

ADDITIONAL NOTES

City of
SACRAMENTO
Community Development

PROJECT DATA

* REFER TO ATTACHED OWNER CERTIFICATION FORM CDD-0438 FOR ADDRESS, PARCEL NUMBER, PROPERTY OWNER OR ANY ADDITIONAL SITE SPECIFIC PROJECT DATA.

JURISDICTION: CITY OF SACRAMENTO
 OCCUPANCY: R-3
 TYPE OF CONSTRUCTION: V-B
 FIRE SPRINKLERS: NO
 PV REQUIRED: YES

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES.

2022 CALIFORNIA BUILDING CODE (CBC)
 2022 CALIFORNIA RESIDENTIAL BUILDING CODE
 2022 CALIFORNIA ELECTRICAL CODE (CEC)
 2022 CALIFORNIA MECHANICAL CODE (CMC)
 2022 CALIFORNIA PLUMBING CODE (CPC)
 2022 CALIFORNIA ENERGY CODE (CENC)
 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGreen CODE)
 2022 CALIFORNIA REFERENCE STANDARDS CODE
 CURRENT CITY OF SACRAMENTO CODES AND ORDINANCES

PROJECT DESCRIPTION

PROPOSED 20'x40' ACCESSORY DWELLING UNIT:

BEDROOMS: 2
 BATHROOMS: 1
 HABITABLE LIVING AREA: 747 SQ FT
 COVERED PORCH: 44 SQ FT
 UTILITY CLOSET: 9 SQ FT



NOTES TO OWNER/BUILDER

- ALL WORK SHALL CONFORM TO APPLICABLE CODES, REGULATIONS, LAWS AND ORDINANCES AS REQUIRED BY CODES AND REGULATIONS LISTED HEREIN AND AS REQUIRED BY THE STATE OF CALIFORNIA AND ALL RELEVANT REGULATORY BODIES.
- FLOOR PLAN DIMENSIONS SHOWN ARE FACE OF FRAME UNLESS OTHERWISE NOTED AT NEW CONSTRUCTION. DIMENSIONS NOTED AS "CLEAR" ARE TO PRECISELY MAINTAINED.
- DO NOT DRILL OR CUT JOISTS, BEAMS, COLUMNS OR OTHER STRUCTURAL ELEMENTS UNLESS SPECIFICALLY INDICATED. MAKE OPENINGS OF PROPER SIZE FOR CONDUITS, DUCTS, PIPES, AND OTHER ITEMS PASSING THROUGH OPENINGS.
- "ALIGN" SHALL MEAN TO ACCURATELY LOCATE FINISH FACES IN THE SAME PLANE. "TYPICAL" OR "TYP" SHALL MEAN THAT THE CONDITION IS REPRESENTATIVE FOR SIMILAR CONDITIONS THROUGHOUT, UNLESS OTHERWISE NOTED. DETAILS ARE USUALLY KEYED AND NOTED "TYP" ONLY ONCE, WHEN THEY FIRST OCCUR. "SIMILAR" MEANS COMPARABLE CHARACTERISTICS FOR THE CONDITIONS NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLANS AND ELEVATIONS.
- ANY ERRORS, OMISSIONS OR CONFLICTS FOUND IN THE VARIOUS PARTS OF THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE CITY FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
- PROTECT AREA OF WORK AND ADJACENT AREAS FROM DAMAGE.
- BLOCKING TO BE PROVIDED BEHIND ALL WALL-MOUNTED ACCESSORIES.

NOTES TO OWNER/BUILDER

- BUILDER TO VERIFY THAT THE SANITARY SEWER SERVING THE ADU WILL HAVE A MINIMUM SLOPE OF 2% FROM THE LOWEST PART OF THE SYSTEM IN THE ADU TO THE POINT IT CONNECTS TO THE SEWER SYSTEM OF THE MAIN HOUSE. IF EXISTING SLOPE IS LESS THAN 2%, A PUMP MAY BE USED.
- AN ENGINEERING PERMIT WILL BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY, INCLUDING BUT NOT LIMITED TO CONSTRUCTION STAGING, CONSTRUCTION PARKING, SIDEWALK, DRAINAGE, OR SEWER WORK. APPROVAL OF THIS BUILDING PERMIT DOES NOT AUTHORIZE WORK IN THE PUBLIC RIGHT-OF-WAY. THE GROUND IMMEDIATELY ADJACENT TO THE ADU FOUNDATION SHALL BE SLOPED AWAY FROM BUILDING AT A SLOPE OF NOT LESS THAN 6" (5% SLOPE) IN THE FIRST 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE WALL. IMPERVIOUS SURFACES WITHIN 10 FEET OF BUILDING SHALL BE SLOPE A MINIMUM OF 2% AWAY FROM BUILDING.
- ADDRESS ASSIGNMENT IS REQUIRED PRIOR TO FINAL INSPECTION OF THE BUILDING PERMIT.

NOTE TO PERSONS WITH DISABILITIES

PLANS HAVE BEEN DESIGNED TO ACCOMMODATE CBC, CHAPTER 11B ACCESSIBLE FEATURES, AND PLANS ARE INCLUSIVE OF COMMONLY UTILIZED DETAIL DRAWINGS. THESE MAY BE INCORPORATED INTO THE CONSTRUCTION AT THE OWNER'S DISCRETION, AND ARE CONSIDERED COMPLETELY VOLUNTARY ON PART OF THE PERMIT HOLDER.

RESTRICTIONS AND REQUIREMENTS FOR USE OF THESE PLANS

- THIS STRUCTURE MUST BE LOCATED A MINIMUM HORIZONTAL DISTANCE OF 5' FROM ALL LOT LINES, WITH THE EXCEPTION OF WALL LINE "1" (SEE SHEET FSD.1 FOR WALL LINE "1" OPTIONS).
- SOLAR-VOLTAIC EQUIPMENT IS REQUIRED BY THE ENERGY CODE COMPLIANCE REPORT INCLUDED IN THIS PLAN SET. IT IS THE APPLICANT'S RESPONSIBILITY TO OBTAIN PLANS FOR THE SOLAR PHOTO-VOLTAIC EQUIPMENT. THE PHOTO-VOLTAIC PLANS MUST BE ADDED TO THE PLAN SET PRIOR TO SUBMITTING PLANS FOR A BUILDING PERMIT.
- THIS STRUCTURE MUST BE LOCATED A MINIMUM HORIZONTAL DISTANCE OF 4' FROM ANY RESIDENTIAL STRUCTURE (OR STRUCTURES ACCESSORY TO ON THE SAME LOT, WITHOUT EXCEPTION).
- ALL PORTIONS OF THIS STRUCTURE MUST BE LOCATED WITHIN 150 FEET FROM THE STREET ACCESS TO THIS LOT.
- THESE PLANS ARE NOT VALID FOR USE WHEN THE MAIN RESIDENCE ON THE PARCEL IS, OR IS REQUIRED TO BE PROVIDED WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM.
- THESE PLANS MAY ONLY BE USED FOR CONSTRUCTION ON LOTS WITHIN THE CITY OF SACRAMENTO AND ONLY IF ALL PROPERTY OWNERS EXECUTE A HOLD HARMLESS AGREEMENT TO THE SATISFACTION OF THE CITY OF SACRAMENTO.
- APPLICANT IS REQUIRED TO PROVIDE A SITE PLAN AND INCORPORATE IT INTO THIS PLAN SET PRIOR TO SUBMITTING PLANS.

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Revisions:

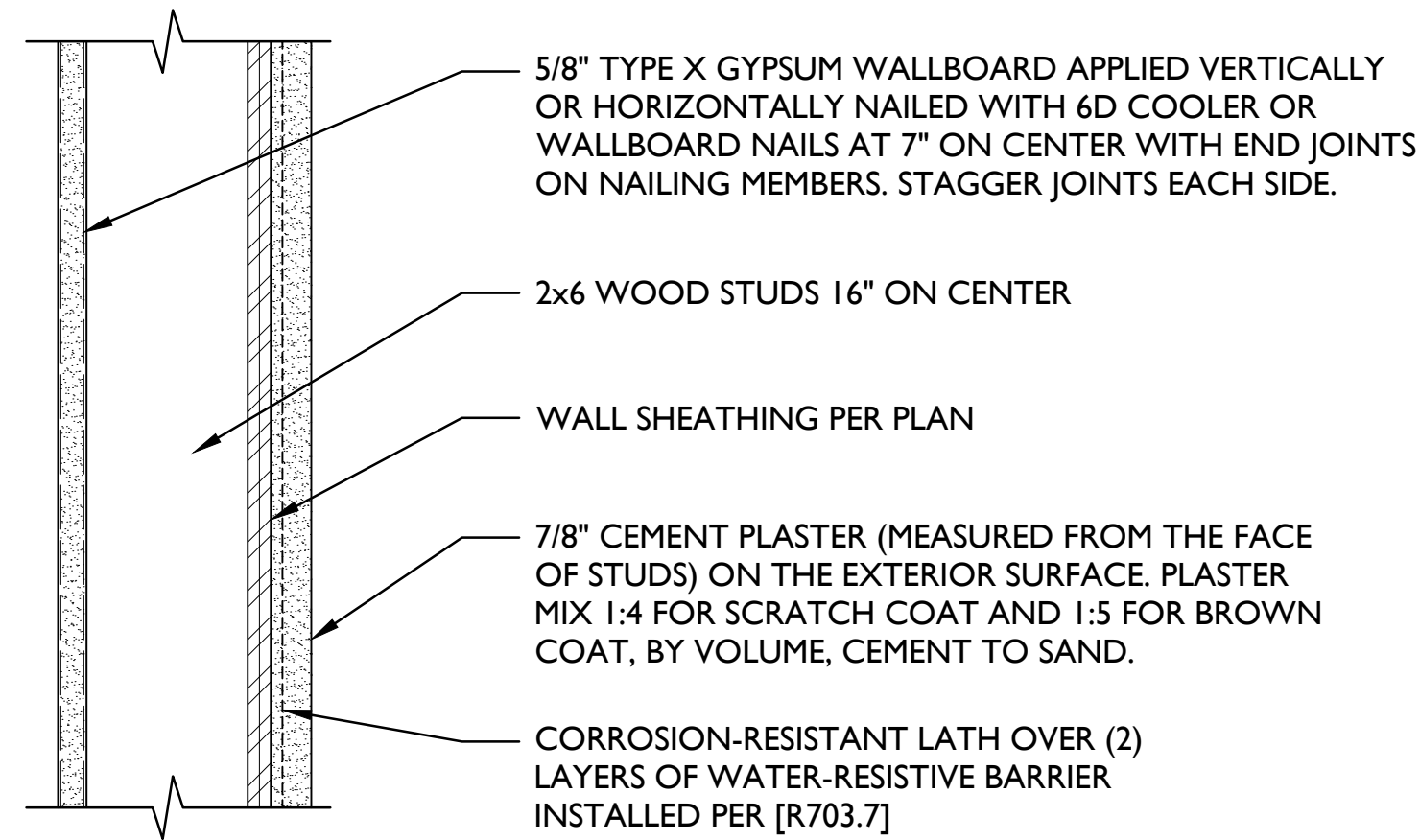
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Scale:	AS NOTED
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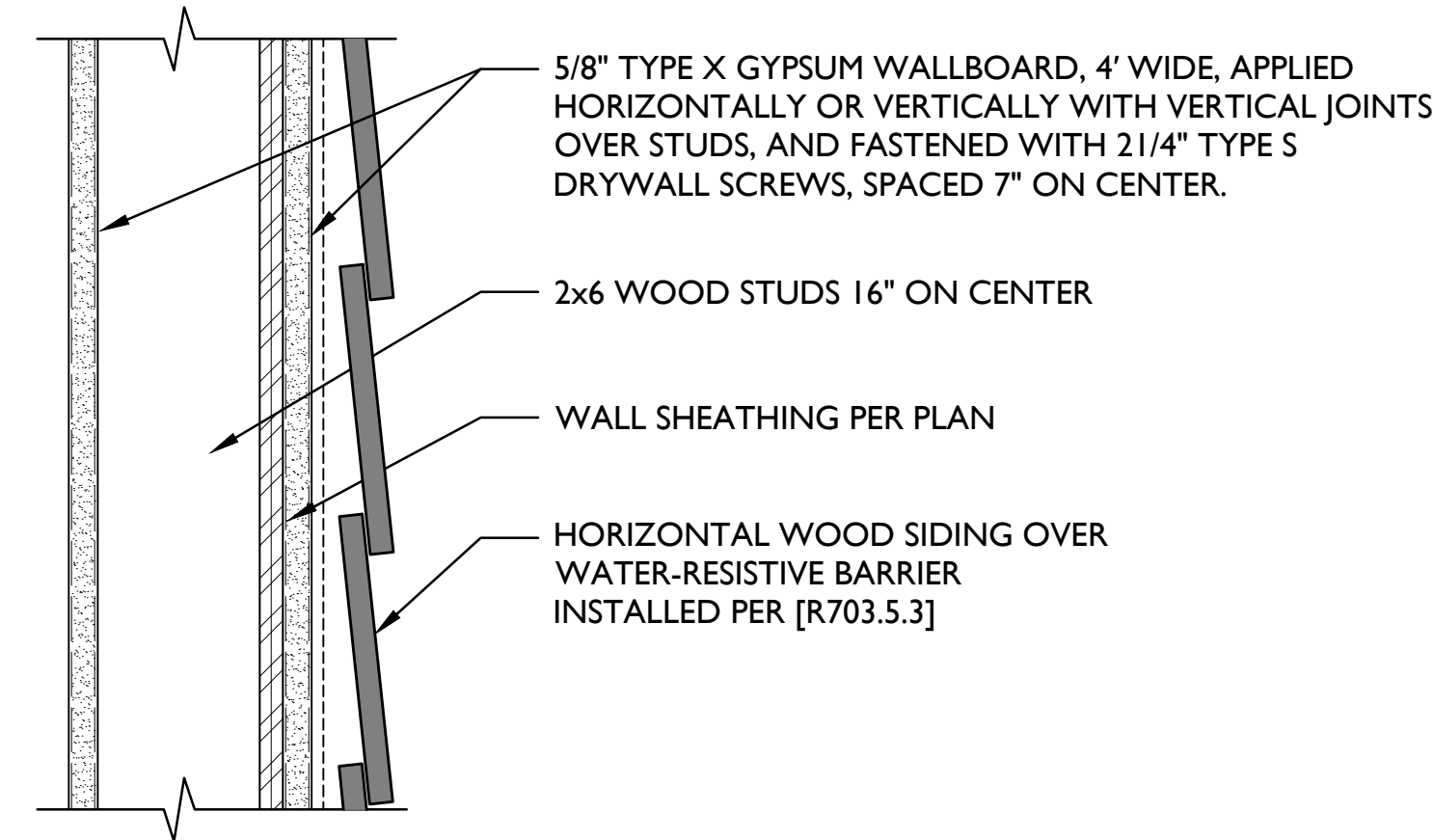
T1.1



EXTERIOR SIDE:
 CBC TABLE 721.1(2), ITEM 15-1.3
 2" x 4" WOOD STUDS 16" ON CENTER WITH 7/8" CEMENT PLASTER (MEASURED FROM THE FACE OF STUDS) ON THE EXTERIOR SURFACE. PLASTER MIX 1:4 FOR SCRATCH COAT AND 1:5 FOR BROWN COAT, BY VOLUME, CEMENT TO SAND.

INTERIOR SIDE:
 CBC TABLE 721.1(2), ITEM 14-1.3
 2" x 4" WOOD STUDS 24" ON CENTER WITH 5/8" TYPE X GYPSUM WALLBOARD APPLIED VERTICALLY OR HORIZONTALLY NAILED WITH 6D COOLER OR WALLBOARD NAILS AT 7" ON CENTER WITH END JOINTS ON NAILING MEMBERS. STAGGER JOINTS EACH SIDE.

NOTE: WOOD STRUCTURAL PANELS SHALL BE PERMITTED TO BE INSTALLED BETWEEN THE FIRE PROTECTION AND THE WOOD STUDS ON EITHER THE INTERIOR OR EXTERIOR SIDE OF THE WOOD FRAME ASSEMBLIES IN THIS TABLE, PROVIDED THAT THE LENGTH OF THE FASTENERS USED TO ATTACH THE FIRE PROTECTION IS INCREASED BY AN AMOUNT NOT LESS THAN THE THICKNESS OF THE WOOD STRUCTURAL PANEL.

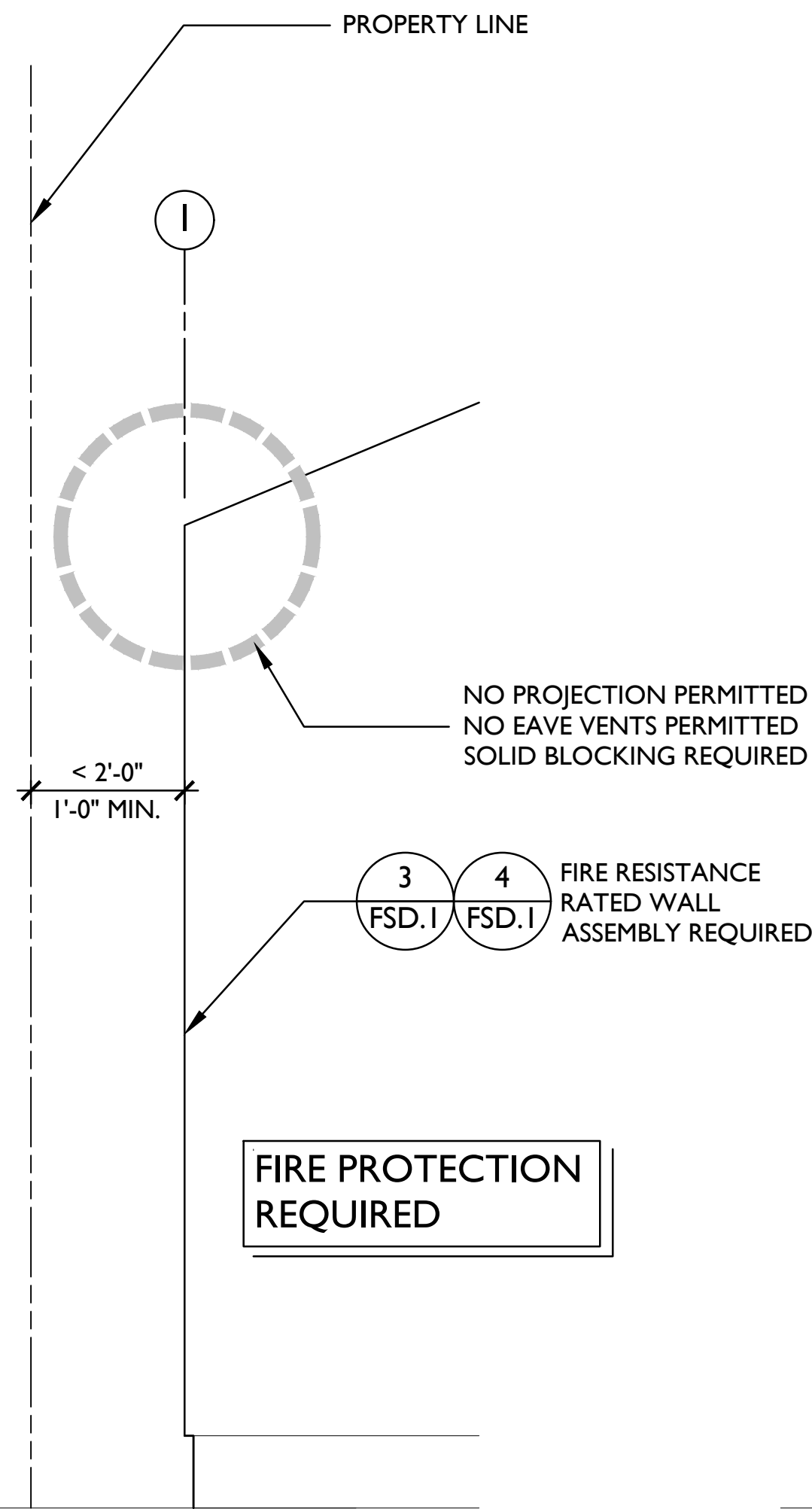


EXTERIOR AND INTERIORS SIDES:
 CBC TABLE 721.1(2), ITEM 15-1.14
 2" x 6" WOOD STUDS AT 16" WITH DOUBLE TOP PLATES, SINGLE BOTTOM PLATE; INTERIOR AND EXTERIOR SIDES COVERED WITH 5/8" TYPE X GYPSUM WALLBOARD, 4" WIDE, APPLIED HORIZONTALLY OR VERTICALLY WITH VERTICAL JOINTS OVER STUDS, AND FASTENED WITH 2 1/4" TYPE S DRYWALL SCREWS, SPACED 7" ON CENTER.

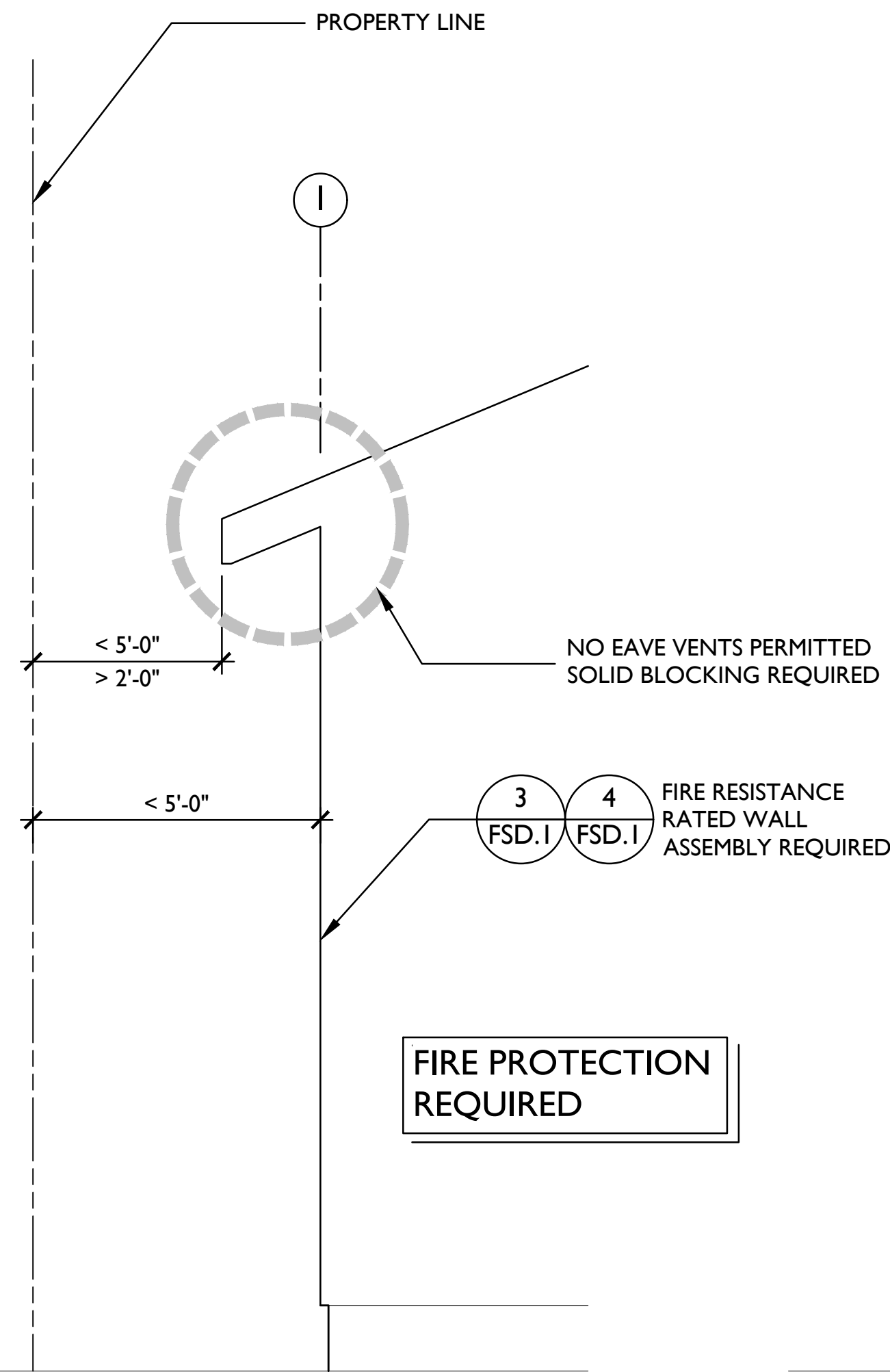
NOTE: WOOD STRUCTURAL PANELS SHALL BE PERMITTED TO BE INSTALLED BETWEEN THE FIRE PROTECTION AND THE WOOD STUDS ON EITHER THE INTERIOR OR EXTERIOR SIDE OF THE WOOD FRAME ASSEMBLIES IN THIS TABLE, PROVIDED THAT THE LENGTH OF THE FASTENERS USED TO ATTACH THE FIRE PROTECTION IS INCREASED BY AN AMOUNT NOT LESS THAN THE THICKNESS OF THE WOOD STRUCTURAL PANEL.

4 STUCCO FIRE RESISTANCE RATED WALL ASSEMBLY
 FSD.1 SCALE: 1" = 1'-0"

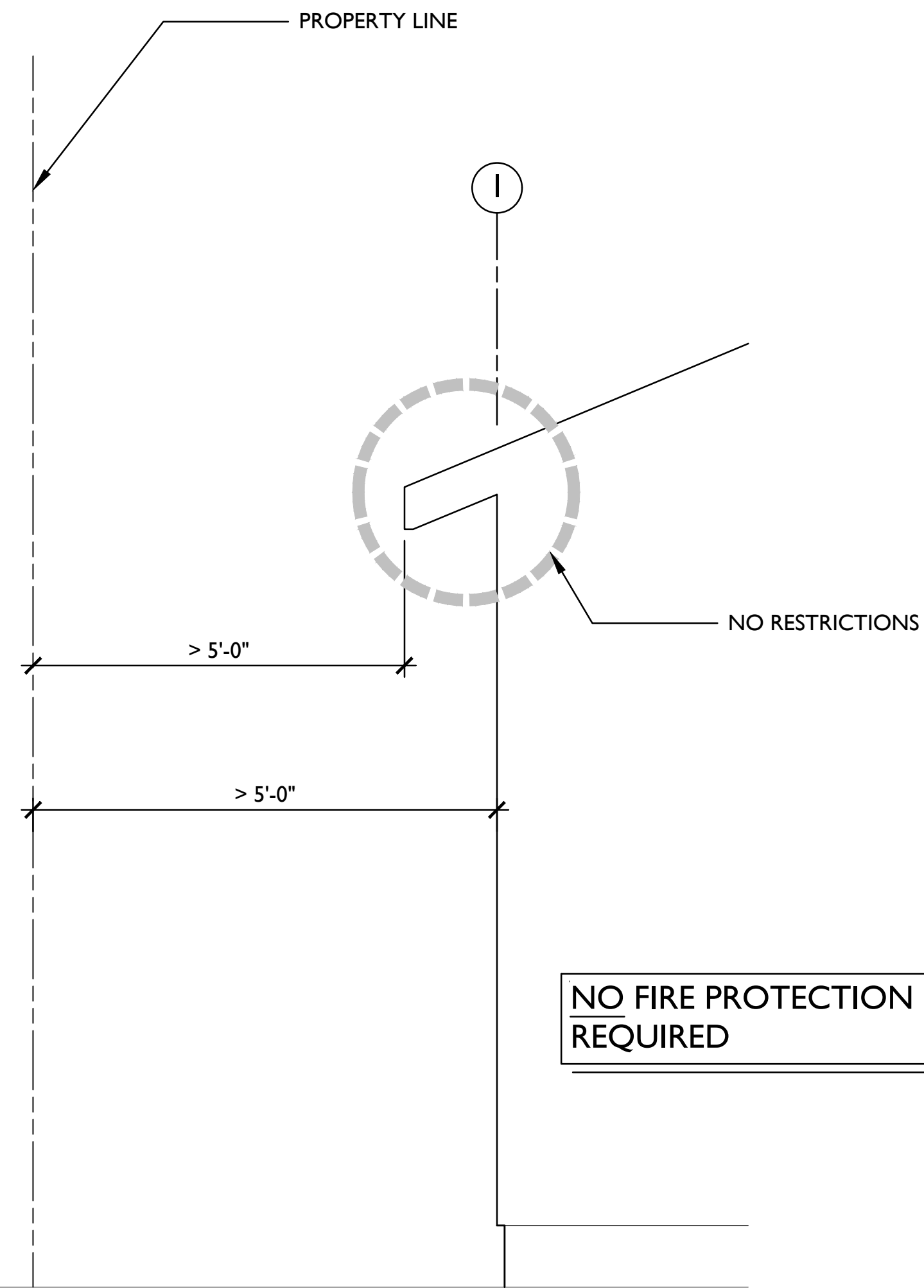
3 WOOD SIDING FIRE RESISTANCE RATED WALL ASSEMBLY
 FSD.1 SCALE: 1" = 1'-0"



CONDITION #3: WHERE THE EXTERIOR FACE OF WALL IS BETWEEN 2 FEET AND 1 FOOT FROM THE PROPERTY LINE. NO PROJECTION PERMITTED.

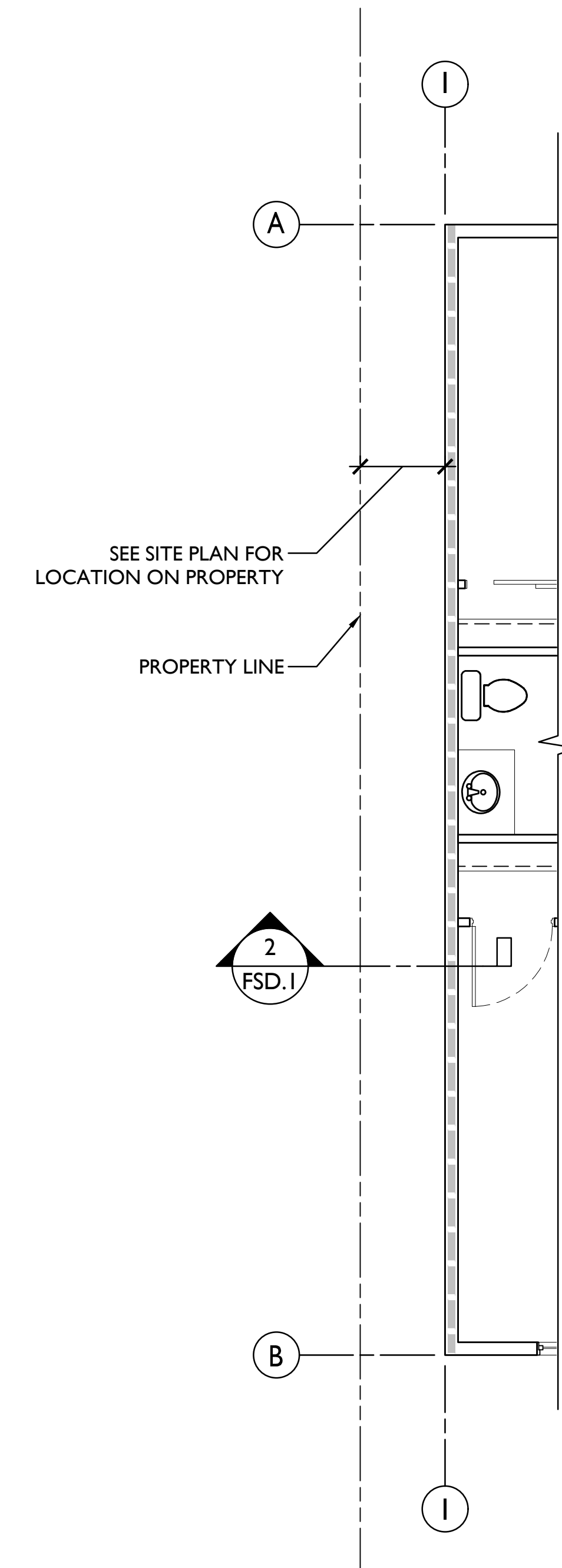


CONDITION #2: WHERE THE EXTERIOR FACE OF WALL IS LESS THAN 5 FEET FROM THE PROPERTY LINE AND THE ROOF PROJECTION IS BETWEEN 5 FEET AND 2 FEET FROM THE PROPERTY LINE.



CONDITION #1: WHERE THE EXTERIOR FACE OF WALL AND ROOF PROJECTION ARE GREATER THAN OR EQUAL TO 5 FEET FROM THE PROPERTY LINE.

2 FIRE SEPARATION DISTANCE SECTIONS
 FSD.1 SCALE: 3/4" = 1'-0" (ALLOWED ALONG WALL 1 ONLY)



1 FIRE SEPARATION PARTIAL FLOOR PLAN
 FSD.1 SCALE: 1/4" = 1'-0"

Residential Code Requirements

2022 Adopted Codes effective January 1st, 2023

The code requirements in this document are excerpts only, not a comprehensive list of all requirements that may apply to your project. These sheets, when attached to a set of plans, become part of those plans, and must remain attached thereto. The approval of these plans and specifications shall not be held to permit or approve the violation of any City ordinance or State or Federal law.

Building Code Requirements

- B-1 **In dwelling units, smoke alarms shall be installed** on the wall or ceiling of the area immediately outside each separate sleeping area, in each room used for sleeping purposes, and on each story within the dwelling unit. In dwellings with basements, an alarm shall be installed on each story and in the basement. In dwellings within where a story or basement is split into two or more levels and does not have an intervening door between the adjacent levels, a smoke alarm need only be installed on the upper level, except that when the lower level is less than one full story below the upper level, an alarm shall be installed on each level. Where the ceiling height of a room that opens onto a hallway serving a bedroom exceeds the height of the hallway by 24 inches, smoke alarms shall be installed in the hallway and in the adjacent room. In new construction, the required smoke alarms shall receive their primary power from a commercial source and have a battery backup. When more than one smoke alarm is being provided the alarms shall be interconnected. 2022 CRC, Section R314.
- B-2 When interior **alterations, repairs, or additions having a value in excess of \$1,000** are made, provide approved **smoke alarms** as required for new buildings. The alarm may be battery operated. 2022 CRC, Section R314.6.2.
- B-3 **For new construction, and alteration, repairs and additions, an approved carbon monoxide alarm shall be installed** in dwelling units and in sleeping units within which fuel-burning appliances including fireplaces are installed and in dwelling units that have attached garages. 2022 CRC, Section R315.1.
- B-4 **Sprinklers shall be installed** to protect all areas of a new dwelling unit. Fire sprinklers shall be designed and installed per 2022 CRC, Section R313.2.1.
- B-5 **Basements, habitable attics, and every sleeping room in dwelling units** shall have not less than one operable emergency escape and rescue opening approved for **emergency escape or rescue** that shall open directly into a public way, yard, or court that opens to a public way. Escape or rescue windows shall have a minimum net clear opening area of not less than 5.7 square feet, except that when escape and rescue windows are on the grade-floor they can have a minimum net clear opening area of 5 square feet. All emergency escape and rescue windows shall have the bottom of the clear opening not greater than 44 inches measured from the floor. The minimum net clear opening height shall be 24 inches. The minimum net clear opening width shall be 20 inches. Storm shelters and basements that are less than 200 square feet and are only used to house mechanical equipment are exempt from this requirement. 2022 CRC, Section R310.1. **See Exception 2** Where the dwelling or townhouse is equipped with an automatic sprinkler system installed in accordance with Section P2904, sleeping rooms in basements shall not be required to have emergency escape and rescue openings provided that the basement has one of the following: 2.1 One means of egress complying with Section R311 and one emergency escape and rescue opening. 2.2 Two means of egress complying with Section R311.
- B-6 **Private garages shall be separated from a dwelling unit and its attic space** by minimum ½ inch gypsum board applied on the garage side. Private garages located beneath habitable spaces shall be separated from the habitable space by means of minimum 5/8 inch gypsum board. A garage shall not open directly into a room used for sleeping purposes. Door openings between a private garage and a dwelling unit are required to be self-closing and self-latching. When not protected by fire sprinklers, the door shall be constructed of solid wood, solid material, or honeycomb core steel and must be 1-3/8 inch thick or have a 20 minute fire rating. 2022 CRC, Sections R302.5 & R302.6.
- B-7 **Ducts may pass through the walls or a ceiling separating a private garage from a dwelling unit** provided the ducts within the garage are constructed of steel having a thickness of not less than 26 gauge galvanized sheet steel and the duct has no openings into the garage. 2022 CRC, Section R302.5.2.
- B-8 Provide **readily accessible natural ventilation directly to the outdoors** for all habitable rooms within a dwelling unit equal to 4 percent of the floor area ventilated. 2022 CRC, Section R303.1.

- B-9 Provide **natural or artificial light** to all habitable rooms within a dwelling unit. Natural light shall be equal to 8 percent of the floor area served. Artificial light shall have an average illumination of 6 foot-candles at a height of 30 inches above the floor level. 2022 CRC, Section R303.1.
- B-10 **Rooms containing bathtubs, showers, spas, and similar bathing fixtures** shall be provided with an aggregate glazing area of not less than 3 square feet of which at least one half must be openable or be mechanically ventilated with the exhaust air going directly to the outside. 2022 CRC, Section R303.3.
- B-11 **Age-in-place design and fall prevention in newly constructed dwellings** shall be designed and constructed in accordance with 2022 CRC, Sections R327.1.1 through R327.1.4. **Reinforcement for grab bars** shall be provided in **at least one bathroom** on entry level. Where there is no bathroom on the entry level, at least one bathroom on the second or third floor of the dwelling shall comply with this section. **Electrical receptacle outlets, switches, and controls** (including controls for heating, ventilation, and air conditioning) intended to be used by occupants **shall be located no more than 48 inches** measured from the top of the outlet box and **not less than 15 inches** measured from the bottom of the outlet box above the finish floor. Effective July 1, 2024, **at least one bathroom and one bedroom** on the entry level shall provide a doorway with a **net clear opening of not less than 32 inches**, measured with the door positioned at an angle of 90 degrees from the closed position. **Doorbell buttons or controls**, when installed, shall **not exceed 48 inches above exterior floor or landing**, measured from the top of the doorbell button assembly.
- B-12 Provide **safely glazing** for all glazing in locations specified as hazardous in the 2022 CRC, Section R308.4.
- B-13 **Shower compartments and walls above bathtubs with installed shower heads** shall be finished with a smooth, nonabsorbent surface to a height of not less than 6 feet above the floor. 2022 CRC, Section R307.2.
- B-14 Provide an approved **attic access** in a readily accessible location sized 22 inches by 30 inches with minimum 30 inch vertical headroom. 2022 CRC, Section R807.1. **If mechanical equipment** is installed in the attic space the access must be sized so that the largest piece of equipment can be removed, but in no case smaller than 22 inch by 30 inch with 30 inch vertical headroom clearance per 2022 CMC, section 304.4.
- B-15 **Enclosed usable space under interior stairways** in dwelling units shall have the walls and soffits protected on the enclosed side with ½ inch gypsum board. 2022 CRC, Section R302.7.
- B-16 **Private stairways** shall be constructed with a 7-3/4 inch maximum rise, a 10 inch minimum run, and a 36 inch minimum width. A nosing not less than ¾ inch but not more than 1-1/4 inch shall be provided on stairways with solid risers where the tread depth is less than 11 inches. The largest tread run and the greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch. Maintain a continuous 5 foot 6 inch headroom clearance above the stairway. 2022 CRC, Section R311.7.
- B-17 A minimum of **one handrail** is required on **all stairway runs with four or more risers** that serve dwelling units. The top of handrails shall be placed not less than 34 inches nor more than 38 inches above the nosing of the treads except for at the lowest riser, landing transitions, and the start of the flight where they may be allowed to be higher. A clear space of 1-1/2 inches is required between the handrail and the wall. The maximum projection of the handrail into the required stairway width shall be 4-1/2 inches. Openings in open **guards on stairways** shall be sized such that a 4-3/8 inch sphere will not pass through. The triangular openings formed by the riser, tread, and bottom rail at the open side of a stairway shall be of a maximum size such that a sphere of 6 inches in diameter cannot pass through the opening. 2022 CRC, Section R311.7.8 and R312.1.3.
- B-18 **Circular handrails** shall have a minimum diameter of 1-1/4 inches and a maximum diameter of 2 inches. **Non-circular handrails** shall have a minimum perimeter dimension of 4 inches, a maximum perimeter dimension of 6-1/4 inches, and a maximum cross-section of 2-1/4 inches. **Handrails with a perimeter greater than 6-1/4 inches** shall have a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch within 7/8 inch below the widest part of the profile. The required depth shall continue for at least 1-3/4 inches below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1-1/4 inches to a maximum of 2-3/4 inches. 2022 CRC, Section R311.7.8.5.
- B-19 **Guards** are required where open-sided walking surfaces including stairs, ramps, and landings are located more than 30 inches above the floor below. These guards shall be a minimum of 42 inches in height. Openings in open guards for these areas shall be sized such that a 4 inch diameter sphere cannot pass through any opening. 2022 CRC, Section R312.1.
- B-20 **On stairways, guards whose top rail also serves as a handrail** shall have a height not less than 34 inches and not more than 38 inches measured vertically from a line connecting the leading edge of the treads. 2022 CRC, Section 312.1.2 exception #2.
- B-21 **Interior spaces intended for human occupancy shall be provided with heating facilities** capable of maintaining a room temperature of 68 degrees Fahrenheit at a point 3 feet above the floor and 2 feet from exterior walls in all habitable rooms. 2022 CRC, Section R303.10.

- B-22 **Ceiling heights** for habitable space, hallways and portions of basements containing these spaces shall have a ceiling height of not less than 7 feet. Bathrooms, toilet rooms and laundry rooms shall have a ceiling height not less than 6 feet 8 inches. 2022 CRC, Section R305.1.
- B-23 **Factory built chimneys and factory built fireplaces** shall be listed and installed in accordance with the terms of their listing and the manufacturer's instructions. 2022 CRC, Sections R1004.1 & R1005.1.
- B-24 **Braced wall lines** shall consist of braced wall panels that meet the requirements for location, size, spacing and type of bracing as shown in 2022 CRC, Sections R602.10.1.1, Tables R602.10.1.2(2) & R602.10.1.2(3), R602.10.1.4.1, and R602.10.3. Brace wall lines shall be in line or offset from each other by not more than 4 feet. All braced wall panels shall be clearly indicated on the plans.
- B-25 Any braced wall panel may be replaced by an **alternate braced wall panel** constructed in accordance with 2022 CRC, Section R602.10.6.1 and Table R602.10.6.1.
- B-26 **Cripple walls having a stud height exceeding 14 inches** shall be framed of studs not less in size than the studs above. Cripple walls exceeding 4 feet in height shall be framed with studs sized as required for an additional story. Cripple walls with studs less than 14 inches high shall be framed of solid blocking or shall be sheathed on at least one side with a wood structural panel that is fastened to both the top and bottom plate. All cripple walls shall be supported on a continuous foundation. 2022 CRC, Section R602.9.
- B-27 **Stud size, height, and spacing** shall conform to 2022 CRC, Table R602.3(5).
- B-28 **Provide access to all under-floor spaces**. Access provided through the floor shall be a minimum size of 18 inches by 24 inches. Access provided through the wall shall be a minimum of 16 inches by 24 inches and shall not be located under a door to the residence. 2022 CRC, Section 408.4.
- B-29 **Provide adequate ventilation at all under-floor spaces**. 2022 CRC, Section 408.1.
- B-30 **Wood framing members** and wood-based products must be foundation grade redwood or treated and marked by an approved agency when required by 2022 CRC, section R317.
- B-31 **Foundation plates or sills shall be bolted or anchored to the foundation** with not less than ½ inch diameter steel bolts or approved anchors spaced a minimum of 6 feet on center for one and two story dwellings and a minimum of 4 feet on center for three or more story dwellings. There shall be at least two bolts per plate that start within 12 inches or 7 bolt diameters of the end of the plate. All foundation bolts shall be embedded a minimum of 7 inches into the concrete or masonry. Each bolt shall have a properly sized nut and washer. 2022 CRC, Sections R403.1.6 & R403.1.6.1. **The washers** must be a minimum 3 x 3 inches square and .229 inches thick. A diagonal slot is allowed of a width 3/16 inch larger than the bolt diameter and a maximum 1-3/4 in length, provided a standard cut washer is used between the nut and plate washer. 2022 CRC, Section R602.11.1.
- B-32 **Cutting and notching** of exterior walls and bearing partitions shall not be greater than 25 percent of the stud width. Cutting or notching of studs to a depth not greater than 40 percent of the width of the stud is permitted in nonbearing partitions supporting no loads other than the weight of the partition. 2022 CRC, Section 602.6 #1.
- B-33 **A drilled or bored hole** not greater in diameter than 60 percent of the stud width is permitted in a non-bearing partition or in a wall where the bored stud is doubled provided not more than two such successive studs are bored. A minimum 5/8 inch of wood is required between the bored hole and the edge of the wood. Where the diameter of a bored hole in a stud located in exterior walls or bearing partitions is over 40 percent, such stud shall be doubled and not more than two successive doubled studs shall be so bored. Bored holes cannot be located in the same vicinity as a cut or a notch. 2022 CRC, Section 602.6 #2.
- B-34 **Footings** shall be designed so that the allowable bearing capacity of the soil is not exceeded per Table R401.4.1. Where a specific design is not provided, the size of concrete footings supporting walls of light-frame construction shall conform to the requirements of 2022 CRC, Table R403.1. The minimum depth of footings shall be 12 inches below undisturbed ground. 2022 CRC, Section R403.1.4.
- B-35 Where **post and beam or girder construction** is used, a **positive connection** shall be provided to ensure against uplift and lateral displacement. 2022 CRC, Section R502.9.
- B-36 Where rafters are not parallel with the ceiling joist, rafters shall be tied to an equivalent **rafter tie** that is connected per Table 802.5.2. The rafter ties shall be a minimum of 2 inch by 4 inch. 2022 CRC, Section R802.5.2. Where ceiling joists or rafter ties are not provided, the ridge formed by these rafters shall be supported by a wall or girder designed in accordance with accepted engineering practice.
- B-37 Provide adequate **ventilation to all attic spaces**. 2022 CRC, Section R806.1
- B-38 Provide **fire blocking and draft stopping** in concealed locations of combustible construction in accordance with the 2022 CRC, Sections R302.11 & R302.12.
- B-39 **All gypsum board, stucco, plaster, and lath** shall be installed as per 2022 CRC, Chapter 7.

Plumbing Code Requirements

- P-1 Provide an **approved dishwasher air gap fitting** as per 2022 CPC, Section 807.3.
- P-2 Potable water outlets with hose attachments, other than water heater drains, boiler drains, and clothes washer connectors, shall be protected by a listed non-removable hose bib type backflow preventor or a listed atmospheric vacuum breaker as per 2022 CPC, Section 603.5.7.
- P-3 **Joints**. Where a fixture comes in contact with the wall or floor, the joint between the fixture and the wall or floor shall be made watertight. 2022 CPC, Section 402.2.
- P-4 **No underfloor cleanout** shall be located more than 5 feet from an access door, trap door, or crawl hole. 2022 CPC, Section 707.9.
- P-5 **Gas Water heaters located in residential garages or adjacent spaces** open to the garage that are not part of the living space shall be installed so that the pilots, burners, and burner-igniter devices are at least 18 inches above the floor unless listed as flammable vapor ignition resistant. 2022 CPC, Section 507.13.
- P-6 **Fuel burning water heaters** shall be installed per 2022 CPC, Section 506.0, for combustion air.
- P-7 **Water heaters that depend on the combustion of fuel for heat** shall not be installed in bedrooms or bathrooms unless installed in an approved closet or direct vent type per 2022 CPC, Section 504.1.
- P-8 **Listed water heaters shall be installed** in accordance with their listing and the manufacturers' instructions. **Unlisted water heaters** shall be installed with a clearance of 12" on all sides and rear. 2022 CPC, Section 504.3.1 & 504.3.2.
- P-9 Any water system containing **storage water heating equipment** shall be provided with an approved, listed, and adequately sized combination pressure and temperature relief valve. 2022 CPC, Section 608.3.
- P-10 **Relief valves located inside a building** shall be provided with a drain of galvanized steel, hard drawn copper piping and fittings, CPVC, or listed valve drain. The drain shall extend from the valve to the outside of the building with the end of the pipe not more than 2 feet nor less than 6 inches above the ground and pointing downward. 2022 CPC, Section 608.5. **Note:** No part of such drainpipe shall be trapped, and the terminal end of the drainpipe shall not be threaded.
- P-11 **Water heaters shall be anchored or strapped** to resist horizontal displacement due to earthquake motion. Strapping shall be at points within the upper one-third and lower one-third of its vertical dimensions. At the lower point, a minimum distance of 4 inches shall be maintained above the controls with the strapping. 2022 CPC, Section 507.2.
- P-12 **Gas utilization equipment** connected to a piping system shall have an accessible approved **manual shut off valve** with a non-displaceable valve member, or a listed gas convenience outlet installed within 6' of the equipment it serves. Shut off valves serving decorative gas appliances shall be permitted to be installed in fireplaces if listed for such use. 2022 CPC, Section 1212.6.
- P-13 **Showers and tub-shower combinations** in all buildings shall be provided with individual control valves of the pressure balance or the thermostatic mixing valve type. 2022 CPC, Section 408.3.

- Note:** When lath is applied over wood base sheathing, include two layers of grade D paper. 2022 CRC, Section R703.6.3.
- B-40 Provide **weather protection** on all exterior walls located above grade that are not constructed of concrete or masonry. 2022 CRC, Section R703.1.
- B-41 On graded sites, **the top of any exterior foundation** shall extend above the elevation of the street gutter at point of discharge or the inlet of an approved drainage device a minimum of 12 inches plus 2 percent per foot (1/4 inch per linear foot measured from the gutter to the edge of the footing). Where a gutter is not present, the measurement shall be taken from the crown of road. 2022 CRC, Section R403.1.7.3.

Mechanical Code Requirements

- M-1 **Domestic clothes dryer moisture exhaust ducts** shall terminate on the outside of the building and shall be equipped with a back-draft damper. Sheet metal screws or other fasteners that will obstruct the flow shall not be used. Unless otherwise permitted or required by the dryer manufacturer's installation instructions and by the building official, domestic dryer moisture exhaust ducts shall not exceed a total combined horizontal and vertical length of 14 feet including two 90° elbows. Two feet shall be deducted for each 90° elbow in excess of two. 2022 CMC, Section 504.4.
- M-2 **Make up air**. When a closet is designed for the installation of a clothes dryer, a minimum opening of 100 square inches for makeup air shall be provided in the door or by other approved means. 2022 CMC, Section 504.4.1.
- M-3 **Installation of a Listed Cooking Appliance or Microwave Oven above a Listed Cooking Appliance**. The installation of a listed cooking appliance or microwave oven over a listed cooking appliance shall conform to the conditions of the upper appliance's listing and the manufacturers' installation instructions. 2022 CMC, Section 921.4.
- M-4 **Domestic range vents**. Ducts for domestic kitchen downdraft grill-range ventilation shall be installed as per 2022 CMC, Section 504.2.
- M-5 **Fuel burning equipment** shall be assured a sufficient supply of combustion air as per Chapter 7, 2022 CMC.
- M-6 **Warm air furnaces shall not be installed** in a room used or designed to be used as a bedroom or bathroom unless direct vent type or installed in an approved closet enclosure per 2022 CMC, Section 904.1.
- M-7 **Attic furnace**. The distance from the passageway access to the furnace shall not exceed 20 feet measured along the center line of the passageway. The passageway shall be unobstructed and shall have continuous solid flooring not less than 24 inches wide from the entrance opening to the furnace. A level working platform not less than 30 inches in depth and width shall be provided in front of the entire fire box side of the warm air furnace. If the furnace temperature limit control, air filter, fuel control valve, vent collar, or air handling unit is not serviceable from the fire box side of the furnace, a continuous floor not less than 24 inches in width shall be provided from the platform in front of the fire box side of the furnace to and in front of this equipment. A permanent electric outlet and lighting fixture controlled by a switch located at the required passageway opening shall be provided at or near the furnace. 2022 CMC, Section 304.4.
- M-8 **Vent termination**. Gas vents with listed vent caps 12 inches in size or smaller shall be permitted to be terminated in accordance with Table 802.6.2, provided they are located at least 8 feet from the vertical wall or similar obstruction. All other gas vents shall terminate not less than 2 feet above the highest point where they pass through the roof and at least 2 feet higher than any portion of a building within 10 feet. 2022 CMC, Section 802.6.2. **Note:** Single wall metal pipe shall not originate in an unoccupied attic or concealed space and shall not pass through any attic, inside wall, concealed space, or floor. 2019 CMC, Section 802.7.3.2.
- M-9 **Approval of Equipment**. Listed and unlisted equipment shall comply with the 2022 CMC, Section 301.2.
- M-10 **Ignition source**. Heating and cooling equipment located in a garage that generates a glow, spark, or flame capable of igniting flammable vapors shall be installed with sources of ignition at least 18 inches above the floor level. 2022 CMC, Section 305.

20x40 TWO BEDROOM PLAN
747 SQ. FT.

PROJECT FILE

RESIDENTIAL CODE REQUIREMENTS

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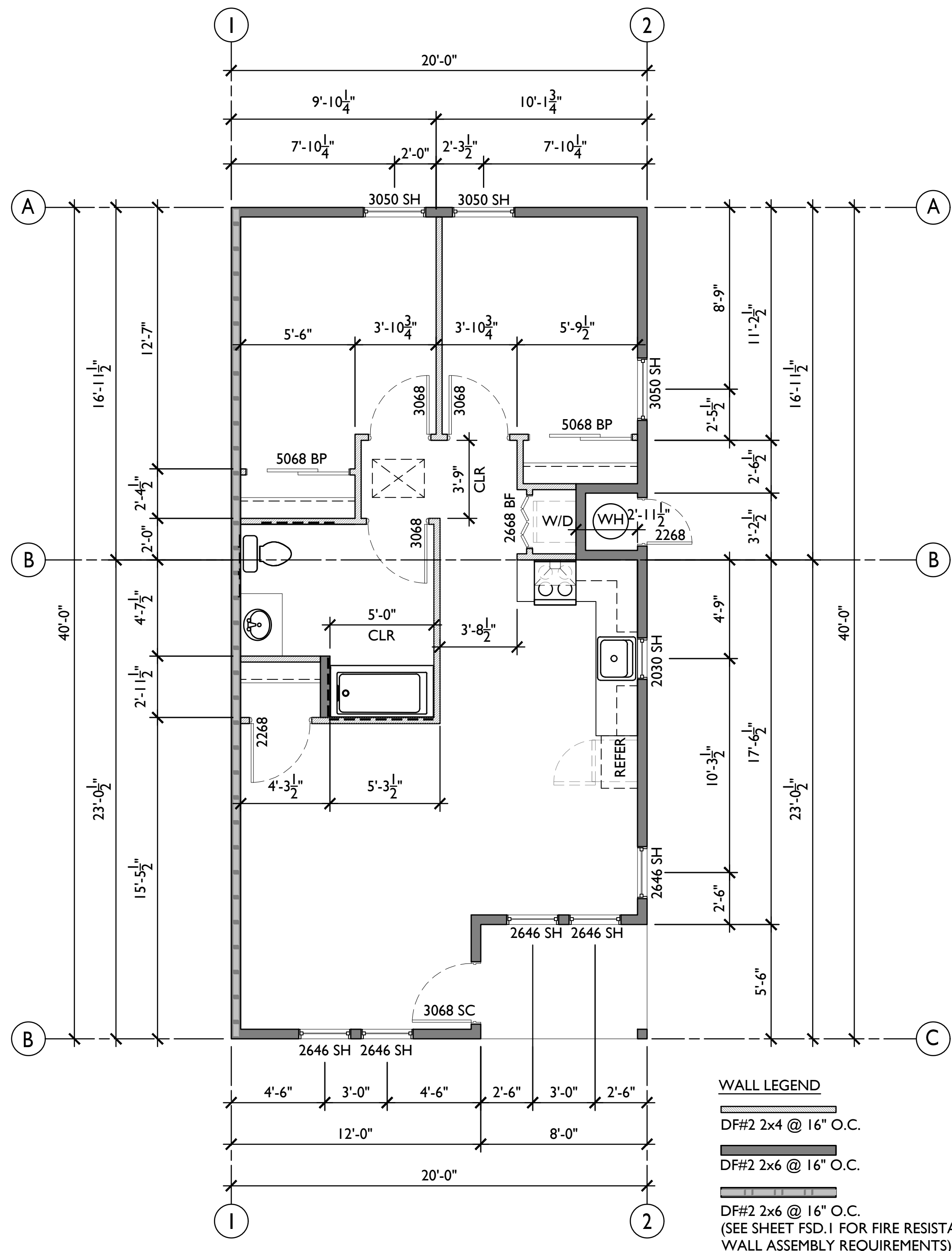
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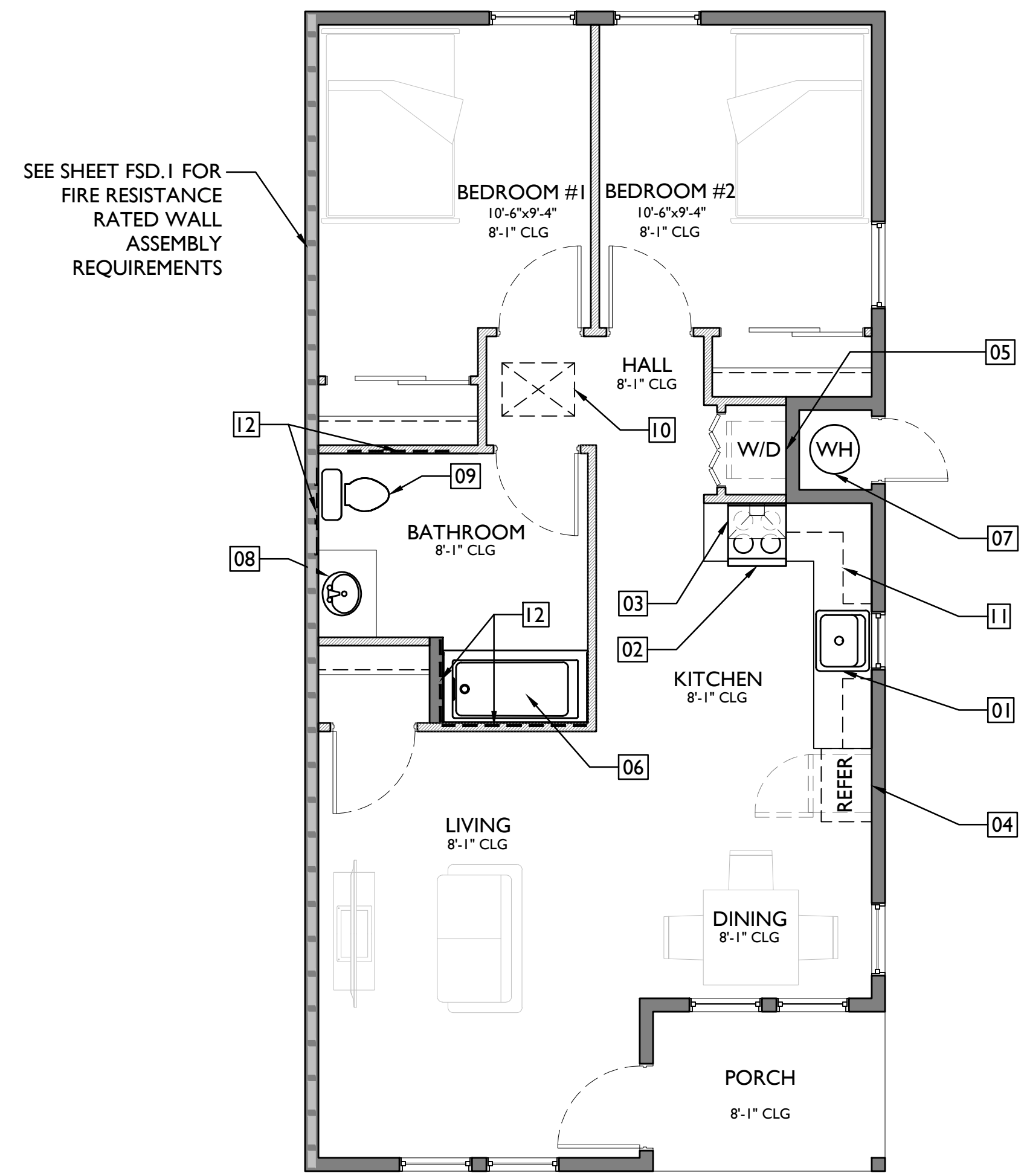
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A2.1



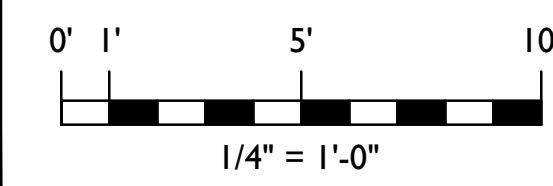
3 DIMENSIONED FLOOR PLAN
A2.1 SCALE: 1/4" = 1'-0"



FLOOR PLAN KEYNOTES

- 01 KITCHEN SINK [CPC TABLE 422.1]
- 02 ELECTRIC COOK TOP OR RANGE OVEN
- 03 LOCAL EXHAUST VENTILATION HOOD, MIN. 100 CFM
- 04 REFRIGERATOR
- 05 AUTOMATIC CLOTHES WASHER CONNECTION [CPC TABLE 422.1]
- 06 SHOWER OR TUB/SHOWER COMBINATION: FLOORS AND WALLS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR. [CRC R307.2]
- 07 ELECTRIC WATER HEATER, SPECIFICATIONS PER ENERGY DOCUMENTATION
- 08 LAVATORY SINK [CPC TABLE 422.1] (PENETRATIONS IN WALL LINE (1) SHALL COMPLY WITH CRC R302.4)
- 09 TOILET [CPC TABLE 422.1] (PENETRATIONS IN WALL LINE (1) SHALL COMPLY WITH CRC R302.4)
- 10 ATTIC ACCESS: PROVIDE 22"X30" OPENING OR LARGE ENOUGH TO REMOVE THE LARGEST PIECE OF EQUIPMENT. LOCATION APPROXIMATE, VERIFY/COORDINATE WITH CEILING FRAMING. [R807.1]
- 11 KITCHEN CABINET LAYOUT BY OWNER/CONTRACTOR
- 12 SOLID BLOCKING REINFORCEMENT FOR GRAB BARS PER [CRC R327.1.1]

1 FLOOR PLAN
A2.1 SCALE: 1/4" = 1'-0"



ENERGY COMPLIANCE REQUIREMENTS

BUILDING ENVELOPE INSULATION R-VALUES

EXTERIOR WALLS	R-21
ATTIC ROOF	R-4
CEILING (BELOW ATTIC)	R-30

ATTIC ROOF

ROOF REFLECTANCE	0.2
ROOF EMITTANCE	0.75
RADIANT BARRIER	NO
COOL ROOF	YES

WINDOW/ GLAZING VALUES

U-FACTOR	0.3
SHGC	0.23

SPACE CONDITIONING SYSTEMS

SYSTEM TYPE	CENTRAL SPLIT HEAT PUMP
SEER/EER	14/11.7
HSPF	8
DUCT INSUL. R-VALUE	R-8

INDOOR AIR QUALITY (IAQ) FAN

AIRFLOW	44 CFM
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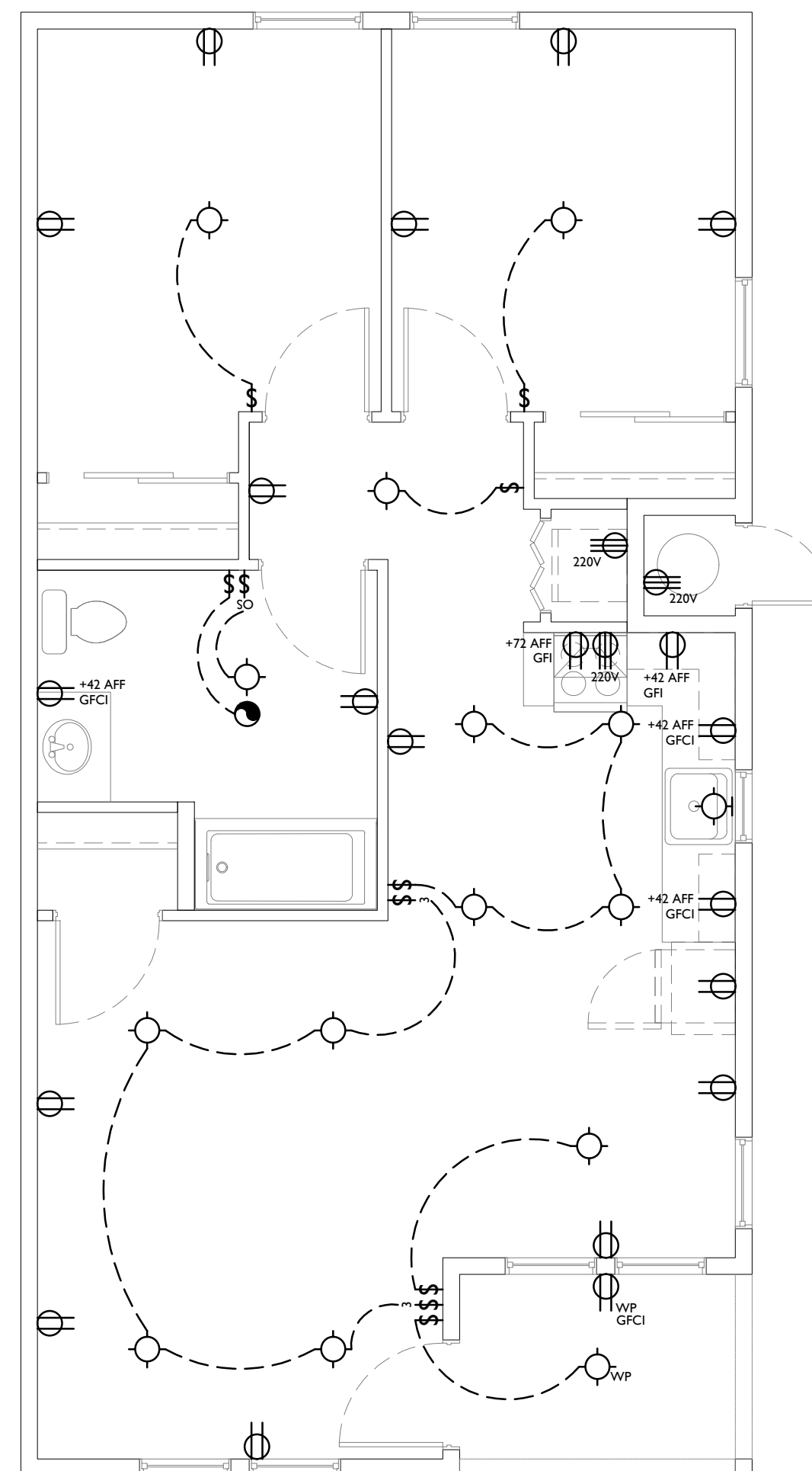
WATER HEATER EFFICIENCY TYPE NEEA HEAT PUMP

PV SYSTEM REQUIREMENTS

STANDARD DESIGN PV CAPACITY	2.06 kWdc
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REQUIRED HERS VERIFICATIONS

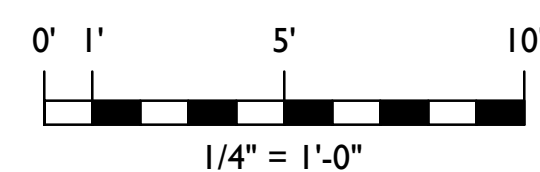
- QUALITY INSULATION INSTALLATION (QII)
- INDOOR AIR QUALITY VENTILATION
- KITCHEN RANGE HOOD
- MINIMUM AIRFLOW
- VERIFIED REFRIGERANT CHARGE
- FAN EFFICACY WATTS/CFM
- VERIFIED HSPF2
- VERIFIED HEAT PUMP RATED HEATING CAPACITY
- DUCT LEAKAGE TESTING



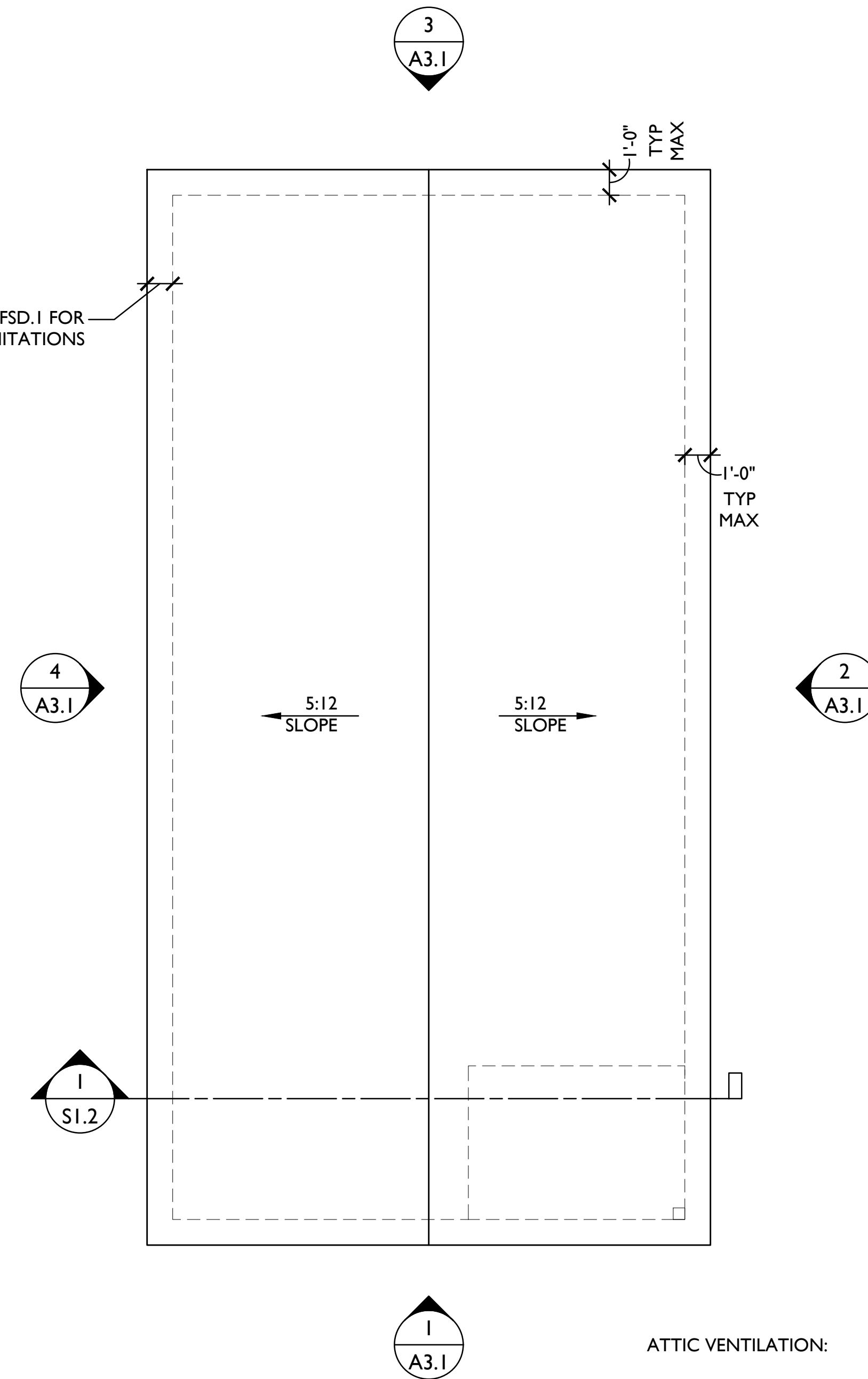
ELECTRICAL SYMBOLS

- EXHAUST VENT, VENT TO EXTERIOR
- 220V RECEPTACLE
- CEILING MOUNTED FIXTURE (HIGH EFFICACY)
- WALL MOUNTED FIXTURE (HIGH EFFICACY)
- DUPLEX WALL RECEPTACLE (ARC FAULT PROTECTED)
- DUPLEX WALL RECEPTACLE (GROUND FAULT INTERRUPTER)
- DUPLEX WALL RECEPTACLE EXTERIOR WEATHER PROOF (GROUND FAULT INTERRUPTER)
- WALL SWITCH
- WALL SWITCH (OCCUPANCY SENSOR)
- WALL SWITCH (3-WAY)

3 ELECTRICAL PLAN
A2.1 SCALE: 1/4" = 1'-0"



SEE SHEET FSD.1 FOR ROOF PROJECTION LIMITATIONS



1 ROOF PLAN
A2.1 SCALE: 1/4" = 1'-0"

ATTIC VENTILATION:

NOTE: CONTRACTOR SHALL VERIFY THAT INSTALLED VENTING PROVIDES THE MINIMUM REQUIRED NET FREE AREA AS SPECIFIED BELOW:

ATTIC AREA: 800 SQ FT

VENT RATIO: 1/300

MINIMUM UPPER VENTING REQUIRED: 192 SQ. INCHES

MINIMUM LOWER VENTING REQUIRED: 192 SQ. INCHES

MINIMUM TOTAL VENTING REQUIRED: 384 SQ. INCHES

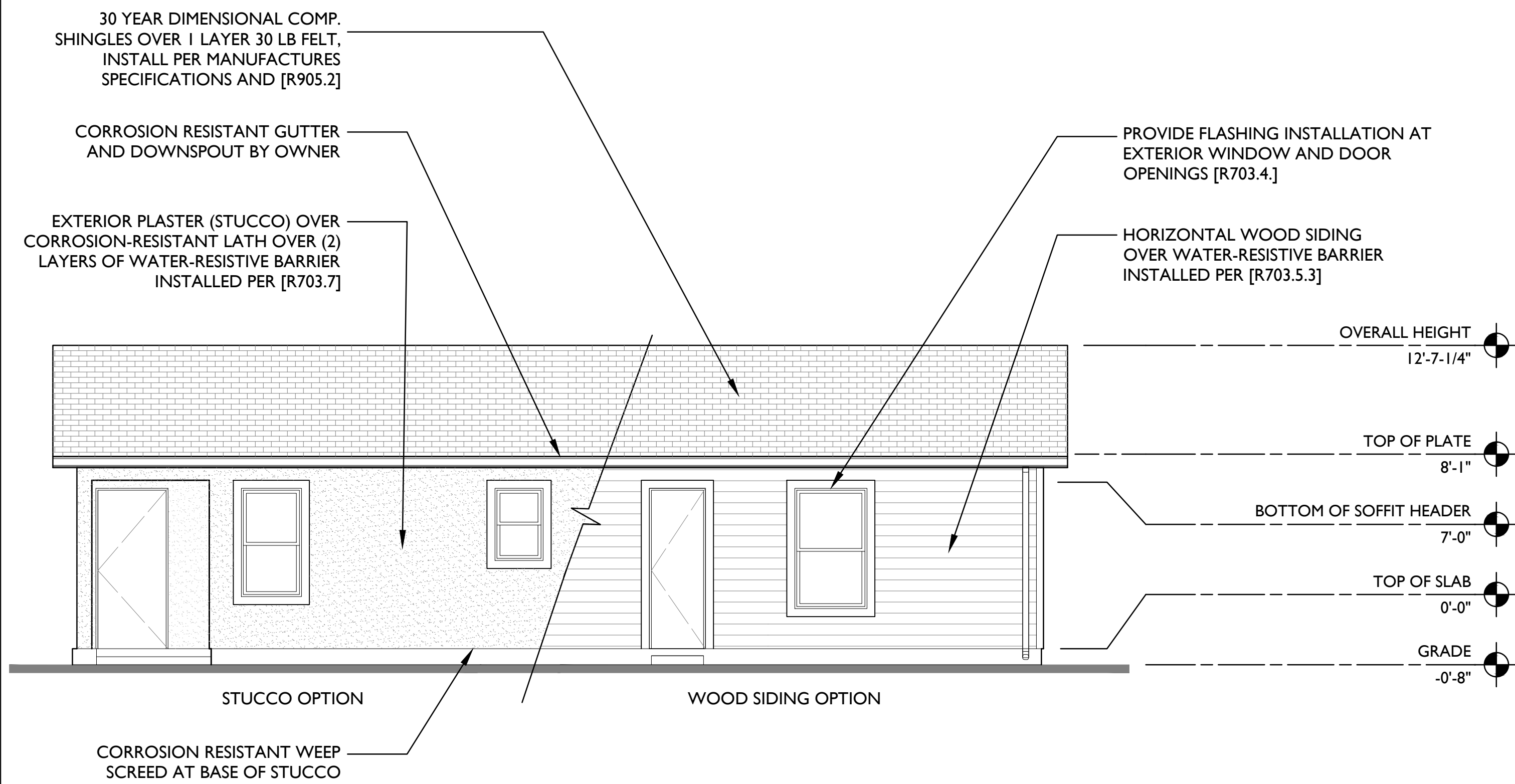
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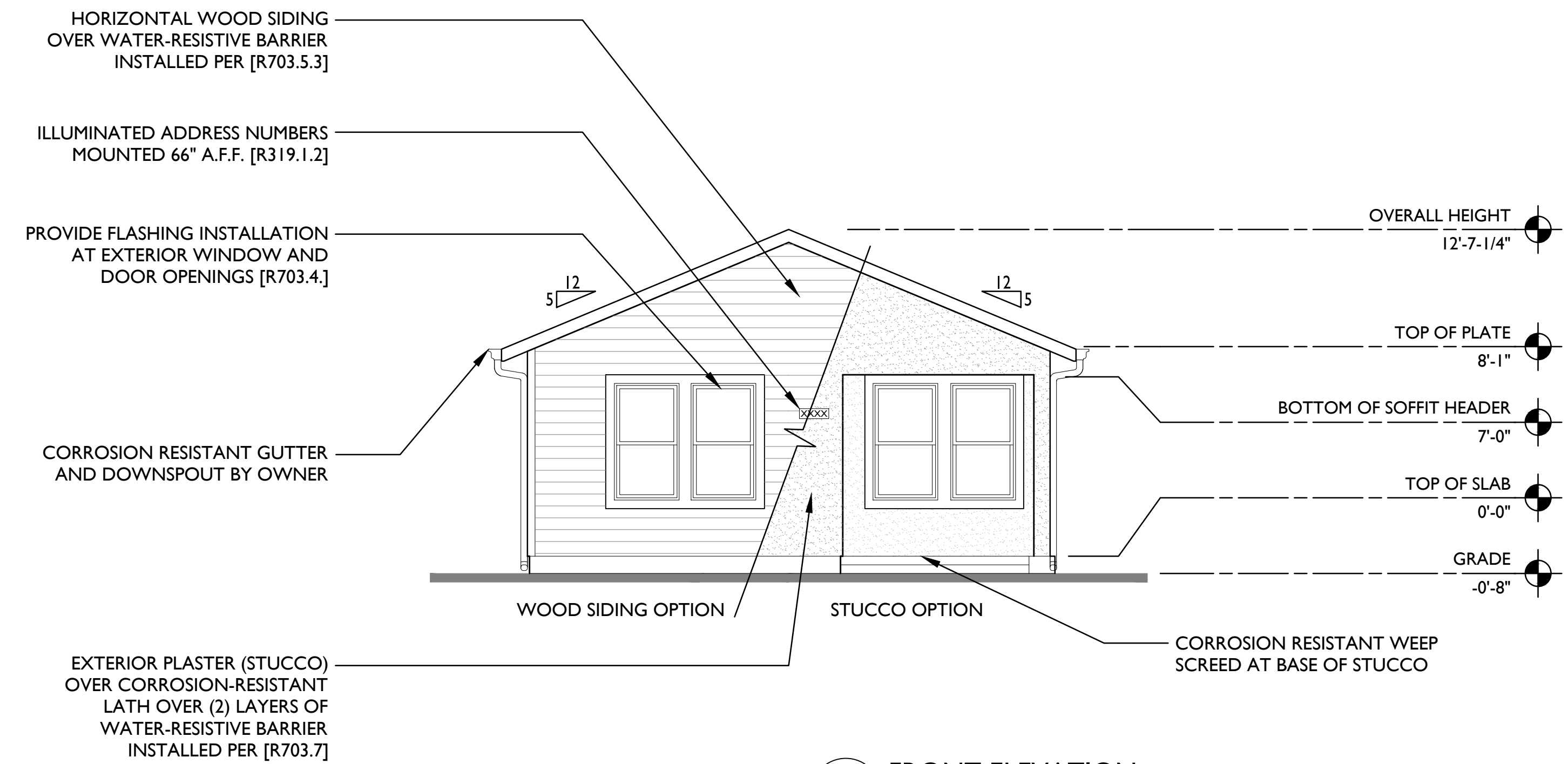
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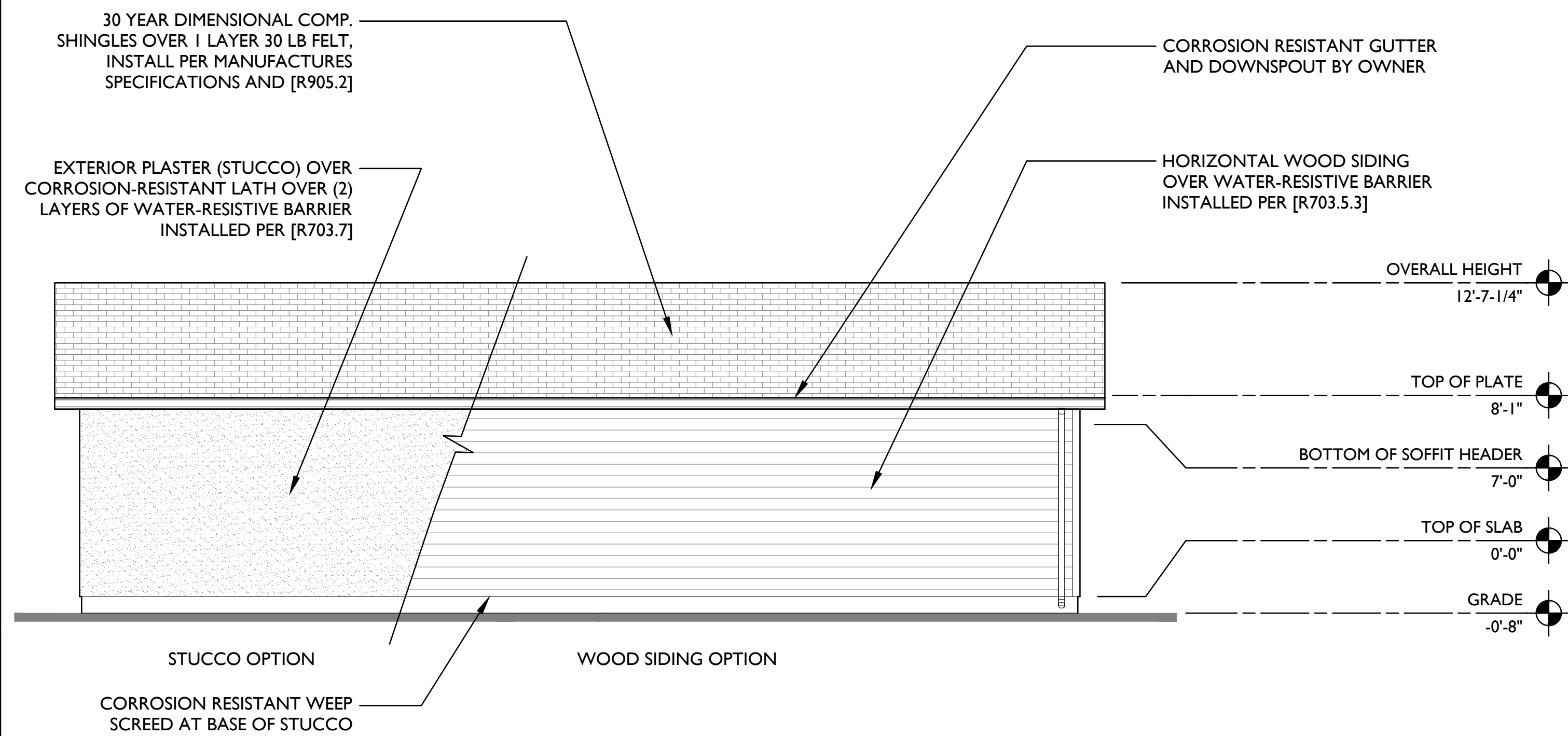
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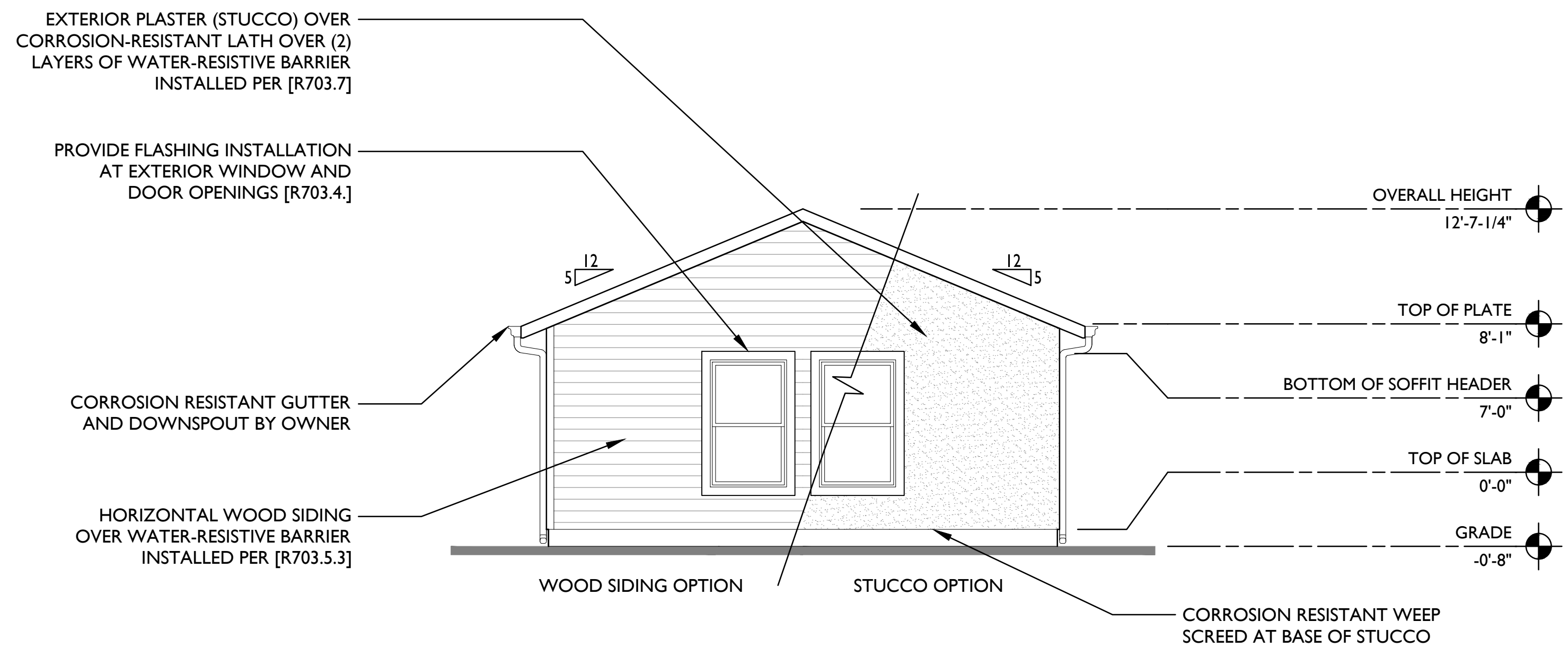
3 RIGHT ELEVATION
A3.1 SCALE: 1/4" = 1'-0"



1 FRONT ELEVATION
A3.1 SCALE: 1/4" = 1'-0"



4 LEFT ELEVATION
A3.1 SCALE: 1/4" = 1'-0"



2 REAR ELEVATION
A3.1 SCALE: 1/4" = 1'-0"

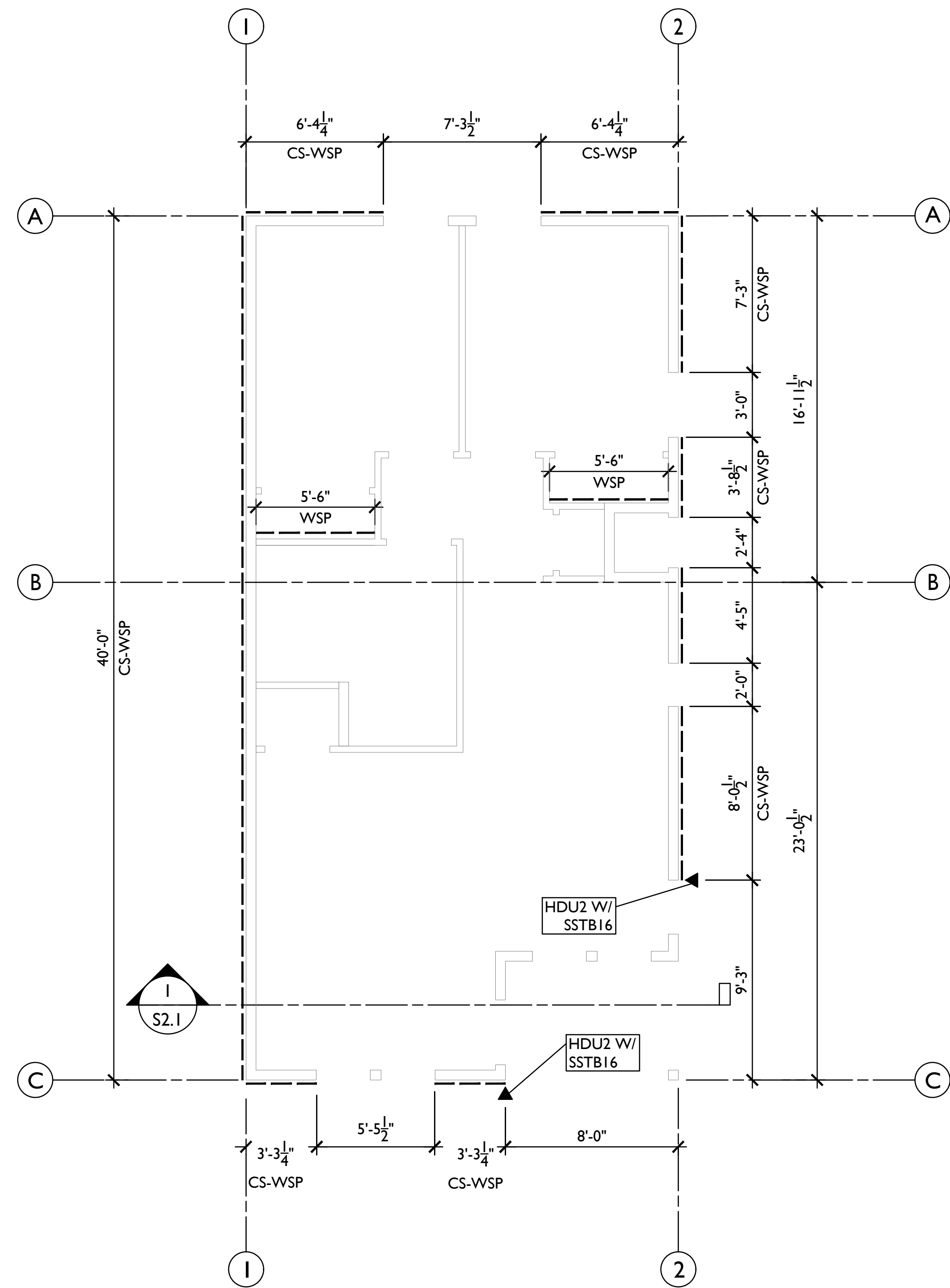
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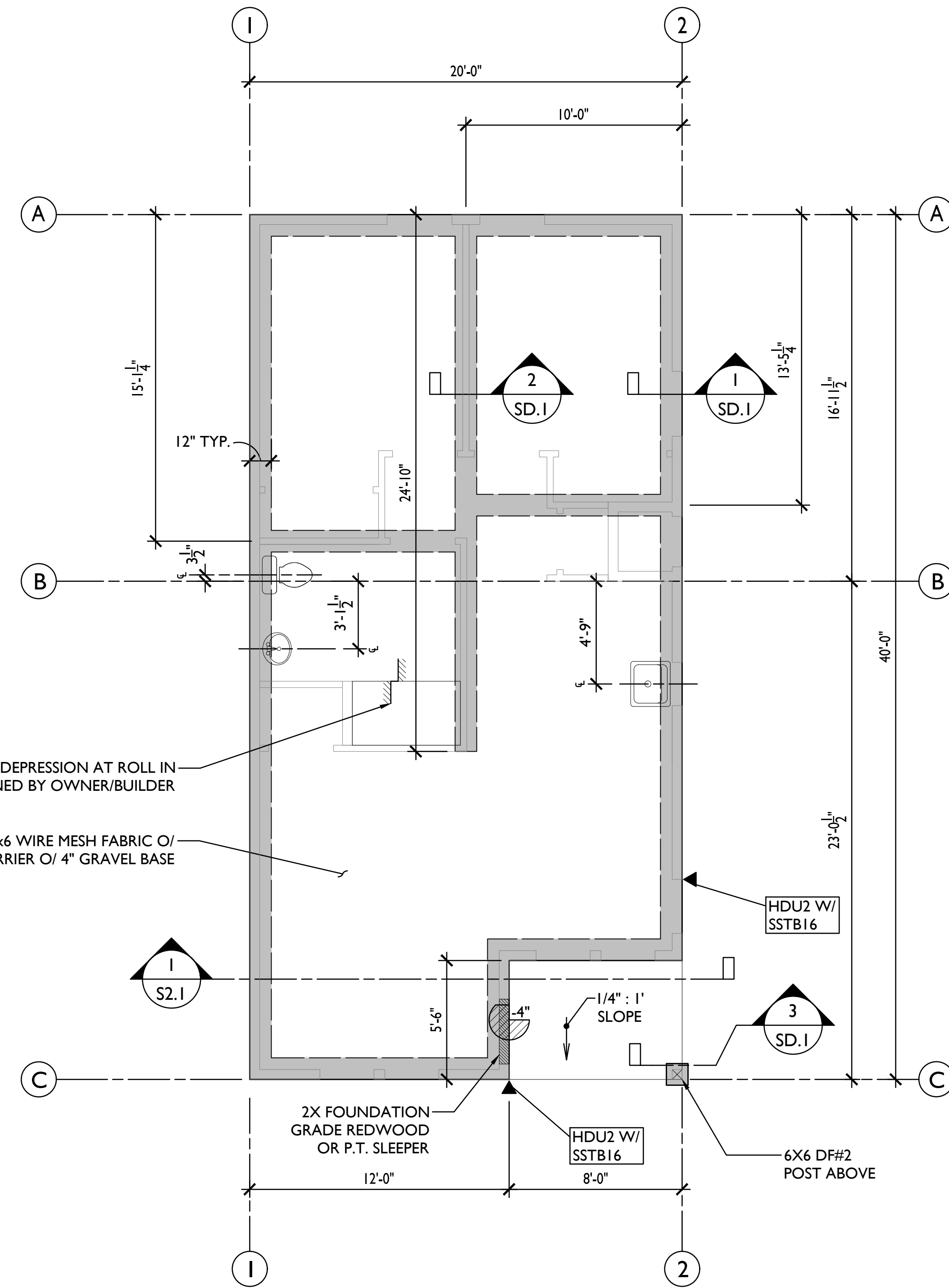
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A3.1



BRACE WALL SCHEDULE			
METHOD	MINIMUM PANEL THICKNESS	NAILING	
		EDGE	FIELD
CS-WSP (CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL)	3/8" OSB	8d @ 6" O.C.	8d @ 12" O.C.
WSP (WOOD STRUCTURAL PANEL)			
ABW (ALTERNATE BRACE WALL)			

2 BRACE WALL PLAN
SI.1 SCALE: 1/4" = 1'-0"



OPTIONAL 2" SLAB DEPRESSION AT ROLL IN SHOWER, DESIGNED BY OWNER/BUILDER

4" CONC. SLAB W/ 6x6 WIRE MESH FABRIC O/ 10 MIL VAPOR BARRIER O/ 4" GRAVEL BASE

HOLDOWN SCHEDULE					
SYMBOL	HOLDOWN ID	CAPACITY (LBS)	MINIMUM FRAMING MEMBER	ANCHOR BOLT	EMBEDMENT
▼	HDU2*	1,810	DBL 2x	SSTB16	12-5/8"

* OTHER LISTED DEVICE WITH MIN. CAPACITY OF 1,800 LB MAY BE UTILIZED

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

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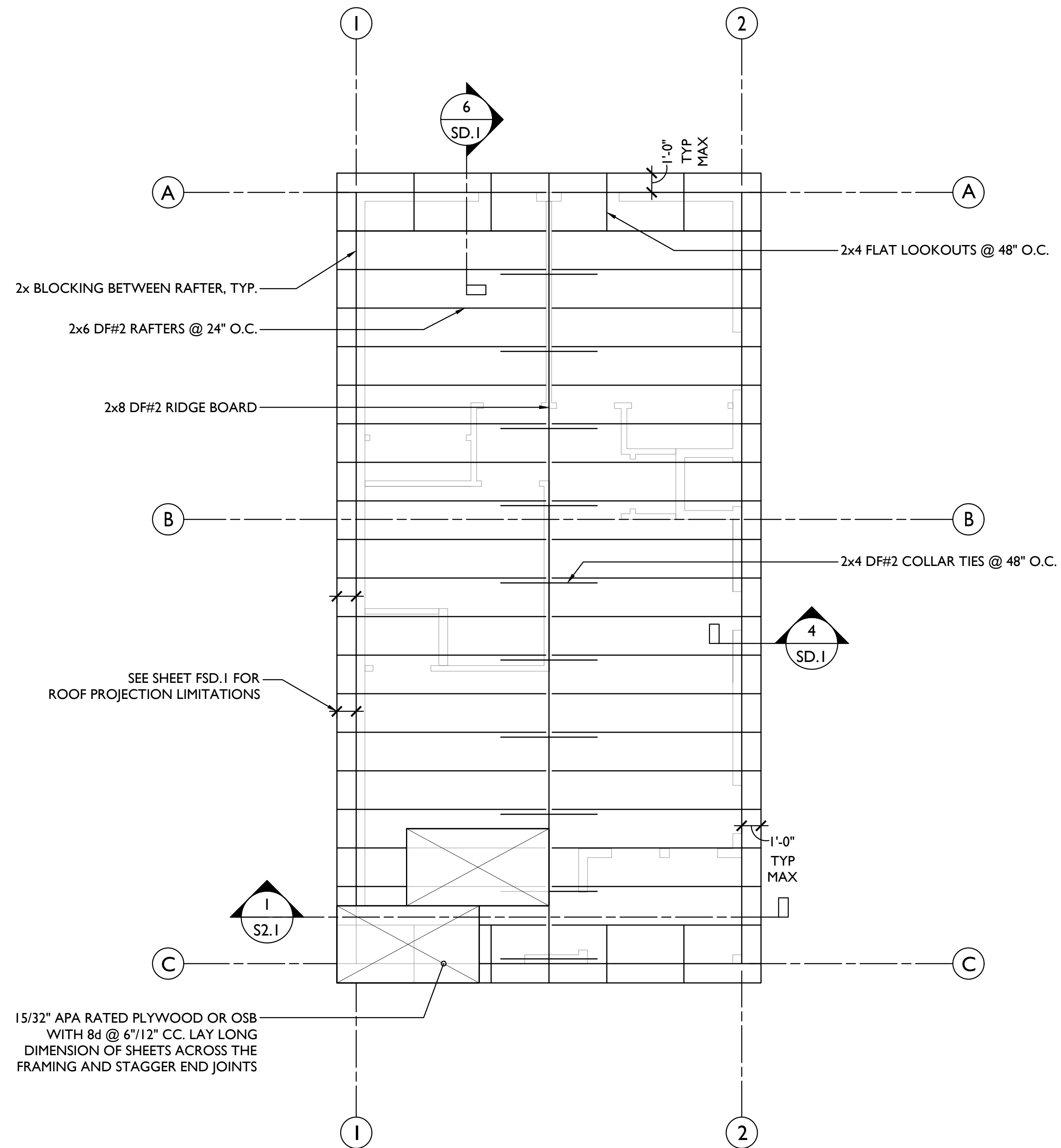
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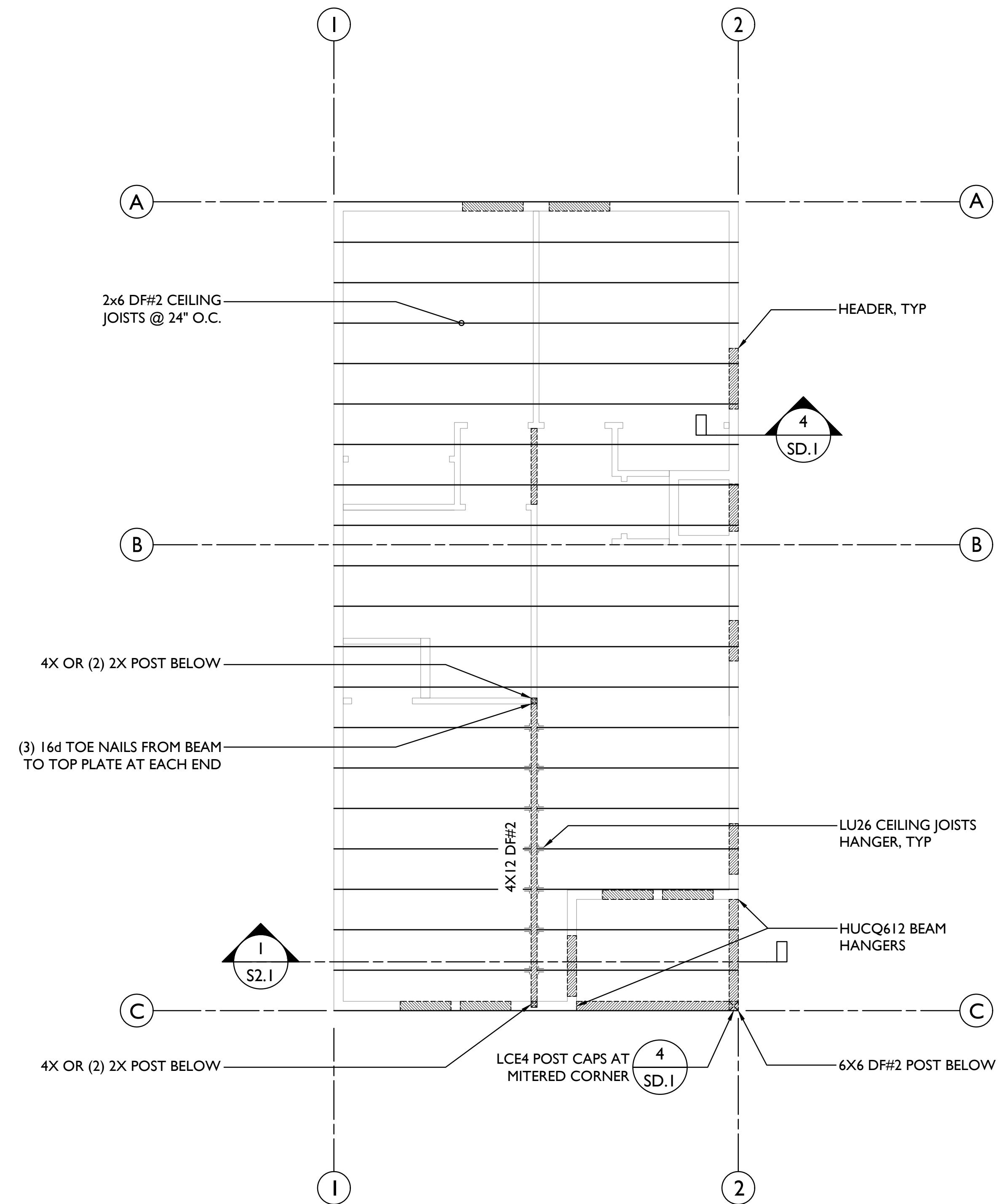
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Job No.

S1.2

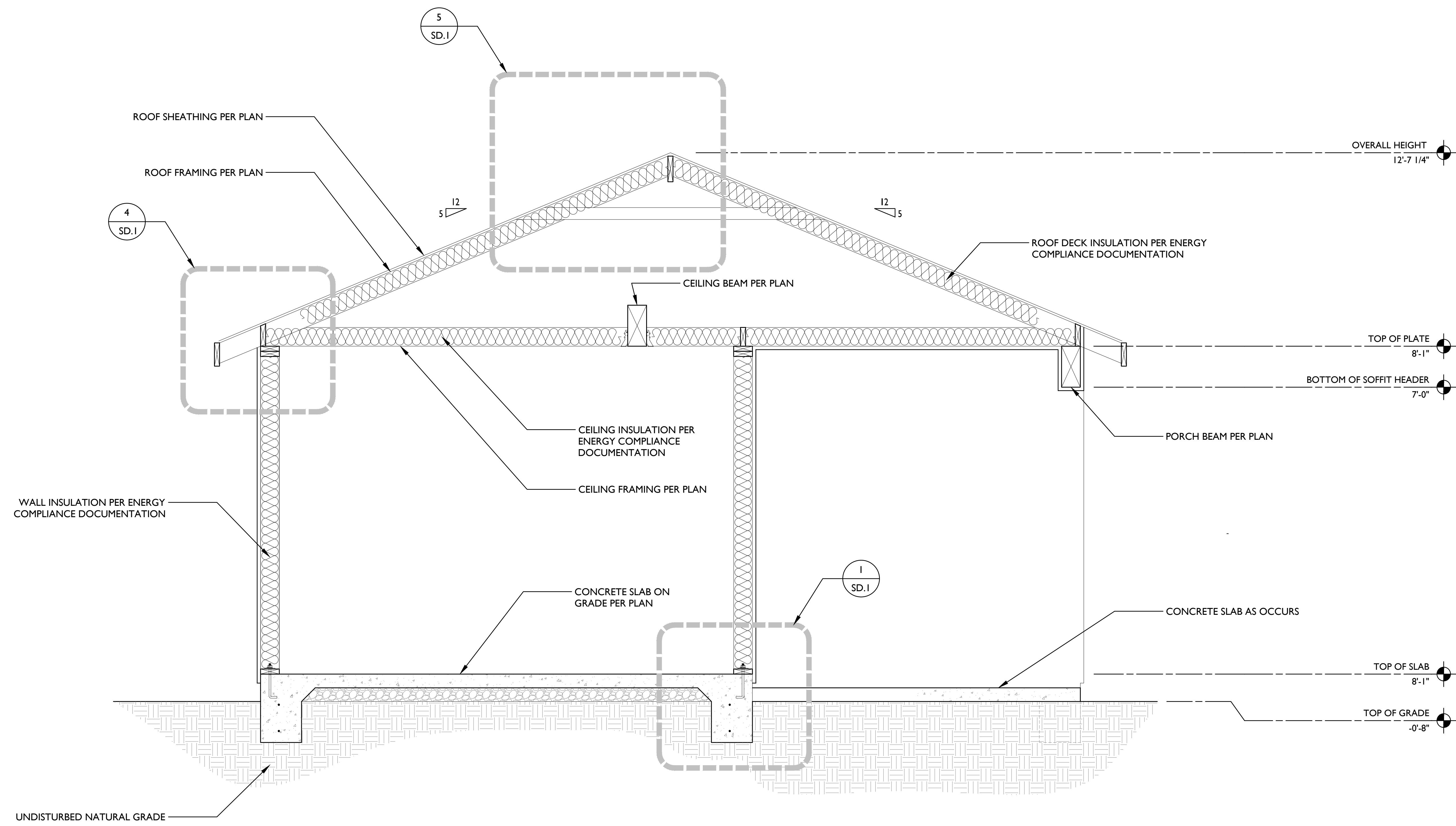


1 ROOF FRAMING PLAN
S1.2 SCALE: 1/4" = 1'-0"



BEAM/HEADER SCHEDULE [TABLE R602.7(1)]			
SPAN	MEMBER SIZE (DF#2)	SUPPORT (JACK STUDS)	FULL HEIGHT (KING STUDS)
>4'	4x4	(1)	(1)
>6'	4x6	(1)	(1)
>7'-7"	4x8	(1)	(1)
>9'	4x10	(1)	(1)
>10'-7"	4x12	(2)	(2)

1 CEILING FRAMING PLAN
S1.2 SCALE: 1/4" = 1'-0"



20x40 TWO BEDROOM PLAN
747 SQ. FT.

STRUCTURAL SECTION

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S2.1

1 STRUCTURAL SECTION
S2.1 SCALE: 3/4" = 1'-0"

TABLE R602.3(1) FASTENING SCHEDULE

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{a, b, c}	
		Roof	SPACING AND LOCATION
1	Blocking between ceiling joists, rafters or trusses to top plate or other framing below	3-8d common (2 1/2" x 0.131"); or	Toe nail
		3-10d box (3" x 0.128"); or	
		3-3" x 0.131" nails	
		2-8d common (2 1/2" x 0.131"); or	
2	Ceiling joists to top plate	3-3" x 0.131" nails	Each end, toe nail
		2-8d common (2 1/2" x 0.131"); or	End nail
		3-3" x 0.131" nails	6" o.c. face nail
3	Ceiling joist not attached to parallel rafter, laps over partitions [see Section R802.5.2 and Table R802.5.2(1)]	3-16d common (3 1/2" x 0.162"); or	Face nail
		4-3" x 0.131" nails	
4	Ceiling joist attached to parallel rafter (heel joint) [see Section R802.5.2 and Table R802.5.2(1)]	3-16d common (3 1/2" x 0.162"); or	Face nail
		4-3" x 0.131" nails	
5	Collar tie to rafter, face nail	3-10d common (3" x 0.128"); or	Face nail each rafter
		4-3" x 0.131" nails	
6	Rafter or roof truss to plate	3-10d common (3" x 0.128"); or	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss ^d
		4-3" x 0.131" nails	

7	Roof rafters to ridge, valley or hip rafters or roof rafter to minimum 2" ridge beam	4-16d box (3 1/2" x 0.135"); or	Toe nail
		3-10d common (3" x 0.148"); or	
		4-10d box (3" x 0.128"); or	
		4-3" x 0.131" nails	
8	Stud to stud (not at braced wall panels)	3-16d box (3 1/2" x 0.135"); or	End nail
		2-16d common (3 1/2" x 0.162"); or	
		3-10d box (3" x 0.128"); or	
9	Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	3" x 0.131" nails	12" o.c. face nail
		16d common (3 1/2" x 0.162")	
10	Built-up header (2" to 2" header with 1/2" spacer)	16d common (3 1/2" x 0.162")	16" o.c. each edge face nail
		16d box (3 1/2" x 0.135")	
11	Continuous header to stud	4-8d common (2 1/2" x 0.131"); or	Toe nail
		4-10d box (3" x 0.128")	
12	Adjacent full-height stud to end of header	4-16d box (3 1/2" x 0.135"); or	End nail
		3-16d common (3 1/2" x 0.162"); or	
13	Top plate to top plate	4-3" x 0.131" nails	16" o.c. face nail
		16d common (3 1/2" x 0.162")	
14	Double top plate splice	12-10d box (3" x 0.128"); or	Face nail on each side of end joint (minimum 24" lap splice length each side of end joint)
		12-3" x 0.131" nails	
15	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common (3 1/2" x 0.162")	16" o.c. face nail
		16d box (3 1/2" x 0.135"); or	
		3" x 0.131" nails	12" o.c. face nail
		Roof	

16	Bottom plate to joist, rim joist, band joist or blocking (at braced wall panels)	3-16d box (3 1/2" x 0.135"); or	16" o.c. face nail
		2-16d common (3 1/2" x 0.162"); or	
17	Top or bottom plate to stud	4-3" x 0.131" nails	Toe nail
		4-8d box (2 1/2" x 0.113"); or	
18	Top plates, laps at corners and intersections	3-16d box (3 1/2" x 0.135"); or	Face nail
		4-8d common (2 1/2" x 0.131"); or	
19	1" brace to each stud and plate	2-16d common (3 1/2" x 0.162"); or	Face nail
		3-3" x 0.131" nails	
20	1" x 6" sheathing to each bearing	3-10d box (3" x 0.128"); or	Face nail
		2-10d box (3" x 0.128"); or	
21	1" x 8" and wider sheathing to each bearing	2-16d common (3 1/2" x 0.162"); or	Face nail
		3-8d box (2 1/2" x 0.113"); or	

22	Joist to sill, top plate or girder	4-8d box (2 1/2" x 0.113"); or	Toe nail
		3-8d common (2 1/2" x 0.131"); or	
23	Rim joist, band joist or blocking to sill or top plate (roof applications also)	3-3" x 0.131" nails	6" o.c. toe nail
		8d box (2 1/2" x 0.113")	
24	1" x 6" subfloor or less to each joist	3-8d common (2 1/2" x 0.131"); or	Face nail
		3-10d box (3" x 0.128"); or	
25	2" subfloor to joist or girder	2-16d common (3 1/2" x 0.162")	Blind and face nail
		3-16d box (3 1/2" x 0.135"); or	
26	2" planks (sill and beam—floor & roof)	2-16d common (3 1/2" x 0.162")	At each bearing, face nail
		3-16d common (3 1/2" x 0.162")	
27	Band or rim joist to joist	4-10d box (3" x 0.128"); or	End nail
		4-3" x 0.131" nails, or	
28	Built-up girders and beams, 2-inch or larger layers	4-3" x 14 ga. staples, 1/2" crown	Nail each layer as follows: 32" o.c. at top and bottom and staggered.
		20d common (4" x 0.192"); or	
		10d box (3" x 0.128"); or 3" x 0.131" nails	24" o.c. face nail at top and bottom staggered on opposite sides

29	Ledger strip supporting joists or rafters	2-20d common (4" x 0.192"); or	Face nail at ends and at each splice
		3-10d box (3" x 0.128"); or	
30	Bridging or blocking to joist, rafter or truss	3-3" x 0.131" nails	Each end, toe nail
		4-16d box (3 1/2" x 0.135"); or	
31	1/2" - 3/4"	3-16d common (3 1/2" x 0.162"); or	At each joist or rafter, face nail
		4-10d box (3" x 0.128"); or	
32	1 3/4" - 3"	4-3" x 0.131" nails	Each end, toe nail
		2-10d box (3" x 0.128"); or	
33	3/4" - 1 1/4"	2-8d common (2 1/2" x 0.131"); or	Each end, toe nail
		2-3" x 0.131" nails	
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{a, b, c}	SPACING OF FASTENERS
	Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing [see Table R602.3(1) for wood structural panel exterior wall sheathing to wall framing]		Edges ^b Intermediate supports ^c
34	1/2" structural cellulose fiberboard sheathing	6d common or deformed (2" x 0.113" x 0.266" head) or 2 1/4" x 0.113" x 0.266" head nail (subfloor, wall)	6" 6"
		8d common (2 1/2" x 0.131") nail (roof); or	6" 6"
35	5/8" structural cellulose fiberboard sheathing	RSRS-01 (2 1/4" x 0.113") nail (roof)	6" 6"
		8d common (2-2 1/2" x 0.131") nail (subfloor, wall)	6" 6"
36	3/4" gypsum sheathing ^d	RSRS-01 (2 1/4" x 0.113") nail (roof)	6" 6"
		Deformed 2 1/4" x 0.113" x 0.266" head (wall or subfloor)	6" 12"
37	1 1/2" gypsum sheathing ^d	10d common (3" x 0.148") nail; or	6" 12"
		2 1/4" x 0.131" x 0.281" head (deformed nail)	6" 12"
38	1 1/2" structural cellulose fiberboard sheathing	1 1/2" x 0.120" galvanized roofing nail, 1/16" head diameter; or	3" 6"
		1 1/4" long 16 ga. staple with 7/16" or 1" crown	3" 6"
39	1 1/2" structural cellulose fiberboard sheathing	1 1/2" x 0.120" galvanized roofing nail, 1/16" head diameter; or	3" 6"
		1 1/4" long 16 ga. staple with 7/16" or 1" crown	3" 6"
40	1 1/2" gypsum sheathing ^d	1 1/2" x 0.120" galvanized roofing nail, 1/16" head diameter; or	2" 2"
		1 1/4" long 16 ga. staple with 7/16" or 1" crown or 1 1/4" screws, Type W or S	2" 2"

37	1/2" gypsum sheathing ^d	1 1/2" x 0.120" galvanized roofing nail, 1/16" head diameter; or 1 1/4" long 16 ga.	2" 2"
		1 1/4" long 16 ga. staple with 7/16" or 1" crown or 1 1/4" screws, Type W or S	2" 2"
Wood structural panels, combination subfloor underlayment to framing			
38	1/2" and less	Deformed (2" x 0.120") nail; or	6" 12"
		8d common (2 1/2" x 0.131") nail	6" 12"
39	1 1/4" - 1"	Deformed (2" x 0.113"); or	6" 12"
		Deformed (2 1/4" x 0.120") nail	6" 12"
40	1 1/2" - 3 1/4"	10d common (3" x 0.148") nail; or	6" 12"
		Deformed (2" x 0.113"); or	6" 12"
		Deformed (2 1/4" x 0.120") nail	6" 12"

FRAMING NOTES:

- FIRE BLOCKING SHALL BE PROVIDED IN ALL CONCEALED SPACES.
- ALL FRAMING MEMBERS TO BE A MINIMUM GRADE OF DOUGLAS FIR #2, U.N.O.
- ALL DOORS TO BE CENTERED WITHIN ADJACENT WALLS, OR DOOR JAMB TO BE FRAMING AT 3" U.N.O.
- DIMENSIONS SHOWN ARE FROM FACE OF STUD U.N.O. DIMENSIONS NOTED AS "CLR" ARE TO BE PRECISELY MAINTAINED.
- FOUNDATION SILL PLATES SHALL BE PRESSURE TREATED DOUGLAS FIR #2 MINIMUM, U.N.O.
- PROVIDE RESTRAINT AT ENDS OF ALL MEMBERS TO PREVENT ROTATION.
- ALL WOOD EXPOSED TO WEATHER TO BE NATURALLY DURABLE OR PRESSURE TREATED.
- ALL NAILS & HARDWARE EXPOSED WEATHER SHALL BE HOT-DIP GALVANIZED STEEL (PER ASTM A153 OR A653), MECHANICALLY-COATED GALVANIZED STEEL (PER ASTM B695), OR STAINLESS STEEL.

FOUNDATION NOTES

FASTENERS AND CONNECTORS IN CONTACT WITH PRESERVATIVE TREATED WOOD SHALL BE HOT DIPPED ZINC COATED GALVANIZED STEEL

MATERIAL SPECIFICATIONS

FOUNDATION CONCRETE	2500 psi
SLAB	2500 PSI
REINFORCEMENT STEEL	ASTM A615 GR60
FOUNDATION ANCHOR BOLTS	ASTM A307

20x40 TWO BEDROOM PLAN
747 SQ. FT.

STRUCTURAL NOTES

Revisions:

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File:
Drawn By: JCE
Checked By: MB
Scale: AS NOTED
Date: 01/04/2023

Job No.

SN. I

City of SACRAMENTO
Community Development

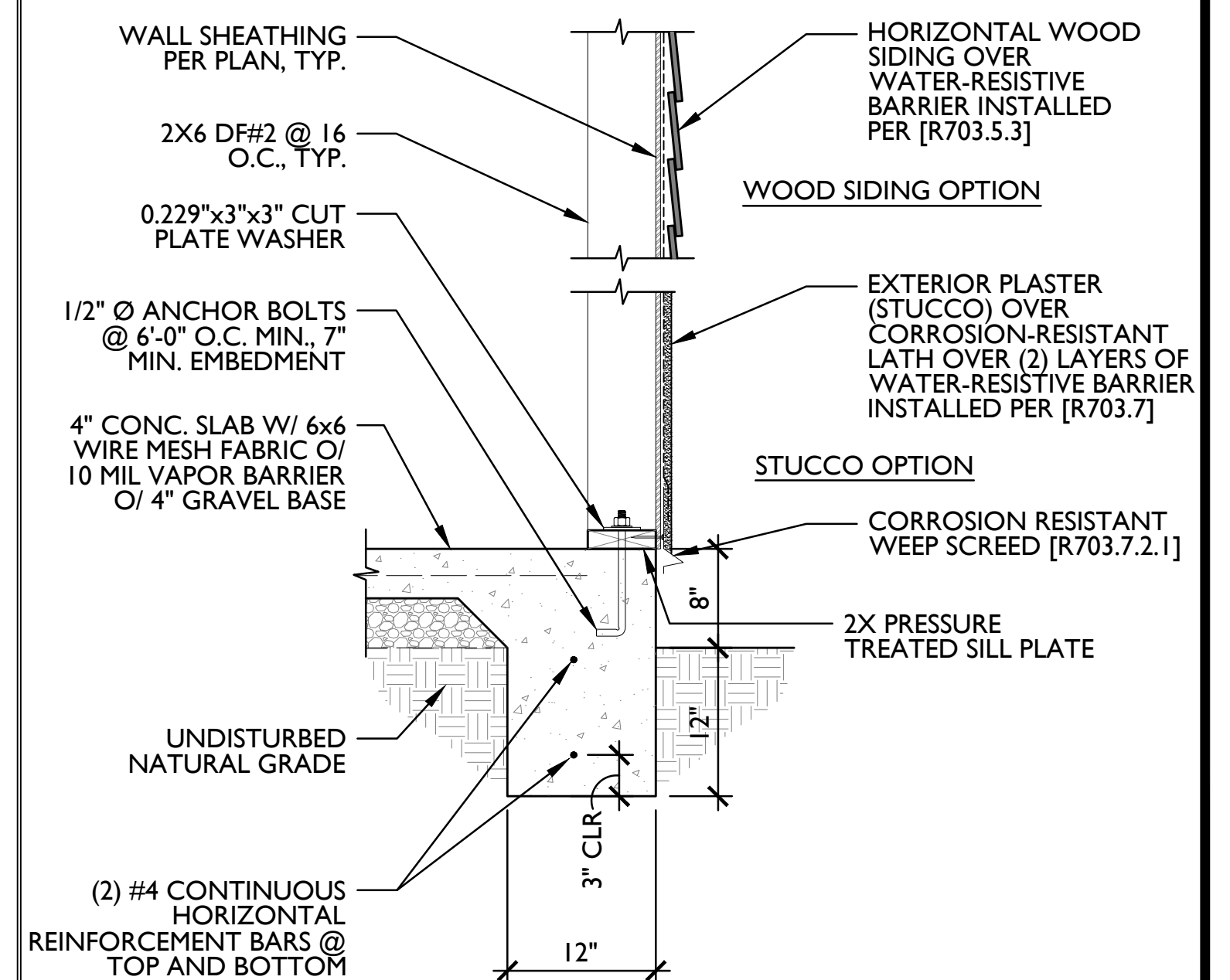
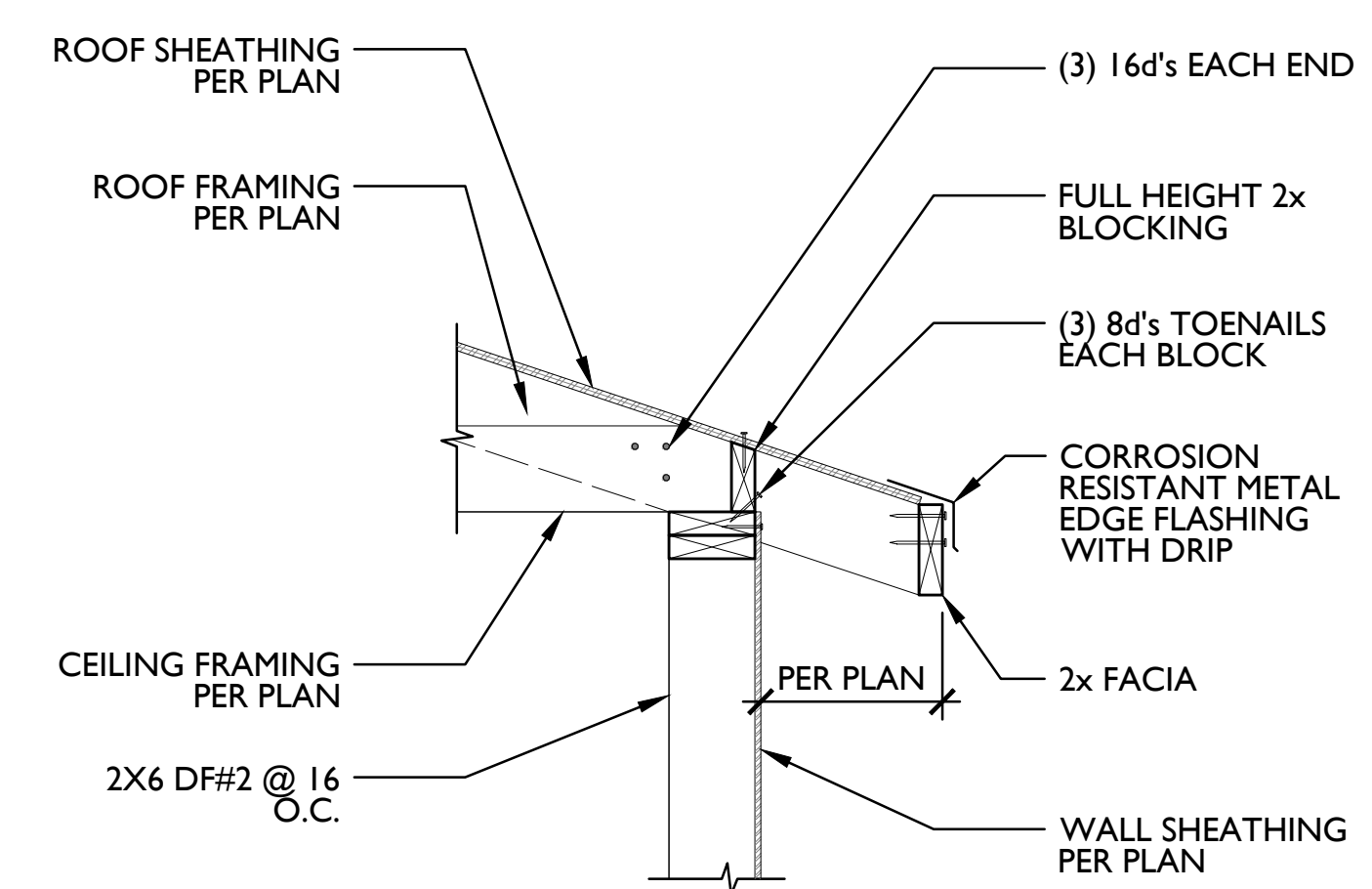
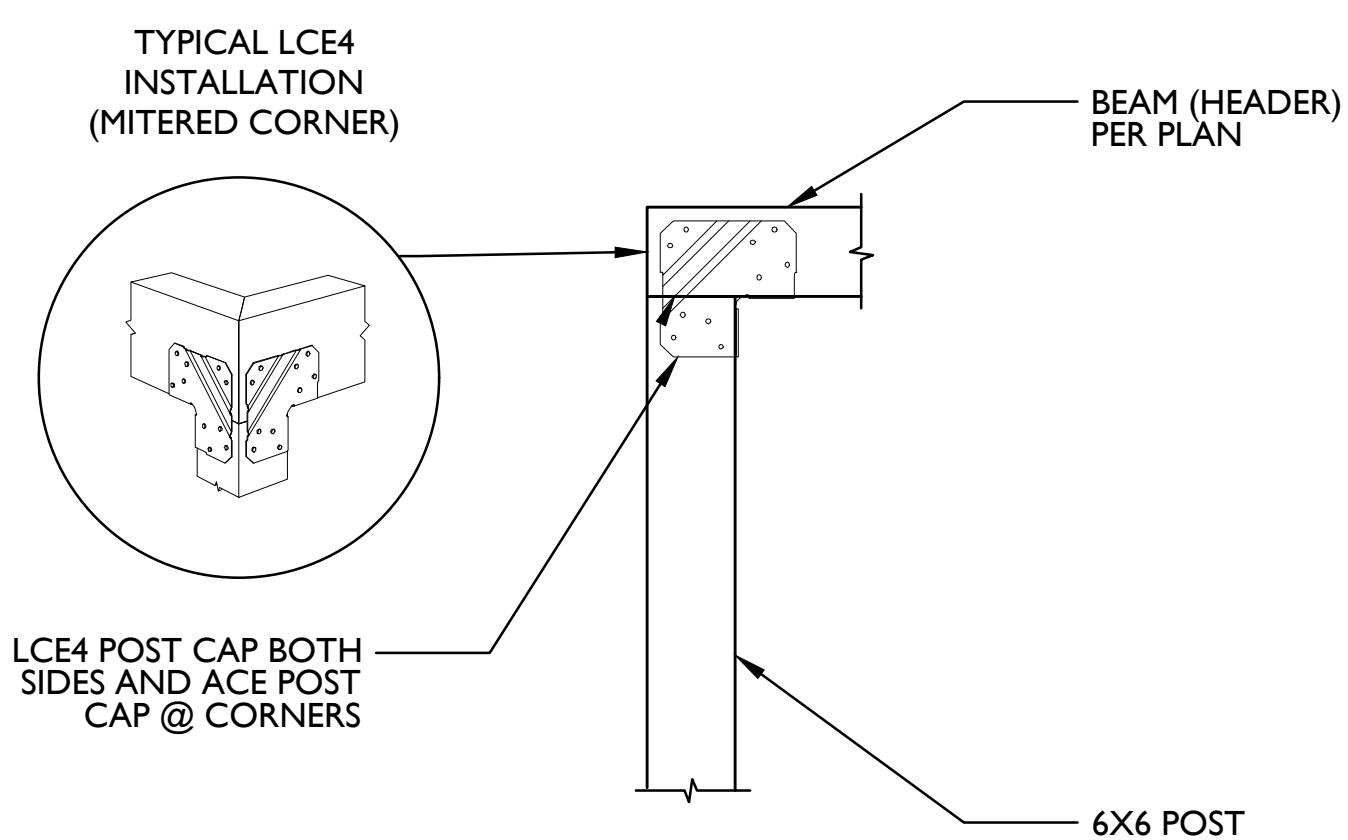
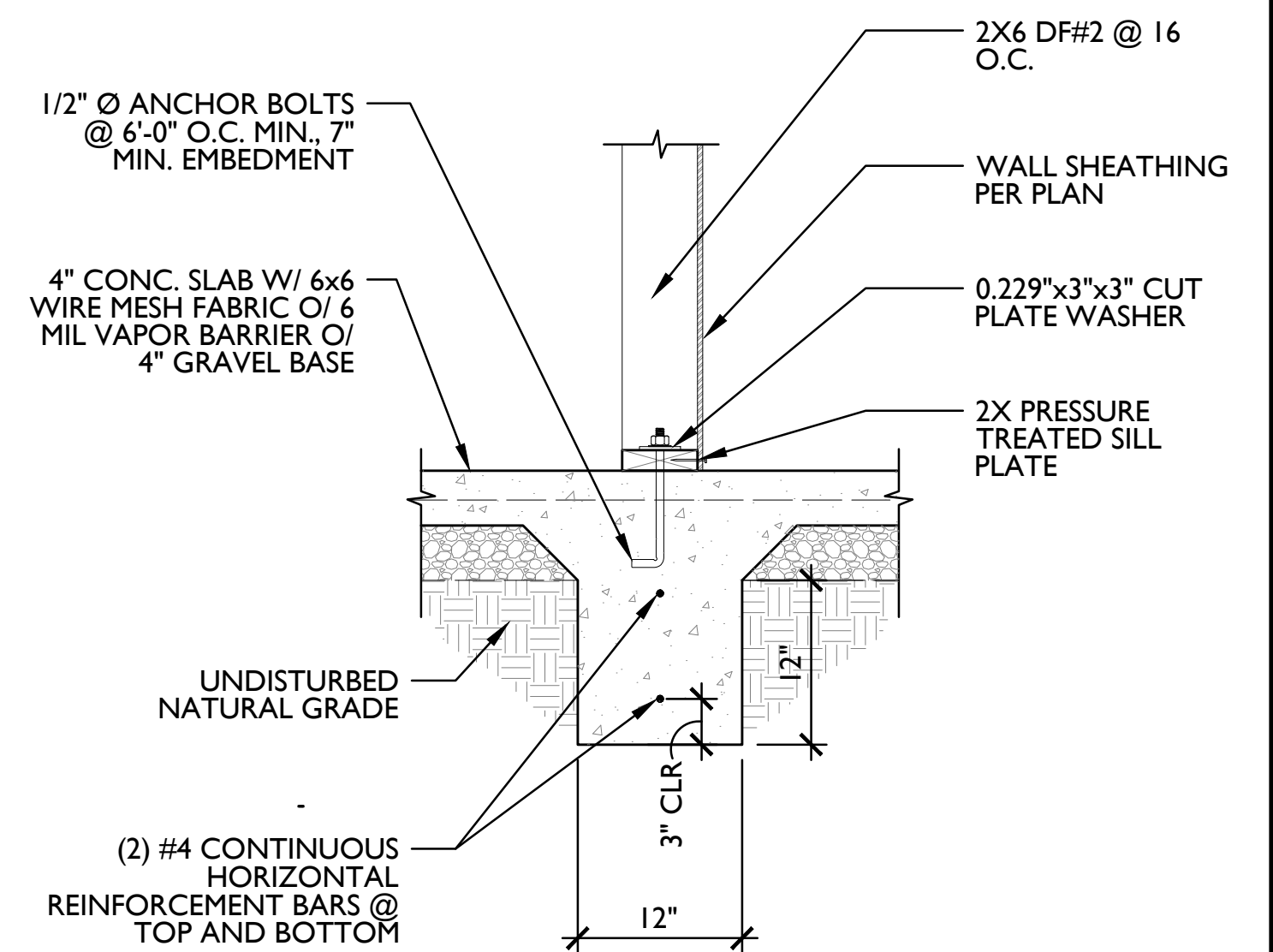
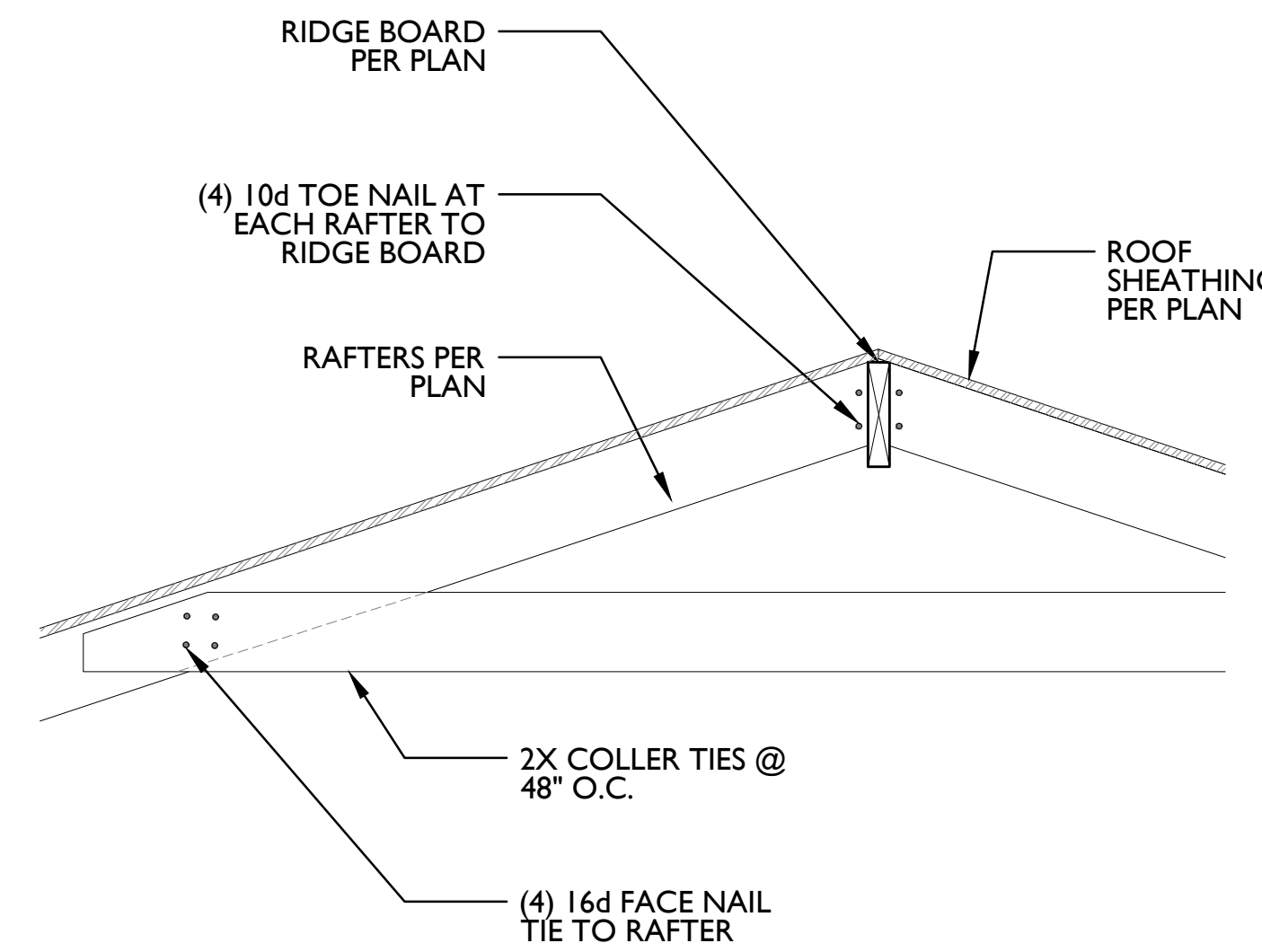
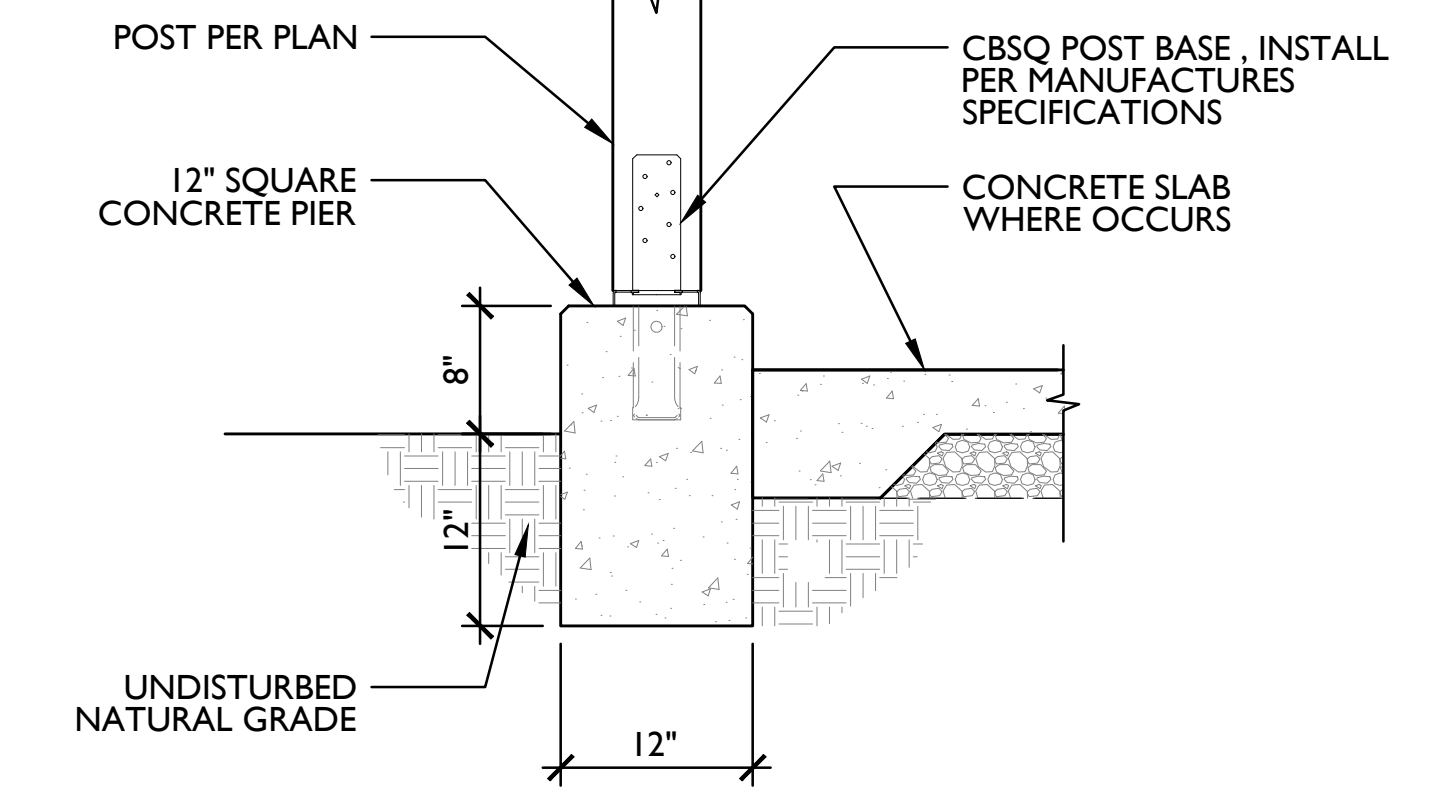
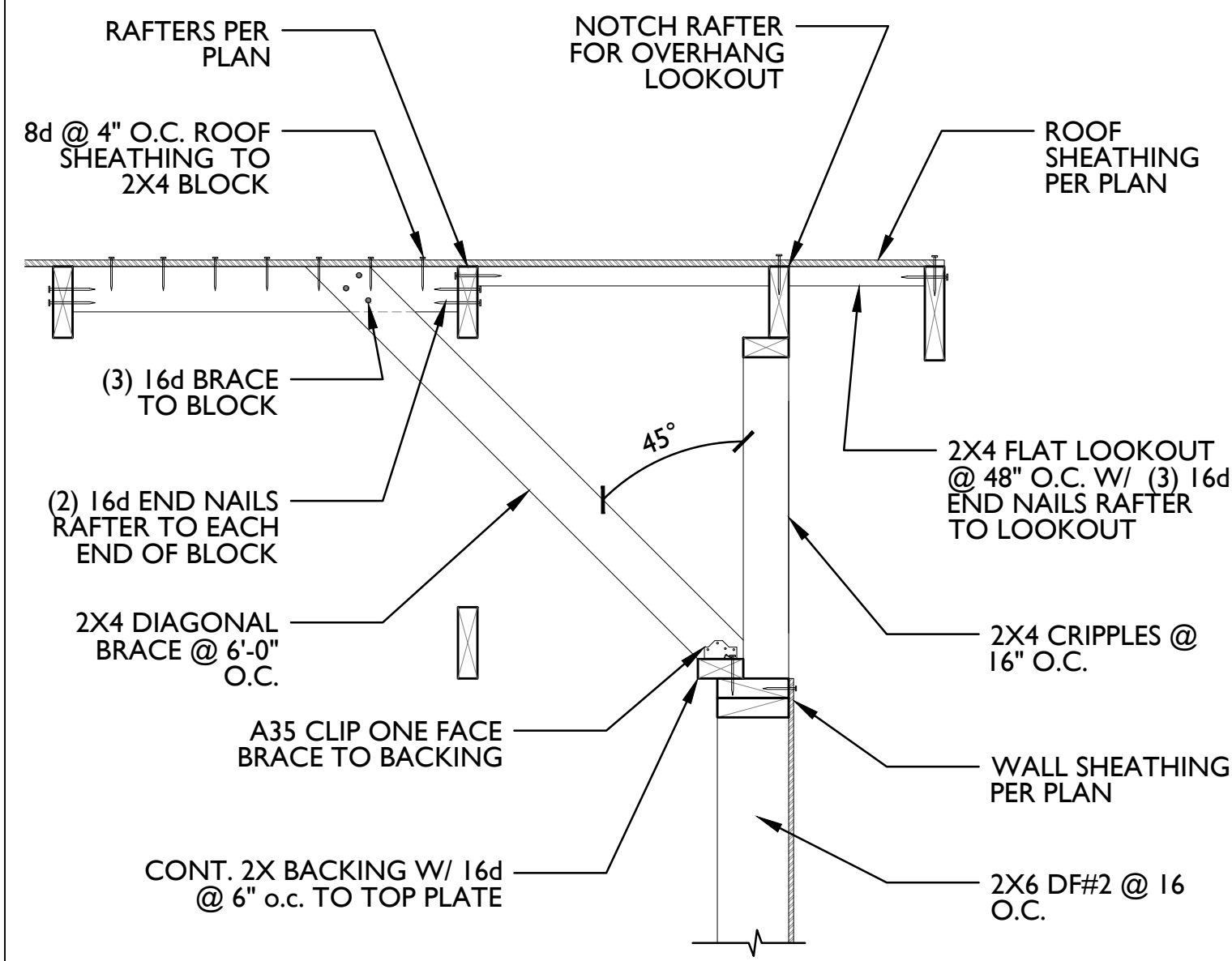
Revisions:

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Drawn By: JCE
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Date: 01/04/2023

Job No.

SD.1





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 Description. Includes sections for Building Envelope (Air Leakage, Labeling, Field Fabricated exterior doors and fenestration products, Air Leakage, Insulation Certification by Manufacturers, Insulation Requirements for Heated Slab Floors, Roofing Products Solar Reflectance and Thermal Emittance, Radiant Barrier, Roof Deck, Ceiling and Rafter Roof Insulation, Loose-fill Insulation, Wall Insulation, Masonry walls, Raised-floor Insulation, Slab Edge Insulation, Vapor Retarder, Vapor Retarder, Fenestration Products) and Fireplaces, Decorative Gas Appliances, and Gas Log.

Table with 2 columns: Code reference and Description. Includes sections for Space Conditioning, Water Heating, and Plumbing System (Certification, HVAC Efficiency, Controls for Heat Pumps with Supplementary Electric Resistance Heaters, Thermostats, Insulation, Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating, Isolation Valves) and Lighting (Lighting Controls and Components, Luminaire Efficacy, Recessed Downlight Luminaires in Ceilings, Light Sources in Enclosed or Recessed Luminaires, Blank Electrical Boxes, Lighting Integral to Exhaust Fans).

5/6/22



2022 Single-Family Residential Mandatory Requirements Summary

Table with 2 columns: Code reference and Description. Includes sections for Pilot Lights, Building Cooling and Heating Loads, Clearances, Liquid Line Drier, Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation, Insulation Protection, Gas or Propane Water Heating Systems, and Solar Water-heating Systems.

Table with 2 columns: Code reference and Description. Includes sections for Ducts and Fans (Ducts, 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.

5/6/22



2022 Single-Family Residential Mandatory Requirements Summary

Table with 2 columns: Code reference and Description. Includes Space Conditioning System Airflow Rate and Fan Efficacy.

Table with 2 columns: Code reference and Description. Includes sections for Ventilation and Indoor Air Quality (Requirements for Ventilation and Indoor Air Quality, Central Fan Integrated (CFI) Ventilation Systems, Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses, Local Mechanical Exhaust, Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems, Field Verification and Diagnostic Testing) and Pool and Spa Systems and Equipment (Certification by Manufacturers, Piping, Covers, Directional Inlets and Time Switches for Pools, Pilot Light, Pool Systems and Equipment Installation).

5/6/22



2022 Single-Family Residential Mandatory Requirements Summary

Table with 2 columns: Code reference and Description. Includes sections for Energy Storage System (ESS) Ready, Heat Pump Space Heater Ready, Electric Cooktop Ready, Electric Clothes Dryer Ready, and Solar Readiness (Single-Family Residences, Minimum Solar Zone Area, Structural Design Loads on Construction Documents, Interconnection Pathways, Documentation, Main Electrical Service Panel, Main Electrical Service Panel).

*Exceptions may apply.

5/6/22



2022 Single-Family Residential Mandatory Requirements Summary

Table with 2 columns: Code reference and Description. Includes sections for 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, Residential Outdoor Lighting, Internally illuminated address signs, Residential Garages for Eight or More Vehicles, and Solar Readiness (Single-Family Residences, Minimum Solar Zone Area, Structural Design Loads on Construction Documents, Interconnection Pathways, Documentation, Main Electrical Service Panel, Main Electrical Service Panel).

5/6/22



20x40 TWO BEDROOM PLAN 747 SQ. FT. ENERGY COMPLIANCE DOCUMENTATION

Table with 2 columns: Revisions and Description. Includes revision markers and descriptions.

Table with 2 columns: File information and Description. Includes fields for Drawn By, Checked By, Scale, and Date.

Job No. EN.1

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: ADU (2 Bedroom) Calculation Date/Time: 2022-11-14T09:01:07-08:00 (Page 1 of 12)
 Calculation Description: Title 24 Analysis Input File Name: 26652-sacramento-ADU (2 Bedroom).ribd22x

GENERAL INFORMATION			
01	Project Name	ADU (2 Bedroom)	
02	Run Title	Title 24 Analysis	
03	Project Location	-	
04	City	Sacramento	05 Standards Version
06	Zip code	95811	07 Software Version
08	Climate Zone	12	09 Front Orientation (deg/ Cardinal)
10	Building Type	Single family	11 Number of Dwelling Units
12	Project Scope	Newly Constructed	13 Number of Bedrooms
14	Addition Cond. Floor Area (ft ²)	0	15 Number of Stories
16	Existing Cond. Floor Area (ft ²)	n/a	17 Fenestration Average U-factor
18	Total Cond. Floor Area (ft ²)	747	19 Glazing Percentage (%)
20	ADU Bedroom Count	n/a	

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

Registration Number: 423-P010000146A-000-000-0000000-0000 Registration Date/Time: 01/02/2023 11:04 HERS Provider: CHEERS
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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: ADU (2 Bedroom) Calculation Date/Time: 2022-11-14T09:01:07-08:00 (Page 2 of 12)
 Calculation Description: Title 24 Analysis Input File Name: 26652-sacramento-ADU (2 Bedroom).ribd22x

	Energy Design Ratings			Compliance Margins		
	Source Energy (EDR1)	Efficiency ³ EDR (EDR2efficiency)	Total ² EDR (EDR2total)	Source Energy (EDR1)	Efficiency ³ EDR (EDR2efficiency)	Total ² EDR (EDR2total)
Standard Design	38.2	33.1	32.5			
Proposed Design						
North Facing	35.1	32.6	32.2	3.1	0.5	0.3
East Facing	35.1	32.1	31.8	3.1	1	0.7
South Facing	34.9	31.4	31.4	3.3	1.7	1.1
West Facing	34.9	32.2	31.9	3.3	0.9	0.6
RESULT ³ : PASS						
¹ Efficiency EDR includes improvements like a better building envelope and more efficient equipment ² Total EDR includes efficiency and demand response measures such as photovoltaic (PV) system and batteries ³ Building complies when source energy, efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded • Standard Design PV Capacity: 2.06 kWdc • Proposed PV Capacity Scaling: North (2.06 kWdc) East (2.06 kWdc) South (2.06 kWdc) West (2.06 kWdc)						

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 Calculation Description: Title 24 Analysis Input File Name: 26652-sacramento-ADU (2 Bedroom).ribd22x

ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft ² -yr)	Standard Design TDV Energy (EDR2) (KTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (KTDV/ft ² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	4.93	33.42	3.57	27.07	1.36	6.35
Space Cooling	1.14	30.71	1.57	44.44	-0.43	-13.73
IAQ Ventilation	0.46	4.92	0.46	4.92	0	0
Water Heating	3.46	35.16	2.53	26.36	0.93	8.8
Self Utilization/Flexibility Credit				0		0
North Facing Efficiency Compliance Total	9.99	104.21	8.13	102.79	1.86	1.42
Space Heating	4.93	33.42	3.64	27.67	1.29	5.75
Space Cooling	1.14	30.71	1.48	42.37	-0.34	-11.66
IAQ Ventilation	0.46	4.92	0.46	4.92	0	0
Water Heating	3.46	35.16	2.53	26.36	0.93	8.8
Self Utilization/Flexibility Credit				0		0
East Facing Efficiency Compliance Total	9.99	104.21	8.11	101.32	1.88	2.89

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 Calculation Description: Title 24 Analysis Input File Name: 26652-sacramento-ADU (2 Bedroom).ribd22x

ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft ² -yr)	Standard Design TDV Energy (EDR2) (KTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (KTDV/ft ² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	4.93	33.42	3.55	26.51	1.38	6.91
Space Cooling	1.14	30.71	1.47	41.11	-0.33	-10.4
IAQ Ventilation	0.46	4.92	0.46	4.92	0	0
Water Heating	3.46	35.16	2.53	26.36	0.93	8.8
Self Utilization/Flexibility Credit				0		0
South Facing Efficiency Compliance Total	9.99	104.21	8.01	98.9	1.98	5.31
Space Heating	4.93	33.42	3.44	25.81	1.49	7.61
Space Cooling	1.14	30.71	1.57	44.28	-0.43	-13.57
IAQ Ventilation	0.46	4.92	0.46	4.92	0	0
Water Heating	3.46	35.16	2.53	26.36	0.93	8.8
Self Utilization/Flexibility Credit				0		0
West Facing Efficiency Compliance Total	9.99	104.21	8	101.37	1.99	2.84

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ENERGY USE INTENSITY				
	Standard Design (kBtu/ft ² -yr)	Proposed Design (kBtu/ft ² -yr)	Compliance Margin (kBtu/ft ² -yr)	Margin Percentage
North Facing				
Gross EUI ¹	29.24	27.15	2.09	7.15
Net EUI ²	14.51	12.42	2.09	14.4
East Facing				
Gross EUI ¹	29.24	27.17	2.07	7.08
Net EUI ²	14.51	12.44	2.07	14.27
South Facing				
Gross EUI ¹	29.24	27	2.24	7.66
Net EUI ²	14.51	12.27	2.24	15.44
West Facing				
Gross EUI ¹	29.24	27.12	2.12	7.25
Net EUI ²	14.51	12.39	2.12	14.61
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.				

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 Calculation Description: Title 24 Analysis Input File Name: 26652-sacramento-ADU (2 Bedroom).ribd22x

REQUIRED PV SYSTEMS											
01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	Exception	Module Type	Array Type	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)	Annual Solar Access (%)
2.06	NA	Standard (14-17%)	Fixed	none	true	150-270	n/a	n/a	<=7:12	96	98
REQUIRED SPECIAL FEATURES											
The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.											
<ul style="list-style-type: none"> Cool roof Insulation below roof deck Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed 											
HERS FEATURE SUMMARY											
The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry											
<ul style="list-style-type: none"> Indoor air quality ventilation Kitchen range hood Minimum Airflow Verified Refrigerant Charge Fan Efficacy Watts/CFM Verified HSPF2 Verified heat pump rated heating capacity Duct leakage testing 											
BUILDING - FEATURES INFORMATION											
01	02	03	04	05	06	07					
Project Name	Conditioned Floor Area (ft ²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems					
ADU (2 Bedroom)	747	1	2	1	0	1					

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01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft ²)	Avg. Ceiling Height	Water Heating System 1	Status
Zone 1	Conditioned	Heat Pump1	747	8.1	DHW Sys 1	New

01	02	03	04	05	06	07	08
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft ²)	Window and Door Area (ft ²)	Tilt (deg)
Front Walls	Zone 1	R-21 Wall	0	Front	161.6	45	90
Left Walls	Zone 1	R-21 Wall	90	Left	323.2	0	90
Rear Walls	Zone 1	R-21 Wall	180	Back	161.6	30	90
Right Walls	Zone 1	R-21 Wall	270	Right	323.2	52.25	90
Ceiling/Roof - HPVA	Zone 1	R-30 Ceiling + R-4 Roof	n/a	n/a	747	n/a	n/a

01	02	03	04	05	06	07	08
Name	Construction	Type	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof
Attic Zone 1	Attic Roof Zone 1	Ventilated	5	0.2	0.75	No	Yes

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft ²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
Front Glazing	Window	Front Walls	Front	0			1	45	0.3	NFRC	0.23	NFRC	Bug Screen
Rear Glazing	Window	Rear Walls	Back	180			1	30	0.3	NFRC	0.23	NFRC	Bug Screen
Right Glazing	Window	Right Walls	Right	270			1	32.25	0.3	NFRC	0.23	NFRC	Bug Screen

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 Calculation Description: Title 24 Analysis Input File Name: 26652-sacramento-ADU (2 Bedroom).ribd22x

01	02	03	04
Name	Side of Building	Area (ft ²)	U-factor
Door	Right Walls	20	0.2

01	02	03	04	05	06	07	08
Name	Zone	Area (ft ²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab-on-Grade	Zone 1	747	120	none	0	80%	No

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.066	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: Wood Siding/Sheathing/Decking
Attic RoofZone 1	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-4	None / None	0.184	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/Sheathing/Decking Cavity / Frame: R-4 / 2x4
R-30 Ceiling + R-4 Roof	Ceilings (below attic)	Wood Framed Ceiling	2x6 @ 16 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-15.7 Insul. Cavity / Frame: R-14.3 / 2x6 Inside Finish: Gypsum Board

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

01	02	03	04	05	06	07	08	09
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)
DHW Sys 1	DHW	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)

01	02	03	04	05	06	07	08
Name	# of Units	Tank Vol. (gal)	NEEA Heat Pump Brand	NEEA Heat Pump Model	Tank Location	Duct Inlet Air Source	Duct Outlet Air Source
DHW Heater 1	1	40	Rheem	RheemPROPH40T2R H37515	Outside	Outside	Outside

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

Registration Number: 423-P010000146A-000-000-0000000-0000 Registration Date/Time: 01/02/2023 11:04 HERS Provider: CHEERS
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 CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2022-11-14 09:01:55

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: ADU (2 Bedroom) Calculation Date/Time: 2022-11-14T09:01:07-08:00 (Page 10 of 12)
 Calculation Description: Title 24 Analysis Input File Name: 26652-sacramento-ADU (2 Bedroom).ribd22x

01	02	03	04	05	06	07	08	09
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type
Heat Pump1	Heat pump heating cooling	Heat Pump System 1	1	Heat Pump System 1	1	HVAC Fan 1	Air Distribution System 1	Setback

01	02	03	04	05	06	07	08	09	10	11	12	13
Name	System Type	Number of Units	Heating			Cooling			Zonally Controlled	Compressor Type	HERS Verification	
			Efficiency Type	HSPF / HSPF2 / COP	Cap 47	Cap 17	Efficiency Type	SEER / SEER2				EER / EER / CEER
Heat Pump System 1	Central split HP	1	HSPF2	8	18000	12000	EER2SEER2	14	11.7	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-hers-htpump	Required	350	Not Required	Not Required	Yes	No	Yes	Yes

01	02	03	04	05	06	07	08	09	10	11	12
Name	Type	Design Type	Duct Ins. R-value		Duct Location		Surface Area		Bypass Duct	Duct Leakage	HERS Verification
			Supply	Return	Supply	Return	Supply	Return			
Air Distribution System 1	Unconditioned attic	Non-Verified	R-8	R-8	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 1-hers-dist

Registration Number: 423-P010000146A-000-000-0000000-0000 Registration Date/Time: 01/02/2023 11:04 HERS Provider: CHEERS
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Project Name: ADU (2 Bedroom) Calculation Date/Time: 2022-11-14T09:01:07-08:00 (Page 11 of 12)
 Calculation Description: Title 24 Analysis Input File Name: 26652-sacramento-ADU (2 Bedroom).ribd22x

01	02	03	04	05	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Not Required	No

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC Fan	0.45	HVAC Fan 1-hers-fan

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
HVAC Fan 1-hers-fan	Required	0.45

01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE	Includes Fault Indicator Display?	HERS Verification	Status
5Fam IAQVentRpt	44	0.35	Exhaust	No	n/a	No	Yes	Merced/Macready Fld

Registration Number: 423-P010000146A-000-000-0000000-0000 Registration Date/Time: 01/02/2023 11:04 HERS Provider: CHEERS
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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: ADU (2 Bedroom) Calculation Date/Time: 2022-11-14T09:01:07-08:00 (Page 12 of 12)
 Calculation Description: Title 24 Analysis Input File Name: 26652-sacramento-ADU (2 Bedroom).ribd22x

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Michael Kunz	Documentation Author Signature: <i>Michael Kunz</i>
Company: Energy Performance Services	Signature Date: 01/02/2023
Address: P.O. Box 587	CEA/HERS Certification Identification (if applicable): 888-828-9488
City/State/Zip: Blue Lake, CA 95525	Phone: 888-828-9488
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:	Responsible Designer Signature:
Company:	Date Signed:
Address:	License:
City/State/Zip:	Phone:

Digitally signed by Corbal Home Energy Efficiency Rating System Services, Inc. (CHEERS). 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.

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20x40 TWO BEDROOM PLAN
747 SQ. FT.
ENERGY COMPLIANCE DOCUMENTATION

Revisions:
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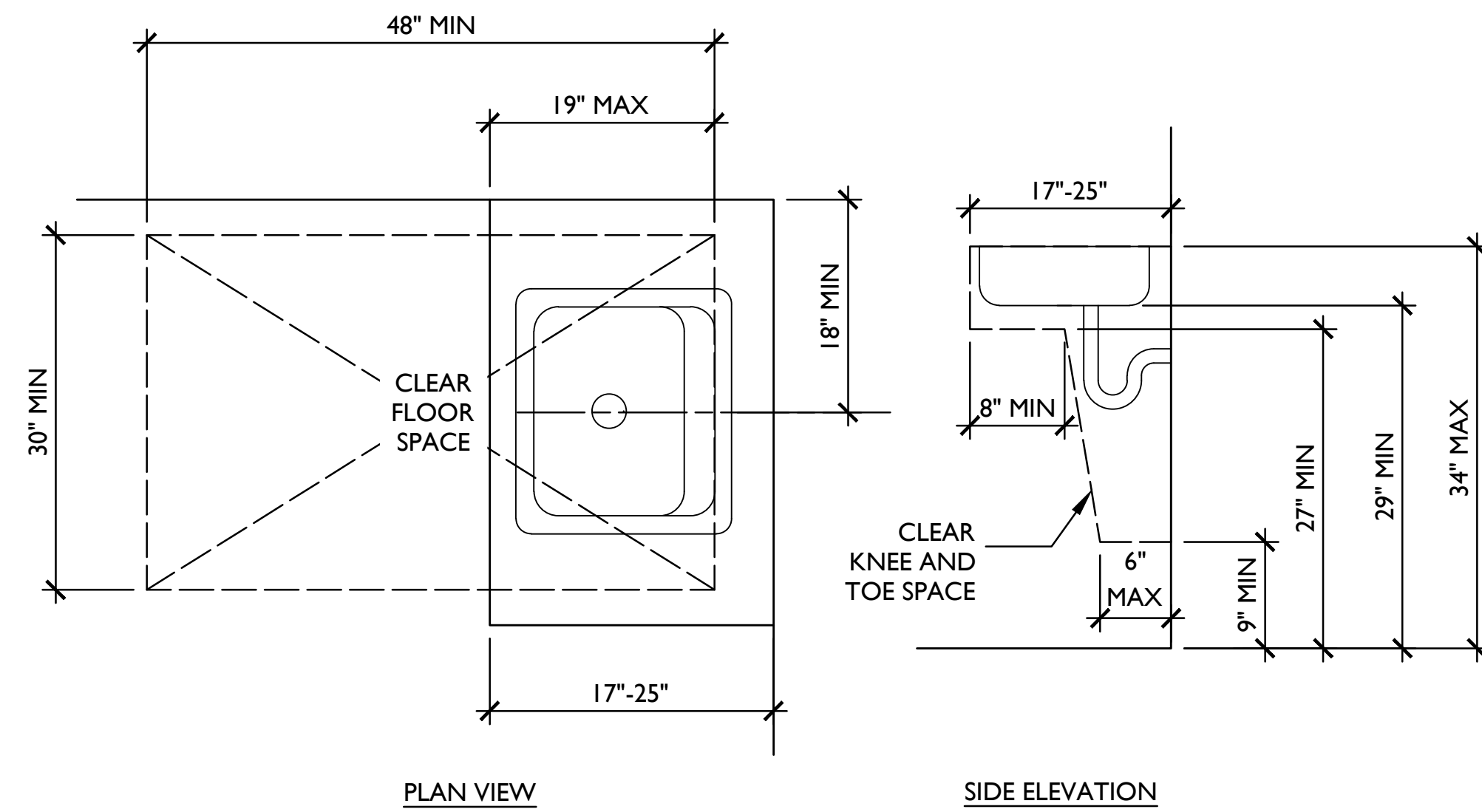
File:
 Drawn By: JCE
 Checked By: MB
 Scale: AS NOTED
 Date: 01/04/2023

Job No.

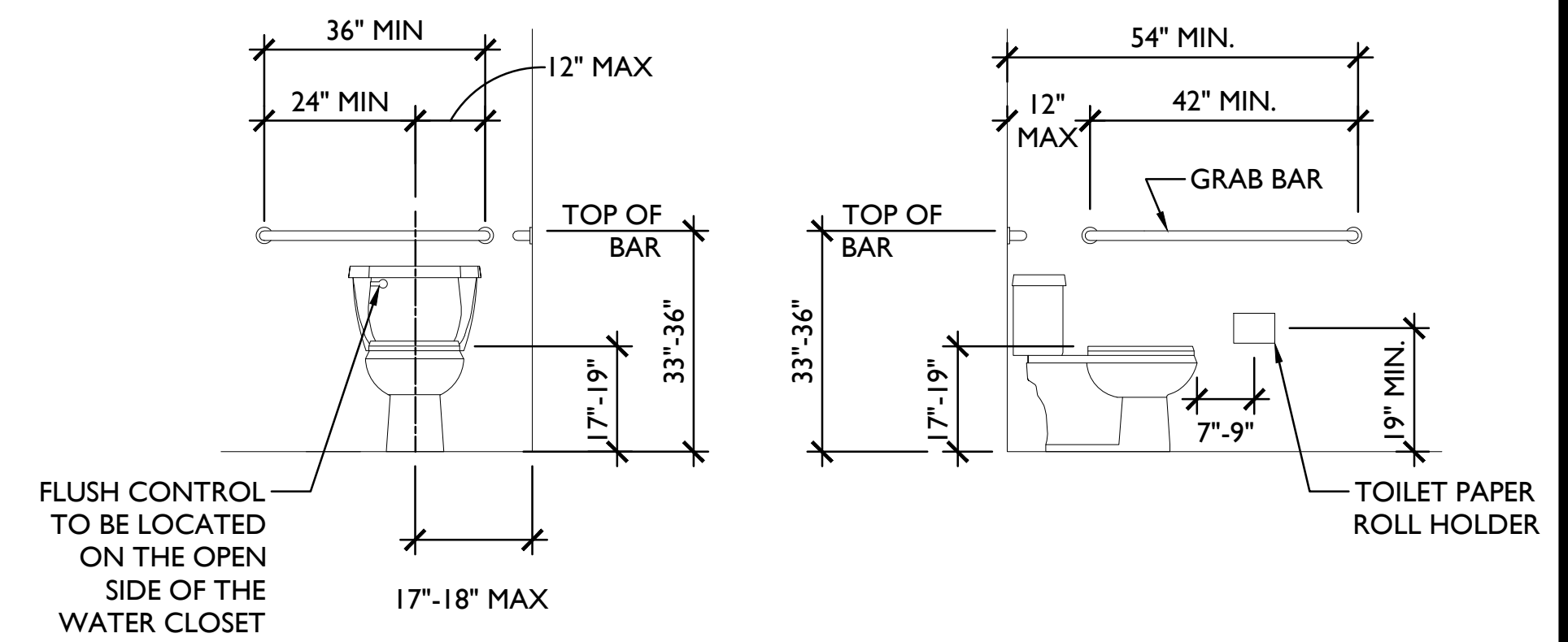
EN.3

NOTES:

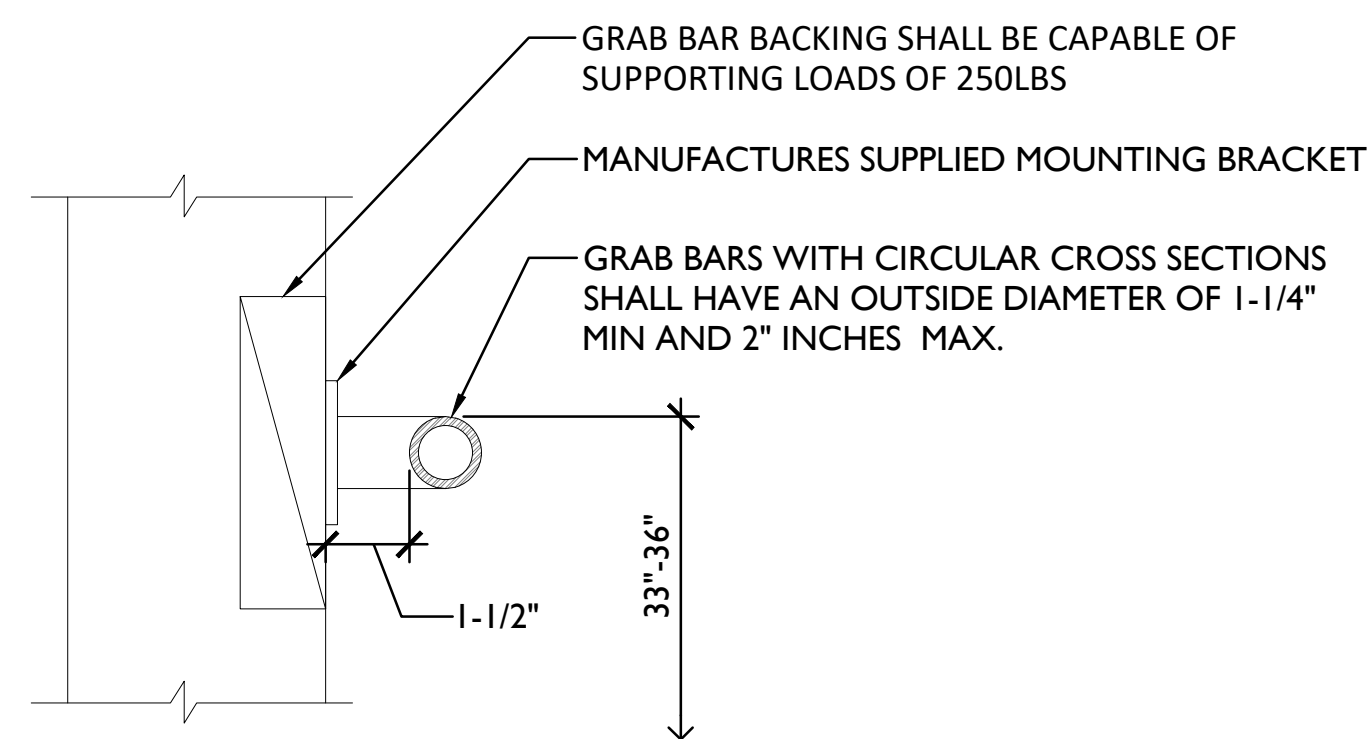
1. PROVIDE LEVER TYPE FAUCET CONTROLS FOR ACCESSIBLE LAVS.
2. PROVIDE INSULATION PADS ON ALL WATER SUPPLY & DRAIN PIPES FOR ACCESSIBLE LAVS.
3. FAUCET CONTROLS & OPERATING MECHANISMS FOR KITCHEN SINKS SHALL BE OPERABLE W/ ONE HAND & SHALL NOT REQUIRE GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE FAUCET CONTROLS & OPERATING MECHANISMS FOR KITCHEN SINKS SHALL BE NO GREATER THAN 5 LF. LEVER OPERATED, PUSH TYPE & ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.



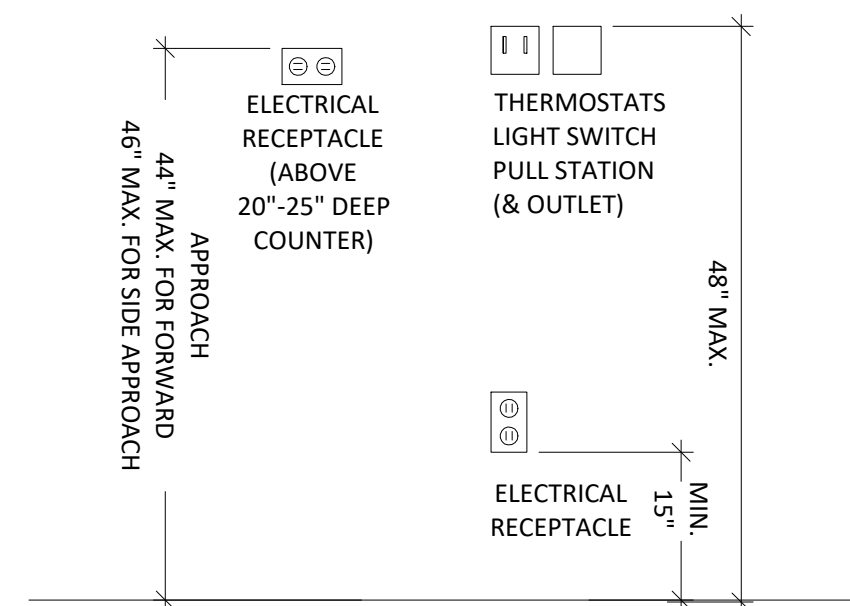
4 ACCESSIBLE CLEARANCES AT VANITY/ KITCHEN SINK
AD.1 SCALE: NTS



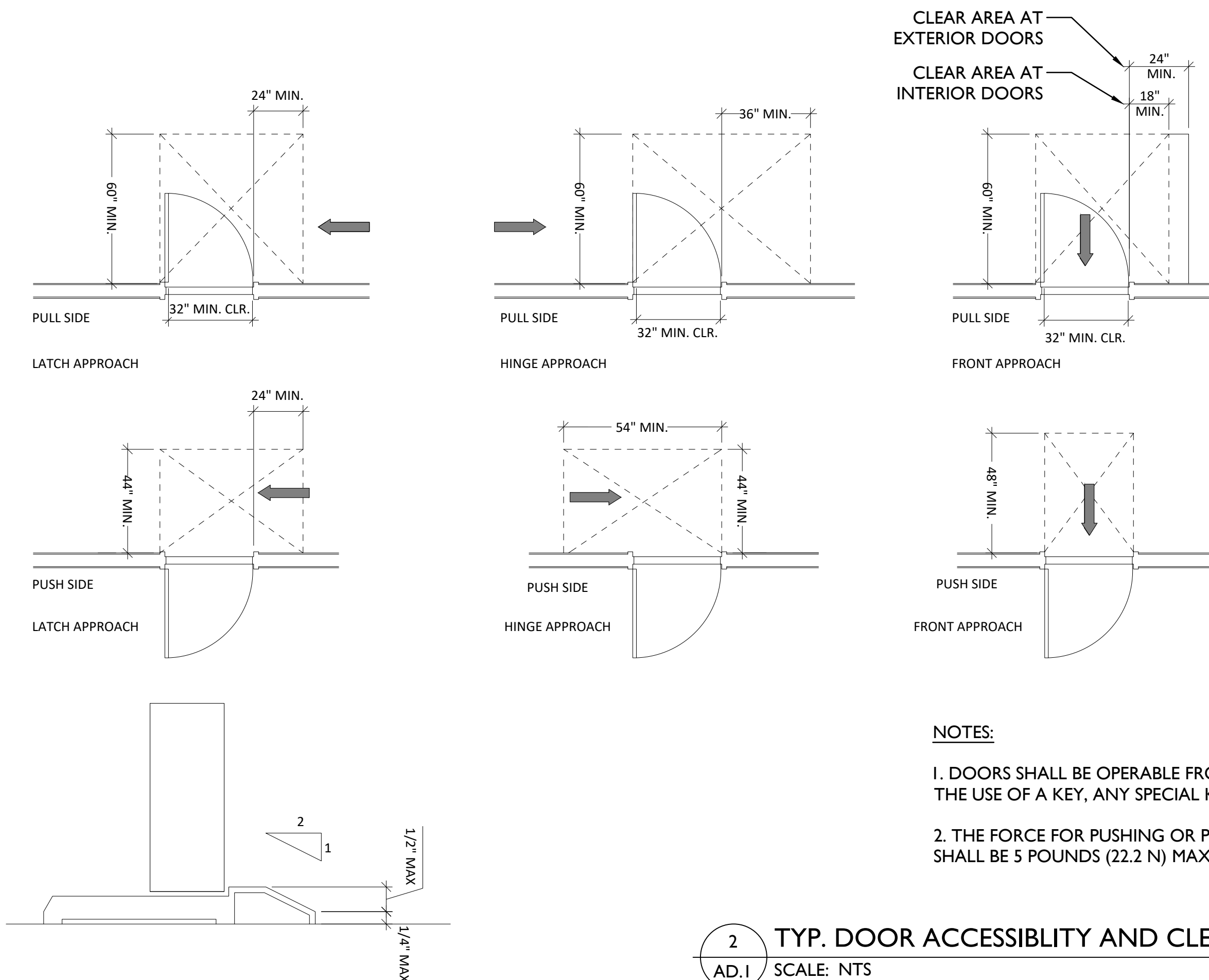
1 TYP. ACCESSIBLE TOILET CLEARANCES
AD.1 SCALE: NTS



5 GRAB BAR MOUNTING /BLOCKING DETAIL
AD.1 SCALE: NTS



6 ACCESSIBLE FIXTURE MOUNTING HEIGHT DETAILS
AD.1 SCALE: NTS



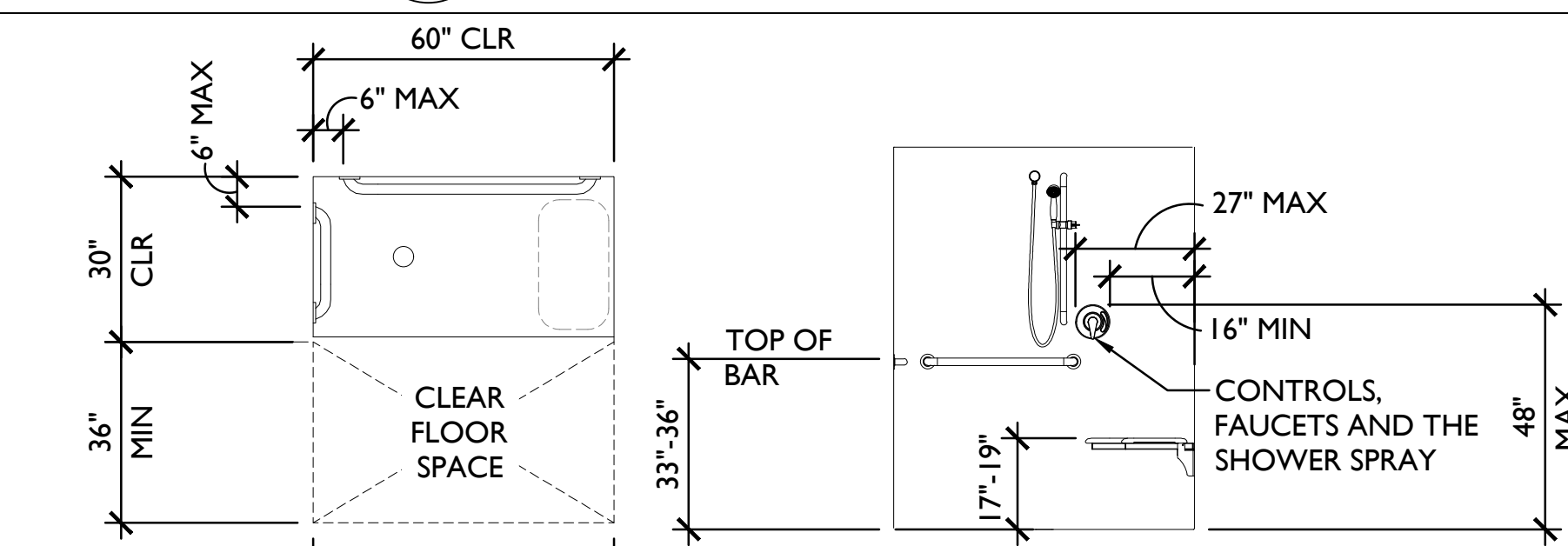
NOTES:

1. DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, ANY SPECIAL KNOWLEDGE OR EFFORT.
2. THE FORCE FOR PUSHING OR PULLING OPEN A DOOR SHALL BE 5 POUNDS (22.2 N) MAXIMUM.

2 TYP. DOOR ACCESSIBILITY AND CLEARANCE DETAILS
AD.1 SCALE: NTS

NOTE: THESE COMMONLY UTILIZED DETAILS ARE PROVIDED ONLY FOR CONVENIENCE AND MAY BE USED OR OMITTED AT THE OWNER'S CHOICE. THE OWNER MAY ALTER DIMENSIONS PER THEIR OWN PREFERENCES, PROVIDED THEY DO NOT CONFLICT WITH OTHER NON-ACCESSIBILITY/RELATED PROVISIONS OF CALIFORNIA BUILDING STANDARD CODE.

7 ACCESSIBILITY NOTES
AD.1 SCALE: NTS



3 ROLL IN SHOWER DETAIL
AD.1 SCALE: NTS

Revisions:

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△	--
△	--

File:

Drawn By: JCE
Checked By: MB
Scale: AS NOTED
Date: 01/04/2023

Job No.

AD.1