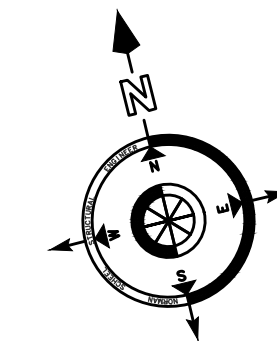


VICINITY MAP  
SCALE: N.T.S.

SITE PLAN SCALE: 1/8"=1'-0"



**HOSE BIBS**

PROVIDE NON-REMOVABLE TYPE BACKFLOW PREVENTION DEVICE AT ALL HOSE BIBS PER 2022 CPC 602.3  
PROVIDE A MINIMUM OF ONE HOSE BIB AT FRONT AND REAR OF THE DWELLING.

**2022 CBC - 1804.4 SITE GRADING**

GROUND ADJACENT TO FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT NOT LESS THAN 5% SLOPE FOR A MIN. DISTANCE OF 10 FEET, PERPENDICULAR TO THE FACE OF THE WALL. IF PHYSICAL OBSTRUCTION OR LOT LINE PROHIBIT 10 FEET OF DISTANCE, A 5% SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. SWALES USED FOR THIS PURPOSE SHALL BE SLOPED MIN. 2% WHERE LOCATED WITHIN 10 FEET OF BUILDING FOUNDATION. IMPERVIOUS SURFACES WITHIN 10 FT. OF THE BUILDING FOUNDATION SHALL BE SLOPED MIN. 2% AWAY FROM THE BUILDING.

THE HEIGHT OF TOP OF FOUNDATION TO BE MIN. 12" PLUS 2% TO STREET GUTTER AT POINT OF DISCHARGE, 2022 CRC R403.1.7.3

THIS IS NOT A SURVEY. VERIFY ALL EASEMENTS, SETBACKS, DIMENSIONS BETWEEN PROPERTY LINE AND DWELLING, HOMEOWNERS ASSOCIATION REQUIREMENTS PRIOR TO CONSTRUCTION OF THIS PROJECT.  
VERIFY PROPERTY LINE LOCATION WITH FINAL OFFICIAL MAPS

A.P.N. 07107800560000

**BUILDING DEPT. DATA**

PROJECT TYPE:	Addition and Covered Patio
TYPE OF CONSTRUCTION:	V-B
OCCUPANCY GROUP:	R3 - U1
LATERAL:	110 M.P.H. EXP. "C"
(E) LIVING SPACE:	1972 SQ. FT.
(E) LIVING SPACE TOTAL:	2122 SQ. FT.
(E) GARAGE:	440 SQ. FT.
(E) COVERED PORCH:	111 SQ. FT.
(N) COVERED PORCH TOTAL:	560 SQ. FT.
BUILDING HEIGHT:	19'-8" MAX.
SOIL PRESSURE:	NO SOILS REPORT 1500 P.S.F.
FLOOR LOAD:	40 L.L. + 10 D.L. + 5 D.L.
CEILING LOAD:	10 L.L. + 10 D.L.
ROOF LOAD:	20 L.L. + 16 D.L. + 10 D.L.
DRAWINGS PREPARATION:	Liz Tuch, N.S.E.

**SHEET INDEX**

A1	BUILDING DATA, SHEET INDEX, SITE
A1.2	GREEN BUILDING STANDARDS
A1.3	GREEN BUILDING STANDARDS
A1.4	LOW RISE RESIDENTIAL MANDATORY MEASURES
T24	TITLE-24 EMERGENCY
T24a	TITLE-24 EMERGENCY
A2	FLOOR PLAN
A3	ROOF PLAN
A4	EXTERIOR ELEVATIONS
A5	EXTERIOR ELEVATIONS
A6	SECTIONS
E1	ELECTRICAL PLAN
SC-1	STRUCTURAL GENERAL NOTES & DETAILS
SC-1a	STRUCTURAL FASTENING SCHEDULE & DETAILS
S1	FOUNDATION PLAN
S2	ROOF FRAMING PLAN
AN-1	ARCHITECTURAL TYP. DETAILS
AN-2	ARCHITECTURAL TYP. DETAILS
AN-3	ARCHITECTURAL TYP. DETAILS
SD-1	STRUCTURAL DETAILS
SD-2	STRUCTURAL DETAILS

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SHAFFER ADDITION  
102 HERRILL CT  
FOLSOM, CA 95630

COONEY CONSTRUCTION  
652 ORENO CT  
FOLSOM, CA 95630

PROJ. MGR.:	BK
ENGINEER:	NS
DRAWN BY:	LT
CHECKED BY:	BK
ISSUE DATE:	9/10/2024
REVISIONS:	



9/16/2024  
SHEET  
**A1**  
INDEX AND SITE  
JOB NO. 24131

# 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

## RESIDENTIAL MANDATORY MEASURES, SHEET 1

### DIVISION A4.6-TIER 1 AND TIER 2-CONTINUED

#### SECTION A4.602

#### RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST

FEATURE OR MEASURE	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION			FEATURE OR MEASURE	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION			FEATURE OR MEASURE	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION		
	Mandatory	Tier 2	Tier 1	Enforcing Agency	Installer	Third party		Mandatory	Tier 2	Tier 1	Enforcing Agency	Installer	Third party		Mandatory	Tier 2	Tier 1	Enforcing Agency	Installer	Third party
<b>PLANNING AND DESIGN</b>																				
<b>Site Selection</b>																				
<b>A4.103.1</b> A site which complies with at least one of the following characteristics is selected: 1. An infill site is selected. 2. A greyfield site is selected. 3. An EPA-recognized Brownfield site is selected.																				
<b>A4.103.2</b> Facilitate community connectivity by one of the following methods: 1. Locate project within a ¼ mile true walking distance of at least 4 basic services. 2. Locate project within ½ mile true walking distance of at least 7 basic services. 3. Other methods increasing access to additional resources.																				
<b>Site Preservation</b>																				
<b>A4.104.1</b> An individual with oversight authority and has responsibility on the project and has participated in an educational program promoting environmentally friendly design or development and has provided training or instruction to appropriate entities.																				
<b>Deconstruction and Reuse of Existing Materials</b>																				
<b>A4.105.2</b> Existing buildings are disassembled for reuse or recycling of building materials. The proposed structure utilizes at least one of the following materials which can be easily reused: 1. Light fixtures 2. Plumbing fixtures 3. Doors and trim 4. Masonry 5. Electrical devices 6. Appliances 7. Foundations or portions of foundations																				
<b>Site Development</b>																				
<b>4.106.2</b> A plan is SEE and implemented to manage storm water drainage during construction.																				
<b>4.106.3</b> Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings.																				
<b>4.106.4</b> Provide capability for electric vehicle charging for one- and two-family dwellings; townhouses with attached private garages; multifamily dwellings; and hotels/motels in accordance with Section 4.106.4.1, 4.106.4.2, or 4.106.4.3, as applicable																				
<b>A4.106.1</b> Reserved																				
<b>A4.106.2.1</b> Soil analysis is performed by a licensed design professional and the findings utilized in the structural design of the building.																				
<b>A4.106.2.2</b> Soil disturbance and erosion are minimized by at least one of the following: 1. Natural drainage patterns are evaluated and erosion controls are implemented to minimize erosion during construction and after occupancy. 2. Site access is accomplished by minimizing the amount of cut and fill needed to install access roads and driveways. 3. Underground construction activities are coordinated to utilize the same trench, minimize the amount of time the disturbed soil is exposed and the soil is replaced using accepted compaction methods.																				
<b>A4.106.2.3</b> Topsoil shall be protected or saved for reuse as specified in this section. <b>Tier 1.</b> Displaced topsoil shall be stockpiled for reuse in a designated area and covered or protected from erosion. <b>Tier 2.</b> The construction area shall be identified and delineated by fencing or flagging to limit construction activity to the construction area.																				
<b>A4.106.3</b> Postconstruction landscape designs accomplish one or more of the following: 1. Areas disrupted during construction are restored to be consistent with native vegetation species and patterns. 2. Utilize at least 75 percent native California or drought tolerant plant and tree species appropriate for the climate zone region.																				
<b>A4.106.4</b> Permeable paving is utilized for the parking, walking or patio surfaces in compliance with the following: <b>Tier 1.</b> Not less than 20 percent of the total parking, walking or patio surfaces shall be permeable. <b>Tier 2.</b> Not less than 30 percent of the total parking, walking or patio surfaces shall be permeable.																				
<b>A4.106.5</b> Roofing materials shall have a minimum 3-year aged solar reflectance and thermal emittance or a minimum Solar Reflectance Index (SRI) equal to or greater than the values specified in the applicable tables. <b>Low-rise Residential</b> <b>Tier 1.</b> roof covering shall meet or exceed the values contained in Table A4.106.5.1(1). <b>Tier 2.</b> roof covering shall meet or exceed the values contained in Table A4.106.5.1(2). <b>High-rise Residential, Hotels and Motels</b> <b>Tier 1.</b> roof covering shall meet or exceed the values contained in Table A4.106.5.1(3). <b>Tier 2.</b> roof covering shall meet or exceed the values contained in Table A4.106.5.1(4).																				
<b>A4.106.6</b> Install a vegetated roof for at least 50 percent of the roof area. Vegetated roofs shall comply with requirements for roof gardens and landscaped roofs in the California Building Code, Chapters 15 and 16.																				
<b>A4.106.7</b> Reduce nonroof heat islands for 50 percent of sidewalks, patios, driveways or other paved areas by using one or more of the methods listed.																				
<b>A4.106.8.1</b> <b>Tier 1</b> and <b>Tier 2</b> for one- and two-family dwellings and townhouses with attached private garages. Install a dedicated 208/240-volt branch circuit, including an overcurrent protective device rated at 40 amperes minimum per dwelling unit.																				
<b>A4.106.8.2</b> Provide capability for future electric vehicle charging in new multifamily dwellings, as specified. <b>Tier 1.</b> In 15 percent of total parking spaces. <b>Tier 2.</b> In 20 percent of total parking spaces.																				
<b>A4.106.8.3</b> Provide electric vehicle spaces for new hotels and motels. <b>Tier 1.</b> Install EV spaces per Table A4.106.8.3.1. <b>Tier 2.</b> Install EV spaces per Table A4.106.8.3.2.																				
<b>A4.106.9</b> Provide bicycle parking facilities as noted below or meet a local ordinance, whichever is more stringent. Number of bicycle parking spaces may be reduced, as approved by the enforcing agency, due to building site characteristics, including but not limited to, isolation from other development. 1. Provide short-term bicycle parking, per Section A4.106.9.1. 2. Provide long-term bicycle parking for multifamily buildings, per Section A4.106.9.2. 3. Provide long-term bicycle parking for hotel and motel buildings, per Section A4.106.9.3.																				
<b>A4.106.10 [HR]</b> Outdoor lighting systems shall be designed and installed to comply with: 1. The minimum requirements in the California Energy Code for Lighting Zones 1-4; and 2. Backlight, Uplight and Glare (BUG) ratings as defined in IES TM-15-11; and 3. Allowable BUG ratings not exceeding those shown in Table A4.106.10; or Comply with a lawfully enacted local ordinance, whichever is more stringent.																				
<b>Innovative Concepts and Local Environmental Conditions</b>																				
<b>A4.108.1</b> Items in this section are necessary to use innovative concepts or local environmental conditions. Item 1 Item 2 Item 3																				
<b>Energy Efficiency</b>																				
<b>General</b>																				
<b>4201.1</b> Building meets or exceeds the requirements of the California Building Energy Efficiency Standards.																				
<b>Performance Approach for Newly Constructed Buildings</b>																				
<b>A4.203.1.1.1</b> <b>Tier 1</b> and <b>Tier 2</b> . Total Energy Design Rating (Total EDR) and Energy Efficiency Design Rating (Efficiency EDR) for the Proposed Design Building is included in the Certificate of Compliance documentation.																				
<b>A4.203.1.1.2</b> <b>Tier 1</b> and <b>Tier 2</b> . Quality Insulation Installation procedures specified in the Building Energy Efficiency Standards Reference Appendices RA3.5 are completed.																				
<b>A4.203.1.2</b> <b>Tier 1</b> and <b>Tier 2</b> . prerequisite options. One of the following options is required. • Roof deck insulation or ducts in conditioned space. • High-performance walls. • HERS-verified compact hot water distribution system. • HERS-verified drain water heat recovery.																				
<b>A4.203.1.3.1</b> <b>Tier 1</b> : Buildings complying with the first level of advanced energy efficiency shall have additional integrated efficiency and onsite renewable energy generation to achieve a Total EDR for Tier 1 as specified in Table A4.203.1.1.1 or lower as calculated by Title 24, Part 6 Compliance Software approved by the Energy Commission. This Total EDR is in addition to meeting the Efficiency EDR.																				
<b>A4.203.1.3.2</b> <b>Tier 2</b> : Buildings complying with the second level of advanced energy efficiency shall have additional integrated efficiency and onsite renewable energy generation to achieve a Total EDR for Tier 2 as specified in Table A4.203.1.1.1 or lower as calculated by Title 24, Part 6 Compliance Software approved by the Energy Commission. This Total EDR is in addition to meeting the Efficiency EDR.																				
<b>A4.203.1.4</b> Local jurisdictions adopting Tier 1 or Tier 2, or considering community shared solar or storage options as specified, shall consult with the local electric service for acceptance.																				
<b>WATER EFFICIENCY AND CONSERVATION</b>																				
<b>Indoor Water Uses</b>																				
<b>4.303.1</b> Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) installed in residential buildings shall comply with the prescriptive requirements of Sections 4.303.1.1 through 4.303.1.4.4.																				
<b>4.303.2</b> Plumbing fixtures and fittings required in Section 4.303.1 shall be installed in accordance with the California Plumbing Code, and shall meet the applicable referenced standards.																				
<b>A4.303.1</b> The maximum flow rate of kitchen faucets shall not exceed 1.5 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 1.5 gallons per minute at 60 psi.																				
<b>Note:</b> Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.																				
<b>4.303.1.4.3</b> Metering faucets in residential buildings shall not deliver more than 0.2 gallons per cycle.																				
<b>A4.303.2</b> Alternate water source for nonpotable applications. Alternate nonpotable water sources are used for indoor potable water reduction. Alternate nonpotable water sources shall be installed in accordance with the California Plumbing Code.																				
<b>A4.303.3</b> Install at least one qualified ENERGY STAR dishwasher or clothes washer.																				
<b>A4.303.4</b> Non water urinals or waterless toilets are installed.																				
<b>A4.303.5</b> One- and two-family dwellings shall be equipped with a demand hot water recirculation system.																				
<b>Outdoor Water Uses</b>																				
<b>4.304.1</b> 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.																				
<b>A4.304.1</b> A rainwater capture, storage and re-use system is designed and installed.																				
<b>A4.304.2</b> A landscape design is installed, which does not utilize potable water.																				
<b>A4.304.3</b> For new water service connections, landscaped irrigated areas less than 5,000 square feet shall be provided with separate submeters or metering devices for outdoor potable water use.																				
<b>Water Reuse Systems</b>																				
<b>A4.305.1</b> Piping is installed to permit future use of a graywater irrigation system served by the clothes washer or other fixtures.																				
<b>A4.305.2</b> Recycled water piping is installed.																				
<b>A4.305.3</b> Recycled water is used for landscape irrigation. Innovative Concepts and Local Environmental Conditions.																				
<b>A4.305.3</b> Recycled water is used for landscape irrigation. <b>Innovative Concepts and Local Environmental Conditions.</b>																				
<b>A4.306.1</b> Items in this section are necessary to address innovative concepts or local environmental conditions. Item 1 Item 2 Item 3																				
<b>MATERIAL CONSERVATION AND RESOURCE EFFICIENCY</b>																				
<b>Foundation Systems</b>																				
<b>A4.403.1</b> A Frost-protected Shallow Foundation (FPSF) is designed and constructed.																				
<b>A4.403.2</b> Cement use in foundation mix design is reduced. Tier 1. Not less than a 20 percent reduction in cement use. Tier 2. Not less than a 25 percent reduction in cement use.																				
<b>Efficient Framing Techniques</b>																				
<b>A4.404.1</b> Beams and headers and trimmers are the minimum size to adequately support the load.																				
<b>A4.404.1</b> Building dimensions and layouts are designed to minimize waste.																				
<b>A4.404.3</b> Use premanufactured building systems to eliminate solid go sawn lumber whenever possible.																				
<b>A4.404.4</b> Material lists are included in the plans which specify material quantity and provide direction for on-site cuts.																				
<b>Material Sources</b>																				
<b>A4.405.1</b> One or more of the following building materials, that do not require additional resources for finishing are used: 1. Exterior trim not requiring paint or stain 2. Windows not requiring paint or stain 3. Siding or exterior wall coverings which do not require paint or stain																				
<b>A4.405.2</b> Floors that do not require additional coverings are used including but not limited to stained, natural or stamped concrete floors.																				
<b>A4.405.3</b> Postconsumer or preconsumer recycled content value (RCV) materials are used on the project. Tier 1. Not less than a 10 percent recycled content value. Tier 2. Not less than a 15 percent recycled content value.																				
<b>A4.405.4</b> Renewable source building products are used.																				
<b>Enhanced Durability and Reduced Maintenance</b>																				
<b>4.406.1</b> Annular spaces around pipes, electric cables, condi or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to the enforcing agency.																				
<b>Water Resistance and Moisture Management</b>																				
<b>A4.407.1</b> Install foundation and landscape drains.																				
<b>A4.467.2</b> Install gutter and downspout systems to route water at least 5 feet away from the foundation or connect to landscape drains which discharge to a dry well, sump, bioswale, rainwater capture system or other approved on-site location.																				
<b>A4.407.3</b> Provide flashing details on the building plans and comply with accepted industry standards or manufacturer's instructions.																				
<b>A4.407.3</b> Provide flashing details on the building plans and comply with accepted industry standards or manufacturer's instructions.																				
<b>A4.407.4</b> Protect building materials delivered to the construction site from rain and other sources of moisture.																				
<b>A4.407.5</b> In Climate Zone 16 an ice/water barrier is installed at roof valleys, eaves and wall to roof intersections.																				
<b>A4.407.6</b> Exterior doors to the dwelling are protected to prevent water intrusion.																				
<b>A4.407.7</b> A permanent overhang or awning at least 2 feet in depth is provided.																				

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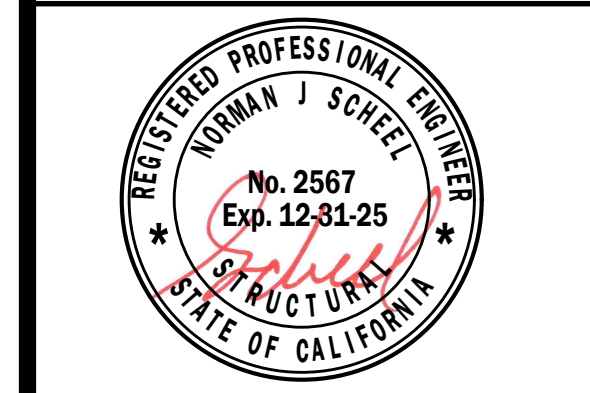
**SHAFFER ADDITION**  
102 HERRILL CT  
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**COONEY CONSTRUCTION**  
652 ORENO CT  
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PROJ. MGR.: BK  
ENGINEER: NS  
DRAWN BY: LT  
CHECKED BY: BK  
W  
ISSUE DATE: 9/10/2024

REVISIONS:

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# 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

## RESIDENTIAL MANDATORY MEASURES, SHEET 1

### DIVISION A4.6-TIER 1 AND TIER 2-CONTINUED SECTION A4.602

#### RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST

FEATURE OR MEASURE	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION			FEATURE OR MEASURE	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION			
	Mandatory	Prerequisites and electives Tier 2	Tier 1	Enforcing Agency All	Installer designer All	Third party All		Mandatory	Prerequisites and electives Tier 2	Tier 1	Enforcing Agency All	Installer designer All	Third party All	
							<b>4.505.3</b> Moisture content of building materials used in wall and floor framing is checked before enclosure.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Construction Waste Reduction, Disposal and Recycling</b>							<b>Indoor Air Quality and Exhaust</b>							
<b>4.408.1</b> Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with one of the following: 1. Comply with a more stringent local construction and demolition waste management ordinance; or 2. A construction waste management plan, per Section 4.408.2; or 3. A waste management company, per Section 4.408.3; or 4. The waste stream reduction alternative, per Section 4.408.4.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<b>4.506.1</b> Each bathroom shall be provided with the following: 1. ENERGY STAR fans ducted to terminate outside the building. 2. Fans must be controlled by a humidity control (separate or built-in); OR functioning as a component of a whole-house ventilation system. 3. Humidity controls with manual or automatic means of adjustment, capable of adjustment between a relative humidity range of < 50 percent to a maximum of 80 percent.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>A4.408.1</b> Construction waste generated at the site is diverted to recycle or salvage in compliance with one of the following: 1. Tier 1 at least a 65 percent reduction with a third-party verification. 2. Tier 2 at least a 75 percent reduction with a third-party verification. Exception: Equivalent waste reduction methods are developed by working with local agencies.		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<b>A4.506.1</b> Reserved.		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Building Maintenance and Operation</b>							<b>A4.506.2</b> [HR] Provide filters on return air openings rated MERV 8 or higher during construction when it is necessary to use HVAC equipment.		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4.410.1</b> An operation and maintenance manual shall be provided to the building occupant or owner.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<b>A4.506.3</b> Direct-vent appliances shall be used when equipment is located in conditioned space; or the equipment must be installed in an isolated mechanical room.		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4.410.2</b> Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible areas that serve the entire building and are 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 meet a lawfully enacted local recycling ordinance, if more restrictive. Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. will also be exempt from the organic waste portion of this section.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<b>Environmental Comfort</b>							
<b>Innovative Concepts and Local Environmental Conditions</b>							<b>4.507.2</b> Duct systems are sized, designed, and equipment is selected using the following methods: 1. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2016 or equivalent. 2. Size duct systems according to ANSVACCA 1 Manual D-2016 or equivalent. 3. Select heating and cooling equipment according to ANSVACCA 3 Manual S-2014 or equivalent.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>A4.411.1</b> Items in this section are necessary to address innovative concepts or local environmental conditions							<b>Outdoor Air Quality Reserved</b>							
Item 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<b>Innovative Concepts and Local Environmental Conditions</b>							
Item 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<b>A4.509.1</b> Items in this section are necessary to address innovative concepts or local environmental conditions.		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Item 1		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
							Item 2		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ENVIRONMENTAL QUALITY</b>							Item 3		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Fireplaces</b>							<b>Installer and Special Inspector Qualifications</b>							
<b>4.503.1</b> Any installed gas burner 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.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<b>Qualifications</b>							
<b>Pollutant Control</b>							<b>702.1</b> HVAC system installers shall be trained and certified in the proper installation of HVAC systems.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4.504.1</b> Duct openings and other related air distribution component openings shall be covered during construction.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<b>702.2</b> Special inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4.504.2.1</b> Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<b>Verifications</b>							
<b>4.504.2.2</b> Paints, stains and other coatings shall be compliant with VOC limits.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	703.1 Verification of compliance with this code may include construction documents, plans, specifications builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show substantial conformance.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4.504.2.3</b> Aerosol paints and coatings shall be compliant with product weighted MIR limits for VOC and other toxic compounds.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	1. Green building measures listed in this table may be mandatory if adopted by a city, county, or city and county as specified in Section 101.7.							
<b>4.504.2.4</b> Documentation shall be provided to verify that compliant VOC limit finish materials have been used.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	2. Required prerequisite for this Tier.							
<b>4.504.3</b> Carpet and carpet systems shall be compliant with VOC limits.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	3. These measures are currently required elsewhere in statute or in regulation.							
<b>4.504.4</b> 80 percent of floor area receiving resilient flooring shall comply with specified VOC criteria.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>								
<b>4.504.5</b> Particleboard, medium density fiberboard (MDF) and hardwood plywood used in interior finish systems shall comply with low formaldehyde emission standards.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>								
<b>A4.504.1</b> Use composite wood products made with either California Air Resources Board approved no-added formaldehyde (NAB) resins or ultra-low emitting formaldehyde (ULEF) resins.		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>								
<b>A4.504.2</b> Install VOC compliant resilient flooring systems. Tier 1. At least 90 percent of the resilient flooring installed shall comply. Tier 2. At least 100 percent of the resilient flooring installed shall comply.		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>								
<b>A4.504.3</b> Thermal insulation installed in the building shall meet the following requirements: Tier 1. Install thermal insulation in compliance with VOC limits. Tier 2. Install insulation which contains No-Added Formaldehyde		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>								
<b>Interior Moisture Control</b>														
<b>4.505.2</b> Vapor retarder and capillary break is installed at slab-on-grade foundations.	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>								

2022 CBC AutoCAD

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Norman Scheel  
Structural Engineer

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652 ORENO CT  
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PROJ. MGR.: BK  
ENGINEER: NS  
DRAWN BY: LT  
CHECKED BY: BK  
W  
ISSUE DATE: 9/10/2024

REVISIONS:  
▲  
▲  
▲  
▲  
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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)

Table with 2 columns: Code Reference and Requirement Description. Includes sections for Building Envelope, Fireplaces, Space Conditioning, and Ducts and Fans.



2022 Single-Family Residential Mandatory Requirements Summary

Table with 2 columns: Code Reference and Requirement Description. Includes Space Conditioning System Airflow Rate and Fan Efficiency.

Ventilation and Indoor Air Quality:

Table with 2 columns: Code Reference and Requirement Description. Includes Requirements for Ventilation and Indoor Air Quality, Central Fan Integrated (CFI) Ventilation Systems, Whole-Dwelling Unit Mechanical Ventilation, Local Mechanical Exhaust, Airflow Measurement and Sound Ratings, and Field Verification and Diagnostic Testing.

Pool and Spa Systems and Equipment:

Table with 2 columns: Code Reference and Requirement Description. Includes Certification by Manufacturers, Piping, Covers, Directional Inlets and Time Switches for Pools, Pilot Light, and Pool Systems and Equipment Installation.

Lighting:

Table with 2 columns: Code Reference and Requirement Description. Includes Lighting Controls and Components, Luminaire Efficacy, Light Sources in Enclosed or Recessed Luminaires, Light Sources in Drawers, Cabinets, and Linen Closets, Interior Switches and Controls, Accessible Controls, Multiple Controls, Mandatory Requirements, Energy Management Control Systems, Automatic Shutoff Controls, Dimmers, Internally Illuminated Address Signs, Residential Garages for Eight or More Vehicles, Independent controls, Residential Outdoor Lighting, Internally Illuminated address signs, and Residential Garages for Eight or More Vehicles.



2022 Single-Family Residential Mandatory Requirements Summary

Table with 2 columns: Code Reference and Requirement Description. Includes Screw-based luminaires, Light Sources in Enclosed or Recessed Luminaires, Light Sources in Drawers, Cabinets, and Linen Closets, Interior Switches and Controls, Accessible Controls, Multiple Controls, Mandatory Requirements, Energy Management Control Systems, Automatic Shutoff Controls, Dimmers, Internally Illuminated Address Signs, Residential Garages for Eight or More Vehicles, Independent controls, Residential Outdoor Lighting, Internally Illuminated address signs, and Residential Garages for Eight or More Vehicles.

Solar Readiness:

Table with 2 columns: Code Reference and Requirement Description. Includes Single-family Residences, Minimum Solar Zone Area, Azimuth, Shading, Shading, Structural Design Loads on Construction Documents, Interconnection Pathways, Documentation, Main Electrical Service Panel, and Main Electrical Service Panel.

Electric and Energy Storage Ready:



2022 Single-Family Residential Mandatory Requirements Summary

Table with 2 columns: Code Reference and Requirement Description. Includes Energy Storage System (ESS) Ready, Electric Cooktop Ready, Heat Pump Space Heater Ready, Electric Clothes Dryer Ready, and Electric Clothes Dryer Ready.

\*Exceptions may apply.



2022 Single-Family Residential Mandatory Requirements Summary

Table with 2 columns: Code Reference and Requirement Description. Includes Pilot Lights, Building Cooling and Heating Loads, Clearances, Liquid Line Drier, Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation, Gas or Propane Water Heating Systems, Solar Water-heating Systems, Ducts and Fans, CMC Compliance, Field-Fabricated Duct Systems, Backdraft Damper, Gravity Ventilation Dampers, Protection of Insulation, Porous Inner Core Flex Duct, Duct System Sealing and Leakage Test, and Air Filtration.

NSSE Structural Engineer logo with contact information for Sacramento Office.

35 Years of Excellence logo for NSSE Structural Engineer.

SHAFFER ADDITION and COONEY CONSTRUCTION logos and contact information.

Table with 2 columns: Role and Name. Includes PROJ. MGR., ENGINEER, DRAWN BY, CHECKED BY, and ISSUE DATE.

Table with 2 columns: Revision Number and Description. Includes revisions 1 through 6.



CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Shaffer Addition Calculation Date/Time: 2024-07-15T07:37:33-07:00
Calculation Description: Title 24 Analysis Input File Name: 2024094Final.rbd22

Table with 6 columns: 01, 02, 03, 04, 05, 06. Headers: Name, Side of Building, Area (ft²), U-factor, Status, Verified Existing Condition.

Table with 17 columns: 01-17. Headers: Window, Depth, Dist Up, Left Extent, Right Extent, Flap Ht., Depth, Top Up, Dist L, Bot Up, Depth, Top Up, Dist R, Bot Up, Status, Verified Existing Condition, Existing Construction.

Table with 10 columns: 01-10. Headers: Name, Zone, Area (ft²), Perimeter (ft), Edge Insul. R-value and Depth, Edge Insul. R-value and Depth, Carpeted Fraction, Heated, Status, Verified Existing Condition.

Table with 8 columns: 01-08. Headers: Construction Name, Surface Type, Construction Type, Framing, Total Cavity R-value, Interior / Exterior Continuous R-value, U-factor, Assembly Layers.

Registration Number: 224-P010088850A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CaCERTS Inc.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2024-07-15 08:04:29

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Shaffer Addition Calculation Date/Time: 2024-07-15T07:37:33-07:00
Calculation Description: Title 24 Analysis Input File Name: 2024094Final.rbd22

Table with 7 columns: 01-07. Headers: Zone Name, Zone Type, HVAC System Name, Zone Floor Area (ft²), Avg. Ceiling Height, Water Heating System 1, Status.

Table with 11 columns: 01-11. Headers: Name, Zone, Construction, Azimuth, Orientation, Gross Area (ft²), Window and Door Area (ft²), Tilt (deg), Wall Exceptions, Status, Verified Existing Condition.

Registration Number: 224-P010088850A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CaCERTS Inc.
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Project Name: Shaffer Addition Calculation Date/Time: 2024-07-15T07:37:33-07:00
Calculation Description: Title 24 Analysis Input File Name: 2024094Final.rbd22

Table with 11 columns: 01-11. Headers: Project Name, Run Title, Project Location, City, Zip code, Climate Zone, Building Type, Project Scope, Addition Cond. Floor Area (ft²), Existing Cond. Floor Area (ft²), Total Cond. Floor Area (ft²), ADU Bedroom Count, Fuel Type.

Table with 3 columns: 01-03. Headers: Building Complies with Computer Performance, This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider, This building incorporates one or more Special Features shown below.

Registration Number: 224-P010088850A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CaCERTS Inc.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2024-07-15 08:04:29

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Calculation Description: Title 24 Analysis Input File Name: 2024094Final.rbd22

Table with 8 columns: 01-08. Headers: Construction Name, Surface Type, Construction Type, Framing, Total Cavity R-value, Interior / Exterior Continuous R-value, U-factor, Assembly Layers.

Registration Number: 224-P010088850A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CaCERTS Inc.
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Project Name: Shaffer Addition Calculation Date/Time: 2024-07-15T07:37:33-07:00
Calculation Description: Title 24 Analysis Input File Name: 2024094Final.rbd22

Table with 11 columns: 01-11. Headers: Name, Zone, Construction, Azimuth, Orientation, Gross Area (ft²), Window and Door Area (ft²), Tilt (deg), Wall Exceptions, Status, Verified Existing Condition.

Table with 10 columns: 01-10. Headers: Name, Construction, Type, Roof Rise (x in 12), Roof Reflectance, Roof Emittance, Radiant Barrier, Cool Roof, Status, Verified Existing Condition.

Table with 16 columns: 01-16. Headers: Name, Type, Surface, Orientation, Azimuth, Width (ft), Height (ft), Mult., Area (ft²), U-factor, SHGC, SHGC Source, Exterior Shading, Status, Verified Existing Condition.

Registration Number: 224-P010088850A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CaCERTS Inc.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2024-07-15 08:04:29

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Shaffer Addition Calculation Date/Time: 2024-07-15T07:37:33-07:00
Calculation Description: Title 24 Analysis Input File Name: 2024094Final.rbd22

Table with 7 columns: Energy Use, Standard Design Source Energy (EDR1) (kBtu/ft²-yr), Standard Design TDV Energy (EDR2) (kTDV/ft²-yr), Proposed Design Source Energy (EDR1) (kBtu/ft²-yr), Proposed Design TDV Energy (EDR2) (kTDV/ft²-yr), Compliance Margin (EDR1), Compliance Margin (EDR2).

Registration Number: 224-P010088850A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CaCERTS Inc.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2024-07-15 08:04:29

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Shaffer Addition Calculation Date/Time: 2024-07-15T07:37:33-07:00
Calculation Description: Title 24 Analysis Input File Name: 2024094Final.rbd22

Table with 8 columns: 01-08. Headers: Construction Name, Surface Type, Construction Type, Framing, Total Cavity R-value, Interior / Exterior Continuous R-value, U-factor, Assembly Layers.

Table with 5 columns: 01-05. Headers: Quality Insulation Installation (QII), High R-value Spray Foam Insulation, Building Envelope Air Leakage, CFMS0, CFMS0.

Table with 12 columns: 01-12. Headers: Name, System Type, Distribution Type, Water Heater Name, Number of Units, Solar Heating System, Compact Distribution, HERS Verification, Water Heater Name (#), Status, Verified Existing Condition, Existing Water Heating System.

Registration Number: 224-P010088850A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CaCERTS Inc.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2024-07-15 08:04:29

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Shaffer Addition Calculation Date/Time: 2024-07-15T07:37:33-07:00
Calculation Description: Title 24 Analysis Input File Name: 2024094Final.rbd22

Table with 16 columns: 01-16. Headers: Name, Type, Surface, Orientation, Azimuth, Width (ft), Height (ft), Mult., Area (ft²), U-factor, SHGC, SHGC Source, Exterior Shading, Status, Verified Existing Condition.

Table with 6 columns: 01-06. Headers: Name, Side of Building, Area (ft²), U-factor, Status, Verified Existing Condition.

Registration Number: 224-P010088850A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CaCERTS Inc.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2024-07-15 08:04:29

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Shaffer Addition Calculation Date/Time: 2024-07-15T07:37:33-07:00
Calculation Description: Title 24 Analysis Input File Name: 2024094Final.rbd22

Table with 5 columns: Standard Design (kBtu/ft²-yr), Proposed Design (kBtu/ft²-yr), Compliance Margin (kBtu/ft²-yr), Margin Percentage.

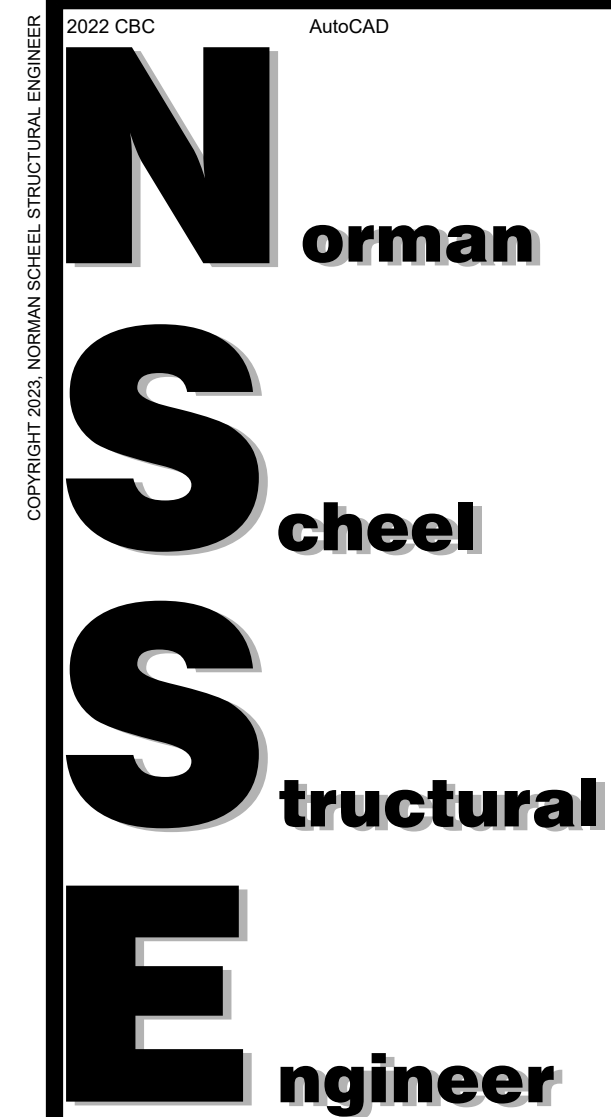
Notes: 1. Gross EUI is Energy Use Total (not including PV) / Total Building Area. 2. Net EUI is Energy Use Total (including PV) / Total Building Area.

Table with 4 columns: Required, Not Required, N/A, n/a.

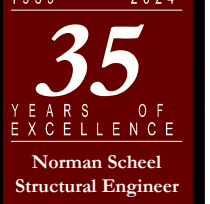
HERS FEATURE SUMMARY: The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis.

Table with 7 columns: 01-07. Headers: Project Name, Conditioned Floor Area (ft²), Number of Dwelling Units, Number of Bedrooms, Number of Zones, Number of Ventilation Cooling Systems, Number of Water Heating Systems.

Registration Number: 224-P010088850A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CaCERTS Inc.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2024-07-15 08:04:29



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SHAFFER ADDITION

102 HERRILL CT
FOLSOM, CA 95630

COONEY CONSTRUCTION

652 ORENO CT
FOLSOM, CA 95630

PROJ. MGR.: BK
ENGINEER: NS
DRAWN BY: LT
CHECKED BY: BK

ISSUE DATE: 9/10/2024

Table with 2 columns: Revision number, Description.



9/10/2024
SHEET
T24

JOB NO. 24131

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Efficiency	Rated Input	Input Rating or Pilot	Tank Insulation R-value (In/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	Tank Location	Status	Verified Existing Condition
New Instant	Gas	Consumer Instantaneous	1	0	UEF	0.96	Btu/Hr	200000	0	n/a	n/a		Altered	No

01	02	03	04	05	06	07
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery
ALT DHW System - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required

01	02	03	04	05	06	07	08	09	10	11	12
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	Existing HVAC System
HVAC1	Heating and cooling system other	Heating Component 1	1	Cooling Component 1	1	HVAC Fan 1	Air Distribution System 1	n/a	Existing	No	

01	02	03	04	05
Name	System Type	Number of Units	Heating Efficiency	Heating Unit Brand
Heating Component 1	Central gas furnace	1	AFUE - 80	n/a

Registration Number: 224-P010088650A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CalCERTS inc.  
 CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2024-07-15 08:04:29  
Schema Version: rev 20220901

01	02	03	04	05	06	07	08	09
Name	System Type	Number of Units	Efficiency Metric	Efficiency EER/SEER/CEER	Efficiency SEER/SEER2	Zonally Controlled	Multi-speed Compressor	HERS Verification
Cooling Component 1	Central split AC	1	EER2/SEER2	11.7	14.3	Not Zonal	Single Speed	Cooling Component 1-hers-cool

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Design Type	Duct Ins. R-value	Duct Location	Surface Area	Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts >= 25 ft			
Air Distribution System 1	Unconditioned attic	Non-Verified	R-8	R-8	Attic	n/a	No Bypass Duct	Existing (not specified)	Existing + New	No		No			

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC Fan	0.58	HVAC Fan 1-hers-fan

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
HVAC Fan 1-hers-fan	Not Required	0

Registration Number: 224-P010088650A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CalCERTS inc.  
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Schema Version: rev 20220901

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
I, I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: <b>Jennifer Ferris</b>	Documentation Author Signature: <i>Jennifer Ferris</i>
Company: <b>Accurate Energy</b>	Signature Date: 2024-07-15 08:11:16
Address: 701 33rd Avenue S	CEM HERS Certification Identification (if applicable): n/a
City/State/Zip: Great Falls, MT 59405	Phone: 916-783-7313
RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California:	
1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance. 2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.	
Responsible Designer Name: <b>Robert Coon</b>	Responsible Designer Signature: <i>Robert Coon</i>
Company: <b>Norman Scheel Structural Engineer</b>	Date Signed: 2024-07-16 08:58:11
Address: 5022 Sunrise Boulevard	License: TBD
City/State/Zip: Fair Oaks, CA 95628	Phone: 916-536-9585

Digitally signed by CalCERTS. This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.



Registration Number: 224-P010088650A-000-000-0000000-0000 Registration Date/Time: 2024-07-16 08:58:11 HERS Provider: CalCERTS inc.  
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2022 CBC AutoCAD

# Norman Scheel Structural Engineer

**Sacramento Office**  
 5022 Sunrise Blvd.  
 Fair Oaks, CA 95628  
 (916) 536-9585  
 info@nsse.com

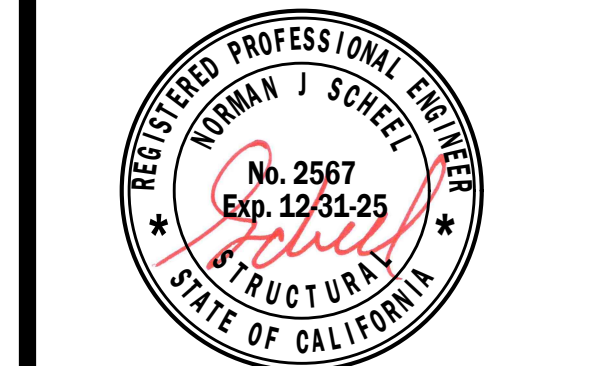
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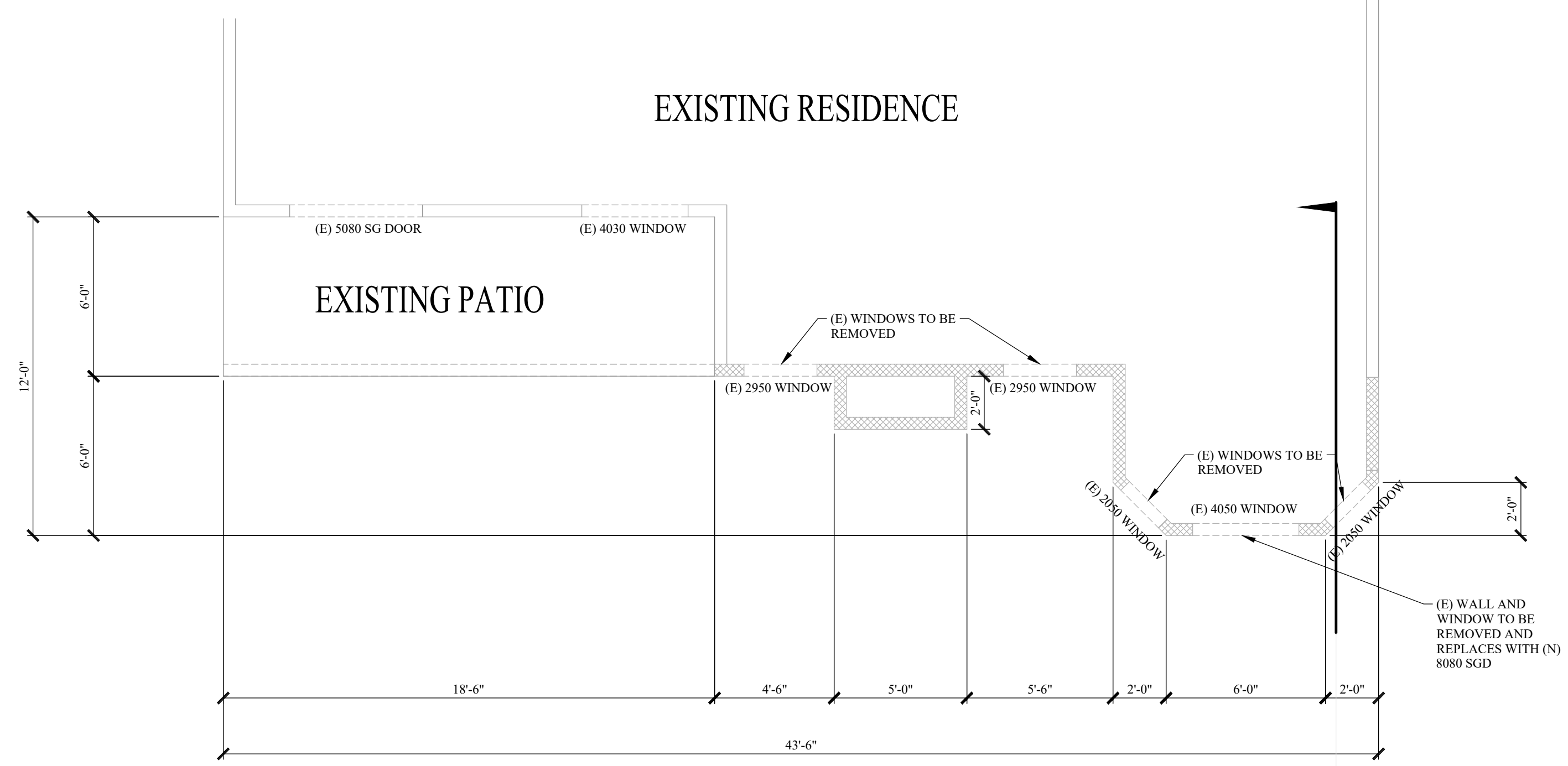
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 652 ORENO CT  
 FOLSOM, CA 95630

PROJ. MGR.: BK  
 ENGINEER: NS  
 DRAWN BY: LT  
 CHECKED BY: BK  
 W  
 ISSUE DATE: 9/10/2024

REVISIONS:

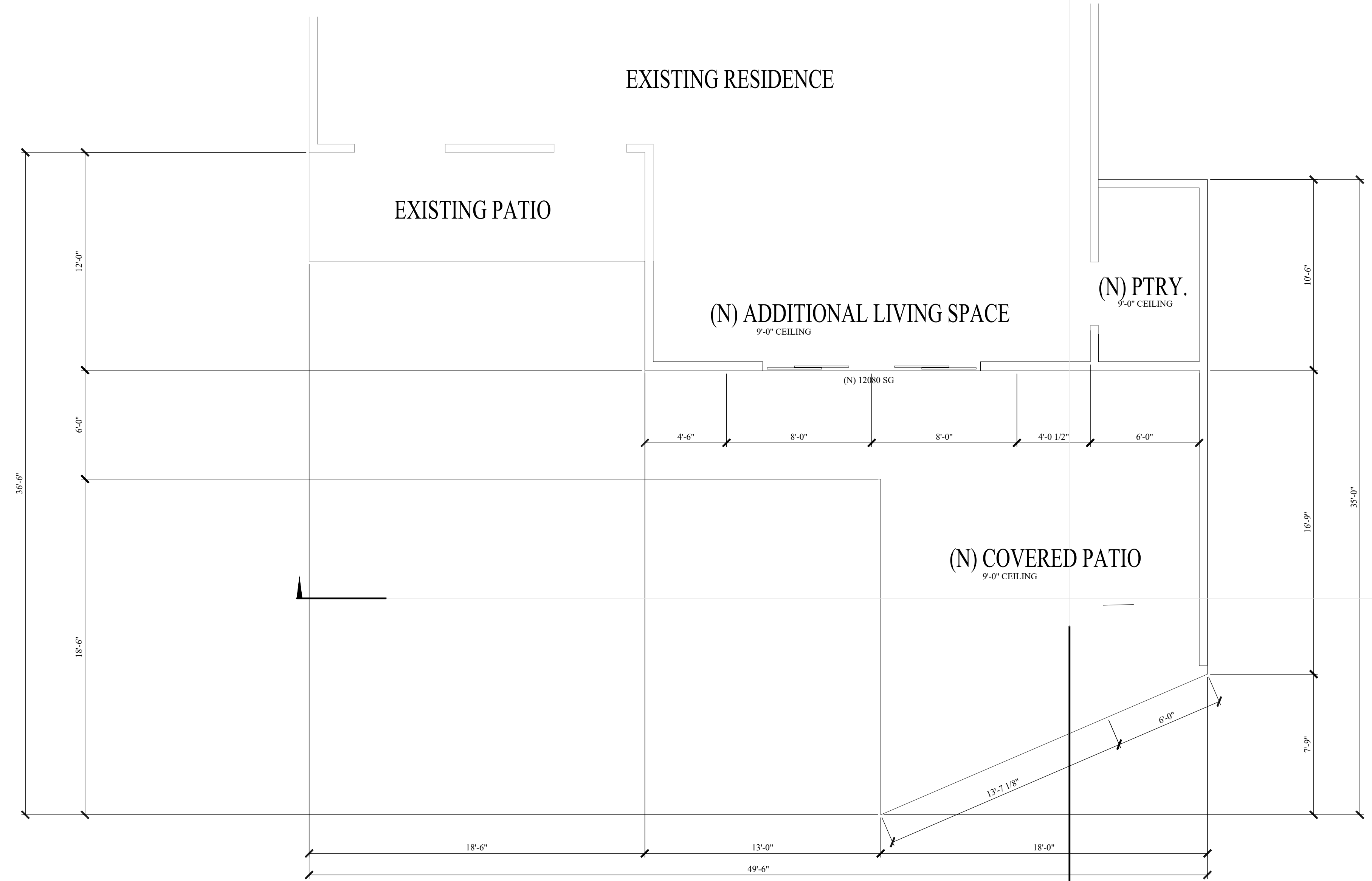


9/10/2024  
 SHEET  
**T24a**  
 JOB NO. 24131



**EXISTING AND DEMO FLOOR PLAN**

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

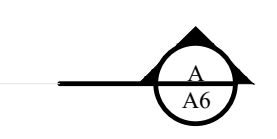


**PROPOSED FLOOR PLAN**

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

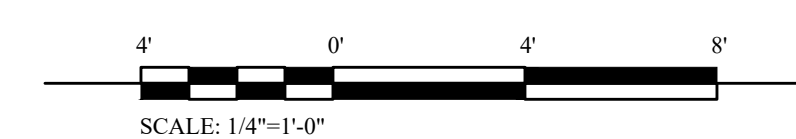
**WALL LEGEND:**

- 2x4 WALL STUDS @ 16" O.C.
- 2x6 WALL STUDS @ 16" O.C.
- (E) WALL TO REMAIN
- WALL TO BE REMOVED



**5-8-2024  
AREA BREAKDOWN**

- (E) LIVING SPACE = 1972 SQ. FT.
- (N) LIVING SPACE = 150 SQ. FT.
- TOTAL = 2,122 SQ. FT.
- (E) COVERED PORCH = 111 SQ. FT.
- (N) COVERED PORCH = 449 SQ. FT.
- TOTAL COVERED PORCH = 650 SQ. FT.



**GENERAL NOTES:**

- 0.0. EGRESS, SLEEPING ROOMS TO HAVE MIN. (1) OPERABLE WINDOW OR DOOR APPROVED FOR EMERGENCY ESCAPE OR RESCUE THAT SHALL OPEN DIRECTLY INTO A PUBLIC STREET, WAY, YARD, OR EXIT COURT AND SHALL HAVE A MIN. NET CLEAR OPENABLE AREA OF 5.7 SQ. FT. MIN. NET CLEAR OPEN HEIGHT OF 24" MIN. NET CLEAR WIDTH OF 20". THE BOTTOM OF CLEAR OPENING NO MORE THAN 44" ABOVE FLOOR, PER 2022 CBC 1031.3
- 1.0 LIGHT & VENTILATION. WINDOW(S) IN BEDROOM MUST MEET EGRESS AND HAVE DOUBLE GLAZING IN EXT. DOORS, WINDOWS & SKYLIGHTS. GUEST ROOMS / HABITABLE ROOMS WITHIN THE DWELLING TO HAVE NATURAL LIGHT WITH GLAZED OPENINGS WITH AN AREA NO LESS THAN 8% OF THE FLOOR AREA OF ROOM SERVED, 2022 CBC 1204.2. THE MINIMUM OPENABLE AREA TO THE OUTDOORS SHALL BE 4% OF THE FLOOR AREA BEING VENTILATED, 2022 CBC 1204.5.1. KITCHENS MAY HAVE ARTIFICIAL LIGHT. BATHROOMS SHALL BE MECHANICALLY VENTILATED PER 2022 CMC 403.7, TABLE 403.7; 2022 CBC 1202.5.2.1
- 2.0 SAFETY GLASS REQUIRED IN EXIT AND ENTRANCE DOORS AND FIXED GLAZED PANELS. GLAZING IN STORM DOORS, GLAZING IN SLIDING DOORS (BOTH FIXED AND SLIDING), GLASS IN ALL SWINGING DOORS, GLAZING IN SHOWER AND TUB ENCLOSURES, GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36" HORIZ. OF WALKING SURFACE. GLAZING WHERE EXPOSED BOTTOM EDGE LESS THAN 18 INCHES ABOVE FLOOR. GLAZING IN PANELS ADJACENT TO DOOR VERTICAL EDGE WITHIN 24 INCHES. 2022 CBC 2406.4, HAZARDOUS LOCATIONS.
- 3.0 GARAGE DOOR(S) TO BE PROVIDED WITH METAL SLIDE BAR BOLT OR MECHANICAL CLOSING DEVICE. PROVIDE SPRING RETENTION DEVICE.
- 4.0 SHOWER COMPARTMENTS AND WALLS ABOVE BATHTUBS WITH SHOWER HEADS SHALL BE FINISHED WITH A SMOOTH, NONABSORBENT SURFACE TO A HEIGHT NO LESS THAN 72" ABOVE THE DRAIN INLET 2022 CBC 1210.2.3 SUCH AS CONCRETE, CERAMIC TILE OR OTHER APPROVED MATERIAL OF A TYPE NOT ADVERSELY AFFECTED BY MOISTURE. INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIX VALVE TYPE AT SHOWERS / TUB SHOWERS MAX. SETTING 120°F (49° C). 2022 CPC 408.3.2
- 5.0 WATERCLOSETS SHALL HAVE A MAX. FLUSHING CAPACITY OF 1.28 GALLONS. 2022 CPC 411.2
- 6.0 AN ATTIC ACCESS TO BE PROVIDED AT ANY ATTIC AREA HAVING A CLEAR HEIGHT OF OVER 30". A 30" MIN. CLEAR HEADROOM IN ATTIC ABOVE ACCESS SHALL BE PROVIDED AT OR ABOVE ACCESS OPENING. PASSAGEWAY ACCESS TO APPLIANCE NOT TO EXCEED 20 FT. A 24" CATWALK OF SOLID FLOORING UNOBSTRUCTED FROM ENTRANCE TO APPLIANCE. A LEVEL PLATFORM MIN. 30" BY 30" IN FRONT OF SERVICE SIDE OF THE EQUIPMENT. A PERMANENT 120-VOLT RECEPTACLE OUTLET AND LIGHT FIXTURE TO BE INSTALLED NEAR APPLIANCE. SWITCH LOCATED AT ENTRANCE OF PASSAGEWAY. 2022 CPC 508.4, 2022 CBC 1209.2. SEE ELECTRICAL SHEET FOR LOCATION.
- 7.0 A REMOVABLE PANEL (MIN. 12"X12") SHALL BE PROVIDED TO ACCESS AND REMOVE THE PUMP. WHIRLPOOL PUMP ACCESS IN THE CRAWL SPACE LOCATED MAX. 20 FT. FROM AN ACCESS DOOR. 2022 CPC 409.6
- 8.0 STAIRWAYS SHALL HAVE MIN. HEADROOM CLEARANCE OF NOT LESS THAN 80" MEASURED VERTICALLY FROM LINE CONNECTING THE EDGE OF NOSING AND FULL WIDTH OF STAIRWAY. STAIRWAYS SHALL HAVE A WIDTH OF NO LESS THAN 36", 2022 CBC 1011.2 -EXCEPTION 1. 7.75" MAX. RISE, 10" MIN. RUN & 1" NOSING. 2022 CBC 1011.5.2 -EXCEPTION 3. HANDRAILS PER 2022 CBC 1014 REQUIRED WHERE THERE ARE 4 OR MORE RISERS. HANDRAIL HEIGHT NOT LESS THAN 34" NOR MORE THAN 38" ABOVE LANDING AND NOSING. 2022 CBC 1014.2
- 9.0 WHERE NOT REQUIRED TO BE ADAPTABLE OR ACCESSIBLE, THE LANDING AT EXTERIOR DOOR SHALL BE NO MORE THAN 7.75" BELOW TOP OF THRESHOLD. PROVIDED THE DOOR OTHER THAN A SCREEN OR STORM DOOR DOES NOT SWING OVER THE LANDING. 2022 CBC 1010.1.6 -EXCEPTION 1.
10. GUARD RAILS REQUIRED ALONG OPEN SIDE OF WALKING SURFACE AT RAMPS AND LANDINGS MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW, MIN. 42" HIGH. 2022 CBC 1015.2 & 1015.3
11. OPEN GUARDS SHALL HAVE BALLUSTERS OR ORNAMENTAL PATTERNS SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING. EXCEPT FOR THE TRIANGULAR OPENINGS FORMED BY RISER, TREAD, BOTTOM RAIL AT OPEN SIDE SHALL HAVE A MAXIMUM SIZE SUCH THAT A 6" DIAMETER SPHERE CANNOT PASS. 2022 CBC 1015.4
12. SMOKE DETECTORS SHALL BE INSTALLED IN ALL SLEEPING AREAS AND OTHER COMMON SPACES NORMALLY ACCESSIBLE TO RESIDENTS. ALSO ON THE CEILING OR WALL OUTSIDE EACH SEPARATE SLEEPING AREA IN VICINITY OF BEDROOMS, IN EACH STORY WITHIN DWELLING INCLUDING BASEMENTS, SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN LEVELS. THE SMOKE ALARM INSTALLED ON UPPER LEVEL WILL SUFFICE FOR ADJACENT LOWER LEVEL PROVIDED LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW UPPER LEVEL. NOT REQUIRED IN KITCHENS. A PHOTOELECTRIC SMOKE ALARM IS REQUIRED WHEN INSTALLED WITHIN 20 FEET OF THE COOKING APPLIANCE. 2022 CBC 907.2.11.1, 907.2.11.2, 907.2.11.5, 907.2.11.8
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17. PROVIDE 2x6 STUD WALLS WHERE PIPING WITHIN THE WALL IS GREATER THAN 2 INCHES OUTSIDE DIAMETER. 2022 CPC 807.3
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19. APPLIANCES AND RECEPTACLES INSTALLED IN GARAGE GENERATING A GLOW, SPARK, OR FLAME SHALL BE LOCATED 18" ABOVE FLOOR.

2022 CBC AutoCAD

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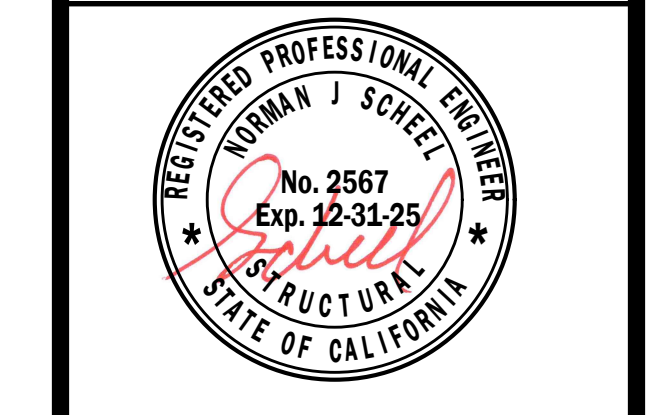
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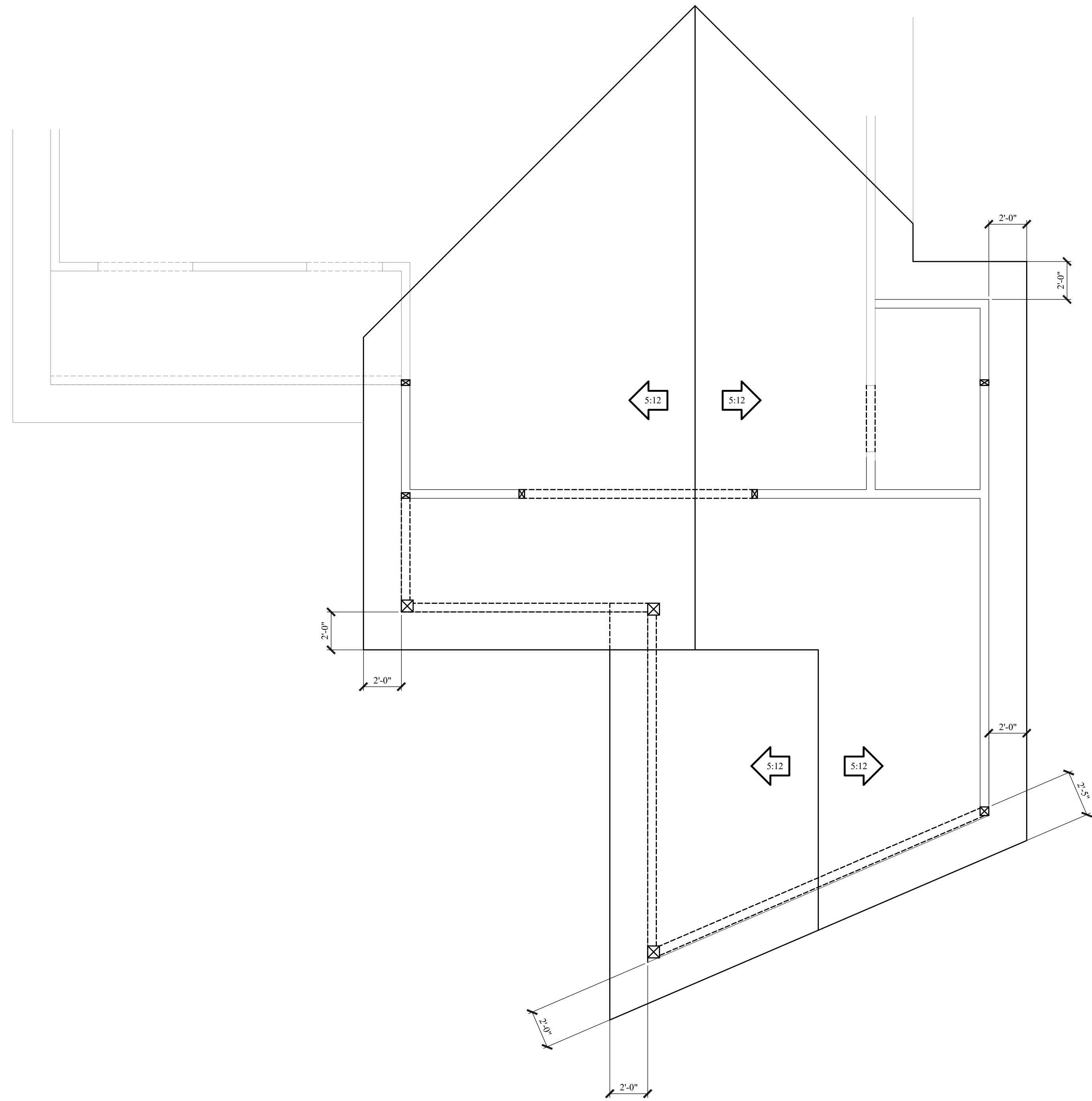
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NOTE:  
EXISTING VENTILATION SATISFIES MIN. REQUIREMENTS FOR (N) ADDITION. NO ADDITIONAL VENTILATION REQUIRED.



**WALL LEGEND:**

- 2x4 WALL STUDS @ 16" O.C.
- 2x6 WALL STUDS @ 16" O.C.
- STAIR RAILING, 2X (4 OR 6) WALL UNDER STEP LEVEL

5-8-2024  
**AREA BREAKDOWN**

(E) LIVING SPACE = 1972 SQ. FT.  
(N) LIVING SPACE = 150 SQ. FT.  
**TOTAL = 2,122 SQ. FT.**

(E) COVERED PORCH = 111 SQ. FT.  
(N) COVERED PORCH = 449 SQ. FT.  
**TOTAL COVERED PORCH = 650 SQ. FT.**



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**ROOF PLAN**  
SCALE: 1/4"=1'-0"

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**COONEY CONSTRUCTION**  
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FOLSOM, CA 95630

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CHECKED BY:	BK
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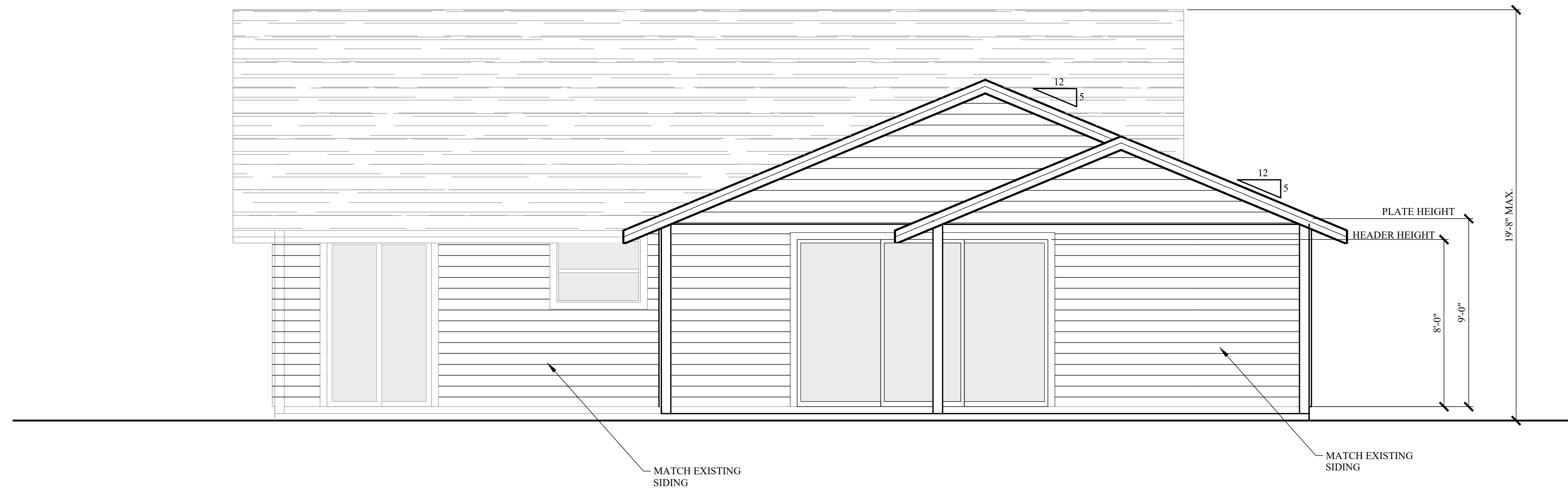
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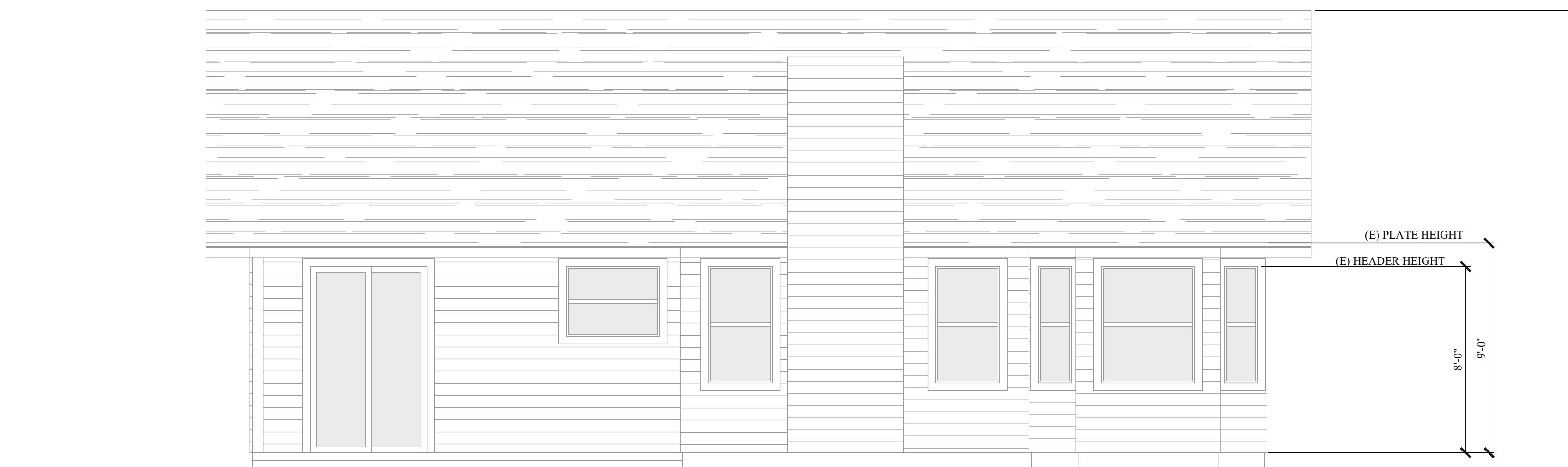
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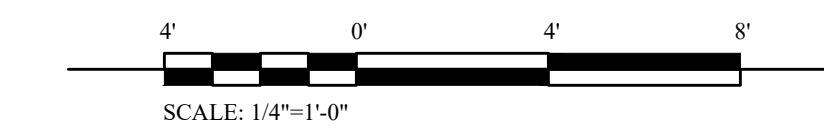




**NEW REAR ELEVATION**  
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**EXISTING REAR ELEVATION**  
SCALE: 1/4"=1'-0"



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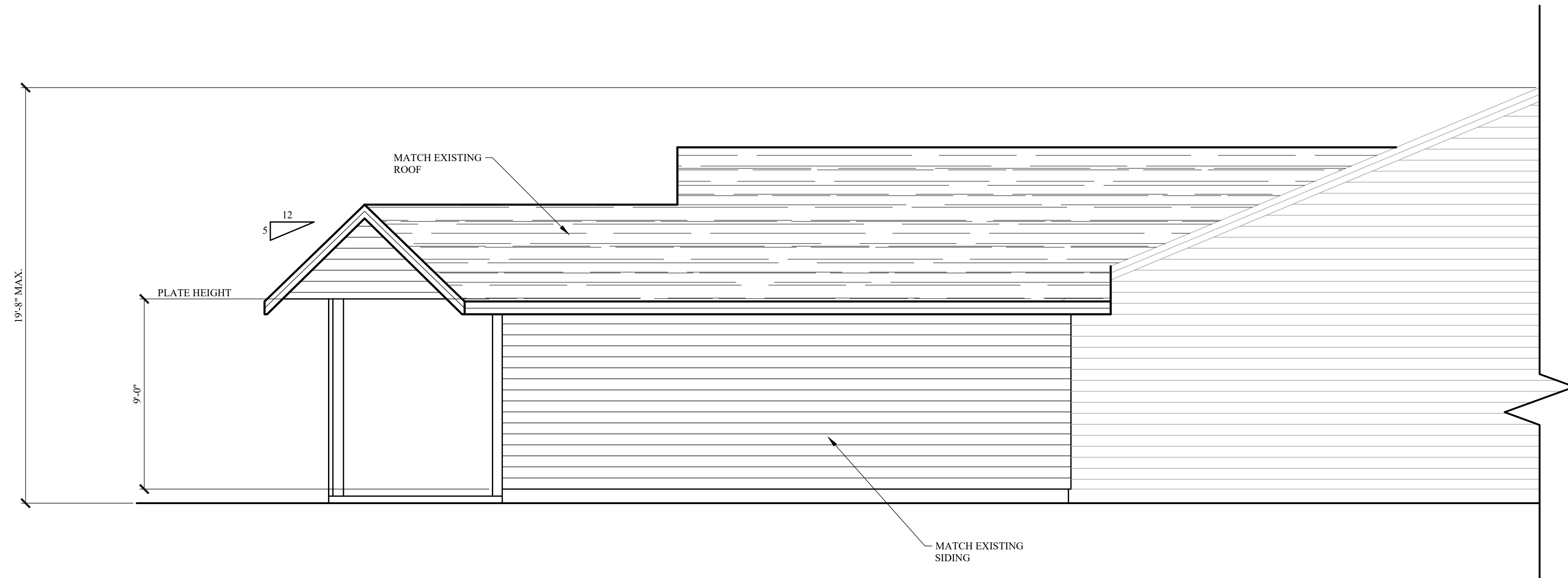
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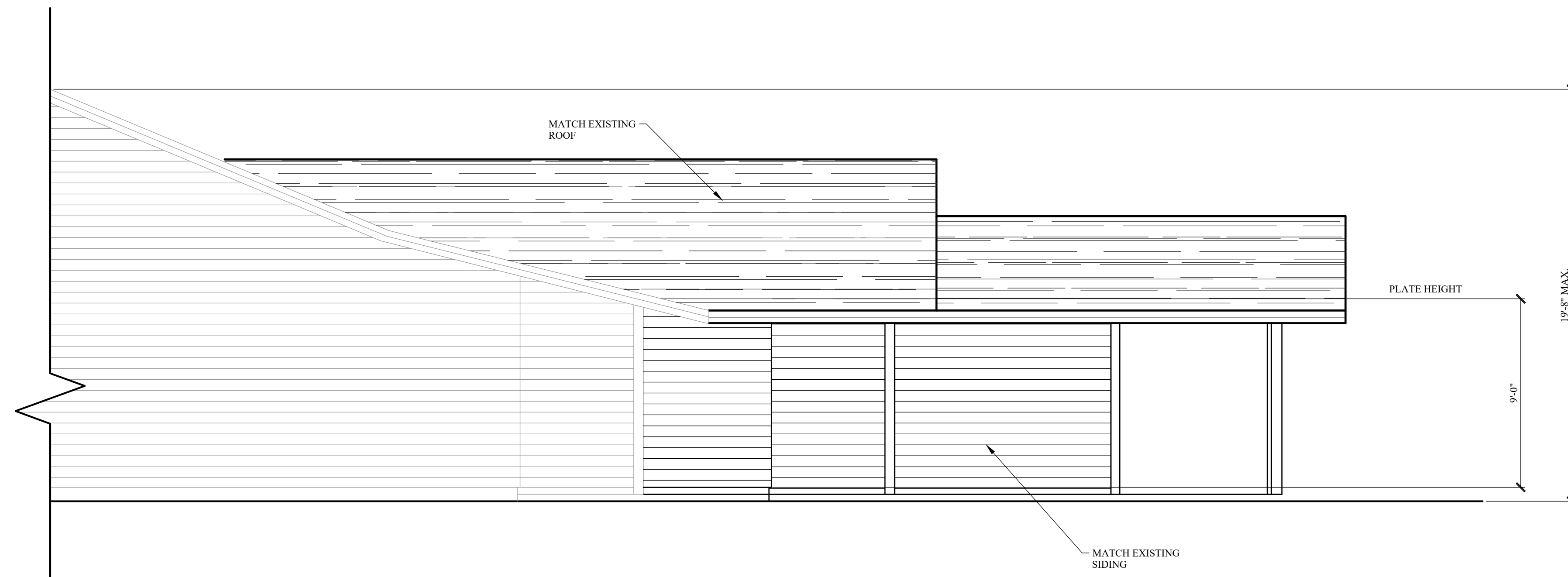
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LEFT ELEVATION  
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RIGHT ELEVATION  
SCALE: 1/4"=1'-0"



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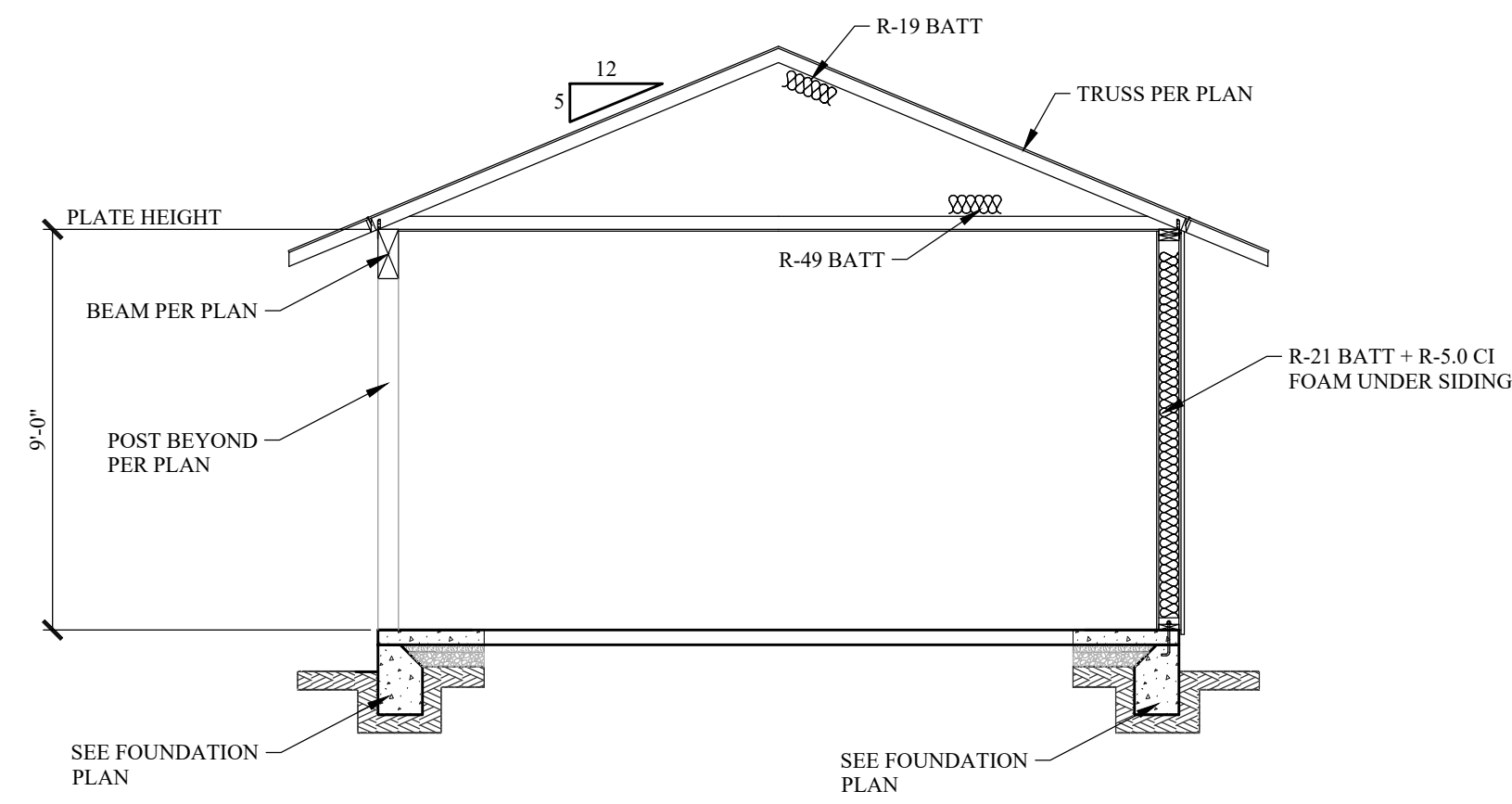
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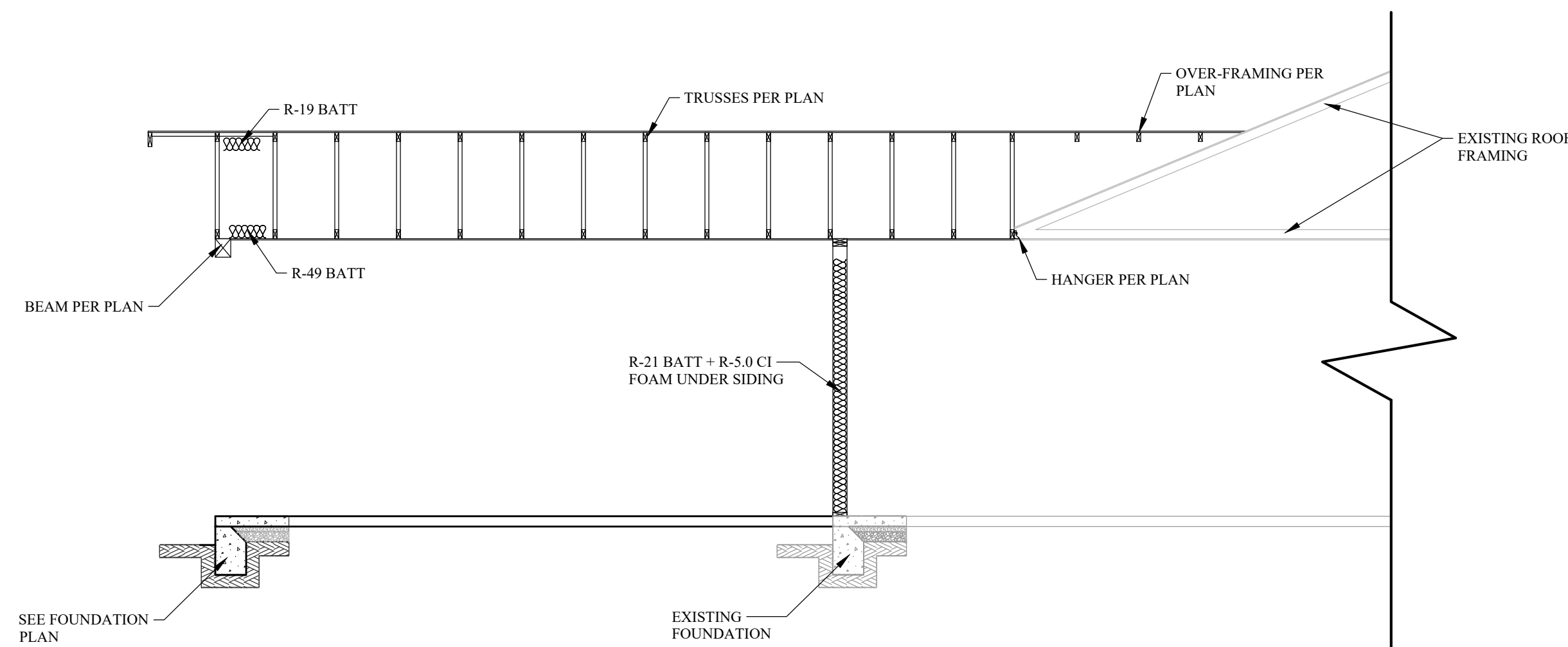
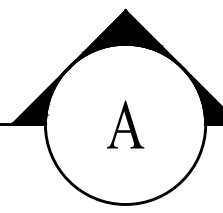
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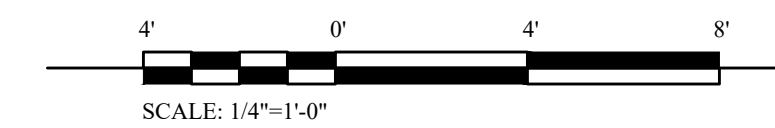
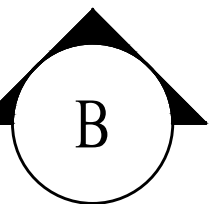
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SCALE: 1/4"=1'-0"



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



NOTES :

PROVIDE WEATHER PROTECTION PER 2022 CBC, SEC. 1403. ALL WEATHER EXPOSED SURFACES SHALL HAVE A WEATHER-RESISTIVE BARRIER TO PROTECT THE INTERIOR WALL COVERING. SUCH BARRIER SHALL BE EQUAL TO THAT PROVIDED FOR IN UBC STANDARD 14-1 FOR KRAFT WATERPROOF BUILDING PAPER OR ASPHALT-SATURATED RAG FELT. PROVIDE "MOISTOP" OR EQUAL W.P. WINDOW AND DOOR FLASHING TYPICAL. CAULK BACK OF WINDOW / DOOR FRAMES BEFORE SETTING. USE WINDOWS THAT ARE WATERTIGHT. 26 GA. G.I. FLASHING IN OTHER WINDOW APPLICATIONS TO BE INSTALLED BY SHEET METAL CONTRACTOR. (SEE TYPICAL ARCHITECTURAL FLASH DETAILS IN PLAN)

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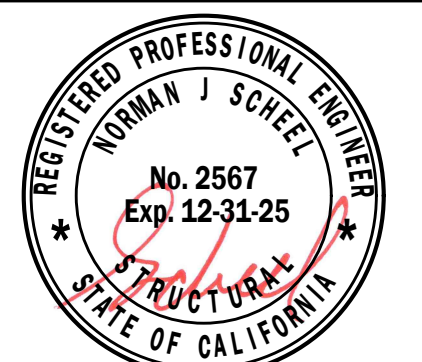


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2022 CALIFORNIA ENERGY EFFICIENCY STANDARDS

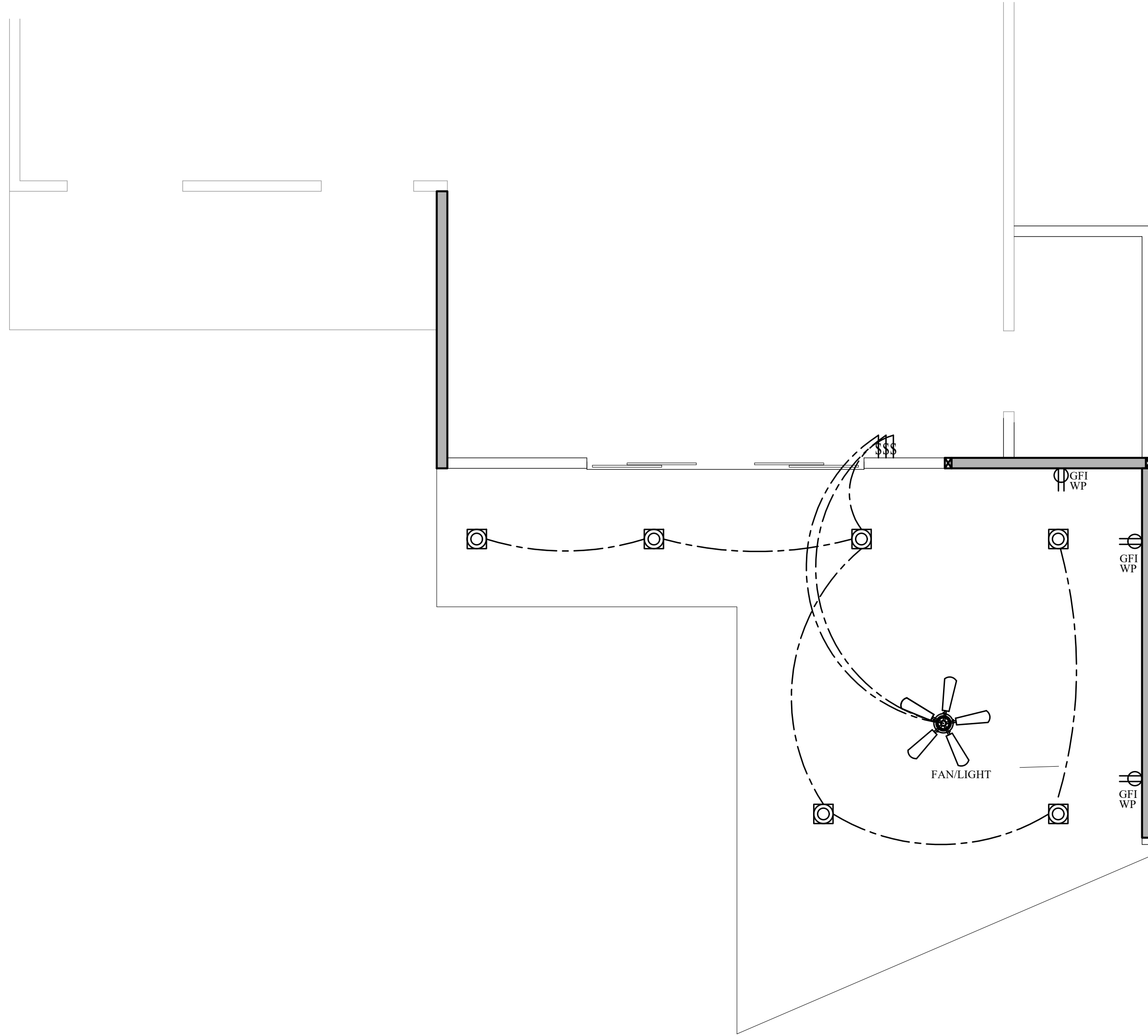
**KITCHENS**  
 KITCHEN LIGHTING TO BE HIGH EFFICACY IN ACCORDANCE WITH TABLE 150.0-A

**BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS**  
 IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES SHALL BE CONTROLLED BY A VACANCY SENSOR. 150.0(k) 2J

**ALL OTHER INTERIOR ROOMS (EXCEPT CLOSETS LESS THAN 70 SQ-FT)**  
 ALL LUMINAIRES REQUIRED TO HAVE LIGHT SOURCES COMPLIANT WITH REFERENCE JOINT APPENDIX JAS, EXCEPT HALLWAYS AND CLOSETS OVER 70 SF., SHALL BE CONTROLLED BY DIMMERS OR VACANCY SENSORS. (THIS APPLIES TO ALL GU-24 LEDs AND RECESSED LUMINAIRES), CBEES 150.0(k) 2J

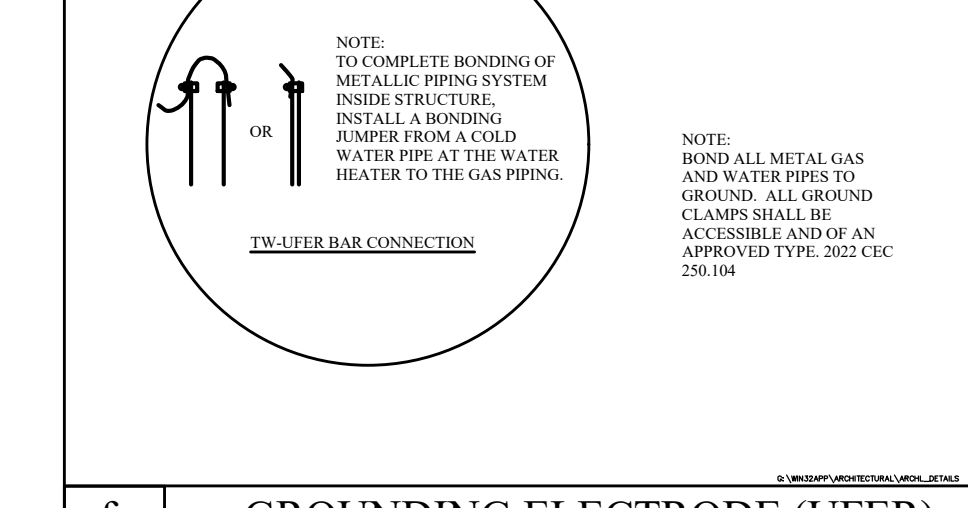
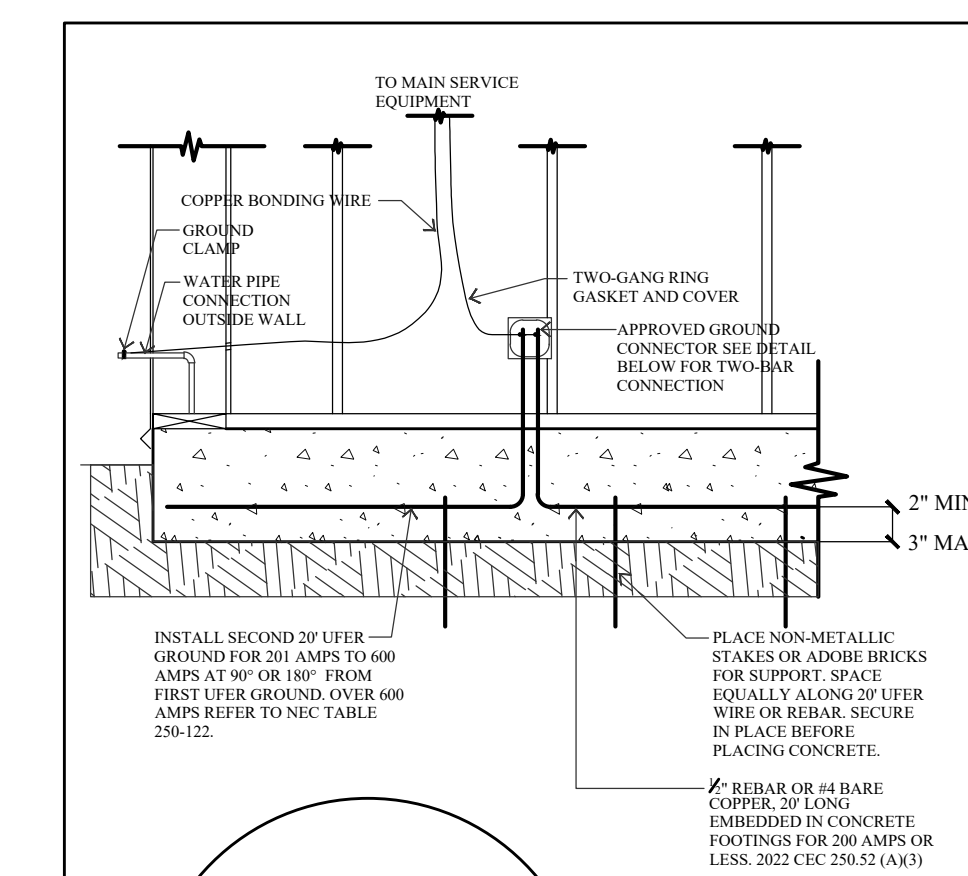
**OUTDOOR LIGHTING ATTACHED TO STRUCTURE**  
 OUTDOOR LIGHTING: ALL OUTDOOR LIGHTING SHALL BE CONTROLLED BY A MANUAL "ON" AND "OFF" SWITCH THAT DOES NOT OVERRIDE TO "ON" AND ONE OF THE FOLLOWING: CONTROLLED BY PHOTOCCELL AND MOTION SENSOR, PHOTO CONTROL AND AUTOMATIC SWITCH CONTROL, ASTRONOMICAL TIME CLOCK, OR ENERGY MANAGEMENT CONTROL SYSTEM. 150.0(k) 3

**RECESSED FIXTURES**  
 LUMINAIRES RECESSED INTO CEILINGS SHALL MEET ALL OF THE FOLLOWING PER 150.0(k) 1C: LISTED FOR ZERO CLEARANCE INSULATION, LABELED THAT CERTIFIED THE LUMINAIRE IS AIRTIGHT WITH A LEAKAGE LESS THAN 2.0CFM AT 75 PASCALS, SEALED WITH A GASKET OR CAULK, ALLOW REPLACEMENT AND MAINTENANCE TO BE READILY ACCESSIBLE FROM BELOW THE CEILING WITHOUT CUTTING HOLES IN THE CEILING, SHALL NOT CONTAIN SCREW BASE SOCKETS; AND SHALL CONTAIN LIGHT SOURCES THAT COMPLY WITH JAS.



ELECTRICAL LEGEND 2022 CEC

	110 V. QUAD OUTLET	NOTICE: ALL OUTLETS AFFECTED UNLESS NOTED OTHERWISE AT GFCI REQUIRED AREAS. 210.8(A) 1-8
	110 OUTLET	
	110 HALF HOT OUTLET	
	220 OUTLET	
	WALL LIGHT	
	CEILING LIGHT	
	RECESSED CANISTER LIGHT	
	ADJ. RECESSED EYEBALL LIGHT	
	ADJ. TRACK LIGHTING	
	SCONCE LIGHT	
	FAN & LIGHT COMBO.	
	EXHAUST FAN	
	CEILING FAN	
	CHANDELIER	
	FLUORESCENT LIGHT	
	(2) TUBED FLUORESCENT LIGHT BOX	
	FLOODLIGHT, 1 & 2 HEAD	
	SMOKE DETECTOR	
	CARBON MONOXIDE ALARM.	MIN. 36" FROM SUPPLY RETURN AIR GRILL. CRC R314.3.1
	COMBO SMOKE DETECTOR CARBON MONOXIDE ALARM. MUST BE REPLACED EVERY 5 YEARS.	
	THERMOSTAT	
	DOOR BELL	
	DOOR BELL CHIMES	
	T.V. OUTLET	
	PHONE JACK	
	SWITCH	
	3 WAY SWITCH	
	4 WAY SWITCH	
	GROUND FAULT CIRCUIT INTERRUPTER	
	WATER PROOF W/ ENCLOSURE 2022 CEC 406.8 (B) (1)	
	36" ABOVE FLOOR	
	42" ABOVE FLOOR	
	WATER FAUCET	
	GAS STUB	



uferr GROUNDING ELECTRODE (UFER)

ELECTRICAL NOTES: 2022 CEC

- SPACING: RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN (6 FT.) FROM A RECEPTACLE OUTLET. ANY WALL SPACE GREATER THAN 2' IN WIDTH SHALL BE PROVIDED WITH A RECEPTACLE. 2022 CEC 210.52(A) 1.
- RECEPTACLES INSTALLED IN KITCHEN TO SERVE COUNTERTOPS CIRCUITS. EITHER BOTH MAY SUPPLY RECEPTACLE OUTLETS IN KITCHEN AND OTHER ROOMS SPECIFIED IN 2022 CEC 210.52(B)(1). SMALL BRANCH CIRCUITS SERVE NO MORE THAN ONE KITCHEN. 2022 CEC 210.52(B)(5).
- DWELLINGS W/ DIRECT GRADE LEVEL ACCESS SHALL HAVE MIN. (1) RECEPTACLE AT GRADE LEVEL (NO MORE THAN 6-12 FT) ABOVE GRADE LEVEL AT FRONT AND BACK OF DWELLING AND BE GFI PROTECTED IN WEATHERPROOF ENCLOSURE. 2022 CEC 210.52(E) 1.
- FEEDERS SUPPLYING 15- AND 20- AMPERE RECEPTACLE BRANCH CIRCUITS SHALL BE PROTECTED BY A GROUND-FAULT CIRCUIT INTERRUPTER IN LIEU OF THE PROVISIONS FOR SUCH INTERRUPTERS AS SPECIFIED IN 210.8(A) AND 590.6(A).
- RECESSED LIGHTING FIXTURES INSTALLED IN INSULATED CEILINGS TO BE TYPE I.C. RATED AND THERMALLY PROTECTED SINGLE WALL FIXTURES TO BE BOXED IN. 2022 CEC 410.115(C) & 410.116 (2).
- CLOSET LIGHT FIXTURES WITH OPEN OR PARTIALLY ENCLOSED LAMPS NOT PERMITTED. COMPLETELY ENCLOSED SURFACE MOUNTED INCANDESCENT OR LED ON WALL ABOVE DOOR OR CEILING 12" CLEAR TO STORAGE. SURFACE MOUNTED FLUORESCENT OR LED, 6" CLEAR TO STORAGE. RECESSED INCANDESCENT OR LED WITH COMPLETELY ENCLOSED LAMP, 6" CLEAR TO STORAGE. 2022 CEC 410.16.
- A "MADE" GROUND ELECTRODE IS REQUIRED ALONG WITH BONDING OF THE WATER PIPING SYSTEM. 20' OF BARE #4 COPPER WIRE IN FOOTING, MIN. 3" OF CONCRETE ENCASUREMENT 20 FEET LONG. VERIFY WITH LOCAL BUILDING CODE. SEE UPPER GROUND DETAIL ON PLANS.
- PROVIDE AT A/C UNIT A POSITIVE MEANS OF DISCONNECT ADJACENT TO AND IN SIGHT FROM EQUIPMENT SERVED. A 125-VOLT RECEPTACLE TO BE LOCATED WITHIN 25' OF UNIT FOR SERVICE AND MAINTENANCE PURPOSES. 2022 CEC 210.63.
- SMOKE DETECTORS SHALL BE INSTALLED IN ALL SLEEPING AREAS AND OTHER COMMON SPACES NORMALLY ACCESSIBLE TO RESIDENTS. ALSO ON THE CEILING OR WALL OUTSIDE EACH SEPARATE SLEEPING AREA IN VICINITY OF BEDROOMS, IN EACH STORY WITHIN DWELLING INCLUDING BASEMENTS, SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN LEVELS. THE SMOKE ALARM INSTALLED ON UPPER LEVEL WILL SUFFICE FOR ADJACENT LOWER LEVEL PROVIDED LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW UPPER LEVEL. DETECTORS SHALL RECEIVE POWER FROM A COMMERCIAL SOURCE AND HAVE A BATTERY BACKUP NOT REQUIRED IN KITCHENS. A PHOTOELECTRIC SMOKE ALARM IS REQUIRED WHEN INSTALLED WITHIN 20 FEET OF THE COOKING APPLIANCE. 2022 CBC 907.2.11.1, 907.2.11.2, 907.2.11.4, 907.2.11.5.
- CARBON MONOXIDE (CO) ALARMS WHEN GAS BURNING APPLIANCE OR ATTACHED GARAGE PRESENT. (CO) ALARMS SHALL BE INSTALLED OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF BEDROOMS, AND ON EACH ADDITIONAL STORY, INCLUDING BASEMENTS AND HABITABLE ATTICS. 2022 CRC R315
- NM CABLE (ROMEX) WITHIN 6 FEET OF ATTIC ACCESS SHALL BE PROTECTED.
- PROTECT NM CABLE (ROMEX) FROM DAMAGE WHEN EXPOSED WITHIN 7 FEET OF FLOOR.
- KITCHEN HOODS, BATHROOM FANS AND OTHER EXHAUST FANS SHALL HAVE A BACK DRAFT DAMPER.
- 2022 CA. ENERGY CODE LOW RISE RESIDENTIAL BUILDINGS- SEC. 150(k)
  - ALL INSTALLED LUMINAIRES SHALL BE HIGH-EFFICACY IN ACCORDANCE WITH TABLE 150.0-A.
  - ALL LUMINAIRES REQUIRED TO HAVE LIGHT SOURCES COMPLIANT WITH REFERENCE JOINT APPENDIX JAS, EXCEPT HALLWAYS AND CLOSETS OVER 70 SF., SHALL BE CONTROLLED BY DIMMERS OR VACANCY SENSORS. (THIS APPLIES TO ALL GU-24 LEDs AND RECESSED LUMINAIRES), CBEES 150.0(k) 2K.
  - IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES SHALL BE CONTROLLED BY A VACANCY SENSOR. 150.0(k) 2J
  - OUTDOOR LIGHTING: ALL OUTDOOR LIGHTING SHALL BE CONTROLLED BY A MANUAL "ON" AND "OFF" SWITCH THAT DOES NOT OVERRIDE TO "ON" AND ONE OF THE FOLLOWING: CONTROL BY PHOTOCCELL AND MOTION SENSOR, PHOTO CONTROL AND AUTOMATIC SWITCH CONTROL, ASTRONOMICAL TIME CLOCK, OR ENERGY MANAGEMENT CONTROL SYSTEM. 150.0(k) 3
  - LUMINAIRES RECESSED INTO CEILINGS SHALL MEET ALL OF THE FOLLOWING PER 150.0(k) 1C: LISTED FOR ZERO CLEARANCE INSULATION, LABELED THAT CERTIFIED THE LUMINAIRE IS AIRTIGHT WITH A LEAKAGE LESS THAN 2.0CFM AT 75 PASCALS, SEALED WITH A GASKET OR CAULK, ALLOW REPLACEMENT AND MAINTENANCE TO BE READILY ACCESSIBLE FROM BELOW THE CEILING WITHOUT CUTTING HOLES IN THE CEILING, SHALL NOT CONTAIN SCREW BASE SOCKETS; AND SHALL CONTAIN LIGHT SOURCES THAT COMPLY WITH JAS.
  - UNDER CABINET LIGHTING SHALL BE SWITCHED SEPARATELY THAN FROM OTHER LIGHTING SYSTEMS. 150.0(k) 2L
  - ROPE LIGHTING MUST ALSO BE HIGH EFFICACY.
- SPACE FOR COVE LIGHTING SHALL HAVE ADEQUATE SPACE AND BE LOCATED THAT LAMPS AND EQUIPMENT CAN BE PROPERLY INSTALLED AND MAINTAINED. 2022 CEC 410.18.
- SEE MANDATORY NOTES FOR TITLE-24 COMPLIANCE ON SHEET A1 AND OR T-24 SHEET. OF PLANS.
- FIXTURES ABOVE TUB OR SHOWERS SHALL BE LISTED AS SUITABLE FOR WET LOCATIONS. 2022 CEC 410.10(A)(D)
- NOTE: ALL BRANCH CIRCUITS THAT SUPPLY 15- AND 20-AMP OUTLETS INSTALLED IN BEDROOMS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, SUNROOMS, RECREATION ROOMS, CLOSETS, AND HALLWAYS WILL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER(s) LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT, INCLUDING LIGHTING OUTLETS AND SMOKE DETECTORS. 2022 CEC 210.12(A)(8).
- ACCESS OPENING MIN. 22" x 30" PASSAGEWAY ACCESS TO APPLIANCE NOT TO EXCEED 20 FT. A 24" CATWALK OF SOLID FLOORING UNOBSTRUCTED FROM ENTRANCE TO APPLIANCE. A LEVEL PLATFORM MIN. 30" x 30" IN FRONT OF SERVICE SIDE OF THE EQUIPMENT. A PERMANENT 120-VOLT RECEPTACLE OUTLET AND LIGHT FIXTURE TO BE INSTALLED NEAR APPLIANCE. SWITCH LOCATED AT ENTRANCE OF PASSAGEWAY. 2022 CPC 508.4
- WATER HEATERS LOCATED IN THE ATTIC NEED ACCESS WITHIN 20 FEET OF THE WATER HEATER. PROVIDE RECEPTACLE OUTLET, LIGHT FIXTURE WITH A SWITCH PER 2022 CPC 508.4
- CEILING FAN BOXES. ELECTRICAL BOXES TO BE APPROVED FOR SUPPORTING CEILING FANS. 2022 CEC 314.27 (C) & 314.27(D)
- CLOTHES DRYER AND ELECTRIC RANGES SHALL HAVE A 4-WIRE GROUNDED ELECTRICAL OUTLET. 2022 CEC 280.140(1).
- BATHROOM RECEPTACLES SHALL BE SUPPLIED BY A SEPARATE 20-AMP BRANCH CIRCUIT AND SHALL HAVE NO OTHER OUTLETS OTHER THAN AS PROVIDED FOR IN 550.13(C)2). 2022 CEC 550.11 (E).
- THE REQUIRED SMALL APPLIANCE CIRCUITS SHALL NOT SUPPLY DISPOSAL, DISHWASHER, OR OTHER LARGE APPLIANCES.
- OUTLET BOXES ON OPPOSITE SIDES OF AN EXTERIOR OR MEMBRANE WALL SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24" MIN. 2022 CBC 714.3.2 (EXCEPT 1.1)
- ALL ASSOCIATED ELECTRICAL COMPONENTS FOR THERAPEUTIC/HYDRO-MASSAGE BATHTUBS SHALL BE BONDED TOGETHER (GROUNDED) AND ALL OUTLETS (NOT EXCEEDING 30 AMPS) WITHIN 6 FEET OF THE INSIDE WALL OF SUCH TUBS SHALL BE "GFCI PROTECTED". 2022 CEC 680.71.
- AT ELECTRICAL AND OTHER UTILITY BOXES INSTALLED PENETRATING THE EXTERIOR WALL, PROVIDE THE FOLLOWING:
  - SHALL BE FLASHED IN SIMILAR FASHION AS THE WINDOWS.
  - ALL ITEMS THAT REQUIRE EXTERIOR PENETRATIONS SHOULD INCORPORATE INTEGRATED FLASHING ASSEMBLIES SUCH AS CONTINUOUS ATTACHMENTS TO ALLOW FOR PROPER FLASHING.
  - PANEL BOXES NEED TO BE SPACED A MINIMUM OF 6 INCHES APART TO ALLOW FOR PROPER FLASHING.
  - UTILITY BOXES SHOULD NOT BE LOCATED IN SHEAR WALLS. CUTTING OPENINGS IN SHEAR WALLS IS NOT RECOMMENDED UNLESS APPROVED BY THE STRUCTURAL ENGINEER.
- ELECTRICAL METER PANELS, SUB-PANELS AND DISCONNECTS, SUCH AS AT AIR CONDITIONER, REQUIRE A MINIMUM CLEAR WORKING SPACE OF NOT LESS THAN 30" WIDE X 36" DEEP AND 6'-6" HIGH
- ALL 15 & 20 AMPERE RECEPTACLES IN WET LOCATIONS SHALL HAVE WEATHERPROOF ENCLOSURES/COVERS. 2022 CEC 406.9(B)(1).
- ALL RECEPTACLES SHALL BE TAMPER-RESISTANT. 2022 CEC 406.12
- VERIFY SERVICES & LOCATION REQUIREMENTS FOR ALL APPLIANCES & MECHANICAL EQUIPMENT PRIOR TO INSTALLATION.

ELECTRICAL LAYOUT, MAIN LEVEL

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

2022 CBC AutoCAD

REGISTERED PROFESSIONAL ENGINEER

Norman Scheel Structural Engineer

**Norman Scheel Structural Engineer**

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1898 - 2024  
**35**  
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 Norman Scheel Structural Engineer

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COONEY CONSTRUCTION  
 652 ORENO CT  
 FOLSOM, CA 95630

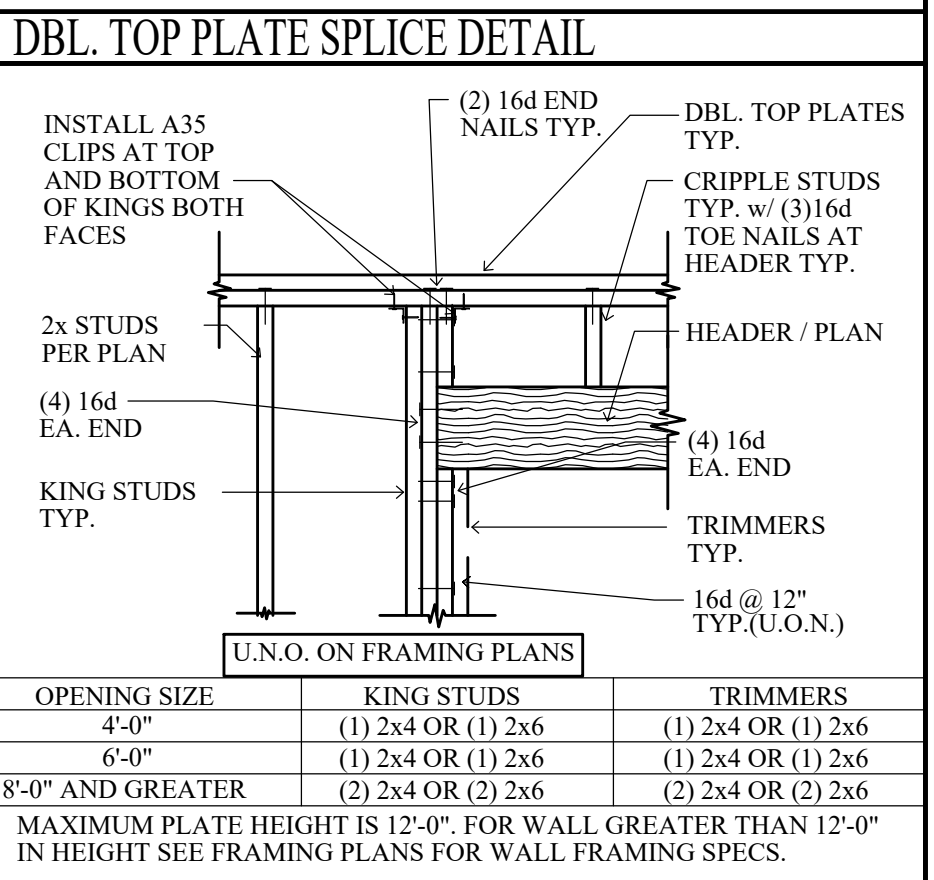
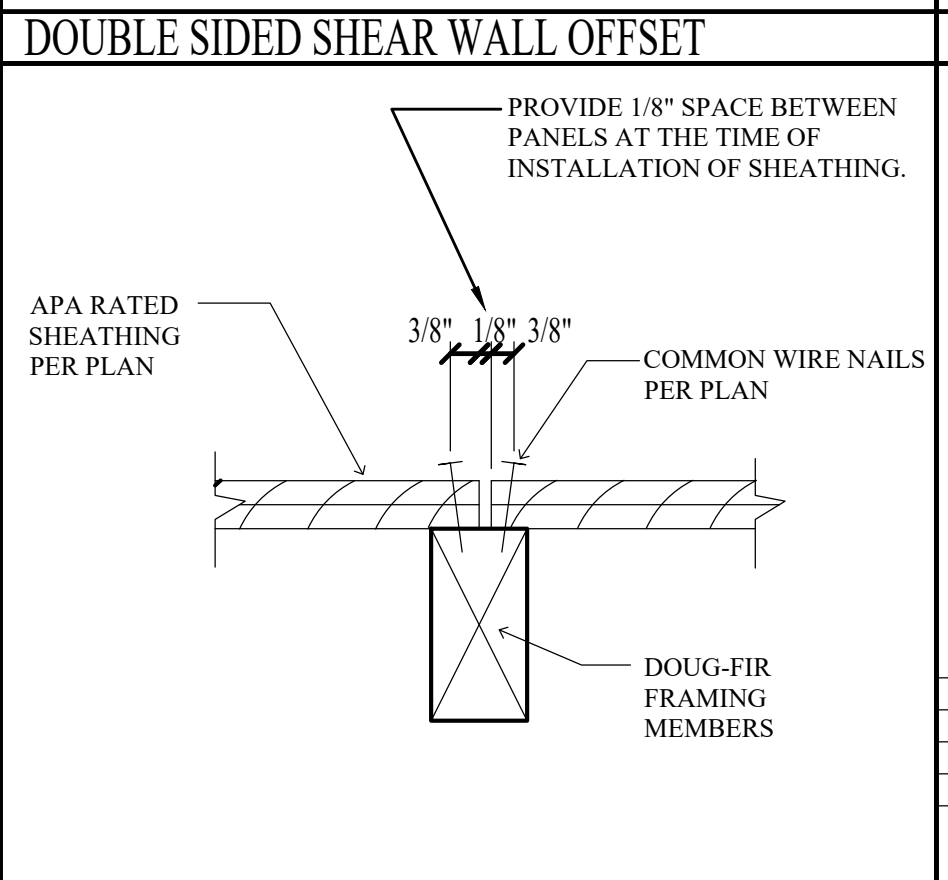
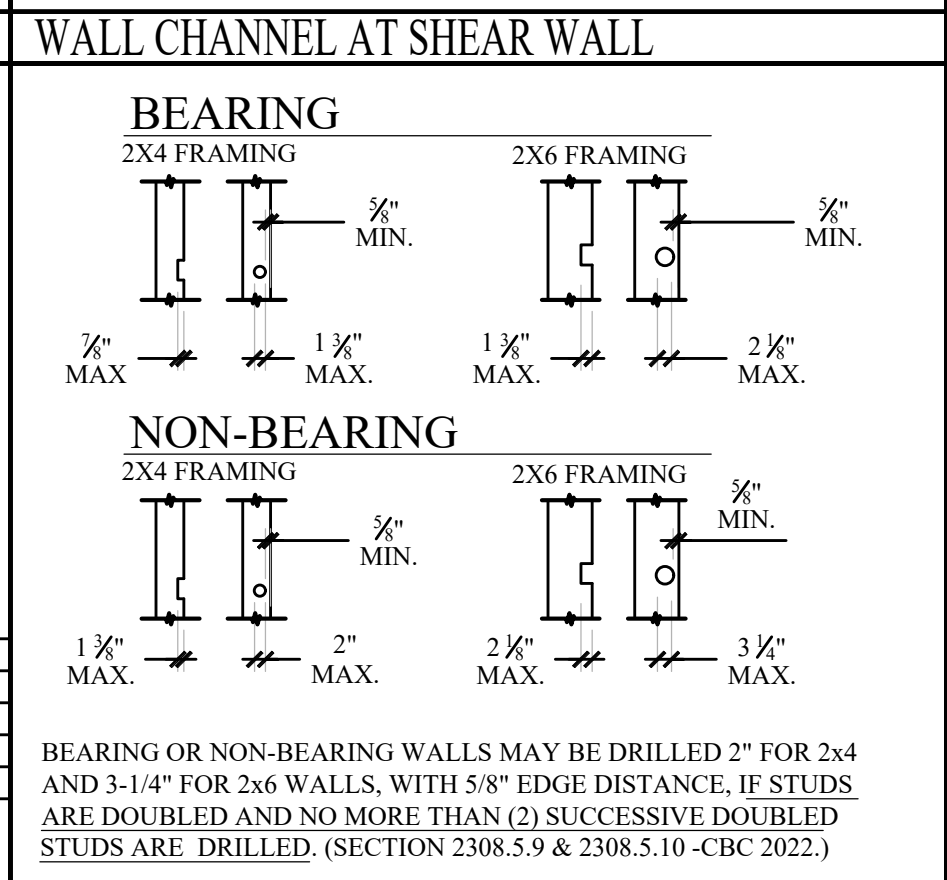
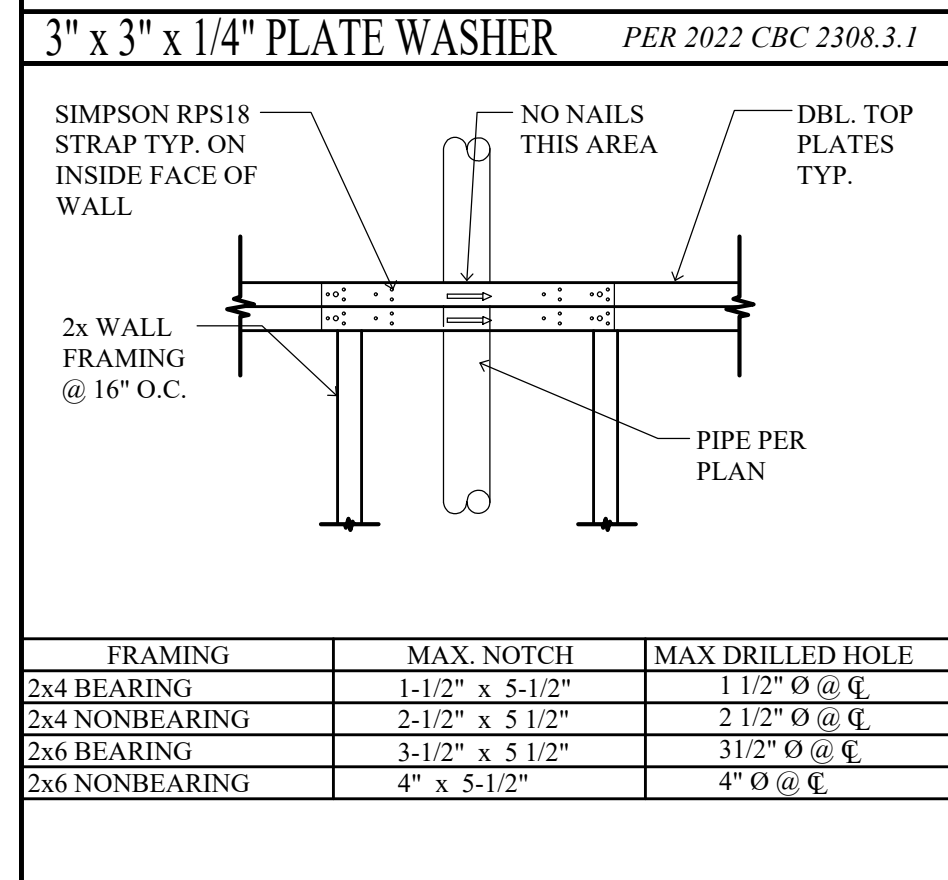
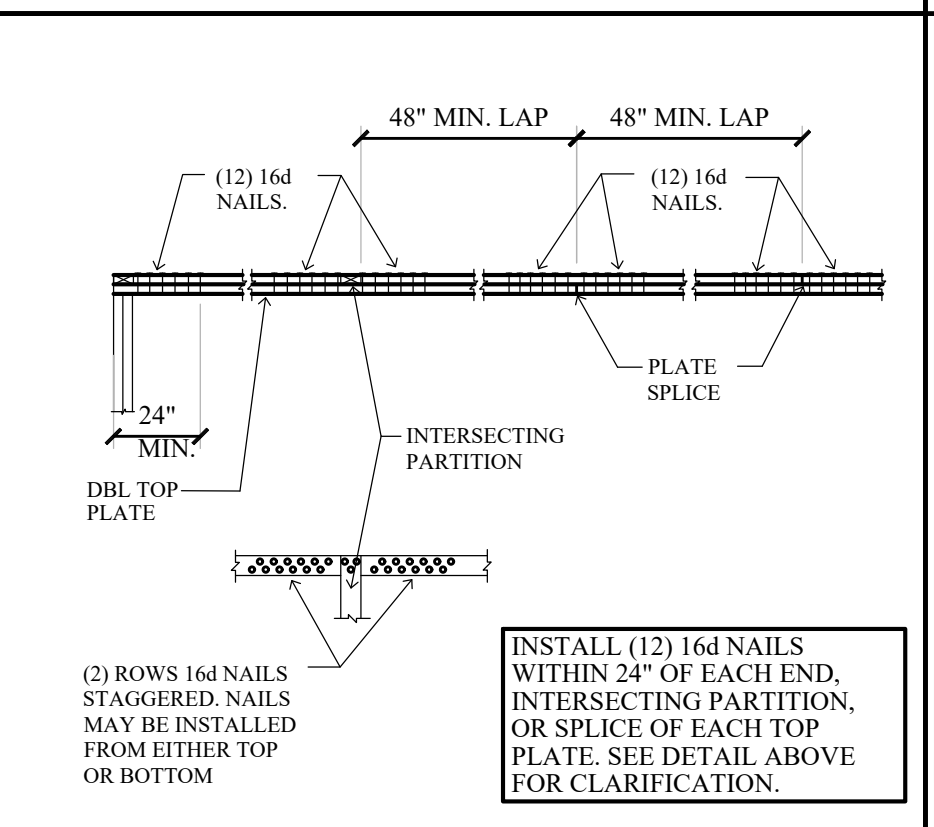
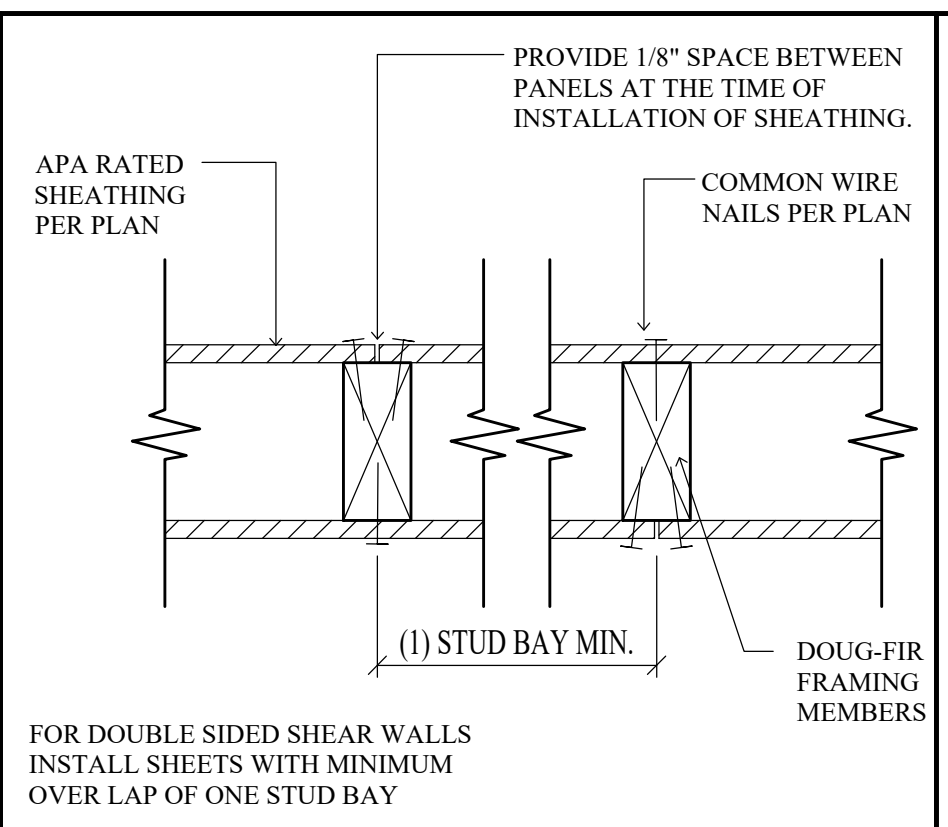
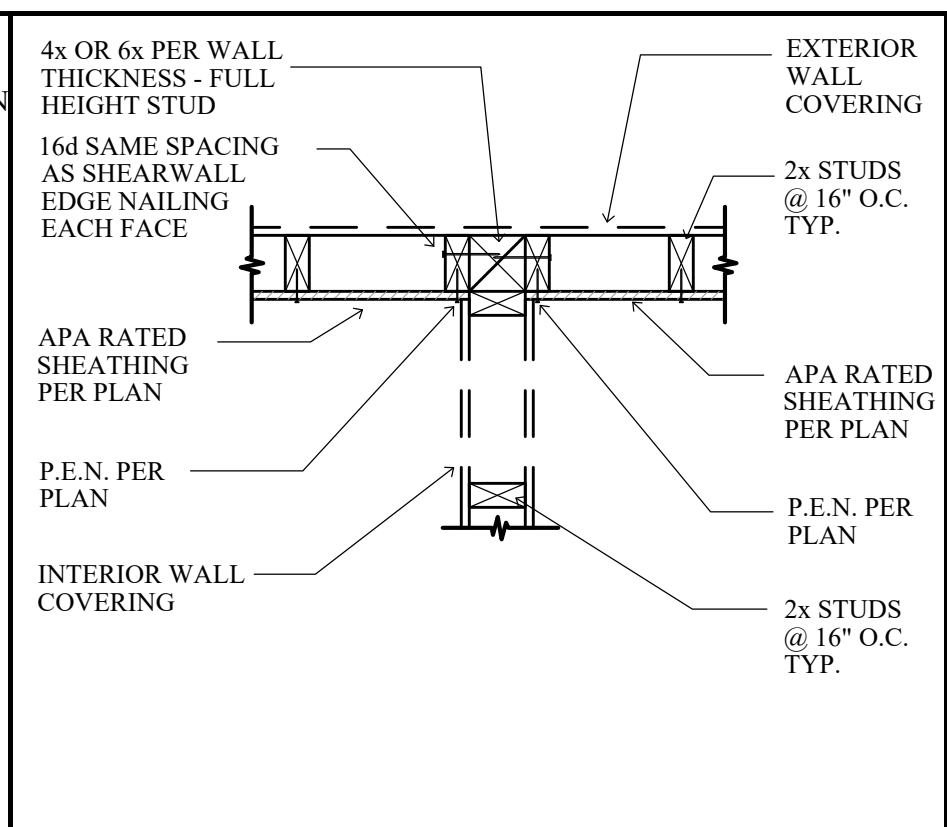
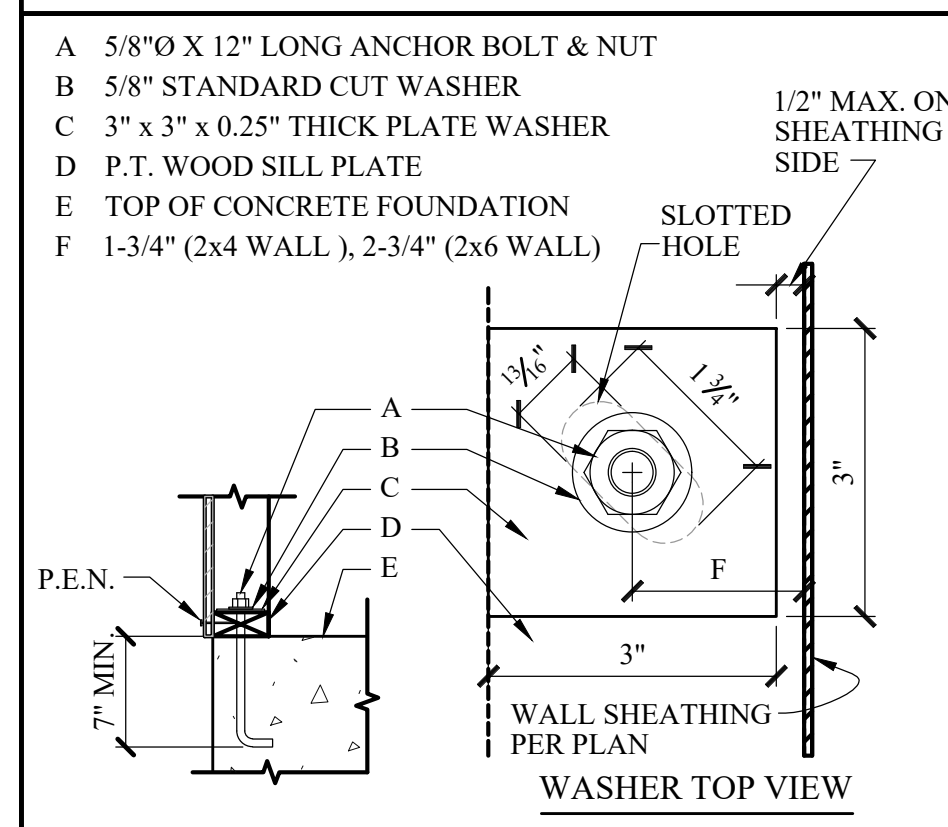
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 ENGINEER: NS  
 DRAWN BY: LT  
 CHECKED BY: BK  
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 ISSUE DATE: 9/10/2024

REVISIONS:

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9/10/2024  
 SHEET  
**E-1**  
 JOB NO. 24131

## TYPICAL DETAILS



FRAMING	MAX. NOTCH	MAX DRILLED HOLE
2x4 BEARING	1-1/2" x 5-1/2"	1 1/2" Ø @ 6"
2x4 NONBEARING	2-1/2" x 5 1/2"	2 1/2" Ø @ 6"
2x6 BEARING	3-1/2" x 5 1/2"	3 1/2" Ø @ 6"
2x6 NONBEARING	4" x 5-1/2"	4" Ø @ 6"

### NOTCH OR DRILLED TOP PLATES

### NOTCH OR DRILLED STUDS

### SHEAR WALL NAILING DETAIL

### TYPICAL HEADER FRAMING DETAIL

**SPECIAL INSPECTION AND STRUCTURAL OBSERVATION PROGRAM 2022 CBC CHAPTER 17**

## ENGINEERING AND LOADING DATA

<p><b>Roof Material Weights (D)</b></p> <p>Roofing = 4.0 psf                  Sheathing = 1.5 psf                  Framing = 2.5 psf                  Insulation = 3.5 psf                  Ceiling = 3.5 psf                  PV Panels = 3.0 psf                  Misc. = 2.0 psf                  Wall (Seismic only) = 5.0 psf</p> <p><b>Roof Loading (psf)</b></p> <p>Roof Live Load (L<sub>r</sub>) = 20.0 psf                  Roof Snow Load (S) = 0.0 psf                  Roof Dead Load (D) = 10.0 psf                  Ceiling Live Load (L) = 10.0 psf                  Ceiling Dead Load (D) = 10.0 psf</p> <p><b>Snow Loading (psf)</b></p> <p>Ground Snow Load = 0 psf                  Flat Roof Snow Load = 0 psf                  Sloped Roof Snow Load = 0 psf                  Exposure Factor = 1.00                  Thermal Factor = 1.10                  Importance Factor = 1.00                  Roof Slope Factor = 1.00</p> <p><b>Site Classification</b> = D  <b>Risk Category</b> = II  <b>Seismic Design Category</b> = D  <b>Importance Factor</b> = 1  <b>Response Modification Factor</b> R = 6.500  <b>System Overstrength Factor</b> Ω<sub>o</sub> = 3.000  <b>Deflection Amplification Factor</b> C<sub>d</sub> = 4.000  <b>Rho Factor (ρ)</b> = 1.300  <b>Spectral Response Short Period</b> S<sub>s</sub> = 0.412  <b>Spectral Response Long Period</b> S<sub>l</sub> = 0.212  <b>Approximate Fundamental Period (T = T<sub>a</sub>)</b> T<sub>a</sub> = 0.152  <b>Long Period</b> T<sub>L</sub> = 12.000  <b>T<sub>0</sub> = 0.20 (S<sub>D1</sub> / S<sub>D5</sub>)</b> T<sub>0</sub> = 0.152  <b>T<sub>s</sub> = (S<sub>D1</sub> / S<sub>D5</sub>)</b> T<sub>s</sub> = 0.762  <b>Spectral Response Accelerations Short</b> S<sub>M5</sub> = 0.606  <b>Spectral Response Accelerations Long</b> S<sub>M1</sub> = 0.461  <b>Spectral Response Short Period</b> S<sub>D5</sub> = 0.404  <b>Spectral Response Long Period</b> S<sub>D1</sub> = 0.308  <b>Seismic Response Coefficient</b> C<sub>s</sub> = 0.062  <b>Maximum Seismic Response Coefficient</b> C<sub>s,max</sub> = 0.310  <b>Minimum Seismic Response Coefficient</b> C<sub>s,min</sub> = 0.018</p>	<p><b>Floor Material Weights (D)</b></p> <p>Sheathing = 2.5 psf                  Framing = 3.0 psf                  Insulation = 3.5 psf                  Ceiling = 3.5 psf                  Decking Material = 2.0 psf                  Deck Soffit = 0.0 psf                  Misc. = 2.5 psf                  Wall (Seismic only) = 10.0 psf</p> <p><b>Floor Loading (psf)</b></p> <p>Floor Live Load (L) = 40.0 psf                  Floor Dead Load (D) = 10.0 psf                  Floor Ceiling Dead Load (D) = 5.0 psf                  Deck Live Load (L) = 60.0 psf                  Deck Dead Load (D) = 10.0 psf                  Deck Soffit Dead Load (D) = 0.0 psf</p> <p><b>Seismic Dead Load Roofs</b> Roof Level Seismic (D) = 25.0 psf  <b>Seismic Dead Load Floors</b> Floor Level Seismic (D) = 25.0 psf</p> <p><b>Seismic Loads ASCE 7-16</b></p> <p>ASCE 7-16 Section 11.4.3 = D                  ASCE 7-16 Table 1.5-1 = II                  ASCE 7-16 Section 11.6 = D                  ASCE 7-16 Section 11.5 = 1                  ASCE 7-16 Table 12.2-1 Bearing wall System #15                  ASCE 7-16 Table 12.2-1 Bearing wall System #15                  ASCE 7-16 Table 12.2-1 Bearing wall System #15                  ASCE 7-16 Chapter 22 ASCE 7 Hazard Report                  ASCE 7-16 Chapter 22 ASCE 7 Hazard Report                  ASCE 7-16 Section 11.4.6                  ASCE 7-16 Figure 22-14 to 22-17 ASCE 7 Hazard Report                  ASCE 7-16 Section 11.4.6                  ASCE 7-16 Section 11.4.6                  ASCE 7-16 Section 11.4.4 Site Coefficients MCE<sub>R</sub>                  ASCE 7-16 Section 11.4.4 Site Coefficients MCE<sub>R</sub>                  ASCE 7-16 Section 11.4.5 Design Spectral Acceleration                  ASCE 7-16 Section 11.4.5 Design Spectral Acceleration                  ASCE 7-16 Eq. 12.8-2 Seismic Response Coefficient                  ASCE 7-16 Eq. 12.8-3 Maximum                  ASCE 7-16 Eq. 12.8-5 or 12.8-6 Minimum</p>	<p><b>Wind Loads ASCE 7-16</b></p> <p>Basic Wind Speed = 94 mph (V<sub>ultimate</sub>)                  Exposure Category = C                  Risk Category = II                  λ = 1.21                  K<sub>z</sub> = 1.00</p> <p><b>Soil information</b></p> <p>2022 CBC Code Minimum                  Report Number                  Date                  Footing Depth = 12 in                  Footing Width = 12 in                  Soil Bearing Pressure Fig = 1500 psf</p>
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**V = 0.062 W**

*Site specific ground motion analysis is not required per ASCE 7-16 Section 11.4.8 Exception 2  
 Seismic Design Category specified from Table 11.4-2 only*

## STANDARD NOTES AND SPECIFICATIONS 2022 CBC INCLUDING SECTION C.B.C. 1603.1

**GENERAL NOTES**

- DETAILS OF CONSTRUCTION NOT FULLY SHOWN SHALL BE OF THE SAME NATURE AS SHOWN FOR SIMILAR CONSTRUCTION.
- CONSTRUCTION SHALL CONFORM TO THE 2022 CBC AND ALL APPLICABLE CODES AND REGULATIONS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
- CONTRACTOR SHALL NOTIFY THE ENGINEER AND ARCHITECT WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DRAWINGS OR DOCUMENTS. CONTRACTORS ARE NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE BUILDING THAT IS IN CONFLICT, UNTIL CONFLICT IS RESOLVED WITH THE AFFECTED PARTIES.
- ALL PRE-MANUFACTURED ROOF TRUSSES, PRE-MANUFACTURED "I" FLOOR JOISTS, PRE-MANUFACTURED LAMINATED VENER & PARALLEL STRESS LUMBER BEAMS, AND GLED LAMINATED BEAMS TO BE SUBMITTED TO THE PROJECT ARCHITECT AND/OR THE ENGINEER FOR REVIEW AND COORDINATION. A SUBMITTAL MAY THEN BE MADE TO THE BUILDING DEPARTMENT FOR REVIEW AND APPROVAL. INCLUDE ALL LETTERS STATING THIS REVIEW AND COORDINATION. HAS BEEN PERFORMED AND COMPLETED AND PLANS AND CALCULATIONS ARE FOUND TO BE ACCEPTABLE. TRUSS DRAWINGS AND LAYOUTS TO BE SUBMITTED PRIOR TO CONSTRUCTION AS PART OF DEFERRED SUBMITTAL PER 2022 CBC 107.3.4.1.
- THE DESIGN, ADEQUACY, AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND HAS NOT BEEN CONSIDERED BY THE STRUCTURAL ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE PRIOR TO THE APPLICATION OF ALL SHEAR WALLS AND ROOF DIAPHRAGMS, AND FINISH MATERIALS, PRIOR TO THE APPLICATION OF THE AFOREMENTIONED MATERIALS. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- IN NO CASE SHOULD DRAWINGS, DETAIL S, OR ANY PART OF THESE PLANS BE SCALED FOR ANY PURPOSE. IF ANY DIMENSIONS NOT SHOWN ARE REQUIRED IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE ENGINEER OR ARCHITECT FOR ADDITIONAL INFORMATION.

**WALL FRAMING**

- UNLESS OTHERWISE NOTED STUDS IN EXTERIOR WALLS AND INTERIOR BEARING WALLS OF BUILDING NO MORE THAN TWO STORIES IN HEIGHT SHALL BE NOT LESS THAN 2x4 IN SIZE. FIRST FLOOR WALLS OF A THREE STORY BUILDING OR CRIPPLE WALL AT A TWO STORY BUILDING SHALL BE NOT LESS THAN 2x6 IN SIZE.
- UNLESS SUPPORTED LATERALLY BY ADEQUATE FRAMING, THE MAXIMUM ALLOWABLE HEIGHT FOR STUDS SHALL BE 10'-0" UNLESS JUSTIFIED WITH AN ANALYSIS.
- STUDS SUPPORTING FLOORS AND CEILINGS OR RAFTERS SHALL BE SPACED NOT MORE THAN 16" O.C. UNLESS NOTED OTHERWISE.
- CRIPPLE WALLS SHALL BE FRAMED OF STUDS NOT LESS IN SIZE THAN THE STUDS ABOVE WITH A MIN. LENGTH OF 14", OR SHALL BE FRAMED OF SOLID BLOCKING.
- IF FINGER JOINTED STUDS ARE USED, THEY MUST BE DOUGLAS FIR STRESS RATED, UNLESS NOTED OTHERWISE.
- PROVIDE FIRE BLOCKING AT 10'-0" INTERVALS AND AT ALL FLOOR AND CEILING LEVELS.
- PROVIDE DOUBLE TRIMMERS AT ALL OPENINGS 8'-0" OR GREATER TYP. U.N.O.

HARDWARE AND FASTENERS IN PRESERVATIVE-TREATED WOOD ARE TO BE APPROVED SILICON BRONZE OR COPPER, STAINLESS STEEL OR HOT-DIPPED ZINC-COATED GALVANIZED STEEL PER 2022 CBC R317.3.1

**SHEAR AND BRACED WALL PANEL NOTES**

- SHEATHING USED IN THE CONSTRUCTION OF SHEAR WALLS TO BE 4" x 8" MINIMUM EXCEPT AT BOUNDARIES OR AT CHANGES IN FRAMING.
- FRAMING MEMBERS OR BLOCKING REQUIRED AT ALL PANEL EDGES IN SHEAR WALLS.
- DO NOT BREAK FACE PLY WHEN NAILING ANY SHEAR WALLS.
- NAILS SPECIFIED FOR SHEAR WALLS:
  - 8d - 2-1/2" LONG, 0.131 SHANK DIAMETER, 9/32" HEAD DIAMETER, 10d - 3" LONG, 0.1483" SHANK DIAMETER, 5/16" HEAD DIAMETER.
  - GUN NAILS TO MATCH ABOVE SPECIFICATIONS. LENGTH OF GUN NAILS FOR USE IN SHEAR WALLS MAY BE AS FOLLOWS:
    - 8d - TO PROVIDE 1-1/2" PENETRATION INTO FRAMING.
    - 10d - TO PROVIDE 1-5/8" PENETRATION INTO FRAMING.
- MOISTURE CONTENT OF LUMBER NOT TO EXCEED 19% AT TIME OF FABRICATION OR CONSTRUCTION.
- ALL FRAMING MEMBERS USED IN THE CONSTRUCTION OF THE SHEAR WALLS MUST BE DOUGLAS FIR. NO HEM FIR OR SPF FRAMING IS TO BE USED UNLESS NOTED ON FRAMING PLANS.
- NOTE THAT HORIZONTAL JOINTS DO NOT REQUIRE BLOCKING FOR BRACED WALL PANEL TYPES A & B PER TABLE 2308.6.3 (I) 2022 CBC.
- BRACED WALL PANEL SOLE PLATES TO BE NAILED TO THE FLOOR FRAMING AND TOP PLATES SHALL BE CONNECTED TO THE FRAMING ABOVE PER TABLE 2304.10.1. SILLS SHALL BE BOLTED TO THE FOUNDATION OR SLAB PER 2022 CBC 2308.6.7.3, 2308.3.1, WHERE POSTS ARE PERPENDICULAR TO BRACED WALL LINES ABOVE. BLOCKING SHALL BE PROVIDED UNDER AND IN LINE WITH THE BRACED WALL PANELS. PROVIDE (3) 16d NAILS @ 16" O.C. (TYP.)

**FOUNDATIONS**

- BEARING SOIL CONDITION IS CLASSIFIED BY MINIMUMS ALLOWED BY CODE OR SOILS REPORT IF AVAILABLE FOR PROJECT NOTED AT THE UPPER RIGHT CORNER OF THIS SHEET.
- FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED NATURAL SOILS OR APPROVED ENGINEERED FILL.
- EXCAVATIONS SHALL BE CLEANED OF ALL DEBRIS. STANDING WATER SHALL BE REMOVED.
- FOUNDATIONS SHALL BE PLACED IN NEATLY CUT EXCAVATIONS.
- SILL BOLTS SHALL EXTEND 7" MINIMUM INTO CONCRETE. (SECTION 2308.3.1, 2308.6.7.3 -CBC 2022)
- HOI DOWN ANCHOR BOLTS SHALL EXTEND INTO CONCRETE THE DISTANCE SPECIFIED BY THE HARDWARE MANUFACTURER.

**CONCRETE AND REINFORCING STEEL**

- CONCRETE CONSTRUCTION SHALL CONFORM TO CBC 2022 AND ACI-318-19(22).
- THE WEIGHT AND MINIMUM 28 DAY STRENGTH OF CONCRETE SHALL BE AS FOLLOWS: SLAB ON GRADE AND FOOTINGS ..... 150 PC FC = 2900 PSI (U.N.O. ON FOUNDATION PLANS)
- CEMENT SHALL CONFORM TO ASTM C150 TYPE 1 OR 2. PROVIDE TYPE 5 CEMENT FOR SOILS CONTAINING SULFATE CONCENTRATIONS OF MORE THAN 0.2%.
- CONCRETE AGGREGATES: NATURAL SANDS AND ROCK AGGREGATES SHALL CONFORM TO ASTM C33.
- REINFORCING SHALL CONFORM TO ASTM A615 GRADE 40.
- REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND INSTALLED ACCORDING TO "MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION" BY WCRSI.
- DIMENSIONS SHOWN FOR LOCATION OF REINFORCING ARE TO THE FACE OF MAIN AND DEMOTE CLEAR COVERAGE. UNLESS OTHERWISE NOTED, CONCRETE SHALL BE AS FOLLOWS:
  - CONCRETE DEPOSITED DIRECTLY AGAINST GROUND (EXCEPT SLABS) ..... 3"
  - CONCRETE EXPOSED TO GROUND BUT PLACED IN FORM ..... 2"
  - SLABS ON GRADE ..... POSITION IN CENTER OF SLAB.
- LAP SPLICE FOR CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH ACI 318 SECTION 12.14. REBAR LAP SPLICES FOR PLANE CONCRETE FOOTING SHALL BE 48 BAR DIAMETERS MINIMUM.
- REMOVE ALL DEBRIS FROM THE FORMS BEFORE PLACING ANY CONCRETE.
- REINFORCING DOWELS, BOLTS, ANCHORS, SL EYES, ETC., TO BE EMBEDDED IN CONCRETE SHALL BE SECURELY POSITIONED BEFORE PLACING CONCRETE.
- MAXIMUM FREE FALL OF CONCRETE SHALL BE 4'-0".
- NO WOOD SPREADERS ARE ALLOWED.
- REFER TO MECHANICAL AND ELECTRICAL DRAWINGS AND FLOOR PLANS FOR LOCATION OF ALL PIPES, CONDUITS, ETC.
- PIPE OR DUCTS EXCEEDING ONE-THIRD THE SLAB OR WALL THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED.
- PIPE MAY PASS THROUGH STRUCTURAL CONCRETE IN SLEEVES, BUT NOT BE EMBEDDED THEREIN.
- THE STRENGTH LEVEL OF THE CONCRETE WILL BE CONSIDERED SATISFACTORY IF THE AVERAGE OF THE STRENGTH TESTS OF A GIVEN AREA OR PANEL EQUALS OR EXCEEDS THE SPECIFIED STRENGTH AT 28 DAYS, WITH NO INDIVIDUAL STRENGTH TEST OF SUCH AREA OR PANEL LESS THAN 5% BELOW THAT SPECIFIED. CONCRETE THAT DOES NOT MEET OR EXCEED THESE CRITERIA WILL BE REMOVED BY THE CONTRACTOR AND REPLACED WITH CONCRETE WHICH CONFORMS TO THESE CRITERIA.
- PROVIDE 3/4" CHAMBERS AT ALL EXPOSED CORNERS.
- REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, CLIPS OR GROUNDS REQUIRED TO BE CAST IN CONCRETE, AND FOR LOCATIONS OF FLOOR FINISHES AND SLAB DEPRESSIONS.
- CONCRETE SHALL NOT BE ALLOWED TO CURE IN TEMPERATURES LESS THAN 40 DEGREES FAHRENHEIT FOR THE FIRST THREE DAYS.
- CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR COLD WEATHER CONCRETING WHERE REQUIRED.
- NO. 5 OR LARGER REINFORCING BARS SHALL NOT BE RE-BENT WITHOUT APPROVAL BY THE STRUCTURAL ENGINEER. DOWELS SHALL HAVE A MINIMUM PROJECTION EQUAL TO STANDARD LAP SPLICE UNLESS OTHERWISE SHOWN.
- ALL CONTINUOUS BARS OR DOWELS SHALL LAP 48 DIAMETERS.
- WELDING OF REBAR IS NOT PERMITTED UNLESS PROCEDURE APPROVED BY THE STRUCTURAL ENGINEER.

**WOOD**

- ALL STRUCTURAL WOOD SHALL CONFORM WITH THE FOLLOWING SPECIFICATIONS.
  - DOUGLAS FIR LARCH WEST COAST LUMBER INSPECTION BUREAU REDWOOD CALIFORNIA REDWOOD ASSOCIATION GRADING RULES.
  - GLUED LAMINATED BEAMS GLUED LAMINATED FABRICATION SHALL BE PERFORMED IN AN APPROVED FABRICATOR'S SHOP IN ACCORDANCE WITH 2022 CBC 170.2 STANDARD SPECIFICATIONS FOR STRUCTURAL GLUED LAMINATED TIMBER, ANSI/AITC A190-102. GLUE-LAM BEAMS SHALL BE INSPECTED AND A CERTIFICATE PROVIDED TO FIELD INSPECTOR AT THE TIME OF FRAMING INSPECTION.
  - OSB PLYWOOD U.S. PRODUCT STANDARDS P.S. 2-92 FOR WOOD BASED STRUCTURAL USE PANELS.
  - MICROLLAM LVL BEAMS NATIONAL EVALUATION REPORT NO. NER-126 BEAM SHALL BE 1 3/4" STANDARD WIDTH.
  - PARALLAM PSL BEAMS NATIONAL EVALUATION REPORT NO. NER-292.
  - MINIMUM GRADES SHALL BE:
    - HORIZONTAL FRAMING 2x FRAMING: #2 D.F.L.
    - 4x FRAMING: #2 D.F.L.
    - 6x AND LARGER #1 D.F.L.
  - WALL FRAMING 2x4 FRAMING: STANDARD OR BETTER D.F.L. 2x6 AND LARGER FRAMING: #2 D.F.L.
  - GLUED LAMINATED MEMBERS COMBINATION 24F-V4 3000' RADIUS
  - STRUCTURAL PLYWOOD APA RATED SHEATHING
  - MICROLLAM LVL BEAMS DOUGLAS FIR 1.9E
  - PARALLAM PSL BEAMS DOUGLAS FIR 2.0E
- BEARING AND SHEAR WALLS HAVE DOUBLE TOP PLATES, LAPPED AT WALL AND PROVIDED TO THE CONTRACTOR BY THE TRUSS MANUFACTURER.
- BEARING AND SHEAR WALLS SHALL BE 48 BAR DIAMETERS MINIMUM WITH LAPPING 48" MINIMUM WITH (24) 16d NAILS IN LAP.
- PROVIDE SOLID BLOCKING BETWEEN RAFTERS OR JOISTS AT ALL SUPPORTS.
- HOLES FOR BOLTS IN WOOD SHALL BE BORED OF THE SAME NOMINAL DIAMETER AS THE BOLT + 1/16".
- LAG SCREWS AND WOOD SCREWS SHALL BE SCREWED AND NOT DRIVEN INTO PLACE.
- ALL BOLTS SHALL BE PROVIDED WITH METAL WASHERS UNDER HEADS AND NUTS WHICH BEAR ON WOOD. APPLIES ALSO TO INSERTED EXPANDING FASTENERS, RED HEADS, ETC.
- WASHERS FOR WOOD TO WOOD CONNECTIONS TO BE AS FOLLOWS:
 

BOLT DIAMETER	M.I. WASHER	STEEL WASHER
1/2" Ø	2-1/2" x 1/4"	2-1/2" x 1/2"
5/8" Ø	2-3/4" x 5/16"	2-3/4" x 1/2"
3/4" Ø	3" x 7/8"	3" x 3/4" x 5/16"
7/8" Ø	3-1/2" x 7/16"	3-1/2" x 1/2" x 3/8"
1" Ø	4" x 1/2"	3-3/4" x 3/4" x 3/8"
- ALL BOLT AND LAG SCREWS SHALL BE TIGHTENED AT THE TIME OF INSTALLATION AND RE-TIGHTENED BEFORE CLOSING IN OR AT COMPLETION OF JOB.
- INSTALL ALL STRUCTURAL PLYWOOD ON ROOF AND FLOORS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS.
- ALL JOIST HANGERS, STRAPS, HOLDDOWNS, CLIPS, ANCHORS... TO BE SIMPSON STRONG-TIE OR EQUAL.
- ALL WOOD STRUCTURAL MEMBERS, WHEN DESIGNED TO BE EXPOSED IN OUTDOOR APPLICATIONS, SHALL BE WOOD OF NATURAL RESISTANCE TO DECAY OR TREATED WOOD, 2022 CBC 2304.12.2.3.

**WOOD CONT'D**

- WOOD IN PERMANENT CONTACT WITH CONCRETE TO BE PRESSURE TREATED LUMBER PER CBC 2304.12.1.
- MOISTURE CONTENT OF LUMBER NOT TO EXCEED 19% AT TIME OF FABRICATION OR CONSTRUCTION.
- FIELD CUT ENDS, NOTCHES, AND DRILLED HOLES SHALL BE TREATED IN THE FIELD IN ACCORDANCE WITH AWPAMA 4, [R317.1.1]

**MANUFACTURED TRUSS DESIGN NOTES**

- TRUSS MANUFACTURER TO PROVIDE SHOP DRAWINGS TO THE PROJECT ENGINEER AND BUILDING DEPARTMENT FOR APPROVAL PRIOR TO FABRICATION OF THE TRUSSES.
- TRUSSES SHALL NOT BE MODIFIED IN THE FIELD WITHOUT AN ENGINEERED TRUSS REPAIR DRAWING PROVIDED BY EITHER THE TRUSS MANUFACTURER'S ENGINEER OR ENGINEER OF RECORD.
- TRUSS SHOP DRAWINGS SHALL MEET THE REQUIREMENTS OF SECTION 2303.4 OF THE 2022 CBC.
- TRUSS SPACING AND LOADING TO BE AS SPECIFIED ON THE ROOF FRAMING PLAN, SECTION 1607, AND TABLE 1607.1 OF THE 2022 CBC.
- GABLE END TRUSSES SHALL BE DESIGNED FOR THE EFFECTS OF OUT-OF-PLANE LOADS DUE TO WIND. AT A MINIMUM, NON-STRUCTURAL GABLE END TRUSSES SHALL HAVE 2x4 GABLE STUDS @ 16" O.C. AS NOTED BELOW.
- STRUCTURAL GABLE END TRUSSES SHALL BE DESIGNED AS NOTED ABOVE WITH THE DIAGONAL WEBS BRACED FOR OUT-OF-PLANE WIND LOADING.
- SHOP DRAWING, PLACEMENT PLANS, BRACING, AND ERECTION DETAIL TO BE PROVIDED TO THE CONTRACTOR BY THE TRUSS MANUFACTURER.
- ALL TRUSS MEMBERS TO BE 3x4 MINIMUM. ALL LUMBER TO BE DOUGLAS FIR LARCH, GRADE TO BE DETERMINED BY THE TRUSS MANUFACTURER. HEM FIR IS NOT TO BE USED IN THE FABRICATION OF THE TRUSSES UNLESS APPROVED BY THE PROJECT ENGINEER PRIOR TO FABRICATION.
- ALL HIP TRUSS SYSTEMS TO HAVE A MINIMUM 8'-0" SET BACK FROM EXTERIOR END WALLS FOR SLOPES 4/12 AND LESS. SLOPES GREATER THAN 4/12 MAY HAVE A 6'-0" SETBACK.
- ALL TRUSS JOIST TH FLOOR AND ROOF FRAMING MEMBERS TO COMPLY WITH ICC ESR-1153.

2022 CBC AutoCAD

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 Structural Engineers

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 FOLSOM, CA 95630

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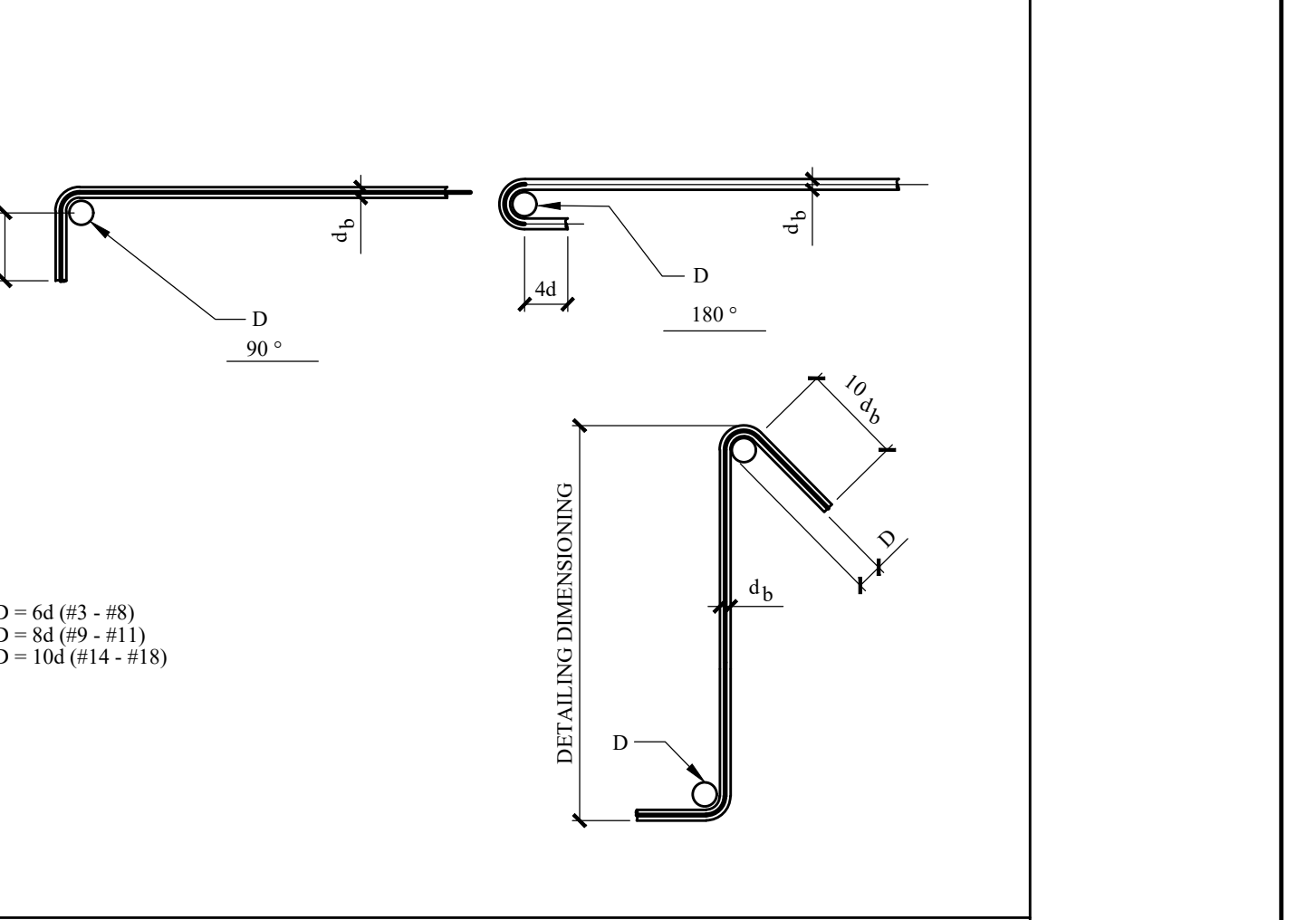
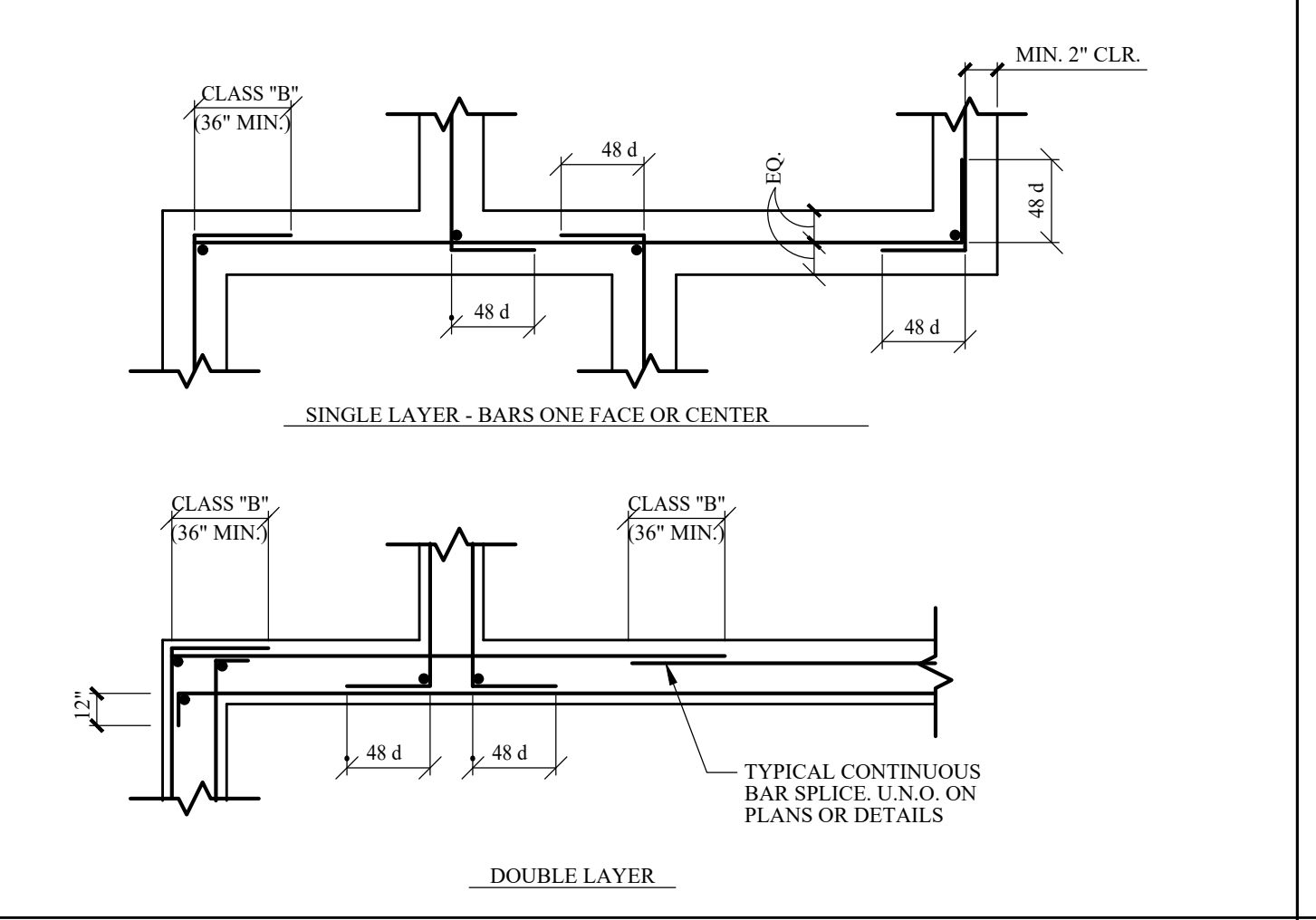
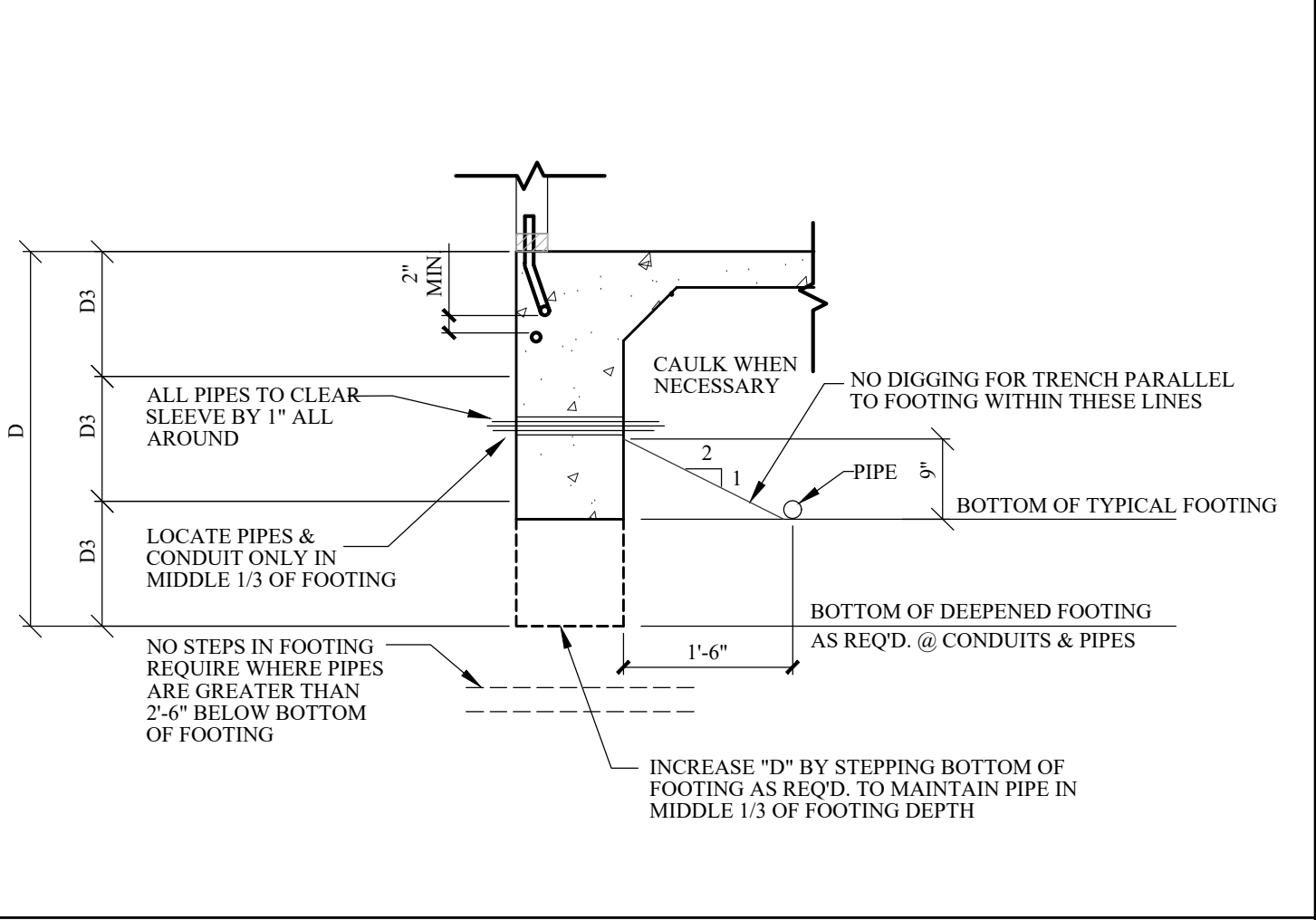
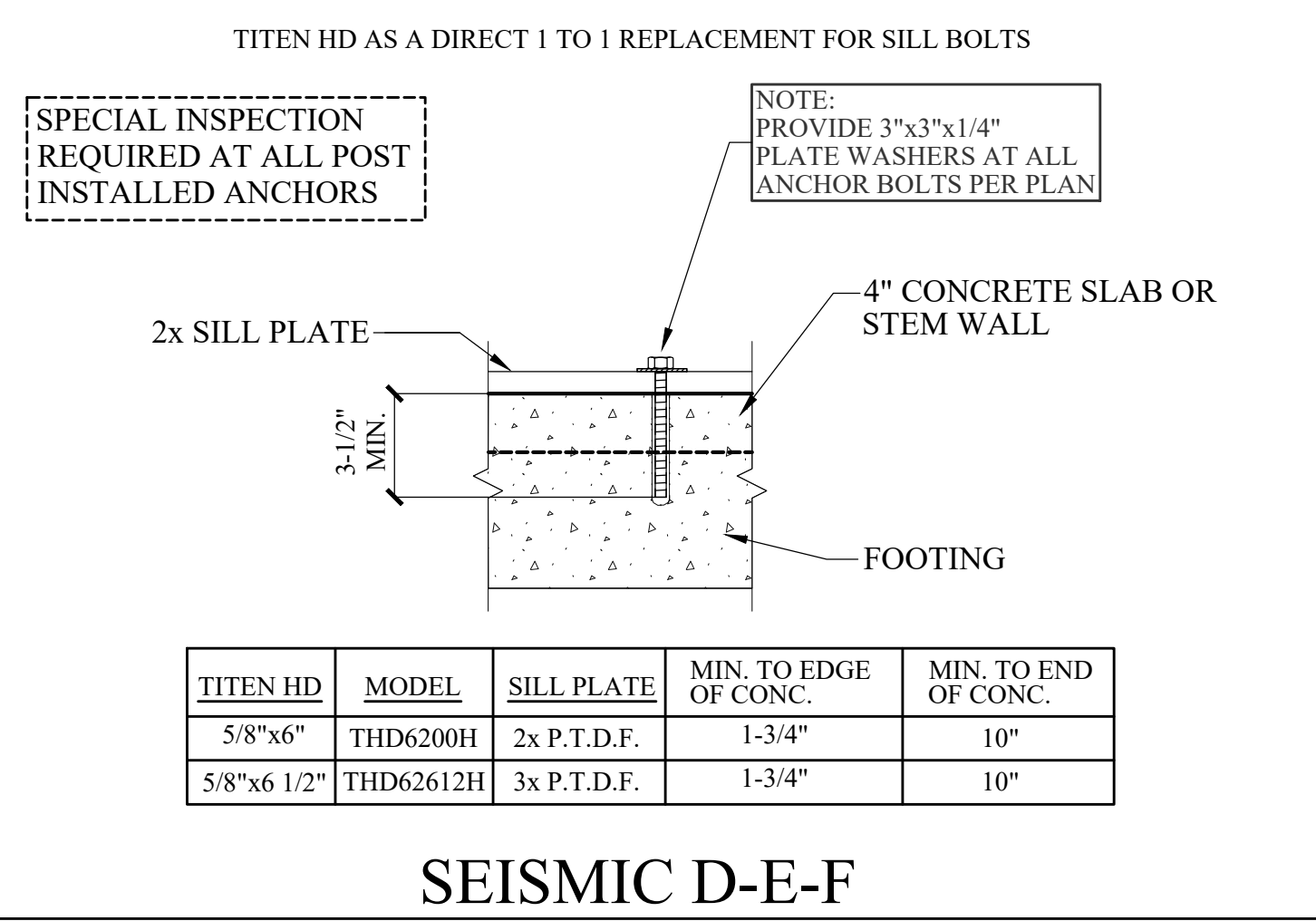
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 ENGINEER: NS  
 DRAWN BY: LT  
 CHECKED BY: BK  
 W  
 ISSUE DATE: 7/16/2024

REVISIONS:

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9/10/2024  
 SHEET  
**SC-1**  
 COVER SHEET  
 JOB NO. 24131

REGISTERED PROFESSIONAL ENGINEER  
 NORMAN J. SCHWELB  
 No. 2567  
 Exp. 12-31-25  
 STRUCTURAL  
 STATE OF CALIFORNIA

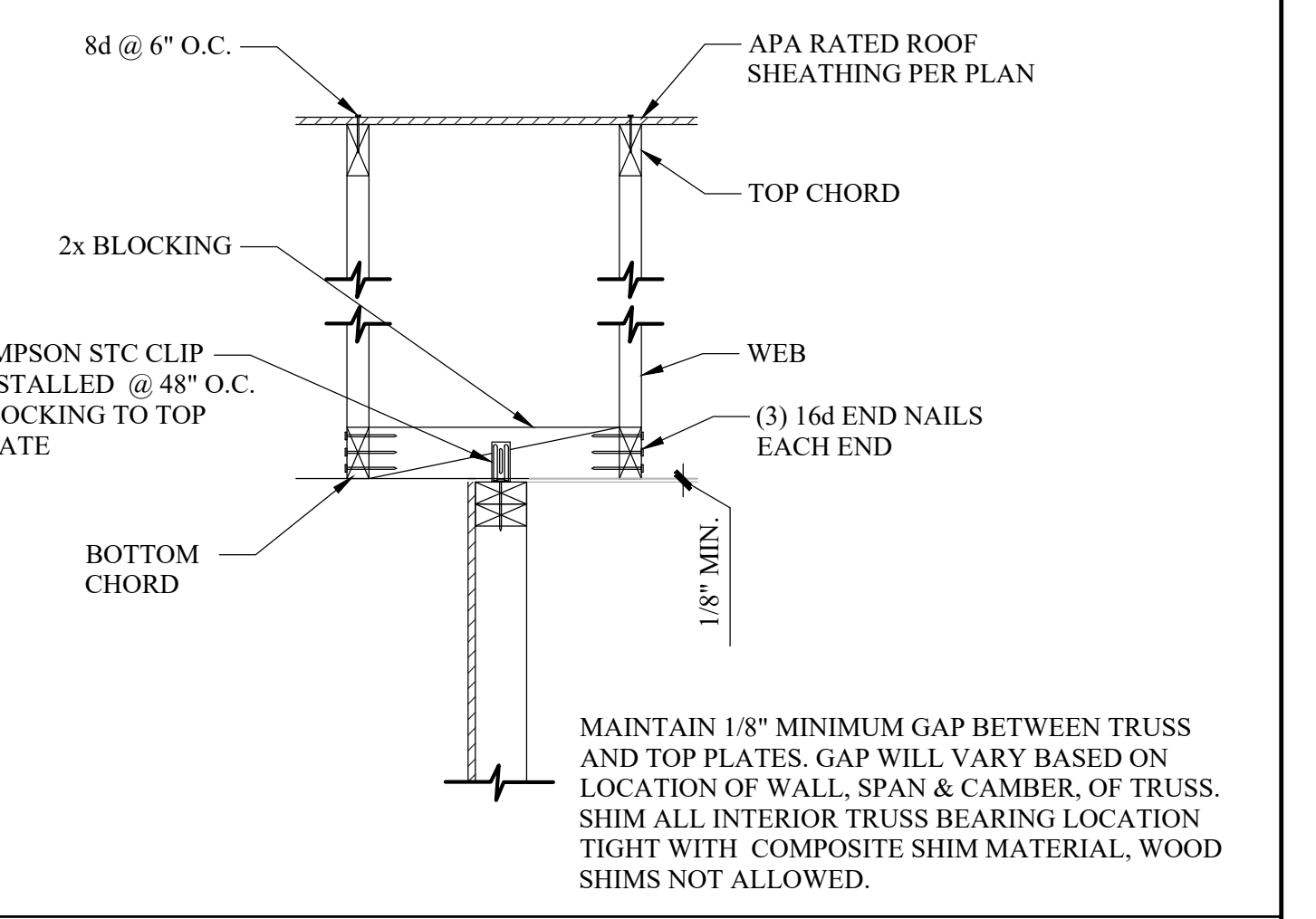
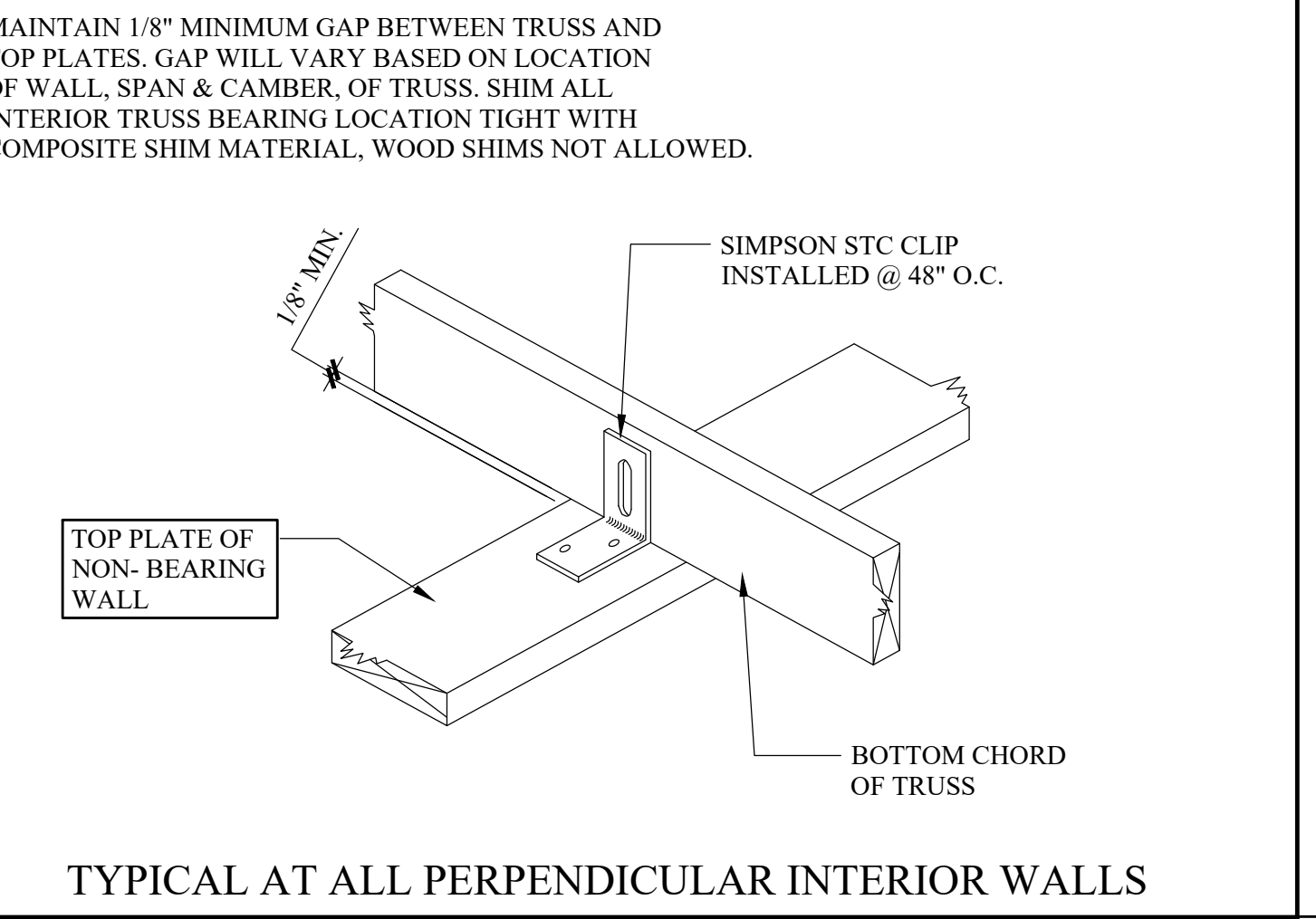
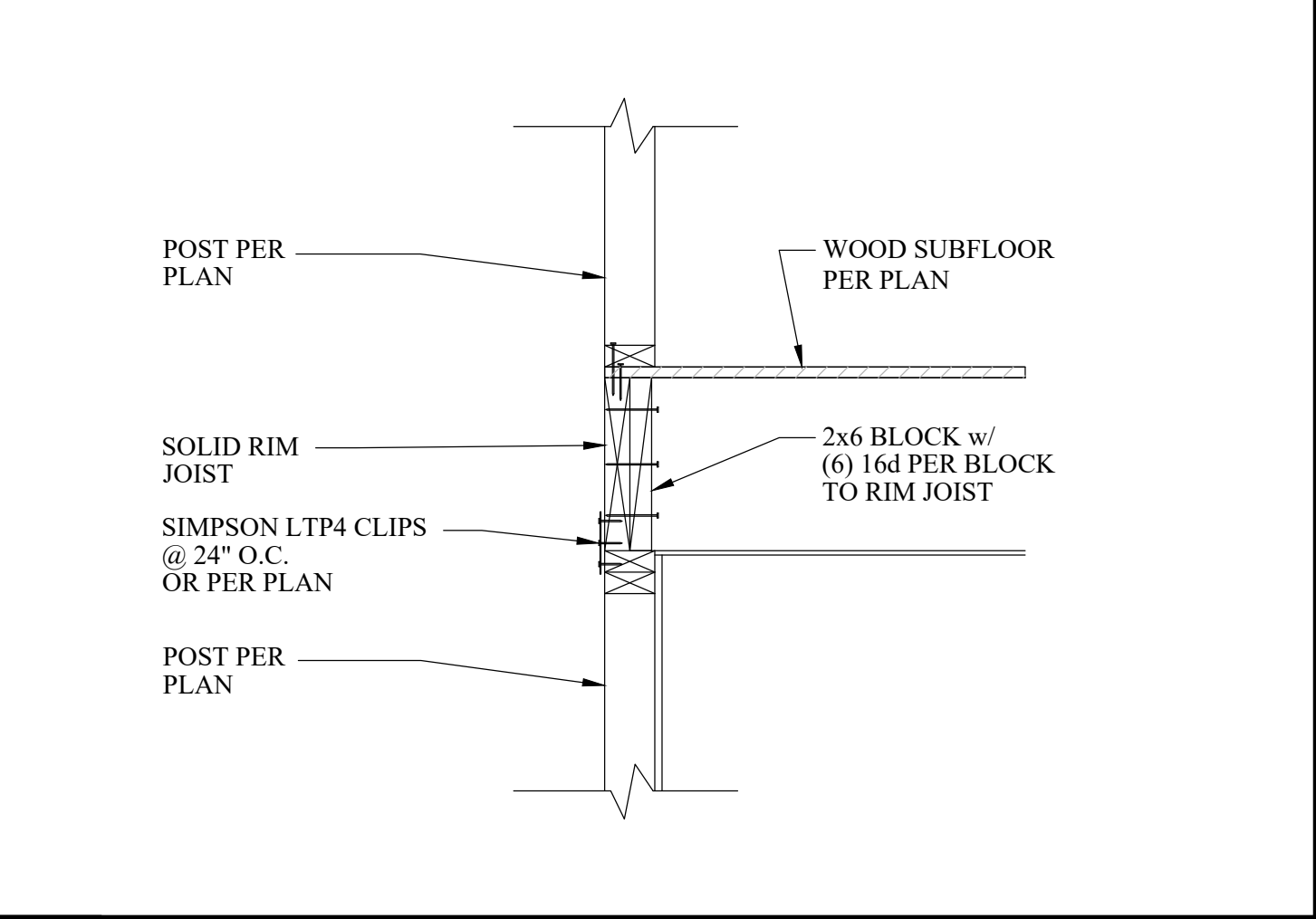
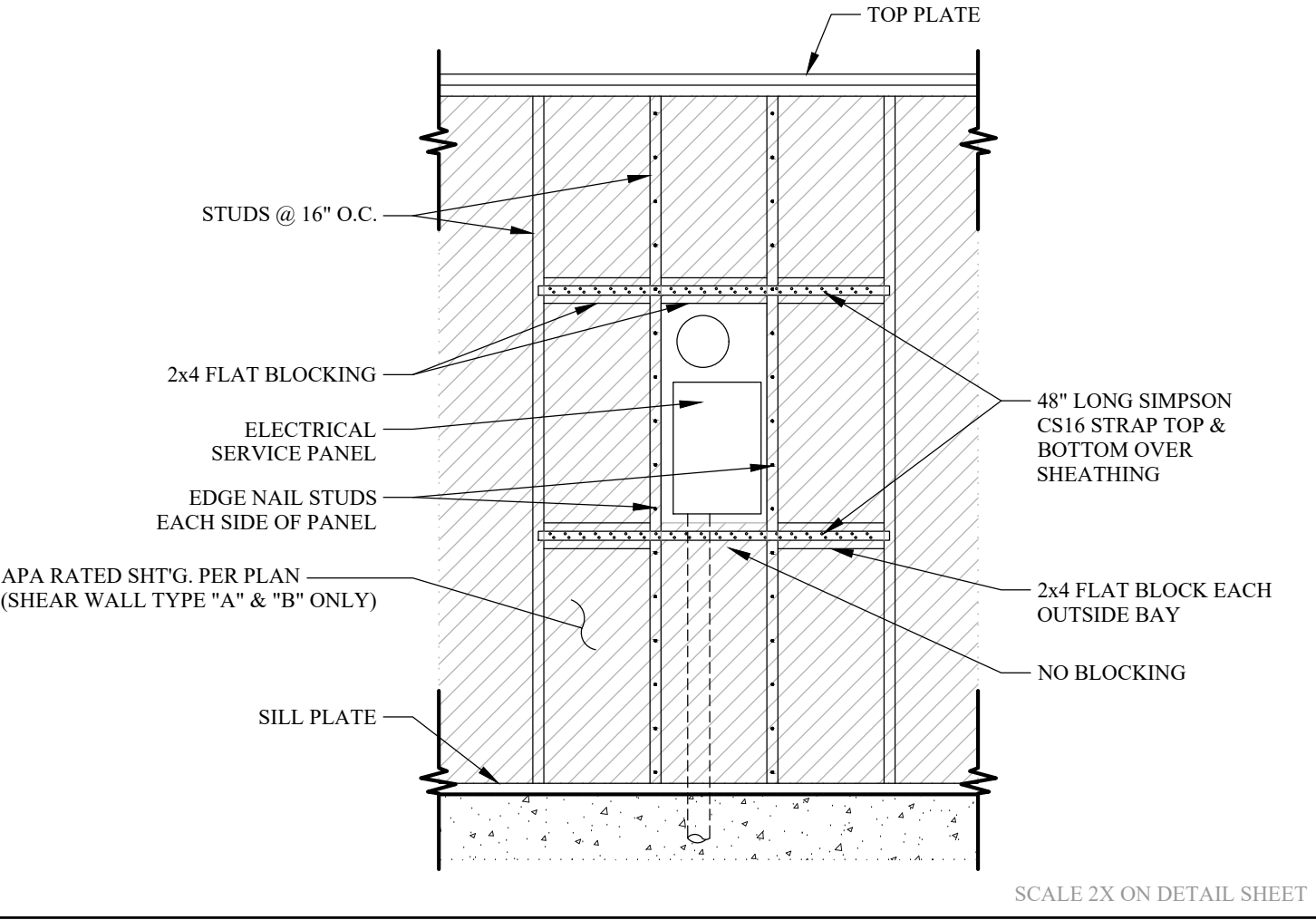


**SEISMIC D-E-F ANCHOR BOLTS TITEN HD**

**PIPES AND CONDUITS AT FOUNDATION**

**REINFORCING BAR SPLICES**

**STIRRUP AND TIE HOOKS**

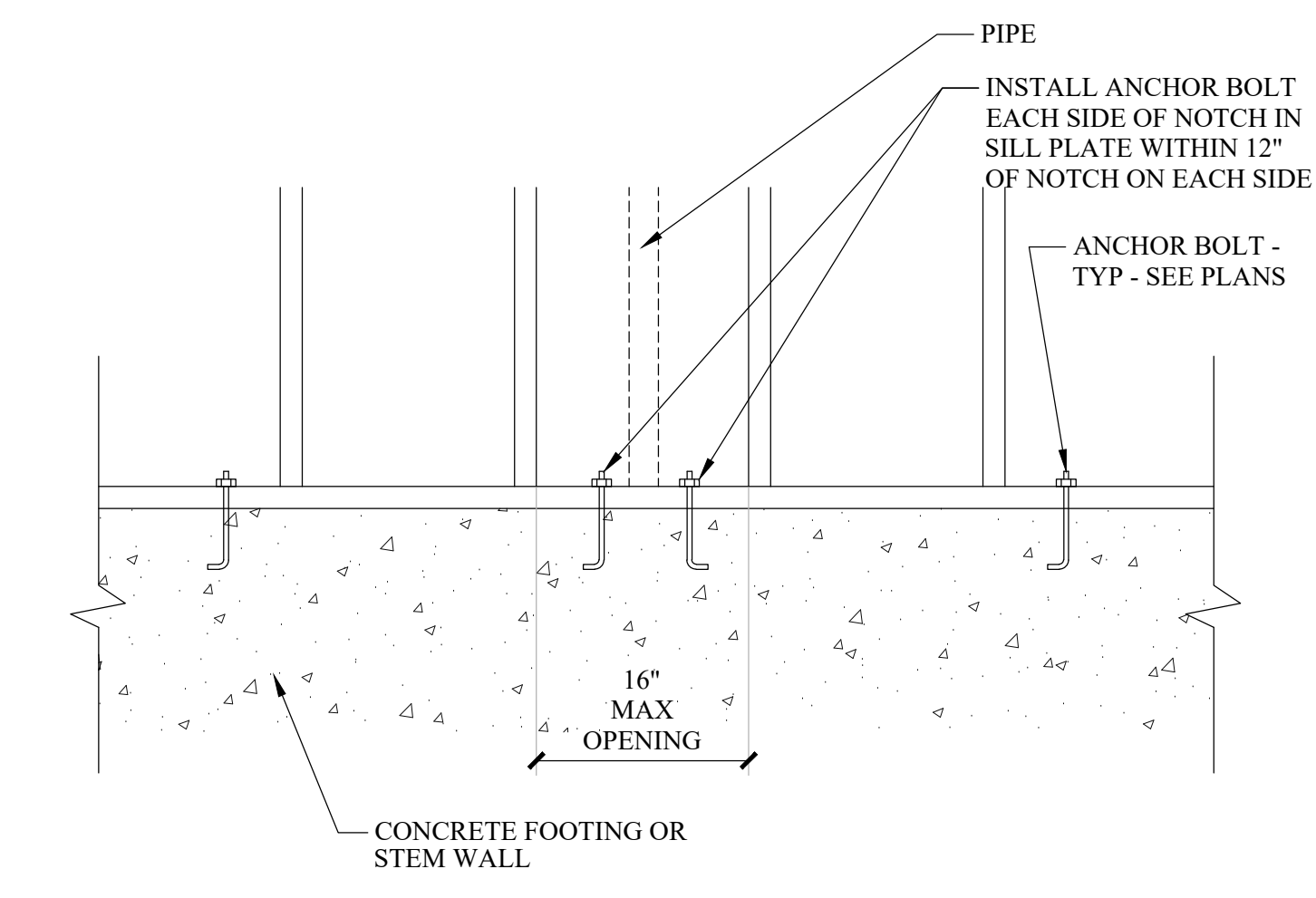


**SERVICE PANEL AT SHEAR WALL**

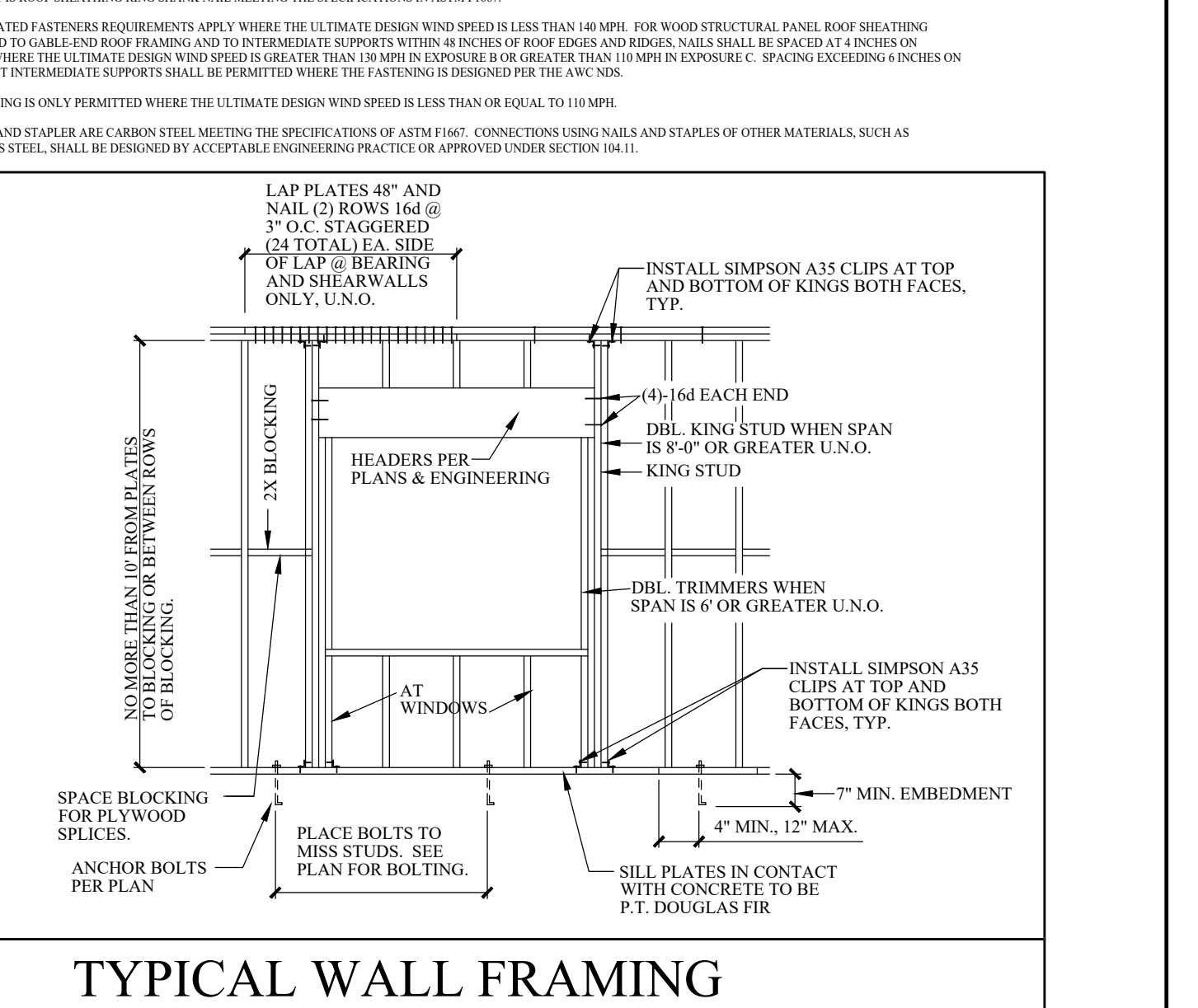
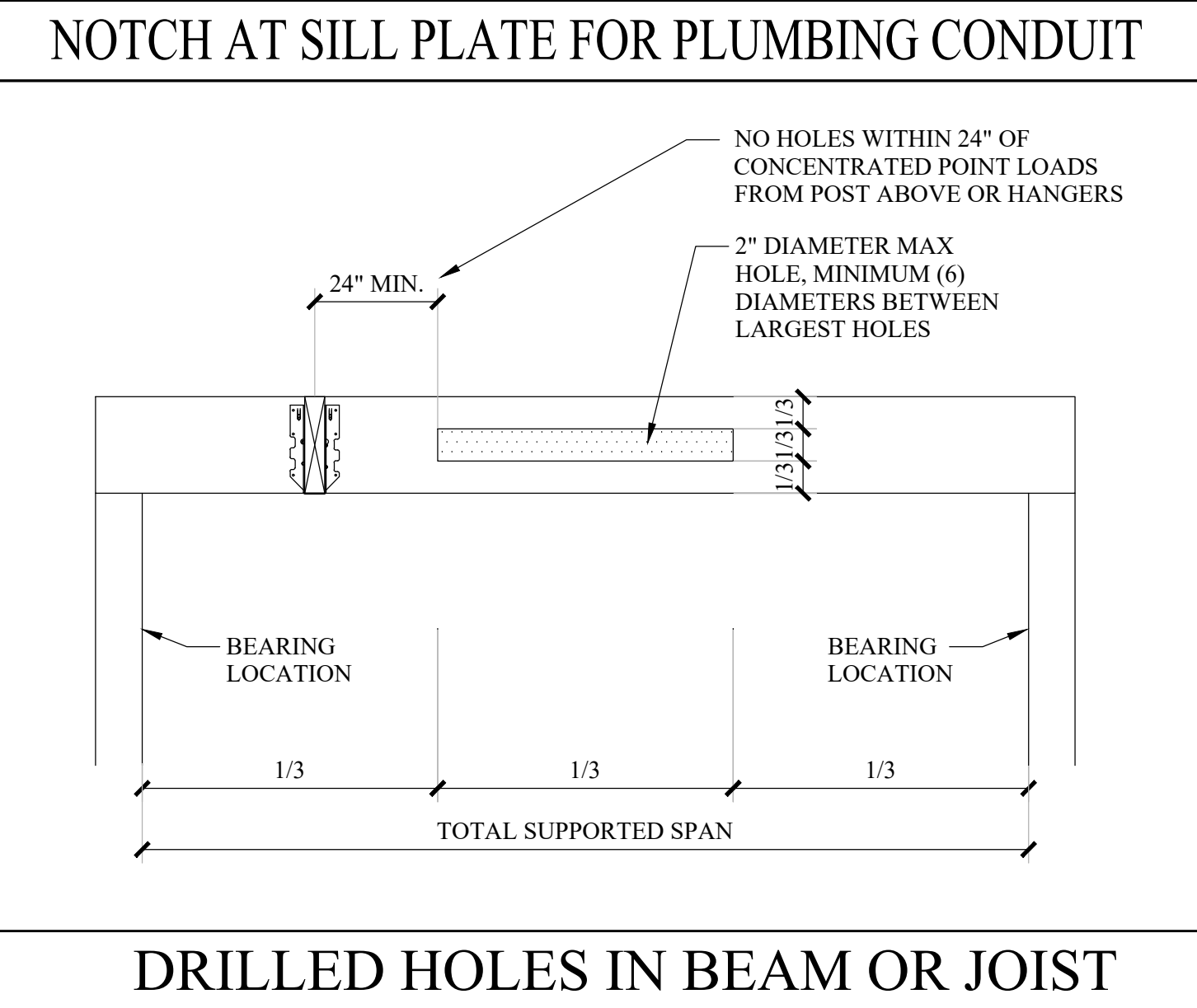
**291 SQUASH BLOCK AT POST ABOVE**

**SIMPSON STC CLIP**

**NON BEARING WALL PARALLEL TO TRUSSES**



2022 CBC TABLE 2304.10.2 FASTENING SCHEDULE			2022 CBC TABLE 2304.10.2 FASTENING SCHEDULE			2022 CBC TABLE 2304.10.2 FASTENING SCHEDULE		
NOTE: THIS FASTENING SCHEDULE TO BE USED UNLESS NOTED OTHERWISE ON PLAN AND ENGINEERING SHEET(S).			NOTE: THIS FASTENING SCHEDULE TO BE USED UNLESS NOTED OTHERWISE ON PLAN AND ENGINEERING SHEET(S).			NOTE: THIS FASTENING SCHEDULE TO BE USED UNLESS NOTED OTHERWISE ON PLAN AND ENGINEERING SHEET(S).		
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
<b>ROOF</b>			<b>WALL</b>			<b>WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING</b>		
1. BLOCKING BETWEEN CEILING TRUSS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL	18. 1" BRACE TO EACH STUD AND PLATE	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	35. 3/4" AND LESS	40 COMMON (2 1/2" x 1 1/2") OR 40 COMMON (2 1/2" x 1 1/2")	EDGES (INCHES) INTERMEDIATE SUPPORTS (INCHES)
BLOCKING BETWEEN RAFTERS OR TRUSSES NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES	EACH END, TOENAIL	19. 1" x 6" SHEATHING TO EACH BEARING	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	36. 3/8" - 1"	40 COMMON (2 1/2" x 1 1/2") OR 40 COMMON (2 1/2" x 1 1/2")	6 12
2. CEILING JOISTS TO TOP PLATES	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	EACH JOIST, TOENAIL	20. 1" x 6" AND WIDER SHEATHING TO EACH BEARING	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	37. 1/4" - 1/4"	40 COMMON (2 1/2" x 1 1/2") OR 40 COMMON (2 1/2" x 1 1/2")	6 12
3. CEILING JOISTS NOT ATTACHED TO PARALLEL RAFTER, LAP OVER PARTITION (NO TRUSS) SEE SECTION 2308.3.1, TABLE 2308.3.1	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	21. JOIST TO SILL, TOP PLATE, OR GRIEDER	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	TOENAIL	<b>PANEL SIDING TO FRAMING</b>		
4. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT) (SEE SECTION 2308.3.1, TABLE 2308.3.1)	PER TABLE 2308.3.1	FACE NAIL	22. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	4" O.C., TOENAIL	38. 1/2" OR LESS	40 CORROSION-RESISTANT SIDING (1 1/2" x 6" OR 1 1/2" x 8") OR 40 CORROSION-RESISTANT SIDING (2" x 6" OR 2" x 8")	6 12
5. COLLAR TIE TO RAFTER	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	23. 2" SUBFLOOR TO JOIST OR GRIEDER	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	39. 5/8"	40 CORROSION-RESISTANT SIDING (2 1/2" x 6" OR 2 1/2" x 8") OR 40 CORROSION-RESISTANT SIDING (2 1/2" x 6" OR 2 1/2" x 8")	6 12
6. RAFTER OR ROOF TRUSS TO TOP PLATE (SEE SECTION 2308.7.5, TABLE 2308.7.5)	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	TOENAIL	24. 2" PLANKS, PLANK & BEAM, FLOOR & ROOF	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	<b>INTERIOR PANELING</b>		
7. ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS, OR ROOF RAFTER TO 2-INCH RIDGE BEAM	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	END NAIL	25. 2" PLANKS, PLANK & BEAM, FLOOR & ROOF	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	40. 1/4"	40 CASING (1 1/2" x 6") OR 40 FINISH (1 1/2" x 6")	6 12
8. STUD TO STUD (NOT BRACED WALL PANELS)	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	3" O.C. FACE NAIL	26. BUILT-UP GIRDERS AND BEAMS, 2 LUMBER LAYERS	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	41. 3/8"	40 CORROSION-RESISTANT SIDING (1 1/2" x 6" OR 1 1/2" x 8") OR 40 FINISH (1 1/2" x 6")	6 12
9. STUD TO STUD, AND BRITING STUDS AT INTERSECTING WALL CORNERS AT BRACED WALL PANELS	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	16" O.C. FACE NAIL	27. LEADER STRIP SUPPORTING JOISTS OR RAFTERS	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	ENDS AND AT EACH SPICE, FACE NAIL	<b>FOR 1/2" INCH - 24 mm</b>		
10. CONTINUOUS HEADER TO STUD	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL	28. JOIST TO BAND JOIST OR RIM JOIST	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	END NAIL	28. 1/2" OR LESS	40 CORROSION-RESISTANT SIDING (1 1/2" x 6" OR 1 1/2" x 8") OR 40 CORROSION-RESISTANT SIDING (2" x 6" OR 2" x 8")	6 12
11. TOP PLATE TO TOP PLATE	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL	29. BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL	<b>4. SPACING SHALL BE 6 INCHES ON CENTER ON THE EDGES AND 2 INCHES ON CENTER AT INTERMEDIATE SUPPORTS FOR NON STRUCTURAL APPLICATIONS. PANEL SUPPORTS AT 16 INCHES (40 INCHES SPACING) STRENGTH AXIS IN THE LOW DIRECTION OF THE PANEL, UNLESS OTHERWISE NOTED.</b>		
12. TOP PLATE TO TOP PLATE AT END JOINTS	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	EACH END OF END JOINT, FACE NAIL	<b>WOOD STRUCTURAL PANELS (WSP), SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING</b>			<b>5. WHERE THE RAFTER FASTENS 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 NAILS IN THE AFTER SHALL BE PERMITTED TO BE REDUCED BY ONE NAIL.</b>		
13. BOTTOM PLATE TO RIM JOIST, RIM JOIST BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL	30. 3/8" - 1/2"	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	<b>6. TABULATED FASTENERS REQUIREMENTS APPLY WHERE THE ULTIMATE DESIGN WIND SPEED IS LESS THAN 140 MPH. FOR WOOD STRUCTURAL PANEL ROOF SHEATHING ATTACHED TO GABLE-END ROOF FRAMING AND TO INTERMEDIATE SUPPORTS WITHIN ANCHORS OF ROOF EDGES AND RIDGES, NAILS SHALL BE SPACED AT 4 INCHES ON CENTER WHERE THE ULTIMATE DESIGN WIND SPEED IS GREATER THAN 140 MPH. FOR GREATER THAN 140 MPH IN EXPOSURE B, SPACING EXCEEDING 4 INCHES ON CENTER AT INTERMEDIATE SUPPORTS SHALL BE PERMITTED WHERE THE FASTENING IS DESIGNED PER THE A.W.C. NDS.</b>		
14. BOTTOM PLATE TO RIM JOIST, RIM JOIST BAND JOIST OR BLOCKING AT BRACED WALL PANELS	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL	31. 1/2" - 3/4"	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	<b>7. FASTENING ONLY PERMITTED WHERE THE ULTIMATE DESIGN WIND SPEED IS LESS THAN OR EQUAL TO 110 MPH.</b>		
15. BOTTOM PLATE TO RIM JOIST, RIM JOIST BAND JOIST OR BLOCKING AT BRACED WALL PANELS	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	16" O.C. FACE NAIL	32. 3/8" - 1/4"	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	<b>8. NAILS AND STAPLES ARE CARBON STEEL, MEETING THE SPECIFICATIONS OF ASTM A667. CONNECTIONS USING NAILS AND STAPLES OF OTHER MATERIALS, SUCH AS STAINLESS STEEL, SHALL BE DESIGNED BY AN ACCEPTABLE ENGINEERING PRACTICE OR APPROVED UNDER SECTION 164.1.</b>		
16. STUD TO TOP OR BOTTOM PLATE	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	END NAIL	<b>OTHER EXTERIOR WALL SHEATHING</b>			<b>9. LAP PLATES 8" AND NAIL (2) ROWS 16d @ 3" O.C. STAGGERED (24 TOTAL) EA. SIDE OF LAP @ BEARING AND SHEAR WALLS ONLY, U.S.A. ONLY.</b>		
17. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 1" x 11 1/2" NAILS OR (3) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	33. 1/2" FIBERBOARD SHEATHING <sup>3</sup>	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	<b>10. NO MORE THAN ONE ROW OF BLOCKING</b>		
			34. 25/32" FIBERBOARD SHEATHING <sup>3</sup>	(1) 16 COMMON (2 1/2" x 1 1/2") OR (2) 160 BOX (2" x 12 1/2") OR (3) 1" x 11 1/2" NAILS OR (4) 1/4" GAGE STAPLES, 7/16" CROWN	FACE NAIL	<b>11. INSTALL SIMPSON A35 CLIPS AT TOP AND BOTTOM OF KINGS BOTH FACES, TYP.</b>		



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PROJ. MGR.: BK  
ENGINEER: NS  
DRAWN BY: LT  
CHECKED BY: BK  
W

ISSUE DATE: 7/16/2024

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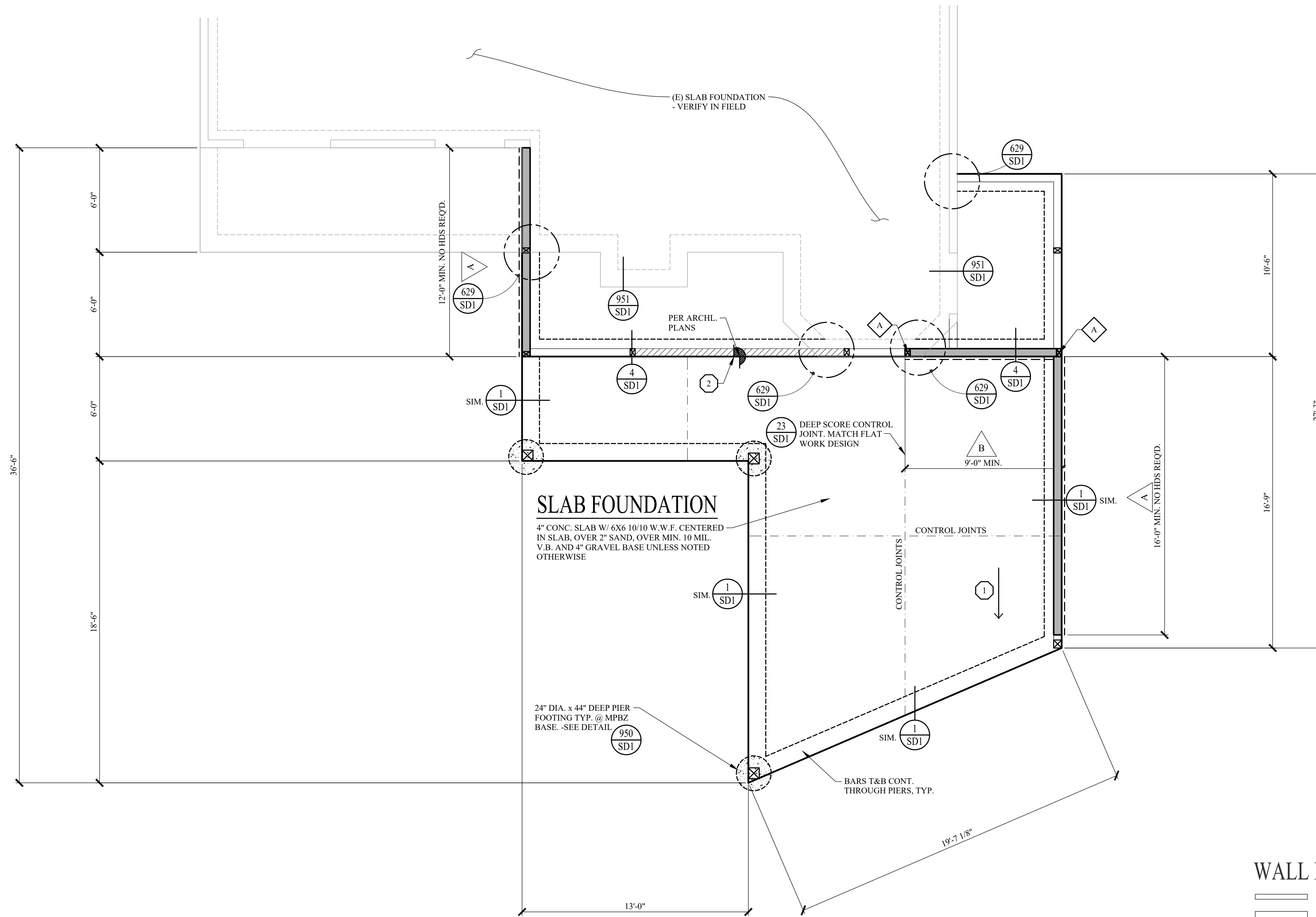
9/10/2024  
SHEET  
**SC-1a**  
FASTENING SCHEDULE  
JOB NO. 24131

REGISTERED PROFESSIONAL ENGINEER  
NORMAN J SCHEEL  
No. 2567  
Exp. 12-31-25  
Folsom  
STATE OF CALIFORNIA

Footings Specifications					
Footings Width	=	12 in	Allowable Soil Bearing Pressure	=	1500 psf
Footings Depth	=	12 in	Maximum allowable load on footing	=	1500 plf
Minimum # Bars	=	1 Top and Bottom	Maximum point load on continuous footing	=	5242 #
Size of Bars	=	4	Area of steel used for calculations	=	0.20 in <sup>2</sup>

Pad Footing Specifications					
Footings #	Size	Thickness	Depth	Rebar	Maximum Load (lb)



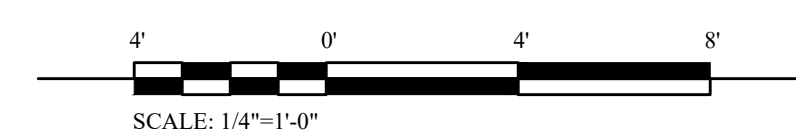
**WALL LEGEND:**

- 2X4 WALL STUDS @ 16" O.C.
- 2X6 WALL STUDS @ 16" O.C.
- 2X4 SHEARWALL STUDS @ 16" O.C.
- 2X6 SHEARWALL STUDS @ 16" O.C.

**LEGEND**

- PAD FOOTING SPECIFICATIONS
- SHEAR WALL LINE GRIDS

PROVIDE DRAINS TO ELIMINATE ALL STANDING WATER AGAINST HOUSE. SLOPE FLATWORK AWAY FROM STRUCTURE AT 1/4" PER FT. DIRECT TO U.G. DRAIN PIPING AND APPROVED OUT FALL. SEE LANDSCAPE AND GRADING PLANS.



**FOUNDATION PLAN**  
SCALE: 1/4" = 1'-0"

SEE LANDSCAPING SPECIFICATIONS FOR ALL FLATWORK LOCATIONS AND DESIGN.

GENERAL SPECIFICATIONS	
FOOTING DEPTH	= 12"
FOOTING WIDTH	= 12"
STEM WALL TYPICAL	= 8"
SOIL BEARING PRESSURE	= 1500 PSF
FOUNDATION DESIGNED PER 2022 CBC MINIMUMS OR SOILS REPORT PROVIDED BY:	
2022 CBC Code Minimum	
REPORT #	
DATE	
2500 PSI DESKIN MIX MINIMUM. USE (1) #4 GRADE 40 BARS TOP AND BOTTOM IN ALL CONTINUOUS FOOTINGS AND AS NOTED AT SPECIAL LOADS ON FOUNDATION PLAN.	
ALL DEPTH DIMENSIONS ARE INTO UNDISTURBED SOIL BELOW ADJACENT GRADE AND / OR ANY FILL. MAINTAIN MIN. 8" BETWEEN WOOD AND EARTH AROUND BUILDING. OBSERVATION OF SITE PREPARATION, GRADING, PLACEMENT AND COMPACTION OF FILL OPERATIONS BY THE GEOTECHNICAL ENGINEER. PROVIDE 5/8" DIA. x 12" ANCHOR BOLTS AND 3"x3"x1/4" PLATE WASHERS AT PRESSURE TREATED SILL PLATE. MIN. (2) BOLTS PER SILL AND (1) BOLT WITHIN 4" MIN., 12" MAX. OF END OF SILL. MIN. (7) BOLT DIA. END DISTANCE. MAX. 6" O.C. BOLT SPACING. MIN 7" INTO CONC. AND PER SHEAR WALL SPECIFICATIONS.	
ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 40. PAD FOOTINGS GREATER THAN 24" SQ. REQUIRE #4 BARS @ 8" O.C. EACH WAY 3" CLEAR FROM THE BOTTOM OF THE FOOTING.	
INSTALL 2x 4x HOLDOWN POST AT ENDS OF ALL SHEAR WALLS, PER PLAN. SEE TABLE AND CALCULATIONS FOR H.D. STUD SIZE REQUIRED. DENOTES STRUCTURAL DETAILS ON SHEET(S) SD-1 ..... ETC.	
FOR ADDITIONAL SPECIFICATIONS AND TYPICAL DETAILS SEE SHEET SC-1.	
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL OF THE NOTES AND TYPICAL DETAILS ON SHEET SC-1 SO THAT THEY MAY BE INCORPORATED INTO THE CONSTRUCTION OF THIS STRUCTURE.	

**SPECIFICATIONS**

- 1 4" CONC. SLAB ON GRAVEL FILL. SLOPE SLAB 1/4" PER FOOT AWAY FROM HOUSE.
  - 2 PROVIDE 2x (4 OR 6) P.T.D.F.L. SLEEPER EMBEDDED INTO CONCRETE w/ (2) 20d @ 24" O.C. & AT EA. END. (TYP.) AT ALL EXTERIOR DOORS W/ THRESHOLDS.
- NOTE:  
PROVIDE 3"x3"x1/4" STEEL PLATE WASHERS AT ALL ANCHOR BOLTS - SEE DETAIL ON SHEET SC-1

**SHEAR WALL SCHEDULE** 2022 CBC

TYPE	SHEATHING 7 APA RATED	NAILING	SILL PLATE 8 AND A.B. 2	SOLE PLATE 9 CONNECT TO RIM	SEISMIC CAPACITY	WIND CAPACITY
1	3/8" SHEATHING ONE FACE	84 @ 6" O.C. EDGE AND 12" @ 48" O.C. FIELD	2x P.T.D.F.L. SILL PLATE, 58"x0 X 12" @ 48" O.C.	16d @ 6" O.C. OR LTP @ 24" O.C. P.L.F.	200 #	365 # P.L.F.

- NOTES
- 1) 2" ANCHORS MINIMUM PER SHEAR WALL. 3" x 3" x 1/4" STEEL WASHERS REQUIRED AT ALL ANCHOR BOLTS USED IN SHEAR WALLS. WASHER EDGE SHALL BE WITHIN 1/2" OF SHEATHING. SLOTTED WASHERS ARE PERMITTED.
  - 2) SILL PLATE ANCHORED TO CONCRETE.
  - 3) TYPICAL 2x SOLE PLATE ON TOP OF SUBFLOOR. APPLIES TO RAISED FLOOR FOUNDATION AND UPPER FLOORS ONLY.
  - 4) 3x FRAMING MEMBERS AT ADJOINING PANEL EDGES OR DBL. STUDS w/ 16d @ 3" O.C.
  - 4b) 3x FRAMING MEMBERS AT ADJOINING PANEL EDGES.
  - 5) WHERE PANELS APPLIED ON BOTH FACES OF A WALL AND NAIL SPACING IS LESS THAN 6-INCHES O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS. OR FRAMING SHALL BE 3-INCH NOMINAL OR THICKER AT ADJOINING PANEL EDGES AND NAILS ON EACH SIDE SHALL BE STAGGERED.
  - 6) GALVANIZED NAILS SHALL BE HOT DIPPED OR TUMBLER.
  - 7) FRAMING MEMBERS OR BRACKING REQUIRED AT ALL PANEL EDGES IN SHEAR WALL.
  - 8) ALL SHEAR WALL VALUES ARE BASED ON 16" O.C. STUD SPACING.
  - 9) ALL FRAMING MEMBERS USED IN THE CONSTRUCTION OF SHEAR WALL TO BE DOUGLAS FIR LARCH.

**HOLDOWN SCHEDULE** 2022 CBC

TYPE	HOLDOWN	MIN. REQ'D POST 9, 12	REQUIRED BOLT 10	REQUIRED NAILS 10	REQUIRED LENGTH	CAPACITY
1	HDU2-SDSL5	(2) 2X PER WALL THICKNESS	7/8" - 5/16"	N/A	N/A	3,075 #

- NOTES
- 1) SINGLE POUR. DEEPEN WHEN FOOTING AROUND PAB ANCHOR AND EXTEND 6'-6" PAST EACH END.
  - 2) TWO POUR. AS SPECIFIED ON HOLDOWN SCHEDULE (4, 6, 8, 9)
  - 3) N/A
  - 4) PROVIDE (2) #4 TOP AND BOTTOM AT FOOTING UNDER SHEARWALL AND EXTEND 5'-6" PAST EACH END.
  - 5) PROVIDE (2) #4 TOP AND BOTTOM AT FOOTING UNDER SHEARWALL AND EXTEND 5'-6" PAST EACH END.
  - 6) DBL. NUT AND STEEL PLATE PER DETAIL S2. PROVIDE (2) #4 TOP AND BOTTOM AT FOOTING UNDER SHEARWALL AND EXTEND 7'-0" PAST EACH END.
  - 7) CENTERLINE OF STRAP TO BE CENTER OF RIM JOIST. MAXIMUM CLEAR SPAN TO BE 16".
  - 8) MINIMUM POST REQUIRED TO BE INSTALLED IN UPPER AND LOWER WALL FRAMING.
  - 9) CONNECT (2) 2x HOLDOWN STUDS TOGETHER WITH (2) 16d SINKER NAILS MIN.
  - 10) ALL NAILS TO BE COMMON WIRE UNLESS NOTED OTHERWISE.
  - 11) ALL SCREWS TO BE SIMPSON SDS 1/4" x 2 1/2". HOLDOWN MAY BE RAISED OFF THE SILL WITH NO REDUCTION IN LOAD.
  - 12) ALL HOLDOWN POST AND SILL PLATES TO BE DOUGLAS FIR LARCH.

2022 CBC AutoCAD

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PROJ. MGR.:	BK
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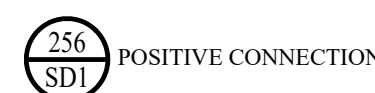
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9/11/2024  
**SHEET S1**

REGISTERED PROFESSIONAL ENGINEER  
NORMAN J SCHEEL  
No. 2567  
Exp. 12/31/25  
STRUCTURAL  
STATE OF CALIFORNIA

JOB NO. 24131



Beam #	Size
Beam #1	6x14
Beam #2	6x14
Beam #3	6x14
Beam #4	6x14
Beam #5	6x14

### Beam Specifications

Grade and Type	Location
No. 1 D.F.L.	PATIO COVER SUPPORT
No. 1 D.F.L.	PATIO COVER SUPPORT
No. 1 D.F.L.	PATIO COVER SUPPORT
No. 1 D.F.L.	PATIO COVER SUPPORT
No. 1 D.F.L.	PATIO COVER SLIDER HEADER

### Header Specifications 1st Floor

Size	Grade and Type	Length	Trimmer	King Stud
6x8	No. 1 D.F.L.	3'-0"	2x	2x
6x8	No. 1 D.F.L.	4'-0"	2x	2x
6x8	No. 1 D.F.L.	5'-0"	2-2x	2x
6x8	No. 1 D.F.L.	6'-0"	2-2x	2-2x

### Wall Framing Specifications

1ST FLOOR WALL FRAMING TO BE 2X6 STUD D.F.L. 16" O.C. UNLESS NOTED OTHERWISE ON PLANS. TRIMMER AND KING STUD SPECIFICATIONS AS NOTED ON HEADER TABLES. PASS AT BEAMS AS SPECIFIED ON PLANS.

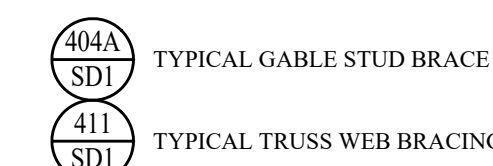
### NOTE :

STRAP ALL DOUBLE PLATE BREAKS WHERE FLUSH BEAMS PASS PER DETAILS WHEN OCCUR

USE MIN. MSTC28 IF STRAP NOT NOTED

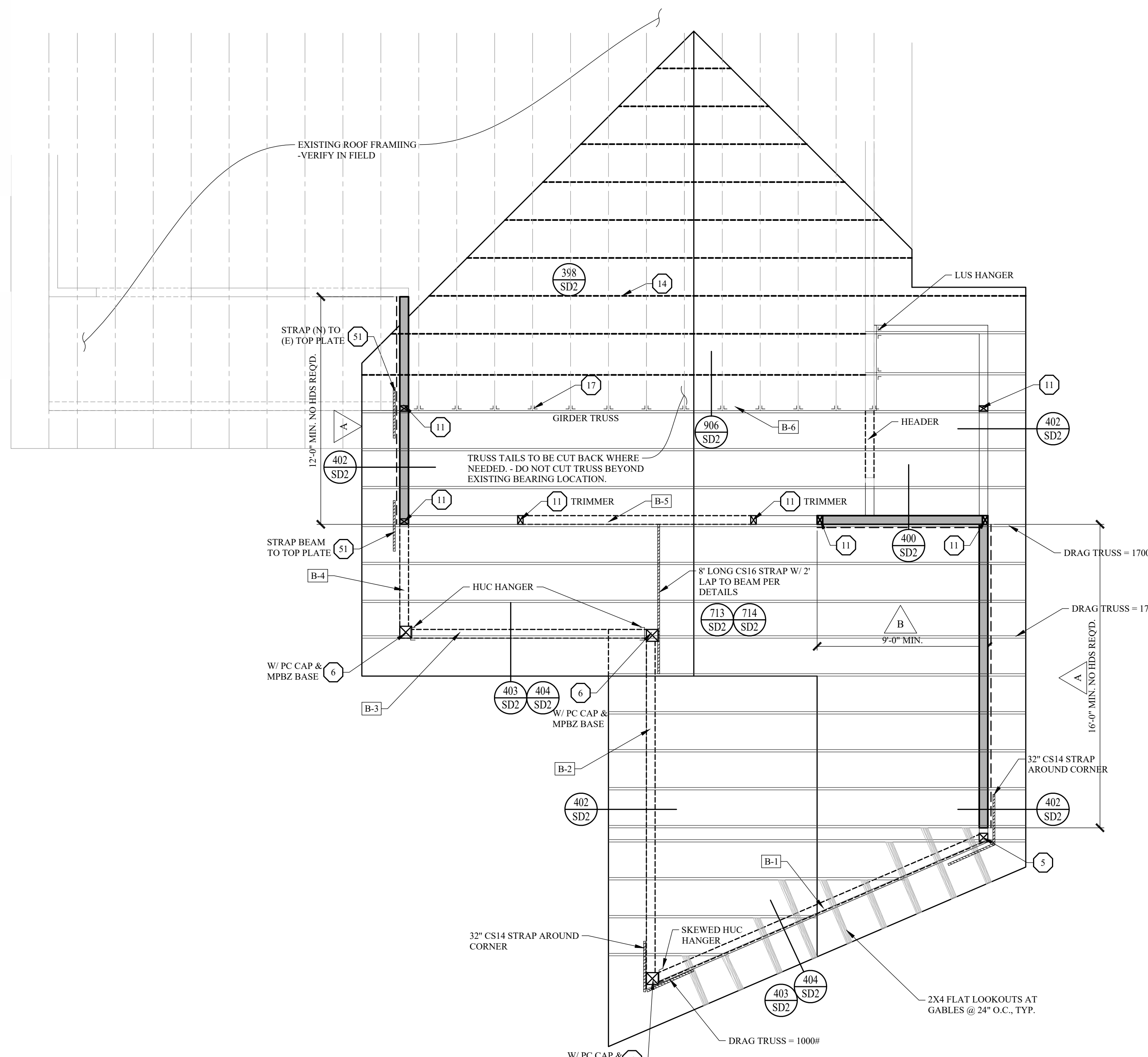
STRAPS FROM TOP PLATES TO FLUSH BEAMS

STRAPS FROM TOP PLATES TO DROP BEAMS

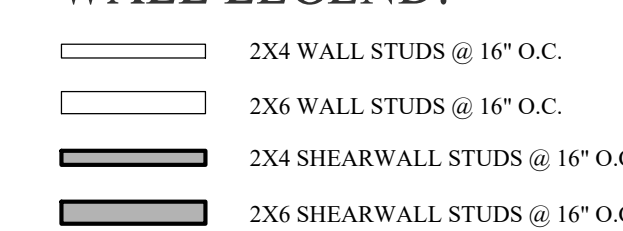


TYPICAL GABLE STUD BRACE

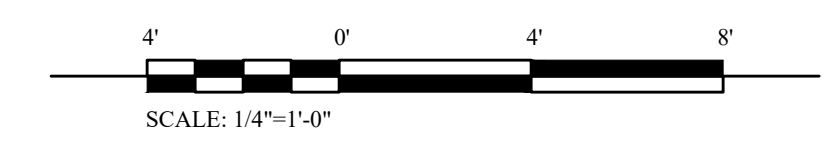
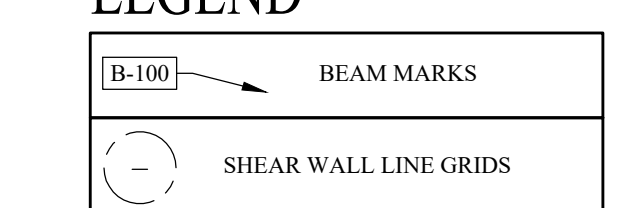
TYPICAL TRUSS WEB BRACING



### WALL LEGEND:



### LEGEND



NOTE: PRIOR TO FABRICATION OF TRUSSES, TWO COPIES OF THE FOLLOWING MATERIALS BEARING THE APPROVAL OF THE DESIGNER (IN THE FORM OF "SHOP DRAWING APPROVAL" OR SEPARATE LETTER) MUST BE SUBMITTED TO THE BUILDING OFFICIAL FOR REVIEW AT LEAST TWO WEEKS PRIOR TO FRAME INSPECTION: (1) TRUSS LAYOUT DRAWINGS; (2) TRUSS CALCULATIONS AND DETAILS SHOWING AXIAL AND BENDING STRESSES AND JOINT DESIGNS CLEARLY INDICATING THAT DESIGNS CONFORM TO THE 2022 CBC 2303.4

### PV PANEL NOTES:

- PV PANELS SHALL BE PARALLEL TO THE ROOF SURFACE, WITH A TOLERANCE OF 2" AND THE MAXIMUM HEIGHT ABOVE THE ROOF SURFACE, NOT EXCEEDING 10 INCHES. A MINIMUM GAP OF 25 INCHES SHALL BE PROVIDED BETWEEN ALL PANELS, WITH THE SPACING OR GAPS BETWEEN THE PANELS NOT EXCEEDING 6.7 FEET.
- THE ARRAY SHALL BE LOCATED AT LEAST 20" FROM THE ROOF EDGE, A GABLE RIDGE, OR A HIP RIDGE.
- RAIL STANDOFF CONNECTIONS SHALL BE STAGGERED AND CONNECTED TO THE ROOF FRAMING MEMBERS. RAIL STANDOFF CONNECTIONS SHALL BE NO GREATER THAN 6'-0" O.C.
- DESIGN OF SOLAR INSTALLATION SHALL BE PROVIDED BY THE SOLAR INSTALLER IN ACCORDANCE WITH ASCET-16, SECTION 29.4.4.

### ROOF FRAMING PLAN

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

### GENERAL SPECIFICATIONS

ROOF LIVE LOAD (L) = 20 PSF  
 ROOF SNOW LOAD (S) = 0 PSF  
 ROOF DEAD LOAD (D) = 10 PSF  
 CEILING LIVE LOAD (L) = 10 PSF  
 CEILING DEAD LOAD (D) = 10 PSF  
 CEILING LIVE LOAD NON-COINCIDENT WITH ROOF LIVE LOAD

DURATION OF LOAD = 1.25

ALL ROOF TRUSSES TO BE 24" O.C. UNLESS NOTED OTHERWISE ON FRAMING PLAN

ROOF SHEATHING TO BE 15/32" APA RATED SHEATHING PANEL ID 32/16 WITH 8D NAILS @ 6" O.C. EDGE AND 12" O.C. FIELD FACE GRAIN PERPENDICULAR TO FRAMING UNLESS NOTED OTHERWISE ON PLANS.

FOR NAILING NOT SHOWN, SEE NAILING SCHEDULE SHEET SC-1a OR TABLE 2304.10.2 2022 CBC.

NAIL ROOF SHEATHING AT ALL DRAG TRUSSES WITH 8d @ 6" O.C. TYP. U.N.O.

TRUSS MANUFACTURER TO SUPPLY TRUSS DRAWINGS AND LAYOUTS TO THE PROJECT ENGINEER AND BUILDING DEPARTMENT PRIOR TO CONSTRUCTION AS PART OF DEFERRED SUBMITTAL PER SECTION 107.3.4.1, 2022 CBC

DOUBLE TOP PLATE, MIN. 48" SPLICES. NAIL WITH (12) 16d NAILS EACH SIDE OF LAP.

ALL HEADERS AND BEAMS TO BE AS SPECIFIED ON THIS SHEET. INTERIOR NON BEARING HEADERS TO BE 4x4 OR DBL. 2x4 NO 2 D.F.L.

ALL NAILS TO BE COMMON WIRE NAILS UNLESS NOTED OTHERWISE.

INSTALL 2X / 4X HOLDDOWN POST AT ENDS OF ALL SHEAR WALLS PER PLAN. SEE TABLE AND CALCULATIONS FOR HOLDDOWN STUD SIZE REQUIRED.

ALL HANGERS, HOLDOWNS, CLIPS, AND STRAPS TO BE SIMPSON STRONG-TIE OR SILVER / KANT-SAG SILVER WITH REF. # MATCHING SIMPSON SPECIFICATIONS.

DENOTES STRUCTURAL DETAILS ON SHEET(S) SD-1 .... ETC.

FOR ADDITIONAL SPECIFICATIONS AND TYPICAL DETAILS SEE SHEET SC-1.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL OF THE NOTES AND TYPICAL DETAILS ON SHEET SC-1 SO THAT THEY MAY BE INCORPORATED INTO THE CONSTRUCTION OF THIS STRUCTURE.

ALL GABLE STUDS LONGER THAN 6'-0" TO BE 2x4 #1 & BTR. D.F.L. IF STUDS ARE LONGER THAN 10'-0" USE 2x6 #2 D.F.L. STRUCTURAL GABLE END TRUSSES WITH MORE THAN 6'-0" ON THE VERTICAL PROJECTION REQUIRE BRACES PER STRUCTURAL GABLE END DETAIL 404A ON SD SHEET.

2x BLOCKING AT RIDGE BETWEEN EACH TRUSS.

### SPECIFICATIONS

- 3 4x4 DF #2 POST
- 4 4x6 DF #2 POST
- 5 6x6 DF #1 POST
- 6 8x8 DF #1 POST
- 11 DBL. 2x (4 OR 6) DF STUD POST. CONNECT TOGETHER w/ (24) 16d SINKER.
- 14 2x4 NO. 2 D.F.L. OVER FRAMING, TO 2x6 NAILER. BRACE TO ROOF BELOW WHEN SPANS EXCEED 7'-0". CONTINUOUS ROOF SHEATHING UNDER FILL. (TYP.) U.N.O. PROVIDE 2x FLAT NAILER FOR ENDS OF RAFTERS BEARING ON TOP OF ROOF SHEATHING.
- 17 SIMPSON LUS24 HANGERS.
- 51 SIMPSON CS16 STRAP MIN. 26" LONG

### SHEAR WALL SCHEDULE

TYPE	# SHEATHING	NAILING	SILL PLATE	SOLE PLATE	SEISMIC CAPACITY	WIND CAPACITY
A	3/8" SHEATHING ONE FACE	8d @ 8" O.C. EDGE AND 12" O.C. FIELD	2X P.T.F.E. SILL PLATE 55/8" X 12" @ 24" O.C.	CONNECT TO RIM CAPACITY	200 #	365 #

- NOTES:
- ANCHORS MINIMUM PER SHEAR WALL. 3" x 3" x 14" STEEL WASHERS REQUIRED AT ALL ANCHOR BOLTS USED IN SHEAR WALLS. WASHER EDGE SHALL BE WITHIN 1/2" OF SHEATHING. SLOTTED WASHERS ARE PERMITTED.
  - SILL PLATE ANCHORED TO CONCRETE.
  - TYPICAL 2x SOLE PLATE ON TOP OF SUBFLOOR. APPLIES TO RAISED FLOOR FOUNDATION AND UPPER FLOORS ONLY.
  - 3x FRAMING MEMBERS AT ADJOINING PANEL EDGES OR DBL. STUDS = 16d @ 3" O.C.
  - 3x FRAMING MEMBERS AT ADJOINING PANEL EDGES OR DBL. STUDS = 16d @ 4" O.C.
  - 3x FRAMING MEMBERS AT ADJOINING PANEL EDGES.
  - WHERE PANELS APPLIED ON BOTH FACES OF A WALL AND NAIL SPACING IS LESS THAN 6-INCHES O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS. OR FRAMING SHALL BE 3-INCH NOMINAL OR THICKER AT ADJOINING PANEL EDGES AND NAILS ON EACH SIDE SHALL BE STAGGERED.
  - GALVANIZED NAILS SHALL BE HOT DIPPED OR TUMBLED.
  - FRAMING MEMBERS OR BLOCKING REQUIRED AT ALL PANEL EDGES IN SHEAR WALL.
  - ALL SHEAR WALL VALUES ARE BASED ON 16" O.C. STUD SPACING.
  - ALL FRAMING MEMBERS USED IN THE CONSTRUCTION OF SHEAR WALL TO BE DOUGLAS FIR LARCH.

### HOLDDOWN SCHEDULE

TYPE	HOLDOWN	MIN. REQ'D POST	REQUIRED BOLT PER WALL THICKNESS	REQUIRED NAILS	REQUIRED LENGTH	REQUIRED CAPACITY
A	HDD2-SDS2.5	11	4x 5/8" DIA. 12" MIN. THICKNESS	N/A	N/A	3075 #

- NOTES:
- SINGLE POUR. DEEPEN / WHEN FOOTING AROUND PAB ANCHOR AS SPECIFIED ON HOLDDOWN SCHEDULE (d, & f)
  - TWO POUR.
  - N/A
  - PROVIDE (2) #4 TOP AND BOTTOM AT FOOTING UNDER SHEARWALL AND EXTEND 4'-6" PAST EACH END.
  - PROVIDE (2) #4 TOP AND BOTTOM AT FOOTING UNDER SHEARWALL AND EXTEND 7'-0" PAST EACH END.
  - DBL. NUT AND STEEL PLATE PER DETAIL 52. PROVIDE (2) #4 TOP AND BOTTOM AT FOOTING UNDER SHEARWALL AND EXTEND 7'-0" PAST EACH END.
  - CENTERLINE OF STRAP TO BE CENTER OF RIM JOIST. MAXIMUM CLEAR SPAN TO BE 16".
  - MINIMUM POST REQUIRED TO BE INSTALLED IN UPPER AND LOWER WALL FRAMING.
  - CONNECT (2) 2x HOLDDOWN STUDS TOGETHER WITH G41 INSINKER NAILS MIN.
  - ALL NAILS TO BE COMMON WIRE UNLESS NOTED OTHERWISE.
  - ALL SCREWS TO BE SIMPSON SDS (14" x 2 1/2"). HOLDDOWN MAY BE RAISED OFF THE SILL WITH NO REDUCTION IN LOAD.
  - ALL HOLDDOWN POST AND SILL PLATES TO BE DOUGLAS FIR LARCH.

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 DRAWN BY: LT  
 CHECKED BY: BK  
 W  
 ISSUE DATE: 9/10/2024

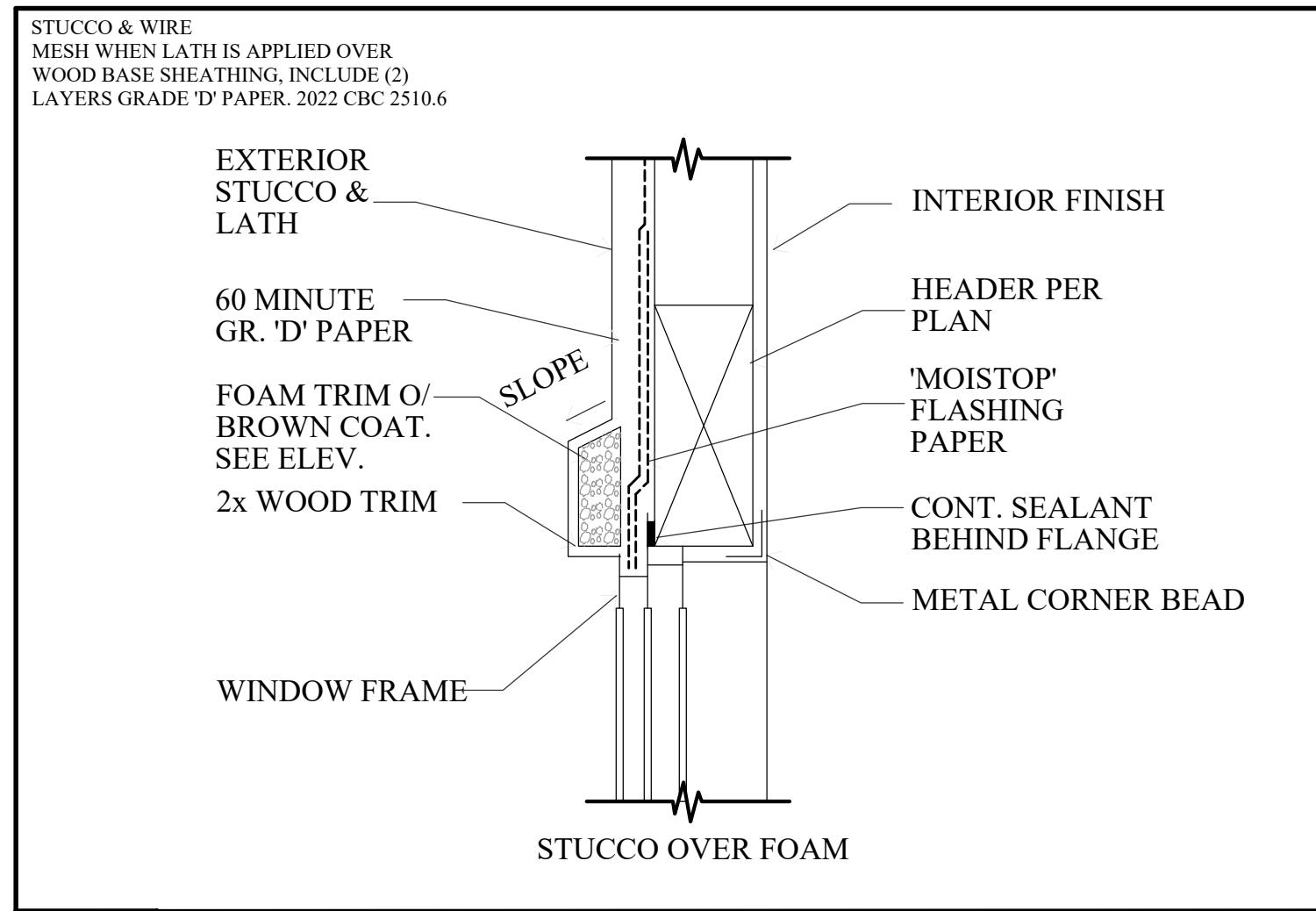
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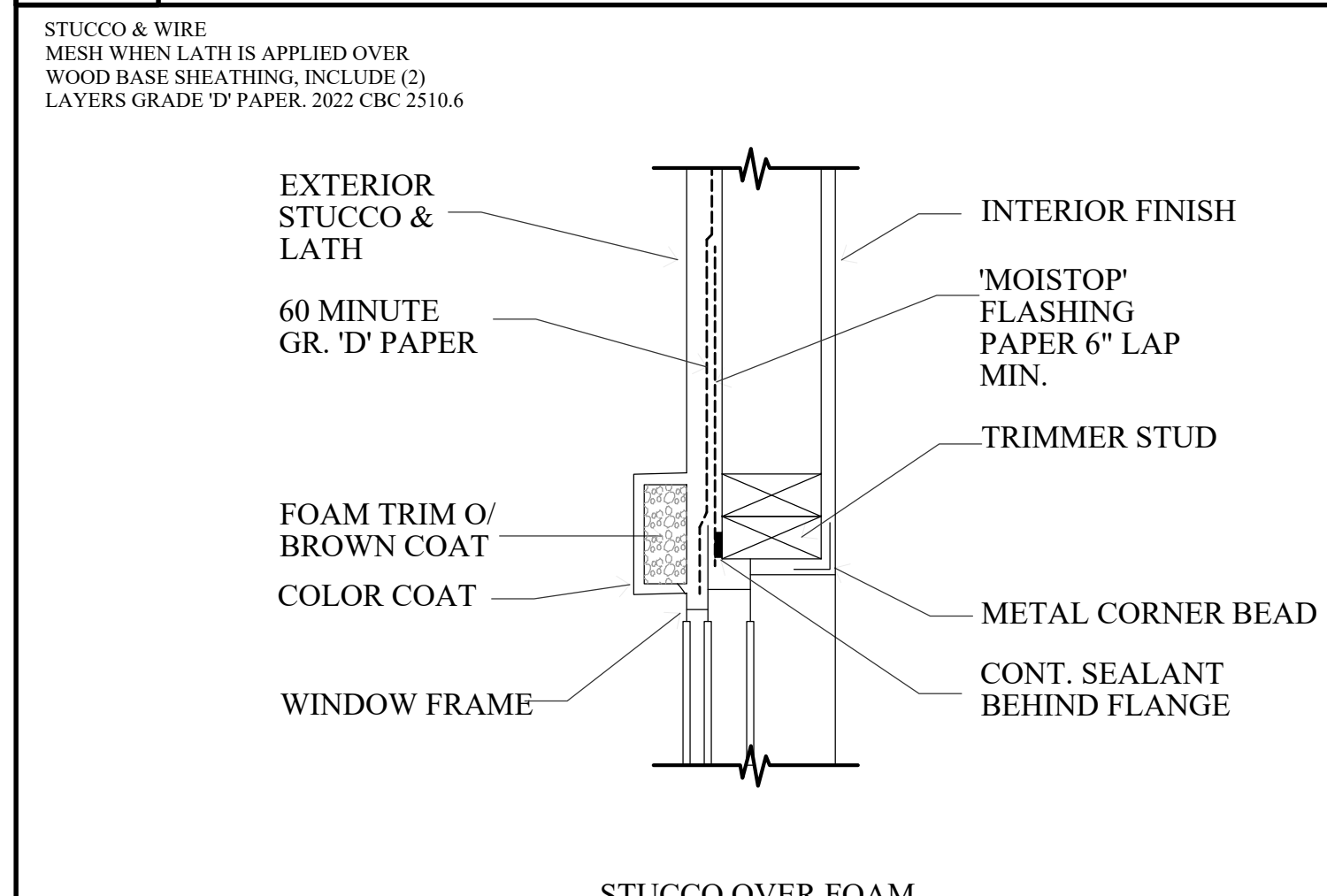
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 No. 2567  
 Exp. 12-31-25  
 State of California

9/11/2024  
 SHEET  
**S2**  
 JOB NO. 24131

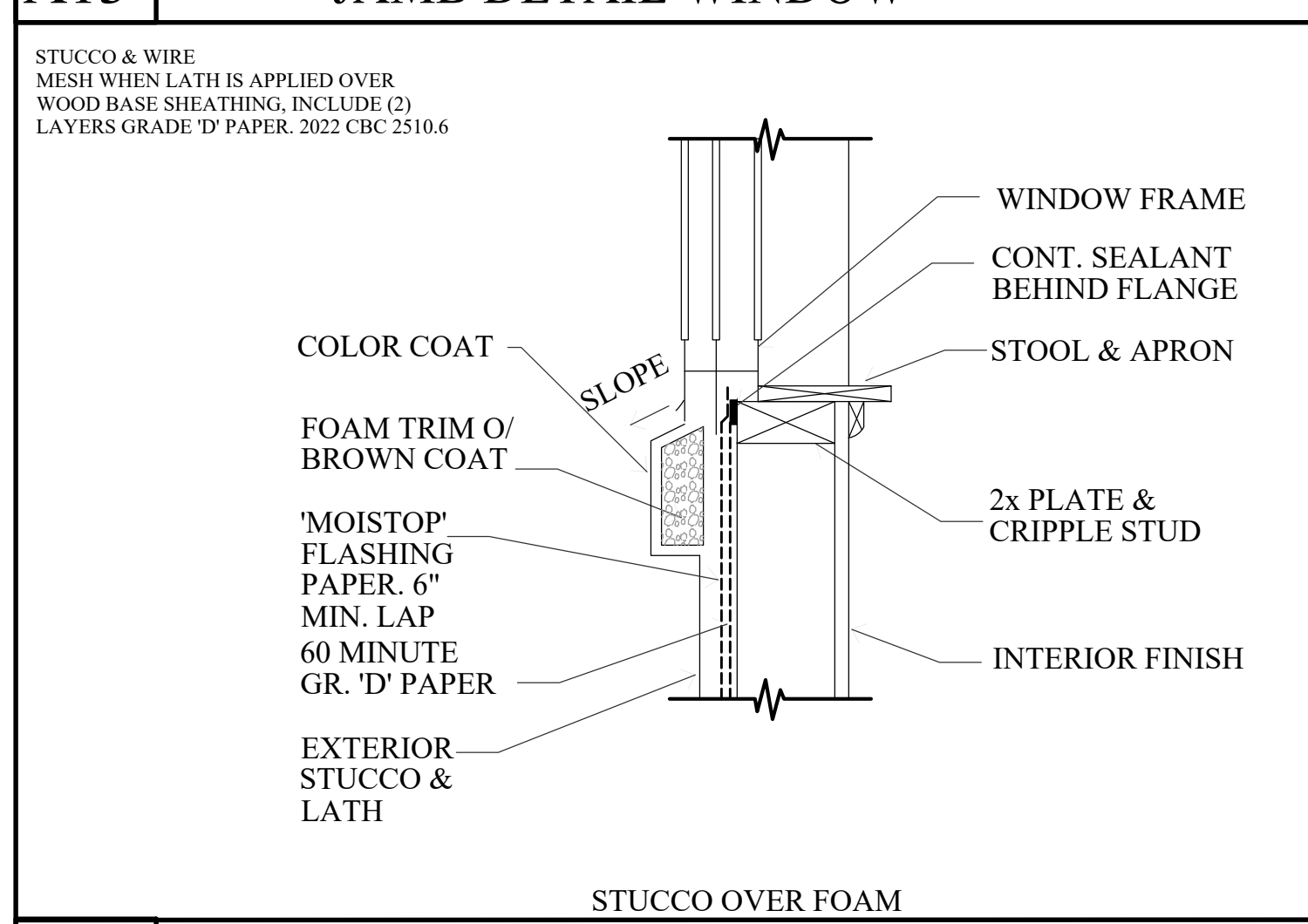




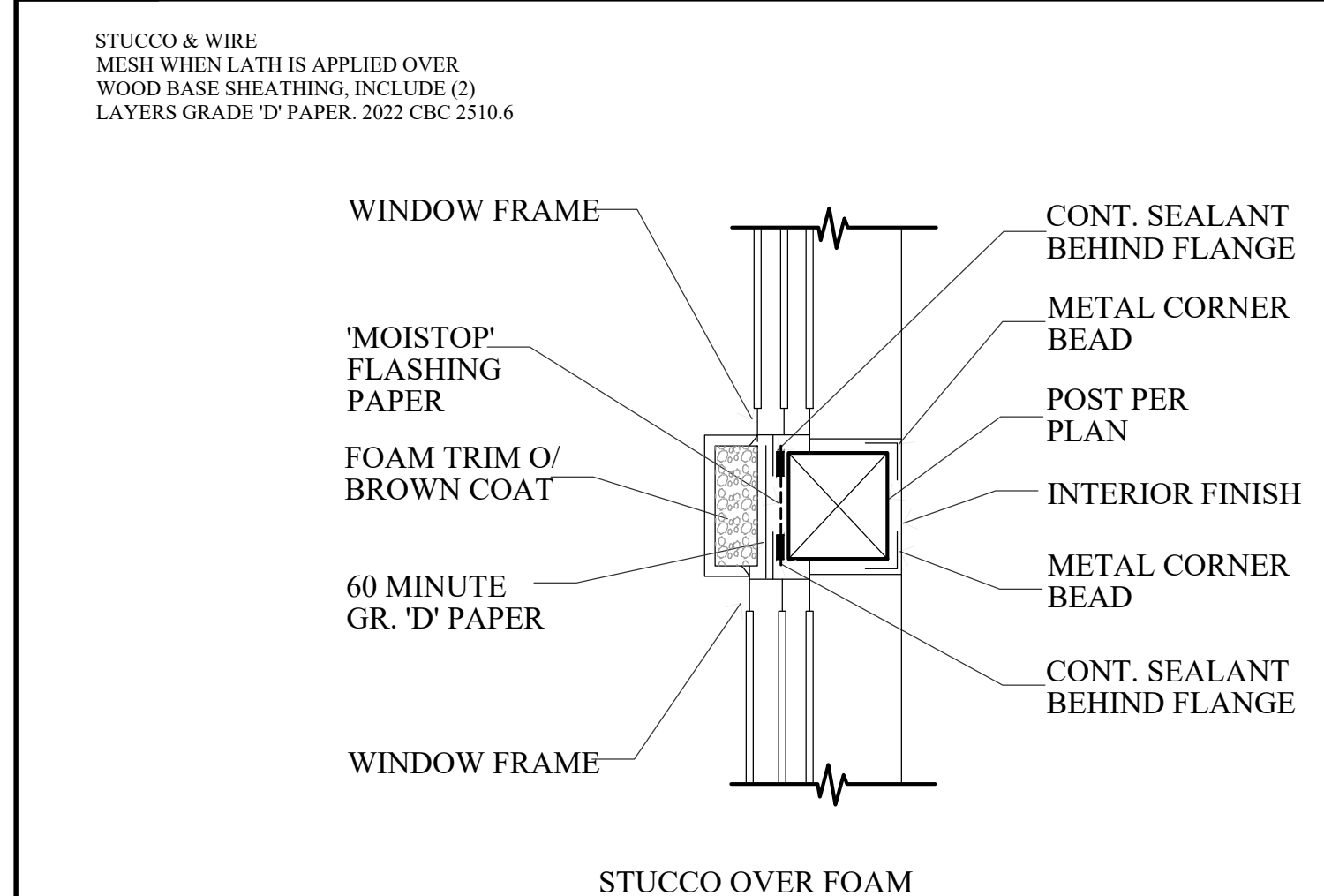
**A12 HEAD DETAIL WINDOW / SGD**



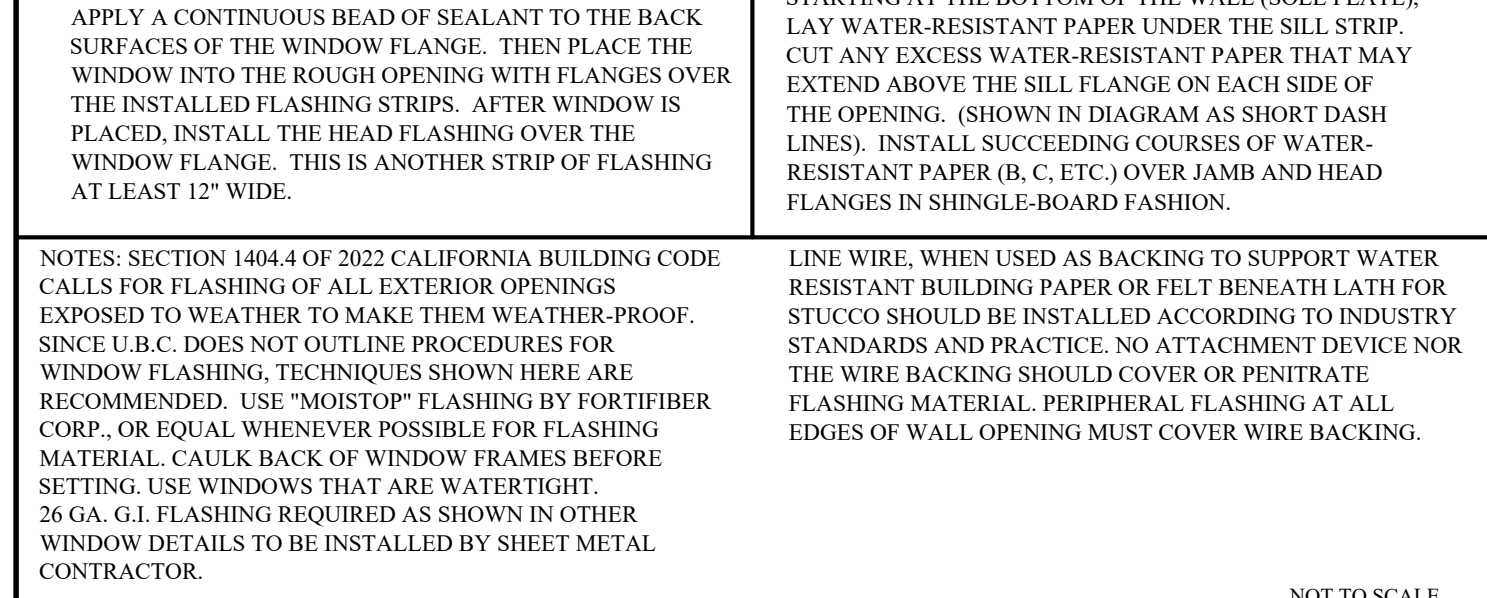
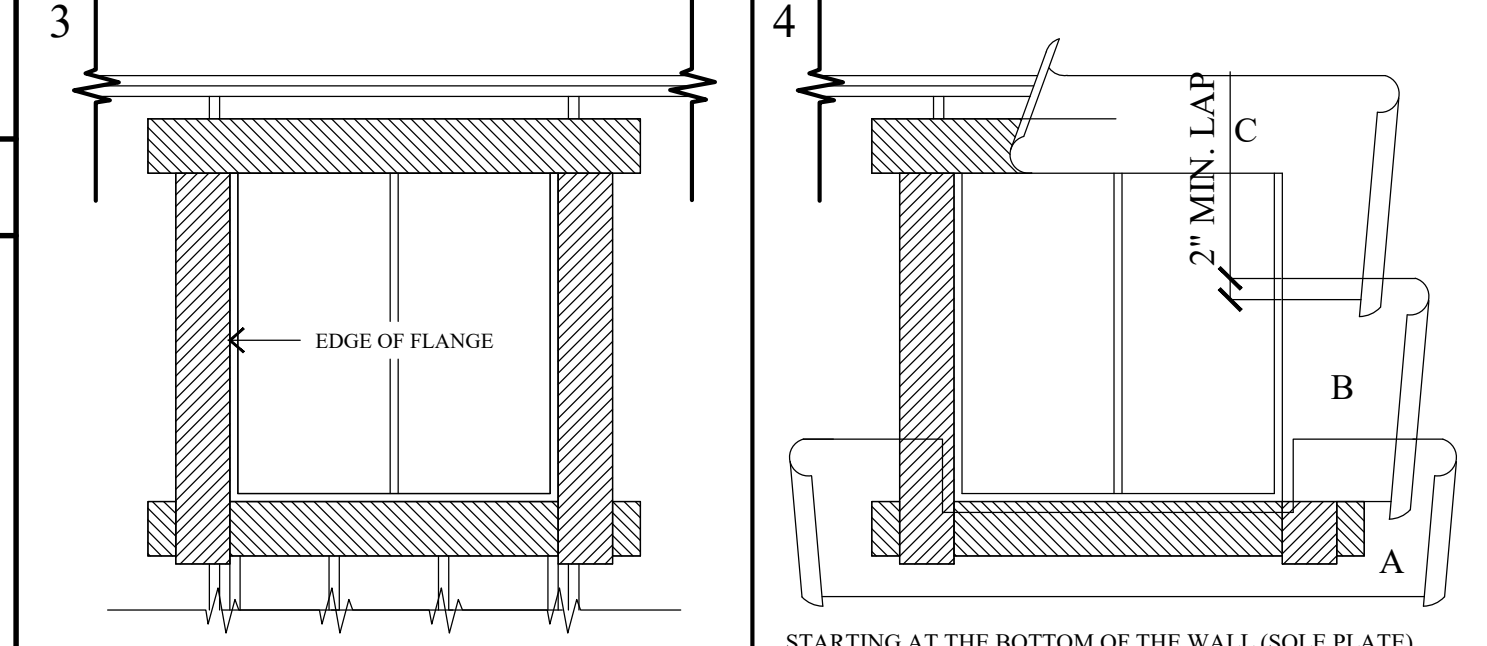
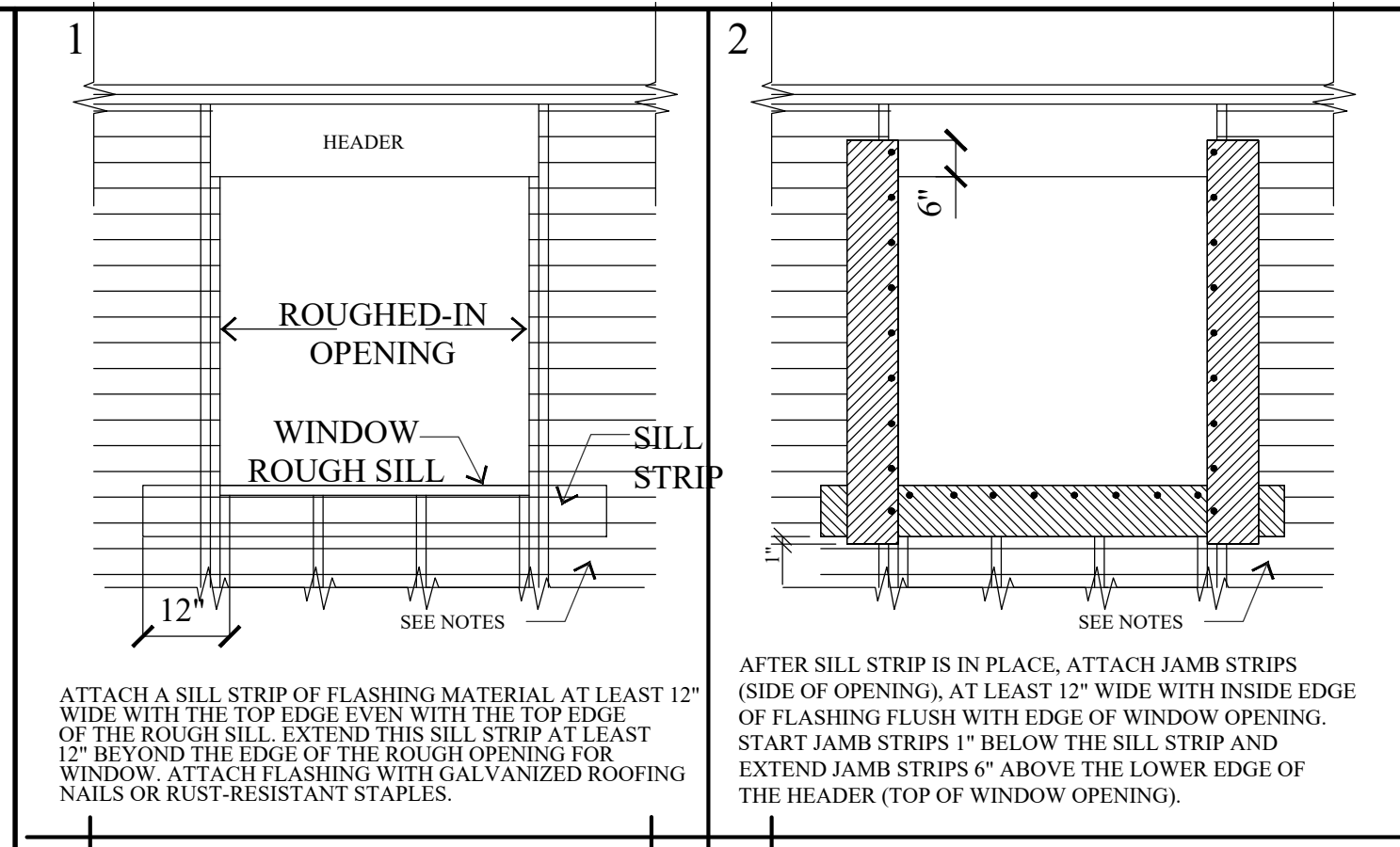
**A13 JAMB DETAIL WINDOW**



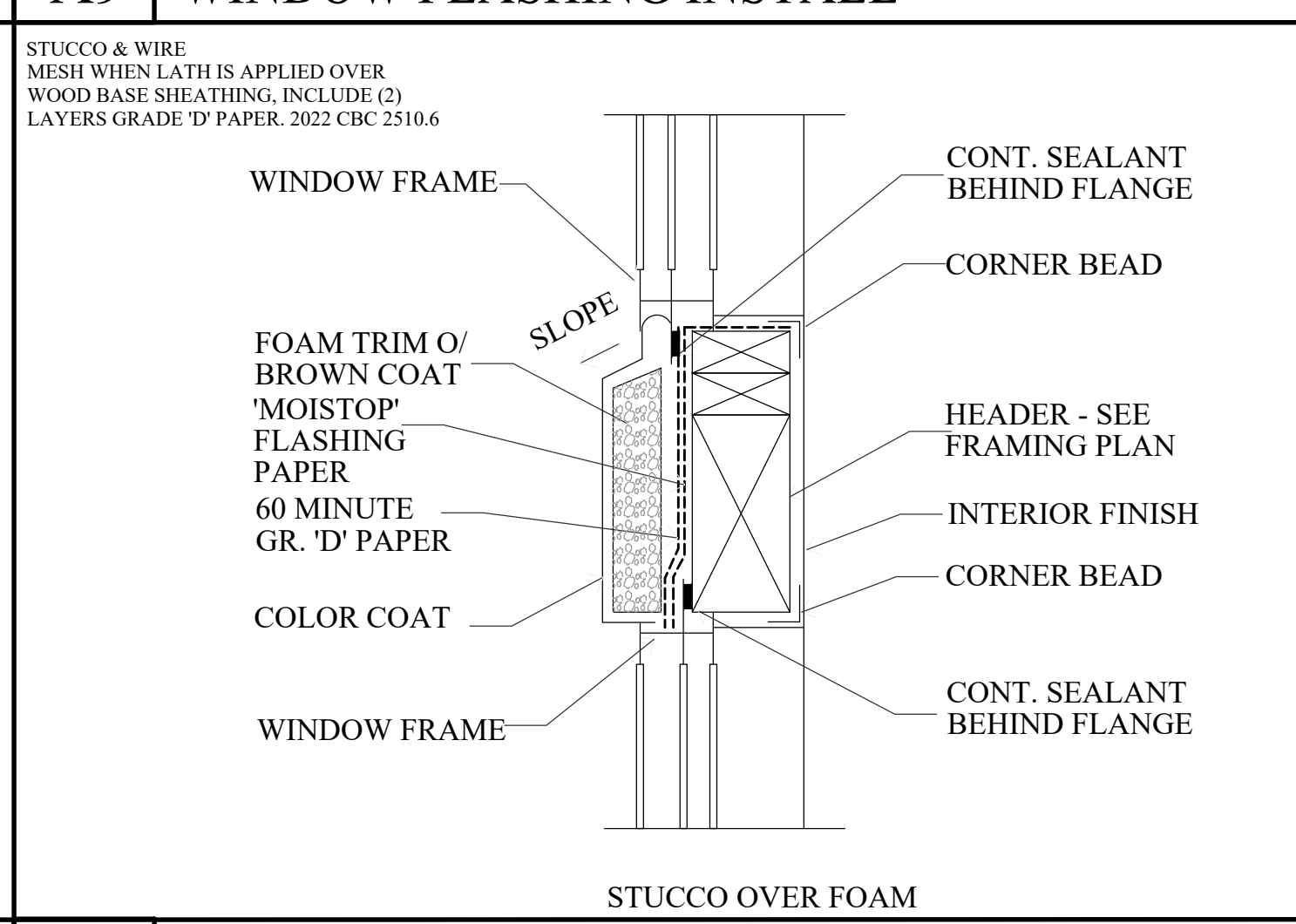
**A14 SILL DETAIL**



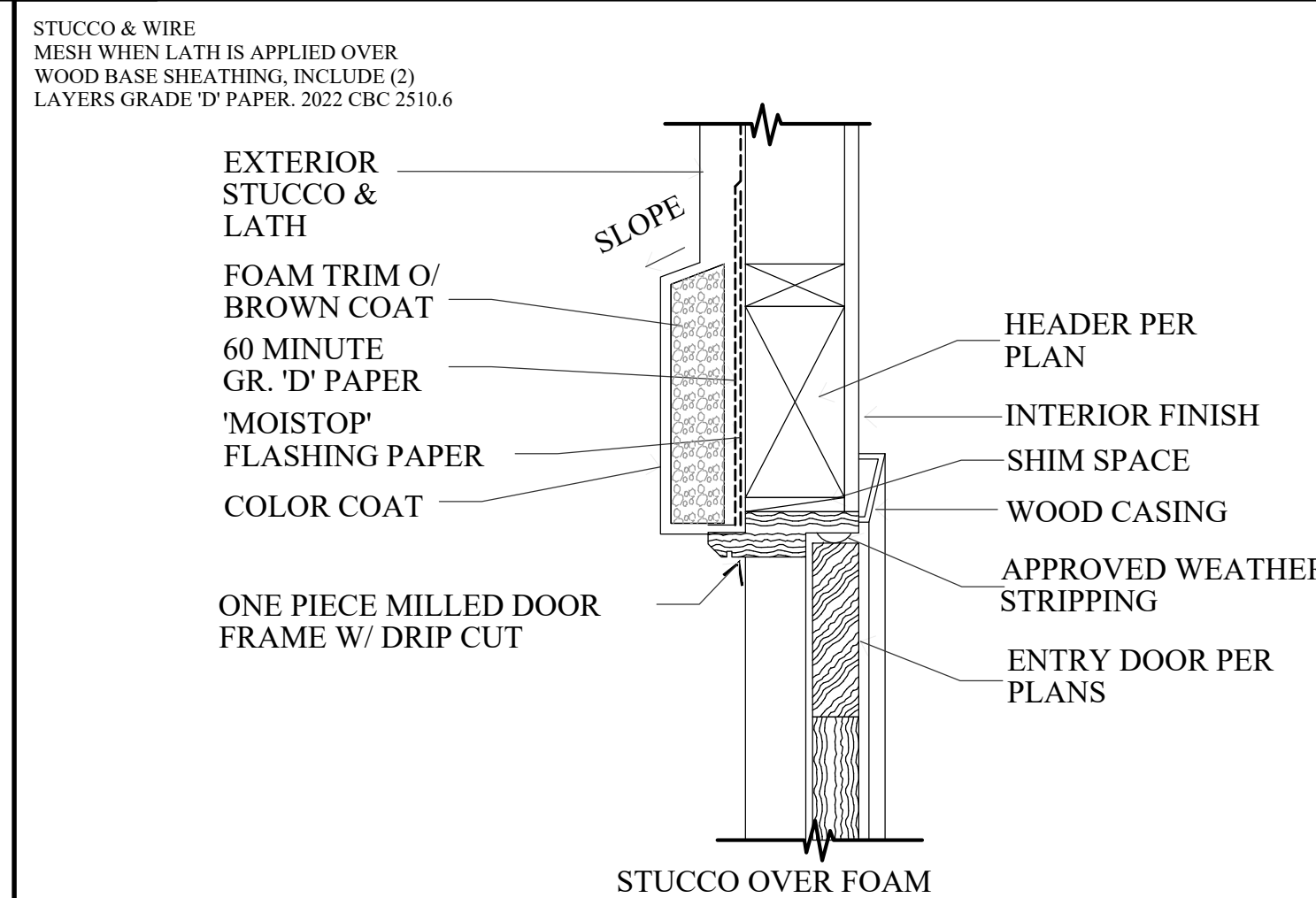
**A15 VERTICAL MULLION**



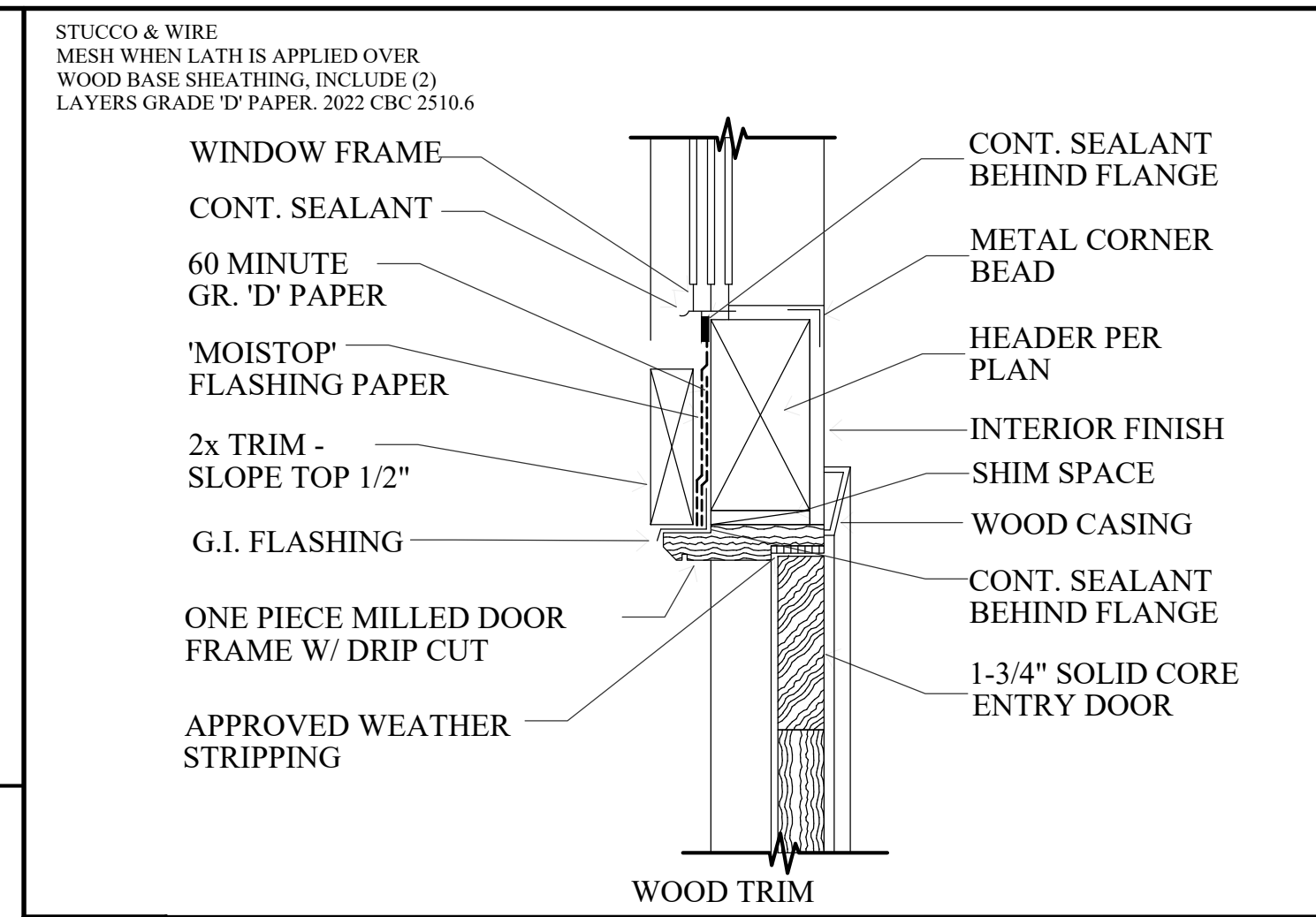
**A9 WINDOW FLASHING INSTALL**



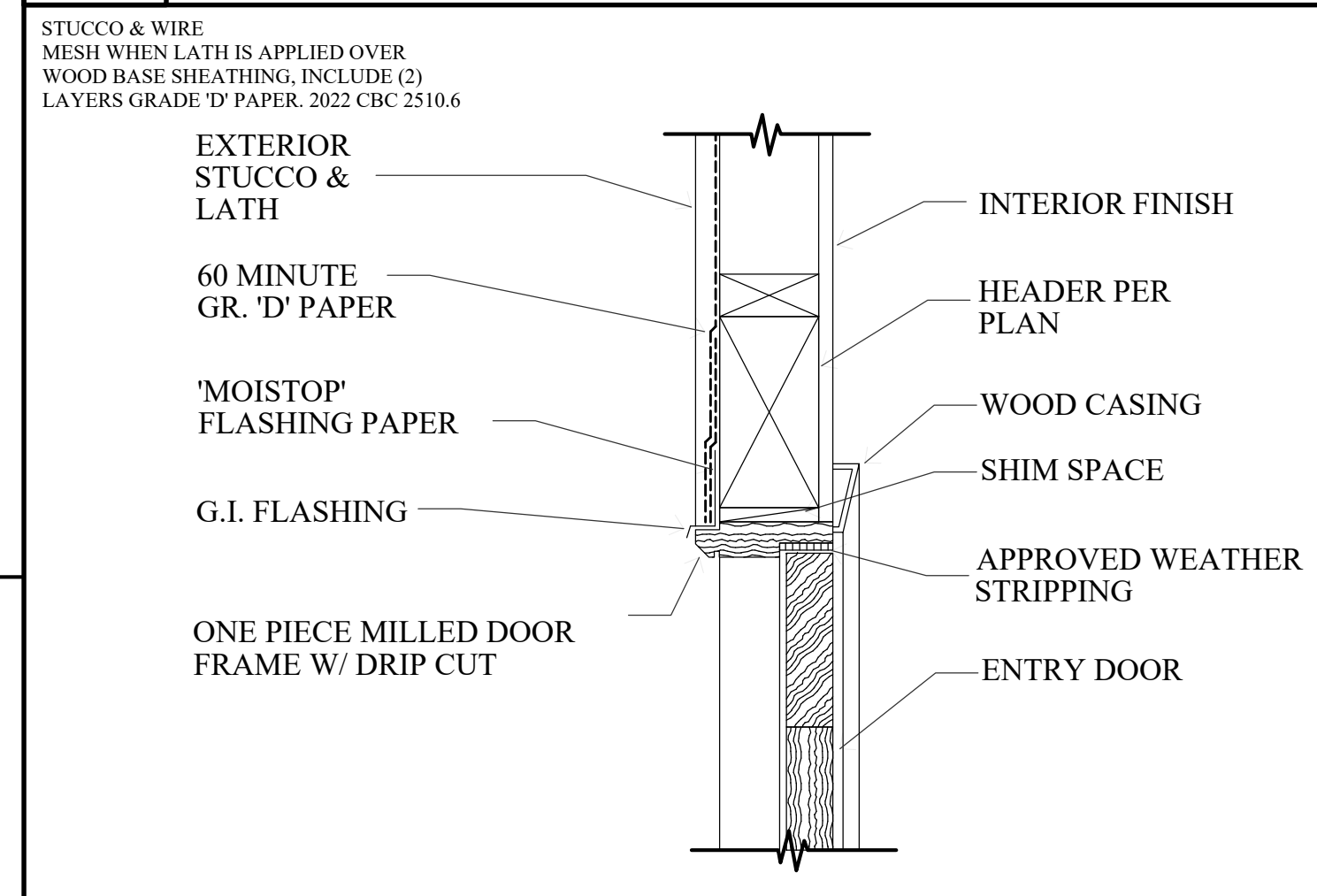
**A10 HORIZONTAL TRANSOM**



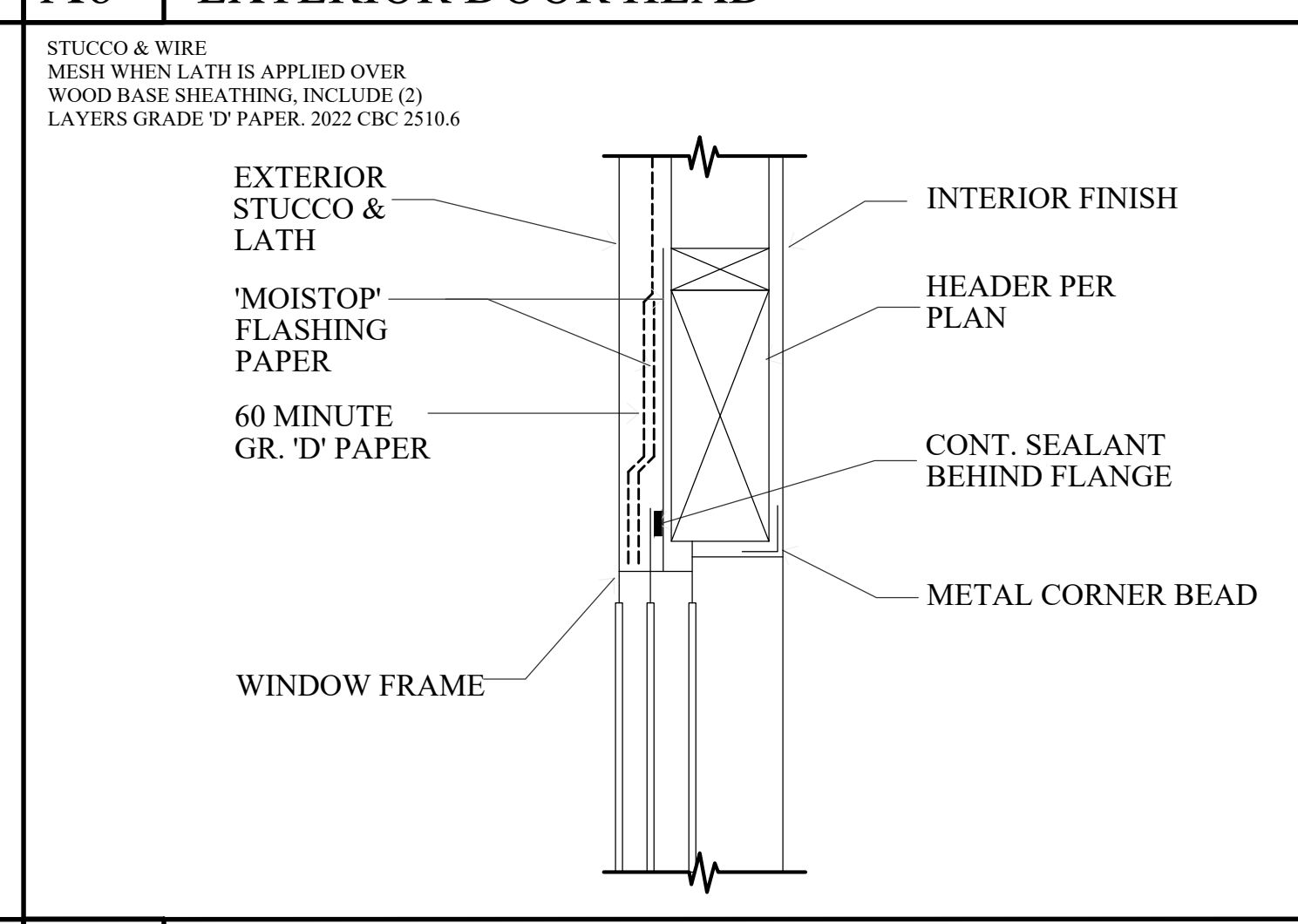
**A11 HEAD OVER ENTRY DOOR**



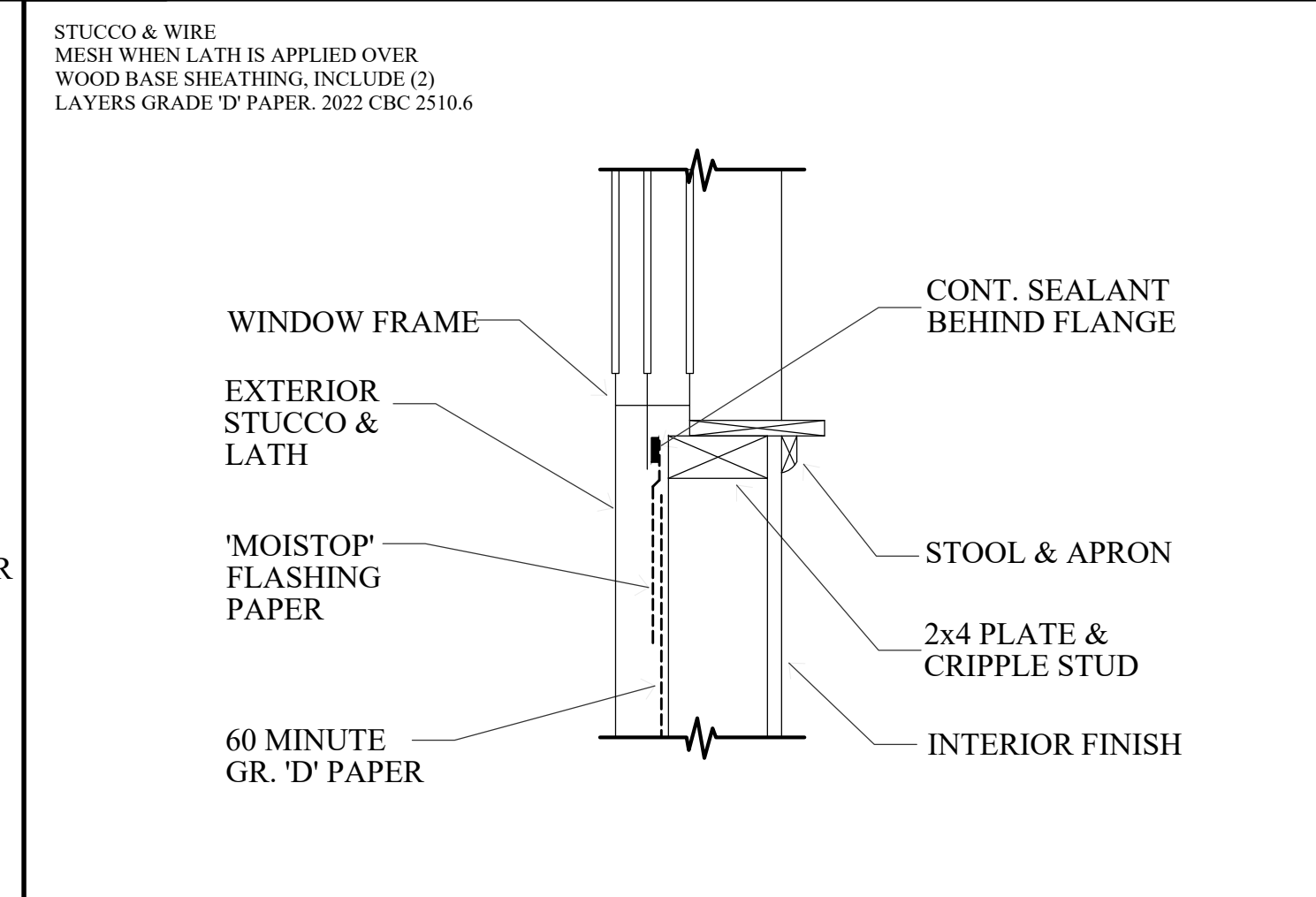
**A5 TRANSOM OVER EXTERIOR DOOR**



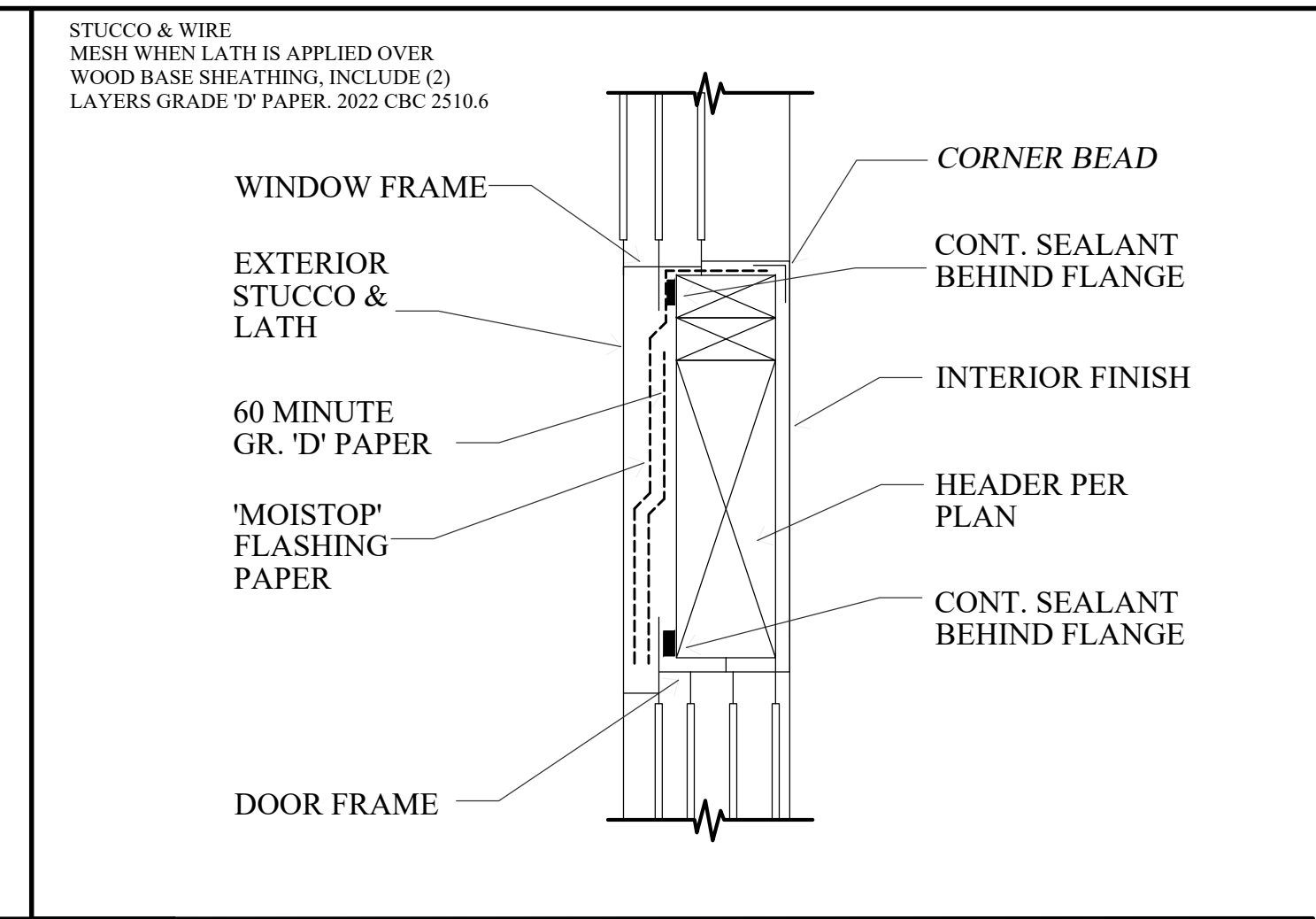
**A6 EXTERIOR DOOR HEAD**



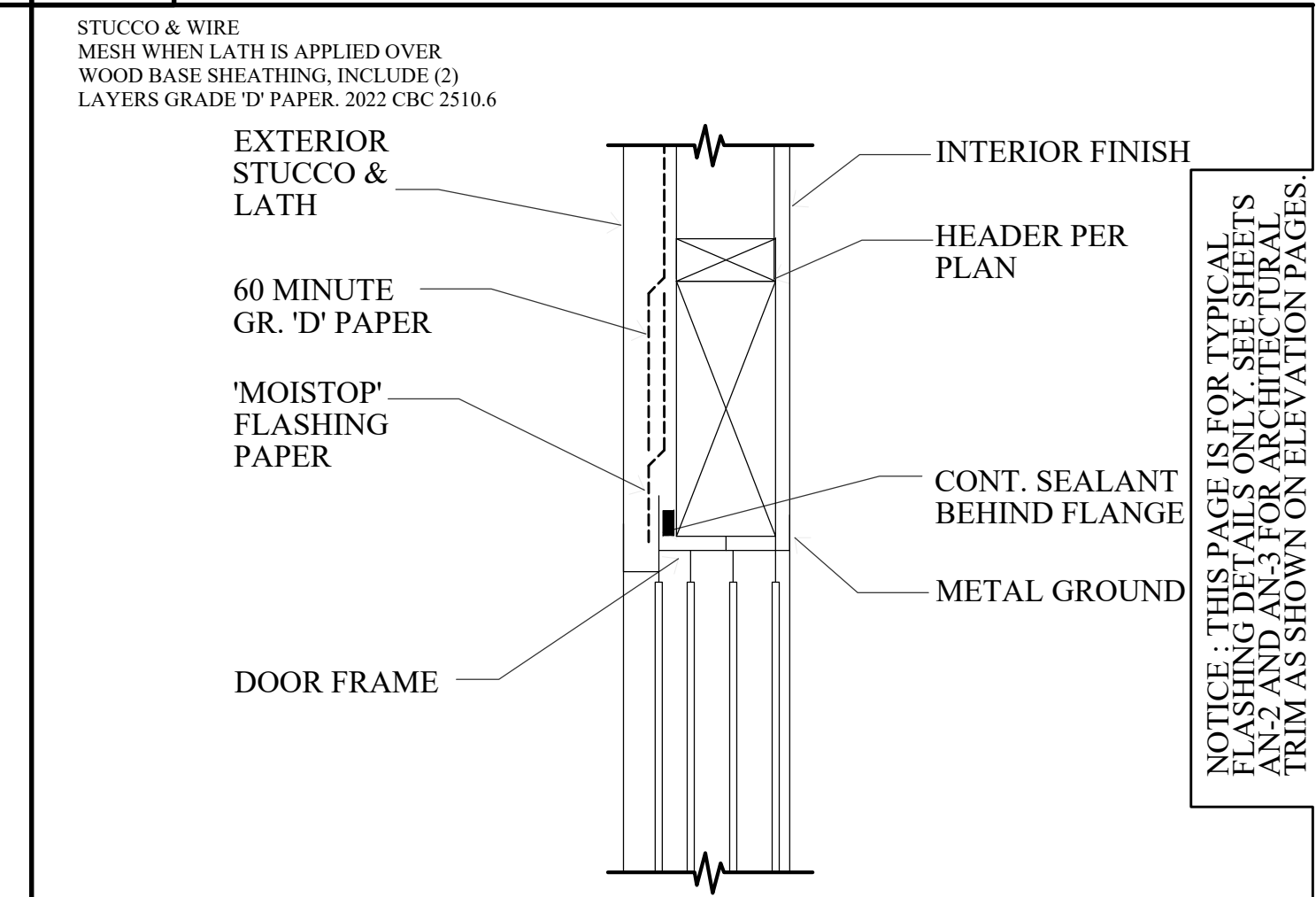
**A7 HEAD / JAMB SIMILAR**



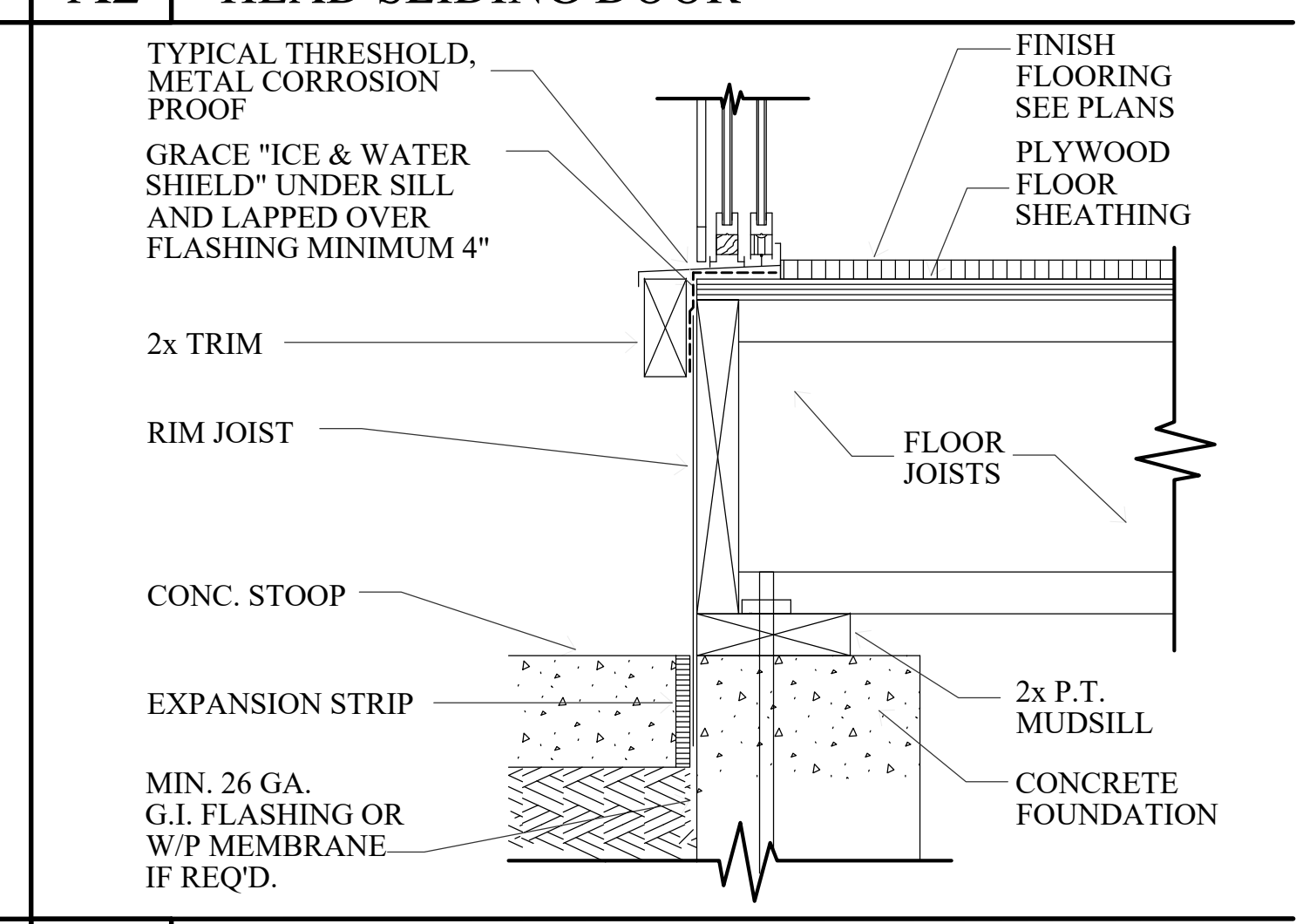
**A8 SILL DETAIL**



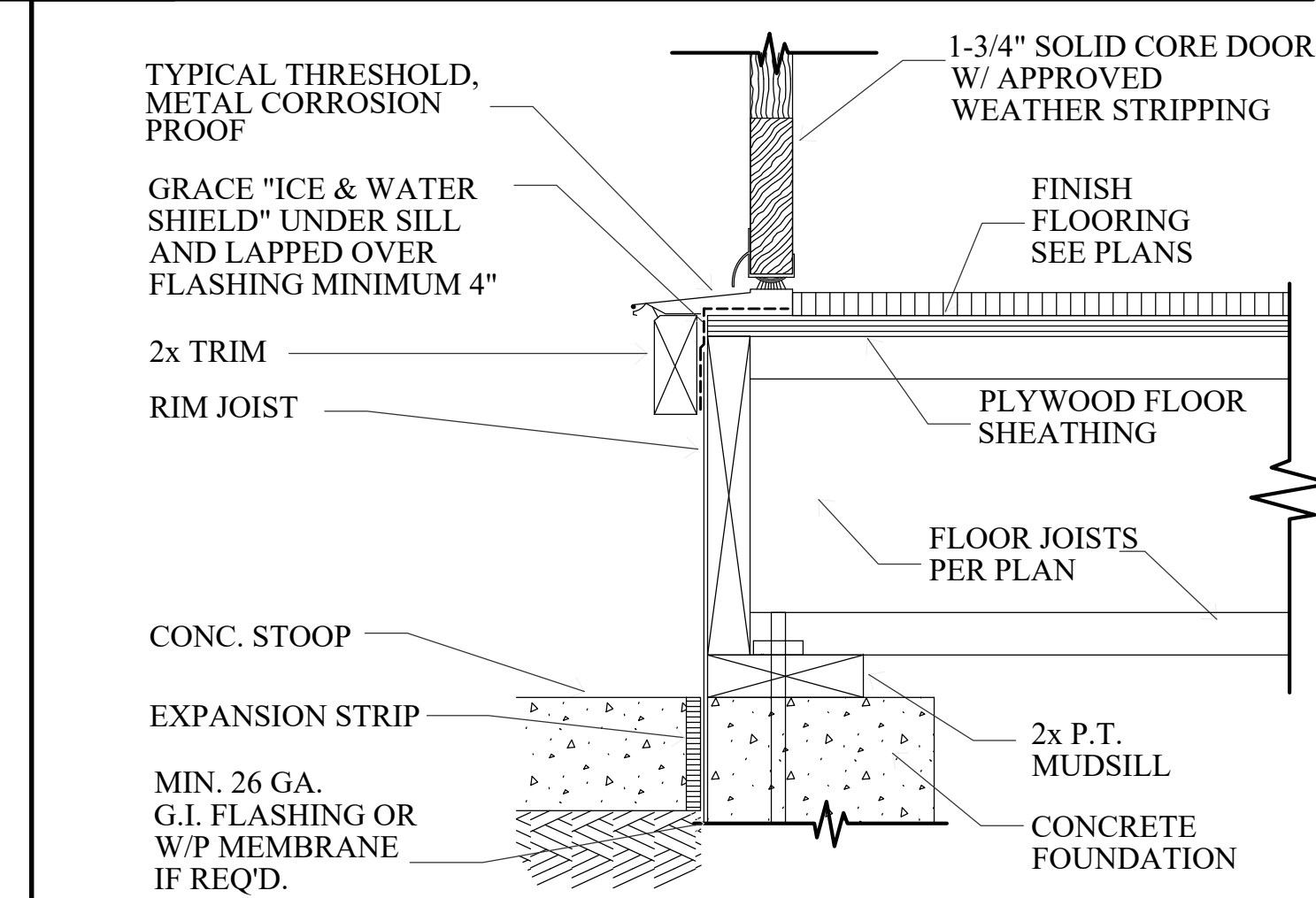
**A1 TRANSOM OVER SLIDING DOOR**



**A2 HEAD SLIDING DOOR**



**A3 TYPICAL SILL AT SL. GLASS DOOR**



**A4 THRESHOLD AT EXTERIOR DOOR**

TYPICAL HEAD AND FLASHING DETAILS - ACTUAL CONDITIONS MAY VARY. THESE DETAILS REPRESENT TYPICAL CONDITIONS FOR REFERENCE WHEN A SPECIFIC DETAIL IS NOT INDICATED.

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DRAWN BY: LT  
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W  
ISSUE DATE: 9/10/2024

REVISIONS:

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▲					

REGISTERED PROFESSIONAL ENGINEER

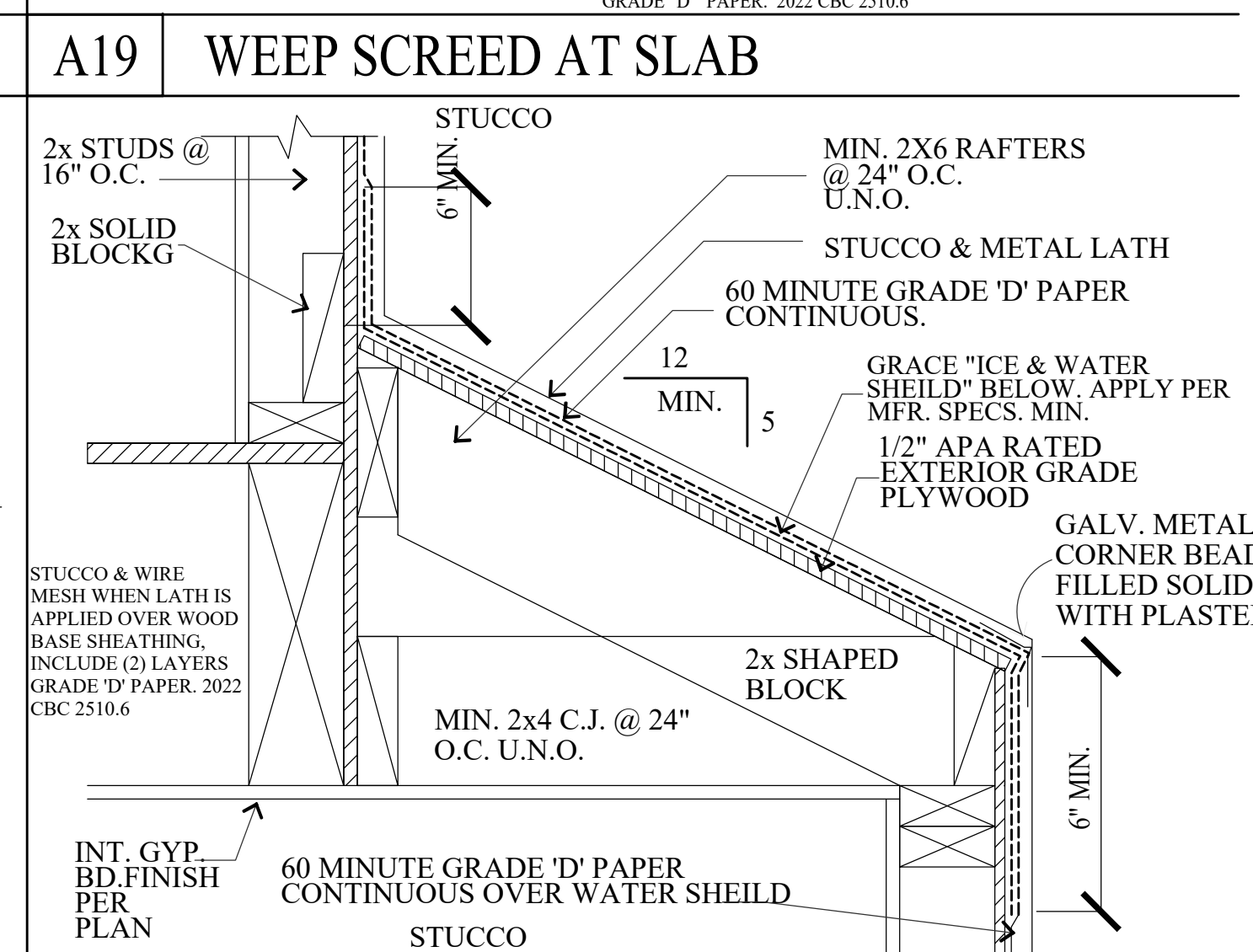
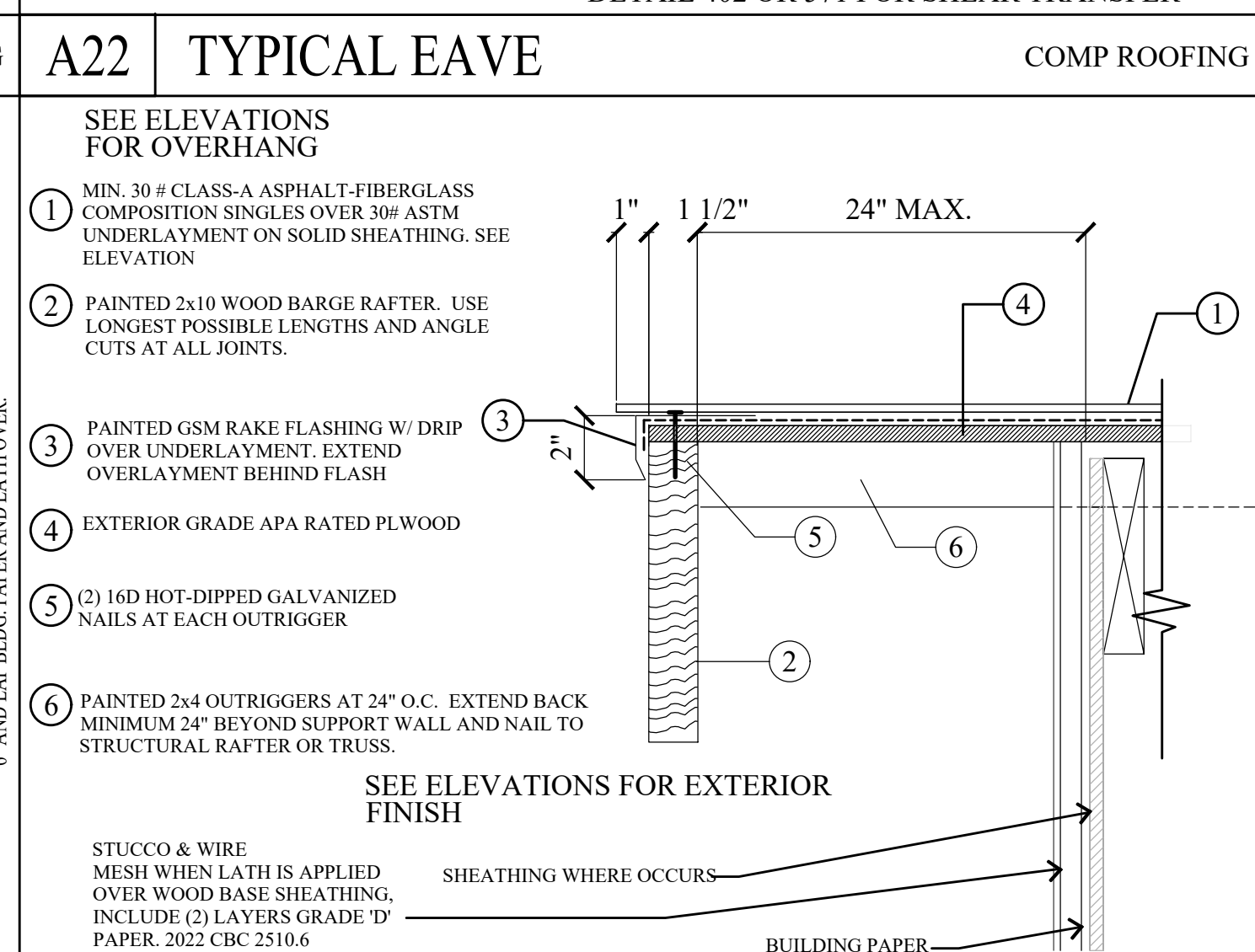
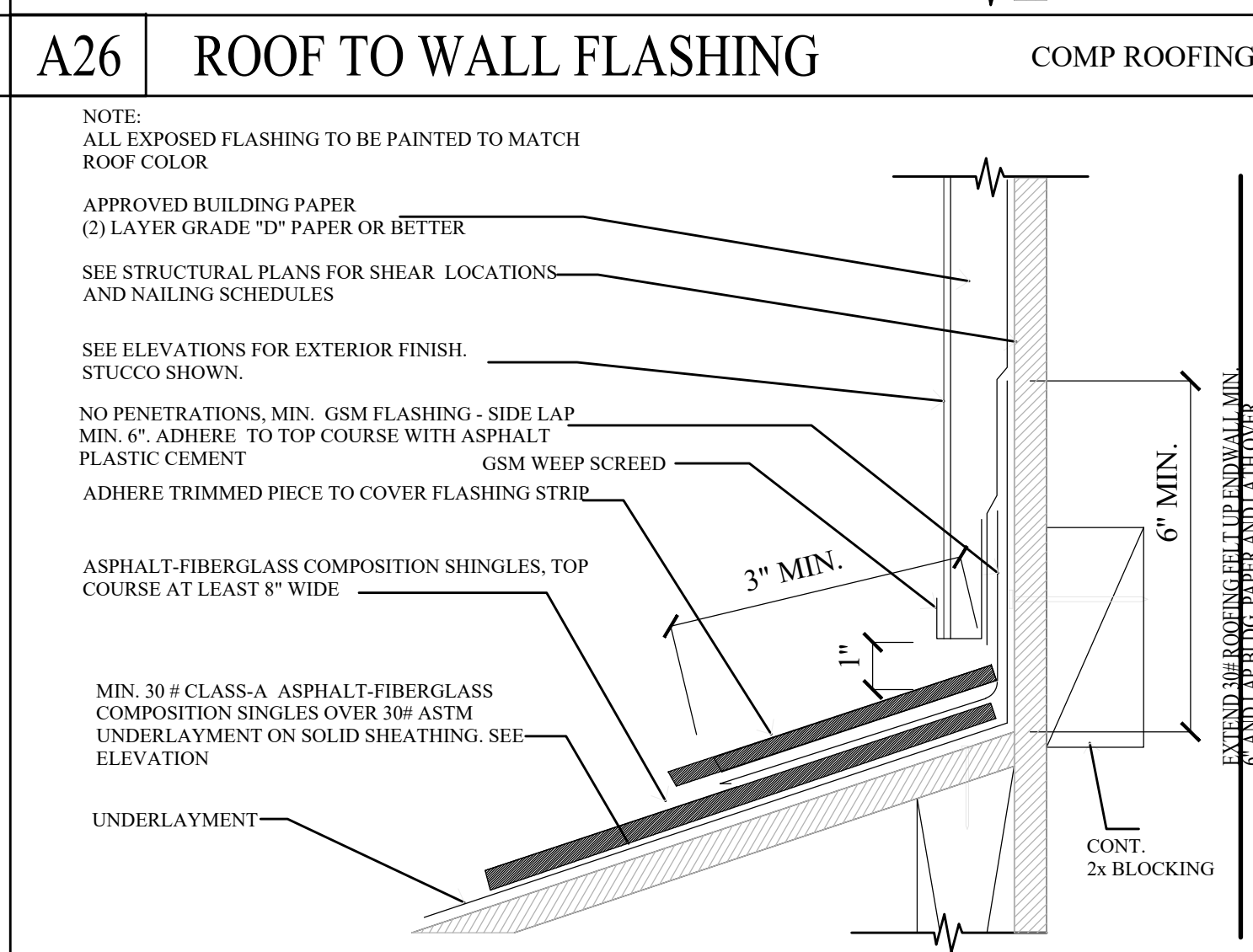
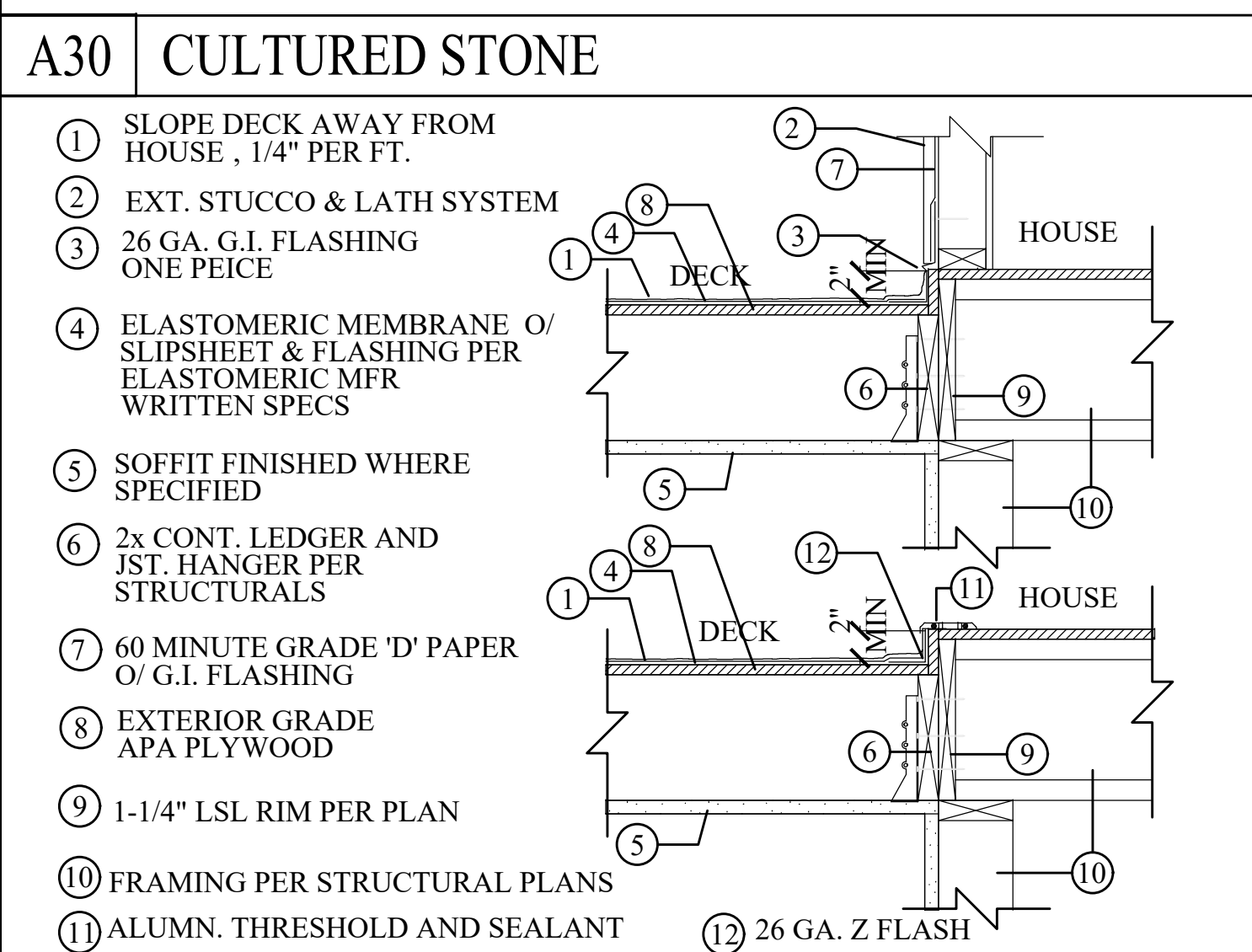
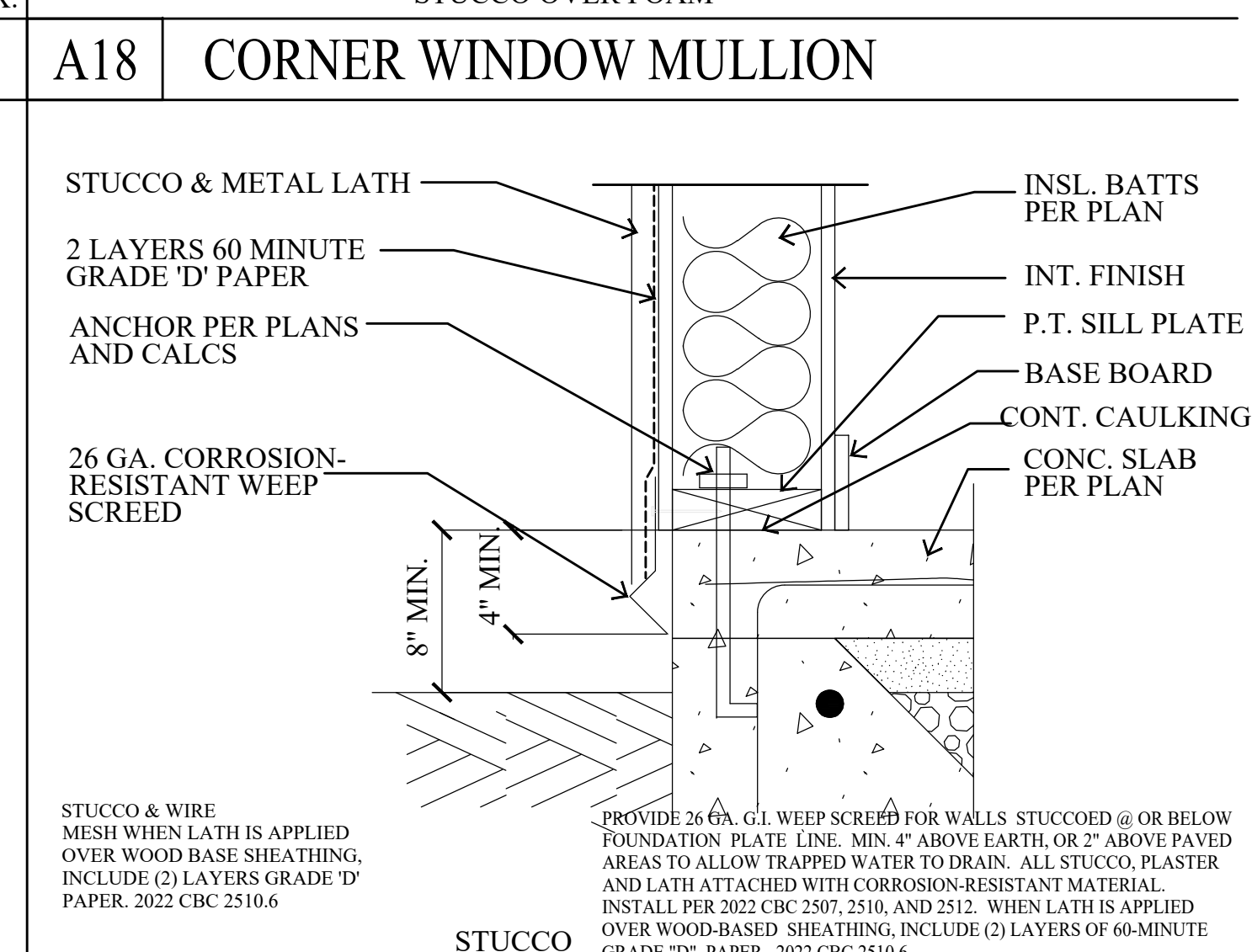
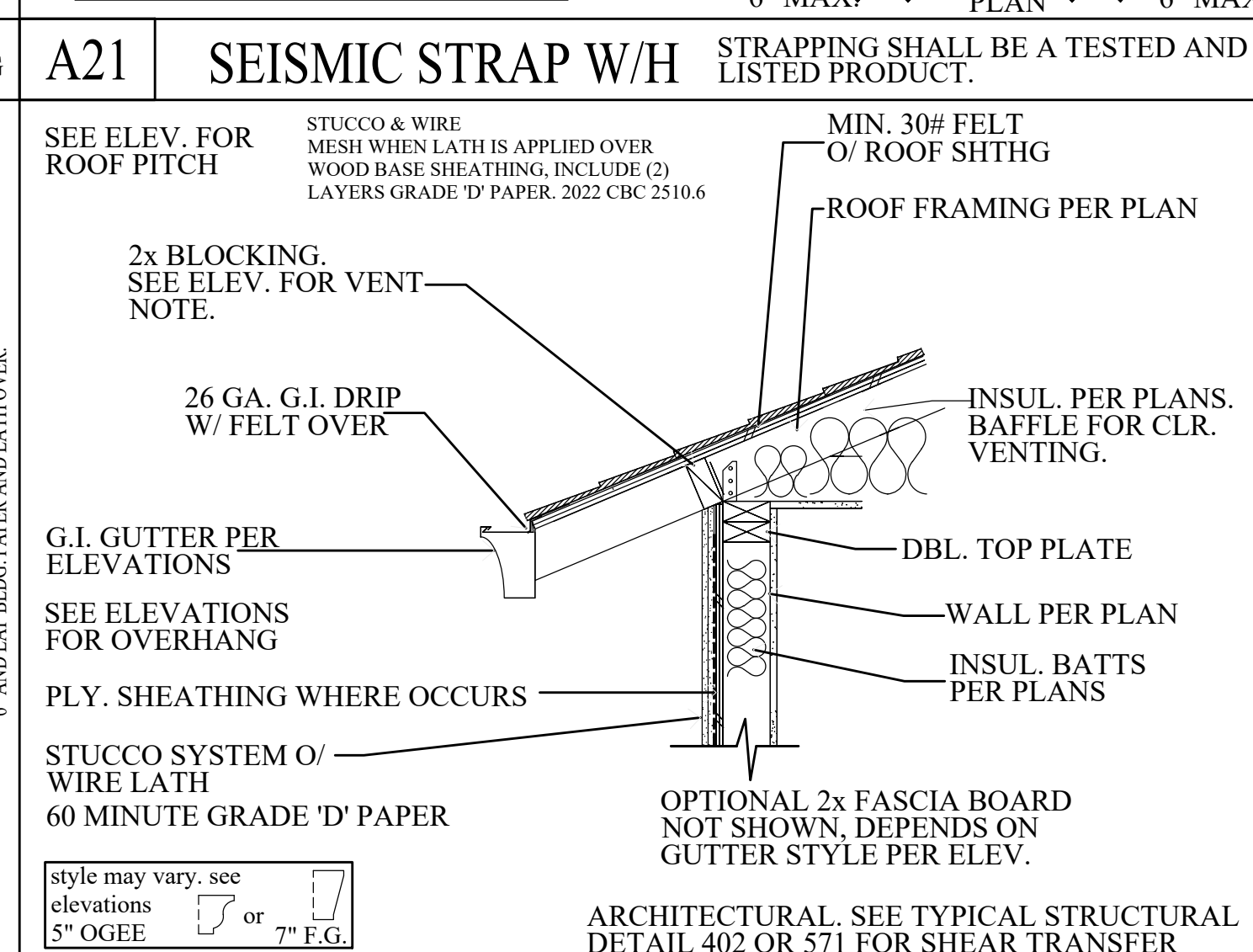
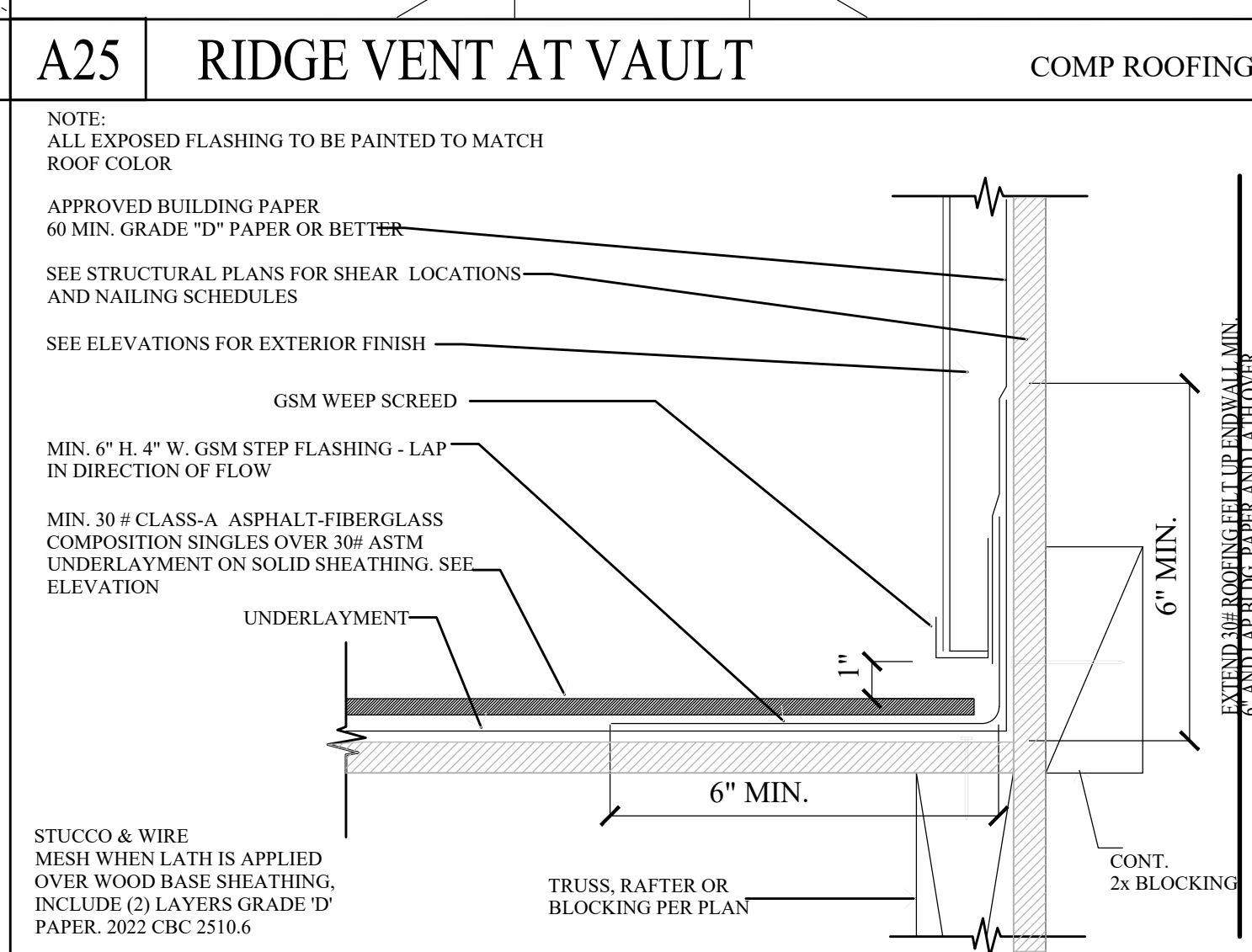
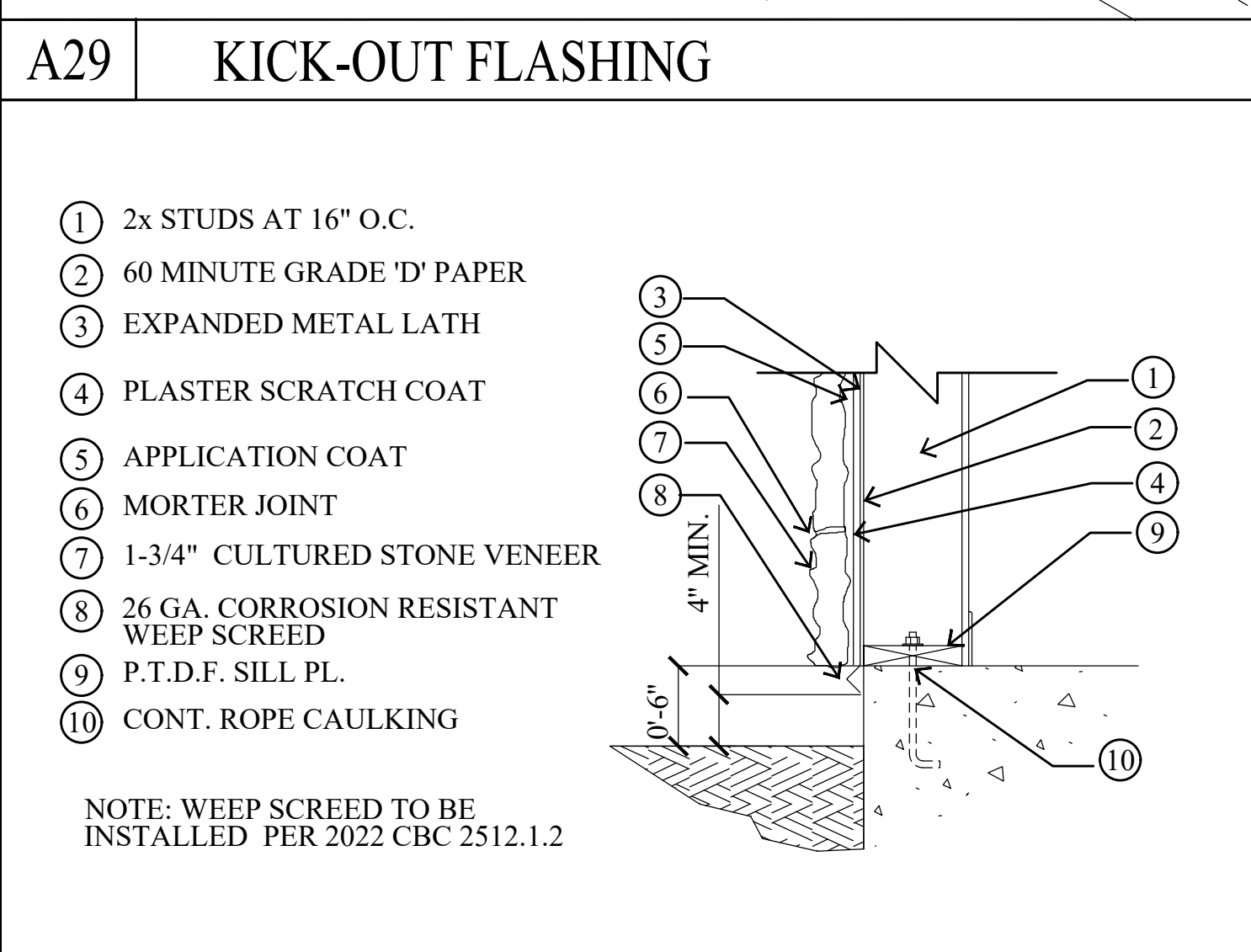
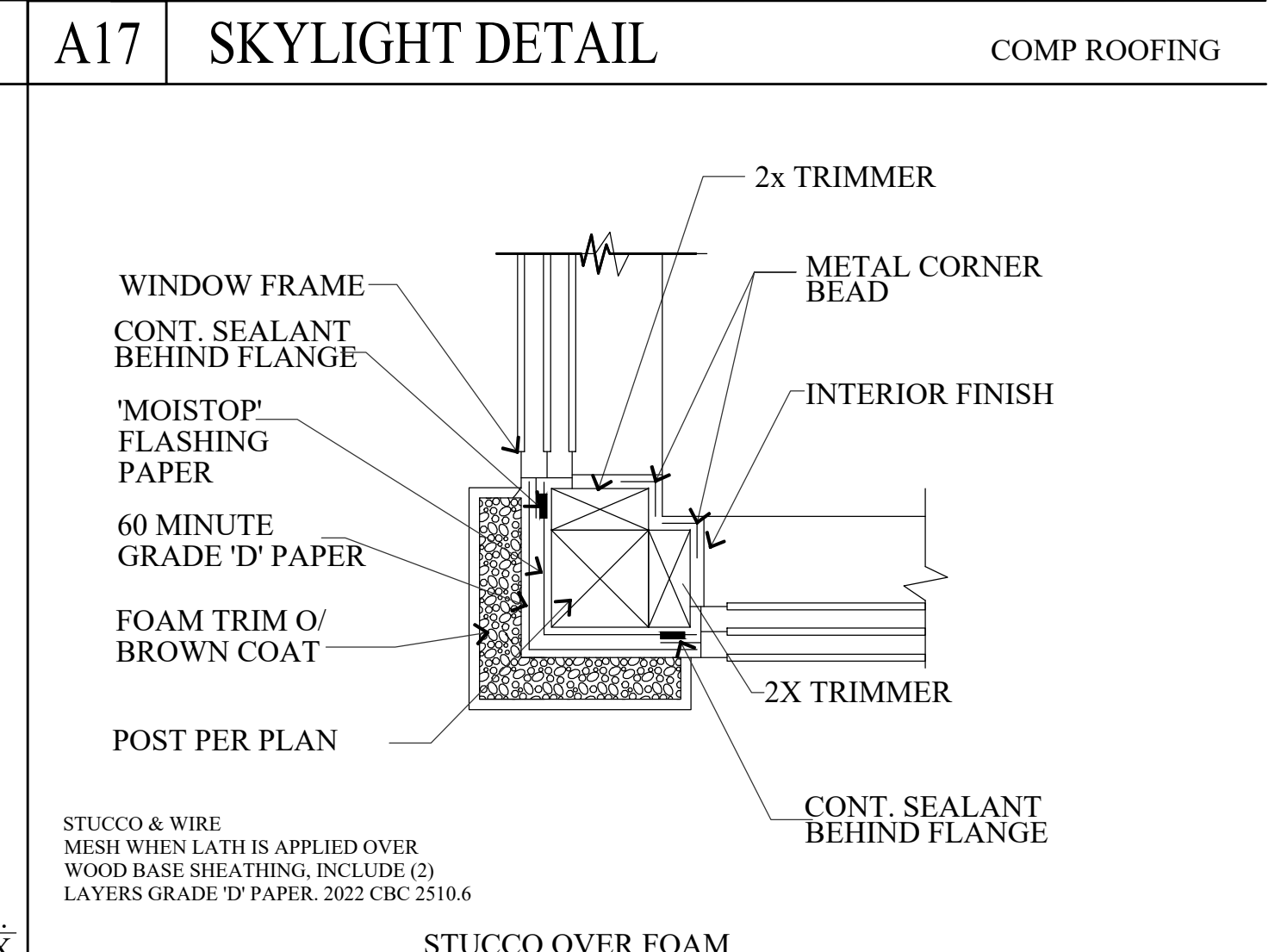
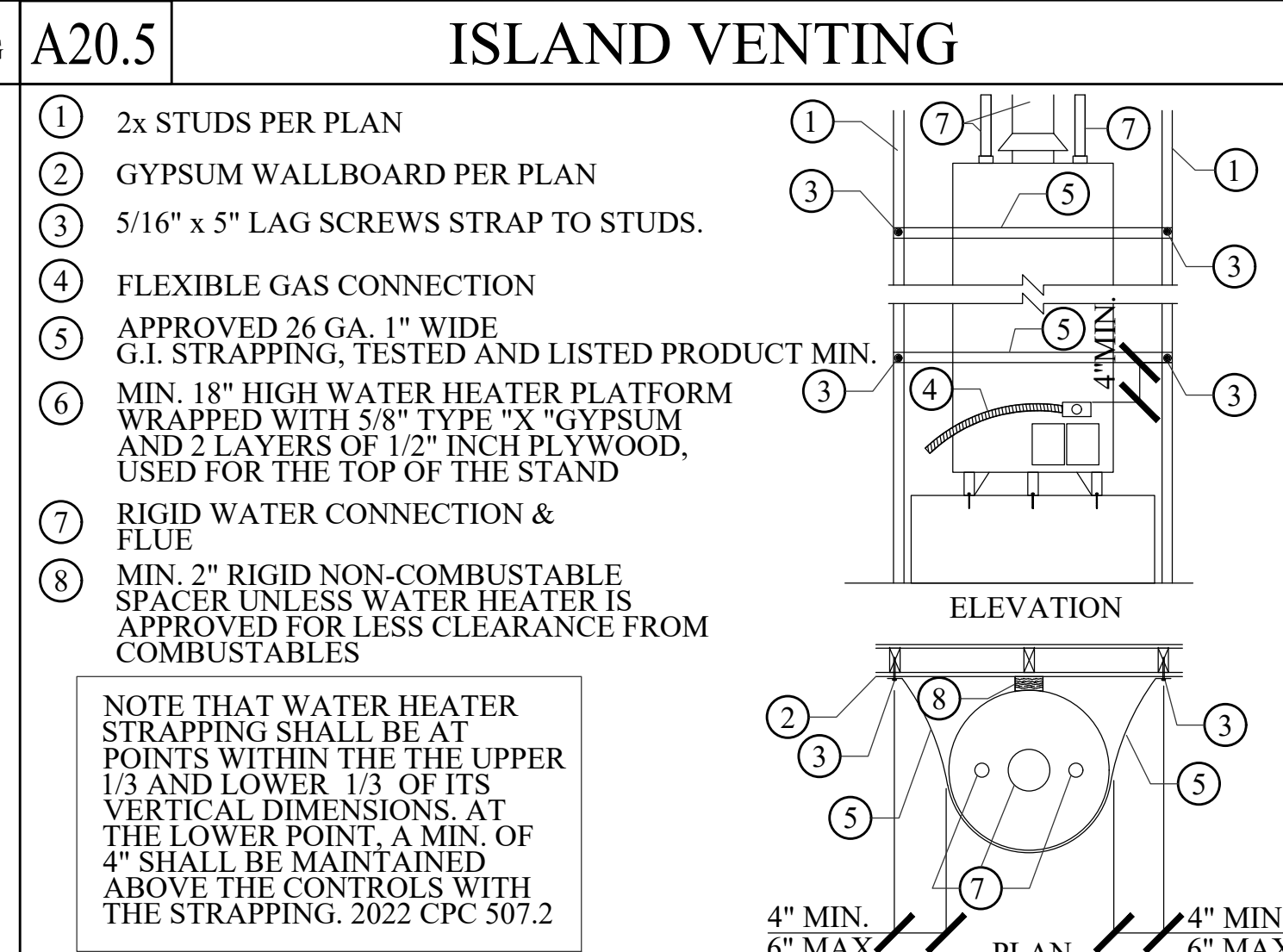
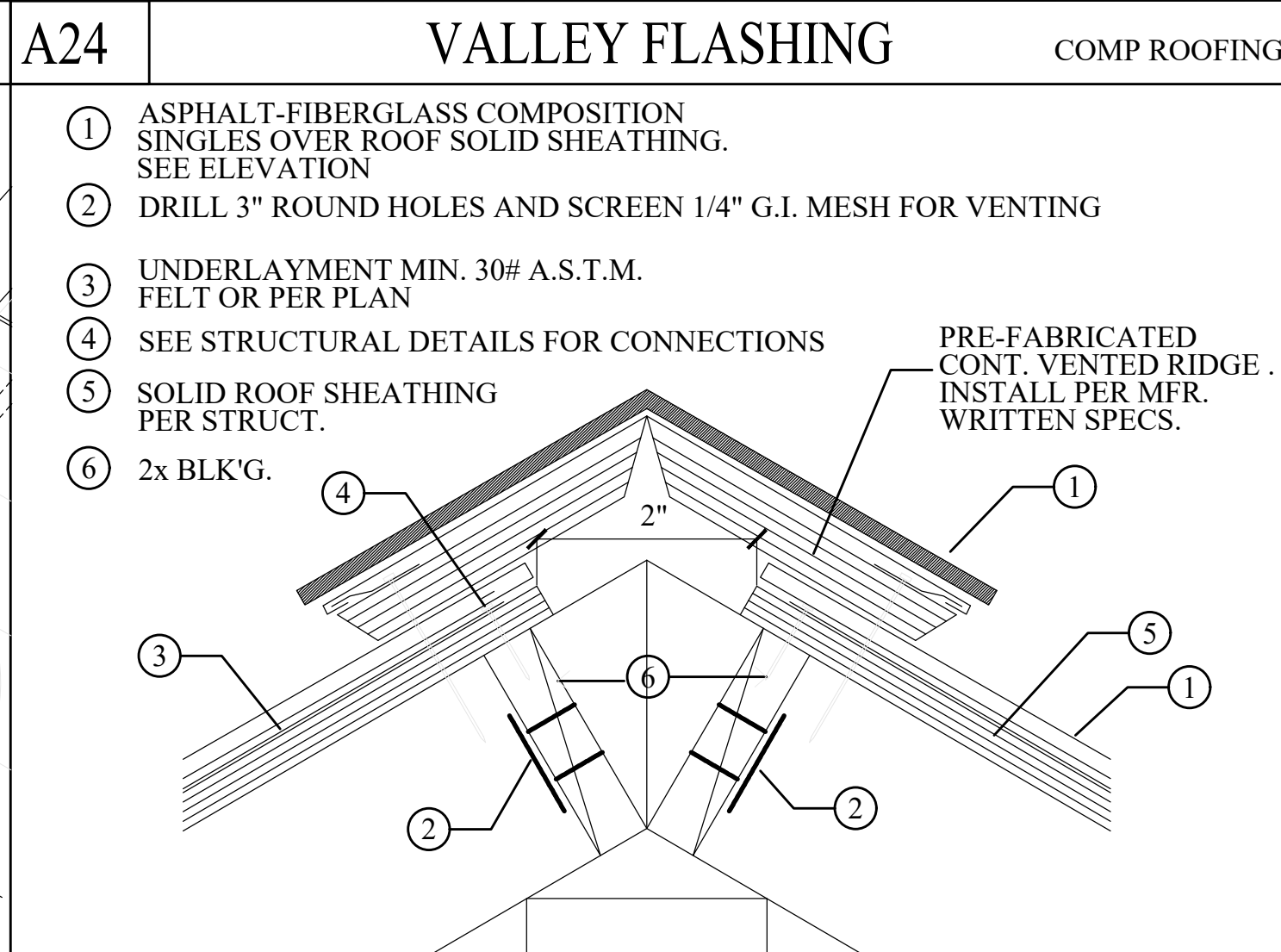
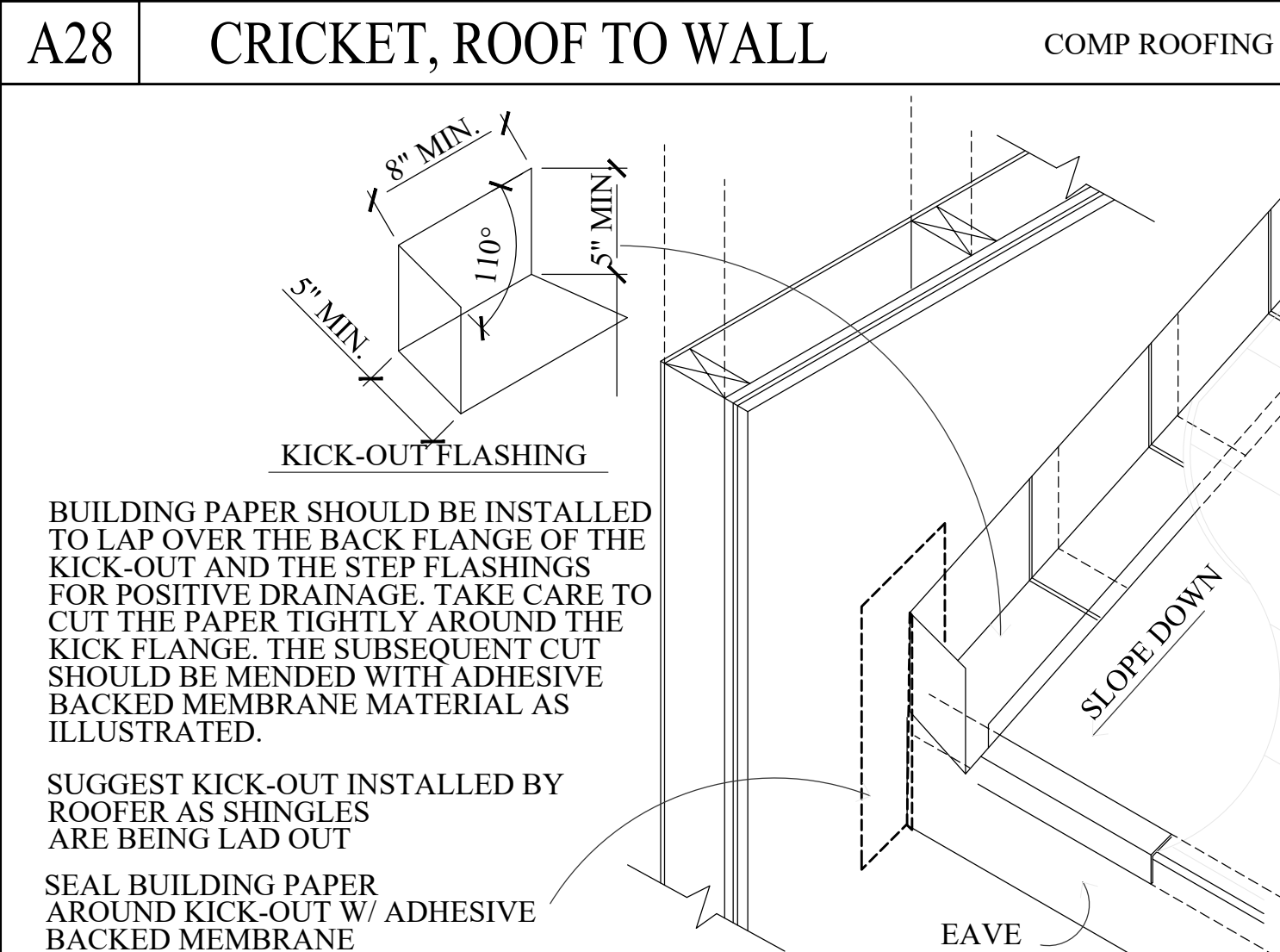
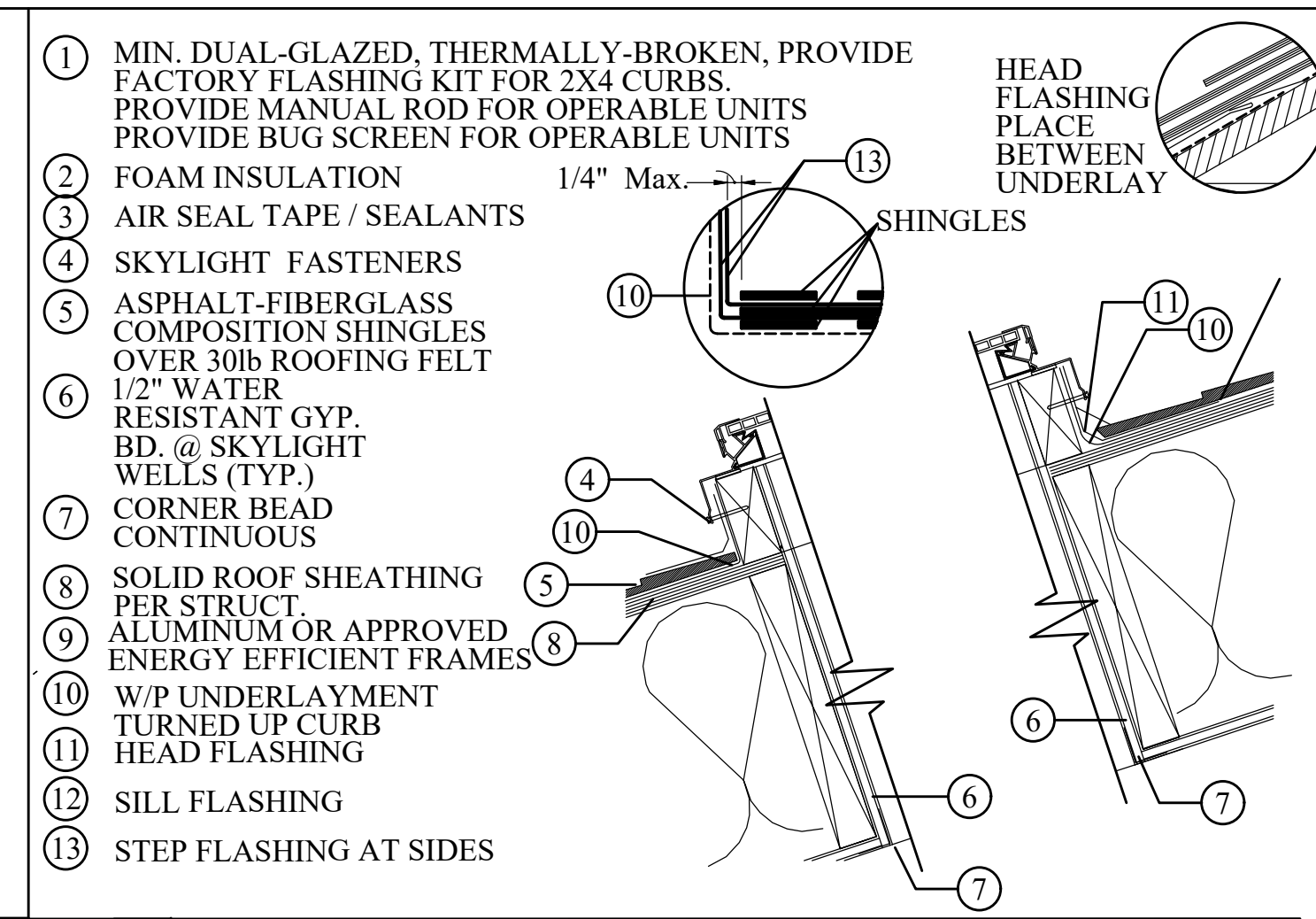
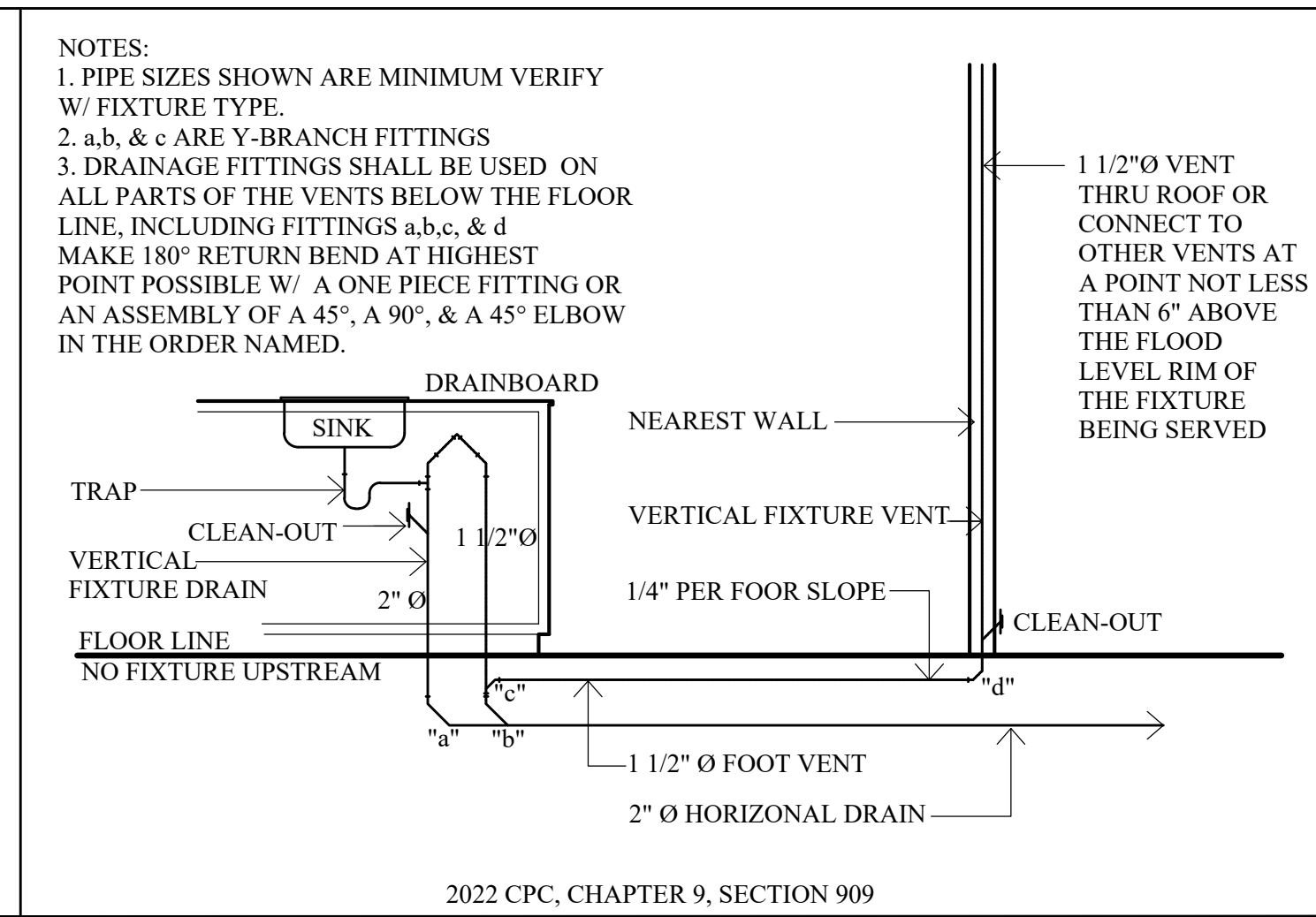
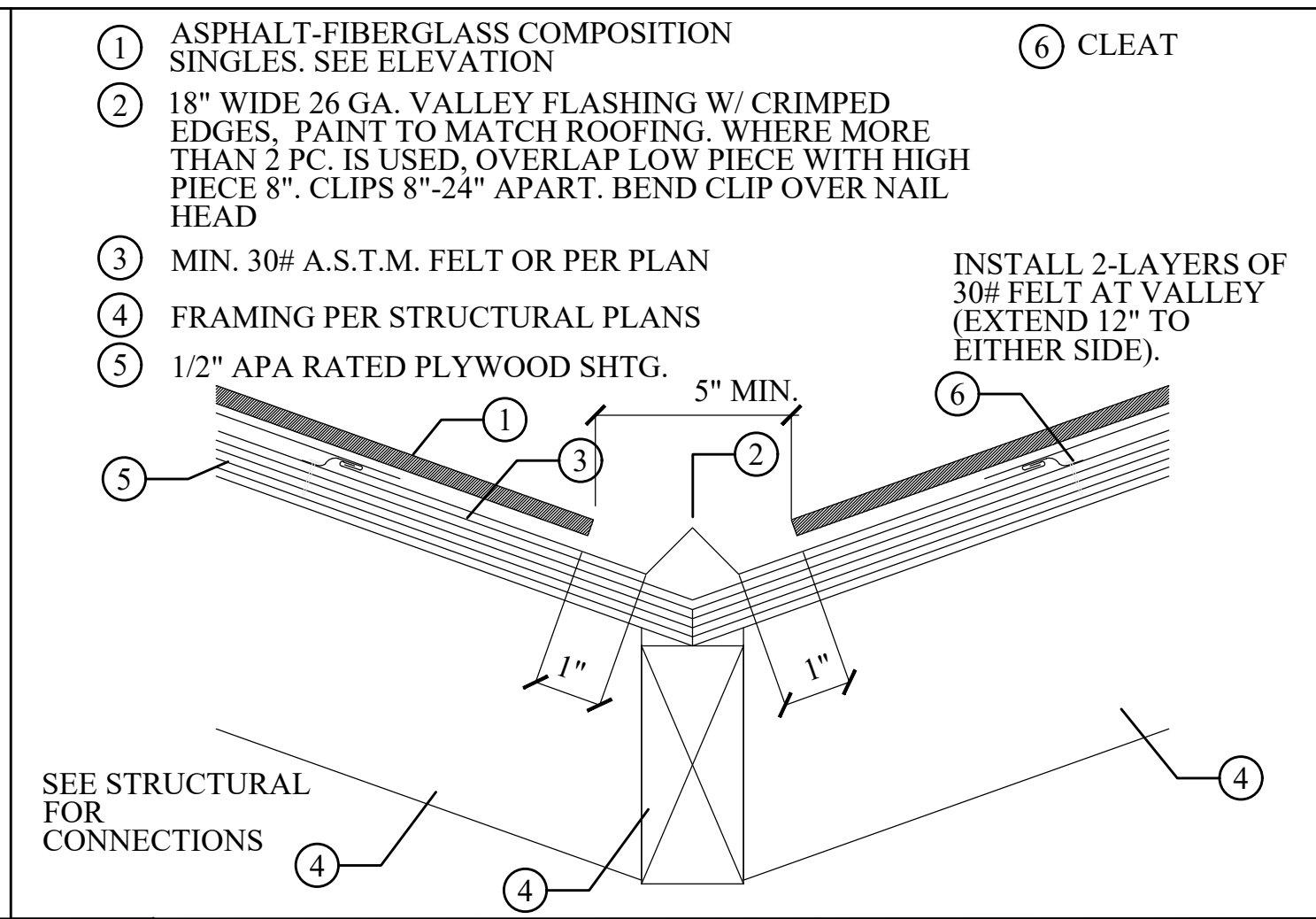
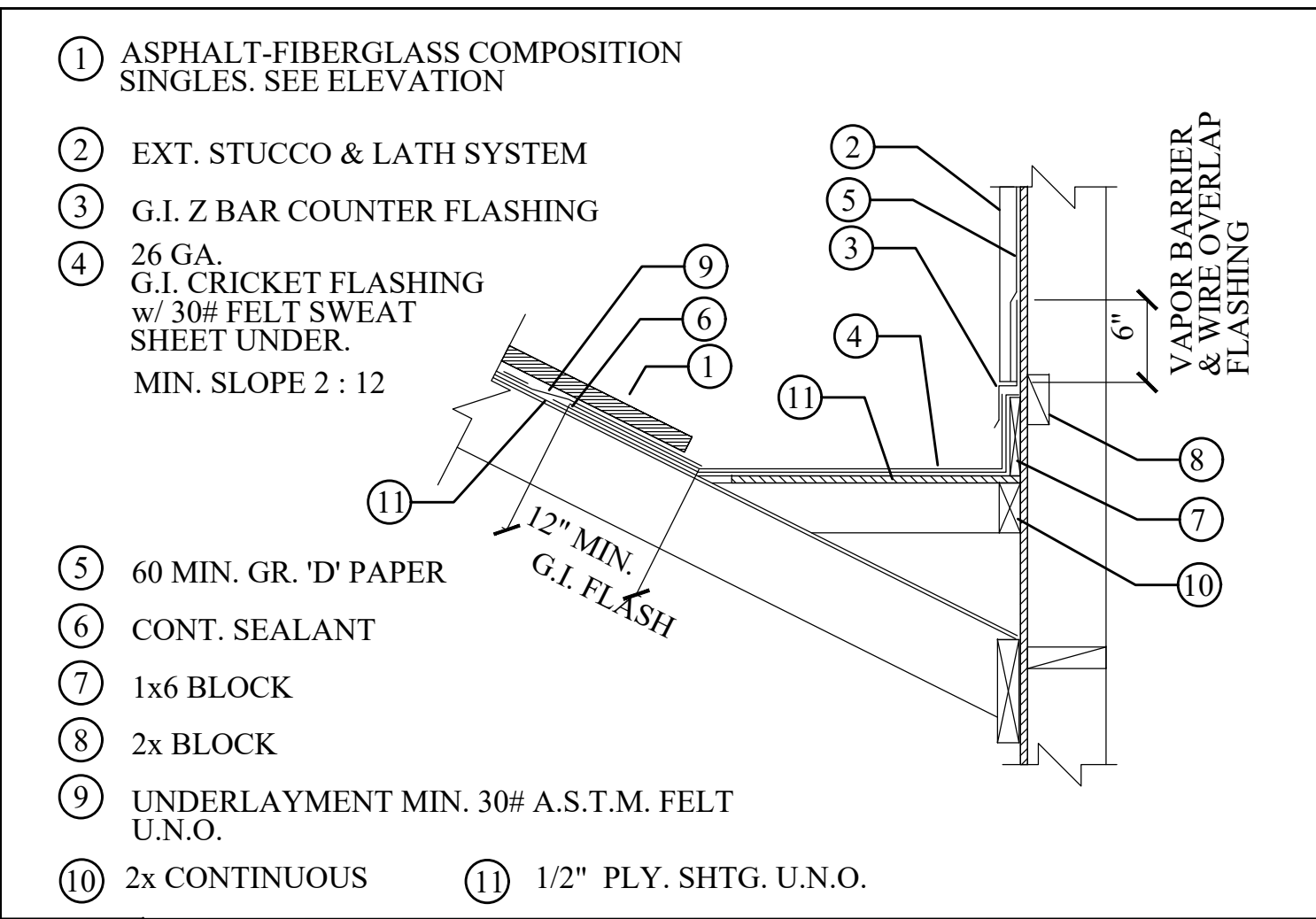
NORMAN J. SCHIFF

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Exp. 12-31-25

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STATE OF CALIFORNIA

9/10/2024  
SHEET  
**AN-1**  
TYP. ARCHITECTURAL ROOF FLASH  
JOB NO. 24131

REV. S.C. 6-21-06



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**AN-2**  
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TYPICAL HEAD AND FLASHING DETAILS - ACTUAL CONDITIONS MAY VARY. THESE DETAILS REPRESENT TYPICAL CONDITIONS FOR REFERENCE WHEN A SPECIFIC DETAIL IS NOT INDICATED.

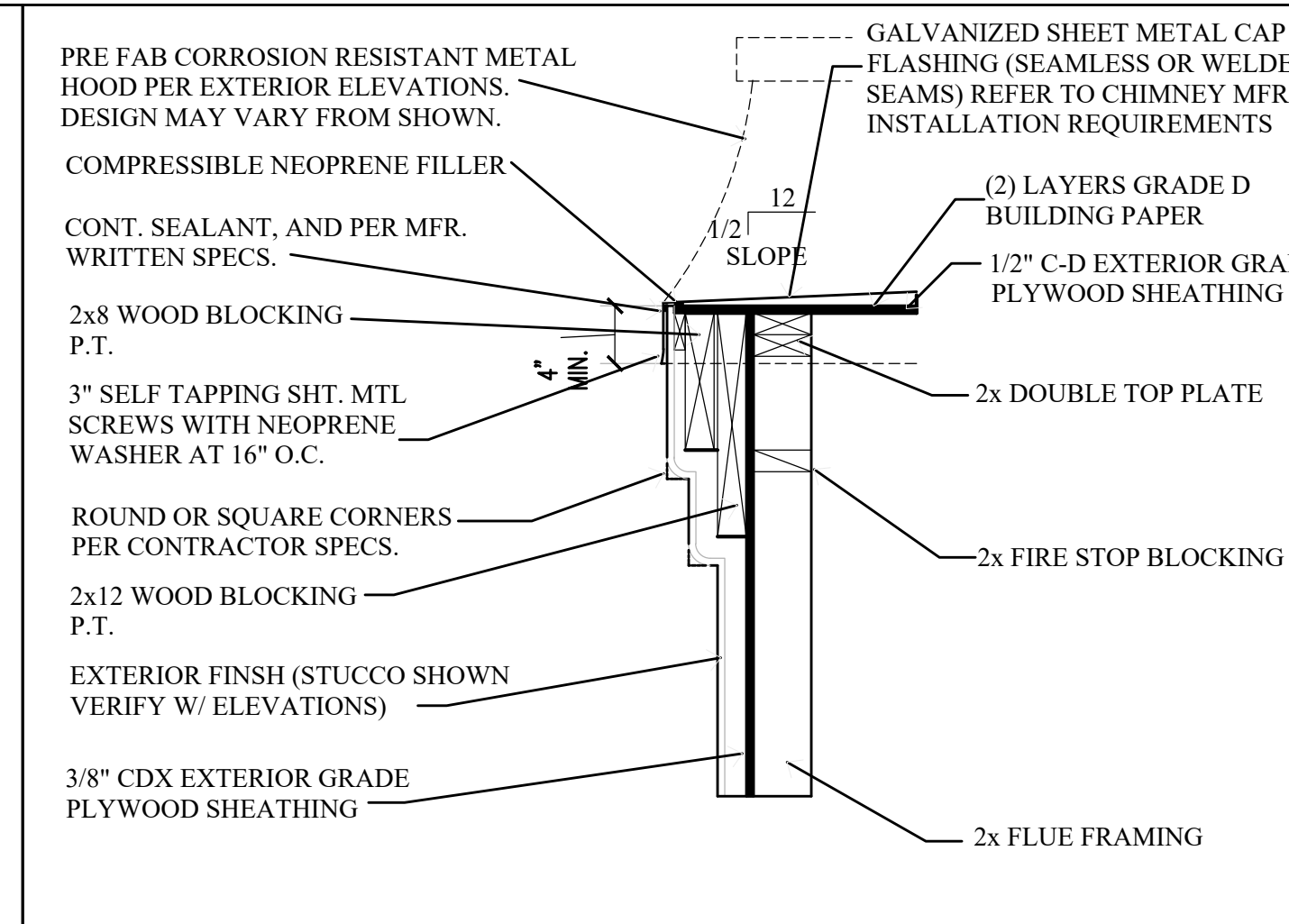
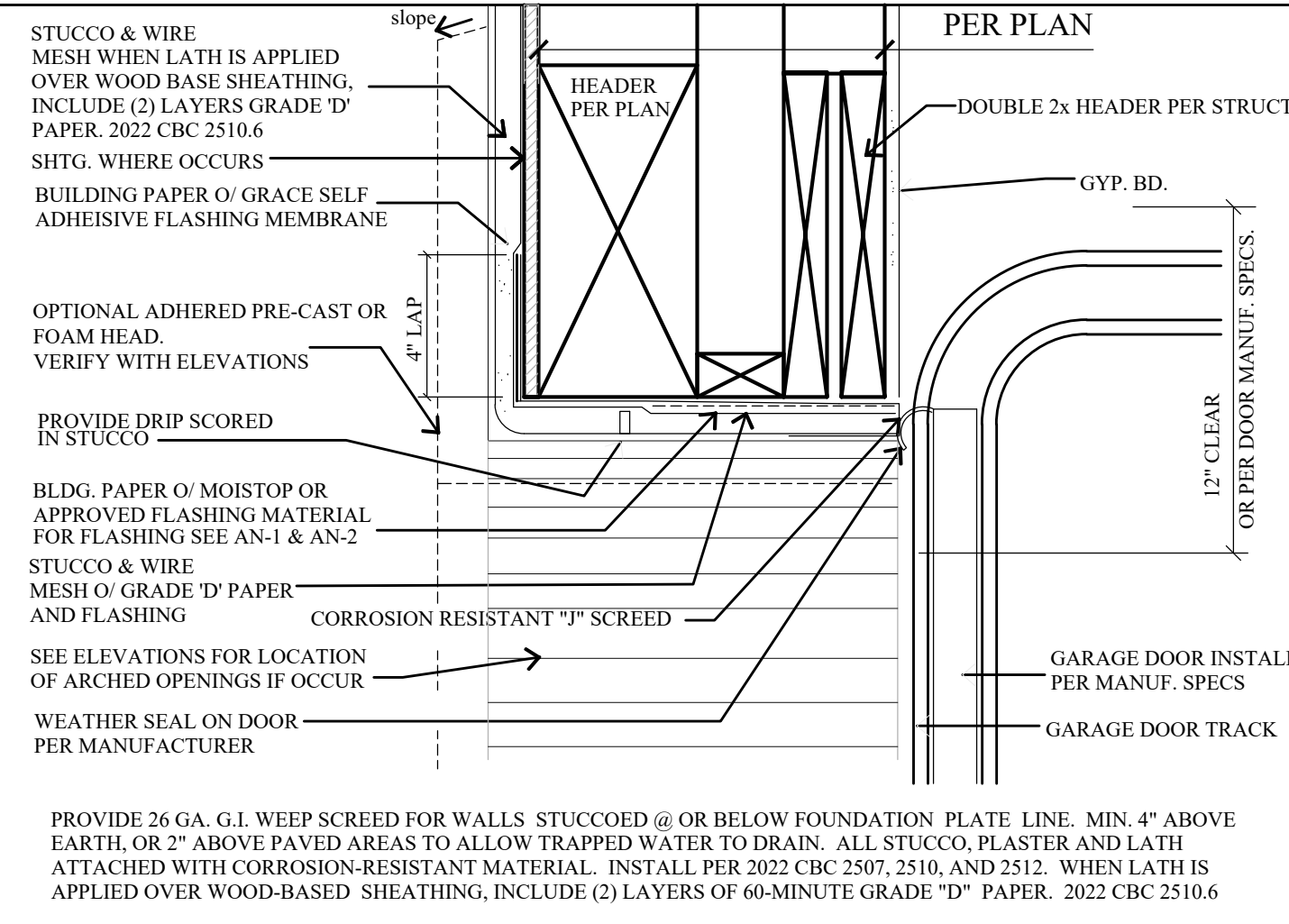
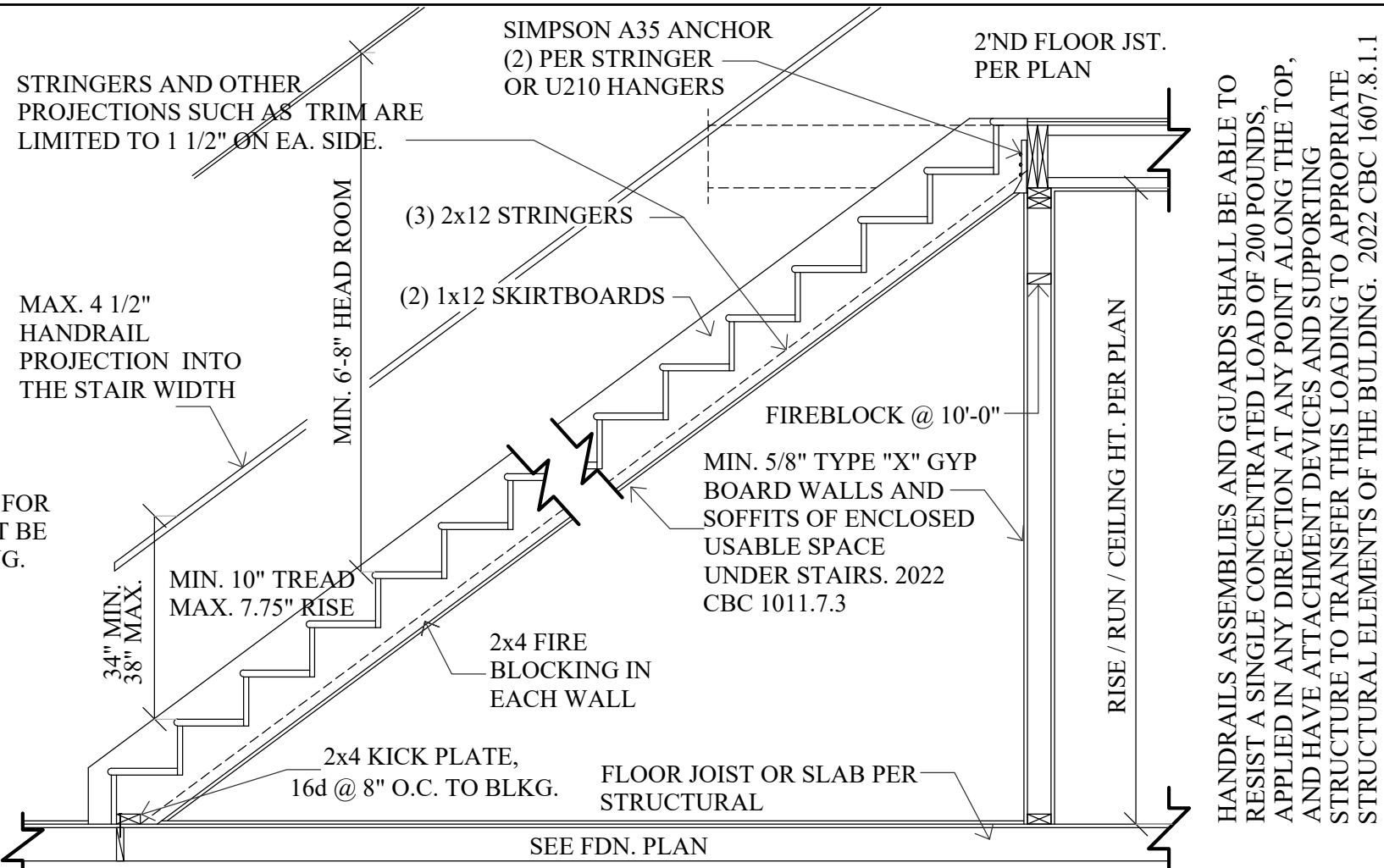
**NOTE:** 2022 CBC 1009 & 1012, 2022 CRC R311

STAIRWAY WIDTH MINIMUM NOT LESS THAN 36" AND PER 2022 CBC 1011.2, 2022 CRC R311. MIN. HEAD CLEARANCE NOT LESS THAN 6'-8". LANDINGS MEASURED IN THE DIRECTION OF TRAVEL NOT LESS THAN WIDTH OF STAIRWAY, AND NEED NOT EXCEED 48" FOR STRAIGHT STAIRS, 2022 CBC 1011.6, 2022 CRC R311.7. DOORS OPENING AT TOP STEP OF INTERIOR STAIRS MAY NOT OPEN OVER THE TOP STEP, 2022 CBC 1011. DOORS OPENING AT A LANDING THAT IS NOT MORE THAN 7.75" LOWER THAN FLOOR LEVEL, DOOR MAY NOT SWING OVER LANDING. SCREEN DOORS, STORM DOORS MAY SWING OVER STAIRS OR LANDINGS. SEE DETAILS FOR HANDRAILS. 7.75" MAX. RISE, 10" MIN. RUN, THE LARGEST TREAD OR RISER SHALL NOT EXCEED SMALLEST BY 3/8". CBC SECTION 1011.5. MIN. (1) HANDRAIL PER 2022 CBC 1009.12, EXCEPTIONS 2 & 4 REQUIRED WHERE THERE ARE 4 OR MORE RISERS. HANDRAIL NOT LESS THAN 34" NOR MORE THAN 38" ABOVE STAIR TREAD NOSING 2022 CBC 1012.2

SKIRTBOARDS TO BE INSTALLED AFTER SHEETROCK IS APPLIED. SKIRTBOARD TO SET ON TOP OF 2x4 NAILED TO STRINGER

CODE COMPLYING HANDRAILS REQUIRED FOR STAIRSTEPS WITH 4 OR MORE RISERS MUST BE 34" MIN. TO 38" MAX. ABOVE TREAD NOSING. 2022 CBC 1014

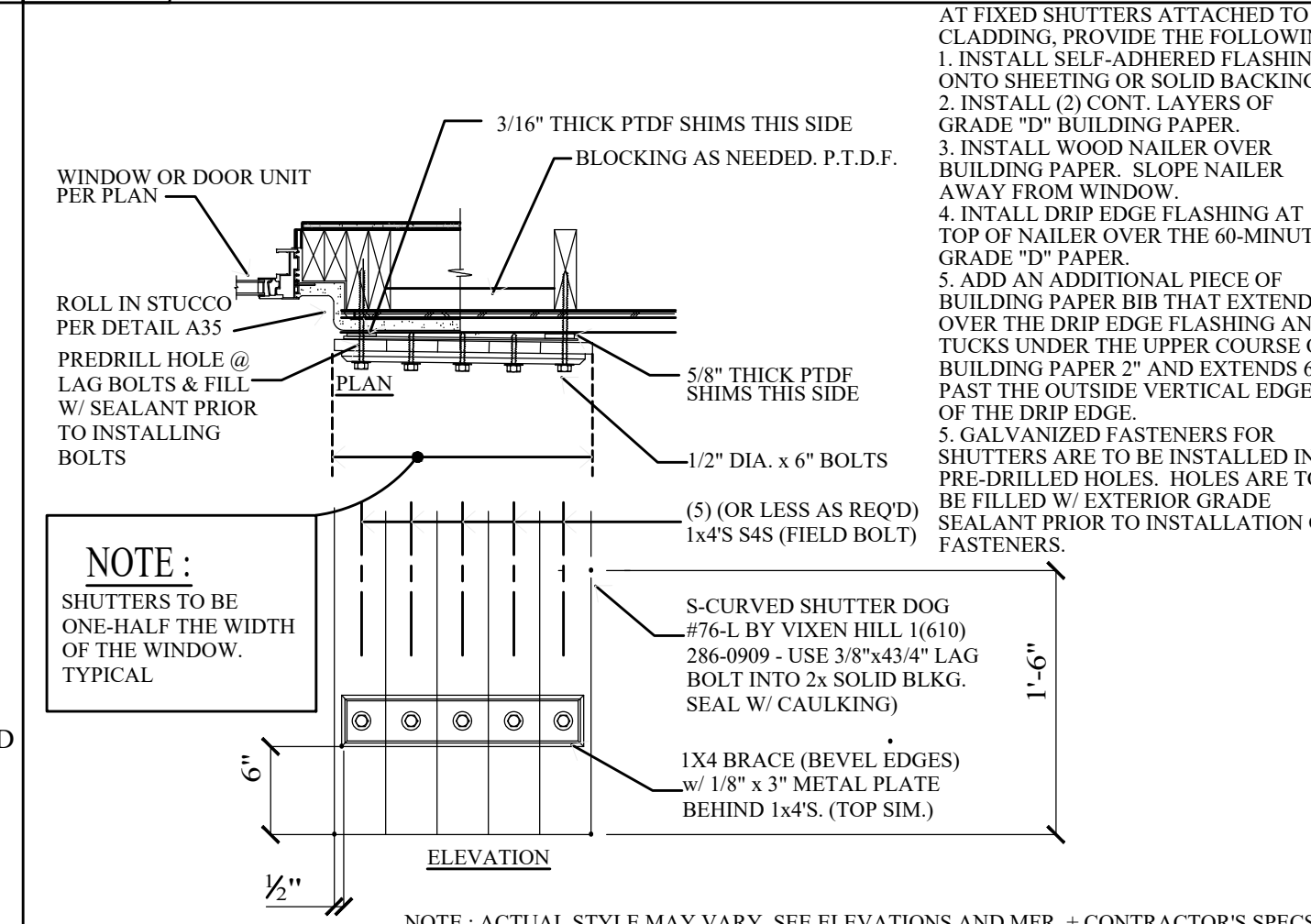
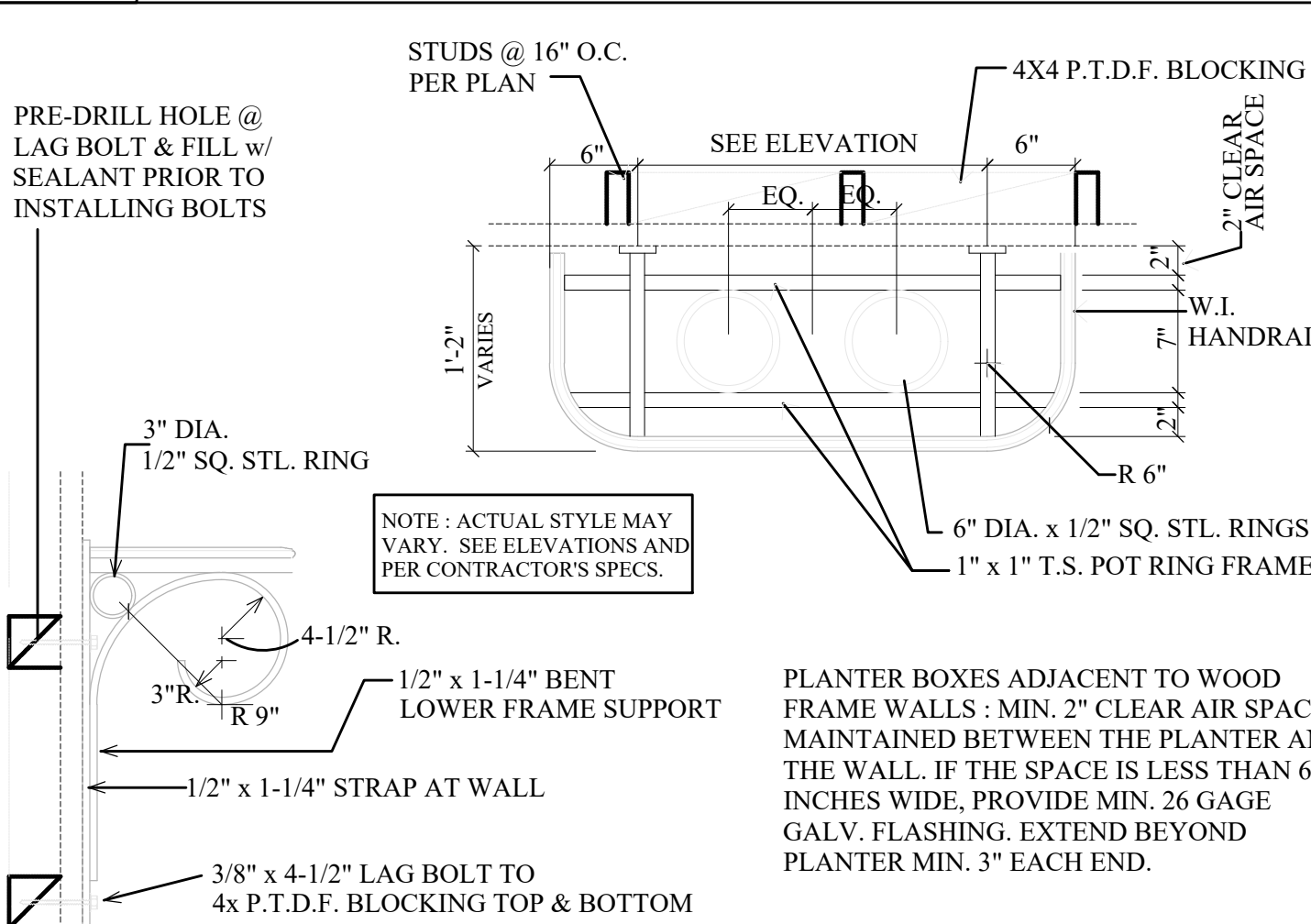
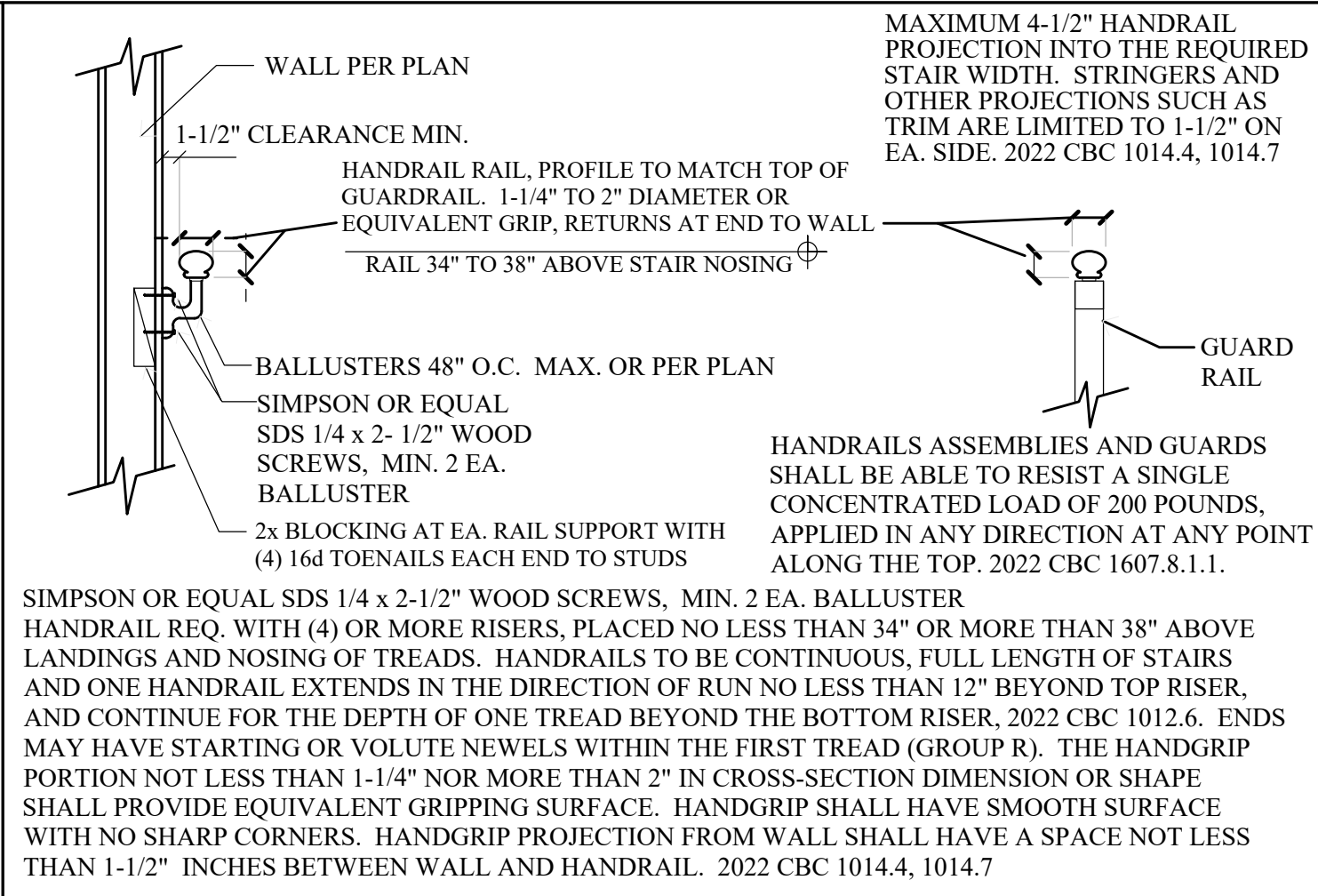
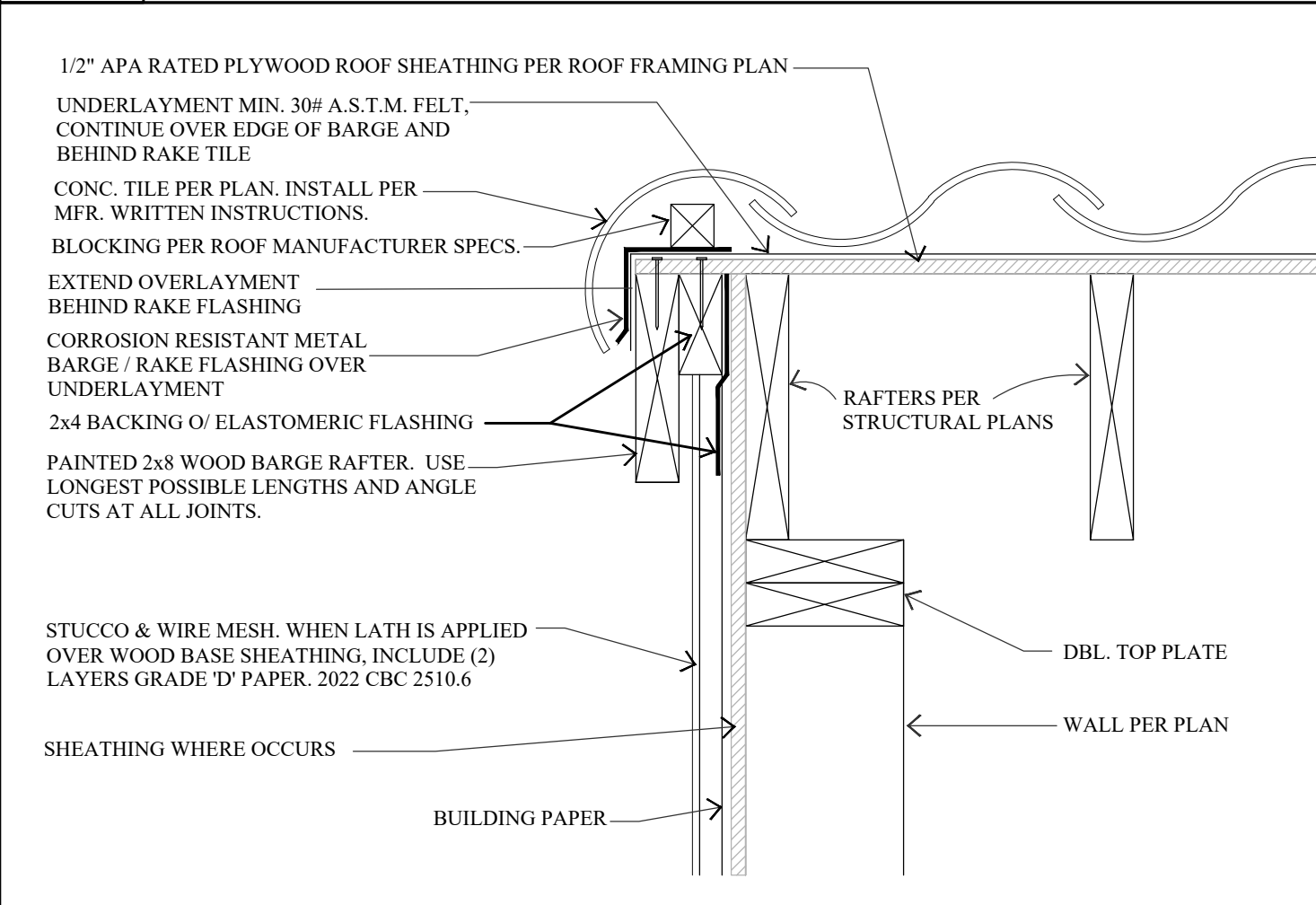
PROVIDE PROTECTIVE RAIL MIN. 42" HIGH (TYP.) FOR PORCHES, BALCONIES, OPEN SIDES OF STAIRS & LANDING THAT ARE 30" OR MORE ABOVE GRADE OR FLOOR BELOW. INTERMEDIATE RAILS OR ORNAMENTAL PATTERN SUCH THAT A SPHERE 4 INCHES IN DIAMETER CANNOT PASS, EXCEPT WHERE THE TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD AND BOTTOM ELEMENT OF RAILING AT OPEN SIDE MAY BE SUCH THAT A 6" DIAMETER SPHERE CANNOT PASS THROUGH. 2022 CBC 1015.4



**S1 TYPICAL STAIR DETAIL**

**A36 RECESSED GARAGE DOOR**

**A32 TYPICAL CHIMNEY TRIM**

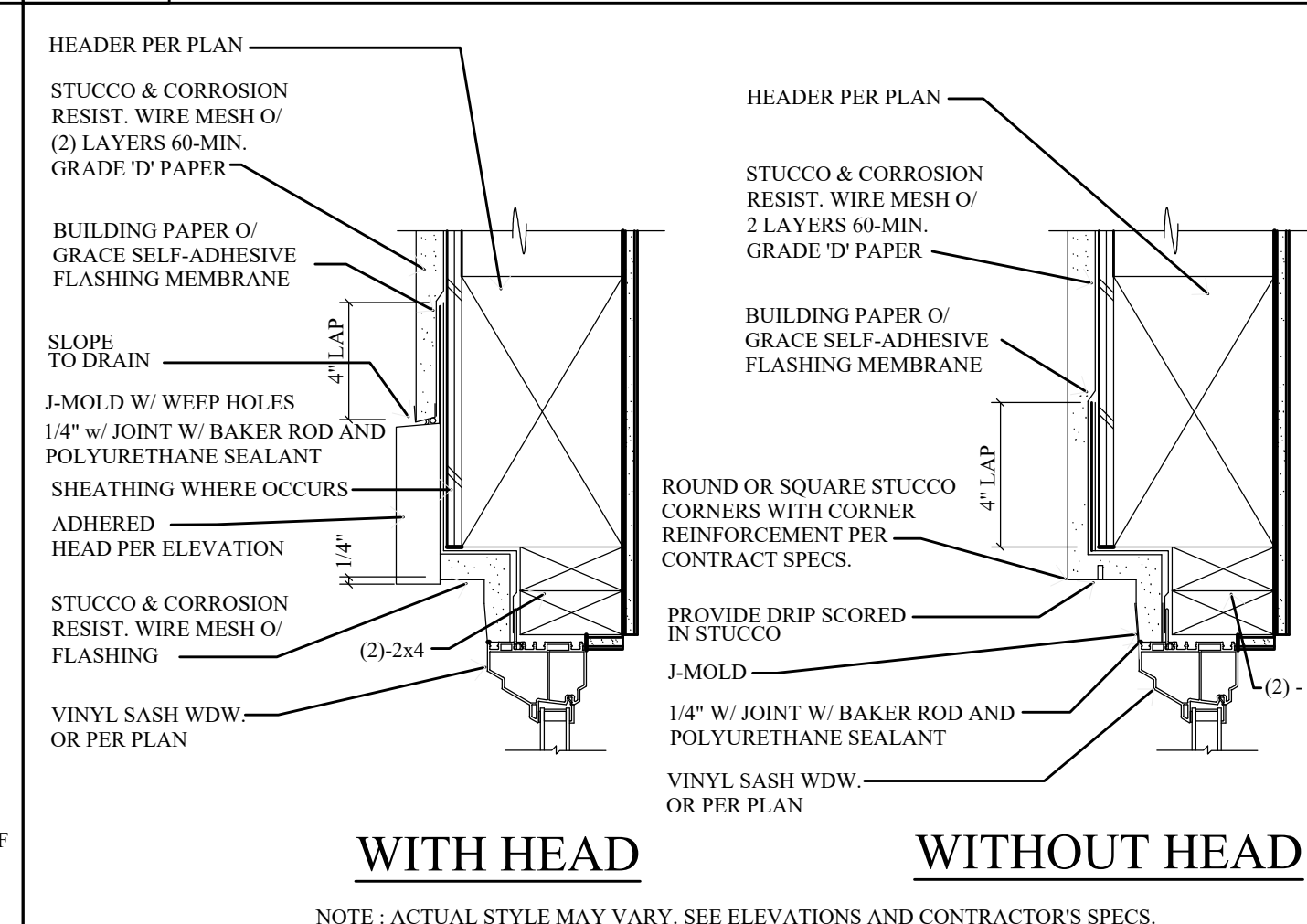
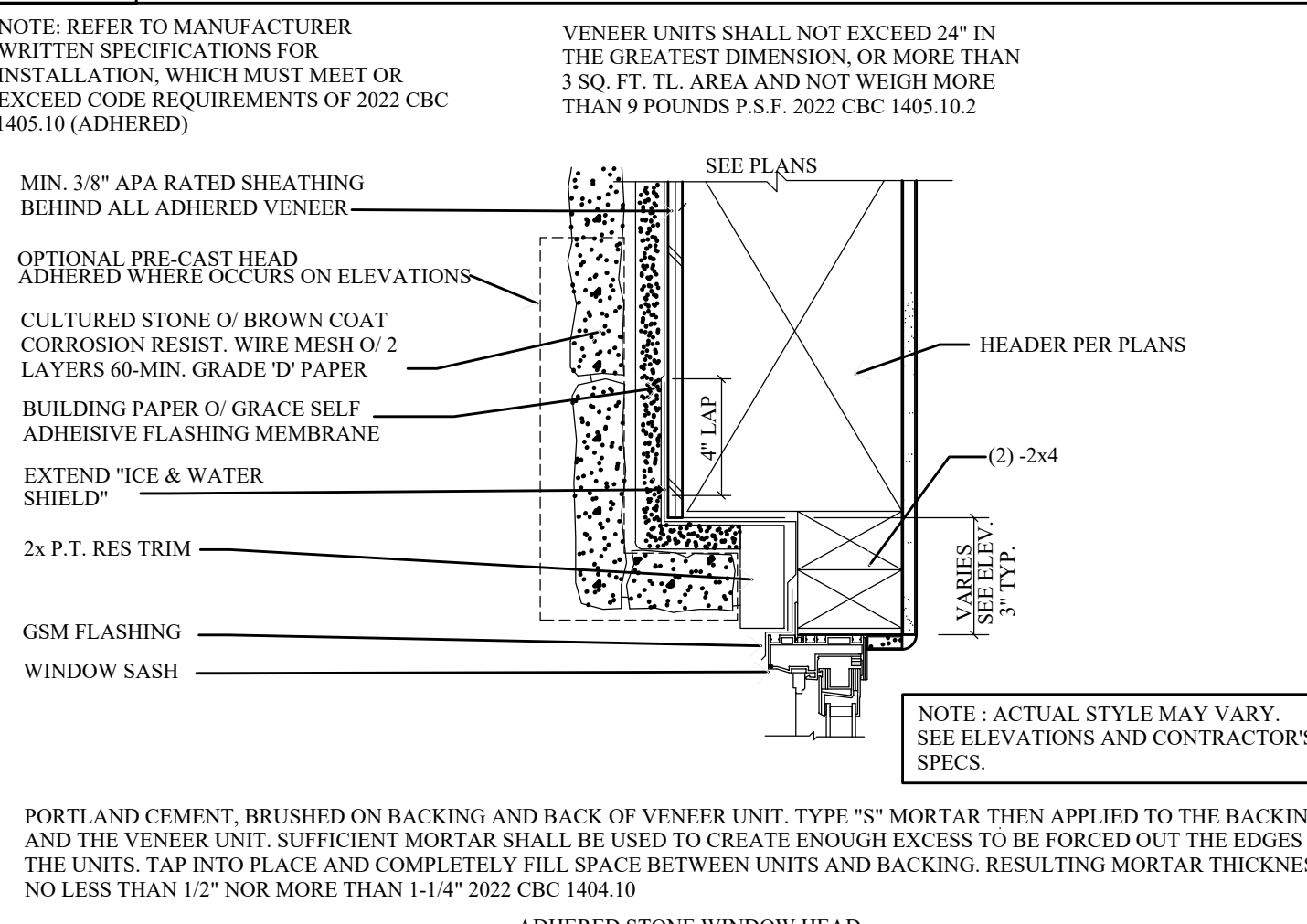
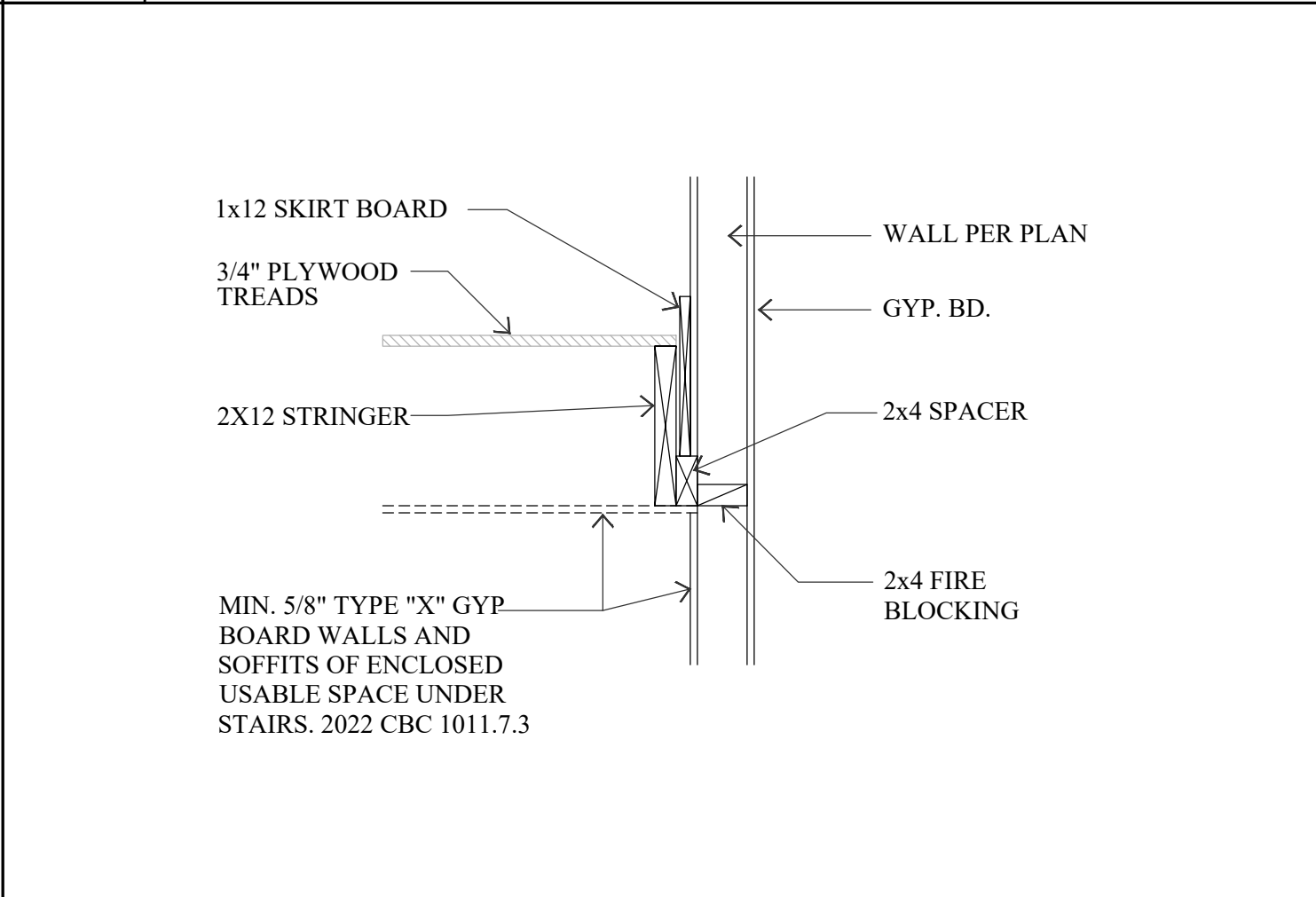
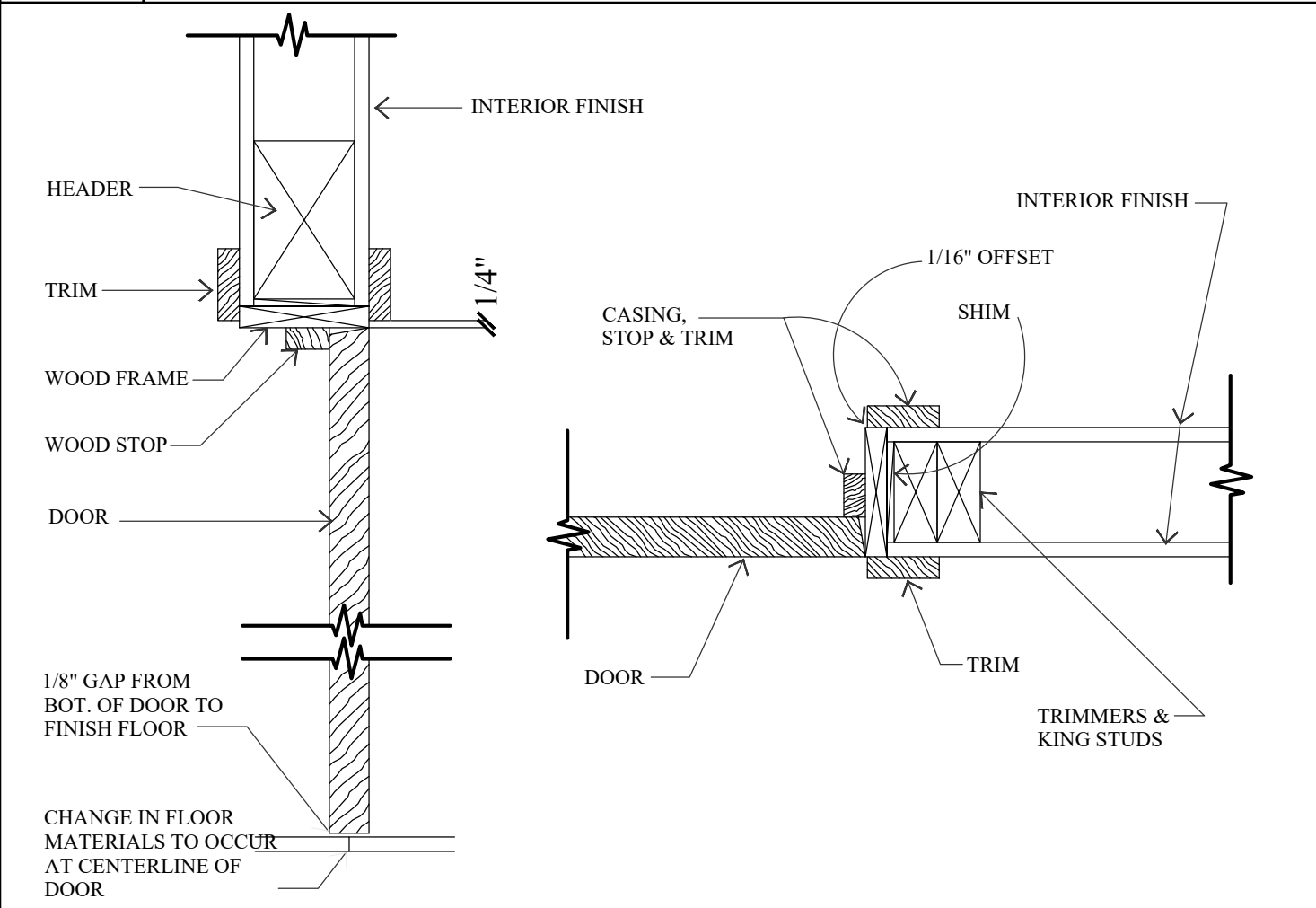


**A42 FLUSH GABLE DETAIL** S' TILE ROOFING W/ COAT STUCCO

**H HANDRAIL DETAIL**

**A37 METAL POT SHELF**

**A33 TYPICAL SHUTTERS**

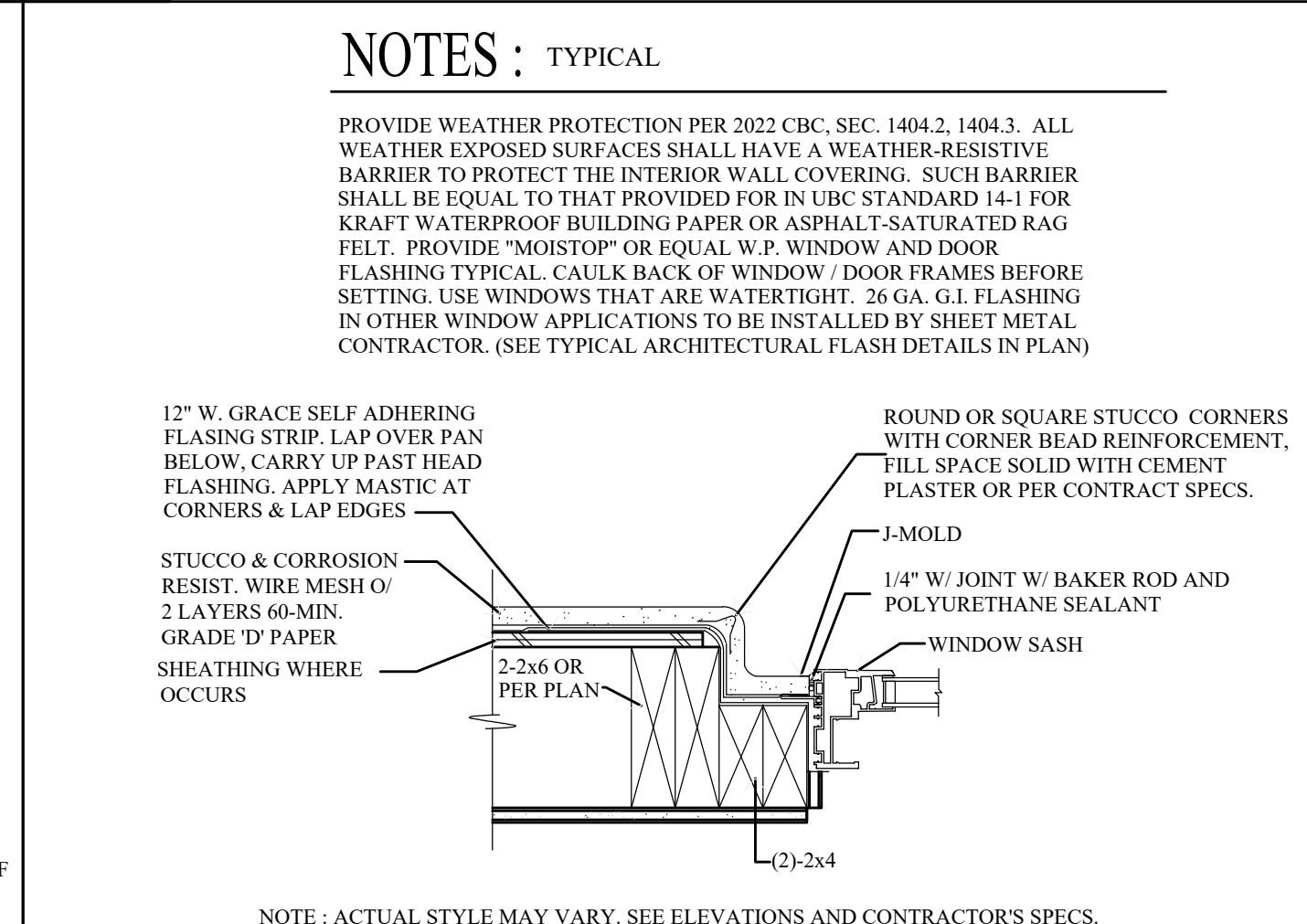
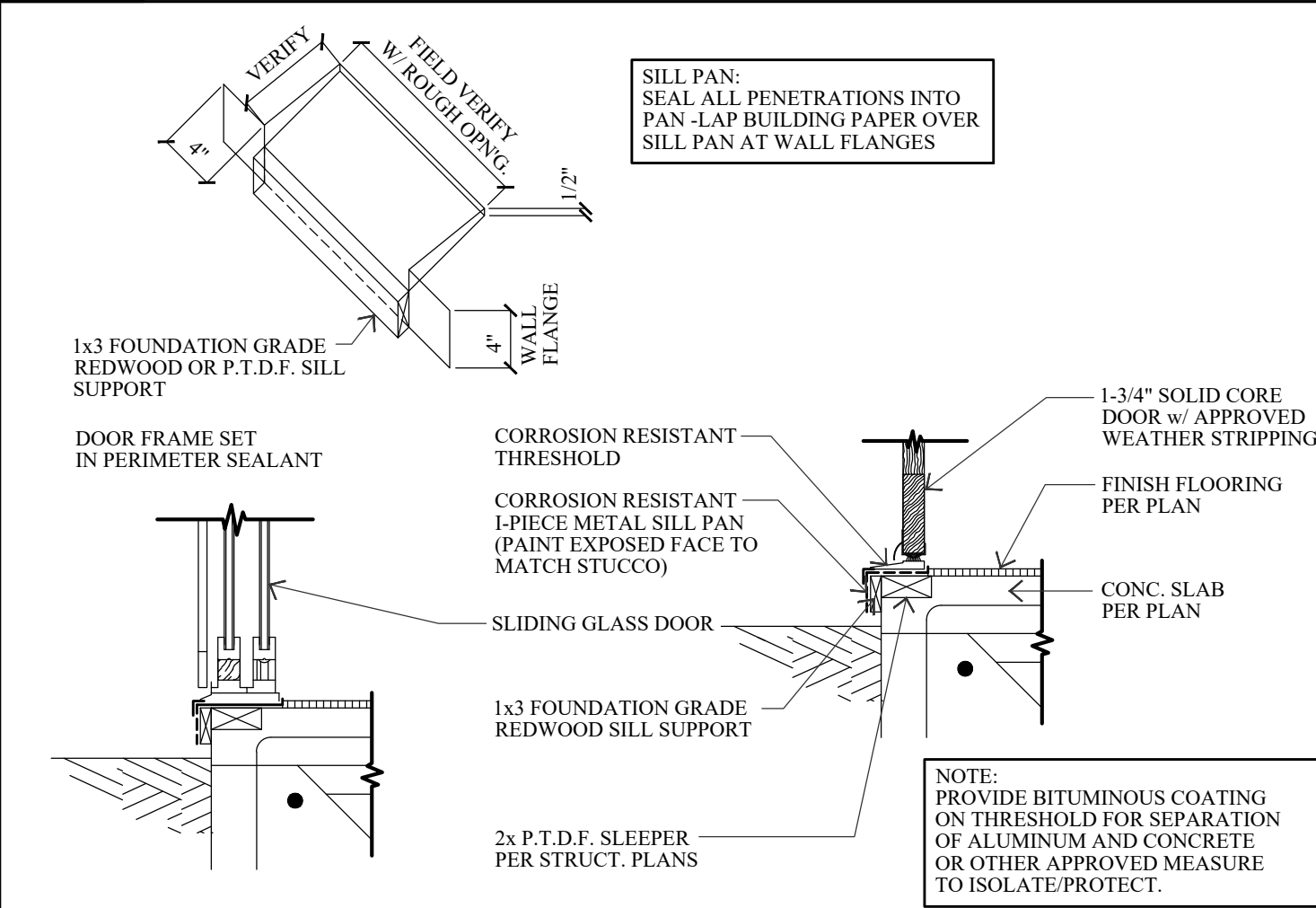


**A43 INTERIOR DOOR & JAMB**

**A40 SKIRT BOARD**

**A38 RECESSED STONE WDW. HEAD**

**A34 RECESSED OPENING WITH TRIM**



**A44 EXTERIOR THRESHOLD**

**A39 RECESSED STONE WDW. SILL**

**A35 RECESSED WINDOW**

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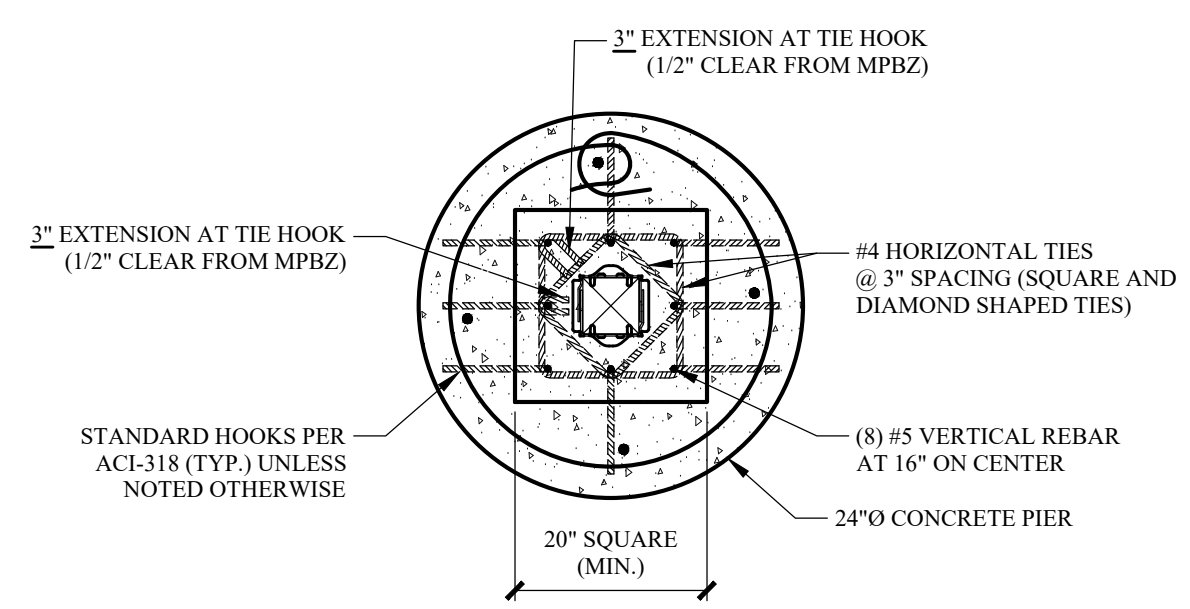
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ENGINEER: NS  
DRAWN BY: LT  
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ISSUE DATE: 9/10/2024

REVISIONS:

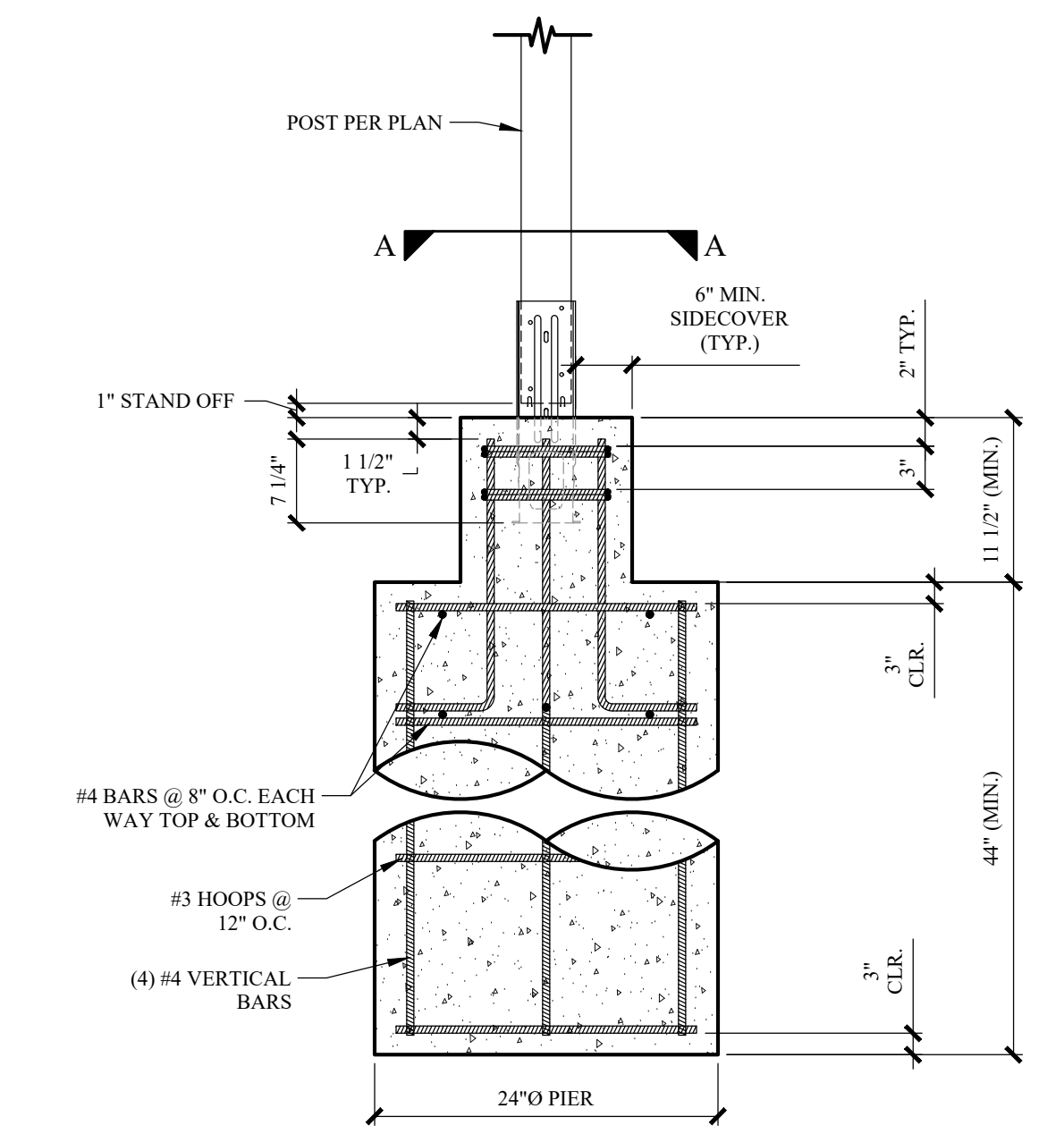
REGISTERED PROFESSIONAL ENGINEER  
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Exp. 12-31-25  
STRUCTURAL  
STATE OF CALIFORNIA

9/10/2024  
SHEET  
**AN-3**  
TYPICAL STANDARD TRIM  
JOB NO. 24131

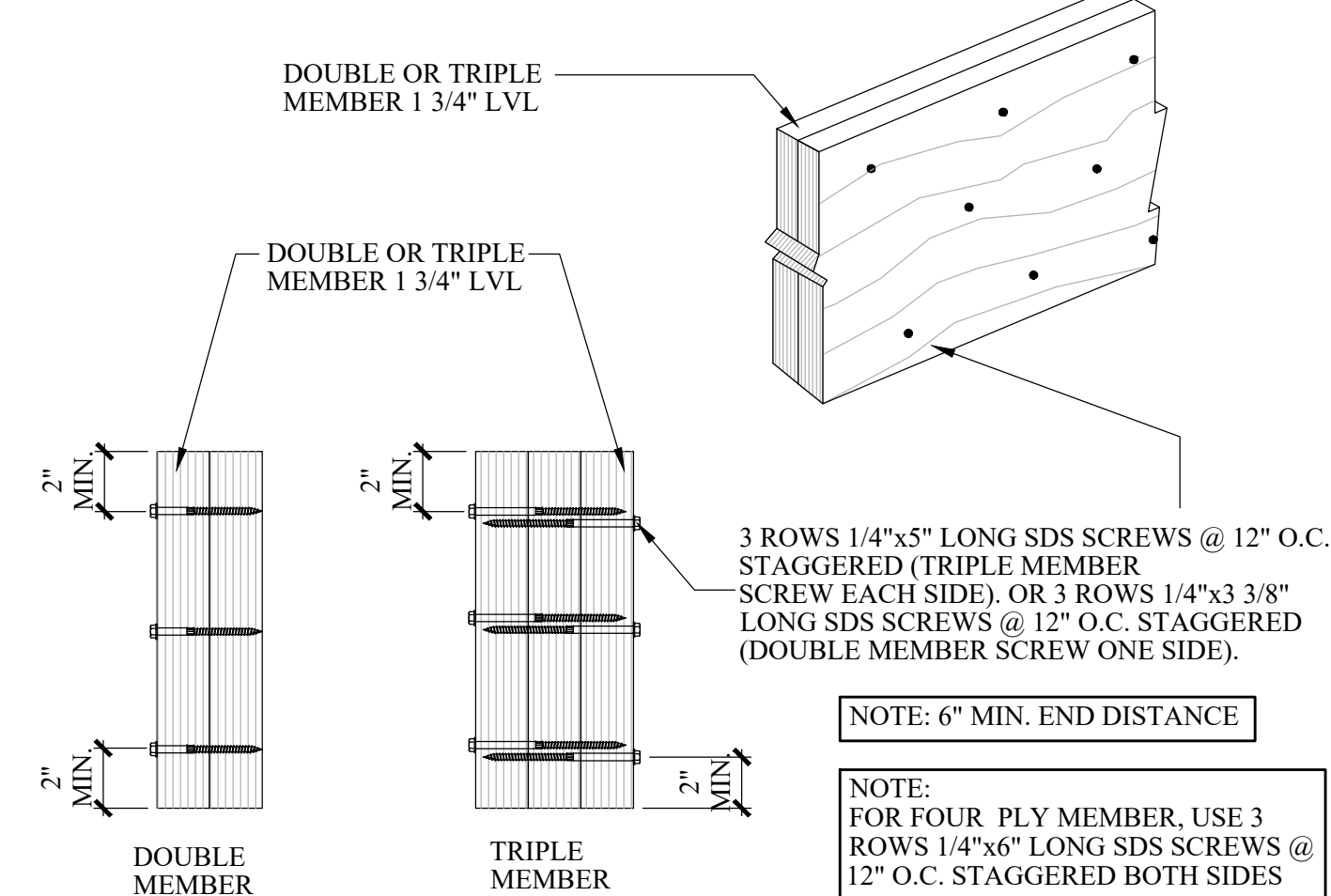
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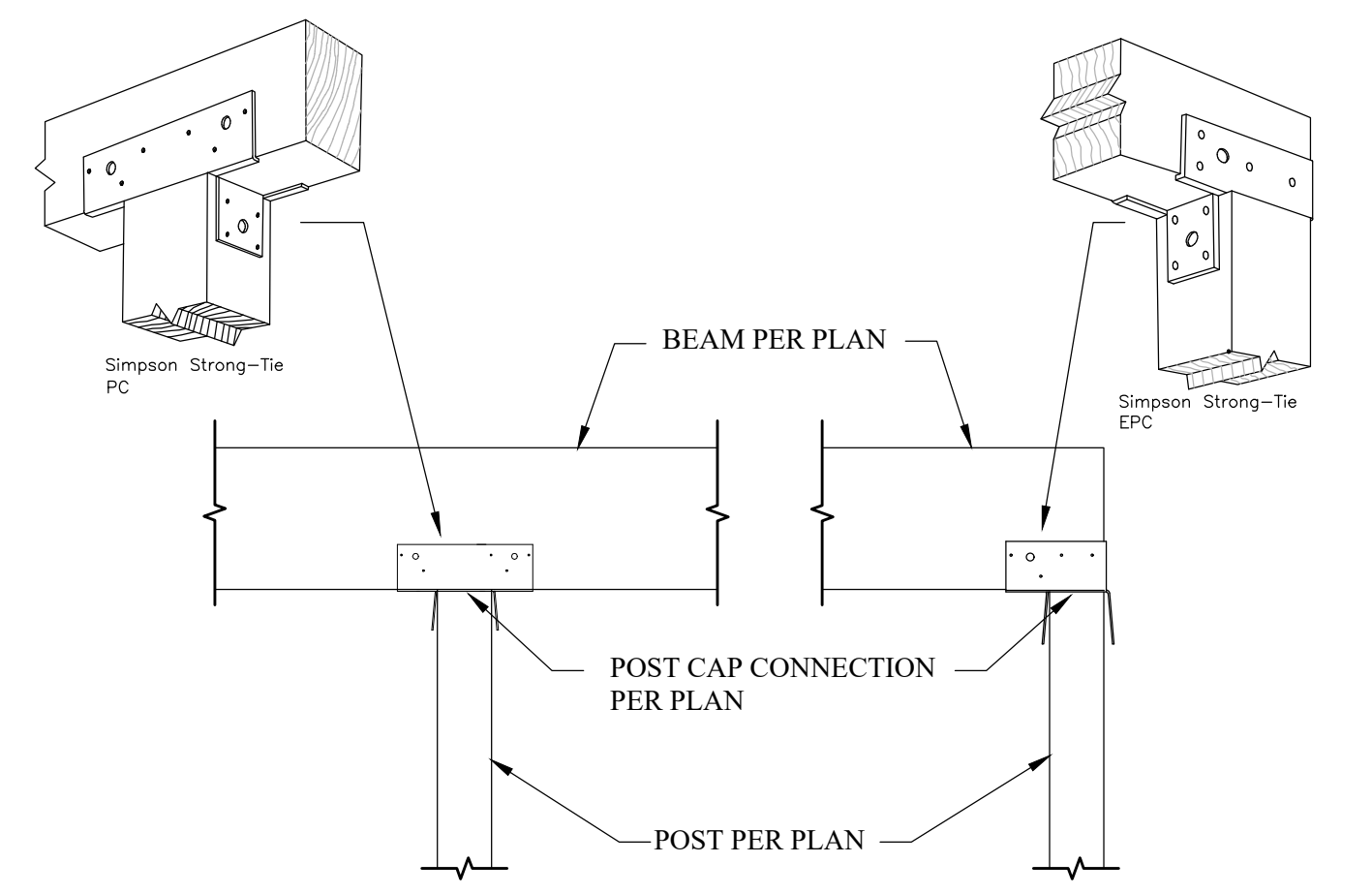
SECTION A-A



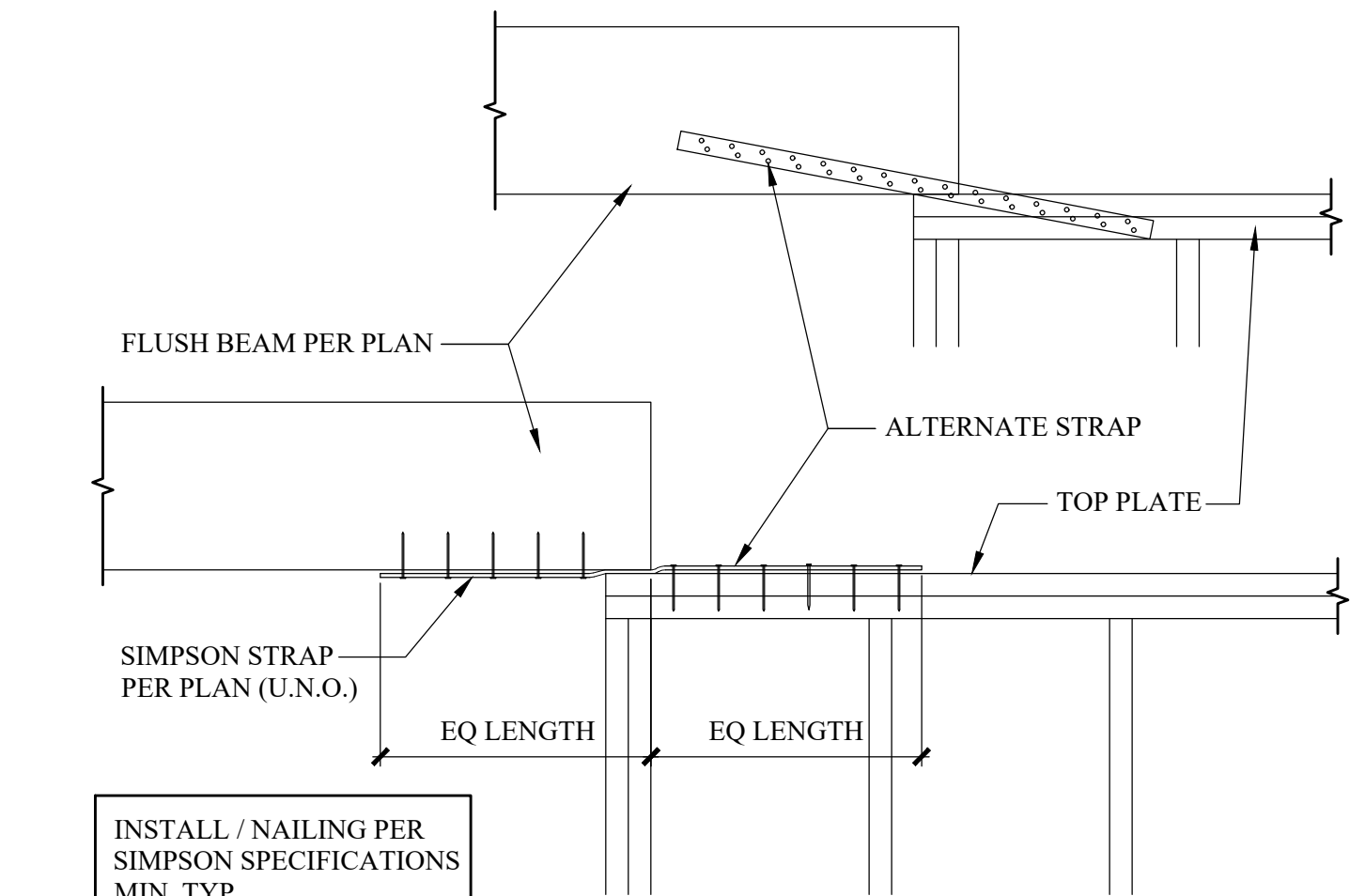
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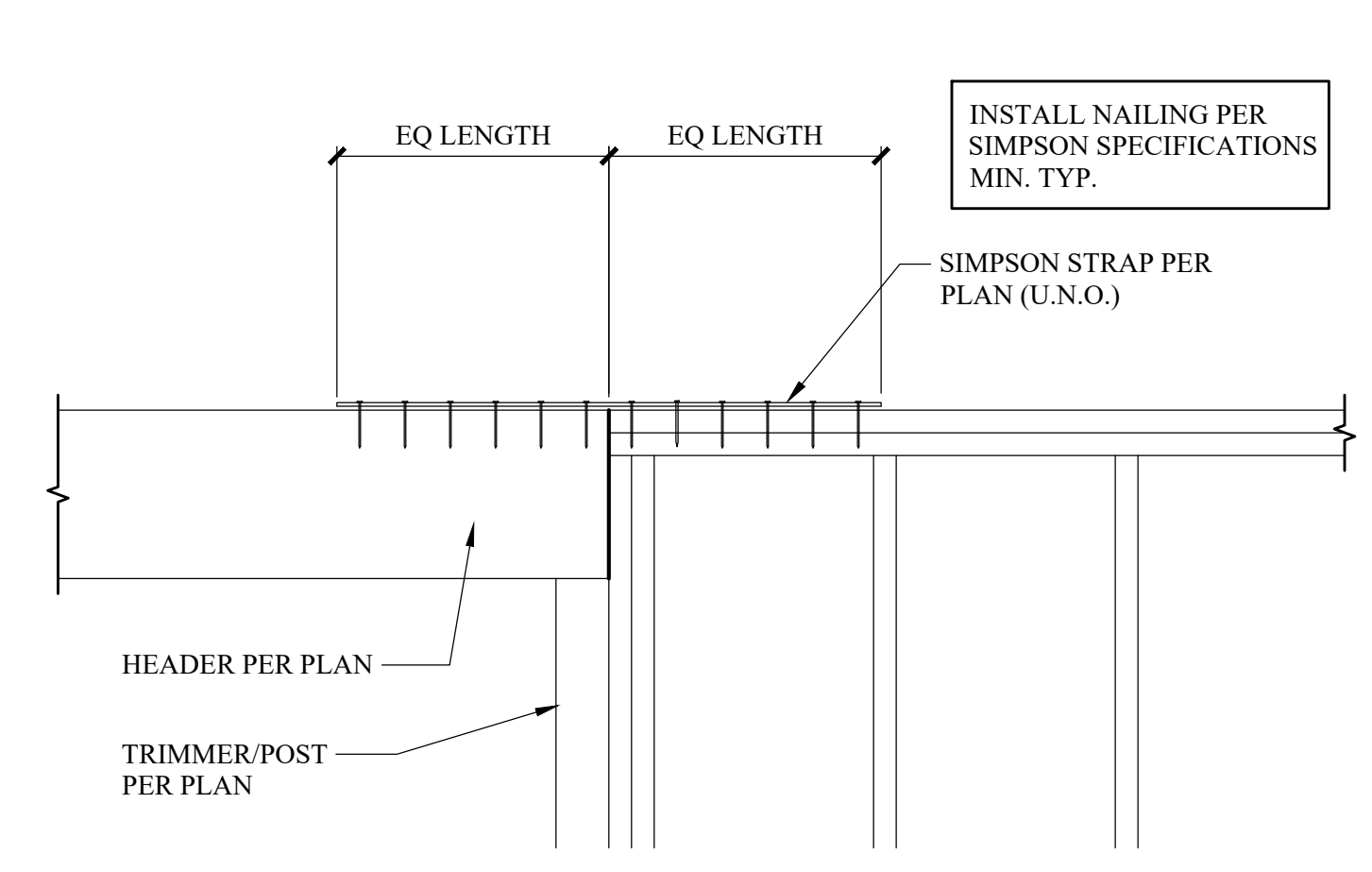
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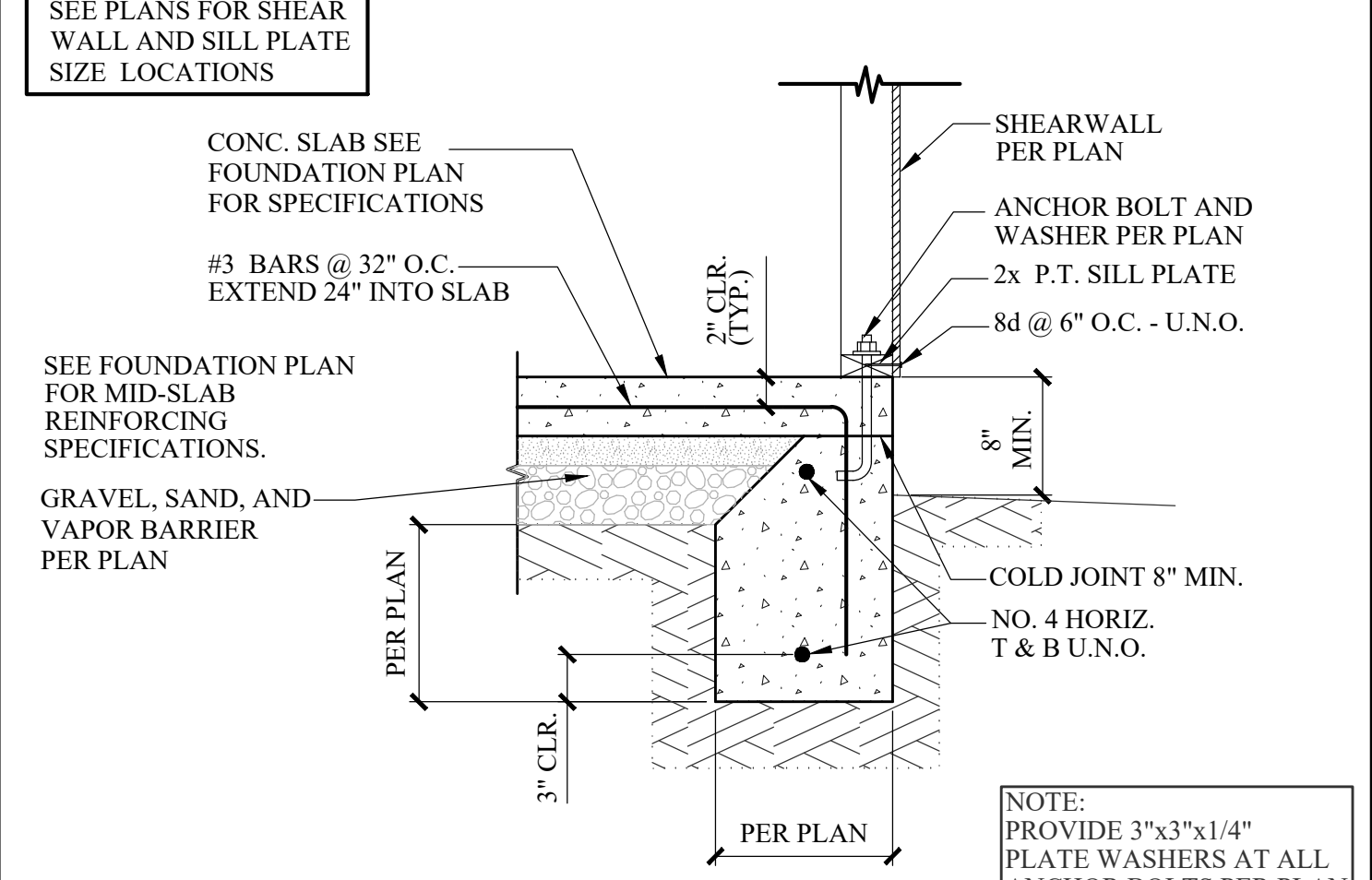
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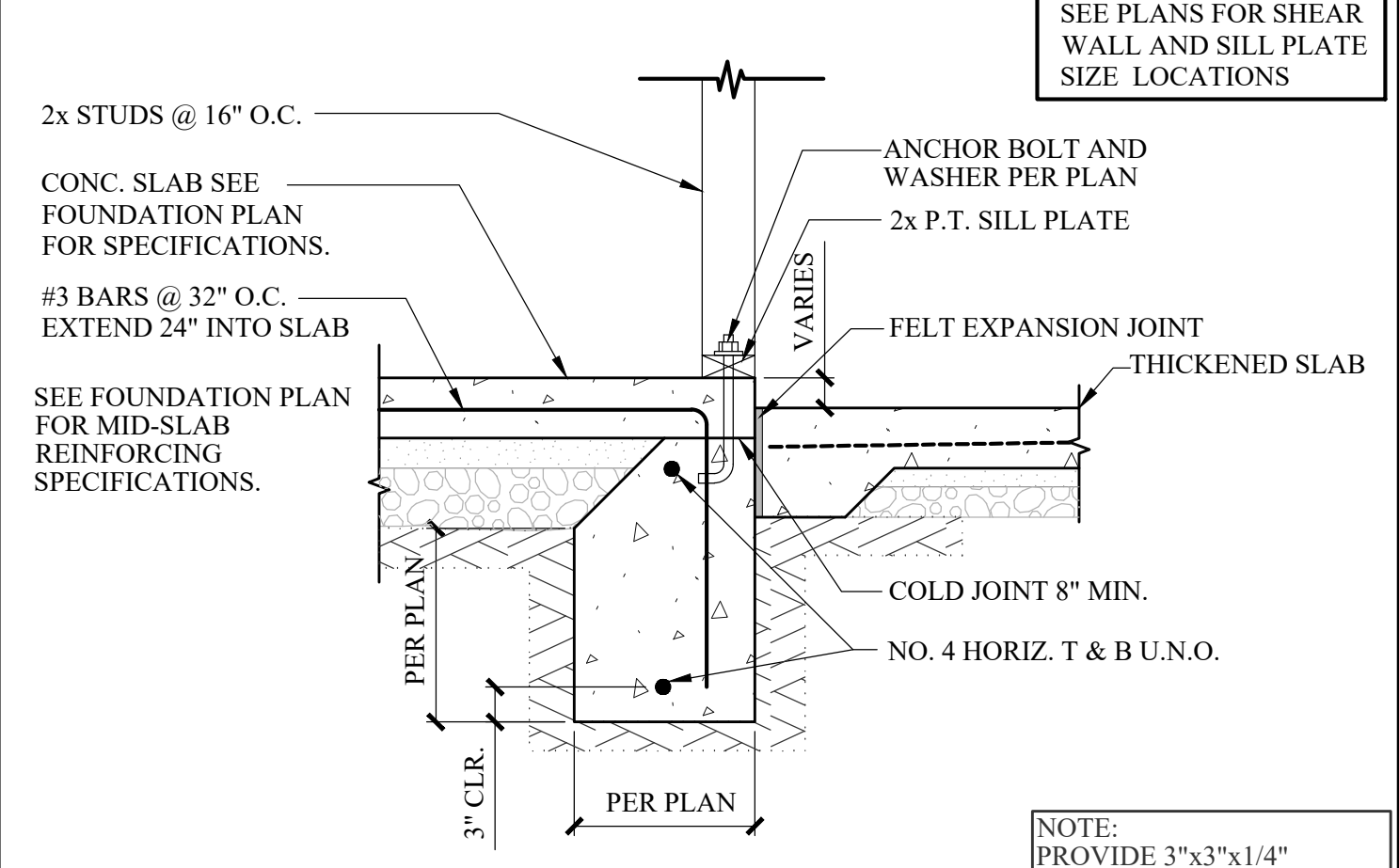
209 SIMPSON STRAP DETAIL



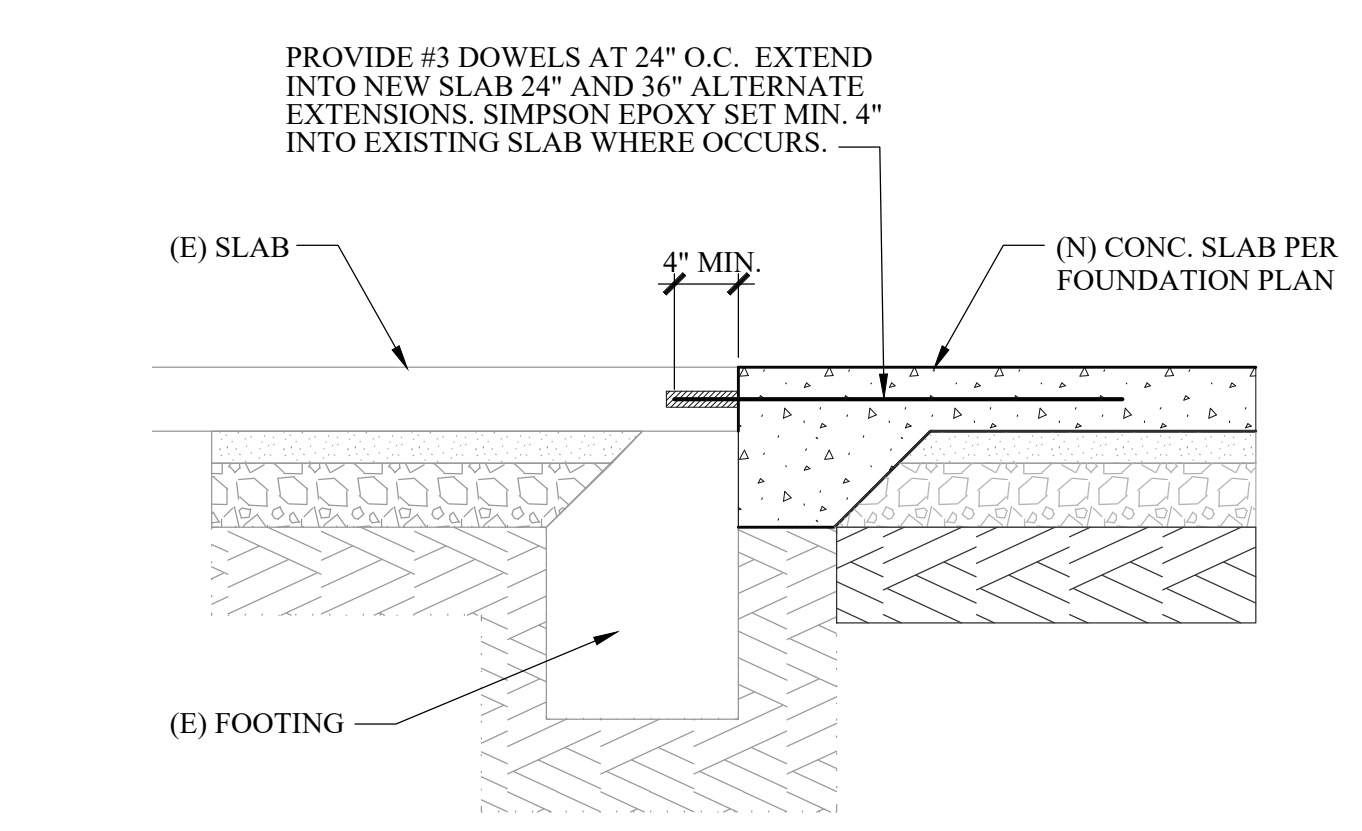
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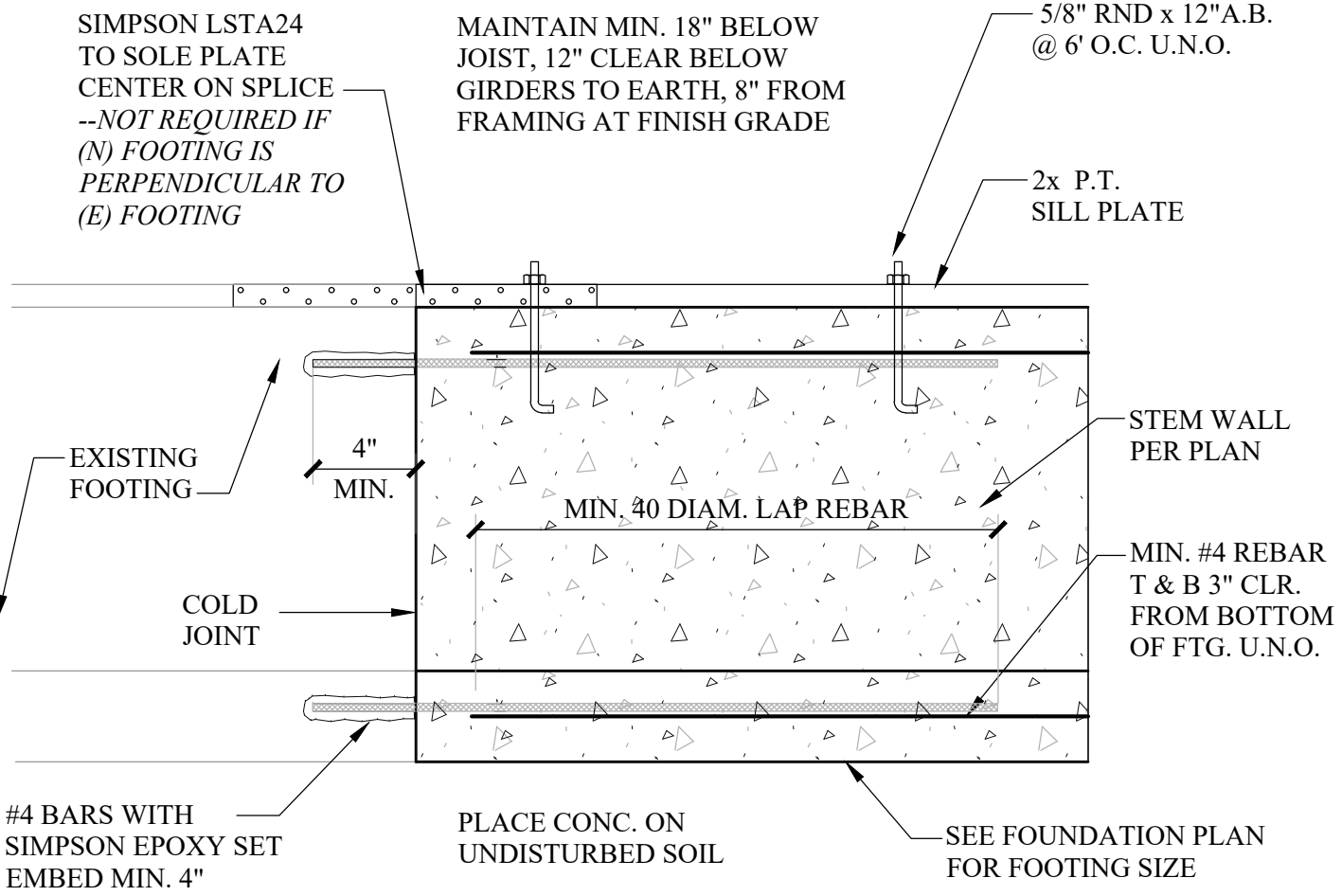
1 EXTERIOR WALL



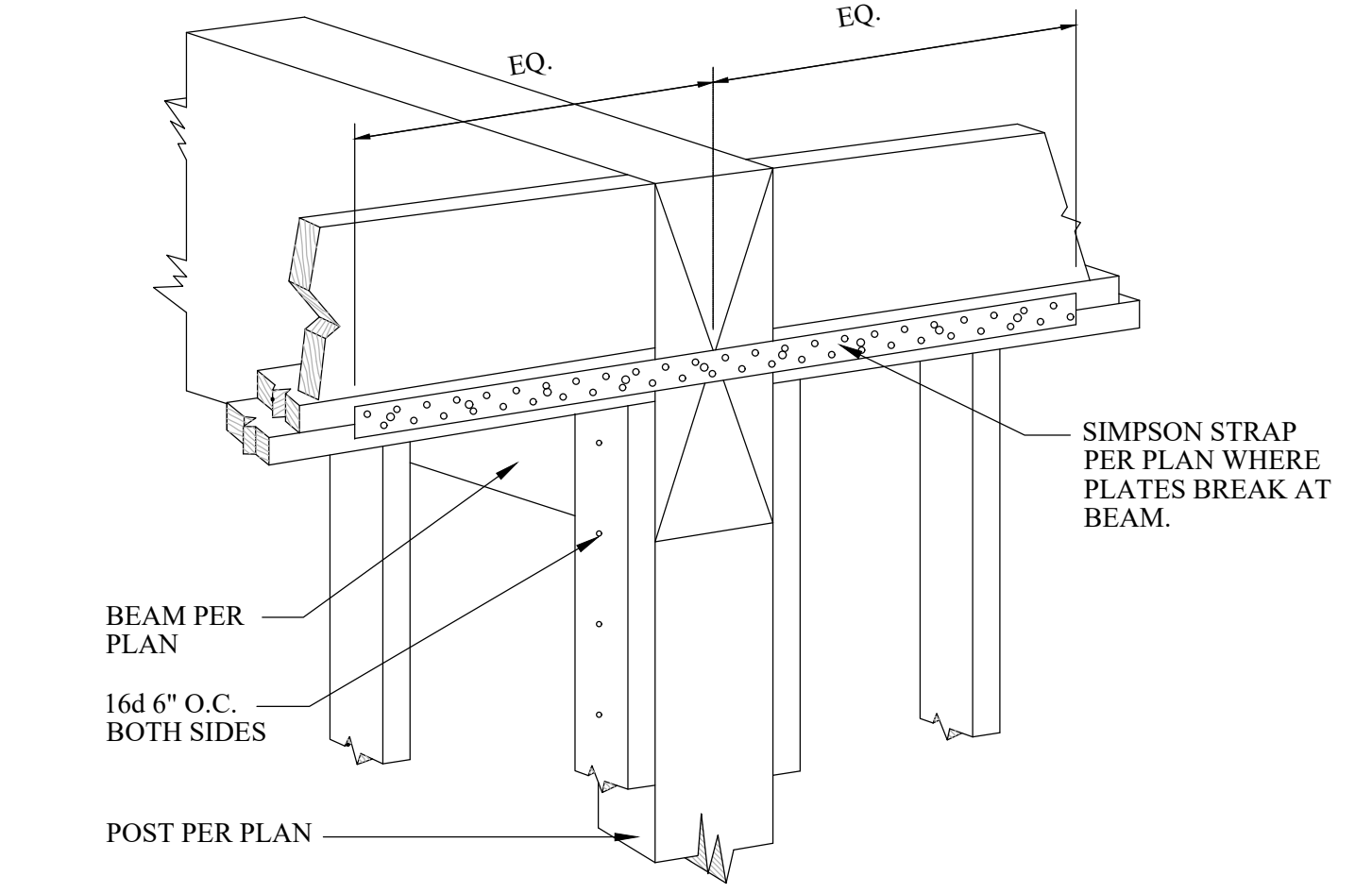
4 HOUSE TO FLATWORK/SLAB



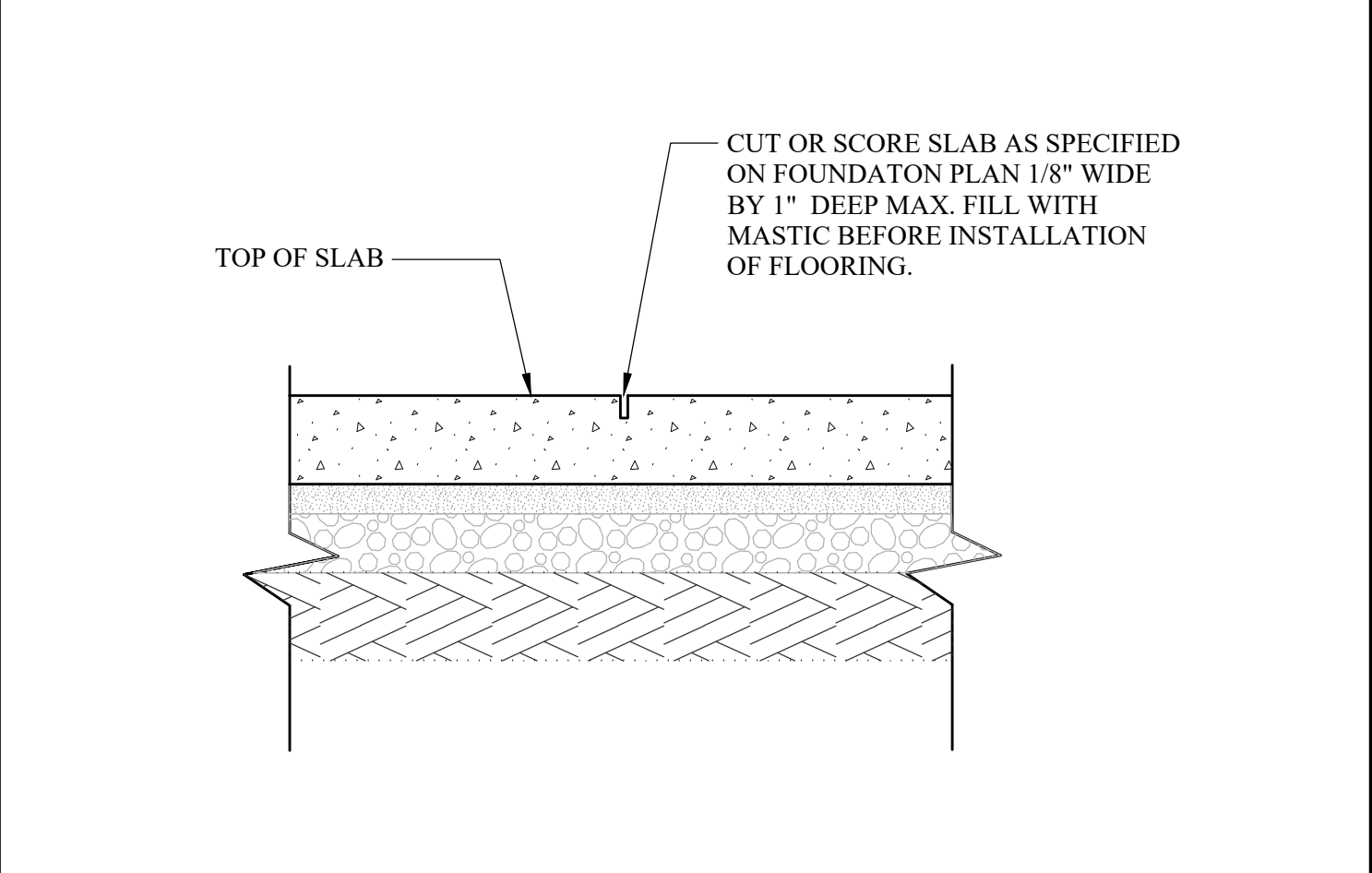
951 FOOTING RETROFIT



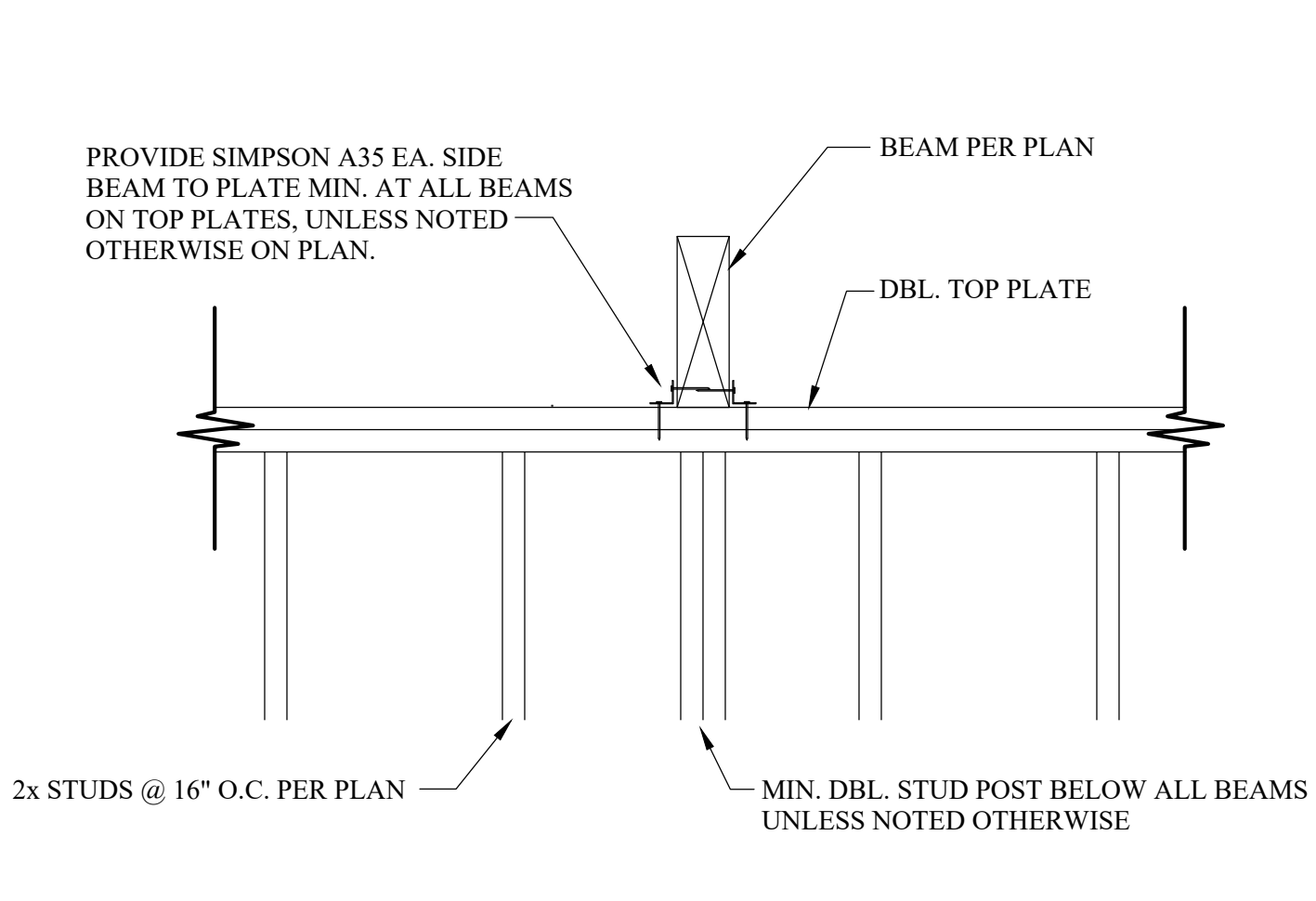
629 FOOTING RETROFIT



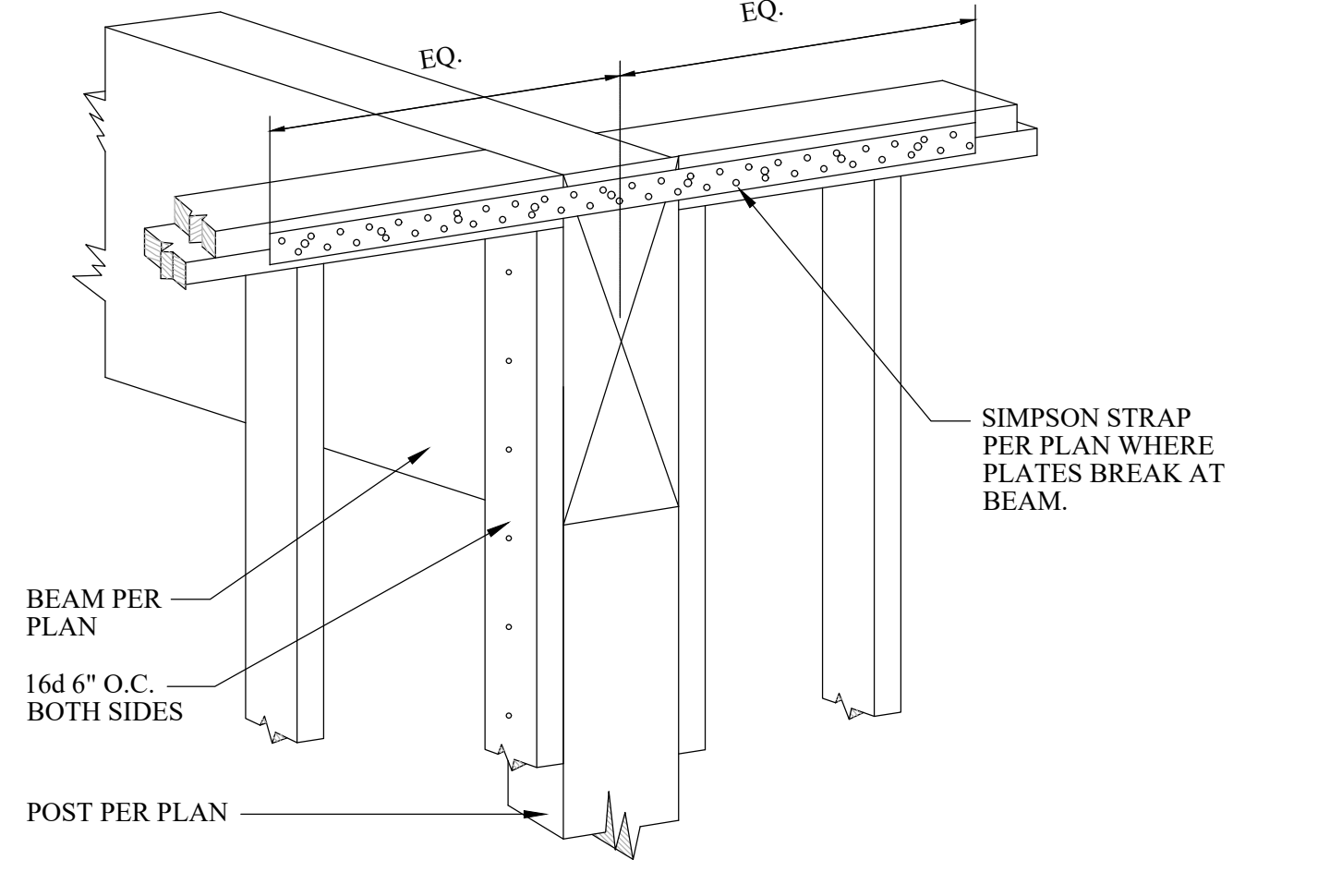
223 PLATE BREAK AT BEAM



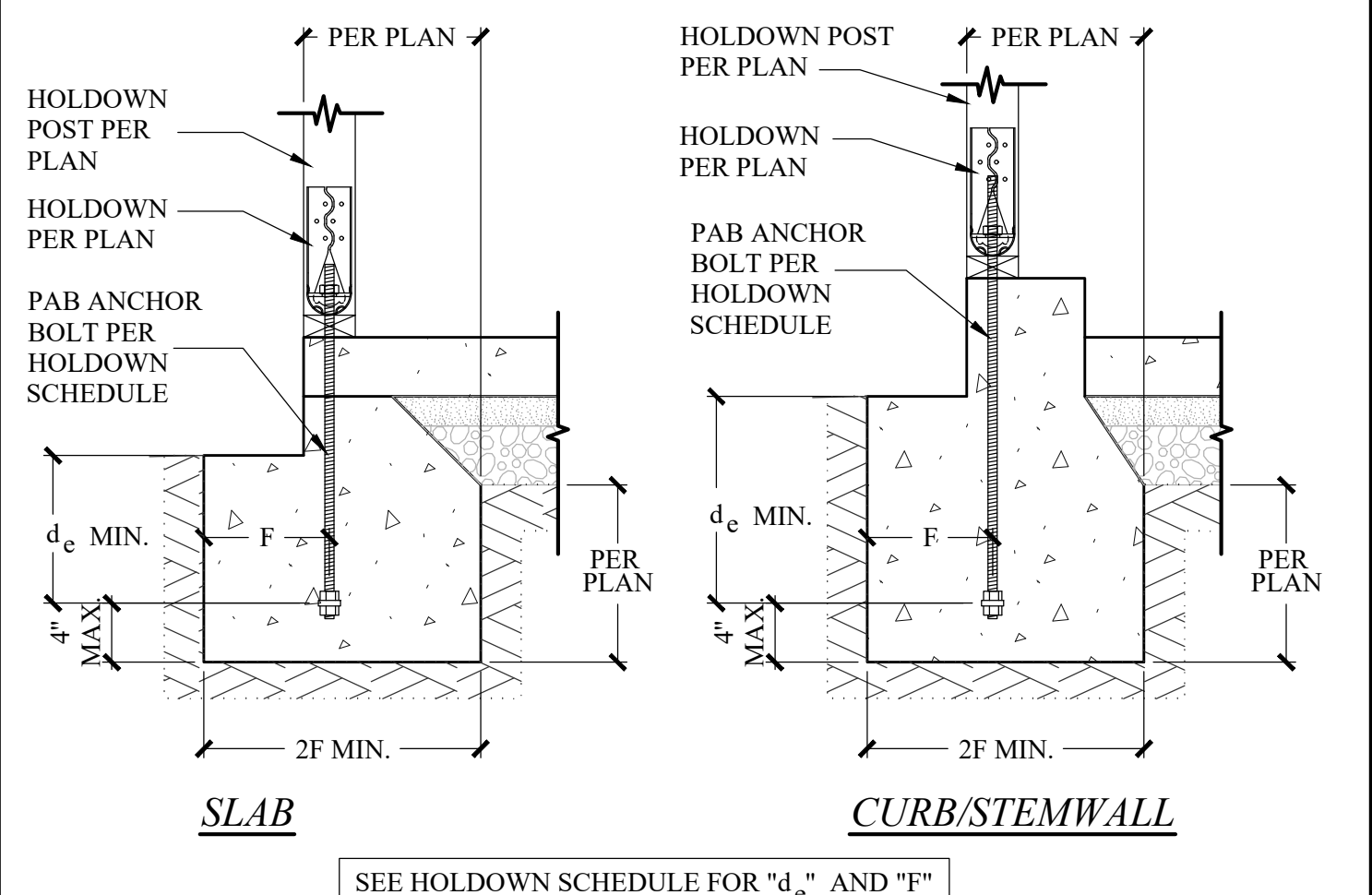
23 CONTROL JOINT DETAIL



724 BEAM TO TOP PLATE



224 PLATE BREAK AT BEAM



53 PAB HOLDOWN BOLT DETAIL

2022 CBC AutoCAD

# Norman Steel Structural Engineer

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1988 - 2024  
**35**  
YEARS OF  
EXCELLENCE  
Norman Steel  
Structural Engineer

**SHAFFER ADDITION**  
102 HERRILL CT  
FOLSOM, CA 95630

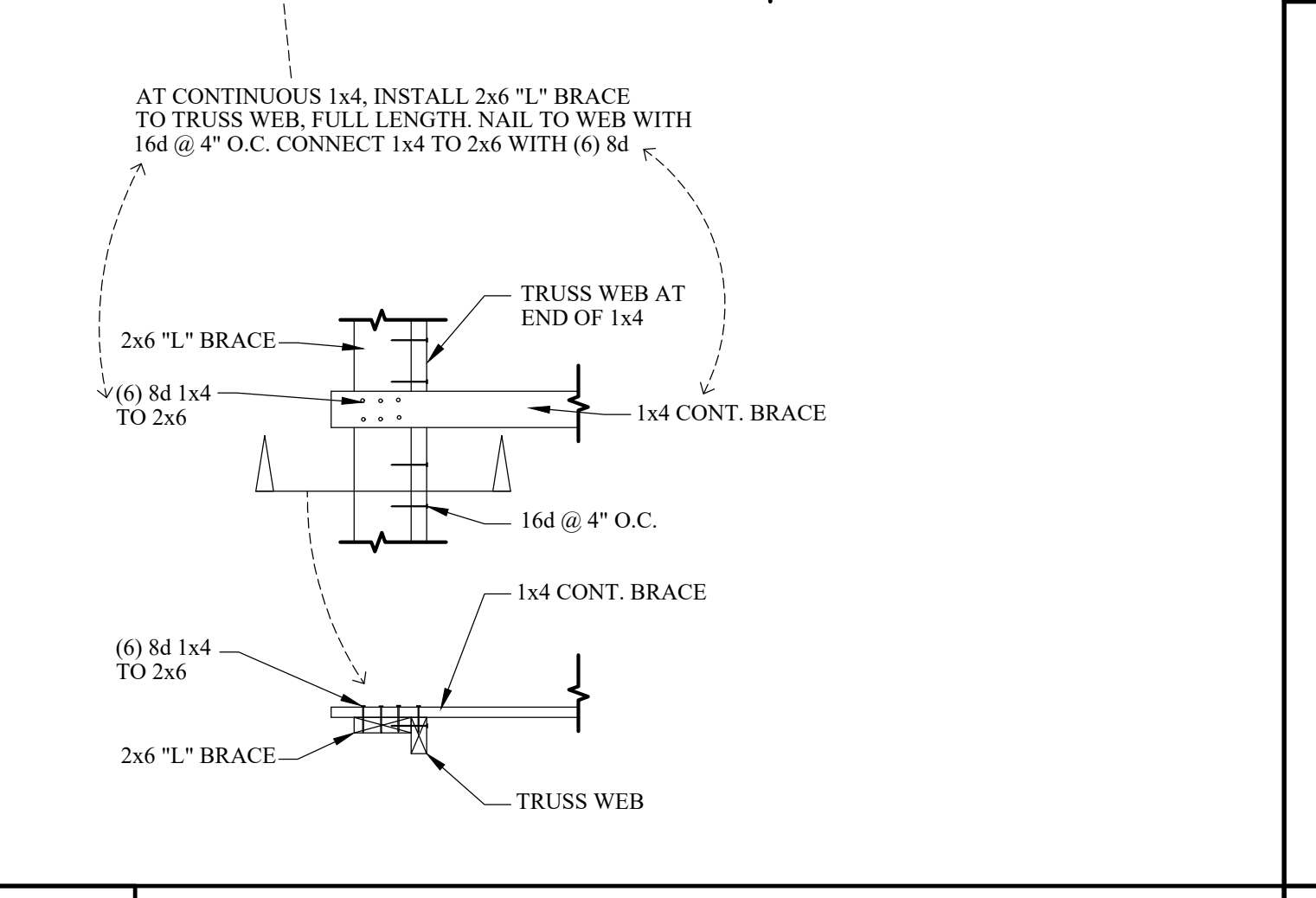
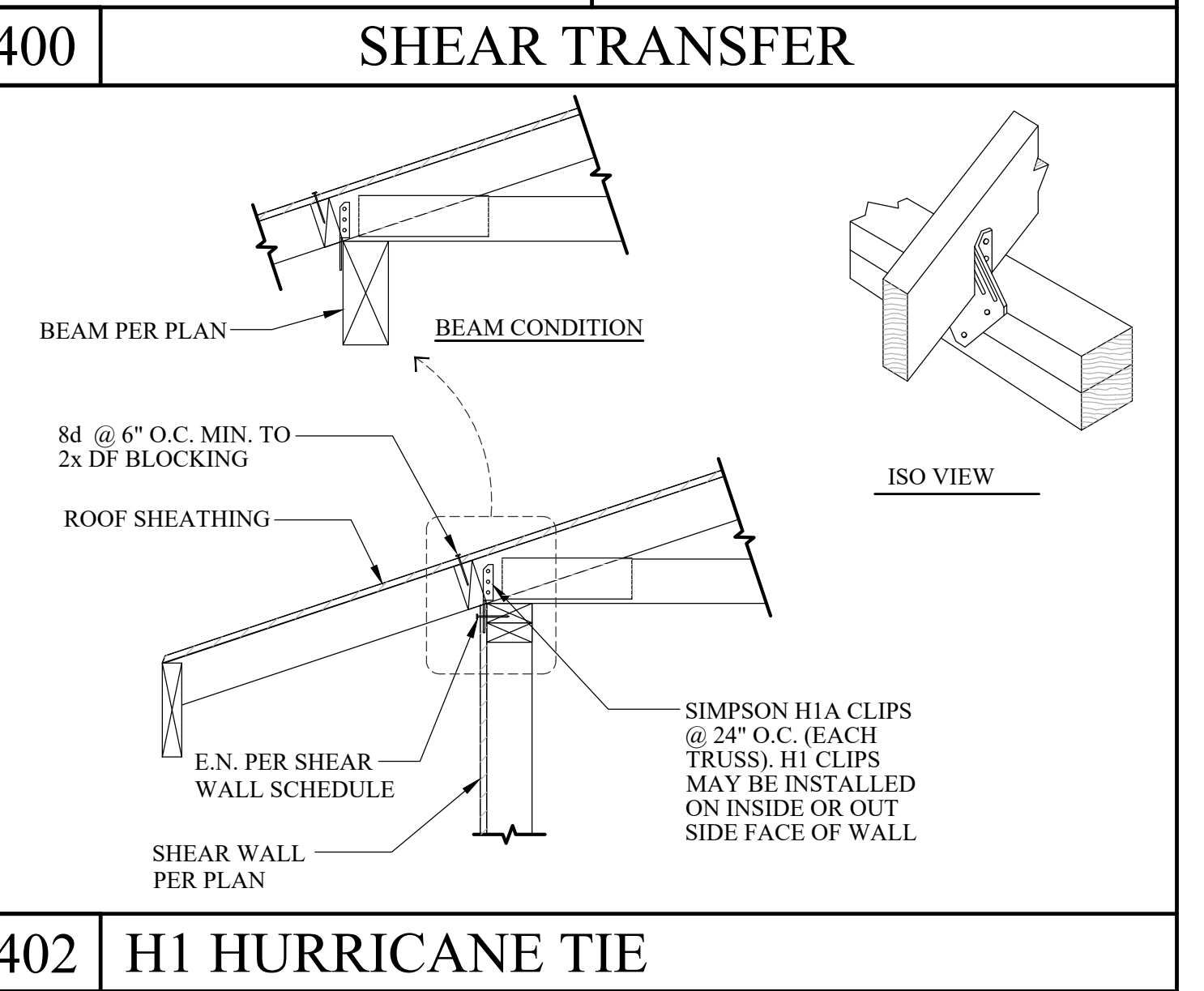
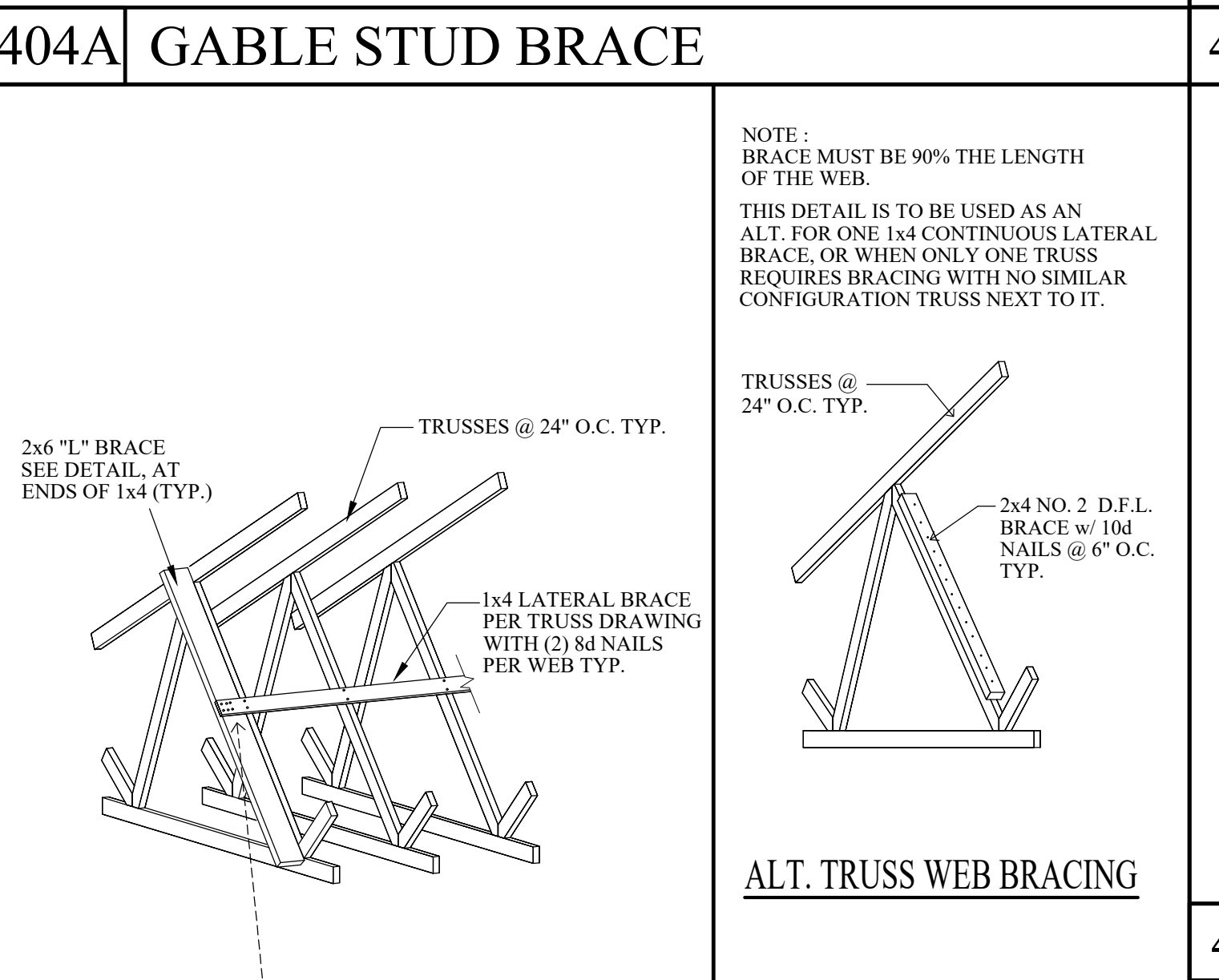
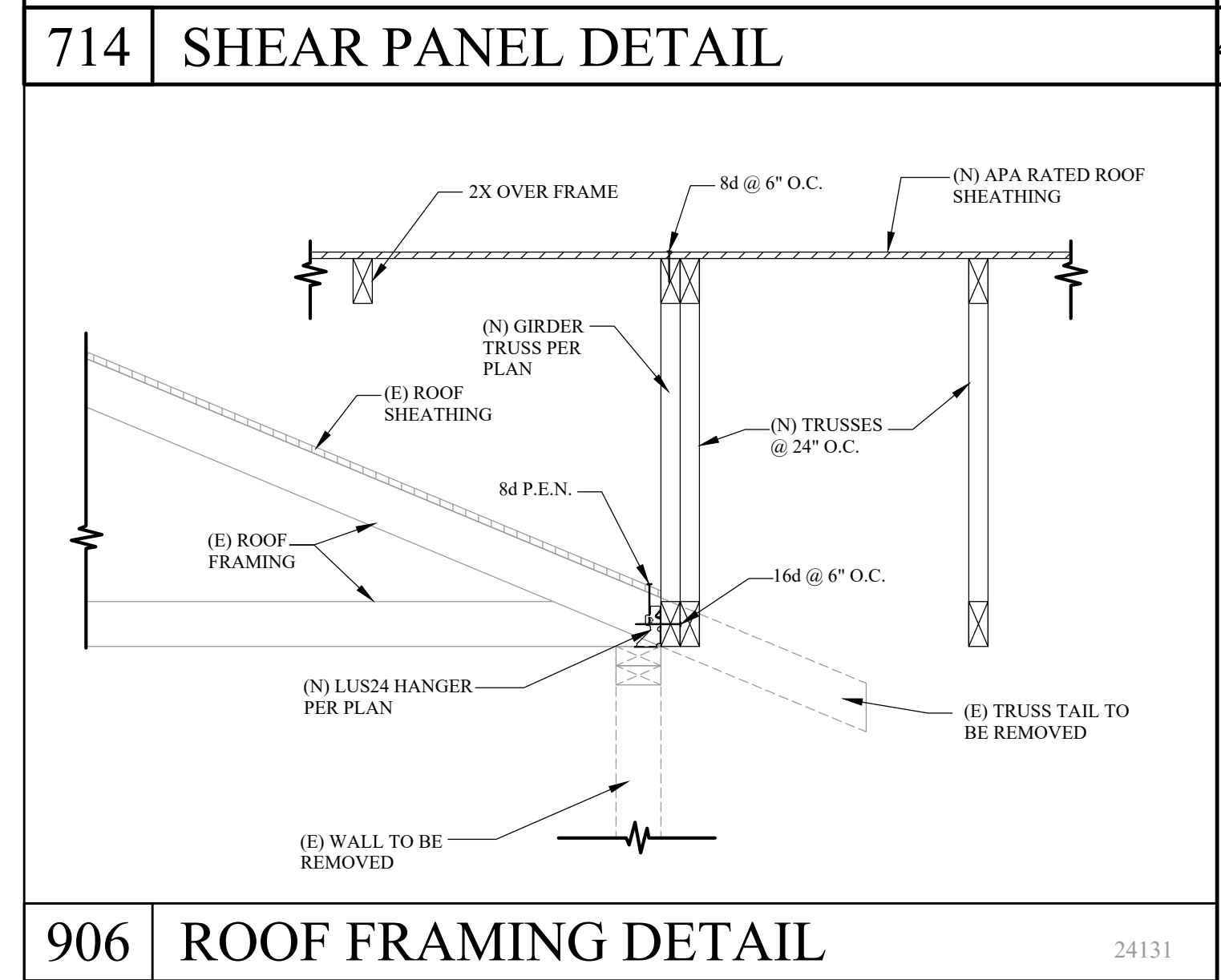
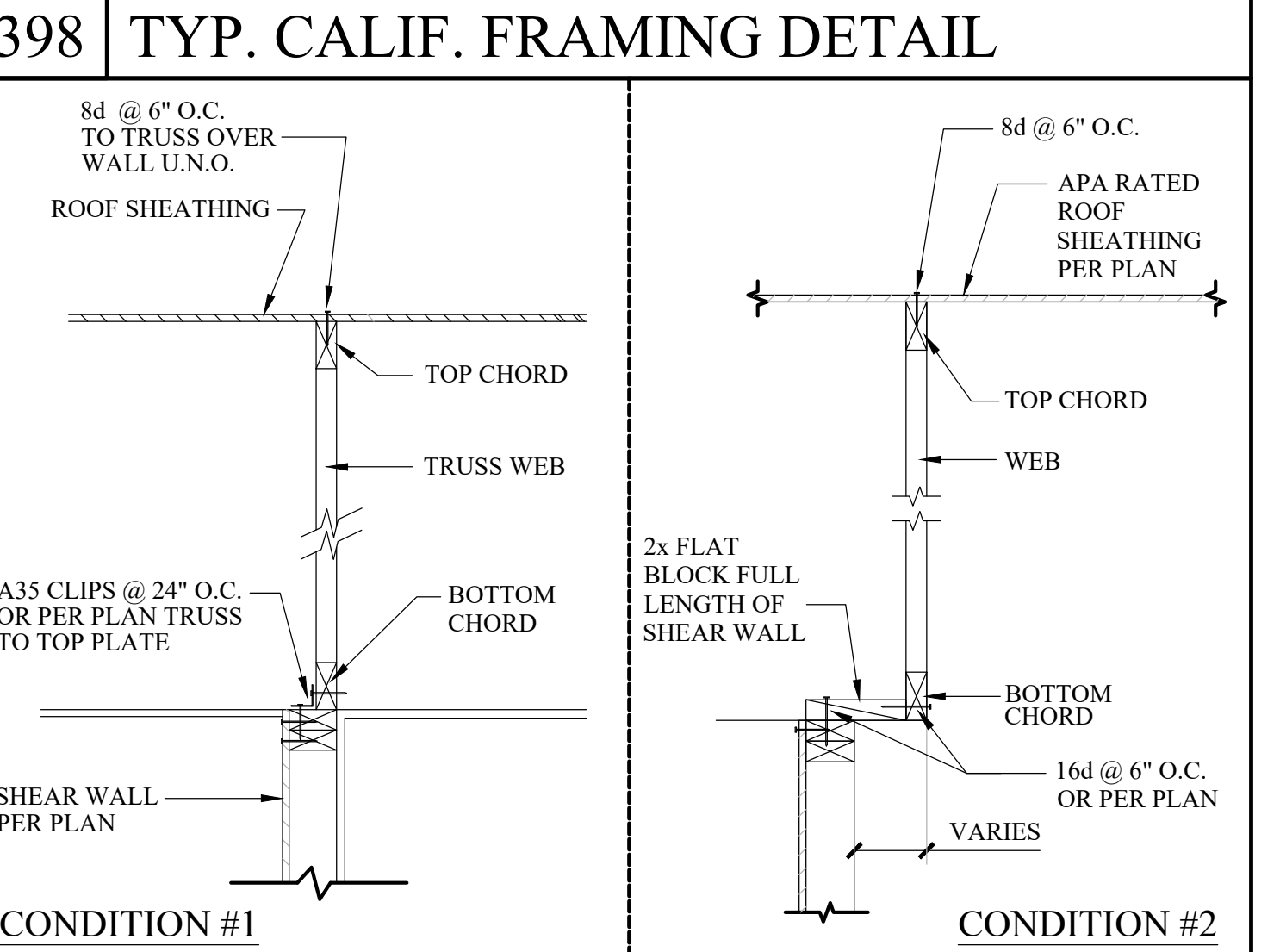
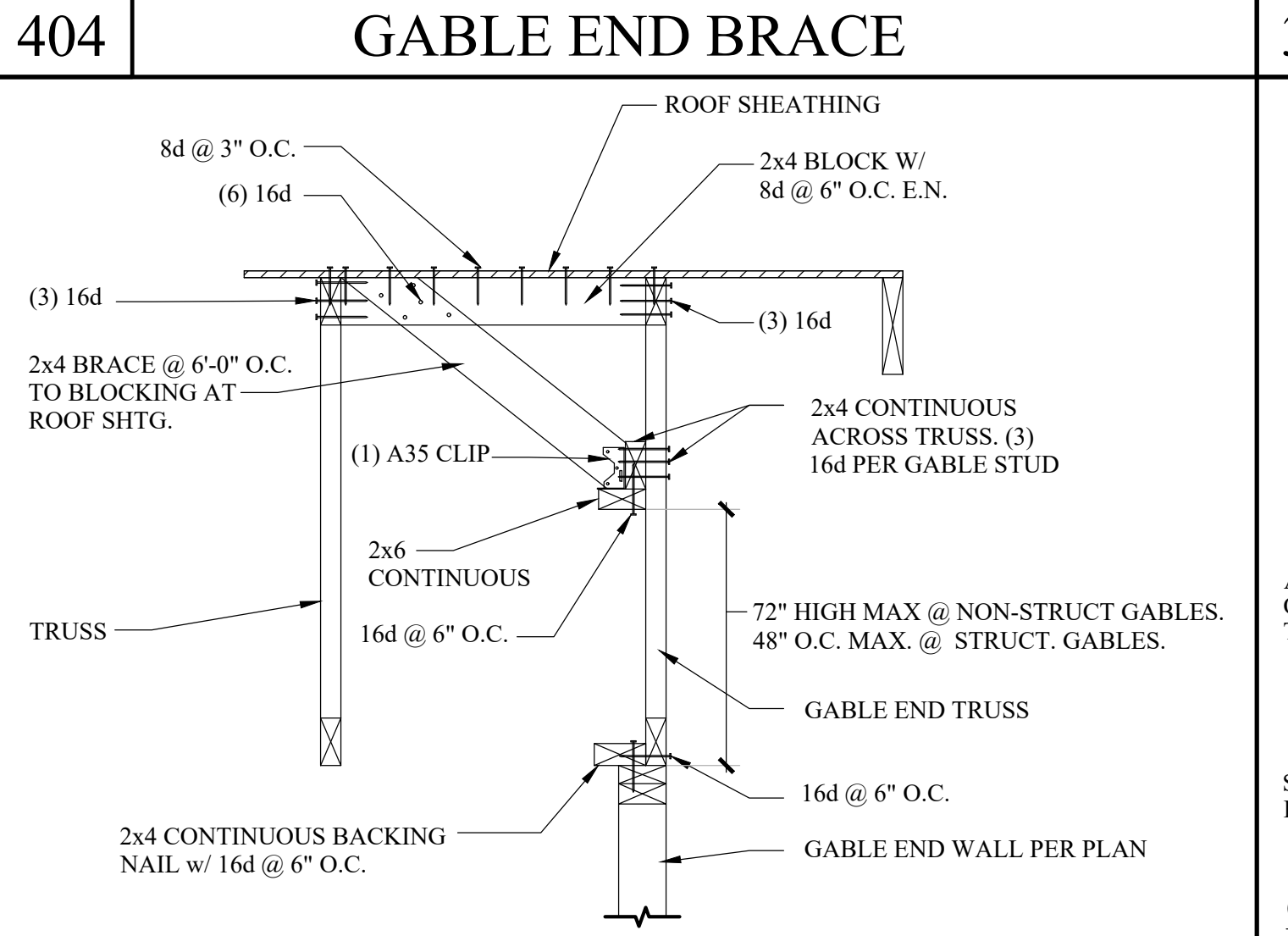
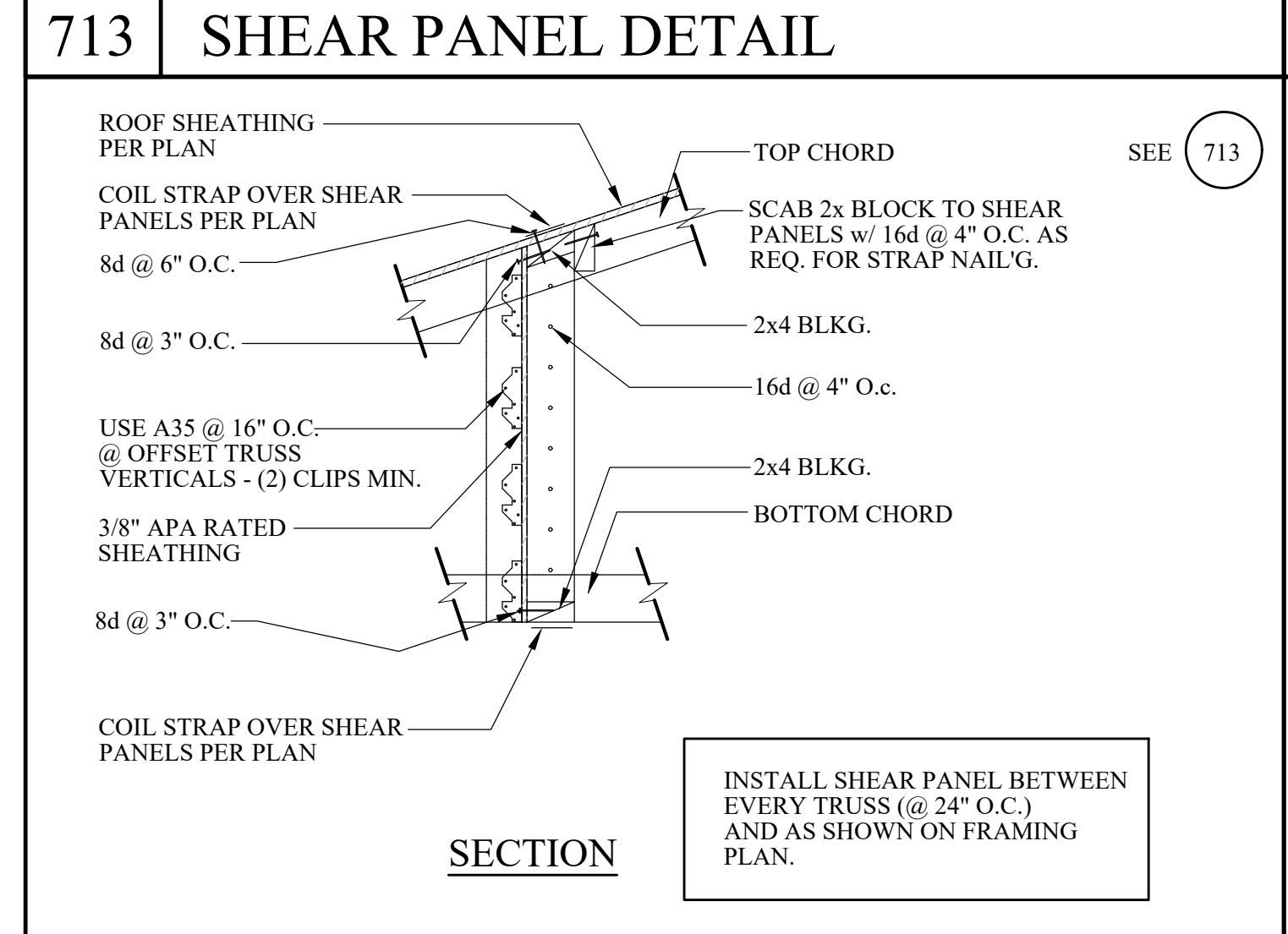
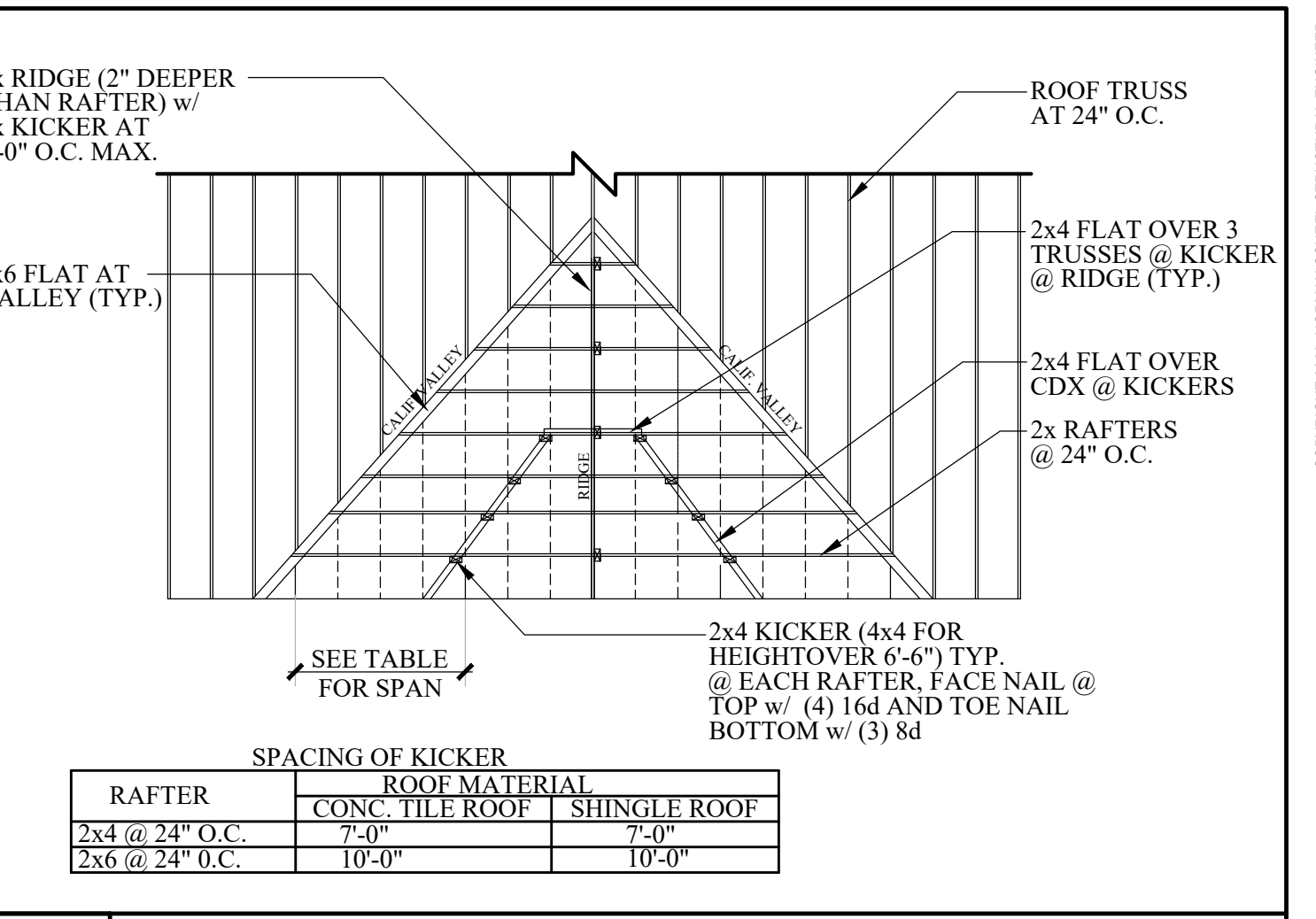
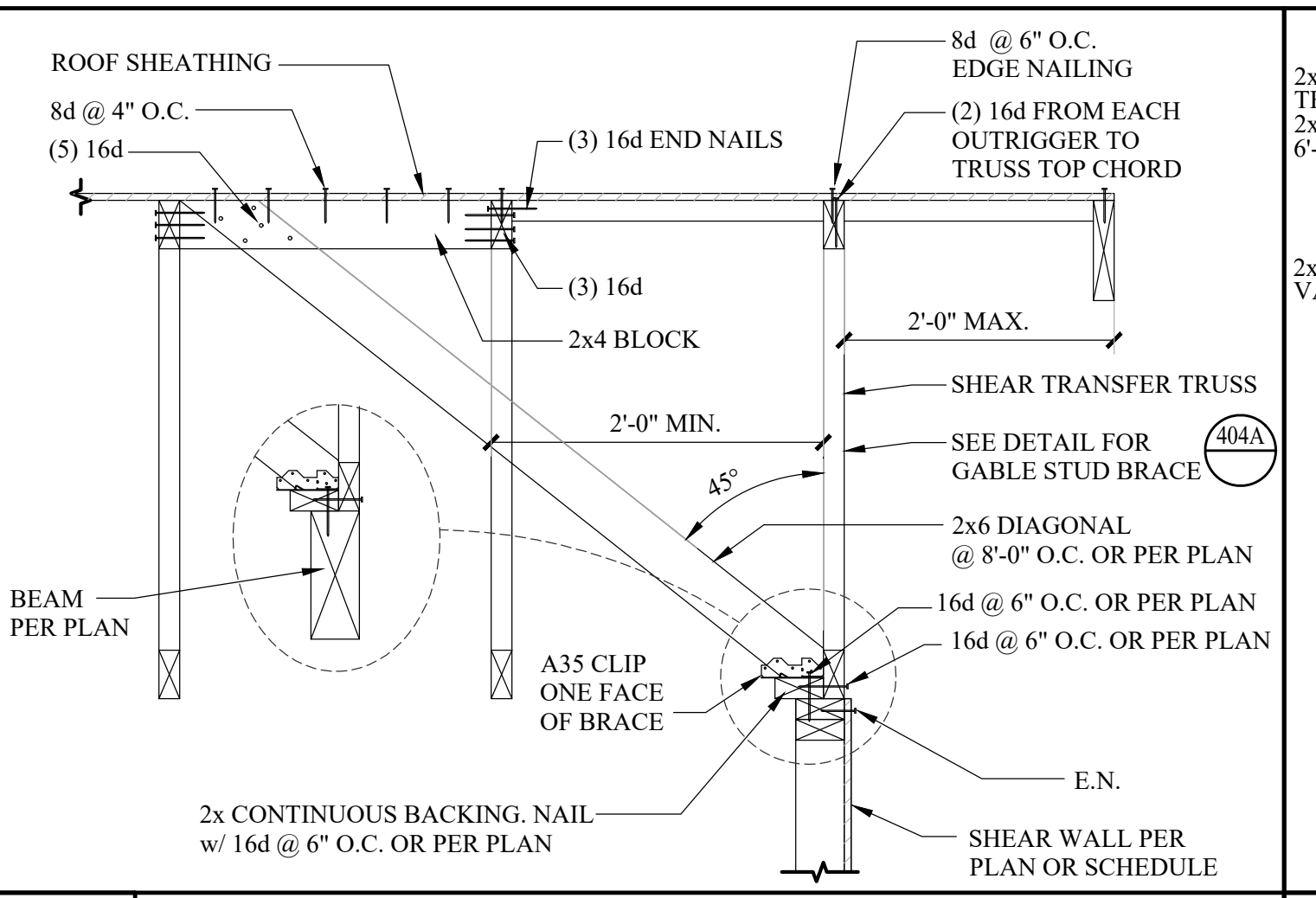
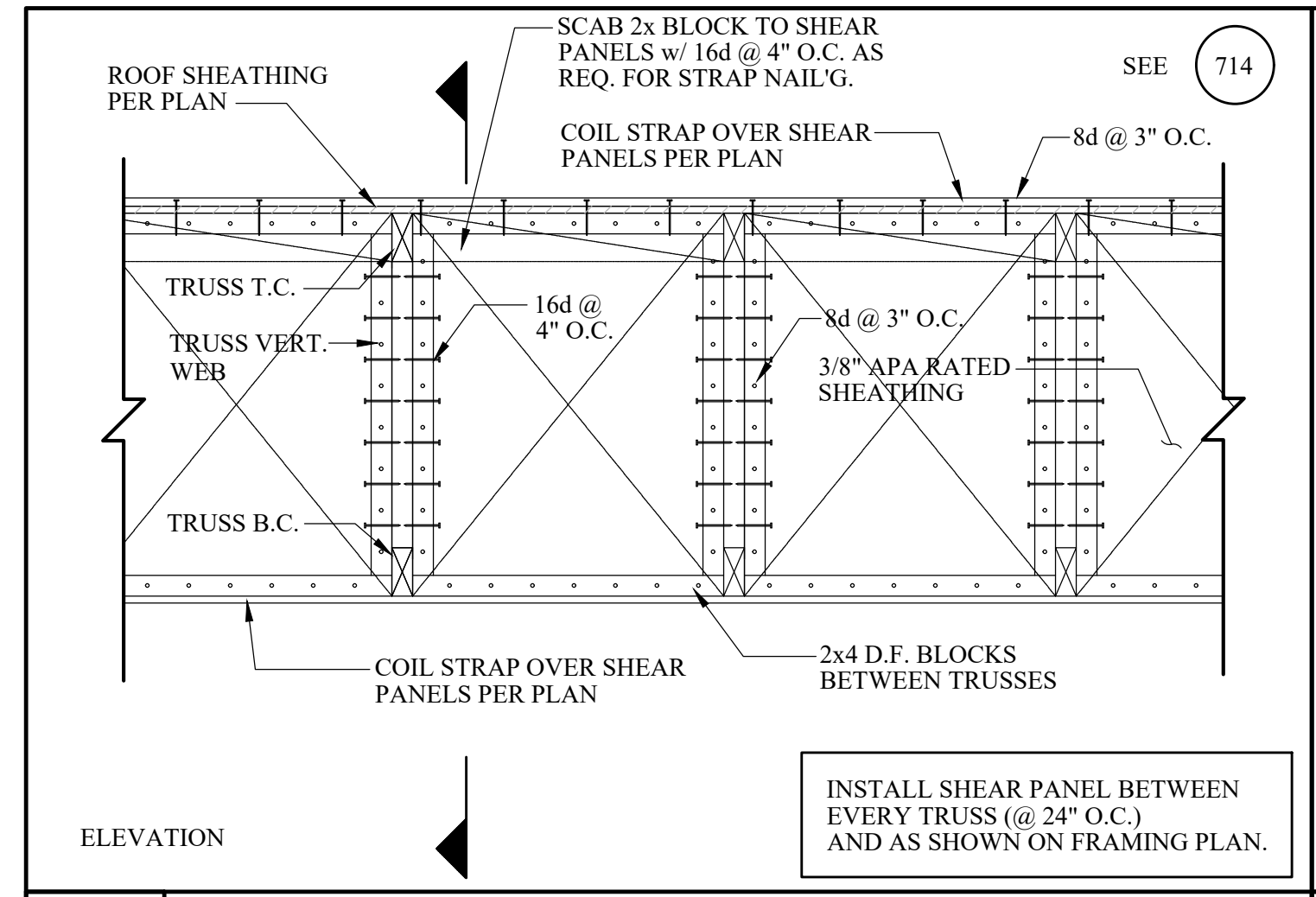
**COONEY CONSTRUCTION**  
652 ORENO CT  
FOLSOM, CA 95630

PROJ. MGR.:	BK
ENGINEER:	NS
DRAWN BY:	LT
CHECKED BY:	BK
ISSUE DATE:	7/16/2024

REVISIONS:


REGISTERED PROFESSIONAL ENGINEER  
NORMAN J. SCHIEL  
No. 2567  
Exp. 12-31-25  
STRUCTURAL  
STATE OF CALIFORNIA

9/10/2024  
SHEET  
**SD-1**  
STRUCTURAL DETAILS  
JOB NO. 24131



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SHAFFER ADDITION  
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FOLSOM, CA 95630

COONEY CONSTRUCTION  
652 ORENO CT  
FOLSOM, CA 95630

PROJ. MGR.: BK  
ENGINEER: NS  
DRAWN BY: LT  
CHECKED BY: BK  
W  
ISSUE DATE: 7/16/2024

REVISIONS:

9/10/2024 SHEET  
**SD-2**  
STRUCTURAL DETAILS  
JOB NO. 24131

REGISTERED PROFESSIONAL ENGINEER  
NORMAN J SCHEEL  
No. 2567  
Exp. 12-31-25  
STRUCTURAL  
STATE OF CALIFORNIA

# Materials for 102 Herrill Ct Addition

Paint Color-Sandpiper Cove



Roof-Timberline Natural Shadow, Color-Slate



James Hardie HZ10 Lap Siding



Milgard double sliding door



Google Earth

