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# FARMHOUSE ACCESSORY DWELLING UNIT - PLAN 5C

## SAN LUIS OBISPO COUNTY, CA

### PROJECT GENERAL NOTES

THESE NOTES APPLY TO ALL PORTIONS, PHASES AND SUBCONTRACTORS OF THIS PROJECT.

APPLICABLE CODES AND STANDARDS:

- 2022 CALIFORNIA BUILDING CODE AND ITS APPENDICES AND STANDARDS.
- 2022 CALIFORNIA PLUMBING CODE AND ITS APPENDICES AND STANDARDS.
- 2022 CALIFORNIA MECHANICAL CODE AND ITS APPENDICES AND STANDARDS.
- 2022 CALIFORNIA FIRE CODE AND ITS APPENDICES AND STANDARDS.
- 2022 CALIFORNIA ELECTRICAL CODE AND ITS APPENDICES AND STANDARDS.
- 2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS.
- 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE AND ITS APPENDICES AND STANDARDS.

CURRENT COUNTY OF SAN LUIS OBISPO MUNICIPAL CODE.

### PROJECT DIRECTORY

\*FOR PLANNING STAFF ONLY

INITIAL WHEN SECTION HAS BEEN REVIEWED. STAFF INITIALS: \_\_\_\_\_

#### APPLICANT (TO BE PROVIDED BY OWNER/APPLICANT)

ADDRESS: \_\_\_\_\_ PROJECT ADDRESS: \_\_\_\_\_

CONTACT: \_\_\_\_\_

EMAIL: \_\_\_\_\_

PHONE: \_\_\_\_\_

#### ARCHITECT

ADDRESS: 3765 S HIGUERA ST., SUITE 102

SAN LUIS OBISPO, CA 93401

CONTACT: RANDY RUSSOM

EMAIL: RWRUSSOM@RMRDESIGN.COM

PHONE: P:(805) 543-1794

### SUPPORTING DOCUMENTS

\*FOR PLANNING STAFF ONLY

INITIAL WHEN SECTION HAS BEEN REVIEWED. STAFF INITIALS: \_\_\_\_\_

UTILITY, GRADING, AND DRAINAGE PLAN TO BE PROVIDED BY OTHERS.

PV SYSTEM: NOT REQUIRED. SYSTEM EXEMPTION < 1.80KWDC. SEE TITLE 24

PLEASE PROVIDE THE WASTE RECYCLE FORM FILLED OUT AND SIGNED PRIOR TO ISSUANCE. THE OWNER/APPLICANT/CONTRACTOR/PERSON DOING THE WORK IS REQUIRED TO RECYCLE 75% OF ALL PROJECT CONSTRUCTION AND DEMOLITION DEBRIS.

#### ENERGY COMPLIANCE

PREPARED BY: \_\_\_\_\_ IN BALANCE GREEN CONSULTING

DATE PREPARED: \_\_\_\_\_ SEPTEMBER 27, 2023

JOB NUMBER: \_\_\_\_\_ CF1R-PRF-01E

**HERS QII:** HERS RATER WILL VERIFY THAT THE HOME'S INSULATION WAS INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS AND PER QUALITY INSULATION INSTALLATION (QII) PROTOCOL.

**HERS VCHP:** HERS RATER WILL NEED TO FOLLOW THE VERIFICATION AND TESTING PROTOCOL FOR THE VARIABLE 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 (BDOMS AND LIVING SPACE).

### SOILS & FOUNDATIONS

\*FOR PLANNING STAFF ONLY

INITIAL WHEN SECTION HAS BEEN REVIEWED. STAFF INITIALS: \_\_\_\_\_

NOTE: THESE PRE-APPROVED PLANS ARE INTENDED FOR FLAT LOTS, WITHOUT THE PRESENCE OF EXPANSIVE OR LIQUEFIABLE SOILS. THE BUILDING OFFICIAL SHALL MAKE THIS DETERMINATION PRIOR TO ISSUING THE PERMIT. A NOTE HAS BEEN ADDED TO THE FOUNDATION PLAN AND FOUNDATION NOTES TO CLEARLY OUTLINE THIS REQUIREMENT. PLEASE REFER TO GENERAL FOUNDATION NOTE 11 ON SS-102 AND FOUNDATION PLAN NOTE 17 ON SS-201.

### PROJECT INFORMATION

\*FOR PLANNING STAFF ONLY

INITIAL WHEN SECTION HAS BEEN REVIEWED. STAFF INITIALS: \_\_\_\_\_

#### PROJECT SCOPE:

- CONSTRUCTION OF A NEW DETACHED ONE STORY 400 SF ACCESSORY DWELLING UNIT WITH 1 BEDROOM AND 1 BATH.
- ALL SITE WORK WITHIN THE PROPERTY LINE.
- ALL THE WORK SHOWN IN THE DRAWINGS AND SPECIFICATIONS.

#### SITE INFORMATION (TO BE PROVIDED BY COUNTY OF SAN LUIS OBISPO):

STREET ADDRESS: \_\_\_\_\_

APN: \_\_\_\_\_

ZONING: \_\_\_\_\_

LOT SIZE: \_\_\_\_\_

LAND USE: \_\_\_\_\_

EXISTING USE: \_\_\_\_\_

PROPOSED USE: \_\_\_\_\_

#### FLOOR AREA RATIO (TO BE PROVIDED BY COUNTY OF SAN LUIS OBISPO)

MAXIMUM FAR: \_\_\_\_\_

PROPOSED FAR: \_\_\_\_\_

#### LOT COVERAGE (TO BE PROVIDED BY OWNER / APPLICANT)

BUILDING: \_\_\_\_\_

HARDSCAPE/PAVING: \_\_\_\_\_

LANDSCAPE: \_\_\_\_\_

#### SETBACKS (TO BE PROVIDED BY COUNTY OF SAN LUIS OBISPO)

FRONT: \_\_\_\_\_ REQUIRED \_\_\_\_\_ PROPOSED \_\_\_\_\_

REAR: \_\_\_\_\_ 4' - 0" (A.B. NO. 86)

SIDES: \_\_\_\_\_ 4' - 0" (A.B. NO. 86)

#### BUILDING INFORMATION:

NUMBER OF STORIES: \_\_\_\_\_ 1

OCCUPANCY GROUP: \_\_\_\_\_ R-3.1 & 2 FAMILY DWELLINGS

CONSTRUCTION TYPE: \_\_\_\_\_ VB

SPRINKLERED: \_\_\_\_\_ SEE FIRE SPRINKLER SECTION ON SHEET

IF YES, A SEPARATE REVIEW/PERMIT IS REQUIRED FOR AUTO SPRINKLER SYSTEM DESIGN (CRC R313.3)

MAX. HEIGHT ALLOWED: (PER CBC TABLE 504.3) \_\_\_\_\_ 16' - 0"

MAX. HEIGHT ALLOWED: (PER CALIFORNIA ASSEMBLY BILL NO. 86) \_\_\_\_\_ 16' - 0"

MAX. HEIGHT PROPOSED: \_\_\_\_\_

ROOF RATING: \_\_\_\_\_ REFER TO 'WILDLAND-URBAN INTERFACE FIRE

HIGH FIRE ZONE: \_\_\_\_\_ AREA' AND 'FIRE HAZARD SEVERITY ZONE LEVEL'

### UTILITIES

WATER AND SEWER SERVICE \_\_\_\_\_ COUNTY OF SAN LUIS OBISPO UTILITIES

ELECTRICAL SERVICE \_\_\_\_\_ PACIFIC GAS & ELECTRIC

GAS SERVICE \_\_\_\_\_ PACIFIC GAS & ELECTRIC

TELEPHONE SERVICE \_\_\_\_\_

GARBAGE SERVICE \_\_\_\_\_

CABLE SERVICE \_\_\_\_\_

### BUILDING AREAS

GROUND FLOOR PLAN DWELLING AREA \_\_\_\_\_ 400 SF

LOFT SLEEPING AREA \_\_\_\_\_ 108 SF

(OPTIONAL) COVERED PORCH \_\_\_\_\_ 63 SF

### PROJECT CHECKLIST

\*FOR PLANNING STAFF ONLY

INITIAL WHEN SECTION HAS BEEN REVIEWED. STAFF INITIALS: \_\_\_\_\_

#### WASTE WATER

☐ SEWER

☐ SEPTIC

\*A SEPARATE REVIEW & PERMIT IS REQUIRED FOR SEPTIC.

#### FIRE SPRINKLERS

DOES THE PRIMARY RESIDENCE HAVE NFPA 13D SPRINKLERS?

☐ NO

☐ YES

IF YES, A SEPARATE REVIEW & PERMIT IS REQUIRED FOR AUTOMATIC SPRINKLER SYSTEM DESIGN (CRC R313.3)

REQUIRED AT PROPOSED ADU: \_\_\_\_\_

COUNTY OF SAN LUIS OBISPO FIRE SPRINKLERS SYSTEM REQUIREMENTS FOR ADU BLD-3044

☐ NO

(NOT REQUIRED IF THE PRIMARY RESIDENCE IS UNSPRINKLERED)

☐ YES

(REQUIRED IF THE PRIMARY RESIDENCE IS SPRINKLERED)

#### FIRE SPRINKLERS NOTES

- IF FIRE SPRINKLERS ARE REQUIRED AT PROPOSED ADU THEN THE FOLLOWING NOTES APPLY.
- AUTOMATIC FIRE SPRINKLER SYSTEM - AN AUTOMATIC FIRE SPRINKLER SYSTEM SHALL BE INSTALLED AS PER NFPA 13D THE MOST CURRENT EDITION. DETAILED SPRINKLER PLANS SHALL BE SUBMITTED TO THE FIRE PREVENTION BUREAU AND APPROVED PRIOR TO INSTALLATION. PLANS AND INSTALLATION MUST BE BY A C16 LICENSED SPRINKLER CONTRACTOR.
- SECTION 903.2.1 GROUP R** AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3 SHALL BE PROVIDED THROUGHOUT ALL BUILDINGS WITH A GROUP R FIRE AREA. THIS INCLUDES SINGLE FAMILY DWELLINGS, MULTI-FAMILY DWELLINGS AND ALL RESIDENTIAL CARE FACILITIES REGARDLESS OF OCCUPANT LOAD.
- SECTION 903.2.1.1** ADDITIONS AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH 903.3 MAY BE REQUIRED TO BE INSTALLED THROUGHOUT STRUCTURES WHEN THE ADDITION IS MORE THAN 50% OF THE EXISTING BUILDING OR WHEN THE ALTERED BUILDING WILL EXCEED A FIRE FLOW OF 1,500 GALLONS PER MINUTE AS CALCULATED PER SECTION 907.3. THE FIRE CODE OFFICIAL MAY REQUIRE AN AUTOMATIC SPRINKLER SYSTEM BE INSTALLED IN BUILDINGS WHERE NO WATER MAIN EXISTS TO PROVIDE THE REQUIRED FIRE FLOW OR WHERE A SPECIAL HAZARD EXISTS SUCH AS: POOR ACCESS ROADS, GRADE, BLUFFS AND CANYON RIMS, HAZARDOUS BRUSH AND RESPONSE TIMES GREATER THAN 5 MINUTES BY A FIRE DEPARTMENT.
- SECTION 903.2.1.2** REMODELS OR RECONSTRUCTION AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3 MAY BE REQUIRED IF THE SCOPE OF WORK INCLUDES SIGNIFICANT MODIFICATION TO THE INTERIOR AND/OR ROOF OF THE BUILDING, AND THE COST OF THE INSTALLATION DOES NOT EXCEED 15 PERCENT OF THE CONSTRUCTION COSTS OF THE REMODEL.
- LOCATION AND SIZE OF WATER SERVICE UNDERGROUND SHALL BE INSTALLED AS SHOWN ON APPROVED FIRE SPRINKLER PLANS. A MINIMUM 1 INCH WATER SHALL BE INSTALLED.
- A FIRE UNDERGROUND FLUSH CERTIFICATION SHALL BE REQUIRED AT FINAL INSPECTION.
- A HYDRO INSPECTION OF THE FIRE SPRINKLER SYSTEM IS REQUIRED PRIOR TO FRAME INSPECTION. ONLY THE NEW PIPING SHALL BE TESTED.

#### ONSITE PARKING REQUIRED

☐ NONE, EXCEPTION USED:

☐ THE ADU IS LOCATED WITHIN 1/2 MILE OF PUBLIC TRANSIT.

☐ OFF STREET PARKING PERMITS ARE REQUIRED BUT NOT OFFERED TO THE OCCUPANT OF THE ADU.

☐ WHEN THERE IS A CAR SHARE VEHICLE LOCATED WITHIN ONE BLOCK OF THE ADU.

☐ ONE PARKING SPACE (STUDIO OR 1-BEDROOM ADU)

☐ TWO PARKING SPACES (2-BEDROOM ADU)

### USER LICENSE AGREEMENT

BY USING THESE PERMIT READY ACCESSORY DWELLING UNIT CONSTRUCTION DOCUMENTS, THE USER AGREES TO RELEASE, HOLD HARMLESS, AND INDEMNIFY THE COUNTY OF SAN LUIS OBISPO, 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 FOR ONLY USE IN SAN LUIS OBISPO COUNTY. NO DEVIATIONS, ALTERATIONS, OR OPTIONS BEYOND THOSE SPECIFICALLY INDICATED IN THE PLANS ARE ALLOWED WITHOUT PRIOR APPROVAL BY THE ISSUING JURISDICTION AND CHIEF BUILDING OFFICIAL. ANY UNAPPROVED PLAN MODIFICATIONS MAY BE DEVELOPED THROUGH RRM DESIGN GROUP AND THE APPROVING JURISDICTION IF REQUIRED.

SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

### SHEET INDEX

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G-102 INDEX, ABBREVIATIONS, & SYMBOLS  
G-103 2022 SINGLE-FAMILY RESIDENTIAL MANDATORY REQUIREMENTS  
G-201 CAL GREEN RESIDENTIAL REQUIREMENTS  
G-202 CAL GREEN RESIDENTIAL REQUIREMENTS

AS-105 ARCHITECTURAL SITE PLAN (EXAMPLE & INSTRUCTIONS)

A5-103 FLOOR PLAN  
A5-111 FINISH, MECHANICAL, & ELECTRICAL PLANS  
A5-123 ROOF PLAN & REFLECTED CEILING PLAN  
A5-203 ELEVATIONS & BUILDING SECTIONS

A-904 ARCHITECTURAL DETAILS - LOFT  
A-905 ARCHITECTURAL DETAILS - LOFT  
A-906 ARCHITECTURAL DETAILS - LOFT  
A-931 ARCHITECTURAL DETAILS - LOFT  
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S-101 SHEET INDEX, ABBREVIATIONS & SYMBOLS  
S-102 GENERAL NOTES  
S-103 GENERAL NOTES, SPECIAL INSPECTION & TESTS  
S-201 FARMHOUSE PLANS  
S-301 TYPICAL CONCRETE DETAILS  
S-311 CONCRETE DETAILS  
S-312 CONCRETE DETAILS  
S-401 TYPICAL WOOD DETAILS  
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S-404 TYPICAL WOOD DETAILS  
S-411 FLOOR FRAMING DETAILS  
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T24 - 509 ENERGY COMPLIANCE - PLAN 5C  
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Grand total: 34

### SPECIAL INSPECTIONS REQUIRED

OWNER/APPLICANT HAS COMPLETED SPECIAL INSPECTION FORM

OWNER/APPLICANT SIGNATURE: \_\_\_\_\_

SEE SHEET S-103 FOR REQUIRED SPECIAL INSPECTIONS

A REGISTERED DESIGN PROFESSIONAL SHALL COMPLETE THE COUNTY OF SAN LUIS OBISPO STATEMENT OF REQUIRED SPECIAL INSPECTIONS CERTIFICATE (FORM BLD-1032) 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). FURTHER INSTRUCTIONS ARE IDENTIFIED IN THE STATEMENT OF SPECIAL INSPECTION AGREEMENT (FORM BLD-1031).

### VICINITY MAP

\*FOR PLANNING STAFF ONLY

INITIAL WHEN SECTION HAS BEEN REVIEWED. STAFF INITIALS: \_\_\_\_\_

(TO BE PROVIDED BY OWNER/APPLICANT)

COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

TITLE SHEET - PLAN 5C

DATE

11/28/2023

SHEET

G-053



## PROJECT GENERAL NOTES

- ALL WORK DESCRIBED IN THE DRAWINGS SHALL BE VERIFIED FOR DIMENSION, GRADE, EXTENT AND COMPATIBILITY WITH EXISTING SITE CONDITIONS. ANY DISCREPANCIES AND UNEXPECTED CONDITIONS THAT AFFECT OR CHANGE THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY. DO NOT PROCEED WITH THE WORK IN THE AREA OF DISCREPANCIES UNTIL ALL SUCH DISCREPANCIES ARE RESOLVED. IF THE CONTRACTOR CHOOSES TO DO SO, HE/SHE SHALL BE PROCEEDING AT HIS/HER OWN RISK.
- DIMENSIONS SHOWN SHALL TAKE PRECEDENCE OVER DRAWING SCALE OR PROPORTION. LARGER SCALE DRAWINGS SHALL TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS.
- IN THE EVENT OF THE UNFORESEEN ENCOUNTER OF MATERIALS SUSPECTED TO BE OF AN ARCHAEOLOGICAL OR PALEONTOLOGICAL NATURE, ALL GRADING AND EXCAVATION SHALL CEASE IN THE IMMEDIATE AREA AND THE CONTRACTOR SHALL NOTIFY THE OWNER. THE FIND SHALL BE LEFT UNTOUCHED UNTIL AN EVALUATION BY A QUALIFIED ARCHAEOLOGIST OR PALEONTOLOGIST IS MADE.
- CONTRACTOR IS TO BE RESPONSIBLE FOR BEING FAMILIAR WITH THESE DOCUMENTS INCLUDING ALL CONTRACT REQUIREMENTS.
- GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
- FIRE SPRINKLER SHOP DRAWINGS & CALCULATIONS SHALL BE SUBMITTED TO BUILDING DEPT. & APPROVED BY FIRE DEPT. PRIOR TO INSTALLATION.
- SHOP WELDS MUST BE PERFORMED BY A LICENSED FABRICATORS SHOP.
- THE FOLLOWING ITEMS SHOWN ON THE DRAWINGS ARE OWNER PROVIDED, OWNER INSTALLED. UTILITIES PROVIDED FOR THESE ITEMS WILL BE PROVIDED BY THE CONTRACTOR. CONTRACTOR TO COORDINATE INSTALLATION WITH OWNER.
- TV/DVD SYSTEMS
- ICE MACHINE
- VENDING MACHINE
- REFRIGERATOR
- MICROWAVE
- OSHA PERMITS REQUIRED FOR VERTICAL CUTS 5' OR OVER.
- CONTRACTOR TO PROVIDE COMPLETE DETAILS OF ENGINEERED TEMPORARY SHORING OR SLOT CUTTING PROCEDURES ON PLANS. CALL FOR INSPECTION BEFORE EXCAVATION BEGINS.
- THE SOILS ENGINEER IS TO APPROVE THE KEY OR BOTTOM AND LEAVE A CERTIFICATE ON THE SITE FOR THE GRADING INSPECTOR. THE GRADING INSPECTOR IS TO BE NOTIFIED BEFORE ANY GRADING BEGINS, AND FOR BOTTOM INSPECTION. BEFORE FILL IS PLACED, FILL MAY NOT BE PLACED WITHOUT APPROVAL OF THE GRADING INSPECTOR.
- CONTRACTOR TO REVIEW CALIFORNIA GREEN CODE REQUIREMENTS FOR CONTRACTOR REQUIREMENTS.
- A SEPARATE OFFICER, ACCESS EASEMENT/AGREEMENT, AND/OR RECIPROCAL ACCESS EASEMENT/AGREEMENT MAY BE REQUIRED TO INSURE THAT THE PROPOSED PRIVATE ACCESS ROADWAY WILL REMAIN OPEN TO THROUGH TRAFFIC AND EMERGENCY VEHICLES PRIOR TO FINAL OF BUILDING PERMIT.
- PROVIDE FIRE ALARM SYSTEM. FIRE ALARM SYSTEM SHALL ACTIVATE UPON FIRE SPRINKLER SYSTEM OPERATION

## SITE NOTES

- CALL BEFORE YOU DIG!** CONTACT UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600 AT LEAST 2 WORKING DAYS BEFORE EXCAVATING.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- AN ENCROACHMENT PERMIT WILL BE REQUIRED FOR ANY CONSTRUCTION ACTIVITY WITHIN A PUBLIC STREET RIGHT OF WAY THAT HAS BEEN ACCEPTED BY THE CITY/COUNTY.

## FLOOR PLAN NOTES

- WATER HEATER** (REFER TO BUILDING ENERGY ANALYSIS REPORT):
    - 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:**
      - 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 FUTURE CONTROL VALVE OR SUPPLY STOP AND THE FUTURE OR APPLANCE 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 MANUFACTURE REQUIREMENTS.
    - CLEARANCES PER MANUFACTURE REQUIREMENTS.
  - INSULATION FOR PIPING AND TANKS** (2022 CEC 105.0(i)):
    - WATER PIPING:** HOT WATER-HEATING SYSTEM PIPING, AND SPACE-CONDITIONING SYSTEM LINE INSULATION THICKNESS AND CONDUCTIVITY, PIPING SHALL BE INSULATED AS FOLLOWS:
      - DOMESTIC HOT WATER PIPING. SEE NOTES ABOVE.
      - PIPING FOR SPACE-CONDITIONING SYSTEMS, SOLAR WATERHEATER SYSTEM COLLECTOR LOOP, SEE 2022 CEC SECTION 120.3(c).
        - EXCEPTION:**
          - 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.
  - 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)):
    - PIPE INSULATION EXPOSED TO WEATHER SHALL BE PROTECTED BY A COVER SUITABLE FOR OUTDOOR SERVICE. THE COVER SHALL BE WATER RETARDANT AND PROVIDES SHIELDING FROM SOLAR RADIATION THAT CAN CAUSE DEGRADATION OF THE MATERIAL. ADHESIVE TAPE SHALL NOT BE USED TO PROVIDE THIS PROTECTION.
    - 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.
    - PIPE INSULATION BURIED BELOW GRADE MUST BE INSTALLED IN A WATER PROOF AND NONCRUSHABLE CASING OR SLEEVE.
- WEATHER BARRIERS.**
  - NOT FEWER THAN ONE-LAYER WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS CONTINUOUS FROM TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES WITH FLASHING. MINIMUM NO. 15 FELT COMPLYING WITH ASTM D226, TYPE 1.
  - 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** MOISTURE EXHAUST DUCTS SHALL TERMINATE OUTSIDE THE BUILDING AND HAVE A BACK-DRAFT DAMPER. EXHAUST DUCT IS LIMITED TO 14'-0" W/ TWO ELBOWS. THE DUCT BE REDUCED 2'-0" 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 REQUIREMENTS. ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS SHOULD BE ON SITE FOR INSPECTIONS.
- SHOWERS AND TUB SHOWERS:** COMBINATION TUBS 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 FINISHING SURFACE. (2022 CRC R308.4.5)
- 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 INTERMITTENT OR 20 CFM FOR CONTINUOUS DIRECT VENT TO OUTSIDE WITH BACKDRAFT DAMPER. (2022 CRC R303.3)
  - NEW WATER CLOSETS AND ASSOCIATED FLUSHMETER VALVES, IF ANY SHALL USE NO MORE THAN 1.28 GALLONS PER FLUSH AND SHALL MEET PERFORMANCE STANDARDS ESTABLISHED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS STANDARD A112-19.2. 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 STANDARD 62.2. PROVIDE THE COUNTY INSPECTOR THE FOLLOWING INFORMATION AT OR BEFORE THE TIME OF INSPECTION:
  - CALCULATIONS FOR REQUIRED VENTING RATES.
  - CALCULATION ADJUSTMENTS FOR INTERMITTENT SYSTEMS IF APPLICABLE.
  - DUCT DIAMETER AND MAXIMUM DUCT LENGTH PER ASHRAE 62.2 TABLE 7.1.
  - TYPE OF SYSTEM USED AND PROVIDE COMPLETED CF-6R-MECH-05 FORM.
  - FANS SHALL BE A MAXIMUM OF 1 SONE.
  - FANS SHALL BE PROVIDED A COVER OR R-4.2 WHEN OFF.
- ATTIC ACCESS:**
  - PROVIDE 30" MIN. HEADROOM IN THE ATTIC SPACE (2019 CRC R807.1)
  - IN ATTIC, PROVIDE LIGHT AND SWITCH, AND ALL NECESSARY ELECTRICAL, PROVIDE UNOBSTRUCTED PASSAGEWAY 24" WIDE OF SOLID CONTINUOUS FLOORING FROM ACCESS TO EQUIPMENT AND ITS CONTROLS. ALSO PROVIDE UNOBSTRUCTED 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.
  - 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 ROUGH-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)
  - PROVIDE A 120V RECEPTACLE AND A LIGHT NEAR THE EQUIPMENT WITH LIGHT SWITCH LOCATED AT THE ATTIC ACCESS.

## ELECTRICAL NOTES

- CONFORM WITH CURRENT CEC, NFPA, MFR'S, AND LOCAL REQUIREMENTS.
- ELECTRICAL SYSTEMS, DOMESTIC AND SERVICE SHALL BE PROVIDED PER NEC ARTICLE 250-81.
- ALL MATERIALS TO BE UL Labeled.
- METER: "SQUARE D", 120 VOLT/ 240 VOLT, 1 AND 3 WIRE GROUND OR EQUAL.
- ELECTRICAL SUB PANEL: FLUSH MOUNT, 30" CLEARANCE, 100 AMP.
- CONDUCTORS: TW, THW, COPPER, MINIMUM 14 AT LIGHTING, 12 AT OTHER CIRCUITS.
- LAMPS: FOR GENERAL LIGHTING IN KITCHENS AND BATH SHALL HAVE AN EFFICIENCY OF NOT LESS THAN 40 LUMENS/ WATT. ALL SOCKETS FILLED WITH SOFT-WHITE, 55 WATT FLUORESCENT: COOL WHITE, RS, SOUND RATING "A", 74" (U.O.N.).
- 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.
- 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))
- PROVIDE ELECTRIC OUTLET AND PUSH-BUTTON WIRE FOR GARAGE OPENER (INCLUDE OPENER).
- THE STAT SHALL BE A PROGRAMMABLE TYPE, HONEYWELL TH8320 OR EQUAL.
- RECESSED LUMINAIRES INSTALLED IN AREAS TO RECEIVE INSULATION SHALL BE "IC" LUMINAIRES AND ARE CERTIFIED AND LABELED AS AIRTIGHT TO THE STANDARDS PRESCRIBED BY THE RESIDENTIAL ENERGY CODE.
- UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENTILATION SYSTEM, FANS MUST BE CONTROLLED BY A HUMIDITY CONTROL. BETWEEN A RELATIVE HUMIDITY RANGE OF 45-60 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 (I.E. BUILT IN)
- 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)
- PER 2022 CEC 150.0(m) PORTIONS OF SUPPLY-AIR AND RETURN-AIR DUCTS AND PLenums SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-6.0. (OR ANY LEVEL HIGHER LEVEL REQUIRED BY 2022 CMC SECTION 605) OR BE ENCLOSED ENTIRELY IN CONDITIONED SPACE.
- HVAC: HSPF2 8.0 MIN. SEER2 16.0 MIN. DUCTLESS, MULTI-SPEED COMPRESSOR. SEE TITLE 24 FOR MINIMUM HEATING CAPACITY AT 47 DEG F AND 17 DEG F.
- HEAT PUMP WATER HEATER (HPWH):** NEEA RATED TIER 3 (UEF 2.9 MIN) 40+ GAL TANK. **NOTE:** THE HEAT PUMP WATER HEATER CAN BE A DUCTED INTEGRATED SYSTEM OR A SPLIT SYSTEM WHERE, IN EITHER CASE, THE TANK IS WITHIN THE INSULATED, AIR AND THERMAL ENVELOPE, I.E., ENCLOSED IN FULLY INSULATED WALLS AND ROOF, BE AIR SEALED, AND WHERE AN EXTERIOR ACCESS DOOR IS USED, THE DOOR MUST BE AN INSULATED WEATHER-SEALED DOOR.
- HIGH EFFICACY LUMINAIRES OTHER THAN OUTDOOR HLT LIGHTING CONTAIN ONLY ONLY HIGH EFFICACY LAMPS AS OUTLINED IN TABLE 150-C OF THE RESIDENTIAL ENERGY CODE AND NOT CONTAIN A MEDIUM SCREW BASE SOCKET.
- BALLAST FOR LAMPS 13 WATTS OR GREATER SHALL BE ELECTRONIC AND HAVE AN OUTPUT FREQUENCY NO LESS THAT 20 KHz.
- 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.
- 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.
- LIGHTS IN OTHER THAN KITCHENS, BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS MUST BE CONTROLLED BY A DIMMER OR CONTROLLED BY A MANUAL-ON OCCUPANT SENSOR. SUCH SENSORS SHALL BE CAPABLE OF AUTOMATICALLY TURNING OFF THE LIGHTS NO MORE THAN 30 MINUTES AFTER THE AREA HAS BEEN VACATED.
- EXHAUST FANS WILL BE CONTROLLED BY A HUMIDISTAT PER THE GREEN BUILDING STANDARDS CODE SECTION 4.508. EXHAUST FANS MUST BE SWITCHED SEPARATELY FROM LIGHTS (CEC 150.0(k)(2)).
- OUTDOOR LIGHTING PERMANENTLY MOUNTED TO A RESIDENTIAL BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL BE HIGH EFFICACY AND MUST MEET THE REQUIREMENTS IN ITEM I AND THE REQUIREMENTS IN EITHER ITEM II OR ITEM III:
  - i) CONTROLLED BY A MANUAL ON AND OFF SWITCH THAT PERMITS THE AUTOMATIC ACTIONS OF ITEMS II OR III BELOW; AND
  - ii) CONTROLLED BY A PHOTOCELL AND EITHER A MOTION SENSOR OR AN AUTOMATIC TIME SWITCH CONTROL' OR
  - iii) CONTROLLED BY AN ASTRONOMICAL TIME CLOCK CONTROL.
- NOTE:** CONTROLS THAT OVERRIDE TO ON SHALL NOT BE ALLOWED UNLESS THE OPERATOR AUTOMATICALLY RETURNS THE AUTOMATIC CONTROL TO ITS NORMAL OPERATION WITHIN 6 HOURS. AN ENERGY MANAGEMENT CONTROL SYSTEM THAT PROVIDES THE SPECIFIED LIGHTING CONTROL FUNCTIONALITY AND COMPLIES WITH ALL REQUIREMENTS APPLICABLE TO THE SPECIFIED CONTROLS MAY BE USED TO MEET THESE REQUIREMENTS.

- AT LEAST ONE LUMINAIRE EACH BATHROOM, LAUNDRY ROOM, AND UTILITY ROOM SHALL BE CONTROLLED BY A MANUAL ON/AUTOMATIC-OFF VACANCY SENSOR.
- EXCEPT FOR CLOSETS LESS THAN 70 SQUARE FEET AND HALLWAYS, ALL LUMINAIRES THAT ARE INSTALLED WITH JA8-CERTIFIED LIGHT SOURCES ARE REQUIRED TO BE CONTROLLED BY EITHER A DIMMER, VACANCY SENSOR OR FAN SPEED CONTROL.

## PLUMBING NOTES

- CONFORM WITH CURRENT CPC AND LOCAL REQUIREMENTS.
- PIPING:
  - APPROVED EQUAL
  - GAS, EXPOSED TO WEATHER: GALVANIZED
  - AIR CHAMBERS: 12" LONG CAPPED NIPPLE AT END OF EACH BRANCH TO EACH FIXTURE.
  - ELECTRIC UNIONS "F.P.C.O." REQUIREMENT AT ALL DISSIMILAR MATERIAL CONNECTIONS.
  - WHEN "OPTIONAL" SOFT-WATER LOOP INTALLED, PROVIDE WITH 2 GATE VALVES.
- 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 CGBSC SECTION 4.303.
- PIPE INSULATION: REFER TO TITLE 24 - MANDATORY MEASURES - "SPACE CONDITIONING, WATER HEATING & PLUMBING SYSTEM MEASURES"
- STRAPS AND HANGERS: PROVIDE AS NECESSARY TO INSURE A STABLE INSTALLATION. SEE TITLE-24 FOR WATER HEATER REQUIREMENTS.
- ALL HOSE BIBS SHALL HAVE APPROVED BACK FLOW PREVENTION DEVICES. PLUMBING FIXTURES (WATER CLOSETS) AND FITTINGS (FAUCETS AND SHOWERHEADS) SHALL MEET THE STANDARDS REFERENCED IN CALGREEN TABLE 4.303.3.
- 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)
- PER 2022 CPC 603.5.7 OUTLETS WITH HOSE ATTACHMENTS, POTABLE WATER OUTLETS WITH HOSE ATTACHMENTS, OTHER THAN WATER HEATER DRAINS, BOLLER 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.

## MECHANICAL NOTES

- CONFORM WITH CURRENT ADOPTED CRC, CMC, SMACNA, NFPA AND LOCAL REQUIREMENTS.
- DUCTWORK: SMACNA "LOW VELOCITY DUCT CONSTRUCTION" NFPA STANDARD #90A. ALL TRANSVERSE DUCT PLENUM AND FITTING JOINTS SHALL BE SEALED WITH PRESSURE SENSITIVE NON-CLOTH TAPE MEETING THE REQUIREMENTS OF UL181, 181A, OR 181B, OR MASTIC TO PREVENT AIR LOSS. DUCTS SHALL BE INSULATED AS REQUIRED BY THE UMC. SEE FLOOR PLAN FOR F.A.U. AND FIREPLACES. DUCTS PENETRATING A WALL OR FLOOR-CEILING BETWEEN GARAGE & DWELLING TO BE MINIMUM 26 GAUGE METAL WITHOUT OPENING IN GARAGE. FIRE DAMPER REQUIRED OTHERWISE.
- GRILLS AND REGISTERS, DIFFUSERS, ETC.: SUBJECT TO OWNERS APPROVAL. "CARNES" OR EQUAL FANS: DIRECTLY VENTED TO OUTSIDE. BACK DRAFT DAMPERS ARE REQUIRED (PER TABLE 2-53V, TITLE 24 C.A.C.).
- THE RETURN AIR PLENUM SERVING THE MECHANICAL EQUIPMENT MUST BE FULLY DUCTED FROM THE EQUIPMENT TO THE CONDITIONED SPACE. DROP CEILINGS, WALL CAVITIES AND EQUIPMENT PLATFORMS MAY NOT BE USED AS PLENUMS.
- 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.
- BATHROOM EXHAUST FANS (BATHROOM APPLIES TO ROOMS CONTAINING BATHTUB, SHOWER, OR TUB/SHOWER COMBINATION) WHICH EXHAUST DIRECTLY FROM BATHROOMS SHALL COMPLY WITH THE FOLLOWING (2022 CGBSC SEC. 4.506.1):
  - 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 45-60 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 (I.E. BUILT IN)
- 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)
- PER 2022 CEC 150.0(m) PORTIONS OF SUPPLY-AIR AND RETURN-AIR DUCTS AND PLenums SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-6.0. (OR ANY LEVEL HIGHER LEVEL REQUIRED BY 2022 CMC SECTION 605) OR BE ENCLOSED ENTIRELY IN CONDITIONED SPACE.
- HVAC: HSPF2 8.0 MIN. SEER2 16.0 MIN. DUCTLESS, MULTI-SPEED COMPRESSOR. SEE TITLE 24 FOR MINIMUM HEATING CAPACITY AT 47 DEG F AND 17 DEG F.
- HEAT PUMP WATER HEATER (HPWH):** NEEA RATED TIER 3 (UEF 2.9 MIN) 40+ GAL TANK. **NOTE:** THE HEAT PUMP WATER HEATER CAN BE A DUCTED INTEGRATED SYSTEM OR A SPLIT SYSTEM WHERE, IN EITHER CASE, THE TANK IS WITHIN THE INSULATED, AIR AND THERMAL ENVELOPE, I.E., ENCLOSED IN FULLY INSULATED WALLS AND ROOF, BE AIR SEALED, AND WHERE AN EXTERIOR ACCESS DOOR IS USED, THE DOOR MUST BE AN INSULATED WEATHER-SEALED DOOR.

## TITLE 24 COMPLIANCE

- ALL INTERIOR RESIDENTIAL LIGHTING IS TO BE HIGH EFFICACY.
- THE FOLLOWING LIGHTING IS HIGH EFFICACY: PIN BASED LINEAR FLUORESCENT, PIN BASED COMPACT FLUORESCENT, PULSE-START METAL HALIDE, HIGH PRESSURE SODIUM, GU-24 (OTHER THAN LED'S), INSEPARABLE SOLID STATE LUMINAIRES, INSTALLED OUTDOORS OR INSEPARABLE SSL LUMINAIRES WITH COLORED LIGHT SOURCES FOR DECORATIVE LIGHTING PURPOSES. (2022 CEC TABLE 150.0-A)
- THE FOLLOWING LAMPS AND LIGHT SOURCES ARE HIGH EFFICACY IF THEY ARE JOINT APPENDIX JA8-CERTIFIED. JA-8 CERTIFIED LAMPS AND LIGHT SOURCES ARE MARKED AS "JA8-2016" OR "JA8-2016P". THESE FIXTURES INCLUDE: LED LUMINAIRES WITH INTEGRAL SOURCES THAT ARE CERTIFIED TO THE ENERGY COMMISSION, SCREW-BASED LED LAMPS (A-LAMPS, PAR LAMPS, ETC.), PIN BASED LED LAMPS (MR-16, AR-11, ETC.), GU-24 BASED LED LIGHT SOURCES AND OTHER LUMINAIRES. (2022 CEC TABLE 150.0-A) **LISTING OF A CERTIFIED FIXTURE IS LOCATED ON THE CALIFORNIA ENERGY COMMISSION WEBSITE AT: [HTTP://APPLIANCES.ENERGY.CA.GOV/ADVANCEDSEARCH/ASPX](http://APPLIANCES.ENERGY.CA.GOV/ADVANCEDSEARCH/ASPX)**
- RECESSED LUMINAIRES INSTALLED IN AREAS TO RECEIVE INSULATION SHALL BE "IC" LUMINAIRES AND ARE CERTIFIED AND LABELED AS AIRTIGHT TO THE STANDARDS PRESCRIBED BY THE RESIDENTIAL ENERGY CODE.
- ADDITIONAL REQUIREMENTS FOR ANY RECESSED DOWNLIGHTS IN CEILINGS ARE AS FOLLOWS. THEY
  - SHALL NOT HAVE SCREW BASED SOCKETS.
  - SHALL CONTAIN JA8-CERTIFIED LIGHT SOURCES AND
  - SHALL MEET PERFORMANCE REQUIREMENTS OF 2022 CEC SECTION 150.0(K)(1).
- THE NUMBER OF ELECTRICAL BOXES LOCATED MORE THAN 5 FEET ABOVE FINISHED FLOOR THAT DO NOT CONTAIN ALUMINAIRE OR OTHER DEVICE SHALL NOT EXCEED THE NUMBER OF BEDROOMS. THESE BOXES MUST BE SERVED BY A DIMMER, VACANCY SENSOR OR FAN SPEED CONTROL. (2022 CEC SECTION 150(K)(1B))
- UNDERCABINET LIGHTING MUST BE SWITCHED SEPARATE FROM ALL OTHER LIGHTING.
- ALL LIGHTING MUST HAVE READILY ACCESSIBLE MANUAL CONTROLS
- EXHAUST FANS MUST BE SWITCHED SEPARATE FROM LIGHTING OR UTILIZE A DEVICE WHERE LIGHTING CAN BE TURNED OFF WHILE THE FAN IS RUNNING.
- FOR ALL SPACE TYPES EXCEPT HALLWAYS AND CLOSETS THAT ARE 70 SF OR SMALLER, VANCANY SENSORS OR DIMMERS ARE REQUIRED WHEN USING A SOURCE REGULATED BY JA8.
- IN KITCHENS, IF THE LUMINAIRE IS AN ENCLOSED OR RECESSED LUMINAIRE, YOU MUST USE A DIMMER OR VACANCY SENSOR.
- AT LEAST ONE LUMINAIRE IN THE BATHROOM, GARAGE, LAUNDRY ROOM AND UTILITY ROOM MUST BE CONTROLLED BY A VACANCY SENSOR.
- THE BUILDER MUST PROVIDE NEW HOMEOWNERS WITH A LUMINAIRE SCHEDULE THAT INCLUDES A LIST OF INSTALLED LAMPS AND LUMINAIRES.
- ALL JOINTS, PENETRATIONS AND OTHER OPENINGS IN THE BUILDING ENVELOPE THAT ARE POTENTIAL SOURCES OF AIR LEAKAGE SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED OR OTHERWISE SEALED TO LIMIT INFILTRATION AND EXFILTRATION (2022 CEC 110.7).
- ATTIC ACCESS DOORS SHALL HAVE PERMANENTLY ATTACHED INSULATION USING ADHESIVE OR MECHANICAL FASTENERS. THE ATTIC ACCESS SHALL BE GASKETED TO PREVENT AIR LEAKAGE (2022 CEC 150.0(a)(2))
- ALL INSTALLED LUMINAIRES SHALL BE HIGH EFFICACY IN ACCORDANCE WITH CEC TABLE 150.0-A. (2022 CEC 150(k)(1A)).
- THE NUMBER OF ELECTRICAL BOXES THAT ARE MORE THAN 5 FEET ABOVE THE FINISHED FLOOR AND DO NOT CONTAIN A LUMINAIRE OR OTHER DEVICE SHALL BE NO GREATER THAN THE NUMBER OF BEDROOMS. THESE ELECTRICAL BOXES MUST BE SERVED BY A DIMMER, VACANCY SENSOR CONTROL, OR FAN SPEED CONTROL. (2022 CEC 150(k)(1B)).

## SOLAR READY NOTES

SOLAR READY REQUIREMENTS PER CcNC 110.10(b) THROUGH 110.10(e)

### SOLAR ZONE:

- MINIMUM AREA.** THE SOLAR ZONE SHALL HAVE A MINIMUM TOTAL AREA AS DESCRIBED BELOW. THE SOLAR ZONE SHALL COMPLY WITH ACCESS, PATHWAY, SMOKE VENTILATION, AND SPACING REQUIREMENTS AS SPECIFIED IN TITLE 24, PART 9 OR OTHER PARTS OF TITLE 24 OR IN ANY REQUIREMENTS ADOPTED BY A LOCAL JURISDICTION.
- THE SOLAR ZONE TOTAL AREA SHALL BE COMPRISED OF AREAS THAT HAVE NO DIMENSION LESS THAN FIVE FEET AND ARE NO LESS THAN 80 SQUARE FEET EACH FOR BUILDINGS WITH ROOF AREAS LESS THAN OR EQUAL TO 10,000 SQUARE FEET OR NO LESS THAN 160 SQUARE FEET EACH FOR BUILDINGS WITH ROOF AREAS GREATER THAN 10,000 SQUARE FEET.
  - SINGLE FAMILY RESIDENCES.** THE SOLAR ZONE SHALL BE LOCATED ON THE ROOF OR OVERHANG OF THE BUILDING AND HAVE A TOTAL AREA NO LESS THAN 250 SQUARE FEET.

**EXCEPTION 1** TO SECTION 110.10(B)(1A): SINGLE FAMILY RESIDENCES WITH A PERMANENTLY INSTALLED DOMESTIC SOLAR WATER-HEATING SYSTEM MEETING THE INSTALLATION CRITERIA SPECIFIED IN THE REFERENCE RESIDENTIAL APPENDIX RA4 AND WITH A MINIMUM SOLAR SAVINGS FRACTION OF 0.50.

**EXCEPTION 5** TO SECTION 110.10(B)(1A): SINGLE FAMILY RESIDENCES HAVING A SOLAR ZONE TOTAL AREA NO LESS THAN 150 SQUARE FEET AND WHERE ALL THERMOSTATS ARE DEMAND RESPONSIVE CONTROLS AND COMPLY WITH SECTION 110.12(A), AND ARE CAPABLE OF RECEIVING AND RESPONDING TO DEMAND RESPONSE SIGNALS PRIOR TO GRANTING OF AN OCCUPANCY PERMIT BY THE ENFORCING AGENCY.

**EXCEPTION 6** TO SECTION 110.10(B)(1A): SINGLE-FAMILY RESIDENCES MEETING THE FOLLOWING CONDITIONS:

- ALL THERMOSTATS ARE DEMAND RESPONSIVE CONTROLS THAT COMPLY WITH SECTION 110.12(A), AND ARE CAPABLE OF RECEIVING AND RESPONDING TO DEMAND RESPONSE SIGNALS PRIOR TO GRANTING OF AN OCCUPANCY PERMIT BY THE ENFORCING AGENCY.
- COMPLY WITH ONE OF THE FOLLOWING MEASURES:
  - INSTALL A DISHWASHER THAT MEETS OR EXCEEDS THE ENERGY STAR® PROGRAM REQUIREMENTS WITH A REFRIGERATOR THAT MEETS OR EXCEEDS THE ENERGY STAR PROGRAM REQUIREMENTS, A WHOLE HOUSE FAN DRIVEN BY AN ELECTRONICALLY COMMUTATED MOTOR, OR AN SAE J1772 LEVEL 2 ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE OR EV CHARGER) WITH A MINIMUM OF 40 AMPERES.
  - INSTALL A HOME AUTOMATION SYSTEM CAPABLE OF, AT A MINIMUM, CONTROLLING THE APPLIANCES AND LIGHTING OF THE DWELLING AND RESPONDING TO DEMAND RESPONSE SIGNALS; OR
  - INSTALL ALTERNATIVE PLUMBING PIPING TO PERMIT THE DISCHARGE FROM THE CLOTHES WASHER AND ALL SHOWERS AND BATHTUBS TO BE USED FOR AN IRRIGATION SYSTEM IN COMPLIANCE WITH THE CALIFORNIA PLUMBING CODE AND ANY APPLICABLE LOCAL ORDINANCES; OR
  - INSTALL A RAINWATER CATCHMENT SYSTEM DESIGNED TO COMPLY WITH THE CALIFORNIA PLUMBING CODE AND ANY APPLICABLE LOCAL ORDINANCES, AND THAT USES RAINWATER FLOWING FROM AT LEAST 65 PERCENT OF THE AVAILABLE ROOF AREA.

## WILDLAND-URBAN INTERFACE

- ROOF COVERING SHALL COMPLY WITH **2022 CRC R337.5.2** UNDERLAYMENT SHALL BE ONE LAYER OF OF MINIMUM 72 POUND MINERAL-SURFACED NONPERFORATED CAP SHEET COMPLYING WITH ASTM D3909 INSTALLED OVER THE COMBUSTIBLE DECKING. ALTERNATELY, A CLASS A FIRE RATED ROOF UNDERLAYMENT, TESTED IN ACCORDANCE WITH ASTM E108, SHALL BE PERMITTED TO BE USED.
- ROOF VALLEYS SHALL COMPLY WITH **2022 CRC R337.5.3**. VALLEY FLASHING SHALL BE NOT LESS THAN 26 GAGE GALVANIZED SHEET CORROSIVE RESISTANT METAL INSTALLED OVER NOT LESS THAN ONE LAYER OF MINIMUM 72 POUND MINERAL-SURFACED NONPERFORATED CAP SHEET COMPLYING WITH ASTM D3909, AT LEAST 36 INCHES WIDE RUNNING THE FULL LENGTH OF THE VALLEY.
- ROOF GUTTERS SHALL COMPLY WITH **2022 CRC R337.5.4**. ROOF GUTTERS SHALL BE PROVIDE WITH THE MEANS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS IN THE GUTTER.
- VENTILATION OPENINGS SHALL COMPLY WITH **2022 CRC R337.6** - VENTILATION OPENINGS FOR ENCLOSED ATTICS, ENCLOSED EAVE SOFFIT SPACES, ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS, AND UNDERFLOOR VENTILATION OPENINGS SHALL BE FULLY COVERED WITH METAL WIRE MESH SCREENS OR OTHER DEVICES. REFER TO **SECTIONS R337.6.1** THROUGH **R337.6.3** FOR ADDITIONAL INFORMATION.
- EXTERIOR COVERINGS SHALL COMPLY WITH **2022CRC R337.7** EXTERIOR WALL COVERINGS OR WALL ASSEMBLIES SHALL COMPLY WITH ONE OF THE FOLLOWING REQUIREMENTS: BE OF NONCOMBUSTIBLE MATERIAL, IGNITION-RESISTANT MATERIAL, HEAVY TIMBER EXTERIOR WALL ASSEMBLY, LOG WALL CONSTRUCTION ASSEMBLY, OR WALL ASSEMBLIES THAT MEET THE PERFORMANCE CRITERIA IN ACCORDANCE WITH THE TEST PROCEDURES FOR A 10-MINUTE DIRECT FLAME CONTACT EXPOSURE TEST SET FORTH IN SFM STANDARD 12-7A-1. REFER TO **SECTIONS R337.7.1** THROUGH **R337.7.9** FOR ADDITIONAL INFORMATION.

## FIRE-RESISTANT CONSTRUCTION

SELECT THE APPROPRIATE BOX BELOW (ONLY 1):

<b>NOTE:</b> EXTERIOR WALLS SHALL HAVE A MINIMUM FIRE SEPARATION DISTANCE OF 4'-0" FROM PROPERTY LINE. ALL ROOF EAVES ARE 1'-0" DEEP.		
<b>NON-SPRINKLERED</b>		
<input type="checkbox"/>	<b>FIRE SEPARATION DISTANCE: 25'-0"</b> (EXTERIOR WALLS, PROJECTIONS, OPENINGS, AND PENETRATIONS)	<b>NO FIRE-RESISTANCE RATING REQUIRED</b>
<input type="checkbox"/>	<b>FIRE SEPARATION DISTANCE: 4'-0" - 5'-0"</b> (EXTERIOR WALLS, OPENINGS, AND PENETRATIONS) <b>PROJECTION SEPARATION DIST.: 23'-0"</b>	
	OPENINGS, AND PENETRATIONS	<b>NO FIRE-RESISTANCE RATING REQUIRED</b>
	EXTERIOR WALLS AND PROJECTIONS	<b>1-HR FIRE-RESISTANCE</b>
<b>SPRINKLERED</b>		
<input type="checkbox"/>	<b>FIRE SEPARATION DISTANCE: 3'-0"</b> (EXTERIOR WALLS, OPENINGS, AND PENETRATIONS)	<b>NO FIRE-RESISTANCE RATING REQUIRED</b>



THESE PLANS ARE PROVIDED BY THE COUNTY OF SAN LUIS OBISPO 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. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT

SAN LUIS OBISPO, CA

GENERAL NOTES

DATE  
11/28/2023

SHEET

G-101



CLIMATE ZONE

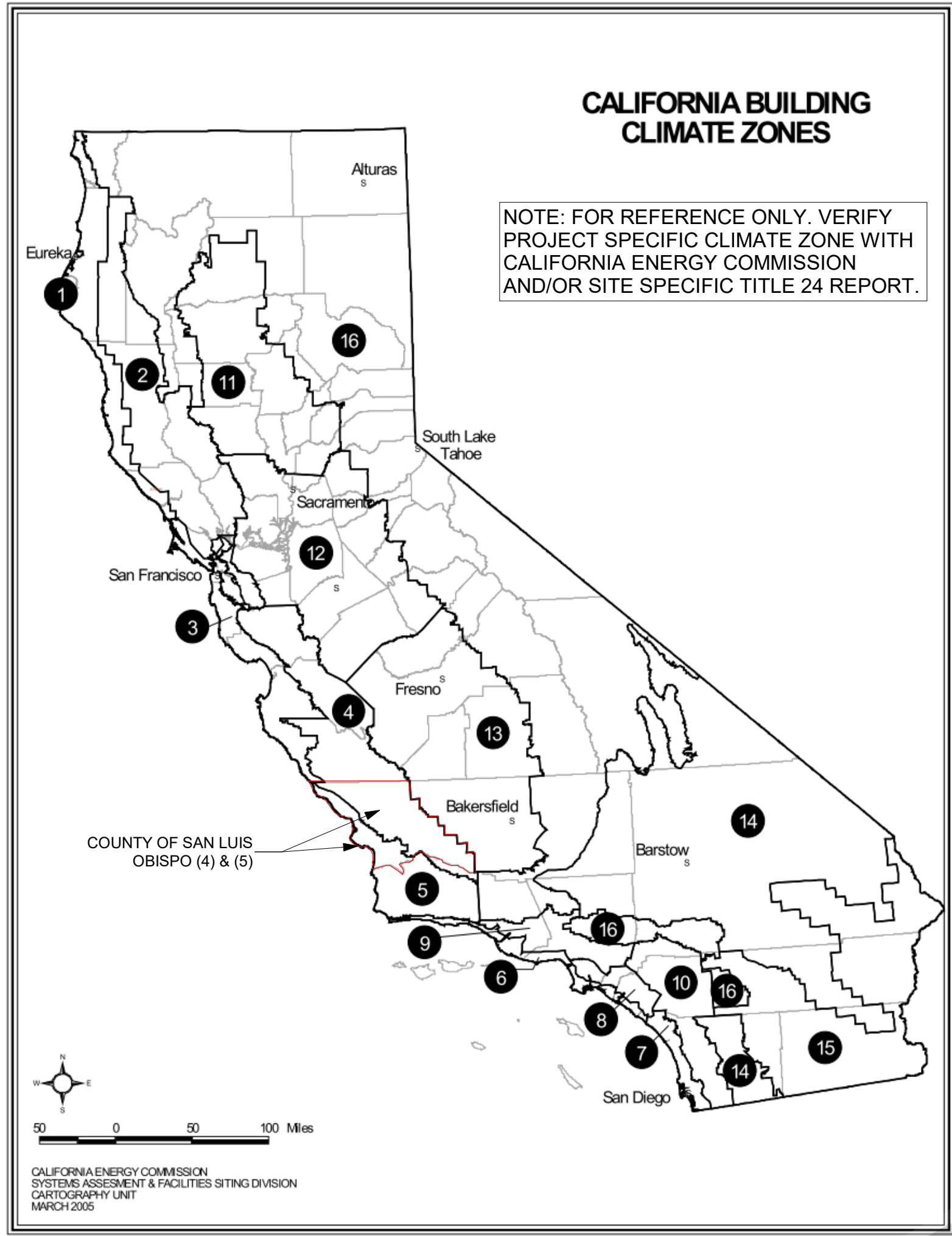


FIGURE 100.1-A—CALIFORNIA CLIMATE ZONES  
Climate Zones for Residential and Nonresidential Occupancies

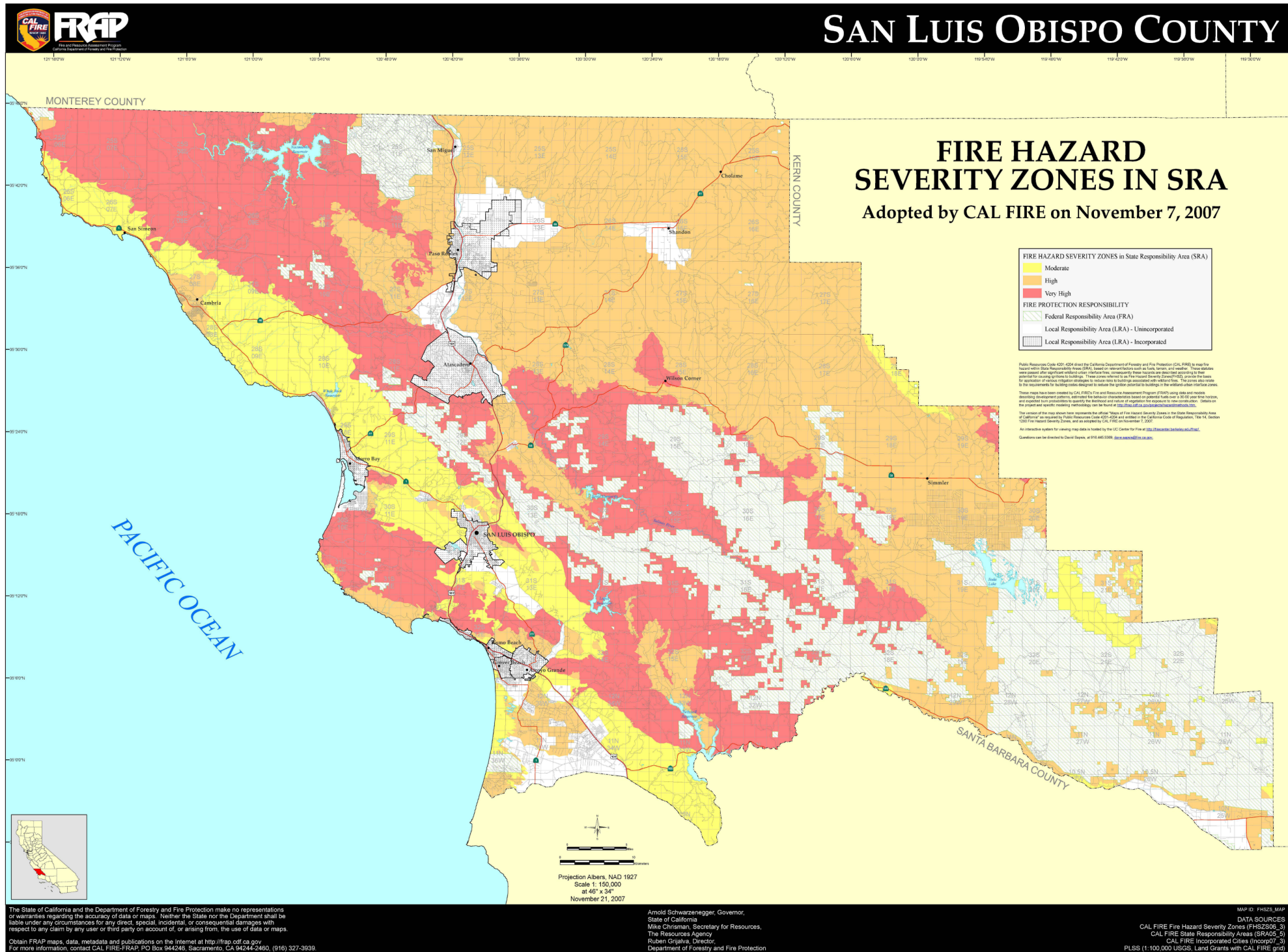
SECTION 100.1 – DEFINITIONS AND RULES OF CONSTRUCTION

ABBREVIATIONS

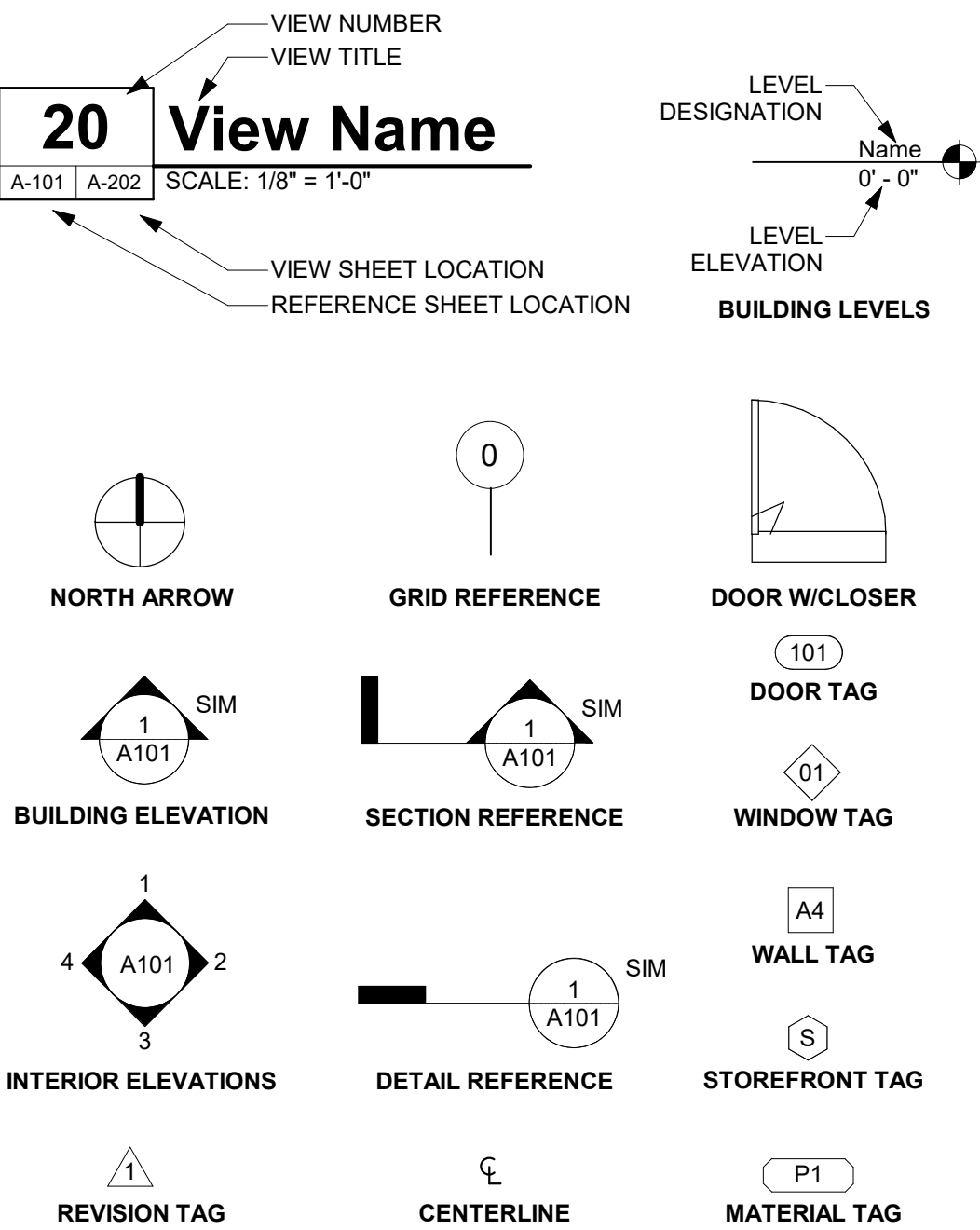
A/C	AIR CONDITIONING	EXT	EXTERIOR	MAX	MAXIMUM	SF	SQUARE FOOT
ABV	ABOVE	FACP	FIRE ALARM CONTROL PANEL	MDF	MEDIUM DENSITY FIBERBOARD	SHT	SHEET
ACOUS	ACOUSTICAL	FAU	FORCED AIR UNIT	MECH	MECHANICAL	SHTHG	SHEATHING
ACT	ACOUSTICAL CEILING TILE	FAWP	FLUID APPLIED WATERPROOFING	MEMB	MEMBRANE	SIM	SIMILAR
ADA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

FIRE HAZARD SEVERITY ZONES

DISCLAIMER: MAP IS FOR GENERAL REFERENCE ONLY. TO ACQUIRE ACCURATE INFORMATION FOR FIRE HAZARD SEVERITY IN SITE SPECIFIC LOCATION, REFER TO THE CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION.



SYMBOLS



COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

INDEX, ABBREVIATIONS, &  
SYMBOLS

DATE  
11/28/2023  
SHEET

G-102





2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(m)13:	<b>Space Conditioning System Airflow Rate and Fan Efficacy.</b> Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. *
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Ventilation and Indoor Air Quality:

§ 150.0(o)1:	<b>Requirements for Ventilation and Indoor Air Quality.</b> All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1. *
§ 150.0(o)1B:	<b>Central Fan Integrated (CFI) Ventilation Systems.</b> Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and uncontrolled per §150.0(o)1Bii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.
§ 150.0(o)1C:	<b>Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses.</b> Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1C-iii.
§ 150.0(o)1G:	<b>Local Mechanical Exhaust.</b> Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o)1Giii enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Gii-iv. Airflow must be measured by the installer per §150.0(o)1Gv, and rated for sound per §150.0(o)1Gvi. *
§ 150.0(o)1H&I:	<b>Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems.</b> The airflow required per § 150.0(o)1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by §150.0(o)1C.
§ 150.0(o)2:	<b>Field Verification and Diagnostic Testing.</b> Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o)1G

Pool and Spa Systems and Equipment:

§ 110.4(a):	<b>Certification by Manufacturers.</b> Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in MAEDS; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent waterproof plate or card with operating instructions; and must not use electric resistance heating. *
§ 110.4(b)1:	<b>Piping.</b> Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	<b>Covers.</b> Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	<b>Directional Inlets and Time Switches for Pools.</b> Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	<b>Pilot Light.</b> Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	<b>Pool Systems and Equipment Installation.</b> Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.

Lighting:

§ 110.9:	<b>Lighting Controls and Components.</b> All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. *
§ 150.0(k)1A:	<b>Luminaire Efficacy.</b> All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors, and garage door openers; navigation lighting less than 5 watts; and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt.
§ 150.0(k)1B:	<b>Screw based luminaires.</b> Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1C:	<b>Recessed Downlight Luminaires in Ceilings.</b> Luminaires recessed into ceilings must not contain screw based sockets, must be airtight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.
§ 150.0(k)1D:	<b>Light Sources in Enclosed or Recessed Luminaires.</b> Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1E:	<b>Blank Electrical Boxes.</b> The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.
§ 150.0(k)1F:	<b>Lighting Integral to Exhaust Fans.</b> Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).

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2022 Single-Family Residential Mandatory Requirements Summary

§ 110.5:	<b>Pilot Lights.</b> Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour.); and pool and spa heaters. *
§ 150.0(h)1:	<b>Building Cooling and Heating Loads.</b> Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.
§ 150.0(h)3A:	<b>Clearances.</b> Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.
§ 150.0(h)3B:	<b>Liquid Line Drier.</b> Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	<b>Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.</b> All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code. *
§ 150.0(j)2:	<b>Insulation Protection.</b> Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	<b>Gas or Propane Water Heating Systems.</b> Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location, and a condensate drain no more than 2' higher than the base of the water heater.
§ 150.0(n)3:	<b>Solar Water-heating Systems.</b> Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.

Ducts and Fans:

§ 110.8(d)3:	<b>Ducts.</b> Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	<b>CMC Compliance.</b> All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than 1/4". If mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed. *
§ 150.0(m)2:	<b>Factory-Fabricated Duct Systems.</b> Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	<b>Field-Fabricated Duct Systems.</b> Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	<b>Backdraft Damper.</b> Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	<b>Gravity Ventilation Dampers.</b> Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	<b>Protection of Insulation.</b> Insulation must be protected from damage due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.
§ 150.0(m)10:	<b>Porous Inner Core Flex Duct.</b> Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.
§ 150.0(m)11:	<b>Duct System Sealing and Leakage Test.</b> When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.
§ 150.0(m)12:	<b>Air Filtration.</b> Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter. *

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(k)s:	<b>Energy Storage System (ESS) Ready.</b> All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, <i>or</i> a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0(s); at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(t):	<b>Heat Pump Space Heater Ready.</b> Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(u):	<b>Electric Cooktop Ready.</b> Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v):	<b>Electric Clothes Dryer Ready.</b> Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

\*Exceptions may apply.

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2022 Single-Family Residential Mandatory Requirements Summary

NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information.  
(04/2022)

Building Envelope:

§ 110.6(a)1:	<b>Air Leakage.</b> Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AAMA WDMA/CSA 10111.S 2/4440-2011. *
§ 110.6(a)5:	<b>Labeling.</b> Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	<b>Field fabricated exterior doors and fenestration products</b> must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stopped.
§ 110.7:	<b>Air Leakage.</b> All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stopped.
§ 110.8(a):	<b>Insulation Certification by Manufacturers.</b> Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	<b>Insulation Requirements for Heated Slab Floors.</b> Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(j):	<b>Roofing Products Solar Reflectance and Thermal Emittance.</b> The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(j) and be labeled per §10-113 when the installation of a cool roof is specified on the CFR.
§ 110.8(j):	<b>Radiant Barrier.</b> When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	<b>Roof Deck, Ceiling and Rafter Roof Insulation.</b> Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling; or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage; insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration, as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.
§ 150.0(b):	<b>Loose-fill Insulation.</b> Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	<b>Wall Insulation.</b> Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B. *
§ 150.0(d):	<b>Raised-floor Insulation.</b> Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. *
§ 150.0(f):	<b>Slab Edge Insulation.</b> Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	<b>Vapor Retarder.</b> In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	<b>Vapor Retarder.</b> In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	<b>Fenestration Products.</b> Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45; or area-weighted average U-factor of all fenestration must not exceed 0.45.

Fireplaces, Decorative Gas Appliances, and Gas Log:

§ 110.5(e):	<b>Pilot Light.</b> Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	<b>Closable Doors.</b> Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	<b>Combustion Intake.</b> Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.
§ 150.0(e)3:	<b>Flue Damper.</b> Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *

Space Conditioning, Water Heating, and Plumbing System:

§ 110.0-s § 110.3:	<b>Certification.</b> Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.
§ 110.2(a):	<b>HVAC Efficiency.</b> Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	<b>Controls for Heat Pumps with Supplementary Electric Resistance Heaters.</b> Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.
§ 110.2(c):	<b>Thermostats.</b> All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.
§ 110.3(c)3:	<b>Insulation.</b> Unlined service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	<b>Isolation Valves.</b> Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(k)1G:	<b>Screw based luminaires.</b> Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1H:	<b>Light Sources in Enclosed or Recessed Luminaires.</b> Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	<b>Light Sources in Drawers, Cabinets, and Linen Closets.</b> Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	<b>Interior Switches and Controls.</b> All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	<b>Interior Switches and Controls.</b> Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A:	<b>Accessible Controls.</b> Lighting must be readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B:	<b>Multiple Controls.</b> Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)2C:	<b>Mandatory Requirements.</b> Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	<b>Energy Management Control Systems.</b> An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E:	<b>Automatic Shutoff Controls.</b> In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F:	<b>Dimmers.</b> Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150.0(k)2K:	<b>Independent controls.</b> Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
§ 150.0(k)3A:	<b>Residential Outdoor Lighting.</b> For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
§ 150.0(k)4:	<b>Internally illuminated address signs.</b> Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	<b>Residential Garages for Eight or More Vehicles.</b> Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

Solar Readiness:

§ 110.10(a)1:	<b>Single-family Residences.</b> Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).
§ 110.10(b)1A:	<b>Minimum Solar Zone Area.</b> The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. *
§ 110.10(b)2:	<b>Azimuth.</b> All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A:	<b>Shading.</b> The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.
§ 110.10(b)3B:	<b>Shading.</b> Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane. *
§ 110.10(b)4:	<b>Structural Design Loads on Construction Documents.</b> For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	<b>Interconnection Pathways.</b> The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	<b>Documentation.</b> A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	<b>Main Electrical Service Panel.</b> The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	<b>Main Electrical Service Panel.</b> The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

5/6/22

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THESE PLANS ARE PROVIDED BY THE COUNTY OF SAN LUIS OBISPO 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 CONTRUCT 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.

COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

2022 SINGLE-FAMILY RESIDENTIAL  
MANDATORY REQUIREMENTS

DATE  
11/28/2023

SHEET

G-103



# 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 COMPILED 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 BE OF SUFFICIENT CLARITY TO 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 101.7.

**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 ONLY 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, RESTRIPING, 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 SITE DEVELOPMENT

**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 OF 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 OF 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, WATTLE 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 DWELLINGS UNITS (JADU) WITHOUT ADDITIONAL PARKING FACILITIES.

**4.106.4.1 NEW ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES WITH ATTACHED PRIVATE GARAGES**  
FOR EACH DWELLING UNIT, INSTALL A LISTED RACEWAY TO ACCOMMODATE A DEDICATED 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 OTHER ENCLOSURE IN CLOSE PROXIMITY TO THE PROPOSED LOCATION OF AN EV CHARGER. RACEWAYS ARE REQUIRED TO BE CONTINUOUS AT ENCLOSED, INACCESSIBLE OR CONCEALED AREAS AND SPACES. THE SERVICE PANEL AND/OR SUBPANEL SHALL PROVIDE CAPACITY TO INSTALL A 40-AMPERE MINIMUM DEDICATED BRANCH CIRCUIT AND SPACE(S) RESERVED TO PERMIT INSTALLATION OF A BRANCH CIRCUIT OVERCURRENT PROTECTION DEVICE.

**4.106.4.1.1 IDENTIFICATION**  
THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE EV CHARGING AS "EV CAPABLE". THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENTLY AND VISIBLY 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 OF EV SPACES SHALL BE ROUNDED UP TO THE NEAREST WHOLE NUMBER. A PARKING SPACE SERVED BY ELECTRIC VEHICLE SUPPLY EQUIPMENT OR DESIGNED AS A FUTURE EV CHARGING SPACE SHALL COUNT AS AT LEAST ONE STANDARD AUTOMOBILE PARKING SPACE ONLY FOR THE PURPOSE OF COMPLYING WITH ANY APPLICABLE MINIMUM PARKING SPACE REQUIREMENTS ESTABLISHED BY A LOCAL JURISDICTION. SEE VEHICLE CODE SECTION 22511.2 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 TRANSFORMERS, 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 SPACE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

**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 TRANSFORMERS, 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 SPACE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

**4.106.4.2.3 EV SPACE REQUIREMENTS**  
**1. SINGLE EV SPACE REQUIRED.** INSTALL A LISTED RACEWAY CAPABLE OF ACCOMMODATING A 208/240-VOLT DEDICATED 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 OF THE PROPOSED LOCATION OF THE EV SPACE. CONSTRUCTION DOCUMENTS SHALL IDENTIFY THE RACEWAY TERMINATION POINT, RECEPTACLE OR CHARGER LOCATION, AS APPLICABLE. THE SERVICE PANEL AND/OR SUBPANEL SHALL BE 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.  
**EXCEPTION:** A RACEWAY IS NOT REQUIRED IF A MINIMUM 40-AMPERE 208/240-VOLT DEDICATED EV 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 IDENTIFICATION**  
THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.  
**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:** AREAS 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 TRANSFORMERS, 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 SPACE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

**EXCEPTION:** WHEN EV CHARGERS (LEVEL 2 EVSE) ARE INSTALLED IN A NUMBER GREATER THAN FIVE (5) PERCENT OF PARKING SPACES REQUIRED BY SECTION 4.106.4.2.2, ITEM 3, THE NUMBER OF EV CAPABLE SPACES REQUIRED MAY BE REDUCED BY A NUMBER EQUAL TO THE NUMBER OF EV CHARGERS INSTALLED OVER THE FIVE (5) PERCENT REQUIRED.

**NOTES:**  
CONSTRUCTION DOCUMENTS SHALL SHOW LOCATIONS OF FUTURE EV SPACES.  
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:** AREAS OF PARKING FACILITIES SERVED BY PARKING LIFTS.

**3. EV CHARGERS.** FIVE (5) PERCENT OF THE TOTAL NUMBER OF PARKING SPACES SHALL BE EQUIPPED WITH LEVEL 2 EVSE. WHERE COMMON USE PARKING IS PROVIDED, AT LEAST ONE EV CHARGER SHALL BE LOCATED IN THE COMMON USE PARKING AREA AND SHALL BE AVAILABLE FOR USE BY ALL RESIDENTS OR GUESTS.

WHEN LOW POWER LEVEL 2 EV CHARGING RECEPTACLES OR LEVEL 2 EVSE ARE INSTALLED BEYOND THE MINIMUM REQUIRED, AN AUTOMATIC LOAD MANAGEMENT SYSTEM (ALMS) MAY BE USED TO REDUCE THE MAXIMUM REQUIRED ELECTRICAL CAPACITY TO EACH SPACE SERVED BY THE ALMS. THE ELECTRICAL SYSTEM AND ANY ON-SITE DISTRIBUTION TRANSFORMERS SHALL HAVE SUFFICIENT CAPACITY TO DELIVER AT LEAST 3.3 KW TO EACH EV CHARGING STATION (EVCS) INSTALLED. THE RACEWAY BY THE ALMS, THE BRANCH CIRCUIT SHALL HAVE A MINIMUM CAPACITY OF 40 AMPERES, AND INSTALLED EVSE SHALL HAVE A CAPACITY OF NOT LESS THAN 30 AMPERES. ALMS SHALL NOT BE USED TO REDUCE THE MINIMUM REQUIRED ELECTRICAL CAPACITY TO THE REQUIRED EV CAPABLE SPACES.

**4.106.4.2.1 ELECTRIC VEHICLE CHARGING STATIONS (EVCS)**  
ELECTRIC VEHICLE CHARGING STATIONS REQUIRED BY SECTION 4.106.4.2.2, ITEM 3, SHALL COMPLY WITH SECTION 4.106.4.2.2.1.

**EXCEPTION:** ELECTRIC VEHICLE CHARGING STATIONS SERVING PUBLIC ACCOMMODATIONS, PUBLIC HOUSING, MOTELS AND HOTELS SHALL NOT BE REQUIRED TO COMPLY WITH THIS SECTION. SEE CALIFORNIA BUILDING CODE, CHAPTER 11B, FOR APPLICABLE REQUIREMENTS.

**4.106.4.2.2.1.1 LOCATION**  
EVCS SHALL COMPLY WITH AT LEAST ONE OF THE FOLLOWING OPTIONS:  
THE CHARGING SPACE SHALL BE LOCATED ADJACENT TO AN ACCESSIBLE PARKING SPACE MEETING THE REQUIREMENTS OF THE CALIFORNIA BUILDING CODE, CHAPTER 11A, TO ALLOW USE OF THE EV CHARGER FROM THE ACCESSIBLE PARKING SPACE.

THE CHARGING SPACE SHALL BE LOCATED ON AN ACCESSIBLE ROUTE, AS DEFINED IN THE CALIFORNIA BUILDING CODE, CHAPTER 2, TO THE BUILDING.

**EXCEPTION:** ELECTRIC VEHICLE CHARGING STATIONS DESIGNED AND CONSTRUCTED IN COMPLIANCE WITH THE CALIFORNIA BUILDING CODE, CHAPTER 11B, ARE NOT REQUIRED TO COMPLY WITH SECTION 4.106.4.2.2.1 AND SECTION 4.106.4.2.2.1.2, ITEM 3.

**4.106.4.2.2.1.2 ELECTRIC VEHICLE CHARGING STATIONS (EVCS) DIMENSIONS**  
THE CHARGING SPACES SHALL BE DESIGNED TO COMPLY WITH THE FOLLOWING:  
1. THE MINIMUM LENGTH OF EACH EV SPACE SHALL BE 18 FEET.  
2. THE MINIMUM WIDTH OF EACH EV SPACE SHALL BE 9 FEET.  
3. ONE IN EVERY 25 CHARGING SPACES, BUT NOT LESS THAN ONE, SHALL ALSO HAVE AN 8-FOOT WIDE MINIMUM AISLE, A 5-FOOT WIDE MINIMUM AISLE SHALL BE PERMITTED PROVIDED THE MINIMUM WIDTH OF THE EV SPACE IS 12 FEET.  
a. SURFACE SLOPE FOR THIS EV SPACE AND THE AISLE SHALL NOT EXCEED 1 UNIT VERTICAL IN 48 UNITS HORIZONTAL (2.083 PERCENT SLOPE) IN ANY DIRECTION.

**4.106.4.2.2.1.3 ACCESSIBLE EV SPACES**  
IN ADDITION TO THE REQUIREMENTS IN SECTIONS 4.106.4.2.2.1.1 AND 4.106.4.2.2.1.2, ALL EVSE, WHEN INSTALLED, SHALL COMPLY WITH THE ACCESSIBILITY PROVISIONS FOR EV CHARGERS IN THE CALIFORNIA BUILDING CODE, CHAPTER 11B, AND THE CALIFORNIA BUILDING CODE, CHAPTER 11A, SECTION 1109A.

**4.106.4.2.3 EV SPACE REQUIREMENTS**

**1. SINGLE EV SPACE REQUIRED.** INSTALL A LISTED RACEWAY CAPABLE OF ACCOMMODATING A 208/240-VOLT DEDICATED 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 OF THE PROPOSED LOCATION OF THE EV SPACE. CONSTRUCTION DOCUMENTS SHALL IDENTIFY THE RACEWAY TERMINATION POINT, RECEPTACLE OR CHARGER LOCATION, AS APPLICABLE. THE SERVICE PANEL AND/OR SUBPANEL SHALL BE 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.  
**EXCEPTION:** A RACEWAY IS NOT REQUIRED IF A MINIMUM 40-AMPERE 208/240-VOLT DEDICATED EV 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 IDENTIFICATION**  
THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

**2. MULTIPLE EV SPACES REQUIRED.** CONSTRUCTION DOCUMENTS SHALL INDICATE THE RACEWAY TERMINATION POINT AND THE LOCATION OF INSTALLED OR FUTURE EV SPACES, RECEPTACLES OR EV CHARGERS. CONSTRUCTION DOCUMENTS SHALL ALSO PROVIDE INFORMATION ON AMPERAGE OF INSTALLED OR FUTURE RECEPTACLES OR EVSE, RACEWAY METHOD(S), WIRING SCHEMATICS AND ELECTRICAL LOAD CALCULATIONS. PLAN DESIGN SHALL BE BASED UPON A 40-AMPERE MINIMUM BRANCH CIRCUIT. REQUIRED RACEWAYS AND RELATED COMPONENTS THAT ARE PLANNED TO BE INSTALLED UNDERGROUND, ENCLOSED, INACCESSIBLE OR IN CONCEALED AREAS AND SPACES SHALL BE INSTALLED AT THE TIME OF ORIGINAL CONSTRUCTION.

**EXCEPTION:** A RACEWAY IS NOT REQUIRED IF A MINIMUM 40-AMPERE 208/240-VOLT DEDICATED EV 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 IDENTIFICATION**  
THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE" IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

**4.106.4.2.5 ELECTRIC VEHICLE READY SPACE SIGNAGE**  
ELECTRIC VEHICLE READY SPACES SHALL BE IDENTIFIED BY SIGNAGE OR PAVEMENT MARKINGS, IN COMPLIANCE WITH CALTRANS TRAFFIC OPERATIONS POLICY DIRECTIVE 13-01 (ZERO EMISSION VEHICLE SIGNS AND PAVEMENT MARKINGS) OR ITS SUCCESSOR(S).

**4.106.4.3 ELECTRIC VEHICLE CHARGING FOR ADDITIONS AND ALTERATIONS OF PARKING FACILITIES SERVING EXISTING MULTIFAMILY BUILDINGS**  
WHEN NEW PARKING FACILITIES ARE ADDED, OR ELECTRICAL SYSTEMS OR LIGHTING OF EXISTING PARKING FACILITIES ARE ADDED OR ALTERED AND THE WORK REQUIRES A BUILDING PERMIT, TEN (10) PERCENT OF THE TOTAL NUMBER OF PARKING SPACES ADDED OR ALTERED SHALL BE ELECTRIC VEHICLE CHARGING SPACES (EV SPACES) CAPABLE OF SUPPORTING FUTURE LEVEL 2 EVSE.

**NOTES:**  
1. CONSTRUCTION DOCUMENTS ARE INTENDED TO DEMONSTRATE THE PROJECT'S CAPABILITY AND CAPACITY FOR FACILITATING FUTURE EV CHARGING.  
2. THERE IS NO REQUIREMENT FOR EV SPACES TO BE CONSTRUCTED OR AVAILABLE UNTIL EV CHARGERS ARE INSTALLED FOR USE.

### DIVISION 4.2 ENERGY EFFICIENCY

#### 4.201 GENERAL

**4.201.1 SCOPE.**  
FOR THE PURPOSES OF MANDATORY ENERGY EFFICIENCY STANDARDS IN THIS CODE, THE CALIFORNIA ENERGY COMMISSION WILL CONTINUE TO ADOPT MANDATORY STANDARDS.

### DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

#### 4.303 INDOOR WATER USE

**4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS**  
PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) SHALL COMPLY WITH THE FOLLOWING:

**4.303.1.1 WATER CLOSETS**  
THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR TANK TYPE TOILET.

**NOTE:** THE EFFECTIVE FLUSH VOLUME OF DUAL FLUSH TOILETS IS DEFINED AS THE COMPOSITE AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH.

**4.303.1.2 URINALS**  
THE EFFECTIVE FLUSH VOLUME OF WALL-MOUNTED URINALS SHALL NOT EXCEED 0.125 GALLONS PER FLUSH. THE EFFECTIVE FLUSH VOLUME OF ALL OTHER URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.

**4.303.1.3 SHOWERHEADS**  
**4.303.1.3.1 SINGLE SHOWERHEAD**  
SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI. SHOWERHEADS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR SHOWERHEADS.

**4.303.1.3.2 MULTIPLE SHOWERHEADS SERVING ONE SHOWER**  
WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME.

**NOTE:** A HAND HELED SHOWER SHALL BE CONSIDERED A SHOWERHEAD.

#### 4.303.1.4 FAUCETS

**4.303.1.4.1 RESIDENTIAL LAVATORY FAUCETS**  
THE MAXIMUM FLOW RATE OF RESIDENTIAL LAVATORY FAUCETS SHALL NOT EXCEED 1.2 GALLONS PER MINUTE AT 60 PSI. THE MINIMUM FLOW RATE OF RESIDENTIAL LAVATORY FAUCETS SHALL NOT BE LESS THAN 0.8 GALLONS PER MINUTE AT 20 PSI.

**4.303.1.4.2 LAVATORY FAUCETS IN COMMON AND PUBLIC USE AREAS**  
THE MAXIMUM FLOW RATE OF LAVATORY FAUCETS INSTALLED IN COMMON AND PUBLIC USE AREAS (OUTSIDE OF DWELLINGS OR SLEEPING UNITS) IN RESIDENTIAL BUILDINGS SHALL NOT EXCEED 0.5 GALLONS PER MINUTE AT 60 PSI.

**4.303.1.4.3 METERING FAUCETS**  
METERING FAUCETS WHEN INSTALLED IN RESIDENTIAL BUILDINGS SHALL NOT DELIVER MORE THAN 0.2 GALLONS PER CYCLE.

**4.303.1.4.4 KITCHEN FAUCETS**  
THE MAXIMUM FLOW RATE OF KITCHEN FAUCETS SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 60 PSI. KITCHEN FAUCETS MAY TEMPORARILY INCREASE THE FLOW ABOVE THE MAXIMUM RATE, BUT NOT TO EXCEED 2.2 GALLONS PER MINUTE AT 60 PSI, AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GALLONS PER MINUTE AT 60 PSI.

**NOTE:** WHERE COMPLYING FAUCETS ARE UNAVAILABLE, AERATORS OR OTHER MEANS MAY BE USED TO ACHIEVE REDUCTION.

**4.303.2 SUBMETERS FOR MULTIFAMILY BUILDINGS AND DWELLING UNITS IN MIXED-USE RESIDENTIAL/COMMERCIAL BUILDINGS**  
SUBMETERS SHALL BE INSTALLED TO MEASURE WATER USAGE OF INDIVIDUAL RENTAL DWELLING UNITS IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE.

**4.303.2 SUBMETERS FOR MULTIFAMILY BUILDINGS AND DWELLING UNITS IN MIXED-USE RESIDENTIAL/COMMERCIAL BUILDINGS**  
SUBMETERS SHALL BE INSTALLED TO MEASURE WATER USAGE OF INDIVIDUAL RENTAL DWELLING UNITS IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE.

**4.303.3 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS**  
PLUMBING FIXTURES AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE, AND SHALL MEET THE APPLICABLE STANDARDS REFERENCED IN TABLE 1701.1 OF THE CALIFORNIA PLUMBING CODE.

**NOTE:**  
THIS TABLE COMPILES THE DATA IN SECTION 4.303.1 AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE - MAXIMUM FIXTURE WATER USE	
FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GAL/CYCLE
WATER CLOSET	1.28 GAL/FLUSH
URINALS	0.125 GAL/FLUSH

#### 4.304 OUTDOOR WATER USE

**4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS**  
RESIDENTIAL DEVELOPMENTS SHALL COMPLY WITH A LOCAL WATER EFFICIENT LANDSCAPE ORDINANCE OR THE CURRENT CALIFORNIA DEPARTMENT OF WATER RESOURCES' MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO), WHICHEVER IS MORE STRINGENT.  
**NOTES:**  
1. THE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO) IS LOCATED IN THE CALIFORNIA CODE OF REGULATIONS, TITLE 23, CHAPTER 2.7, DIVISION 2.

MWELO AND SUPPORTING DOCUMENTS, INCLUDING A WATER BUDGET CALCULATOR, ARE AVAILABLE AT: [HTTPS://WWW.WATER.CA.GOV/](https://www.water.ca.gov/)

### DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

#### 4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

**4.406.1 RODENT PROOFING**  
ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/BOTTOM PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY LOCOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR A SIMILAR METHOD ACCEPTABLE TO THE ENFORCING AGENCY.

#### 4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

**4.408.1 CONSTRUCTION WASTE MANAGEMENT**  
RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65 PERCENT OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDANCE WITH EITHER SECTION 4.408.2, 4.408.3, OR 4.408.4, OR MEET A MORE STRINGENT LOCAL CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT ORDINANCE.

**EXCEPTIONS:**  
1. EXCAVATED SOIL AND LAND-CLEARING DEBRIS.  
2. ALTERNATE WASTE REDUCTION METHODS DEVELOPED BY WORKING WITH LOCAL AGENCIES IF DIVERSION OR RECYCLE FACILITIES CAPABLE OF COMPLIANCE WITH THIS ITEM DO NOT EXIST OR ARE NOT LOCATED REASONABLY CLOSE TO THE JOBSITE.  
3. THE ENFORCING AGENCY MAY MAKE ACCEPTATIONS TO THE REQUIREMENTS OF THIS SECTION WHEN ISOLATED JOBSITES ARE LOCATED IN AREAS BEYOND THE HAUL BOUNDARIES OF THE DIVERSION FACILITY.

**4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN**  
SUBMIT A CONSTRUCTION WASTE MANAGEMENT PLAN IN CONFORMANCE WITH ITEMS 1 THROUGH 5. THE CONSTRUCTION WASTE MANAGEMENT PLAN SHALL BE UPDATED AS NECESSARY AND SHALL BE AVAILABLE DURING CONSTRUCTION FOR EXAMINATION BY THE ENFORCING AGENCY.

1. IDENTIFY THE CONSTRUCTION AND DEMOLITION WASTE MATERIALS TO BE DIVERTED FROM DISPOSAL BY RECYCLING, REUSE ON THE PROJECT OR SALVAGE FOR FUTURE USE OR SALE.  
2. SPECIFY IF CONSTRUCTION AND DEMOLITION WASTE MATERIALS WILL BE SORTED ON-SITE (SOURCE-SEPARATED) OR BULK MIXED (SINGLE STREAM).  
3. IDENTIFY DIVERSION FACILITIES WHERE THE CONSTRUCTION AND DEMOLITION WASTE MATERIAL WILL BE TAKEN.  
4. IDENTIFY CONSTRUCTION METHODS EMPLOYED TO REDUCE THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE GENERATED.  
5. SPECIFY THAT THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE MATERIAL DIVERTED SHALL BE CALCULATED BY WEIGHT OR VOLUME, BUT NOT BY BOTH.

**4.408.3 WASTE MANAGEMENT COMPANY.**  
UTILIZE A WASTE MANAGEMENT COMPANY, APPROVED BY THE ENFORCING AGENCY, WHICH CAN PROVIDE VERIFIABLE DOCUMENTATION THAT THE PERCENTAGE OF CONSTRUCTION AND DEMOLITION WASTE MATERIAL DIVERTED FROM THE LANDFILL COMPLIES WITH SECTION 4.408.1.  
**NOTE:** THE OWNER OR CONTRACTOR MAY MAKE THE DETERMINATION IF THE CONSTRUCTION AND DEMOLITION WASTE MATERIALS WILL BE DIVERTED BY A WASTE MANAGEMENT COMPANY.



# 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:

- DIRECTIONS TO THE OWNER OR OCCUPANT THAT THE MANUAL SHALL REMAIN WITH THE BUILDING THROUGHOUT THE LIFE CYCLE OF THE STRUCTURE.
- OPERATION AND MAINTENANCE INSTRUCTIONS FOR THE FOLLOWING:
  - EQUIPMENT AND APPLIANCES, INCLUDING WATER-SAVING DEVICES AND SYSTEMS, HVAC SYSTEMS, PHOTOVOLTAIC SYSTEMS, ELECTRIC VEHICLE CHARGERS, WATER-HEATING SYSTEMS AND OTHER MAJOR APPLIANCES AND EQUIPMENT.
  - ROOF AND YARD DRAINAGE, INCLUDING GUTTERS AND DOWNSPOUTS.
  - SPACE CONDITIONING SYSTEMS, INCLUDING CONDENSERS AND AIR FILTERS.
  - LANDSCAPE IRRIGATION SYSTEMS.
  - WATER REUSE SYSTEMS.
- INFORMATION FROM LOCAL UTILITY, WATER AND WASTE RECOVERY PROVIDERS ON METHODS TO FURTHER REDUCE RESOURCE CONSUMPTION, INCLUDING RECYCLE PROGRAMS AND LOCATIONS.
- PUBLIC TRANSPORTATION AND/OR CARPOOL OPTIONS AVAILABLE IN THE AREA.
- EDUCATIONAL MATERIAL ON THE POSITIVE IMPACTS OF AN INTERIOR RELATIVE HUMIDITY BETWEEN 30-80 PERCENT AND WHAT METHODS AN OCCUPANT MAY USE TO MAINTAIN THE RELATIVE HUMIDITY LEVEL IN THAT RANGE.
- INFORMATION ABOUT WATER-CONSERVING LANDSCAPE AND IRRIGATION DESIGN AND CONTROLLERS WHICH CONSERVE WATER.
- INSTRUCTIONS FOR MAINTAINING GUTTERS AND DOWNSPOUTS AND THE IMPORTANCE OF DIVERTING WATER AT LEAST 5 FEET AWAY FROM THE FOUNDATION.
- INFORMATION ON REQUIRED ROUTINE MAINTENANCE MEASURES, INCLUDING, BUT NOT LIMITED TO, CAULKING, PAINTING, GRADING AROUND THE BUILDING, ETC.
- INFORMATION ABOUT STATE SOLAR ENERGY AND INCENTIVE PROGRAMS AVAILABLE.
- A COPY OF ALL SPECIAL INSPECTION VERIFICATIONS REQUIRED BY THE ENFORCING AGENCY OR THIS CODE.
- INFORMATION FROM CAL FIRE ON MAINTENANCE OF DEFENSIBLE SPACE AROUND RESIDENTIAL STRUCTURES.
- 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, PROVIDE READILY ACCESSIBLE AREA(S) THAT SERVES ALL BUILDINGS ON THE SITE AND IS IDENTIFIED FOR THE DEPOSITING, STORAGE AND COLLECTION OF NON-HAZARDOUS MATERIALS FOR RECYCLING, INCLUDING (AT A MINIMUM) PAPER, CORRUGATED CARDBOARD, GLASS, PLASTICS, ORGANIC WASTE, AND METALS, OR MEEL 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 PERMANENT 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, SHEET METAL 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:

- 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, AS APPLICABLE. SUCH 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.
- 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 ARB 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 MIR LIMITS FOR ROC IN SECTION 94522(A)(2) AND OTHER REQUIREMENTS, INCLUDING PROHIBITIONS ON USE OF CERTAIN TOXIC COMPOUNDS AND OZONE DEPLETING SUBSTANCES, IN SECTIONS 94522(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:

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

#### 4.504.3 CARPET SYSTEMS

##### 4.504.3.1 CARPET CUSHION

ALL 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.CDPH.CA.GOV/PROGRAMS/CCDPHP/DEODC/EHLB/IAQ/PAGES/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.CDPH.CA.GOV/PROGRAMS/CCDPHP/DEODC/EHLB/IAQ/PAGES/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.) AS SHOWN IN TABLE 4.504.5.

#### 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:

- PRODUCT CERTIFICATIONS AND SPECIFICATIONS.
- CHAIN OF CUSTODY CERTIFICATIONS.
- PRODUCT LABELED AND INVOICED AS MEETING THE COMPOSITE WOOD PRODUCTS REGULATION (SEE CCR, TITLE 17, SECTION 93120, ET SEQ.).
- EXTERIOR GRADE PRODUCTS MARKED AS MEETING THE PS-1 OR PS-2 STANDARDS OF THE ENGINEERED WOOD ASSOCIATION, THE AUSTRALIAN AS/NZS 2269, EUROPEAN 636 33, AND CANADIAN CSA 0121, CSA 0151, CSA 0153 AND CSA Q325 STANDARDS.
- OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY.

TABLE 4.504.1 - ADHESIVE VOC LIMIT

(LESS WATER AND LESS EXEMPT COMPOUNDS IN GRAMS PER LITER)

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOORING ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT AND ASPHALT TILE ADHESIVES	50
DRYWALL AND PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVES	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT SPECIFICALLY LISTED	50
SPECIALTY APPLICATIONS	CURRENT VOC LIMIT
PVC WELDING	510
CPVC WELDING	490
ABG WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP AND TRIM ADHESIVES	250
SUBSTRATE SPECIFIC APPLICATIONS	CURRENT VOC LIMIT
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

- IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.
- FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

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	
NONPOROUS	250
POROUS	250
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS<sup>2,3</sup>

(GRAMS OF VOC PER LITER OF COATING, LESS WATER AND LESS EXEMPT COMPOUNDS)

COATING CATEGORY	CURRENT VOC LIMIT
FLAT COATINGS	50
NONFLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
SPECIALTY COATINGS	CURRENT VOC LIMIT
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	280
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS <sup>1</sup>	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, AND UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUPT PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS AND UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB AND TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

- GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER AND INCLUDING EXEMPT COMPOUNDS.
- THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.
- 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 LIMITS<sup>1</sup>

(MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION)

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLEBOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD <sup>2</sup>	0.13

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

## DIVISION 4.5 ENVIORNMENTAL 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:

- A 4-INCH-THICK (101.6 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.
- OTHER EQUIVALENT METHODS APPROVED BY THE ENFORCING AGENCY.
- 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:

- MOISTURE CONTENT SHALL BE DETERMINED WITH EITHER A PROBE-TYPE 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.
- 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.
- 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 MANUFACTURERS' 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 SHALL COMPLY WITH THE FOLLOWING:

- FANS SHALL BE ENERGY STAR COMPLIANT AND BE DUCTED TO TERMINATE OUTSIDE THE BUILDING.
- 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 4-50 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 THE EXHAUST FAN AND IS NOT REQUIRED TO BE INTEGRAL (I.E., BUILT-IN).

#### NOTES:

- FOR THE PURPOSES OF THIS SECTION, A BATHROOM IS A ROOM WHICH CONTAINS A BATHTUB, SHOWER, OR TUB/ SHOWER COMBINATION.
- LIGHTING INTEGRAL TO BATHROOM EXHAUST FANS SHALL COMPLY WITH THE CALIFORNIA ENERGY CODE.

### 4.507 ENVIORNMENTAL COMFORT

#### 4.507.1 RESERVED

#### 4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN

HEATING AND AIR-CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED AND HAVE THEIR EQUIPMENT SELECTED USING THE FOLLOWING METHODS:

- THE HEAT LOSS AND HEAT GAIN IS ESTABLISHED ACCORDING TO ANSI/ACCA 2 MANUAL J—2016 (RESIDENTIAL LOAD CALCULATION), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
- DUCT SYSTEMS ARE SIZED ACCORDING TO ANSI/ACCA 1 MANUAL D—2016 (RESIDENTIAL DUCT SYSTEMS), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
- SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S—2016 (RESIDENTIAL EQUIPMENT SELECTION) OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.

EXCEPTION: USE OF ALTERNATE DESIGN TEMPERATURES NECESSARY TO ENSURE THE SYSTEMS FUNCTION ARE ACCEPTABLE.

## CHAPTER 7 - INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

### 702.1 INSTALLER TRAINING

HVAC SYSTEM INSTALLERS SHALL BE TRAINED AND CERTIFIED IN THE PROPER INSTALLATION OF HVAC SYSTEMS INCLUDING DUCTS AND EQUIPMENT BY A NATIONALLY OR REGIONALLY RECOGNIZED TRAINING OR CERTIFICATION PROGRAM. UNCERTIFIED PERSONS MAY PERFORM HVAC INSTALLATIONS WHEN UNDER THE DIRECT SUPERVISION AND RESPONSIBILITY OF A PERSON TRAINED AND CERTIFIED TO INSTALL HVAC SYSTEMS OR CONTRACTOR LICENSED TO INSTALL HVAC SYSTEMS. EXAMPLES OF ACCEPTABLE HVAC TRAINING AND CERTIFICATION PROGRAMS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

- STATE CERTIFIED APPRENTICESHIP PROGRAMS.
- PUBLIC UTILITY TRAINING PROGRAMS.
- TRAINING PROGRAMS SPONSORED BY TRADE, LABOR OR STATEWIDE ENERGY CONSULTING OR VERIFICATION ORGANIZATIONS.
- PROGRAMS SPONSORED BY MANUFACTURING ORGANIZATIONS.
- OTHER PROGRAMS ACCEPTABLE TO THE ENFORCING AGENCY.

### 702.2 SPECIAL INSPECTION [HCD]

WHEN REQUIRED BY THE ENFORCING AGENCY, THE OWNER OR THE RESPONSIBLE ENTITY ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTION OR OTHER DUTIES NECESSARY TO SUBSTANTIATE COMPLIANCE WITH THIS CODE. SPECIAL INSPECTORS SHALL DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE ENFORCING AGENCY FOR THE PARTICULAR TYPE OF INSPECTION OR TASK TO BE PERFORMED. IN ADDITION TO OTHER CERTIFICATIONS OR QUALIFICATIONS ACCEPTABLE TO THE ENFORCING AGENCY, THE FOLLOWING CERTIFICATIONS OR EDUCATION MAY BE CONSIDERED BY THE ENFORCING AGENCY WHEN EVALUATING THE QUALIFICATIONS OF A SPECIAL INSPECTOR:

- CERTIFICATION BY A NATIONAL OR REGIONAL GREEN BUILDING PROGRAM OR STANDARD PUBLISHER.
- CERTIFICATION BY A STATEWIDE ENERGY CONSULTING OR VERIFICATION ORGANIZATION, SUCH AS HERS RATERS, BUILDING PERFORMANCE CONTRACTORS, AND HOME ENERGY AUDITORS.
- SUCCESSFUL COMPLETION OF A THIRD PARTY APPRENTICE TRAINING PROGRAM IN THE APPROPRIATE TRADE.
- OTHER PROGRAMS ACCEPTABLE TO THE ENFORCING AGENCY.

#### NOTES:

- SPECIAL INSPECTORS SHALL BE INDEPENDENT ENTITIES WITH NO FINANCIAL INTEREST IN THE MATERIALS OR THE PROJECT THEY ARE INSPECTING FOR COMPLIANCE WITH THIS CODE.
- HERS RATERS ARE SPECIAL INSPECTORS CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION (CEC) TO RATE HOMES IN CALIFORNIA ACCORDING TO THE HOME ENERGY RATING SYSTEM (HERS).

[BSC] WHEN REQUIRED BY THE ENFORCING AGENCY, THE OWNER OR THE RESPONSIBLE ENTITY ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTION OR OTHER DUTIES NECESSARY TO SUBSTANTIATE COMPLIANCE WITH THIS CODE. SPECIAL INSPECTORS SHALL DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE ENFORCING AGENCY FOR THE PARTICULAR TYPE OF INSPECTION OR TASK TO BE PERFORMED. IN ADDITION, THE SPECIAL INSPECTOR SHALL HAVE A CERTIFICATION FROM A RECOGNIZED STATE, NATIONAL OR INTERNATIONAL ASSOCIATION, AS DETERMINED BY THE LOCAL AGENCY. THE AREA OF CERTIFICATION SHALL BE CLOSELY RELATED TO THE PRIMARY JOB FUNCTION, AS DETERMINED BY THE LOCAL AGENCY.

#### NOTE:

- SPECIAL INSPECTORS SHALL BE INDEPENDENT ENTITIES WITH NO FINANCIAL INTEREST IN THE MATERIALS OR THE PROJECT THEY ARE INSPECTING FOR COMPLIANCE WITH THIS CODE.

## 703 VERIFICATIONS

### 703.1 DOCUMENTATION

DOCUMENTATION USED TO SHOW COMPLIANCE WITH THIS CODE SHALL INCLUDE BUT IS NOT LIMITED TO, CONSTRUCTION DOCUMENTS, PLANS, SPECIFICATIONS, BUILDER OR INSTALLER CERTIFICATION, INSPECTION REPORTS, OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY WHICH DEMONSTRATE SUBSTANTIAL CONFORMANCE. WHEN SPECIFIC DOCUMENTATION OR SPECIAL INSPECTION IS NECESSARY TO VERIFY COMPLIANCE, THAT METHOD OF COMPLIANCE WILL BE SPECIFIED IN THE APPROPRIATE SECTION OR IDENTIFIED APPLICABLE CHECKLIST.



THESE PLANS ARE PROVIDED BY THE COUNTY OF SAN LUIS OBISPO 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 CONTRACT 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.

COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT

SAN LUIS OBISPO, CA

CAL GREEN RESIDENTIAL  
REQUIREMENTS

#### DATE

11/28/2023

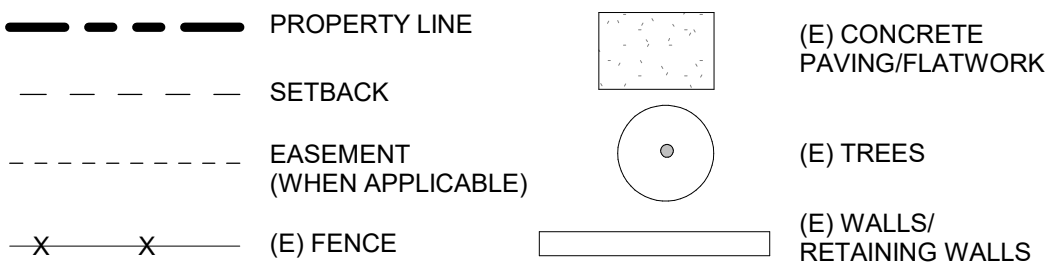
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G-202



# SITE PLAN TO BE PROVIDED BY APPLICANT

## SITE PLAN LEGEND



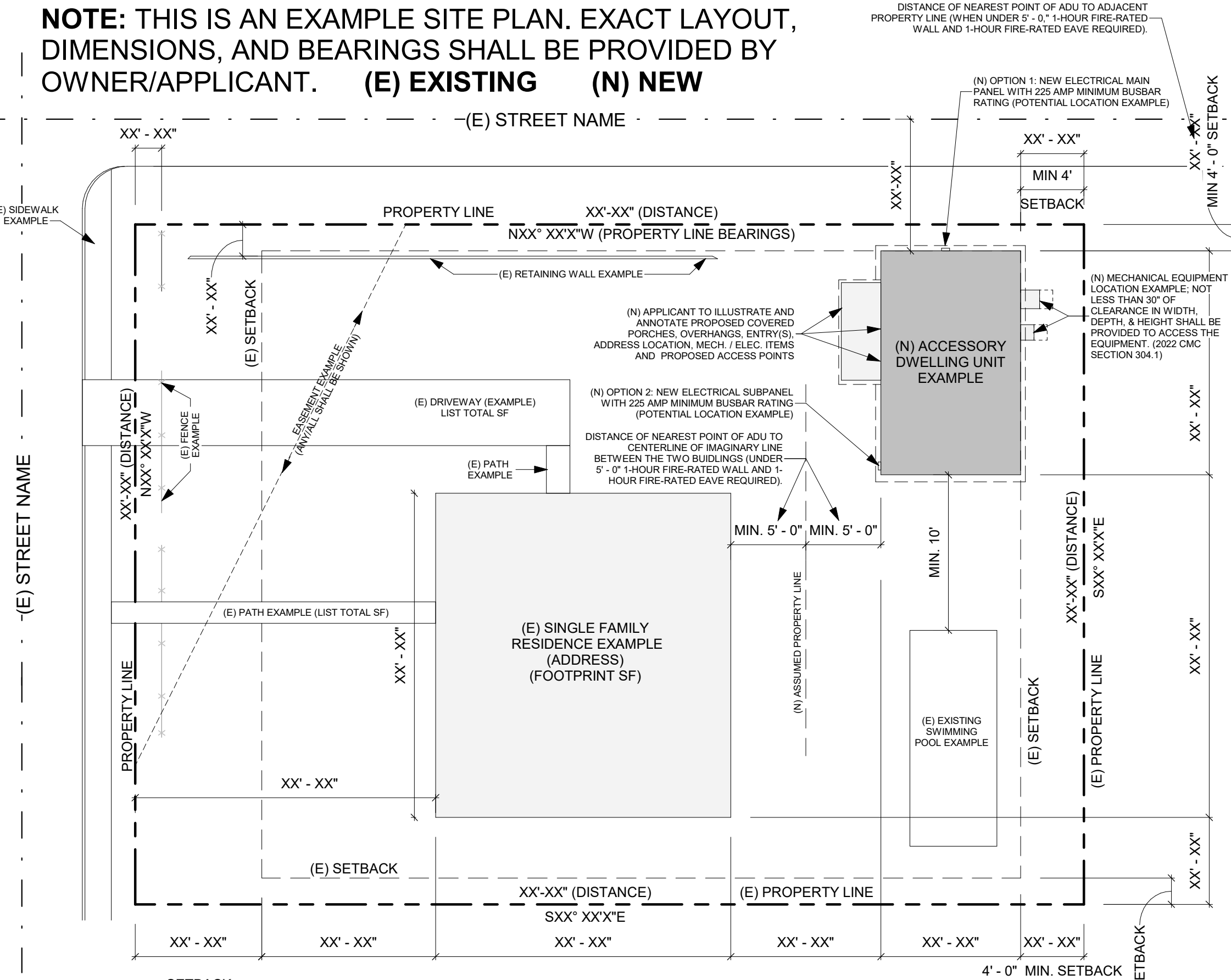
## SITE PLAN CHECKLIST

ELECTRICAL PANEL: ☐ OPTION 1 - NEW ELECTRICAL MAIN PANEL WITH 225 AMP MINIMUM BUSBAR RATING  
☐ OPTION 2 - A NEW ELECTRICAL SUBPANEL CONNECTS TO THE ELECTRICAL MAIN PANEL OF THE PRIMARY HOME WITH A 225 AMP MINIMUM BUSBAR RATING. A SEPARATE ELECTRICAL PERMIT SHALL BE PULLED FOR THE ELECTRICAL MAIN PANEL OF THE PRIMARY HOME. ELECTRICAL LOAD CALCULATIONS IS REQUIRED.

IS THE NEW ADU IS 5' - 0" OR LESS TO ANY PROPERTY LINE AND/OR ADU IS 10' - 0" OR LESS FROM ANY ADJACENT BUILDING OR STRUCTURE?  
☐ NO ☐ YES; IF YES, 1-HR FIRE RATED WALL, 1-HR RATED ROOF, AND 1-HR RATED FIRE PROJECTS REQUIRED. SEE DETAILS: 21/A-903 & 24/A-903

- NOTE:**  
A. A SEPARATE PERMIT FOR ONSITE WASTEWATER SYSTEM WILL BE REQ'D.  
B. SOILS REPORT TO BE PROVIDED BY OTHERS.  
C. UTILITY, GRADING, AND DRAINAGE PLAN TO BE PROVIDED BY OTHERS.  
D. PROVIDE WASTE RECYCLE FORM FILLED OUT AND SIGNED PRIOR TO ISSUANCE. THE OWNER/APPLICANT/CONTRACTOR/PERSON DOING THE WORK IS REQUIRED TO RECYCLE 75% OF ALL PROJECT CONSTRUCTION AND DEMOLITION DEBRIS.
- ☐ 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. IF AN OPTIONAL COVERED PATIO IS SELECTED, PLEASE PLOT THAT AS WELL.
- ☐ AREA OF EXISTING BUILDING  
INDICATE THE SQUARE FOOTAGE OF THE EXISTING HOUSE.
- ☐ FOOTPRINT OF PROPOSED ADU  
REFER TO LEGEND FOR FOOTPRINT AT 10'=1" SCALE
- ☐ DRAWING SCALE  
SITE PLAN SHOULD BE DRAWN TO A MEASURABLE SCALE.
- ☐ PROPERTY LINES  
SHOW OUTLINE OF PROPERTY USING DASHED LINE IN LEGEND. INDICATE THE BEARING AND DISTANCE OF THE PROPERTY LINE.
- ☐ LABEL YARDS  
LABEL FRONT, REAR, SIDE YARDS, AS WELL AS DRIVEWAYS, PATHWAYS AND ANY OTHER HARDSCAPE.
- ☐ SETBACKS  
DIMENSION THE DISTANCE BETWEEN BUILDINGS AND PROPOERTY LINES, AS WELL AS BUILDINGS TO OTHER STRUCTURES. SETBACKS TO SIDE AND REAR PROPERTY SIDE SHALL BE A MINIMUM OF (4' - 0"). PROPOSED ADU SHALL BE LOCATED A MINIMUM OF (10' - 0") FROM EXISTING STRUCTURES.
- ☐ EASEMENTS  
REFER TO LEGEND. MUST INCLUDE ALL APPLICABLE EASEMENTS. SETBACK PROPOSED STRUCTURE HSALL COMPLY WITH EASEMENT REQUIREMENTS.
- ☐ LOCATION OF RAIN WATER LEADERS  
THE ROOF DRAINS SHOULD DRAIN AWAY FROM THE PROPERTY LINES AND INTO THE LANDSCAPE AREA.
- ☐ LABEL STREETS & SIDEWALKS
- ☐ LABEL ADU AND ADDRESS LOCATION  
ADU SHALL HAVE THE SAME ADDRESS AS THE PRIMARY RESIDENCE. THE ADDRESS IDENTIFICATION SHALL BE LEGIBLE AND PLACED IN A POSITION THAT IS VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. ADDRESS IDENTIFICATION CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND. ADDRESS SHALL COMPLY WITH CRC SECTION R319.
- ☐ DIMENSION BUILDING SEPARATION  
DIMENSION THE DISTANCE BETWEEN THE PROPOSED ADU AND ANY EXISTING STRUCTURES
- ☐ ALL EXISTING/PROPOSED PLANTINGS AND HARDSCAPE SHOWN
- ☐ LOT COVERAGE CALCULATION  
TOTAL FOOTPRINT AREA FOR STRUCTURES ON SITE / LOT AREA
- ☐ SWIMMING POOLS  
ALL EXISTING SWIMMING POOLS SHALL BE SHOWN ON THE SITE PLAN AND SHALL HAVE 10' - 0" MINIMUM SETBACK TO THE NEW ADU STRUCTURE.
- ☐ PORCHES  
THERE SHALL BE NO MORE THAN 30 INCHES MEASURED VERITCALLY 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.
- ☐ LOCATION OF EXISTING UTILITIES  
UTILITIES, POLES, SEWER, DRAINS, ELECTRICAL, GAS METERS AND LINES AND ANY PHOTOVOLTAIC.
- LOCATION OF PROPOSED UTILITIES**  
SANITARY SEWER FROM ADU TO EXISTING SEWER. SEWER LINE TO THE PROPOSED ADU SHALL BE CONNECTED TO THE MAIN LATERAL AT THE PROPERTY LINE OR BEHIND THE SIDEWALK. LATERAL POINT OF CONNECTION INCLUDING REQUIRED CLEANOUTS, WATER LINE TO ADU, ELECTRIC TO ADU INCLUDING ANY NEW METERS OR SUBPANELS, GAS LINE TO ADU.
- ☐ A. TOTAL DEVELOPED LENGTH OF GAS SYSTEM FROM METER / REGULATOR TO MOST REMOTE GAS OUTLET.
- ☐ B. TOTAL DEVELOPED LENGTH FOR EACH GAS BRANCH AND ITS CORRESPONDING DEMAND.
- ☐ C. SHOW MECHANICAL, PLUMBING, AND KITCHEN GAS APPLIANCE LOCATION AND ITS DEMAND FACTORS.
- ☐ D. SHOW THE LOCATION AND AMPACITY OF THE ELECTRICAL PANEL SERVING THE ADU. VERIFY COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF THE 2022 CEC.

**NOTE: THIS IS AN EXAMPLE SITE PLAN. EXACT LAYOUT, DIMENSIONS, AND BEARINGS SHALL BE PROVIDED BY OWNER/APPLICANT. (E) EXISTING (N) NEW**



**1 SITE PLAN EXAMPLE**  
SCALE: 1" = 20'-0"

## SITE PLAN GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS
2. REFER TO STRUCTURAL PLANS FOR FURTHER INFORMATION.



THESE PLANS ARE PROVIDED BY THE COUNTY OF SAN LUIS OBISPO 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 CONTRUCT 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.

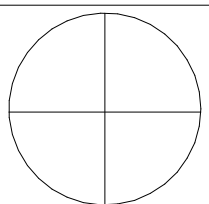
**COUNTY OF SAN LUIS OBISPO**  
**ACCESSORY DWELLING UNIT**  
SAN LUIS OBISPO, CA  
**ARCHITECTURAL SITE PLAN**  
**(EXAMPLE & INSTRUCTIONS)**

DATE  
11/28/2023  
SHEET

AS-105

**SITE PLAN**

SCALE:



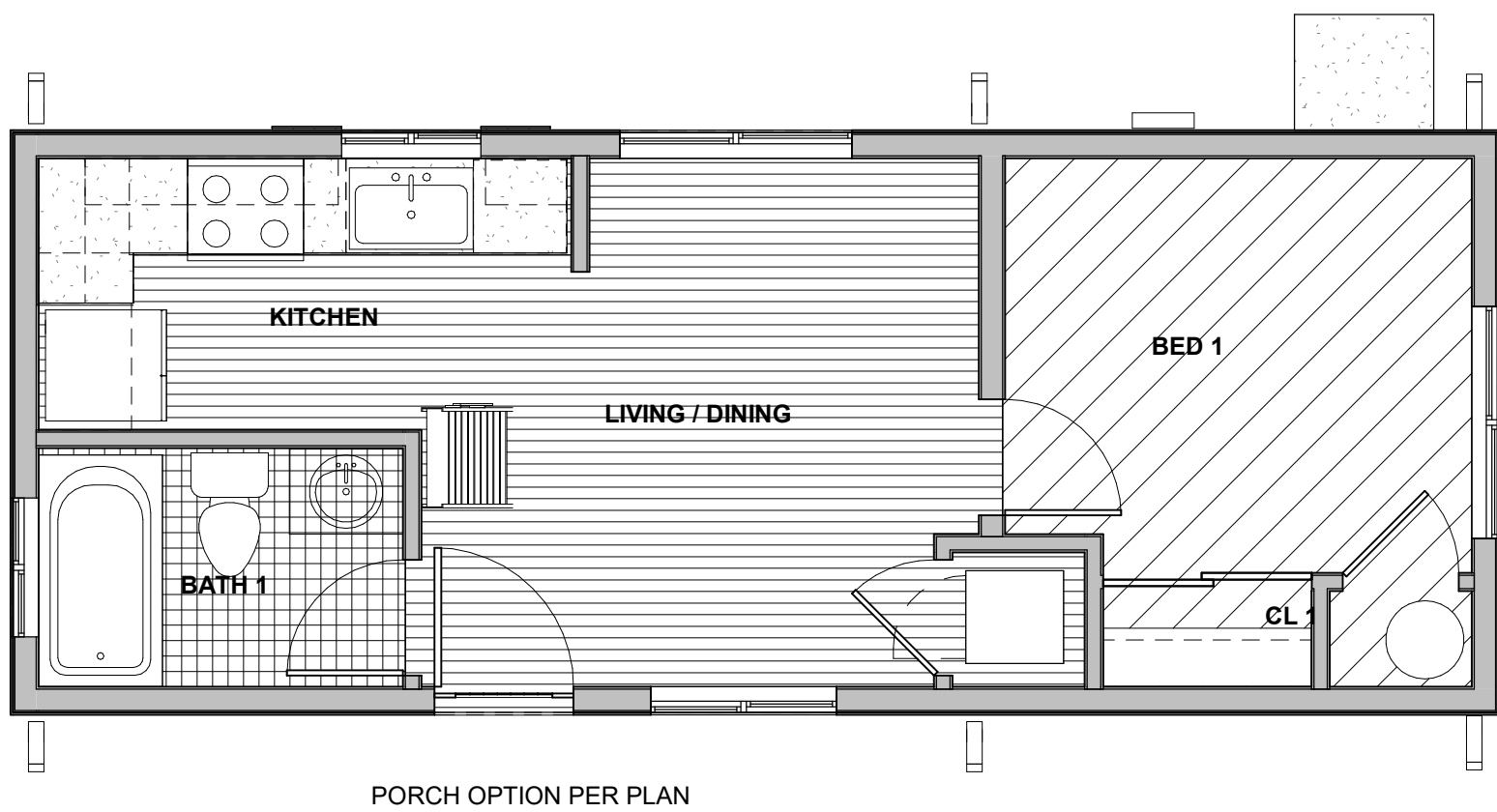
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## 2 FINISH PLAN

A1-201 | A5-111 SCALE: 1/4" = 1'-0"

## FINISH PLAN GENERAL NOTES

- REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
- REFER TO ELECTRICAL PLANS FOR FURTHER INFORMATION.
- REFER TO PLUMBING PLANS FOR FURTHER INFORMATION.
- REFER TO DETAILS FOR FLOOR/CEILING ASSEMBLIES AND INTERIOR FINISH DETAILS.
- ALL HARD SURFACE FLOORING SHALL BE SLIP RESISTANT AND MEET THE **ANSI A326.3** STANDARD FOR MEASURING THE DYNAMIC COEFFICIENT OF FRICTION (DCOF).
- ALL FLOORING MATERIALS SHALL COMPLY WITH **CBC SEC. 804.1**.
- ALL WALL AND CEILING FINISHES SHALL COMPLY WITH **CBC TABLE 803.13** FOR MAXIMUM FLAME SPREAD AND SMOKE DENSITY.

FINISH SCHEDULE PLAN 5				
NAME	FLOOR	WALL	CEILING	NOTES
LIVING / DINING	LVP	GWB	GWB	WR GWB BEHIND KITCHEN COUNTER
BATH 1	CT	WR GWB	WR GWB	AT CERAMIC TILE IN TUB/SHOWER AREAS, PROVIDE BACKER BOARD PER CRC-TABLE R702.4.2
BED 1	CPT	GWB	GWB	
CL 1	CPT	GWB	GWB	
LAUNDRY	LVP	GWB	GWB	

## FINISH LEGEND

	LUXURY VINYL PLANK (LVP)		CARPET (CPT)
	CERAMIC TILE (CT)		CONCRETE (EC)

## VENTILATION SUMMARIES

### 1) LOCAL EXHAUST VENTILATION

BATHROOM	OPTION A	OPTION B
BATHROOM FAN FLOW (cfm) .....	50 CFM	50
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.		

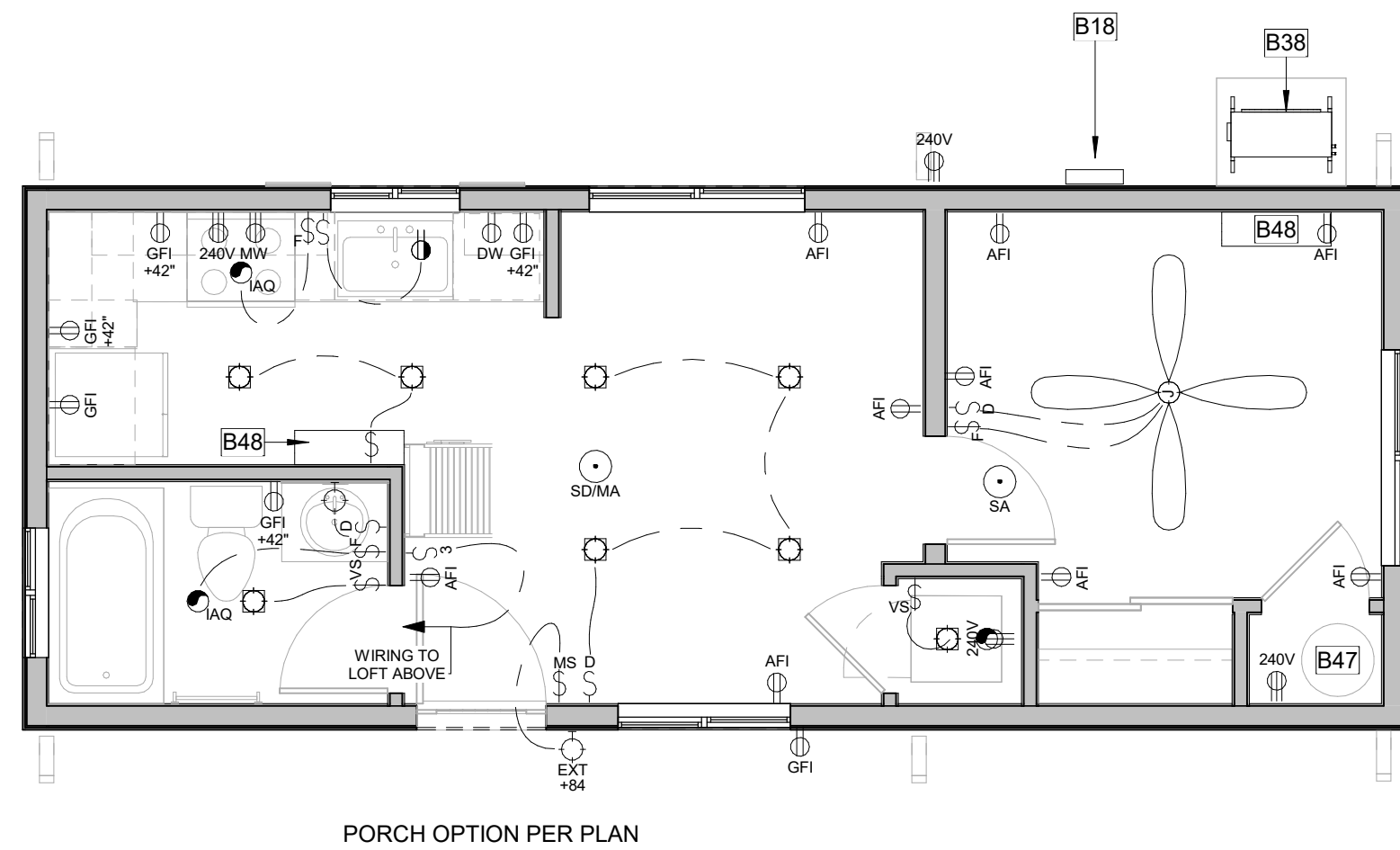
KITCHEN	OPTION A	OPTION B
KITCHEN FAN FLOW (cfm) .....	10 CFM	50
DUCT TYPE .....	FLEX DUCT	SMOOTH DUCT
DUCT SIZE (in) .....	35"	5
MAX. ALLOWABLE DUCT LENGTH (ft) .....	0'	85
THIS EXHAUST FAN IS REQUIRED TO BE RATED FOR SOUND AT A MAX. OF 3 SONES.		

### 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
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.		

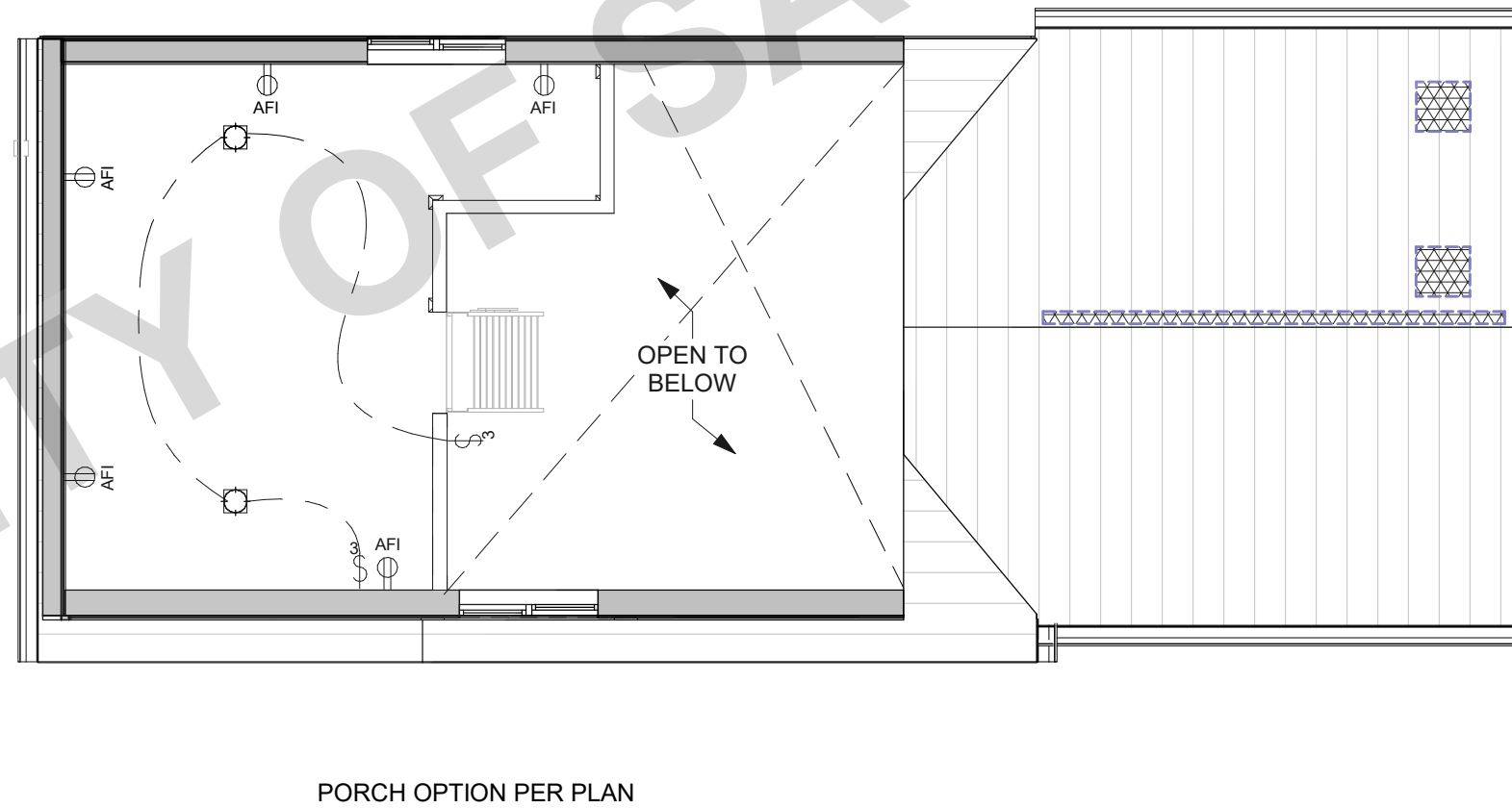
**TOTAL (MINIMUM) REQUIRED VENTILATION RATE**  
PER ASHRAE STANDARD 62.2, CEC EQUATION 150.0-B  
QCFM = .03(FLOOR AREA) + 7.5 (# OF BEDROOMS + 1)

**1 BED - MINIMUM CUBIC FEET PER MINUTE (CFM)**  
Qcfm = .03(X) + 7.5 (0 + 1) = XX.XX      **.03(497 sf) + 7.5 (1) = 22.41 CFM < 50 CFM**



## 1 GROUND FLOOR ELECTRICAL PLAN

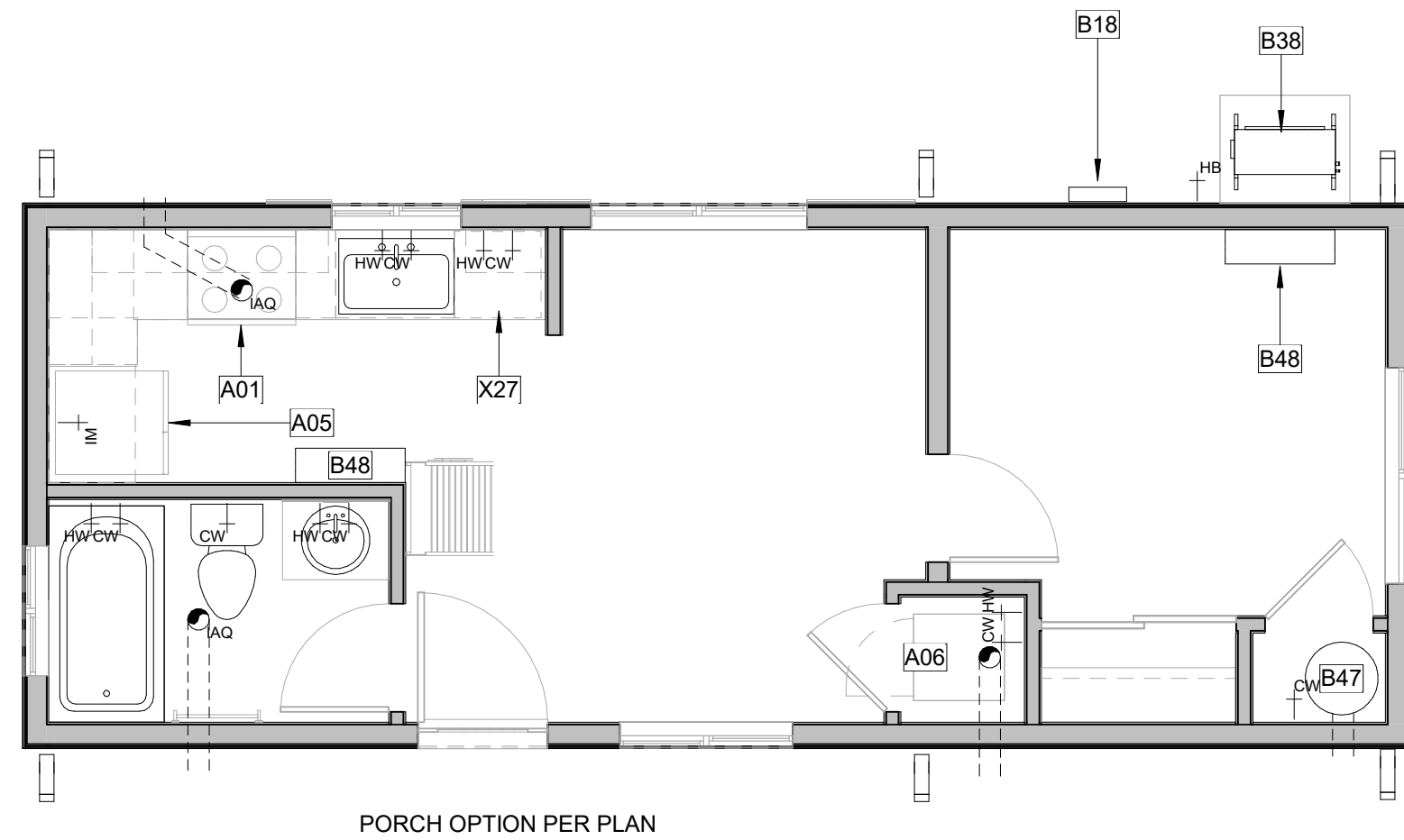
A1-201 | A5-111 SCALE: 1/4" = 1'-0"



## 3 LOFT ELECTRICAL PLAN

A1-201 | A5-111 SCALE: 1/4" = 1'-0"

**NOTE:** SIZE, DESIGN, AND SELECTION OF HVAC EQUIPMENT SHALL BE PROVIDED FOR PROJECT BY ONE OF THE FOLLOWING:  
A. HEAT LOSS AND GAIN PER "RESIDENTIAL LOAD CALCULATION" [ANSI/ACCA 2 MANUAL J - 2011, ASHRAE]  
B. DUCT SIZING PER "RESIDENTIAL DUCT SYSTEMS" [ANSI/ACCA 1 MANUAL D - 2014, ASHRAE]  
C. SELECTION PER "RESIDENTIAL EQUIPMENT SELECTION" [ANSI/ACCA 3 MANUAL S - 2014]



## 4 GROUND FLOOR MECHANICAL PLAN

A1-201 | A5-111 SCALE: 1/4" = 1'-0"

## GENERAL MEP NOTES

- REFER TO ELECTRICAL NOTES ON SHEET G-101.
- REFER TO MECHANICAL NOTES ON SHEET G-101.
- REFER TO PLUMBING NOTES ON SHEET G-101.
- REFER TO TITLE 24 COMPLIANCE NOTES ON SHEET G-101.
- EXTERNALLY MOUNTED HEATING/COOLING UNITS SHALL BE SCREENED IF THEY ARE VISIBLE FROM A PUBLIC STREET.
- ALL SMOKE ALARMS TO BE HARD-WIRED WITH A BATTERY BACK-UP, AND ALL SMOKE ALARMS MUST BE INTERCONNECTED AND SOUND AN ALARM CLEARLY AUDIBLE IN ALL BEDROOMS.
- ALL CARBON MONOXIDE ALARMS TO BE HARD-WIRED WITH A BATTERY BACK-UP, AND ALL CARBON MONOXIDE ALARMS MUST BE INTERCONNECTED AND SOUND AN ALARM CLEARLY AUDIBLE IN ALL BEDROOMS.

## KEYNOTES

- A01 30" WIDE FREE STANDING ELECTRIC RANGE OVEN. VENT TO EXTERIOR, STAINLESS STEEL.
- A05 REFRIGERATOR LOCATION. PROVIDE 42" SPACE WITH ROUGH PLUMBING FOR ICE MAKER (RECESS IN WALL).
- A06 STACKED WASHER/DRYER MACHINE LOCATION. PROVIDE WASTE AND WATER IN RECESSED WALL BOX. PROVIDE DRYER VENT. VENT TO OUTSIDE AIR.
- B18 ELECTRIC PANEL, 100AMP 240V.
- B38 MULTI-ZONE HEAT PUMP CONDENSER UNIT. REFER TO PLANS FOR LOCATION OF INDOOR FAN 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.
- B47 40 GALLON HEAT PUMP WATER HEATER. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION.
- B48 FAN COIL. REFER TO PLANS FOR LOCATION OF OUTDOOR CONDENSING UNIT. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION. PROVIDE OUTLET.
- X27 OPTIONAL DISHWASHER

## LEGEND

**NOTE:** ALL OUTDOOR OUTLETS SHALL HAVE GFCI PROTECTION AND WEATHERPROOF COVERS.

	SMOKE DETECTOR/ALARM		DUPLEX OUTLET
	COMBINATION SMOKE/CARBON MONOXIDE ALARM		DUPLEX OUTLET 240 VOLTS
	COMPUTER DATA LOCATION		DUPLEX OUTLET GROUND FAULT INTERRUPTER
	TELEPHONE LOCATION		DUPLEX OUTLET WATERPROOF GROUND FAULT INTERRUPTER
	CABLE TELEVISION LOCATION		DUPLEX OUTLET AFCI-HALF HOT
	ELECTRICAL JUNCTION BOX		DUPLEX OUTLET DISH WASHER
			DUPLEX OUTLET RANGE HOOD
	CEILING FAN OPTIONAL (PRE WIRE FOR CEILING FAN ONLY)		COLD WATER STUB OUT
			HOT WATER STUB OUT
			WATER HOSE BIBB
			WATER HOSE BIBB WITH SHUT OFF VALVE
			ICE MACHINE STUB OUT
			UNDER CABINET HIGH-EFFICACY LIGHT
			22"x30" MIN. CEILING ACCESS PANEL
			AIR HANDLER UNIT, PROVIDE DEDICATED OUTLET



THESE PLANS ARE PROVIDED BY THE COUNTY OF SAN LUIS OBISPO 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 CONTRUCT 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.

COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

FINISH, MECHANICAL, &  
ELECTRICAL PLANS

DATE  
11/28/2023

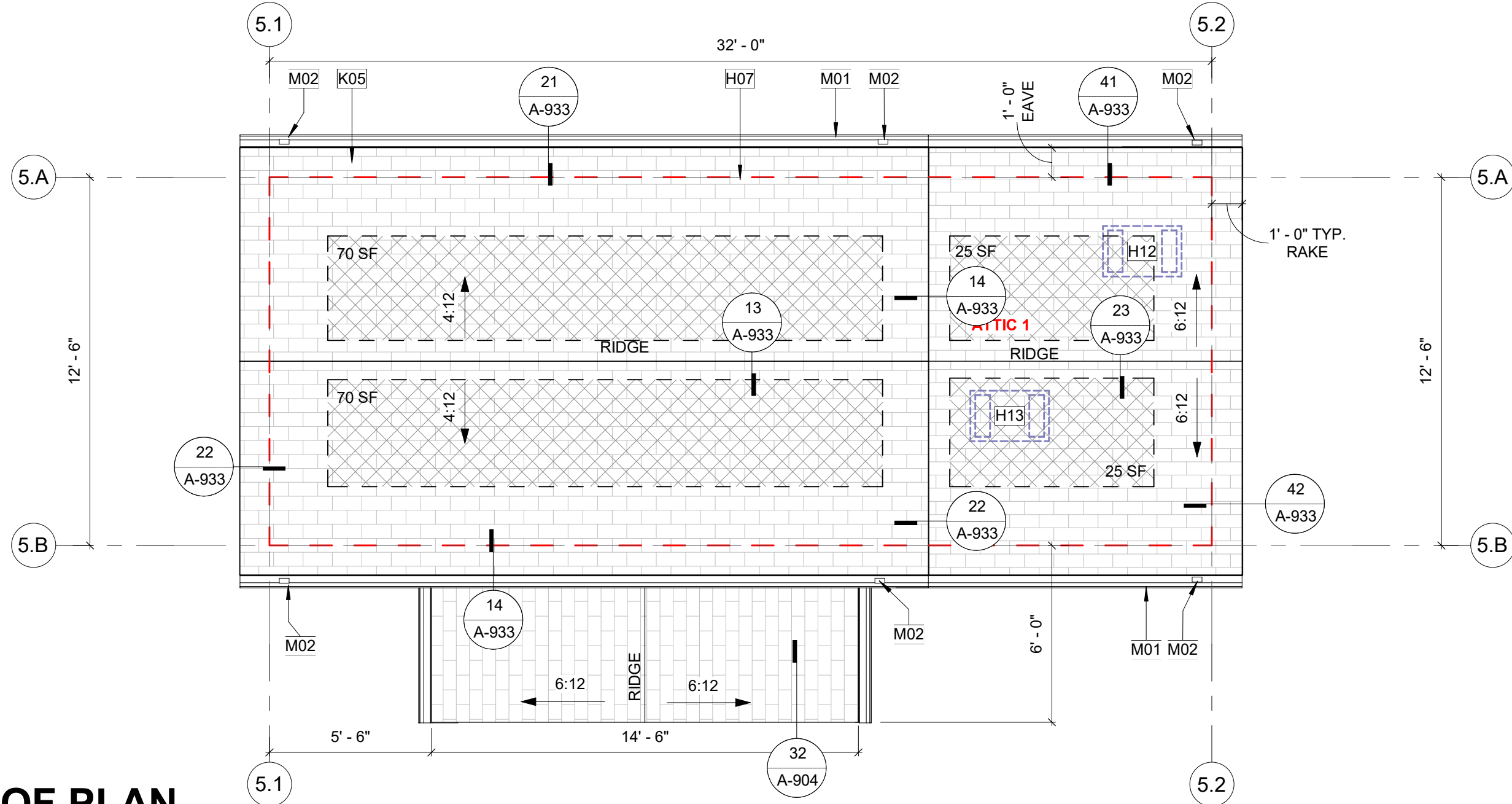
SHEET

A5-111



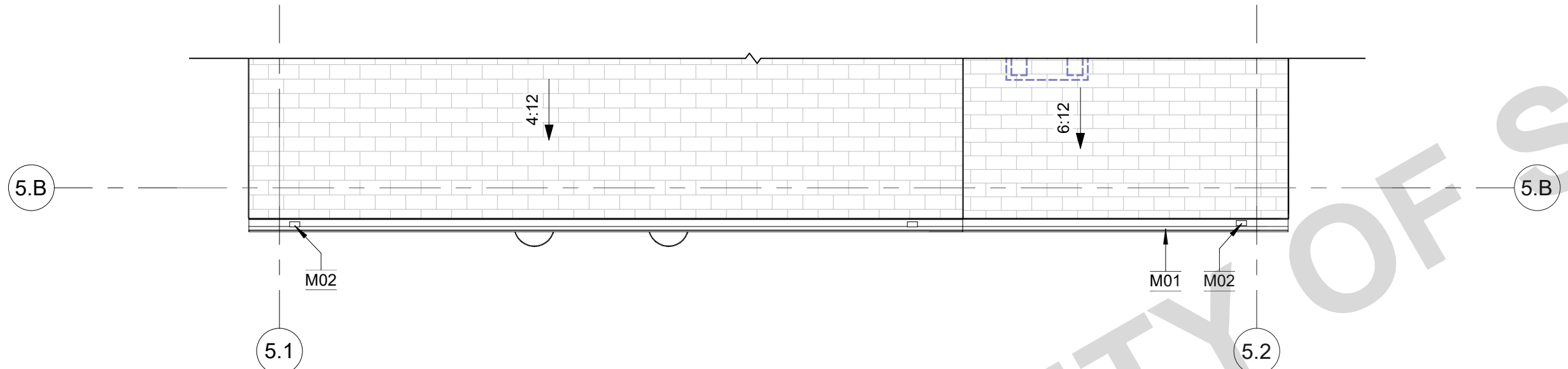
## 1 ROOF PLAN

A1-201 | A5-123 SCALE: 1/4" = 1'-0"



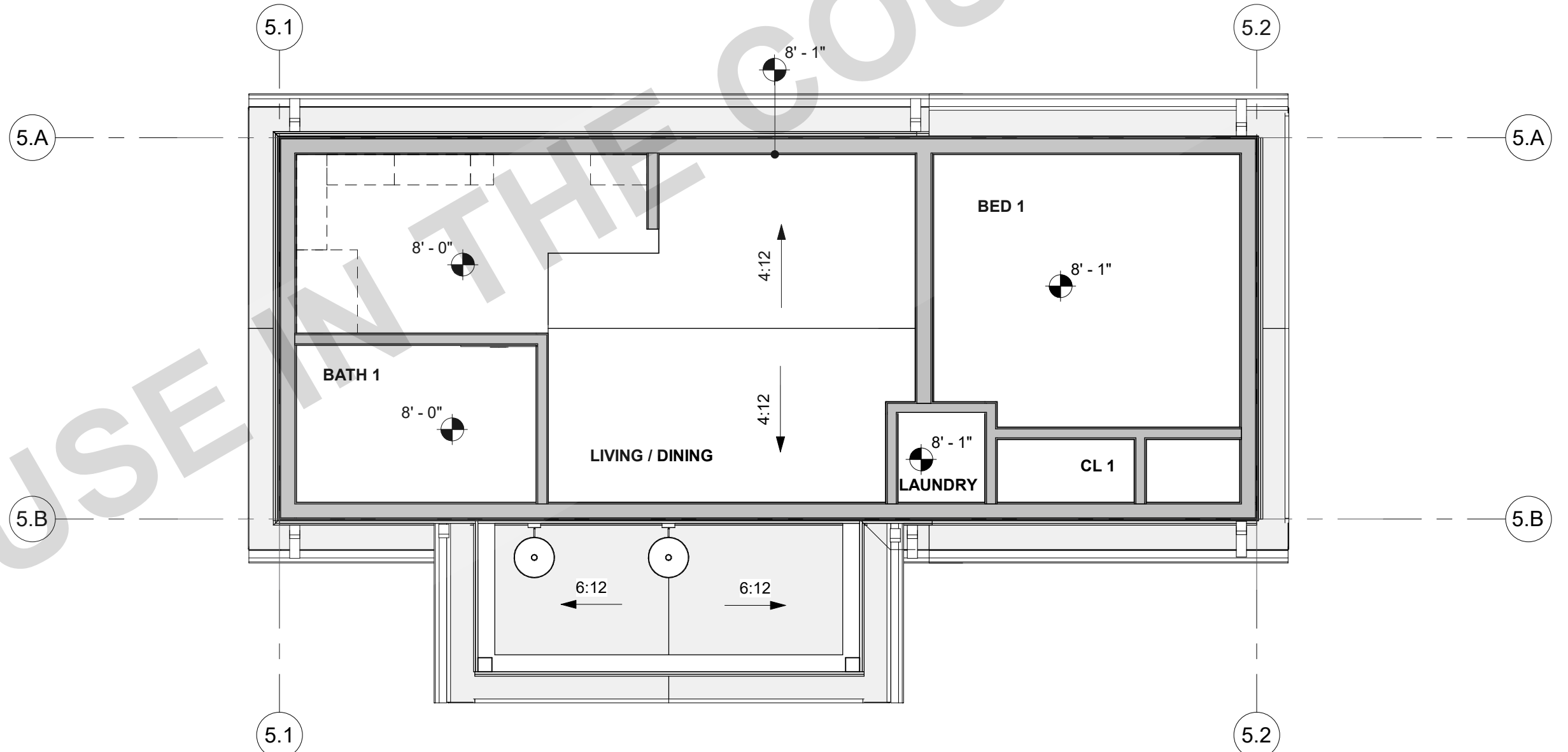
## 2 ROOF PLAN - NO FRONT PORCH OPTION

A1-201 | A5-123 SCALE: 1/4" = 1'-0"



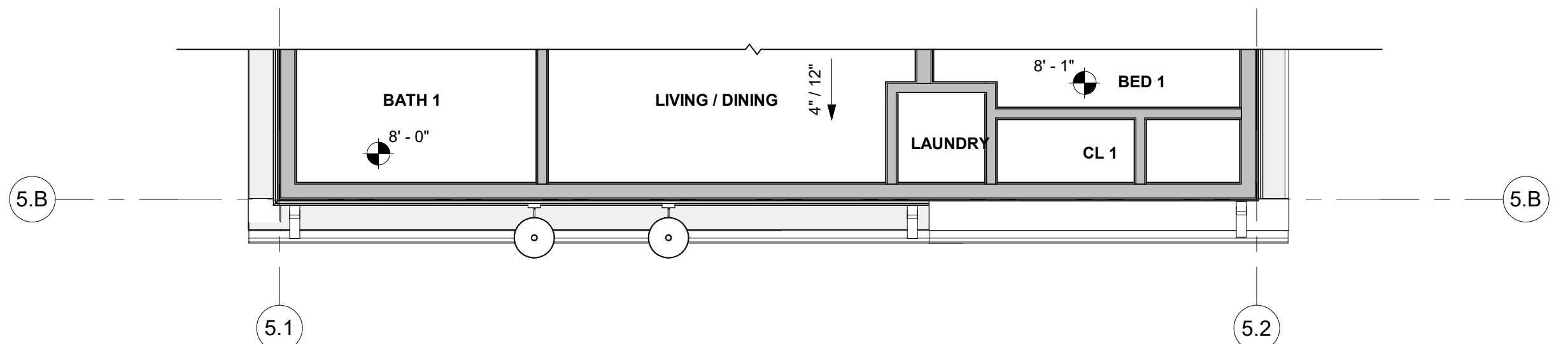
## 3 REFLECTED CEILING PLAN

A1-201 | A5-123 SCALE: 1/4" = 1'-0"



## 4 REFLECTED CEILING PLAN - NO FRONT PORCH OPTION

A1-201 | A5-123 SCALE: 1/4" = 1'-0"



## ROOF INSULATION NOTES

ROOF ASSEMBLY SHALL MEET REQUIREMENTS OF CRC CHAPTER 9.

### CRC R806.5 UNVENTED ATTIC

ROOF ASSEMBLY **MINIMUM R-VALUE R-38** REQUIRED PER TITLE-24.

PROPOSED INSULATION: 7.25" OF AIR-IMPERMEABLE CLOSED CELL SPRAY FOAM INSULATION WITH R-VALUE OF 5.25 MINIMUM.

$$7.25" (\text{MIN.}) (X) R-5.25 = \mathbf{R-38 \text{ TOTAL}}$$

**NOTE:** HIGHER PERFORMING AIR-IMPERMEABLE CLOSED CELL SPRAY INSULATION MAY BE USED TO MEET THE R-38 REQUIRED TOTAL.

EXAMPLE: 5.5" OF **AIR IMPERMEABLE** CLOSED CELL SPRAY FOAM INSULATION WITH R-VALUE OF 7.

$$5.43" (\text{MIN.}) (X) R-7 = \mathbf{R-38 \text{ TOTAL}}$$

**NOTE:** MINIMUM INSULATION DEPTH REQUIRED FOR MOISTURE CONTROL VARIES BY CLIMATE LOCATION. SEE CALIFORNIA ENERGY CODE PROVISIONS, FIGURE 100. 1-A OF THE CALIFORNIA ENERGY CODE FOR SITE SPECIFIC PROJECT.

AN UNVENTED ATTIC IN CLIMATE **ZONE 5** REQUIRES MINIMUM AIR-IMPERMEABLE INSULATION OF **R-20** PER **CRC 806.5** TABLE R806.5 FOR MOISTURE CONTROL.

AN UNVENTED ATTIC IN CLIMATE **ZONE 4B** REQUIRES MINIMUM AIR-IMPERMEABLE INSULATION OF **R-15** PER **CRC 806.5** TABLE R806.5 FOR MOISTURE CONTROL.

## 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 ELECTRICAL PLANS FOR LIGHT FIXTURE AND EXHAUST LOCATIONS.
- DIMENSIONS ARE TO THE FACE OF FRAMING UNLESS OTHERWISE NOTED.
- LABEL MATERIAL SELECTIONS ON ALL RAKES, EAVES, PORCH SOFFITS, & OVERHANGS (A, B, C...).

## MATERIALS LEGEND

**GRAPHICS LEGEND:** OWNER/APP. TO PROVIDE MANUFACTURER, COLOR/FINISH SPECIFICATIONS, & WUI (WHEN REQ.) PRODUCT LISTINGS:

ROOFING: SEE MATERIALS LEGEND ON ELEVATION SHEET FOR MORE INFORMATION. CLASS A ROOF REQ. BY WUI.

**INTERIOR CEILING FINISH, TYP. 5/8" GYP.**  
INSTALL PER MFR RECOMMENDATIONS  
**NOTE:** SEE MANUFACTURER'S PRODUCT LISTINGS FOR **IMPROVED SOUND AND/OR MOISTURE/MOLD/MILDEW-RESISTANT PERFORMANCE** PRODUCTS.  
VISIT GYPSUM.ORG FOR MORE INFORMATION.

**EXTERIOR EAVES, SOFFITS, & PORCHES, & OVERHANGS**

**A) 2X TOUNGE & GROOVED (SOLID SAWN LUMBER)**

**B) FIBER CEMENT SOFFIT PANELS**

**C) HARDBOARD SOFFIT PANELS**

**D) EXT. GRADE FIRE RETARDANT TREATED SHEATHING**

(LABEL SELECTION ON REFLECTED CEILING PLAN)

- NOTES:**
- SOFFIT MATERIALS TO MEET REQ. OF **CRC 337** & **CRC 704**.
  - INSTALL ALL MATERIALS, FASTENERS, & COMPONENTS PER MANUFACTURER'S SPECIFICATIONS & RECOMMENDATIONS
  - INSTALL ADDITIONAL BLOCKING AS NEEDED TO MEET ATTACHMENT REQUIREMENTS PER **CRC TABLE R702.3.5**
  - A PROJECT SITE WITHIN THE WILDLAND-URBAN INTERFACE FIRE AREA SHALL COMPLY WITH THE **CRC SECTION R337**. IF WUI APPROVED PRODUCTS ARE REQUIRED, PROVIDE SELECTED PRODUCT LISTINGS IN THE SPACES PROVIDED.

## ROOF PLAN & RCP LEGEND

**XX'-X"** CEILING HEIGHT (SEE PLAN FOR ACTUAL HEIGHTS)

**X : 12** ROOF SLOPE (REFER TO PLANS FOR ACTUAL SLOPE)

**X : 12** CEILING SLOPE (REFER TO PLANS FOR ACTUAL SLOPE)

22"x30" MIN. ATTIC ACCESS PANEL (WHERE REQ.)

DORMER STYLE ROOF VENT, SEE ROOF VENTING CALCULATIONS **24/A-913**

OUTLINE OF WALL BELOW

GUTTER, CONNECT TO DOWNSPOUT; SEE DETAIL: **12/A-904**

APPROXIMATE LOCATION OF DOWNSPOUT/LEADER TO ROOF OR SPLASHBLOCK BELOW; SEE DETAILS:

AVAILABLE SOLAR ZONE LOCATIONS: PV SYSTEM UNDER SEPARATE PERMIT. SEE TITLE 24 REPORT FOR MORE INFORMATION

AREA OF ATTIC WITH 30' HEIGHT OR GREATER. 22" X 30" CLEAR OPENING ACCESS REQUIRED IF TOTAL AREA GREATER THAN 30 SQ. FT. PER CRC R807.1

## 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.
- REFER TO MECHANICAL/ELECTRICAL SHEETS FOR ROOF PENETRATION LOCATIONS.
- 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 MINERAL-SURFACED 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 AND UNDERLAYMENT SHALL BE APPLIED IN ACCORDANCE WITH (**CRC R806**), AND MANUFACTURER'S INSTALLATION INSTRUCTIONS
- 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 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.
- 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**.
- FOR VENTED ROOF ASSEMBLIES:** PROVIDE A MINIMUM OF 1 INCH OF AIRSPACE BETWEEN THE INSULATION AND ROOF SHEATHING.
- FOR UN-VENTED ROOF ASSEMBLIES:** ROOF ASSEMBLY TO MEET CODE REQUIREMENTS OF **CRC R806.5**. PROVIDE MINIMUM 2" HIGH DENSITY CLOSE CELL INSULATION. PROVIDE ADDITIONAL INSULATION AS NEEDED TO MEET MINIMUM ROOF ASSEMBLY R-VALUE REQUIRED BY TITLE-24.
- ALL ROOFING TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- OVERHANG DIMENSIONS ARE FROM FACE OF EXTERIOR WALL FRAMING TO ROOF EDGE.

## KEYNOTES

- H07 BUILDING LINE BELOW.  
H12 ATTIC VENT (LOW). PAINT OR FINISH TO MATCH ROOF COLOR, SEE VENTING CALC'S.  
H13 ATTIC VENT (HIGH). PAINT OR FINISH TO MATCH ROOF COLOR, SEE VENTING CALC'S.  
K05 COMPOSITE ROOF SHINGLES, SEE MATERIALS LEGEND FOR MORE INFO.  
M01 GUTTER. CONNECT TO DOWNSPOUT. PROVIDE MEANS TO PREVENT ACCUMULATION OF LEAVES AND DEBRIS IN GUTTER PER CRC R337.5.4  
M02 DOWNSPOUT. CONNECT TO STORM DRAIN SYSTEM OR APPROVED DRAINAGE SYSTEM BY COUNTY.

## ROOF VENTING CALCULATIONS

### UPPER & LOWER VENTS:

*O'HAGIN TAPERED LOW PROFILE FIRE & ICE COMPOSITION SHINGLE  
FINISH TO MATCH ROOF  
72.0 SQ. IN. OF AIR MOVEMENT PER VENT = 72. SQ. IN. / 144 = 0.5 SF*

"UPPER VENTS PROVIDED" = (TOTAL ATTIC AREA/3000) \* (0.5) / (0.5 SF)

"LOWER VENTS PROVIDED" = (TOTAL ATTIC AREA/3000) \* (0.5) / (0.5 SF)

**NOTE:** ROOF VENTING SHALL COMPLY WITH **CRC R806** & **CRC 337**.

**A) 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.**

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

**C) PER CRC R902.1.3 ROOFING REQUIREMENTS FOR STRUCTURES LOCATED IN A WILDLAND-URBAN INTERFACE (WUI) FIRE AREA SHALL COMPLY WITH SECTION R337.5.**

**D) THE PRODUCT ABOVE CAN BE FOUND IN THE CAL-FIRE STATE FIRE MARSHAL LISTED WILDLAND URBAN INTERFACE (WUI) PRODUCT HANDBOOK.**

ATTIC	AREA	REQUIRED ATTIC VENTING (NFA)	UPPER VENTING REQUIRED (NFA)	LOWER VENTING REQUIRED (NFA)
ATTIC 1 - FARMHOUSE	133 SF	0.44 SF	0.22 SF	0.22 SF

VENT TYPE	COUNT	VENT LENGTH	NET FREE AREA PER VENT	PROVIDED NET FREE AREA
LOWER O'HAGIN SHINGLE ROOF VENT (LOWER)	1	2' - 8"	0.50 SF	0.50 SF
UPPER O'HAGIN SHINGLE ROOF VENT (UPPER)	1	2' - 8"	0.50 SF	0.50 SF

COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

ROOF PLAN & REFLECTED  
CEILING PLAN

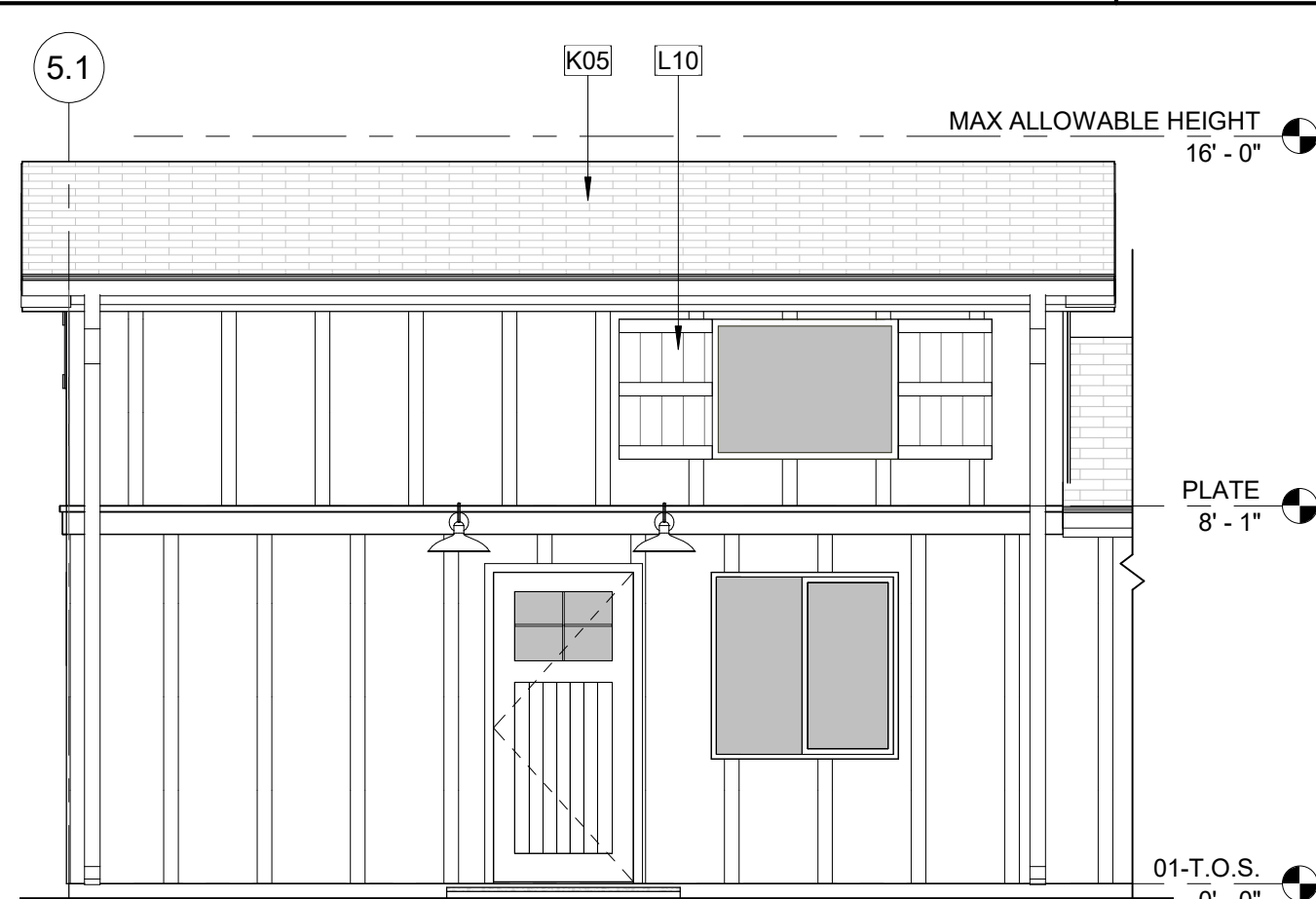
DATE  
11/28/2023

SHEET

A5-123

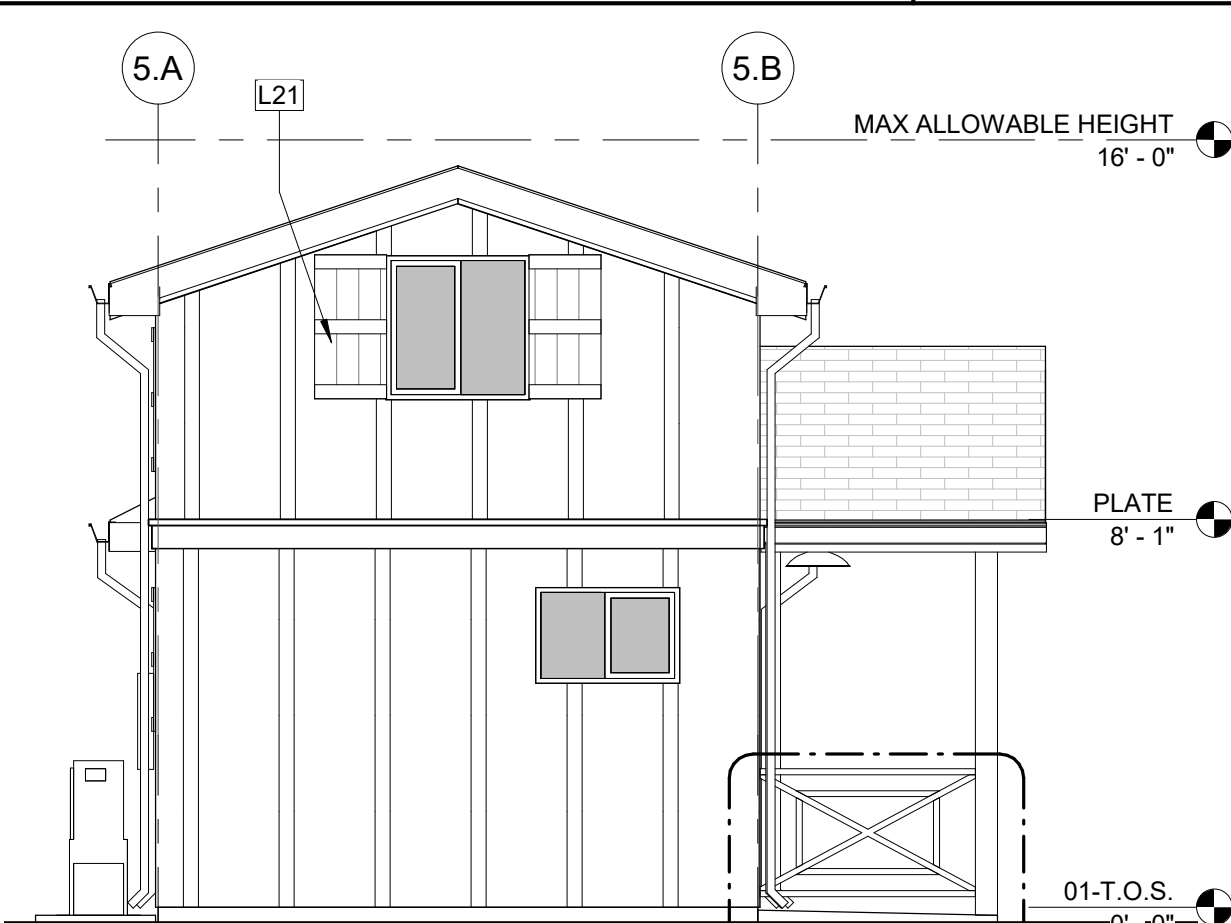


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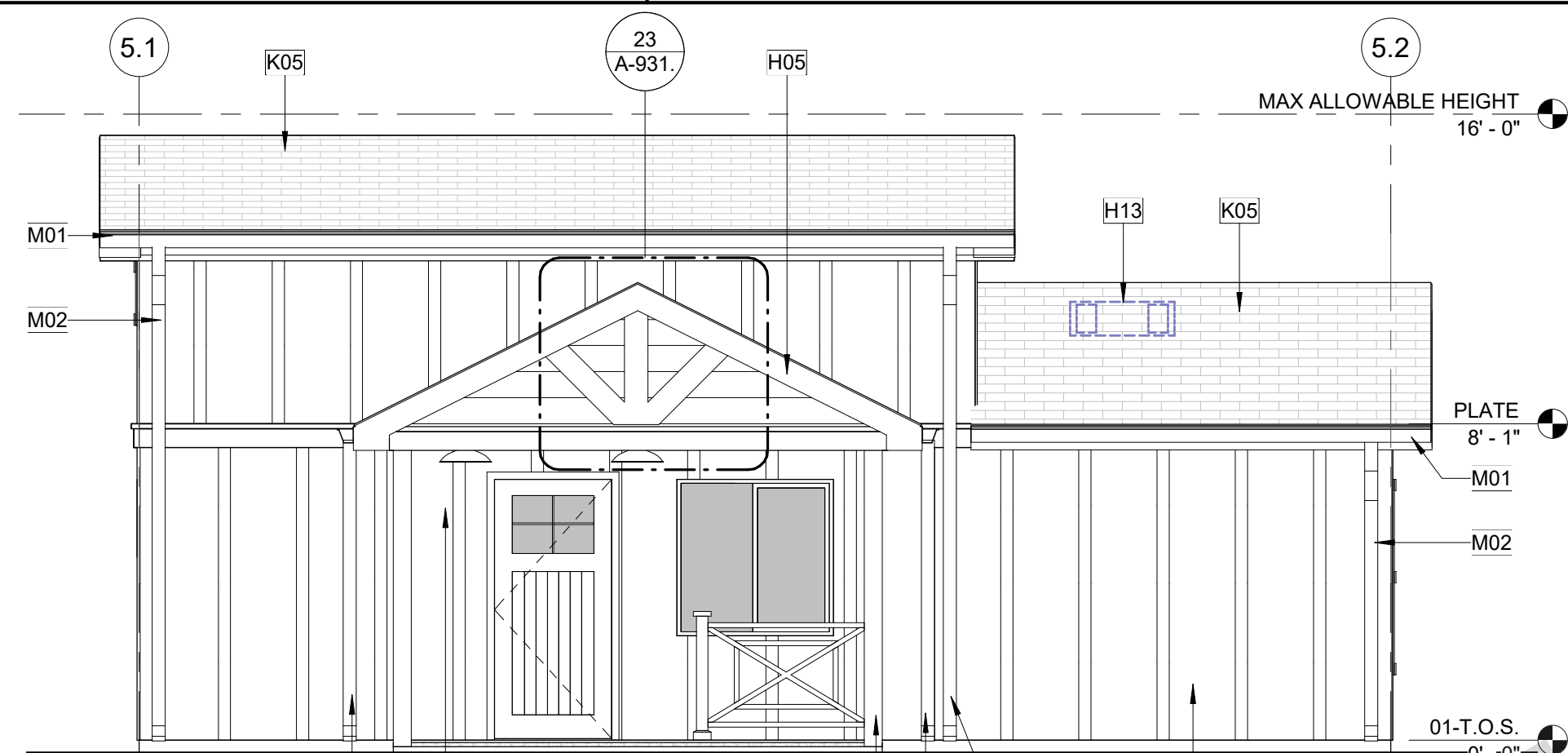
**3 FRONT ELEVATION  
NO FRONT PORCH OPTION**

A5-103 | A5-203 SCALE: 1/4" = 1'-0"



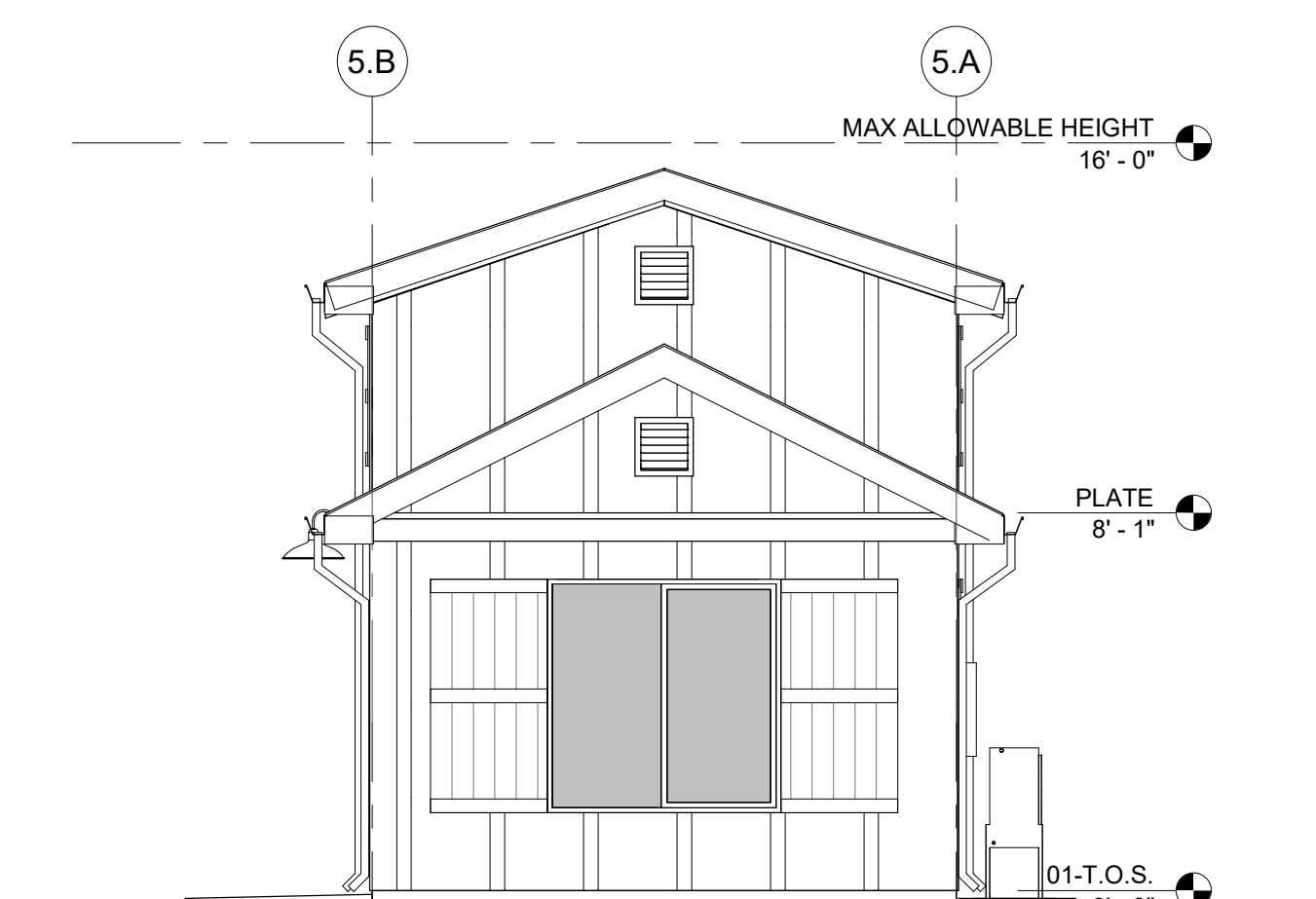
**2 LEFT ELEVATION**

A5-103 | A5-203 SCALE: 1/4" = 1'-0"



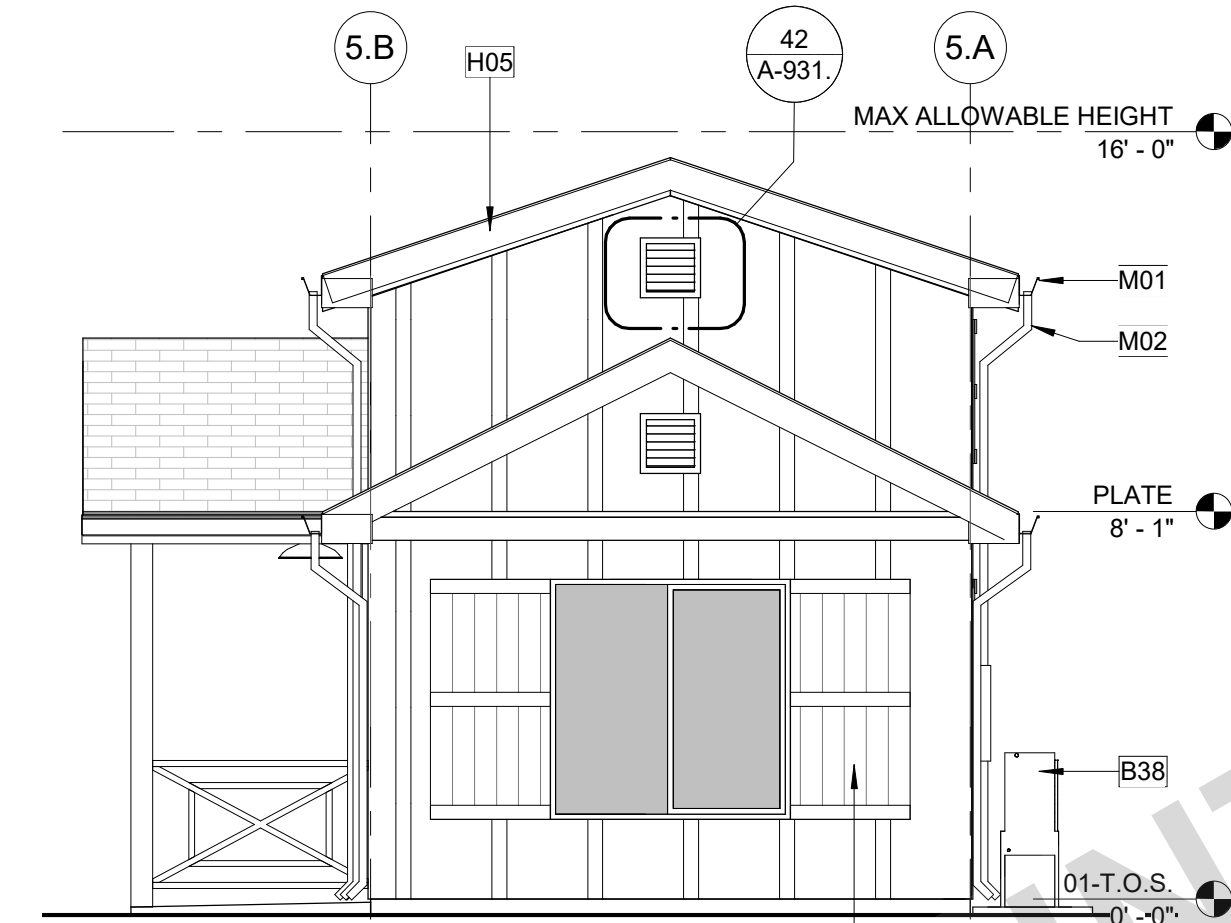
**1 FRONT ELEVATION**

A5-103 | A5-203 SCALE: 1/4" = 1'-0"



**6 RIGHT ELEVATION  
NO FRONT PORCH OPTION**

A5-103 | A5-203 SCALE: 1/4" = 1'-0"



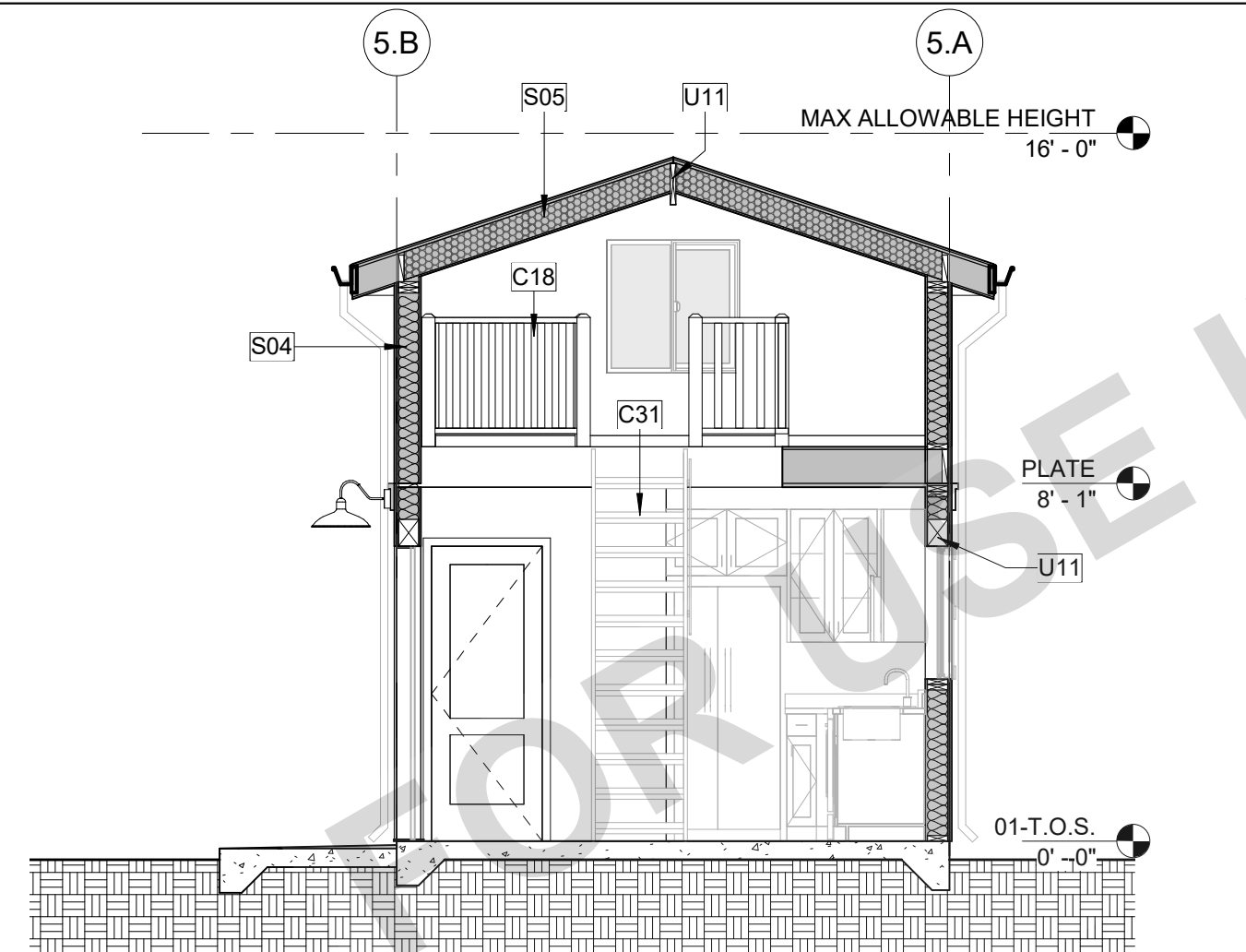
**5 RIGHT ELEVATION**

A5-103 | A5-203 SCALE: 1/4" = 1'-0"



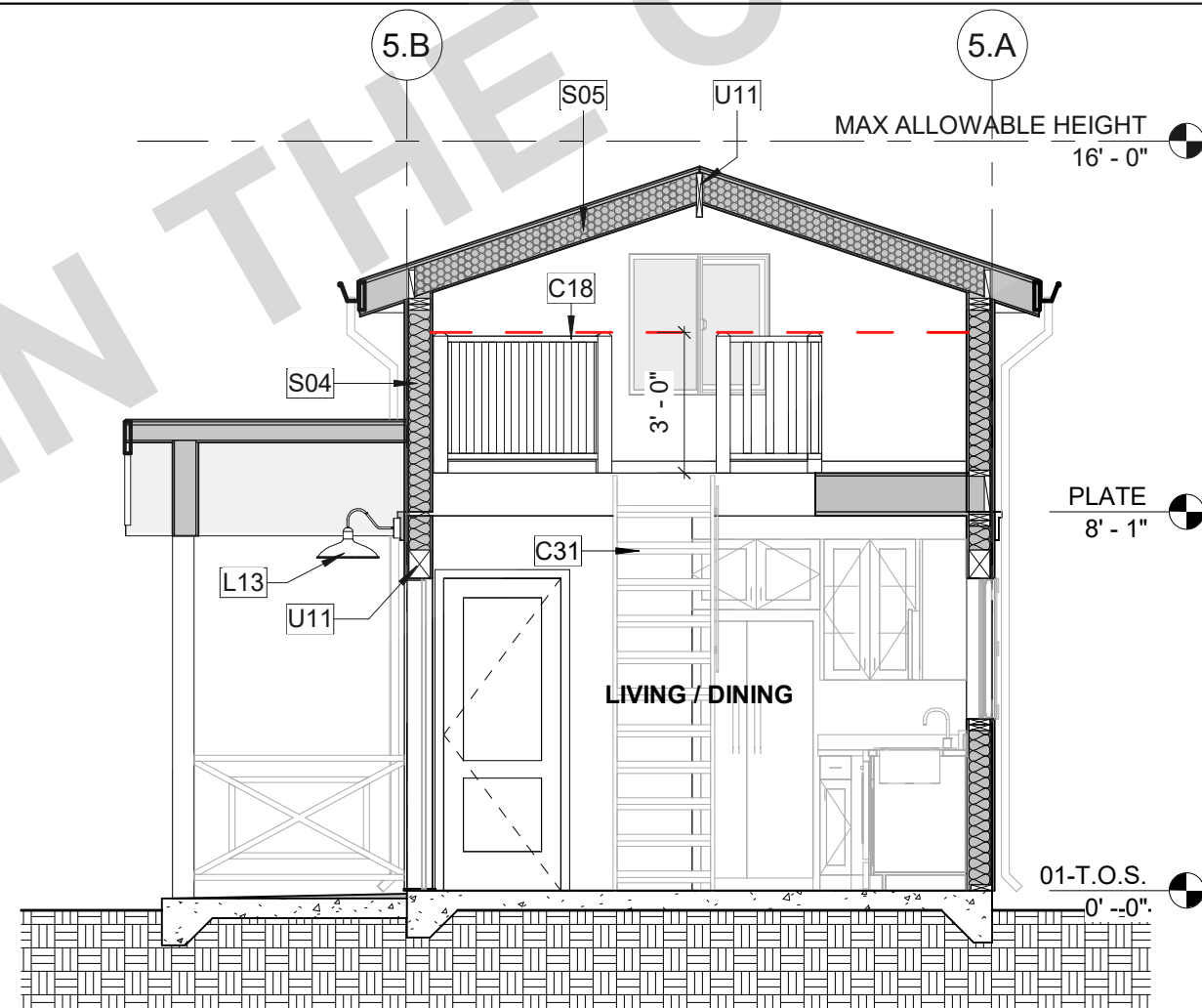
**4 REAR ELEVATION**

A5-103 | A5-203 SCALE: 1/4" = 1'-0"



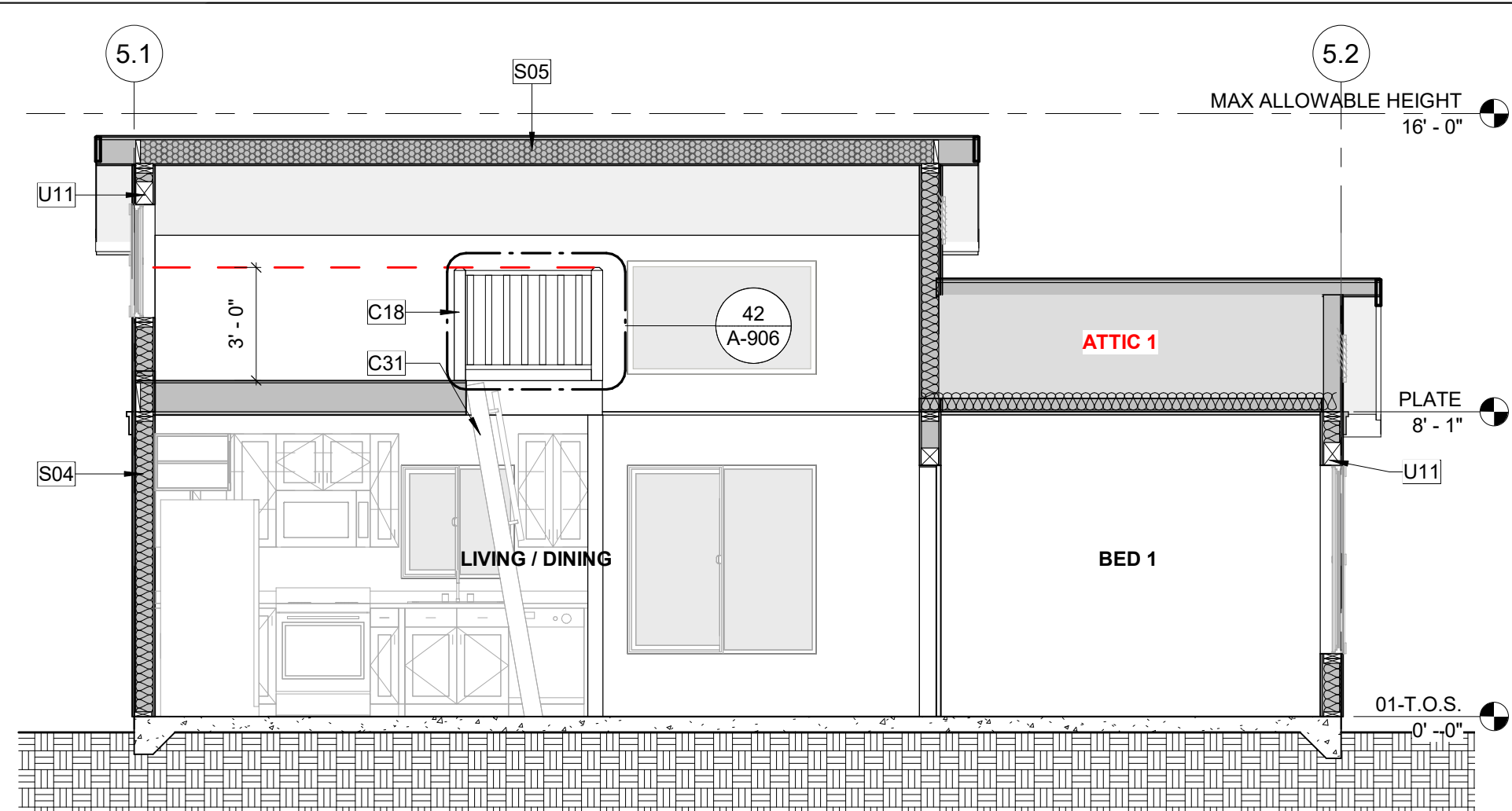
**9 SECTION 02  
NO FRONT PORCH OPTION**

A5-103 | A5-203 SCALE: 1/4" = 1'-0"



**8 SECTION 02**

A5-103 | A5-203 SCALE: 1/4" = 1'-0"



**7 SECTION 01**

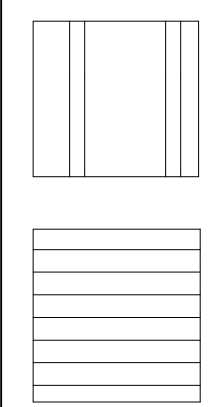
A5-103 | A5-203 SCALE: 1/4" = 1'-0"

## MATERIALS LEGEND

- COLOR SCHEMES AND FINISH OF PRODUCT SELECTIONS RECOMMENDED TO MATCH PRIMARY RESIDENCE. **INSTALL ALL MATERIAL SELECTIONS PER MANUFACTURER'S RECOMMENDATIONS.**
- A PROJECT SITE WITHIN THE WILDLAND-URBAN INTERFACE FIRE AREA SHALL COMPLY WITH THE **CRC SECTION R337**. IF WUI APPROVED PRODUCTS ARE REQUIRED, PROVIDE SELECTED PRODUCT LISTINGS IN THE SPACES PROVIDED. WHEN NOT REQUIRED, WRITE "NOT APPLICABLE."
- APPROVED PRODUCT LISTINGS CAN BE FOUND IN THE (CURRENT) CAL-FIRE STATE FIRE MARSHAL LISTED WILDLAND-URBAN INTERFACE WUI PRODUCT HANDBOOK.
- IF PROJECT SITE REQUIRES WUI COMPLIANCE, IN THE CASE THAT PRODUCT SELECTIONS ARE NOT BML LISTED, NOR IN THE HANDBOOK, MATERIALS SHALL COMPLY WITH THE PRESCRIPTIVE STANDARDS OF **CHAPTER 7A**.

### GRAPHICS LEGEND:

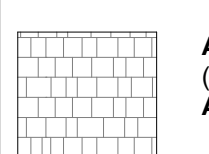
MARK ALL THAT APPLY AND LABEL ALL SURFACES ON THE ELEVATIONS



- ☐ E) FIBER CEMENT - BOARD & BATTEN PATTERN (SHALL MEET ALL REQ. OF **CRC 337** & **CRC R703.10.2**, **CRC R703.10.1**)
- ☐ F) VERTICAL EXT. GRADE WOOD SIDING - BOARD & BATTEN PATTERN (SHALL MEET ALL REQ. OF **CRC 337** & **CRC R703.5.3**)
- ☐ G) FIBER CEMENT PANEL SIDING - HORIZONTAL PATTERN (SHALL MEET ALL REQ. OF **CRC 337** & **CRC R703.10.1**)
- ☐ H) EXT. GRADE WOOD PANEL SIDING (SHALL MEET ALL REQ. OF **CRC 337** & **CRC R703.5.2**)

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

### GRAPHICS LEGEND:



ASPHALT COMPOSITE ROOF SHINGLES (SHALL COMPLY WITH **CRC 337** & **CRC R905.2.4** & **ASTM D3462**)

CLASS-A ROOF ASSEMBLY REQ. PER WUI:

☐ YES ☐ NO

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

## GENERAL ELEVATION NOTES

- REFER TO GENERAL NOTES SHEET G-102 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 R602.3.

## 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.
  - FIREBLOCKING TO BE LOCATED AT THE FOLLOWING LOCATIONS PER **2022 CRC SECTION R302.11**:
    - 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:
        - VERTICALLY AT CEILING AND FLOOR LEVELS
        - HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET.
      - AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS SOFFITS, DROP CEILINGS AND COVE CEILINGS.
    - IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN. ENCLOSED SPACES UNDER STAIRS SHALL COMPLY WITH **SECTION R302.7**.
    - AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILINGS AND FLOOR LEVEL, 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.
    - FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES, SEE **SECTION R1003.19**.
  - FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING-UNIT SEPARATION.
- SECTION R302.11.1** - FIREBLOCKING MATERIALS SHALL CONSIST OF FOLLOWING MATERIALS:
  - TWO-INCH NOMINAL LUMBER
  - TWO THICKNESSES OF ONE-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS
  - THE THICKNESS OF 0.719-INCH WOOD STRUCTURAL PANELS WITH JOINTS BACKED BY 0.719-INCH WOOD STRUCTURAL PANELS
  - THE THICKNESS OF 0.75-INCH PARTICLE BOARD WITH JOINTS BACKED BY 0.75-INCH PARTICLE BOARD
  - ONE-HALF-INCH GYPSUM BOARD
  - ONE-FOURTH-INCH CEMENT-BASED MILLBOARD
  - BATTS OR BLANKETS OF MINERAL WOOL, MINERAL FIBER OR OTHER APPROVED MATERIAL INSTALLED AS SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE
  - CELLULOSE INSULATION INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E119 OR UL 263, FOR THE SPECIFIC APPLICATION
- PER **2022 CRC SECTION R317** SLEEPERS AND SILLS ON A CONCRETE OR MASONRY SLAB 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 AWPAC U1.

## KEYNOTES

- B18 ELECTRIC PANEL, 100AMP 240V.
- B38 MULTI-ZONE HEAT PUMP CONDENSER UNIT. REFER TO PLANS FOR LOCATION OF INDOOR FAN FAN COIL UNITS. REFER TO PLANS FOR ADDITIONAL INFORMATION. PROVIDE CONCRETE PAD MIN. 6" LARGER THAN UNIT IN EACH DIRECTION, 3' MIN. ABOVE GRADE.
- C18 INTERIOR LOFT GUARD (PER CRC AQ104.2.5). ONE HALF OF THE CLEAR HEIGHT TO THE CEILING OR 36" MIN. U.N.O. SEE LOFT GUARD DETAIL 42 ON SHEET A-906 FOR MORE INFORMATION.
- C31 LOFT ACCESS LADDER (PER CRC AQ104.2.2). SEE DETAILS FOR MORE INFORMATION.
- H05 ROOF EDGE/FASCIA. SEE DETAILS FOR FASCIA TYPE.
- H12 ATTIC VENT (LOW). PAINT OR FINISH TO MATCH ROOF COLOR. SEE VENTING CALCS."
- H13 ATTIC VENT (HIGH). PAINT OR FINISH TO MATCH ROOF COLOR. SEE VENTING CALCS."
- K05 COMPOSITE ROOF SHINGLES. SEE MATERIALS LEGEND FOR MORE INFO.
- K06 EXTERIOR WALL COVERING. SEE TITLE SHEET & MATERIALS LEGEND FOR SELECTIONS & MORE INFO.
- L10 DECORATIVE SHUTTER. SEE TITLE SHEET & DETAILS FOR STYLE SELECTION & MORE INFORMATION.
- L13 LIGHT FIXTURE LOCATION. SEE DETAILS & ELECTRIC PLAN FOR MORE INFO.
- L20 BUILDING SHALL HAVE ADDRESS NUMBERS PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM STREET, MINIMUM OF 4" HIGH WITH A MIN. STROKE OF 1/2" (EXACT LOCATION PER OWNER/APPLICANT).
- L21 DECORATIVE SHUTTER. SEE TITLE SHEET & DETAILS FOR STYLE SELECTION & MORE INFORMATION.
- M01 GUTTER. CONNECT TO DOWNSPOUT. PROVIDE MEANS TO PREVENT ACCUMULATION OF LEAVES AND DEBRIS IN GUTTER PER CRC R337.5.4
- M02 DOWNSPOUT. CONNECT TO STORM DRAIN SYSTEM OR APPROVED DRAINAGE SYSTEM BY COUNTY.
- S04 2X6 WALL INSULATION. R-19 MIN.
- S05 SPRAY FOAM INSULATION. SEE 'ROOF INSULATION NOTES' ON ROOF PLAN.
- T14 6x6 POST, REFER TO STRUCTURAL
- U11 WOOD BEAM / HEADER, REFER TO STRUCTURAL.



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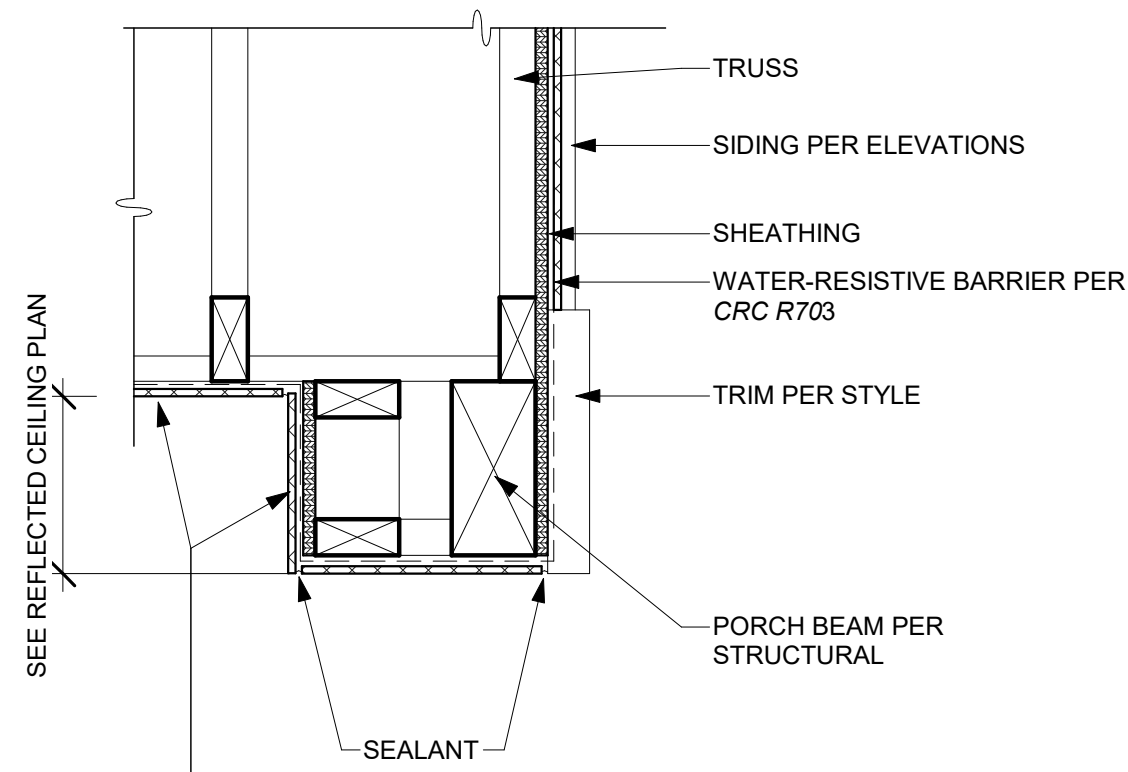
COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

ELEVATIONS & BUILDING  
SECTIONS

DATE  
11/28/2023  
SHEET

A5-203



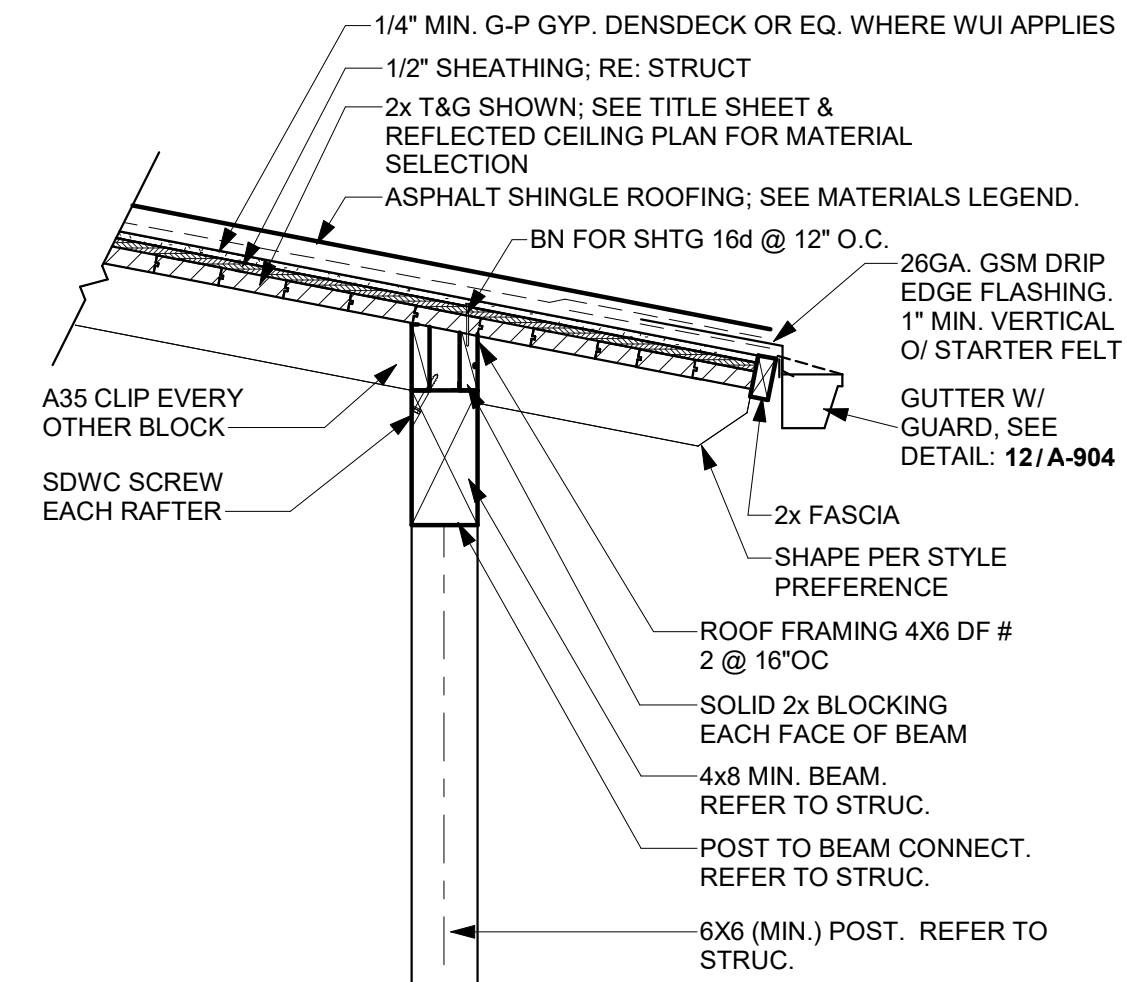


SEE REFLECTED CEILING PLAN

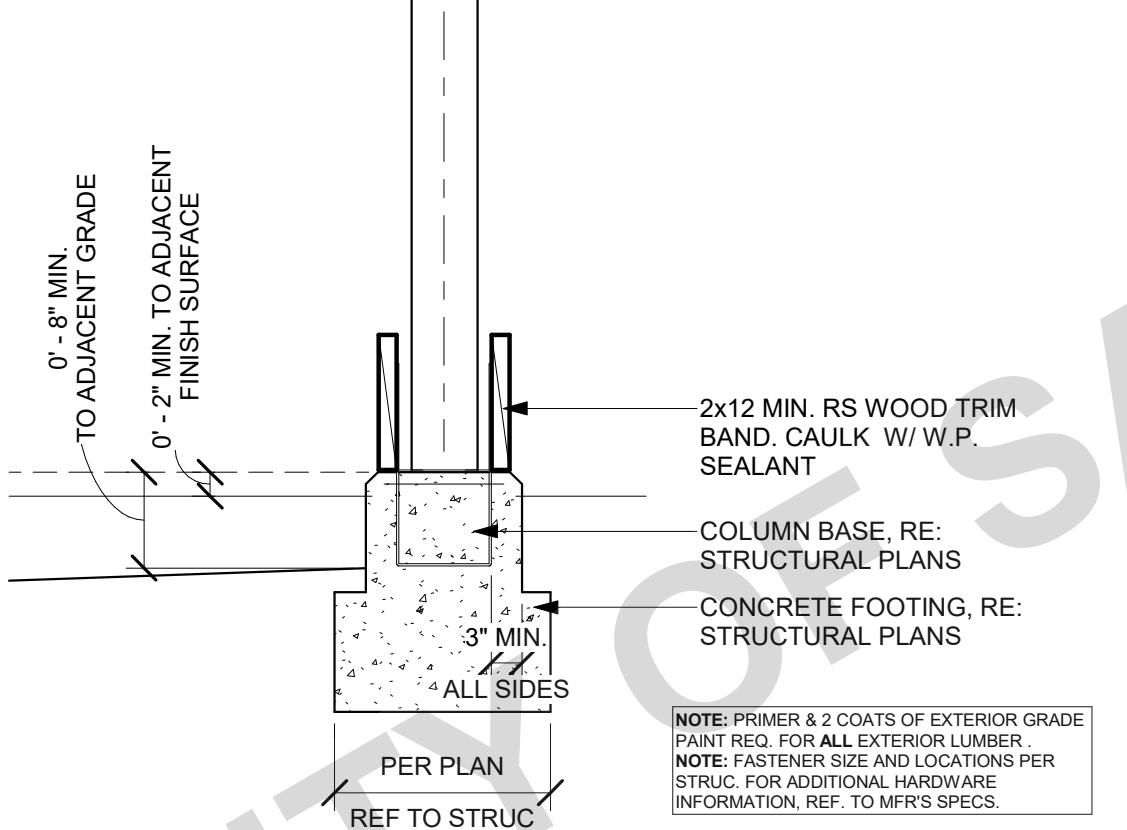
MATERIAL PER REFLECTED CEILING PLANS. INSTALL PER MFR'S SPECIFICATIONS

#### 41 TYP. PORCH BEAM

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

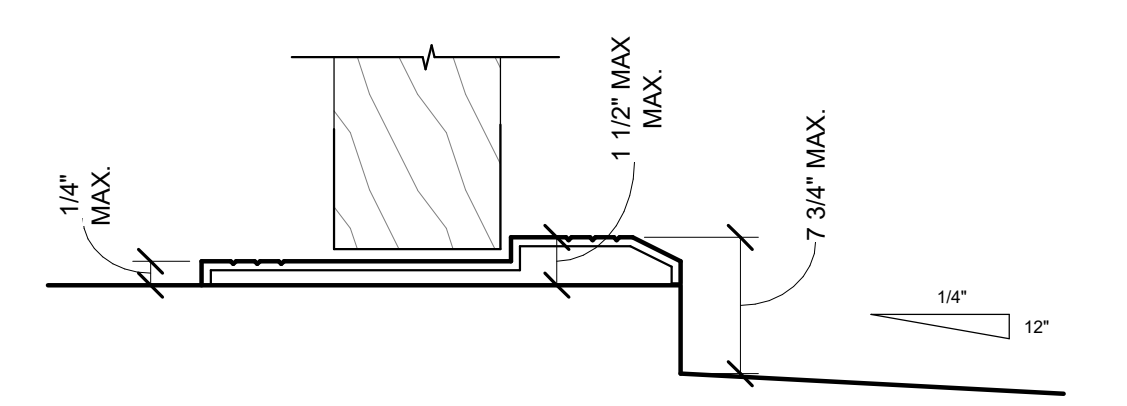


TYP. NOTES  
1. CAULK ALL JOINTS.  
2. PRIME TRIM ALL SIDES.



#### 32 TYP. POST W/ ROOF @ PORCHES

SCALE: 3/4" = 1'-0"

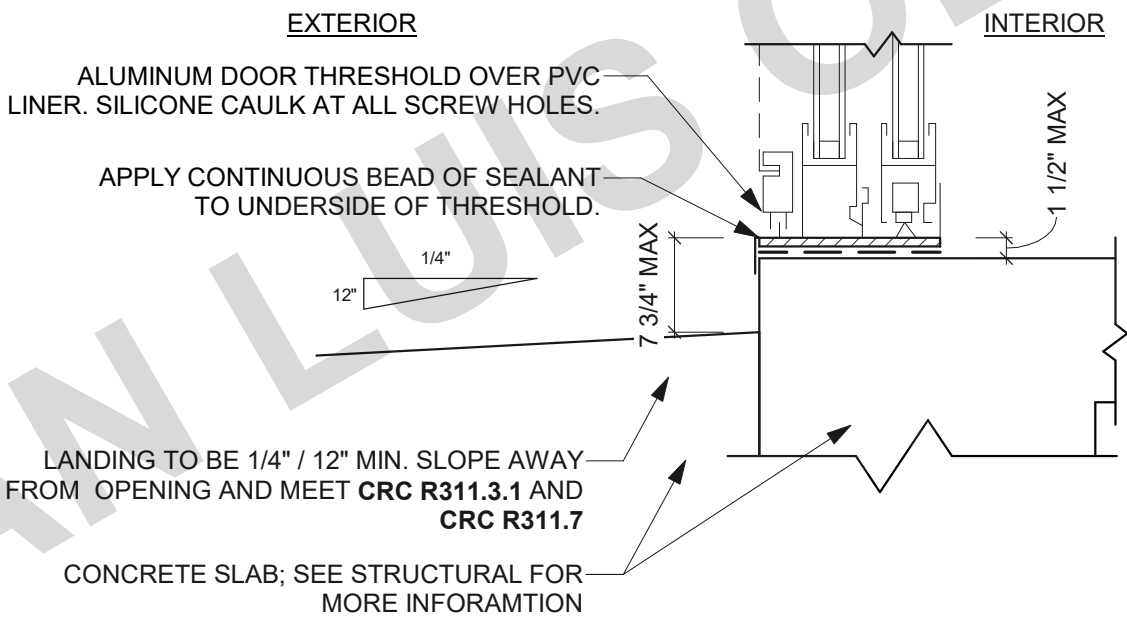


**R311.3.1 FLOOR ELEVATIONS AT THE REQUIRED EGRESS DOORS**  
LANDINGS OR FINISHED FLOORS AT THE REQUIRED EGRESS DOOR SHALL BE NOT MORE THAN 1 1/2 INCHES LOWER THAN THE TOP OF THE THRESHOLD. THE LANDING OR FLOOR ON THE EXTERIOR SIDE SHALL BE NOT MORE THAN 7 3/4 INCHES BELOW THE TOP OF THE THRESHOLD PROVIDED 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**.

#### 21 EXTERIOR DOOR THRESHOLD - TYPICAL

SCALE: 6" = 1'-0"

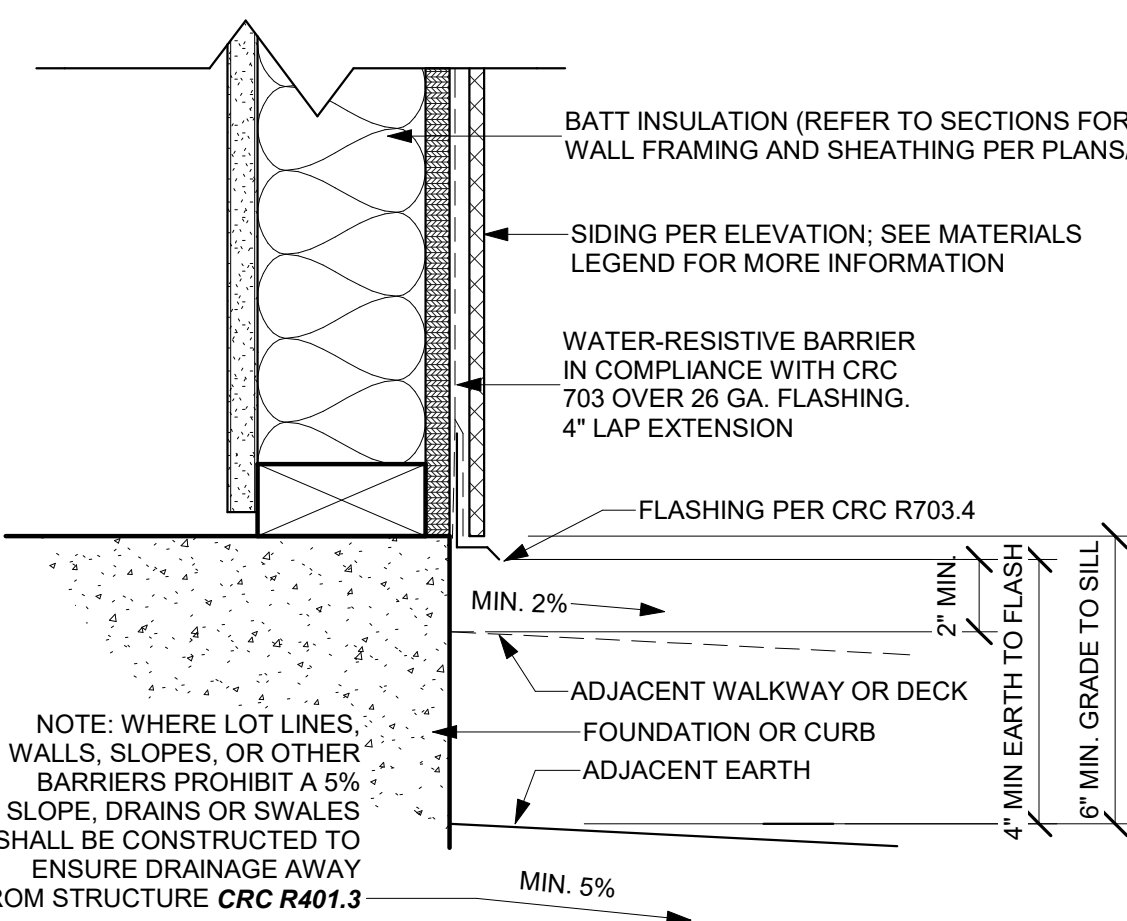


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#### 22 DOOR-SLIDING GLASS - THRESHOLD

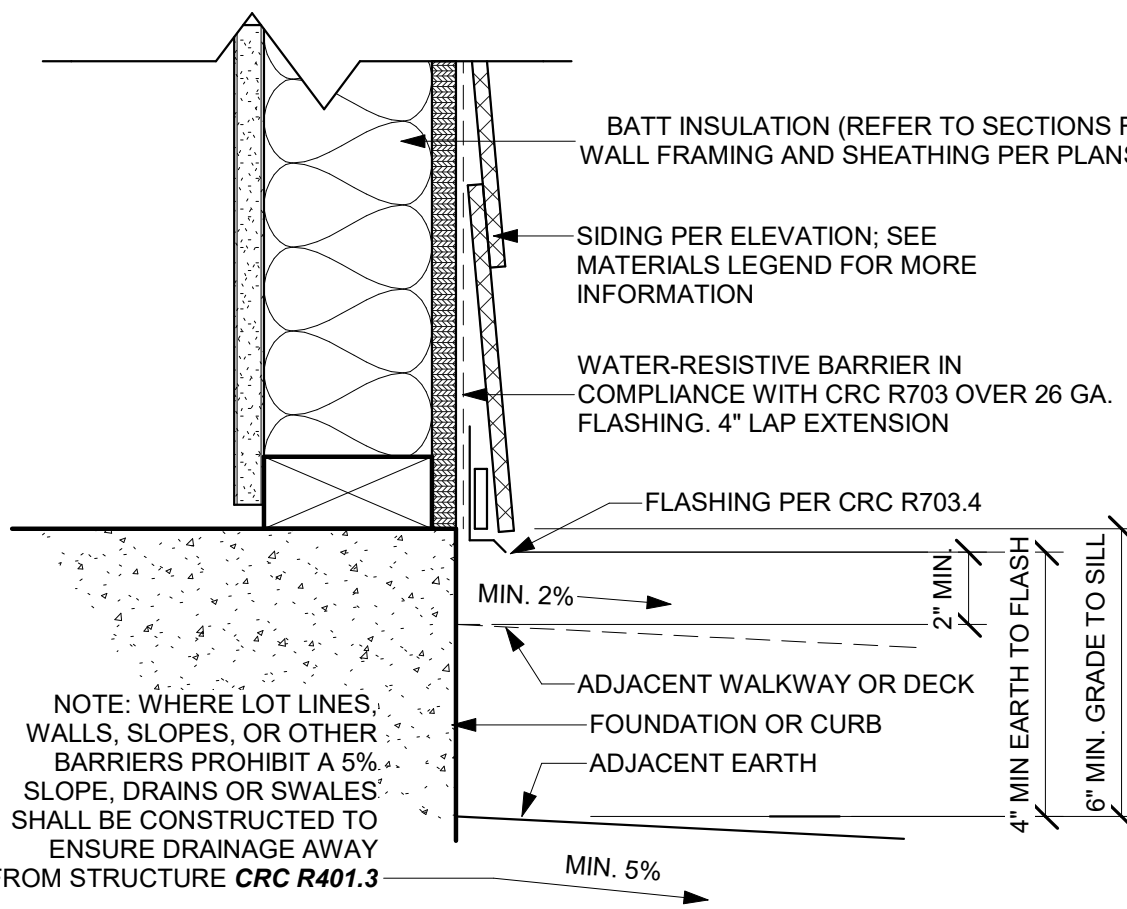
SCALE: 3" = 1'-0"



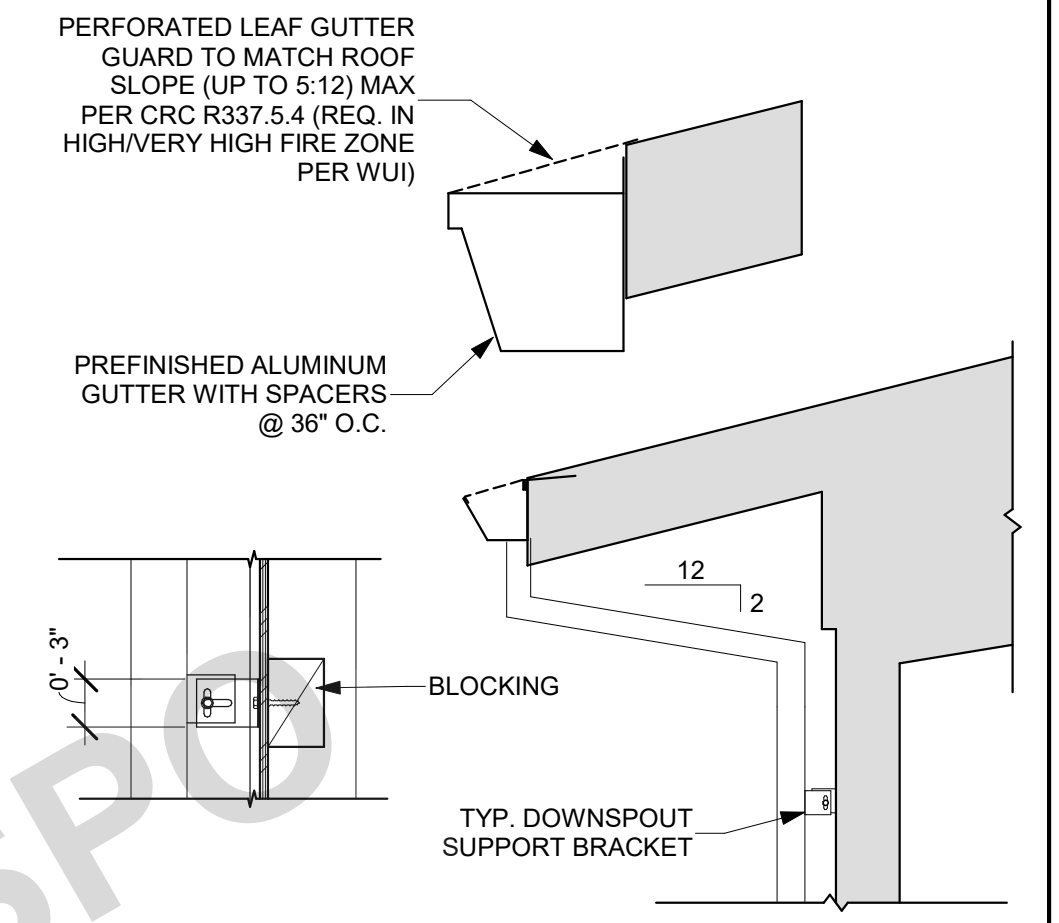
**OPTION A - NO BASE TRIM**

#### 23 TYP. FOUNDATION

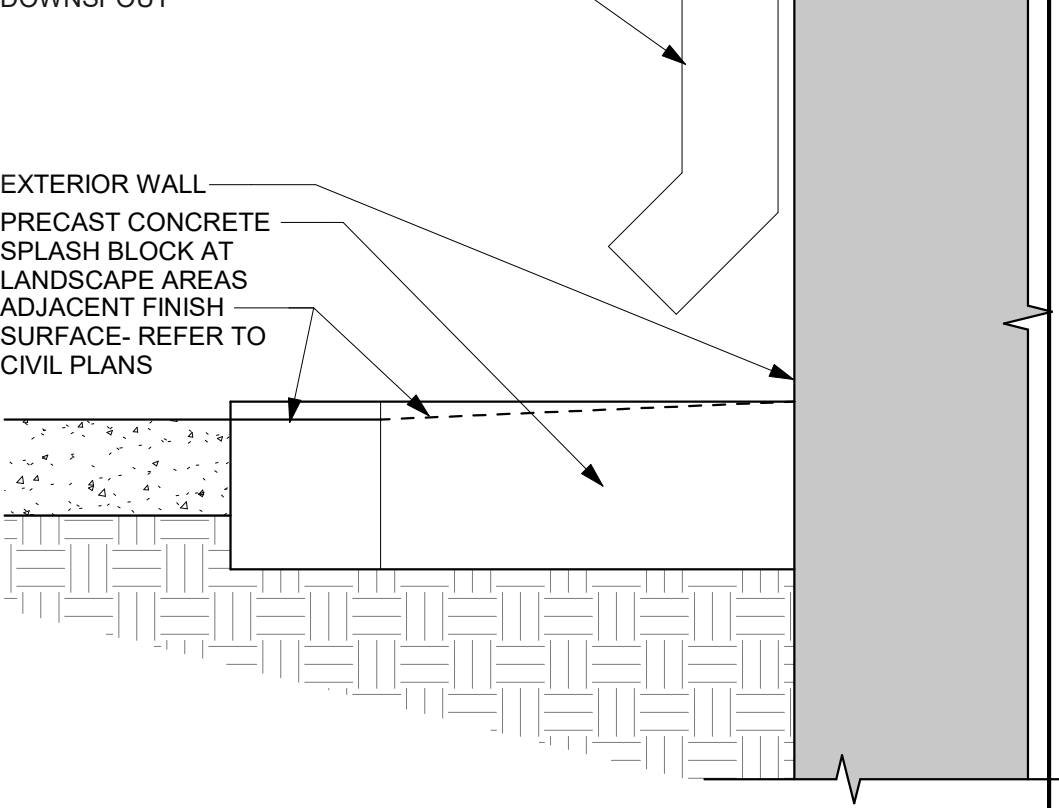
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**OPTION A - NO BASE TRIM**

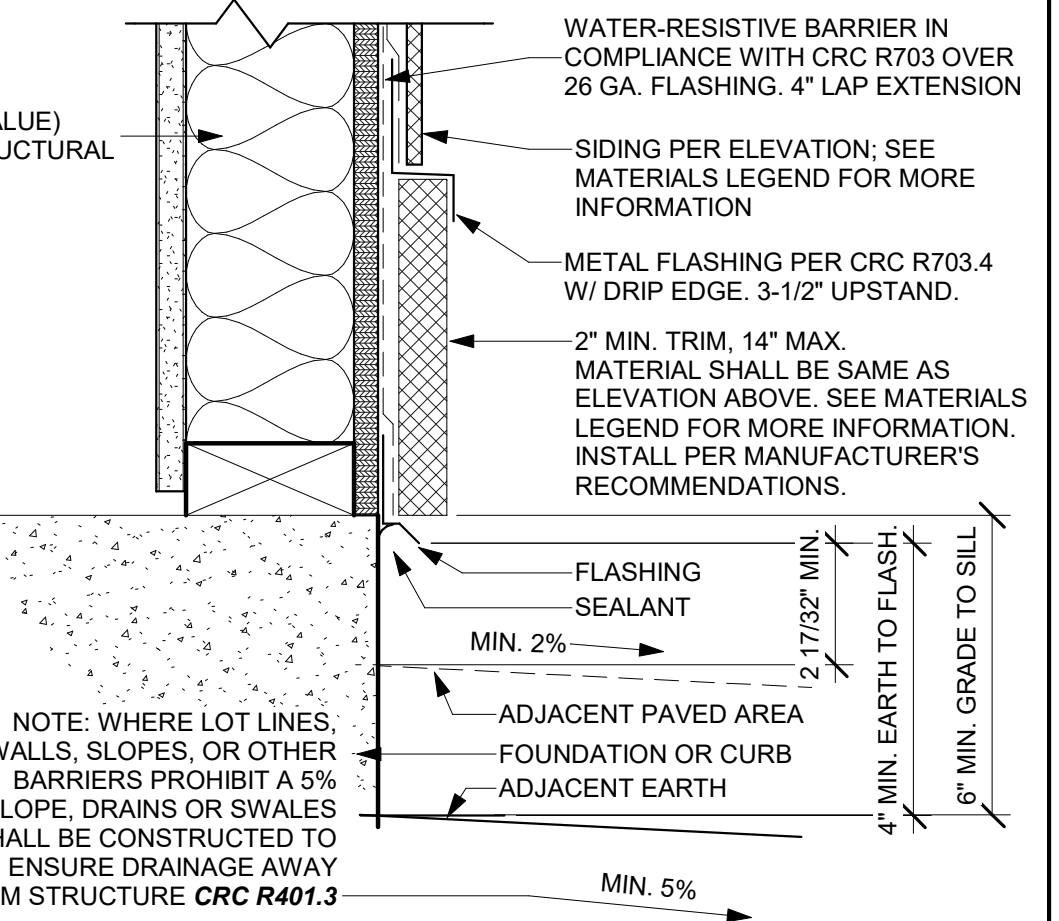


NOTE:  
SPLASH BLOCK OCCURS AT ANY DOWNSPOUT ENDING AT GRADE LEVEL

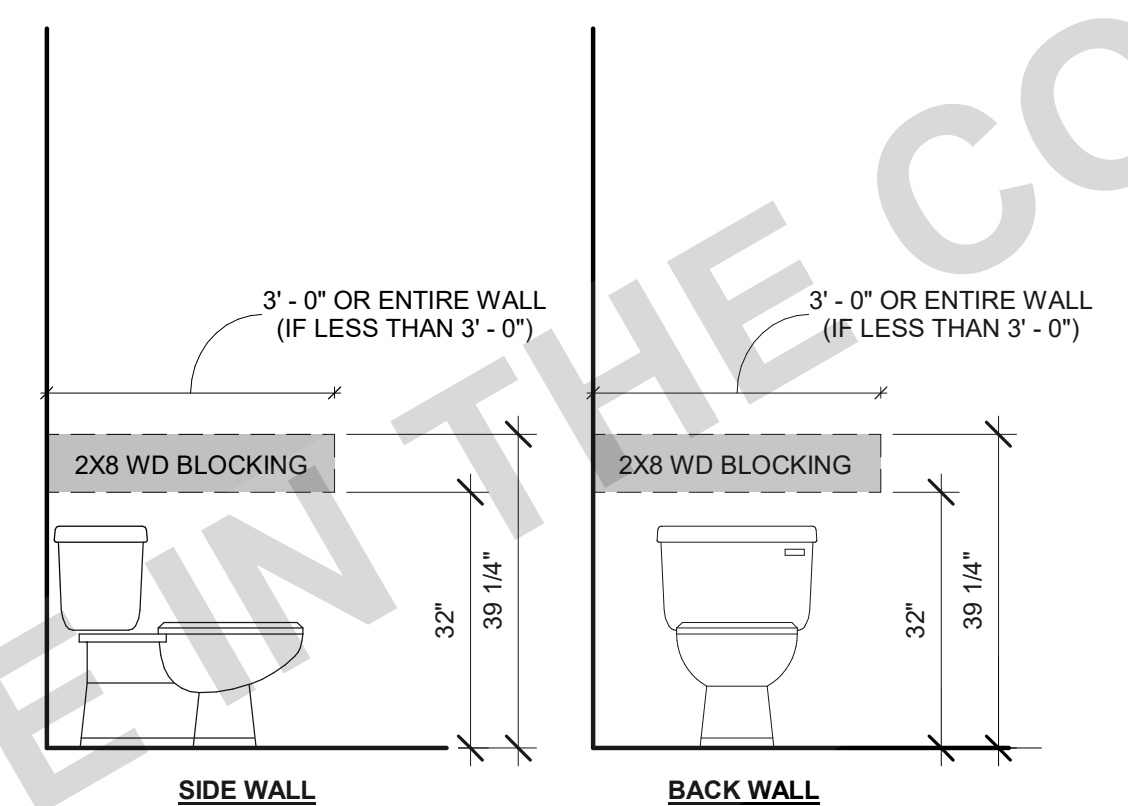


#### 12 TYP. GUTTER TO EXT. DOWNSPOUT

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

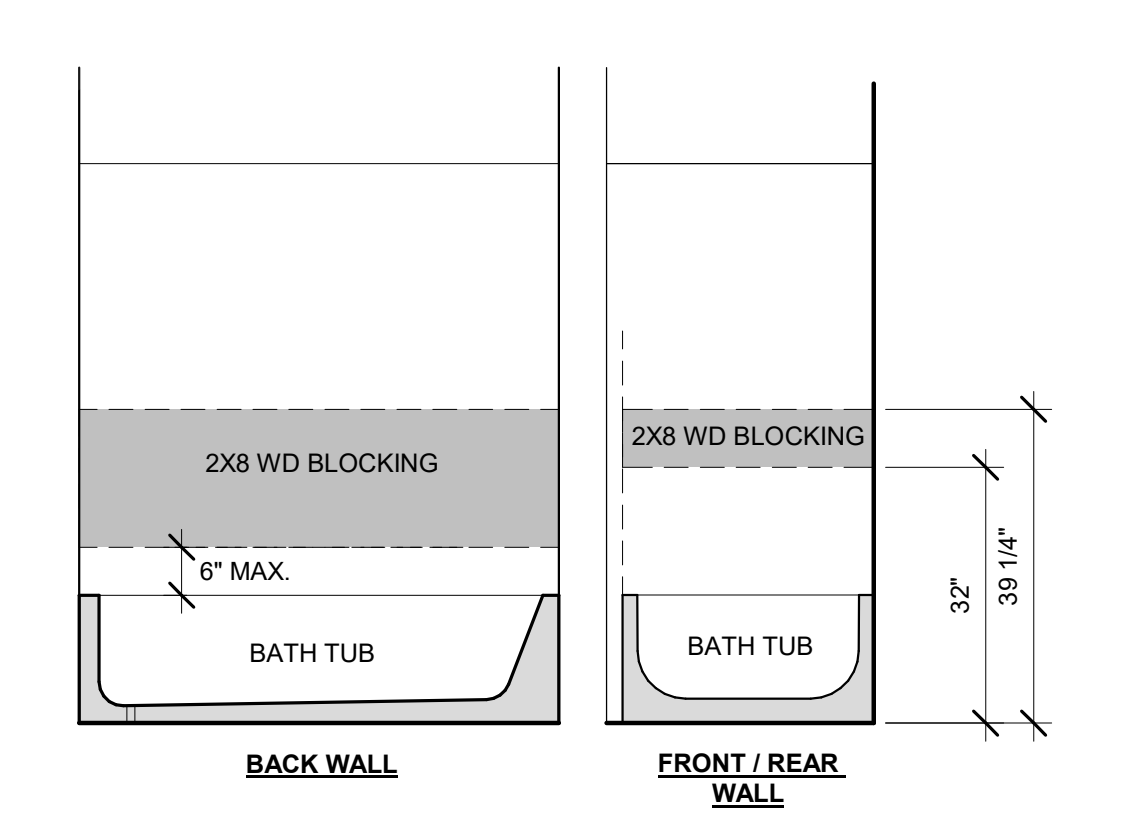


**OPTION B - WITH BASE TRIM**



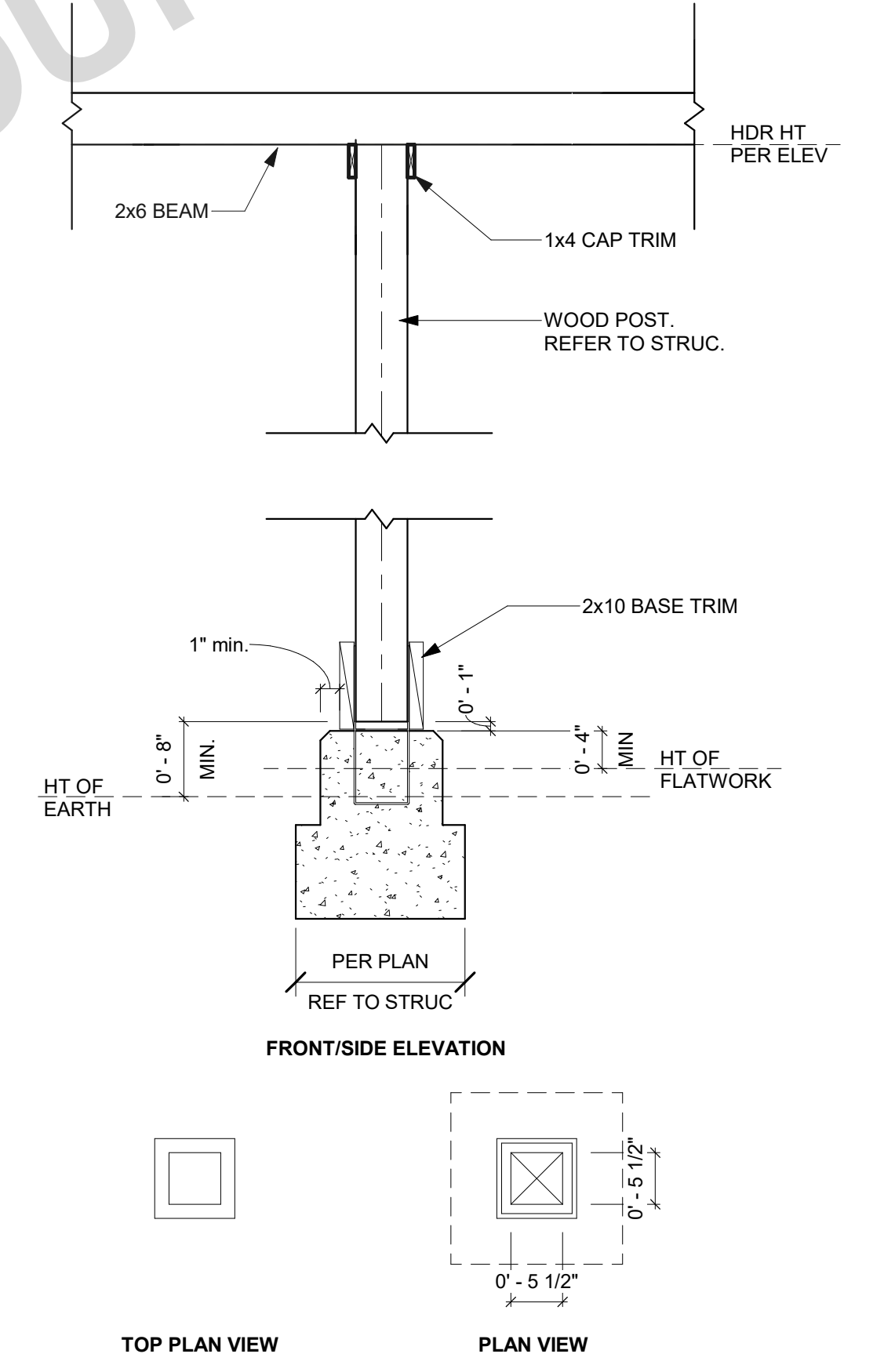
#### 43 TOILET BLOCKING - AGING-IN-PLACE

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



#### 44 TUB BLOCKING - AGING-IN-PLACE

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



POSTS AND COLUMNS THAT ARE EITHER EXPOSED TO THE WEATHER OR LOCATED IN BASEMENTS OR CELLARS, SUPPORTED BY CONCRETE PIERS OR METAL PEDESTALS, SHALL BE PROJECTED AT LEAST 1 INCH ABOVE THE SLAB OR DECK AND 8 INCHES ABOVE EXPOSED EARTH AND SHALL BE SEPARATED BY AN IMPERVIOUS MOISTURE BARRIER (ALTERNATE, PROVIDE A PRESERVATIVE-TREATED WOOD POST OR COLUMN). 2304.12.2.2 & EXCEPTION 1 CBC

NOTE: PRIMER & 2 COATS OF EXTERIOR GRADE PAINT REQ. FOR ALL EXTERIOR LUMBER.  
NOTE: FASTENER SIZE AND LOCATIONS PER STRUC. FOR ADDITIONAL HARDWARE INFORMATION, REF. TO MFR'S SPECS.

#### 34 TYP. POST

SCALE: 3/4" = 1'-0"

#### 24 TYP. FOUNDATION @ HORIZONTAL LAP SIDING

SCALE: 3" = 1'-0"



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COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

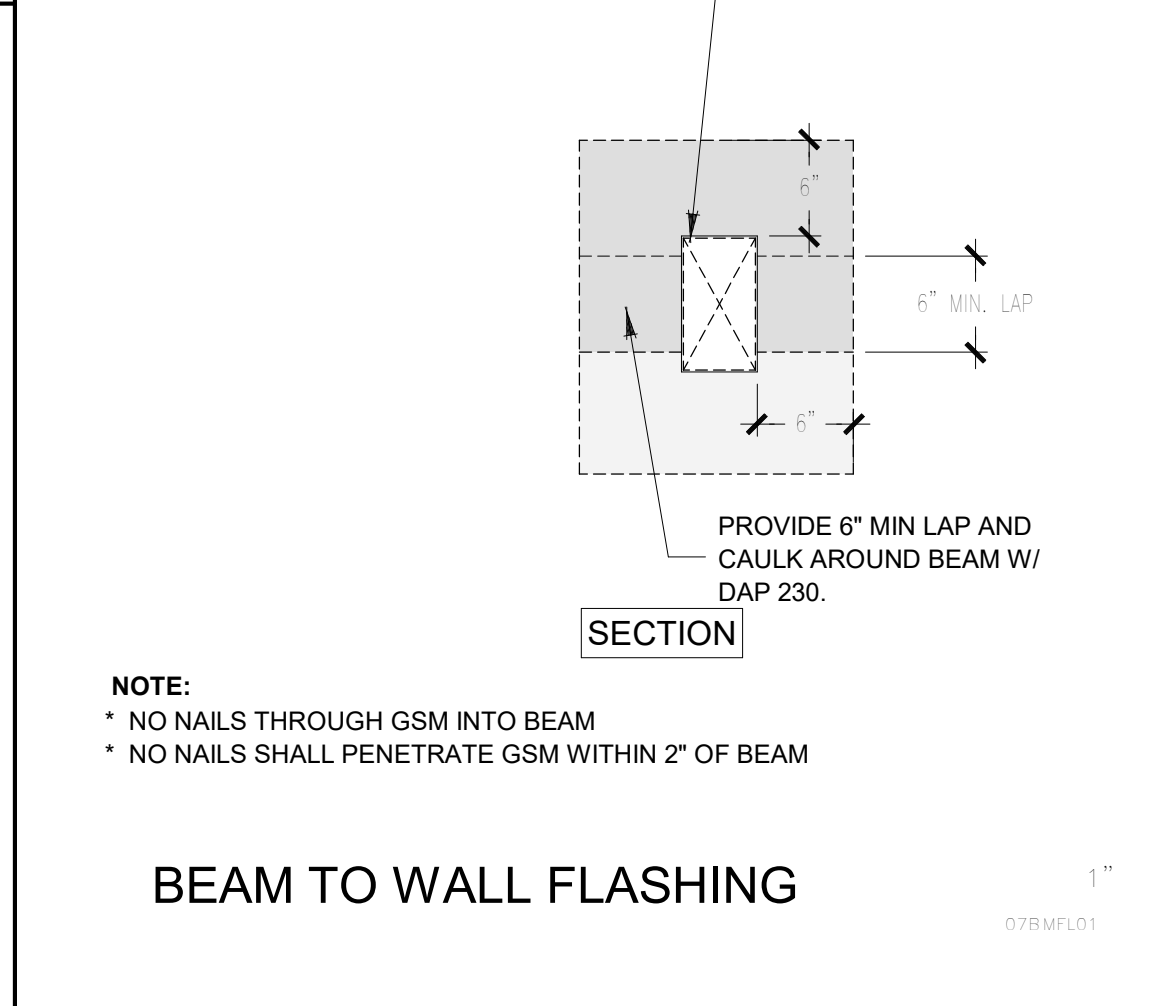
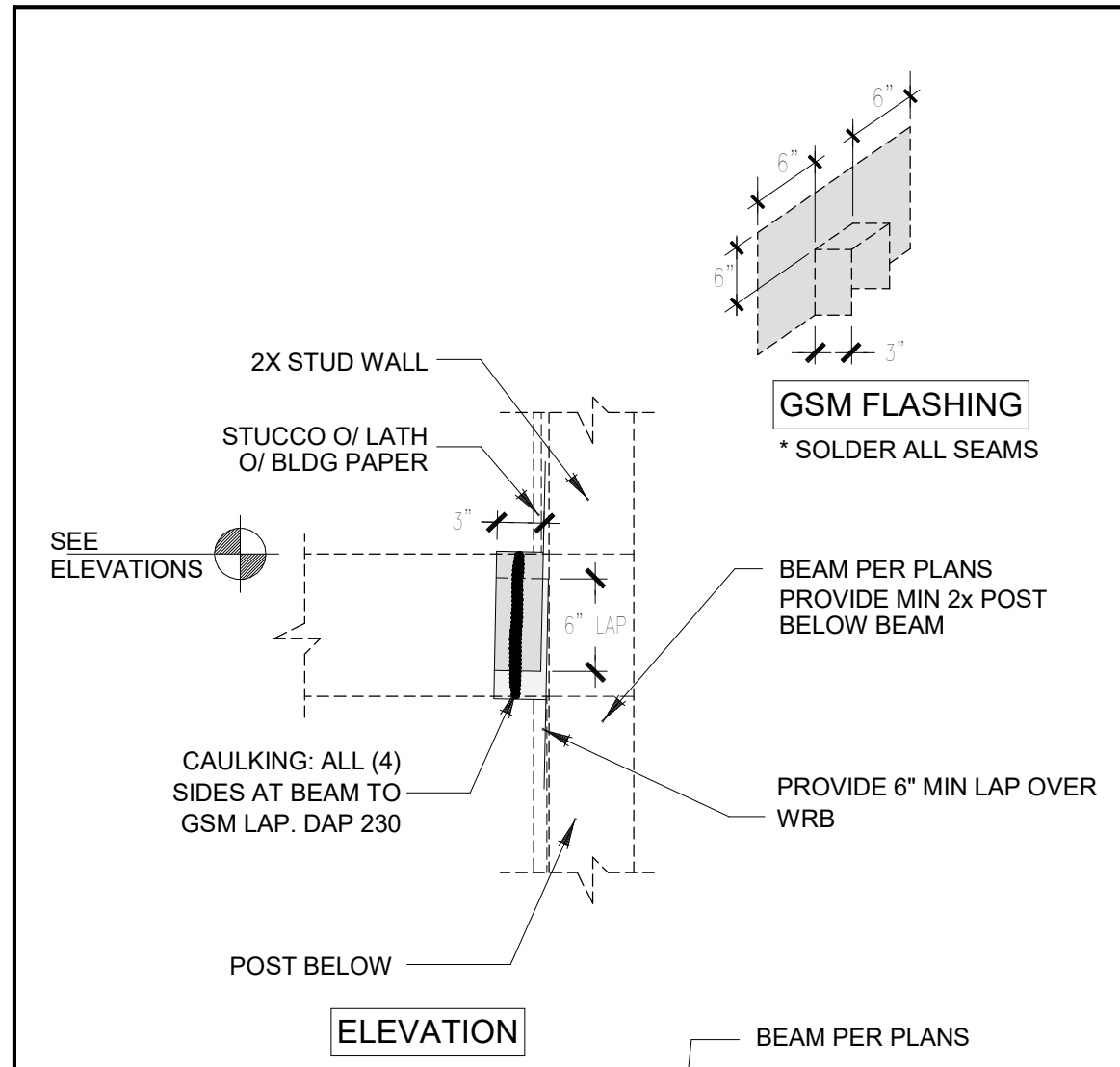
ARCHITECTURAL DETAILS - LOFT

DATE  
11/28/2023  
SHEET

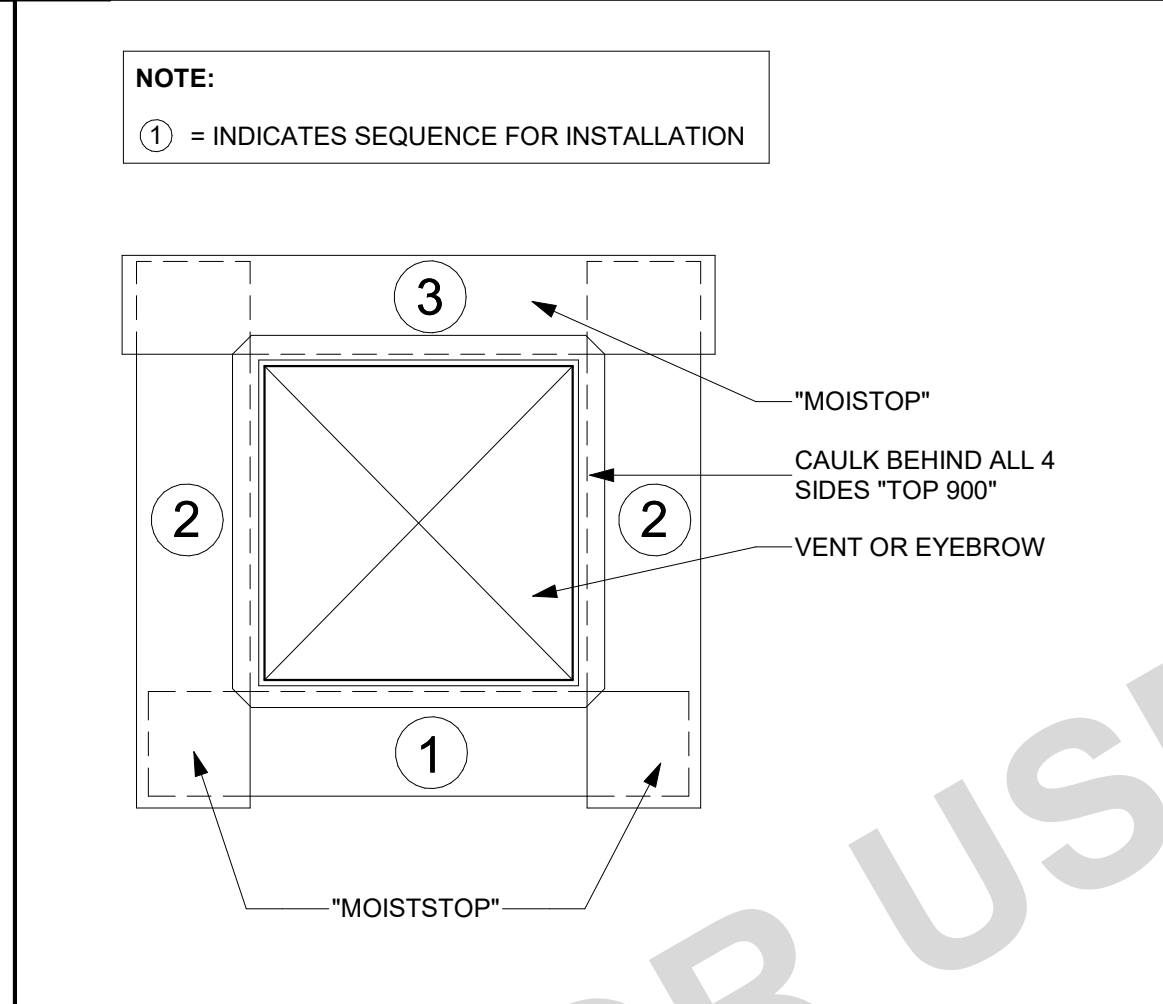
A-904



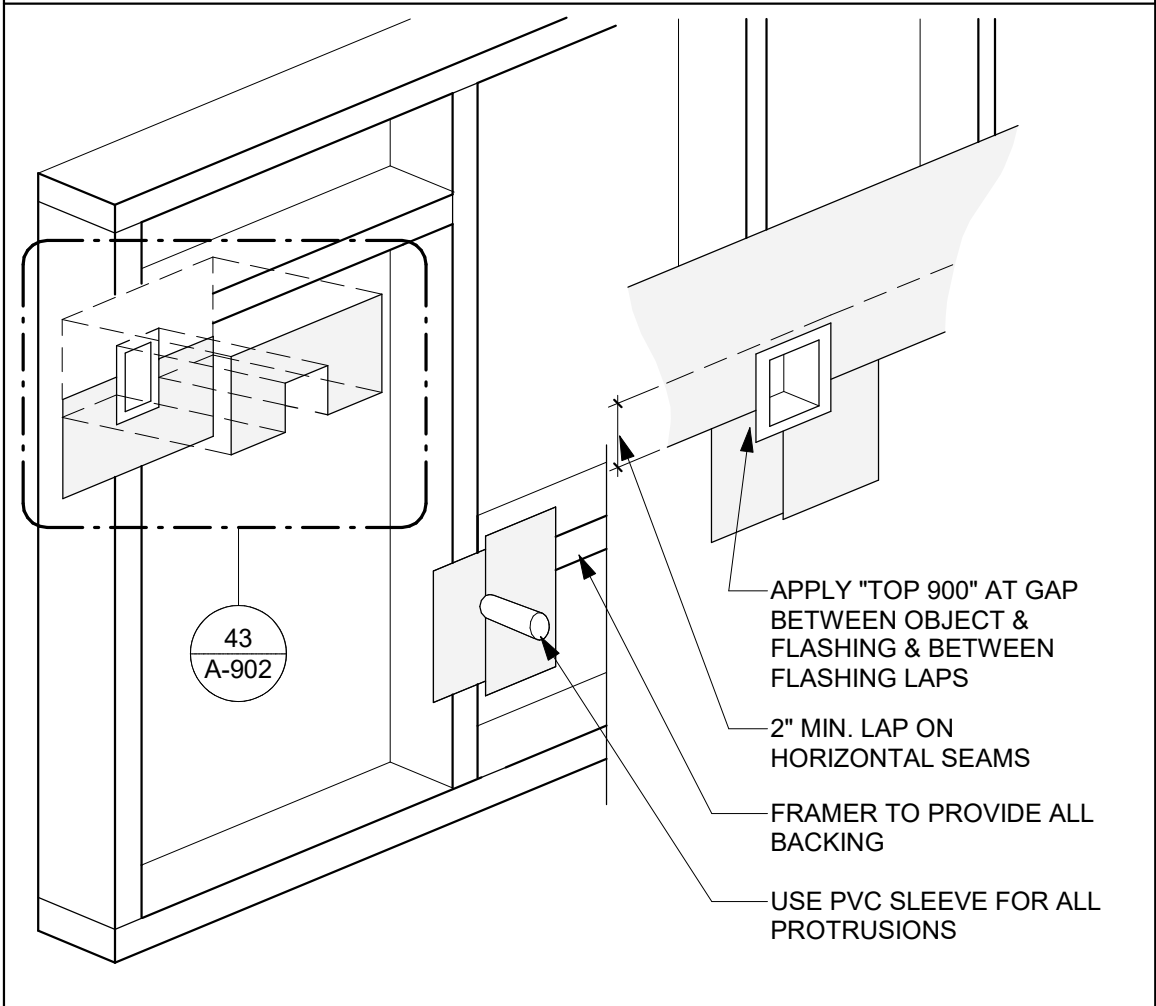
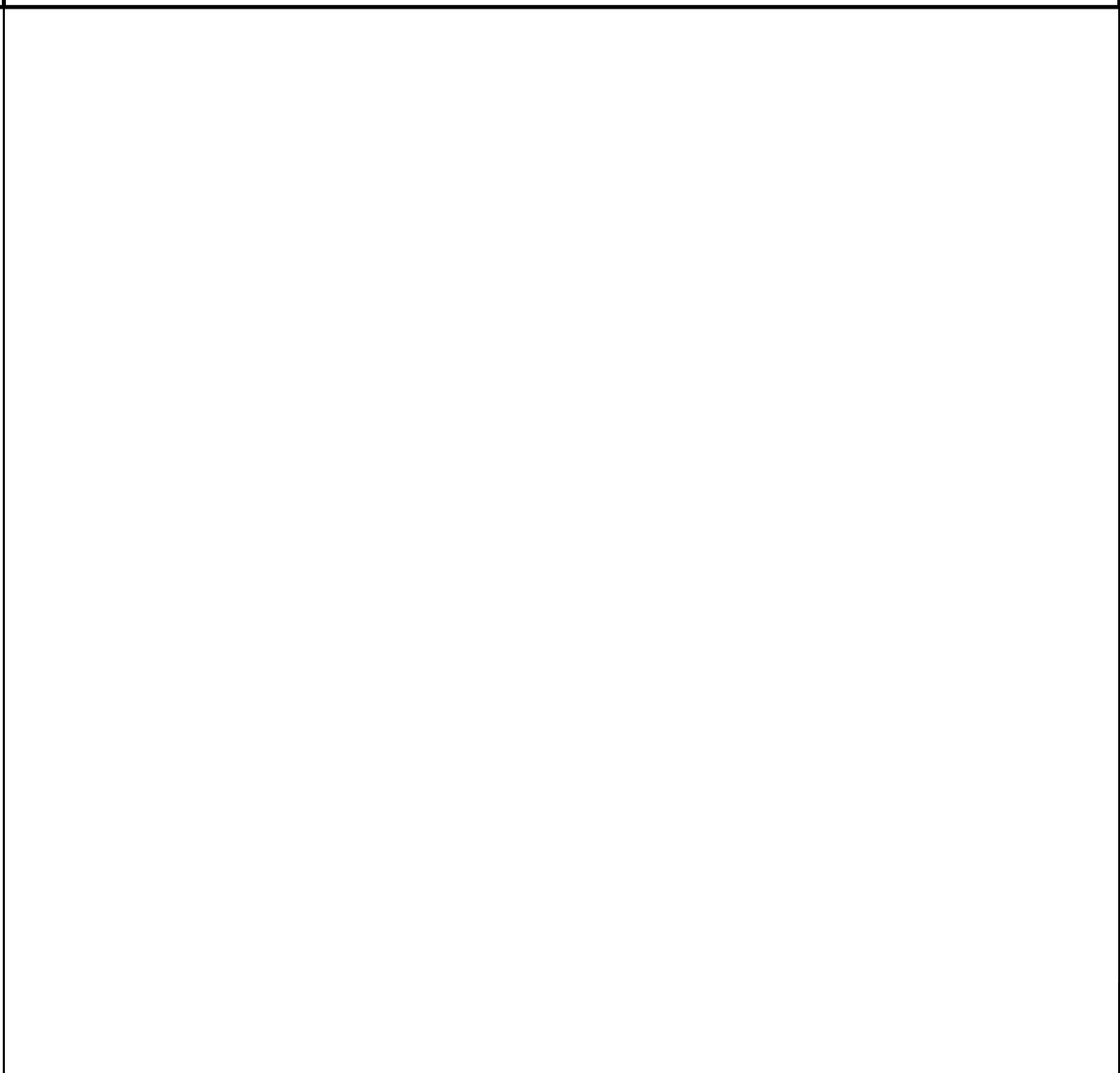
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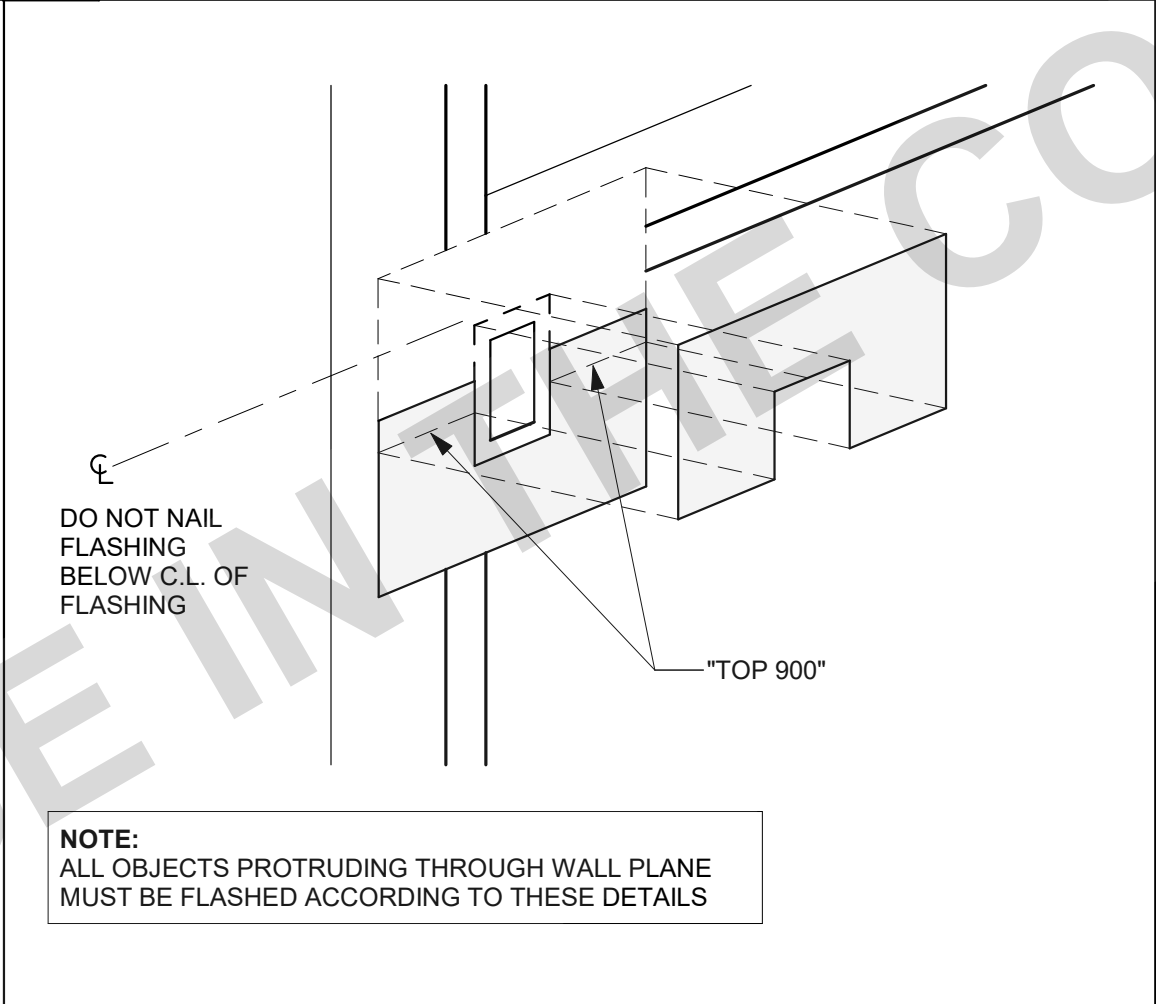
52 BEAM TO WALL FLASHING  
SCALE: 1" = 1'-0"



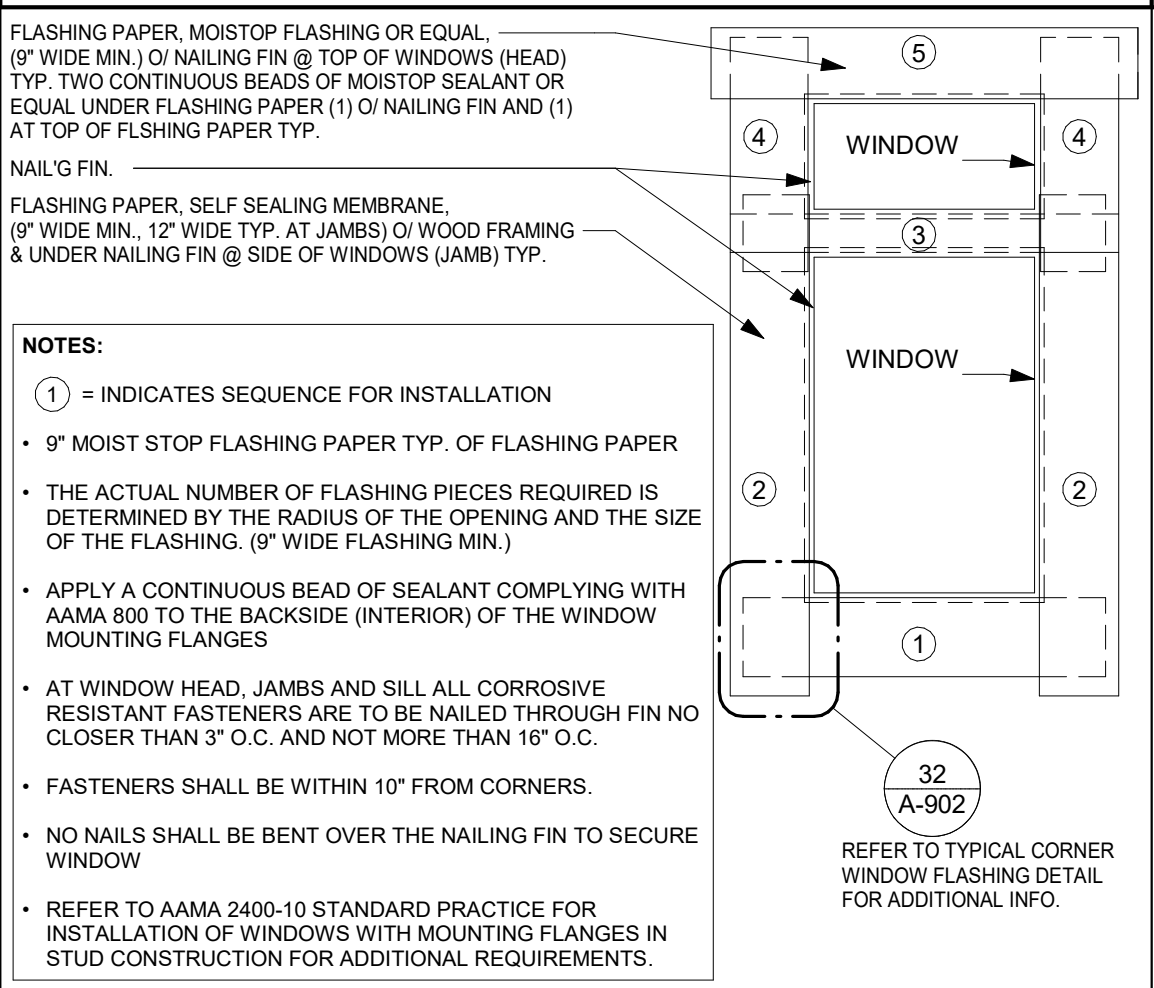
53 FLASHING - G.I. VENT  
SCALE: 1" = 1'-0"



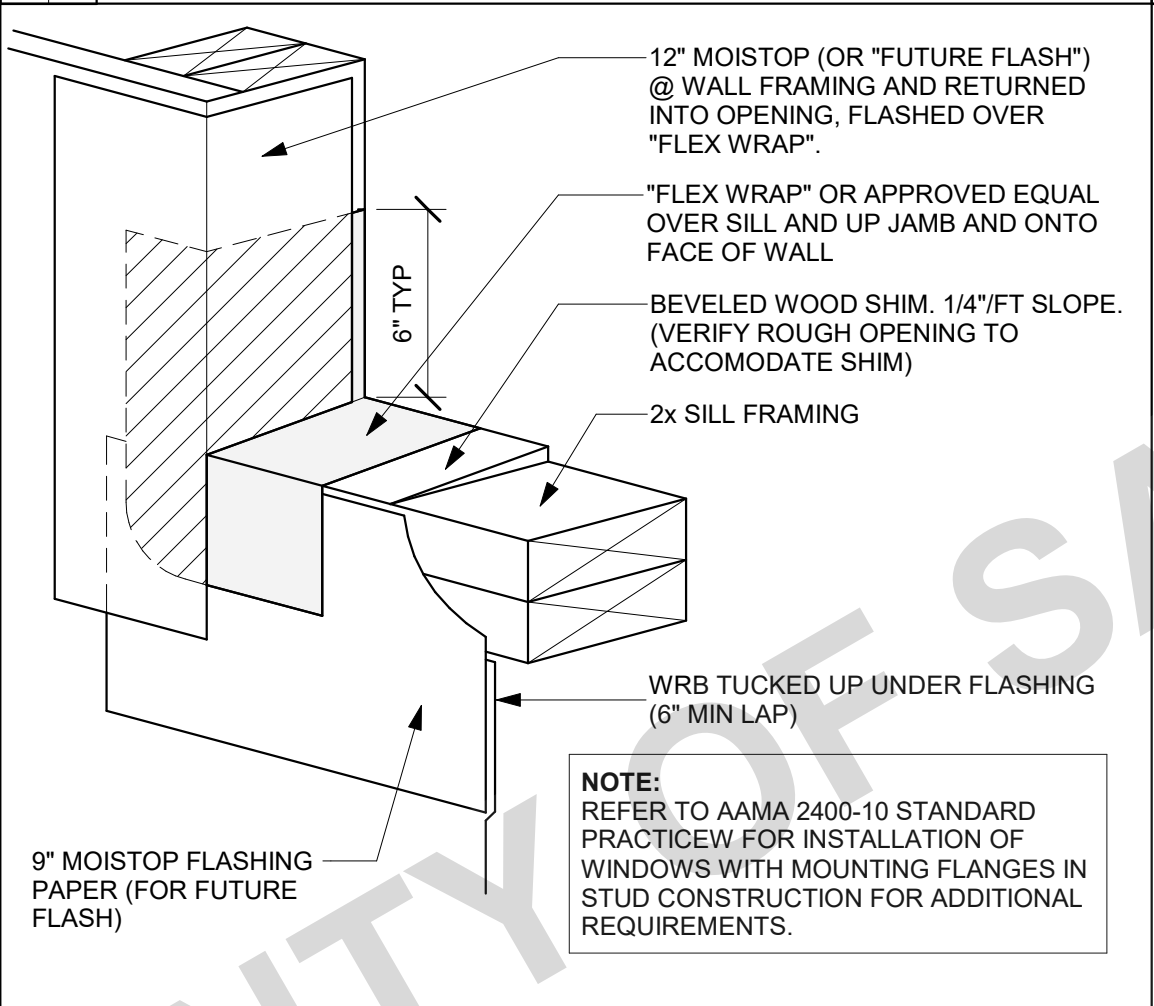
42 FLASHING - PROTRUSIONS  
SCALE: 1 1/2" = 1'-0"



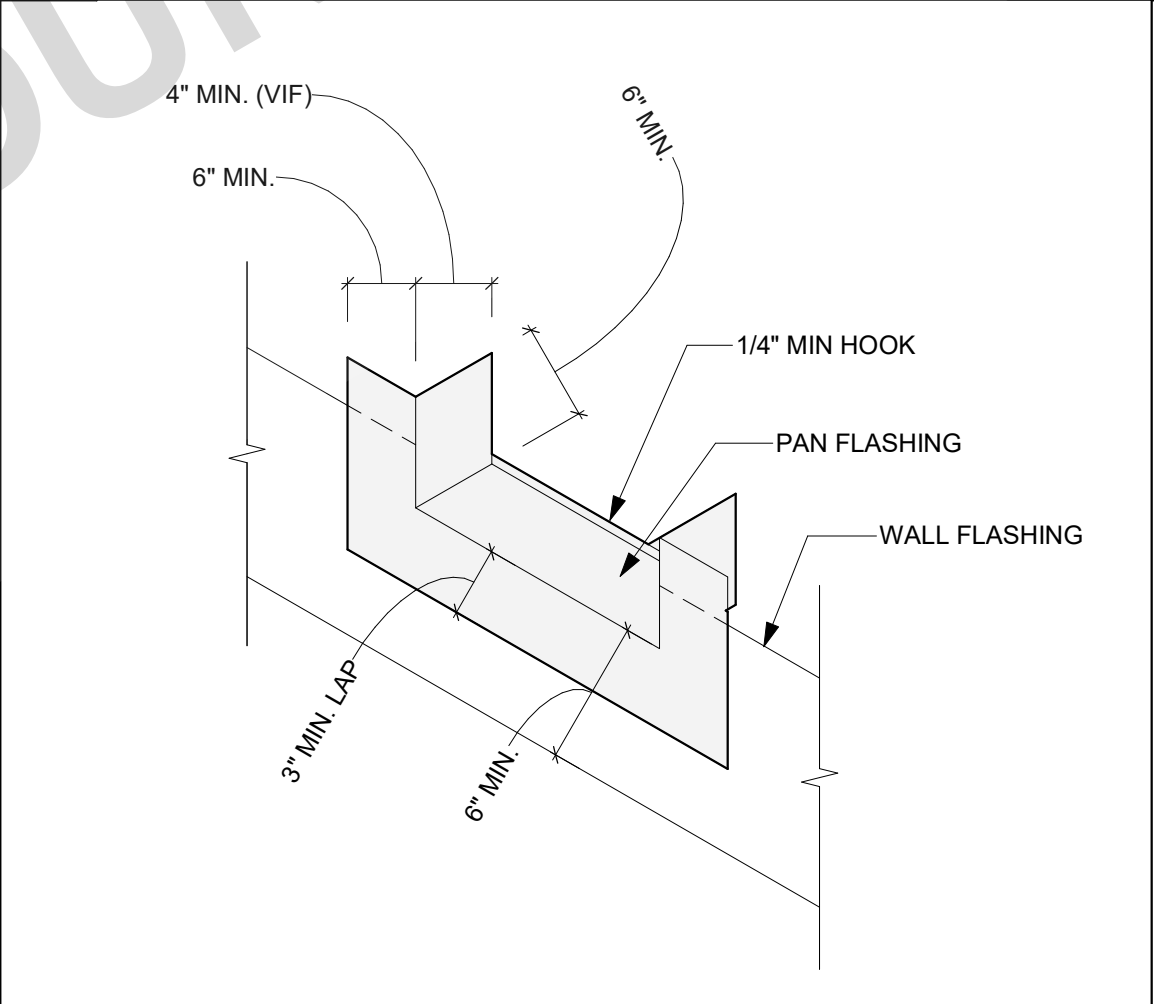
43 FLASHING - DETAILED PROTRUSION  
SCALE: 1 1/2" = 1'-0"



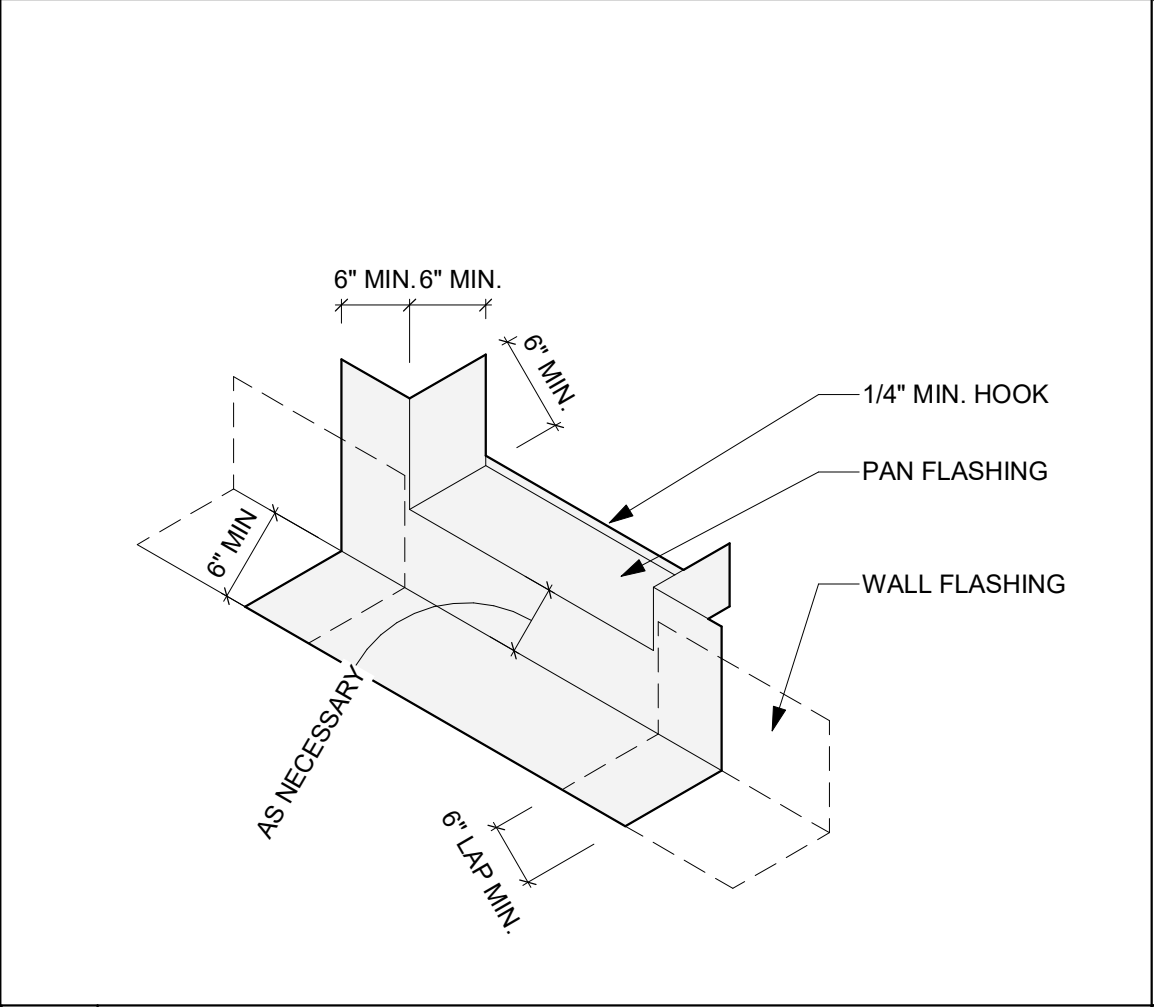
31 FLASHING - WINDOW TYP.  
SCALE: 12" = 1'-0"



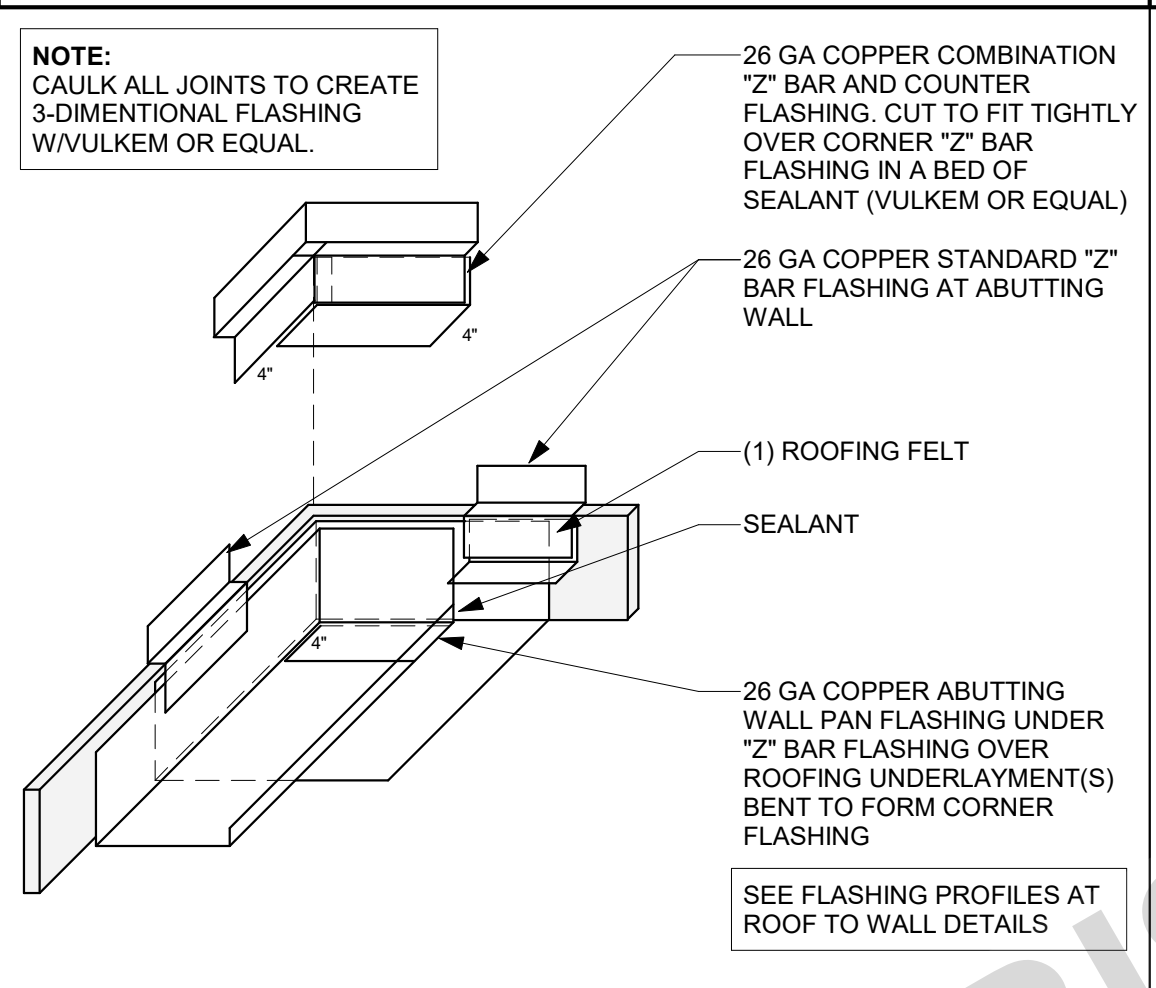
32 FLASHING - WINDOW CORNER TYP.  
SCALE: 12" = 1'-0"



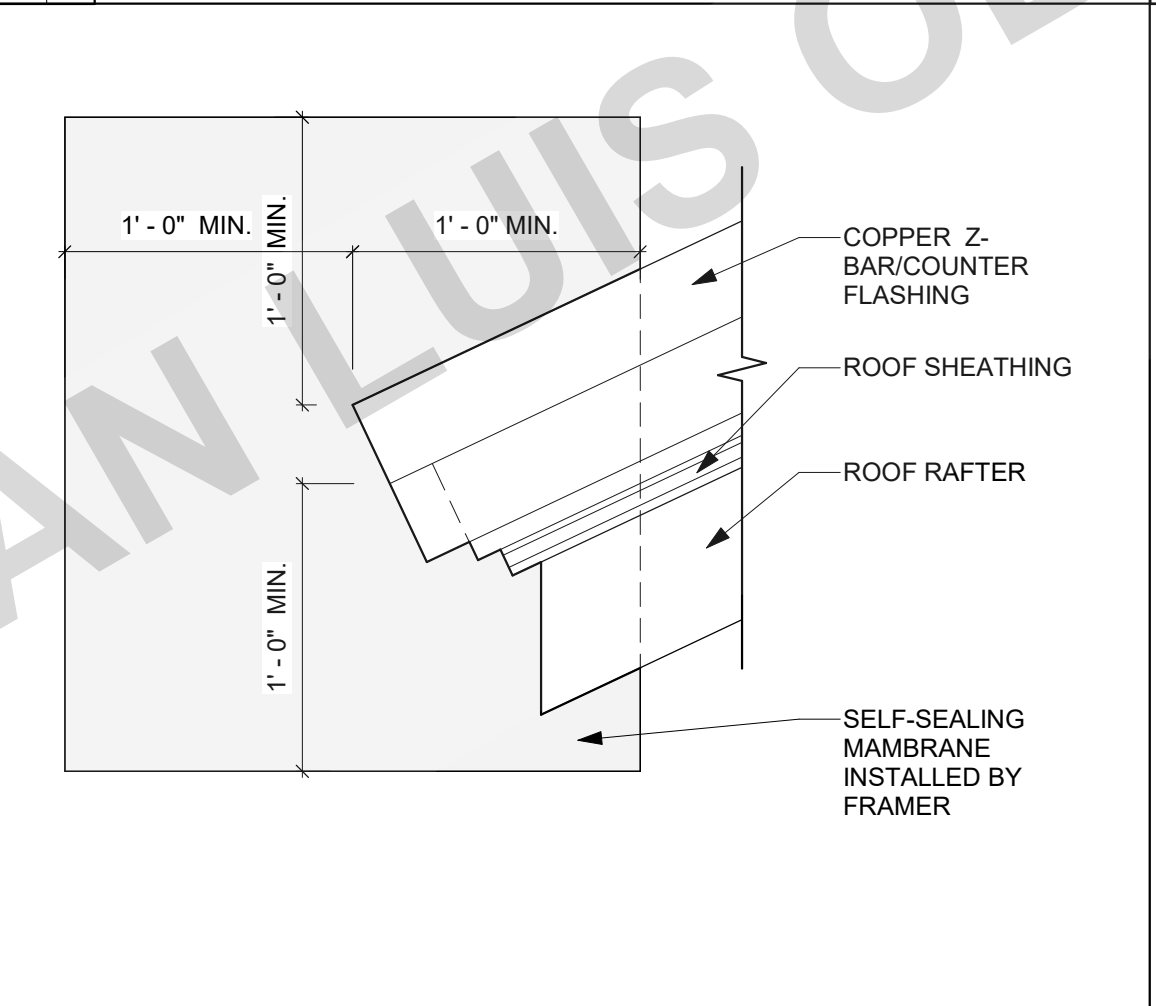
33 FLASHING - DOOR AT GRADE  
SCALE: 3" = 1'-0"



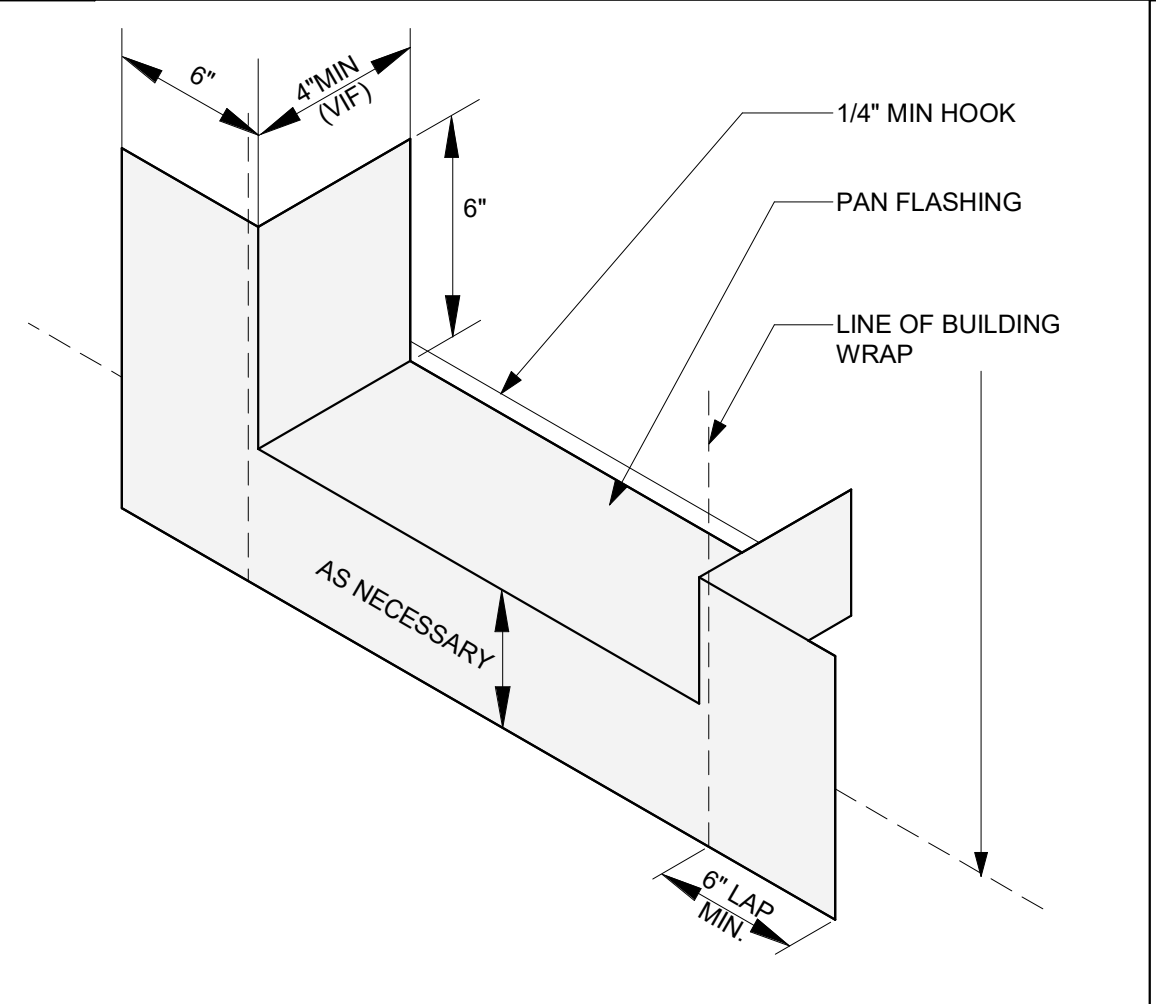
34 FLASHING - DOOR AT W.P. DECK2 - LOFT  
SCALE: 3" = 1'-0"



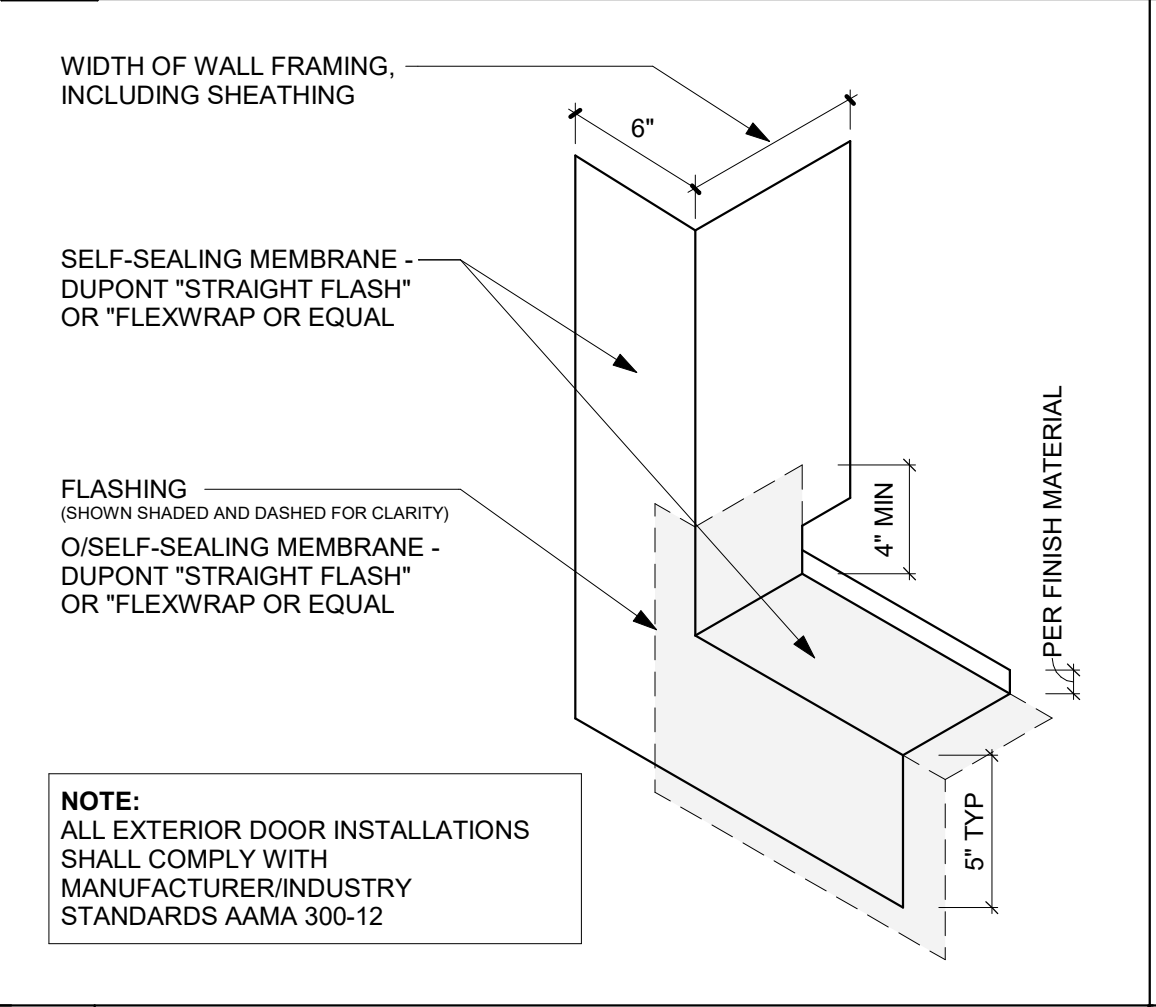
21 ROOF TO WALL TYP. FLASHING 5  
SCALE: 3" = 1'-0"



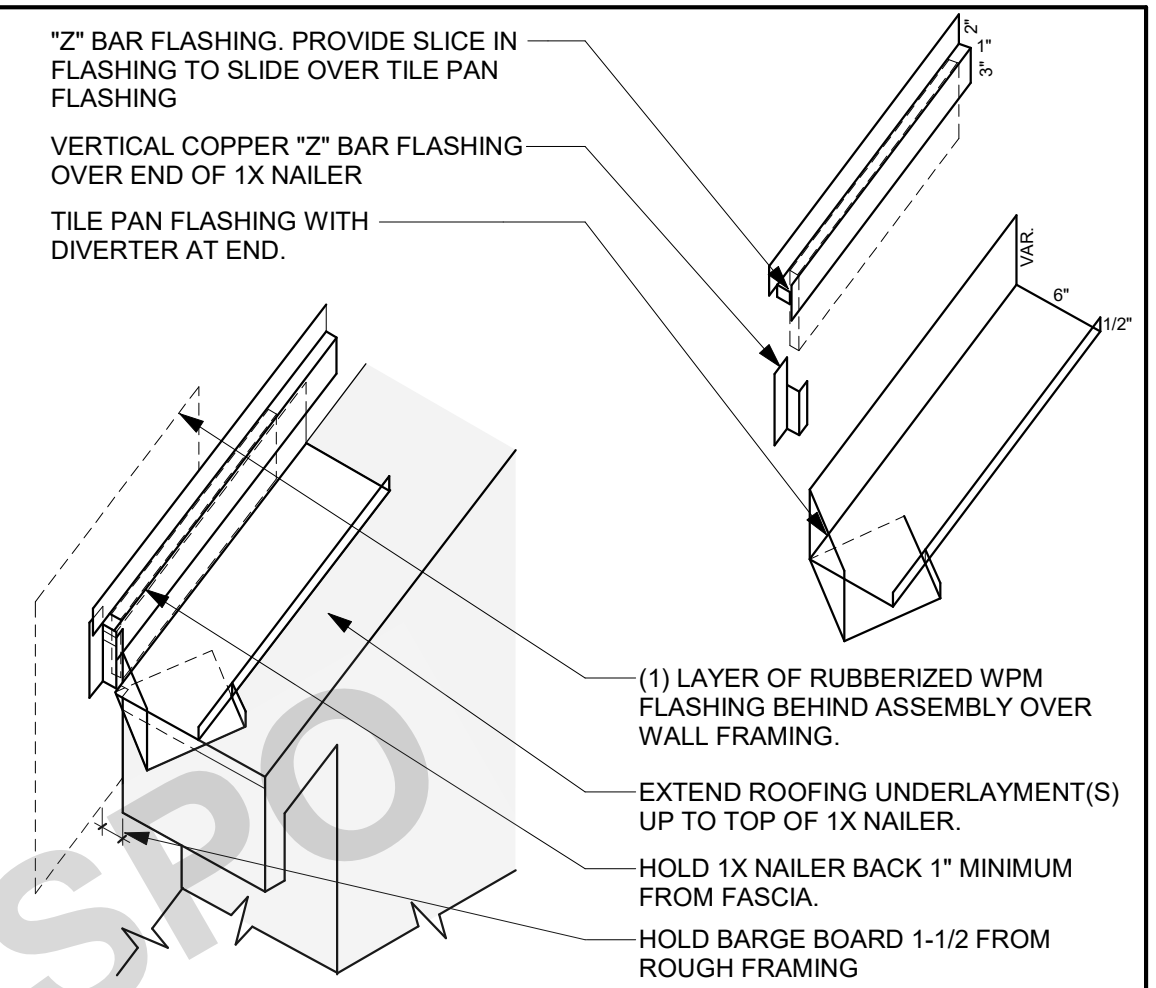
22 FLASHING - FASCIA TO WALL TYP.  
SCALE: 1 1/2" = 1'-0"



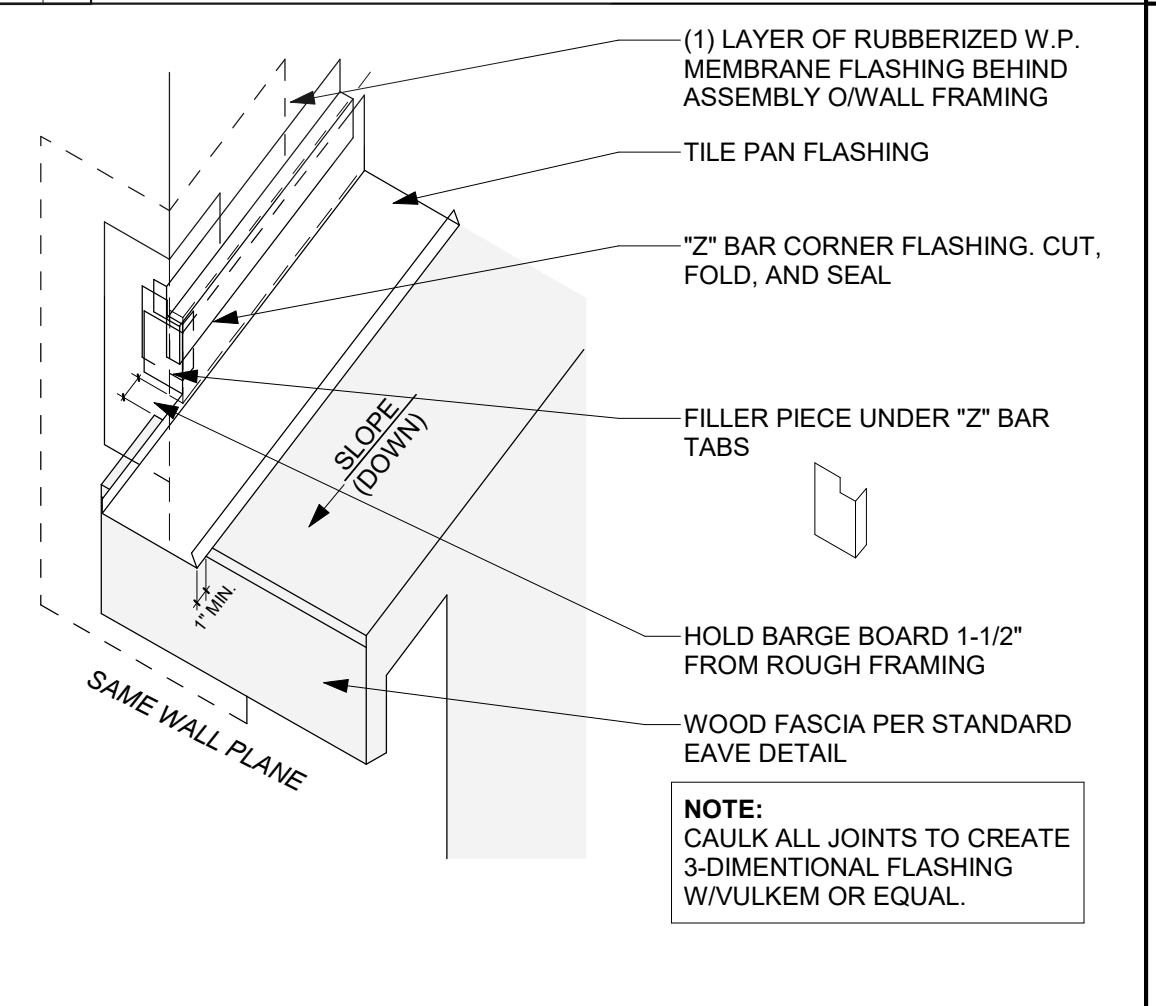
23 FLASHING PAN @ DOOR THRESHOLD  
SCALE: 3" = 1'-0"



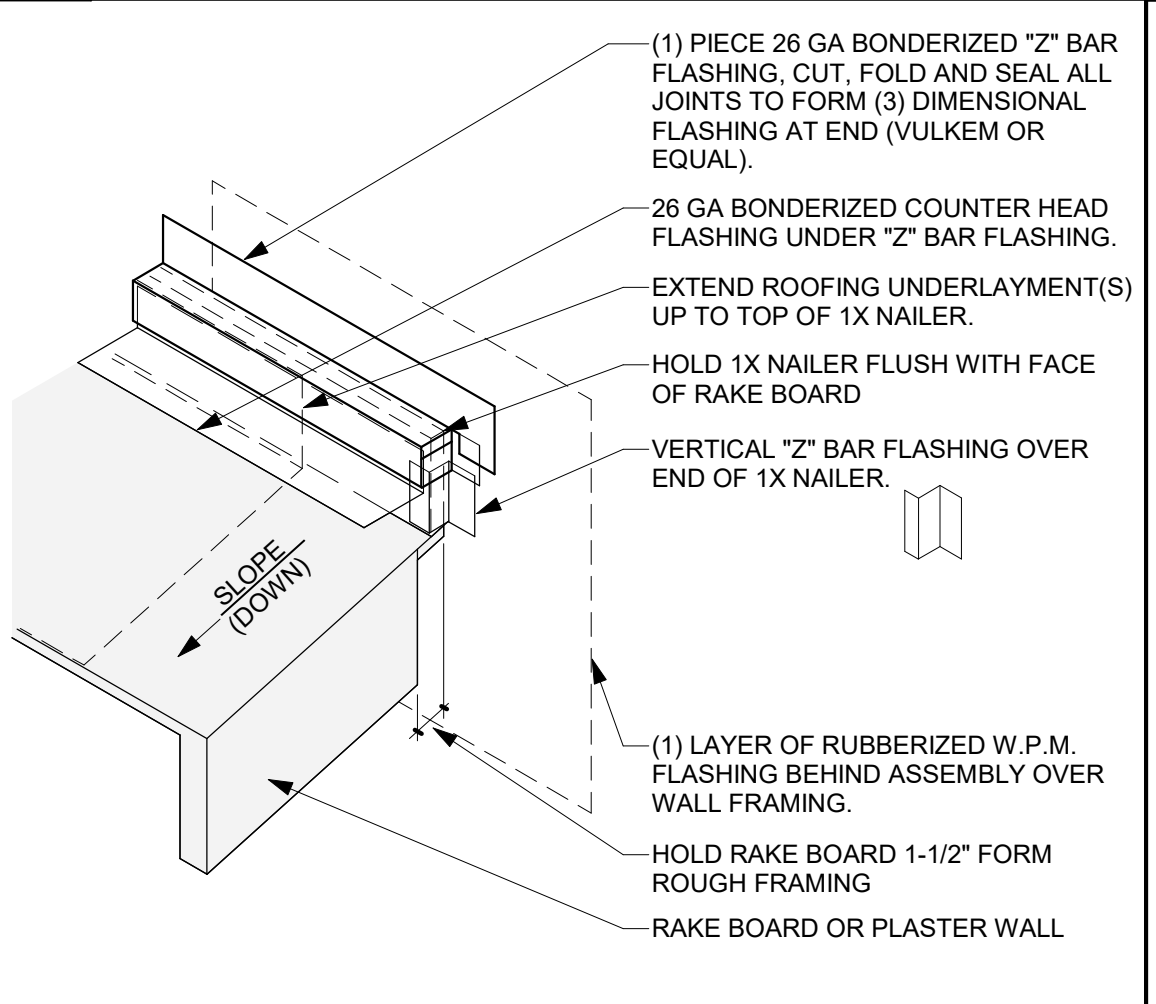
24 FLASHING - JAMB TO SILL TYP.  
SCALE: 3" = 1'-0"



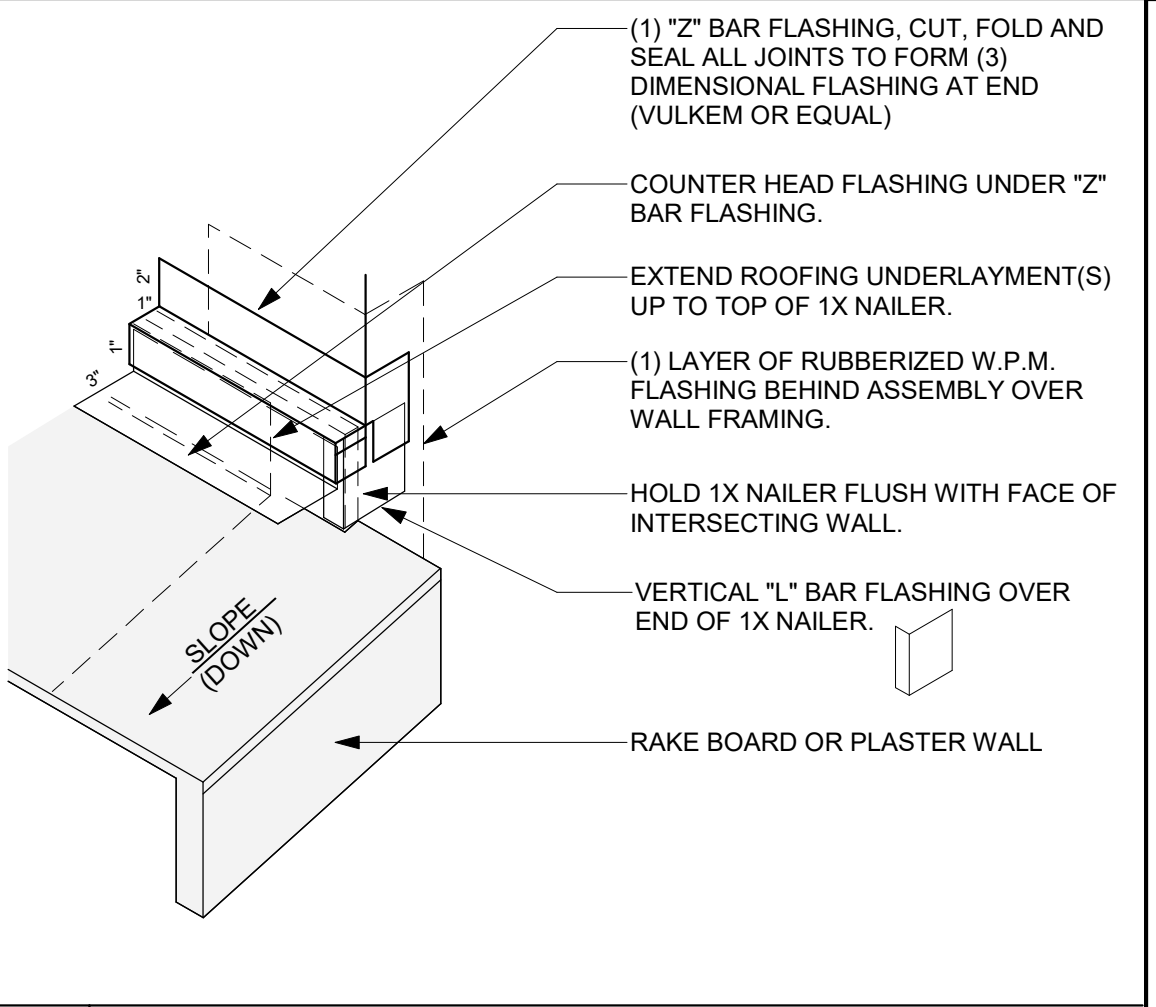
11 ROOF TO WALL TYP. FLASHING 1  
SCALE: 6" = 1'-0"



12 ROOF TO WALL TYP. FLASHING 2  
SCALE: 3" = 1'-0"



13 ROOF TO WALL TYP. FLASHING 3  
SCALE: 3" = 1'-0"



14 ROOF TO WALL TYP. FLASHING  
SCALE: 3" = 1'-0"



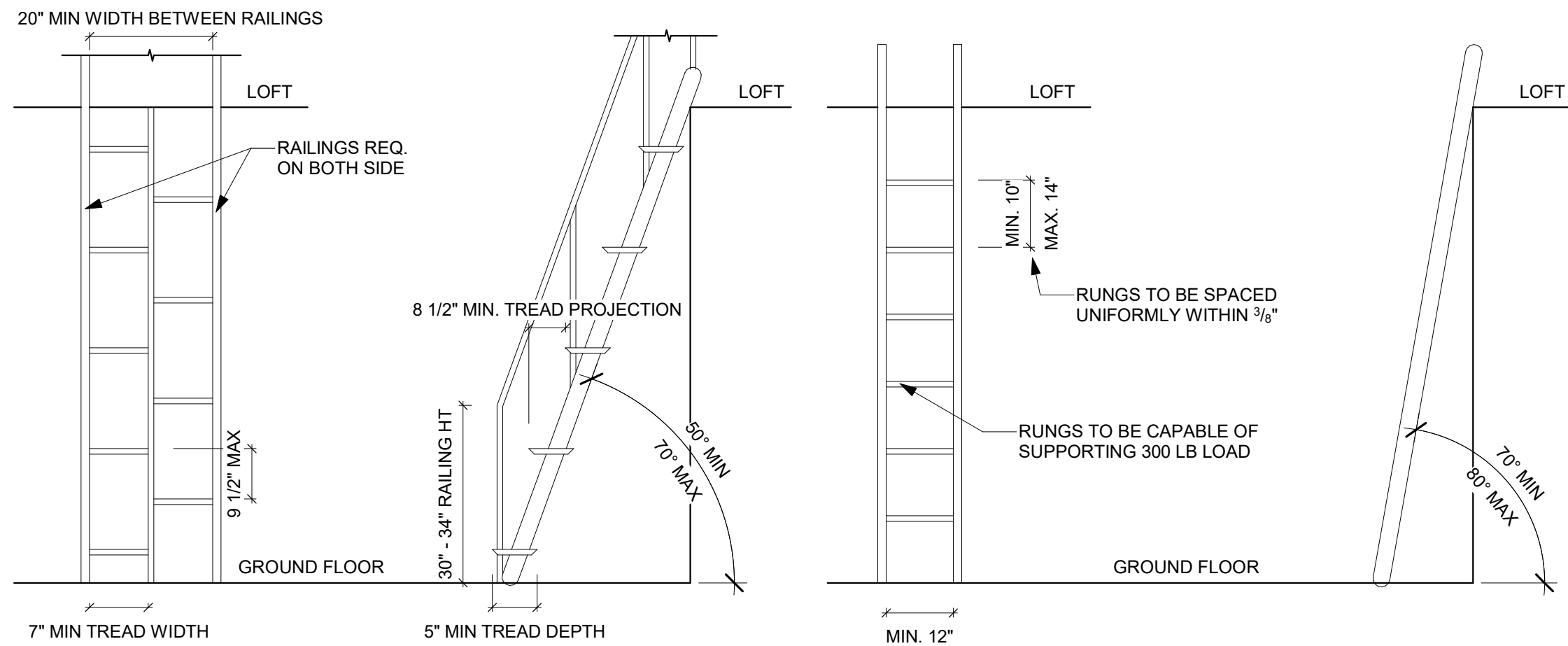
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COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

ARCHITECTURAL DETAILS - LOFT

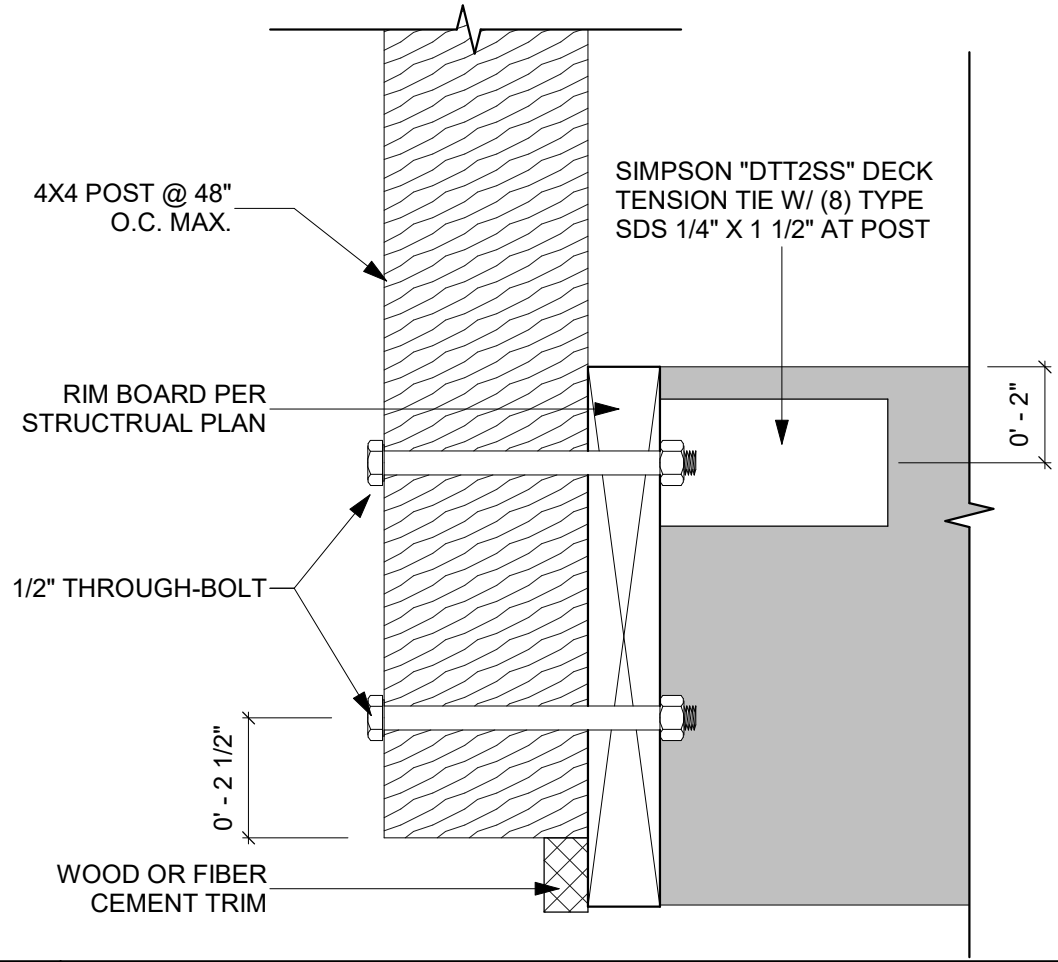
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SHEET  
A-905





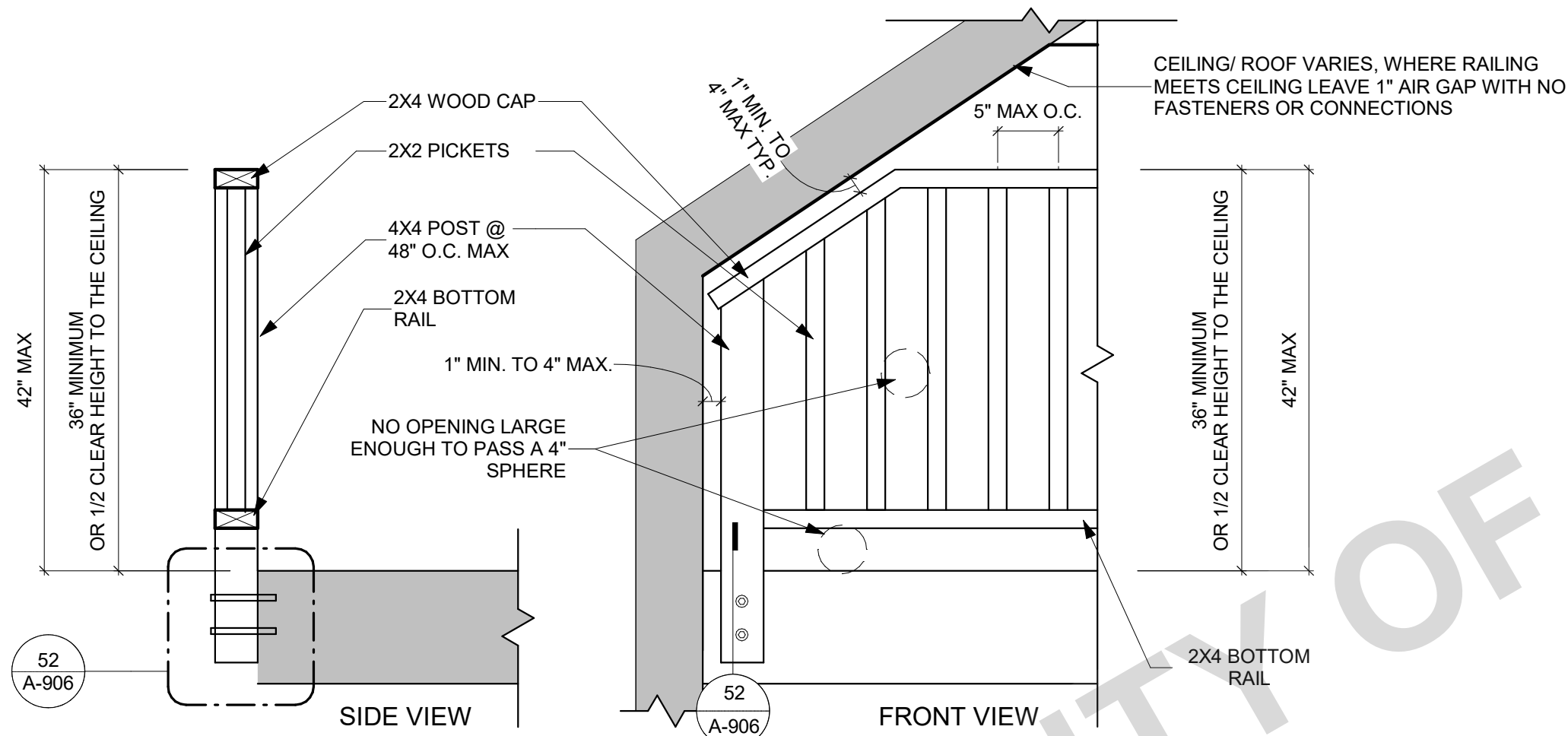
**41 LOFT ACCESS LADDER**

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



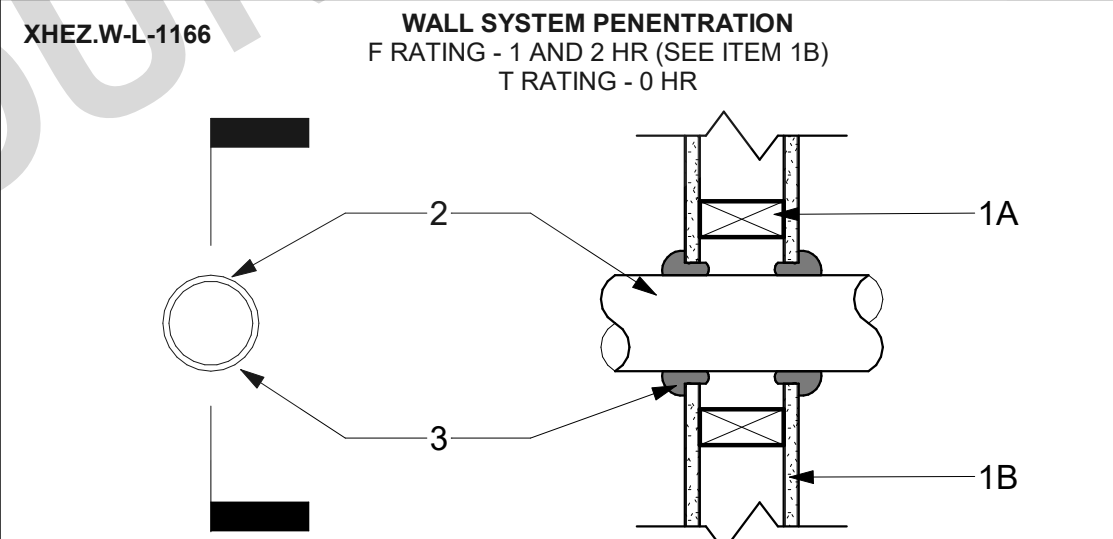
**52 INT. RAILING CONNECTION DETAIL**

SCALE: 3" = 1'-0"



**42 LOFT GUARDS**

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



**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 ANNULAR SPACE BETWEEN THE PIPE, CONDUIT OR TUBING AND 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.

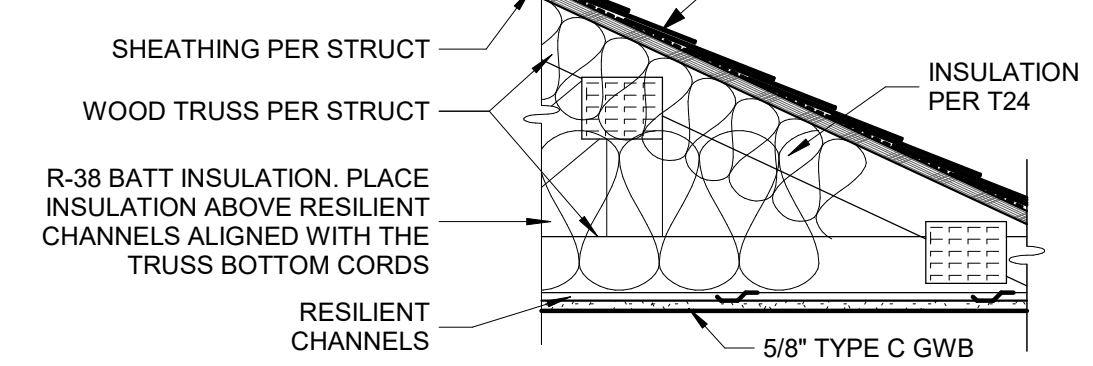
**3. FILL, VOID OR CAVITY MATERIALS (BEARING THE UL CLASSIFICATION MARKING) -**  
CAULK OR PUTTY-MIN. 1/2 IN. DIAMETER BEAD CAULK OR PUTTY APPLIED CONTINUOUSLY AROUND THE PENETRANT ON THE WALL SURFACES ON BOTH SIDES OF THE WALL.

3M COMPANY - CP 25WB+ CAULK OR MPS-2+ PUTTY

**34 THROUGH PENETRATION @ WALL - LOFT**

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

**GA FILE NO. RC 2606**  
**1-HOUR FIRE RATED**

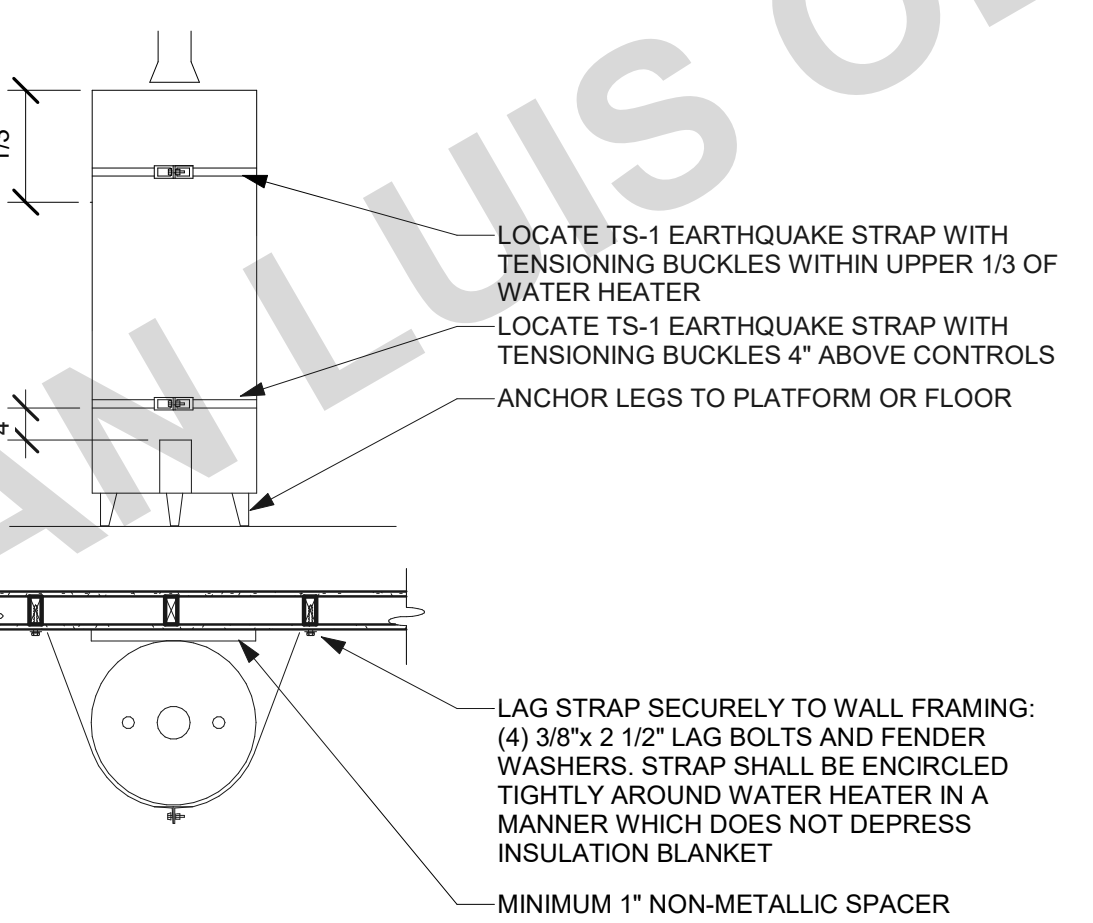


ONE LAYER 5/8" PROPRIETARY TYPE X GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED AT RIGHT ANGLES TO RESILIENT FURRING CHANNELS 16" O.C. (12" O.C. WHEN INSULATION IS DRAPED OVER CHANNELS) WITH 1" TYPE S DRYWALL SCREWS 12" O.C. GYPSUM BOARD END JOINTS ATTACHED WITH SCREWS 8" O.C. TO ADDITIONAL PIECES OF 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 11/4" 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

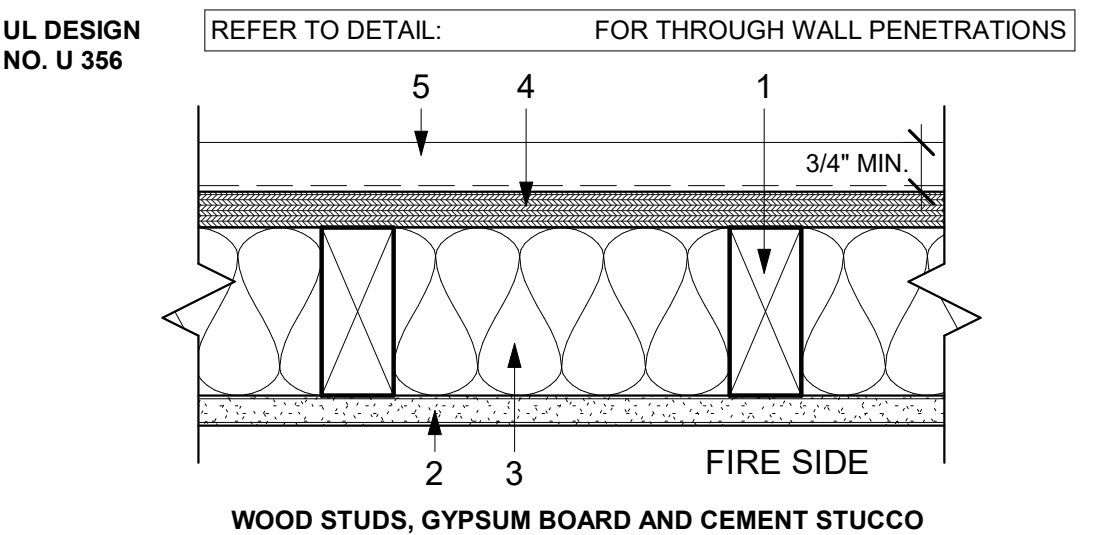
**21 ROOF ASSEMBLY (1-HOUR) - LOFT**

SCALE: 1" = 1'-0"



**22 WATER HEATER MOUNTING - LOFT**

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



**1. WOOD STUDS**  
NOMINAL 2X4 SPACED 16" O.C. WITH (2) 2X4 TOP PLATES (1) 2X4 BOTTOM PLATE. STUDS LATERALLY-BRACED BY WOOD STRUCTURAL PANEL SHEATHING (ITEM 5) AND EFFECCECTIVELY FIRE STOPPED AT TOP AND BOTTOM OF WALL.

**2. GYPSUM BOARD**  
ANY CLASSIFIED 5/8" THICK, 48" WIDE, APPLIED VERTICALLY AND NAILED TO STUDS AND BEARING PLATES 7" O.C. WITH 6D CEMENT-COATED NAILS, 1 7/8" LONG WITH 1/4" DIAM. HEAD.

JOINTS AND NAILHEADS (NOT SHOWN) - WALLBOARD JOINTS COVERED WITH TAPE AND JOINT COMPOUND. NAIL HEADS COVERED WITH JOINT COMPOUND.

**3. BATTS AND BLANKETS**  
MINERAL FIBER OR GLASS INSULATION, 3 1/2" THICK. PRESSURE FIT TO FILL WALL CAVITIES BETWEEN STUDS AND PLATES. MINERAL FIBER INSULATION TO BE UNFACED AND TO HAVE A MIN. DENSITY OF 3 PCF. GLASS FIBER INSULATION TO BE FACED WITH ALUMIUM FOIL OR FRAFT PAPER AND TO HAVE A MIN. DENSITY OF 0.9 PCF (MIN. R-13 THERMAL INSULATION RATING). FIBER SPRAYED - AS AN ALTERNATE TO BATTS AND BLANKETS (ITEM 4) - SPRAY APPLIED CELLULOSE INSULATION MATERIAL. THE FIBER IS APPLIED WITH WATER TO COMPLETELY FILL THE ENCLOSED CAVITY IN ACCORDANCE WITH THE APPLICATION INSTRUCTIONS SUPPLIED WITH THE PRODUCT. NOMINAL DRY DENSITY OF 3.0 LB/CU.FT.

**4. WOOD STRUCTURAL PANEL SHEATHING**  
MIN 7/16" THICK, 4 FT. WIDE WOOD STRUCTURAL PANELS, MIN. GRADE "C-D" OR "SHEATHING". INSTALLED WITH LONG DIMENSION OF SHEET (STRENGTH AXIS) OR FACE GRAIN OF PLYWOOD PARALLEL WITH OR PERPENDICULAR TO STUDS. VERTICAL JOINTS CENTERED ON STUDS. HORIZONTAL JOINTS BACKED WITH NOMINAL 2X4 WOOD BLOCKING ATTACHED TO STUDS ON EXTERIOR SIDE OF WALL WITH 6D CEMENT COATED BOX NAILS SPACED 6" O.C. AT PERIMETER OF PANELS AND 12" O.C. ALONG INTERIOR STUDS.

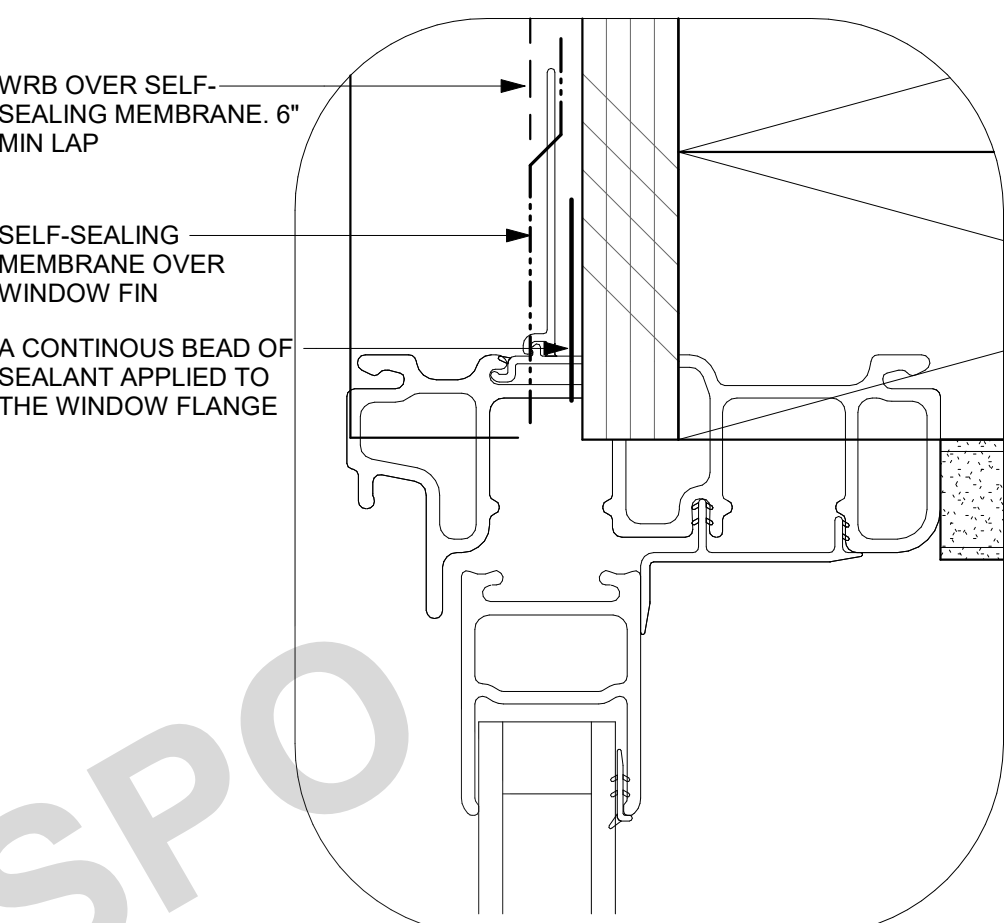
**5. EXTERIOR FACING**  
INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTION. ONE OF THE FOLLOWING EXTERIOR FACINGS IS TO BE APPLIED OVER THE SHEATHING. REFER TO PLAN FOR INFOEMATION:

- D.** CEMENTITIOUS STUCCO - PORTLAND CEMENT OR SYNTHETIC STUCCO SYSTEM WITH SELF-FURRING METAL LATH OR ADHESIVE-BASE COAT. THICKNESS FROM 3/8" TO 3/4", DEPENDING ON SYSTEM.
- H.** FIBER-CEMENT SIDING - FIBER-CEMENT EXTERIOR SIDING INCLUDING SMOOTH AND PATTERNED PANEL OR LAP SIDING.

**UL DES U306**  
AT INTERIOR WALL USE:  
5/8" SHEETROCK® FIRE CODE CORE PANELS,  
5/8" SHEETROCK® ULTRALIGHT PANELS FIRE CODE X OR  
5/8" FIBEROCK PANELS -  
2 X 4 WOOD STUD 16" OR 24" O.C.

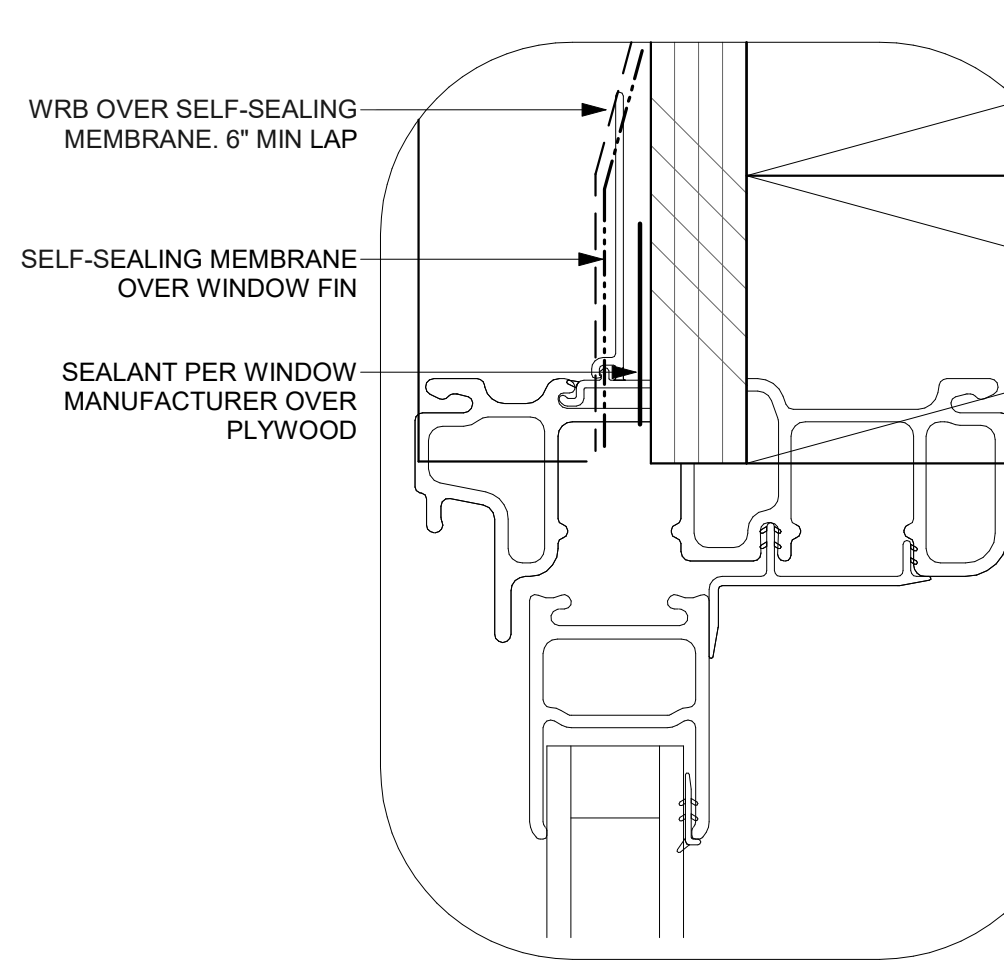
**24 1-HR EXTERIOR RATED WALL ASSEMBLY**

SCALE: 3" = 1'-0"



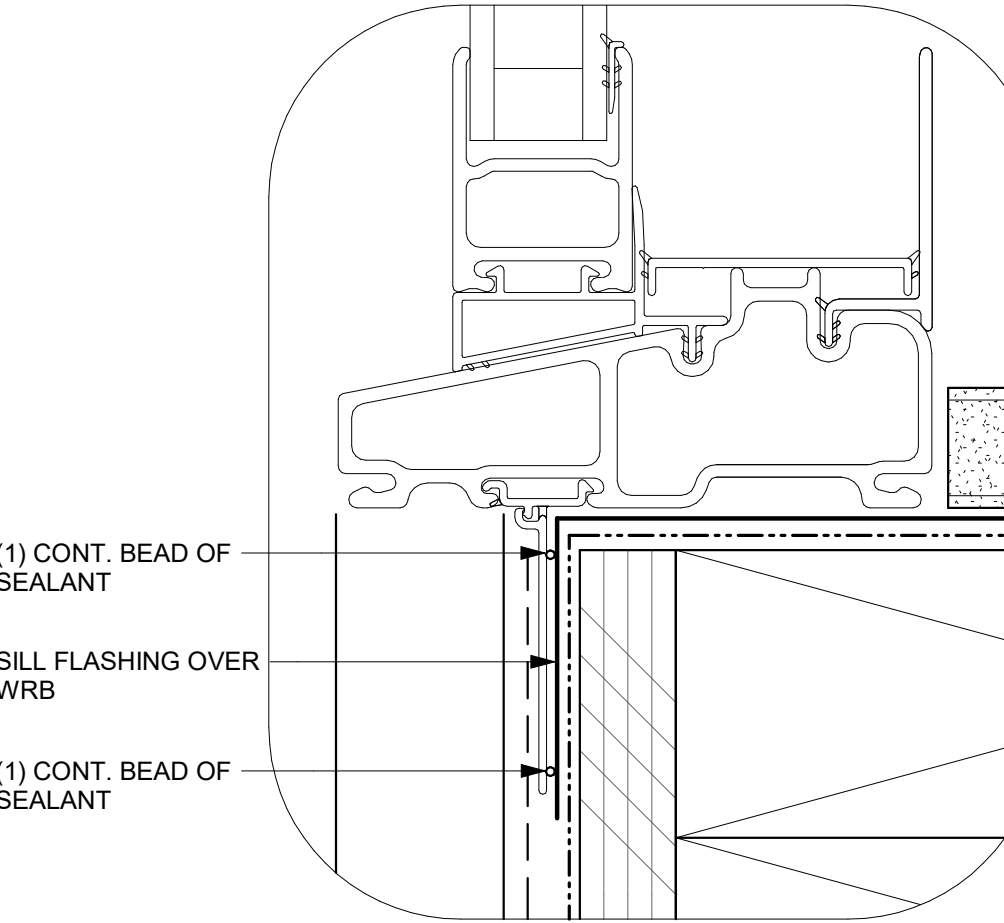
**11 DETAILED HEAD FLASHING**

SCALE: 12" = 1'-0"



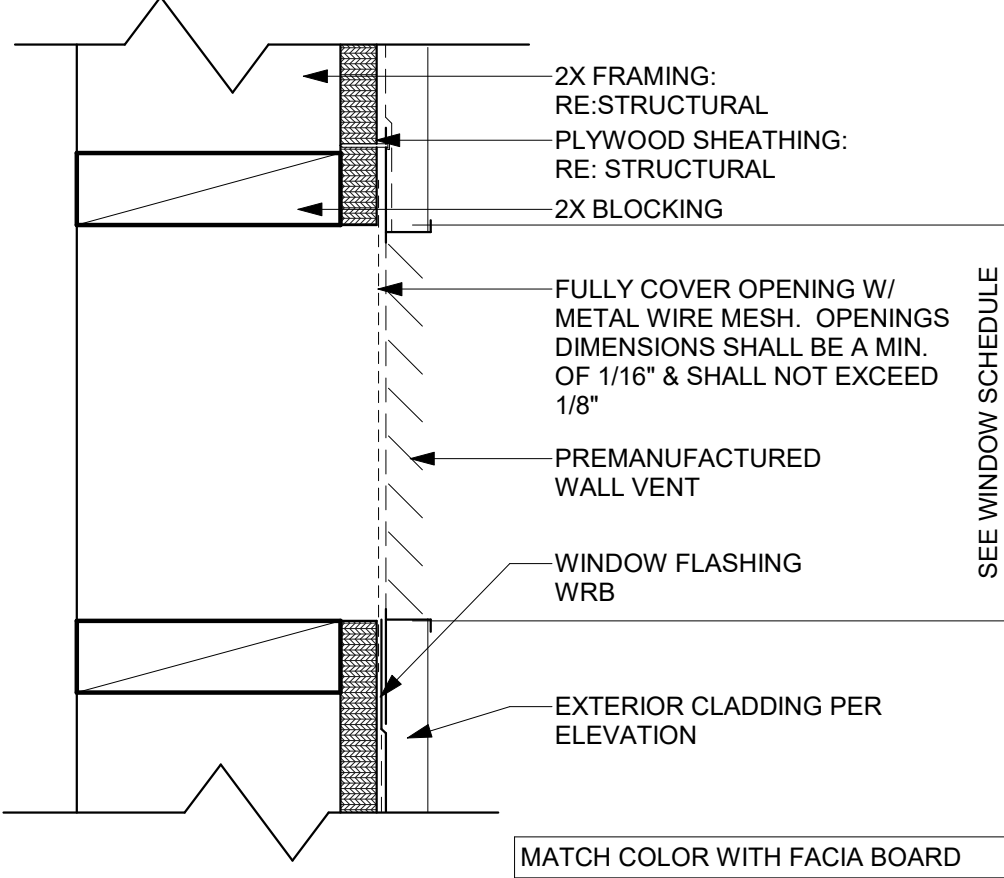
**12 DETAILED JAMB FLASHING**

SCALE: 12" = 1'-0"



**13 DETAILED SILL FLASHING**

SCALE: 12" = 1'-0"



**NOTE: DETAIL PROVIDED FOR ADDITIONAL VENTING WHEN REQUIRED BY SPECIAL CIRCUMSTANCES**

**14 WALL VENT - LOFT**

SCALE: 3" = 1'-0"



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COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

ARCHITECTURAL DETAILS - LOFT

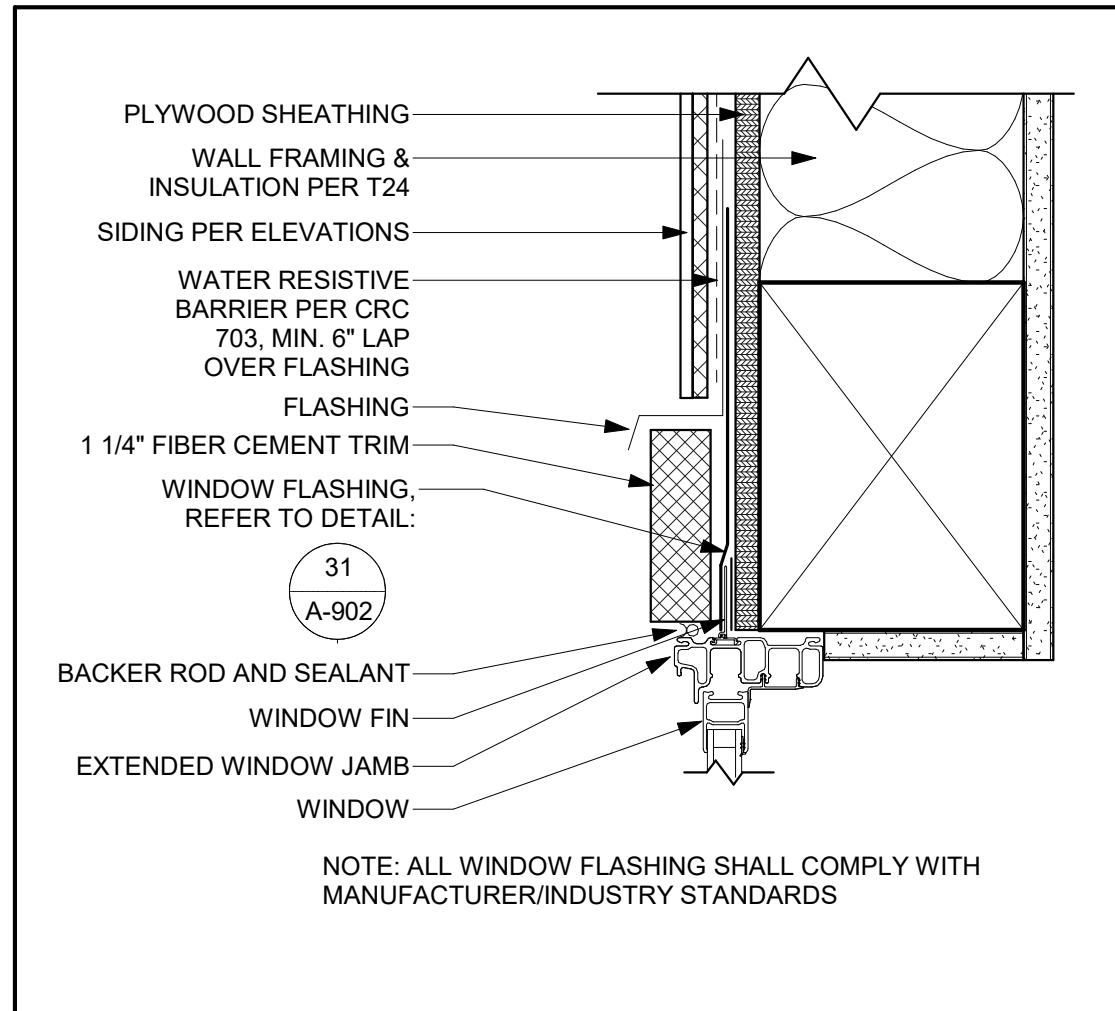
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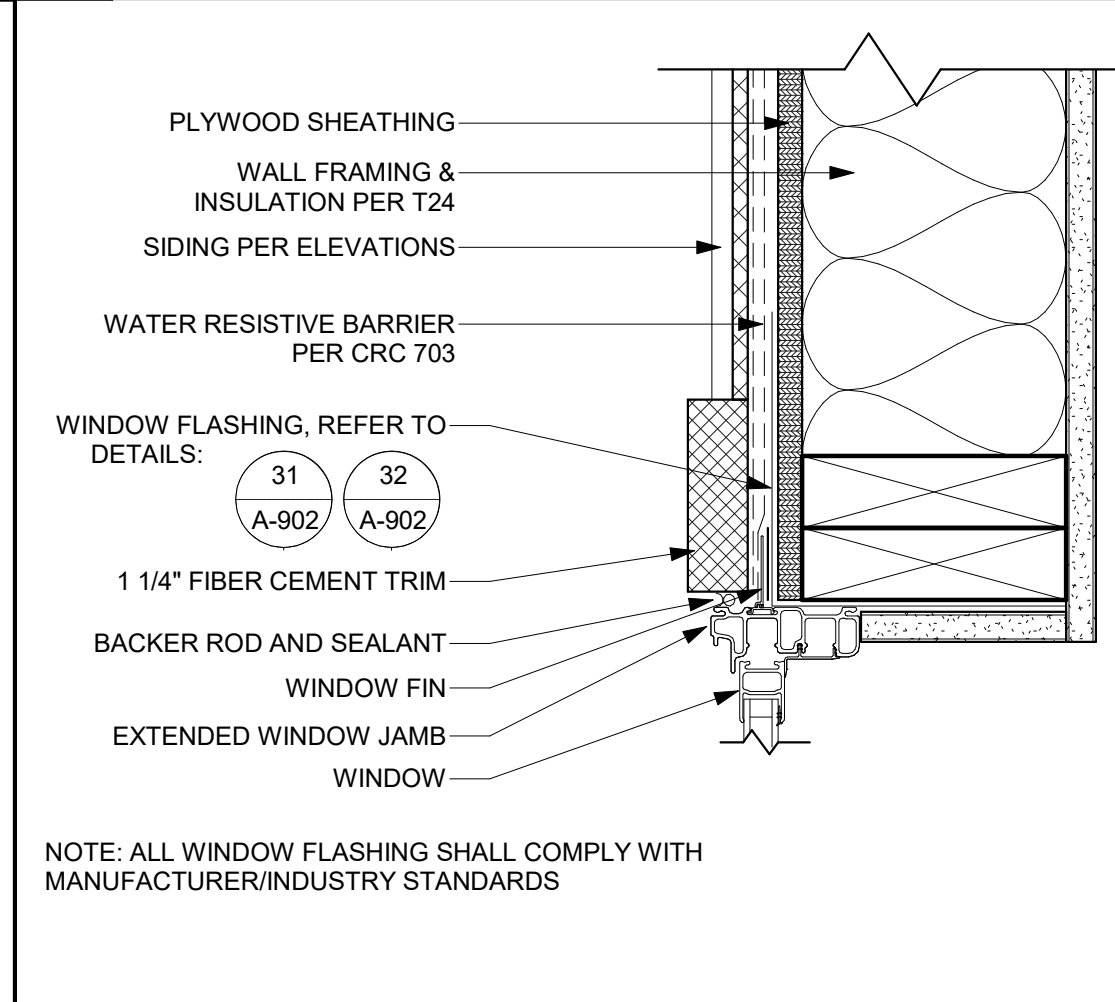


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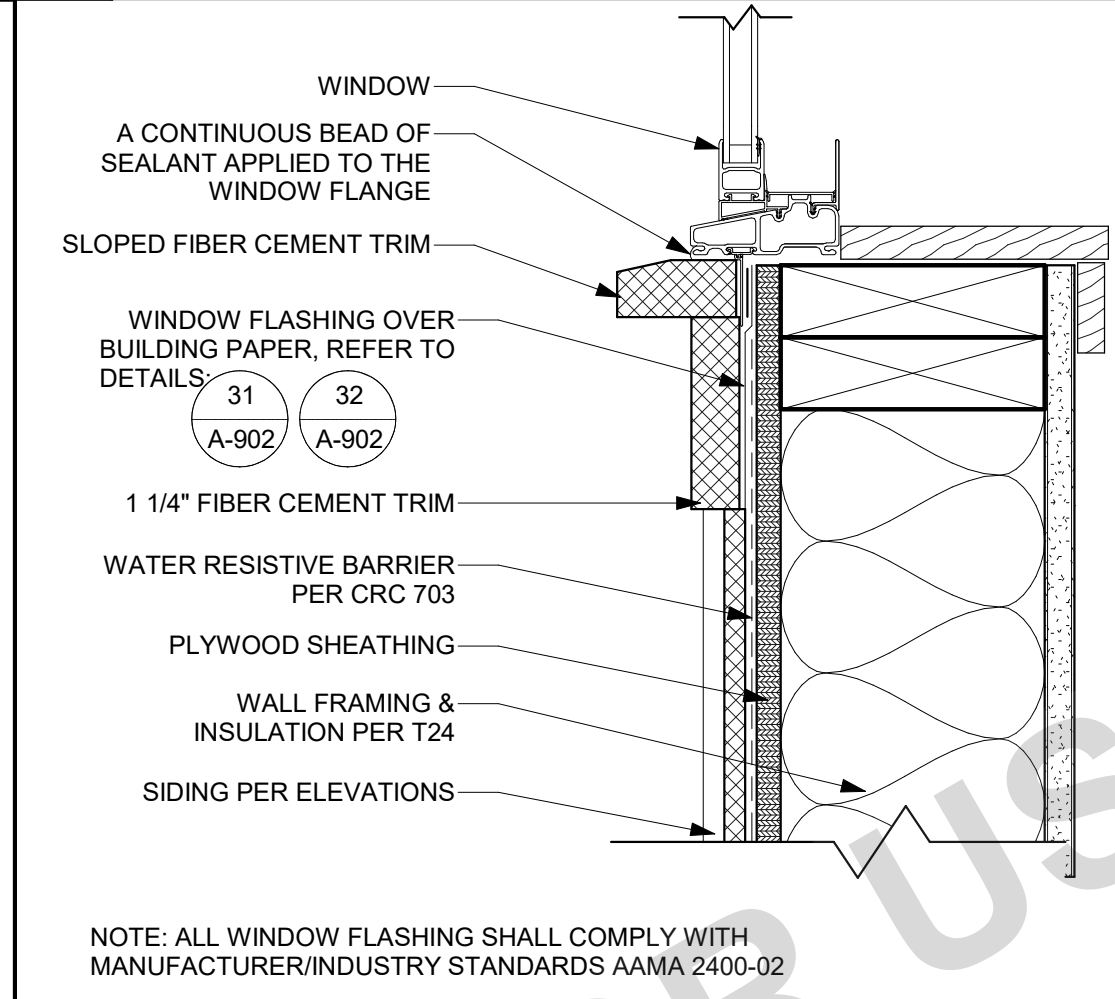
51 TYP. WINDOW HEAD - FARMHOUSE

SCALE: 3" = 1'-0"



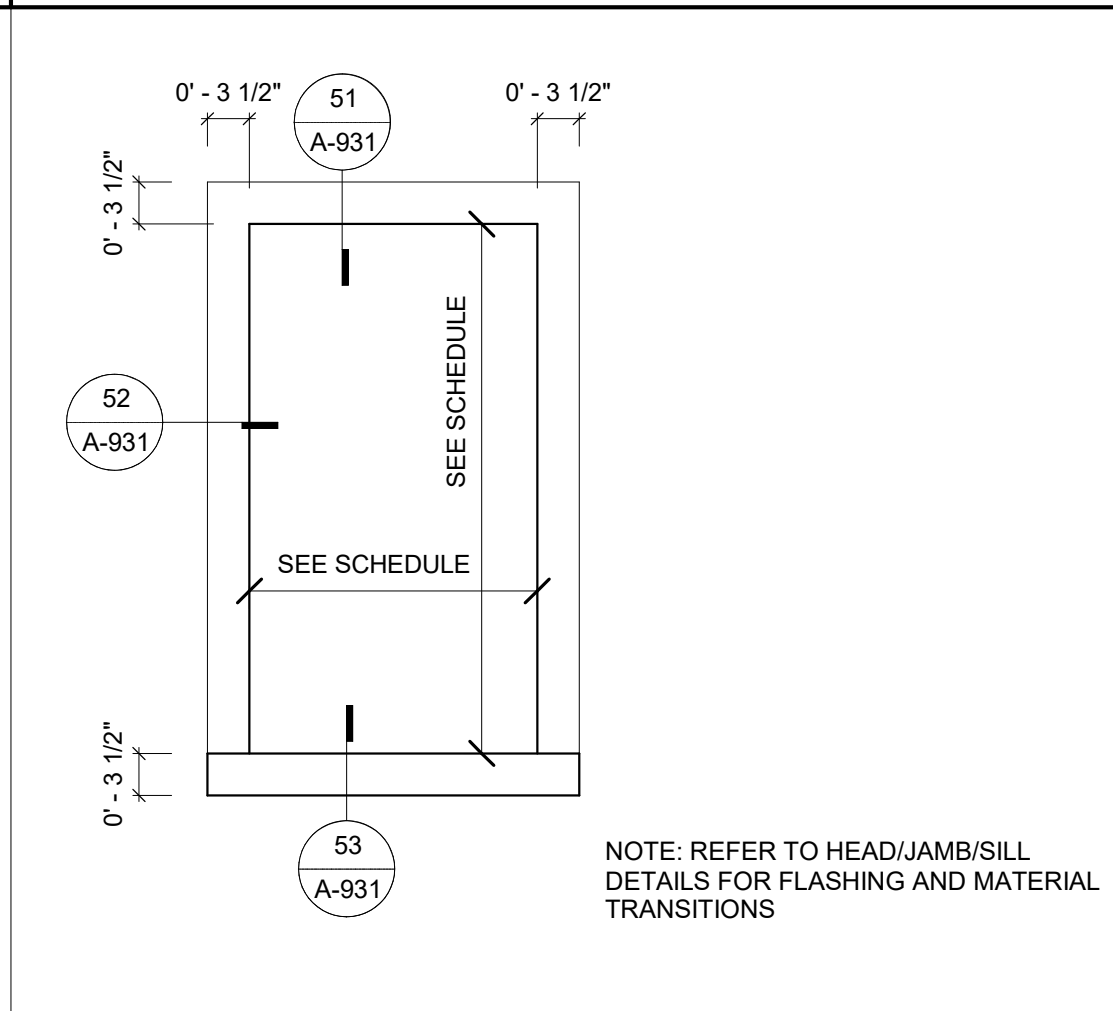
52 TYP. WINDOW JAMB - FARMHOUSE

SCALE: 3" = 1'-0"



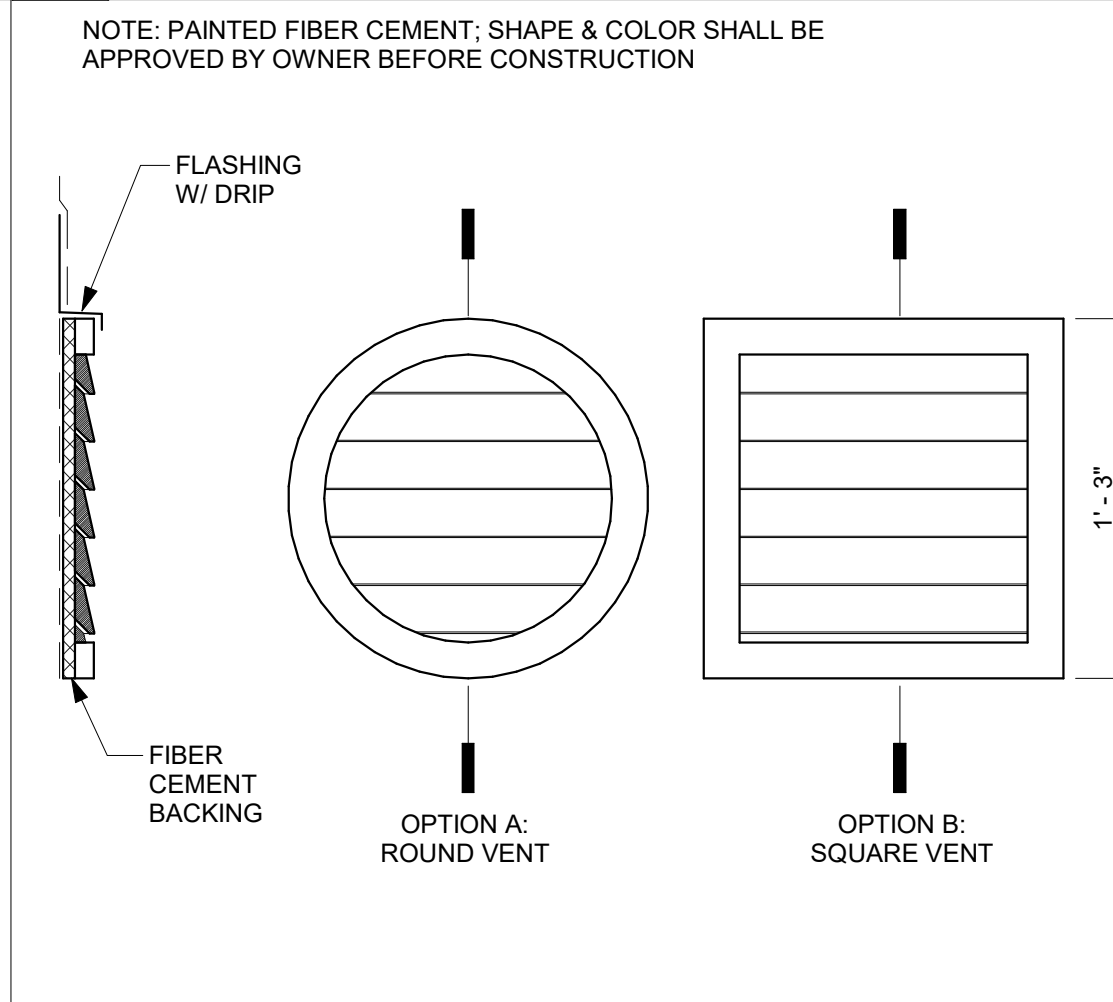
53 TYP. WINDOW SILL - FARMHOUSE

SCALE: 3" = 1'-0"



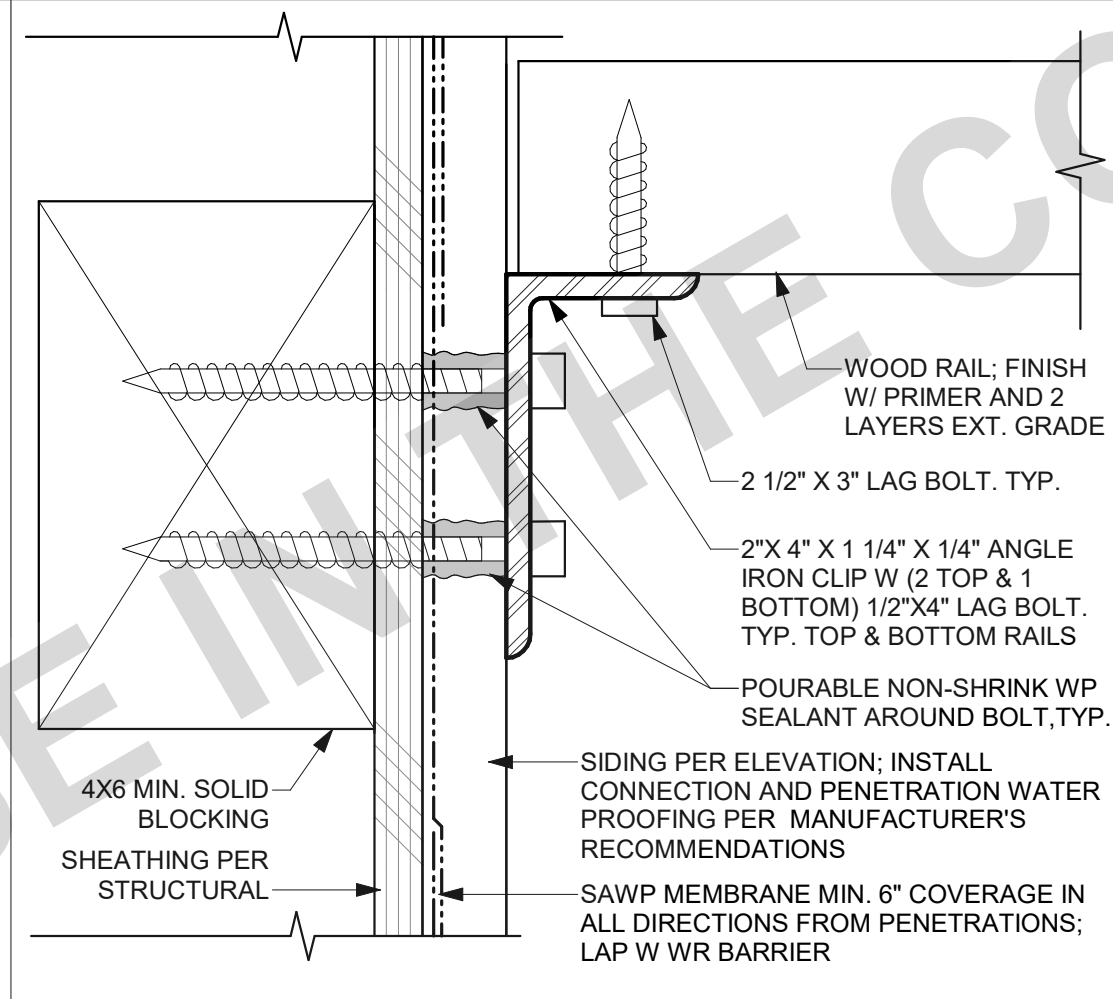
41 WINDOW TRIM - FARMHOUSE

SCALE: 3/4" = 1'-0"



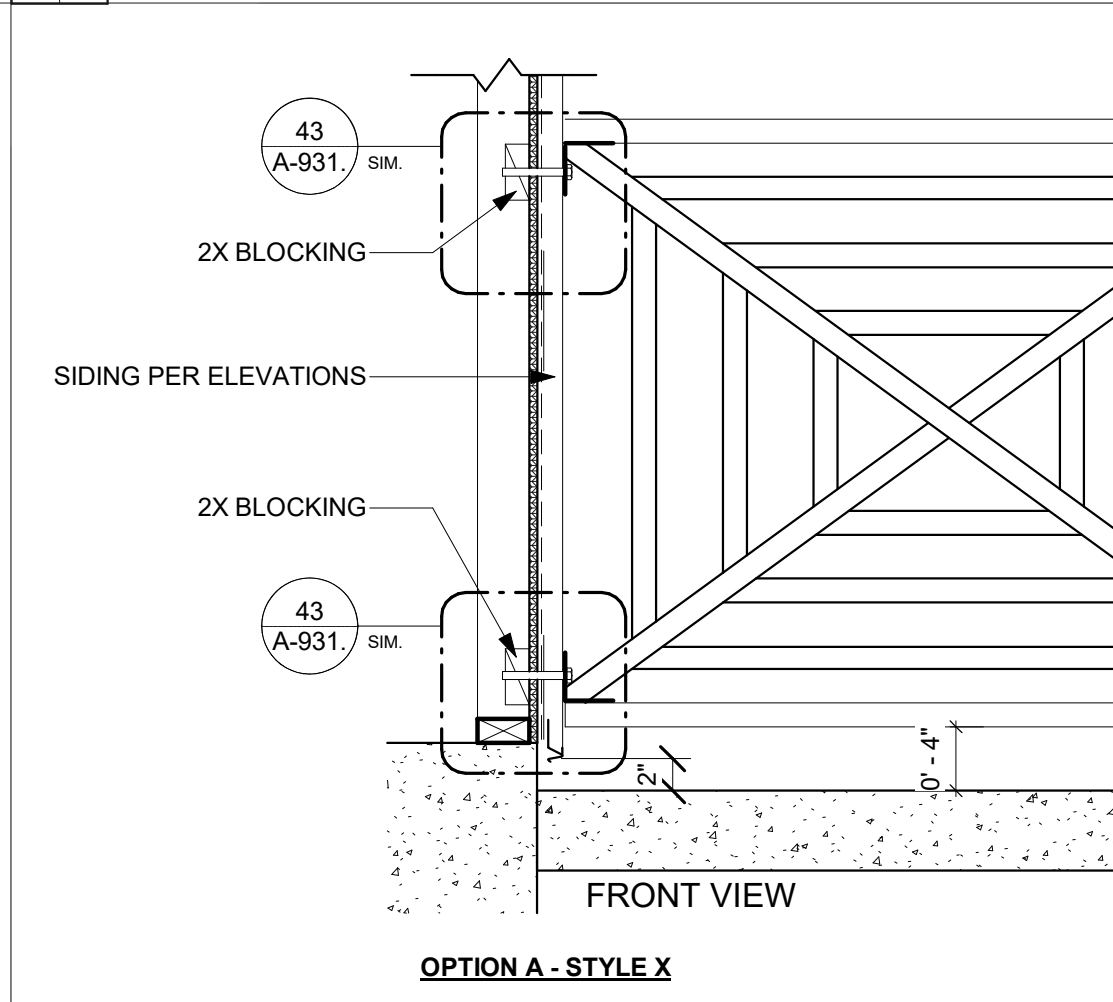
42 DECORATIVE FAUX VENT - LOFT

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



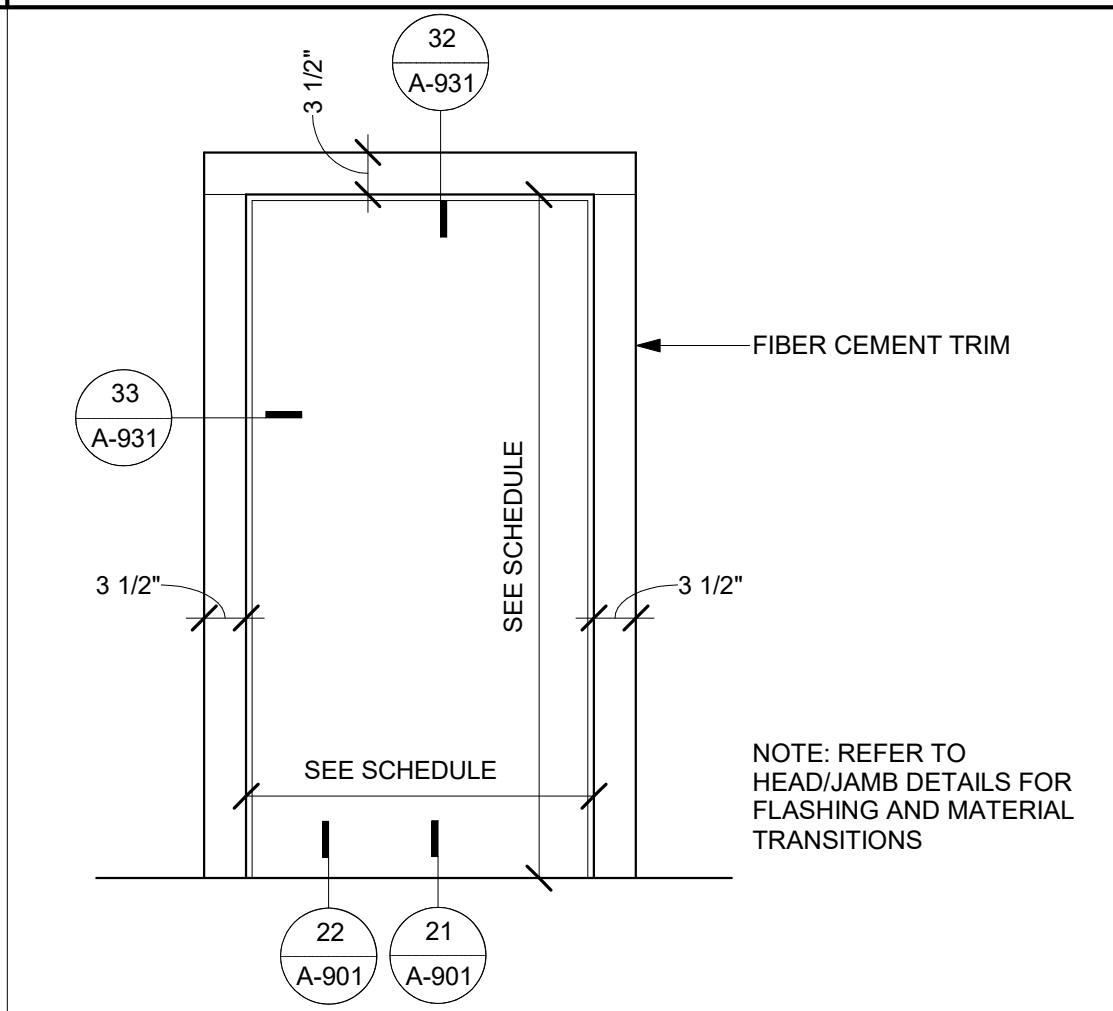
43 EXTERIOR RAILING CONNECTION DETAIL

SCALE: 6" = 1'-0"



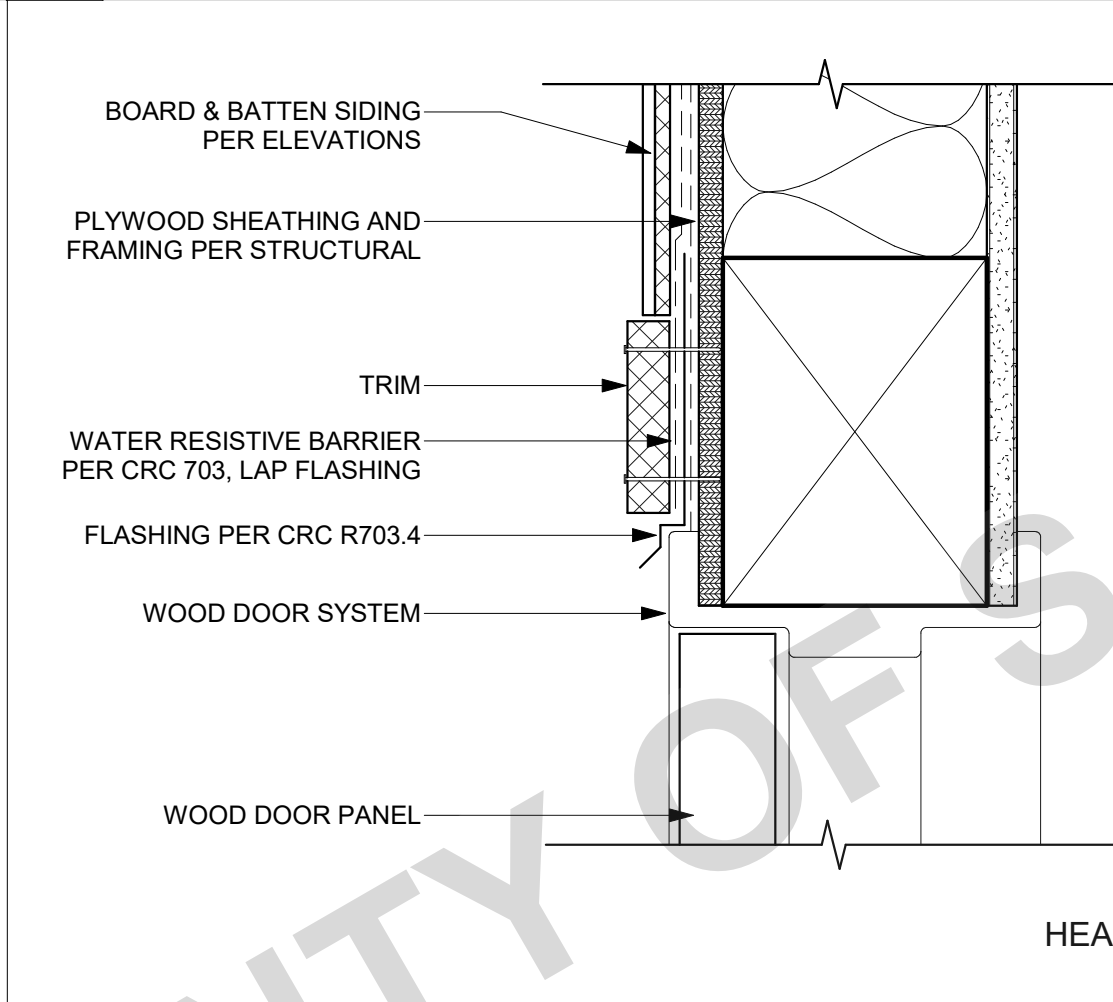
44 DECORATIVE PORCH RAILING

SCALE: 1" = 1'-0"



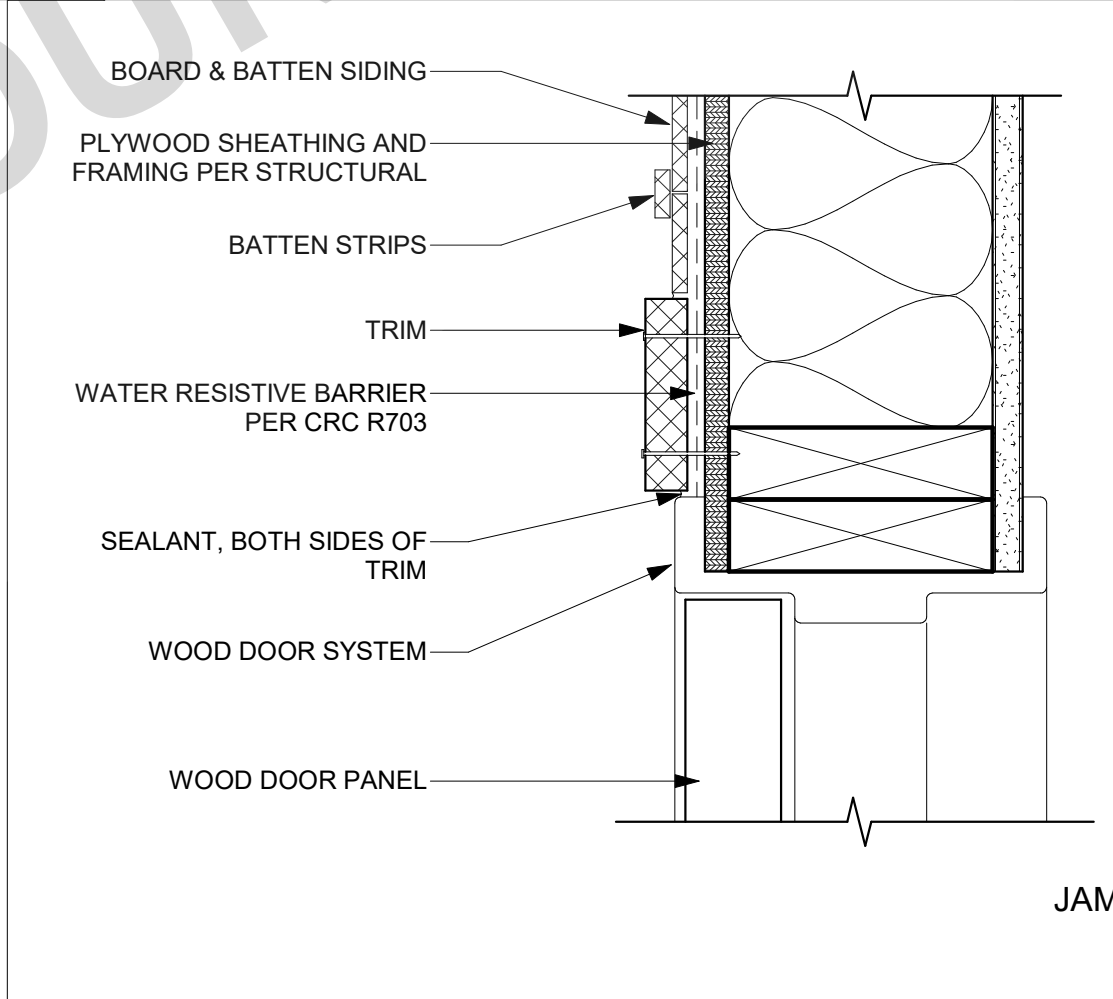
31 TYP. DOOR TRIM

SCALE: 3/4" = 1'-0"



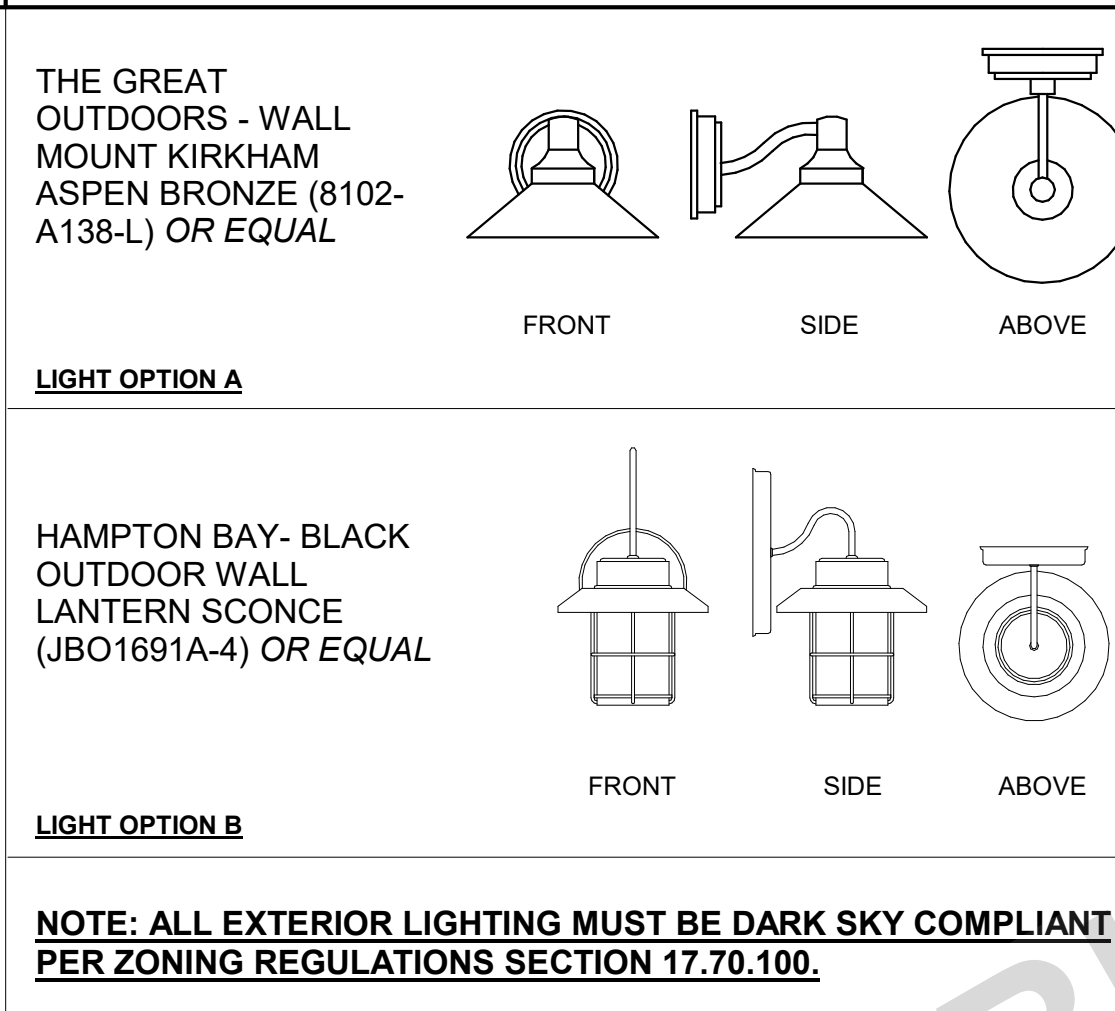
32 DOOR HEAD - BOARD & BATTEN C- LOFT

SCALE: 3" = 1'-0"



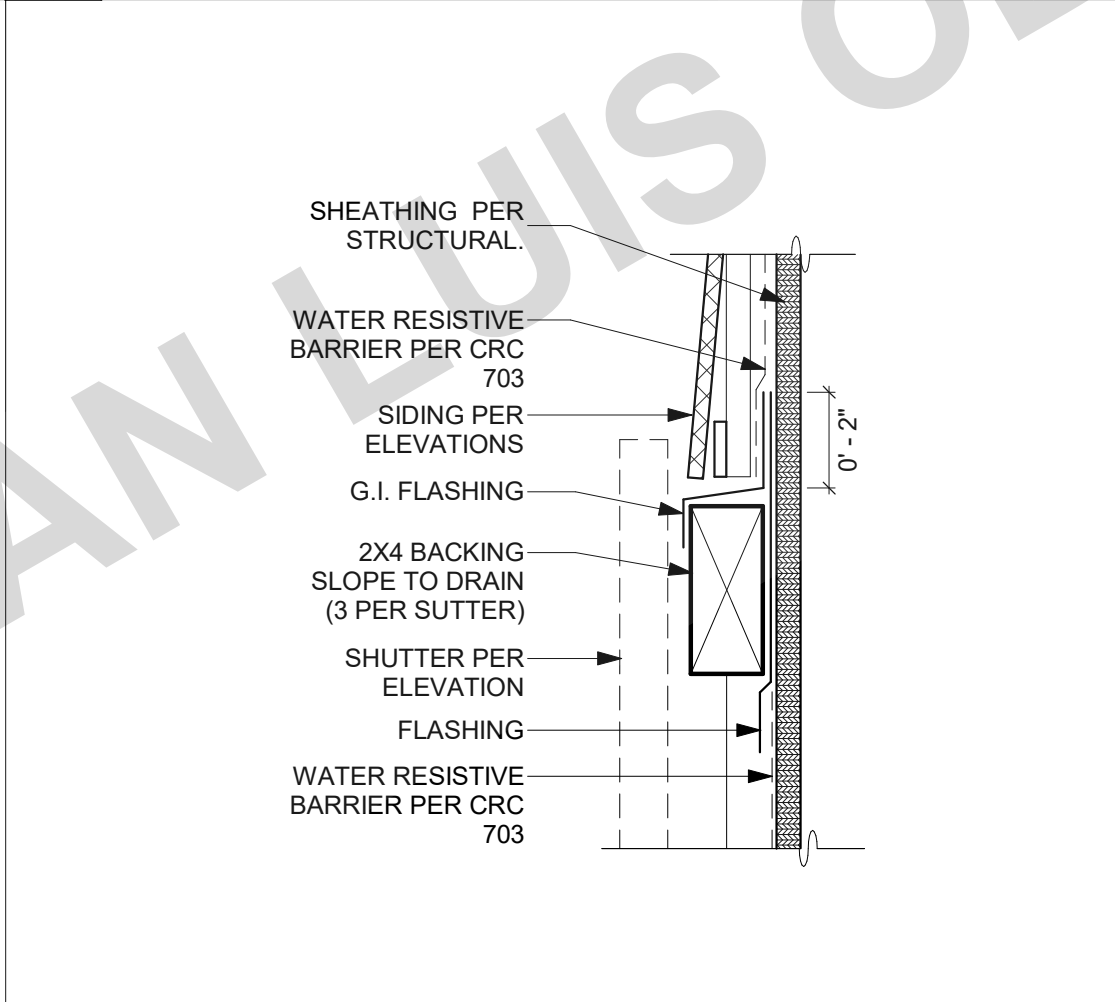
33 DOOR JAMB - BOARD & BATTEN - LOFT

SCALE: 3" = 1'-0"



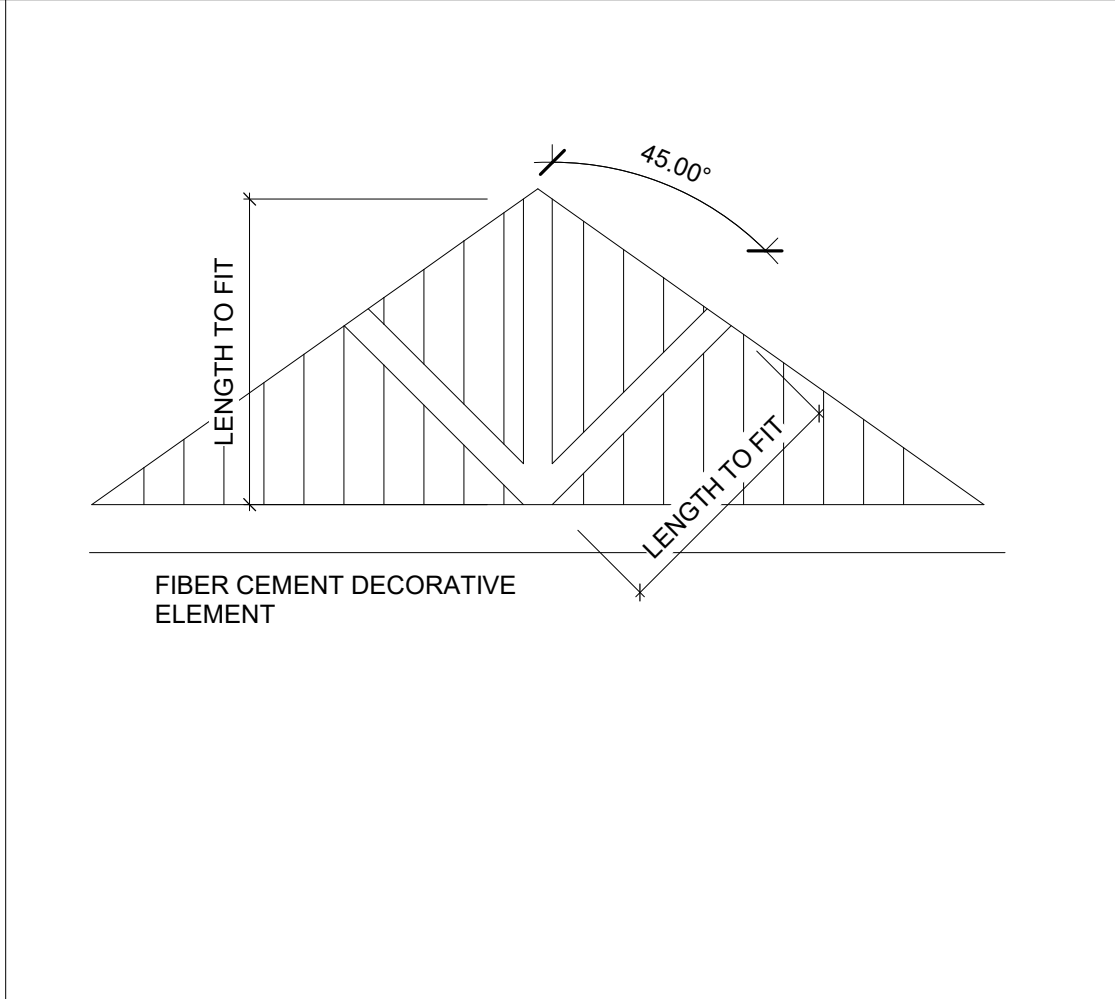
21 LIGHT FIXTURE

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



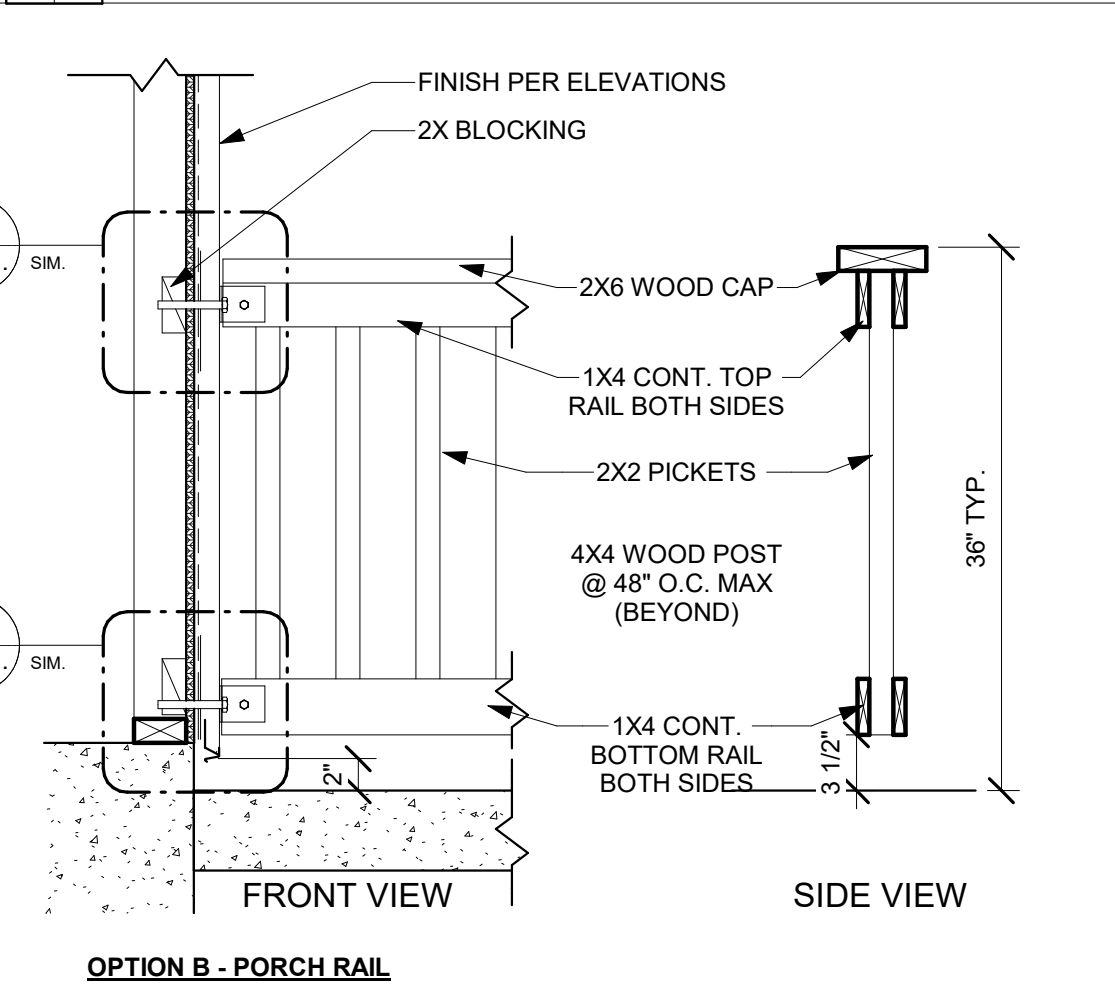
22 DECORATIVE SHUTTER

SCALE: 3" = 1'-0"



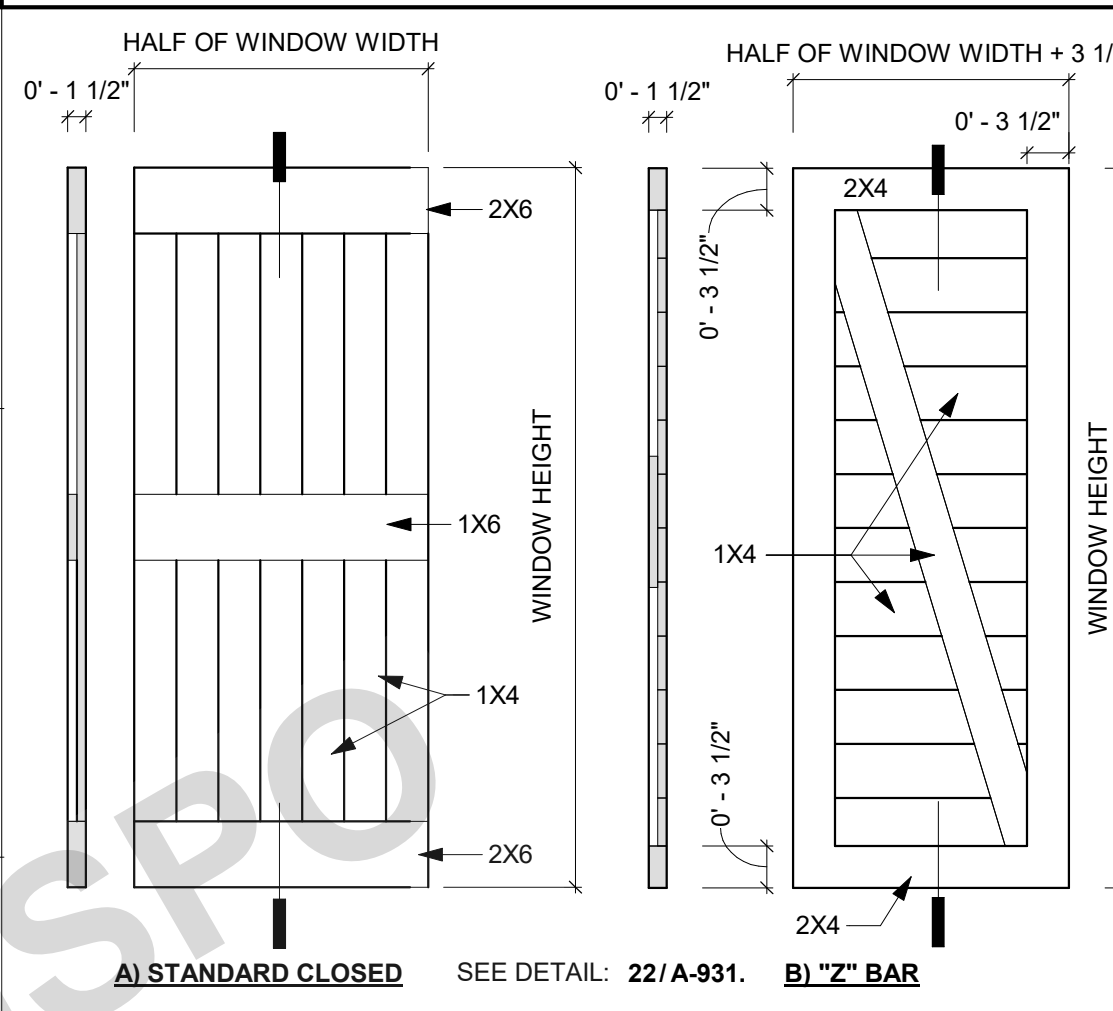
23 DECORATIVE ELEMENT

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



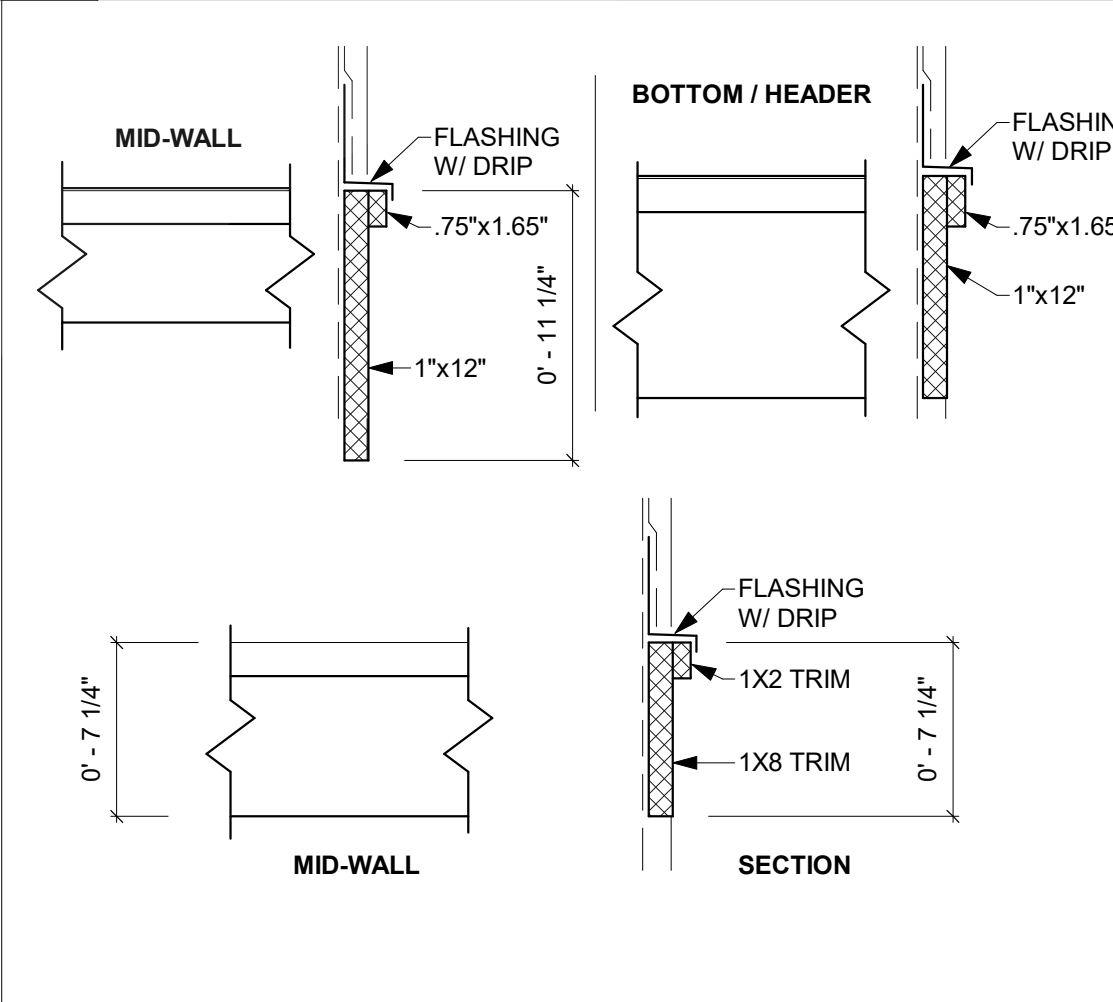
24 TYP. INSIDE CORNER

NOTE: ALL EXPOSED WOOD; FINISH W/ PRIMER AND 2 LAYERS EXT. GRADE



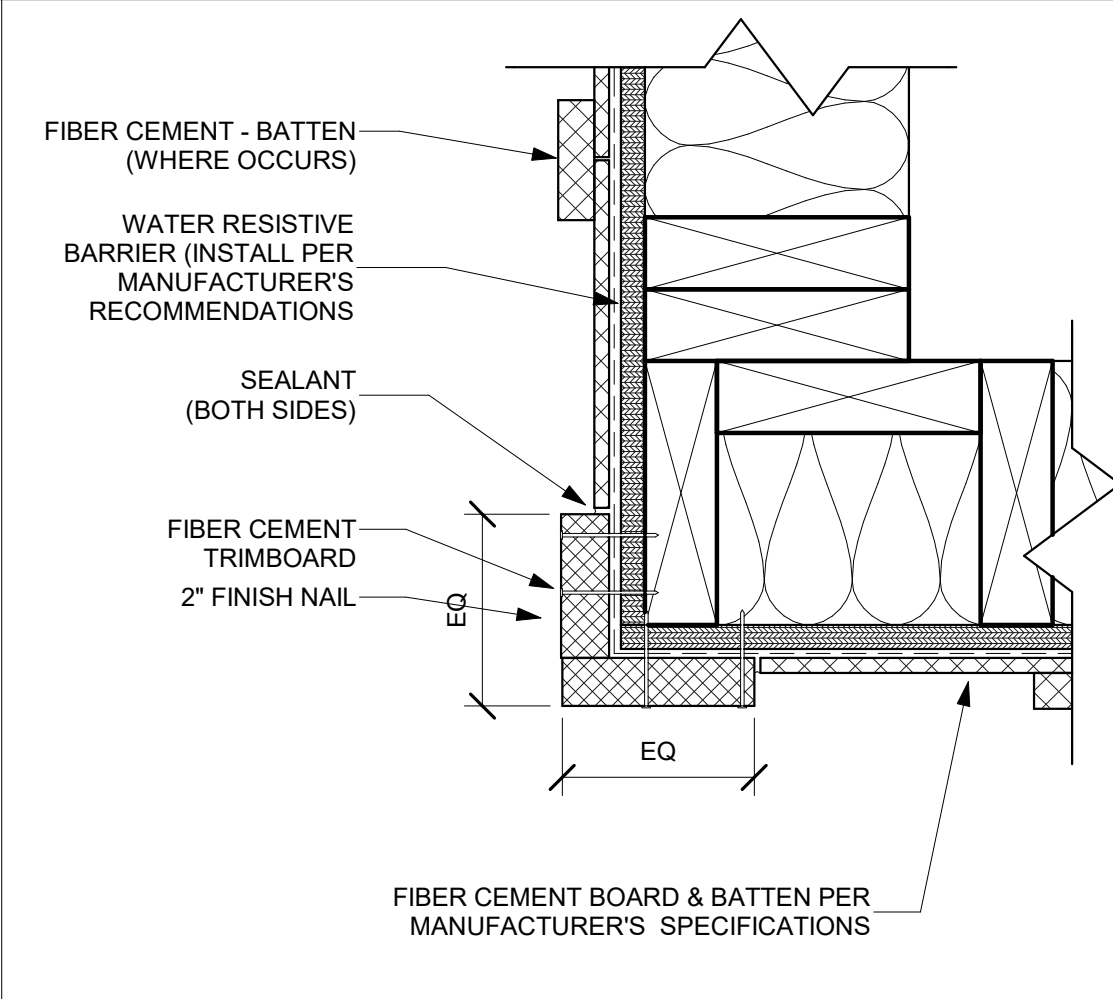
11 DECORATIVE SHUTTER

SCALE: 3/4" = 1'-0"



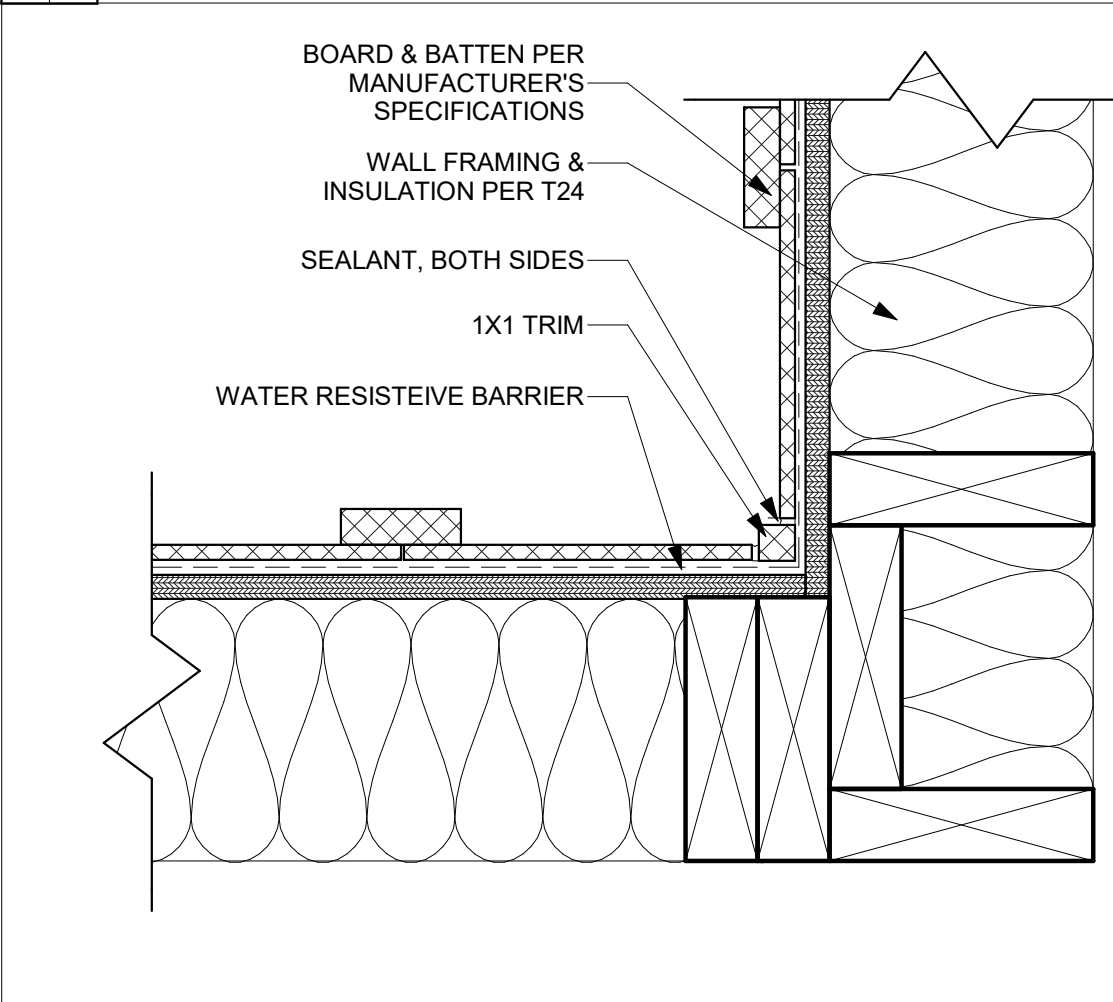
12 TYP. TRIM PROFILE

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



13 TYP. OUTSIDE CORNER

SCALE: 3" = 1'-0"



14 TYP. INSIDE CORNER

SCALE: 3" = 1'-0"

COUNTY OF SAN LUIS OBISPO

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COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

ARCHITECTURAL DETAILS - LOFT

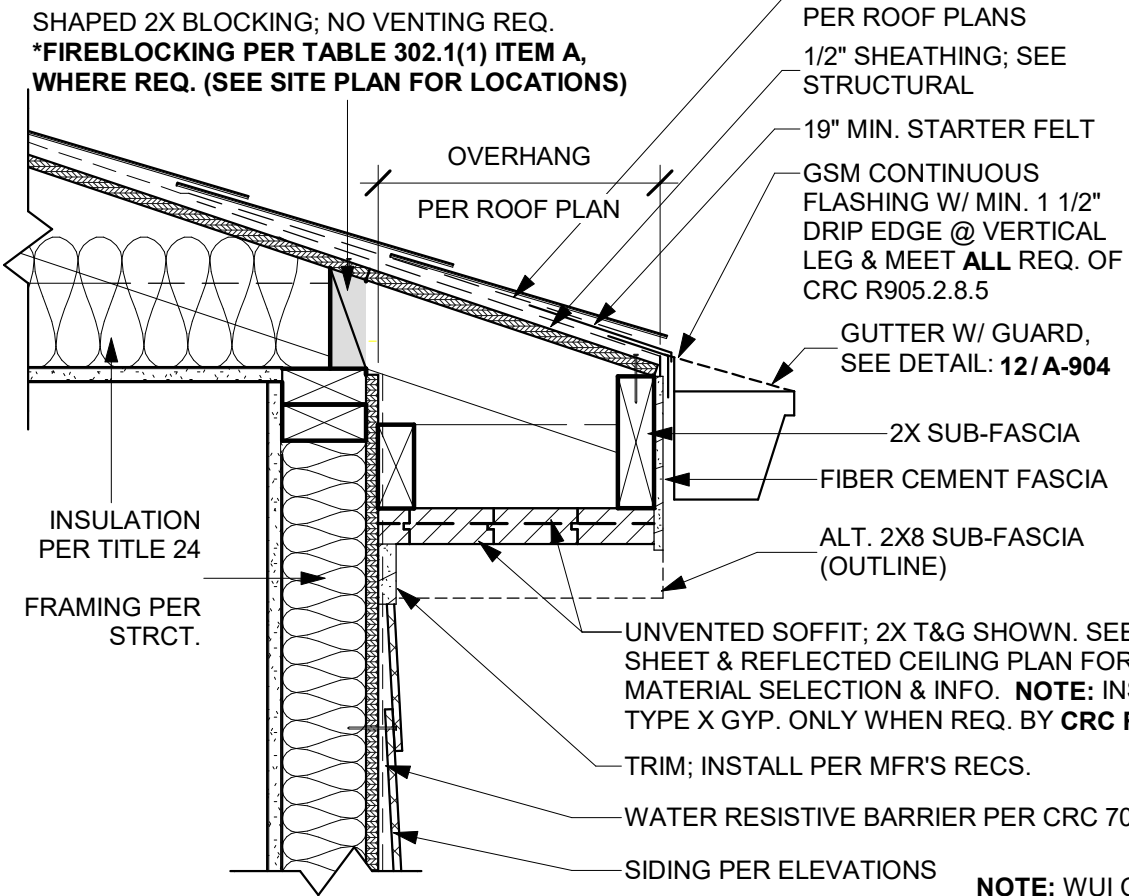
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SHEET  
A-931.

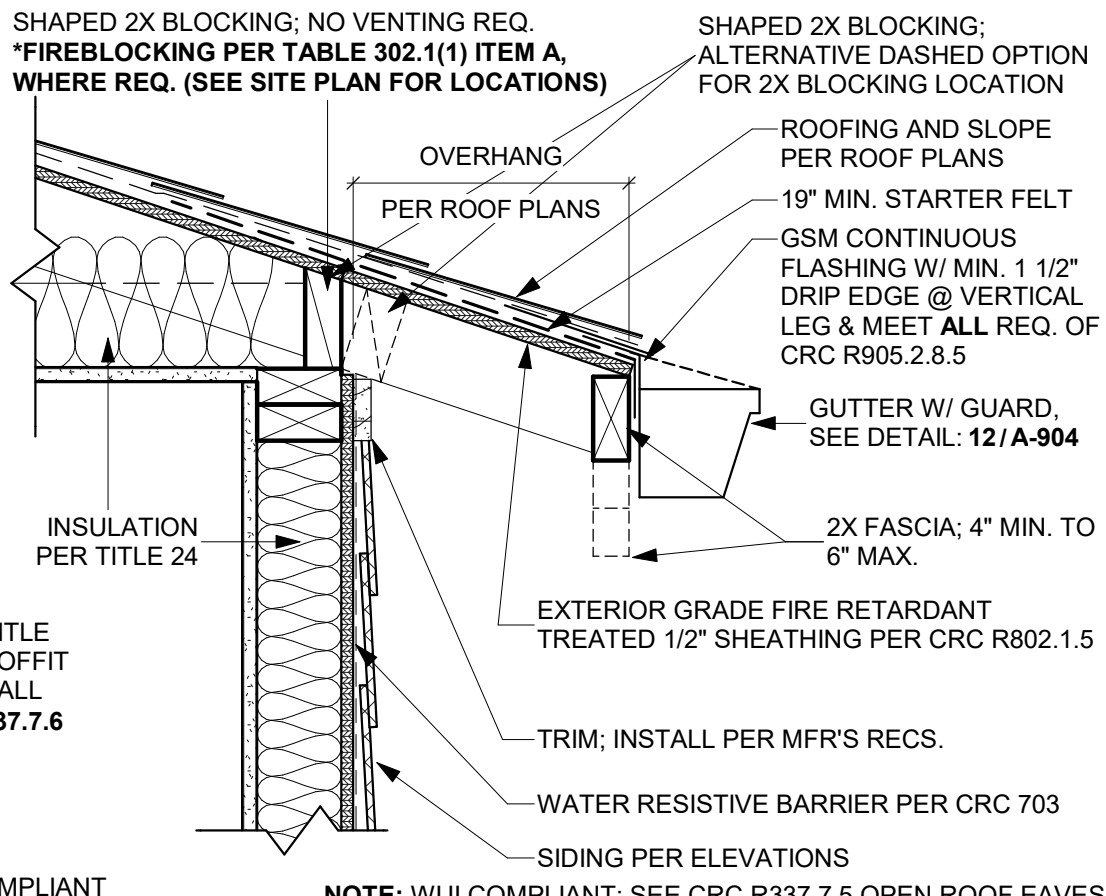


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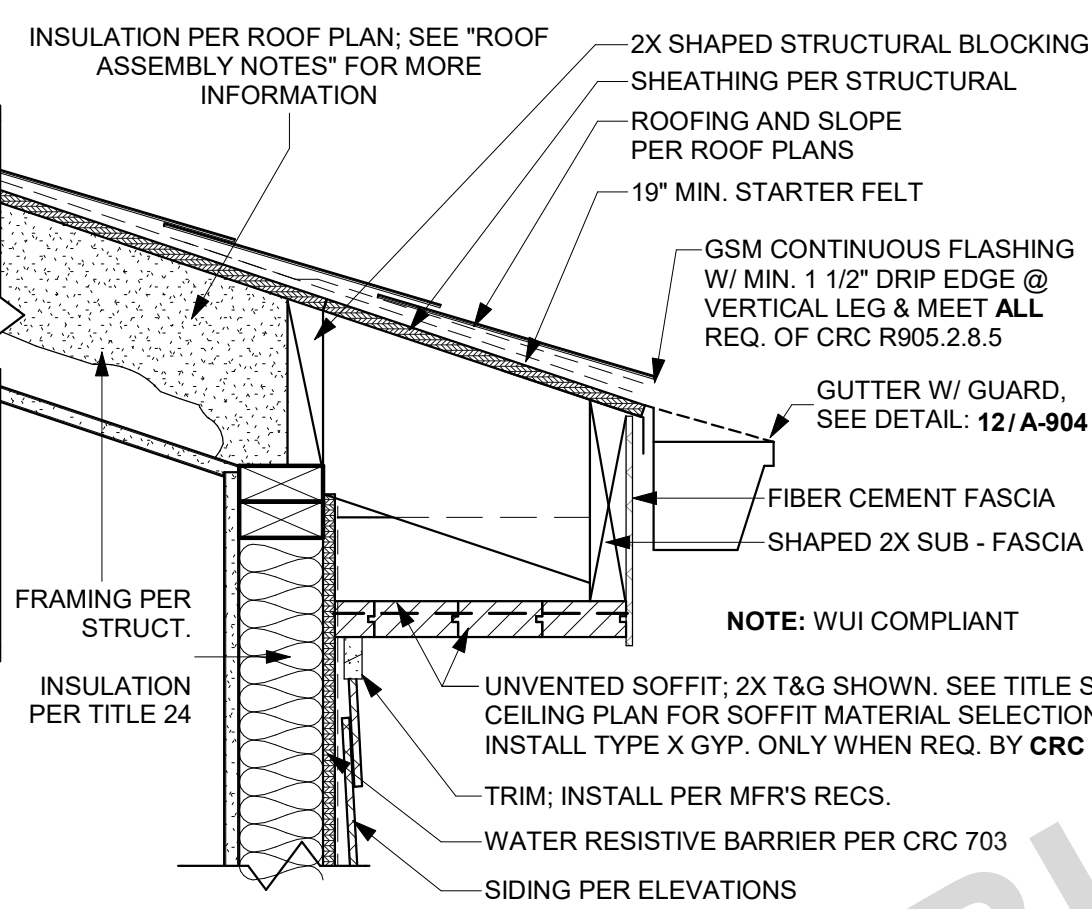
### EAVE OPTION B - ENCLOSED



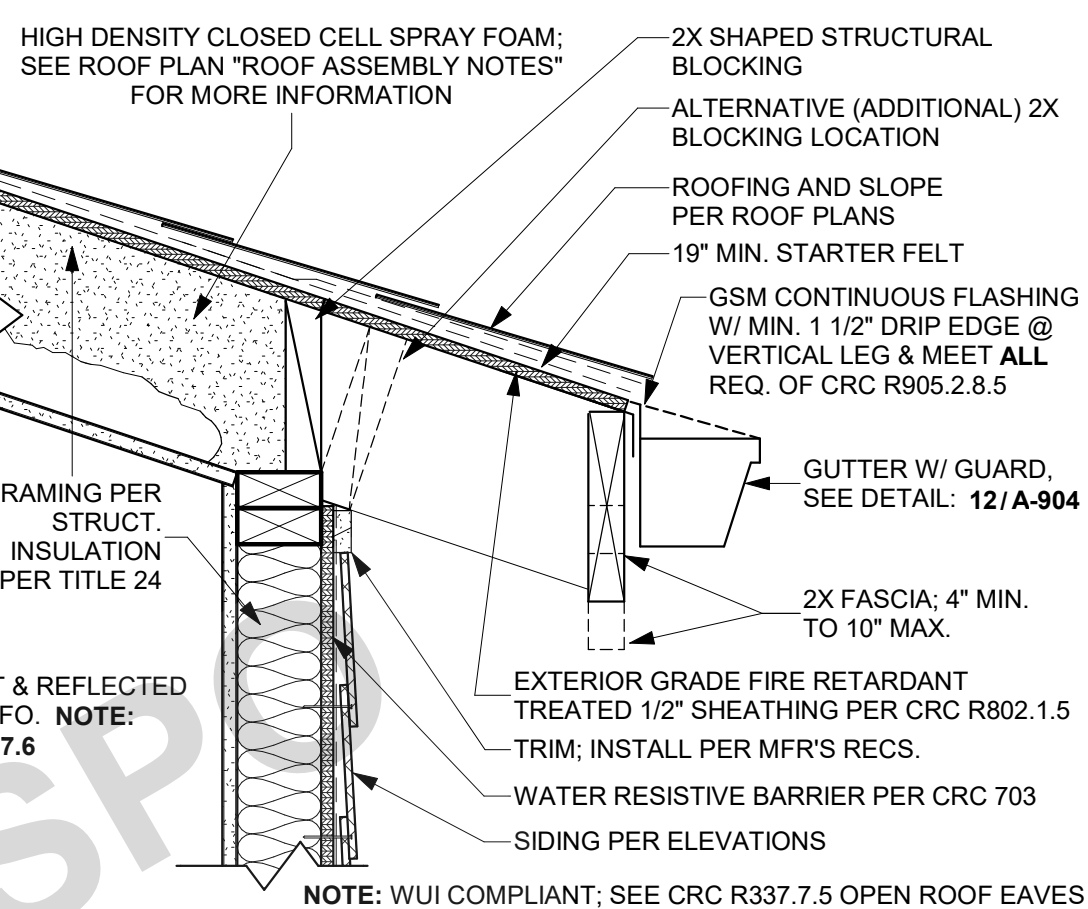
### EAVE OPTION A - OPEN EXPOSED



### EAVE OPTION B - ENCLOSED EAVE



### OPTION A - OPEN EXPOSED EAVE



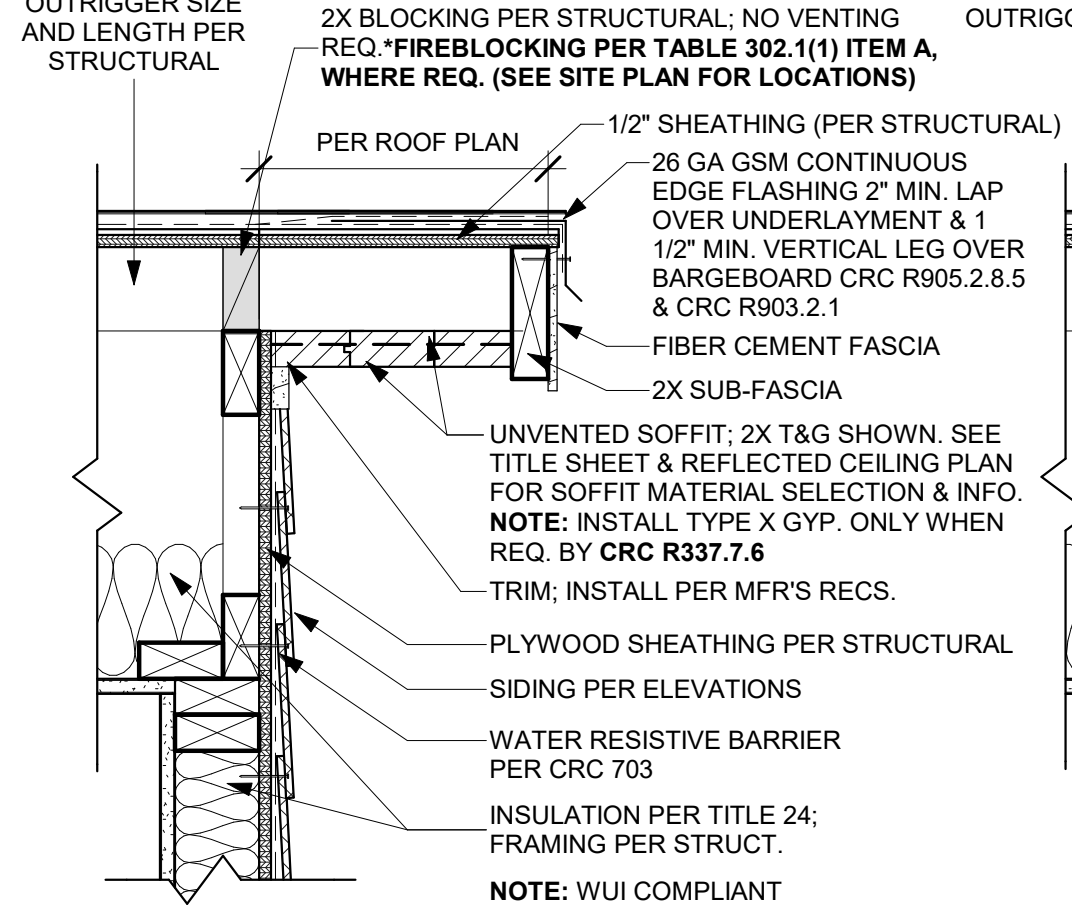
### 41 EAVE @ ATTIC (WHERE APPLICABLE)

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

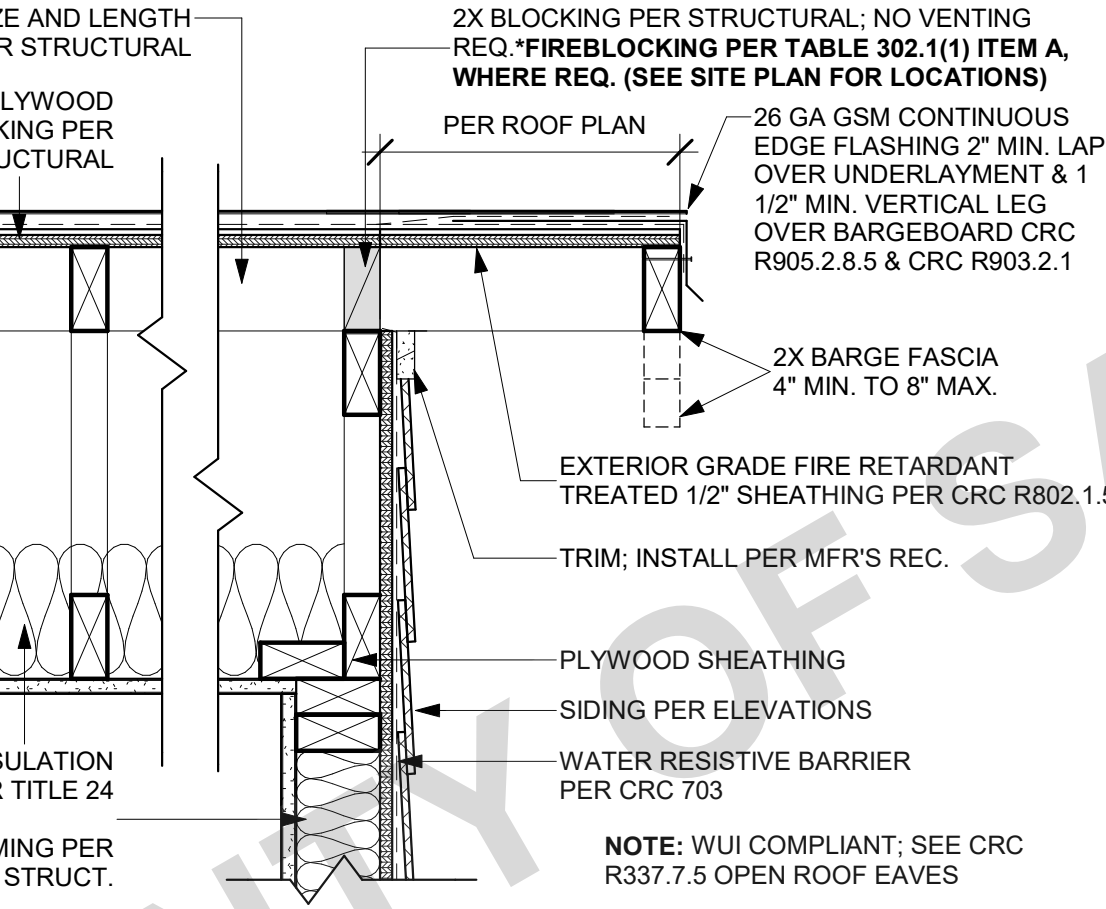
### 21 TYP. EAVE

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

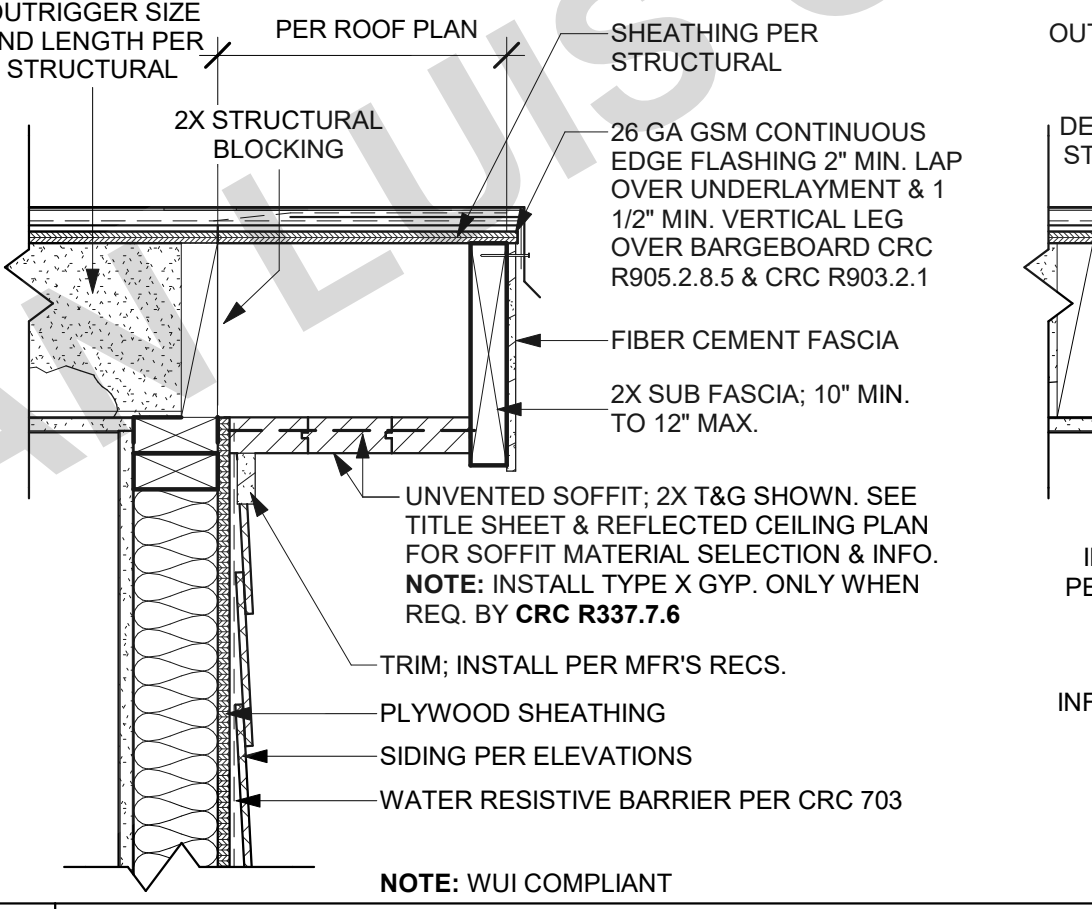
### RAKE OPTION B - ENCLOSED



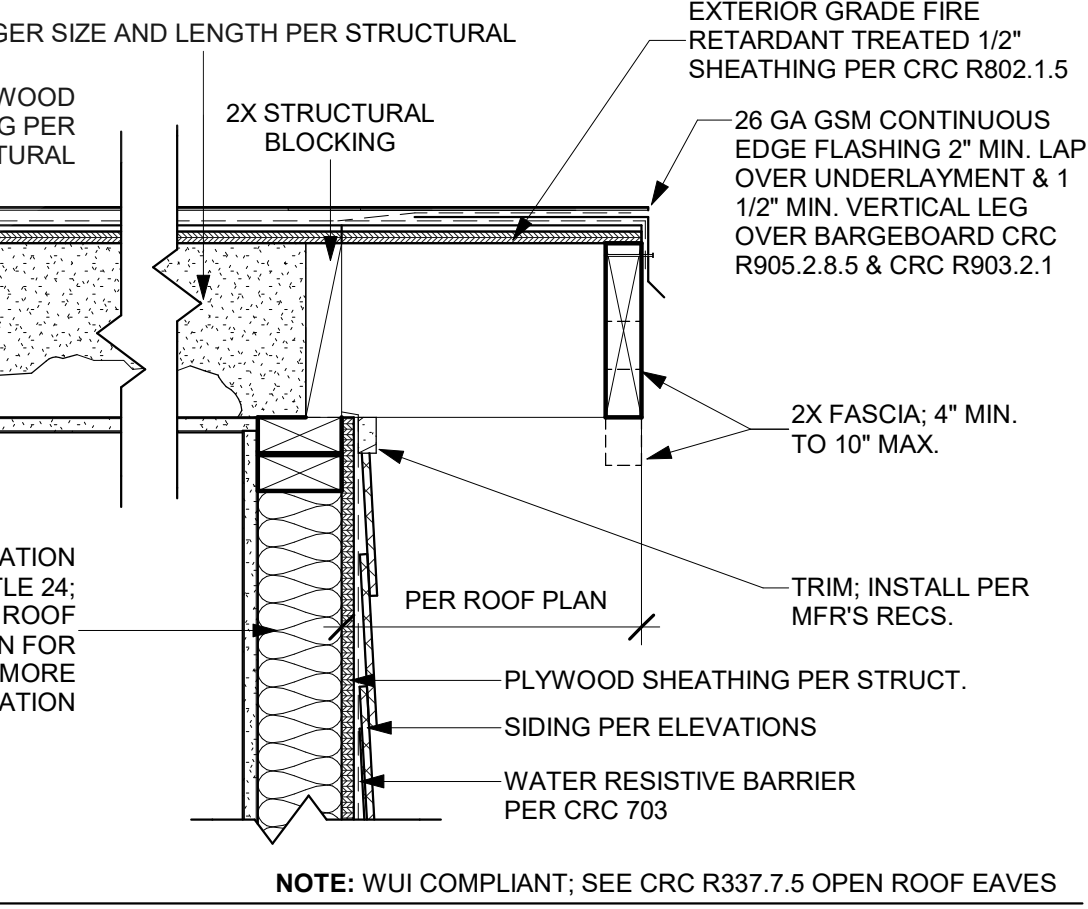
### RAKE OPTION A - OPEN EXPOSED



### RAKE OPTION B - ENCLOSED



### RAKE OPTION A - OPEN EXPOSED

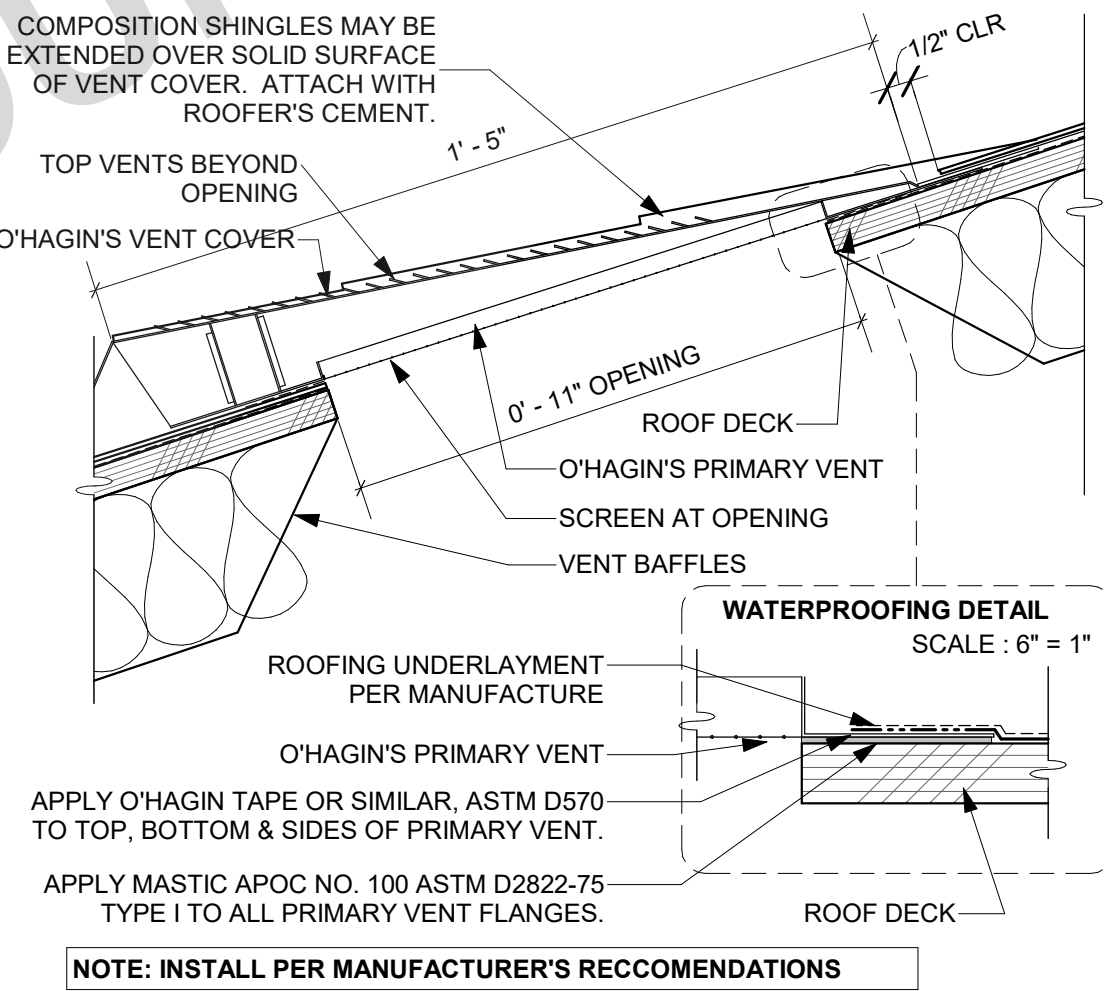


### 42 RAKE @ ATTIC (WHERE APPLICABLE)

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

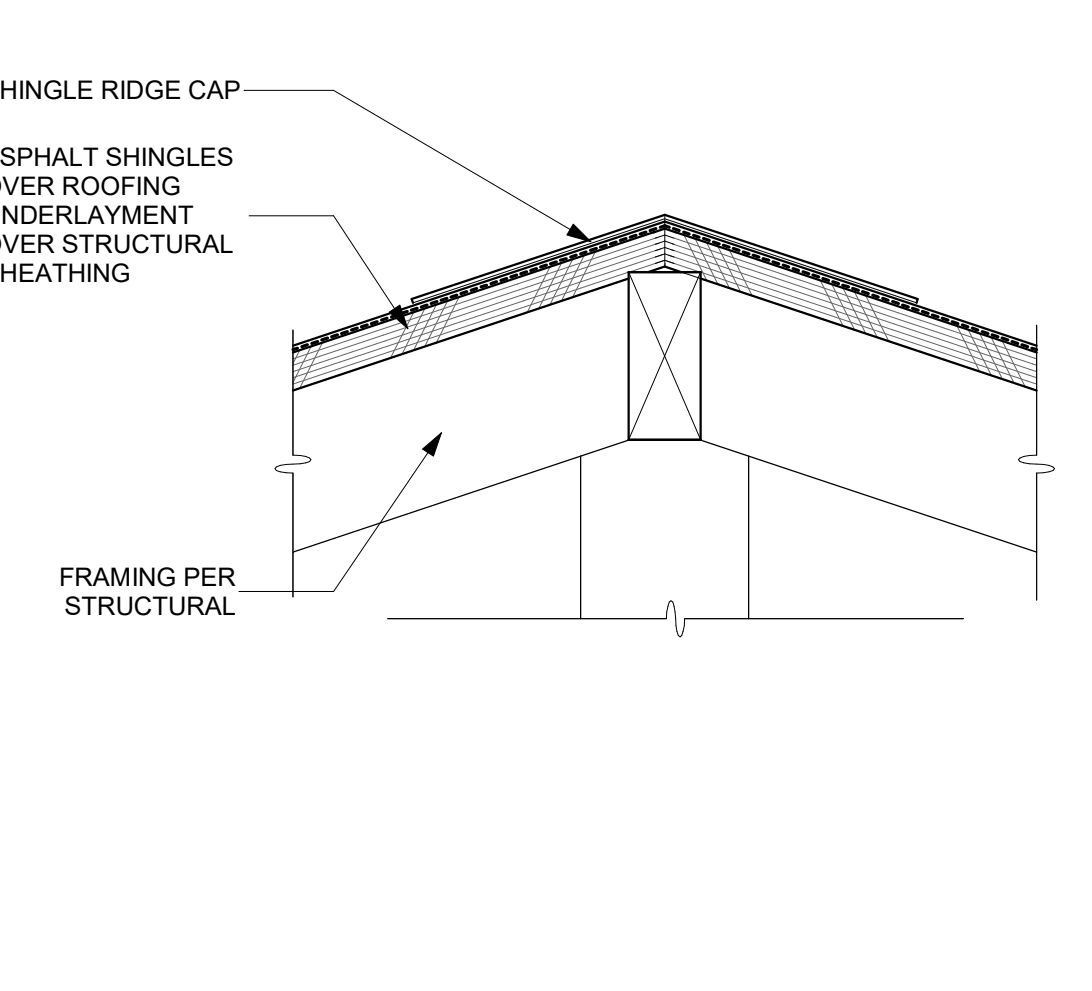
### 22 TYP. RAKE

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



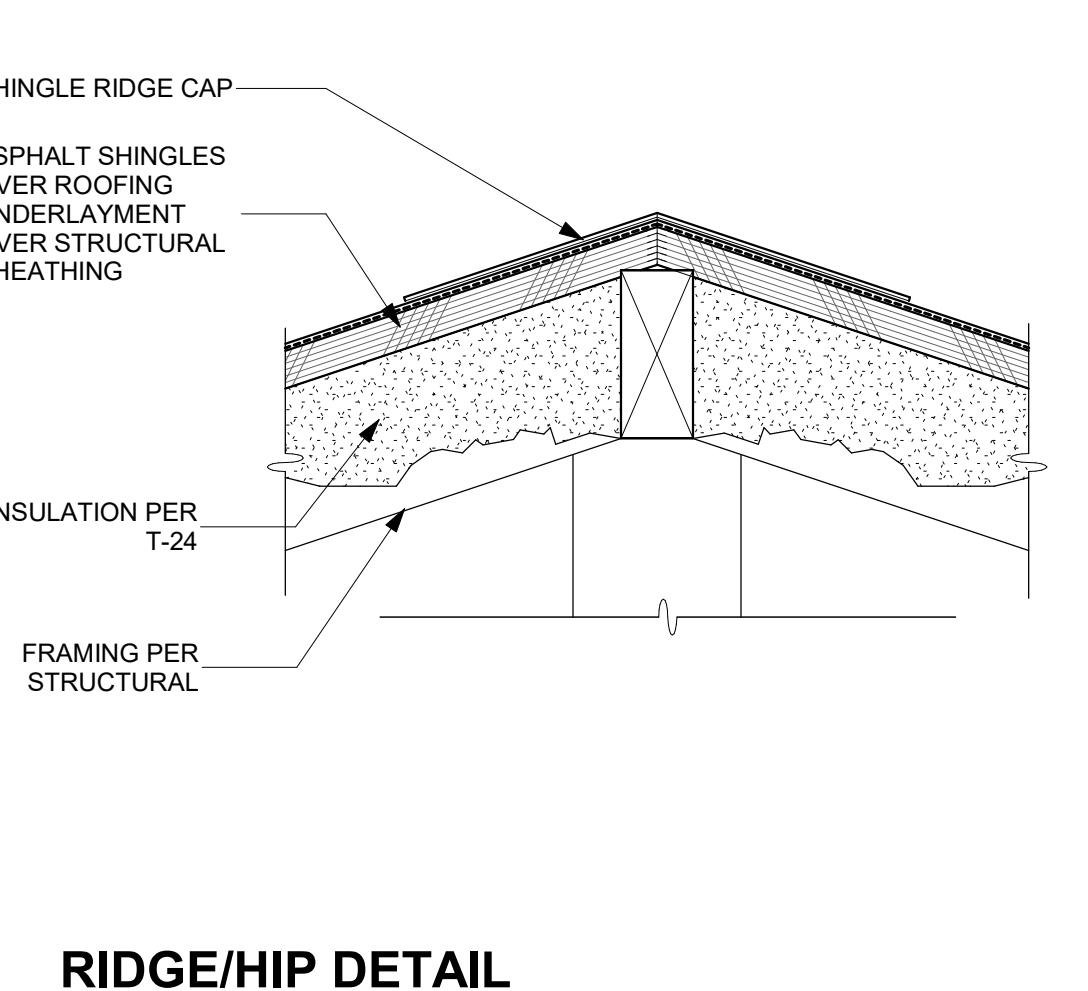
### 33 O'HAGIN ROOF VENT

SCALE: 3" = 1'-0"



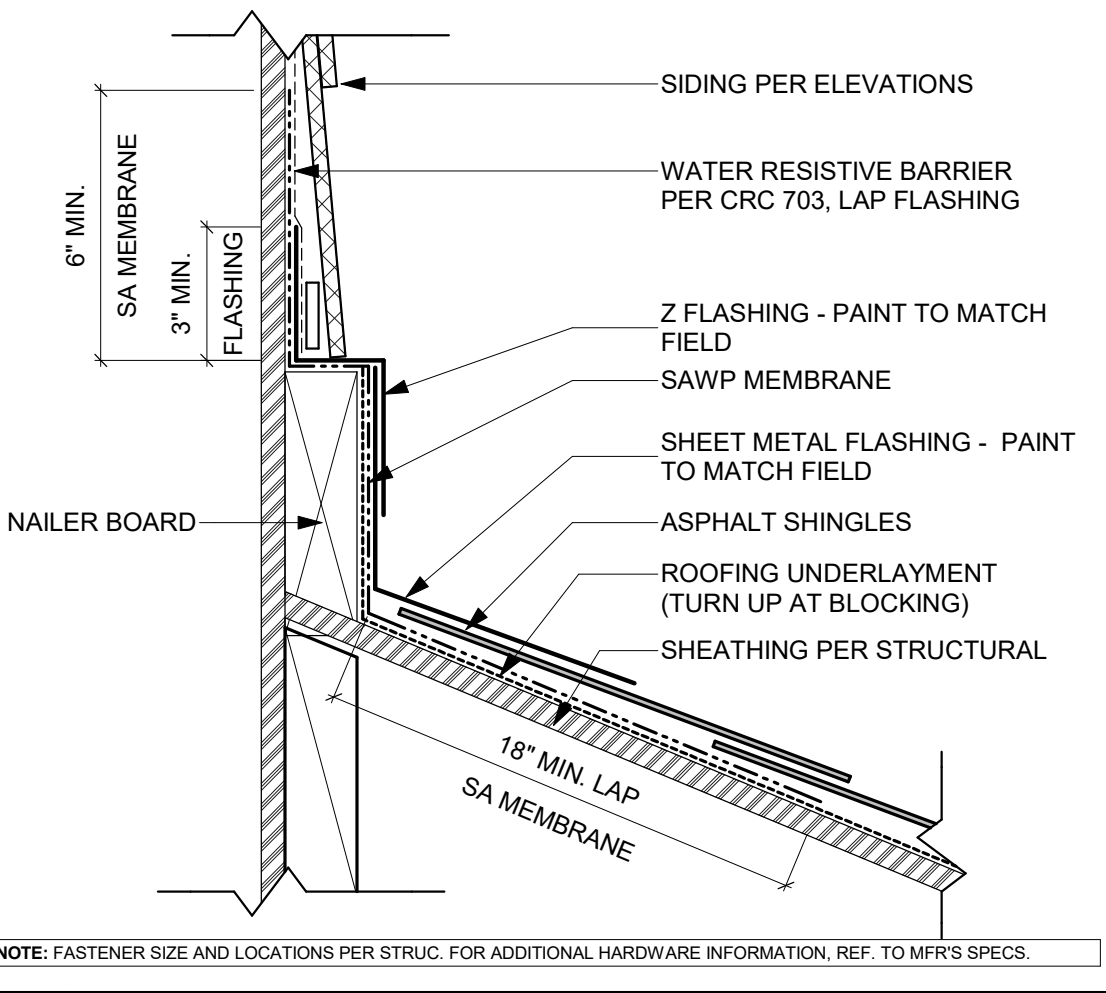
### 23 TYPICAL RIDGE/HIP DETAIL

SCALE: 3" = 1'-0"



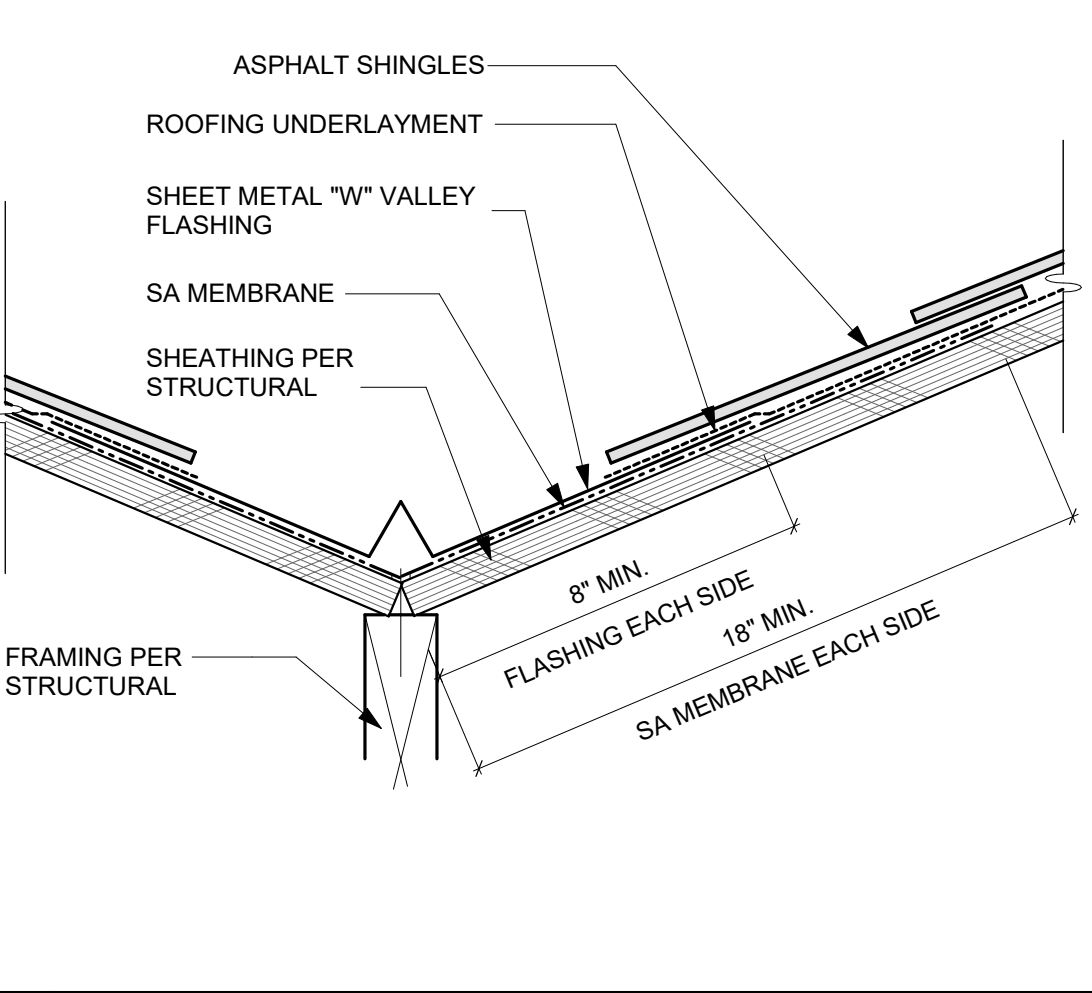
### 13 @ INSULATION

SCALE: 3" = 1'-0"



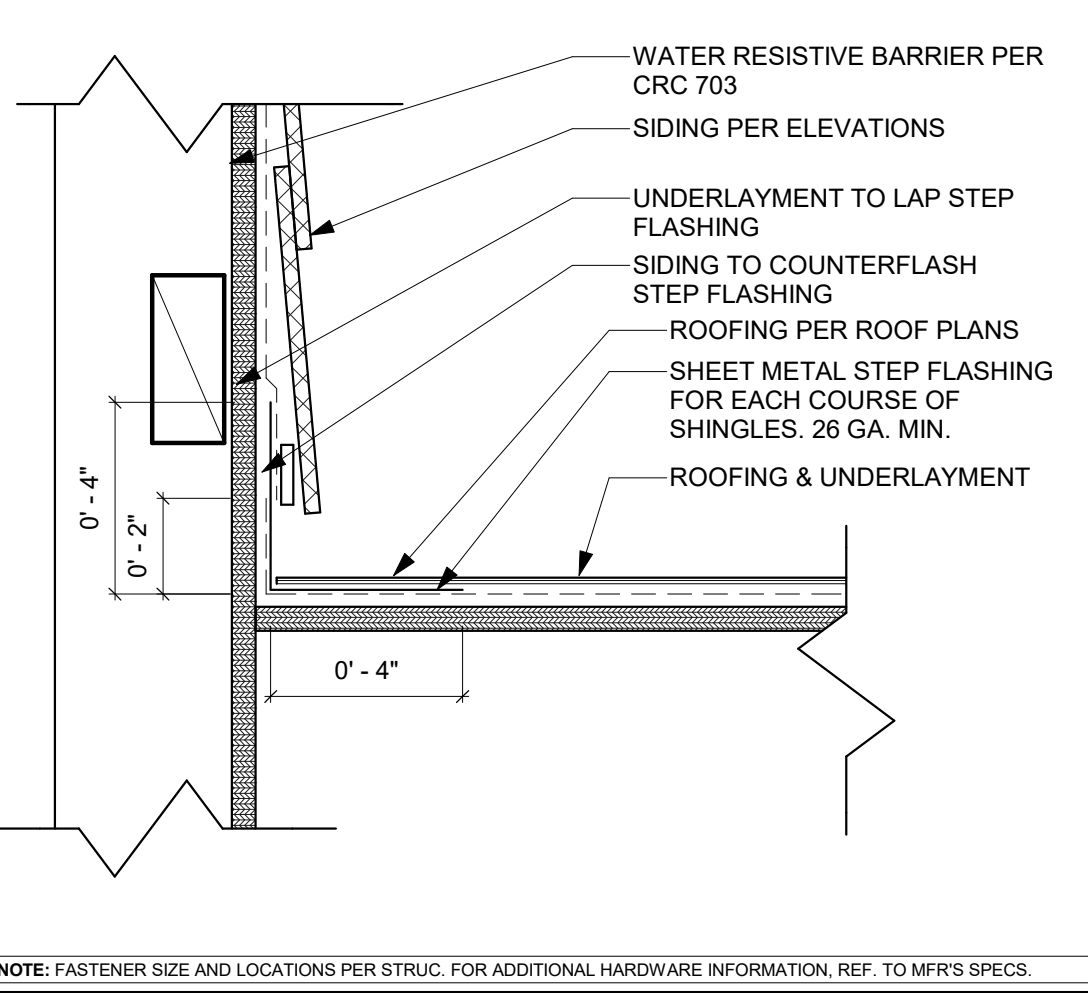
### 34 HEADWALL

SCALE: 3" = 1'-0"



### 24 TYPICAL VALLEY DETAIL

SCALE: 3" = 1'-0"



### 14 SIDE WALL

SCALE: 3" = 1'-0"



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SAN LUIS OBISPO, CA

ARCHITECTURAL DETAILS - LOFT

DATE  
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SHEET

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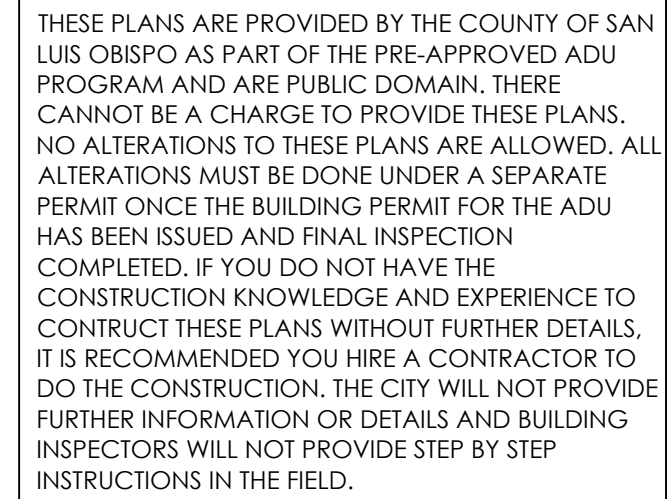


SYMBOLS			
	DETAIL REFERENCE BUBBLE WITH LEADER		INDICATES SHEAR WALL TYPE AND LENGTH, PER SHEAR WALL SCHEDULE
	DETAIL REFERENCE BUBBLE		INDICATES SPAN AND DIRECTION OF PREFABRICATED ROOF TRUSS (BY OTHERS)
	FULL HEIGHT SECTION INDICATOR		INDICATES SPAN AND DIRECTION OF ROOF RAFTER OR FLOOR JOIST WITH WEB STIFFENER
	ELEVATION OF WALL OR FRAME		INDICATES SPAN AND DIRECTION OF ROOF RAFTER OR FLOOR JOIST
	NORTH ARROW		INDICATES EXTENTS OF FRAMING OR OTHER STRUCTURAL ELEMENT
	TOP/BOTTOM OF ELEVATIONS		INDICATES HEADER @ OPENING PER HEADER SCHEDULE
	SLOPE		EARTH LAYER
	WELDED WIRE FABRIC (WWF LAYER)		INDICATES SAND OR GROUT
	STEPPED SURFACE FLOOR DEPRESSION		INDICATES GRAVEL
	SLOPED SURFACE		STEEL IN CROSS SECTION
	STEPPED FOOTING		INDICATES BEARING WALL
	BOTTOM STEPPED FOOTING		SHADED AREA INDICATES CALIFORNIA FRAMING
			SHADED AREA INDICATES FOOTPRINT OF FLOOR ABOVE
			STEEL HSS TUBE COLUMN
			STEEL HSS OR PIPE COLUMN
			WIDE FLANGE STEEL COLUMN
			WOOD POST
			INDICATES TOP PLATE SPLICE NAILING PER SCHEDULE
			INDICATES SHEAR WALL STRAP / HOLDOWN TYPE PER SCHEDULE
			INDICATES PAD FOOTING TYPE PER SCHEDULE
			INDICATES CONTINUOUS FOOTING TYPE PER SCHEDULE
			ANGLE BRACE
			DOUBLE ANGLE BRACE
			DRAG STRUT CONNECTION
			FULL HEIGHT STIFFENER CONNECTION
			MOMENT CONNECTION
			MEMBER SPLICE
			TOP OF STEEL ± ELEVATION
			NUMBER OF EVENLY SPACED SHEAR STUDS
			SPECIAL STUD SPACING SEE TYPICAL STEEL DETAILS
			BEAM CAMBER AT MID-SPAN

## WALL TYPES

	INDICATES PLYWOOD SIDE FOR SHEAR WALL
	INDICATES BEARING WOOD WALL BELOW
	INDICATES BEARING WOOD WALL ABOVE
	INDICATES NON-BEARING WOOD WALL BELOW
	INDICATES NON-BEARING WOOD WALL ABOVE
	INDICATES EXISTING BEARING WOOD WALL
	INDICATES EXISTING NON-BEARING WOOD WALL
	INDICATES BEARING CMU WALL BELOW
	INDICATES BEARING CMU WALL ABOVE
	INDICATES NON-BEARING CMU WALL BELOW
	INDICATES NON-BEARING CMU WALL ABOVE
	INDICATES EXISTING BEARING CMU WALL
	INDICATES EXISTING NON-BEARING CMU WALL
	INDICATES BEARING CONCRETE WALL BELOW
	INDICATES BEARING CONCRETE WALL ABOVE
	INDICATES NON-BEARING CONCRETE WALL BELOW
	INDICATES NON-BEARING CONCRETE WALL ABOVE
	INDICATES EXISTING BEARING CONCRETE WALL
	INDICATES EXISTING NON-BEARING CONCRETE WALL

SHEET INDEX	
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S-201	FARMHOUSE PLANS
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S-311	CONCRETE DETAILS
S-312	CONCRETE DETAILS
S-401	TYPICAL WOOD DETAILS
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S-421	ROOF FRAMING DETAILS



SHEET INDEX,  
ABBREVIATION & SYMBOLS

S-101



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SAWN LUMBER				
1. FRAMING LUMBER SHALL MEET THE FOLLOWING MINIMUM STANDARDS EXCEPT WHERE OTHERWISE NOTED:				
SAWN LUMBER PROPERTIES				
USE	SIZE	SPECIES	GRADE	REFERENCE
MUDSILLS	2 X 4	D.F.	STANDARD OR BETTER PRESSURE TREATED	2022 CBC 2303.1.9
	2 X 6 AND LARGER	D.F.	NO. 2 OR BETTER PRESSURE TREATED	
	2 X	REDWOOD	FOUNDATION GRADE	
HORIZONTAL FRAMING LUMBER				
ROOF JOISTS AND RAFTERS	2 x	D.F.	NO. 2	WCUB & WWPA
FLOOR JOISTS	2 X	D.F.	NO. 2	
HEADERS AND BEAMS	4 X	D.F.	NO. 2	
ANY OTHER HORIZONTAL	4 X 4 AND SMALLER	D.F.	NO. 2	
	6 X 6 AND LARGER	D.F.	NO. 1	
VERTICAL FRAMING LUMBER				
TOP PLATES	2 X	D.F.	NO. 2	WCUB & WWPA
STUDS	2 X 4 & 3 X 4	D.F.	STUD	
	2 X 6 & 2 X 8	D.F.	NO. 2	
POSTS	4 X 4 & 4 X 6 POSTS	D.F.	NO. 2	
	6 X 6 & LARGER POSTS	D.F.	NO. 1	
ALL OTHER FRAMING LUMBER				
ALL OTHER FRAMING LUMBER, UNO	ALL SIZES	D.F.	STANDARD & BETTER	WCUB & WWPA

2. FLOOR JOISTS SHALL BE GRADE STAMPED "S-DRY" WHICH INDICATES A MOISTURE CONTENT NOT EXCEEDING 19 PERCENT.
3. ALL SOLE PLATES AND TOP PLATES SHALL BE GRADE STAMPED "KD" WHICH INDICATES KILN DRIED WITH A MOISTURE CONTENT NOT EXCEEDING 15 PERCENT.
4. STUD WALLS SHOWN ON PLANS ARE NONBEARING PARTITIONS WALLS, BEARING WALLS OR SHEAR WALLS BELOW THE FRAMING LEVEL, UNLESS NOTED OTHERWISE. STUDS SHALL BE SIZE AND SPACING AS NOTED IN THE DRAWINGS, SEE PLANS AND ARCHITECTURAL DRAWINGS, UNLESS OTHERWISE NOTED.
5. MINIMUM FRAMING NAILING SHALL CONFORM TO CBC TABLE 2304.10.2. ALL NAILS SHALL BE COMMON WIRE NAILS. PREDRILL NAIL HOLES TO 70% OF NAIL SHANK DIAMETER WHERE NAILING TENDS TO SPLIT WOOD.
6. UNLESS OTHERWISE NOTED, ALL WOOD SILL PLATES UNDER BEARING, EXTERIOR, OR SHEAR WALLS IN CONTACT WITH CONCRETE OR MASONRY SHALL BE BOLTED TO THE CONCRETE OR MASONRY WITH 5/8" Ø X 12" BOLTS W/ 0.229" X 3" X 3" PLATE WASHER (GALV) AT 4'-0" O.C. BEGINNING AT 9" O.C. MAXIMUM FROM EACH END OF THE PLATES. THE BOLTS SHALL EXTEND A MINIMUM OF 7" INTO THE CONCRETE OR MASONRY. (POWDER DRIVEN PINS AT 1/3 OF THE BOLT SPACING OR 24" O.C. MAXIMUM MAY BE SUBSTITUTED FOR THE ANCHOR BOLTS AT INTERIOR NON-SHEAR WALLS ONLY).
7. ALL LUMBER IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED LUMBER WITH AWP/A TREATMENT C2 USING EITHER ALKALINE QUAT (ACQ TYPE B AND D), COPPER AZOLE (CBA-A, CA-B), OR SODIUM BORATES (SBX), ANCHOR BOLTS, FASTENERS, AND METAL FRAMING CONNECTORS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED TO A RATING OF G-185 PER ASTM A653.
8. PROVIDE 2 STUDS UNDER ALL 4 X 10 AND LARGER BEAMS OR HEADERS AT SPANS 6 FEET OR LONGER, UNLESS OTHERWISE NOTED. WHERE POSTS OR MULTIPLE STUDS UNDER BEAMS OR HEADERS ARE CALLED FOR ON DRAWINGS THOSE POSTS OR MULTIPLE STUDS SHALL BE CARRIED TO THE FOUNDATION/PODIUM LEVEL.
9. PROVIDE THE FOLLOWING BLOCKING AS A MINIMUM, UNLESS SHOWN OTHERWISE:  
2" X FULL DEPTH SOLID BLOCKING BETWEEN JOISTS OVER SUPPORT.  
2" X FULL DEPTH SOLID BLOCKING BETWEEN JOISTS OVER AND BELOW PARTITION WALLS.
10. DOUBLE JOISTS UNDER PARTITIONS RUNNING PARALLEL TO JOISTS, UNLESS SUPPORTED BY A WALL BELOW OR SHOWN OTHERWISE, NAIL DOUBLED JOISTS WITH 16D AT 12" O.C., STAGGERED.
11. BRIDGING SHALL BE 2 X SOLID BLOCKS, INSTALLED AS FOLLOWS:  
ROOF JOISTS MORE THAN 10" DEPTH, 8'-0" O.C. MAXIMUM, NOT MORE THAN 8'-0' FROM SUPPORT.  
FLOOR JOISTS MORE THAN 10" DEPTH, 8'-0" O.C. MAXIMUM, NOT MORE THAN 8'-0' FROM SUPPORT.
12. JOIST HANGERS AND OTHER METAL FRAMING ACCESSORIES ARE REFERRED TO ON PLANS BY PARTICULAR TYPE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, STOCKTON, CALIFORNIA. ACCESSORIES OF OTHER MANUFACTURE WITH EQUIVALENT LOAD CARRYING CHARACTERISTICS MAY BE USED.
13. FIRE STOPPING, BACKING FOR INTERIOR FINISHES, NONBEARING WALLS, AND OTHER NON-STRUCTURAL FRAMING ARE NOT NECESSARILY SHOWN ON STRUCTURAL DRAWINGS.

HARDWARE AND CONNECTORS	
GENERAL: USE ALL SPECIFIED FASTENERS AS SPECIFIED ON PLANS. IF NOT INDICATED ON PLANS PROVIDE FASTENERS PER MFR'S APPROVED ICC-ESR REPORT OR PRODUCT LITERATURE	
HOLD-DOWNS:	
1.	DO NOT OVER TIGHTEN NUTS ON TIE-DOWN ANCHOR RODS OR BOLTS. TIGHTEN ANCHOR ROD NUTS ONE-THIRD TO ONE HALF TURN BEYOND FINGER TIGHT
2.	INSTALL ALL HOLD-DOWNS TIGHT TO END STUDS/POST. DO NOT USE FILLER BLOCKS. FOR MISALIGNED ANCHOR BOLTS, EXTEND THE ANCHOR ROD AT A 1:4 (HORIZONTAL) USING A COUPLER WITH EQUIVALENT ANCHOR ROD AND INSTALL THE HOLD-DOWN HIGHER ON END STUD / POST
3.	FOR HOLD-DOWNS THAT BOLT TO END POSTS, INSTALL THE HEAD OF THE BOLT TO THE BRACKET SIDE, AND ON THE SIDE OPPOSITE THE BRACKET, INSTALL A WASHER BETWEEN THE NUT AND THE STUD / POSTS
TIE-DOWN & COLLECTOR STRAPS:	
1.	TIE-DOWN AND COLLECTOR STRAPS SHALL BE INSTALLED STRAIGHT AND TRUE. DO NOT FOLD, BEND, KINK OR OTHERWISE ALTER CONNECTOR STRAPS
2.	INSTALL TIE-DOWN STRAPS DIRECT TO POST IN LIEU OF OVER SHEATHING. STRAPS MAY BE INSTALLED ON THE UNSHEATHED SIDE OF THE END STUDS / POSTS

CONCRETE	
1. ALL CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19 OF THE CODE AND WITH THE PROVISIONS OF ACI 318-19.	
2. CONCRETE MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:	
MATERIAL	ASTM STANDARD
PORTLAND CEMENT (TYPE II)	C150
CONCRETE AGGREGATES (HARD ROCK)	C33
WATER <sup>a</sup>	C1602
COAL FLY ASH OR POZZOLAN (CLASS F)	C618
NATURAL OR MANUFACTURED SAND	C33
SLAG	C989

- A. FOR SOILS WITH HIGH CONCENTRATIONS OF SULFATES (EXPOSURES S2 OR S3 PER ACI 318-19 TABLE 19.3.2.1) PORTLAND CEMENT SHALL BE TYPE V. VERIFY WITH PROJECT GEOTECHNICAL REPORT.
- B. WATER SHOULD ONLY BE ADDED AT THE BATCH PLANT. IN NO CASE SHALL THE DESIGN WATER/ CEMENT RATIO BE EXCEEDED.
3. CONCRETE MIXES SHALL BE PROPORTIONED BASED ON SECTION 26.4.3 OF ACI 318-19, WHICH REFERENCES ACI 301-10 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 301-10 ARTICLE 4.2.3.4. SCHEDULE OF STRUCTURAL CONCRETE STRENGTHS AND LOCATIONS (UNO):
- | LOCATION IN STRUCTURE                        | MINIMUM STRENGTH (PSI) | DENSITY (PCF) | MAX SLUMP (IN) | MAX WATER/CEMENT RATIO | SLAG/ FLY ASH <sup>a</sup> (MAX) |
|--|------------------------|---------------|----------------|------------------------|----------------------------------|
| CONCRETE FOUNDATIONS, GRADE BEAMS, TIE BEAMS | 2,500                  | 150           | 4              | 0.5                    | 0.15                             |
| CONCRETE SLAB ON GRADE                       | 2,500                  | 150           | 4              | 0.45                   | 0.15                             |
- A. AS MEASURED BY CEMENTITIOUS WEIGHT
4. DEPOSITING AND CONVEYING OF CONCRETE SHALL CONFORM TO SECTION 26.5 OF ACI 318-19 AND PROJECT SPECIFICATIONS.
5. ALL CONCRETE SURFACES AGAINST WHICH NEW CONCRETE IS TO BE PLACED SHALL BE CLEANED AND ROUGHENED TO 1/4" MINIMUM.
6. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
7. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING 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.
8. PIPES EMBEDDED IN CONCRETE:  
A. CONCRETE  
a. PIPES LARGER THAN 1-1/2" DIAMETER SHALL NOTE BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED BY SEOR.  
b. NO CONDUITS SHALL BE PLACED IN CONCRETE FILL OVER METAL DECK.  
c. PIPES SHALL NOT DISPLACE OR INTERRUPT REINFORCING BARS.  
d. DO NOT STACK CONDUITS, SPACE EMBEDDED PIPES AND CONDUITS AT A MINIMUM OF 3 DIAMETERS CLEAR FROM OTHER EMBEDDED PIPES/ CONDUITS AND REBAR.

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 GRA60 STEEL PER ACI 318-19 SECTION 20.2.2.5 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 26.4.4 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. REINFORCING BAR LAP SPICES SHALL BE MADE AS INDICATED ON THE DRAWINGS. LAP ALL HORIZONTAL BARS AT CORNERS AND INTERSECTIONS. STAGGER ALL SPICES UNLESS NOTED OTHERWISE ON PLANS.	
A. MINIMUM LAP SPICE LENGTH FOR REINFORCING STEEL BARS IN CONCRETE SHALL BE PER ACI 318-19 SECTION 25.5.2 AND THE REINFORCING SCHEDULE ON THE DRAWINGS.	
5. REINFORCING STEEL SHALL BE ACCURATELY PLACED AND ADEQUATELY SUPPORTED BEFORE THE CONCRETE IS PLACED AND SHALL BE SECURED AGAINST DISPLACEMENT 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 PER THE "CRSI MANUAL OF STANDARD PRACTICE", LATEST EDITION.	
6. ED ITEMS MAY BE CORRECTED PRIOR TO PLACEMENT OF OVERLYING GRIDS OR REINFORCING STEEL.	
7. CONCRETE PROTECTION FOR REINFORCEMENT	
THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT IN CAST-IN-PLACE CONCRETE (NON-PRESTRESSED):	MINIMUM COVER, IN.
A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3
B. CONCRETE EXPOSED TO EARTH OR WEATHER: NO. 6 THROUGH NO. 18 BAR NO. 5 BAR, W31 OR D31 WIRE & SMALLER	2 1 1/2"
C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS, JOISTS NO. 14 AND NO. 18 BARS NO. 11 BAR & SMALLER BEAMS, COLUMNS: PRIMARY REINFORCEMENT TIES, STIRRUPS, SPIRALS	1 1/2" 3/4" 1 1/2"

WOOD (GENERAL)	
1. PRESERVATIVE TREATMENT:	
A. WOOD MEMBERS SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH A19-07, STANDARD FOR PRESERVATIVE TREATMENT, BASED ON THE SERVICE CONDITION PER THE USE CATEGORIES (UCs) SPECIFIED IN AWWA U1-06.	
a. UC1 - INTERIOR CONSTRUCTION, ABOVE GROUND, DRY - NO PRESERVATIVE TREATMENT REQUIRED	
b. UC2 - INTERIOR CONSTRUCTION, ABOVE GROUND, WET - PRESERVATIVE TREATMENT REQUIRED IF THE HUMIDITY OR MOISTURE CONDENSATION IS 20% OR GREATER.	
c. UC3 - EXTERIOR CONSTRUCTION ABOVE GROUND - PRESERVATIVE TREATMENT REQUIRED.	
B. FOR ALL TREATED WOOD MEMBERS, ALL CUTS, HOLES AND INJURIES SUCH AS ABRASIONS OR HOLES FROM REMOVAL OF NAILS AND SPIKES WHICH MAY PENETRATE THE TREATED ZONE SHALL BE FIELD TREATED IN ACCORDANCE WITH AWWA M4-06. THE FOLLOWING FIELD TREATMENTS SHALL BE USED:	
a. BORED HOLES: HOLES FOR CONNECTORS OR BOLTS MAY BE TREATED BY PUMPING COAL TAR ROOFING CEMENT MEETING ASTM D5643 INTO HOLES USING A GREASE GUN OR SIMILAR DEVICE	
b. EXTERIOR: COPPER NAPHTHENATE	
c. INTERIOR: INORGANIC-BORON PRESERVATIVES LIMITED TO USE IN APPLICATIONS NOT IN CONTACT WITH GROUND AND CONTINUOUSLY PROTECTED FROM LIQUID WATER	

FOUNDATION			
1. GEOTECHNICAL INFORMATION AND FOUNDATION DESIGN IS BASED ON THE FOLLOWING: A. DESIGN LATERAL SOIL LOADS ARE IN ACCORDANCE WITH 2022 CBC TABLE 1601.1 B. ALLOWABLE FOUNDATION BEARING AND LATERAL PRESSURES ARE IN ACCORDANCE WITH 2022 CBC TABLE 1806.2			
2. SPREAD OR CONTINUOUS FOOTINGS:			
ELEMENT	ALLOWABLE BEARING CAPACITY (PSF) <sup>a</sup>	ALLOWABLE LATERAL RESISTANCE <sup>b</sup> PASSIVE RESISTANCE (PSF/FT BELOW GRADE) <sup>c</sup>	COHESION (PSF)
SHALLOW FOUNDATION	1,500	100	130

- 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 D 1557 (2022 CBC 1804.6)
4. WHERE NOT SHOWN ON THE DRAWINGS, CONTRACTOR TO PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIBBING, 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.
5. CONTRACTOR TO PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER AND/OR SEEPAGE.
6. EXCAVATION FOR FOOTINGS SHALL BE APPROVED BY THE INSPECTOR OR GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE AND REINFORCING.
7. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. DO NOT PLACE BACKFILL BEHIND RETAINING WALLS BEFORE CONCRETE OR GROUT HAS ATTAINED FULL DESIGN STRENGTH. CONTRACTOR SHALL PROVIDE FOR DESIGN, PERMITS AND INSTALLATION OF SUCH BRACING.
8. EXCAVATIONS SHALL BE CUT SQUARE AND SMOOTH, WITH LEVEL BOTTOMS.
9. FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT AND APPROVED BY THE GEOTECHNICAL ENGINEER. FLOODING WILL NOT BE PERMITTED. ALL FILLS USED TO SUPPORT FOUNDATIONS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER REPRESENTATIVE PER SECTION 1705.6 OF THE CODE.
10. ALL ABANDONED FOOTINGS, UTILITIES, ETC. SHALL BE REMOVED. NEW FOOTINGS MUST EXTEND INTO UNDISTURBED SOILS.
11. THIS PLAN IS INTENDED FOR FLAT LOTS, WITHOUT HIGHLY EXPANSIVE OR LIQUEFABLE SOILS. IF THE PROJECT SITE IS DETERMINED TO HAVE ANY OF THESE QUALITIES, AS DETERMINED BY THE BUILDING OFFICIAL, THESE PER APPROVED ADU FOUNDATION PLANS AND DETAILS ARE NOT APPLICABLE.

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. 1-800-227-2800.	

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	

DESIGN INFORMATION

1. FLOOR LIVE LOADS: (2022 CBC SECTION 1603.1.1)

FLOOR LIVE LOADS			
OCCUPANCY OR USE	UNIFORM (PSF)	CONC. (LBS)	REFERENCE
RESIDENTIAL ONE- AND TWO- FAMILY DWELLINGS UNINHABITABLE ATTICS WITHOUT STORAGE UNINHABITABLE ATTICS WITH STORAGE HABITABLE ATTICS AND SLEEPING AREAS ALL OTHER AREAS	10 20 30 40	—	2022 CBC TABLE 1607.1

2. ROOF LIVE LOADS (2022 CBC SECTION 1603.1.2)

ROOF LIVE LOADS			
OCCUPANCY OR USE	UNIFORM (PSF)	CONC. (LBS)	REFERENCE
ROOF ORDINARY FLAT, PITCHED AND CURVED ROOFS (THAT ARE NOT OCCUPIABLE)	20	—	2022 CBC TABLE 1607.1

3. ROOF SNOW LOADS (2022 CBC SECTION 1603.1.3):

SNOW DESIGN DATA		
PARAMETER	VALUE	REFERENCE
GROUND SNOW LOAD	P <sub>g</sub> = 0 PSF	ASCE 7-16 7.2

4. WIND DESIGN DATA (2022 CBC SECTION 1603.1.4):

COMPONENTS & CLADDING WIND PRESSURES (PSF)				
LOCATION		COMPONENT TRIBUTARY AREA (SQ FT)		
		10	100	500
ROOF	ZONE 1	-31.0	-16.0	-16.0
	ZONE 2a	-31.0	-16.0	-16.0
	ZONE 2n	-34.1	-21.6	-18.4
	ZONE 2r	-31.0	-16.0	-16.0
	ZONE 3a	-41.9	-26.3	-18.4
	ZONE 3r	-34.1	-21.6	-18.4
	ALL ZONES	16.9	16.0	16.0
	OVERHANG	-43.5	-27.8	-27.8
OVERHANG	ZONE 2a	-43.5	-27.8	-27.8
	ZONE 2n	-46.6	-34.1	-31.0
	ZONE 2r	-43.5	-27.8	-27.8
	ZONE 3a	-54.4	-38.8	-31.0
	ZONE 3r	-46.6	-34.1	-31.0
	ZONE 4	-20.0	-17.4	-16.0
	ZONE 5	-24.7	-19.2	-16.0
	POSITIVE	18.4	16.0	16.0

5. EARTHQUAKE DESIGN DATA (2022 CBC SECTION 1603.1.5):		
SITE AND OCCUPANCY PARAMETERS		
PARAMETER	VALUE	REFERENCE
RISK CATEGORY	II	2022 CBC TABLE 1604.5
SEISMIC IMPORTANCE FACTOR	I = 1.0	ASCE 7-16 TABLE 1.5-2
MAPPED SPECTRAL RESPONSE ACCELERATIONS:	S <sub>1</sub> = 2.47 g	2022 CBC 1613.2.1
	S <sub>1</sub> = 1.05 g	
SITE CLASS	D (DF)	2022 CBC 1613.2.2
SPECTRAL RESPONSE COEFFICIENTS:	S <sub>DS</sub> = 1.97 g	2022 CBC 1613.2.4
	S <sub>D1</sub> = 1.19 g	

BUILDING PARAMETERS		
PARAMETER	VALUE	REFERENCE
SEISMIC DESIGN CATEGORY	SDC = E	2022 CBC 1613.2.5
BASIC SEISMIC FORCE RESISTING SYSTEM	LIGHT FRAME (WOOD) WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE	ASCE 7-16 TABLE 12.2-1
RESPONSE MODIFICATION FACTOR	R = 6 1/2	
SYSTEM OVERSTRENGTH FACTOR	Ω <sub>o</sub> = 3	
DEFLECTION AMPLIFICATION FACTOR	C <sub>d</sub> = 4	
DESIGN BASE SHEAR	V = 7.4 k	
SEISMIC RESPONSE COEFFICIENTS	C <sub>s</sub> = 0.304	ASCE 7-16 12.8.1.1
ANALYSIS PROCEDURE USED	EQUIVALENT LATERAL FORCE PROCEDURE	ASCE 7-16 12.8

6. GEOTECHNICAL INFORMATION (2022 CBC SECTION 1603.1.6):  
REFER TO FOUNDATION GENERAL NOTES

## GENERAL

- ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES AND STANDARDS:
  - 2022 CALIFORNIA BUILDING CODE, PART 2, VOLUME 2 OF 2, AND TITLE 24 C.C.R. 2022 EDITION AND LATEST REVISIONS (INCLUDING SUPPLEMENTS AND ERRATA) HEREIN REFERRED TO AS "THE CODE".
  - ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK, INCLUDING THE STATE OF CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (CAL/OSHA).
  - CODES & STANDARDS REFERENCED IN THE CODE OR LISTED IN THESE NOTES AND SPECIFICATIONS.
- ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
- NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS, WHERE NO DETAILS ARE GIVEN. CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES. IN NO INSTANCE SHALL DIMENSIONS BE SCALED FROM THE DRAWINGS.
- SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
  - SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT AS NOTED
  - SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-BEARING PARTITIONS UNLESS NOTED AND/OR DETAILED ON THE STRUCTURAL DRAWINGS
  - SIZE AND LOCATION OF ALL CONCRETE CURBS, EQUIPMENT PADS, PITS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGE IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC
  - SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS EXCEPT AS SHOWN
  - FLOOR AND ROOF FINISHES
  - MISCELLANEOUS DRAINAGE AND WATERPROOFING
  - ALL FIREPROOFING REQUIREMENTS INCLUDING FIREPROOFING OF STRUCTURAL STEEL
  - DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS
- SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
  - PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
  - ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
  - CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES.
  - SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS.
- SEE CIVIL DRAWINGS FOR THE FOLLOWING:
  - HEIGHT AND/OR ELEVATION OF:
    - FINISHED SURFACE
    - TOP OF WALL
    - TOP OF GRADE
    - FINISHED GRADE
    - SLOPE
  - SITE CONCRETE WALKWAYS, CURBS & PAVING
- THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT ETC. THE CONTRACTOR IS RESPONSIBLE FOR PROVISION OF TEMPORARY SHORING AND OTHER CONSTRUCTION AIDS, INCLUDING ALL ENGINEERING OF SUCH SYSTEMS, FOR TEMPORARY SUPPORT OF NEW AND/OR EXISTING STRUCTURAL ELEMENTS AS REQUIRED FOR ERECTION AND OTHER CONTRACTORS' MEANS AND METHODS OF CONSTRUCTION (UNO). OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS OR CONCERN CONSTRUCTION MEANS AND METHODS OR CONSTRUCTION SAFETY.
- BACKFILL SHALL NOT BE PLACED BEHIND EXTERIOR AND INTERIOR RETAINING WALLS UNTIL THE CONCRETE / CMU HAS ACHIEVED FULL DESIGN STRENGTH. FOR BRACED WALLS SUPPORTED BY STRUCTURAL DIAPHRAGMS, BACKFILL SHALL NOT BE PLACED BEHIND THE WALL UNTIL THE DIAPHRAGM HAS BEEN INSTALLED, AND FOR CONCRETE DIAPHRAGMS, HAS ACHIEVED FULL DESIGN STRENGTH.
- THE CONTRACT STRUCTURAL DRAWINGS SHOW THE BUILDING IN ITS FINAL INTENDED POSITION. CONTRACTOR SHALL MAKE PROVISIONS IN THE LAYOUT OF THE BUILDING TO TAKE INTO ACCOUNTS SHRINKAGE, CREEP, SHORTENING, ETC.
- OPENINGS, POCKETS, ETC., LARGER THAN 6" SHALL NOT BE PLACED IN CONCRETE SLABS, DECKS, WALLS, UNLESS SPECIALLY DETAILED ON THE STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC., LARGER THAN 6" NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN STRUCTURAL MEMBERS.
- ASTM SPECIFICATIONS ON THE DRAWINGS SHALL BE THE VERSION REFERENCED IN CHAPTER 35 OF THE CODE OR AS REFERENCED IN THE APPLICABLE DESIGN STANDARD.
- CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE STRUCTURAL ENGINEER AND GEOTECHNICAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF OR FLOOR. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. THE CONTRACTOR TO DESIGN AND PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.
- CONTRACTOR SHALL COORDINATE SHORING WITH DRAWINGS OF RECORD TO INSURE PROVISIONS FOR POCKETS, BLOCKOUTS, OFFSETS, STEPPED FOOTINGS AND ANY OTHER ITEMS AFFECTED BY THE SHORING
- AN UNDERGROUND SERVICE ALERT INQUIRY IDENTIFICATION NUMBER MUST BE OBTAINED AT LEAST TWO WORKING DAYS BEFORE STARTING WORK WITH THIS PERMIT.
  - FOR PROJECTS IN SOUTHERN CALIFORNIA TELEPHONE NO. 1-800-422-4133.
  - FOR PROJECTS IN NORTHERN CALIFORNIA TELEPHONE NO. 1-800-227-2600.
- EDGE OF SLAB DIMENSIONS TO BE COORDINATED AND VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO FABRICATION.



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FOR USE IN THE COUNTY OF SAN LUIS OBISPO

REQUIRED VERIFICATION AND INSPECTIONS

WOOD

CODE CHAPTER 17 AND REFERENCED 2018 NDS AND AWC SDPWS-2015

SPECIAL INSPECTION OR TEST	CONTINUOUS	PERIODIC	CBC REFERENCE
1. HIGH LOAD DIAPHRAGM WOOD STRUCTURAL PANELS - VERIFY THE FOLLOWING: - GRADE - THICKNESS - NOMINAL SIZE OF FRAMING MEMBERS AT ADJOINING PANEL EDGES - NAIL OR STAPLE DIAMETER AND LENGTH - NUMBER OF FASTENER LINES - SPACING BETWEEN FASTENERS IN EACH LINE - SPACING BETWEEN FASTENERS AT EDGE MARGINS	---	X	1705.5.1 2306.2
2. FIELD GLUING OPERATIONS OF ELEMENTS OF THE SEISMIC FORCE RESISTING SYSTEM.	X	---	1705.13.2
3. WOOD LATERAL FORCE-RESISTING SYSTEM WITH FASTENER SPACING OF THE SHEATHING LESS THAN OR EQUAL TO 4" O.C. - WOOD SHEAR WALLS - WOOD DIAPHRAGMS - DRAG STRUTS - SHEAR PANELS - HOLD-DOWNS	---	X	1705.13.2
4. WOOD LATERAL FORCE-RESISTING SYSTEM WITH FASTENER SPACING OF THE SHEATHING GREATER THAN 4" O.C. (NOT REQUIRED) - WOOD SHEAR WALLS - WOOD DIAPHRAGMS - DRAG STRUTS - SHEAR PANELS - HOLD-DOWNS	---	---	1705.13.2
5. METAL PLATE CONNECTED WOOD TRUSSES SPANNING 60 FEET OR GREATER - TEMPORARY INSTALLATION RESTRAINT/BRACING - PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT/BRACING - IN ACCORDANCE WITH APPROVED TRUSS SUBMITTAL PACKAGE	---	X	1705.5.2

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

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 <sup>(a)</sup> (a) ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS (b) MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.a.	X	X	ACI 318: 26.7.1 ACI 318: 26.7.1	---

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:

a. 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:

a. 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:

a. THE SPECIAL INSPECTIONS 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:

a. 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 ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL INSPECTION REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS.

E. SPECIAL INSPECTOR REPORT REQUIREMENTS:

a. 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 1704.2.5. 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 1704.2.5.1. THE FOLLOWING ACCREDITATIONS MEET THE REQUIREMENTS OF THIS EXCEPTION:

A. STEEL BUILDINGS (OR STEEL ELEMENTS IN OTHER BUILDINGS)

a. FOR GENERAL STEEL BUILDINGS OR ELEMENTS THE FABRICATOR SHALL BE AN AISC CERTIFIED FABRICATOR IN ACCORDANCE WITH THE AISC CERTIFICATION PROGRAM FOR STRUCTURAL STEEL FABRICATORS (AISC 201-06).

b. OTHER ACCREDITATION DEEMED ACCEPTABLE BY THE AUTHORITY HAVING JURISDICTION.

c. IF FABRICATION IS PERFORMED BY AN APPROVED FABRICATOR A CERTIFICATE OF COMPLIANCE MUST BE PROVIDED TO THE BUILDING INSPECTOR THAT THE MATERIALS SUPPLIED AND WORK PERFORMED BY THE FABRICATOR ARE IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS.

d. IF FABRICATION IS NOT PERFORMED BY AN APPROVED FABRICATOR WELDING INSPECTION REPORTS MUST BE SUBMITTED TO THE BUILDING OFFICIAL BY AN APPROVED TESTING AGENCY.

e.a. NONDESTRUCTIVE TESTING (NDT) MAY BE PERFORMED BY THE FABRICATOR, HOWEVER THE QA AGENCY SHALL REVIEW THE FABRICATOR'S NOT REPORTS.

B. WOOD BUILDINGS

a. WOOD STRUCTURAL PANELS (SHEATHING) SHALL BE IDENTIFIED BY THE APA TRADEMARK.

WOOD STRUCTURAL PANELS (SHEATHING)

1. WOOD STRUCTURAL PANELS SHALL MEET THE FOLLOWING MINIMUM STANDARDS EXCEPT WHERE OTHERWISE NOTED:

WOOD STRUCTURAL PANEL PROPERTIES

USE	PLY	BOND CLASSIFICATION <sup>c</sup>	SHEATHING GRADE	PERFORMANCE RATING	SPAN RATING	RATING <sup>8</sup>	REFERENCE <sup>4</sup>
ROOF	5	EXPOSURE 1	REFER TO TYPICAL DIAPHRAGM SCHEDULE			APA	2022 CBC 2303.1.5 (DOC PS 1-09 OR PS 2-10)
FLOOR	5	EXPOSURE 1				APA	
WALL <sup>9</sup>	5	EXPOSURE 1	REFER TO TYPICAL SHEAR WALL SCHEDULE			APA	

TABLE NOTES:

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):

a. 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 REDRYING, LONG-TERM EXPOSURE TO WEATHER, OR CONDITIONS OF SIMILAR 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.

a. EXCEPTION: WOOD STRUCTURAL PANEL, ROOF SHEATHING EXPOSED TO THE OUTDOORS ON THE UNDERSIDE IS PERMITTED TO BE "EXPOSURE 1" TYPE.

b. WOOD STRUCTURAL PANELS TO BE USED AS SIDING SHALL COMPLY WITH ANSI/APA PRP-210.

D. ORIENTED STRAND BOARD (OSB) WITH EQUIVALENT CLASSIFICATION AND RATINGS MAY BE USED IN LIEU OF PLYWOOD FOR WOOD STRUCTURAL PANEL WALL SHEATHING.

2. TRANSPORTATION, STORAGE, AND HANDLING:

A. TRANSPORTATION

a. IN TRANSPORTING PANELS ON OPEN TRUCK BEDS, COVER THE BUNDLES WITH A TARP.

B. STORAGE

a. ALWAYS STORE THE PANELS UNDER COVER WHENEVER POSSIBLE

b. WHEN STORING PANELS OUTSIDE STACK THEM ON A LEVEL SURFACE ON TOP OF STRINGERS OR OTHER BLOCKING, THREE STRINGERS MINIMUM.

c. NEVER LEAVE PANELS IN CONTACT WITH THE GROUND

d. COVER THE STACK WITH A PLASTIC TARP, ENSURING THAT THE BUNDLE IS WELL VENTILATED TO PREVENT MILDEW.

e. IF MOISTURE ABSORPTION IS EXPECTED, CUT THE STEEL BAND TO PREVENT DAMAGE

f. KEEP SANDED OR OTHER APPEARANCE GRADE PANELS AWAY FROM HIGH TRAFFIC AREAS

C. HANDLING

a. ALWAYS PROTECT ENDS AND EDGES, ESPECIALLY TONGUE AND GROOVE PRODUCTS, FROM PHYSICAL DAMAGE.

b. ACCLIMATE THE PANELS FOR 24 HOURS MINIMUM BEFORE INSTALLATION BY STANDING THE PANELS ON EDGE WITH A GAP BETWEEN EACH TO ALLOW FOR AIR CIRCULATION OR PER MANUFACTURER'S RECOMMENDATIONS.

3. PLYWOOD ORIENTATION

A. ROOF AND FLOOR SHEATHING SHALL BE LAID WITH THE GRAIN OF THE OUTER PILES PERPENDICULAR TO THE FRAMING MEMBERS. SHALL BE CONTINUOUS OVER 2 JOIST BAYS MINIMUM AND END JOINTS SHALL BE JOINED OVER FRAMING AND STAGGERED. LEAVE A 1/8" GAP BETWEEN PANELS TO ALLOW FOR PANEL EXPANSION UNLESS RECOMMENDED OTHERWISE BY THE PANEL MANUF. REFER TO SPECIFIC DETAILS IN THE DRAWINGS FOR FURTHER PARAMETERS.

B. PLYWOOD OR OSB WALL SHEATHING MAY BE APPLIED VERTICALLY OR HORIZONTALLY. ALL END JOINTS BE JOINED OVER FRAMING AND STAGGERED.

4. BLOCKING:

A. ROOF: ALL ROOF SHEATHING SHALL BE BLOCKED UNLESS SPECIFICALLY ALLOWED ON PLANS, WHERE PERMITTED TO BE UNBLOCKED, ALL UNBLOCKED EDGES SHALL BE TONGUE AND GROOVE.

B. ALL FLOOR SHEATHING SHALL BE BLOCKED UNLESS SPECIFICALLY ALLOWED ON PLANS, WHERE PERMITTED TO BE UNBLOCKED, ALL UNBLOCKED EDGES SHALL BE TONGUE AND GROOVE.

C. WALLS: ALL SHEAR WALLS SHALL BE FULLY BLOCKED AT PLYWOOD EDGES.

5. FASTENERS

A. USE SHEATHING NAILS SAME GAUGE AS COMMON WIRE NAILS WITH LENGTHS AT LEAST EQUAL TO SHEATHING THICKNESS PLUS REQUIRED PENETRATION PER AWS SDPWS TABLE 4.2A OR 4.3A (AS REQUIRED).

B. EQUIVALENT PNEUMATIC DRIVE NAILS OR STAPLES MAY BE USED IF FASTENER MANUFACTURER HAS RECEIVED ICC OR IAPMO APPROVAL FOR THE INTENDED USE. FASTENERS TO BE SUBSTITUTED SHALL BE EQUIVALENT IN LATERAL AND WITHDRAWAL STRENGTH TO THE SIZE OF COMMON NAIL SPECIFIED.

C. USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOB SITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD OR OSB SHEATHING. IF NAIL HEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.

D. TYPICAL NAILING SHALL BE 10D AT 6" O.C. AT ALL SUPPORTED EDGES AND OVER SHEAR WALLS, AND 10D AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS, UNLESS OTHERWISE NOTED. SEE PLANS AND REFER TO SHEAR WALL SCHEDULE.

COUNTY OF SAN LUIS OBISPO

THESE PLANS ARE PROVIDED BY THE COUNTY OF SAN LUIS OBISPO 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 CONTRUCT 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.

COUNTY OF SAN LUIS OBISPO

ACCESSORY DWELLING UNIT

SAN LUIS OBISPO, CA

GENERAL NOTES, SPECIAL INSPECTION & TESTS

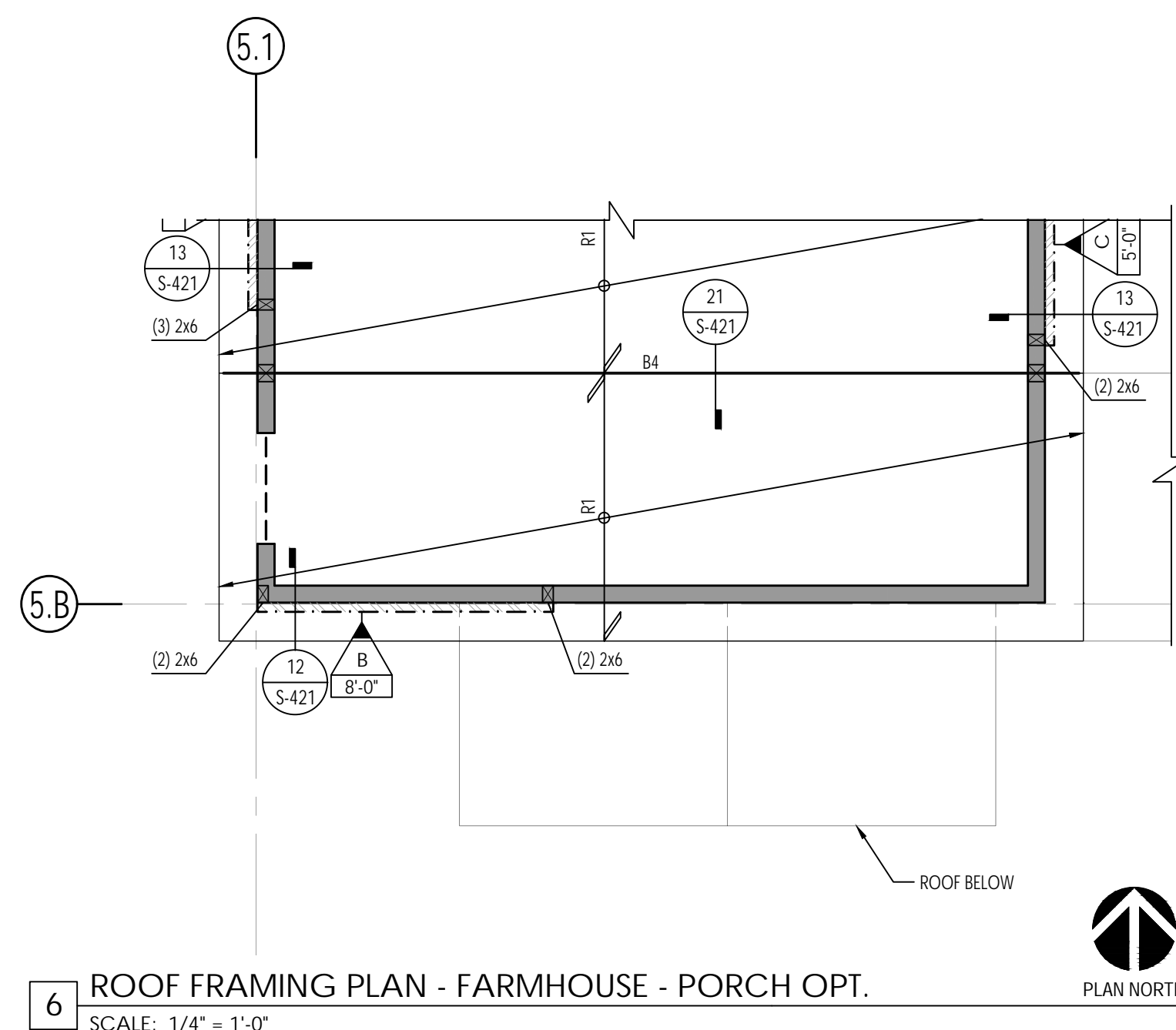
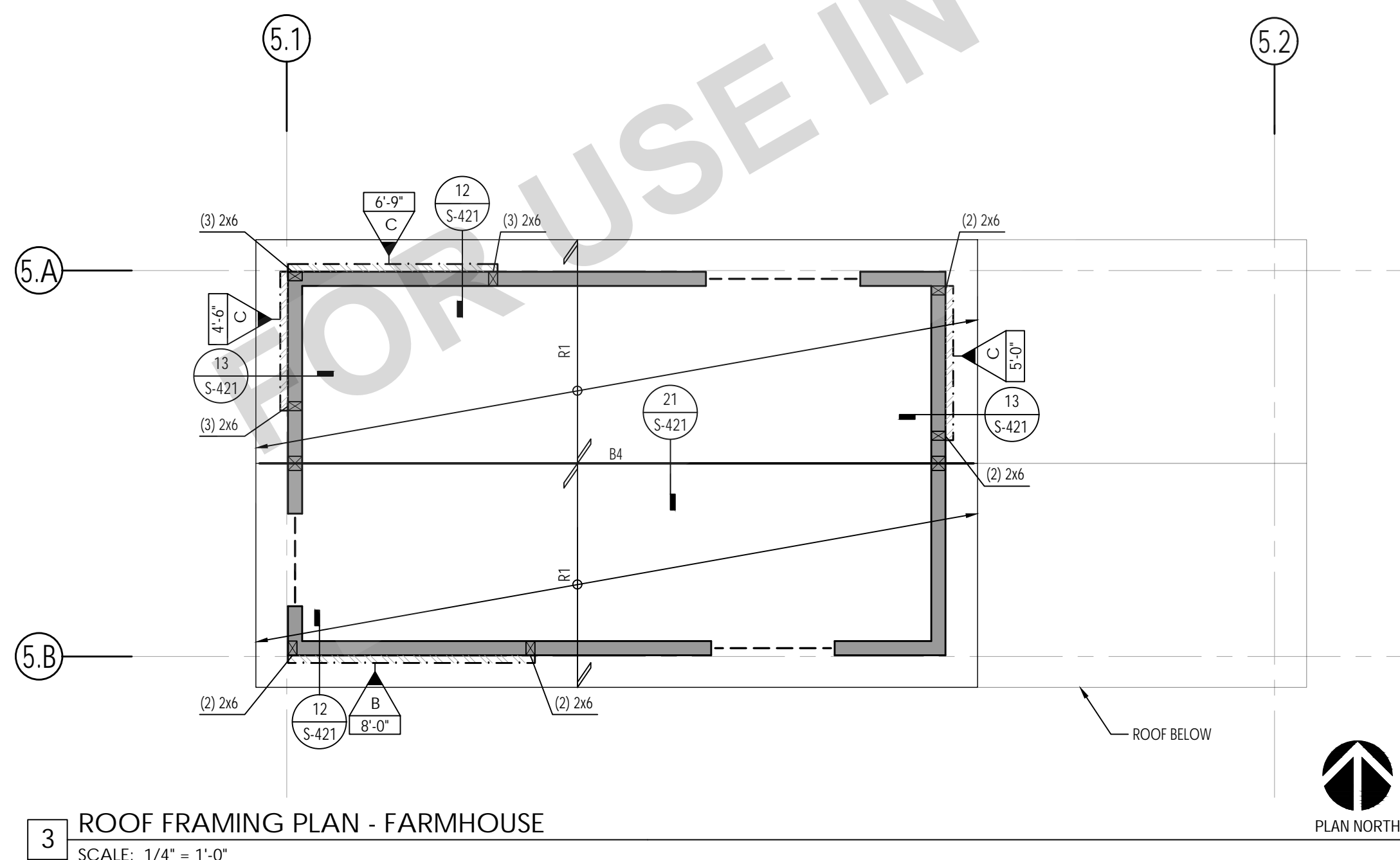
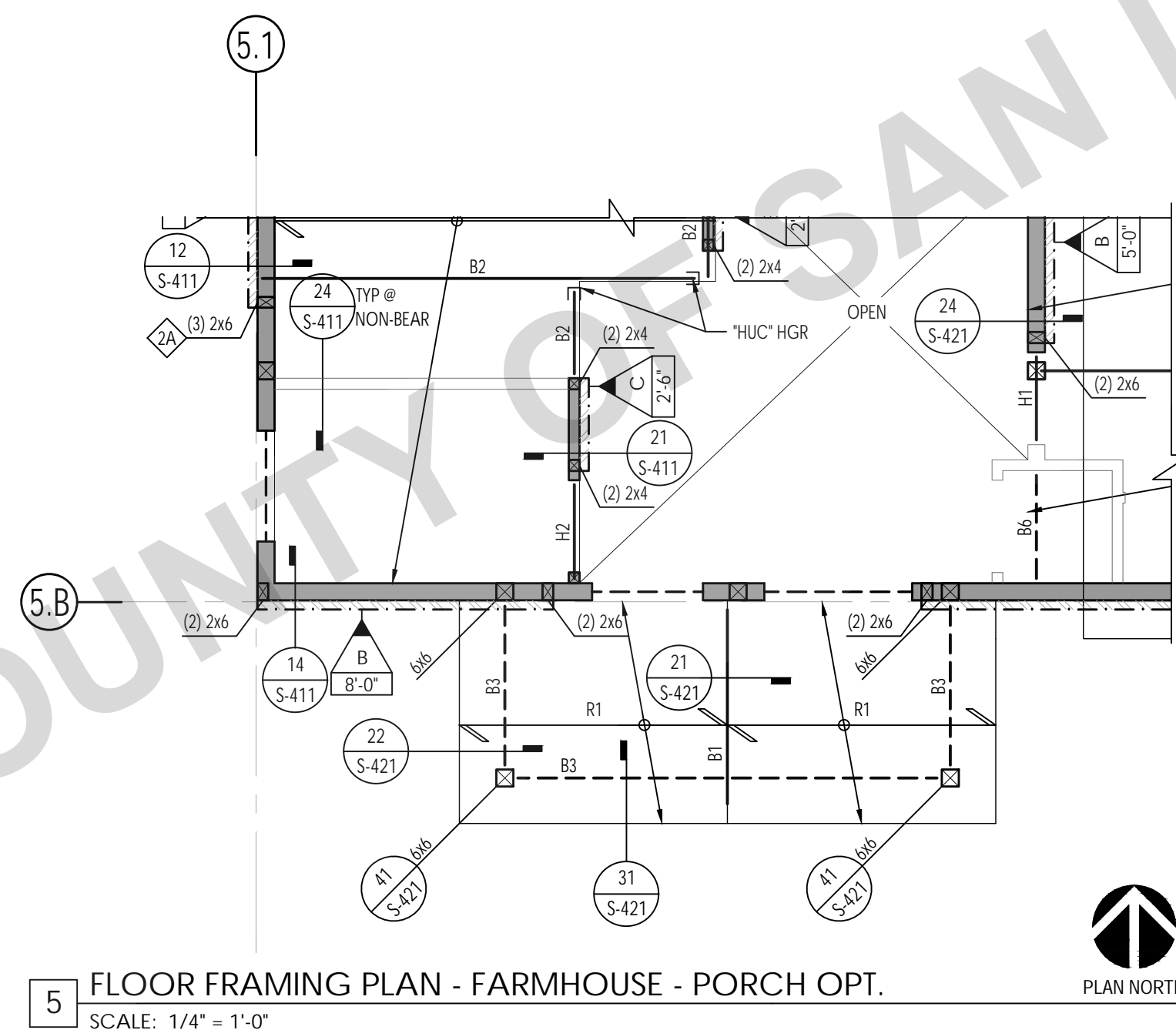
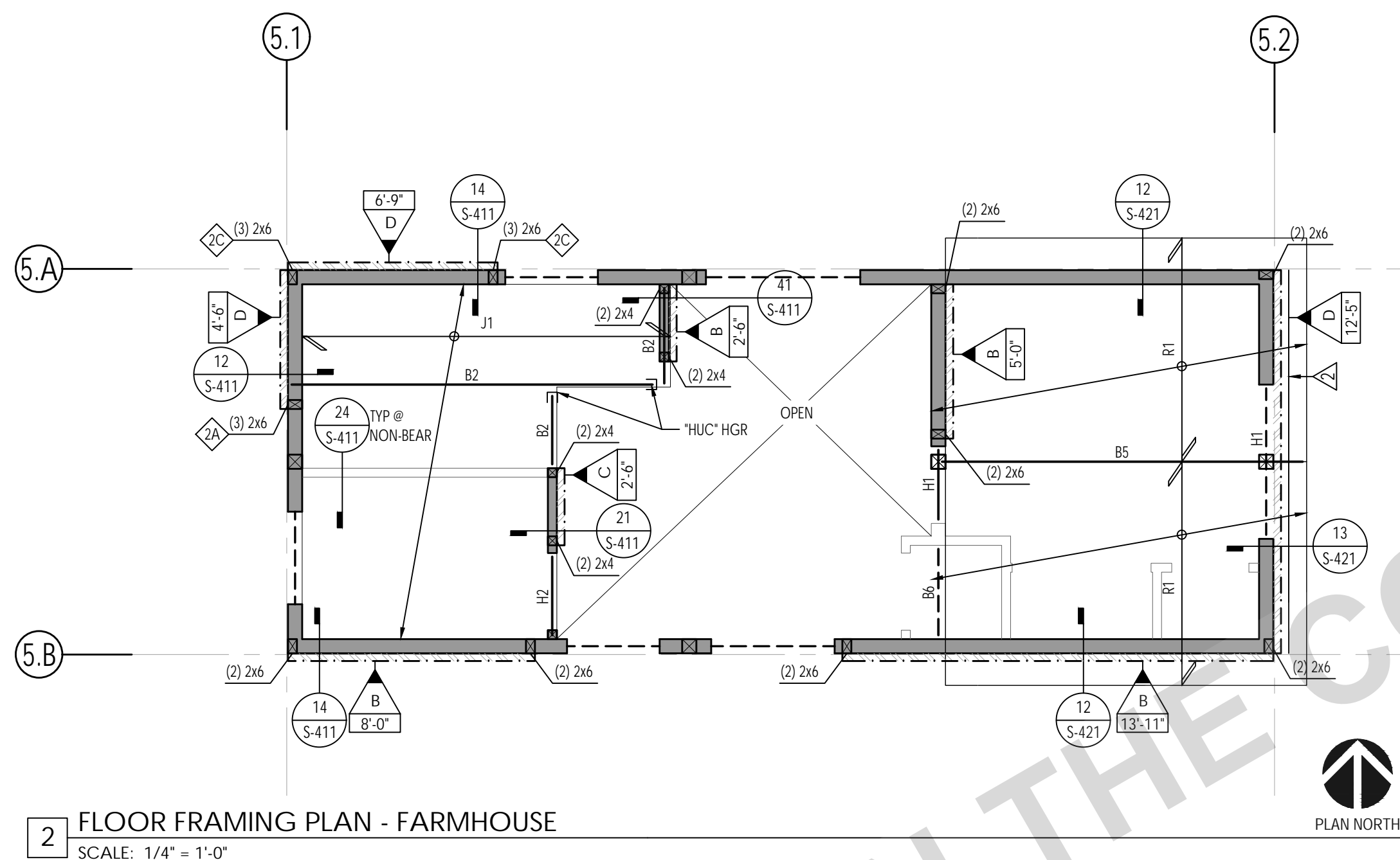
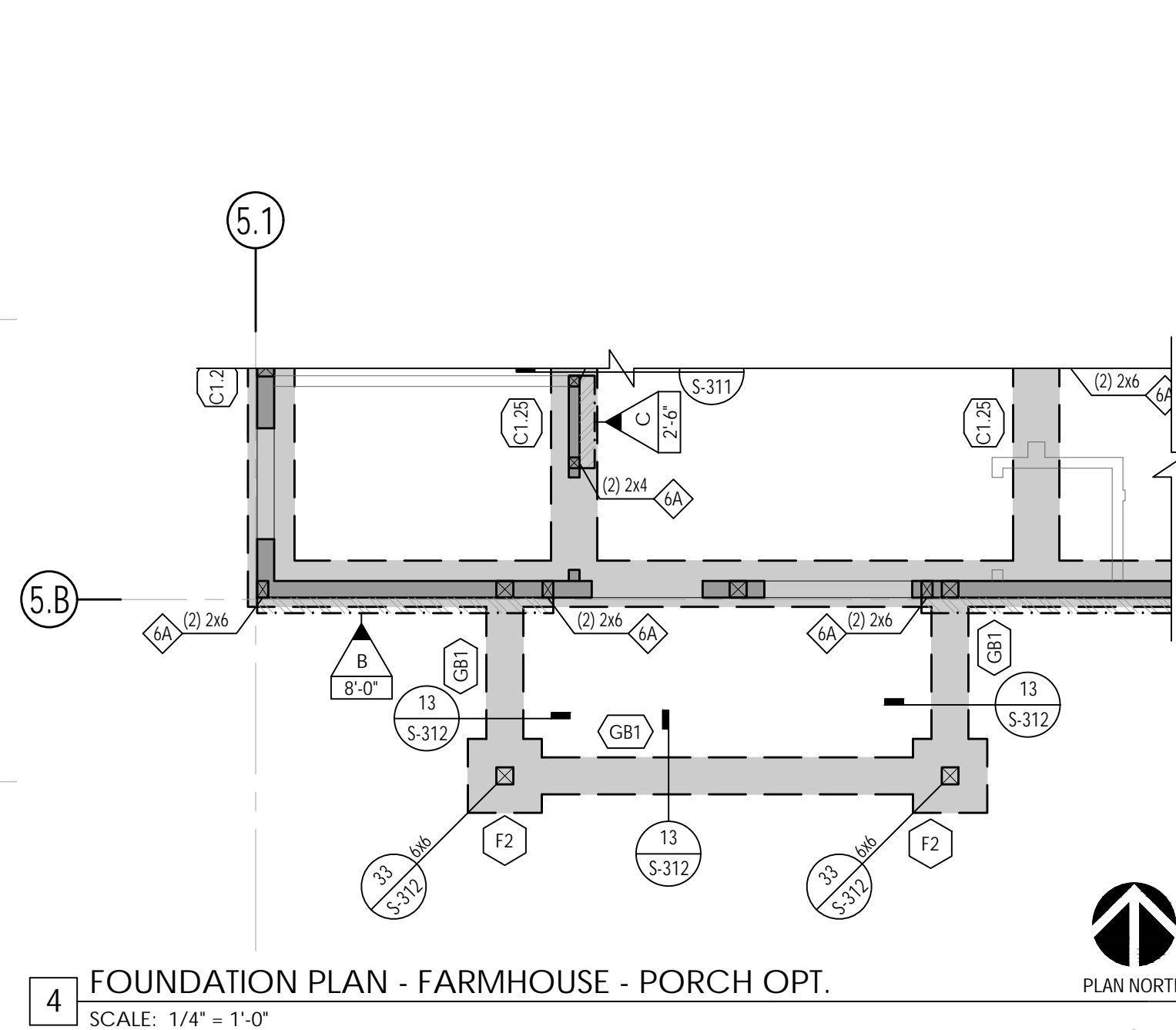
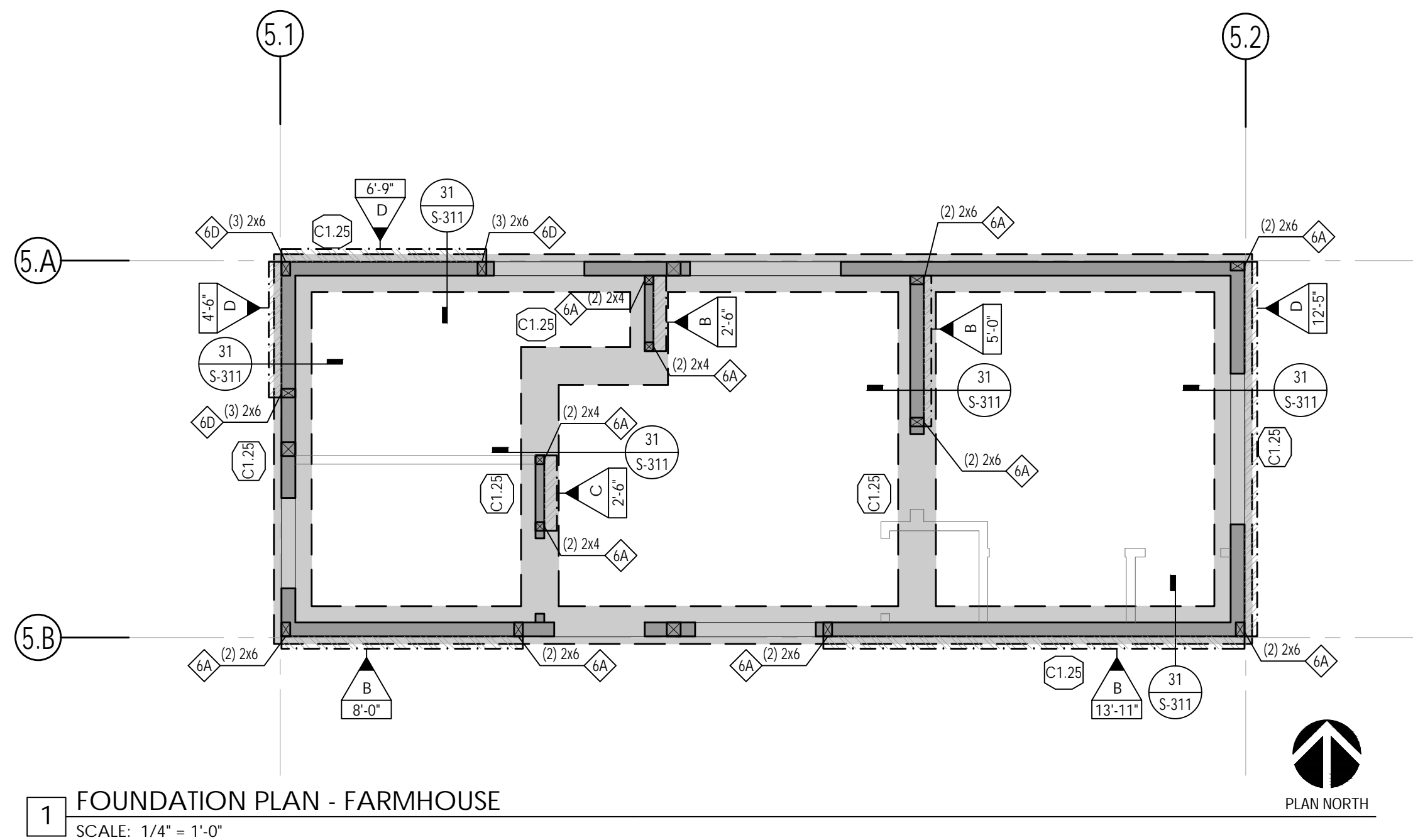
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SHEET

S-103





## FRAMING PLAN NOTES

### GENERAL

1. SEE THE FOLLOWING SHEETS FOR GENERAL NOTES AND TYPICAL DETAILS.

DESCRIPTION	SHEET (S)
SYMBOLS AND ABBREVIATIONS	S-101
STRUCTURAL GENERAL NOTES	S-102 - S-103
TESTING AND INSPECTION	S-103
TYPICAL CONCRETE DETAILS	S-301
TYPICAL WOOD DETAILS	S-401 - S-404

2. SEE ARCHITECTURAL DRAWINGS FOR FINISHED FLOOR ELEVATIONS. REFERENCE FINISHED FLOOR ELEVATION = 0'-0" CORRESPONDS TO FINISHED FLOOR ELEVATION.

3. SEE ARCHITECTURAL DRAWINGS FOR ALL EXTERIOR CONCRETE PAVING, SLABS, BASES, CURBS, ETC.

4. FOR ANY DIMENSIONAL INFORMATION NOT SHOWN, SEE ARCHITECTURAL DRAWINGS.

5. ALL DIMENSIONS SHOWN ARE FROM FACE OF MASONRY, FACE OF SHEATHING, OR CENTERLINE OF COLUMN, UNLESS NOTED OTHERWISE. ALL COLUMNS ARE CENTERED IN STUD WALLS.

6. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS IN BEARING AND NON-BEARING WALLS.

7. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF INTERIOR NON-BEARING PARTITIONS

8. ALL POSTS IN 6"x WALLS SHALL BE 6x6 UNLESS NOTED OTHERWISE  
ALL POSTS IN 4"x WALLS SHALL BE 4x4 UNLESS NOTED OTHERWISE

9. ALL POSTS IN 6" WALLS SHALL BE 6x6, UNLESS NOTED OTHERWISE.

#### TYPICAL WALL FRAMING SHALL BE:

2x6 @ 16" OC @ ALL EXTERIOR WALLS, UNO  
 2x4 @ 16" OC @ ALL INTERIOR BEARING WALLS, UNO  
 2x4 @ 16" @ ALL INTERIOR NON-BEARING WALLS, UNO

### FOUNDATION

10. SEE PLANS AND ARCHITECTURAL DRAWINGS FOR DEPRESSIONS AND/OR SLOPES IN CONCRETE SLABS.

11. SEE ARCHITECTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL EMBEDDED ITEMS AND SLAB PENETRATIONS.

12. FOR TYPICAL SLAB-ON-GRADE REQUIREMENTS, INCLUDING SLAB JOINTS, SEE DETAIL 31/S-301

13. ALL POSTS IN 6"x WALLS SHALL BE 6x6 UNLESS NOTED OTHERWISE  
ALL POSTS IN 4"x WALLS SHALL BE 4x4 UNLESS NOTED OTHERWISE

14. PLATE WASHERS ARE REQUIRED FOR ALL SLL PLATE ANCHOR BOLTS

15. ALL HOLDUP ANCHOR NUTS SHALL BE TIGHTENED JUST PRIOR TO COVERING

16. ALL BOLT HOLES, IN WOOD MEMBERS, SHALL BE DRILLED A MAXIMUM OF 1/16" OVERSIZE.  
INSPECTOR TO VERIFY

17. THE BUILDING PAD SHALL BE PREPARED AS OUTLINED IN DETAIL 53/S-301. THE BUILDING FOOTING SHALL REQUIRE PAD CERTIFICATION BY A GEOTECHNICAL ENGINEER AT THEIR DISCRETION.

18. BOTTOM OF FOOTING SHALL BE, UNLESS DEEPER FOUNDATIONS ARE REQUIRED BY THE BUILDING OFFICIAL:  
 A. 2'1" BELOW PAD OR ADJACENT GRADE AT PERMETER, WHICHEVER IS DEEPER, UNO  
 B. 2'1" BELOW PAD OR ADJACENT GRADE AT INTERIOR GRADE BEAMS, WHICHEVER IS DEEPER, UNO  
 NOTE: FOOTING MUST BE DEEPEENED LOCALLY PER DETAIL 32/S-301 TO ACCOMMODATE ANCHOR BOLT HOLDUP EMBED DEPTHS







19. ALL THIS PLAN IS INTENDED FOR FLAT LOTS, WITHOUT HIGHLY EXPANSIVE OR LIQUEFIABLE SOILS. IF THE PROJECT SITE IS DETERMINED TO HAVE ANY OF THESE QUALITIES, AS DETERMINED BY THE BUILDING OFFICIAL, THESE PRE-APPROVED ADU FOUNDATION PLANS AND DETAILS ARE NOT APPLICABLE.

### FRAMING




ALL LINES OR MEMBERS INDICATED AS "STRUT" SHALL RECEIVE (2) ROWS OF BOUNDARY NAILING (BN), STAGGERED.


21. ALL INTERIOR WALLS NOT SHOWN ON THE STRUCTURAL FRAMING PLANS BUT SHOWN ON THE ARCHITECTURAL DRAWINGS SHALL BE CONSTRUCTED PER NON-BEARING PARTITION WALL DETAIL 43/S-401, UNO.


22. PLYWOOD SHEATHED DIAPHRAGM TYPES:  
 ALL ROOF DIAPHRAGMS SHALL BE TYPE B, UNO  
 REFER TO 12/S-403


SYMBOL LEGEND	
	INDICATES SHEAR WALL TYPE AND LENGTH. SEE SCHEDULE ON 13/5-402
	INDICATES BLOCKING & STRAPPING ABOVE & BELOW WINDOW OPENINGS PER DETAIL 44/5-402
	INDICATES HEADER @ OPENING. REFER TO 32/5-401 FOR HEADER SIZE, UNQ, ON PLANS
	INDICATES TOP PLATE SPLICE NAILING PER 33/5-403 NOTE THAT NAILING APPLIES TO ENTIRE LENGTH OF TOP PLATE. PROVIDE TYPE (C) SPLICE, UNQ
	INDICATES STRAP PER 31/5-411, UNQ
	INDICATES CONT BLK & STRAP PER 32/5-411 @ ROOF, UNQ

# SCHEDULES

HOLDOWN SCHEDULE			
SPECIFICS HOLDOWN/ STRAP DETAIL		INDICATES HOLDOWN/ STRAP TYPE	DETAIL
	INDICATES SIMPSON SSB HOLDOWN TO: CONC FOUNDATION:		34/S-411
	INDICATES SIMPSON SSB HOLDOWN TO: CONC FOUNDATION:		12/S-311

CONTINUOUS FOOTING SCHEDULE					
MARK	WIDTH	MIN EMBED BELOW LOWEST PAD GRADE	LONG REIN	TRANS REIN	DETAIL
	1'-3"	SEE NOTE 18	(2) #5 T&B	#3 @ 12" OC, BOT	31/S-311

GRADE BEAM SCHEDULE						
TYPE	WIDTH	THICKNESS	MIN EMBED BELOW LOWEST PAD GRADE	LONG REIN	TRANS REIN	DETAIL
	1'-0"	1'-0"	SEE NOTE 18	(2) #4 @ TOP (2) #4 @ BOT	#3 @ 24" OC	13/S-312

PAD FOOTING SCHEDULE							
TYPE	WIDTH	LENGTH	THICKNESS	MIN EMBED BELOW LOWEST PAD GRADE	TOP REIN	BOT REIN	DETAIL
	1'-0"	1'-0"	1'-0"	SEE NOTE 18	(2) #4 @ TOP (2) #4 @ BOT	#3 @ 24" OC	13/S-312

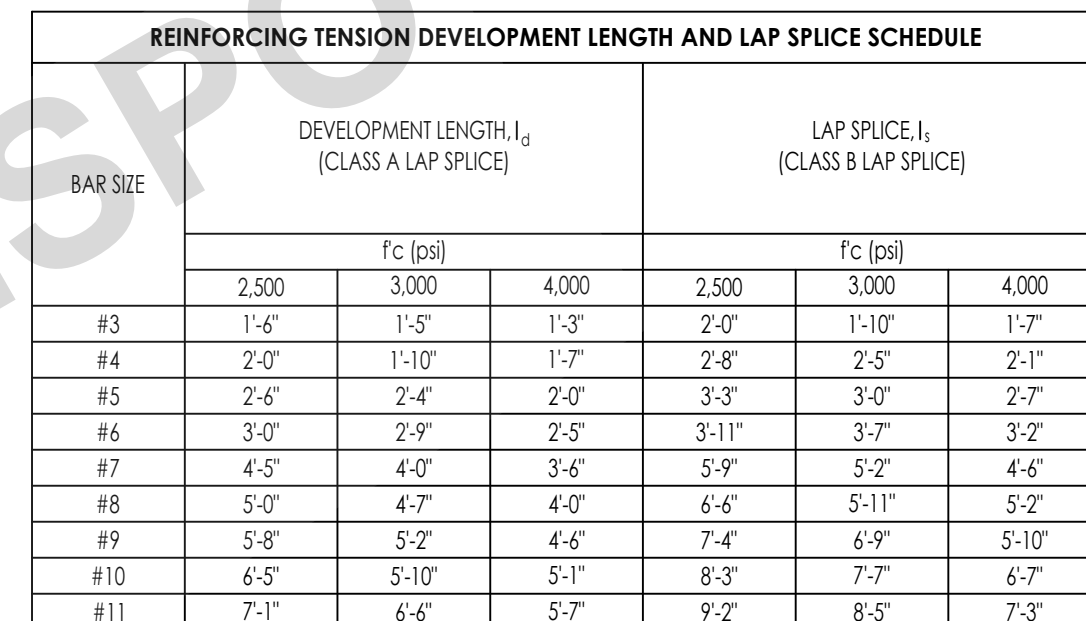
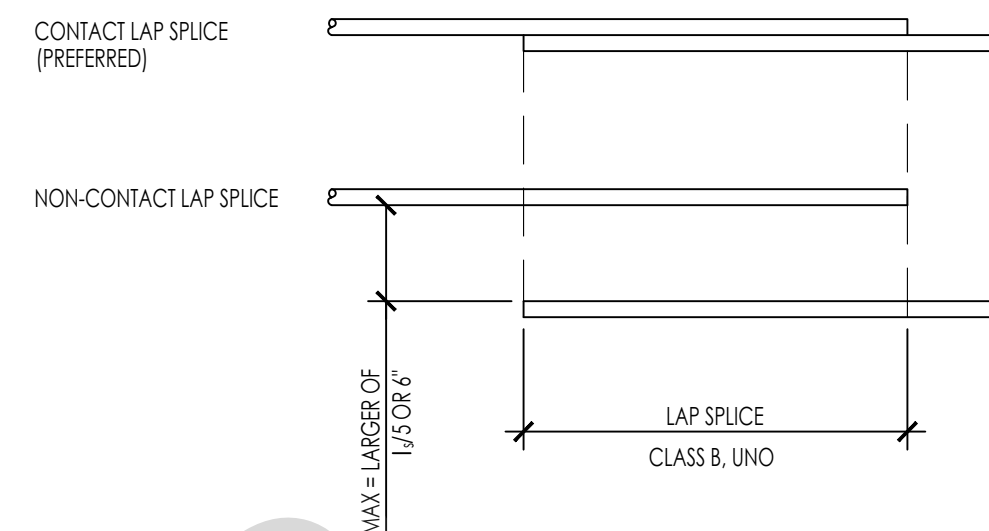
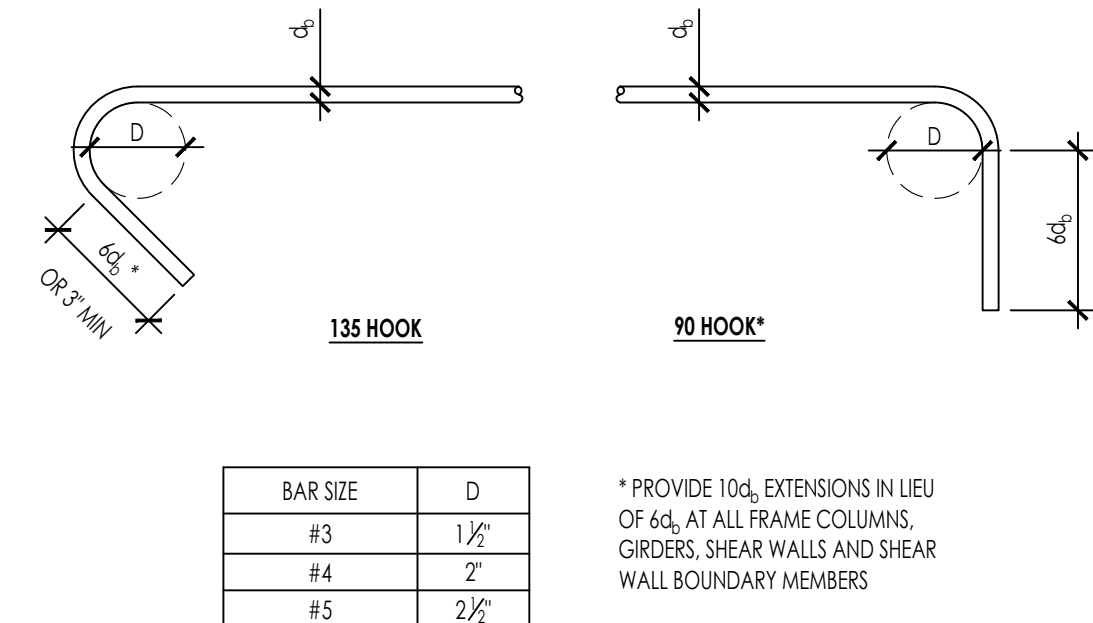
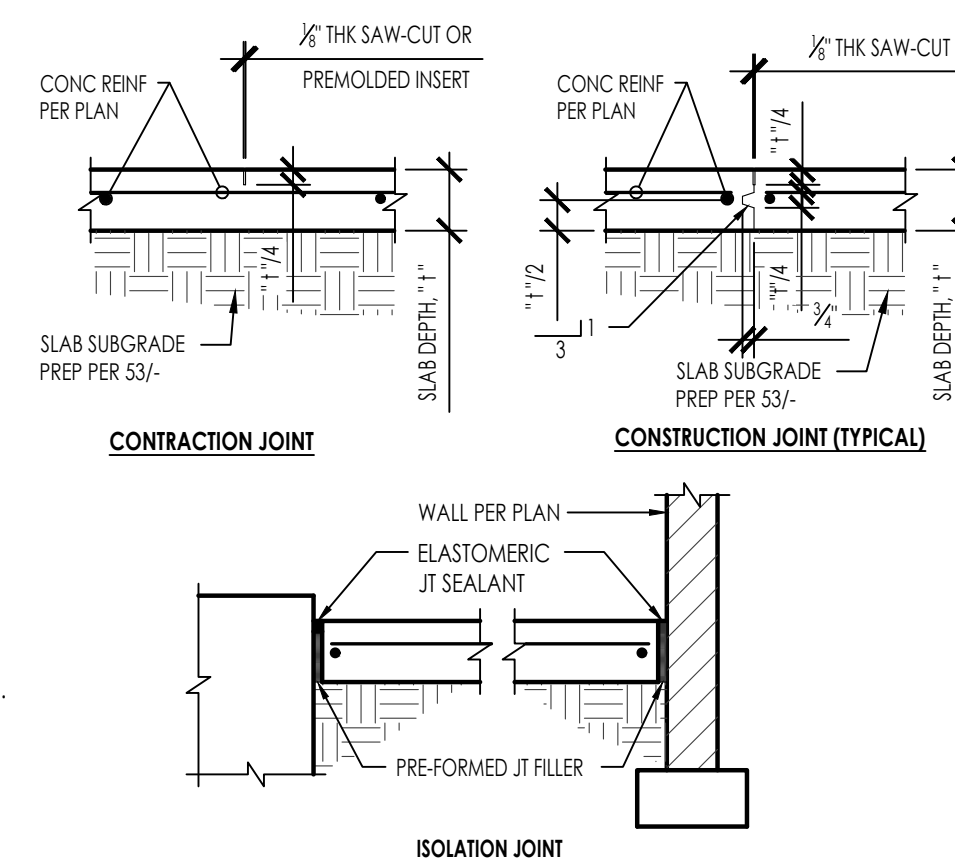
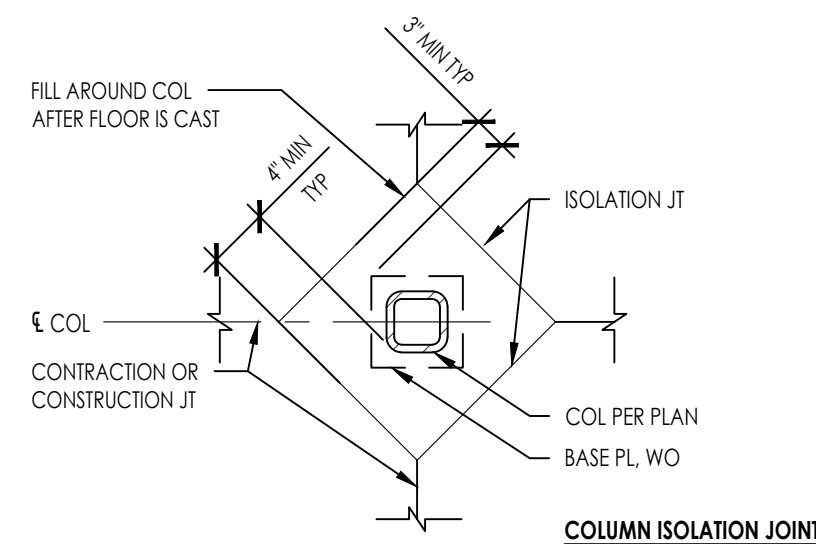
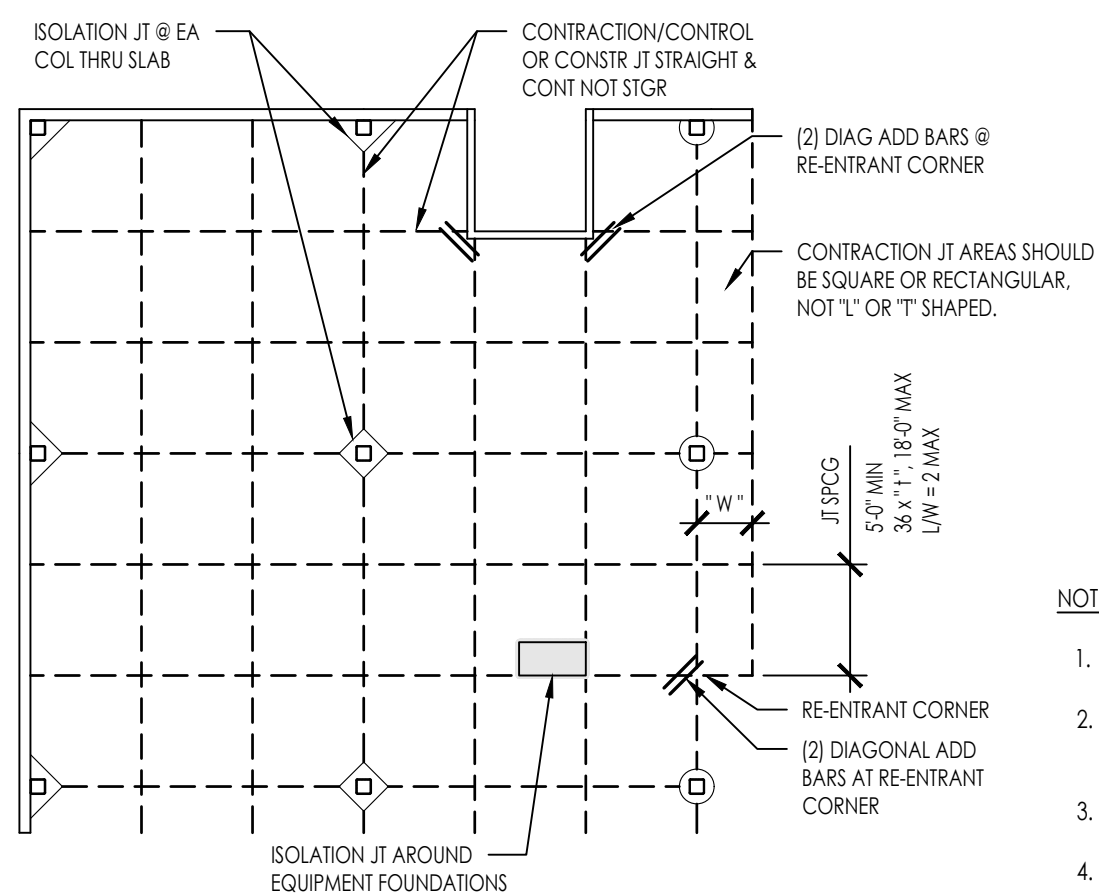
ROOF BEAM SCHEDULE		
MARK	SIZE	REMARKS
B1	4x8	
B2	4x12	
B3	6x8	
B4	1½" x 14' LVL (2.0E)	2 PLY
B5	1½" x 11½' LVL (2.0E)	2 PLY
B6	6x6	

ROOF RAFTER SCHEDULE		
MARK	SIZE	REMARKS
R1	2x6 @ 24" OC	
R2	2x10 @ 24" OC	
R3	2x10 @ 16" OC	

FLOOR JOIST SCHEDULE		
MARK	SIZE	REMARKS
J1	2x12 @ 24" OC	

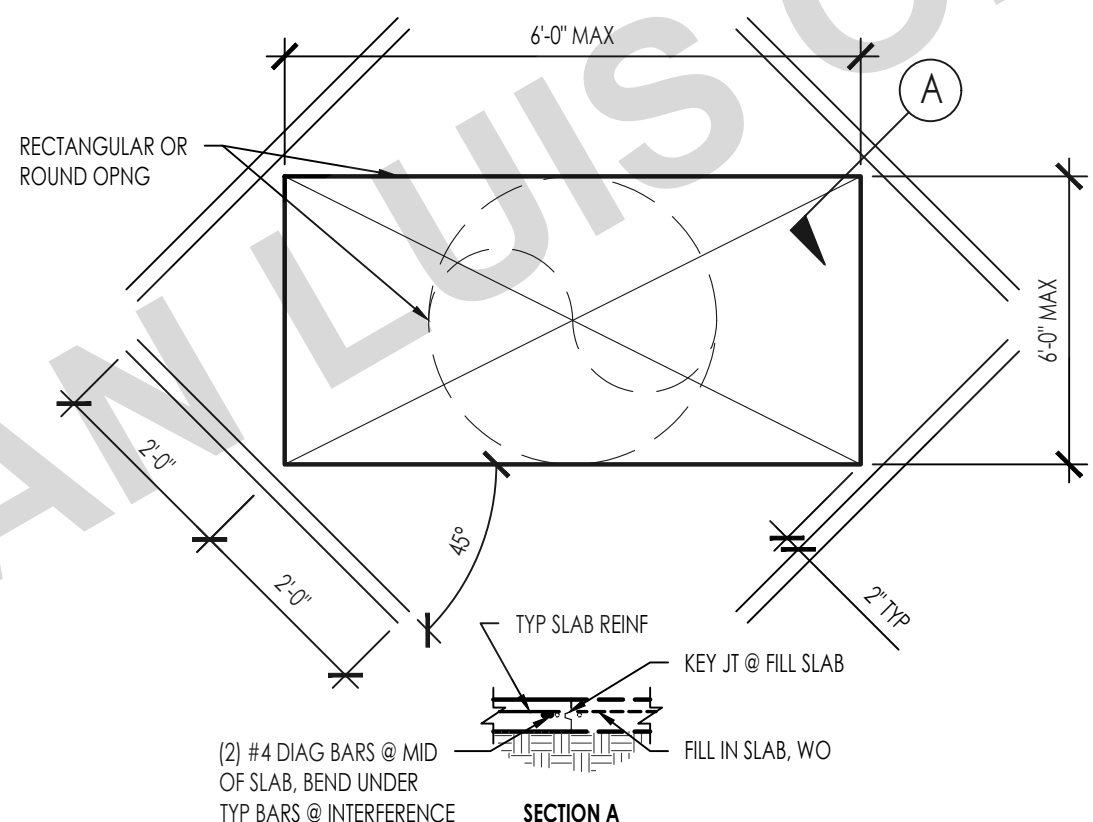
HEADER SCHEDULE		
MARK	SIZE	REMARKS
H1	6x6	
H2	4x4	





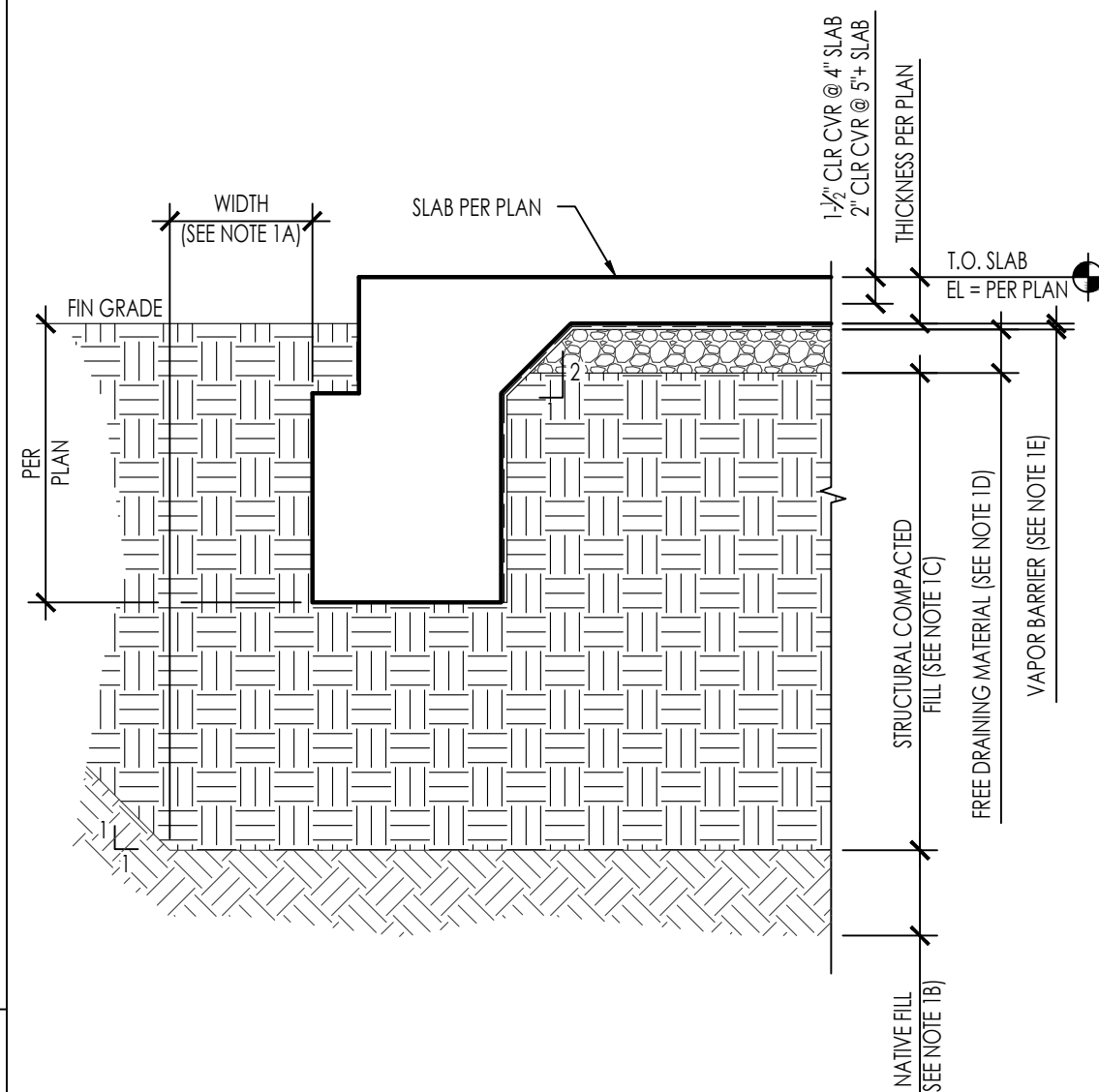
NOTES:

1. VALUES ABOVE ARE FOR REINFORCEMENT WITH THE FOLLOWING PARAMETERS:
  - A. GRADE 60 REINFORCEMENT
  - B. NORMAL WEIGHT CONCRETE
    - a. FOR LIGHTWEIGHT CONCRETE MULTIPLY THE VALUES ABOVE BY 1.3
  - C. NON-EPOXY COATED REINFORCEMENT
  - D. HORIZONTAL BARS WITHOUT 12" OF CONCRETE BELOW (BOTTOM BARS), AND VERTICAL BARS
    - a. FOR TOP BARS WITH 12" OR MORE OF CONCRETE BELOW THE BAR MULTIPLY THE VALUES ABOVE BY 1.3
  - E. CLEAR SPACING NOT LESS THAN  $c_d$ , CLEAR COVER NOT LESS THAN  $c_d$  AND STIRRUPS THROUGH  $L_d$  NOT LESS THAN MIN
    - OR
    - CLEAR SPACING NOT LESS THAN  $2d_b$ , AND CLEAR COVER NOT LESS THAN  $d_b$ 
      - a. FOR OTHER SPACING AND COVER CONDITIONS MULTIPLY THE VALUES ABOVE BY 1.5
  - F. REINFORCEMENT NOT IN SHEAR WALLS
    - a. FOR REINFORCEMENT IN SHEAR WALLS MULTIPLY THE VALUES ABOVE BY 1.25
2. THE MULTIPLIERS LISTED IN NOTE 1 ABOVE ARE CUMULATIVE INCREASES IN DEVELOPMENT/LAP SPICE LENGTH.
3. ALL LAP SPACES REFERENCED IN THE PLANS SHALL BE CLASS B UNLESS NOTED OTHERWISE.
4. WHEN REINFORCING BARS OF TWO SIZES ARE LAP-SPLICED IN TENSION, USE THE LARGER OF THE TENSION CLASS B, LAP SPICE LENGTH  $(l_{d1})$  OF THE SMALLER BAR, AND THE CLASS A, TENSION DEVELOPMENT LENGTH  $(l_{d2})$  OF THE LARGER BAR.



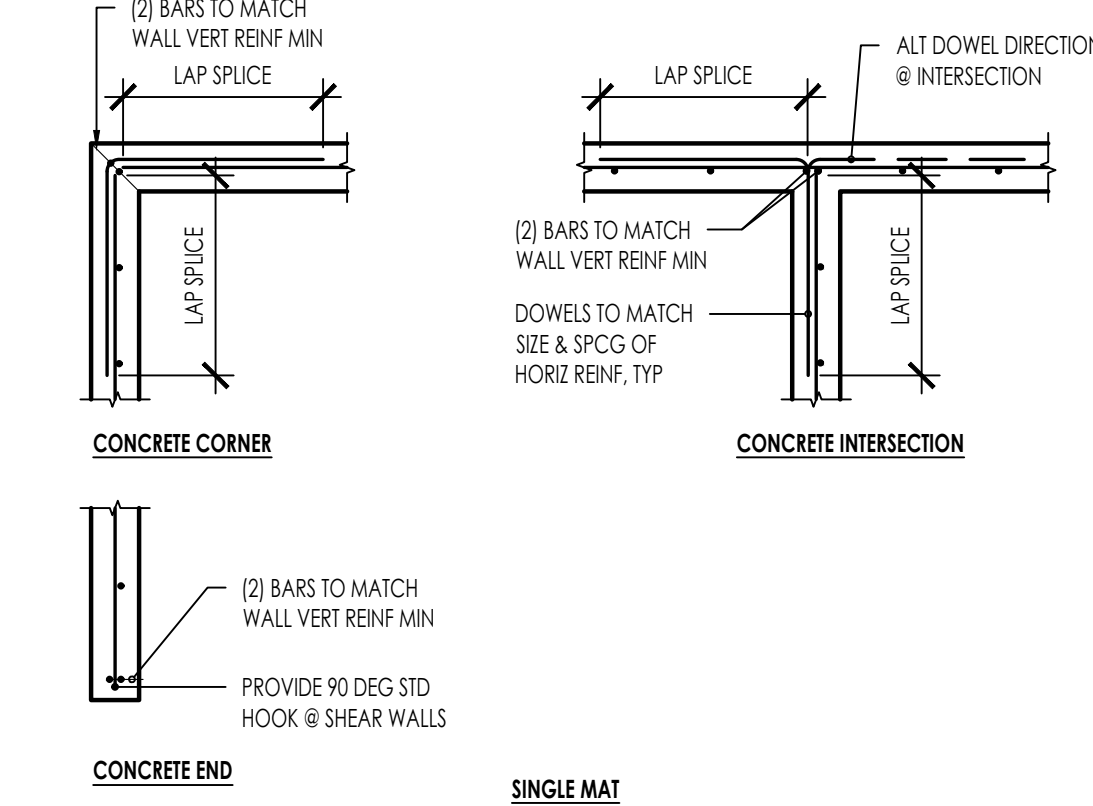
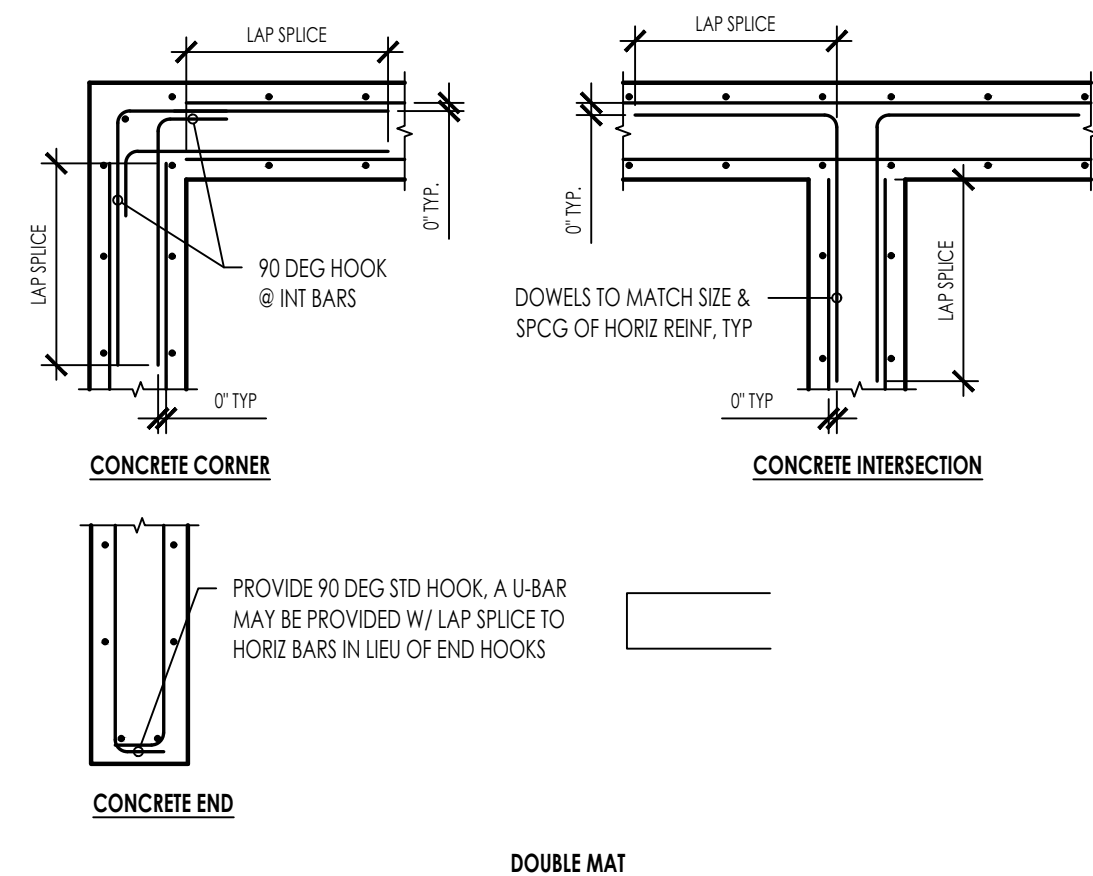
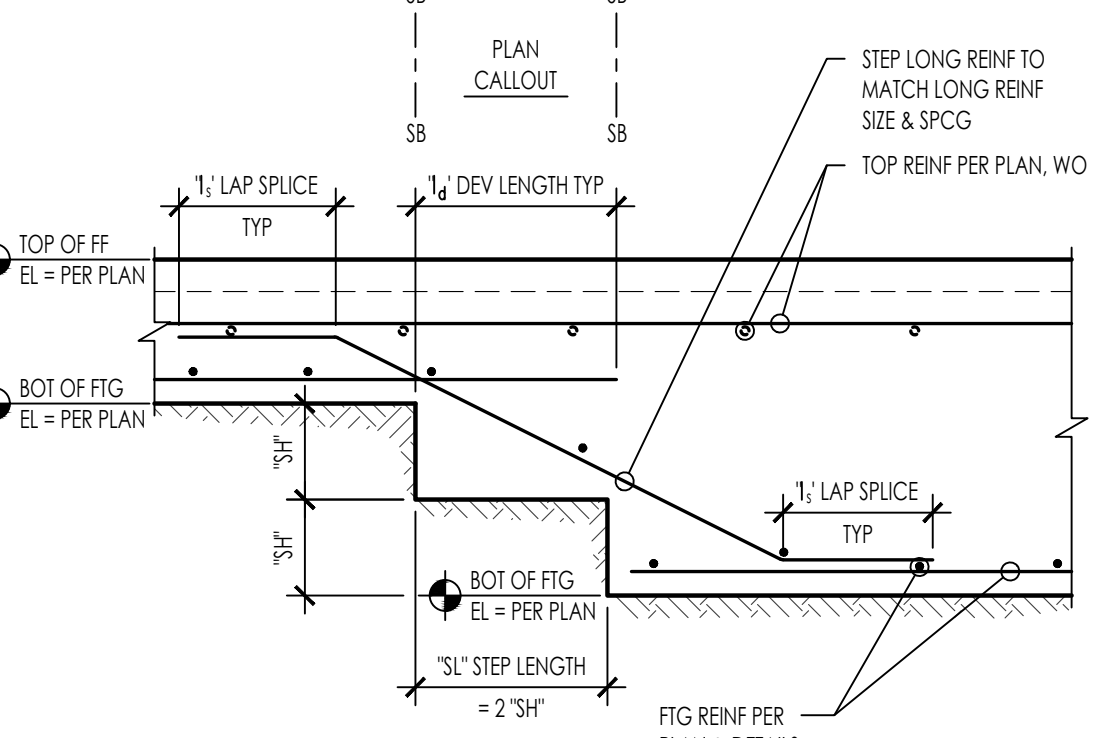
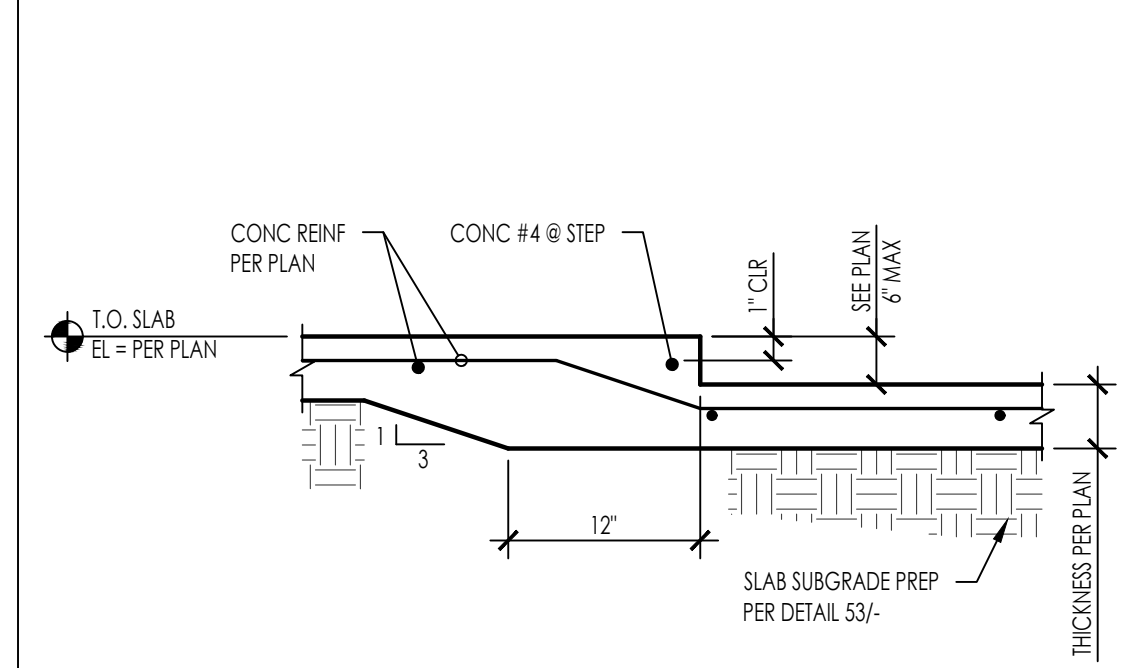
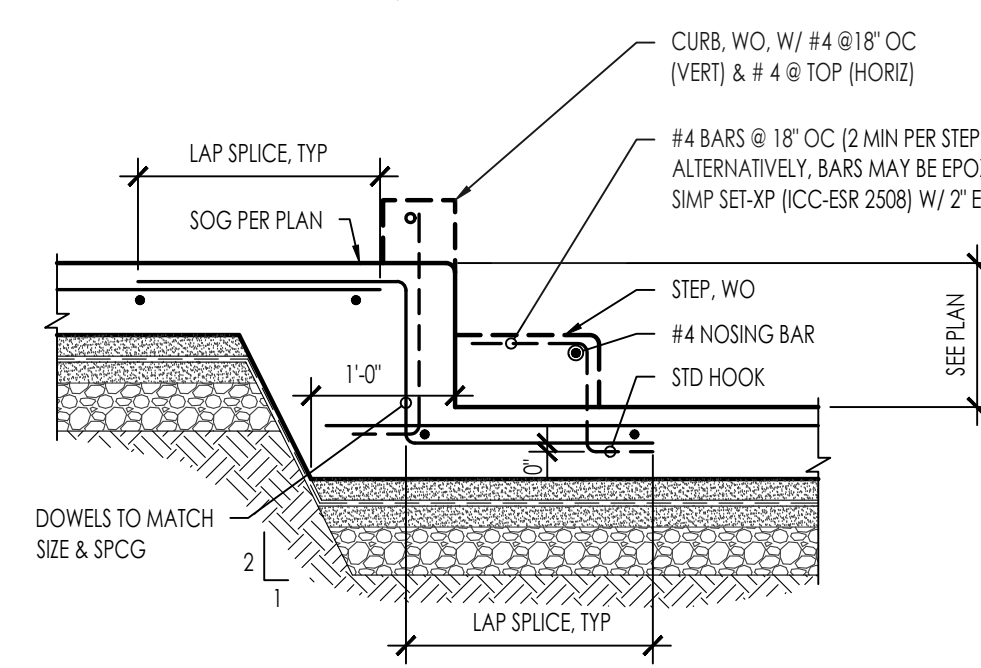
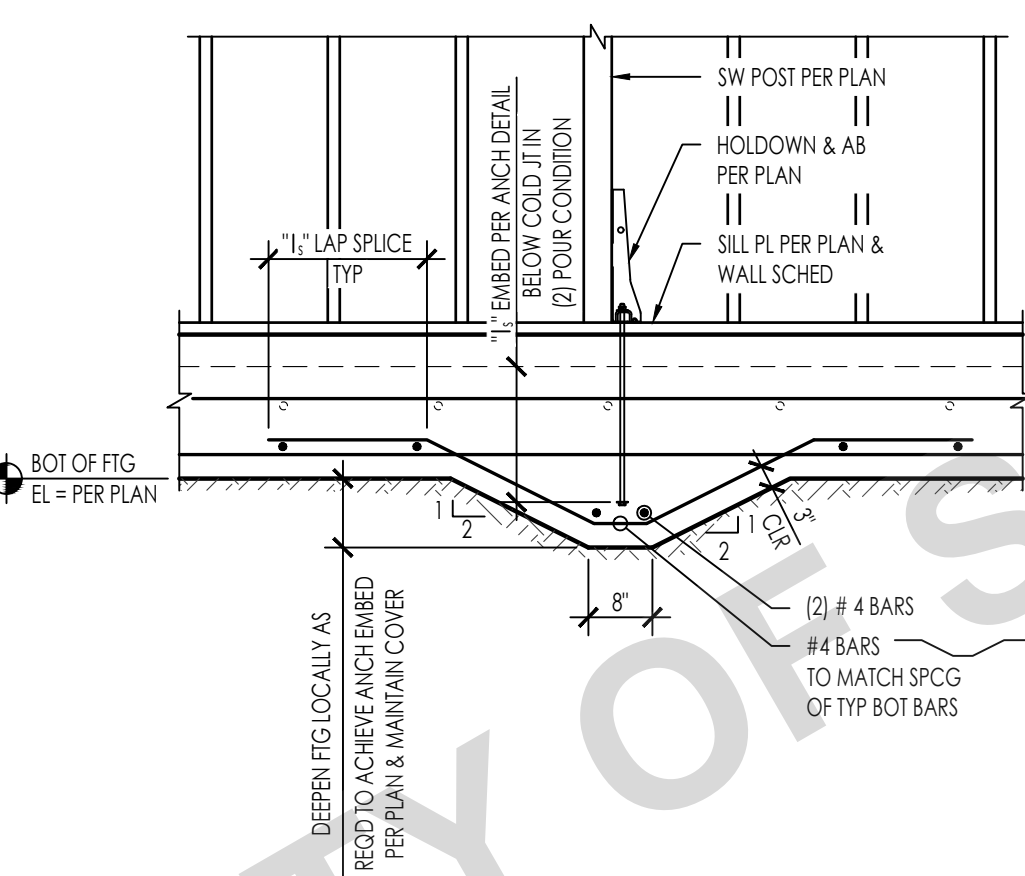
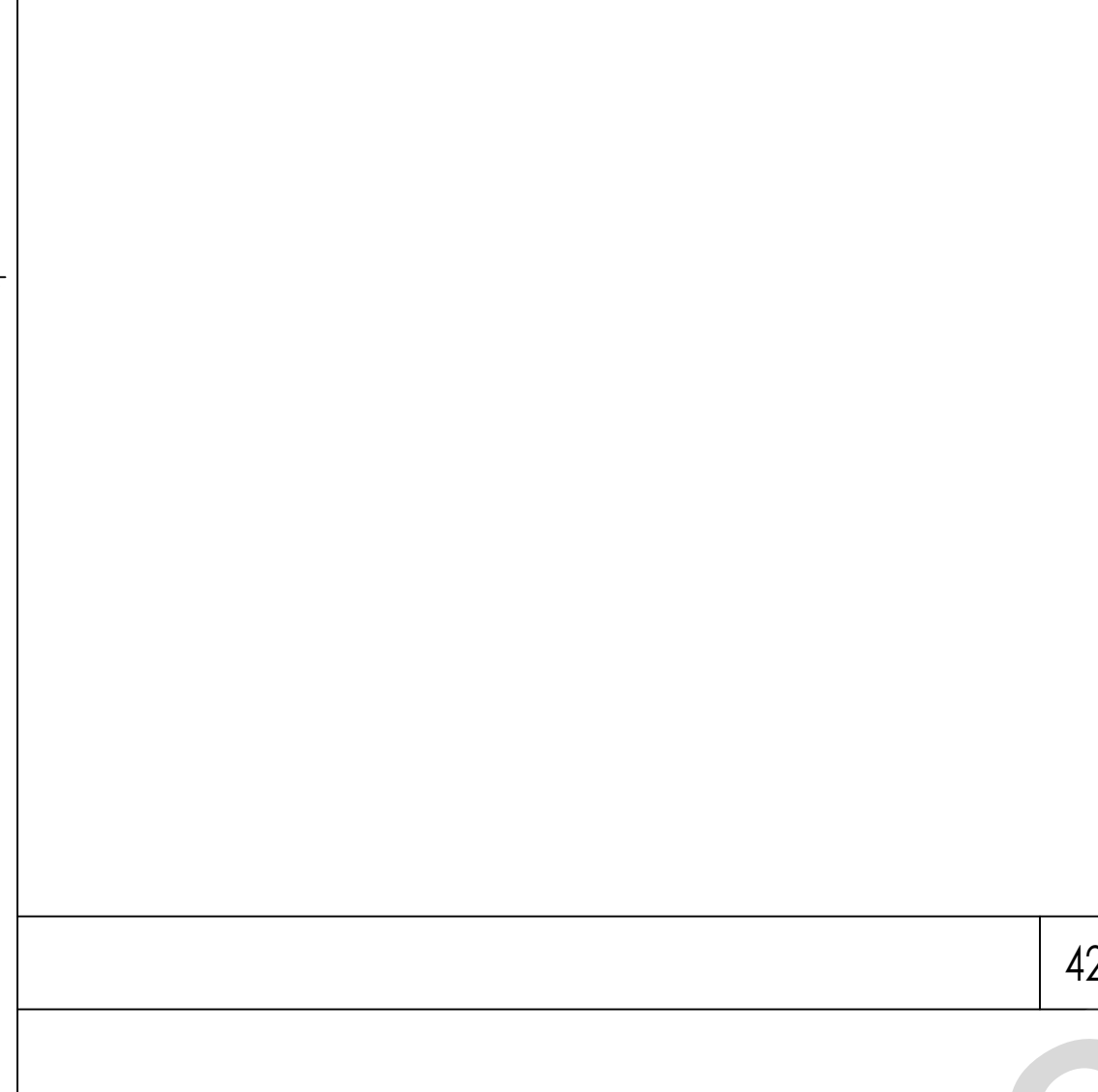
NOTES:

1. ELIMINATE BARS IF OPENING IS LESS THAN 2'-0" IN BOTH DIMENSIONS.
2. REFER TO DETAIL 53/- FOR SLAB ON GRADE SUBGRADE SUPPORT

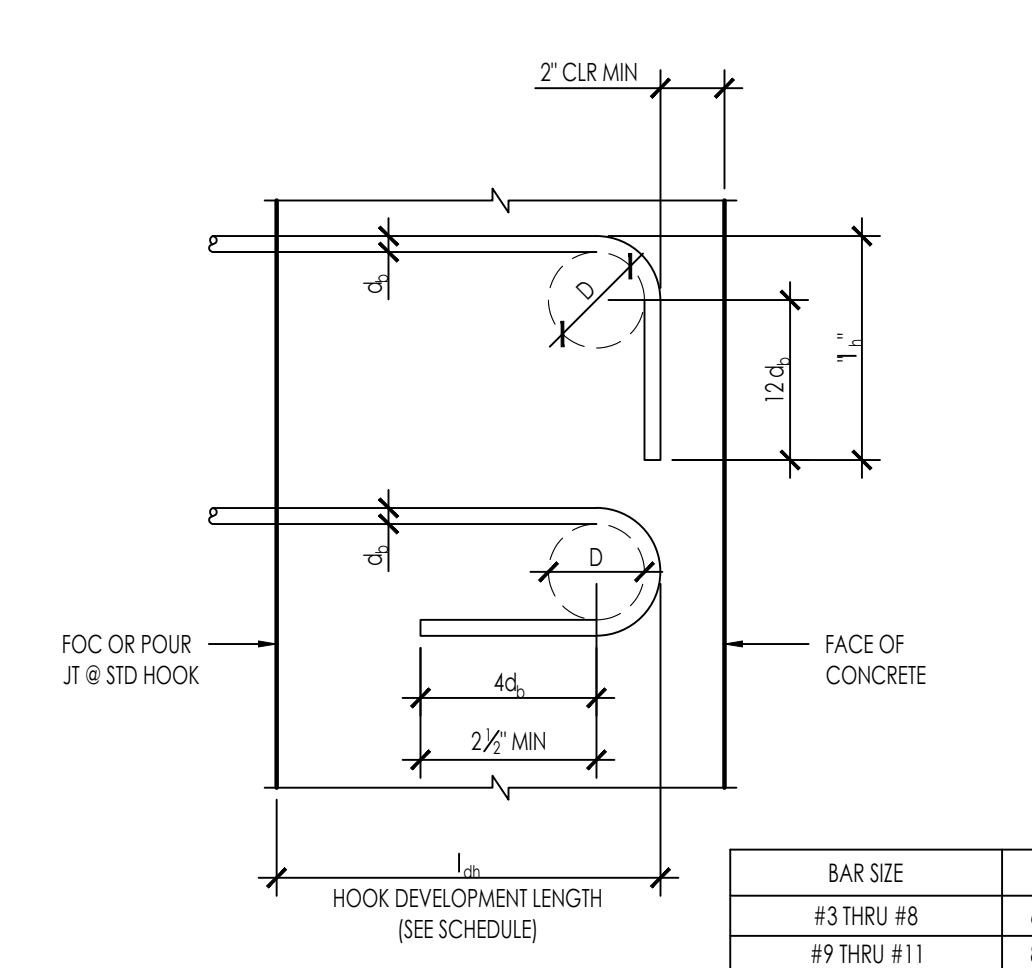


NOTES:

1. PREPARATION OF THE SLAB SUBGRADE SHALL BE BASED ON THE GEOTECHNICAL INVESTIGATION REPORT AS REFERENCED IN THE FOUNDATION GENERAL NOTES. THE FOLLOWING INFORMATION IS FOR REFERENCE ONLY.
  - A. OVER AVERAGE SUBGRADE SHALL EXCEED 5 FEET BEFORE PERIMETER FOUNDATION. TO PROPERTY LINES OR EXISTING IMPROVEMENTS, WHICHEVER IS LEAST.
2. NATIVE MATERIALS
  - a. SHALL BE OVER-EXCAVATED 36" BELOW (E) GRADE OR 18" BELOW BOTTOM OF FOOTINGS, WHICHEVER IS GREATEST.
  - b. THE EXPOSED SURFACE SHALL BE SCARIFIED TO A DEPTH OF 6". MOISTURE CONDITIONED TO 3 PERCENT OVER OPTIMUM MOISTURE CONTENT AND COMPACTED TO A MINIMUM RELATIVE DENSITY OF 90 PERCENT (ASTM D1557)
3. ENGINEERED COMPACTED FILL
  - a. REFER TO THE GEOTECHNICAL INVESTIGATION REPORT FOR RECOMMENDATIONS FOR STRUCTURAL FILL
  - b. STRUCTURAL FILL SHALL BE PLACED IN HORIZONTAL LAYERS, EACH APPROXIMATELY 8" THICK BEFORE COMPACTED, AND SHOULD BE CONDITIONS WITH WATER TO PRODUCE A SOIL WATER CONTENT NEAR OPTIMUM MOISTURE AND COMPACTED TO A MINIMUM RELATIVE DENSITY OF 90 PERCENT (ASTM D1557)
4. 4" THICK, CLEAN FREE-DRAINING MATERIAL SUCH AS 5/8" COARSE AGGREGATE
5. REFER TO GEOTECH REPORT AND ARCH DRAWINGS FOR VAPOR BARRIER. INSTALL PER MANUFACTURER'S RECOMMENDATIONS FOR SEALING OF PENETRATIONS, JOINTS AND EDGES.
  - a. VAPOR BARRIER IS NOT TO BE PUNCTURED DURING CONSTRUCTION OF SLAB ON GRADE.
6. 2" THICK OPTIONAL SAND SHALL BE LIGHTLY MOISTENED PRIOR TO PLACING CONCRETE.



NOTE:  
REINFORCEMENT SHOWN ON WALL ELEVATION(S),  
BOUNDARY REINFORCING DETAILS, AND OTHER  
SPECIFICALLY REFERENCED DETAILS SHALL TAKE  
PRECEDENCE OVER REINFORCEMENT SHOWN HERE



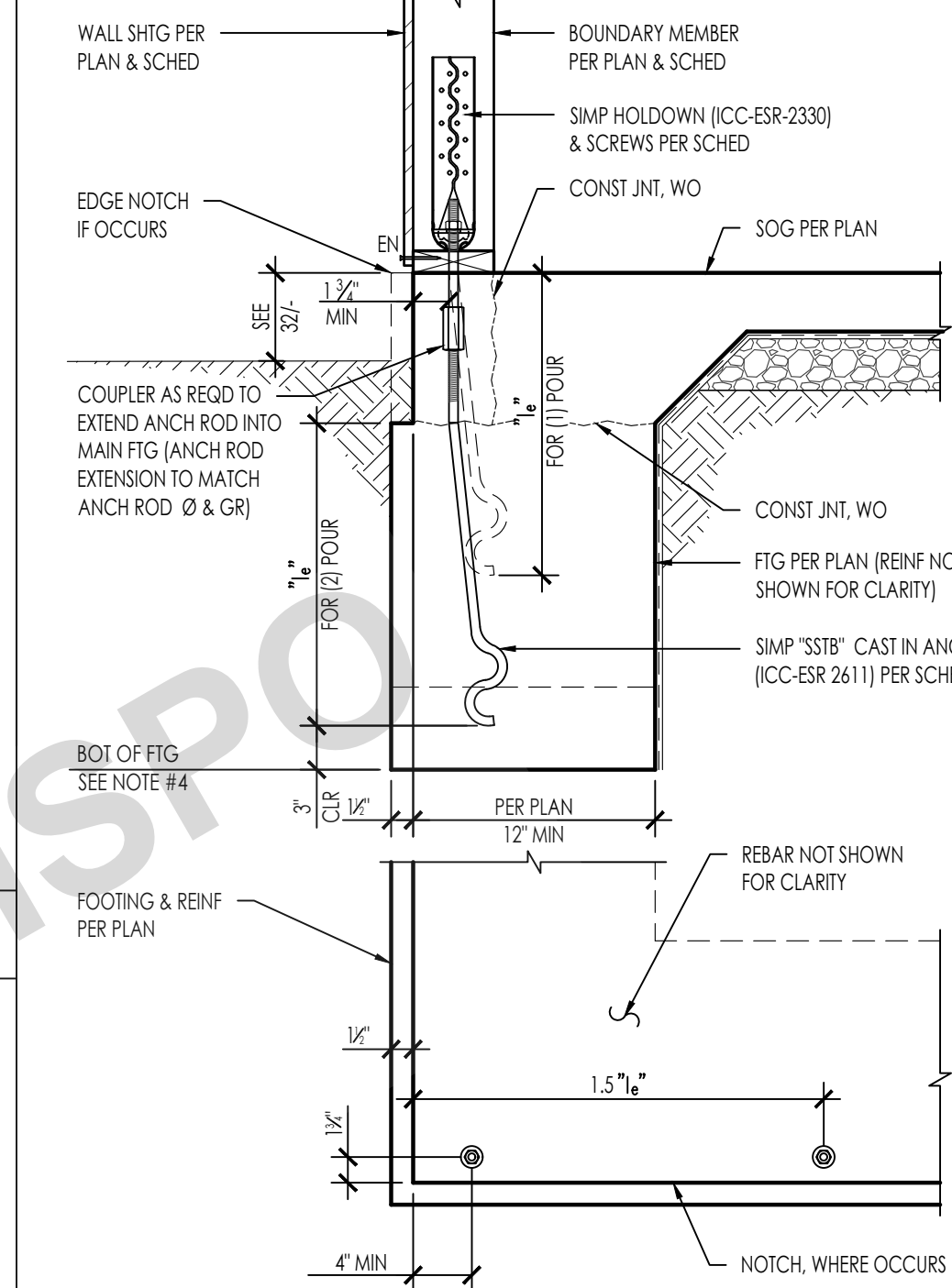
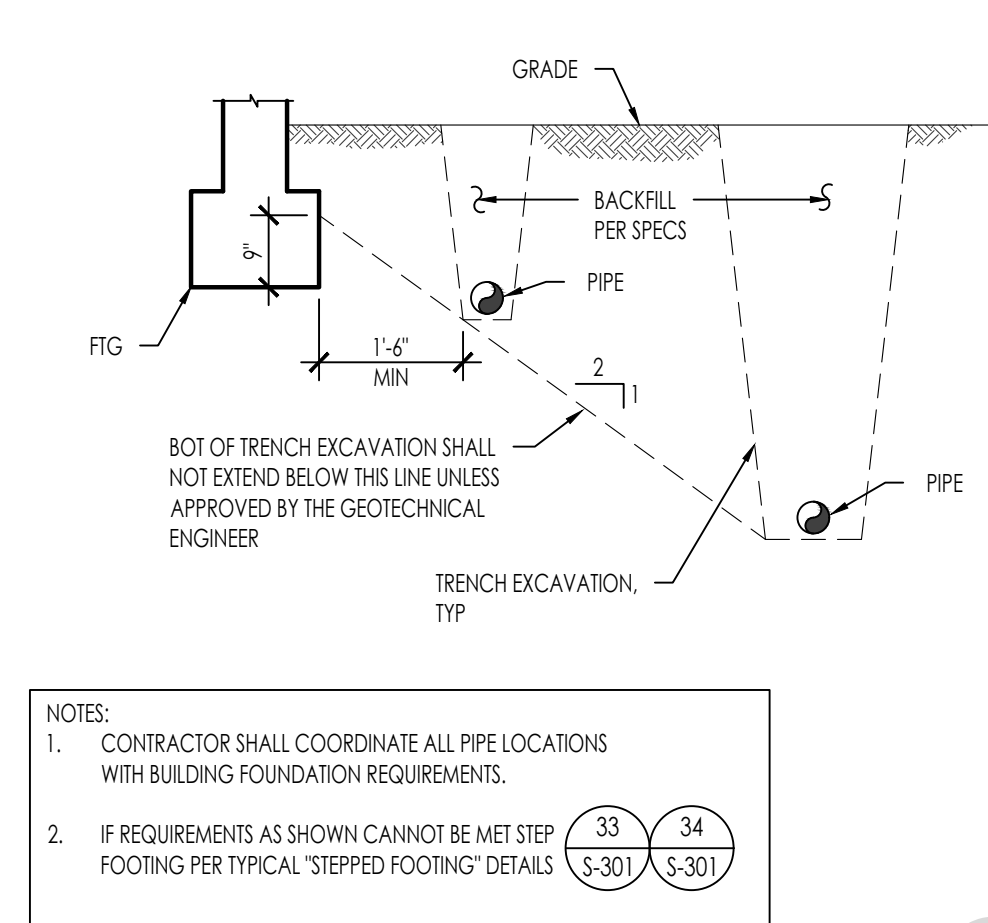
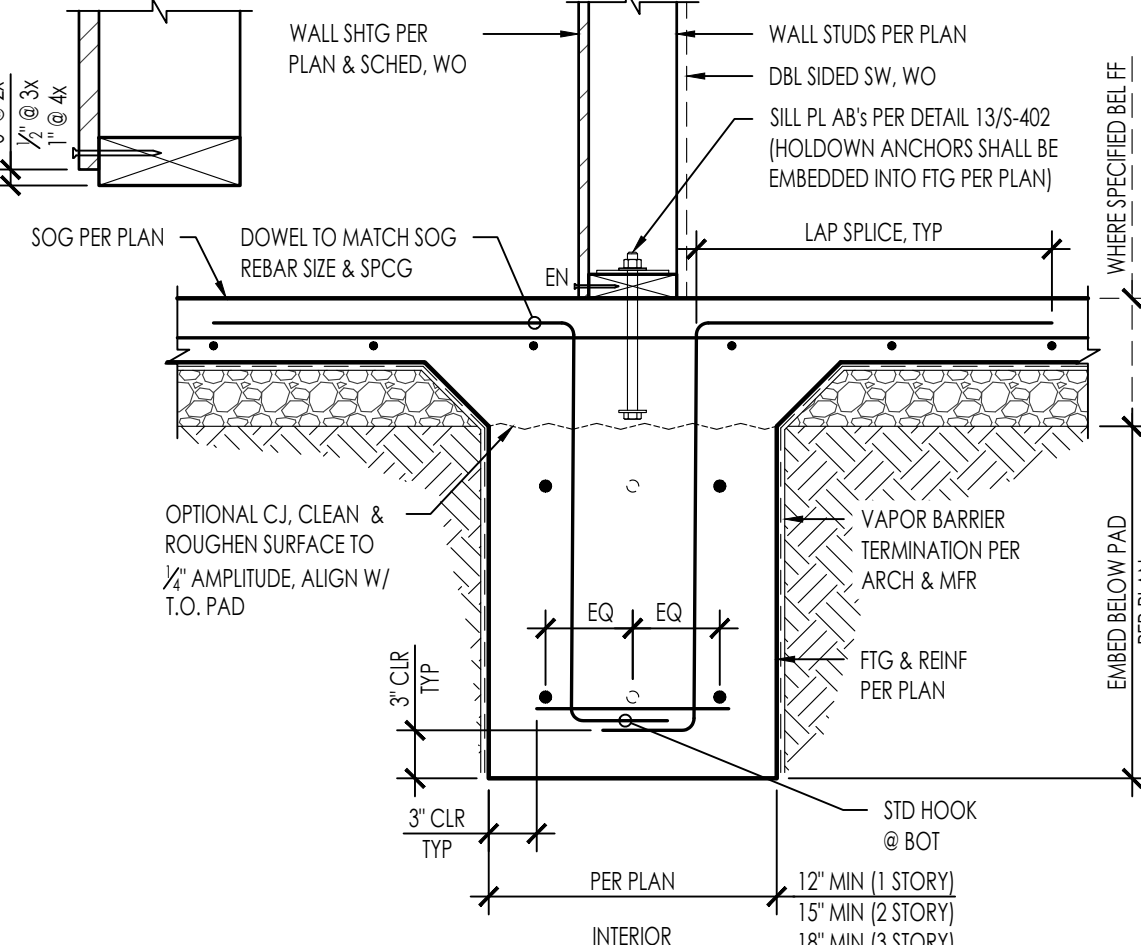
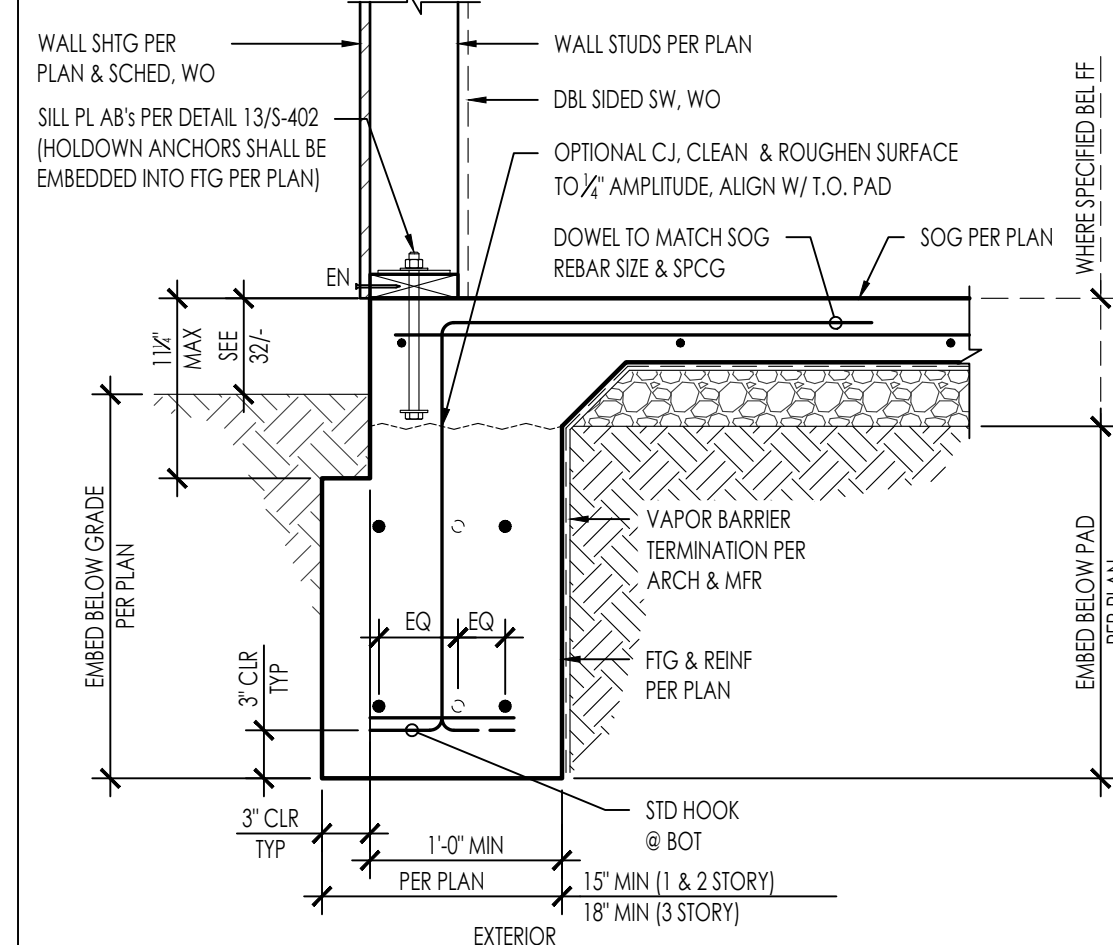
STANDARD HOOK DEVELOPMENT LENGTH $l_{dh}$					
BAR SIZE	D	$l_{dh}$	NORMAL WEIGHT		
			2,500	3,000	4,000
#3	2 1/4"	6"	0-9"	0-9"	0-8"
#4	3"	8"	1-0"	0-11"	0-10"
#5	3 3/4"	10"	1-3"	1-2"	1-0"
#6	4 1/2"	12"	1-6"	1-5"	1-3"
#7	5 1/4"	1'-2"	1-9"	1-8"	1-5"
#8	6"	1'-4"	2-0"	1-10"	1-7"
#9	9 1/2"	1'-7 1/2"	2-3"	2-1"	1-10"
#10	10 3/4"	1-10"	2-7"	2-4"	2-1"
#11	12"	2-0 1/2"	2-10"	2-7"	2-3"





NOTES:

1. ALL HOOKED BARS SHALL EXTEND AS FAR AS POSSIBLE WITH A MINIMUM 2" END COVER AND WITH EMBEDMENT NOT LESS THAN SHOWN ON THE SCHEDULE UNLESS NOTED OTHERWISE ON PLANS.
2. MINIMUM SIDE COVER = 2 1/2".
3. FOR LIGHTWEIGHT CONCRETE MULTIPLY LENGTHS IN SCHEDULE BY 1.3.

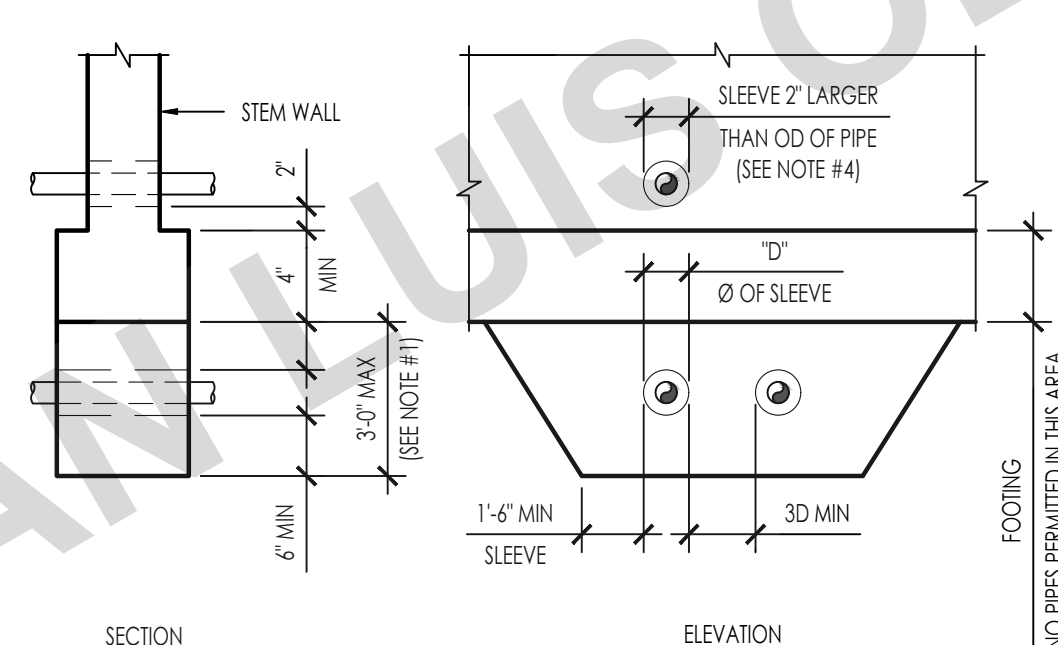
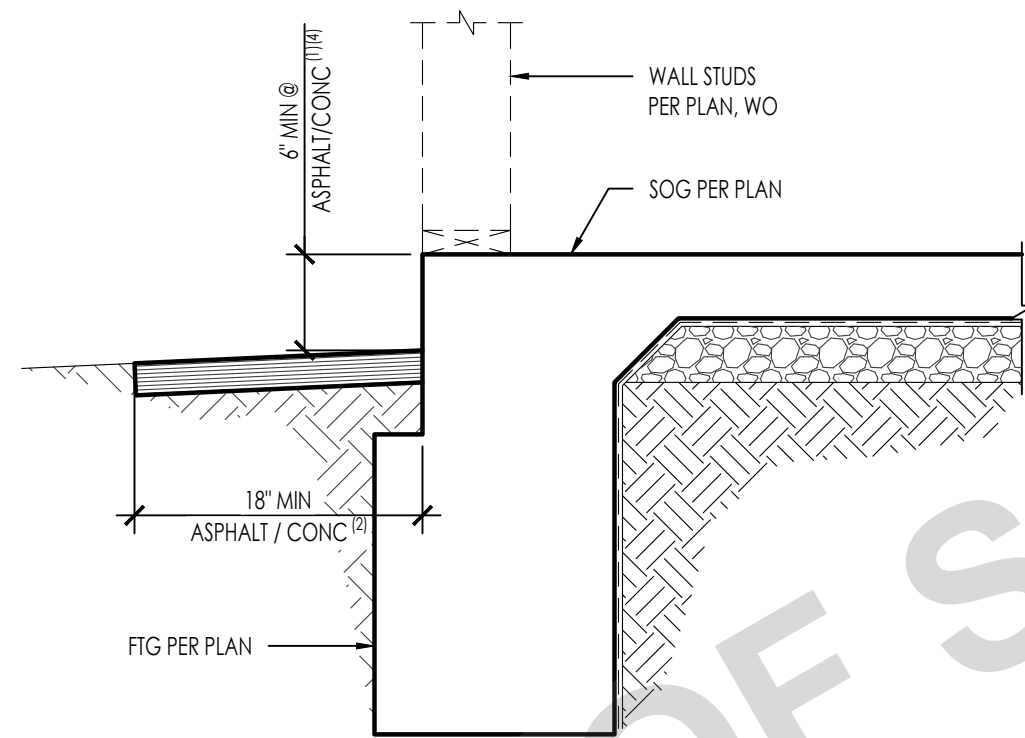
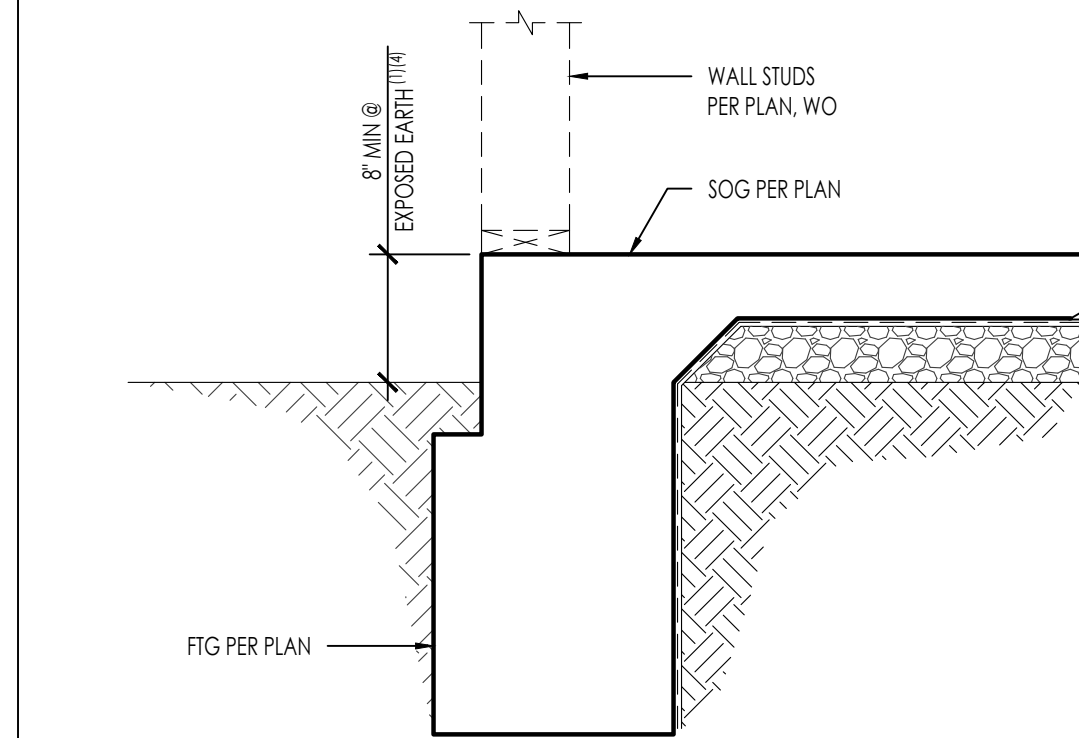






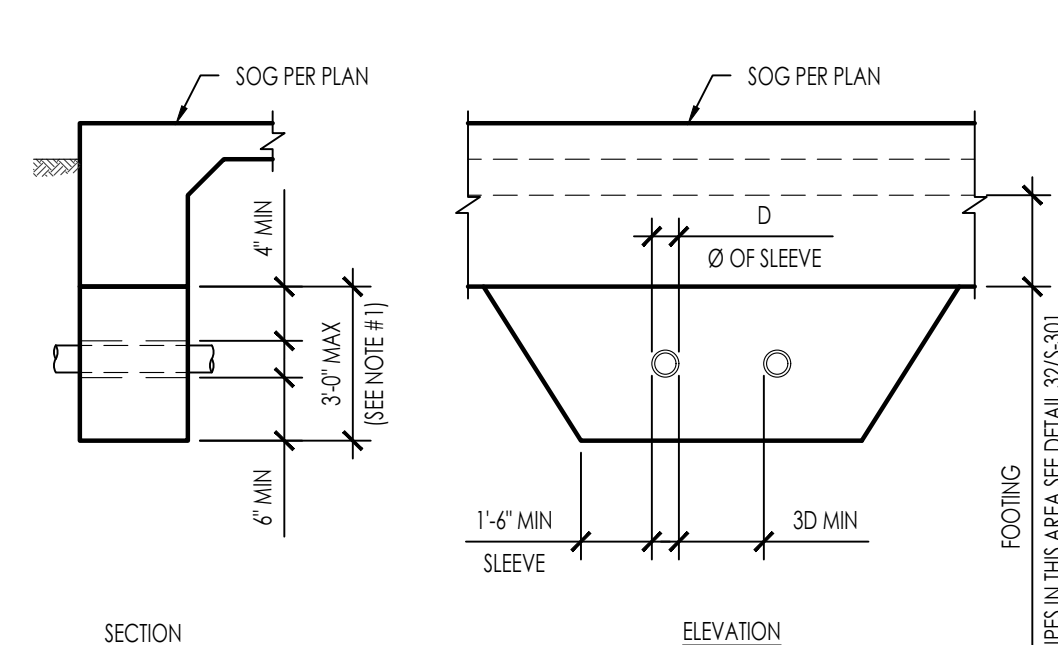
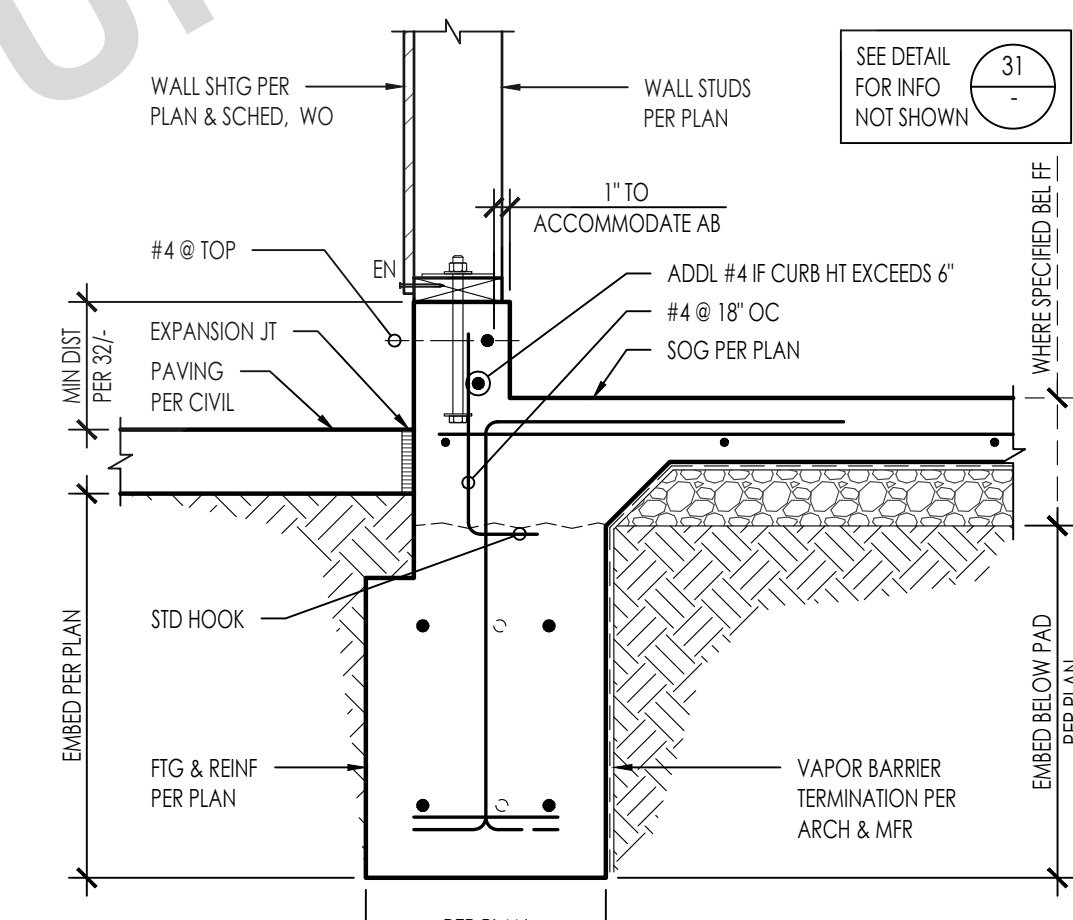
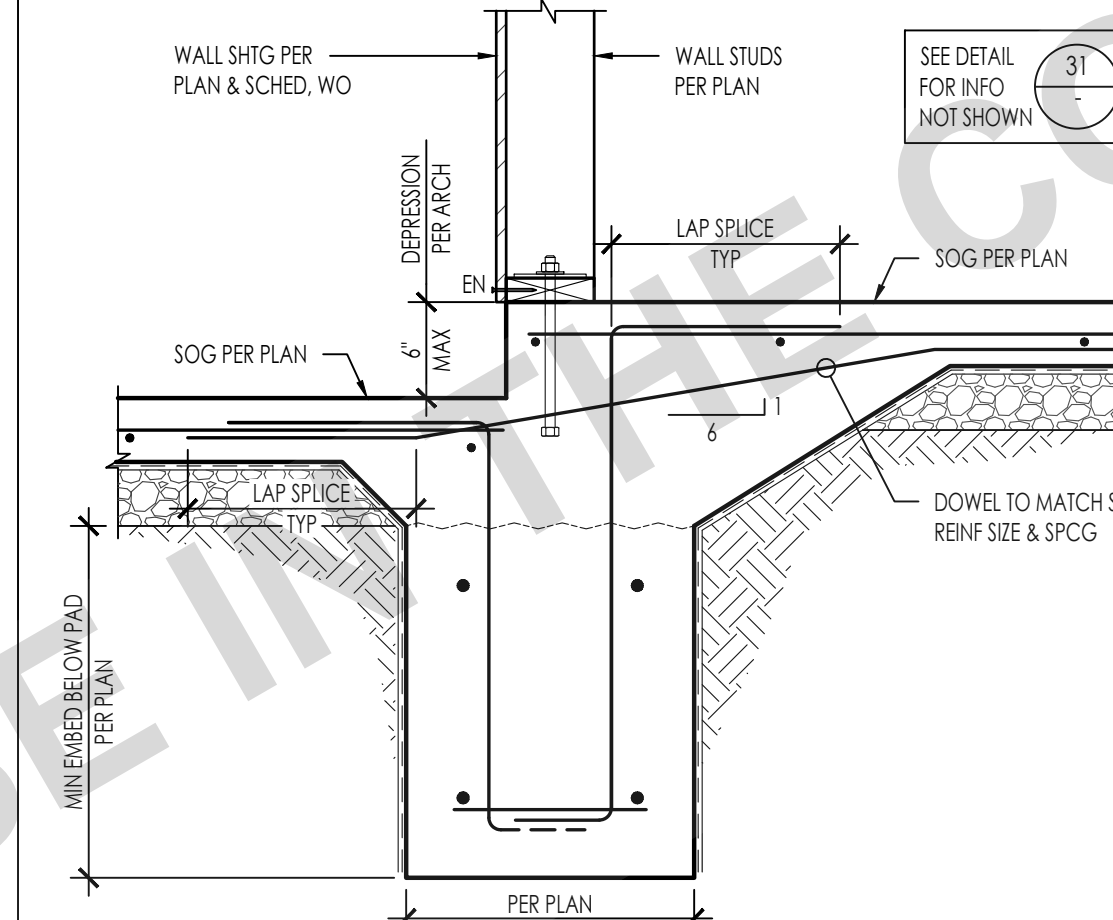
TYPE	HOLDOWN	ANCHOR	DIA. <sup>(1)</sup>	FASTENERS	BOUNDARY MEMBER MIN THICKNESS <sup>(2)</sup>	MIN EMBED <sup>(3)</sup>	ALLOWABLE LOADS <sup>(10)</sup>	
							CORNER	MIDWALL
	HDU4-SDS2.5	SSTB16	3/8"	10-SDS 3/8" x 2 1/2"	3	12 3/8"	3,780	3,780
	HDU5-SDS2.5	SSTB20		14-SDS 3/8" x 2 1/2"	3	16 3/8"	4,785	4,785
	HDU5-SDS2.5	SSTB24		14-SDS 3/8" x 2 1/2"	3	20 3/8"	5,645*	5,645*
	HDQ8-SDS3	SSTB28	3/8"	20-SDS 1/2" x 3"	4 1/2"	24 1/8"	9,230*	9,230*

1. MINIMUM EDGE DISTANCE IS SHOWN ABOVE, ANCHOR LOCATIONS PER PLAN  
2. MINIMUM ANCHOR TO ANCHOR SPACING IS  $3l_d$   
3. \* = CAPACITY LIMITED BY HOLDOWN  
4. DEEPEN FOOTING AT HOLDOWN ANCHOR AS REQ'D PER DETAIL 32/-



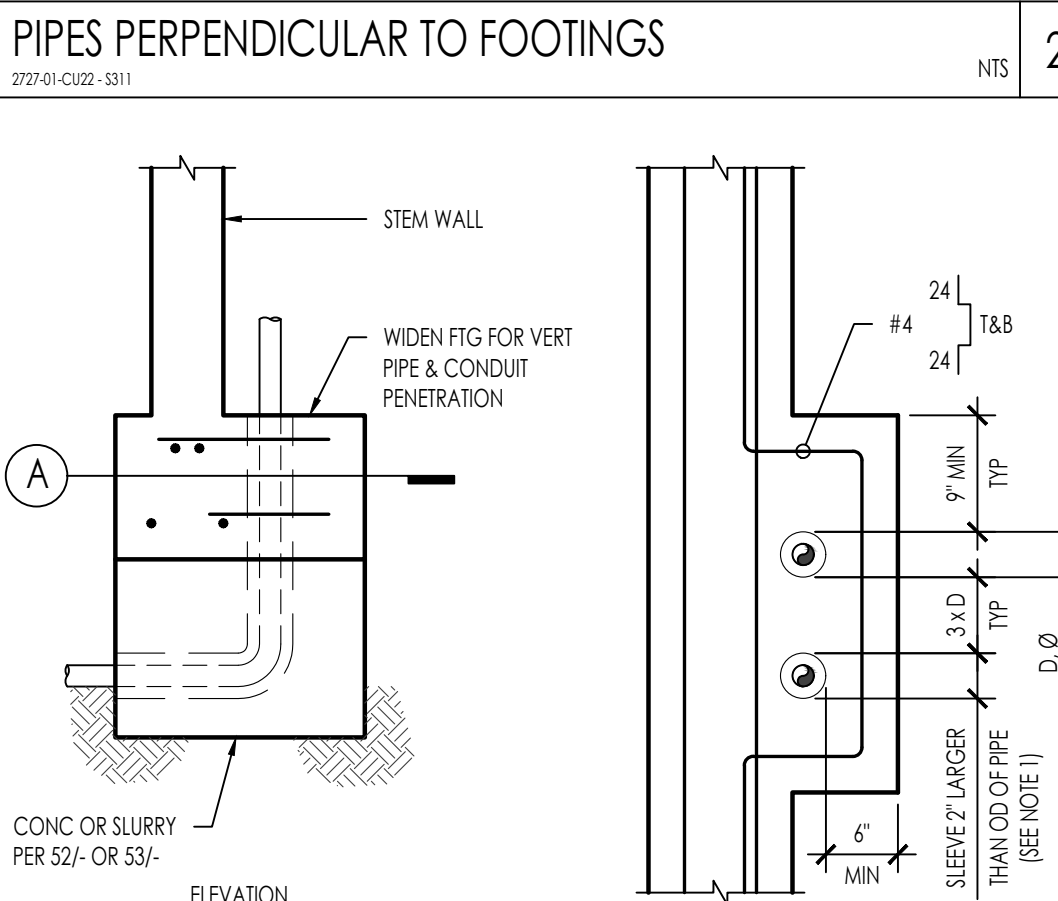
NOTES:

1. FOOTINGS SHALL BE STEPPED PER DETAIL 33/ & 34/S-301 SO THAT THIS DIMENSION DOES NOT EXCEED 3'-0".
2. CONTRACTOR SHALL COORDINATE ALL PIPE LOCATIONS WITH BUILDING FOUNDATION REQUIREMENTS.
3. TRENCH BELOW FOOTING SHALL BE FILLED WITH CONCRETE OR 3-SACK SLURRY BEFORE POURING FOOTING. FOOTING FILL SHALL BE SAME WIDTH AS FOOTING AND FULL WIDTH OF PIPE TRENCH.
4. PIPES MAY BE WRAPPED IN 1" THICK LOOSE FOAM IN LIEU OF SLEEVING.
5. CONDUIT MAY BE RUN THRU STEM OR ENCASEMENT UNDER FOOTING WITHOUT SLEEVES OR FOAM WRAP.



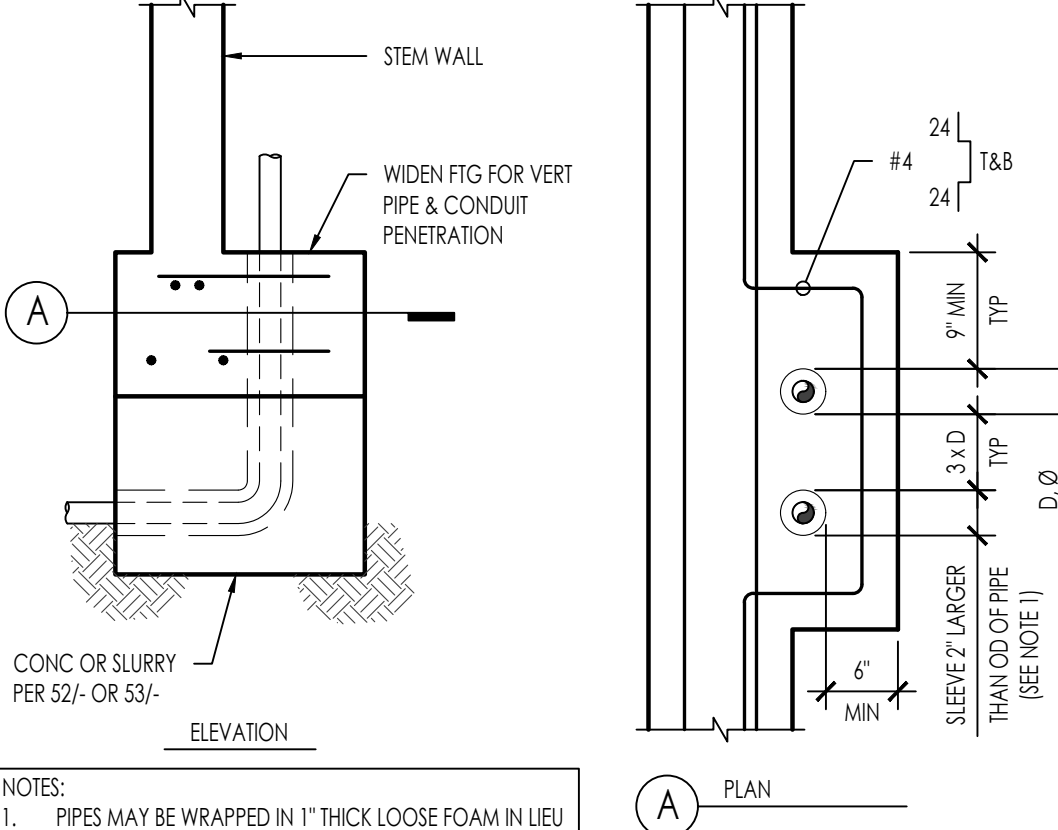
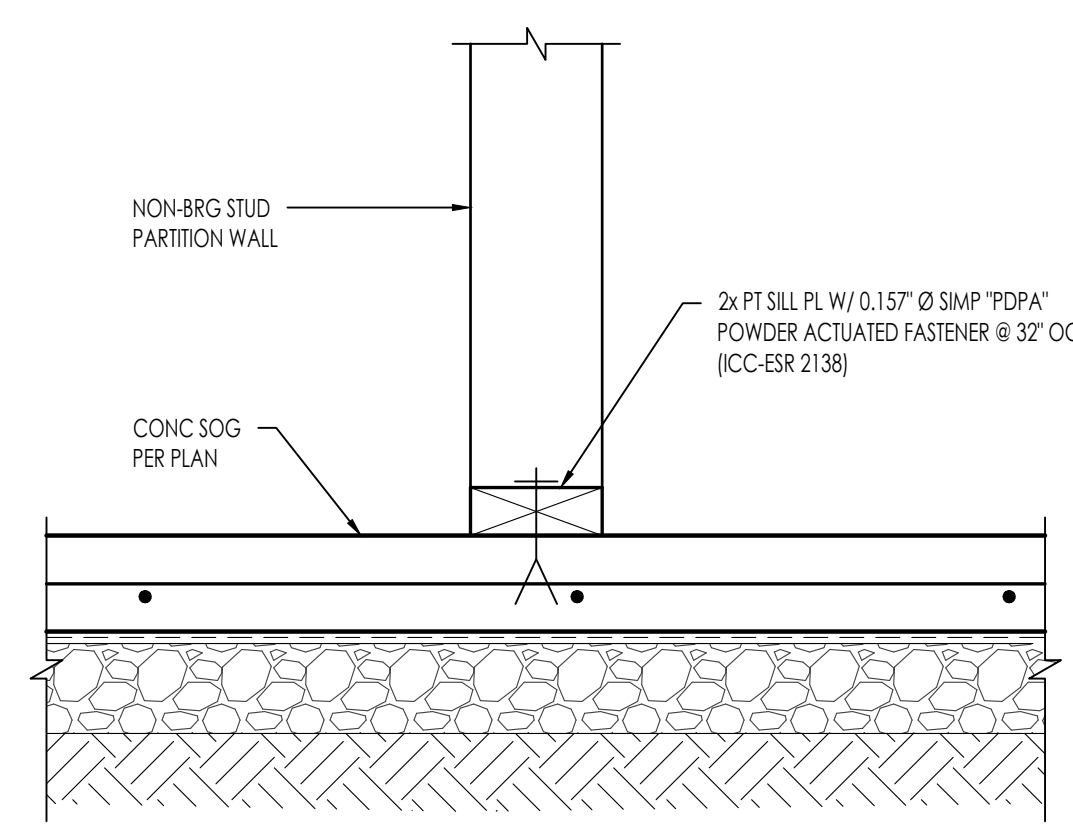
NOTES:

1. FOOTINGS SHALL BE STEPPED PER DETAIL 33/ & 34/S-301 SO THAT THIS DIMENSION DOES NOT EXCEED 3'-0".
2. TRENCH BELOW FOOTING SHALL BE FILLED WITH CONCRETE OR 3-SACK SLURRY BEFORE POURING FOOTING. CONCRETE FILL SHALL BE SAME WIDTH AS FOOTING AND FULL WIDTH OF PIPE TRENCH.
3. PIPES MAY BE WRAPPED IN 1" THICK LOOSE FOAM IN LIEU OF SLEEVING.
4. CONDUIT MAY BE RUN THRU STEM OR ENCASEMENT UNDER FOOTING WITHOUT SLEEVES OR FOAM WRAP.



NOTES:

1. PIPES MAY BE WRAPPED IN 1" THICK LOOSE FOAM IN LIEU OF SLEEVING.
2. CONDUIT MAY BE ROUTED UP THROUGH FOOTING WITHOUT SLEEVES OR FOAM WRAP.



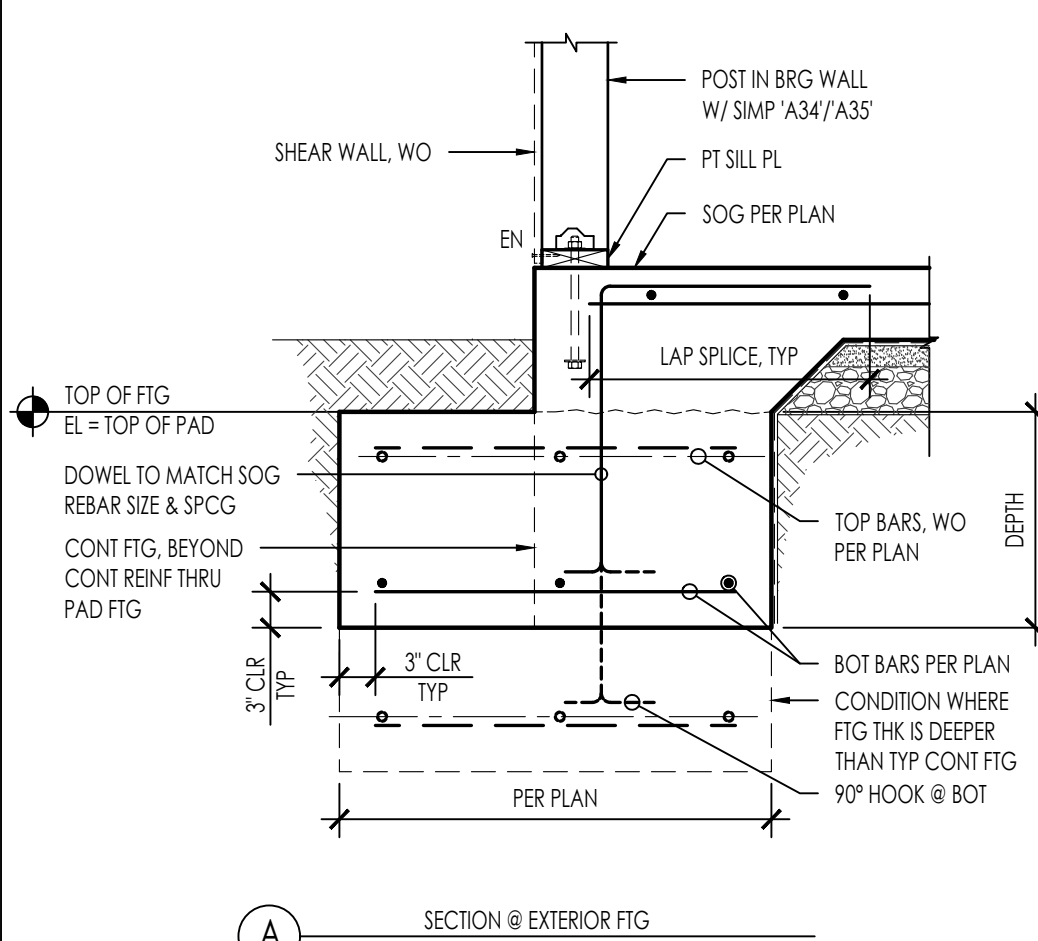
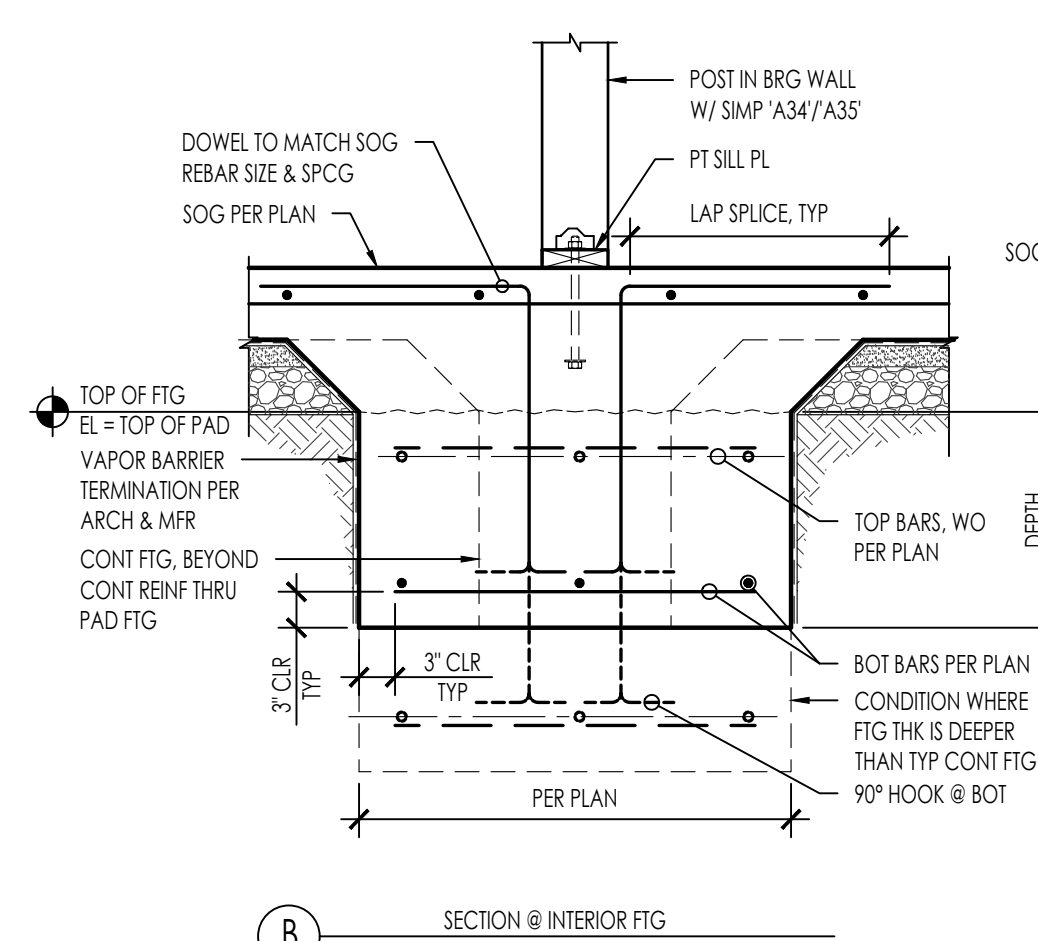
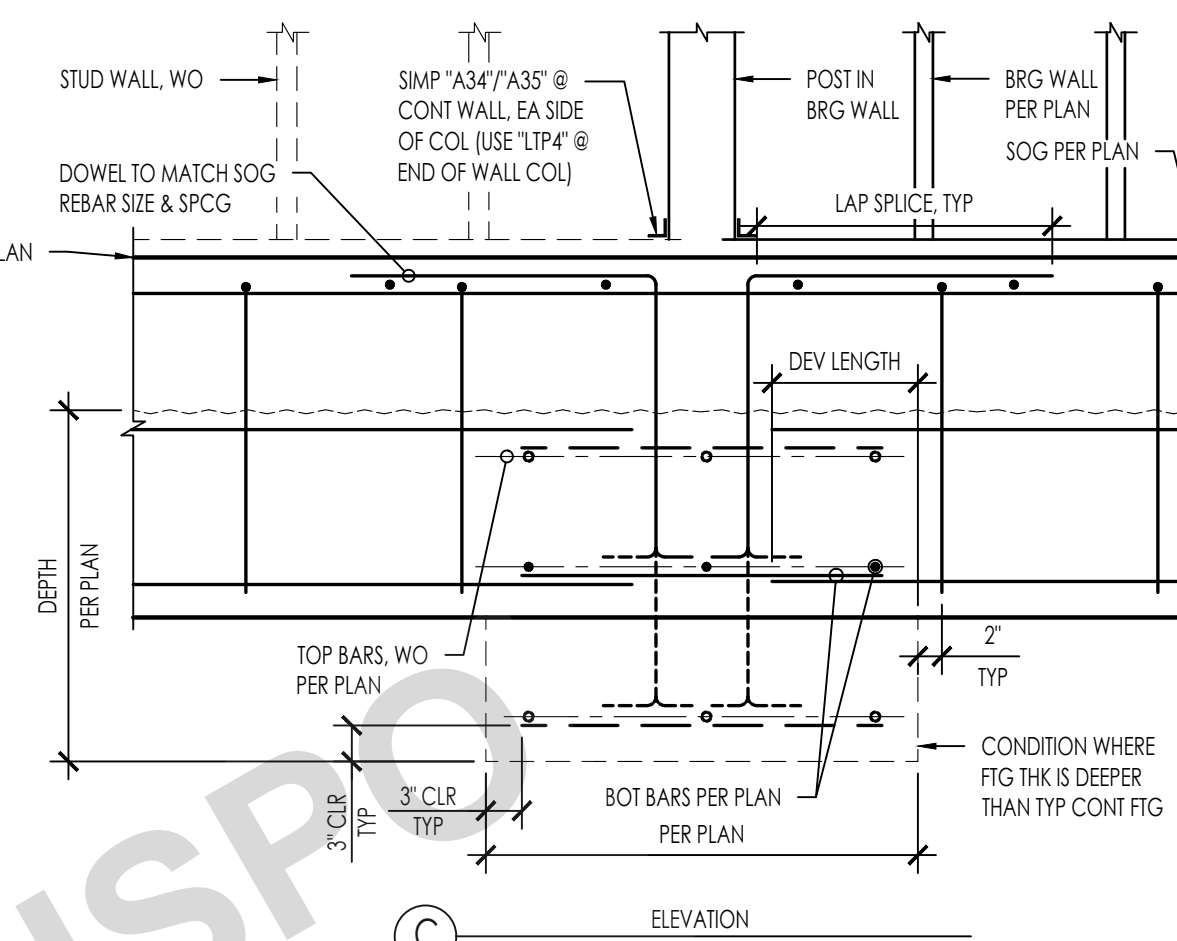
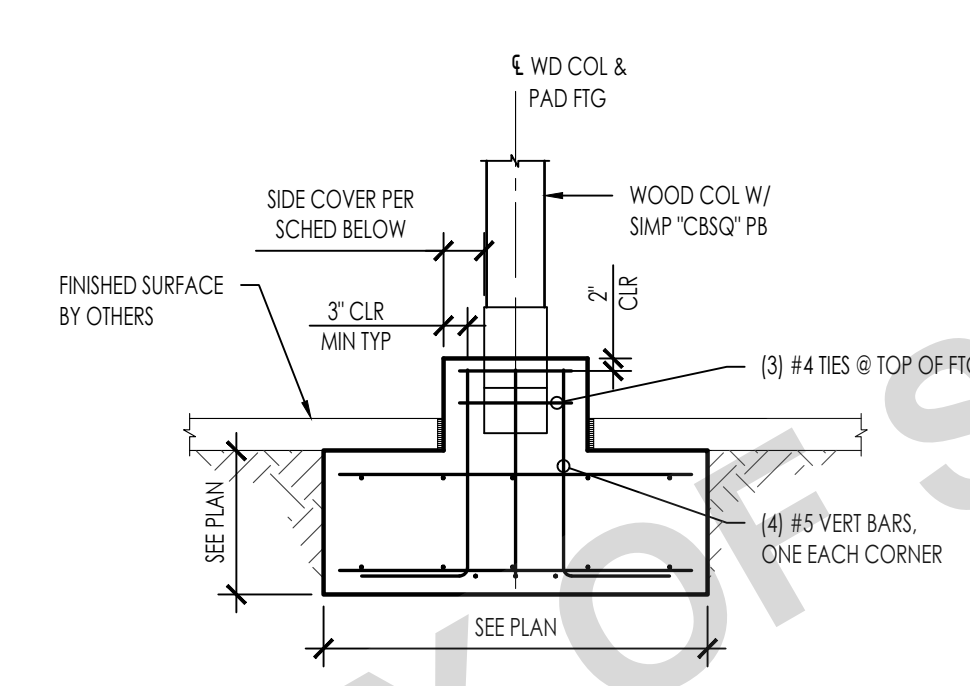
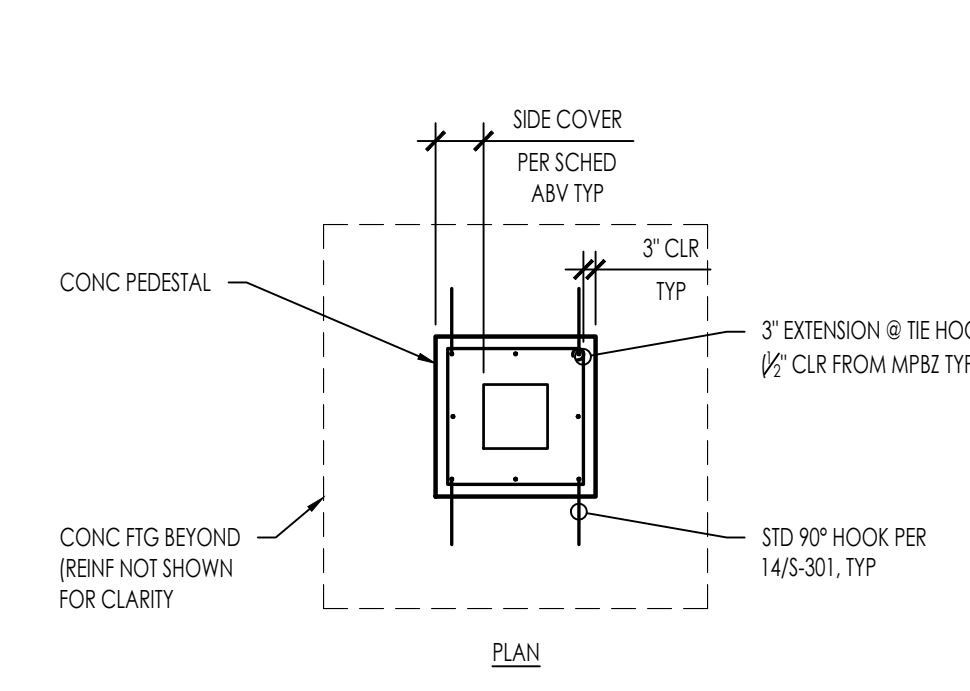
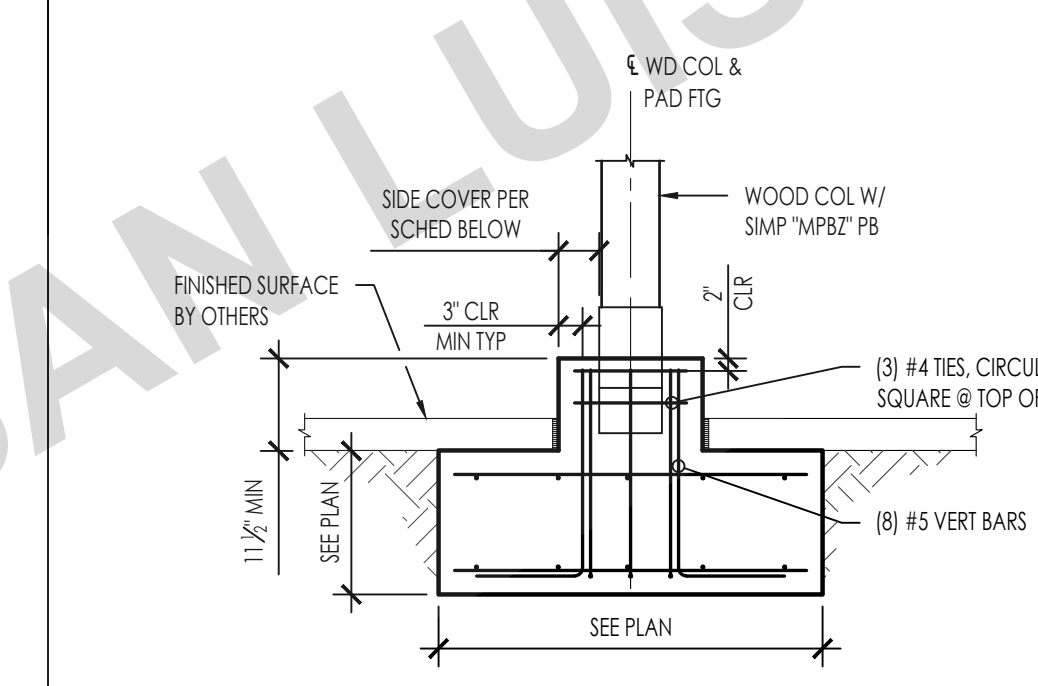
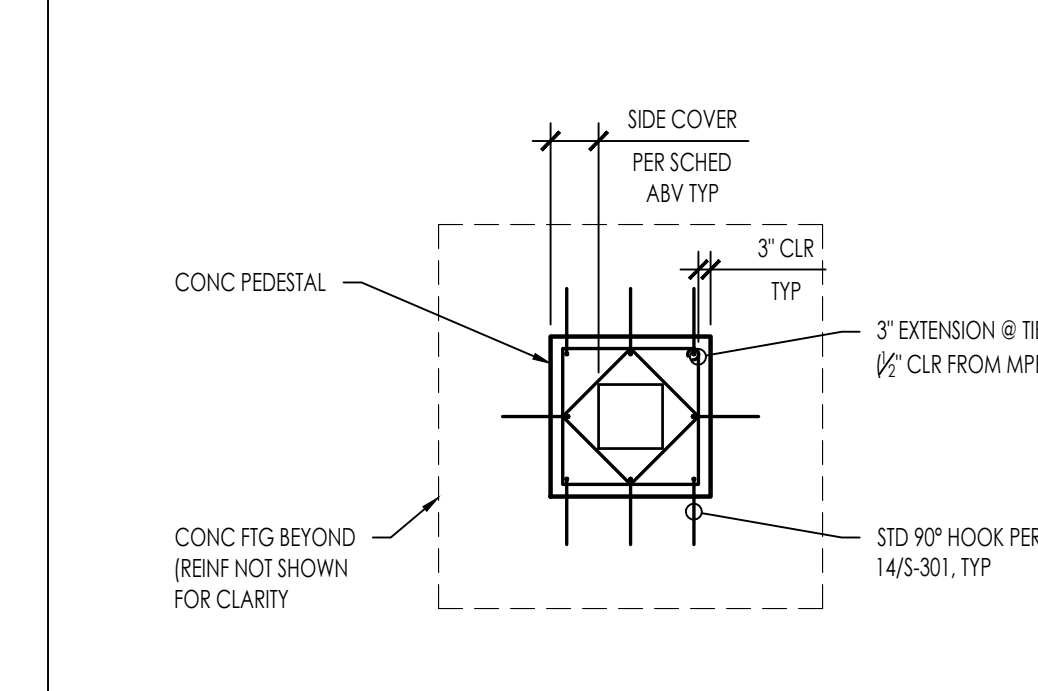
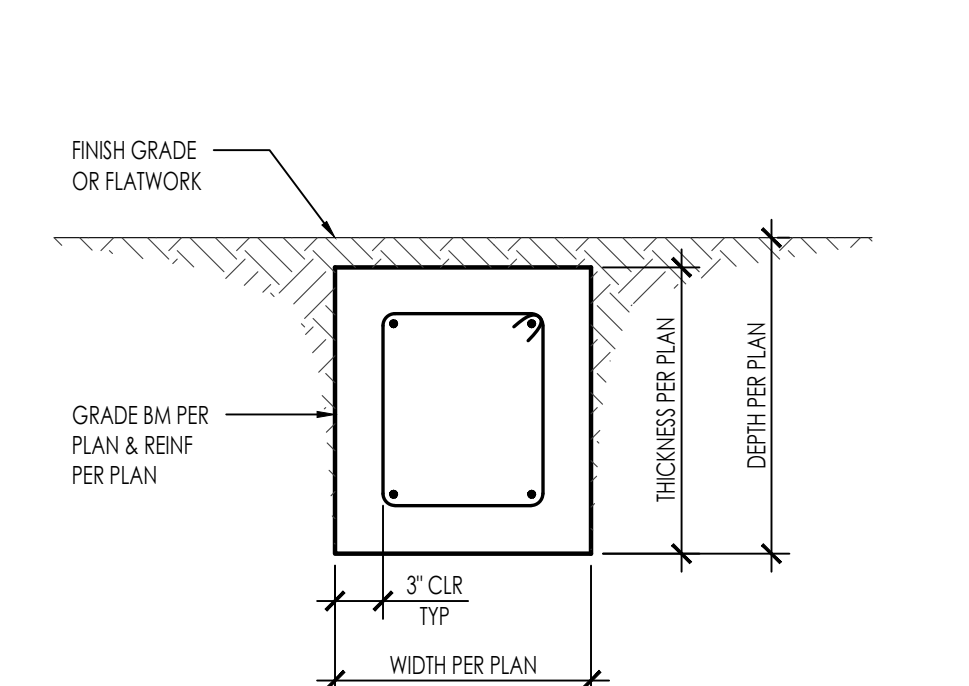
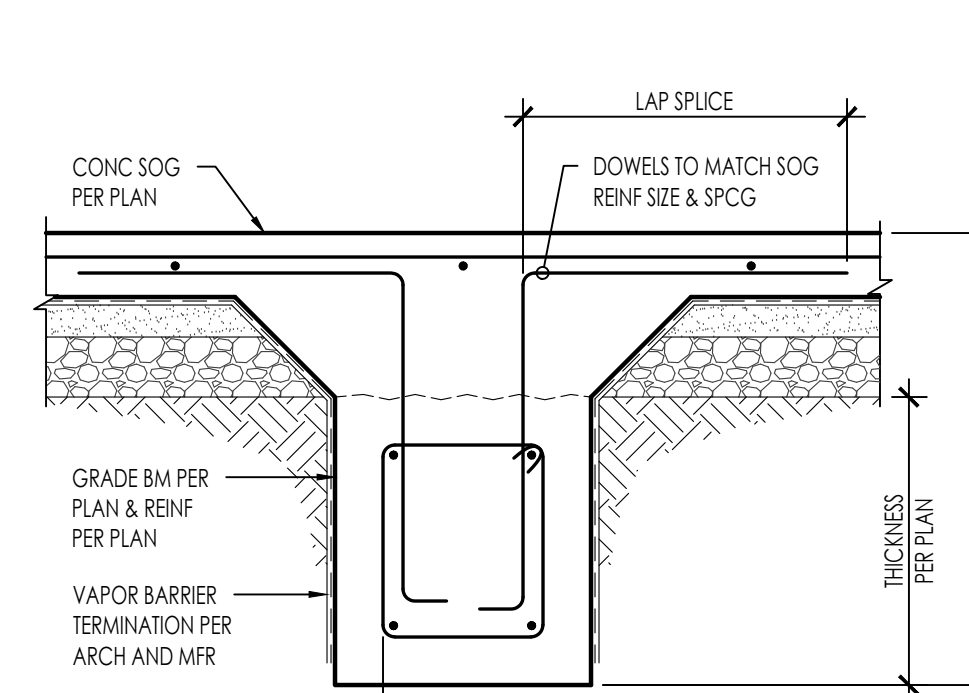
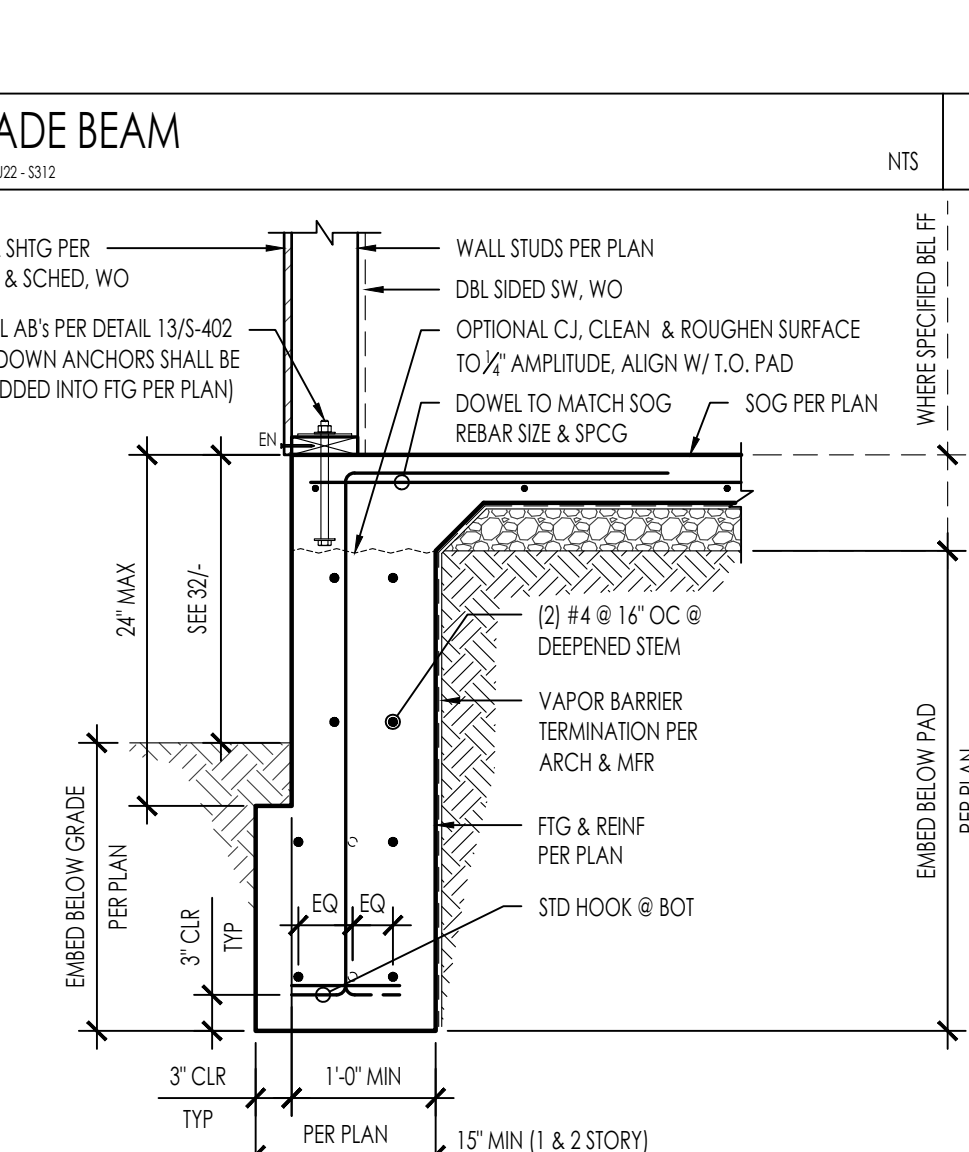
### TYPICAL VERT PIPES OR COND THROUGH FOOTING

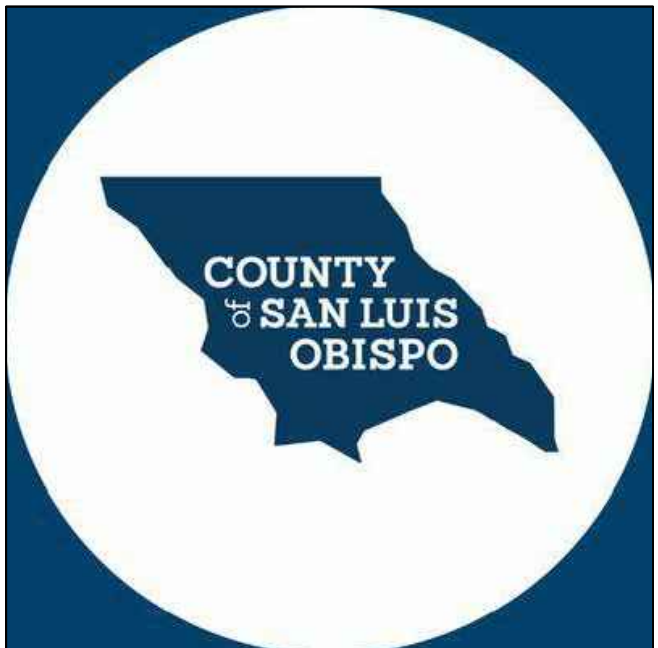


THESE PLANS ARE PROVIDED BY THE COUNTY OF SAN LUIS OBISPO AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN. THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONTRACT 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.



N:\2000\2727-01\c029-ko-county\ad\structural\ConDoc\Sheet\2727-01-C022 - S312.dwg, PLAN 5, S312, Nov 20, 2023, 3:29pm, dsgpcc

																						
	51	41	SPREAD FOOTING @ BEARING WALL POST <small>2727-01-C022 - S312</small>																			
					3/4" = 1'-0"	11																
	52	42	 <table><tr><th>POST SIZE</th><th>MIN. SIDE COVER</th></tr><tr><td>4x4</td><td>0'-3"</td></tr><tr><td>6x6</td><td>0'-3"</td></tr><tr><td>8x8</td><td>0'-3"</td></tr></table> 	POST SIZE	MIN. SIDE COVER	4x4	0'-3"	6x6	0'-3"	8x8	0'-3"	 <table><tr><th>POST SIZE</th><th>MIN. SIDE COVER</th></tr><tr><td>4x4</td><td>0'-4"</td></tr><tr><td>6x6</td><td>0'-5"</td></tr><tr><td>8x8</td><td>0'-6"</td></tr></table> 	POST SIZE	MIN. SIDE COVER	4x4	0'-4"	6x6	0'-5"	8x8	0'-6"	1/2" = 1'-0"	33
POST SIZE	MIN. SIDE COVER																					
4x4	0'-3"																					
6x6	0'-3"																					
8x8	0'-3"																					
POST SIZE	MIN. SIDE COVER																					
4x4	0'-4"																					
6x6	0'-5"																					
8x8	0'-6"																					
	53	43	PORCH PAD FOOTING <small>2727-01-C022 - S312</small>	1/2" = 1'-0"	NTS	13																
	54	44	DEEPEND EXTERIOR FOOTING <small>2727-01-C022 - S312</small>	3/4" = 1'-0"	14																	
																						
																						
																						



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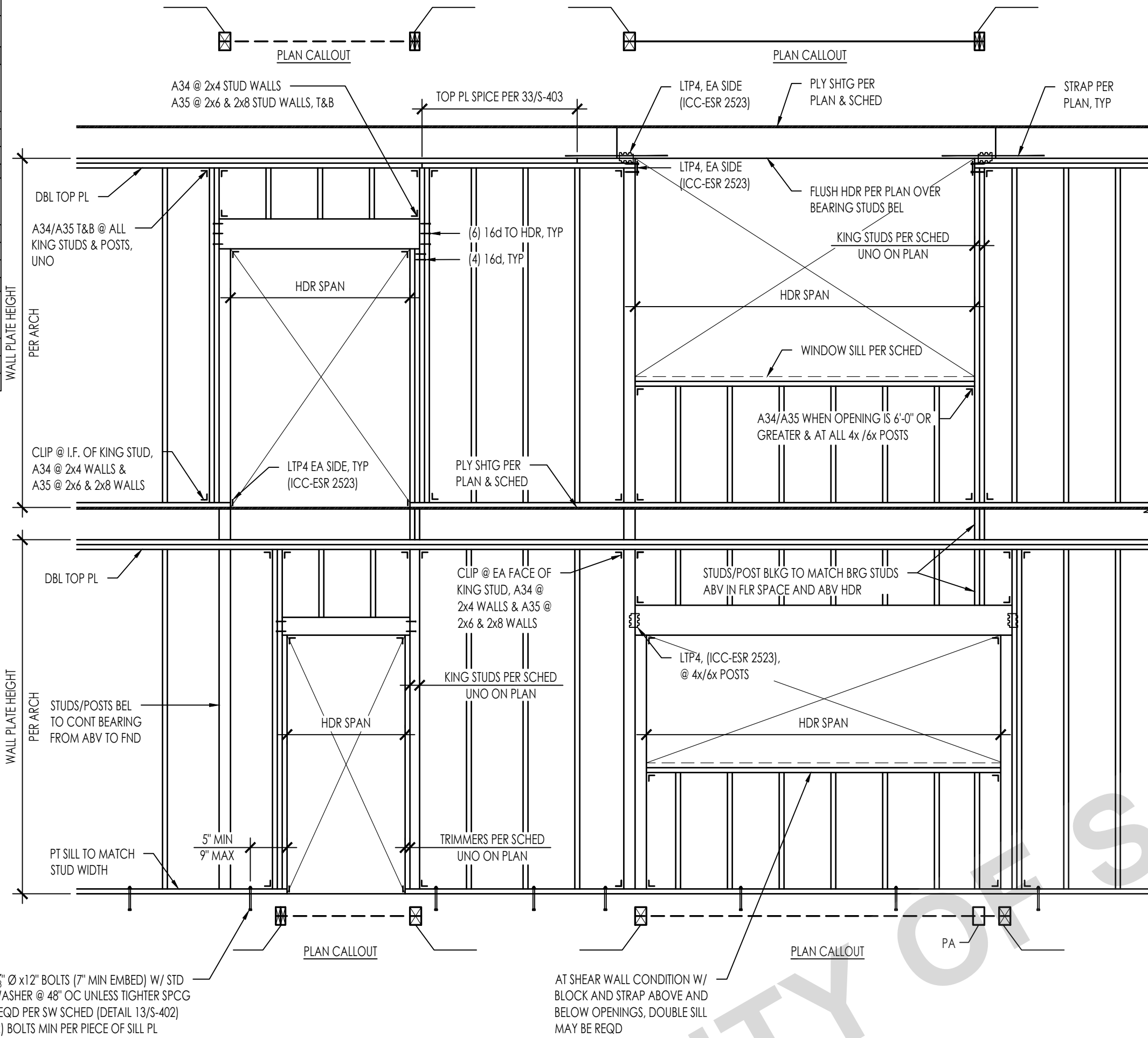


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BEARING/SHEAR WALL HEADER SCHEDULE												
4 INCH WALLS					3-STORY	2-STORY	1-STORY	6 INCH WALLS				
OPENING WIDTH	4x HEADER	SILL AT WINDOW	POST / TRIMMER	KING STUDS	3-STORY	2-STORY	1-STORY	OPENING WIDTH	6x HEADER	SILL AT WINDOW	POST / TRIMMER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

BEARING/SHEAR WALL HEADER SCHEDULE												
8 INCH WALLS					3-STORY	2-STORY	1-STORY					
OPENING WIDTH	8x HEADER	SILL AT WINDOW	POST / TRIMMER	KING STUDS	3-STORY	2-STORY	1-STORY	OPENING WIDTH	8x HEADER	SILL AT WINDOW	POST / TRIMMER	KING STUDS
UP TO 3'-0"	6x8 FLAT	2x	2x6	2x6				UP TO 3'-0"	6x8 FLAT	2x	2x6	2x6
3'-0" - 5'-0"	6x8 FLAT	2x	2x6	2x6				3'-0" - 5'-0"	6x8 FLAT	2x	2x6	2x6
5'-0" - 7'-0"	6x8 FLAT	(2) 2x	2x6	(2) 2x6				5'-0" - 7'-0"	6x8 FLAT	(2) 2x	2x6	(2) 2x6

- NOTES:
- THIS DETAIL APPLIES AT ALL EXT WALLS AND INT LOAD BEARING WALLS AND ALSO APPLIES TO SHEAR WALL FRAMING.  
A. FOR SHEAR WALLS SEE 34/5-402 FOR ADD'L REQUIREMENTS.  
B. FOR INTERIOR NON-BEARING PARTITIONS SEE DETAIL 43/1.
  - HEADERS, KING STUDS AND OTHER REFERENCES ON PLAN GOVERN OVER THIS TYPICAL SCHED/DETAILS.
  - PROVIDE A34 @ 4" WALLS & A35 @ 6" OR GREATER WALLS (ICC-ESR 2353)



FASTENING SCHEDULE PER 2022 CBC 2304.10.1		
CONNECTION	FASTENING	LOCATION
1. BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	3-8d COMMON	EACH END, TOENAIL
2. BLOCKING BETWEEN RAFTERS OR TRUSSES NOT AT THE WALL TO TOP PLATE, TO RAFTER OR TRUSS	2-8d COMMON 2-16d COMMON	EACH END, TOENAIL END NAIL
3. FLAT BLOCKING TO TRUSS AND WEB FILLER	1-6d COMMON @ 6" OC	FACE NAIL
4. CEILING JOIST TO TOP PLATE	3-8d COMMON	EACH JOIST, TOENAIL
5. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS	3-1-6d COMMON	FACE NAIL
6. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	3-1-6d COMMON	FACE NAIL
7. COLLAR TIE TO RAFTER	3-10d COMMON	FACE NAIL
8. RAFTER OR ROOF TRUSS TO PLATE	3-10d COMMON	TOENAIL <sup>3</sup>
9. ROOF RAFTER TO RIDGE VALLEY OR HIP RAFTER; OR ROOF RAFTER TO 2-INCH RIDGE BEAM	2-1-6d COMMON 3-10d COMMON	END NAIL TOENAIL
10. STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS	1-6d COMMON	1/4" OC FACE NAIL
11. BUILT-UP HEADER (2" TO 2" HEADER)	1-6d COMMON	1/4" OC EACH EDGE, FACE NAIL
12. CONTINUOUS HEADER TO STUD	4-10d COMMON 1-6d COMMON	TOENAIL 1/4" OC FACE NAIL
13. TOP PLATE TO TOP PLATE	1-6d COMMON	1/4" OC FACE NAIL
14. TOP PLATE TO TOP PLATE, AT END JOINTS	8-1-6d COMMON	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPICE LENGTH EACH SIDE OF END JOINT)
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING	2-1-6d COMMON	1/4" OC FACE NAIL
16. STUD TO TOP OR BOTTOM PLATE	4-8d COMMON 2-1-6d COMMON	TOENAIL END NAIL
17. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-1-6d COMMON	FACE NAIL
18. JOIST TO SILL, TOP PLATE, OR GIRDER	3-8d COMMON	TOENAIL
20. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d COMMON	6" OC, TOENAIL
21. 1"x6" SUBFLOOR OR LESS TO EACH JOIST	2-8d COMMON	FACE NAIL
22. 2" SUBFLOOR TO JOIST OR GIRDER	2-1-6d COMMON	FACE NAIL
23. BUILT-UP GIRDER AND BEAMS, 2" LUMBER LAYERS	20d COMMON (4" x 0.192")	32" OC FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDE
24. LEDGER STRIP SUPPORTING JOIST OR RAFTERS	3-1-6d COMMON	EACH JOIST OR RAFTER, FACE NAIL
26. JOIST TO BAND JOIST OR RIM JOIST	3-1-6d COMMON	END NAIL
27. BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	2-8d COMMON	EACH END, TOENAIL

- NOTES:
- THIS NAILING SCHEDULE SHALL ONLY BE USED IF CONDITION IS NOT OTHERWISE DETAILED OR SPECIFIED ON THE CONSTRUCTION DOCUMENTS. COMMON NAILS SHALL BE USED EXCEPT WHERE OTHERWISE STATED.
  - WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE AND THE CEILING JOIST IS FASTENED TO THE TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE, THE NUMBER OF TOENAILS IN THE RAFTER SHALL BE PERMITTED TO BE REDUCED BY ONE NAIL.

#### EXTERIOR WALL / INTERIOR WALL BEARING WALL FRAMING

2727-01-C1022 - \$401

NTS

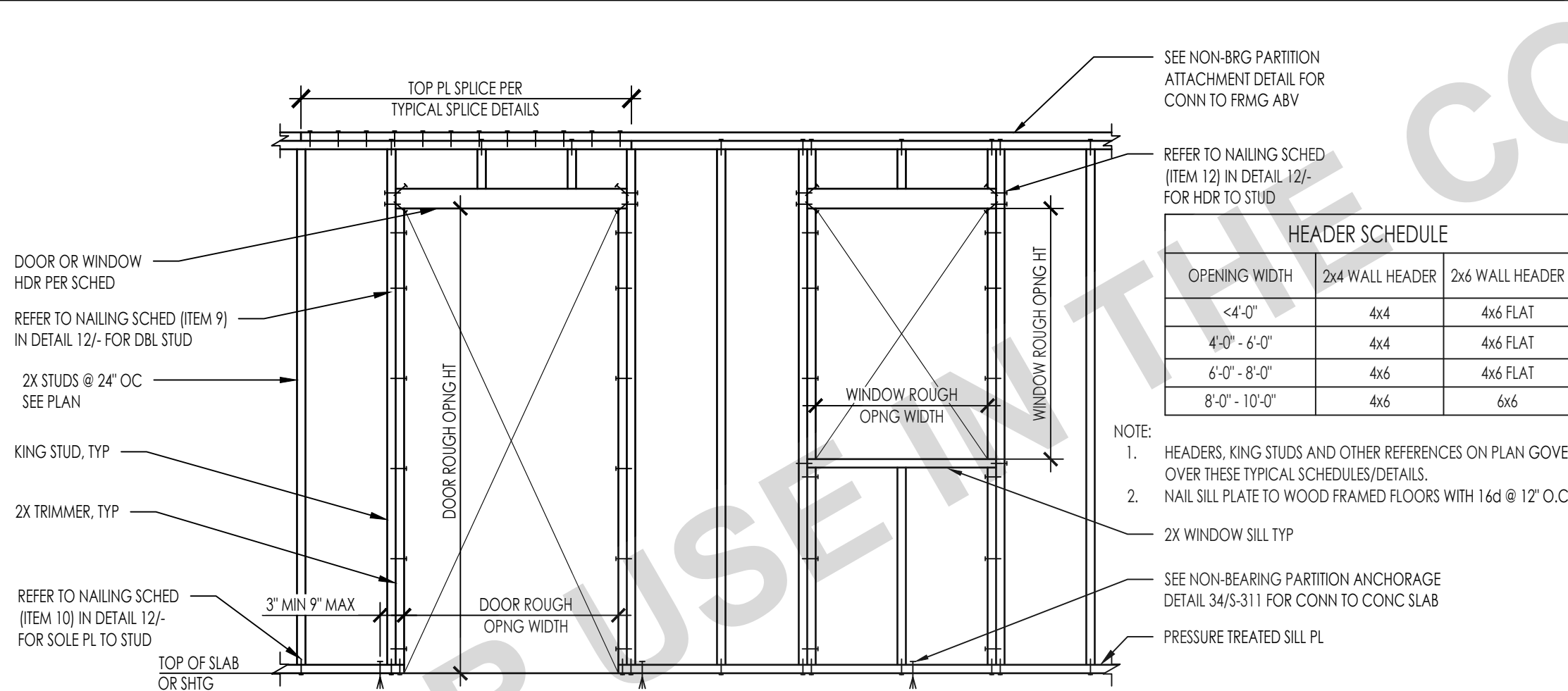
32

#### NAILING SCHEDULE

2727-01-C1022 - \$401

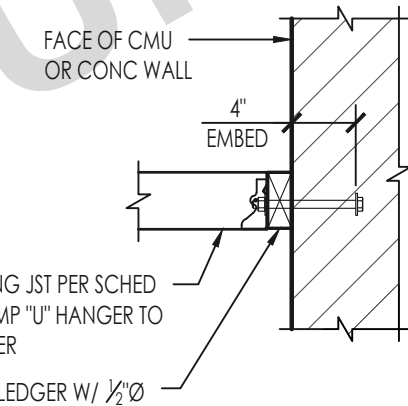
NTS

12



HEADER SCHEDULE		
OPENING WIDTH	2x4 WALL HEADER	2x6 WALL HEADER
<4'-0"	4x4	4x6 FLAT
4'-0" - 6'-0"	4x4	4x6 FLAT
6'-0" - 8'-0"	4x6	4x6 FLAT
8'-0" - 10'-0"	4x6	6x6

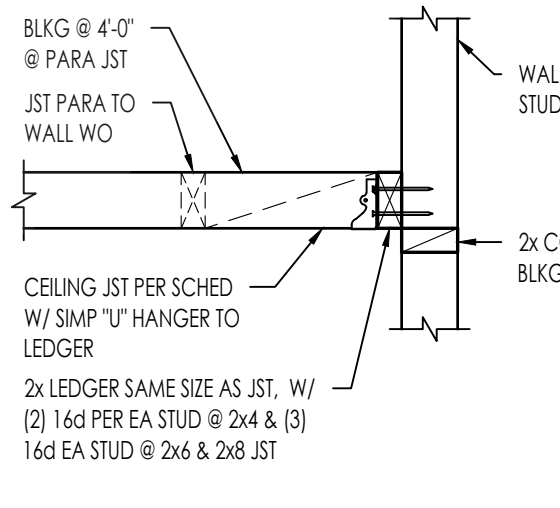
- NOTE:
- HEADERS, KING STUDS AND OTHER REFERENCES ON PLAN GOVERN OVER THESE TYPICAL SCHEDULES/DETAILS.
  - NAIL SILL PLATE TO WOOD FRAMED FLOORS WITH 1-6d @ 12" O.C.



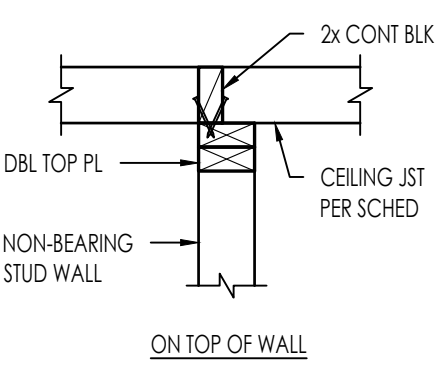
#### AGAINST CMU OR CONC WALL

CEILING JOIST SCHED	
JOIST SIZE	MAX SPAN
2x4 @ 16" OC	9'-0"
2x6 @ 16" OC	14'-0"
2x8 @ 16" OC	18'-0"

NOTE: THIS DETAIL IS INTENDED FOR CEILING JOIST THAT SPAN FROM WALL TO WALL @ CONTRACTORS OPTION



#### AGAINST STUD WALL



#### INTERIOR NON-BEARING PARTITION WALL FRAMING

2727-01-C1022 - \$401

NTS

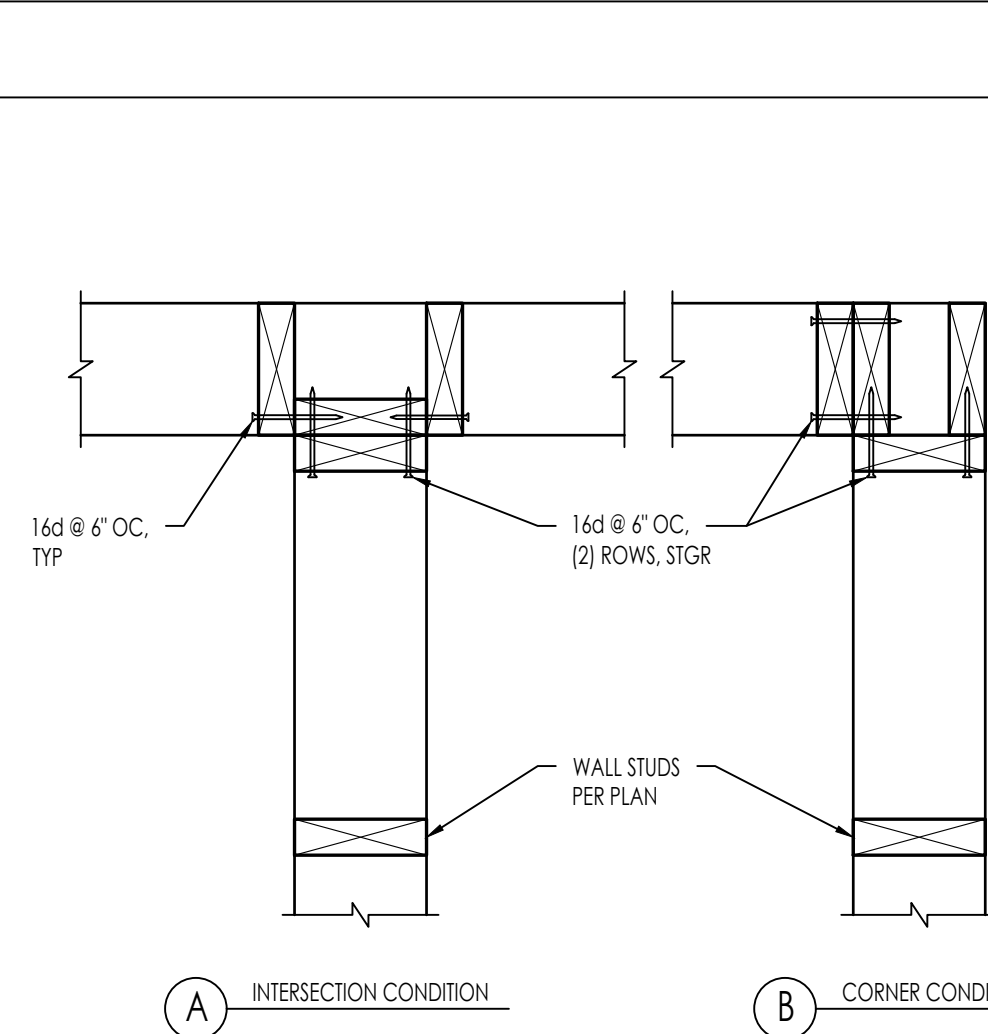
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#### CEILING JOIST SCHED & DETAILS

2727-01-C1022 - \$401

NTS

33

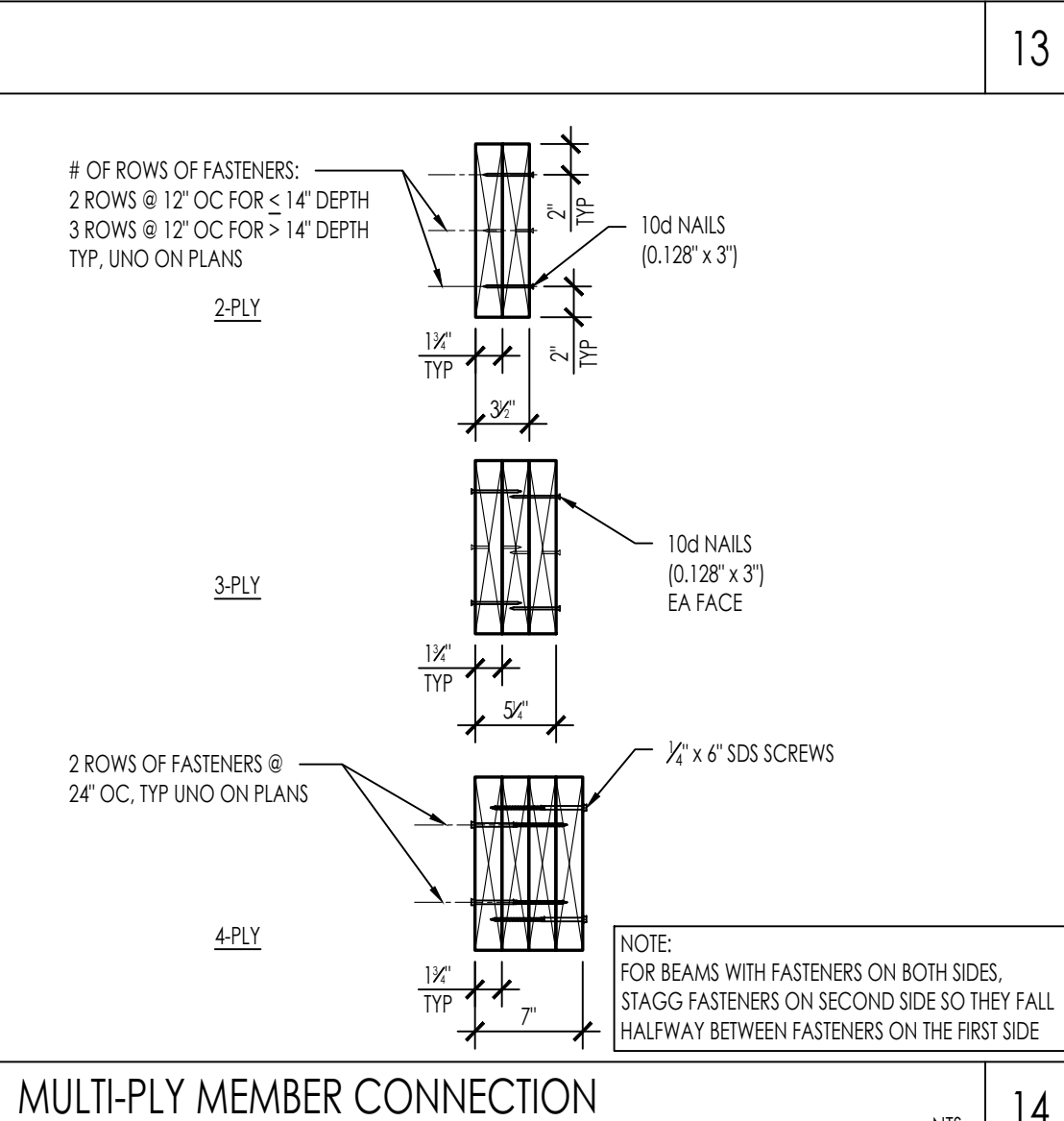


#### TYPICAL WOOD STUD INTERSECTIONS

2727-01-C1022 - \$401

NTS

24



#### MULTI-PLY MEMBER CONNECTION

2727-01-C1022 - \$401

NTS

14



THESE PLANS ARE PROVIDED BY THE COUNTY OF SAN LUIS OBISPO 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.

## COUNTY OF SAN LUIS OBISPO ACCESSORY DWELLING UNIT

SAN LUIS OBISPO, CA

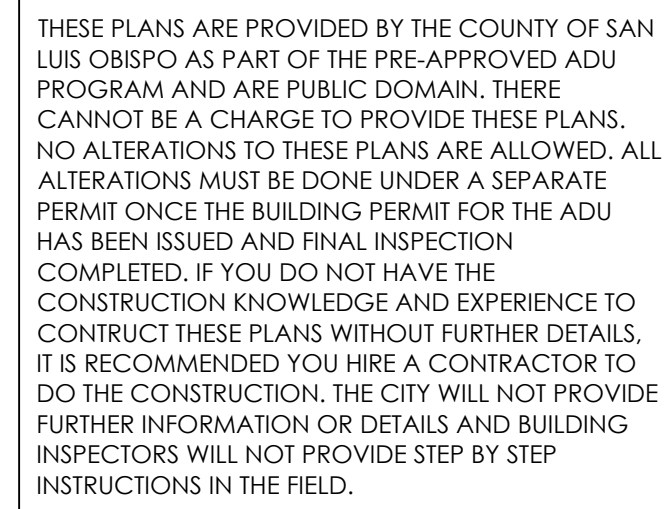
### TYPICAL WOOD DETAILS

DATE  
11/20/2023

SHEET

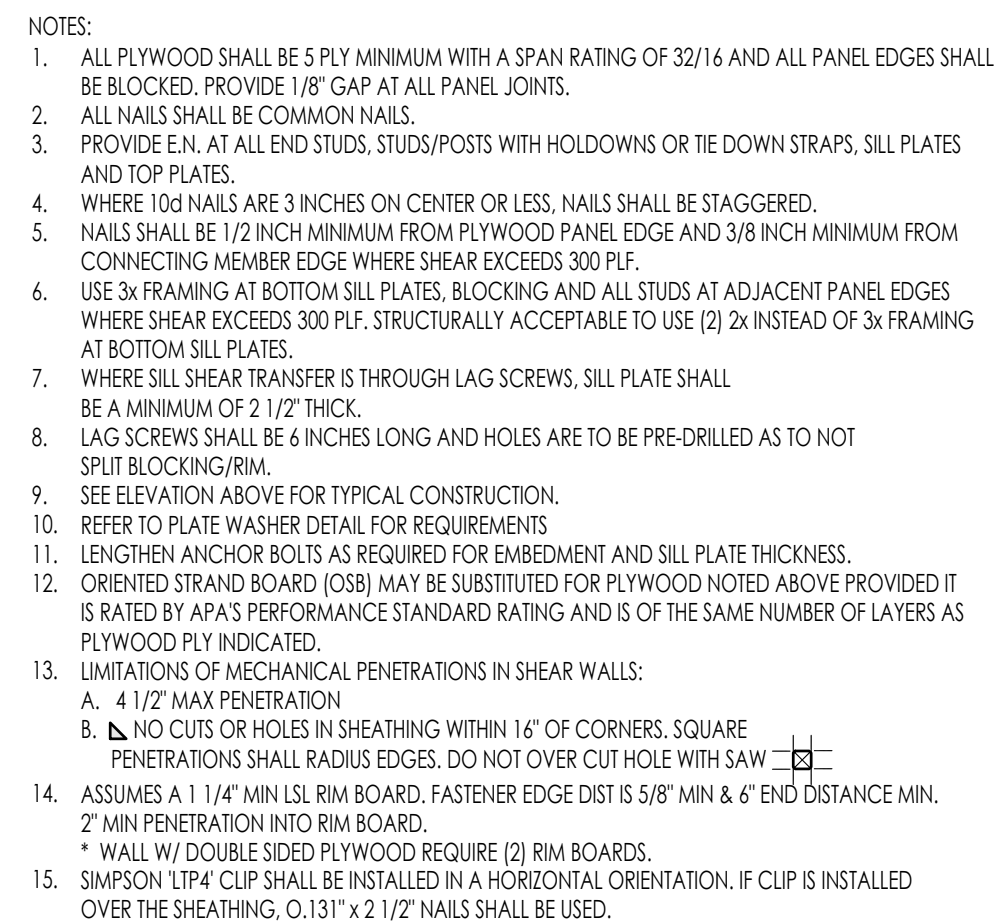
S-401





NOTES:

1. 2 BAYS OR 32" MIN STRAP LENGTH
2. BOUNDARY AND EDGE NAILING FROM PLYWOOD TO STUDS FRAMING SHALL OCCUR ABOVE AND BELOW OPENINGS AT THIS CONDITION
3. SEE TYPICAL SHEAR WALL ELEVATION FOR BALANCE OF INFO NOT SHOWN

TYPICAL SHEAR WALL ELEVATION AND SCHEDULE  
2227-01-C1122 - S402



N:\2000\2727-01\c029-40-county\ad\structural\ConDoc\Sheet-figs\2727-01-C022-5403.dwg, PLAN 5 - 5403, Nov 20, 2023, 3:29pm, adspace

		<div><table><caption>TOP PLATE LAP NAILING</caption><tr><th>WALL TYPE</th><th>MIN LAP SPLICE</th><th>NAILS EA SIDE</th></tr><tr><td>NON-BEARING</td><td>2'-0"</td><td>(8) 16d</td></tr></table><table><caption>TOP PLATE LAP NAILING</caption><tr><th>SYMBOL</th><th>MIN LAP SPLICE</th><th>NAILS EA SIDE</th><th>ALLOWABLE TOP CHORD CAPACITY</th></tr><tr><td>⊙</td><td>4'-0"</td><td>(8) 16d</td><td>1,800#</td></tr><tr><td>⊙</td><td>4'-0"</td><td>(12) 16d</td><td>2,700#</td></tr><tr><td>⊙</td><td>4'-0"</td><td>(16) 16d</td><td>3,600#</td></tr><tr><td>⊙</td><td>4'-0"</td><td>(20) 16d</td><td>4,500#</td></tr><tr><td>⊙</td><td>4'-0"</td><td>(24) 16d</td><td>5,400#</td></tr><tr><td>⊙</td><td>4'-0"</td><td>(28) 16d</td><td>6,300#</td></tr><tr><td>⊙</td><td>4'-0"</td><td>(32) 16d</td><td>7,200#</td></tr></table></div>	WALL TYPE	MIN LAP SPLICE	NAILS EA SIDE	NON-BEARING	2'-0"	(8) 16d	SYMBOL	MIN LAP SPLICE	NAILS EA SIDE	ALLOWABLE TOP CHORD CAPACITY	⊙	4'-0"	(8) 16d	1,800#	⊙	4'-0"	(12) 16d	2,700#	⊙	4'-0"	(16) 16d	3,600#	⊙	4'-0"	(20) 16d	4,500#	⊙	4'-0"	(24) 16d	5,400#	⊙	4'-0"	(28) 16d	6,300#	⊙	4'-0"	(32) 16d	7,200#			
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	51	DBL TOP PLATE SPLICE NAILING 2727-01-C022-5403	NTS	32																																							
	52		42	32	PLYWOOD DIAPHRAGM SHEATHING 2727-01-C022-5403																																						
	53		43	33	OPENING AT FRAMING 2727-01-C022-5403																																						
	54		44	34	TYP JOIST BLOCKING 2727-01-C022-5403																																						
					DIAPHRAGM PANEL JOINTS 2727-01-C022-5403																																						

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COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT

SAN LUIS OBISPO, CA

TYPICAL WOOD DETAILS

DATE  
11/20/2023

SHEET  
S-403



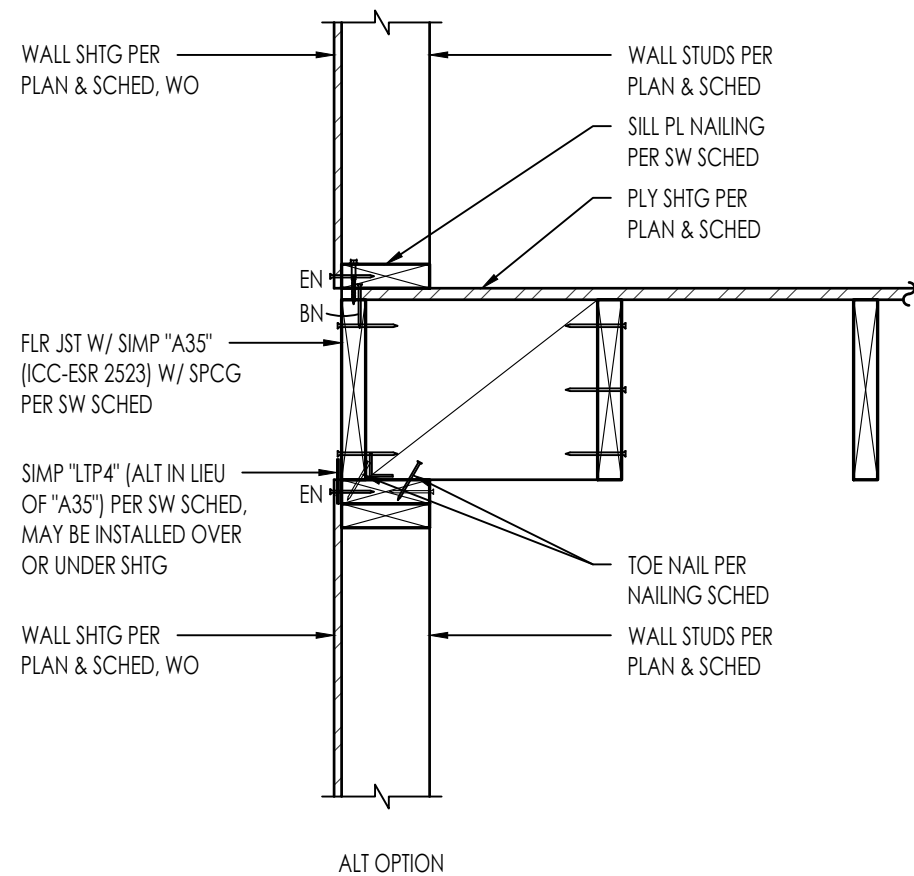
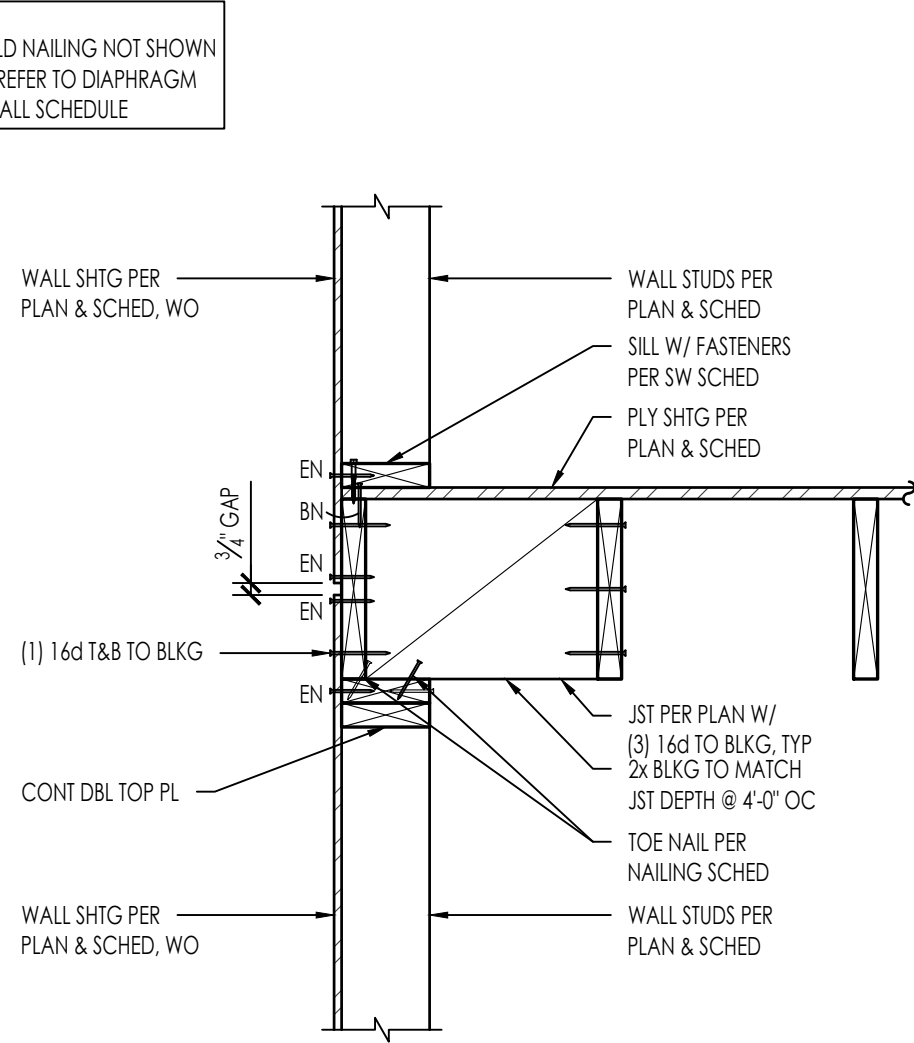
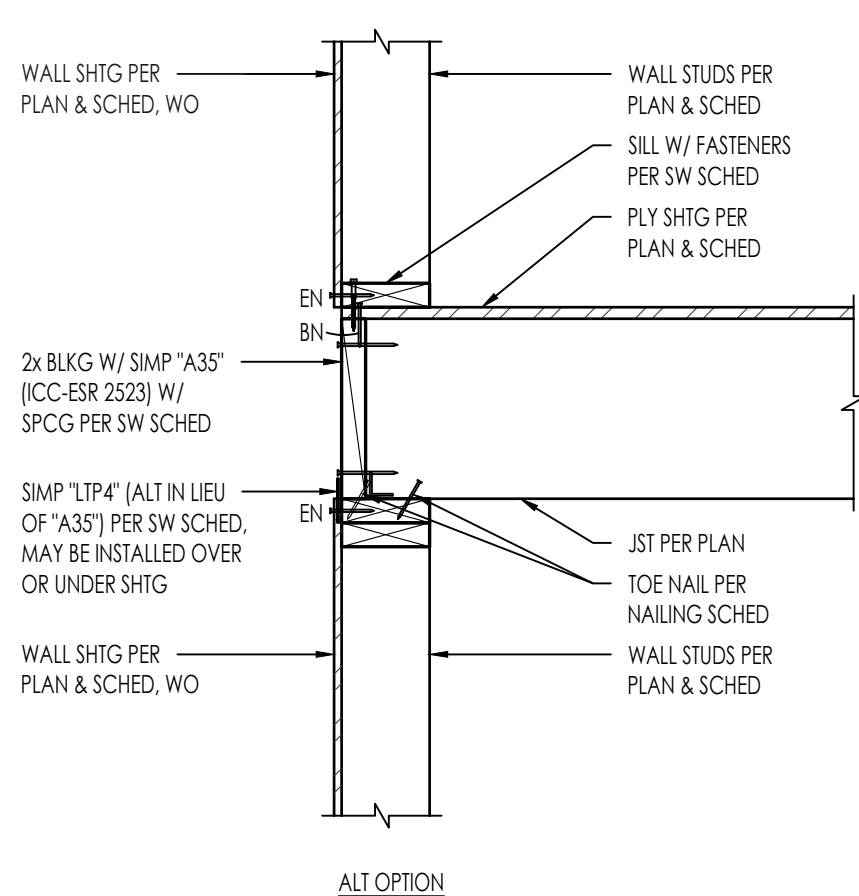
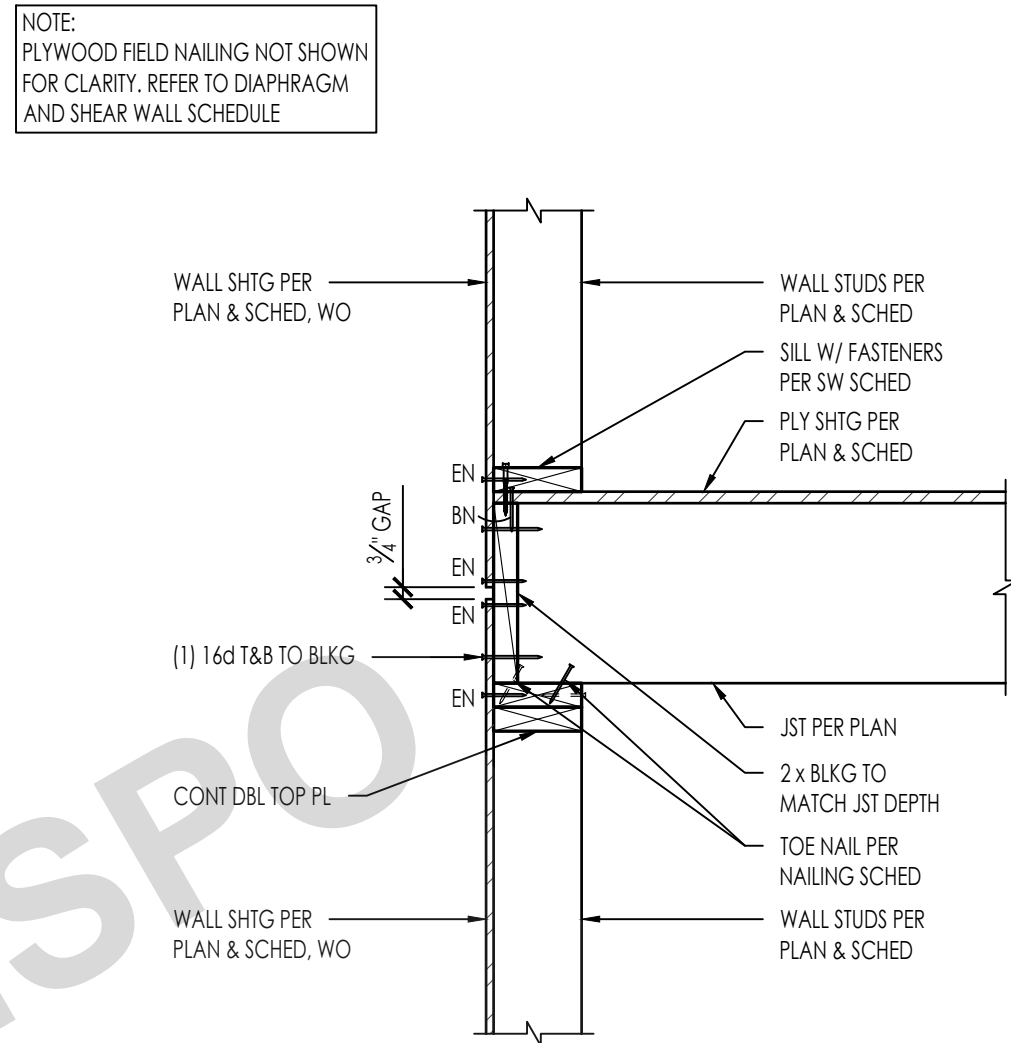
				<table> <tr><th colspan="2">1.55E LSL BEAMS &amp; HEADERS</th></tr> <tr><th>HEADER OR BEAM DEPTH</th><th>MAX ROUND HOLE SIZE</th></tr> <tr><td>9 1/2"</td><td>3"</td></tr> <tr><td>11 1/2"</td><td>3 1/2"</td></tr> <tr><td>14" - 16"</td><td>4 1/2"</td></tr> </table> <p>1.55E LSL NOTES: 1. ALLOWED HOLE ZONE SUITABLE FOR HEADERS AND BEAMS WITH UNIFORM AND/OR CONCENTRATED LOADS ANYWHERE ALONG THE MEMBER. 2. ROUND HOLES ONLY. 3. NO HOLES IN HEADERS OR BEAMS IN PLANK ORIENTATION.</p>	1.55E LSL BEAMS & HEADERS		HEADER OR BEAM DEPTH	MAX ROUND HOLE SIZE	9 1/2"	3"	11 1/2"	3 1/2"	14" - 16"	4 1/2"																									
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51	41	31		<table> <tr><th colspan="2">LVL, PSL, &amp; 1.3E LSL BEAMS &amp; HEADERS</th></tr> <tr><th>HEADER OR BEAM DEPTH</th><th>MAX ROUND HOLE SIZE</th></tr> <tr><td>4 1/2"</td><td>1"</td></tr> <tr><td>5 1/2"</td><td>1 1/4"</td></tr> <tr><td>7 1/4" - 20"</td><td>2"</td></tr> </table> <p>LVL/PSL/1.3E LSL: 1. ALLOWED HOLE ZONE SUITABLE FOR HEADERS AND BEAMS WITH UNIFORM LOADS ONLY. 2. ROUND HOLES ONLY. 3. NO HOLES IN CANTILEVERS. 4. NO HOLES IN HEADERS OR BEAMS IN PLANK ORIENTATION.</p> <p>DO NOT CUT, NOTCH, OR DRILL HOLES IN HEADERS OR BEAMS EXCEPT AS INDICATED IN THE ILLUSTRATIONS AND TABLES</p>	LVL, PSL, & 1.3E LSL BEAMS & HEADERS		HEADER OR BEAM DEPTH	MAX ROUND HOLE SIZE	4 1/2"	1"	5 1/2"	1 1/4"	7 1/4" - 20"	2"																									
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52	42	32	ALLOWABLE HOLES THRU ENGINEERED LUMBER HEADERS & BEAMS	NTS	12																																		
			<p>NOTES: 1. NOTCHING AND BORING NOT PERMITTED IN THE SAME JOIST CROSS SECTION WITHOUT STRUCTURAL ENGINEER'S APPROVAL. 2. NOTCH WIDTHS GREATER THAN SHOWN IN TABLE NOT PERMITTED WITHOUT STRUCTURAL ENGINEER'S APPROVAL. 3. NO NOTCHES OR HOLES PERMITTED ANYWHERE IN CANTILEVERED ELEMENTS WITHOUT STRUCTURAL ENGINEER'S APPROVAL.</p> <table> <tr><th colspan="5">NOTCH AND HOLE LIMITATIONS</th></tr> <tr><th>JOIST SIZE</th><th>MAX HOLE</th><th>MAX NOTCH DEPTH</th><th>MAX END NOTCH</th><th>MAX NOTCH LENGTH</th></tr> <tr><td>2X4</td><td>NONE</td><td>NONE</td><td>NONE</td><td>NONE</td></tr> <tr><td>2X6</td><td>1 1/2"</td><td>7/8"</td><td>1 3/8"</td><td>1 1/2"</td></tr> <tr><td>2X8</td><td>2 3/8"</td><td>1 1/4"</td><td>1 1/2"</td><td>2 1/2"</td></tr> <tr><td>2X10</td><td>3"</td><td>1 1/2"</td><td>2 3/8"</td><td>3"</td></tr> <tr><td>2X12</td><td>3 3/4"</td><td>1 1/2"</td><td>2 1/2"</td><td>3 1/2"</td></tr> </table>	NOTCH AND HOLE LIMITATIONS					JOIST SIZE	MAX HOLE	MAX NOTCH DEPTH	MAX END NOTCH	MAX NOTCH LENGTH	2X4	NONE	NONE	NONE	NONE	2X6	1 1/2"	7/8"	1 3/8"	1 1/2"	2X8	2 3/8"	1 1/4"	1 1/2"	2 1/2"	2X10	3"	1 1/2"	2 3/8"	3"	2X12	3 3/4"	1 1/2"	2 1/2"	3 1/2"	
NOTCH AND HOLE LIMITATIONS																																							
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53	43	33	SAWN LUMBER AND RAFTER JOIST NOTCHING AND BORING LIMITATIONS	NTS	13																																		
			<p>NOTES: 1. NOTCHING AND BORING NOT PERMITTED IN THE SAME STUD SECTION. 2. NO MORE THAN 2 SUCCESSIVE DBL STUDS ARE PERMITTED TO HAVE 60% MAX BORED HOLES.</p> <table> <tr><th colspan="4">MAXIMUM BORED HOLE DIAMETER/NOTCH DEPTH</th></tr> <tr><th>STUD SIZE (IN)</th><th>APPLICATION</th><th>MAX HOLE DIAMETER (IN)</th><th>MAX NOTCH DEPTH (IN)</th></tr> <tr><td rowspan="2">2X4</td><td>NON-BEARING</td><td>2 1/8"</td><td>1 3/8"</td></tr> <tr><td>EXTERIOR/BEARING</td><td>1 3/4"</td><td>7/8"</td></tr> <tr><td rowspan="2">2X6</td><td>NON-BEARING</td><td>3 1/4"</td><td>2 3/8"</td></tr> <tr><td>EXTERIOR/BEARING</td><td>2 3/8"</td><td>1 3/8"</td></tr> </table>	MAXIMUM BORED HOLE DIAMETER/NOTCH DEPTH				STUD SIZE (IN)	APPLICATION	MAX HOLE DIAMETER (IN)	MAX NOTCH DEPTH (IN)	2X4	NON-BEARING	2 1/8"	1 3/8"	EXTERIOR/BEARING	1 3/4"	7/8"	2X6	NON-BEARING	3 1/4"	2 3/8"	EXTERIOR/BEARING	2 3/8"	1 3/8"														
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			<p>NOTES: 1. NOTCHES MIN 6'-0" OC 2. "C" MAX BORED HOLE 3. "A" MAX 4. "E" MAX 5. "F" MAX 6. "D" MAX</p> <table> <tr><th colspan="7">NOTCH AND HOLE LIMITATIONS</th></tr> <tr><th>TOP PL OR SILL PL</th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th></tr> <tr><td>2X4</td><td>3/2"</td><td>1 1/2"</td><td>1 1/4"</td><td>1 1/2"</td><td>5/4"</td><td>6</td></tr> <tr><td>2X6</td><td>4/2"</td><td>2 1/2"</td><td>2 1/4"</td><td>2 1/2"</td><td>8/4"</td><td>9</td></tr> <tr><td>2X8</td><td>5/2"</td><td>3"</td><td>3 1/4"</td><td>3 1/2"</td><td>12/4"</td><td>12</td></tr> </table>	NOTCH AND HOLE LIMITATIONS							TOP PL OR SILL PL	A	B	C	D	E	F	2X4	3/2"	1 1/2"	1 1/4"	1 1/2"	5/4"	6	2X6	4/2"	2 1/2"	2 1/4"	2 1/2"	8/4"	9	2X8	5/2"	3"	3 1/4"	3 1/2"	12/4"	12	
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


**COUNTY OF SAN LUIS OBISPO**  
**ACCESSORY DWELLING UNIT**  
SAN LUIS OBISPO, CA

## FLOOR FRAMING DETAILS

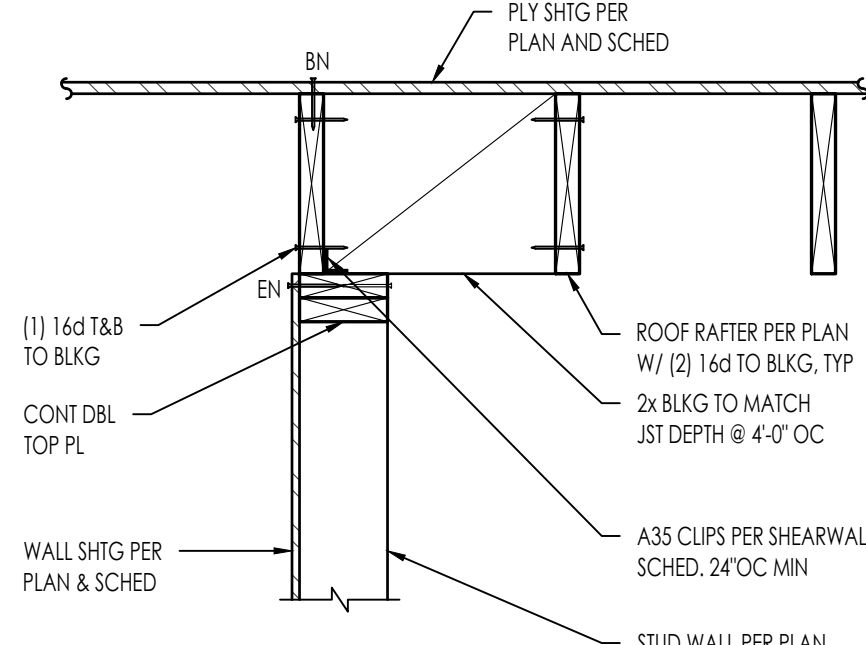
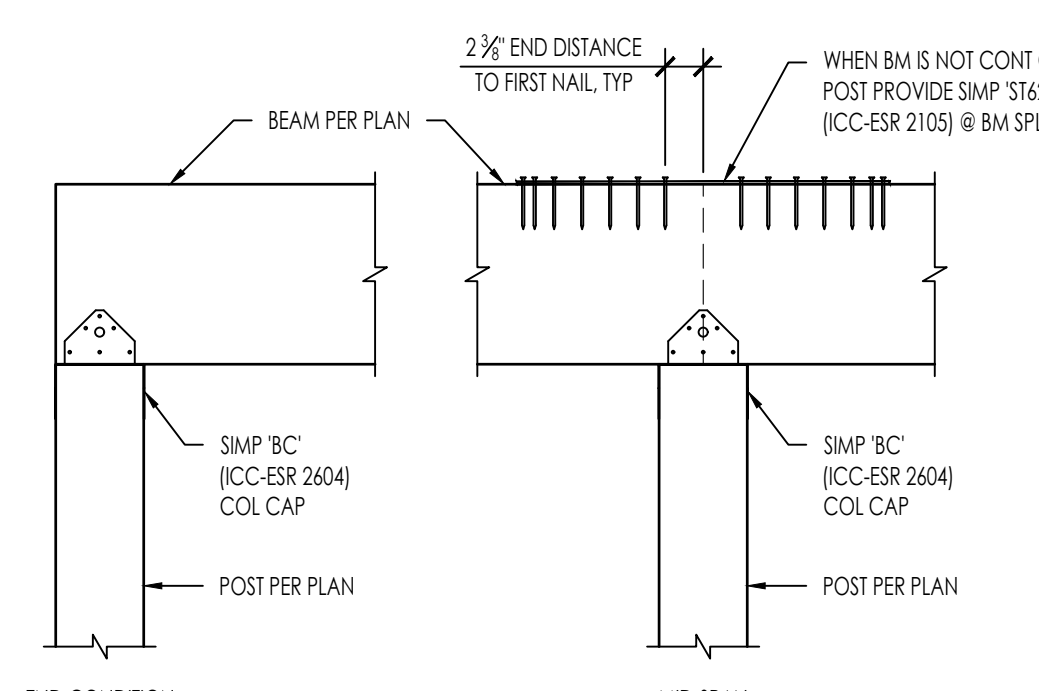
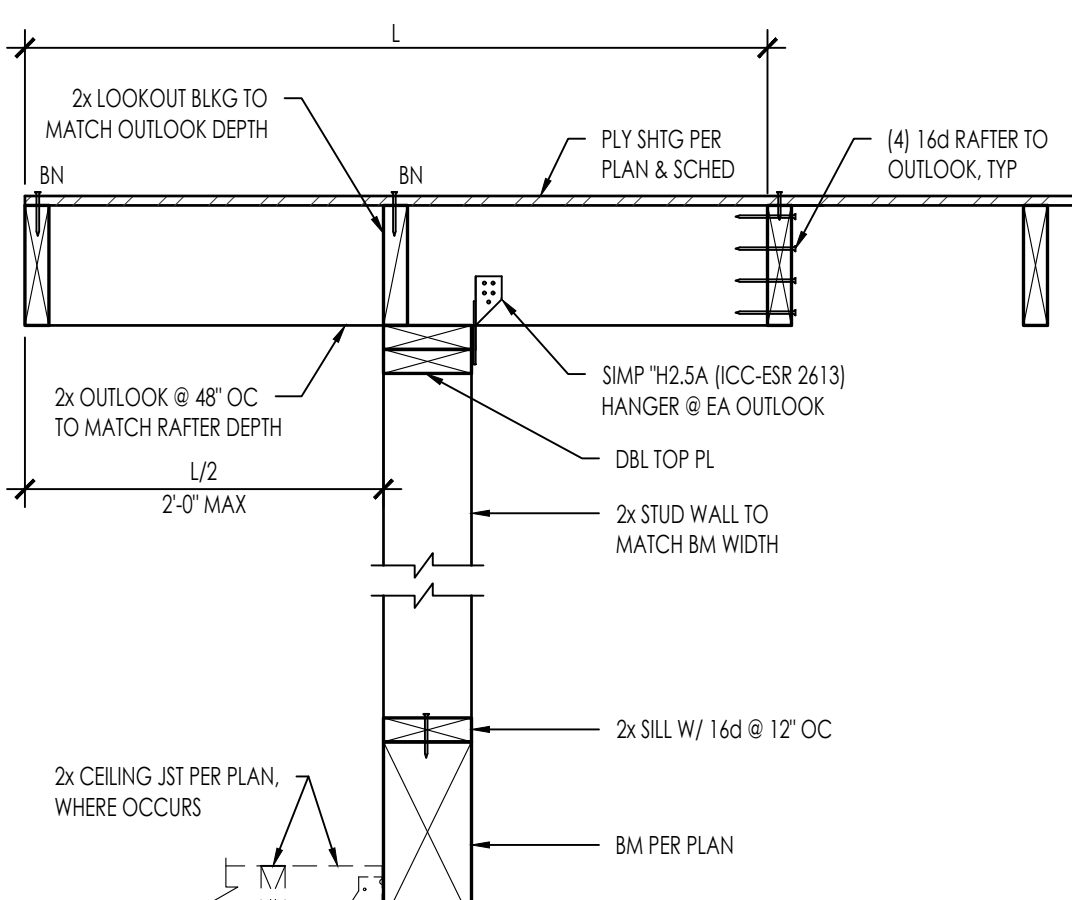
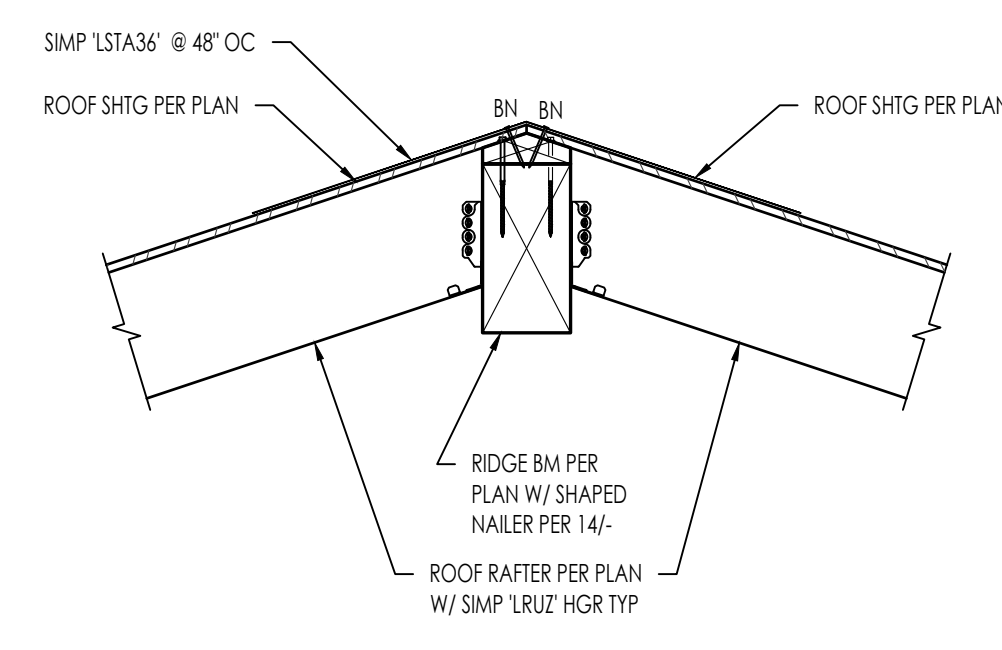
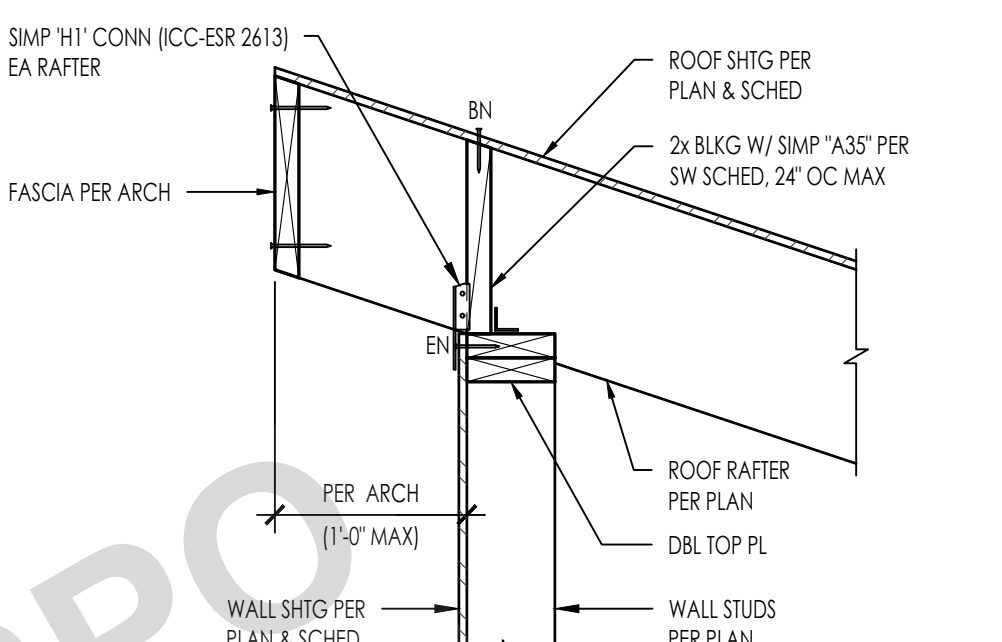
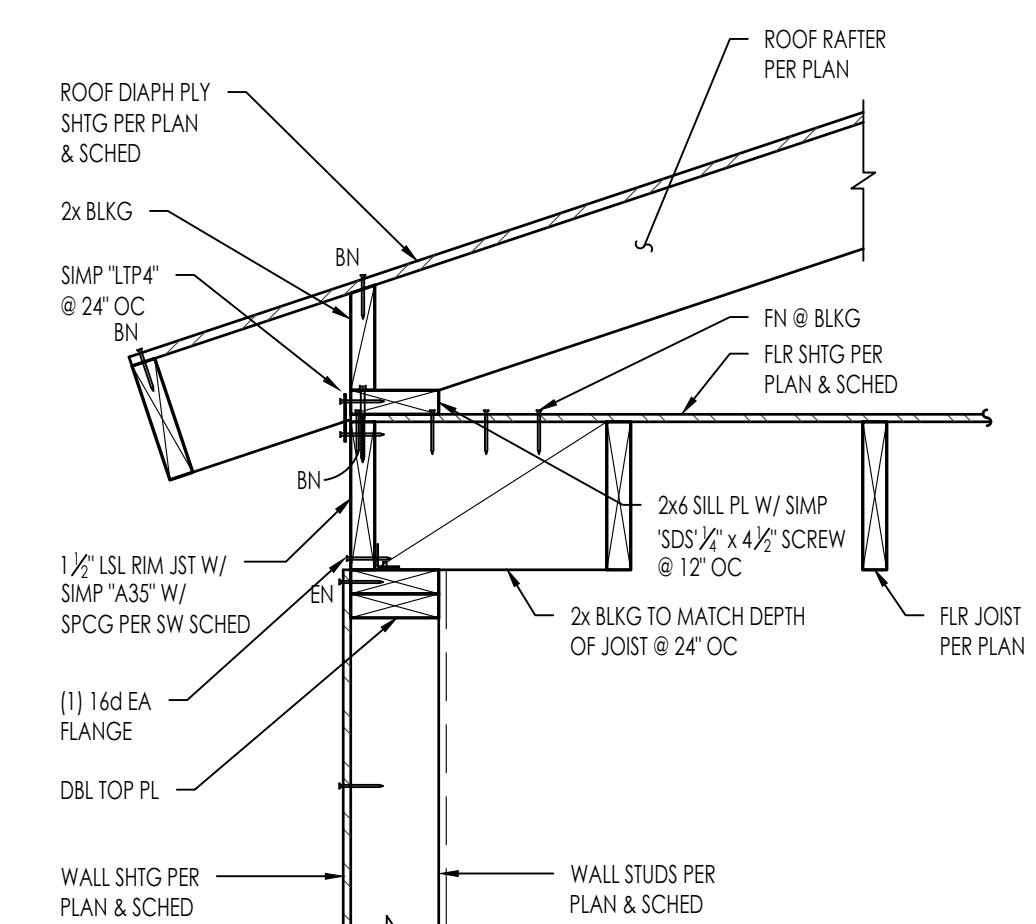
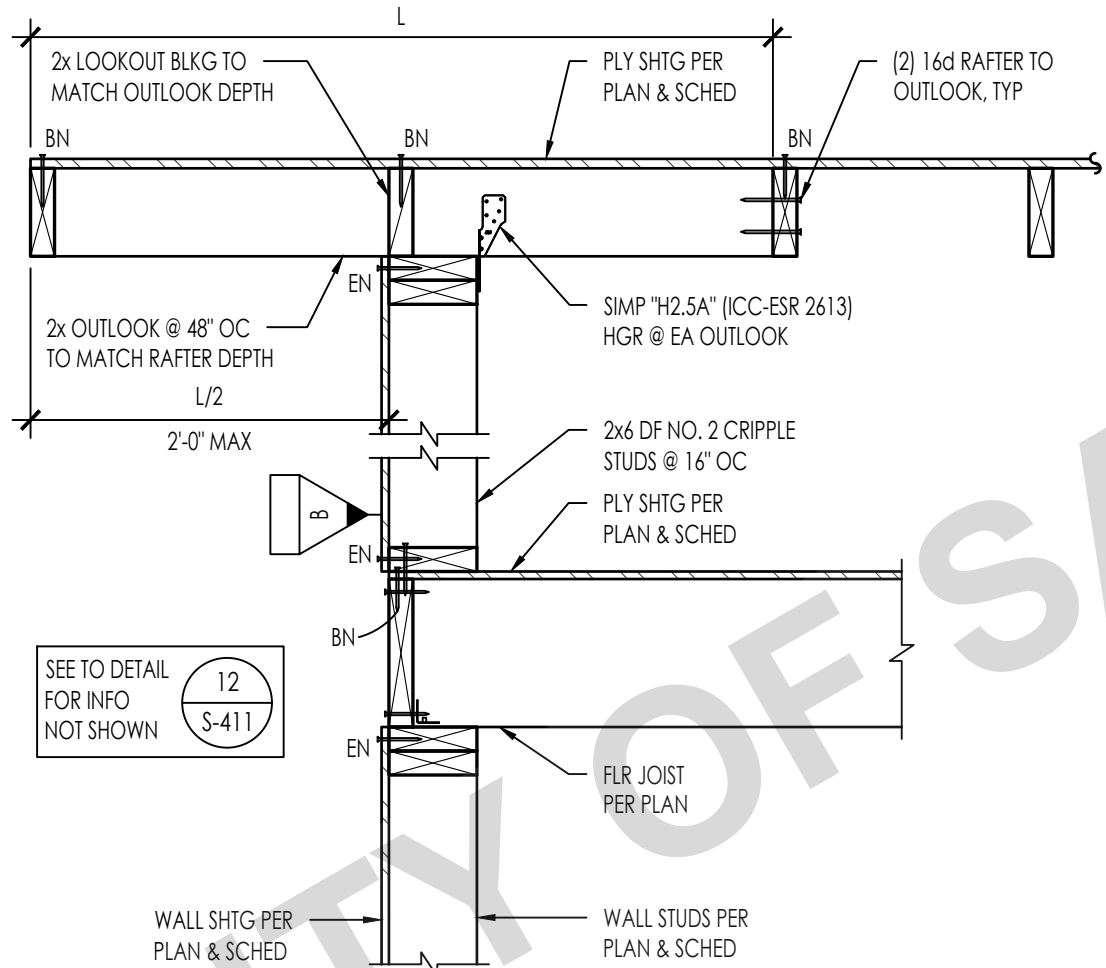
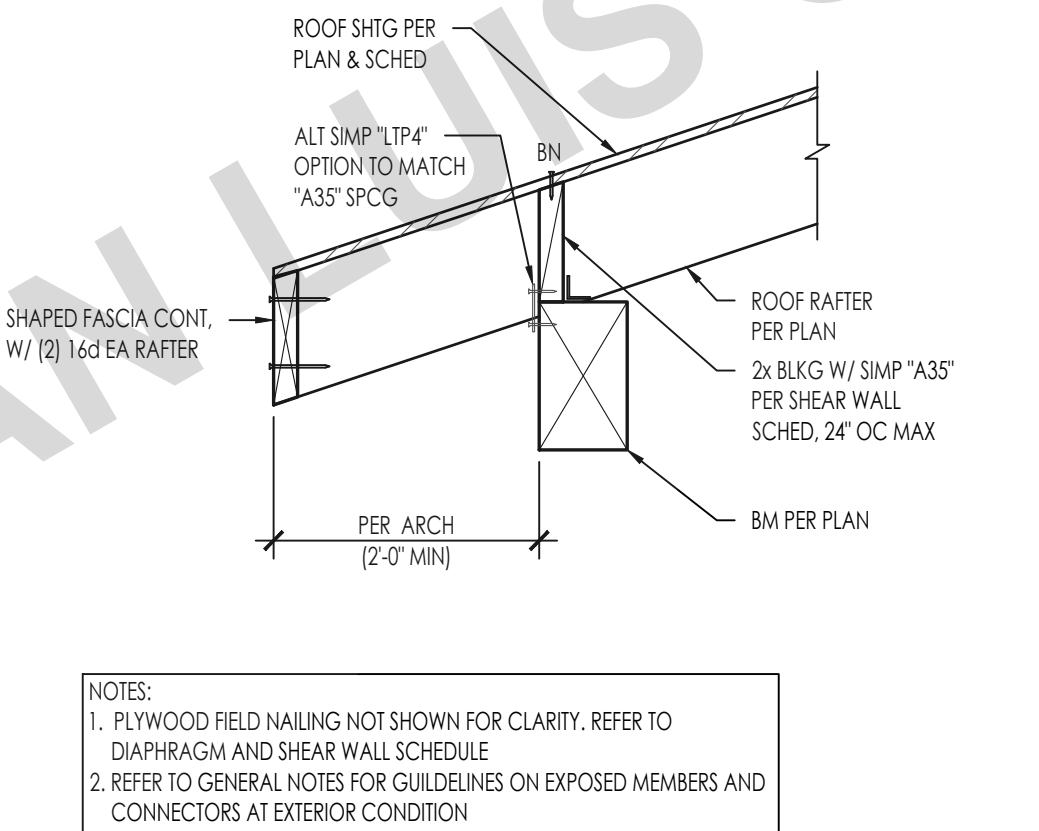
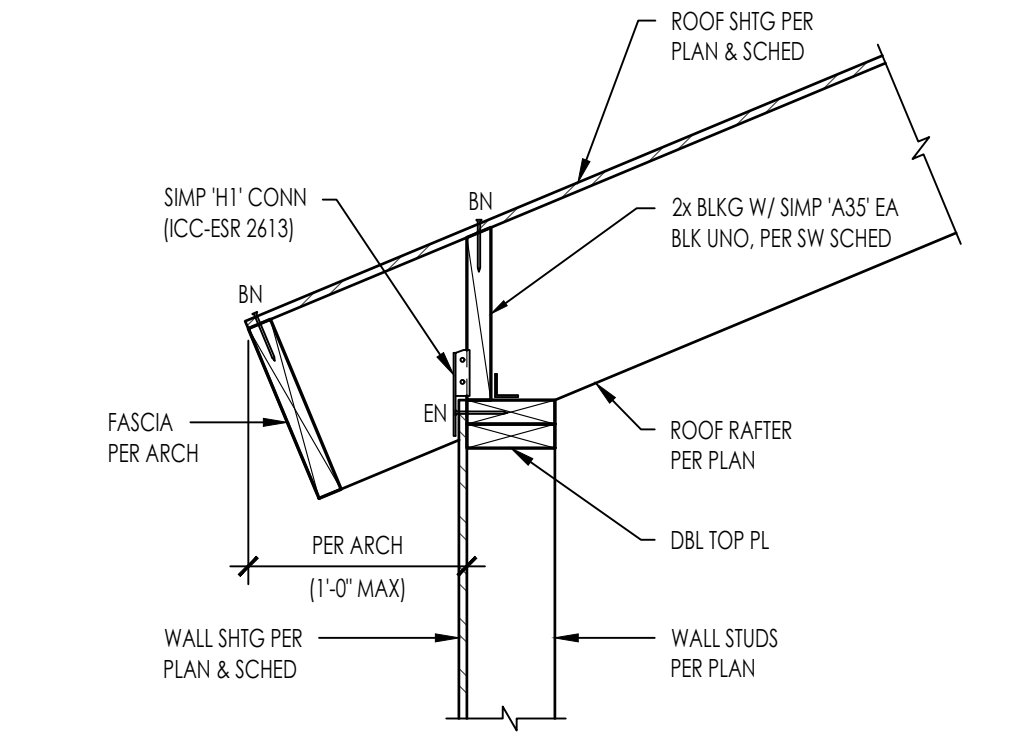
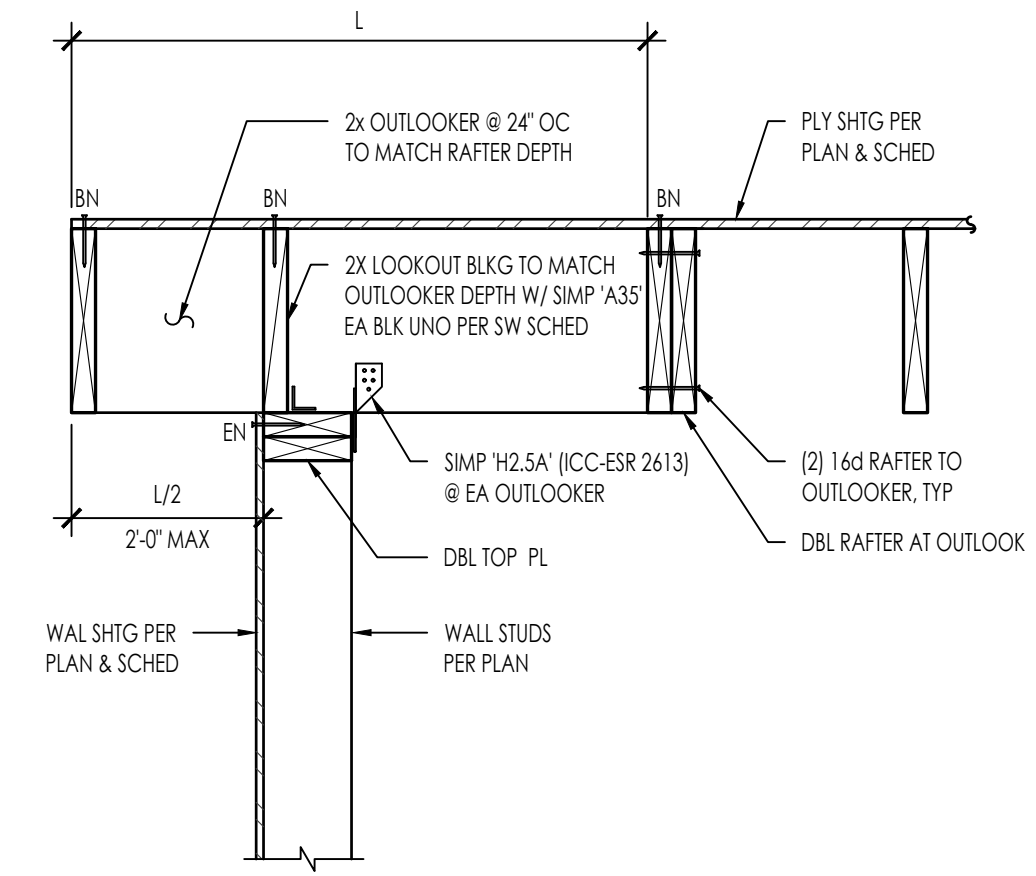
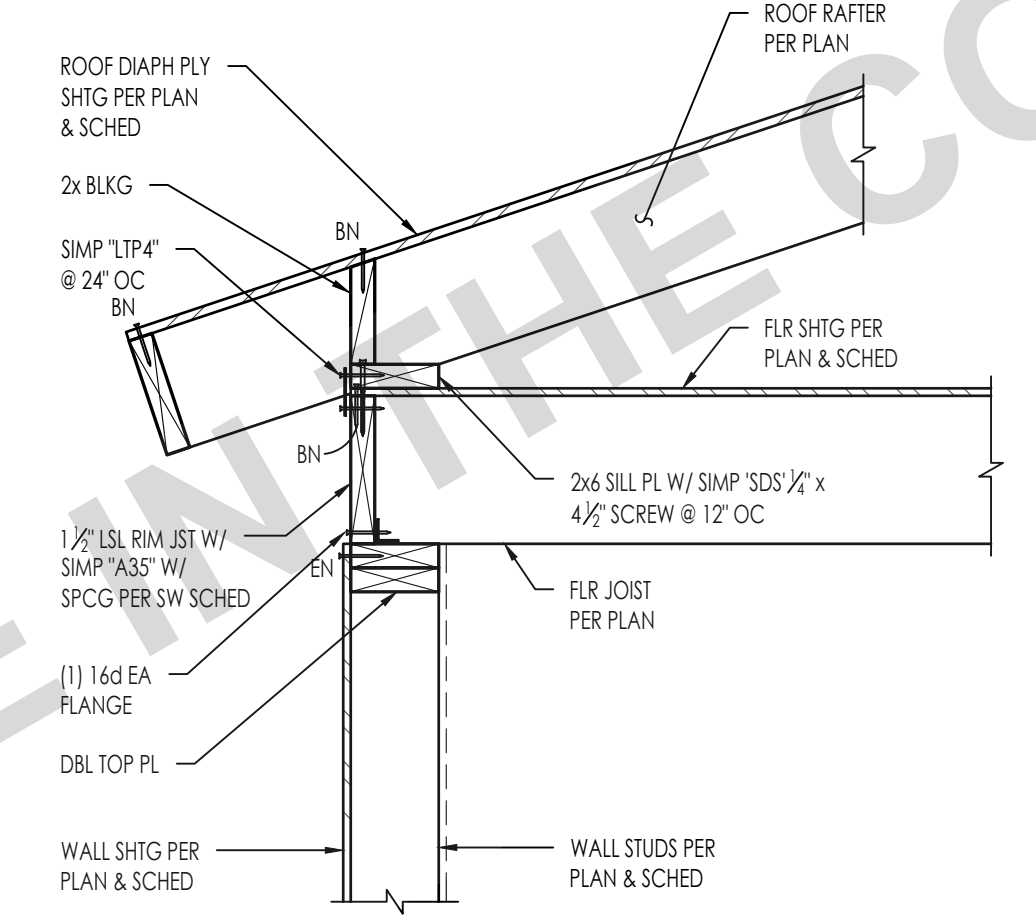
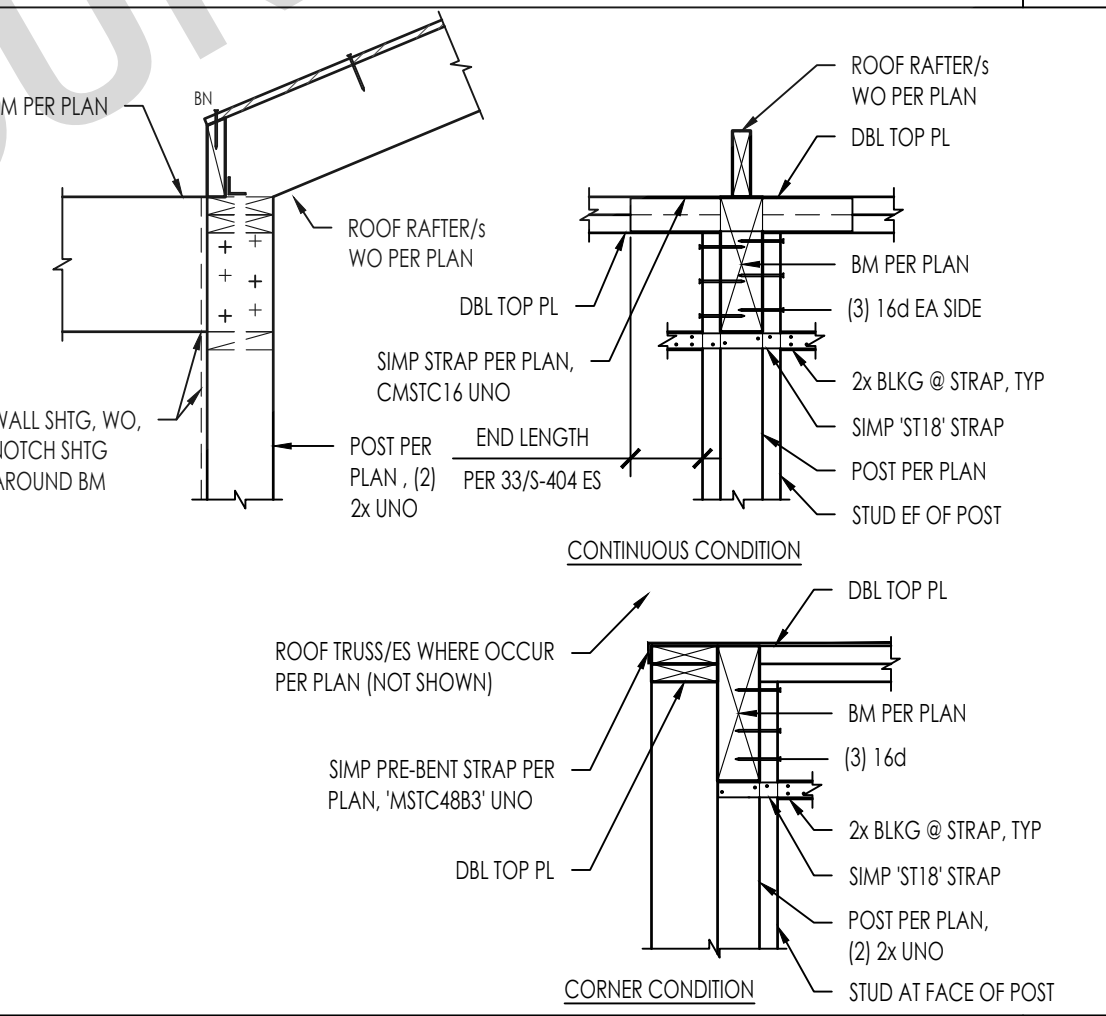
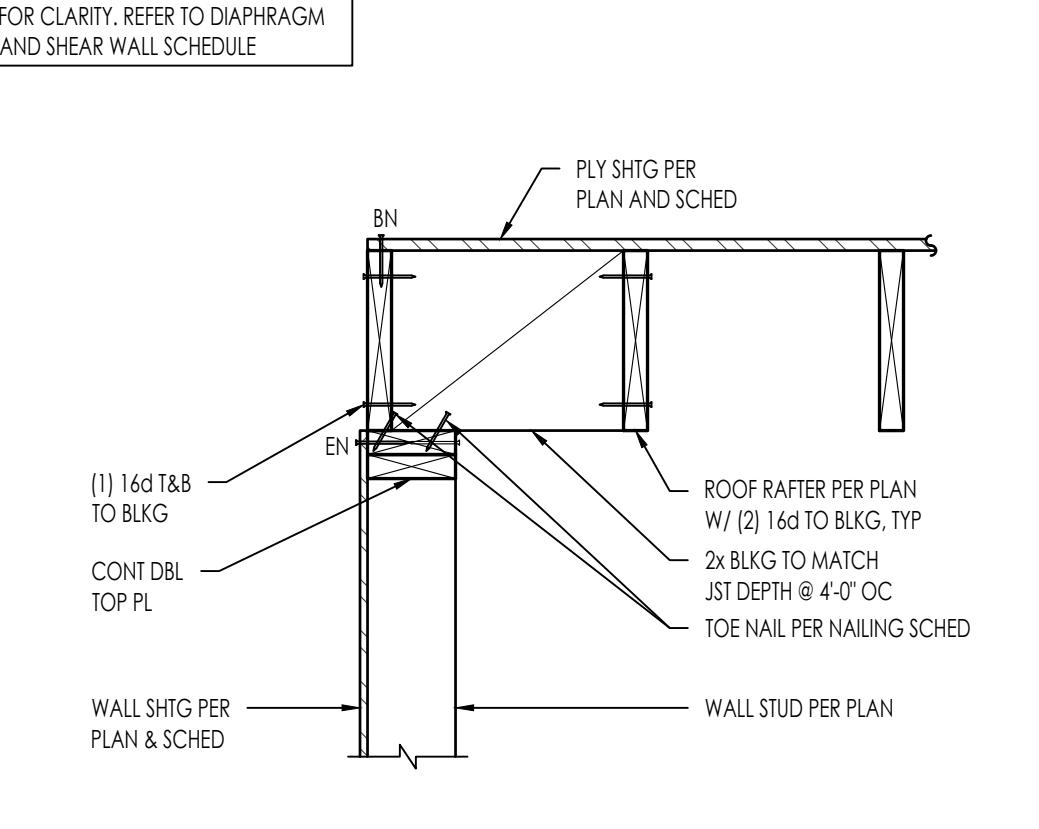
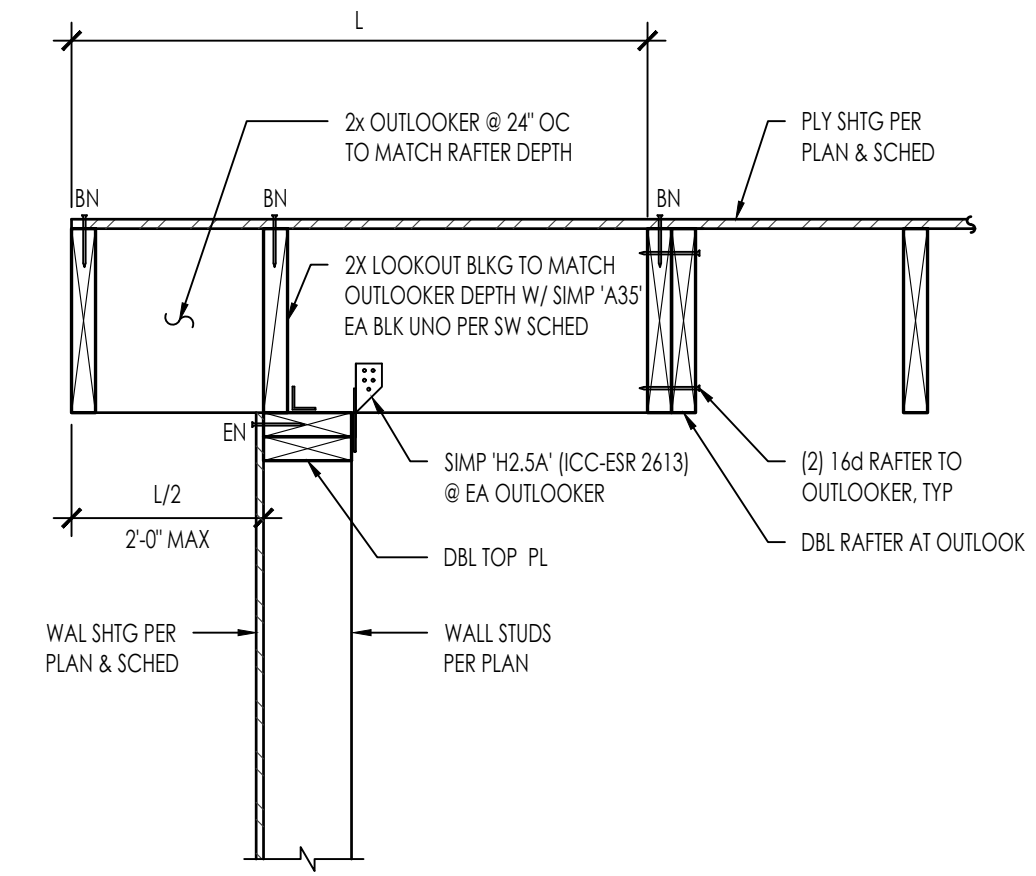
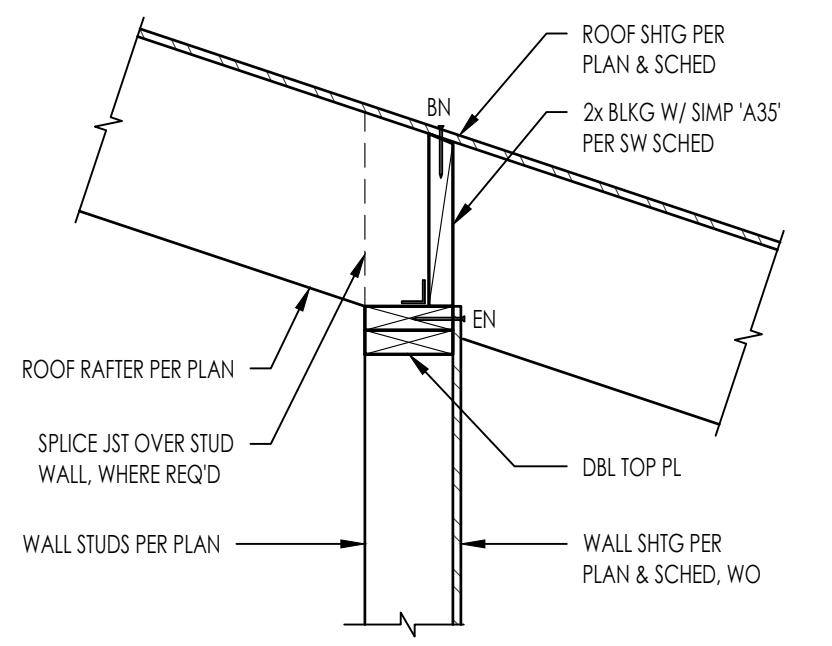
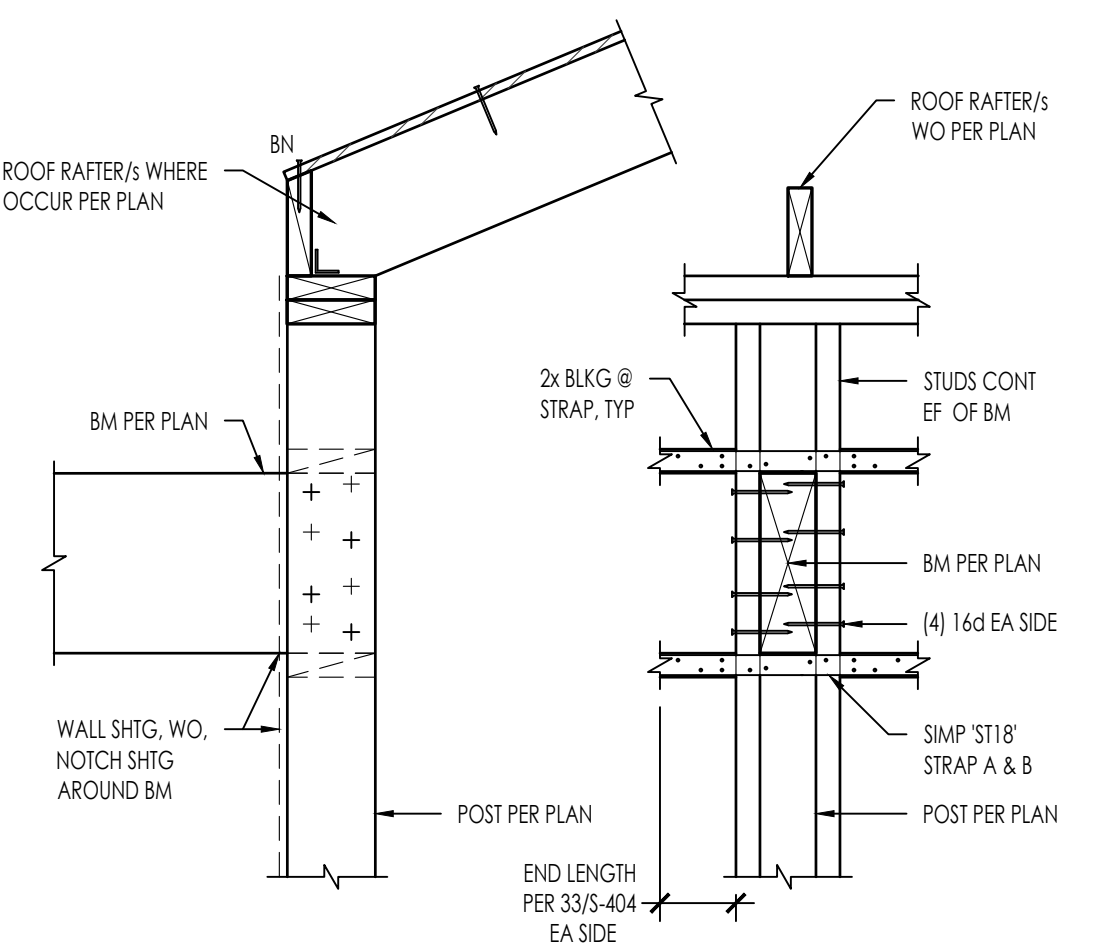
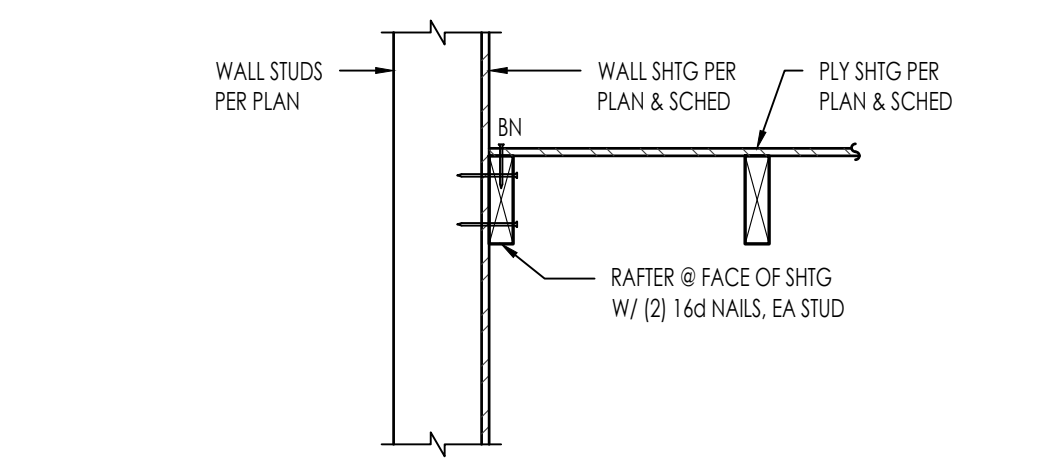
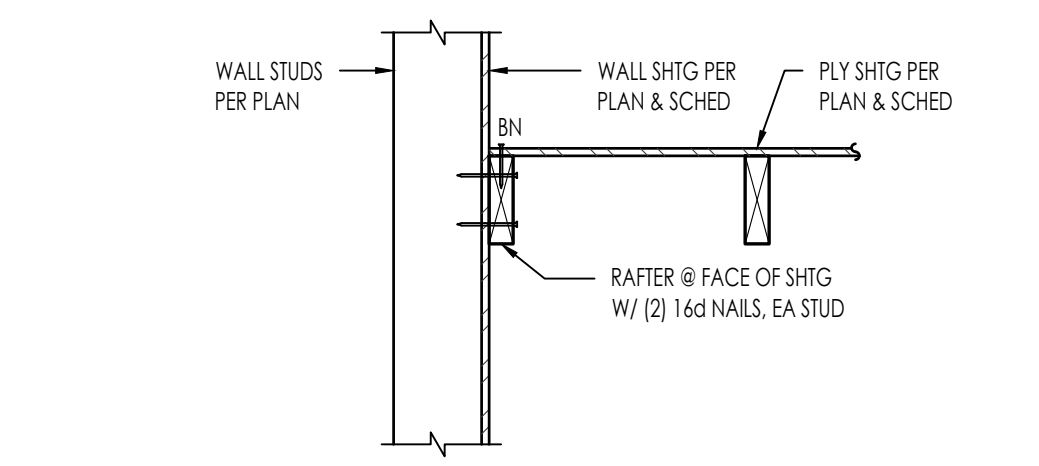
S-411




MARK	STRAP MODEL	FASTENERS	END LENGTH (in)	ALLOWABLE TENSION LOADS (lbs)
	CS16	22-10d	11	1,705
	CS14	30-10d	15	2,490
	CMSTC16	50-16d SINKER	20	4,585
	CMST14	56-10d	26	6,490
		66-10d	30	
	CMST12	74-16d	33	9,215
		86-10d	39	



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<div>NOTE: PLYWOOD FIELD NAILING NOT SHOWN FOR CLARITY, REFER TO DIAPHRAGM AND SHEAR WALL SCHEDULE</div>  <div>INTERIOR SHEAR WALL (JOIST PARALLEL) 2727-01-C022-5401 - 515</div> <div>1" = 1'-0"</div> <div>51</div>		 <div>BEAM TO POST CONNECTION 2727-01-C022-5401 - 415</div> <div>1" = 1'-0"</div> <div>41</div>		 <div>OUTLOOK AT PORCH ROOF 2727-01-C022-5401 - 315</div> <div>NTS or 1" = 1'-0"</div> <div>31</div>		 <div>ROOF RIDGE 2727-01-C022-5401 - 215</div> <div>1" = 1'-0"</div> <div>21</div>		<div>NOTE: PLYWOOD FIELD NAILING NOT SHOWN FOR CLARITY, REFER TO DIAPHRAGM AND SHEAR WALL SCHEDULE</div>  <div>RAFTER @ EXTERIOR SHEAR WALL 2727-01-C022-5401 - 11</div> <div>1" = 1'-0"</div> <div>11</div>									
 <div>ROOF RAFTER ABOVE FLOOR (PARALLEL JOIST) 2727-01-C022-5401 - 435</div> <div>1" = 1'-0"</div> <div>52</div>		 <div>LOW ROOF @ FLOOR FRAMING 2727-01-C022-5401 - 325</div> <div>1" = 1'-0"</div> <div>42</div>		 <div>ROOF RAFTER ABOVE BEAM 2727-01-C022-5401 - 225</div> <div>1" = 1'-0"</div> <div>32</div>		 <div>RAFTER @ EXTERIOR SHEAR WALL 2727-01-C022-5401 - 125</div> <div>1" = 1'-0"</div> <div>22</div>		 <div>RAFTER @ EXTERIOR SHEAR WALL 2727-01-C022-5401 - 135</div> <div>1" = 1'-0"</div> <div>12</div>									
 <div>ROOF RAFTER ABOVE FLOOR (PARA JOIST) 2727-01-C022-5401 - 435</div> <div>1" = 1'-0"</div> <div>53</div>		 <div>BEAM POCKET THROUGH EXTERIOR WALL 2727-01-C022-5401 - 335</div> <div>NTS or 3/4" = 1'-0"</div> <div>43</div>		<div>NOTE: PLYWOOD FIELD NAILING NOT SHOWN FOR CLARITY, REFER TO DIAPHRAGM AND SHEAR WALL SCHEDULE</div>  <div>EXTERIOR SHEAR WALL (JOIST PARALLEL) 2727-01-C022-5401 - 235</div> <div>1" = 1'-0"</div> <div>33</div>		 <div>OUTLOOKER @ EXTERIOR SHEAR WALL 2727-01-C022-5401 - 135</div> <div>1" = 1'-0"</div> <div>23</div>		 <div>RAFTER TO WALL BELOW 2727-01-C022-5401 - 445</div> <div>1" = 1'-0"</div> <div>54</div>		 <div>BEAM POCKET THROUGH EXTERIOR WALL 2727-01-C022-5401 - 345</div> <div>NTS</div> <div>44</div>		 <div>ROOF RAFTER TO EXTERIOR WALL (PARA) 2727-01-C022-5401 - 245</div> <div>NTS or 1" = 1'-0"</div> <div>34</div>		 <div>ROOF RAFTER TO EXTERIOR WALL (PARA) 2727-01-C022-5401 - 245</div> <div>NTS or 1" = 1'-0"</div> <div>24</div>			



THESE PLANS ARE PROVIDED BY THE COUNTY OF SAN LUIS OBISPO 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 CONTRUCT 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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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Residential Building

Calculation Date/Time: 2023-10-30 11:52:30-07:00

Calculation Description: Title 24 Analysis

Input File Name: 1 Bedrm Plan - Plan 5a CZ 4.rbd22x

CF1R-PRF-01E

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INDOOR AIR QUALITY (IAQ) FANS

01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Efficiency - SRE/ASRE	Includes Fault Indicator Display?	HERS Verification	Status
Sfam IAQVentRpt	27	0.35	Exhaust	No	n/a / n/a	No	Yes	

Registration Number:

Registration Date/Time:

HERS Provider:

CZ-4-12

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Report Version: 2022.0.000  
Schema Version: rev 20220901

Report Generated: 2023-10-30 11:52:56

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Residential Building

Calculation Date/Time: 2023-10-30 11:52:30-07:00

Calculation Description: Title 24 Analysis

Input File Name: 1 Bedrm Plan - Plan 5a CZ 4.rbd22x

CF1R-PRF-01E

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SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	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	2	Heat Pump System 1	2	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
			Heating Efficiency Type	HSPF/HSPF2/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/SEER2	EER/EEER2/CEER			
Heat Pump System 1	VCHP-ductless	2	HSPF2	8	10900	10200	EER2SEER2	16	12.4	Not Zonal	Multi-speed	Heat Pump System 1-HERS-htpump

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
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
Heat Pump System 1-HERS-htpump	Not Required	0	Required	Required	Yes	Yes	Yes	Yes

VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09	10
Name	Certified Low-Static VCHP System	Airflow to Habitable Rooms	Ductless Units in Conditioned Space	Wall Mount Thermostat	Air Filter Sizing & Pressure Drop Rating	Low Leakage Ducts in Conditioned Space	Minimum Airflow per RA3.3 and SC3.3.3.4.1	Certified non-continuous Fan	Indoor Fan not Running Continuously
Heat Pump System 1	Not required	Required	Required	Required	Not required	Not required	Not required	Not required	Not required

Registration Number:

Registration Date/Time:

HERS Provider:

CZ-4-11

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Report Version: 2022.0.000  
Schema Version: rev 20220901

Report Generated: 2023-10-30 11:52:56

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Residential Building

Calculation Date/Time: 2023-10-30 11:52:30-07:00

Calculation Description: Title 24 Analysis

Input File Name: 1 Bedrm Plan - Plan 5a CZ 4.rbd22x

CF1R-PRF-01E

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WATER HEATING SYSTEMS

01	02	03	04	05	06	07	08	09
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	Basic	n/a	DHW Heater 1 (1)

WATER HEATERS - NEEA HEAT PUMP

01	02	03	04	05	06	07	08
Name	# of Units	Tank Vol. (gal)	NEEA Heat Pump Brand	NEEA Heat Pump Model	Tank Location	Duct Inlet Air Source	Duct Outlet Air Source
DHW Heater 1	1	40	Generic	Tier3Generic40	TankZone	Zone 1	Zone 1

WATER HEATING - COMPACT DISTRIBUTION

01	02	03	04	05	06	07
Dwelling Unit type	Water Heating System Name	Master Bath distance of furthest fixture to Water Heater (ft)	Kitchen distance of furthest fixture to Water Heater (ft)	Furthest Third furthest fixture to Water Heater (ft)	Compactness Factor	HERS Verification
Dwelling	DHW Sys 1	n/a	n/a	n/a	0.7	n/a

WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07
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	Basic	Not Required	Not Required

Registration Number:

Registration Date/Time:

HERS Provider:

CZ-4-10

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Report Version: 2022.0.000  
Schema Version: rev 20220901

Report Generated: 2023-10-30 11:52:56



THESE PLANS ARE PROVIDED BY THE COUNTY OF SAN LUIS OBISPO 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 CONTRUCT 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.

COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

ENERGY COMPLIANCE - PLAN 5C

DATE

11/28/2023

SHEET

T24 - 510



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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: Residential Building  
Calculation Date/Time: 2023-10-11 17:59:57-07:00  
Input File Name: 1 Bedrm Plan -Plan Sa CZ 5.rbd22x  
CF1R-PRF-01E  
(Page 3 of 13)

ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft <sup>2</sup> -yr)	Standard Design TDV Energy (EDR2) (KTDV/ft <sup>2</sup> -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft <sup>2</sup> -yr)	Proposed Design TDV Energy (EDR2) (KTDV/ft <sup>2</sup> -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	1.29	6.07	2.19	17.62	-0.9	-11.55
Space Cooling	0.13	4.56	0.02	0.87	0.11	3.69
IAQ Ventilation	0.51		0.51		0	0
Water Heating	5.47	60.93	3.61	46.09	1.86	14.84
Self Utilization/Flexibility Credit				0		0
North Facing Efficiency Compliance Total	7.4	77.11	6.33	70.13	1.07	6.98
Space Heating	1.29	6.07	2.6	20.17	-1.31	-14.1
Space Cooling	0.13	4.56	0.04	1.12	0.09	3.44
IAQ Ventilation	0.51	5.55	0.51	5.55	0	0
Water Heating	5.47	60.93	3.61	45.97	1.86	14.96
Self Utilization/Flexibility Credit			0			0
East Facing Efficiency Compliance Total	7.4	77.11	6.76	72.81	0.64	4.3

Registration Number: CA Building Energy Efficiency Standards - 2022 Residential Compliance  
Registration Date/Time: Report Version: 2022.0.000  
Schema Version: rev 20220901  
HERS Provider: CZ-5-03  
Report Generated: 2023-10-11 18:00:35

CF1R-PRF-01E  
(Page 2 of 13)  
Calculation Date/Time: 2023-10-11 17:59:57-07:00  
Input File Name: 1 Bedrm Plan -Plan Sa CZ 5.rbd22x  
Project Name: Residential Building  
Calculation Description: Title 24 Analysis

ENERGY DESIGN RATINGS			
Source Energy (EDR1)	Efficiency <sup>1</sup> EDR (EDR2/EDR1)	Source Energy (EDR1)	Efficiency <sup>1</sup> EDR (EDR2/EDR1)
Standard Design	37	69.7	62.7
North Facing	55.4	58.8	57.9
East Facing	36	48.3	68.4
South Facing	55.4	39	67.8
West Facing	55.6	39	67.9
North Facing	55.4	58.8	57.9
East Facing	36	48.3	68.4
South Facing	55.4	39	67.8
West Facing	55.6	39	67.9

HERS Provider: CZ-5-03  
Report Generated: 2023-10-11 18:00:35

Registration Number: CA Building Energy Efficiency Standards - 2022 Residential Compliance  
Registration Date/Time: Report Version: 2022.0.000  
Schema Version: rev 20220901  
HERS Provider: CZ-5-03  
Report Generated: 2023-10-11 18:00:35

CZ-5-02

CF1R-PRF-01E  
(Page 1 of 13)  
Calculation Date/Time: 2023-10-11 17:59:57-07:00  
Input File Name: 1 Bedrm Plan -Plan Sa CZ 5.rbd22x  
Project Name: Residential Building  
Calculation Description: Title 24 Analysis

GENERAL INFORMATION			
01	Project Name	Residential Building	Run Title
02	Project Location	Zone 1	Run Title
03	Climate Zone	Zone 1	Run Title
04	Building Type	Single-Family	Run Title
05	Project Scope	Whole Building	Run Title
06	Number of Bedrooms	1	Run Title
07	Number of Bathrooms	1	Run Title
08	Number of Stories	1	Run Title
09	Foundation Type	Slab	Run Title
10	Foundation Area (ft <sup>2</sup> )	100	Run Title
11	Foundation Perimeter (ft)	100	Run Title
12	Foundation Percentage (%)	100	Run Title
13	Foundation Percentage (%)	100	Run Title
14	Foundation Percentage (%)	100	Run Title
15	Foundation Percentage (%)	100	Run Title
16	Foundation Percentage (%)	100	Run Title
17	Foundation Percentage (%)	100	Run Title
18	Foundation Percentage (%)	100	Run Title
19	Foundation Percentage (%)	100	Run Title
20	Foundation Percentage (%)	100	Run Title
21	Foundation Percentage (%)	100	Run Title
22	Foundation Percentage (%)	100	Run Title
23	Foundation Percentage (%)	100	Run Title

HERS Provider: CZ-5-03  
Report Generated: 2023-10-11 18:00:35

CZ-5-01

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: Residential Building  
Calculation Date/Time: 2023-10-11 17:59:57-07:00  
Input File Name: 1 Bedrm Plan -Plan Sa CZ 5.rbd22x  
CF1R-PRF-01E  
(Page 6 of 13)

01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	Exception	Module Type	Array Type	Power Electronics	CFI	Asimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff (%)	Annual Solar Access (%)
0		Standard (14-17%)	Fixed	none	true	n/a	n/a	n/a	n/a	n/a	

REQUIRED SPECIAL FEATURES  
The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.  
• PV exception 2: No PV required when minimum PV size (Section 150.1(c)(14)) < 1.8 kWdc (0 kW)  
• Ceiling has high level of insulation  
• Variable capacity heat pump compliance option (verification details from VCHP Staff report, Appendix B, and RA3)  
• Compact distribution system basic credit  
• Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed

HERS FEATURE SUMMARY  
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 for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry  
• Quality insulation installation (QII)  
• Indoor air quality ventilation  
• Kitchen range hood  
• Verified EER/EER2  
• Verified SEER/SEER2  
• Verified Refrigerant Charge  
• Airflow in habitable rooms (SC3.1.4.1.7)  
• Verified HSPF2  
• Verified heat pump rated heating capacity  
• Wall-mounted thermostat in zones greater than 150 (SC3.4.5)  
• Ductless indoor units located entirely in conditioned space (SC3.1.4.1.8)

Registration Number: CA Building Energy Efficiency Standards - 2022 Residential Compliance  
Registration Date/Time: Report Version: 2022.0.000  
Schema Version: rev 20220901  
HERS Provider: CZ-5-06  
Report Generated: 2023-10-11 18:00:35

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: Residential Building  
Calculation Date/Time: 2023-10-11 17:59:57-07:00  
Input File Name: 1 Bedrm Plan -Plan Sa CZ 5.rbd22x  
CF1R-PRF-01E  
(Page 5 of 13)

ENERGY USE INTENSITY				
	Standard Design (kBtu/ft <sup>2</sup> - yr)	Proposed Design (kBtu/ft <sup>2</sup> - yr)	Compliance Margin (kBtu/ft <sup>2</sup> - yr)	Margin Percentage
North Facing				
Gross EU1 <sup>1</sup>	36	34.58	1.42	3.94
Net EU1 <sup>2</sup>	36	34.58	1.42	3.94
East Facing				
Gross EU1 <sup>1</sup>	36	34.81	1.19	3.31
Net EU1 <sup>2</sup>	36	34.81	1.19	3.31
South Facing				
Gross EU1 <sup>1</sup>	36	34.59	1.41	3.92
Net EU1 <sup>2</sup>	36	34.59	1.41	3.92
West Facing				
Gross EU1 <sup>1</sup>	36	34.53	1.47	4.08
Net EU1 <sup>2</sup>	36	34.53	1.47	4.08

Notes  
1. Gross EU1 is Energy Use Total (not including PVI) / Total Building Area.  
2. Net EU1 is Energy Use Total (including PVI) / Total Building Area.

Registration Number: CA Building Energy Efficiency Standards - 2022 Residential Compliance  
Registration Date/Time: Report Version: 2022.0.000  
Schema Version: rev 20220901  
HERS Provider: CZ-5-05  
Report Generated: 2023-10-11 18:00:35

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: Residential Building  
Calculation Date/Time: 2023-10-11 17:59:57-07:00  
Input File Name: 1 Bedrm Plan -Plan Sa CZ 5.rbd22x  
CF1R-PRF-01E  
(Page 4 of 13)

ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft <sup>2</sup> -yr)	Standard Design TDV Energy (EDR2) (KTDV/ft <sup>2</sup> -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft <sup>2</sup> -yr)	Proposed Design TDV Energy (EDR2) (KTDV/ft <sup>2</sup> -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	1.29	6.07	2.25	17.89	-0.96	-11.82
Space Cooling	0.13	4.56	0.01	0.77	0.12	3.79
IAQ Ventilation	0.51	5.55	0.51	5.55	0	0
Water Heating	5.47	60.93	3.61	46.15	1.86	14.78
Self Utilization/Flexibility Credit			0			0
South Facing Efficiency Compliance Total	7.4	77.11	6.38	70.36	1.02	6.75
Space Heating	1.29	6.07	2.31	17.65	-1.02	-11.58
Space Cooling	0.13	4.56	0.05	1.35	0.08	3.21
IAQ Ventilation	0.51	5.55	0.51	5.55	0	0
Water Heating	5.47	60.93	3.6	45.82	1.87	15.11
Self Utilization/Flexibility Credit			0			0
West Facing Efficiency Compliance Total	7.4	77.11	6.47	70.37	0.93	6.74

Registration Number: CA Building Energy Efficiency Standards - 2022 Residential Compliance  
Registration Date/Time: Report Version: 2022.0.000  
Schema Version: rev 20220901  
HERS Provider: CZ-5-04  
Report Generated: 2023-10-11 18:00:35

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
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Input File Name: 1 Bedrm Plan -Plan Sa CZ 5.rbd22x  
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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-19 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-19	None / None	0.074	Inside Finish: Gypsum Board Cavity / Frame: R-19 in 5-1/2 in. (R-18) / 2x6 Exterior Finish: 3 Coat Stucco
R-38 Roof No Attic	Cathedral Ceilings	Wood Framed Ceiling	2x12 @ 16 in. O. C.	R-38	None / None	0.03	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-38 / 2x12 Inside Finish: Gypsum Board
Attic RoofZone 1	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
R-38 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-38	None / None	0.025	Over Ceiling Joists: R-38.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board

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

Registration Number: CA Building Energy Efficiency Standards - 2022 Residential Compliance  
Registration Date/Time: Report Version: 2022.0.000  
Schema Version: rev 20220901  
HERS Provider: CZ-5-09  
Report Generated: 2023-10-11 18:00:35

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: Residential Building  
Calculation Date/Time: 2023-10-11 17:59:57-07:00  
Input File Name: 1 Bedrm Plan -Plan Sa CZ 5.rbd22x  
CF1R-PRF-01E  
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01	02	03	04	05	06	07	08
Name	Construction	Type	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof
Attic Zone 1	Attic RoofZone 1	Ventilated	4	0.1	0.85	Yes	No

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Asimuth	Width (ft)	Height (ft)	Mult.	Area (ft <sup>2</sup> )	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
Window	Window	Front Wall	Front	0	16	0.3	NFRC	0.35	NFRC	Bug Screen			
Front Door	Window	Front Wall	Front	0	1	20	0.3	NFRC	0.35	NFRC	Bug Screen		
Upper Window(s)	Window	Front Wall	Front	0	1	6.75	0.3	NFRC	0.35	NFRC	Bug Screen		
Window 2	Window	Left Wall	Left	90	1	6	0.3	NFRC	0.35	NFRC	Bug Screen		
Window 3	Window	Rear Wall	Back	180	1	34	0.3	NFRC	0.35	NFRC	Bug Screen		
Upper Window	Window	Rear Wall	Back	180	1	9	0.3	NFRC	0.35	NFRC	Bug Screen		
Window 4	Window	Right Wall	Right	270	1	25	0.3	NFRC	0.35	NFRC	Bug Screen		

01	02	03	04	05	06	07	08
Name	Zone	Area (ft <sup>2</sup> )	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab	Zone 1	403.2	89.2	none	0	80%	No

Registration Number: CA Building Energy Efficiency Standards - 2022 Residential Compliance  
Registration Date/Time: Report Version: 2022.0.000  
Schema Version: rev 20220901  
HERS Provider: CZ-5-08  
Report Generated: 2023-10-11 18:00:35

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: Residential Building  
Calculation Date/Time: 2023-10-11 17:59:57-07:00  
Input File Name: 1 Bedrm Plan -Plan Sa CZ 5.rbd22x  
CF1R-PRF-01E  
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BUILDING - FEATURES INFORMATION						
01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft <sup>2</sup> )	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
Residential Building	403.2	1	1	1	0	1

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft <sup>2</sup> )	Avg. Ceiling Height	Water Heating System 1	Status
Zone 1	Conditioned	HVAC System1	403.2	8	DHW Sys 1	New

01	02	03	04	05	06	07	08
Name	Zone	Construction	Asimuth	Orientation	Gross Area (ft <sup>2</sup> )	Window and Door Area (ft <sup>2</sup> )	Tilt (deg)
Front Wall	Zone 1	R-19 Wall	0	Front	306	42.75	90
Left Wall	Zone 1	R-19 Wall	90	Left	137	6	90
Rear Wall	Zone 1	R-19 Wall	180	Back	306	43	90
Right Wall	Zone 1	R-19 Wall	270	Right	100	25	90
Roof-Attic	Zone 1	R-38 Roof Attic	n/a	n/a	140	n/a	n/a

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Asimuth	Orientation	Area (ft <sup>2</sup> )	Skylight Area (ft <sup>2</sup> )	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof
Roof	Zone 1	R-38 Roof No Attic	270	Right	132	0	3	0.1	0.85	No
Roof 2	Zone 1	R-38 Roof No Attic	90	Left	132	0	3	0.1	0.85	No

Registration Number: CA Building Energy Efficiency Standards - 2022 Residential Compliance  
Registration Date/Time: Report Version: 2022.0.000  
Schema Version: rev 20220901  
HERS Provider: CZ-5-07  
Report Generated: 2023-10-11 18:00:35



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COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA  
ENERGY COMPLIANCE - PLAN 5C

DATE  
11/28/2023  
SHEET

T24 - 511



11/28/2023 10:37:33 AM  
C:\Users\fox\Documents\2727-01\_SLO County ADU\_CD\_CENTRAL\_2022\_jos@ENVU.rvt

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Residential Building

Calculation Date/Time: 2023-10-11 17:59:57-07:00

Calculation Description: Title 24 Analysis

Input File Name: 1 Bedrm Plan - Plan 5a CZ 5.ribd22x

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INDOOR AIR QUALITY (IAQ) FANS

01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE	Includes Fault Indicator Display?	HERS Verification	Status
Sfam IAQVentRgt	27	0.35	Exhaust	No	n/a / n/a	No	Yes	

Registration Number:

Registration Date/Time:

HERS Provider:

CZ-5-12

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Report Version: 2022.0.000  
Schema Version: rev 20220901

Report Generated: 2023-10-11 18:00:35

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Residential Building

Calculation Date/Time: 2023-10-11 17:59:57-07:00

Calculation Description: Title 24 Analysis

Input File Name: 1 Bedrm Plan - Plan 5a CZ 5.ribd22x

CF1R-PRF-01E

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SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	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	2	Heat Pump System 1	2	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	
			Efficiency Type	HSPF / HSPF2 / COP	Cap 47	Cap 17	Efficiency Type	SEER / SEER2				EER / EER / CEER
Heat Pump System 1	VCHP-ductless	2	HSPF2	8	6000	5400	EER2SEER2	16	12.4	Not Zonal	Multi-speed	Heat Pump System 1-HERS-htpump

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-HERS-Htpump	Not Required	0	Required	Required	Yes	Yes	Yes	Yes

VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09	10
Name	Certified Low-Static VCHP System	Airflow to Habitable Rooms	Ductless Units in Conditioned Space	Wall Mount Thermostat	Air Filter Sizing & Pressure Drop Rating	Low Leakage Ducts in Conditioned Space	Minimum Airflow per RA3.3 and SC3.3.3.4.1	Certified non-continuous Fan	Indoor Fan not Running Continuously
Heat Pump System 1	Not required	Required	Required	Required	Not required	Not required	Not required	Not required	Not required

Registration Number:

Registration Date/Time:

HERS Provider:

CZ-5-11

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Report Version: 2022.0.000  
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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Residential Building

Calculation Date/Time: 2023-10-11 17:59:57-07:00

Calculation Description: Title 24 Analysis

Input File Name: 1 Bedrm Plan - Plan 5a CZ 5.ribd22x

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WATER HEATING SYSTEMS

01	02	03	04	05	06	07	08	09
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	Basic	n/a	DHW Heater 1 (1)

WATER HEATERS - NEEA HEAT PUMP

01	02	03	04	05	06	07	08
Name	# of Units	Tank Vol. (gal)	NEEA Heat Pump Brand	NEEA Heat Pump Model	Tank Location	Duct Inlet Air Source	Duct Outlet Air Source
DHW Heater 1	1	40	Generic	Tier3Generic40	TankZone	Zone 1	Zone 1

WATER HEATING - COMPACT DISTRIBUTION

01	02	03	04	05	06	07
Dwelling Unit type	Water Heating System Name	Master Bath distance of furthest fixture to Water Heater (ft)	Kitchen distance of furthest fixture to Water Heater (ft)	Furthest Third furthest fixture to Water Heater (ft)	Compactness Factor	HERS Verification
Dwelling	DHW Sys 1	n/a	n/a	n/a	0.7	n/a

WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07
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	Basic	Not Required	Not Required

Registration Number:

Registration Date/Time:

HERS Provider:

CZ-5-10

CA Building Energy Efficiency Standards - 2022 Residential Compliance

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COUNTY OF SAN LUIS OBISPO  
ACCESSORY DWELLING UNIT  
SAN LUIS OBISPO, CA

ENERGY COMPLIANCE - PLAN 5C

DATE

11/28/2023

SHEET

T24 - 512



New Home Single Family Version 8.0									
G2. Install Water-Efficient Fixtures									
Yes	G2.1 WaterSense Showerheads 1.8 gpm with Matching Compensation Valve	2				2			
Yes	G2.2 WaterSense Bathroom Faucets 1.0 gpm	1				1			
<128 gal	G2.3 WaterSense Toilets with a Maximum Performance (MP) Threshold of No Less Than 600 Gons/L (2.8 gal @ 1.1 gpi)					2			
No	G3. Pre-Plumbing for Graywater System	0				1			
No	G4. Operational Graywater System	0				5			
No	G5. Thermostatic Shower Valve or Auto-Diversion Tub Spout	0				1			
H. HEATING, VENTILATION, AND AIR CONDITIONING									
H1. Sealed Combustion Units									
No	H1.1 Sealed Combustion Furnace	0			1				
No	H1.2 Sealed Combustion or Heat Pump Water Heater	0			2				
No	H2. High-Performing Zoned Hydronic Radiant Heating System	0	1	1					
H3. Effective Ductwork									
No	H3.1 Duct Mastic on Duct Joints and Seams	0	1						
No	H3.2 Pressure-Balance the Ductwork System	0	1						
No	H4. ENERGY STAR® Bathroom Fans Per HVI Standards with Air Flow Verified	0			1				
H5. Advanced Practices for Cooling									
No	H5.1 ENERGY STAR® Ceiling Fans in Living Areas and Bedrooms	0	1						
H6. Whole House Mechanical Ventilation Practices to Improve Indoor Air Quality									
Yes	H6.1 Meet ASHRAE 62.2-2016 Ventilation Residential Standards	✓	✓	✓	✓	✓	✓	✓	✓
No	H6.2 Advanced Ventilation Standards	0			2				
No	H6.3 Outdoor Air is Filtered and Tempered	0			1				
H7. Effective Range Hood Design and Installation									
No	H7.1 Effective Range Hood Ducting and Design	0			1				
No	H7.2 Automatic Range Hood Control	0			1				
No	H8. High-Efficiency HVAC Filter (MERV 16+)	0			1				
No	H9. Advanced Refrigerants	0			1				
Yes	H10. No Fireplace or Sealed Gas Fireplace	1			1				
No	H11. Humidity Control Systems	0			1				
No	H12. Register Design Per ACCA Manual T	0	1						Only applies to climate zones 1, 3, 5, 6, and 7.
I. RENEWABLE ENERGY									
100%	I1. Onsite Renewable Generation (Solar PV, Solar Thermal, and Wind)	25			25				
I2. Low Carbon Homes									
Yes	I2.1 Near Zero Energy Home	2		2					
No	I2.2 Low Carbon Home	0		4					
No	I3. Energy Storage	0		1					
No	I4. Solar Hot Water Systems to Preheat Domestic Hot Water	0		4					
J. BUILDING PERFORMANCE AND TESTING									
No	J1. Third-Party Verification of Quality of Insulation Installation	0			1				
No	J2. Supply and Return Air Flow Testing	0		1	1				
No	J3. Mechanical Ventilation Testing	0			1				
No	J4. All Electric or Combustion Appliance Safety Testing	0			1				
K. MIXED-FUEL COMPLIANCE ENERGY DESIGN RATING									
K5. Building Performance Exceeds Title 24 Part 6									
Select Project Climate Zone									
5									
1	J5.1 Home Outperforms Title 24 Part 6	✓	✓	✓	✓	✓	✓	✓	✓
Yes	J6. Title 24 Prepared and Signed by a CABEC Certified Energy Analyst	0		1					
No	J7. Participation in Utility Program with Third-Party Plan Review	0		1					
No	J8. ENERGY STAR® for Homes	0		1					
No	J9. EPA Indoor airPlus Certification	0			2				
No	J10. Blower Door Testing	0			3				
L. FINISHES									
No	L1. Entryways Designed to Reduce Tracked-In Contaminants								


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New Home Single Family Version 8.0									
Yes	C13. Reduced Light Pollution	1	1						
No	C14. Large Stature Trees	0	1						
No	C15. Third-Party Landscape Program Certification	0						1	
No	C16. Maintenance Contract with Certified Professional	0						1	
D. STRUCTURAL FRAME AND BUILDING ASSEMBLIES									
D1. Optimal Value Engineering									
No	D1.1 Joists, Rafters, and Studs at 24 Inches on Center	0		1		2			
No	D1.2 Non-Load Bearing Door and Window Headers Sized for Load	0				1			
No	D1.3 Advanced Framing Measures	0				2			
No	D2. Construction Material Efficiencies	0				1			
D3. Engineered Lumber									
No	D3.1 Engineered Beams and Headers	0				1			
No	D3.2 Wood Joists or Web Trusses for Floors	0				1			
Yes	D3.3 OSB for Subfloor	0.5				0.5			
Yes	D3.4 OSB for Wall and Roof Sheathing	0.5				0.5			
No	D4. Insulated Headers	0	1						
D5. FSC-Certified Wood									
No	D5.1 Dimensional Lumber, Studs, and Timber	0				5			
No	D5.2 Panel Products	0				3			
D6. Solid Wood Systems									
No	D6.1 At Least 90% of Floors	0				1			
No	D6.2 At Least 90% of Exterior Walls	0	1	1					
No	D6.3 At Least 90% of Roofs	0	1	1					
D7. Energy Heels on Roof Trusses									
No	D7.1 Energy Heels on Roof Trusses	0		1					
D8. Overhangs and Gutters									
Header	D8.1 Overhangs and Gutters	1	1	1	1				
D9. Reduced Pollution Entering the Home from the Garage									
No	D9.1 Detached Garage	0			2				
No	D9.2 Mitigation Strategies for Attached Garage	0		1					
D10. Structural Pest and Rot Controls									
Yes	D10.1 All Wood Located At Least 12 Inches Above the Soil	1				1			
No	D10.2 Wood Framing Treated With Borates or Factory-Integrated, or Wall Materials Other Than Wood	0				1			
Yes	D11. Moisture-Resistant Materials in Wet Areas (such as Kitchens, Bathrooms, Utility Rooms, and Basements)	2		1	1				
E. EXTERIOR									
No	E1. Environmentally Preferable Decking	0				1			
No	E2. Flashing Installation Third-Party Verified	0				2			
No	E3. Rain Screen Wall System	0				2			
Yes	E4. Durable and Non-Combustible Cladding Materials	1				1			
E5. Durable Roofing Materials									
Yes	E5.1 Durable and Fire-Resistant Roofing Materials or Assembly	1				1			
No	E6. Vegetated Roof	0	2	2					
F. INSULATION									
F1. Insulation with 30% Post-Consumer or 60% Post-Industrial Recycled Content									
No	F1.1 Walls and Floors	0				0.5			
No	F1.2 Ceilings	0				0.5			
F2. Insulation that Meets the CDPH Standard Method—Residential for Low Emissions									
No	F2.1 Walls and Floors	0				0.5			
No	F2.2 Ceilings	0				0.5			
F3. Low GWP Insulation That Does Not Contain Fire Retardants									
No	F3.1 Cavity Walls and Floors	0				1			
No	F3.2 Ceilings	0				1			
No	F3.3 Interior and Exterior	0				1			
G. PLUMBING									
G1. Efficient Distribution of Domestic Hot Water									
Yes	G1.1 Insulated Hot Water Pipes	1		1					
No	G1.2 WaterSense Volume Limit for Hot Water Distribution	0				1			
No	G1.3 Increased Efficiency in Hot Water Distribution	0				2			

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NEW HOME RATING SYSTEM, VERSION 8.0									
SINGLE FAMILY CHECKLIST									
The GreenPoint Rated checklist tracks green features incorporated into the home. GreenPoint Rated is administered by Build It Green, a non-profit whose mission is to provide healthy, energy and resource efficient buildings in California.									
The minimum requirements of GreenPoint Rated are: verification of 80 or more points; Earn the following minimum points per category: Community (2), Energy (25), Indoor Air Quality/Health (6), Resource (8), and Water (8), and meet the prerequisites CALGreen Headers (5.1, H6.1, H6.3, C15, C17).									
Directions for Use: Column A is a dropdown menu with the options of "Yes", "No", or "TBD" or a range of percentages to allocate points. Select the appropriate dropdown and the appropriate points will appear in the blue "Points Achieved" column.									
The minimum requirements of GreenPoint Rated are: verification of 80 or more points; Earn the following minimum points per category: Community (2), Energy (25), Indoor Air Quality/Health (6), Resource (8), and Water (8), and meet the prerequisites CALGreen Headers (5.1, H6.1, H6.3, C15, C17).									
A home is only GreenPoint Rated if all features are verified by a Certified GreenPoint Rater and certified by Build It Green.									
New Home Single Family Version 8.0									
Project Name: 01-02 County: 01-01 Plan: 5									
Project City: San Luis Obispo									
MEASURES									
CALGreen									
Yes	CALGreen Req. (REQUIRED)	4	1	1	1	1			
A. SITE									
No	A1. Construction Footprint	0				1			
A2. Job Site Construction Waste Diversion									
Yes	A2.1 70% CAD Waste Diversion (Including Alternative Daily Cover)	2				2			
No	A2.2 Recycling Rates from Third-Party Verified Mixed-Use Waste Facility	0				1			
Yes	A3. Recycled Content Base Material	1				1			
No	A4. Heat Island Effect Reduction (Non-Roof)	0	1	1					
No	A5. Construction Environmental Quality Management Plan Including Flush-Out	0				1			
A6. Stormwater Control: Prescriptive Path (section capped at 3 points)									
No	A6.1 Permeable Paving Material	0				1			
No	A6.2 Filtration and/or Bio-Retention Features	0				1			
Yes	A6.3 Non-Leaching Roofing Materials	1				1			
TBD	A6.4 Smart Stormwater Street Design	0	1						
No	A7. Stormwater Control: Performance Path	0				3			
B. FOUNDATION									
Yes	B1. Fly Ash and/or Slag in Concrete	1				1			
No	B2. Radon-Resistant Construction	0				2			
No	B3. Foundation Drainage System	0				2			
No	B4. Moisture Controlled Crawlspace	0				1			
B5. Structural Pest Controls									
No	B5.1 Termite Shields and Separated Exterior Wood-to-Concrete Connections	0				1			
No	B5.2 Plant Trunks, Bases, or Stems at Least 36 Inches from the Foundation	0				1			
C. LANDSCAPE									
C1. Plants Grouped by Water Needs (Hydrozoning)									
No	C1.1 Plants Grouped by Water Needs (Hydrozoning)	0				1			
C2. Three Inches of Mulch in Planting Beds									
No	C2.1 Three Inches of Mulch in Planting Beds	0				1			
C3. Resource Efficient Landscapes									
Yes	C3.1 No Invasive Species Listed by Cal-IPC	1				1			
No	C3.2 Plants Chosen and Located to Grow to Natural Size	0				1			
No	C3.3 Drought Tolerant, California Native, Mediterranean Species, or Other Appropriate Species	0				3			
C4. Minimal Turf in Landscape									
Yes	C4.1 No Turf on Slopes Exceeding 10% and No Overhead Sprinklers Installed in Areas Less Than Eight Feet Wide	2				2			
No	C4.2 Turf on a Small Percentage of Landscaped Area	0				2			
C5. Trees to Moderate Building Temperature									
No	C5.1 Trees to Moderate Building Temperature	0	1	1	1	1			
C6. High-Efficiency Irrigation System									
No	C6.1 High-Efficiency Irrigation System	0				2			
No	C7. One Inch of Compost in the Top Six to Twelve Inches of Soil	0				2			
No	C8. Rainwater Harvesting System	0				3			
No	C9. Recycled Wastewater Irrigation System	0				1			
No	C10. Submeter or Dedicated Meter for Landscape Irrigation	0				2			
No	C11. Landscape Meets Water Budget	0				1			
C12. Environmentally Preferable Materials for Site									
No	C12.1 Environmentally Preferable Materials for 70% of Non-Plant Landscape Elements and Fencing	0				1			

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COUNTY OF SAN LUIS OBISPO

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New Home Single Family Version 8.0									
Yes	N5.1 Residents Entitled Views to Caltrans	1	1						
No	N5.2 Caltrans Visible from Street and/or Other Front Doors	0	1						
No	N6.1 Porches Oriented to Street and Public Space	0	1						
N6. Passive Solar Design									
No	N6.1 Heating Load	0		2					
No	N6.2 Cooling Load	0		2					
N7. Adaptable Building									
No	N7.1 Universal Design Principles in Units	0	1		1				
No	N7.2 Full-Function Independent Rental Unit	0	1						
N8. Resiliency									
No	N8.1 Assessment	0	1		1	1			
No	N8.2 Strategies to Address Assessment Findings	0	1		1	1			
N9. Social Equity in Community									
No	N9.1 Diverse Workforce	0	1			1			
No	N9.2 Community Location	0	1		1				
O. OTHER									
Yes	O1. GreenPoint Rated Checklist in Blueprints	✓	✓	✓	✓	✓	✓	✓	✓
Yes	O2. Pre-Construction Kickoff Meeting with Rater and Subcontractors	2		0.5		1	0.5		
No	O3. Orientation and Training to Occupants—Conduct Educational Walkthroughs	0		0.5	0.5	0.5	0.5		
No	O4. Builder's or Developer's Management Staff are Certified Green Building Professionals	0		0.5	0.5	0.5	0.5		
O5. Home System Monitors									
No	O5.1 Energy Home System Monitors	0		1					
No	O5.2 Water Home System Monitors	0				1			
O6. Green Building Education									
Yes	O6.1 Marketing Green Building	2	2				5.5		
No	O6.2 Green Building Signage	0			0.5				
Yes	O7. Green Appraisal Addendum	✓	✓	✓	✓	✓	✓	✓	✓
No	O8. Detailed Durability Plan and Third-Party Verification of Plan Implementation	0				1			
Summary									
Total Available Points in Specific Categories									
		25.5	20	75.5	59	82	49		
Minimum Points Required in Specific Categories									
		55	2	25	5	6	6		
Total Points Achieved									
		78.0	6.0	38.5	8.0	15.0	10.5		

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Yes	K1.1 Individual Entryways	1				1			
Yes	K2. Zero-VOC Interior Wall and Ceiling Paints	2				2			
Yes	K3. Low-VOC Caulks and Adhesives	1				1			
K4. Environmentally Preferable Materials for Interior Finish									
No	K4.1 Cabinets	0				2			
No	K4.2 Interior Trim	0				2			
No	K4.3 Shelving	0				2			
No	K4.4 Doors	0				2			
No	K4.5 Countertops	0				1			
K5. Formaldehyde Emissions in Interior Finish Exceed CARB									
No	K5.1 Doors	0				1			
No	K5.2 Cabinets and Countertops	0				2			
No	K5.3 Interior Trim and Shelving	0				2			
No	K6. Products That Comply With the Health Product Declaration Open Standard	0				2			
No	K7. Indoor Air Formaldehyde Level Less Than 27 Parts Per Billion	0				2			
No	K8. Comprehensive Inclusion of Low-Emitting Finishes	0				1			
L. FLOORING									
No	L1. Environmentally Preferable Flooring	0				3			
NOV	L2. Low-Emitting Flooring Meets CDPH 2010 Standard Method—Residential	1				3			
Yes	L3. Durable Flooring	1				1			
Yes	L4. Thermal Mass Flooring	1	1						
M. APPLIANCES AND LIGHTING									
Yes	M1. ENERGY STAR® Dishwasher	1				1			
M2. Efficient Laundry Appliances									
CEE Tier 2	M2.1 CEE-Rated Clothes Washer	2		1			2		
Yes	M2.2 ENERGY STAR® Dryer	2		1					
No	M2.3 Solar Dryer/Laundry Lines	0		0.5					
<20 cubic feet	M3. Size								