT (HIGH). ATTIC VENTING OPTION B. STRIKE THROUGH IF NOT USED. SEE VENTING CALCS.

H13 ATTIC VENT (LOW). ATTIC VENTING OPTION B. STRIKE THROUGH IF NOT USED. SEE VENTING CALCS.

H18 WHERE AIRFLOW IS BLOCKED BY SHEAR PANEL, PROVIDE MINIMUM OF 12X12" BLOCKED OPENING TO PROVIDE CROSS-VENTILATION.

K02 STUCCO SIDING. SEE MATERIALS LEGEND FOR MORE INFORMATION.

K10 S-TYPE CLAY ROOF TILE. ROOF REFLECTANCE (.1) MIN. ROOF EMITTANCE (.05) MIN. SEE MATERIALS LEGEND FOR MORE INFORMATION.

K14 MEDITERRANEAN STYLE DECORATIVE TILE DOOR SURROUND; WIDTH/ HEIGHT MAY VARY 3" MINIMUM TO 9" MAXIMUM. SELECTION REQUIRES APPROVAL FROM APPLICANT/OWNER

L05 STUCCO BAND TRIM

L10 DECORATIVE FAUX GABLE VENT - SEE DETAIL 42/A-922.

L17 EXTERIOR LIGHT. SEE DETAILS FOR MORE INFORMATION.

M01 GUTTER. CONNECT TO DOWNSPOUT. PROVIDE MEANS TO PREVENT ACCUMULATION OF LEAVES AND DEBRIS IN GUTTER PER CRC R337.5.4. SEE DETAIL 12/A-903.

M02 DOWNSPOUT TO SPLASH BLOCK BELOW. SEE DETAIL 43/A-904.

S02 EXTERIOR WALL INSULATION. REFER TO TITLE 24 (R-21 MIN.)

S03 R-30 MIN. ROOF INSULATION. RADIANT BARRIER REQUIRED (VERIFY WITH TITLE 24 REPORT)

T01 2X4 WOOD STUD WALL. REFER TO STRUCTURAL.

T02 2X6 WOOD STUD WALL. REFER TO STRUCTURAL.

U03 G01/G02 WOOD BEAM / HEADER. REFER TO STRUCTURAL.

U09 6X8 WOOD BEAM / WOOD HEADER. REFER TO & VERIFY WITH STRUCTURAL DRAWINGS.

PRE-APPROVED ADU

CITY OF LAGUNA NIGUEL

ELEVATIONS & SECTIONS - MEDITERRANEAN



CITY OF LAGUNA NIGUEL ARCHITECTURAL DETAILS COMMON

ARCHITECTURAL DETAILS - COMMON

THE CITY OF LAGUNA
PROVED ADU
DMAIN. THERE
VIDE THESE PLANS.
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A CONTRACTOR TO
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WALL SYSTEM PENETRATION
F RATING - 1 AND 2 HR (SEE ITEM 1B)
T RATING - 0 HR

STUCCO EXTERIOR WALL
CBC TABLE 721.1(2) ITEM 15-1.3 (EXTERIOR)

1 HOUR

EXTERIOR SIDE
CEMENT PLASTER SYSTEM OVER WEATHER RESISTIVE BARRIER(S)
WHEN LOCATED IN MARINE CLIMATE, DRAINABLE WRB WITH 90% OR BETTER REQUIRED PER CBC 2510.6
18 GA HORIZONTAL LINE WIRE AT 8" O.C. BENEATH WRB FOR FULL LENGTH & HEIGHT OF EXTERIOR BUILDING WALLS - TYPICAL. OMIT LINE WIRE AT SHEATHED WALLS
SHEAR PANEL WHERE OCCURS PER STRUCTURAL, ADD SHEATHING TO ENTIRE LENGTH OF WALL AT WALLS IN LINE WITH SHEAR PANEL. OTHERWISE, TYPICAL WOOD FRAMED EXTERIOR WALLS USE LINE WIRE
2 X 6 FRAMING @ 16" OC, TYP.
ADD 1/2" OR 5/8" FURRING AS NEEDED TO FLUSH INTERIOR FACE OF FINISH
INSULATION PER ENERGY REPORT

INTERIOR SIDE
5/8" TYPE X GWB TYP* APPLIED VERTICALLY OR HORIZONTALLY, ATTACHED WITH 1 1/4" TYPE S SCREWS, AT 7" O.C. WITH END JOINTS ON NAILING MEMBERS. STAGGER JOINTS EACH SIDE.
*NOTE: SUBSTITUTE 5/8" TYPE X MOLD-RESISTANT NON-PAPER GWB W/ FIBERGLASS MATS AT ALL BATHROOM WALLS & CEILINGS, AND AT KITCHEN, LAUNDRY, AND JANITOR CLOSET WET WALLS
**INCREASE FASTENER LENGTH BY AMOUNT AT LEAST EQUAL TO FURRING THICKNESS

ROOF ASSEMBLY FIRE RESISTANCE CALCULATION
PER CBC TABLE 722.6.2(1) & PER CBC 722.6.2(2)
WOOD JOISTS 16" O.C. 10 MIN.
1/2" PLYWOOD 40 MIN.
TOTAL FIRE RESISTANCE 60 MIN.

WALL ASSEMBLY FIRE RESISTANCE CALCULATION
PER CBC TABLE 722.6.2(1) & PER CBC 722.6.2(2)
WOOD STUDS 16" O.C. 20 MIN.
1/2" PLYWOOD 40 MIN.
5/8" TYPE X GYPSUM BOARD
TOTAL FIRE RESISTANCE 70 MIN.

1. WALL ASSEMBLY
THE 1 OR 2 HR. FIRE RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
A. STUDS: WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM. 2 IN. BY 4 IN. LUMBER SPACED 16 IN. O.C. STEEL STUDS TO BE MIN. 3 1/2 IN. WIDE AND SPACED MAX. 24 IN. O.C.
B. GYPSUM BOARD (BEARING THE UL CLASSIFICATION MARKING)- THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS AS REQUIRED IN THE INDIVIDUAL WALL AND PARTITION DESIGN. MAX. DIAM. OF OPENING IS 5 IN.
THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.

2. THROUGH- PENETRANTS
ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNUAL SPACE BETWEEN THE PIPE, CONDUIT OR TUBING AND THE PERIPHERY OF THE OPENING SHALL BE MIN. OF 0 IN. (POINT CONTACT) TO A MAX. 1/8 IN. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
A. COPPER TUBING- NOM. 4 IN. DIAM. (OR SMALLER) TYPE M (OR HEAVIER) COPPER TUBING.
B. COPPER PIPE- NOM. 4 IN. DIAM. (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
C. STEEL PIPE- NOM. 4 IN. DIAM. (OR SMALLER) SCHEDULE 5 (OR HEAVIER) STEEL PIPE.
D. CONDUIT- NOM. 4 IN. DIAM. (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR RIGID STEEL CONDUIT
E. IRON PIPE- NOM. 4 IN. DIAM. (OR SMALLER) CAST OR DUCTILE IRON PIPE.

3. FILL, VOID OR CAVITY MATERIALS (BEARING THE UL CLASSIFICATION MARKING) - CAULK OR PUTTY-MIN. 1/2 IN. DIAMETER BEAD CAULK OR PUTTY APPLIED CONTINUOUSLY AROUND THE PENETRANT ON THE WALL SURFACES ON BOTH SIDES OF THE WALL.
3M COMPANY - CP 25WB+ CAULK OR MPS-2+ PUTTY

52 | THROUGH PENETRATION @ WALL
SCALE: 1 1/2" = 1'-0"

42 | EXTERIOR RATED WALL ASSEMBLY-1HR
SCALE: 1 1/2" = 1'-0"

EXTERIOR FOUNDATION

CONCRETE ENCASED ELECTRODE
1. ALL NEW CONSTRUCTION REQUIRES A UFER SERVICE GROUND IN THE FOUNDATION REQUIREMENTS ARE NOT LESS THAN 20 FEET OF EITHER 1/2" RE-BAR (INSIDE TERMINAL) #4 BARE COPPER WIRE, OR 3/4" GALVANIZED STEEL CONDUIT INSTALLED CORRECTLY. REFER TO DETAIL.
2. ELECTRICAL EQUIPMENT AND MATERIAL TO BE LISTED FOR THAT USE.
3. SECURE AN ENGRAVED NAMEPLATE TO THE FUSE ENCLOSURE FACE, RELAY FUSES MARKED (MFRS. TYPE OR DESIGNATION), (CONTINUOUS CURRENT RATING), (VOLTAGE RATING), (AMERAGE INTERRUPTING RATING).
4. USE "T TAP" CONNECTIONS ON ALL MULTI-WIRE CIRCUITS WITH COMMON NEUTRAL.
5. SWITCHING CIRCUIT BREAKER MUST BE UL LISTED FOR THAT USE.
6. UNDERGROUND SERVICE ENTRANCE CONDUCTORS WILL SERVE THE MAIN ELECTRIC SERVICE PANEL.

31 | CALC. FIRE RESISTANCE RATING
A-901
SCALE: 12" = 1'-0"

32 | DETAILED HEAD FLASHING
A-901
SCALE: 12" = 1'-0"

33 | DETAILED JAMB FLASHING
A-901
SCALE: 12" = 1'-0"

34 | DETAILED SILL FLASHING
A-901
SCALE: 12" = 1'-0"

21 | TYPICAL SLAB O/ VAPOR BARRIER
A-901
SCALE: 1 1/2" = 1'-0"

22 | RAILING CONNECTION DETAIL
A-901
SCALE: 6" = 1'-0"

23 | SHOWER SECTION
A-901
SCALE: 1 1/2" = 1'-0"

24 | DECORATIVE FAUX VENT
A-901
SCALE: 1 1/2" = 1'-0"

14 | WATER HEATER MOUNTING
A-901
SCALE: 1/2" = 1'-0"

FOUNDATION MINIMUM REQUIREMENTS: 5" SLAB WITH #4 @ 18" O.C. EW OVER 2" SAND OVER MINIMUM 6 MIL VISQUEEN, OVER 2" SAND OR CALIFORNIA GREEN CODE SECTION 4.505.2.1 CAPILLARY BREAK TO BE APPROVED BY THE BUILDING OFFICIAL.

REFERENCE DETAIL:

311.3.1 FLOOR ELEVATIONS AT THE REQUIRED EGRESS DOORS
LANDINGS OR FINISHED FLOORS AT THE REQUIRED EGRESS DOOR SHALL BE NOT MORE THAN 1 1/2 INCHES LOWER THAN THE TOP OF THE THRESHOLD. THE LANDING OR FLOOR ON THE EXTERIOR SIDE SHALL BE NOT MORE THAN 7 3/4 INCHES BELOW THE TOP OF THE THRESHOLD PROVIDED THAT THE DOOR DOES NOT SWING OVER THE LANDING OR FLOOR.
WHERE EXTERIOR LANDINGS OR FLOORS SERVING THE REQUIRED EGRESS DOOR ARE NOT AT GRADE, THEY SHALL BE PROVIDED WITH ACCESS TO GRADE BY MEANS OF A RAMP IN ACCORDANCE WITH CRC R311.8 OR A STAIRWAY IN ACCORDANCE WITH CRC R311.7.

11 | EXTERIOR DOOR THRESHOLD - TYPICAL
A-901
SCALE: 6" = 1'-0"

EXTERIOR
ALUMINUM DOOR THRESHOLD OVER PVC LINER. SILICONE CAULK AT ALL SCREW HOLES.
APPLY CONTINUOUS BEAD OF SEALANT TO UNDERSIDE OF THRESHOLD.
1/4" 12" 7 3/4" MAX

INTERIOR
LANDING TO BE 1/4" / 12" MIN. SLOPE AWAY FROM OPENING AND MEET CRC 311.3 AND CRC 311.7
CONCRETE SLAB: SEE STRUCTURAL FOR MORE INFORMATION

R311.3.1 FLOOR ELEVATIONS AT THE REQUIRED EGRESS DOORS
LANDINGS OR FINISHED FLOORS AT THE REQUIRED EGRESS DOOR SHALL BE NOT MORE THAN 1 1/2 INCHES LOWER THAN THE TOP OF THE THRESHOLD. THE LANDING OR FLOOR ON THE EXTERIOR SIDE SHALL BE NOT MORE THAN 7 3/4 INCHES BELOW THE TOP OF THE THRESHOLD PROVIDED THAT THE DOOR DOES NOT SWING OVER THE LANDING OR FLOOR.
WHERE EXTERIOR LANDINGS OR FLOORS SERVING THE REQUIRED EGRESS DOOR ARE NOT AT GRADE, THEY SHALL BE PROVIDED WITH ACCESS TO GRADE BY MEANS OF A RAMP IN ACCORDANCE WITH CRC R311.8 OR A STAIRWAY IN ACCORDANCE WITH CRC R311.7.

6-MIL POLY OR 15# FELT (LAP OVER MEMBRANE)
EXTEND MEMBRANE UP WALLS TO 3" ABOVE CURB, FASTEN AT TOP ONLY
CERAMIC TILE OVER LATEX-MODIFIED THINSET
PEA GRAVEL OR CRUSHED TILE AROUND WEEP HOLES
CEMENT BACKERBOARD
CURB
SOLID BLOCKING BETWEEN STUDS
2 MIL FELT AND WIRE LATH
LATEX-MODIFIED MORTAR SLOPED 1/4" PER FT.
2 PIECE CLAMPING DRAIN
WIRE MESH REINFORCEMENT
MORTAR BED
40-MIL CPE SHOWER PAN MEMBRANE

NOTE: APPLIANCES INSTALLED IN GARAGES, WAREHOUSES OR OTHER AREAS SUBJECT TO MECHANICAL DAMAGE SHALL BE GUARDED AGAINST SUCH DAMAGE BY BEING INSTALLED BEHIND PROTECTIVE BARRIERS OR BY BEING ELEVATED OR LOCATED OUT OF THE NORMAL PATH OF VEHICLES. CPC 507.13.1 PHYSICAL DAMAGE

LOCATE TS-1 EARTHQUAKE STRAP WITH TENSIONING BUCKLES WITHIN UPPER 1/3 OF WATER HEATER
LOCATE TS-1 EARTHQUAKE STRAP WITH TENSIONING BUCKLES 4" ABOVE CONTROLS WITHIN LOWER 1/3 OF THE VERTICAL DIMENSION OF THE WATER HEATER CPC 507.2
ANCHOR LEGS TO PLATFORM OR FLOOR
MINIMUM 1" NON-METALLIC SPACER
LAG STRAP SECURELY TO WALL FRAMING: (4) 3/8" x 1/2" LAG BOLTS AND FENDER WASHERS. STRAP SHALL BE ENCIRCLED TIGHTLY AROUND WATER HEATER IN A MANNER WHICH DOES NOT DEPRESS INSULATION BLANKET

AGING-IN-PLACE DESIGN

1. AGING-IN-PLACE DESIGN AND FALL PREVENTION. NEWLY CONSTRUCTED DWELLINGS SUBJECT TO THE REQUIREMENTS OF THIS CODE SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH SECTIONS R327.1.1 THROUGH R327.1.4

A. EXCEPTIONS

1. COVERED MULTIFAMILY DWELLINGS DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CHAPTER 11A OF CBC

2. REINFORCEMENT FOR GRAB BARS. AT LEAST ONE BATHROOM ON THE ENTRY LEVEL SHALL BE PROVIDED WITH REINFORCEMENT INSTALLED IN ACCORDANCE WITH THIS SECTION, WHERE THERE IS NO BATHROOM ON THE ENTRY LEVEL, AT LEAST ONE BATHROOM ON THE SECOND OR THIRD FLOOR OF THE DWELLING SHALL COMPLY WITH THIS SECTION:

A. REINFORCEMENT SHALL BE SOLID LUMBER OR OTHER CONSTRUCTION MATERIALS APPROVED BY THE ENFORCING AGENCY.

B. REINFORCEMENTS SHALL NOT BE LESS THAN 2 BY 8 INCH (51 MM BY 203 MM) NOMINAL SIZE, 1/2 BY 1-1/4 INCH (38 MM BY 184 MM) ACTUAL DIMENSION OR OTHER CONSTRUCTION MATERIALS PROVIDING EQUAL HEIGHT AND LOAD CAPACITY. REINFORCEMENT SHALL BE LOCATED BETWEEN 32 INCHES (812.8 MM) AND 39 1/4 INCHES (997 MM) ABOVE THE FINISHED FLOOR FLUSH WITH THE WALL FRAMING.

C. WATER CLOSET REINFORCEMENT SHALL BE INSTALLED ON BOTH SIDE WALLS OF THE FIXTURE, OR ONE SIDE WALL AND THE BACK WALL.

D. SHOWER REINFORCEMENT SHALL BE CONTINUOUS WHERE WALL FRAMING IS PROVIDED.

E. BATHTUB AND COMBINATION BATHTUB/SHOWER REINFORCEMENT SHALL BE CONTINUOUS ON EACH END OF THE BATHTUB AND THE BACK WALL. ADDITIONALLY, BACK WALL REINFORCEMENT FOR A LOWER GRAB BAR SHALL BE PROVIDED WITH THE BOTTOM EDGE LOCATED NO MORE THAN 6 INCHES (152.4 MM) ABOVE THE BATHTUB RIM.

F. EXCEPTIONS

WHERE THE WATER CLOSET IS NOT PLACED ADJACENT TO A SIDE WALL CAPABLE OF ACCOMMODATING A GRAB BAR, THE BATHROOM SHALL HAVE PROVISIONS FOR INSTALLATION OF FLOOR-MOUNTED, FOLDAWAY OR SIMILAR ALTERNATE GRAB BAR REINFORCEMENT APPROVED BY THE ENFORCING AGENCY.

1. REINFORCEMENT SHALL NOT BE REQUIRED IN WALL FRAMING FOR PRE-FABRICATED SHOWER ENCLOSURES AND BATHTUB WALL PANELS WITH INTEGRAL FACTORY-INSTALLED GRAB BARS OR WHEN FACTORY-INSTALLED REINFORCEMENT FOR GRAB BAR IS PROVIDED.

2. SHOWER ENCLOSURES THAT DO NOT PERMIT INSTALLATION OF REINFORCEMENT ALONG GRAB BARS SHALL BE PERMITTED, PROVIDED REINFORCEMENT FOR INSTALLATION OF FLOOR-MOUNTED GRAB BARS OR AN ALTERNATE METHOD IS APPROVED BY THE ENFORCING AGENCY.

3. BATHTUBS WITH NO SURROUNDING WALLS, OR WHERE WALL PANELS DO NOT PERMIT THE INSTALLATION OF REINFORCEMENT SHALL BE PERMITTED, PROVIDED REINFORCEMENT FOR INSTALLATION OF FLOOR-MOUNTED GRAB BARS ADJACENT TO THE BATHTUB OR AN ALTERNATE METHOD IS APPROVED BY THE ENFORCING AGENCY.

4. REINFORCEMENT OF FLOORS SHALL NOT BE REQUIRED FOR BATHTUBS AND WATER CLOSETS INSTALLED ON CONCRETE SLAB FLOORS.

1. INFORMATION AND/OR DRAWINGS IDENTIFYING THE LOCATION OF GRAB BAR REINFORCEMENT SHALL BE PLACED IN THE OPERATION AND MAINTENANCE MANUAL IN ACCORDANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS CODE, CHAPTER 4, DIVISION 4.4.

A. INFORMATION AND/OR DRAWINGS IDENTIFYING THE LOCATION OF GRAB BAR REINFORCEMENT SHALL BE PLACED IN THE OPERATION AND MAINTENANCE MANUAL IN ACCORDANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS CODE, CHAPTER 4, DIVISION 4.4

2. ELECTRICAL RECEPTACLE OUTLET, SWITCH AND CONTROL HEIGHTS SHALL BE COMPLIANT WITH SECTION R327.1.2.

A. ELECTRICAL RECEPTACLE OUTLETS, SWITCHES AND CONTROLS (INCLUDING CONTROLS FOR HEATING, VENTILATION AND AIR CONDITIONING) INTENDED TO BE USED BY OCCUPANTS SHALL BE LOCATED NO MORE THAN 48 INCHES (1219.2 MM) MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15 INCHES (381 MM) MEASURED FROM THE BOTTOM OF THE OUTLET BOX ABOVE THE FINISH FLOOR.

B. EXCEPTIONS:

1. DEDICATED RECEPTACLE OUTLETS; FLOOR RECEPTACLE OUTLETS; CONTROLS MOUNTED ON CEILING FANS AND CEILING LIGHTS; AND CONTROLS LOCATED ON APPLIANCES.

2. RECEPTACLE OUTLETS REQUIRED BY THE CALIFORNIA ELECTRICAL CODE ON A WALL SPACE WHERE THE DISTANCE BETWEEN THE FINISHED FLOOR AND A BUILT-IN FEATURE ABOVE THE FINISH FLOOR, SUCH AS A WINDOW, IS LESS THAN 15 INCHES (381 MM).

3. INTERIOR DOORS SHALL COMPLY WITH SECTION R327.1.3.

A. EFFECTIVE JULY 1, 2024, AT LEAST ONE BATHROOM AND ONE BEDROOM ON THE ENTRY LEVEL SHALL PROVIDE A DOORWAY WITH A NET CLEAR OPENING OF NOT LESS THAN 32 INCHES (812.8 MM), MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM THE CLOSED POSITION; OR, IN THE CASE OF A TWO- OR THREE-STORY SINGLE FAMILY DWELLING, ON THE SECOND OR THIRD FLOOR OF THE DWELLING IF A BATHROOM OR BEDROOM IS NOT LOCATED ON THE ENTRY LEVEL.

4. DOORBELL BUTTONS SHALL COMPLY WITH SECTION R327.1.4.

A. DOORBELL BUTTONS OR CONTROLS, WHEN INSTALLED, SHALL NOT EXCEED 48 INCHES (1219.2 MM) ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL BUTTON ASSEMBLY, WHERE DOORBELL BUTTONS INTEGRATED WITH OTHER FEATURES ARE REQUIRED TO BE INSTALLED ABOVE 48 INCHES (1219.2 MM) MEASURED FROM THE EXTERIOR FLOOR OR LANDING. A STANDARD DOORBELL BUTTON OR CONTROL SHALL ALSO BE PROVIDED AT A HEIGHT NOT EXCEEDING 48 INCHES (1219.2 MM) ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL BUTTON OR CONTROL.

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54 AGING-IN-PLACE DESIGN AND FALL PREVENTION REQUIREMENTS CRC R327
SCALE: 1/2" = 1'-0"

EFFECTIVE JULY 1, 2024 AT LEAST ONE BATHROOM AND ONE BEDROOM ON THE ENTRY LEVEL MUST PROVIDE A DOORWAY WITH A NET CLEAR OPENING OF NOT LESS THAN 32-INCHES MEASURED WITH THE DOOR POSITIONED AT AN 90 DEGREE ANGLE. IN A 2- OR 3-STORY DWELLING, WHERE THERE IS NO BATHROOM ON THE ENTRY LEVEL, AT LEAST ONE BATHROOM ON THE SECOND OR THIRD FLOOR OF THE DWELLING SHALL COMPLY WITH THIS SECTION.

WATER CLOSET ADJACENT TO ONE SIDE WALL AND A BACK WALL

WATER CLOSET ADJACENT TO TWO SIDE WALLS

SIDE WALL

BACK WALL

SIDE WALL

BACK WALL

HEAD END

BACK WALL

HEAD END

BACK WALL

SHOWER ENCLOSURE

BATHTUB OR TUB/SHOWER

EXTERIOR

INTERIOR

EXTERIOR

INTERIOR

HEIGHTS FOR ELECTRICAL RECEPTACLE OUTLETS, SWITCHES, DOORBELL BUTTONS, INCLUDING HVAC CONTROLS

HEIGHTS FOR ELECTRICAL RECEPTACLE OUTLETS, SWITCHES, DOORBELL BUTTONS, INCLUDING HVAC CONTROLS

NOTES:

1. REINFORCEMENT MUST BE LOCATED BETWEEN THE DIMENSIONS SPECIFIED.
2. REINFORCEMENT SHALL BE CONTINUOUS IN BATHTUB, BATHTUB COMBO, AND SHOWER WALL ENCLOSURES, WHERE WALL FRAMING IS PROVIDED.
3. REINFORCEMENT MAY BE SOLID LUMBER OR OTHER CONSTRUCTION MATERIALS THAT PROVIDE EQUAL HEIGHT AND LOAD CAPACITY
4. THE LOCATION OF THE REINFORCEMENT MUST BE INCORPORATED IN THE OPERATION MANUAL (E.G. FLOOR PLAN AND ELEVATION DETAILS) REQUIRED BY CAL GREEN BUILDING CHAPTER 4 DIVISION 4.4
5. ADDITIONAL BACKWALL REINFORCEMENT MUST BE INSTALLED WITH THE BOTTOM EDGE NO MORE THAN 6-INCHES ABOVE THE BATHTUB RIM.
6. THE SUGGESTED DIMENSIONS ARE TO ACCOMMODATE THE MINIMUM REQUIRED 36 INCHES CLEARANCE, CENTER TO CENTER, AT A WATER CLOSET AND MINIMUM 24-INCHES CLEAR SPACE IN FRONT OF WATER CLOSET (CPC 402.5). AT THIS TIME CRC R327 DOES NOT SPECIFY THE MINIMUM LENGTHS AT THESE LOCATIONS. HOWEVER, THESE DRAWINGS RECOMMEND THAT THE BACKING SHOULD MEET THE SUGGESTED LENGTHS SHOWN IN THE DETAILS ABOVE (54" AND 36" MINIMUM).

EXCEPTIONS:

1. REINFORCEMENT FOR FUTURE FLOOR-MOUNTED, FOLDAWAY OR SIMILAR ALTERNATE GRAB BAR MAY BE INSTALLED WITH PRIOR APPROVALS FROM THE ENFORCING AGENCY.
2. WALL REINFORCEMENT IS NOT REQUIRED WHERE PRE-FABRICATED SHOWER & BATHTUB PANELS THAT HAVE INTEGRAL FACTORY INSTALLED GRAB BARS, OR WHEN FACTORY-INSTALLED REINFORCEMENT FOR GRAB BARS IS PROVIDED.
3. REINFORCEMENT OF FLOOR IS NOT REQUIRED FOR BATHTUBS AND WATER CLOSETS INSTALLED ON CONCRETE FLOORS.
4. DEDICATED RECEPTACLE OUTLETS; FLOOR RECEPTACLE OUTLETS; CONTROLS MOUNTED ON CEILING FANS AND CEILING LIGHTS; CONTROLS LOCATED ON APPLIANCES. RECEPTACLE OUTLETS REQUIRED BY THE CALIFORNIA ELECTRICAL CODE ON A WALL SPACE WHERE THE DISTANCE BETWEEN THE FINISHED FLOOR AND A BUILT-IN FEATURE ABOVE, SUCH AS A WINDOW, IS LESS THAN 15 INCHES.

ELEVATION

PLAN

SECTION A

ELEVATION

PLAN

SECTION B

ELEVATION

PLAN

SECTION C

ELEVATION

PLAN

SECTION C

NOTES:

1. DO NOT CUT OR NOTCH STUDS TO INSTALL BACKING
2. VERIFY LENGTH, HEIGHT, QUANTITY & LOCATION FO BACKING W/ARCH. DETAILS & ACCESSORY MANUFACTURER
3. EXTEND BACKING TO FIRST STUD PAST END OF ACCESSORY

PUBLIC SET

DATE
02/05/2025

SHEET

A-903

THESE PLANS ARE PROVIDED BY THE CITY OF LAGUNA NIGUEL AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN, THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONSTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

PRE-APPROVED ADU

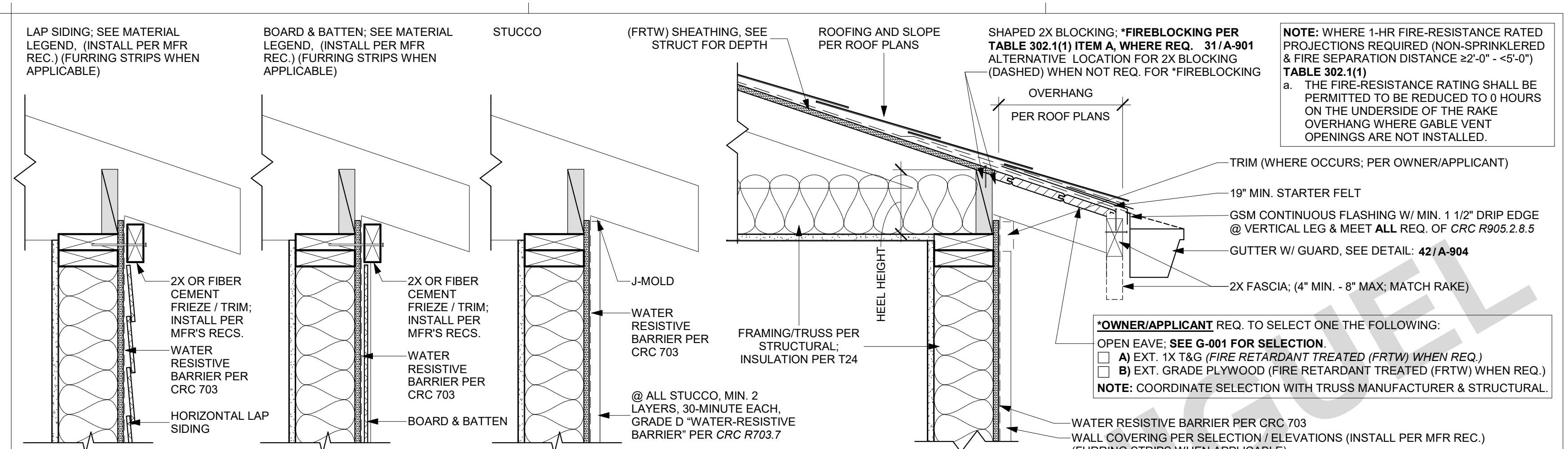
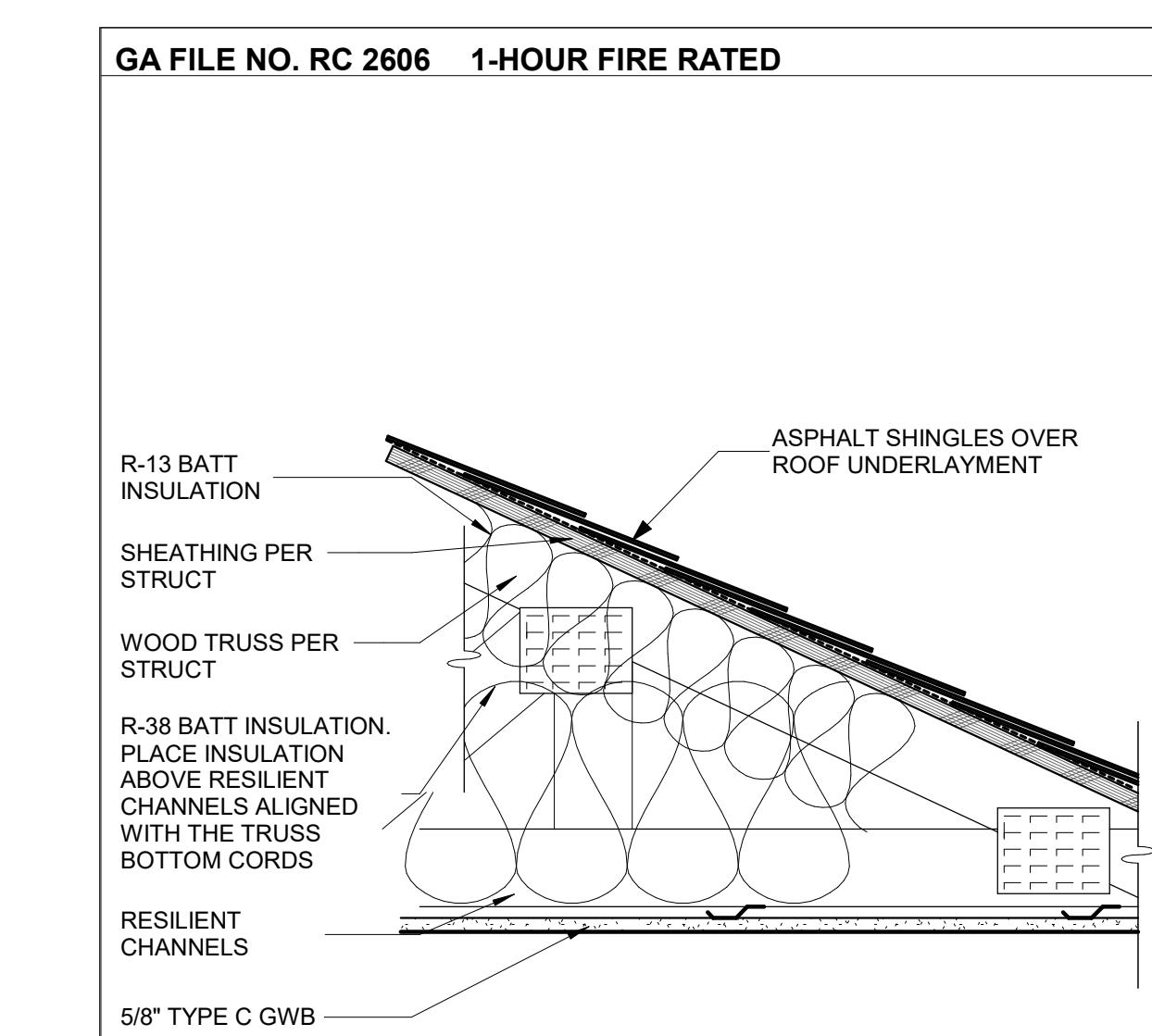
CITY OF LAGUNA NIGUEL

ARCHITECTURAL DETAILS -

COMMON

14 TYPICAL WOOD STUD BLOCKING

A-903



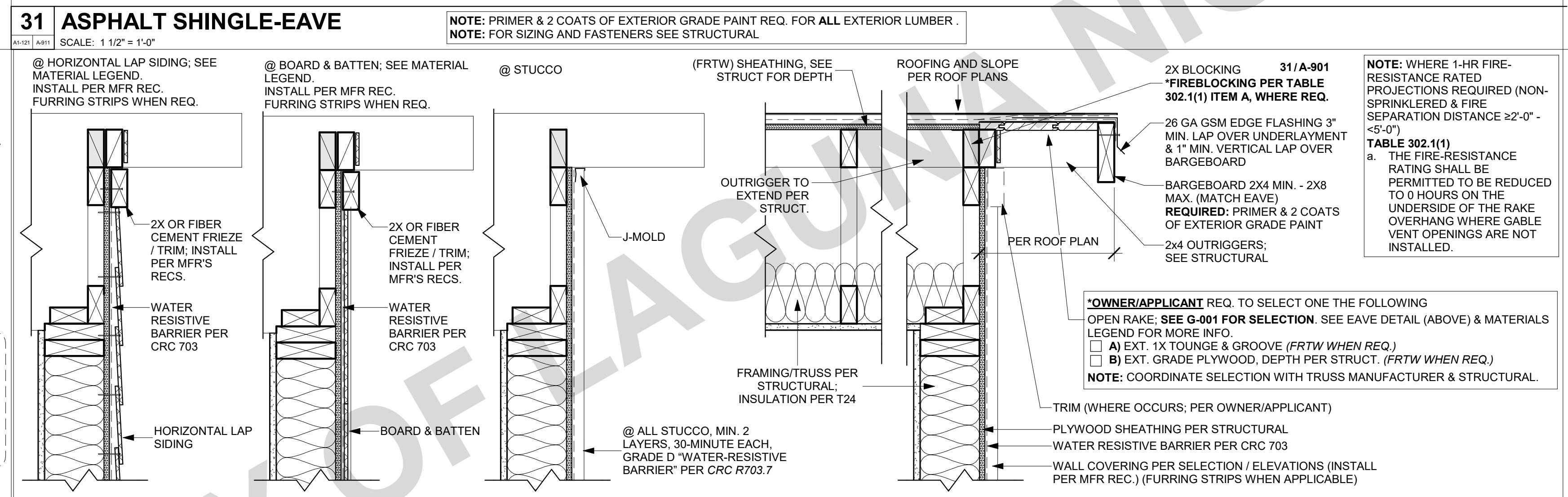
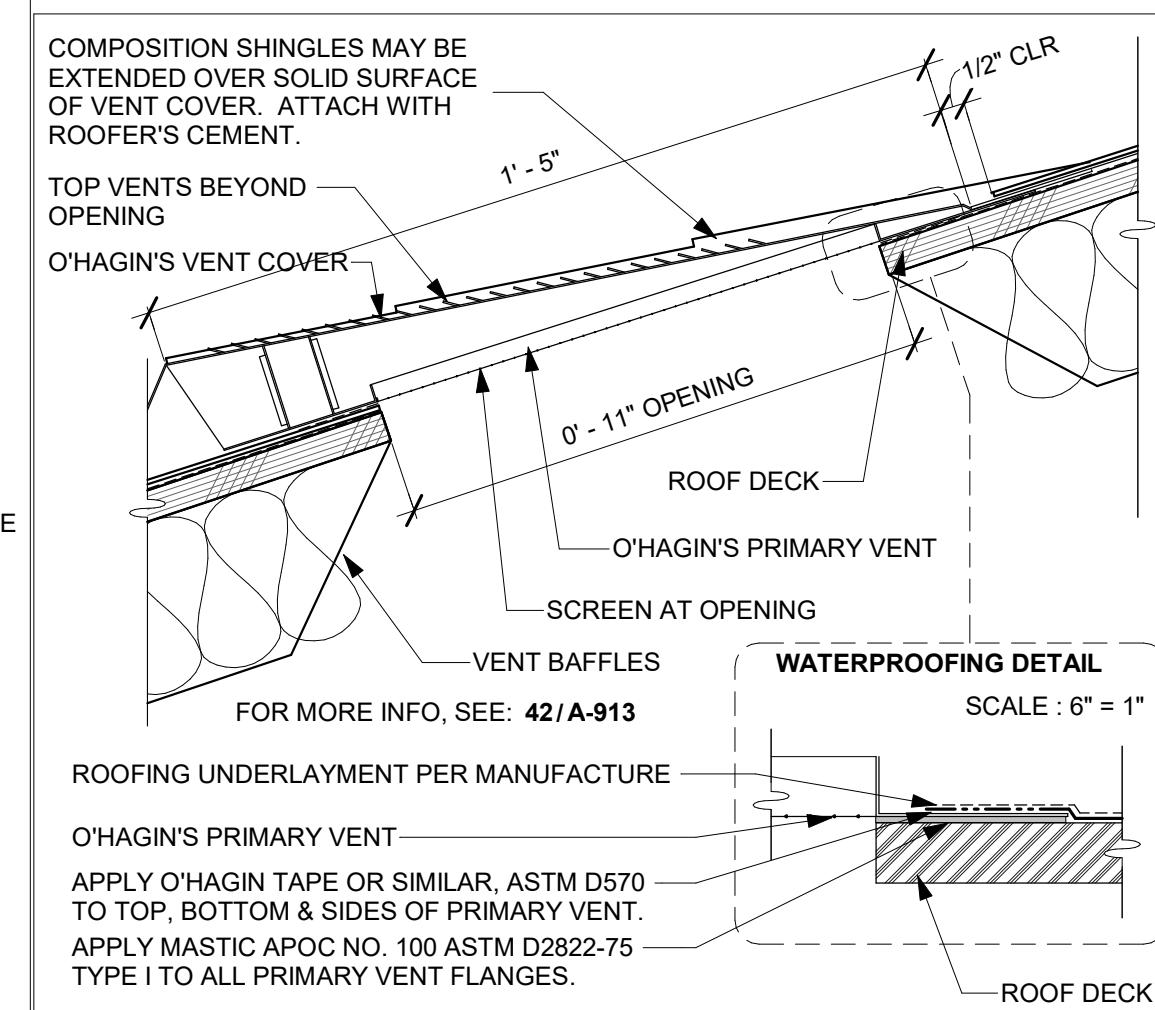
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ONE LAYER 5/8" PROPRIETARY TYPE X GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED AT RIGHT ANGLES TO RESILIENT FURRING CHANNELS 16" O.C. (12" O.C. WHEN INSULATION IS DRAPED OVER CHANNELS) WITH 1" TYPE S DRYWALL SCREWS 12" O.C. GYPSUM BOARD END JOINTS ATTACHED WITH SCREWS 8" O.C. TO ADDITIONAL PIECES OF CHANNEL 60" LONG LOCATED 3" BACK ON EITHER SIDE OF END JOINT. RESILIENT CHANNELS APPLIED AT RIGHT ANGLES TO BOTTOM CHORD OF PITCHED WOOD TRUSSES 24" O.C. WITH 1 1/4" TYPE S OR W SCREWS. GLASS FIBER INSULATION SECURED TO WOOD STRUCTURAL PANELS OR DRAPED OVER CHANNELS. TRUSSES SUPPORTING 15/32 WOOD STRUCTURAL PANELS APPLIED AT RIGHT ANGLES TO TRUSSES WITH CONSTRUCTION ADHESIVE AND 6D RING SHANK NAILS 12" O.C. OPTIONAL CEILING DAMPER (REFER TO MANUFACTURER FOR INFORMATION ON THE TYPE OF DAMPER).

PROPRIETARY GYPSUM BOARD
UNITED STATES GYPSUM COMPANY - 5/8" SHEETROCK® BRAND FIRECODE® C CORE GYPSUM PANELS

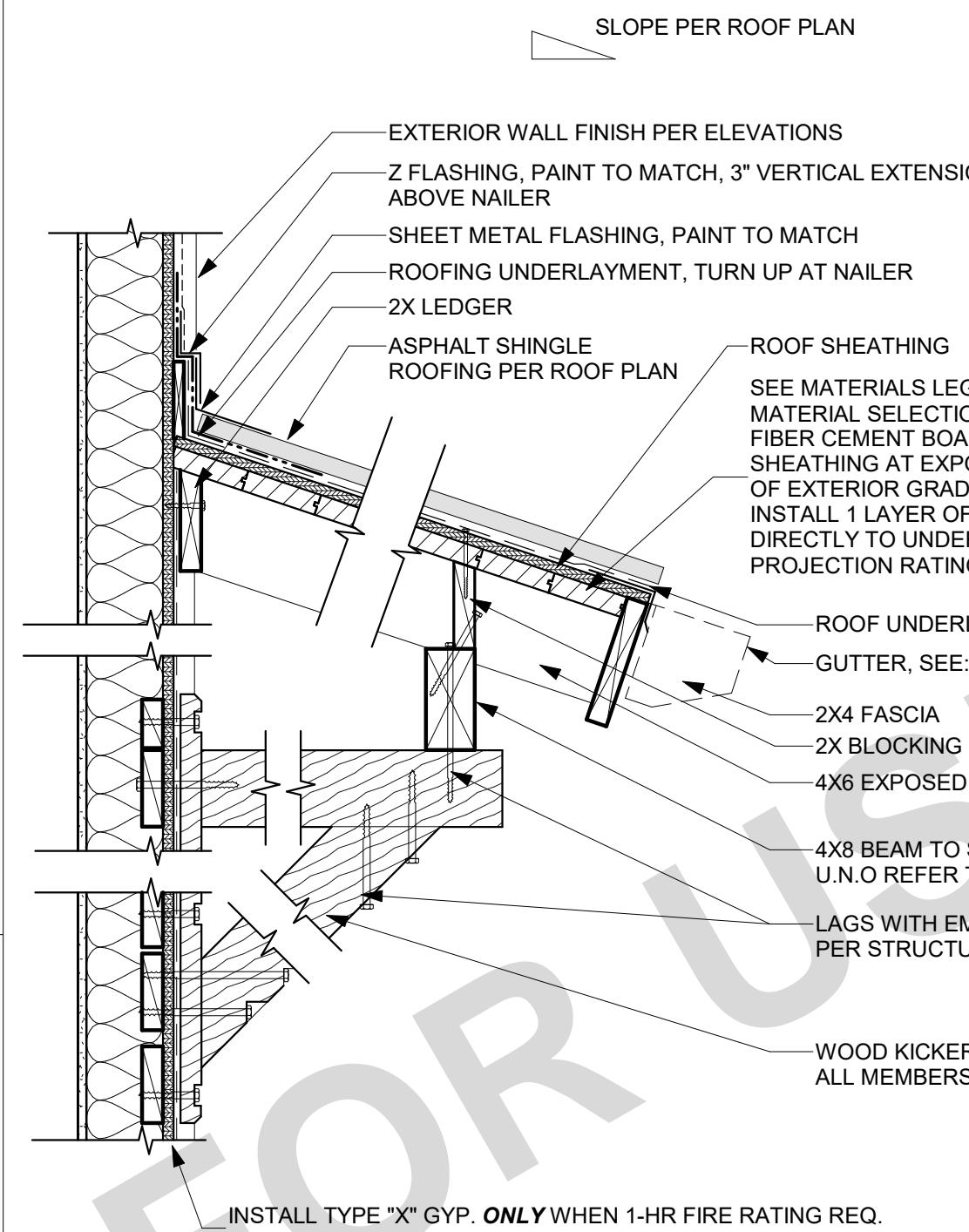
52 ROOF ASSEMBLY (1-HOUR)

SCALE: 1 1/2" = 1'-0"



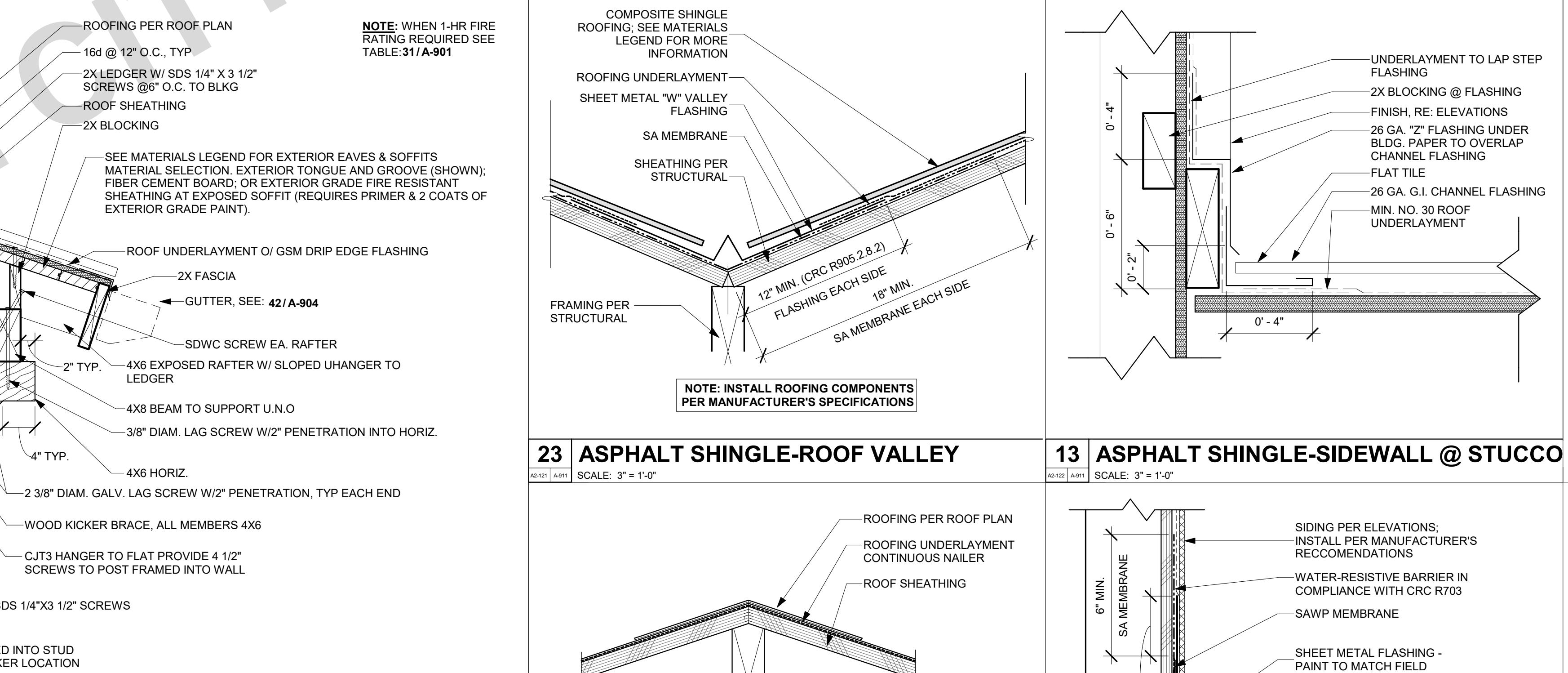
42 ASPHALT SHINGLE-O'HAGIN ROOF VENT

A911 SCALE: 3" = 1'-0"



32 ASPHALT SHINGLE-RAKE

A911 SCALE: 1 1/2" = 1'-0"



NOTES
1. PRE-PRIME ALL SIDES OF BRACE FRAMING PRIOR TO INSTALLATION, TYPICAL
2. A SELF SEALING MEMBRANE SHALL BE INSTALLED BEHIND WALL TRIM & EXTEND 6" BEYOND WALL TRIM AND 4" MIN. LAP O/WEATHER BARRIER
3. CAULK AROUND TOP & SIDES OF 4X AT WALL PENETRATION.
4. A BITUTHENE MEMBRANE SHALL BE INSTALLED BEHIND 4X6 BRACE W/ 4" LAP MIN.

54 BRACE-SHED ROOF

SCALE: 1" = 1'-0"

44 BRACE-EXTENDED EAVE

A911 SCALE: 1" = 1'-0"

24 ASPHALT SHINGLE-ROOF RIDGE/HIP

A911 SCALE: 3" = 1'-0"

14 HEADWALL FLASHING

SCALE: 3" = 1'-0"

PRE-APPROVED ADU

CITY OF LAGUNA NIGUEL

ARCHITECTURAL DETAILS - ASPHALT SHINGLE ROOF



PRE-APPROVED ADU CITY OF LAGUNA NIGUEL

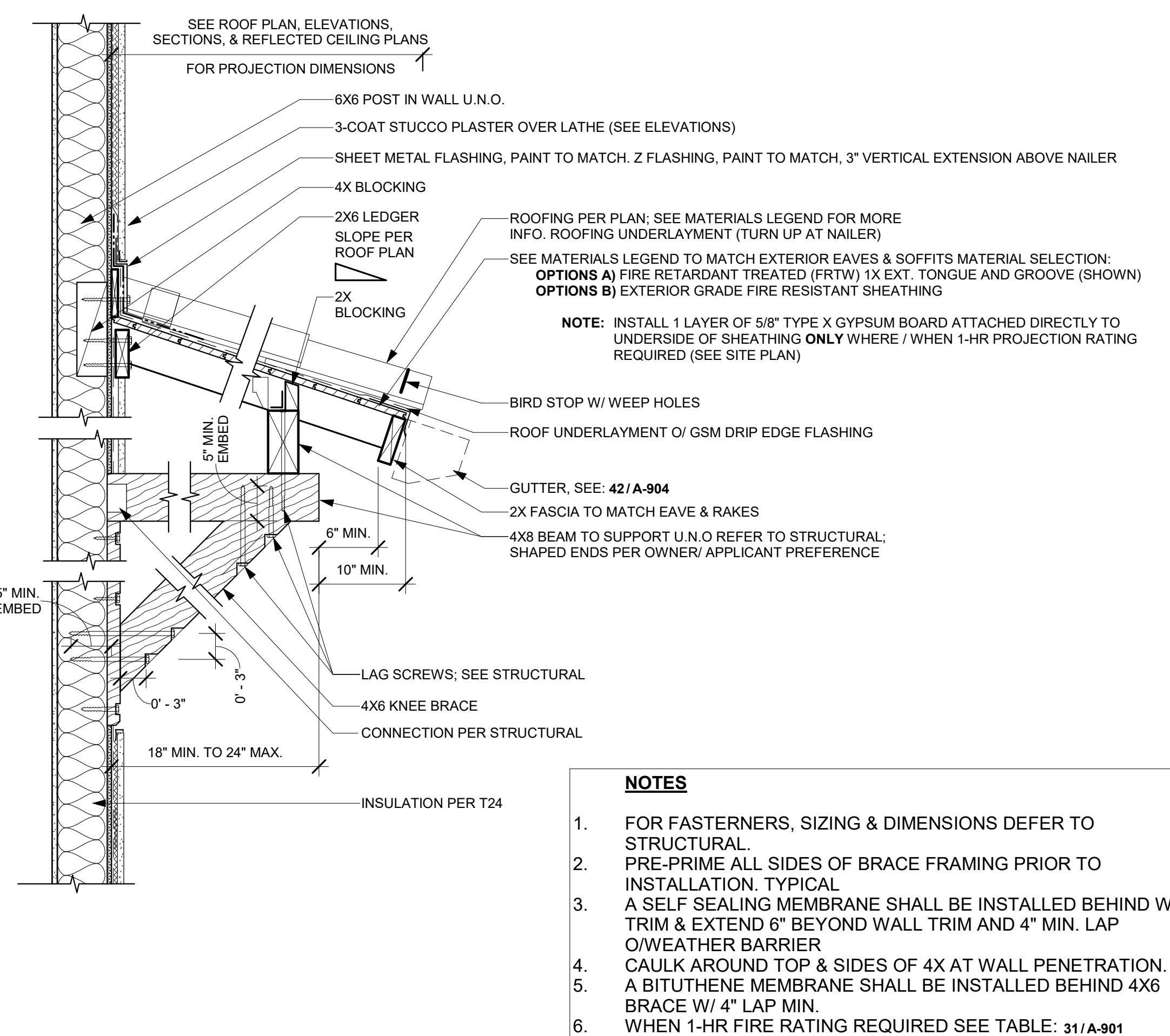
ARCHITECTURAL DETAILS - S-TILE ROOF

PUBLIC SET

DATE
02/05/2025

SHEET

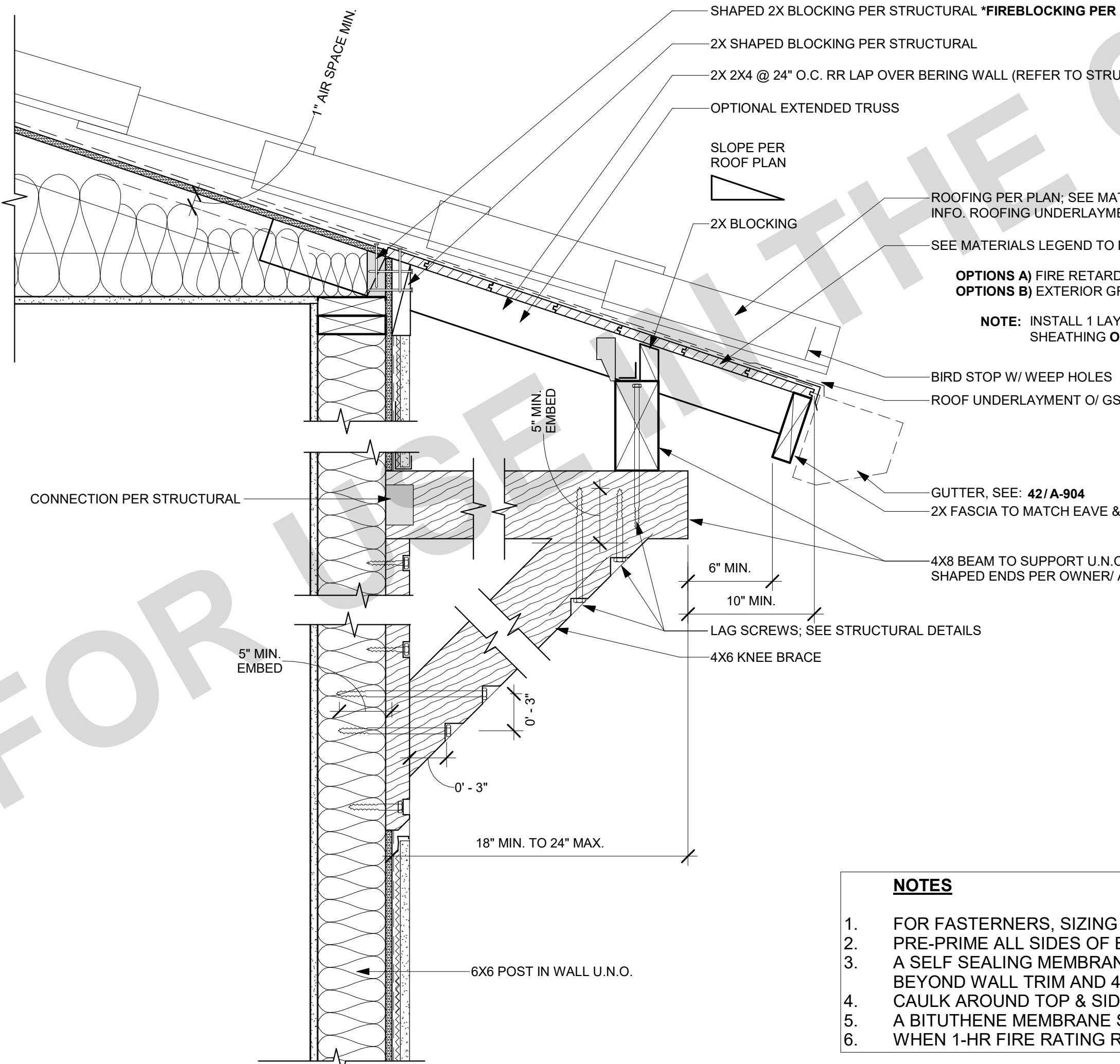
A-912



1 SHED ROOF W/ KICKER

A-912

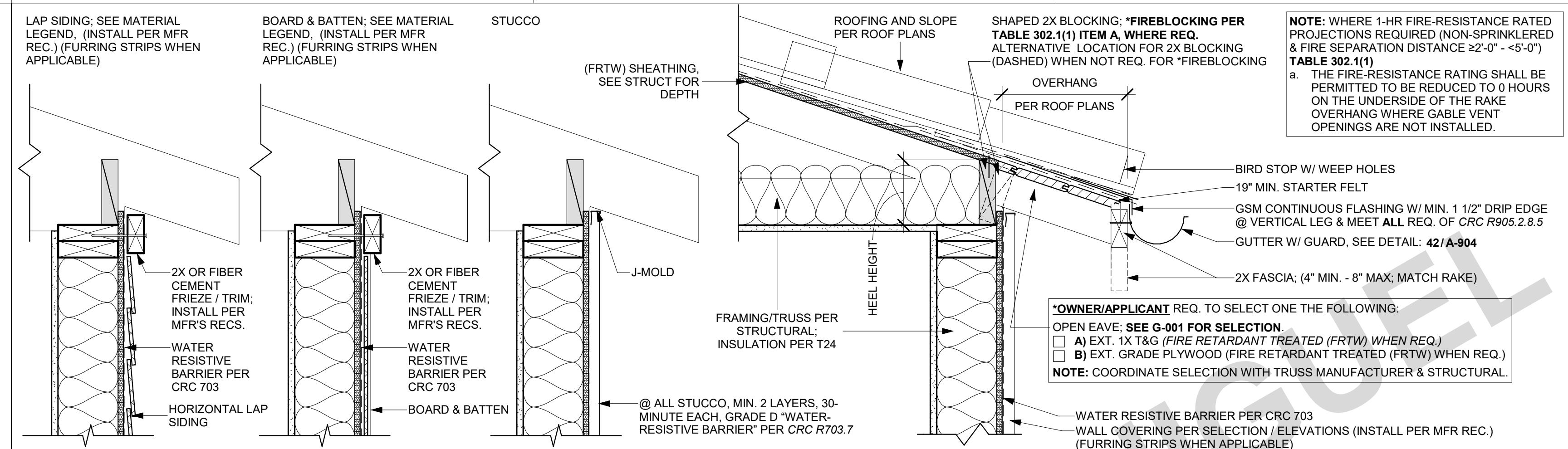
SCALE: 1" = 1'-0"



54 SHED ROOF W/ KICKER

A-912

SCALE: 1" = 1'-0"

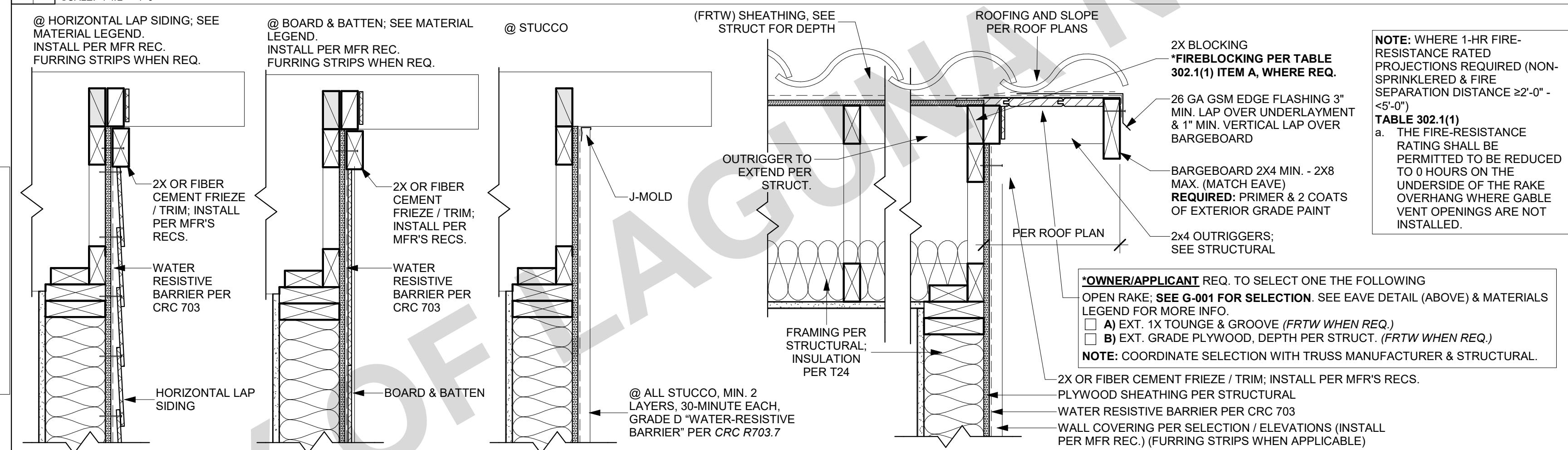


31 S-TILE-EAVE @ STUCCO

A-123

A-912

SCALE: 1 1/2" = 1'-0"



32 S-TILE-RAKE @ STUCCO

A-123

A-912

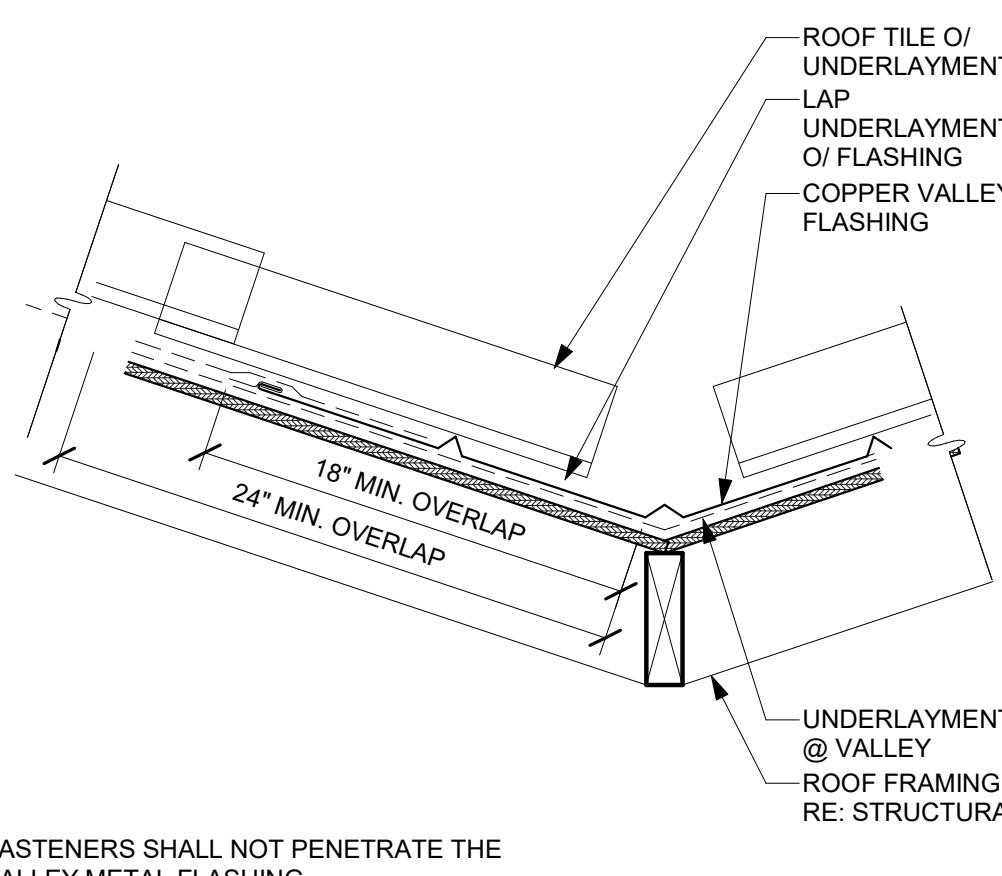
SCALE: 1 1/2" = 1'-0"

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NOTE: PRIMER & 2 COATS OF EXTERIOR GRADE PAINT REQ. FOR ALL EXTERIOR LUMBER.
NOTE: FOR SIZING AND FASTENERS SEE STRUCTURAL.

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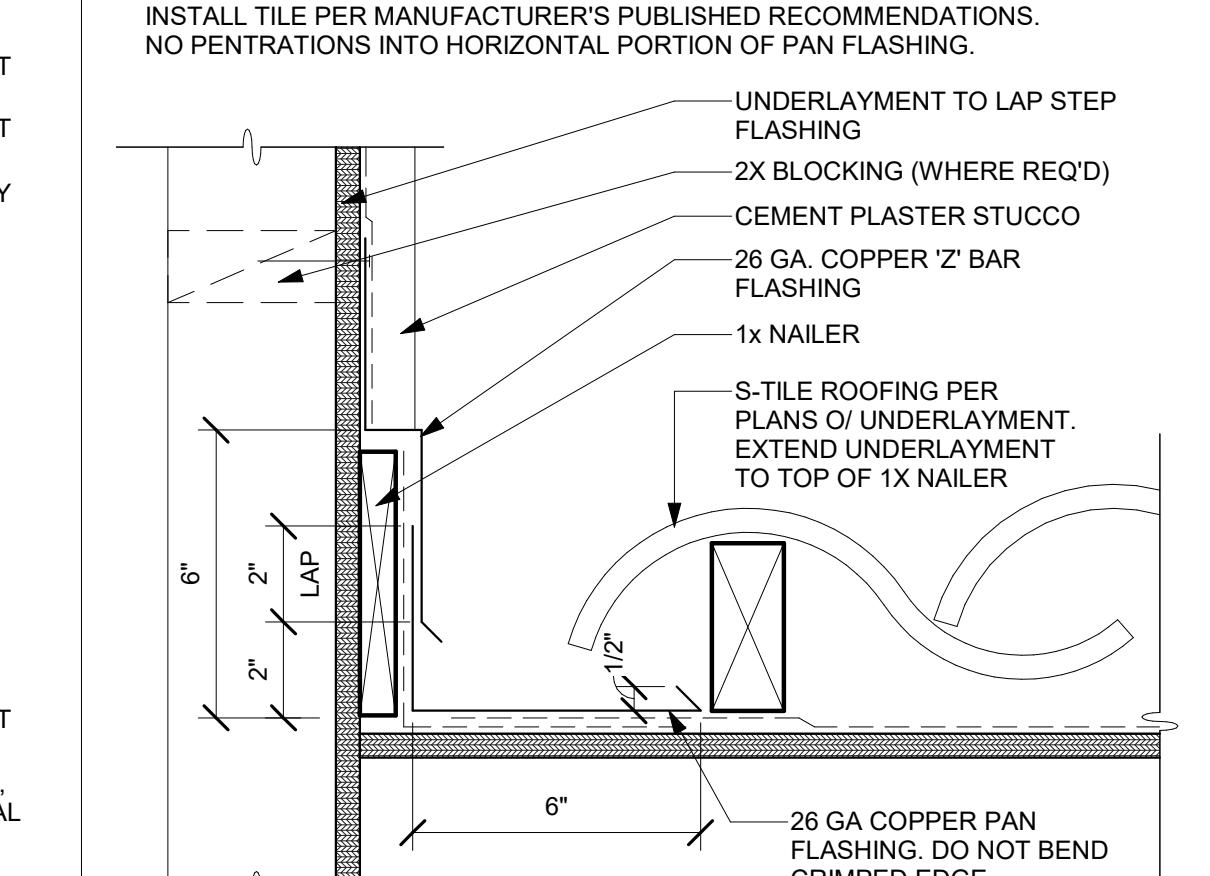


23 S-TILE-VALLEY FLASHING

A-123

A-912

SCALE: 1 1/2" = 1'-0"

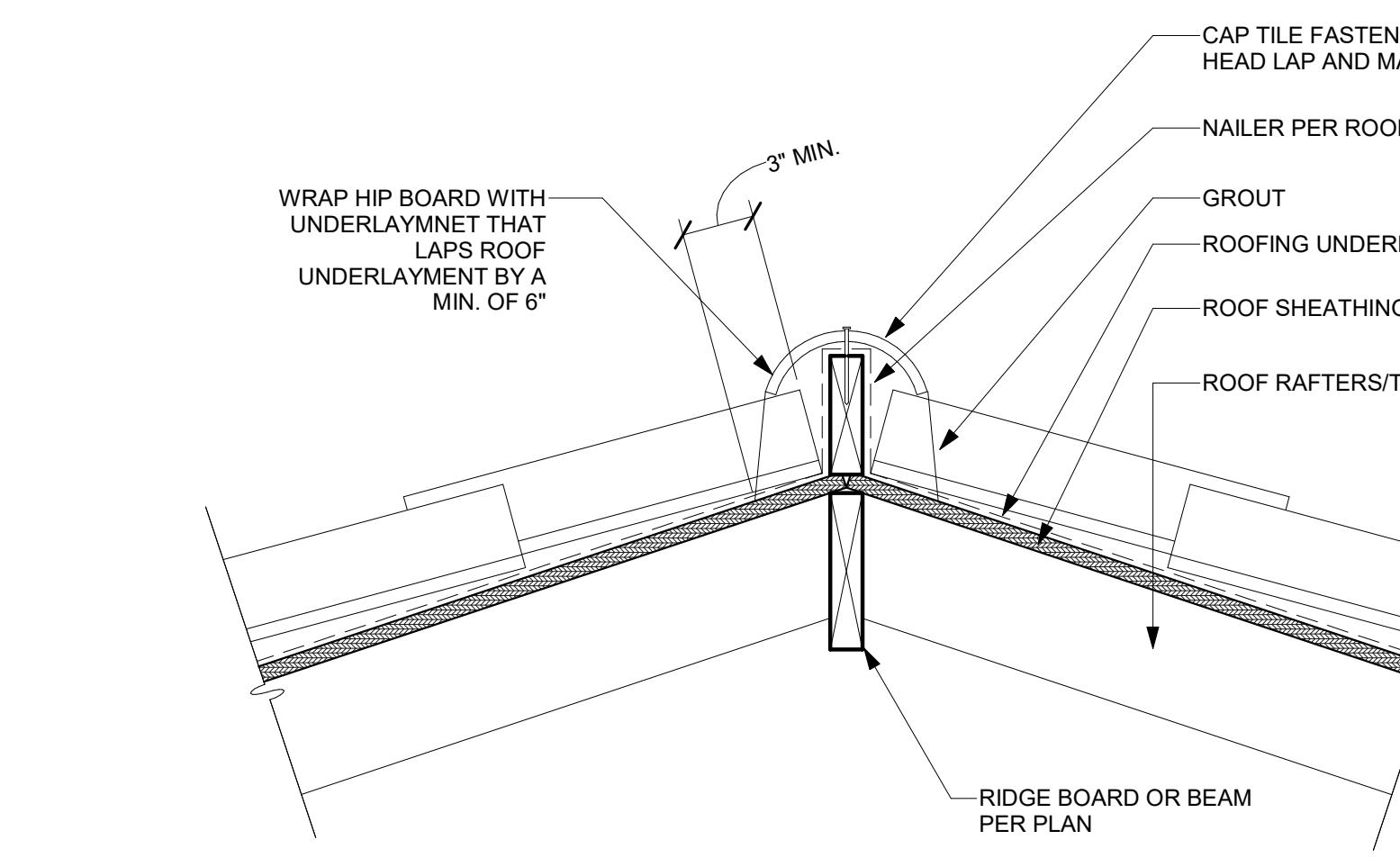


13 S-TILE-SIDEWALL - STUCCO

A-123

A-912

SCALE: 3" = 1'-0"



24 S-TILE-ROOF-RIDGE/HIP

A-123

A-912

SCALE: 1 1/2" = 1'-0"



CONSULTANT

AGENCY

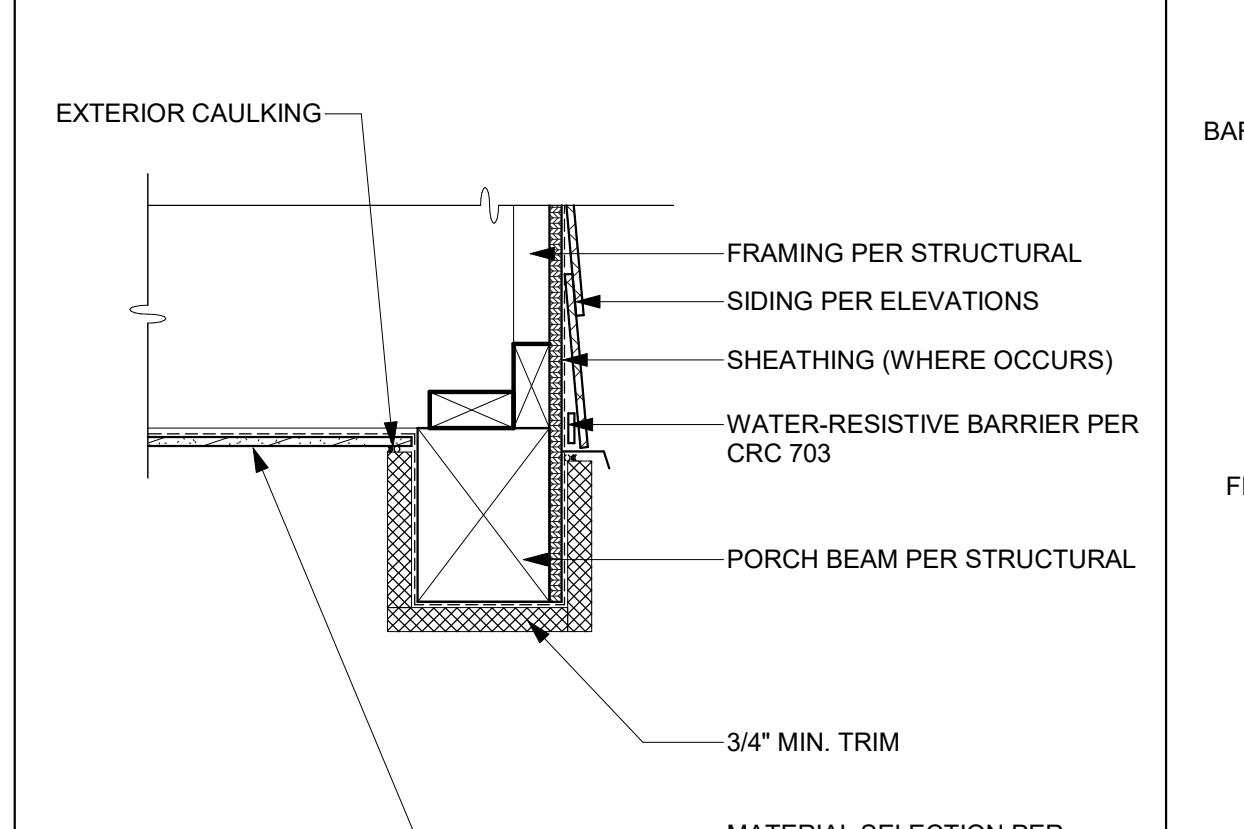
PRE-APPROVED ADU
CITY OF LAGUNA NIGUEL
ARCHITECTURAL DETAILS - LAP SIDING

NO.	REVISION	DATE
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PROJECT MANAGER	RR	
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02/05/2025		
PROJECT NUMBER	2889-00-CU22	
SHEET		

PUBLIC SET

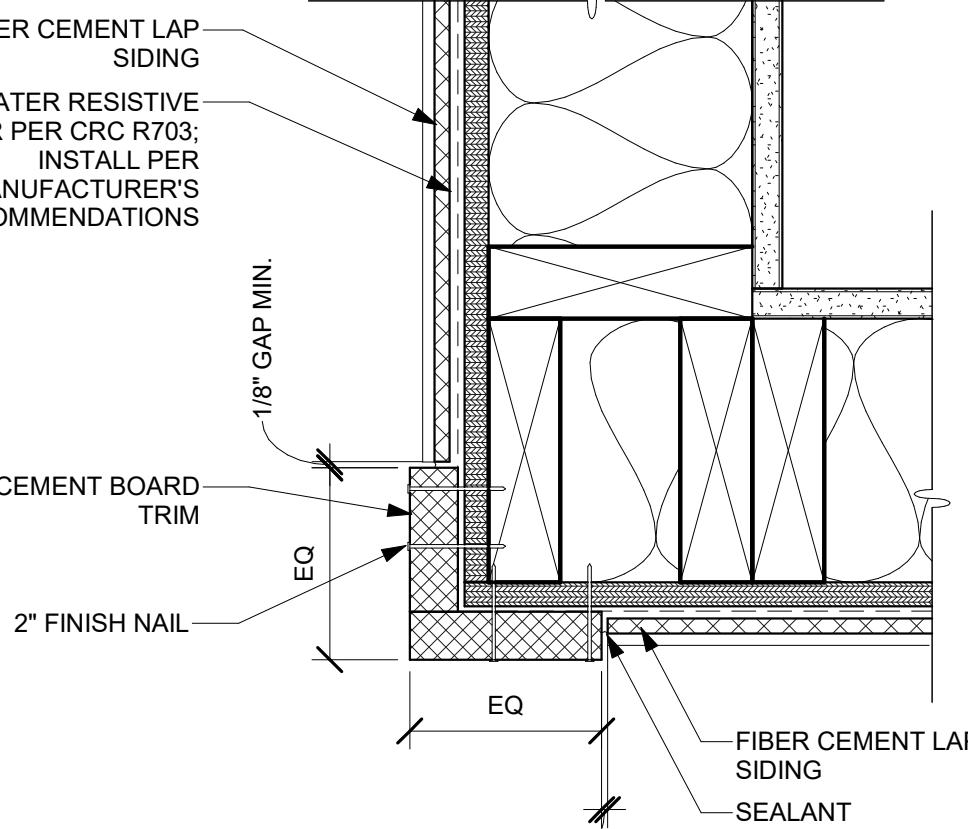
A-921

FOR USE IN THE CITY OF LAGUNA NIGUEL



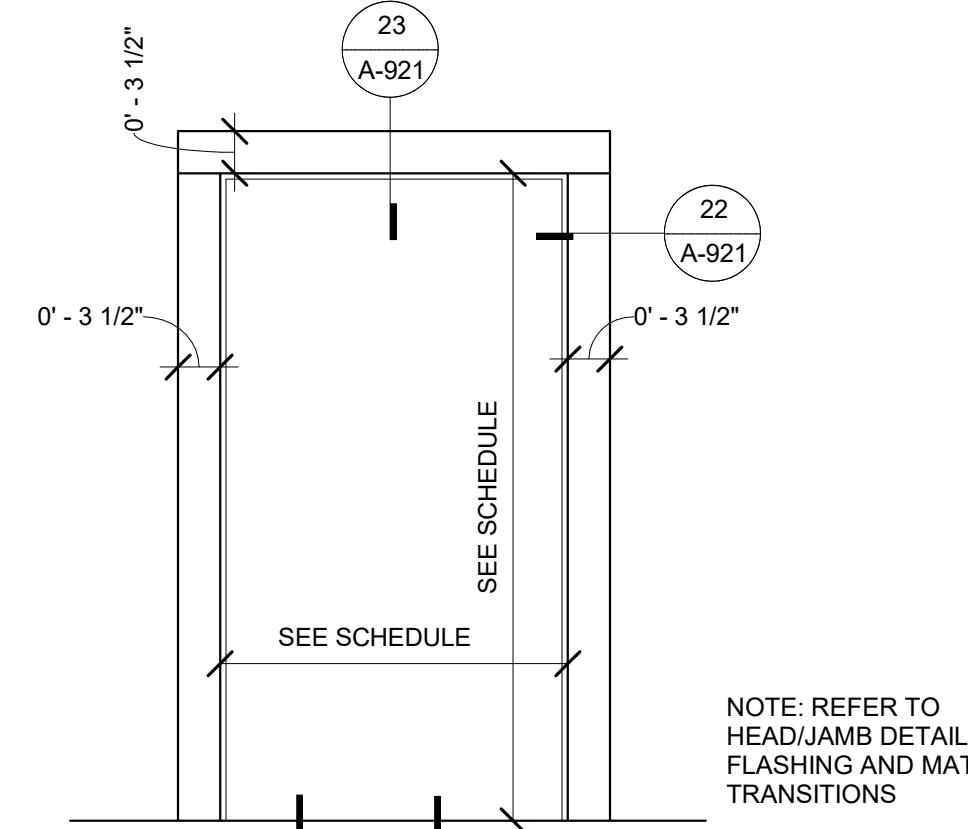
41 PORCH BEAM - HORIZONTAL LAP SIDING
A-921 A-921 SCALE: 1 1/2" = 1'-0"

44 TYPICAL FOUNDATION - HORIZONTAL LAP SIDING
A-921 A-921 SCALE: 3" = 1'-0"



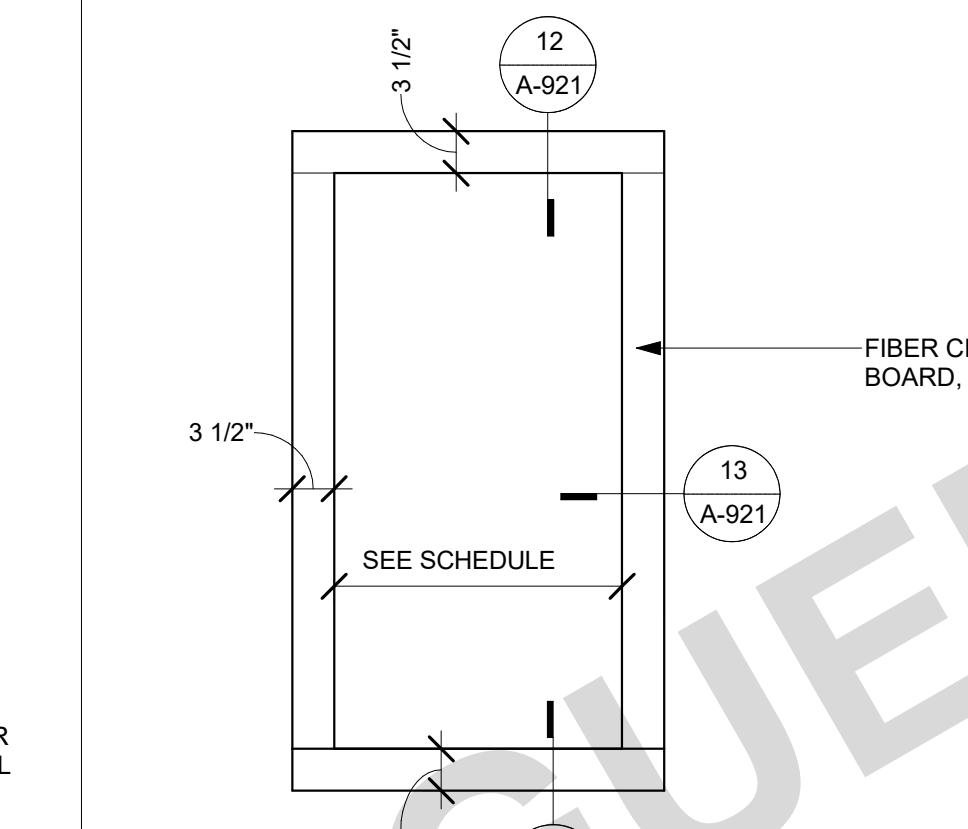
31 CORNER-SIDING
A-921 A-921 SCALE: 3" = 1'-0"

32 FIBER CEMENT-INSIDE CORNER-SIDING
A-921 A-921 SCALE: 3" = 1'-0"



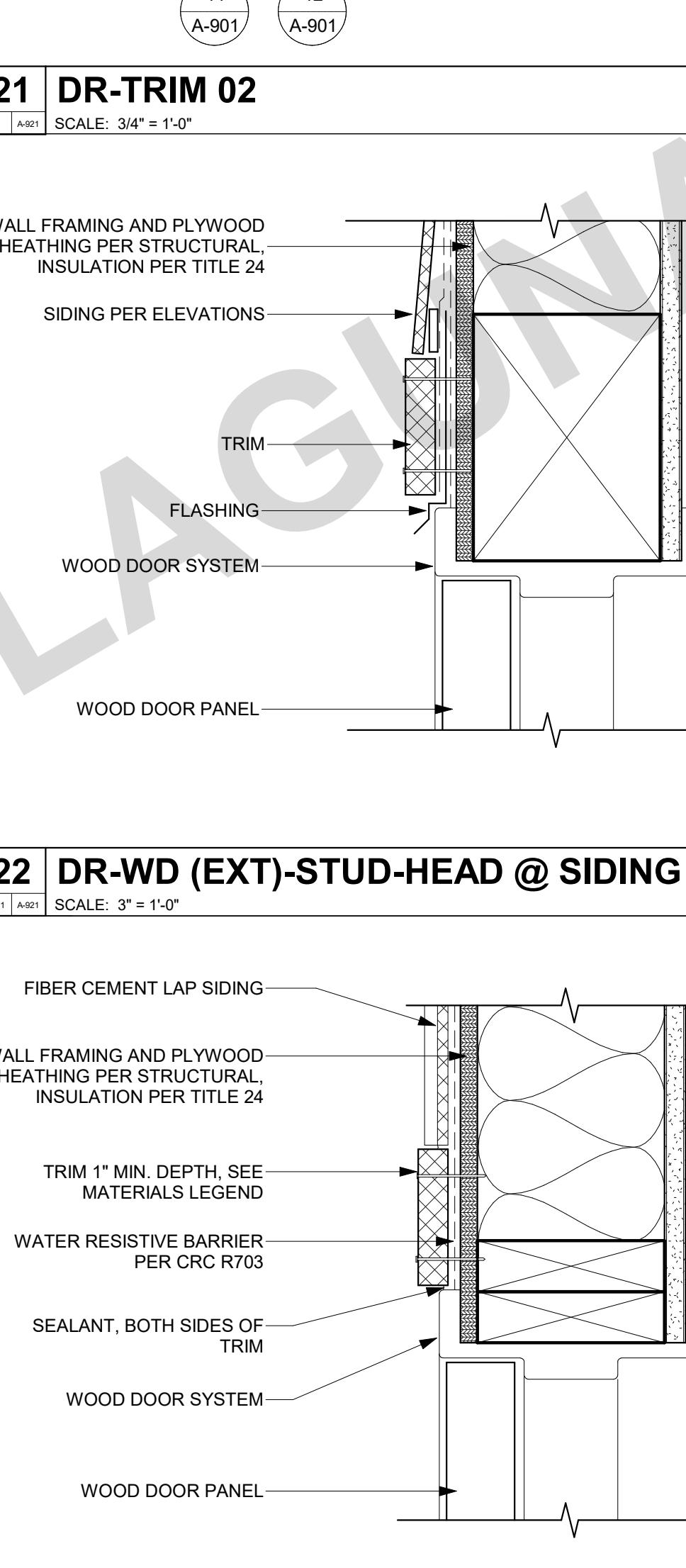
21 DR-TRIM 02
A-921 A-921 SCALE: 3/4" = 1'-0"

22 DR-WD (EXT)-STUD-HEAD @ SIDING
A-921 A-921 SCALE: 3" = 1'-0"



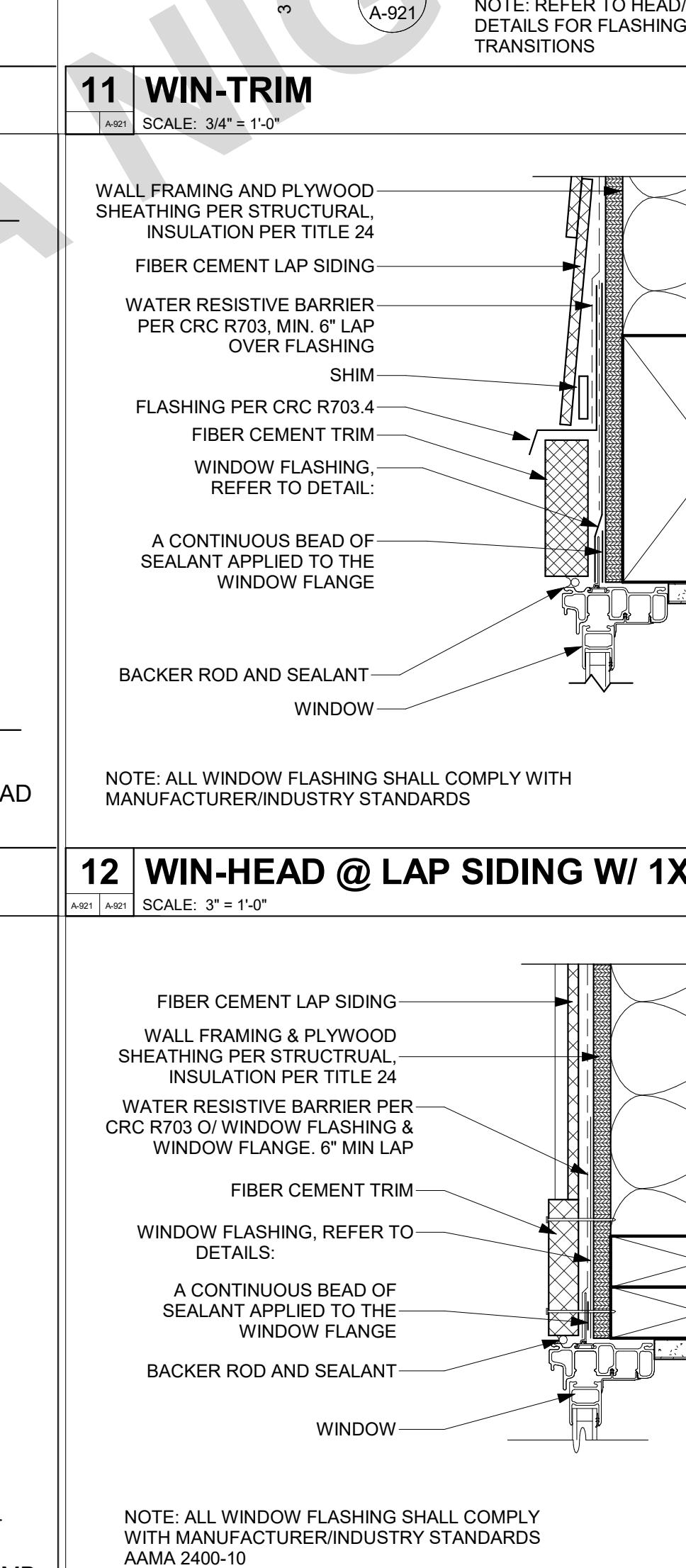
11 WIN-TRIM
A-921 A-921 SCALE: 3/4" = 1'-0"

12 WIN-HEAD @ LAP SIDING W/ 1X4 TRIM
A-921 A-921 SCALE: 3" = 1'-0"



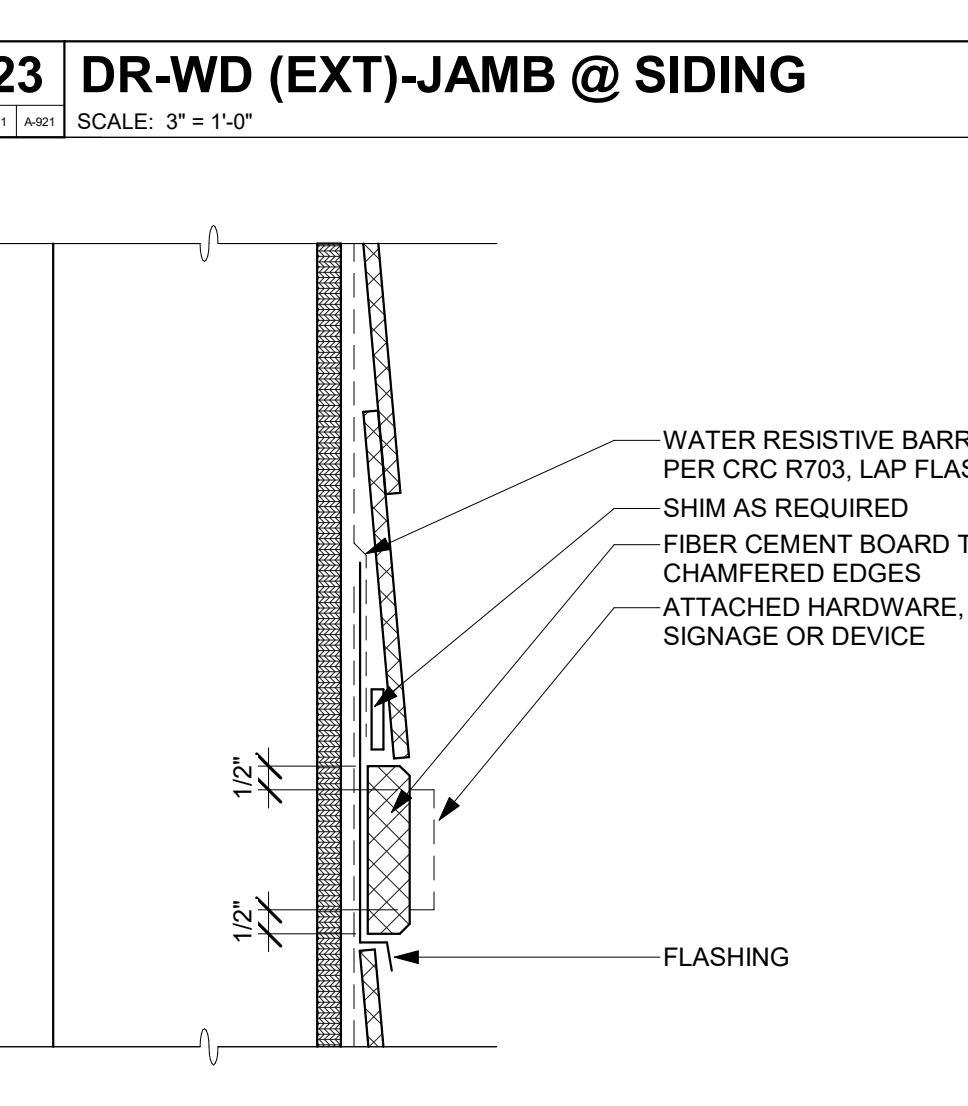
23 DR-WD (EXT)-JAMB @ SIDING
A-921 A-921 SCALE: 3" = 1'-0"

24 FIBER CEMENT-MOUNTING PAD-SIDING
A-921 A-921 SCALE: 3" = 1'-0"

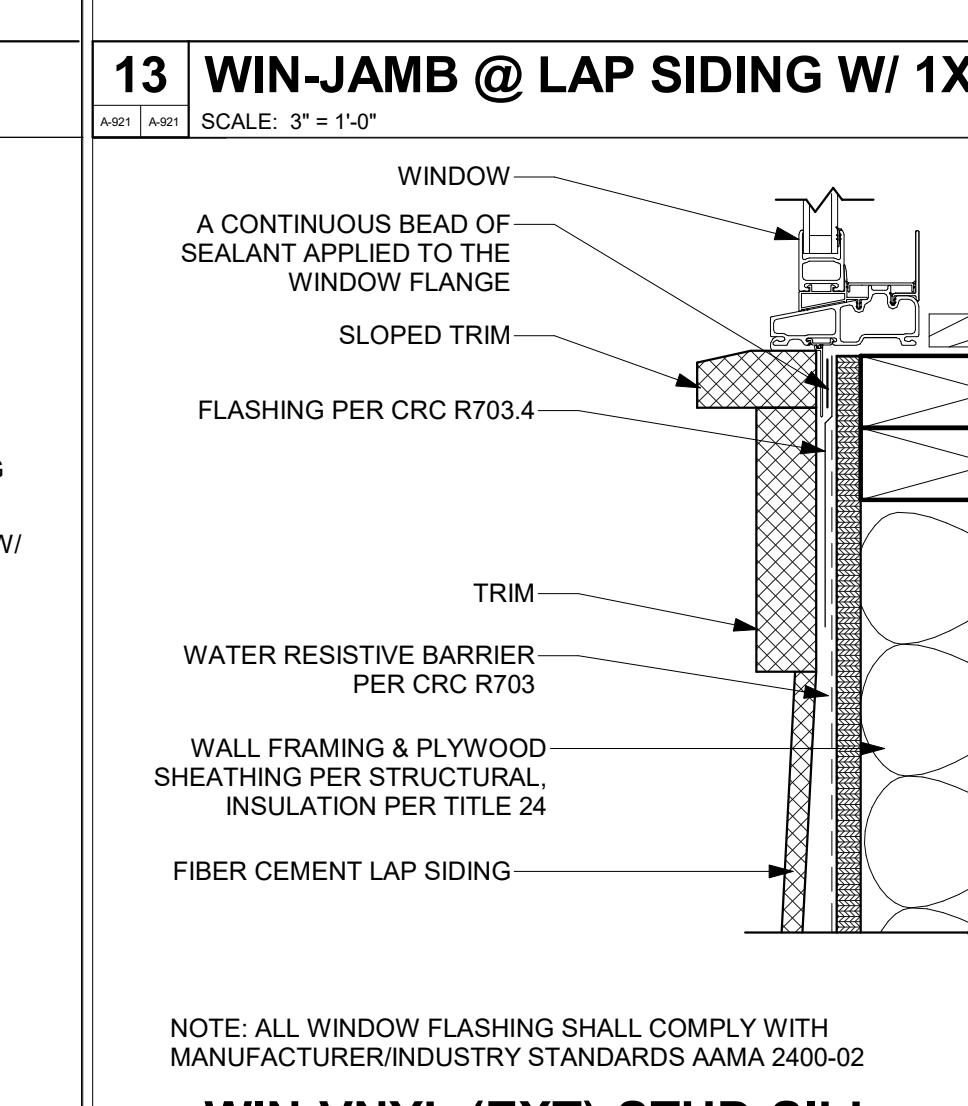


13 WIN-JAMB @ LAP SIDING W/ 1X4 TRIM
A-921 A-921 SCALE: 3" = 1'-0"

24 FIBER CEMENT-MOUNTING PAD-SIDING
A-921 A-921 SCALE: 3" = 1'-0"



14 @ FIBER CEMENT-LAP SIDING
A-921 A-921 SCALE: 3" = 1'-0"



PUBLIC SET



PUBLIC SET



PUBLIC SET



PUBLIC SET



PUBLIC SET

PUBLIC SET

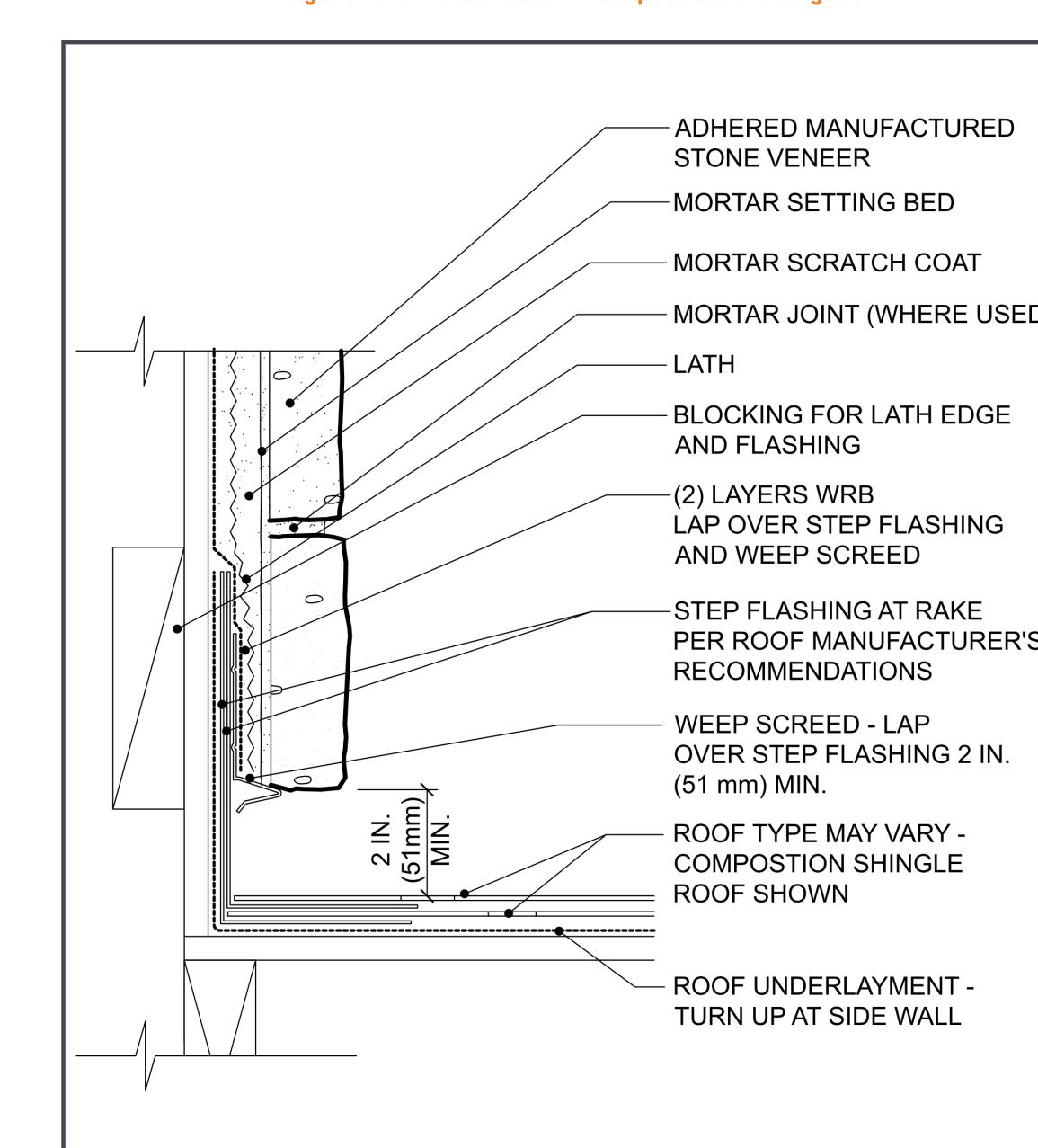
</

<p>51 FAUX VENT A1-203 A1-202 SCALE: 3" = 1'-0"</p>	<p>41 PORCH BEAM - SPANISH COLONIAL A1-201 A1-202 SCALE: 1 1/2" = 1'-0"</p>	<p>31 OUTSIDE CORNER-STUCCO A1-203 A1-202 SCALE: 3" = 1'-0"</p>	<p>21 DR-TRIM-MEDITERRANEAN A1-202 SCALE: 3/4" = 1'-0"</p>	<p>11 WIN-TRIM-MEDITERRANEAN A1-202 SCALE: 3/4" = 1'-0"</p>
<p>52 FAUX VENT ATTACHEMENT A1-203 A1-202 SCALE: 3" = 1'-0"</p>	<p>42 CEMENT PLASTER-PLASTER BAND A1-203 A1-202 SCALE: 3" = 1'-0"</p>	<p>32 INSIDE CORNER-STUCCO A1-203 A1-202 SCALE: 3" = 1'-0"</p>	<p>12 DR-HEAD RECESSED @ STUCCO A1-203 A1-202 SCALE: 3" = 1'-0"</p>	<p>22 WIN-HEAD-RECESSED @ STUCCO A1-203 A1-202 SCALE: 3" = 1'-0"</p>
<p>43 CEMENT PLASTER-PLASTER WAINSCOT A1-203 A1-202 SCALE: 3" = 1'-0"</p>	<p>33 CEMENT PLASTER-SPANISH ARCHWAY A1-203 A1-202 SCALE: 3/4" = 1'-0"</p>	<p>13 DR-JAMB RECESSED - STUCCO A1-203 A1-202 SCALE: 3" = 1'-0"</p>	<p>23 WIN-JAMB-RECESSED @ STUCCO A1-203 A1-202 SCALE: 3" = 1'-0"</p>	<p>44 TYP. FOUNDATION - STUCCO A1-203 A1-202 SCALE: 3" = 1'-0"</p>
<p>34 CONTROL JOINT @ STUCCO A1-203 SCALE: 3" = 1'-0"</p>	<p>14 MOUNTING PAD - STUCCO A1-203 SCALE: 3" = 1'-0"</p>	<p>24 WIN-SILL-RECESSED @ STUCCO A1-203 A1-202 SCALE: 3" = 1'-0"</p>	<p>PRE-APPROVED ADU CITY OF LAGUNA NIGUEL ARCHITECTURAL DETAILS - STUCCO</p>	



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REFER AND INSTALL ADHERED MASONRY FROM THE SELECTED MANUFACTURER'S
SPECIFICATIONS & RECOMMENDATIONS.

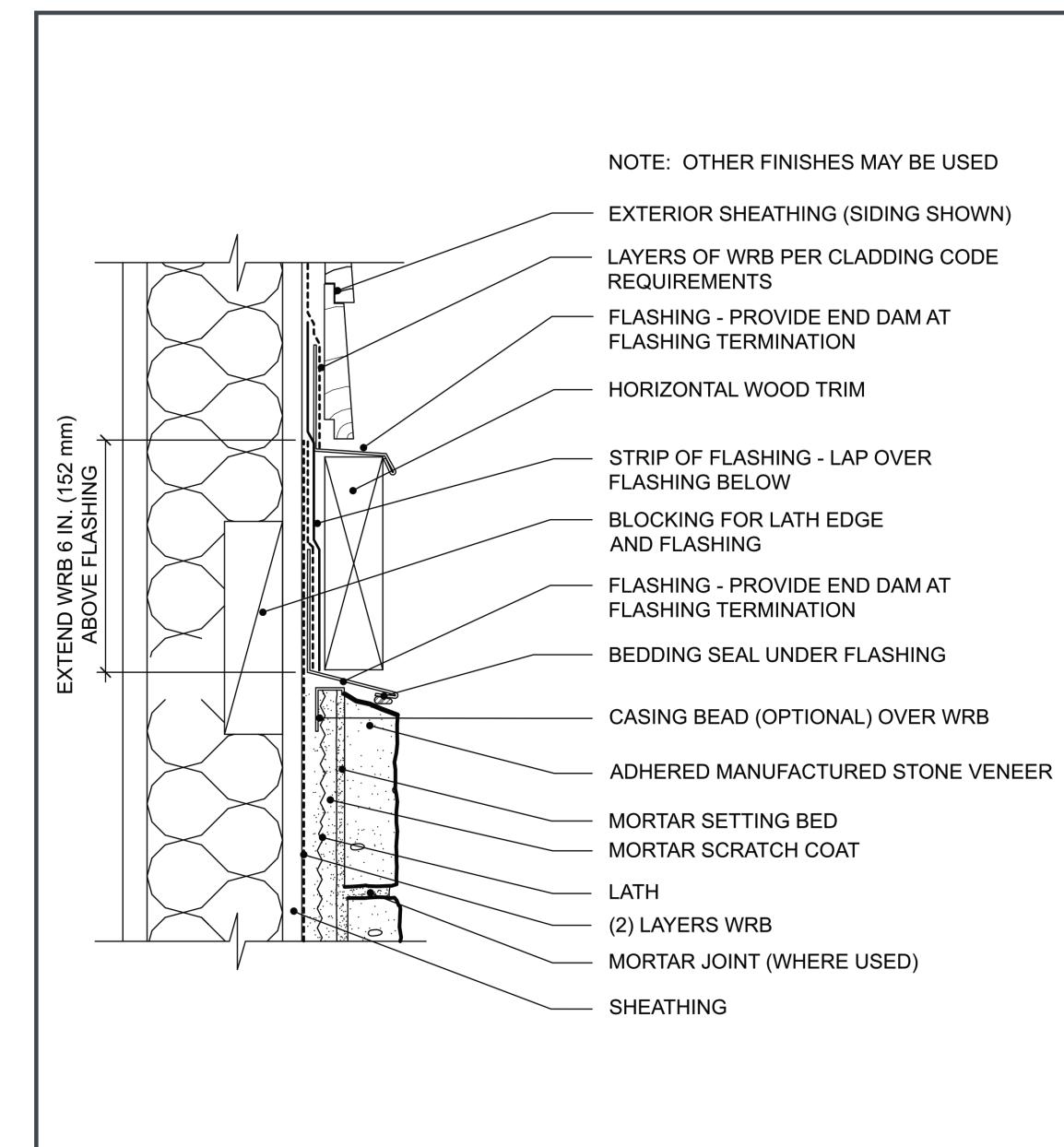


NATIONAL CONCRETE MASONRY ASSOCIATION

39

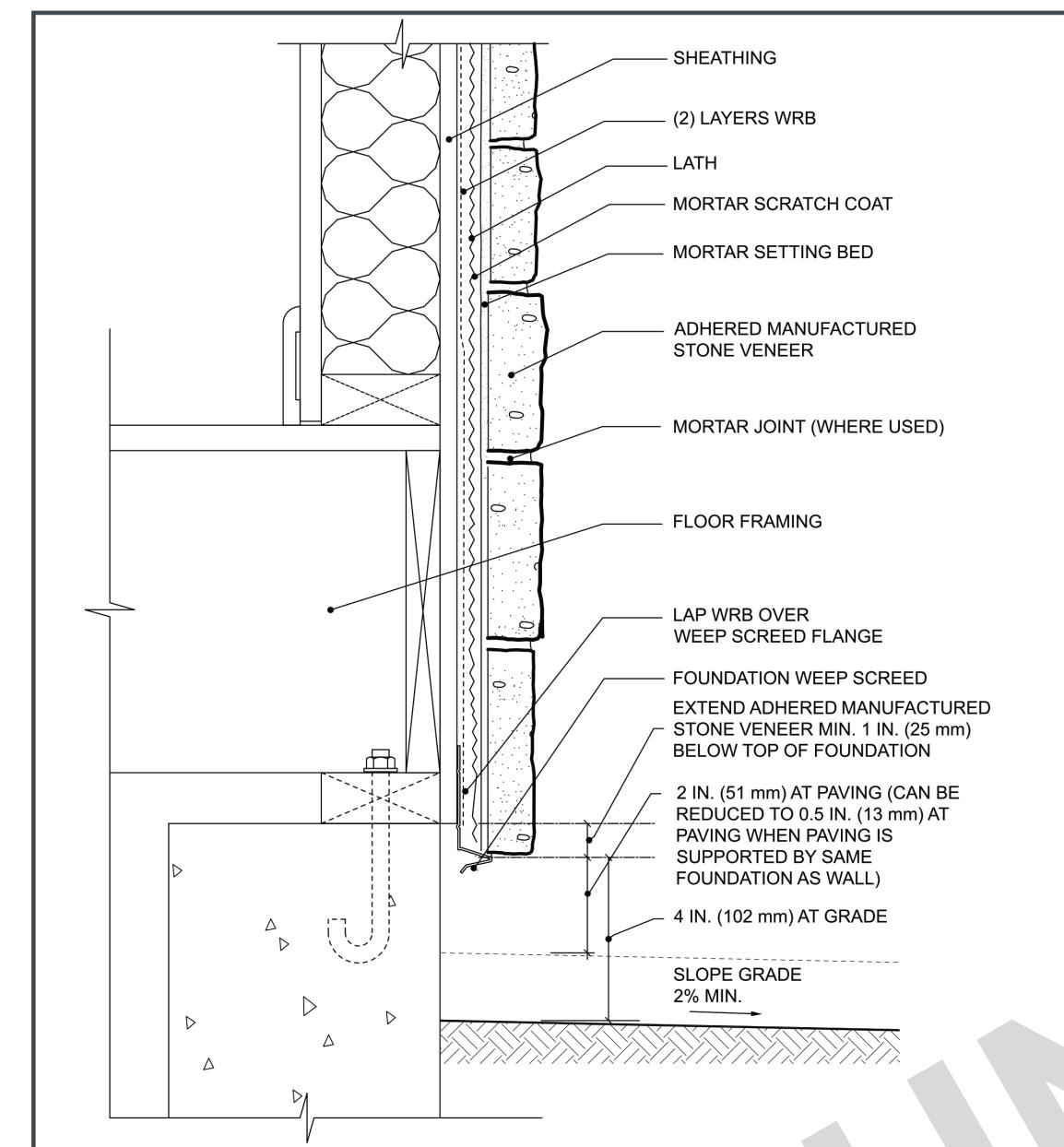
30 INSTALLATION GUIDE FOR ADHERED MANUFACTURED STONE VENEER, 5th EDITION, 5th PRINTING, REVISED AUGUST 2021

Figure 11a. Horizontal Transition



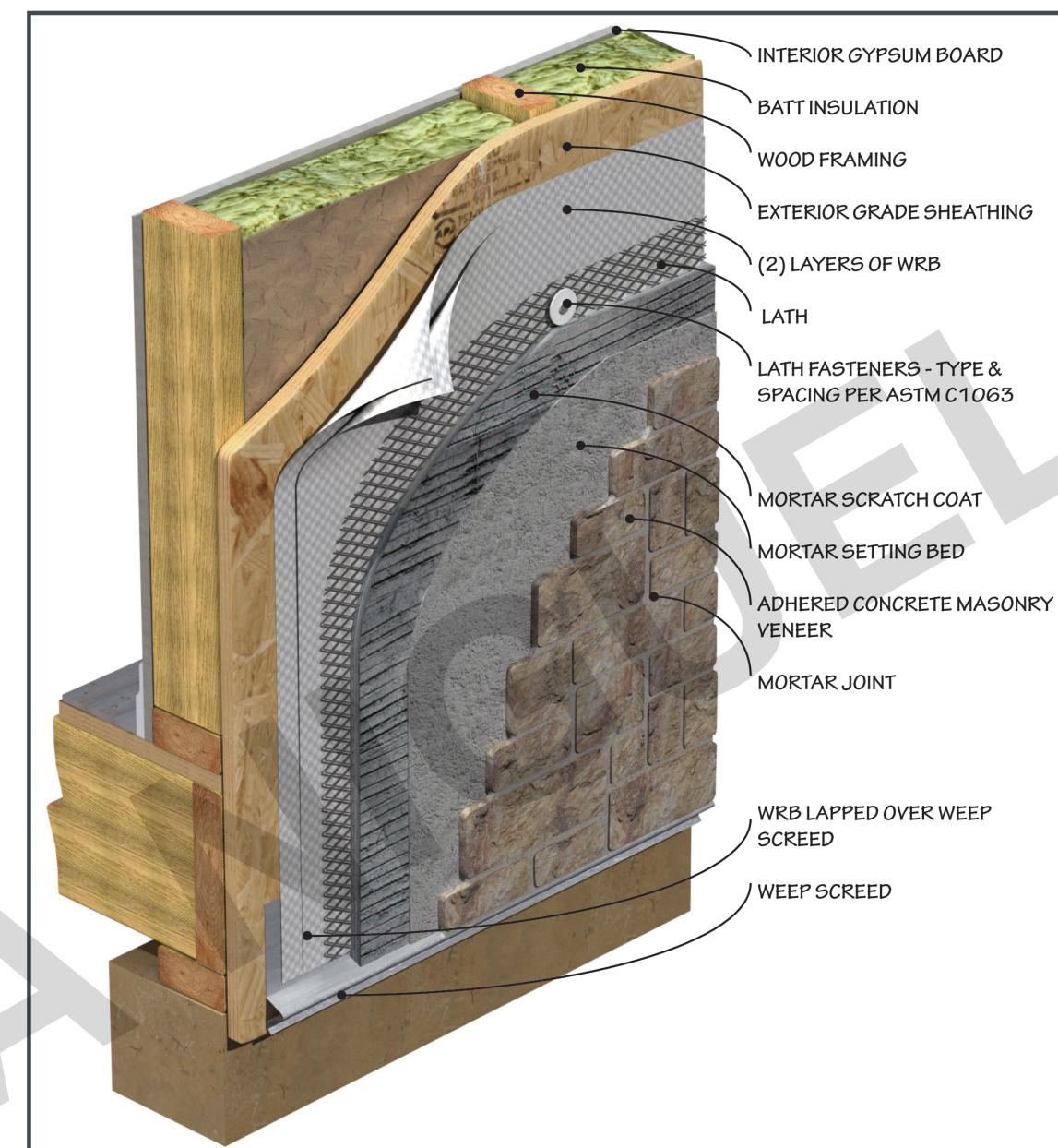
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Figure 5a. Foundation Wall Base



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Figure 1. Installation Over Wood Framing



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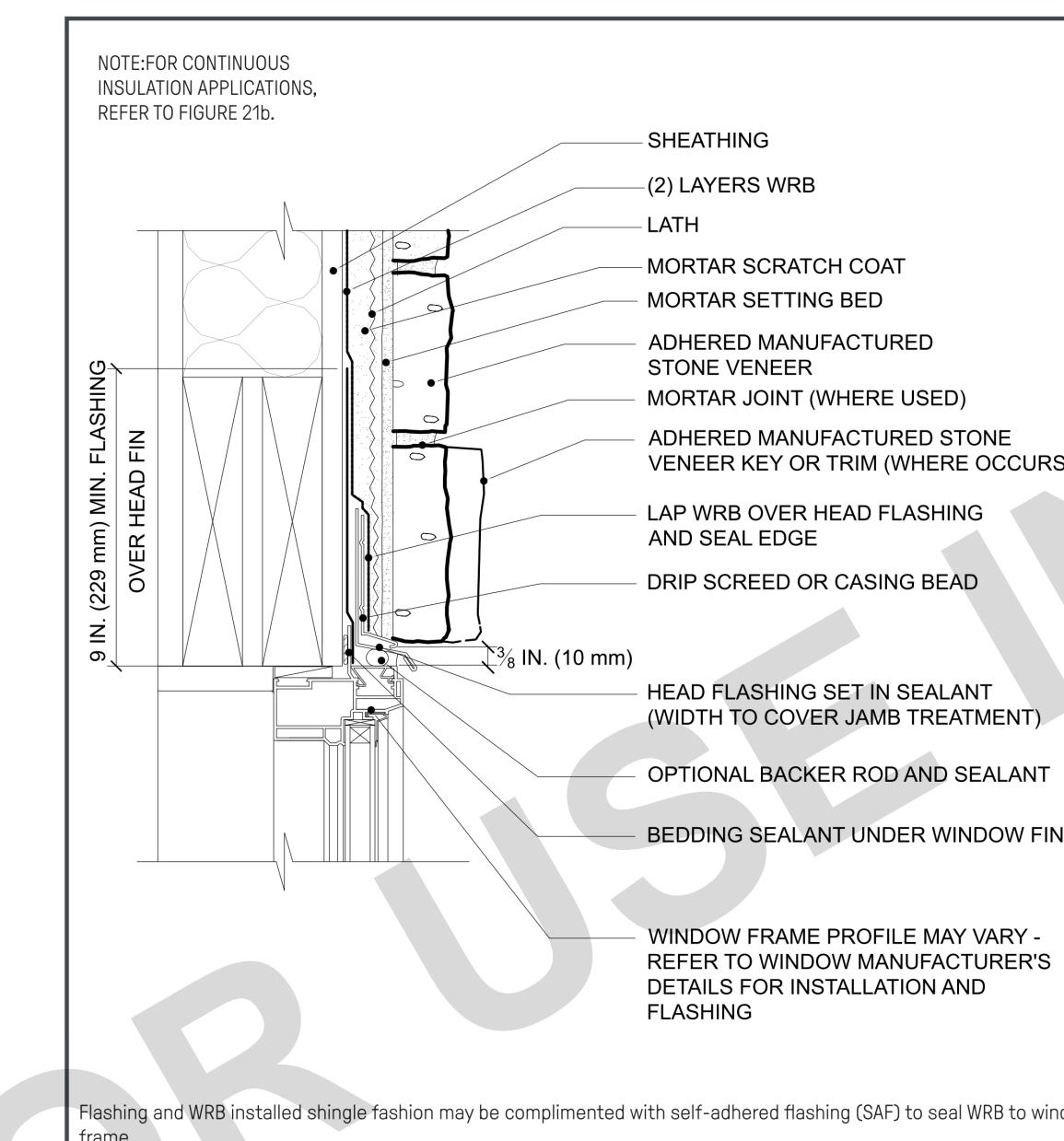
NATIONAL CONCRETE MASONRY ASSOCIATION

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Figure 23. Window Head



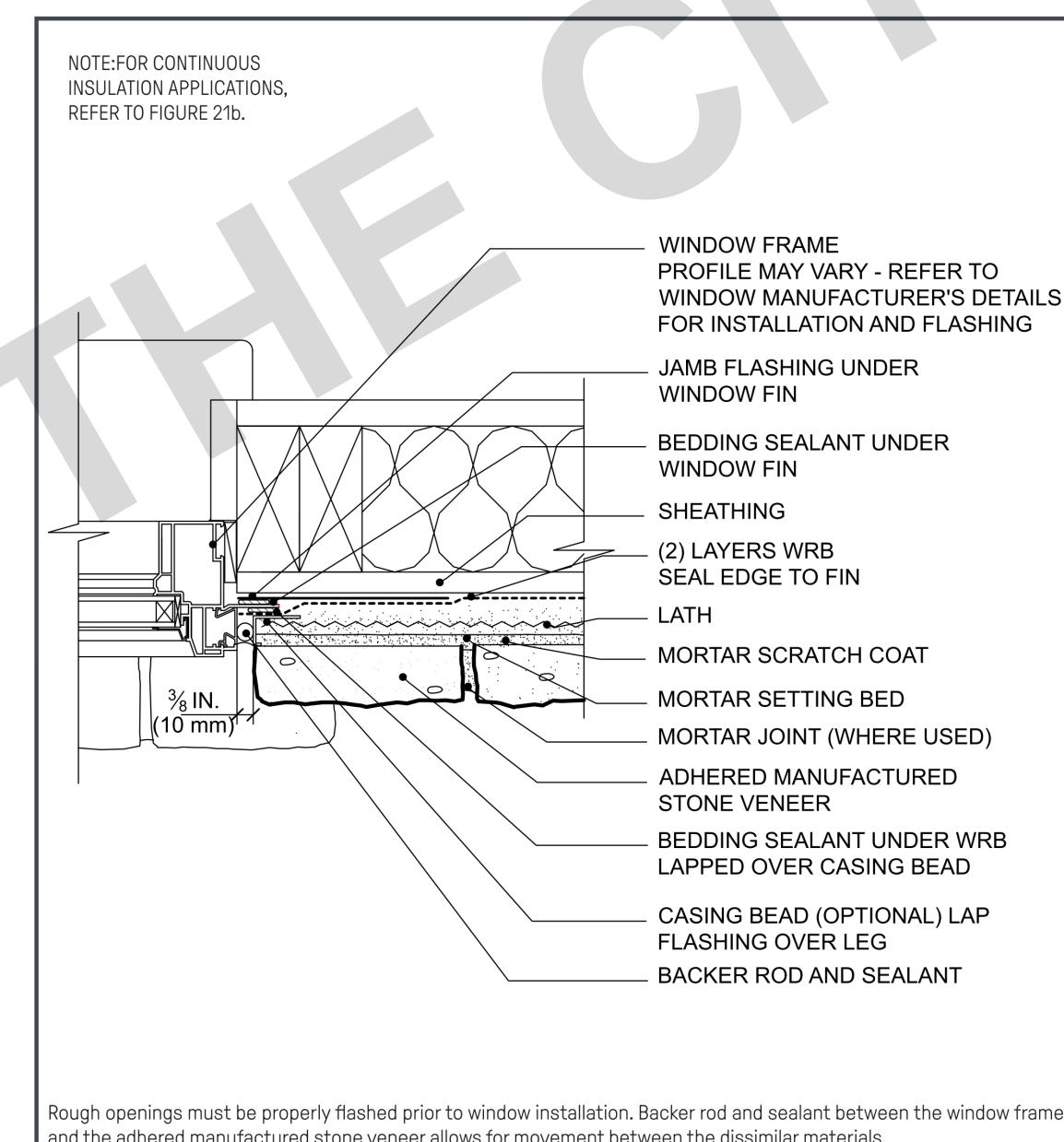
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NATIONAL CONCRETE MASONRY ASSOCIATION

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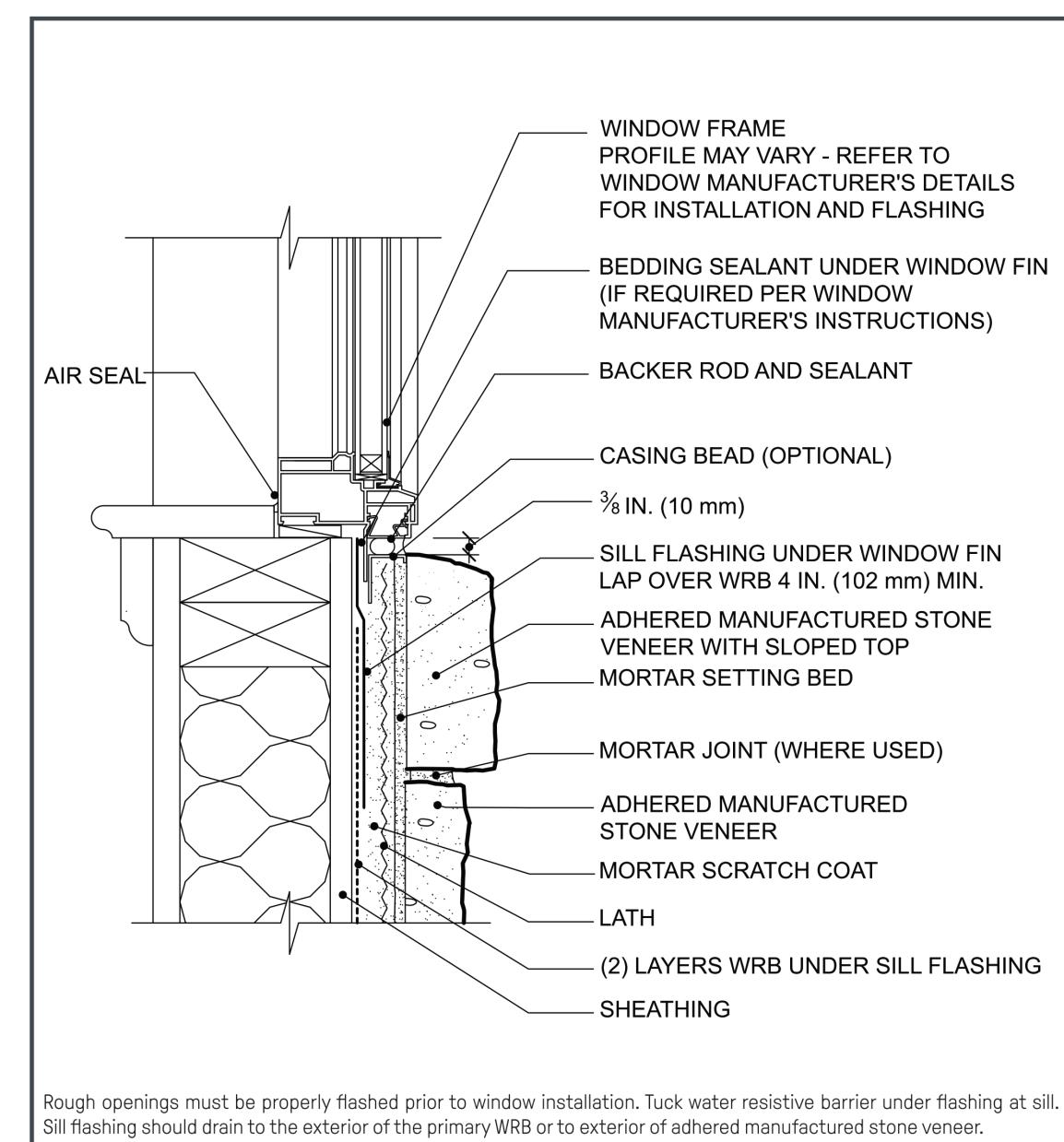
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Figure 22. Window Jamb



Rough openings must be properly flashed prior to window installation. Backer rod and sealant between the window frame and the adhered manufactured stone veneer allows for movement between the dissimilar materials.

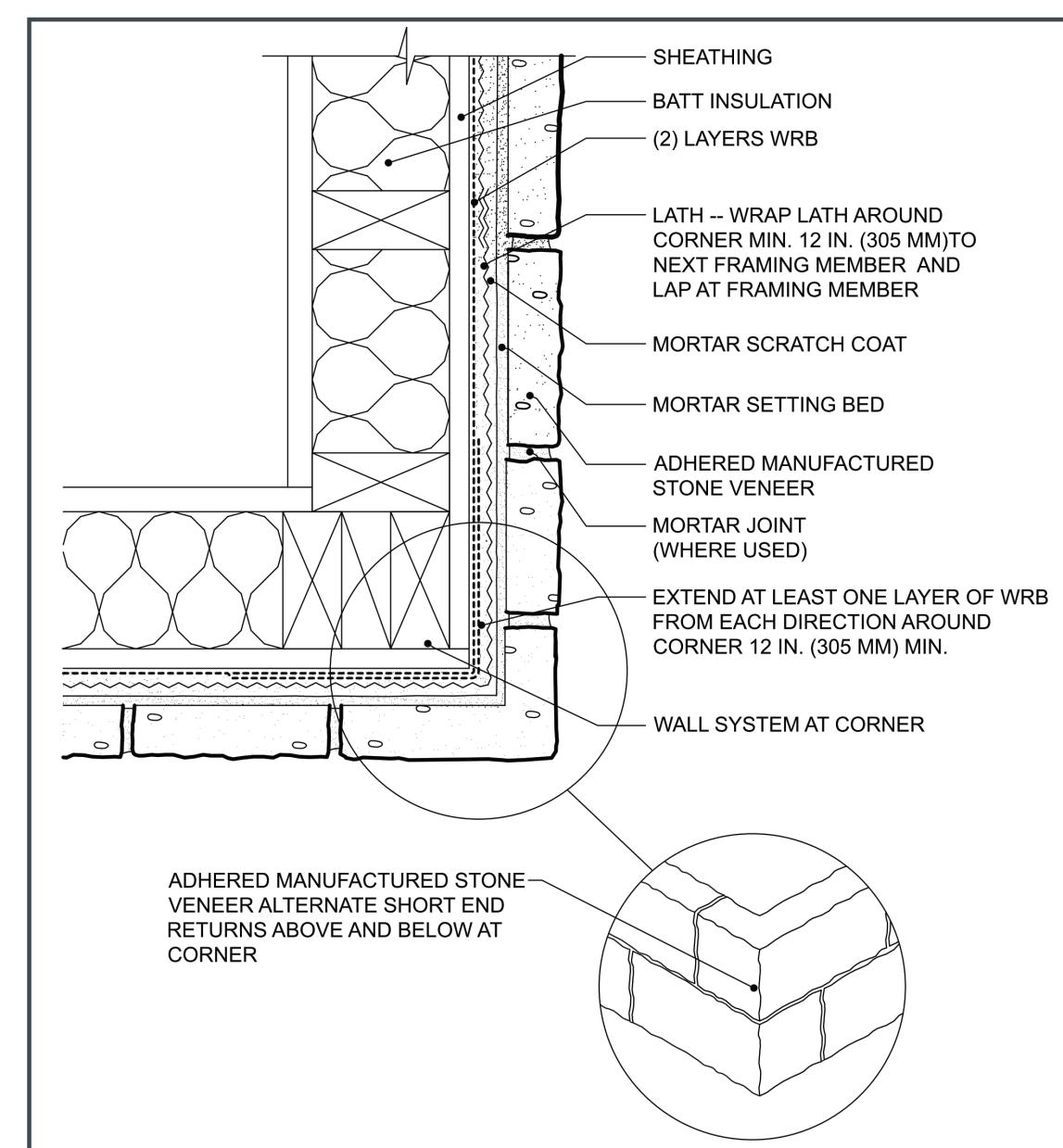
Figure 21a. Window Sill



Rough openings must be properly flashed prior to window installation. Tuck water resistive barrier under flashing at sill. Sill flashing should drain to the exterior of the primary WRB or to exterior of adhered manufactured stone veneer.

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Figure 9a. Outside Corner



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PRE-APPROVED ADU
CITY OF LAGUNA NIGUEL
ARCHITECTURAL DETAILS -
ADHERED MASONRY VENEER

PUBLIC SET
DATE
02/05/2025
SHEET
A-924

REINFORCING STEEL	
1. REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 19 OF THE CODE AND WITH THE PROVISIONS OF ACI 318-19, ASTM A706, GRADE 60 UNO, ASTM A615 GR 60 STEEL. MAY BE SUBSTITUTED FOR ASTM A706 GR60 STEEL PER ACI 318-19 SECTION 20.2.5 PROVIDED THE FOLLOWING CONDITIONS ARE MET:	
A. THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED THE SPECIFIED YIELD STRENGTH BY MORE THAN 18,000 PSI.	
B. THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRESS TO THE ACTUAL YIELD STRENGTH IS NOT LESS THAN 1.25.	
C. WHERE REINFORCEMENT COMPLYING WITH ASTM A615 IS TO BE WELDED, CHEMICAL TESTS SHALL BE PERFORMED TO DETERMINE WELDABILITY IN ACCORDANCE WITH SECTION 26.6.4 OF ACI 318-19.	
2. BARS SHALL BE CLEAN OF RUST, GREASE, OR OTHER MATERIALS LIKELY TO IMPAIR BOND. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.	
3. WELDED WIRE REINFORCEMENT (WWR), PLAIN OR DEFORMED, SHALL CONFORM TO ASTM A185. WELDED DEFORMED WIRE REINFORCEMENT (WWR) SHALL CONFORM TO ASTM A1064. ALL WWR FOR STAIR PANS AND ALL WWR FOR CONCRETE FILM ON METAL DECK SHALL BE PLAIN WWR. PROVIDE LAPS PER ACI 318-19 SECTION 25.5.3 OR 25.5.4 MINIMUM. WWR SHALL BE SUPPORTED ON APPROVED CHAIRS.	
4. REINFORCING BAR LAP SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS. LAP ALL HORIZONTAL BARS AT CORNERS AND INTERSECTIONS, STAGGER ALL SPLICES UNLESS NOTED OTHERWISE ON PLANS.	
A. MINIMUM LAP SPLICE LENGTH FOR REINFORCING STEEL BARS IN CONCRETE SHALL BE PER ACI 318-19 SECTION 25.5.2 AND THE REINFORCING SCHEDULE ON THE DRAWINGS.	
B. MINIMUM LAP SPLICE LENGTH FOR REINFORCING STEEL BARS IN MASONRY SHALL BE PER TMS 402-16 SECTION 6.1.6.1 AND THE REINFORCING SCHEDULE ON THE DRAWINGS.	
5. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE. ALL REINFORCING CONFORMING TO DIFFERENT ASTM SPECIFICATIONS AND/OR OF DIFFERENT GRADES SHALL BE CLEARLY MARKED TO DIFFERENTIATE THEM FROM OTHER REINFORCING STEEL IF CONCURRENTLY PRESENT ON SITE.	
6. WHERE WELDING OF REINFORCING IS APPROVED BY THE STRUCTURAL ENGINEER, IT SHALL BE DONE BY AWS CERTIFIED WELDERS USING EBOXX OR APPROVED ELECTRODES. WELDING PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF STRUCTURAL WELDING CODE, REINFORCING STEEL, AWS-D1.4-15. REINFORCING BARS TO BE WELDED SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706.	
7. REINFORCING STEEL SHALL BE ACCURATELY PLACED, ADEQUATELY SUPPORTED, AND SHALL BE SECURED AGAINST DISPLACEMENT, AND TIED BEFORE THE CONCRETE IS PLACED DURING CONSTRUCTION WITHIN PERMITTED TOLERANCES. ADEQUATE SUPPORTS ARE ALSO NECESSARY TO KEEP THE REINFORCING STEEL AT THE PROPER DISTANCE FROM THE FORMS. USE WIRE BAR SUPPORTS, PRECAST CONCRETE SUPPORTS, SPACERS, BOLSTERS, REINFORCEMENT OR OTHER MEANS OF SUPPORT FOR THE CRSI MANUAL OF STANDARD PRACTICE, LATEST EDITION.	
8. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE CRSI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, LATEST EDITION.	
9. COMPLETE AND DETAILED REINFORCING PLACEMENT DRAWINGS SHALL BE PREPARED AND SUBMITTED TO THE ARCHITECT FOR APPROVAL BY THE SEOR PRIOR TO FABRICATION IN ACCORDANCE WITH THE SPECIFICATIONS AND APPLICABLE CODES. THESE DRAWINGS SHALL BE AVAILABLE ON THE JOB SITE PRIOR TO PLACING OF CONCRETE. THE REINFORCING PLACEMENT DRAWINGS SHALL INCLUDE ALL PRIMARY REINFORCEMENT, LAP SPLICES, TIES, DOWELS, HEADED U-DOWELS, EMBED PLATES, ANCHOR BOLTS, ETC. AREAS OF CONGESTION SHALL BE DETAILED SUFFICIENTLY TO DEMONSTRATE THAT PLACEMENT OF REBAR MEETS SPACING REQUIREMENTS OF ACI 318-19.	
10. MILL TEST REPORTS FOR GRADE 60 BARS SHALL BE SUBMITTED TO THE INSPECTOR OF RECORD PRIOR TO PLACEMENT OF CONCRETE PER ACI 318-19 SECTION 26.13.2.3 OF THE CODE.	
11. WHEN REQ'D, INSPECTION OF CONCRETE SHALL INCLUDE INSPECTION DURING INSTALLATION OF REINFORCING STEEL. INSPECTION SHALL BE SCHEDULED SO THAT PLACEMENT OF REINFORCING STEEL, CONDUIT, SLEEVES, AND EMBEDDED ITEMS MAY BE CORRECTED PRIOR TO PLACEMENT OF OVERLYING GRIDS OR REINFORCING STEEL.	
12. CONCRETE PROTECTION FOR REINFORCEMENT	
THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT IN CAST-IN-PLACE CONCRETE (NON-PRESTRESSED):	
A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3	
B. CONCRETE EXPOSED TO EARTH OR WEATHER: NO. 6 THROUGH NO. 18 BAR 2 NO. 5 BAR, W31 OR D31 WIRE & SMALLER 1½"	
C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS, JOISTS: NO. 14 AND NO. 8 BARS 1½" NO. 11 BAR & SMALLER BEAMS, COLUMNS: PRIMARY REINFORCEMENT TIES, STIRRUPS, SPIRALS 1½"	
13. MECHANICAL BAR SPLICE CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-19 SECTION 25.5.7 USE OF MECHANICAL CONNECTIONS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER. SPLICES MUST BE TESTED AS INDICATED IN THE CONCRETE REINFORCEMENT SPECIFICATION. ACCEPTABLE PRODUCTS INCLUDE:	
LENTON STANDARD COUPLERS (IAPMO-ES 0129) LENTON FORM SAVERS, TYPE 5A (IAPMO-ES 0129) LENTON WELDABLE HALF COUPLERS (IAPMO-ES 0129) LENTON LOCK COUPLERS PER (IAPMO-ES 0129)	
NOTE THAT REBAR ATTACHED TO PLATE USING LENTON WELDABLE HALF COUPLERS SHALL BE ASTM A706 PER IAPMO-ES 0129.	
ALL MECHANICAL BAR SPLICE CONNECTIONS IN SPECIAL STRUCTURAL WALLS, SPECIAL MOMENT FRAMES AND CONCRETE DIAPHRAGMS SHALL BE TYPE 2 CONFORMING TO THE REQUIREMENTS OF ACI 318-19 SECTION 18.2.7 & 18.12.7.4.	

CONCRETE																			
1. GEOTECHNICAL INFORMATION AND FOUNDATION DESIGN IS BASED ON THE FOLLOWING:																			
A. DESIGN LATERAL SOIL LOADS ARE IN ACCORDANCE WITH 2022 CBC TABLE 1610.1																			
B. ALLOWABLE FOUNDATION BEARING AND LATERAL PRESSURES ARE IN ACCORDANCE WITH 2022 CBC TABLE 1806.2																			
2. CONCRETE MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:																			
<table border="1"> <thead> <tr> <th>MATERIAL</th> <th>ASTM STANDARD</th> </tr> </thead> <tbody> <tr> <td>PORTLAND CEMENT (TYPE V)</td> <td>C150</td> </tr> <tr> <td>CONCRETE AGGREGATES (HARDROCK)</td> <td>C33</td> </tr> <tr> <td>CONCRETE AGGREGATES (LIGHTWEIGHT)</td> <td>C330</td> </tr> <tr> <td>WATER^a</td> <td>C1602</td> </tr> <tr> <td>COAL FLY ASH OR POZOLAN (CLASS F)</td> <td>C618</td> </tr> <tr> <td>NATURAL OR MANUFACTURED SAND</td> <td>C33</td> </tr> <tr> <td>SLAG</td> <td>C99</td> </tr> </tbody> </table>		MATERIAL	ASTM STANDARD	PORTLAND CEMENT (TYPE V)	C150	CONCRETE AGGREGATES (HARDROCK)	C33	CONCRETE AGGREGATES (LIGHTWEIGHT)	C330	WATER ^a	C1602	COAL FLY ASH OR POZOLAN (CLASS F)	C618	NATURAL OR MANUFACTURED SAND	C33	SLAG	C99		
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SLAG	C99																		
3. CONCRETE MIXES SHALL BE PROPORTIONED BASED ON SECTION 26.4.3 OF ACI 318-19, WHICH REFERENCES ACI 301-20 ARTICLE 4.2.3. MIX DESIGNS SHALL INCLUDE DOCUMENTATION OF MIX AVERAGE COMPRESSIVE STRENGTH THROUGH FIELD TEST DATA OR TRAIL MIXTURES IN ACCORDANCE WITH ACI 301-20 ARTICLE 4.2.4.																			
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7. ALL CONCRETE SURFACES AGAINST WHICH NEW CONCRETE IS TO BE PLACED SHALL BE CLEANED AND ROUGHENED TO 1/4" AMPLITUDE.																			
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9. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CAVING IN CONCRETE IS NOT PERMITTED WITHOUT SEOR APPROVAL. NOTIFY THE SEOR IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS. SEE THE DRAWINGS FOR ADDITIONAL RESTRICTIONS ON THE PLACEMENT OF OPENINGS IN SLABS AND WALLS.																			
10. ALL ABANDONED FOOTINGS, UTILITIES, ETC. SHALL BE REMOVED. NEW FOOTINGS MUST EXTEND INTO UNDISTURBED SOILS.																			
11. PIPES WITHIN THE ZONE OF INFLUENCE OF BUILDING OR SITE ELEMENT FOUNDATIONS SHALL BE ENCASED IN LEAN CONCRETE.																			
EXISTING CONDITIONS																			
1. ALL INFORMATION SHOWN ON THE PLANS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE FROM PLANS SUPPLIED BY THE OWNER, BUT WITHOUT GUARANTEE OF ACCURACY.																			
2. WHERE ACTUAL CONDITIONS ARE NOT IN ACCORDANCE WITH THE INFORMATION PRESENTED, THE ARCHITECT AND/OR STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY. NO MODIFICATIONS OF THE PLANS FOR NEW CONSTRUCTION SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.																			
EXISTING UNDERGROUND UTILITIES																			
1. THE ARCHITECT AND ENGINEERS ARE NOT RESPONSIBLE FOR THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE DRAWINGS. DRAWINGS, IF ANY, IS APPROXIMATE. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THE SITE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND/OR STRUCTURAL ENGINEER SHOULD ANY SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED.																			
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES WHICH MAY RESULT FROM HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES.																			
3. AN UNDERGROUND SERVICE ALERT INQUIRY IDENTIFICATION NUMBER MUST BE OBTAINED AT LEAST TWO WORKING DAYS BEFORE STARTING WORK WITH THIS PERMIT.																			
A. FOR PROJECTS IN SOUTHERN CALIFORNIA TELEPHONE NO. 1-800-422-4133. B. FOR PROJECTS IN NORTHERN CALIFORNIA TELEPHONE NO. 1-800-227-2600.																			
DEMOLITION																			
1. ALL DEMOLITION SHALL BE CARRIED ON IN SUCH A WAY AS NOT TO DAMAGE EXISTING ELEMENTS, WHICH ARE TO REMAIN IN THE FINISHED STRUCTURE.																			
2. ALL ELEMENTS OF THE STRUCTURE, WHICH ARE TO REMAIN, AND WHICH ARE DAMAGED DURING DEMOLITION WORK SHALL BE REPLACED AT NO ADDITIONAL COST. EXISTING ELEMENTS SHALL BE PROTECTED TO THE FULLEST EXTENT POSSIBLE, IN ORDER TO MITIGATE DAMAGE.																			
3. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF ALL EXISTING ELEMENTS THAT ARE NECESSARY FOR THE INSTALLATION OF ALL NEW WORK.																			
4. WHERE EXISTING PARTITION WALLS ARE TO BE DEMOLISHED, CONTRACTOR SHALL VERIFY WALLS ARE NON-BEARING. PRIOR TO DEMOLITION, IF WALLS ARE FOUND TO BE BEARING, CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY.																			
FOOTING																			
1. THE ACTUAL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 19 OF THE CODE AND WITH THE PROVISIONS OF ACI 318-19.																			
2. CONCRETE MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:																			
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7. NOTES:																			
A. THE ALLOWABLE CAPACITY MAY BE INCREASED BY ONE-THIRD WHEN CONSIDERING LOADS OF SHORT DURATION SUCH AS WIND OR SEISMIC FORCES.																			
B. THE ALLOWABLE LATERAL RESISTANCE CAN BE TAKEN AS THE SUM OF THE FRICTIONAL RESISTANCE AND PASSIVE RESISTANCE.																			
C. THE UPPER 0 FOOT OF SOIL NOT PROTECTED BY PAVEMENT SHALL BE NEGLECTED WHEN CALCULATING PASSIVE RESISTANCE.																			
D. COMPACTED FILL SHOULD BE PREPARED AS FOLLOWS: A MIN OF 12' OF COMPACTED FILL SHALL BE PROVIDED, COMPACTED TO A MIN OF 90 PERCENT MODIFIED PROCTOR IN ACCORDANCE WITH ASTM E 1557 (2022 CBC 1804.6)																			
E. MAY BE DOUBLED FOR ISOLATED POLES PER 2022 CBC 1806.3.4																			
4. WHERE NOT SHOWN ON THE DRAWINGS, CONTRACTOR TO PROVIDE FOR DESIGN AND INSTALLATION OF ALL CHIRPING, SHEATHING AND SHORING REQUIRED AND SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS, AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.																			
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REQUIRED VERIFICATION AND INSPECTIONS			
CONCRETE CONSTRUCTION CODE TABLE 1705.3			
SPECIAL INSPECTION OR TEST	CONTINUOUS PERIODIC	REFERENCED STANDARD	CBC REFERENCE
3. INSPECT ANCHORS CAST IN CONCRETE	—	X	ACI 318: 26.7
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS (a) (i) ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS (b) MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.c.	X	X	ACI 318: 26.7.1 ACI 318: 26.7.1

WOOD CODE CHAPTER 17 AND REFERENCED 2018 NDS AND AWC SDPWS-2021			
SPECIAL INSPECTION OR TEST	CONTINUOUS PERIODIC	CBC REFERENCE	
3. WOOD LATERAL FORCE-RESISTING SYSTEM WITH FASTENER SPACING OF THE SHEATHING LESS THAN OR EQUAL TO 4' OC. - WOOD SHEAR WALLS - WOOD DIAPHRAGMS - DRAG STRUTS - SHEAR PANELS - HOLD-DOWNS	—	X	1705.12.2 1705.13.2
4. WOOD LATERAL FORCE-RESISTING SYSTEM WITH FASTENER SPACING OF THE SHEATHING GREATER THAN 4' OC (NOT REQUIRED) - WOOD SHEAR WALLS - WOOD DIAPHRAGMS - DRAG STRUTS - SHEAR PANELS - HOLD-DOWNS	—	—	1705.12.2 1705.13.2

SOILS CODE TABLE 1705.6			
SPECIAL INSPECTION OR TEST	CONTINUOUS PERIODIC		
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	—	X	
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	—	X	
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	—	X	
4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	X	—	
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	—	X	

STATEMENT OF SPECIAL INSPECTIONS			
1. THIS STATEMENT OF SPECIAL INSPECTIONS HAS BEEN PREPARED PURSUANT TO SECTION 1704.3 OF THE CODE. THIS SECTION DETAILS BOTH REQUIRED SPECIAL INSPECTIONS AND TESTS INCLUDING TESTING PER SECTION 1705 OF THE CODE. THE FOLLOWING SHALL BE OBSERVED DURING THEIR IMPLEMENTATION:			
A. GENERAL: o. STRUCTURAL VERIFICATIONS, INSPECTIONS AND TESTS SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF THE CODE AND/OR THE APPLICABLE REFERENCE STANDARD.			
B. OWNER REQUIREMENTS: o. THE OWNER OR OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN SECTION 1705 OF THE CODE AND IN THIS STATEMENT OF INSPECTIONS.			
C. SPECIAL INSPECTOR QUALIFICATIONS: o. THE SPECIAL INSPECTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING HIS OR HER COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING, THE EXPERIENCE OR TRAINING SHALL BE CONSIDERED RELEVANT WHEN THE DOCUMENTED EXPERIENCE OR TRAINING IS RELATED IN COMPLEXITY TO THE SAME TYPE OF SPECIAL INSPECTION ACTIVITIES FOR PROJECTS OF SIMILAR COMPLEXITY AND MATERIAL QUANTITIES.			
D. CONTRACTOR REQUIREMENTS: o. SPECIAL INSPECTION IS IN ADDITION TO THE CONTRACTOR'S QUALITY CONTROL INSPECTIONS AND TESTING. THE CONTRACTOR'S QUALITY CONTROL INSPECTIONS AND TESTING SHALL OCCUR PRIOR TO SPECIAL INSPECTION AND REPORTS SHALL BE AVAILABLE TO THE SPECIAL INSPECTOR. b. THE CONTRACTOR SHALL ENSURE THAT THE WORK FOR WHICH SPECIAL INSPECTION IS REQUIRED REMAINS ACCESSIBLE AND EXPOSED FOR SPECIAL INSPECTION PURPOSES UNTIL COMPLETION OF THE REQUIRED SPECIAL INSPECTION. c. ANY CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF THE MAIN WIND OR SEISMIC FORCE RESISTING SYSTEM SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER PRIOR TO COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL INSPECTION REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS.			
E. SPECIAL INSPECTOR REPORT REQUIREMENTS: o. THE SPECIAL INSPECTOR SHALL KEEP RECORD OF INSPECTIONS b. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD. c. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. d. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. e. IF NOT CORRECTED DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD PRIOR TO THE COMPLETION OF THAT PHASE OF WORK. f. A FINAL REPORT DOCUMENTING SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED SHALL BE SUBMITTED TO THE BUILDING OFFICIAL.			

SHOP FABRICATION			
1. SHOP FABRICATION REQUIRES SPECIAL INSPECTION IN ACCORDANCE WITH CODE SECTION 1704.25. EXCEPTION: SHOP SPECIAL INSPECTIONS ARE NOT REQUIRED WHEN WORK IS DONE ON THE PREMISES OF FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK IN ACCORDANCE WITH CODE SECTION 1704.2.1, THE FOLLOWING ACCREDITATIONS MEET THE REQUIREMENTS OF THIS EXCEPTION:			
A. WOOD BUILDINGS o. PREFABRICATED WOOD TRUSSES			
2. THE TRUSS DESIGNER SHALL MEET ALL THE REQUIREMENTS LISTED IN SECTION 2.3.5 OF ANSI/TPI 1-2014 INCLUDING THE FOLLOWING: a. TRUSS DESIGNER SHALL SUPERVISE THE PREPARATION OF THE TRUSS DESIGN DRAWINGS WHICH SHALL CONTAIN THE INFORMATION LISTED IN SECTION 2.3.5.5 OF ANSI/TPI 1-2014. THIS INCLUDES ALL TRUSS TO TRUSS CONNECTIONS, AND DETAILS FOR THE "CALIFORNIA F1" AREAS. b. TRUSS DESIGNER SHALL COMPLY WITH THE REFERENCED CODE AND DESIGN CRITERIA ABOVE. c. TRUSS DESIGNER SHALL SHOW ALL HANGERS, BRACING AND RESTRAINTS AS WELL AS METHOD OF RESTRAINT/BRACING ON THE TRUSS PLANS TO MEET ANY SEISMIC AND WIND REQUIREMENTS OF THE CODE. d. SUBMIT TRUSS DESIGN DRAWINGS INCLUDING ALL RELEVANT DETAILS FOR THE FABRICATION OF THE TRUSSES AND PREPARE CALCULATIONS. ALL PLANS, DETAILS AND CALCULATIONS FOR THE TRUSSSES SHALL BE STAMPED AND SIGNED BY A LICENSED PROFESSIONAL ENGINEER (CIVIL OR STRUCTURAL) LICENSED TO PRACTICE IN THE STATE OF CALIFORNIA.			
3. THE TRUSS DESIGNER REQUIREMENTS: A. THE TRUSS DESIGNER SHALL MEET ALL THE REQUIREMENTS LISTED IN SECTION 2.3.5 OF ANSI/TPI 1-2014 INCLUDING THE FOLLOWING: a. TRUSS DESIGNER SHALL SUPERVISE THE PREPARATION OF THE TRUSS DESIGN DRAWINGS WHICH SHALL CONTAIN THE INFORMATION LISTED IN SECTION 2.3.5.5 OF ANSI/TPI 1-2014. THIS INCLUDES ALL TRUSS TO TRUSS CONNECTIONS, AND DETAILS FOR THE "CALIFORNIA F1" AREAS. b. TRUSS DESIGNER SHALL COMPLY WITH THE REFERENCED CODE AND DESIGN CRITERIA ABOVE. c. TRUSS DESIGNER SHALL SHOW ALL HANGERS, BRACING AND RESTRAINTS AS WELL AS METHOD OF RESTRAINT/BRACING ON THE TRUSS PLANS TO MEET ANY SEISMIC AND WIND REQUIREMENTS OF THE CODE. d. SUBMIT TRUSS DESIGN DRAWINGS INCLUDING ALL RELEVANT DETAILS FOR THE FABRICATION OF THE TRUSSES AND PREPARE CALCULATIONS. ALL PLANS, DETAILS AND CALCULATIONS FOR THE TRUSSSES SHALL BE STAMPED AND SIGNED BY A LICENSED PROFESSIONAL ENGINEER (CIVIL OR STRUCTURAL) LICENSED TO PRACTICE IN THE STATE OF CALIFORNIA.			

PRE-FABRICATED WOOD TRUSS NOTES			
1. THE DESIGN OF METAL PLATE CONNECTED WOOD TRUSSES SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS:			
a. THE GOVERNING CODE LISTED IN THE PROJECT GENERAL NOTES			
b. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7-16)			
c. NATIONAL DESIGN STANDARD FOR WOOD CONSTRUCTION AND SUPPLEMENT (ANSI/AWC NDS-2018)			
d. SPECIAL DESIGN PROVISIONS FOR WIND & SEISMIC (AWC SDPWS-2021)			
e. THE NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION (ANSI/TPI 1-2014)			
B. DESIGN CRITERIA:			
a. TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING MINIMUM VERTICAL LOADS AND OTHER LOADS INDICATED ON THE CONSTRUCTION DOCUMENTS (ATTIC MECHANICAL UNITS, ETC.)			
ROOF TRUSS LOADING: CLAY TILE W/ GYP CEILING: TOP-CHORD DEAD LOAD: 19.9 PSF * (18.2 PSF SUPERIMPOSED) BOT-CHORD DEAD LOAD: 8.3 PSF (6.7 PSF SUPERIMPOSED) ROOF - LIVE LOAD: 20 PSF			
ROOF TRUSS LOADING AT PORCH: CLAY TILE W/ STUCCO CEILING: TOP-CHORD DEAD LOAD: 19.9 PSF * (18.2 PSF SUPERIMPOSED) BOT-CHORD DEAD LOAD: 14.6 PSF (13.0 PSF SUPERIMPOSED) ROOF - LIVE LOAD: 20 PSF			
DEFLECTION CRITERIA: DEAD + LIVE LOAD: L/240 LIVE LOAD ONLY: L/360			
*INCLUDES 4 PSF ALLOWANCE FOR PV PANELS			

WOOD STRUCTURAL PANELS (SHEATHING)																																			
1. WOOD STRUCTURAL PANELS SHALL MEET THE FOLLOWING MINIMUM STANDARDS EXCEPT WHERE OTHERWISE NOTED:																																			
WOOD STRUCTURAL PANEL PROPERTIES																																			
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a. WOOD STRUCTURAL PANELS SHALL CONFORM TO THE REQUIREMENTS FOR THEIR TYPE IN ACCORDANCE WITH THE FOLLOWING VOLUNTARY STANDARDS BY THE ENGINEERED WOOD ASSOCIATION (APA): o. VOLUNTARY PRODUCT STANDARD, STRUCTURAL PLYWOOD, PS 1-09 b. VOLUNTARY PRODUCT STANDARD, PERFORMANCE STANDARD FOR WOOD-BASED STRUCTURAL-USE PANELS, PS 2-10																																			
b. WOOD STRUCTURAL PANELS SHALL BE IDENTIFIED BY THE APA TRADEMARK INDICATING CONFORMANCE TO THE APPLICABLE VOLUNTARY STANDARD																																			
c. WHERE PANELS ARE EXPOSED TO REPEATED WETTING AND DRYING, LONG-TERM EXPOSURE TO WEATHER, OR CONDITIONS OF SMALL SEVERITY, "EXTERIOR" APA RATED PLYWOOD SHEATHING SHALL BE USED. C-D "EXPOSURE 1" APA RATED PLYWOOD SHEATHING (CDX) SHALL NOT BE USED FOR CONDITIONS INVOLVING LONG-TERM EXPOSURE TO WEATHER. o. EXCEPTION: WOOD STRUCTURAL PANEL ROOF-SHEATHING EXPOSED TO THE OUTDOORS ON THE UNDERSIDE IS PERMITTED TO BE "EXPOSURE 1" TYPE.																																			
d. WOOD STRUCTURAL PANELS TO BE USED AS SIDING SHALL COMPLY WITH ANSI/APA PRP-210.																																			

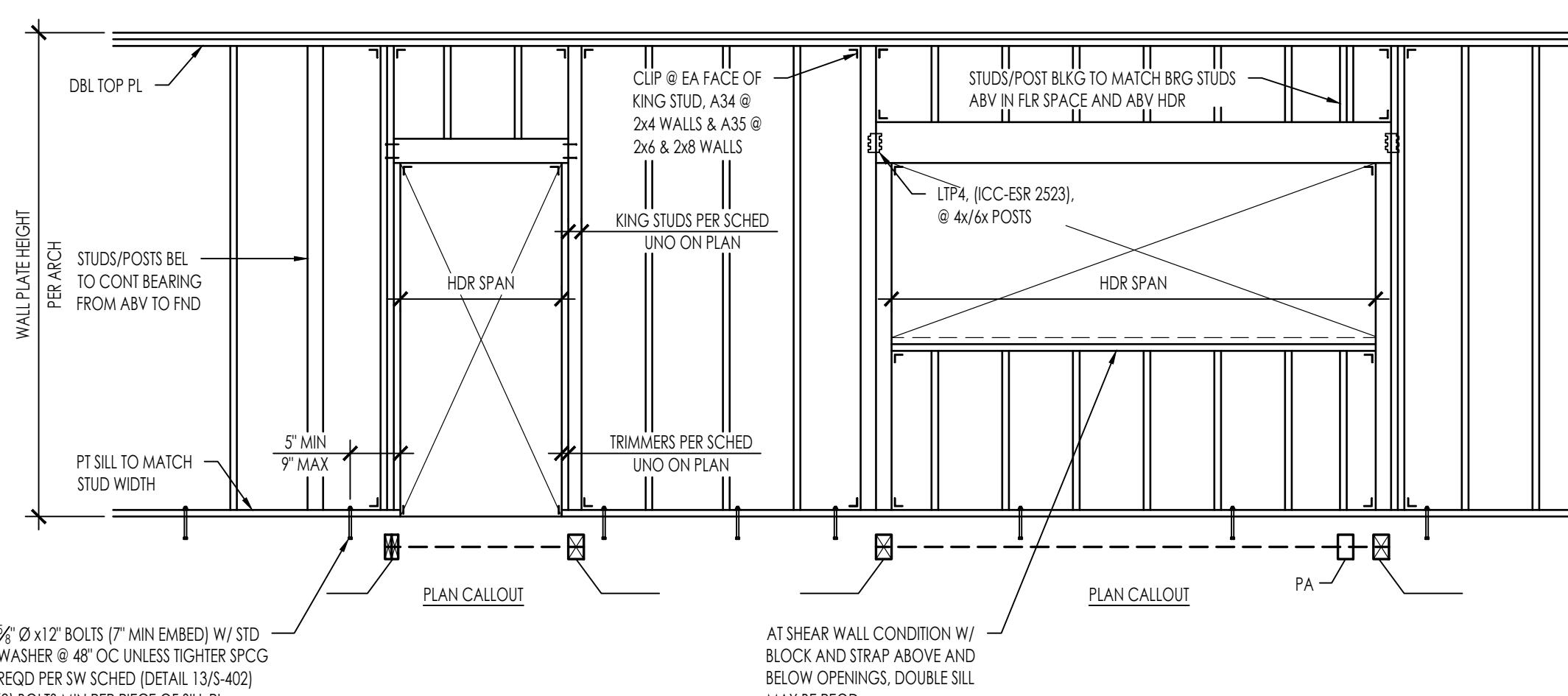
SAWN LUMBER																							
1. FRAMING LUMBER SHALL MEET THE FOLLOWING MINIMUM STANDARDS EXCEPT WHERE OTHERWISE NOTED:																							
SAWN LUMBER PROPERTIES																							
<table border="1"> <thead> <tr> <th>USE</th> <th>SIZE</th> <th>SPECIES</th> <th>GRADE</th> <th>REFERENCE</th> </tr> </thead> <tbody> <tr> <td>MUDSILLS</td> <td>2x</td> <td>D.F.</td> <td>STANDARD OR BETTER PRESSURE TREATED</td> <td>2022 CBC 2303.1.9</td> </tr> <tr> <td>2x6 AND LARGER</td> <td>2x</td> <td>D.F.</td> <td>NO. 2 OR BETTER PRESSURE TREATED</td> <td></td> </tr> <tr> <td>2x</td> <td>REDWOOD</td> <td></td> <td>FOUNDATION GRADE</td> <td></td> </tr> </tbody> </table>				USE	SIZE	SPECIES	GRADE	REFERENCE	MUDSILLS	2x	D.F.	STANDARD OR BETTER PRESSURE TREATED	2022 CBC 2303.1.9	2x6 AND LARGER	2x	D.F.	NO. 2 OR BETTER PRESSURE TREATED		2x	REDWOOD		FOUNDATION GRADE	
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HORIZONTAL FRAMING LUMBER																							



THESE PLANS ARE PROVIDED BY THE CITY OF LAGUNA NIGUEL AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN. THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONSTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

BEARING/SHEAR WALL HEADER SCHEDULE

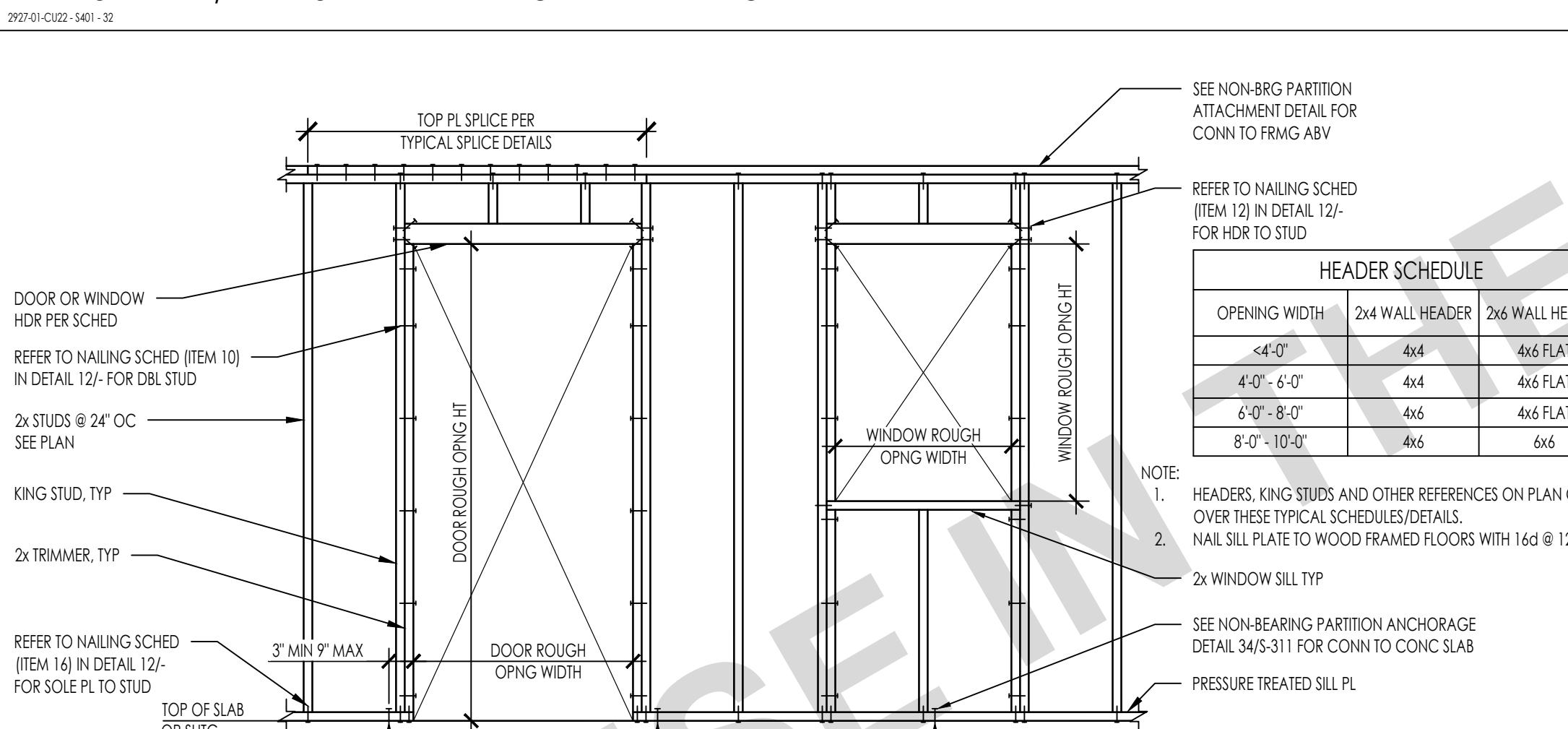
1-STORY		6 INCH WALLS			
1-STORY	OPENING WIDTH	6x HEADER	SILL AT WINDOW	POST / TRIMMER	KING STUDS
	UP TO 3'-0"	6x4	2x	2x6	2x6
	3'-0" - 5'-0"	6x6	2x	2x6	2x6
	5'-0" - 7'-0"	4x8	(2) 2x	2x6	(2) 2x6



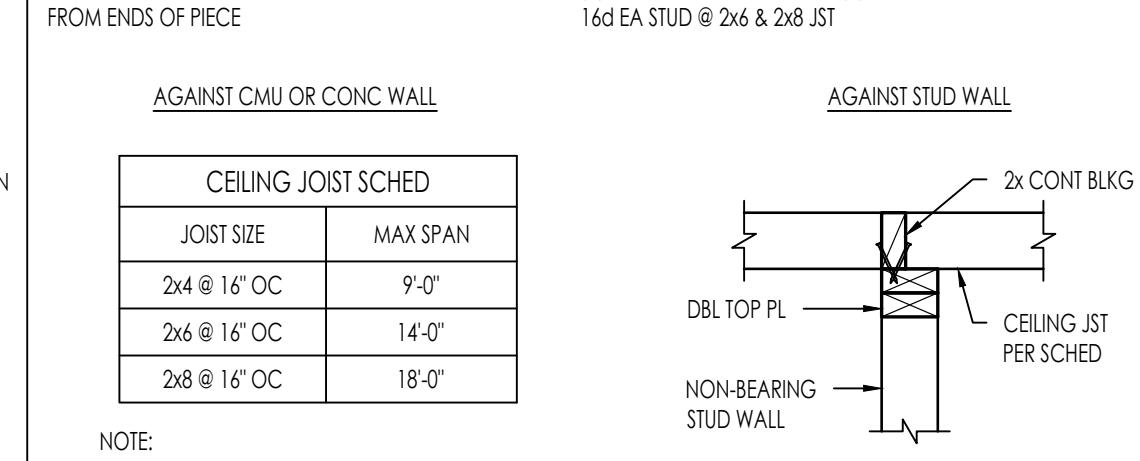
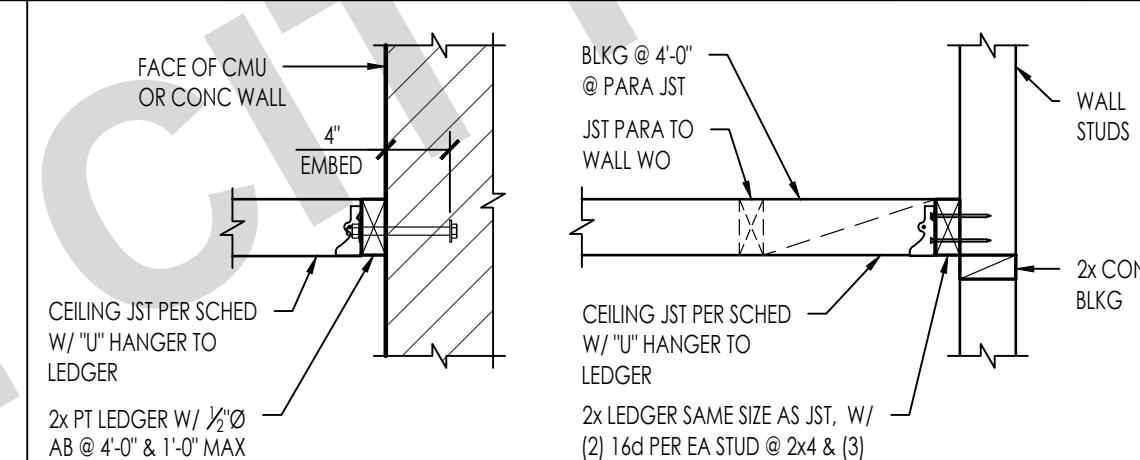
NOTES:

1. THIS DETAIL APPLIES AT ALL EXT WALLS AND INT LOAD BEARING WALLS AND ALSO APPLIES TO SHEAR WALL FRAMING
 - A. FOR SHEAR WALLS SEE 13/S-402 FOR ADD'L REQUIREMENTS.
 - B. FOR INTERIOR NON-BEARING PARTITIONS SEE DETAIL 43/-
2. HEADERS, KING STUDS AND OTHER REFERENCES ON PLAN GOVERN OVER THIS TYPICAL SCHED/DETAILS
3. PROVIDE A34 @ 4" WALLS & A35 @ 6" OR GREATER WALLS (ICC-ESR 2353)

EXTERIOR WALL / INTERIOR WALL BEARING WALL FRAMING



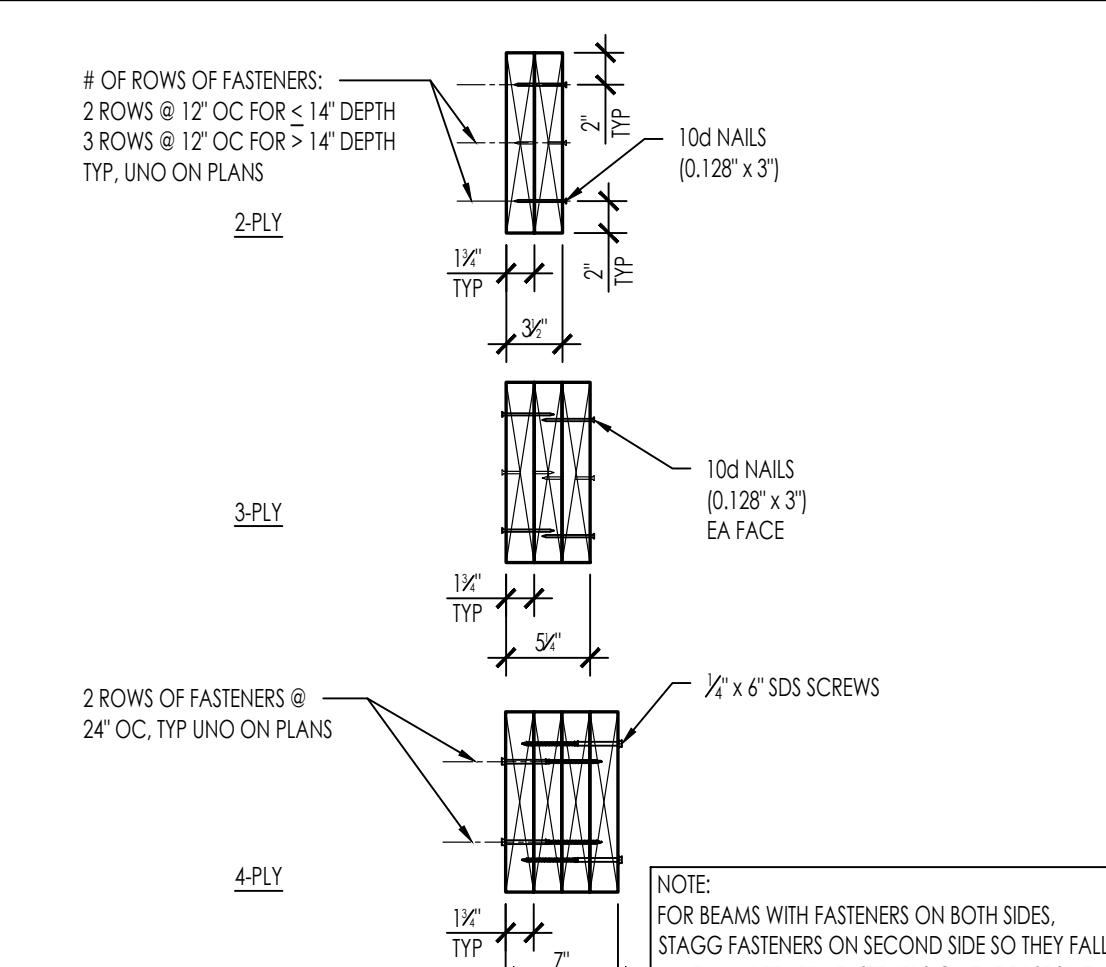
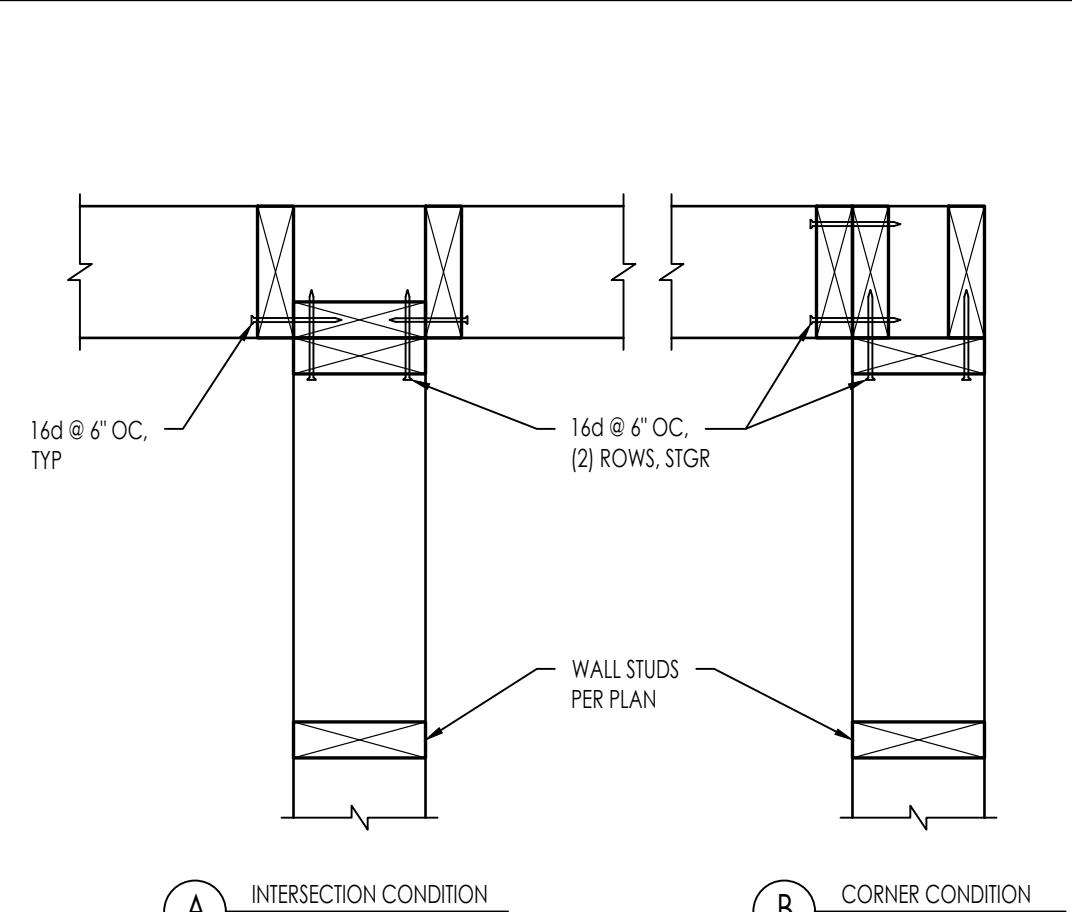
INTERIOR NON-BEARING PARTITION WALL FRAMING



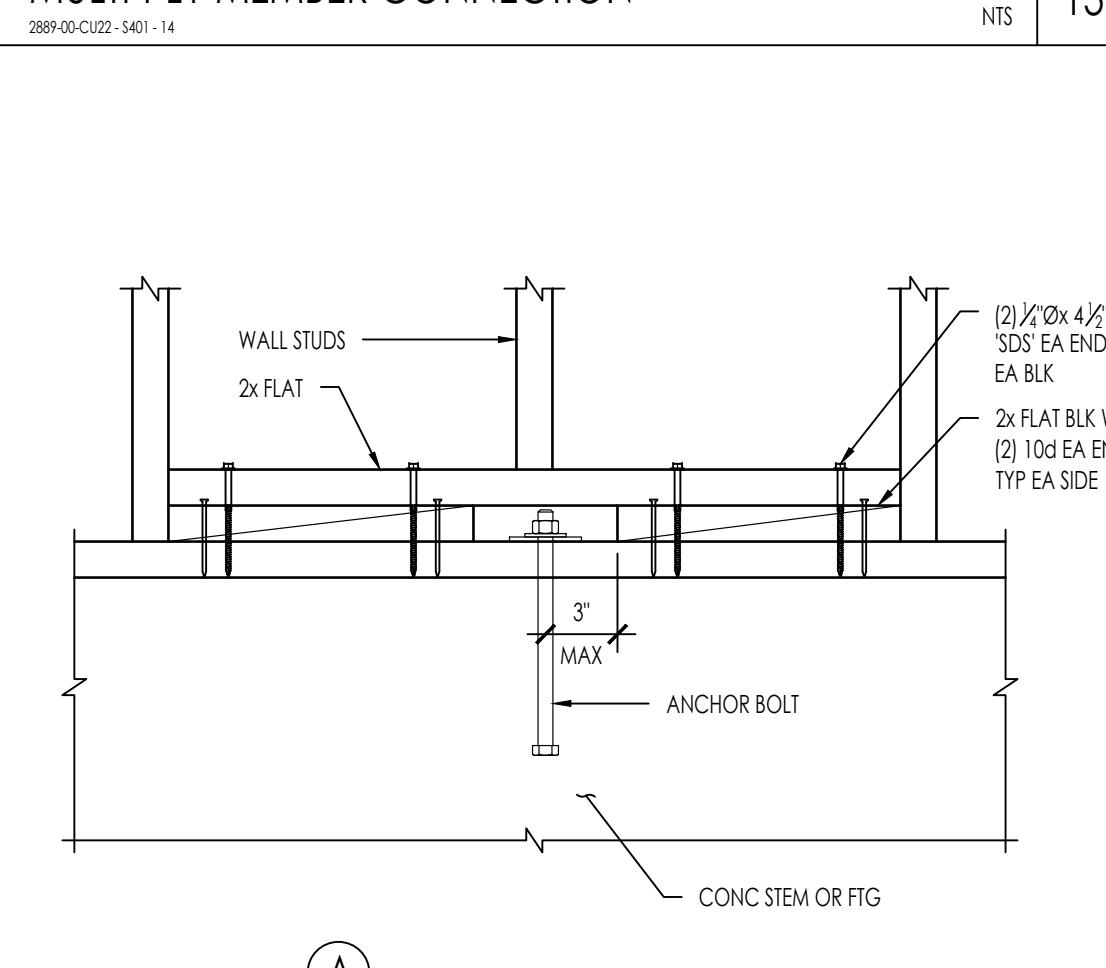
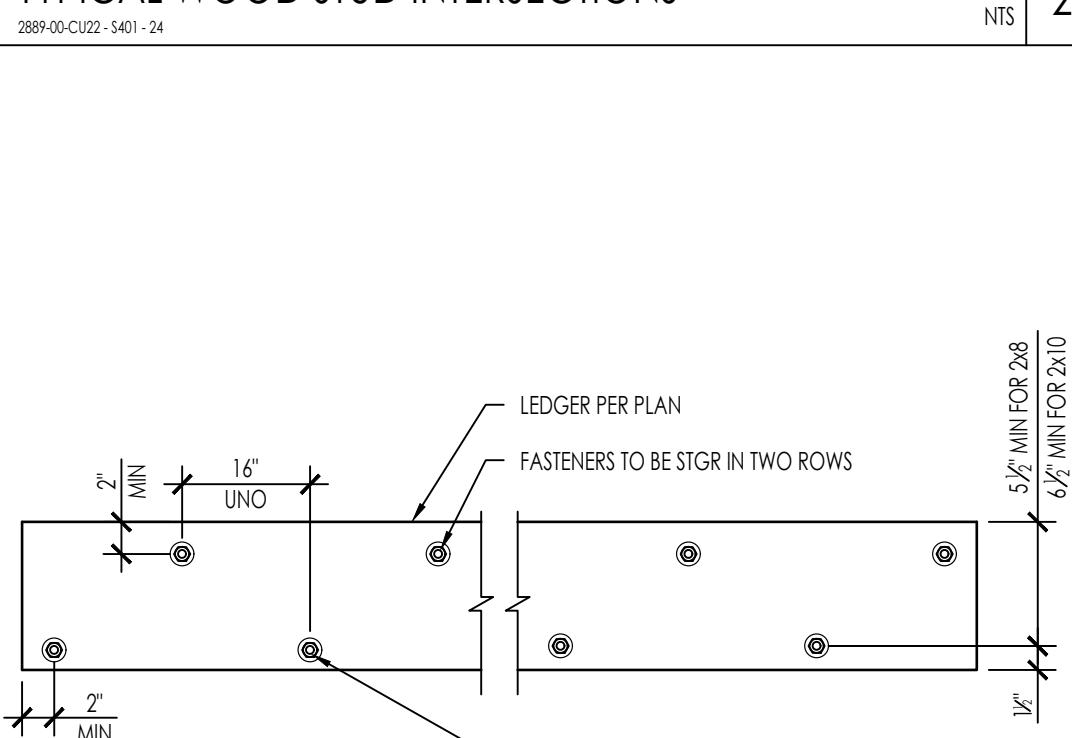
CEILING JOIST SCHED	
JOIST SIZE	MAX SPAN
2x4 @ 16" OC	9'-0"
2x6 @ 16" OC	14'-0"

NOTE:
THIS DETAIL IS INTENDED FOR CEILING JST THAT SPAN
FROM WALL TO WALL @ CONTRACTOR'S OPTION

NAILING SCHEDULE



TYPICAL WOOD STUD INTERSECTIONS



LAGUNA NIGUEL PRE - APPROVED ADU

CITY OF LAGUNA NIGUEL

TYPICAL WOOD DETAILS

