CITY OF PICO RIVERA

PRE APPROVED STANDARD PLANS FOR ACCESSORY DWELLING UNIT

PROJECT ADDRESS: _____

PICO RIVERA

CITY OF PICO RIVERA
COMMUNITY & ECONOMIC
DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

GENERAL NOTES

1. AT THE TIME OF PERMIT ISSUANCE, CONTRACTOR SHALL SHOW THEIR VALID WORKERS' COMPENSATION INSURANCE CERTIFICATE.
2. ALL WORK SHALL CONFORM TO ALL REQUIREMENTS OF STATE OF CALIFORNIA TITLE 24 REGARDLESS OF THE INFORMATION INDICATED ON THESE PLANS. IT IS THE RESPONSIBILITY OF THE INDIVIDUAL SUPERVISING THE CONSTRUCTION TO ENSURE THAT THE WORK IS DONE IN ACCORDANCE WITH CODE REQUIREMENTS PRIOR TO REQUESTING INSPECTION.
3. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN DISPOSED OF AS A SOLID WASTE.
4. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
5. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
6. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
7. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER.
8. THE ISSUANCE OF A PERMIT SHALL NOT PREVENT THE BUILDING OFFICIAL FROM REQUIRING THE CORRECTION OF ERROR ON THESE PLANS OR FROM PREVENTING ANY VIOLATION OF THE CODES ADOPTED BY THE CITY, RELEVANT LAWS, ORDINANCES, RULES AND/OR REGULATIONS.
9. FOR SINGLE FAMILY DWELLINGS AND MULTI FAMILY DWELLINGS BUILT ON OR BEFORE JAN 1 1994: FOR ALL ALTERATIONS OR IMPROVEMENTS, AS A CONDITION FOR ISSUANCE OF A CERTIFICATE OF FINAL COMPLETION AND OCCUPANCY OR FINAL PERMIT APPROVAL, ALL NON COMPLIANT PLUMBING FIXTURES SHALL BE REPLACED WITH WATER CONSERVING FIXTURES PURSUANT TO CALIFORNIA CIVIL CODE SECTION 1101.1 AND THE CALIFORNIA GREEN BUILDING STANDARDS CODE SECTION 4.303.1
10. HERS RATER VERIFICATION IS REQUIRED FOR THIS PROJECT. SEE CR-1R FOR FEATURES REQUIRING HERS VERIFICATION.

WATER SUPPLY

1. A SEPARATE OR UPSIZED WATER METER IS RECOMMENDED FOR OPTIMAL WATER PRESURE.
2. SHOW LOCATION OF EXISTING WATER METER ON SITE PLAN.
3. SHOW LOCATION OF NEW WATER METER ON SITE PLAN IF DESIRED.
4. FOR UNITS WITH AUTOMATIC FIRE SPRINKLERS, SEPARATE METER IS REQUIRED WITH MULLER U-BRANCH FITTING FOR FIRE AND DOMESTIC SERVICE LINES.
   4.1. FIRE DEPARTMENT APPROVED FIRE SPRINKLER PLANS TO BE APPROVED BY THE PROVIDING WATER PURVEYOR PRIOR TO INSTALLATION.

ELECTRICAL SERVICE PANELS

PANEL UPGRADES, RELOCATION & NEW ADU PANEL INSTALLATIONS

REQUIREMENTS:
- CALL & REQUEST A METER SPOT FOR PANEL - CALL SCE AT (800) 655-4555
- OBTAIN PERMIT(S)
- INSTALL OR RELOCATE ELECTRICAL PANEL AT SCE APPROVED LOCATION
- APPLY FOR AN APPLICATION FOR SERVICE - CALL SCE AT (800) 655-4555 TO START BILLING ON METER (NEW METER SETS ONLY)
- OBTAIN CITY INSPECTION AFTER PANEL IS INSTALLED.

IF LOCK RING REMOVAL REQUIRED CALL (800) 655-4555
RESIDENTIAL/GENERAL SERVICES/ EDISON 800 SERVICE (800) 655-4555
COMMERCIAL/TEMPORARY POWER SERVICES (800) 990-7788

EMERGENCY SERVICES, POWER OUTAGES, STREET LIGHT REPAIRS (800) 611-1911

DIGALERT — EXCAVATION NOTICE: BEFORE A PERMIT TO EXCAVATE WILL BE VALID, CONTACT DIG ALERT FOR DIG ALERT IDENTIFICATION NUMBER 48 HOURS BEFORE EXCAVATION — CALL 811

USE OF THESE DOCUMENTS

THIS PLAN IS PROVIDED BY THE CITY OF PICO RIVERA PRE-APPROVED ADU PROGRAM AND IS PUBLIC DOMAIN. THERE SHALL NOT BE A CHARGE TO PROVIDE THIS PLAN.

THIS STANDARD PLAN SET MAY BE USED FOR PERMITTING AND CONSTRUCTION WITHIN THE DESIGN OF THIS PROTOTYPE. THESE PLANS MAY NOT BE MODIFIED AND SHALL NOT BE DEVIATED DURING CONSTRUCTION. ANY CHANGE, MODIFICATION OR DEVIATION SHALL INVALIDATE THE BUILDING PERMIT AND A RE-DESIGNED PLAN SHALL BE SUBMITTED TO THE CITY OF PICO RIVERA FOR REVIEW.

A CITY OF PICO RIVERA BUILDING PERMIT FOR CONSTRUCTION OF THE ACCESSORY DWELLING UNIT SHALL BE OBTAINED BEFORE COMMENCEMENT OF CONSTRUCTION. APPROVALS FROM APPLICABLE CITY DEPARTMENTS SHALL BE OBTAINED, AND REQUIRED FEES PAID PRIOR TO OBTAINING THE BUILDING PERMIT.

IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONSTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS, AND THE BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

FIRE-RESISTANCE REQ.

DWELLING & ACCESSORIES **WITHOUT** AUTOMATIC RESIDENTIAL FIRE SPRINKLER PROTECTION [R302.1; TABLE R302.1(1)
1. EXTERIOR WALLS LESS THAN 5-FT OF PROPERTY LINE SHALL BE ONE-HOUR RATED PER ASTM E 119 OR UL 263 WITH EXPOSURE FROM BOTH SIDES
2. PROJECTIONS THAT EXTEND BETWEEN 2-FT AND LESS THAN 5-FT OF THE PROPERTY LINE SHALL HAVE A ONE-HOUR FIRE RATED PROTECTION ON THE UNDERSIDE. PROJECTIONS CANNOT EXTEND CLOSER THAN 2-FT OF THE PROPERTY LINE.
3. OPENINGS IN EXTERIOR WALLS WITHIN 5-FT OF THE PROPERTY LINE IS LIMITED TO 25% OF THE WALL AREA. OPENINGS ARE NOT ALLOWED WHEN WALLS ARE CLOSER THAN 3-FT TO THE PROPERTY LINE.

DWELLING & ACCESSORIES **WITH** AUTOMATIC RESIDENTIAL FIRE SPRINKLER PROTECTION [R302.1; TABLE R302.1(2)
1. EXTERIOR WALLS LESS THAN 3-FT OF PROPERTY LINE SHALL BE ONE-HOUR RATED PER ASTM E 119 OR UL 263 WITH EXPOSURE FROM BOTH SIDES
2. PROJECTIONS THAT EXTEND BETWEEN 2-FT AND LESS THAN 3-FT OF THE PROPERTY LINE SHALL HAVE A ONE-HOUR FIRE RATED PROTECTION ON THE UNDERSIDE. PROJECTIONS CANNOT EXTEND CLOSER THAN 2-FT OF THE PROPERTY LINE.
3. OPENINGS ARE NOT ALLOWED WHEN EXTERIOR WALLS ARE CLOSER THAN 3-FT TO THE PROPERTY LINE.

WHERE APPROVED SITE PLAN SPECIFIES 1-HR RATED WALLS:
- EXTERIOR WALLS SHALL COMPLY WITH DETAIL 1/A-4.0
- EXTERIOR PROJECTIONS SHALL COMPLY WITH EAVE AND RAKE DETAILS FOR 1-HR FIRE RESISTANT CONSTRUCTION

FIRE SPRINKLER SYSTEM IS REQUIRED FOR ADU PER CA ASSEMBLY BILL AB-976 IF ANY OF THE FOLLOWING CONDITIONS ARE PRESENT:
1. THE MAIN RESIDENCE HAS OR IS REQUIRED TO HAVE A FIRE SPRINKLER SYSTEM.
2. THE MINIMUM FIRE FLOW REQUIREMENT IS NOT MET (1000gpm @ 20psi, CFC 2022 SECTION B105). COPY OF FIRE FLOW CAN BE OBTAINED FROM THE WATER PURVEYOR SERVICING THE PARCEL.

   PICO RIVERA WATER AUTHORITY - (562) 801-4404
   PICO WATER DISTRICT - (562) 692-3756

3. THE MINIMUM REQUIRED DISTANCE TO NEAREST FIRE HYDRANT IS NOT MET (ALL EXTERIOR PORTION OF PROPOSED ADU'S 1ST FLOOR SHALL BE WITHIN 400-FT OF FIRE HYDRANT. (CFC 2022 SECTION 507.5.1)

WHEN SPRINKLERS ARE REQUIRED:
1. DETAILED SPRINKLER PLANS SHALL BE SUBMITTED TO THE FIRE DEPARTMENT AND APPROVED PRIOR TO INSTALLATION. PLANS AND INSTALLATION MUST BE BY A C16 LICENSED SPRINKLER CONTRACTOR.
2. SECTION 903.3.1.3 NFPA 13D SPRINKLER SYSTEMS AUTOMATIC FIRE SPRINKLER SYSTEMS INSTALLED IN ONE-AND TWO-FAMILY DWELLINGS, GROUP R-3, AND TOWNHOUSES SHALL BE PERMITTED TO BE INSTALLED THROUGHOUT IN ACCORDANCE WITH THE CURRENT EDITION OF NFPA 13D AMENDED IN CHAPTER 35.
3. SECTION 903.2.8 GROUP R - AN AUTOMATED SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3 SHALL BE PROVIDED THROUGHOUT ALL BUILDINGS WITH A GROUP R FIRE AREA.
4. SECTION 903.2.8.1 GROUP R-3 AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.3 SHALL BE PERMITTED IN GROUP R-3 OCCUPANCIES.
5. LOCATION AND SIZE OF WATER SERVICE UNDERGROUND SHALL BE INSTALLED AS SHOWN ON APPROVED FIRE SPRINKLER PLANS. A MINIMUM 1-INCH WATER SHALL BE INSTALLED.
6. A HYDRO INSPECTION OF THE FIRE SPRINKLER SYSTEM IS REQUIRED PRIOR TO FRAME INSPECTION. ONLY THE NEW PIPING SHALL BE TESTED.

PROJECT INFORMATION

PROJECT SCOPE:

1. CONSTRUCTION OF A NEW DETACHED SINGLE STORY ACCESSORY DWELLING UNIT (800 SQ.FT.) WITH (2)-BEDROOM, (1)-BATH, AND COVERED FRONT PORCH (68 SQ.FT.)
2. ALL SITE WORK WITHIN THE PROPERTY LINE
3. ALL WORK SHOWN IN THE DRAWINGS AND SPECIFICATIONS ONLY.

AREAS:

MAIN SFD: _____ SQ.FT.
ADU: 800 SQ.FT.
PROPOSED HEIGHT: 13'-1"

BUILDING INFORMATION: (OWNER TO COMPLETE)

- NUMBER OF STORIES: _____
- OCCUPANCY GROUP: R-3
- CONSTRUCTION TYPE: VB
- APN: _____
- ZONING DESIGNATION _____
- LOT SIZE: _____
- FIRE SPRINKLERS: _____
- EXISTING SQUARE FOOTAGE: _____

  (THIS SHOULD INCLUDE EXISTING RESIDENCE, GARAGE, SHEDS, ETC)
- PROPOSED SQUARE FOOTAGE: _____

APPLICABLE CODES: 2022 CBC, 2022 CRC, 2022 CPC, 2022 CMC, 2022 CEC, 2022 CGrC, 2022CEnC W/ CITY OF PICO RIVERA AMENDMENTS

MAXIMUM ALLOWABLE LOT COVERAGE:

- S-F ZONE:

  LOT < 5,500 SQ.FT. = 45 %

  LOT > 5,500 SQ.FT. = 40 %
- R-E ZONE:

  ANY LOT SIZE = 35 %

LOT COVERAGE CALCULATION

1. (E) MAIN SFD .....
2. (E) GARAGE .....
3. (E) ACCESSORY STRUCTURES .....
4. (N) PORCH ..... 68.0 SQ.FT.
5. (N) ADU ..... 800.0 SQ.FT.

TOTAL EXISTING LIVING SPACE .....
TOTAL EXISTING NON-LIVING SPACE .....

TOTAL NEW LIVING SPACE .....
TOTAL NEW NON-LIVING SPACE .....

FOOT PRINT AREA .....

LOT AREA .....
LOT COVERAGE .....

SUPPORTING DOCUMENTS

THE FOLLOWING SUPPORTING DOCUMENTS MUST BE SUBMITTED BY THE OWNER / APPLICANT FOR CITY APPROVAL PRIOR TO CONSTRUCTION:

1. SITE PLAN.
2. REGISTERED ENERGY CALCULATIONS TO BE SITE SPECIFIC.

   FOR ENERGY INFORMATION VISIT:

   WWW.ENERGY.CA.GOV
   WWW.CHEERS.ORG/FIND-A-PRO/
   WWW.ENERGYCODEACE.COM
3. A SOLAR PHOTOVOLTAIC ENERGY SYSTEM (SOLAR PV PANELS) MUST BE INSTALLED PURSUANT TO CALIFORNIA ENERGY CODE SECTION 150.1C.14. A SEPARATE PERMIT MUST BE OBTAINED AND INSTALLATION OF THE PV SYSTEM MUST BE COMPLETE AND APPROVED BY THE BUILDING & SAFETY DIVISION PRIOR TO THE FINAL OF THE PERMIT.

   CONTACT PICO RIVERA INNOVATIVE MUNICIPAL ENERGY (PRIME) AT (562) 801-4027 OR SUSTAINABILITY@PICO-RIVERA.ORG TO DISCUSS THE PRIME POWER CHOICE PROGRAM.
4. PROPERTY LINE SURVEY FOR NEW CONSTRUCTION WITHIN 5-FT FROM PROPERTY LINES.
   4.1. THE PROPERTY LINES SURVEY SHALL BE DONE BY A CALIFORNIA STATE LICENSED LAND SURVEYOR OR ENGINEER. PROPERTY LINES SHALL BE STAKED AND PROPER DOCUMENTATION BY THE RESPONSIBLE LICENSED LAND SURVEYOR OR ENGINEER SHALL BE SUBMITTED TO THE BUILDING INSPECTOR PRIOR TO FOUNDATION INSPECTION APPROVAL.

SITE PLAN

THE FOLLOWING MINIMUM INFORMATION MUST BE PROVIDED ON AN OWNER-PROVIDED SITE PLAN AND MUST BE DRAWN TO SCALE ON A 24"x 36" SHEETS. ADDITIONAL INFORMATION MAY BE REQUESTED ON A CASE-BY-CASE BASIS.

- SIZE AND LOCATION OF ALL STRUCTURES ON SITE
- DIMENSION TO PROPERTY LINES
  - THE ADU SHALL MAINTAIN A MINIMUM 4-FT SETBACK TO PROPERTY LINES.
- DIMENSION TO OTHER STRUCTURES ON SITE MEASURED EAVE-TO-EAVE.
- ACCESS INTO THE SITE (DRIVEWAY)
- LOCATION OF ALL TREES ON SITE
- ALL ADDRESSES ON EACH UNIT
- VICINITY MAP DEMONSTRATING WHETHER THE PROPERTY IS LOCATED WITHIN ONE-HALF MILE WALKING DISTANCE OF A PUBLIC TRANSIT STOP.
- LOCATION & SIZE OF OF ELECTRICAL SERVICE PANEL & SUB-PANELS
- LOCATION OF PROPOSED HEATING / COOLING EQUIPMENT PER ENERGY DOCUMENTATION SERVING THE DWELLING
  - ASSOCIATED MECHANICAL EQUIPMENT (AC CONDENSER / HEAT PUMP) SHALL MAINTAIN A MINIMUM 3-FT SETBACK FROM PROPERTY LINE AND SHALL BE SCREENED FROM THE PUBLIC-RIGHT-OF-WAY AND NEIGHBORING PROPERTIES.
- LOCATION OF PROPOSED WATER HEATER PER ENERGY DOCUMENTATION SERVING THE DWELLING
- TANK WATER HEATER SHALL BE LOCATED WITHIN A METAL OR STUCCO ENCLOSURE PAINTED TO MATCH RESIDENCE.
- SEWER LINE ROUTE & CONNECTIONS
- SITE DRAINAGE AWAY FROM THE NEW FOUNDATION AND DIRECT SITE DRAINAGE TO A STORM SEWER CONVEYANCE SYSTEM, PUBLIC STREET, OR OTHER APPROVED POINT OF COLLECTION.
  - SHOW RELATIVE OR ACTUAL ELEVATION POINTS, SLOPE, AND/OR DIRECTION OF FLOW

FOUNDATION SYSTEM

1. THIS PROJECT IS DESIGNED WITH A SLAB-ON-GRADE FOUNDATION AND ASSUMED A FLAT SITE WITH STANDARD SOIL.
2. IF THE ADU IS TO BE LOCATED ON A SLOPE / HILLSIDE OR EXPANSIVE SOIL, THIS PLAN SET CANNOT BE USED FOR PERMITTING OR CONSTRUCTION.

SHEET INDEX

DIRECTORY

PROPERTY OWNER

NAME: _____
ADDRESS: _____
_____
PHONE: _____
E-MAIL: _____

SITE PLAN & TITLE SHEET INFORMATION PREPARED BY:

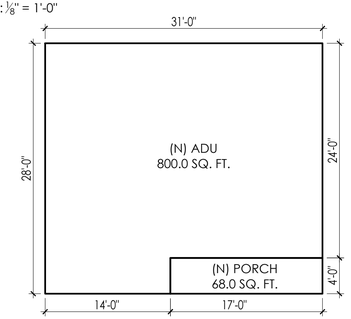
COMPANY: _____
CONTACT PERSON: _____
ADDRESS: _____
_____
PHONE: _____
E-MAIL: _____

ENERGY CALCULATIONS PREPARED BY:

COMPANY: _____
CONTACT PERSON: _____
ADDRESS: _____
_____
PHONE: _____
E-MAIL: _____

FOOTPRINTS

SCALE: 3/8" = 1'-0"



PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -

THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

BY USING THESE PERMIT READY CONSTRUCTION DOCUMENTS, THE RECIPIENT, OWNERS AGREE TO RELEASE, HOLD HARMLESS, AND IDEMNIFY THE CITY OF PICO RIVERA, ITS ELECTED OFFICIALS AND EMPLOYEES AND THE ARCHITECT/ENGINEER WHO PREPARED THE CONSTRUCTION DOCUMENTS FROM ANY AND ALL CLAIMS, LIABILITIES, SUITS, AND DEMANDS ON ACCOUNT OF ANY INJURY, DAMAGE, OR LOSS TO PERSONS OR PROPERTY, INCLUDING INJURY OR DEATH, OR ECONOMIC LOSSES, ARISING OUT OF THE USE OF THESE CONSTRUCTION DOCUMENTS.
THE USE OF THESE PERMIT READY CONSTRUCTION DOCUMENT DOES NOT ELIMINATE OR REDUCE THE OWNER'S OR CONTRACTOR'S RESPONSIBILITY TO VERIFY ANY AND ALL INFORMATION RELEVANT TO THE RECIPIENT'S WORK AND RESPONSIBILITY ON THIS PROJECT.

SHEET DESCRIPTION

COVER SHEET

SHEET NO.

T-0.0

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y	N/A	RESPON. PARTY

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.

The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.

Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.

Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

Exceptions:
1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.
2. [HCD] For purposes of *CALGreen*, live/work units, complying with Section 419 of the *California Building Code*, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.

DIVISION 4.1 PLANNING AND DESIGN

ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
DSA-SS	Division of the State Architect, Structural Safety
OSHPD	Office of Statewide Health Planning and Development
LR	Low Rise
HR	High Rise
AA	Additions and Alterations
N	New

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES

SECTION 4.102 DEFINITIONS

4.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.

WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.

4.106 SITE DEVELOPMENT

4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
3. Compliance with a lawfully enacted storm water management ordinance.

Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil.

(Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)

4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales
2. Water collection and disposal systems
3. French drains
4. Water retention gardens
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

Exception: Additions and alterations not altering the drainage path.

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625.

Exceptions:
1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
   1.1 Where there is no local utility power supply or the local utility is unable to supply adequate power.
   1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the *California Electrical Code*.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities.
When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

4.106.4.2.1Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms.
The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

Exceptions:

1.When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces.

2.When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.

Notes:

a.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.

b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms.
The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.

Notes:

a.Construction documents shall show locations of future EV spaces.

b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

3.EV Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.

When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS).
Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.

Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.

4.106.4.2.2.1.1 Location.
EVCS shall comply with at least one of the following options:

1.The charging space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.

2.The charging space shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section 4.106.4.2.2.1.2, Item 3.

4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) dimensions.
The charging spaces shall be designed to comply with the following:

1.The minimum length of each EV space shall be 18 feet (5486 mm).

2.The minimum width of each EV space shall be 9 feet (2743 mm).

3.One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).

a.Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.2.1.3 Accessible EV spaces.
In addition to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A.

4.106.4.2.3 EV space requirements.
1.Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the location or the proposed location of the EV space. Construction documents shall identify the raceway termination point, receptacle or charger location, as applicable. The service panel and/ or subpanel shall have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space, at the time of original construction in accordance with the California Electrical Code.

2.Multiple EV spaces required. Construction documents shall indicate the raceway termination point and the location of installed or future EV spaces, receptacles or EV chargers. Construction documents shall also provide information on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space at the time of original construction in accordance with the California Electrical Code.

4.106.4.2.4 Identification.
The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

4.106.4.2.5 Electric Vehicle Ready Space Signage
Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings.
When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.

Notes:

1.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.

2.There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

DIVISION 4.2 ENERGY EFFICIENCY

4.201 GENERAL

4.201.1 SCOPE. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

4.303 INDOOR WATER USE

4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.4.4.

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3 Showerheads.

4.303.1.3.1 Single Showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time.

Note: A hand-held shower shall be considered a showerhead.

4.303.1.4 Faucets.

4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.

4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.

4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

4.303.1.4.5 Pre-rinse spray valves.
When installed, shall meet the requirements in the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7) and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations),Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALVES MANUFACTURED ON OR AFTER JANUARY 28, 2019

PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≤ 5.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)]

4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial buildings.
Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the *California Plumbing Code*.

4.303.3 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code*.

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

TABLE - MAXIMUM FIXTURE WATER USE

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

4.304 OUTDOOR WATER USE
4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

NOTES:

1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the *California Code Regulations*, Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.

Exceptions:

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).
3. Identify diversion facilities where the construction and demolition waste material collected will be taken.
4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.

4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4..

Notes:

1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.
2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

4.410 BUILDING MAINTENANCE AND OPERATION

4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
2. Operation and maintenance instructions for the following:
   a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
   b. Roof and yard drainage, including gutters and downspouts.
   c. Space conditioning systems, including condensers and air filters.
   d. Landscape irrigation systems.
   e. Water reuse systems.
3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
4. Public transportation and/or carpool options available in the area.
5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
6. Information about water-conserving landscape and irrigation design and controllers which conserve water.
7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
9. Information about state solar energy and incentive programs available.
10. A copy of all special inspections verifications required by the enforcing agency or this code.
11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures.
12. Information and/or drawings identifying the location of grab bar reinforcements.

4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site 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 waster, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of this section.

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL

4.501.1 Scope
The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS

5.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -
THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

SHEET DESCRIPTION

CALIFORNIA GREEN BUILDING STANDARDS

SHEET NO.

GRN-1

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O^3/g ROC).
Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).
Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

4.503 FIREPLACES

4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

4.504 POLLUTANT CONTROL

4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.

4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and tricloroethylene), except for aerosol products, as specified in Subsection 2 below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with section 94507.

4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply.

4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of *California Code of Regulations*, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.

4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification.
2. Field verification of on-site product containers.

TABLE 4.504.1 - ADHESIVE VOC LIMIT[1,2]

(Less Water and Less Exempt Compounds in Grams per Liter)

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

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC LIMIT

(Less Water and Less Exempt Compounds in Grams per Liter)

SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2,3]

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

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

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

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

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

TABLE 4.504.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

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

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)

4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed , at least 80% of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5

4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.
5. Other methods acceptable to the enforcing agency.

4.505 INTERIOR MOISTURE CONTROL

4.505.1 General. Buildings shall meet or exceed the provisions of the *California Building Standards Code*.

4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.

4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following:

1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Other equivalent methods approved by the enforcing agency.
3. A slab design specified by a licensed design professional.

4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:

1. Moisture content shall be determined with either a probe-type or contact-type moisture meter.Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece verified.
3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

4.506 INDOOR AIR QUALITY AND EXHAUST

4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:

1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
   a. Humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of adjustment.
   b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

Notes:

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.
2. Lighting integral to bathroom exhaust fans shall comply with the *California Energy Code*.

4.507 ENVIRONMENTAL COMFORT

4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection), or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the system functions are acceptable.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

Notes:

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC
DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -
THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

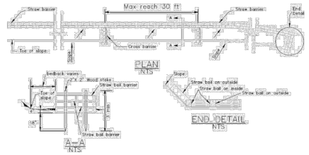
SHEET DESCRIPTION

CALIFORNIA GREEN BUILDING STANDARDS

SHEET NO.

GRN-2

BEST MANAGEMENT PRACTICE



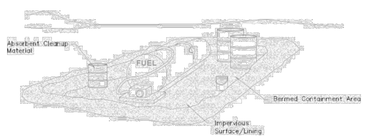
STRAW BALE BARRIER

A straw bale border is a temporary linear sediment barrier consisting of straw bales, designed to intercept and slow sediment laden sheet flow runoff. Straw bale barriers allow sediment to settle from runoff before water leaves the construction site.

Notes:

1. Place along the perimeter of a site, streams and channels, and/or around stockpiles.
2. Place below the toe of exposed and erodible slopes.
3. Place downslope of exposed soil areas.
4. Place parallel to roadway to keep sediment off paved areas.
5. Do no use for drain inlet protection or in areas of concentrated flows.
6. Straw bale to be minimum of 14 inches wide, 18 inches in height, and 36 inches in length.
7. Shall be composed entirely of vegetative material, except for the binding material.
8. Bale bindings shall be either steel wire, nylon or polypropylene string placed horizontally.
9. Commercial quality lumber shall be used for 2 inch by 2 inch wood stakes of adequate length.
10. Limit the drainage area upstream of the border to 0.25 ac/100 ft.
11. Limit the slope length draining to the straw bale barrier to 100 ft.
12. Slopes of 2 percent or flatter area preferred.
13. If slope exceeds 10 percent, the length of the slope upstream of the barrier must be less than 50 ft.
14. Install straw barrier along a level contour, in a trench and tightly abut adjacent bales.
15. Last straw bale on end needs to be turned up slope.
16. Inspect straw bale barriers before and after each rain event.
17. Inspect straw bale barriers for sediment accumulations and remove sediment when depth reaches 1/3 of barrier height.
18. Replace or repair damaged bales as needed.

BEST MANAGEMENT PRACTICE

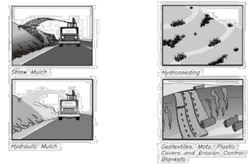


VEHICLE/ EQUIPMENT FUELING

Notes:

1. Fueling shall be performed in a designated area and away from drainage courses.
2. Absorbent cleanup material shall be on site and used immediately in the event of a spill.
3. Drip pans or absorbent pads shall be used during vehicle and equipment fueling, unless the fueling is performed over an impermeable surface in a dedicated fueling area.
4. Dedicated fueling areas shall be protected from storm water run-on and runoff, and shall be located at least 50 feet from downstream drainage facilities and water courses. Fueling must be performed on level-grade areas.
5. Protect fueling areas with berms and/or dikes to prevent run-on, runoff, and to contain spills.

BEST MANAGEMENT PRACTICE

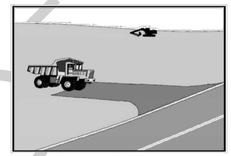


EROSION CONTROL

Notes:

1. Soil/Slope stabilization practices shall be designed to preserve existing vegetation where feasible and to re-vegetate open areas as soon as feasible after grading. These control practices shall include temporary seeding, permanent seeding, mulching, sod stabilization, vegetative bugger strips, protection of trees, or other soil stabilization practices.
2. Soil stabilization shall be implemented on all inactive disturbed areas from October 1 thru May 30 and on all disturbed areas during a rain event or potentialrain.
3. Soil stabilization practices shall control/prevent erosion from the forces of wind and water.
4. Stabilization practices shall be implemented in conjunction with sediment trapping/filtering practices and practices to reduce the tracking of sediment onto paved roads.
5. When using straw mulching, the minimum application shall be 2 tons/acre. Mulch must be anchored immediately to minimize loss by wind or water.
6. When using hydroseeding/mulching, the minimum application of wood fiber shall be 1,500 lbs/acre, that does not contain more than 50 percent newsprint.
7. For seeding recommendations, contact: USDA, Natural Resource Conversation Service at 44811 Dale Ave, Lancaster, CA 93534-3136. Phone: (661) 945-2684
8. When using hydraulic mulch, the application shall be between 1 to 2 tons per acre.
9. Geotextiles, mates, plastic covers, and erosion control blankets should be considered when disturbed soils may be particularly difficult to stabilize.
10. For geotextiles, mats, and erosion control blankets, installation should be in accordance with manufacture's recommendations. Typically, overlap of geotextiles/mats edge is 2 to 3 inch end-over-end (shingle style) with 6 inch overlap and staple through overlapped area, approximately 12 inch apart.

BEST MANAGEMENT PRACTICE



STABILIZED CONSTRUCTION ENTRANCE/EXIT

Notes:

1. Sediments and other materials shall not be tracked from the site by vehicle traffic. The construction entrance roadways shall be stabilized so as to prevent sediments from being deposited into the public roads. Sediment deposited on the roadway must be swept up immediately and may not be washed down by rain or other means into the storm drain system. See Type 1 and Type 2 details.
2. Stabilized construction entrance shall be:
   a. Located at any point where traffic will be entering or leaving a construction site to or from a public right of way, street, alley, and sidewalk or parking area.
   b. A series of steel plates with "rumble strips" and/or min -3" to <6" crushed aggregate with length, width & thickness as needed to adequately prevent any tracking onto paved surfaces.
3. Adding a wash rack with a sediment trap large enough to collect all wash water can greatly improve efficiency.
4. All vehicles accessing the construction site shall utilize the stabilized construction entrance sites.
   a. Remove all sediment deposited on paved roadways immediately.
   b. Sweep paved areas that receive construction traffic whenever sediment becomes visible.
   c. Pavement washing with water is prohibited if it results in a discharge to the storm drain system.

BEST MANAGEMENT PRACTICE

BEST MANAGEMENT PRACTICE NOTES:

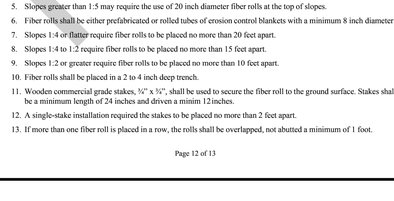
1. Every effort should be made to eliminate the discharge of non-storm water from the project site at all times.
2. Eroded sediments and other pollutants must be retained on-site and may not be transported from the site via sheet flow, swales, area drains, natural drainage courses or wind.
3. Stockpiles of earth and other construction related materials must be protected from being transported from the site by the forces of wind or water.
4. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.
5. Excess or waste concrete may not be washed into the public way or any other drainage system. Provisions shall be made to retain concrete wastes on-site until they can be disposed of as solid waste.
6. Trash and construction related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
7. Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.
8. Any slopes with disturbed soils or vegetation must be stabilized so as to inhibit erosion by wind and water.

"I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/or inaccurate information, failing to update the plans to reflect current conditions, or failing to properly and/or adequately implement BMP's may result in revocation of grading and/or other permits or other sanctions provided by law."

Print Name _____
(Owner or authorized agent of the owner)

Signature _____ Date _____
(Owner or authorized agent of the owner)

BEST MANAGEMENT PRACTICE



SILT FENCE

Notes:

1. Construct the silt fence along a level contour.
2. Silt fences shall remain in place until the disturbed area is permanently stabilized.
3. Provide sufficient room for runoff to pond behind the fence and allow sediment removal equipment to pass between the silt fence and toe of slope or other obstructions. About 1,200 sq.-ft. of ponding area shall be provided for every acre draining to the fence.
4. Turn the ends of the filter fence uphill to prevent storm water from flowing around the fence.
5. Leave an undisturbed or stabilized area immediately downslope from the fence.
6. Do not place in live stream or intermittently flowing channels.
7. When standard filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the post using heavy-duty (0.6 inch) wire staples at least 1.75 inches long, tie wires or hog rings.
8. Filter fabric shall be woven polypropylene geotextile with a minimum width of 36 inches and a minimum tensile strength of 100 lb force.
9. Wood stakes shall be commercial quality lumber no less than 2 inch by 2 inch. Wood stakes shall be driven to a depth of no less than 18 inches from surface.

BEST MANAGEMENT PRACTICE

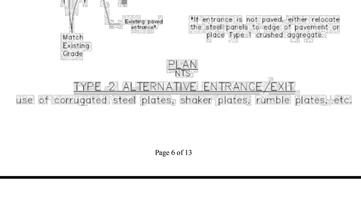
MATERIAL STORAGE

Notes:

Stockpile management procedures and practices are designated to reduce or eliminate air and storm water pollution from stockpiles of soil, and paving materials such as Portland cement concrete (PCC) rubble, asphalt concrete (AC), asphalt concrete rubble, aggregate base, aggregate sub-base or pre-mixed aggregate, asphalt binder and pressure treated wood.

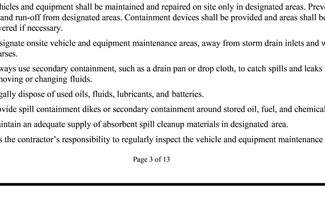
1. Protection of stockpile is a year-round requirement.
2. Locate stockpiles a minimum of 50 feet away from concentrated flows of storm water, drainage course, and drain inlets.
3. Implement wind erosion/transport control practices as appropriate.
4. All stockpiles shall be covered, stabilized, or protected with a temporary linear barrier (i.e. sandbags, etc.) prior to the onset of precipitation.

BEST MANAGEMENT PRACTICE



TYPE 1 GRAVEL ENTRANCE/EXIT

BEST MANAGEMENT PRACTICE



CATCH BASIN/INLET PROTECTION

Notes:

1. Catch Basin/Inlet protection shall be installed wherever there is a potential of storm water or non-storm water being discharged into it.
2. Inlet protection is required along with other pollution prevention measures, such as erosion control, soil stabilization, and measures to prevent tracking onto paved surfaces.
3. Modify inlet protection as needed to avoid creating traffic hazards.
4. Include inlet protection measures at hillside v-ditches and misc. drainage swales.
5. Inlet protection shall be inspected and accumulated sediments removed. Sediment shall be disposed of properly and in a manner than assures that the sediment does not enter the storm drain system.
6. Damage bags shall be replaced immediately.
7. Additional sandbag sediment traps shall be placed at intervals as indicated on site plan.

BEST MANAGEMENT PRACTICE

FIBER ROLL

Notes:

1. Place along the toe, top, face, and at grade breaks of exposed and erodible slopes.
2. Place on the down-slope of exposed soil areas.
3. Place around temporary stockpiles.
4. Place along the perimeter of a project.
5. Slopes greater than 1:5 may require the use of 20 inch diameter fiber rolls at the top of slopes.
6. Fiber rolls shall be either prefabricated or rolled tubes of erosion control blankets with a minimum 8 inch diameter.
7. Slopes 1:4 or flatter require fiber rolls to be placed no more than 20 feet apart.
8. Slopes 1:4 to 1:2 require fiber rolls to be placed no more than 15 feet apart.
9. Slopes 1:2 or greater require fiber rolls to be placed no more than 10 feet apart.
10. Fiber rolls shall be placed in a 2 to 4 inch deep trench.
11. Wooden commercial grade stakes, ¾" x ¾", shall be used to secure the fiber roll to the ground surface. Stakes shall be a minimum length of 24 inches and driven a minim 12 inches.
12. A single-stake installation required the stakes to be placed no more than 2 feet apart.
13. If more than one fiber roll is placed in a row, the rolls shall be overlapped, not abutted a minimum of 1 foot.

BEST MANAGEMENT PRACTICE

CONCRETE WASTE MANAGEMENT

Notes:

1. Excess and waste concrete shall not be washed into the street or into a drainage system.
2. For washout of concrete and mortar products, a designated containment facility of sufficient capacity to retain liquid and solid waste shall be provided on site and disposed of properly off site.
3. Slurry from concrete and asphalt saw cutting shall be vacuumed or contained, dried, picked up, and disposed of properly.

BEST MANAGEMENT PRACTICE

TYPE 2 ALTERNATIVE ENTRANCE/EXIT
use of corrugated steel plates, shaker plates, rumble plates, etc.

BEST MANAGEMENT PRACTICE

EQUIPMENT MAINTENANCE AREAS

Notes:

1. Leaking vehicles and equipment shall not be allowed on site. Equipment and vehicles shall be inspected frequently for leaks and shall be repaired immediately. Clean up spills and leaks promptly with absorbent materials. Do not flush with water.
2. Vehicles and equipment shall be maintained and repaired on site only in designated areas. Prevent run-on and run-off from designated areas. Containment devices shall be provided and areas shall be covered if necessary.
3. Designate onsite vehicle and equipment maintenance areas, away from storm drain inlets and water courses.
4. Always use secondary containment, such as a drain pan or drop cloth, to catch spills and leaks when removing or changing fluids.
5. Legally dispose of used oils, fluids, lubricants, and batteries.
6. Provide spill containment dikes or secondary containment around stored oil, fuel, and chemical drums.
7. Maintain an adequate supply of absorbent spill cleanup materials in designated areas.
8. It is the contractor's responsibility to regularly inspect the vehicle and equipment maintenance area(s).

PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -
THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

SHEET DESCRIPTION

BEST MANAGEMENT PRACTICES

SHEET NO.

BMP-1

CITY OF PICO RIVERA, PRE-APPROVED ADU, DATE: 1/1/2025

2022 Single-Family Residential Mandatory Requirements Summary

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

*Exceptions may apply.

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary

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

Ventilation and Indoor Air Quality:

§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2,** Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1. *
§ 150.0(o)1B:	**Central Fan Integrated (CFI) Ventilation Systems. Continuous operation of CFI air handlers is not allowed to provide the whole-**dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed andcontrolled per §150.0(o)1Biii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.
§ 150.0(o)1C:	**Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses . Single-family detached dwelling units,** and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1C-iii.
§ 150.0(o)1G:	**Local Mechanical Exhaust. Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand-**controlled exhaust system meeting requirements of §150.(o)1Gii;enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Gii-iv. Airflow must be measured by the installer per §150.0(o)1Gv., and rated for sound per §150.0(o)1Gvi. *
§ 150.0(o)1H&I:	**Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems. The airflow required per § 150.0(o)1C must** be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by §150.0(o)1C.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing. Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating,** and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4 3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o)1G

Pool and Spa Systems and Equipment:

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

Lighting:

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

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary

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

Building Envelope:

§ 110.6(a)1:	**Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or** less when tested per NFRC-400; ASTM E283; or AAMA/WDMA/CSA 101/I.S.2/A440-2011. *
§ 110.6(a)5:	**Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).**
§ 110.6(b):	**Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from** Tables 110.6-A, 110.6-B, or JA4 5 for exterior doors. They must be caulked and/or weather-stripped. *
§ 110.7:	**Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be** caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household** Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).**
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the** roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer** Affairs.
§ 150.0(a):	**Roof Deck, Ceiling and Rafter Roof Insulation. Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted** average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling; or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling. *
§ 150.0(b):	**Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.**
§ 150.0(c):	**Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood** framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B. *
§ 150.0(d):	**Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. ***
§ 150.0(f):	**Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone** without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II** vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	**Vapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of** all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	**Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have** a maximum U-factor of 0.45; or area-weighted average U-factor of all fenestration must not exceed 0.45. *

Fireplaces, Decorative Gas Appliances, and Gas Log:

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

Space Conditioning, Water Heating, and Plumbing System:

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

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary

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

Solar Readiness:

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

Electric and Energy Storage Ready:

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary

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

Ducts and Fans:

§ 110.8(d)3:	**Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a** contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance. All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC** Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than ¼". If mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed. *
§ 150.0(m)2:	**Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction,** connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes,** mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic** dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible,** manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation. Insulation must be protected from damage due tosunlight, moisture, equipment maintenance, and wind.** Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.
§ 150.0(m)10:	**Porous Inner Core Flex Duct. Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and** outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an** occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.
§ 150.0(m)12:	**Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13** or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter. *

5/6/22

PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC
DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -
THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

BY USING THESE PERMIT READY CONSTRUCTION DOCUMENTS, THE RECIPIENT, OWNERS AGREE TO RELEASE, HOLD HARMLESS, AND INDEMNIFY THE CITY OF PICO RIVERA, ITS ELECTED OFFICIALS AND EMPLOYEES AND THE ARCHITECT/ENGINEER WHO PREPARED THE CONSTRUCTION DOCUMENTS FROM ANY AND ALL CLAIMS, LIABILITIES, SUITS, AND DEMANDS ON ACCOUNT OF ANY INJURY, DAMAGE, OR LOSS TO PERSONS OR PROPERTY, INCLUDING INJURY OR DEATH, OR ECONOMIC LOSSES, ARISING OUT OF THE USE OF THESE CONSTRUCTION DOCUMENTS.
THE USE OF THESE PERMIT READY CONSTRUCTION DOCUMENT DOES NOT ELIMINATE OR REDUCE THE OWNER'S OR CONTRACTOR'S RESPONSIBILITY TO VERIFY ANY AND ALL INFORMATION RELEVANT TO THE RECIPIENT'S WORK AND RESPONSIBILITY ON THIS PROJECT.

SHEET DESCRIPTION

RESIDENTIAL MANDATORY MEASUREMENTS

SHEET NO.

T24-1

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 13 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name:	Documentation Author Signature:
Company:	Signature Date:
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

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:

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 9 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

OPAQUE SURFACE CONSTRUCTIONS

01 Construction Name	02 Surface Type	03 Construction Type	04 Framing	05 Total Cavity R-value	06 Interior / Exterior Continuous R-value	07 U-factor	08 Assembly Layers
Exterior Wall Construction Assembly	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.065	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Sheathing / Insulation: Wood Siding/sheathing/decking Exterior Finish: 3 Coat Stucco
Asphalt Shingle Roof	Attic Roofs	Wood Framed Ceiling	2x8 @ 16 in. O. C.	R-19	None / None	0.055	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x8
Ceiling Construction Assembly	Ceilings (below attic)	Wood Framed Ceiling	2x6 @ 24 in. O. C.	R-38	None / None	0.026	Over Ceiling Joists: R-23.7 insul. Cavity / Frame: R-14.3 / 2x6 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

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

WATER HEATING SYSTEMS

01 Name	02 System Type	03 Distribution Type	04 Water Heater Name	05 Number of Units	06 Solar Heating System	07 Compact Distribution	08 HERS Verification	09 Water Heater Name (#)
DHW System 1	Domestic Hot Water (DHW)	HERS Verified Pipe Insulation credit	Water Heater 1	1	n/a	None	DHW System 1-hers-dhw	Water Heater 1 (1)

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 5 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

ENERGY USE INTENSITY

	Standard Design (kBtu/ft^2 - yr)	Proposed Design (kBtu/ft^2 - yr)	Margin (kBtu/ft^2 - yr)	Margin Percentage
North Facing				
Gross EUI[1]	21.78	21.16	0.62	2.85
Net EUI[2]	7.67	6.82	0.85	11.08
East Facing				
Gross EUI[1]	21.78	21.3	0.48	2.2
Net EUI[2]	7.67	6.96	0.71	9.26
South Facing				
Gross EUI[1]	21.78	21.15	0.63	2.89
Net EUI[2]	7.67	6.81	0.86	11.21
West Facing				
Gross EUI[1]	21.78	21.3	0.48	2.2
Net EUI[2]	7.67	6.96	0.71	9.26

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.

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 1 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

GENERAL INFORMATION

01	Project Name	PRE APPROVED ADU		
02	Run Title	PRE-APPROVED ADU		
03	Project Location	6615 PASSONS BLVD.		
04	City	PICO RIVERA, CA	05	Standards Version 2022
06	Zip code	90660	07	Software Version CBECC-Res 2022.3.1
08	Climate Zone	9	09	Front Orientation (deg/ Cardinal) All orientations
10	Building Type	Single family	11	Number of Dwelling Units 1
12	Project Scope	Newly Constructed	13	Number of Bedrooms 2
14	Addition Cond. Floor Area (ft^2)	0	15	Number of Stories 1
16	Existing Cond. Floor Area (ft^2)	n/a	17	Fenestration Average U-factor 0.3
18	Total Cond. Floor Area (ft^2)	800	19	Glazing Percentage (%) 8.19%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area n/a
22	Fuel Type	All electric	23	No Dwelling Units No

COMPLIANCE RESULTS

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

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 10 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

WATER HEATERS - NEEA HEAT PUMP

01 Name	02 # of Units	03 Tank Vol. (gal)	04 NEEA Heat Pump Brand	05 NEEA Heat Pump Model	06 Tank Location	07 Duct Inlet Air Source	08 Duct Outlet Air Source
Water Heater 1	1	40	Rheem	Rheem HPLD40-T50	TankZone	Outside	Outside

WATER HEATING - HERS VERIFICATION

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

SPACE CONDITIONING SYSTEMS

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

HVAC - HEAT PUMPS

01 Name	02 System Type	03 Number of Units	04 Heating Efficiency Type	05 HSPF/IVS PF2/CCP	06 Cap 47	07 Cap 17	08 Cooling Efficiency Type	09 SEER/SEER2	10 EER/EER 2/CEER	11 Zonally Controlled	12 Compressor Type	13 HERS Verification
			Heating				Cooling					
Heat Pump System 1	Multi-split HP-ductless	1	HSPF2	8.1	13000	22000	EERSEER2	23	12.48	Not Zonal	Single Speed	Heat Pump System 1-hers-hpump

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 6 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

REQUIRED PV SYSTEMS

01 DC System Size (kWdc)	02 Exception	03 Module Type	04 Array Type	05 Power Electronics	06 CFI	07 Azimuth (deg)	08 Tilt Input	09 Array Angle (deg)	10 Tilt: (x in 12)	11 Inverter Eff. (%)	12 Annual Solar Access (%)
1.94	NA	Standard(14.17%)	Fixed	Microinverters	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.

- PV System: 1.94 kWdc
- PV power electronics: Microinverters
- Insulation below roof deck
- Window overhangs and/or fins
- Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand, model, or equivalent, must be installed

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry.

- Quality insulation installation (QII)
- Indoor air quality ventilation
- Kitchen range hood
- Verified Refrigerant Charge
- Verified heat pump rated heating capacity
- Pipe Insulation, All Lines

BUILDING - FEATURES INFORMATION

01 Project Name	02 Conditioned Floor Area (ft^2)	03 Number of Dwelling Units	04 Number of Bedrooms	05 Number of Zones	06 Number of Ventilation Cooling Systems	07 Number of Water Heating Systems
PRE APPROVED ADU	800	1	2	1	0	1

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 2 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

ENERGY DESIGN RATINGS

	Energy Design Ratings			Compliance Margins		
	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)
Standard Design	32.8	39.3	34.4			
Proposed Design						
North Facing	31.6	37.2	33	1.2	2.1	1.4
East Facing	31.5	37.9	33.4	1.3	1.4	1
South Facing	31.5	37.8	33.3	1.3	1.5	1.1
West Facing	31.9	39.1	34	0.9	0.2	0.4

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: 1.94 kWdc
- Proposed PV Capacity Scaling: North [1.94 kWdc] East [1.94 kWdc] South [1.94 kWdc] West [1.94 kWdc]

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 11 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

HVAC HEAT PUMPS - HERS VERIFICATION

01 Name	02 Verified Airflow	03 Airflow Target	04 Verified EER/EER2	05 Verified SEER/SEER2	06 Verified Refrigerant Charge	07 Verified HSPF/HSPF2	08 Verified Heating Cap 47	09 Verified Heating Cap 17
Heat Pump System 1-hers-hpump	Not Required	0	Not Required	Not Required	Yes	No	Yes	Yes

HVAC - DISTRIBUTION SYSTEMS

01 Name	02 Type	03 Design Type	04 Duct Ins. R-value Supply	05 Duct Ins. R-value Return	06 Duct Location Supply	07 Duct Location Return	08 Surface Area Supply	09 Surface Area Return	10 Bypass Duct	11 Duct Leakage	12 HERS Verification
Distribution System 1	No ducts	Non-Verified	R-0.0	R-0.0	n/a	n/a	n/a	n/a	No Bypass Duct	Sealed and Tested	Distribution System 1-hers-dist

HVAC - FAN SYSTEMS

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

HVAC FAN SYSTEMS - HERS VERIFICATION

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

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 7 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

ZONE INFORMATION

01 Zone Name	02 Zone Type	03 HVAC System Name	04 Zone Floor Area (ft^2)	05 Avg. Ceiling Height	06 Water Heating System 1	07 Status
ADU	Conditioned	HVAC System 1	800	8	DHW System 1	New

OPAQUE SURFACES

01 Name	02 Zone	03 Construction	04 Azimuth	05 Orientation	06 Gross Area (ft^2)	07 Window and Door Area (%2)	08 Tilt (deg)
FRONT WALL	ADU	Exterior Wall Construction Assembly	0	Front	248	56	90
REAR WALL	ADU	Exterior Wall Construction Assembly	180	Back	248	9	90
RIGHT SIDE WALL	ADU	Exterior Wall Construction Assembly	270	Right	224	0	90
LEFT SIDE WALL	ADU	Exterior Wall Construction Assembly	90	Left	224	20.5	90
Ceiling (below attic) 1	ADU	Ceiling Construction Assembly	n/a	n/a	800	n/a	n/a

ATTIC

01 Name	02 Construction	03 Type	04 Roof Rise (x in 12)	05 Roof Reflectance	06 Roof Emittance	07 Radiant Barrier	08 Cool Roof
Attic	Asphalt Shingle Roof	Vented	3	0.1	0.85	No	No

FENESTRATION / GLAZING

01 Name	02 Type	03 Surface	04 Orientation	05 Azimuth	06 Width (ft)	07 Height (ft)	08 Mult.	09 Area (ft^2)	10 U-factor	11 U-factor Source	12 SHGC	13 SHGC Source	14 Exterior Shading
Window 1	Window	FRONT WALL	Front	0	5	4	1	20	0.3	NFRC	0.23	NFRC	Bug Screen

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 3 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

ENERGY USE SUMMARY

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0.32	1.54	0.29	2.13	0.03	-0.59
Space Cooling	1.23	26.84	1.31	28.37	-0.08	-1.53
IAQ Ventilation	0.45	4.7	0.45	4.7	0	0
Water Heating	2.34	24.87	1.82	19.63	0.5	5.24
Self Utilization/Flexibility Credit			0	0	0	0
North Facing Efficiency Compliance Total	**4.34**	**57.95**	**3.89**	**54.83**	**0.45**	**3.12**
Space Heating	0.32	1.54	0.23	1.6	0.09	-0.06
Space Cooling	1.23	26.84	1.37	30.04	-0.14	-3.2
IAQ Ventilation	0.45	4.7	0.45	4.7	0	0
Water Heating	2.34	24.87	1.83	19.6	0.51	5.27
Self Utilization/Flexibility Credit			0	0	0	0
East Facing Efficiency Compliance Total	**4.34**	**57.95**	**3.88**	**55.94**	**0.46**	**2.01**

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 12 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

INDOOR AIR QUALITY (IAQ) FANS

01 Dwelling Unit	02 Airflow (CFM)	03 Fan Efficacy (W/CFM)	04 IAQ Fan Type	05 Includes Heat/Energy Recovery?	06 IAQ Recovery Effectiveness - SRE/ASRE	07 Includes Fault Indicator Display?	08 HERS Verification	09 Status
Sfam IAQVentRpt	46	0.35	Exhaust	No	n/a / n/a	No	Yes	

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 8 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

FENESTRATION / GLAZING

01 Name	02 Type	03 Surface	04 Orientation	05 Azimuth	06 Width (ft)	07 Height (ft)	08 Mult.	09 Area (ft^2)	10 U-factor	11 U-factor Source	12 SHGC	13 SHGC Source	14 Exterior Shading
Window 2	Window	FRONT WALL	Front	0	4	4	1	16	0.3	NFRC	0.23	NFRC	Bug Screen
Window 5	Window	REAR WALL	Back	180	3	3	1	9	0.3	NFRC	0.23	NFRC	Bug Screen
Window 3	Window	LEFT SIDE WALL	Left	90	4	4	1	16	0.3	NFRC	0.23	NFRC	Bug Screen
Window 4	Window	LEFT SIDE WALL	Left	90	3	1.5	1	4.5	0.3	NFRC	0.23	NFRC	Bug Screen

OPAQUE DOORS

01 Name	02 Side of Building	03 Area (ft^2)	04 U-factor
MAIN DOOR	FRONT WALL	20	0.2

OVERHANGS AND FINS

01 Window	02 Overhang Depth	03 Overhang Dist Up	04 Overhang Left Extent	05 Overhang Right Extent	06 Overhang Flap Ht.	07 Left Fin Depth	08 Left Fin Top Up	09 Left Fin Dist L	10 Left Fin Bot Up	11 Right Fin Depth	12 Right Fin Top Up	13 Right Fin Dist R	14 Right Fin Bot Up
Window 1	4	1.25	7.5	4.5	0	0	0	0	0	0	0	0	0

SLAB FLOORS

01 Name	02 Zone	03 Area (ft^2)	04 Perimeter (ft)	05 Edge Insul. R-value and Depth	06 Edge Insul. R-value and Depth	07 Carpeted Fraction	08 Heated
Slab On Grade 1	ADU	800	118	none	0	80%	No

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

CF1R-PRF-01-E (Page 4 of 13)

Project Name: PRE APPROVED ADU
Calculation Date/Time: 2025-01-01T10:58:41-08:00
Calculation Description: PRE-APPROVED ADU
Input File Name: PRE APPROVED ADU 12312024.ribd22

ENERGY USE SUMMARY

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0.32	1.54	0.22	1.56	0.1	-0.02
Space Cooling	1.23	26.84	1.35	29.92	-0.12	-3.08
IAQ Ventilation	0.45	4.7	0.45	4.7	0	0
Water Heating	2.34	24.87	1.81	19.59	0.51	5.28
Self Utilization/Flexibility Credit			0	0	0	0
South Facing Efficiency Compliance Total	**4.34**	**57.95**	**3.85**	**55.77**	**0.49**	**2.18**
Space Heating	0.32	1.54	0.31	2.29	0.01	-0.75
Space Cooling	1.23	26.84	1.41	31.05	-0.18	-4.21
IAQ Ventilation	0.45	4.7	0.45	4.7	0	0
Water Heating	2.34	24.87	1.84	19.63	0.5	5.24
Self Utilization/Flexibility Credit			0	0	0	0
West Facing Efficiency Compliance Total	**4.34**	**57.95**	**4.01**	**57.67**	**0.33**	**0.28**

Registration Number: — Registration Date/Time: — HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220901 — Report Generated: 2025-01-01 10:59:26

PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC
DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -
THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

BY USING THESE PERMIT READY CONSTRUCTION DOCUMENTS, THE RECIPIENT, OWNERS AGREE TO RELEASE, HOLD HARMLESS, AND INDEMNIFY THE CITY OF PICO RIVERA, ITS ELECTED OFFICIALS AND EMPLOYEES AND THE ARCHITECT/ENGINEER WHO PREPARED THE CONSTRUCTION DOCUMENTS FROM ANY AND ALL CLAIMS, LIABILITIES, SUITS, AND DEMANDS ON ACCOUNT OF ANY INJURY, DAMAGE, OR LOSS TO PERSONS OR PROPERTY, INCLUDING INJURY OR DEATH, OR ECONOMIC LOSSES, ARISING OUT OF THE USE OF THESE CONSTRUCTION DOCUMENTS.
THE USE OF THESE PERMIT READY CONSTRUCTION DOCUMENT DOES NOT ELIMINATE OR REDUCE THE OWNER'S OR CONTRACTOR'S RESPONSIBILITY TO VERIFY ANY AND ALL INFORMATION RELEVANT TO THE RECIPIENT'S WORK AND RESPONSIBILITY ON THIS PROJECT.

SHEET DESCRIPTION

SAMPLE
ENERGY REPORT

SHEET NO.

T24-2

CITY OF PICO RIVERA- PRE-APPROVED ADU, DATE: 1/1/2025

ABBREVIATIONS

@	AT
A.F.F.	ABOVE FINISH FLOOR
A.P.	ACCESS PANEL
ACC	ACCESSIBLE
A.T.	ACOUSTIC TILE
ADJ.	ADJUSTABLE
A/C	AIR CONDITIONING
ALUM.	ALUMINUM
A.B.	ANCHOR BOLT
ARCH.	ARCHITECT(URAL)
A.D.	AREA DRAIN
A.C.P.	ASBESTOS CEMENT PIPE
A.C.	ASPHALTIC CONCRETE
ADO.	AUTOMATIC DOOR OPERATOR
BM.	BEAM
B.M.	BENCH MARK
BLK.	BLOCK
BLKG.	BLOCKING
BD.	BOARD
BOTT.	BOTTOM
BDRY.	BOUNDARY
BLDG.	BUILDING
CAB.	CABINET
C.I.	CAST IRON
C.I.P.	CAST IRON PIPE
C.B.	CATCH BASIN
CLKG.	CAULKING
CLG.	CEILING
CEM.	CEMENT
CTR.	CENTER
C.L.	CENTER LINE
C.T.	CERAMIC TILE
C.BD.	CHALK BOARD
C.O.	CLEAN OUT
CLR.	CLEAR
CLOS.	CLOSET
COL.	COLUMN
CONC.	CONCRETE
C.P.	CONCRETE PIPE
CONST.	CONSTRUCTION
C.J.T.	CONSTRUCTION JOINT
CONT.	CONTINUE/CONTINUOUS
CONTR.	CONTRACTOR
C.J.	CONTROL JOINT
CORR.	CORRIDOR
CTSK.	COUNTERSUNK
C.Y.	CUBIC YARD
CUST.	CUSTODIAN
D.	DEEP
DET., DTL.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DISP.	DISPENSER
DR.	DOOR
D.F.	DRINKING FOUNTAIN
DN.	DOWN
D.S.	DOWNSPOUT
DWG.	DRAWING
EA.	EACH
E.W.	EACH WAY
ELEC.	ELECTRIC(AL)
E.P.	ELECTRIC PANEL
EL.	ELEVATION
ELEV.	ELEVATOR
EQ.	EQUAL
EQUIP.	EQUIPMENT
EXIST.	EXISTING
(E)	EXISTING
E.G.	EXISTING GRADE
E.J.	EXPANSION JOINT
EXT.	EXTERIOR
F.O.B.	FACE OF BLOCK
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.M.	FACE OF MASONRY
F.G.	FIXED GLASS
GALV.	GALVANIZED
G.I.	GALVANIZED IRON
G.S.	GALVANIZED STEEL
G.L.	GAS LINE
GA.	GAUGE
GL.	GLASS
GLU. LAM.	GLUE LAMINATED
GR.	GRADE
G.B.	GRADE BEAM
G.F.C.I.	GROUND FAULT CIRCUIT INTERRUPTER
GYP. BD.	GYPSUM BOARD
H.S.	HAND SINK
HNGR.	HANGER
HDWR.	HARDWARE
HDR.	HEADER
HTR.	HEATER
HT.	HEIGHT
H.	HIGH
H.P.	HIGH POINT
H.S.	HIGH STRENGTH
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
H.B.	HOSE BIB
H.W.	HOT WATER
IN.. "	INCH (ES)
INFO.	INFORMATION
I.D.	INSIDE DIAMETER
INSL.	INSULATE (ED) (TION)
INT.	INTERIOR
INV.	INVERT
I.P.S.	IRON PIPE SIZE
JAN.	JANITOR
JST.	JOIST
KIT.	KITCHEN
LAB.	LABORATORY
LAM. PLAS.	LAMINATED PLASTIC
LS.	LANDSCAPE (ING)
LAV.	LAVATORY
LT. WT.	LIGHTWEIGHT
L.P.	LOW POINT
M.B.	MACHINE BOLT
M.H.	MAN HOLE
MFR.	MANUFACTURE (URER)
MAS.	MASONRY
M.O.	MASONRY OPENING
MAT'L.	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
M.	MEN
MET., MTL.	METAL
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.P.	MOISTURE PROOF
N.G.	NATURAL GRADE
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
OBS.	OBSCURE
O.C.	ON CENTER
OPNG.	OPENING
O.H.	OPPOSITE HAND
O.D.	OUTSIDE DIAMETER
O.F.F.	OUTSIDE FACE OF FRAME
O.H.S.	OVAL HEAD SCREW
O.H.S.M.S.	OVAL HEAD SHEET MTL SCREW
O.D.	OVERFLOW DRAIN
PNT.(D)	PAINT (ED)
PR.	PAIR
PNL.	PANEL
P.H.	PANIC HARDWARE
Q.T.	QUARRY TILE
RAD.	RADIUS
REC.	RECESSED
RWD.	REDWOOD
REFG.	REFRIGERATOR
REINF.	REINFORCEMENT
R.C.	REINFORCED CONCRETE
REQ'D	REQUIRED
R.	RISER, RADIUS
RD.	ROAD
R.D.	ROOF DRAIN
R.R.	ROOF RAFTER
RM.	ROOM
R.O.	ROUGH OPENING
R.H.S.	ROUND HEAD SCREW
SCHED.	SCHEDULE
S.C.	SOLID CORE
SECT.	SECTION
S.S.	SELECT STRUCTURAL
S.SK.	SERVICE SINK
S.STL.,	STAINLESS STEEL
SHTG.	SHEATHING
SHT. MTL	SHEET METAL
S.M.S.	SHEET METAL SCREW
SHT. V.,	SHEET VINYL
SHWR.	SHOWER
S.O.V.	SHUT-OFF VALVE
SIM.	SIMILAR
S.	SINK
SPCG.	SPACING
SPEC.	SPECIFICATION(S)
S.B.	SPLASH BLOCK
SQ.	SQUARE
STD.	STANDARD
STL.	STEEL
STOR.	STORAGE
S.D.	STORM DRAIN
STRUCT.	STRUCTURAL
S.T.	STRUCTURAL TUBING
SUSP.	SUSPENDED
SW.	SWITCH
SYMM.	SYMMETRICAL
T.B.	TACKBOARD
TEL.	TELEPHONE
TEL. BD.	TELEPHONE BOARD
THK.	THICK
THRES.	THRESHOLD
THRU.	THROUGH
TLT.	TOILET
T & G	TONGUE & GROOVE
T.C.	TOP OF CURB
T.G.	TOP OF GRATE
T.O.P.	TOP OF PLATE
T.P.	TOP OF PARAPET
T.S.	TUBE STEEL
T.ST.	TOP OF STEEL
T.W.	TOP OF WALL
T.	TREAD
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
U.	URINAL
V. JT.	V-JOINT
VERT.	VERTICAL
V.G.	VERTICAL GRAIN
V.B.	VINYL BASE
V.C.T.	VINYL COMPOSITION TILE
V.F.	VINYL FABRIC
V.I.F.	VERIFY IN FIELD
V.W.C.	VINYL WALL COVERING
V.C.P.	VITRIFIED CLAY PIPE
WSCT.	WAINSCOT
W.C.	WATER CLOSET
W/	WITH

FLOOR PLAN NOTES

WATER HEATER (REFER TO BUILDING ENERGY ANALYSIS REPORT):

1. ALL DOMESTIC HOT WATER PIPING SHALL BE INSULATED. (2022 CPC 609.12.1)
   1.1. PIPES UP TO 2 INCHES IN DIAMETER: INSULATION WALL THICKNESS NOT LESS THAN DIAMETER OF PIPE. (2022 CPC 609.12.2)
   1.2. PIPES GREATER THAN 2 INCHES IN DIAMETER: INSULATION WALL THICKNESS NOT LESS THAN 2 INCHES. (2022 CPC 609.12.2)

   EXCEPTIONS:
   - PIPING THAT PENETRATES FRAMING MEMBERS SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION FOR THE DISTANCE OF THE FRAMING PENETRATION. (2022 CPC 609.12.2)
   - HOT WATER PIPING BETWEEN THE FIXTURE CONTROL VALVE OR SUPPLY STOP AND THE FIXTURE OR APPLIANCE SHALL NOT BE REQUIRED TO BE INSULATED. (2022 CPC 609.12.2)
2. PROVIDE A TEMPERATURE AND PRESSURE RELIEF VALVE WITH A FULL SIZE DRAIN OF GALVANIZED STEEL OR HARD DRAWN COPPER TO THE OUTSIDE OF THE BUILDING WITH THE END OF THE PIPE PROTRUDING 6" MINIMUM @ 2' MAX. ABOVE GRADE POINTING DOWNWARD TO THE TERMINATION - UNTHREADED.
3. COMBUSTION AIR PER MANUFACTURE REQUIREMENTS.
4. CLEARANCES PER MANUFACTURE REQUIREMENTS.

INSULATION FOR PIPING AND TANKS (2022 CEC 105.0(j)):

1. WATER PIPING, SOLAR WATER-HEATING SYSTEM PIPING, AND SPACE CONDITIONING SYSTEM LINE INSULATION THICKNESS AND CONDUCTIVITY. PIPING SHALL BE INSULATED AS FOLLOWS:
   1.1. DOMESTIC HOT WATER PIPING, SEE NOTES ABOVE.
   1.2. PIPING FOR SPACE-CONDITIONING SYSTEMS, SOLAR WATER-HEATER SYSTEM COLLECTOR LOOP, SEE 2022 CEC SECTION 120.3(c).

   EXCEPTION:
   - PIPING SURROUNDED WITH A MINIMUM OF 1 INCH OF WALL INSULATION. 2 INCHES OF CRAWLSPACE INSULATION, OR 4 INCHES OF ATTIC INSULATION SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION.

INSULATION PROTECTION

1. PIPE INSULATION SHALL BE PROTECTED FROM DAMAGE DUE TO SUNLIGHT, MOISTURE, EQUIPMENT MAINTENANCE AND WIND. PROTECTION SHALL, AT MINIMUM, INCLUDE THE FOLLOWING (2022 CEC SECTION 120.3(B)):
   1.1. PIPE INSULATION EXPOSED TO WEATHER SHALL BE PROTECTED BY A COVER SUITABLE FOR OUTDOOR SERVICE. THE COVER SHALL BE WATER RETARDANT AND PROVIDES SHIELDING FROM SOLAR RADIATION THAT CAN CAUSE DEGRADATION OF THE MATERIAL. ADHESIVE TAPE SHALL NOT BE USED TO PROVIDE THIS PROTECTION.
   1.2. PIPE INSULATION COVERING CHILLED WATER PIPING AND REFRIGERANT SUCTION PIPING LOCATED OUTSIDE THE CONDITIONED SPACE SHALL INCLUDE, OR BE PROTECTED BY, A CLASS I OR CLASS II VAPOR RETARDER. ALL PENETRATIONS AND JOINTS SHALL BE SEALED.
   1.3. PIPE INSULATION BURIED BELOW GRADE MUST BE INSTALLED IN A WATER PROOF AND NON-CRUSHABLE CASING OR SLEEVE.

WEATHER BARRIERS

A. NOT FEWER THAN ONE-LAYER WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR HEATHING OF ALL EXTERIOR WALLS CONTINUOUS FROM TOP OF WALS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES WITH FLASHING. MINIMUM NO. 15 FELT COMPLYING WITH ASTM D226, TYPE 1.

B. PROVIDE (2) LAYERS OF GRADE D PAPER OR EQUAL WHEN PLASTER IS INSTALLED OVER WOOD BASED SHEATHING. (2022 CRC R703.7.3)

GENERAL NOTES

1. THE CONSTRUCTION SHALL NOT RESTRICT A FIVE-FOOT CLEAR AND UNOBSTRUCTED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES, PULL-BOXES, TRANSFORMERS, VAULTS, PUMPS, VALVES, METERS, APPURTENANCES, ETC.) OR TO THE LOCATION OF THE HOOK-UP. THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER LINES-WHETHER OR NOT THE LINES ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/OR ADDITIONAL EXPENSES.
2. AN APPROVED SEISMIC GAS SHUT OFF VALVE OR EXCESS FLOW SHUT OFF VALVE WILL BE INSTALLED ON THE FUEL LINE ON THE DOWN-STREAM SIDE OF THE UTILITY METER AND BE RIGIDLY CONNECTED TO THE EXTERIOR OF THE BUILDING OR STRUCTURE CONTAINING THE FUEL GAS PIPING. (PER ORDINANCE 170, 158, AND 180, 670) (INCLUDES COMMERCIAL ADDITIONS AND TI WORK OVER $10,000.) SEPARATE PLUMBING PERMIT IS REQUIRED.
3. PROVIDE ULTRA-FLUSH WATER CLOSETS FOR ALL NEW CONSTRUCTION. EXISTING SHOWER HEADS AND TOILETS MUST BE ADAPTED FOR LOW WATER CONSUMPTION.
4. PROVIDE (72) INCH HIGH NON ABSORBENT WALL ADJACENT TO SHOWER AND APPROVED SHATTER RESISTANT MATERIALS FOR SHOWER ENCLOSURE. (1210.2.3, 2406.4.5, R307.2, R308.4)
5. WATER HEATER MUST BE STRAPPED TO WALL. (SEC. 507.3 & LAPC)
6. CARBON MONOXIDE ALARM IS REQUIRED PER (SEC. 420.6, R315)
7. PLUMBING FIXTURES ARE REQUIRED TO BE CONNECTED TO A SANITARY SEWER OR TO AN APPROVED SEWAGE DISPOSAL SYSTEM. (R306.3)
8. KITCHEN SINKS, LAVATORIES, BATHTUBS, SHOWERS, BIDETS, LAUNDRY TUBS AND WASHING MACHINE OUTLETS SHALL BE PROVIDED WITH HOT AND COLD WATER AND CONNECTED TO AN APPROVED WATER SUPPLY. (R306.4)
9. WALL COVERINGS IN SHOWERS AND TUBS WITH SHOWERHEADS SHALL BE CEMENT PLASTER, TILE, OR EQUAL TO 6-FEET (72") ABOVE DRAIN. ENCLOSURES MUST BE OF APPROVED SAFETY GLAZING AND DOORS (22"MIN, WIDTH) MUST SWING OUT OF SHOWERS. WINDOWS IN ENCLOSURE WALLS SHALL BE LABELED SAFETY GLAZING WHEN LESS THAN 60" ABOVE THE DRAIN. (R307.2)
10. SMOKE DETECTORS SHALL BE PROVIDED FOR ALL DWELLING UNITS INTENDED FOR HUMAN OCCUPANCY, WHERE A PERMIT IS REQUIRED FOR ALTERATIONS, REPAIRS, OR ADDITIONS. (R314.2)
11. WHERE A PERMIT IS REQUIRED FOR ALTERATIONS, REPAIRS OR ADDITIONS, EXISTING DWELLINGS OR SLEEPING UNITS THAT HAVE ATTACHED GARAGES OR FUEL-BURNING APPLIANCES SHALL BE PROVIDED WITH A CARBON MONOXIDE ALARM IN ACCORDANCE WITH SECTION R315.2. CARBON MONOXIDE ALARMS SHALL ONLY BE REQUIRED IN THE SPECIFIC DWELLING UNIT OR SLEEPING UNIT FOR WHICH THE PERMIT WAS OBTAINED. (R325.2)
12. EVERY SPACE INTENDED FOR HUMAN OCCUPANCY SHALL BE PROVIDED WITH NATURAL LIGHT BY MEANS OF EXTERIOR GLAZED OPENINGS IN ACCORDANCE WITH SEC. R303.1 OR SHALL BE PROVIDED WITH ARTIFICIAL LIGHT THAT IS ADEQUATE TO PROVIDE AN AVERAGE ILLUMINATION OF 6 FOOT-CANDLES OVER THE AREA OF THE ROOM AT A HEIGHT OF 30 INCHES ABOVE THE FLOOR LEVEL (R303.1)
13. A COPY OF THE EVALUATION REPORT AND/OR CONDITIONS OF LISTING SHALL BE MADE AVAILABLE AT THE JOBSITE.
14. THE PANEL OR SUB-PANEL SHALL PROVIDE CAPACITY TO INSTALL A 40-AMPERE MINIMUM DEDICATED BRANCH CIRCUIT AND SPACE(S) RESERVED TO PERMIT INSTALLATION OF A BRANCH CIRCUIT OVER-CURRENT PROTECTIVE DEVICE.
15. THE SERVICE PANEL OR SUB-PANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVER-CURRENT PROTECTIVE DEVICE S PACE(S) RESERVED FOR FUTURE EV CHARGING AS EV CAPABLE. THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENT AND VISIBLY MARKED EV CAPABLE.

ELECTRICAL NOTES

1. THE MAIN ELECTRICAL SERVICE PANEL, AND SUB-PANEL FOR THE ADU SHALL BE OF SUFFICIENT CAPACITY TO CARRY THE ELECTRICAL LOAD OF EACH STRUCTURE PER LOAD CALCULATION REQUIREMENTS OF ARTICLE 220 OF THE CALIFORNIA ELECTRICAL CODE. IF INADEQUATE FOR EXISTING AND NEW LOADS, ELECTRICAL PANELS MAY HAVE TO BE INCREASED IN CAPACITY. CONTACT BUILDING & SAFETY, AND SOUTHERN CALIFORNIA EDISON
2. PROVIDE A MINIMUM OF 100 AMPERE ELECTRICAL SERVICE PANEL WITH 1/2" Ø x 20' LONG REBAR FOR BACKUP UFER GROUND BONDED TO COLD WATER PIPE. CONTACT EDISON FOR METER LOCATION AND UNDERGROUND SERVICE IF REQUIRED.
3. RECEPTACLE OUTLETS SHALL BE SPACED @ 12' O.C. MAX. AND SHALL BE LOCATED WITHIN 6' OF DOOR OPENINGS. ALSO, EVERY 2' OR WIDER OF WALLS. OUTLETS ALSO REQUIRED FOR COUNTER TOPS @ 4' O.C. AND WITHIN 2' OF ENDS OR BREAKS OR COUNTERS, NEC.
8. ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE PHASE, 15 AND 20 AMPERE OUTLETS INSTALLED IN DWELLING UNITS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER(S). REQUIREMENT IS FOR THE ENTIRE CIRCUIT, NOT JUST THE OUTLETS. REQUIREMENT APPLIES TO ALL NEW OUTLETS, NOT JUST BEDROOMS.
9. OUTDOOR LIGHTING ATTACHED TO THE BUILDING SHALL BE HIGH EFFICACY OR MUST BE CONTROLLED BY A MOTION SENSOR WITH INTEGRAL PHOTO CONTROL.
10. BATHROOM RECEPTACLES SHALL BE SERVED BY DEDICATED 20 AMP, CIRCUITS.
11. OCCUPANCY SENSORS MUST HAVE NO MANUAL OVERRIDE. 30 MINUTE MAXIMUM TIMER AND BE MICROWAVE/ULTRASONIC OR PASSIVE INFRA-RED TYPE.
12. KITCHENS, ALL LUMINARIES IN KITCHENS SHALL BE HIGH EFFICACY
13. LIGHTING IN BATHROOMS, GARAGES, LAUNDRY RM, AND UTILITY RM. SHALL EITHER BE HIGH EFFICACY OR SHALL BE CONTROLLED BY VACANCY SENSOR.
14. OTHER ROOMS, ALL LUMINARIES SHALL BE HIGH EFFICACY.
15. OUTDOOR LIGHTING ALL LUMINARIES MOUNTED TO THE BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL BE HIGH EFFICACY LUMINARIES OR SHALL BE CONTROLLED BY A PHOTO-CONTROL/MOTION SENSOR COMBINATION.
16. SURFACE MOUNTED LIGHTING FIXTURES IN CLOSETS MUST BE 18" FROM STORAGE AREA(S). FLUSH MOUNTED MUST BE 6" AWAY.
17. PROVIDE GROUND CIRCUIT INTERRUPTER (GFI) PROTECTION AT OUTLETS INSTALLED IN BATHROOMS, KITCHEN COUNTERTOPS, LAUNDRY AREAS, EXTERIOR, AND ANY OUTLET WITHIN 6-FT FROM A SINK.
18. NEW ELECTRICAL SERVICE PANELS, SUB-PANEL SHALL BE PROVIDED WITH A SERVICE GROUNDING ELECTRODE AND WATER PIPE BONDING CONDUCTORS. 100 AMP - NO. 8 COPPER, 200 AMPS - NO. 4 COPPER, 300 AMPS - NO. 2 COPPER, 400 AMPS - 0 COPPER. [CEC 250].
19. PROVIDE A UFER OR OTHER APPROVED GROUND PER CEC 250.
20. ALL SERVICES SUPPLYING THE DWELLING UNITS SHALL BE PROVIDED WITH A SURGE-PROTECTIVE DEVICE. SPECIFY TYPE 1 OR TYPE 2 SPD. [CEC 230.67]

PLUMBING NOTES

1. SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEAD SHALL BE FINISHED WITH A NONABSORBENT SURFACE TO A HEIGHT NOT LESS THAN 6 FT, ABOVE THE FLOOR.
2. ACCOMMODATE 30" Ø WITH MIN. FLOOR AREA OF 1024 SQ. IN.
3. SHOWER DOOR MIN. 22" UNOBSTRUCTED OPENING SWINGING OUTWARDS.
4. PROVIDE A MIN. OF 3" Ø SEWER/DRAIN LINE W/ 2% MIN. SLOPE.
5. CONTROL VALVES FOR SHOWER AND TUB-SHOWER SHALL BE OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE TYPE.
6. INSTALL LOW CONSUMPTION WATER FOR PLUMBING FIXTURES:

KITCHEN FAUCETS:	1.8 GPM AT 60 PSI.
LAVATORY FAUCETS:	1.2 GPM AT 60 PSI.
WATER CLOSETS:	1.28 GAL. PER PLUSH.
SHOWERHEADS:	1.8 GPM AT 80 PSI.

7. ACCESS PANEL (12"x12") REQUIRED FOR TUB TRAP SLIP-JOINT OR USE NON-SLIP (WELDED) JOINT.
8. ONLY APPROVED METALLIC WATER LINE CONNECTORS FROM SHUTOFFS TO PLUMBING FIXTURE TO BE USED. RUBBER AND PLASTICS ARE NOT PERMITTED.

CLOTHES DRYER VENT NOTES

1. CLOTHES DYER LOCATED IN AN AREA THAT IS HABITABLE OR CONTAINING OTHER FUEL BURNING APPLIANCES SHALL BE EXHAUSTED TO THE OUTSIDE (NOT BENEATH BUILDING OR IN ATTIC AREA).
2. DRYER EXHAUST DUCT SHALL BE MINIMUM 4" DIAMETER AND EQUIPPED WITH A BACK-DRAFT DAMPER.
3. CLOTHES DRYER MOISTURE EXHAUST DUCT IS LIMITED TO 14' WITH TWO ELBOWS FROM THE CLOTHES DRYER TO THE POINT OF TERMINATION. REDUCE THIS LENGTH BY 2' FOR EACH ELBOW IN EXCESS OF 2.
4. PROVIDE MINIMUM OF 100 SQUARE INCHES OF MAKE-UP AIR OPENING AS REQUIRED BY CMC w/ A 14"x10" OPENING w/ GRILL ABOVE THE DOOR LEADING TOT HE HALL, OR LOCATION AS PER BUILDER.

EMERGENCY EGRESS

1. EVERY SLEEPING ROOM SHALL HAVE AN EMERGENCY EGRESS WINDOW OR DOOR. ESCAPE OR RESCUE WINDOW SHALL HAVE A MINIMUM NET CLEAR WIDTH OF 20-INCHES AND MINIMUM NET CLEAR HEIGHT OF 24-INCHES (TOTAL OPENABLE AREA OF NOT LESS THAN 5.7 SQ.F.T.). WHEN WINDOWS ARE PROVIDED AS MEANS OF ESCAPE OR RESCUE THEY SHALL HAVE A FINISHED SILL HEIGHT NOT MORE THAN 44" ABOVE THE FLOOR.

SLIDING GLASS DOORS & WINDOWS

1. SAFETY GLAZING (TEMPERED GLAZING) IS REQUIRED FOR THE FOLLOWING:
   1.1. FIXED AND OPERABLE PANELS OF SWINGING, SLIDING, AND BI-FOLD DOOR ASSEMBLIES.
   1.2. GLAZING AN INDIVIDUAL FIXED OF OPERABLE PANEL WITHIN 24-IN ARC OF EITHER VERTICAL EDGE OF A DOOR AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR OF WALKING SURFACE.
   1.3. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL THE FOLLOWING CONDITIONS:
      1.3.1. EXPOSED AREA OF AN INDIVIDUAL PANEL GREATER THAN 9 S.F.
      1.3.2. BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR.
      1.3.3. TOP EDGE GREATER THAN 36 INCHES ABOVE THE FLOOR.
      1.3.4. ONE OR MORE WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY OF THE GLAZING
   1.4. ALL GLASS ENCLOSURES AT BATHTUB AND SHOWER
2. SLIDING GLASS DOORS OPENING ONTO PATIOS OR BALCONIES WHICH ARE LESS THAN ONE STORY ABOVE GRADE OR ARE OTHERWISE ACCESSIBLE FROM THE OUTSIDE SHALL BE SECURED AS FOLLOWS:
   2.1. ALL SLIDING GLASS DOORS SHALL HAVE A HOOK-BOLT DEADLOCK WHICH IS NO LESS THAN 1/8" IN THICKNESS, AND WHICH HAS A MINIMUM THROW OF 1/2"
   2.2. HE HOOKBOLT DEADLOCK AND THE STRIKE SHALL BE MADE FROM HARDENED STEEL.
3. ALL SLIDING WINDOWS SHALL HAVE SAFETY LOCKS.

AGEING-IN-PLACE & FALL PREVENTION REQ. (R327)

1. AT LEAST ONE BATHROOM ON THE ENTRY LEVEL SHALL BE PROVIDED WITH THE FOLLOWING REINFORCEMENT FOR GRAB BARS. (WHEN 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 SECTIONS.)
   1.1. REINFORCEMENT SHALL BE SOLID LUMBER.
   1.2. REINFORCEMENT SHALL BE NOT LESS THAN 2x8 NOMINAL LUMBER.
   1.3. REINFORCEMENT SHALL BE LOCATED BETWEEN 32 INCHES AND 39 ½ INCHES ABOVE THE FINISHED FLOOR FLUSH WITH THE WALL FRAMING.
   1.4. WATER CLOSET REINFORCEMENT SHALL BE INSTALLED ON BOTH SIDE WALLS OF THE FIXTURE, OR ONE SIDE WALL AND THE BACK WALL.
   1.5. SHOWER REINFORCEMENT SHALL BE CONTINUOUS WHERE WALL FRAMING IS PROVIDED.
   1.6. BATHTUB AND COMBINATION BATHTUB/SHOWER REINFORCEMENT SHALL BE CONTINUOUS ON EACH END OF THE BATHTUB AND THE BACK WALL. ADDITIONALLY, BACK WALL REINFORCEMENT FOR A LOWER GRAB BAR SHALL BE PROVIDED WITHIN THE BOTTOM EDGE LOCATED NOT MORE THAN 6 INCHES ABOVE THE BATHTUB RIM.
2. ELECTRICAL RECEPTACLES OUTLETS, SWITCHES AND CONTROLS (INCLUDING CONTROLS FOR HEATING VENTILATION AND AIR CONDITIONING) INTENDED TO BE USED BY THE OCCUPANTS SHALL BE LOCATED NOT MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15 INCHES MEASURED FORM THE BOTTOM OF THE OUTLET BOX ABOVE THE FINISH FLOOR.
3. DOORBELL BUTTONS OR CONTROLS, WHEN INSTALLED, SHALL NOT EXCEED 48 INCHES ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL ASSEMBLY.
4. 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.

ENERGY STORAGE SYSTEM (ESS) READY INFRASTRUCTURE MUST BE INSTALLED (CEnC 150.0):

1. AT LEAST ONE SHALL BE PROVIDED:
   1.1. ESS READY INTERCONNECTION EQUIPMENT WITH MINIMUM BACKED UP CAPACITY OF 60 AMP AND 4 ESS SUPPLIED BRANCH CIRCUITS.
   1.2. DEDICATED RACEWAY FROM MAIN SERVICE TO SUB-PANEL THAT SUPPLIES BRANCH CIRCUITS.
2. IDENTIFY AT LEAST 4 BRANCH CIRCUITS FOR EMERGENCY USE (SUPPLY REFRIGERATOR, LIGHTING NEAR FRONT DOOR, ONE OUTLET IN BEDROOM).
3. SPACE FOR FUTURE SYSTEM ISOLATION EQUIPMENT OR TRANSFER SWITCH WITHIN 3 FEET OF MAIN PANEL AS WELL AS RACEWAYS INSTALLED BETWEEN PANEL AND SYSTEM ISOLATION EQUIPMENT OR TRANSFER SWITCH LOCATION TO ALLOW THE CONNECTION OF BACKUP POWER SOURCE.
4. MAIN PANELBOARD SHALL HAVE A MINIMUM BUSBAR RATING OF 225 AMPS.

ELECTRIC READY MANDATORY REQUIREMENTS (INFRASTRUCTURE MUST BE INSTALLED): (CEnC 150.0):

1. IF GAS OR PROPANE WATER HEATING SYSTEM, PROVIDE DESIGNATED SPACE FOR FUTURE HEAT PUMP WATER HEATER AT LEAST 2.5 FEET BY 2.5 FEET AND 7 FEET TALL.
   1.1. IF WITHIN 3 FEET OF WATER HEATER PROVIDE A 125 V, 20 A CIRCUIT WITH 120/240V CONDUCTOR. RESERVE AND LABEL SINGLE POLE BREAKER IN MAIN PANEL. PROVIDE CONDENSATE DRAIN.
   1.2. IF MORE THAN 3 FEET FROM WATER HEATER PROVIDE 240V, 30A CIRCUIT WITH TERMINATION 3 FEET FROM DESIGNATED SPACE. RESERVE AND LABEL DOUBLE POLE BREAKER IN MAIN PANEL. PROVIDE WATER LINES, BOTH HOT AND COLD, ROUTED THROUGH DESIGNATED SPACE BEFORE REACHING GAS OR PROPONE WATER HEATER. PROVIDE A CONDENSATE LINE.
2. IF GAS OR PROPANE SPACE HEATING SYSTEM, PROVIDE A 240V, 30A CIRCUIT WITH TERMINATION 3 FEET FROM FURNACE. RESERVE AND LABEL DOUBLE POLE BREAKER IN MAIN PANEL.
3. IF GAS OR PROPANE STOVE, PROVIDE 240V, 50A CIRCUIT WITH TERMINATION 3 FEET FROM COOKTOP RESERVE AND LABEL POLE BREAKER IN MAIN PANEL.
4. IF GAS OR PROPANE CLOTHES DRYER, PROVIDE 240V, 30A CIRCUIT WITH TERMINATION 3 FEET FROM CLOTHES DRYER LOCATION. RESERVE AND LABEL DOUBLE POLE BREAKER IN MAIN PANEL.

SMOKE ALARM NOTE

1. PROVIDE HARD WIRE SMOKE ALARM WITH BATTERY BACKUP IN EACH SLEEPING AREA AND IN POINT CENTRALLY LOCATED IN THE CORRIDOR OR AREA GIVING ACCESS TO EACH SEPARATE SLEEPING AREA AND IN EACH STORY WITHIN A DWELLING UNIT. EACH DWELLING UNIT SMOKE ALARM SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. CFC SECTION 907.2.10.3.
2. SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN A 3-FOOT HORIZONTAL DISTANCE FROM THE OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM REQUIRED BE OTHER SECTIONS OF THE CODE. [R314.3]
3. SMOKE ALARMS OR SMOKE DETECTORS SHALL BE INSTALLED A MINIMUM OF 20-FEET HORIZONTAL DISTANCE FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. [R314.3]

CARBON MONOXIDE NOTE

1. PROVIDE HARD WIRED CARBON MONOXIDE ALARMS WITH BATTERY BACK-UP AND COMPLYING WITH UL 2075, THEY ARE REQUIRED OUTSIDE OF EACH SLEEPING AREA IN THE IMMEDIATE VICINITY OF BEDROOMS; AND ON EACH LEVEL OF A DWELLING UNIT, INCLUDING BASEMENT WHERE THERE IS AN ATTACHED GARAGE OR FUEL BURNING APPLIANCE. [R315]

ENERGY CODE LIGHTING STANDARDS

1. KITCHEN: ALL INSTALLED WATTAGE OF LUMINARIES IN KITCHENS SHALL BE HIGH EFFICACY.
2. BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS: ALL LUMINARIES SHALL BE HIGH EFFICACY AND SHALL BE CONTROLLED BY A VACANCY SENSOR.
3. OTHER ROOMS: ALL LUMINARIES SHALL BE HIGH EFFICACY AND SHALL BE CONTROLLED BY A VACANCY SENSOR OR DIMMER. CLOSETS THAT ARE LESS THAN 70 S.F. ARE EXEMPT FROM THIS REQUIREMENT.
4. OUTDOOR LIGHTING: ALL LUMINARIES MOUNTED TO THE BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL BE HIGH EFFICACY LUMINARIES OR SHALL BE CONTROLLED BY A PHOTO-CONTROL / MOTION SENSOR COMBINATION (WITH OVERRIDE).
5. HERS RATER VERIFICATION IS REQUIRED FOR THIS PROJECT. SEE CR-1R FOR FEATURES REQUIRING HERS VERIFICATION.
6. SEE THE RESIDENTIAL MANDATORY MEASUREMENTS FOR MORE REQUIREMENTS, SHEET T24-1.

PICO RIVERA

CITY OF PICO RIVERA
COMMUNITY & ECONOMIC
DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -

THE PLANS ARE PRE-APPROV

ELECTRICAL LOAD CALCULATION

PANEL:	ADU		
QTY.	EQUIPMENT	VA PER UNIT	VA
800	GENERAL LIGHTHING & RECEPTACLES	3	2,400
2	SMALL APPLIANCE	1500	3,000
1	REFRIGERATOR	1500	1,500
1	DISHWASHER	900	900
1	DISPOSAL	600	600
1	MICROWAVE	1500	1,500
1	RANGE/OVEN	9600	9,600
1	DRYER	4500	4,500
1	LAUNDRY	1500	1,500
1	WATER HEATER	4500	4,500
		SUB-TOTAL:	30,000
	DEMAND CALCULATION		
	FIRST 10,000 VA @ 100%		10,000
		REMAINDER	20,000
	REMAINDER @ 40%		8,000
	HVAC EQUIPMENT		
1	COND/HEAT PUMP TO 4 TON.	5500	5,500
2	EXHAUST FANS	60	120
		TOTAL VA	**23,620**
	(TOTAL VA/240)	TOTAL AMPS:	**98.42**

ADU - SIZING CHART

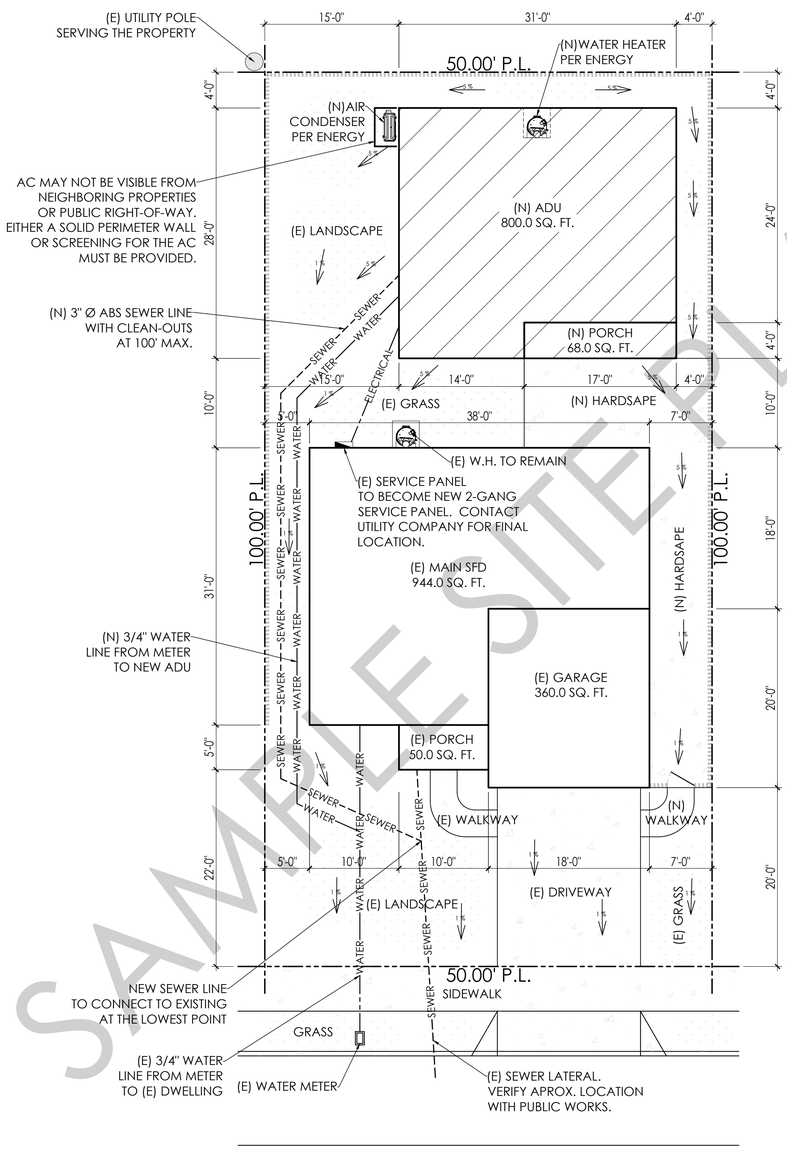
TABLE 702.1 - DRAINAGE FIXTURE UNITS VALUES (DFU)

FIXTURE	MIN. SIZE TRAP & TRAP ARM (IN.)	DFU (EA.)	QTY.	TOTAL DFU
BATH/SHOWER	1 1/2	2	1	2
WASHER	2	3	1	3
DISHWASHER	1 1/2	2	1	2
LAVATORY	1 1/4	1	1	1
LAVATORY IN SE	1 1/2	2	0	0
KITCHEN	1 1/2	2	1	2
LAUNDRY SINK	1 1/2	2	0	0
W.C. (1.6 GPF)	3	3	1	3
		TOTAL DFU:		13
3" MAIN SANITARY DRAINAGE				

ADU - SIZING CHART

TABLE 610.3 - WATER SUPPLY FIXTURE UNITS (WSFU)

FIXTURE	MIN. BRANCH PIPE SIZE (IN.)	WSFU (EA)	QTY.	TOTAL WSFU
BATH/SHOWER	1/2	4	1	4
WASHER	1/2	4	1	4
DISHWASHER	1/2	1.5	1	1.5
HOSE BIDD	1/2	2.5	1	2.5
LAVATORY	1/2	1	1	1
KITCHEN	1/2	1.5	1	1.5
LAUNDRY SINK	1/2	1.5	0	0
W.C. (1.6 GPF)	1/2	2.5	1	2.5
		TOTAL WSFU:		17
SERVICE SIZE:	3/4"	METER SIZE:		3/4"
	OVER 60 PSI @	150'		
	PER 2022 CPC (TABLE 610.4)			



A SAMPLE SITE PLAN

Scale: 1/8"=1'-0"

LOT COVERAGE CALCULATION

1. (E) MAIN SFD	944.0 SQ.FT.
2. (E) GARAGE	360.0 SQ.FT.
3. (E) PORCH	50.0 SQ.FT.
4. (N) PORCH	68.0 SQ.FT.
5. (N) ADU	800.0 SQ.FT.
TOTAL EXISTING LIVING SPACE	944.0 SQ.FT.
TOTAL EXISTING NON-LIVING SPACE	410.0 SQ.FT.
TOTAL NEW LIVING SPACE	1,744.0 SQ.FT.
TOTAL NEW NON-LIVING SPACE	478.0 SQ.FT.
FOOT PRINT AREA	2,222.0 SQ.FT.
LOT AREA:	5,000.0 SQ.FT.
LOT COVERAGE	44.4 %

SURVEY NOTE:

THIS SITE PLAN IS PREPARED USING AS-BUILT INFORMATION AND FIELD OBSERVATION. THIS DRAWING IS INTENDED TO PROVIDE INFORMATION REGARDING ARCHITECTURAL ELEMENTS OF THE BUILDING ONLY.

PER CITY POLICY A PROPERTY LINE SURVEY IS REQUIRED FOR NEW CONSTRUCTION AND ANY AUXILIARY BUILDINGS OR ADDITIONS WHERE SETBACK IS LESS THAN 5'-0" TO THE PROPERTY LINE.

LEGEND

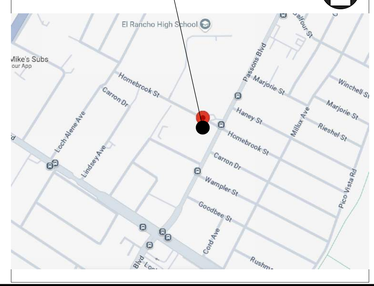
- SITE SLOPED DRAINAGE. 5% SLOPED AWAY FROM STRUCTURE. 1% SLOPED AT SITE.
- NEW PROPOSE CONSTRUCTION
- PROPERTY LINE
- STRUCTURES/ROOF LINE
- CONCRETE EDGE LINE
- CONCRETE SLAB. I.E. DRIVEWAY, WALKWAY, SIDEWALK.
- LANDSCAPE /GRASS
- ELECTRICAL SERVICE PANEL
- WATER HEATER
- (E) CONCRETE BLOCK WALL. 6' HIGH
- --SEWER--- 3" Ø ABS SEWER LINE
- —WATER— 3/4" Ø COPPER-TYPE L WATER LINE

SITE PLAN NOTES

1. THE SANITARY DRAINAGE FOR A DETACHED OR ATTACHED ACCESSORY DWELLING UNIT IS NOT REQUIRED TO HAVE A SEPARATE-INDEPENDENT CONNECTION TO THE PUBLIC SEWER IN THE PUBLIC STREET. THE SANITARY DRAINAGE FOR AN ADU IS ALLOWED TO CONNECT TO THE EXISTING SEWER LATERAL OF THE MAIN DWELLING WHERE THIS METHOD OF CONNECTION IS A STANDARD FOR ADU SANITARY DRAINAGE. THE DRAIN LINE FOR THE ADU SHOULD BE INSTALLED WITHIN THE PROPERTY'S COURT, YARD, OR DRIVEWAY - OR, WHERE COMPLIANT, UNDER THE RAISED FLOOR OF THE EXISTING DWELLING.
   1.1. 5 OR MORE TOILETS REQUIRED 4" SEWER LINE. (TABLE 703.2 NOTE #4 CPC)
2. PV SYSTEM REQUIRED, UNDER SEPARATE PERMIT. SEE ENERGY ANALYSIS FOR MINIMUM PV SYSTEM SIZE.
3. ADDRESS IDENTIFICATION. NEW AND EXISTING BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. THESE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND. ADDRESS NUMBERS SHALL BE ARABIC NUMBERS OR ALPHABETICAL LETTERS. NUMBERS SHALL BE A MIN. OF 4" HIGH WITH A MIN. STROKE OF 0.5" FOR SINGLE FAMILY RESIDENTIAL STRUCTURES. WHERE ACCESS IS BY MEANS OF A PRIVATE ROAD AND THE BUILDING CANNOT BE VIEWED FROM A PUBLIC WAY, A MONUMENT, POLE OR OTHER ACCEPTABLE SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE.
4. PROVISIONS FOR CONTRIBUTORY DRAINAGE SHALL BE MADE AT ALL TIMES.
5. ONSITE RUNOFF SHALL BE CARRIED TO THE STREET OR STORM DRAIN FACILITIES. ALL THE EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST CONTINUE TO FUNCTION AT ALL TIMES; ESPECIALLY DURING STORM CONDITIONS. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING THE PROJECT. IN ANY CASE, THE CONTRACTOR AND OWNERS SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO CONSTRUCTION.
6. DO NOT DRAIN OR DIRECT SITE DRAINAGE TO ADJACENT PROPERTIES.

VICINITY MAP

PROJECT LOCATION



PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -

THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

SHEET DESCRIPTION

SAMPLE SITE PLAN

SHEET NO.

A-1.0

ELECTRICAL LOAD CALCULATION

PANEL:	ADU		
QTY.	EQUIPMENT	VA PER UNIT	VA
800	GENERAL LIGHTHING & RECEPTACLES	3	2,400
2	SMALL APPLIANCE	1500	3,000
1	REFRIGERATOR	1500	1,500
1	DISHWASHER	900	900
1	DISPOSAL	600	600
1	MICROWAVE	1500	1,500
1	RANGE/OVEN	9600	9,600
1	DRYER	4500	4,500
1	LAUNDRY	1500	1,500
1	WATER HEATER	4500	4,500
		SUB-TOTAL:	30,000
	DEMAND CALCULATION		
	FIRST 10,000 VA @ 100%		10,000
		REMAINDER	20,000
	REMAINDER @ 40%		8,000
	HVAC EQUIPMENT		
1	COND/HEAT PUMP TO 4 TON.	5500	5,500
2	EXHAUST FANS	60	120
		TOTAL VA	**23,620**
		(TOTAL VA/240) TOTAL AMPS:	**98.42**

ADU - SIZING CHART

TABLE 702.1 - DRAINAGE FIXTURE UNITS VALUES (DFU)

FIXTURE	MIN. SIZE TRAP & TRAP ARM (IN.)	DFU (EA.)	QTY.	TOTAL DFU
BATH/SHOWER	1 1/2	2	1	2
WASHER	2	3	1	3
DISHWASHER	1 1/2	2	1	2
LAVATORY	1 1/4	1	1	1
LAVATORY IN SET	1 1/2	2	0	0
KITCHEN	1 1/2	2	1	2
LAUNDRY SINK	1 1/2	2	0	0
W.C. (1.6 GPF)	3	3	1	3
			TOTAL DFU:	13
3" MAIN SANITARY DRAINAGE				

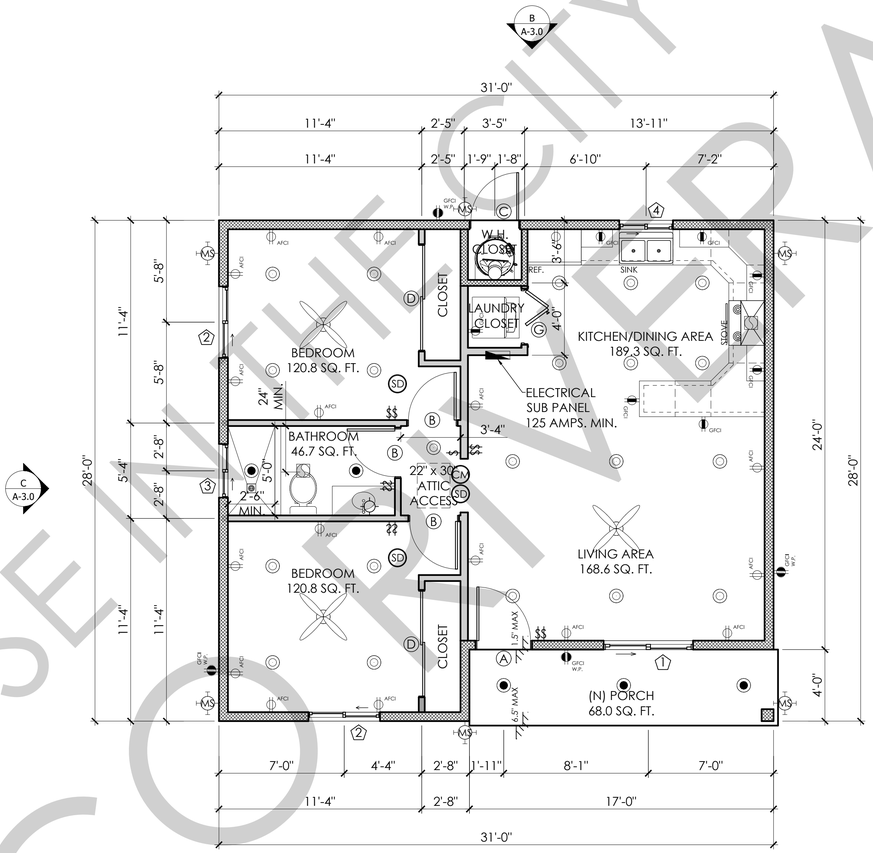
ADU - SIZING CHART

TABLE 610.3 - WATER SUPPLY FIXTURE UNITS (WSFU)

FIXTURE	MIN. BRANCH PIPE SIZE (IN.)	WSFU (EA)	QTY.	TOTAL WSFU
BATH/SHOWER	1/2	4	1	4
WASHER	1/2	4	1	4
DISHWASHER	1/2	1.5	1	1.5
HOSE BIDD	1/2	2.5	1	2.5
LAVATORY	1/2	1	1	1
KITCHEN	1/2	1.5	1	1.5
LAUNDRY SINK	1/2	1.5	0	0
W.C. (1.6 GPF)	1/2	2.5	1	2.5
			TOTAL WSFU:	17
SERVICE SIZE:	3/4"		METER SIZE:	3/4"
	OVER 60 PSI @	150'		
	PER 2022 CPC (TABLE 610.4)			

WINDOW SCHEDULE				
	SIZE & TYPE	GLAZING AREA (S.F.)	LOCATION (ROOM)	TEMPERED GLAZING
1	5'-0" X 4'-0" SL	20.0	LIVING	NO
2	4'-0" X 4'-0" SL	16.0	BEDROOM	NO
3	3'-0" X 1'-6" SL	4.5	BATHROOM	YES
4	3'-0" X 3'-0" SL	9.0	KITCHEN/ DINING	NO

DOOR SCHEDULE					
	SIZE	MATERIAL	LOCATION	NOTE
A	36" X 80"	SOLID CORE	ENTRY	TEMPERED
B	36" X 80"	HOLLOW CORE	INTERIOR	SINGLE PANEL
C	36" X 80"	SOLID CORE	EXTERIOR	VENTED
D	72" X 80"	HOLLOW CORE	CLOSET	SLIDING
E	30" X 80"	HOLLOW CORE	LAUNDRY	LOUVER



A FLOOR PLAN

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

WALL LEGEND

- 2X6 1-HR FIRE RATED STUD WALL PER DETAIL 1/A-4.0 U.N.O. (SEE REGISTER ENERGY CALCULATIONS BY OTHERS)
- 2X4 INTERIOR WALL

ELECTRICAL LEGEND

- RECESS LIGHT FIXTURE (I.C. RATED), HIGH EFFICIENCY LIGHTING OR BE CONTROLLED BY DIMMER SWITCHES
- LIGHT FIXTURE, HIGH EFFICIENCY LIGHTING OR BE CONTROLLED BY MANUAL ON OCCUPANT SENSOR OR DIMMER SWITCHES
- MS — OUTDOOR LIGHTING ATTACHED TO THE BUILDING CONTROLLED BY A MOTION SENSOR WITH INTEGRAL PHOTO CONTROL.
- DUPLEX CONVENIENCE OUTLET +15" TO 48" UNLESS NOTED
- GFCI — DUPLEX CONVENIENCE GFI OUTLET +15" TO 48" UNLESS NOTED
- HUMIDITY CONTROLLED EXHAUST FAN 50 CFM MIN. ENERGY STAR COMPLIANT & TO BE DUCTED TO TERMINATE TO THE OUTSIDE OF BUILDING. MAX SOUND 3 SONES
- $ — SINGLE POLE TOGGLE SWITCH +4' UNLESS NOTED
- $3 — SINGLE POLE TOGGLE 2 WAY SWITCH +4' UNLESS NOTED
- SD — 120 V. HARD WIRED SMOKE DET. W/ BATT. BACK UP BATT. OPERATED SMOKE DET. AT EXIST'G SLEEPING AREA IS OK. SMOKE DETECTOR SHALL SOUND AN ALARM AUDIBLE IN ALL SLEEPING AREAS
- CM — 120 V. HARD WIRED CARBON MONOXIDE DET. W/ BATT. BACK UP BATT. OPERATED CARBON MONOXIDE DET. AT EXIST'G AREA IS OK. CARBON MONOXIDE DETECTR SHALL BE INTERCONNECTED SUCH THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS
- W.P. — WEATHER-PROOF
- ELECTRICAL SERVICE PANEL
- INDOOR AIR QUALITY (IAQ) FAN - 50 CFM MIN. U.N.O.
- KITCHEN EXHAUST FAN: **THIS FAN IS TO BE USED FOR LOCAL VENTILATION EXHAUST. MINIMUM 130 CFM (OVER ELECTRIC RANGE) FAN TESTED AT A STATIC PRESSURE OF .25 WC AND RATED @ 3 SONES OR LESS REQUIRED TO BE INSTALLED. FAN MUST BE ATTACHED TO A MINIMUM 5" SMOOTH DUCT AND NO LONGER THAN 85'. SUBTRACT 15' OF ALLOWED LENGTH FOR EACH ELBOW**
- CEILING FAN (OPTIONAL)

FLOOR PLAN NOTES

1. ALL EXTERIOR WALLS TO BE 2X6 STUDS @ 16" O.C. U.N.O. SEE ENERGY CALCULATIONS.
2. POSTS AT PORCH MUST BE 5'-0" MIN. FROM ALL PROPERTY LINES.

GENERAL NOTES

1. THE PURPOSE OF THESE DRAWINGS IS TO SHOW CONSTRUCTION MATERIALS/ASSEMBLIES. FOR SPECIFIC SIZES AND DETAILS REFER TO ARCHITECTURAL PLANS, ELEVATIONS, DETAILS, AND STRUCTURAL PLANS.
2. WALL ASSEMBLIES TO BE PER FLOOR PLAN.
3. DOORS AND WINDOWS TO BE PER APPLICABLE SCHEDULE. REFER TO FLOOR PLANS FOR IDENTIFICATION.
4. INSULATION: REFER TO TITLE 24 REPORT AND KEYNOTES ON SHEET FOR ADDITIONAL RATINGS, REQUIREMENTS, AND INFORMATION.
5. FIRE-BLOCKING TO BE LOCATED AT THE FOLLOWING LOCATIONS PER 2022 CRC *SECTION R302.11*:
   - *A. SECTION R302.11* -
   - A.A. FIRE-BLOCKING SHALL BE PROVIDED IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS:
     - A.A.A. VERTICALLY AT CEILING AND FLOOR LEVELS
     - A.A.B. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET.
   - A.B. AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS SOFFITS, DROP CEILINGS AND COVE CEILINGS.
   - A.C. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN. ENCLOSED SPACES UNDER STAIRS SHALL COMPLY WITH *SECTION R302.7*.
   - A.D. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILINGS AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME PRODUCTS OF COMBUSTION. THE MATERIAL FILLING THIS ANNULAR SPACE SHALL NOT BE REQUIRED TO MEET THE ASTM E136 REQUIREMENTS.
   - A.E. FOR THE FIRE-BLOCKING OF CHIMNEYS AND FIREPLACES, SEE SECTION *R1003.19*.
   - A.F. FIRE-BLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING-UNIT SEPARATION.
   - *B. SECTION R302.11.1* - FIRE-BLOCKING MATERIALS SHALL CONSIST OF FOLLOWING MATERIALS:
     - B.A. TWO-INCH NOMINAL LUMBER
     - B.B. TWO THICKNESS OF ONE-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS
     - B.C. THE THICKNESS OF 0.719-INCH WOOD STRUCTURAL PANELS WITH JOINTS BACKED BY 0.719-INCH WOOD STRUCTURAL PANELS
     - B.D. THE THICKNESS OF 0.75-INCH PARTICLE BOARD WITH JOINTS BACKED BY 0.75-INCH PARTICLE BOARD
     - B.E. ONE-HALF-INCH GYPSUM BOARD
     - B.F. ONE-FOURTH-INCH CEMENT-BASED MILLBOARD
     - B.G. BATTS OR BLANKETS OF MINERAL WOOL, MINERAL FIBER OR OTHER APPROVED MATERIAL INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE
     - B.H. CELLULOSE INSULATION INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E119 OR UL 263, FOR THE SPECIFIC APPLICATION.
6. PER 2022 CRC SECTION R317 SLEEPERS AND SILLS ON A CONCRETE OR MASONRY SLAB THAT IS IN DIRECT CONTACT WITH GROUND, UNLESS SEPARATED BY AN IMPERVIOUS MOISTURE BARRIER SHALL BE NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD.
7. RECESS LIGHTING FIXTURES SHALL BE RATED AS AIR-TIGHT (AT) AND, WHEN INSTALLED IN AN INSULATED CEILING SHALL HAVE AN APPROVED ZERO CLEARANCE INSULATION COVER (IC). (CENC SECTION 150).
8. ALL INSTALLED LUMINARIES SHALL BE HIGH EFFICIENCY FIXTURES (CENC 150.0(K)1.A).
9. OUTDOOR LIGHTING MUST BE HIGH EFFICACY LIKE INDOOR LIGHTING. MUST INCLUDE MANUAL ON/OFF SWITCH AND ONE OF THE FOLLOWING:
   - A. PHOTOCONTROL AND MOTION SENSOR.
   - B. PHOTOCONTROL AND AUTOMATIC TIME SWITCH CONTROL.
   - C. ASTRONOMICAL TIME SWITCH CONTROL.
   - D. ENERGY MANAGEMENT CONTROL SYSTEM.
4. CALIFORNIA GREEN BUILDING STANDARDS CODE REQUIRES REPLACEMENT OF ALL EXISTING NON-COMPLIANCE PLUMBING FIXTURES. (GBSC 301.1)(GBSC 301.3.1).
5. SHOWERS SHALL HAVE A MINIMUM INTERIOR AREA OF 1024 SQUARE INCHES AND ENCOMPASS A 30" DIAMETER CIRCLE. DOOR(S) MUST BE OF TEMPERED GRALL AND SWING OUTWARD WITH A MINIMUM OPENING OF 22". (CPC 408.5, 408.6)
6. CONTROL VALVES AND SHOWERHEADS SHALL BE LOCATED THAT THE SHOWER DOES NOT DISCHARGE DIRECTLY AT THE ENTRANCE TO THE BATH TUB COMPARTMENT ALLOWING FOR TEMPERATURE ADJUSTMENT WITHOUT STEPPING INTO THE SHOWER SPRAY. (CPC 408.9).
7. SHOWERS AND TUB SHOWER COMBINATIONS SHALL HAVE VALVES THAT ARE PRESSURE BALANCING AND THERMOSTATIC. (CPC 408.3).
8. ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE PHASE, 15 AND 20 AMPERE OUTLETS INSTALLED IN DWELLING UNITS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER(S). REQUIREMENT IS FOR THE ENTIRE CIRCUIT, NOT JUST THE OUTLETS. REQUIREMENT APPLIES TO ALL NEW OUTLETS, NOT JUST BEDROOMS.
9. TAMPER RESISTANT OUTLETS PER CEC 406.11
10. BATHROOM OUTLET(S) SHALL BE ON A DEDICATED 20 AMP. CIRCUIT.
11. 2-20 AMP. MIN. KITCHEN CIRCUITS.
12. 20 AMP. MIN. DEDICATED CIRCUIT FOR LAUNDRY.

PICO RIVERA

CITY OF PICO RIVERA
COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU

PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -

THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

SHEET DESCRIPTION

FLOOR PLAN & ROOF PLAN

SHEET NO.

A-2.0

ATTIC VENTILATION

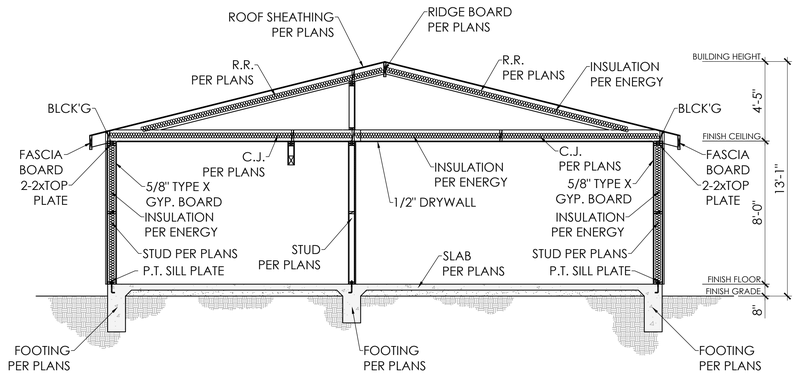
1. THE MINIMUM NET FREE VENTILATING AREA SHALL BE 1/150 OF THE AREA OF THE VENTED SPACE.
2. WHERE EAVE OR CORNICE VENTS ARE INSTALLED, INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR. A MINIMUM OF A 1-INCH SPACE SHALL BE PROVIDED BETWEEN THE INSULATION AND THE ROOF SHEATHING AND THE LOCATION OF THE VENT.
3. INSTALL VENTS SO AS TO PROVIDE PROPER CROSS VENTILATION.
4. VENTS SHALL BE COVERED WITH CORROSION-RESISTANT METAL MESH WITH MESH OPENINGS OF ¼". USE MESH OPENING OF 1/8" AT FIRE RATED WALLS.

VENTILATION CALCS:

SQUARE FOOTAGE = 868 S.F.
868 S.F. X 1/150 = 5.78 S.F. (833.3 SQ.IN.) - REQUIRED

-O'HAGIN STANDARD - LOW PROFILE VENT
NET FREE AIR SPACE: 72 SQ.IN.
(4) x 72 SQ.IN. = 288 SQ.IN.
-GIBRALTAR UNDER EAVE VENT - 16"x4"
NET FREE AIR SPACE: 28 SQ.IN.
(10) x 28 = 280 SQ.IN.
-GIBRALTAR RECTANGULAR LOUVERS VENT - 14"X18"
NET FREE AIR SPACE: 110 SQ.IN.
(2) X 110 = 440 SQ.IN.

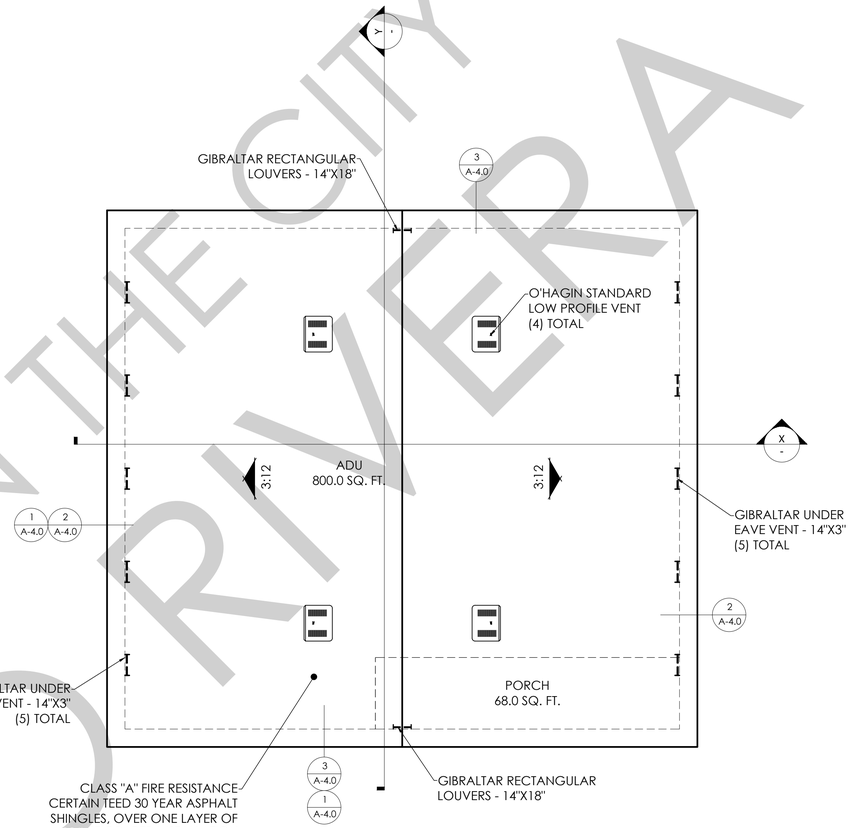
TOTAL VENTILATION PROVIDED: 1,008 SQ.IN.



- FIRE WALL ASSEMBLIES SHALL EXTEND TO AND BE TIGHT AGAINST EXTERIOR WALLS, EXTEND FROM THE FOUNDATION TO THE UNDERSIDE OF THE ROOF SHEATHING. (R302.3)

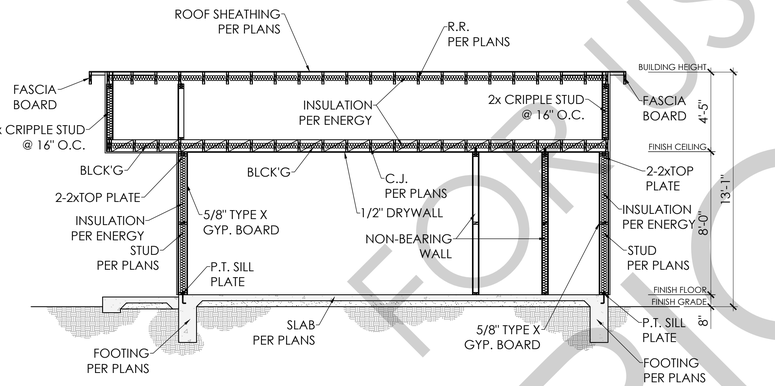
X SECTION X-X

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



A ROOF PLAN

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



- FIRE WALL ASSEMBLIES SHALL EXTEND TO AND BE TIGHT AGAINST EXTERIOR WALLS, EXTEND FROM THE FOUNDATION TO THE UNDERSIDE OF THE ROOF SHEATHING. (R302.3)

Y SECTION Y-Y

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

PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC
DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU

PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -

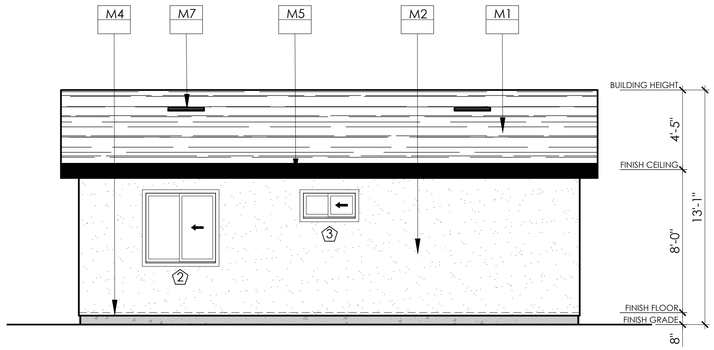
THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

SHEET DESCRIPTION

ROOF PLAN
& CROSS SECTIONS

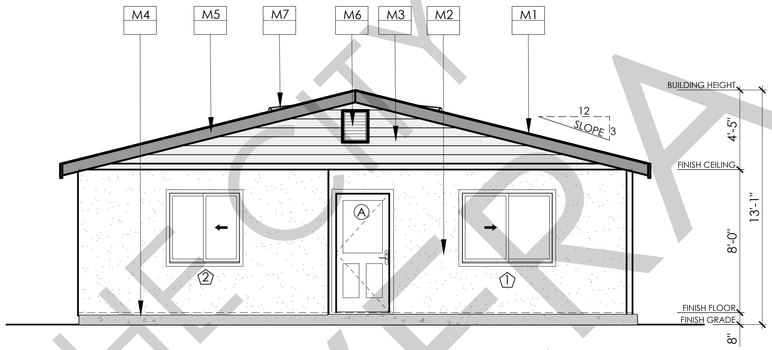
SHEET NO.

A-2.1



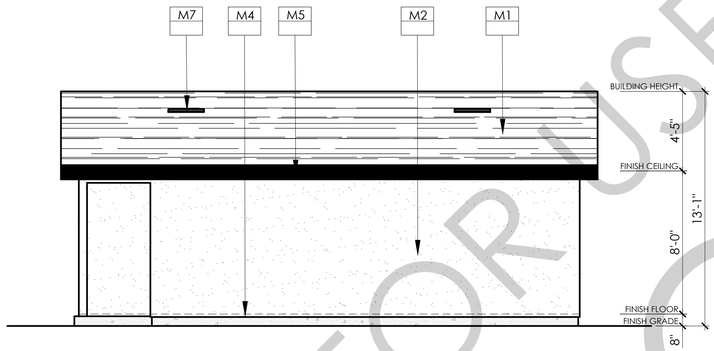
C RIGHT SIDE ELEVATION

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



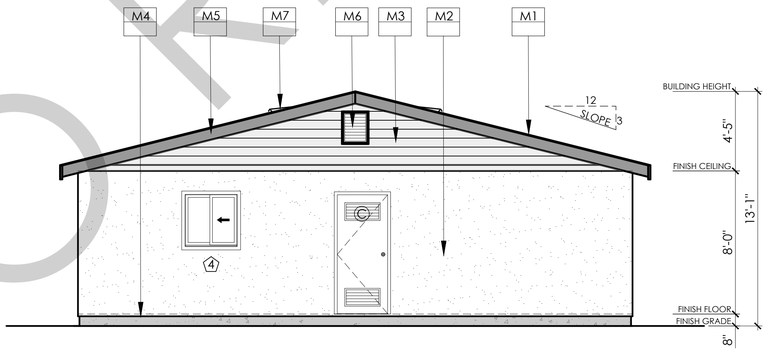
A FRONT ELEVATION

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



D LEFT SIDE ELEVATION

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



B REAR SIDE ELEVATION

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

FINISH MATERIAL

M1	CLASS A FIRE RESISTANCE CERTAIN TEED 30 YEAR ASPHALT SHINGLES, OVER ONE LAYER OF 30# FELT PAPER INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS (ICC# ESR-1389) NO SECONDS ALLOWED
M2	(N) $\frac{7}{8}$" STUCCO OVER 15# FELT PAPER TO MATCH EXISTING. LA HABRA ICC-ESR:2564
M3	HARDIEPLANK SIDING OVER 15# FELT PAPER ICC- ESR#2290 (HORIZONTAL)
M4	WEEP SCREED 4" ABOVE THE EARTH OR 2" ABOVE PAVED AREA
M5	2'x 6" FASCIA BOARDS, WITH 1'-0" MAX. OVERHANG AT EAVE.
M6	GIBRALTAR RECTANGULAR LOUVERS - 14"X18"
M7	O'HAGIN STANDARD LOW PROFILE VENT

ELEVATION GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET A-0.1 FOR ADDITIONAL REQUIREMENTS
2. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.
3. FRAMING ELEVATIONS, INCLUDING FLOOR PLATES AND FLOOR LEVEL ELEVATIONS ARE MEASURED FROM BUILDING FINISH FLOOR, U.N.O.
4. REFER TO ROOF PLAN FOR ROOF PITCH, OVERHANGS, AND APPROXIMATE DOWNSPOUT LOCATIONS, U.N.O. FASCIA PER DETAILS. PROVIDE ALUMINUM GUTTER.
5. REFER TO DOOR AND WINDOW SCHEDULES FOR TYPE AND ADDITIONAL INFORMATION.
6. PAINT GRILLES AND LOUVERS TO MATCH ADJACENT FINISH WHERE OCCURS.
7. THE ADU BUILDING COLORS AND MATERIALS SHALL BE THE SAME OR SIMILAR TO THE PRINCIPAL RESIDENCE. CONTRACTOR TO VERIFY COLOR SCHEME WITH OWNER BEFORE PERFORMING THE WORK.

PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC
DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

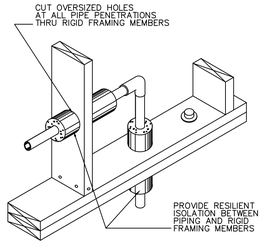
- FOR USE IN THE CITY OF PICO RIVERA ONLY -
THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

SHEET DESCRIPTION

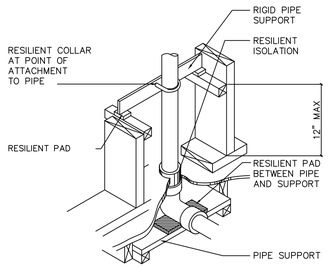
ELEVATIONS

SHEET NO.

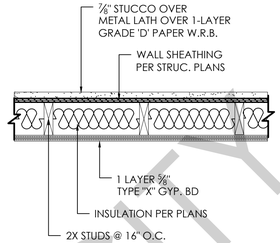
A-3.0



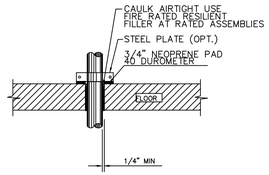
RESILIENT ISOLAT. AT PENETRAT. 8
NTS



RIGID PIPE SUPPORT 4
NTS

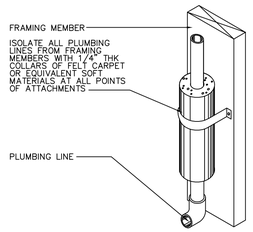


- FIRE PERFORMANCE TEST NO. UL DES U327 (1 HR. FIRE RATING)
- ACCOUSTICAL PERFORMANCE TEST NO. BBN-760903 (STC 50)
- FIRE WALL ASSEMBLIES SHALL EXTEND TO AND BE TIGHT AGAINST EXTERIOR WALLS, EXTEND FROM THE FOUNDATION TO THE UNDERSIDE OF THE ROOF SHEATHING. (R302.3)

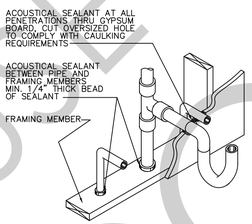


NOTE:
IF PIPE IS SUSPENDED OR DIRECTLY ATTACHED TO STRUCTURE OR OTHER BUILDING ELEMENTS, USE 1/2" THICK 40 DUROMETER NEOPRENE AS SLEEVE BETWEEN PIPE AND PIPE COLLAR

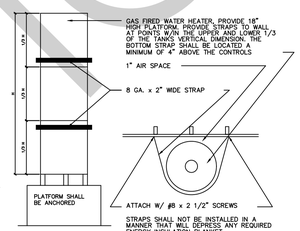
PIPE ISOL. FOR WASTE/SUPPLY 9
NTS



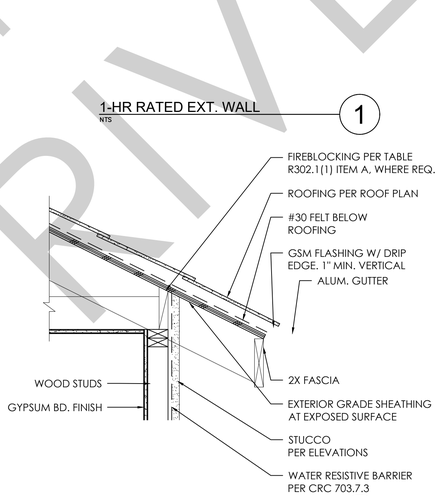
PLUMBING ISOLATION 5
NTS



ACOUSTICAL SEAL. AT PENETRAT. 6
NTS

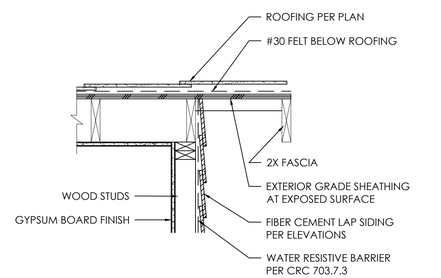


WATER HEATER STRAP 7
NTS

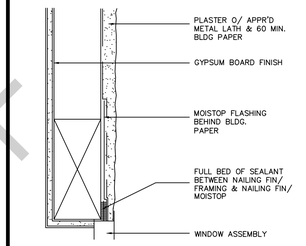


EAVE DETAIL 2
NTS

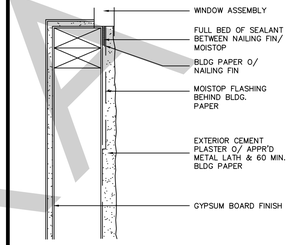
1-HR RATED EXT. WALL 1
NTS



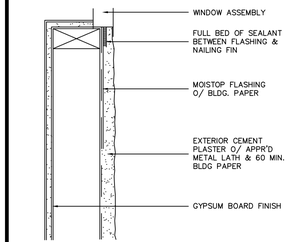
RAKE DETAIL 3
NTS



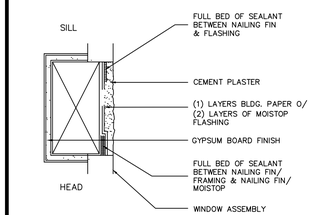
WINDOW HEAD DETAIL



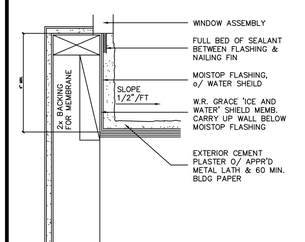
WINDOW JAMB DETAIL



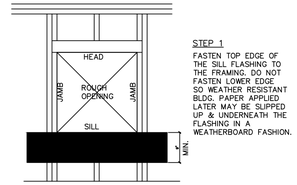
WINDOW SILL DETAIL



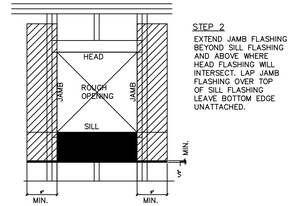
HORIZONTAL MULLION DETAIL



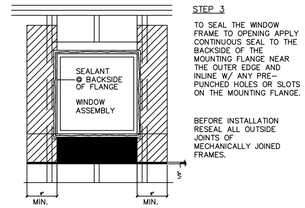
WINDOW SILL DETAIL



STEP 1
FASTEN TOP EDGE OF THE SILL FLASHING TO THE FRAMING. DO NOT FASTEN LOWER EDGE SO WEATHER RESISTANT BLDG. PAPER APPLIED LATER MAY BE SLIPPED UP & UNDERNEATH THE FLASHING IN A WEATHERBOARD FASHION.

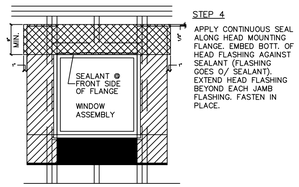


STEP 2
EXTEND JAMB FLASHING BEYOND SILL FLASHING AND ABOVE WHERE HEAD FLASHING WILL INTERSECT. LAP JAMB FLASHING OVER TOP OF SILL FLASHING LEAVE BOTTOM EDGE UNATTACHED.

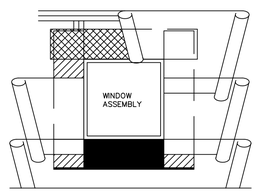


STEP 3
TO SEAL THE WINDOW FRAME TO OPENING APPLY CONTINUOUS SEAL TO THE BACKSIDE OF THE MOUNTING FLANGE NEAR THE OUTER EDGE AND INLINE W/ ANY PRE–PUNCHED HOLES OR SLOTS ON THE MOUNTING FLANGE.

BEFORE INSTALLATION RESEAL ALL OUTSIDE JOINTS OF MECHANICALLY JOINED FRAMES.



STEP 4
APPLY CONTINUOUS SEAL ALONG HEAD MOUNTING FLANGE. EMBED BOTT. OF HEAD FLASHING AGAINST SEALANT (FLASHING GOES O/ SEALANT). EXTEND HEAD FLASHING BEYOND EACH JAMB FLASHING. FASTEN IN PLACE.



SLIP BOTTOM OF JAMB FLASHING & SILL FLASHING O/ BUILDING PAPER AT BOTTOM OF WINDOW SILL.

INSTALL ALL EXTERIOR WALL COVERINGS PER CBC SEC 1402.

INSTALL BUILDING PAPER, INSULATION BD OR OTHER MATERIALS O/ HEAD FLASHING & O/ TOP OF NAIL–ON HEAD FLANGE OF WINDOW.

NOTES

1. STANDARD FLASHING APPLICATION FOR OPENINGS WITH A MOUNTING FLANGE SHOWN, TO INCLUDE BUT NOT LIMITED TO WINDOWS, DOORS, VENTS, ETC.
2. THE ABOVE IS A RECOMENDATION BY THE AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (SEE AAMA 2004–02, METHOD 'B' FOR ADDITIONAL INFORMATION).
3. MANUFACTURERS INSTALLATION PROCEEDURES & SPECIFICATIONS GOVERN. IF MANUFACTURERS INSTALLATION PROCEDURES AND SPECIFICATIONS DIFFER FROM THE ABOVE, NOTIFY ARCHITECT AND BUILDER IMMEDIATELY.
4. USE 'MOISTOP' FLASHING BY FORTIFIBER CORP. OR EQUAL FOR FLASHING MATERIAL.
5. USE WINDOWS THAT ARE WATERTIGHT.
6. LINE WIRE, WHEN USED AS BACKING TO SUPPORT WATER–RESISTANT BLDG. PAPER OR FELT BENEATH LATH FOR STUCCO SHOULD BE INSTALLED ACCORDING TO INDUSTRY STANDARDS AND PRACTICE. NO ATTACHEMENT DEVICE NOR WIRE BACKING SHOULD COVER OR PENETRATE FLASHING MATERIAL PERIPHERAL FLASHING AT ALL EDGES OF WALL OPENINGS MUST COVER WIRE BACKING.

WINDOW/TYP. OPENING FLASHING DETAIL | A

PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -
THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

SHEET DESCRIPTION
ARCHITECTURAL DETAILS

SHEET NO.
A-4.0

FASTENING SCHEDULE (TABLE R602.3(1)

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER a,b,c	SPACING AND LOCATION
	ROOF		
1	BLOCKING BETWEEN CEILING JOIST OR RAFTERS TO TOP PLATE	4-8d BOX (2 1/2"X0.113"); OR 3-8d COMMON (2 1/2"X0.131"); OR 3-10d BOX (3"X0.128"); OR 3-3"X0.131" NAILS	TOE NAIL
2	CEILING JOIST TO TOP PLATE	4-8d BOX (2 1/2"X0.113"); OR 3-8d COMMON (2 1/2"X0.131"); OR 3-10d BOX (3"X0.128"); OR 3-3"X0.131" NAILS	PER JOIST, TOE NAIL
3	CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (SEE SECTION R802.3.1, R802.3.2 AND TABLE R802.5.1 (9)).	4-10d BOX (3"X0.128"); OR 3-16d COMMON (3 1/2"X0.162"); OR 4-3"X0.131" NAILS.	FACE NAIL
4	CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT) (SEE SECTION R802.3.1 ADN R802.3.2 AND TABLE R802.5.1 (9)).	TABLE R802.5.1(9)	FACE NAIL
5	COLLAR TIE TO RAFTER, FACE NAIL OR 1 1/2" X 20 GA. RIDGE STRAP TO RAFTER	4-10d BOX (3"X0.128"); OR 3-16d COMMON (3 1/2"X0.162"); OR 4-3"X0.131" NAILS.	FACE NAIL EA. RAFTER
6	RAFTER OR ROOF TRUSS TO TOP PLATE	3-16d BOX (3 1/2"X0.135"); OR 3-10d COMMON (3"X0.148"); OR 4-10d BOX (3"X0.128"); OR 4-3"X0.131" NAILS.	2 TOE NAIL ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS
7	ROOF RAFTER TO RIDGE, VALLEY OR HIP RAFTERS OR ROOF RAFTER TO MINIMUM 2" RIDGE BEAM	4-16d (3 1/2"X0.135"); OR 3-10d COMMON (3"X0.148"); OR 4-10d BOX (3"X0.128"); OR 4-3"X0.131" NAILS. 3-16d BOX (3 1/2"X0.135"); OR 2-16d COMMON (3 1/2"X0.162"); OR 3-10d BOX (3"X0.128"); OR 3-3"X0.131" NAILS.	TOE NAIL END NAIL
	WALL		
8	STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMONS (3 1/2"X0.162" 10d BOX (3"X0.128"; OR 3"X0.131" NAILS	24" O.C. FACE NAIL 16" O.C. FACE NAIL
9	STUD TO STUD ADN ABUTTING STUDS AT INTERSECTION WALL CORNERS (AT BRACED WALL PANELS.)	16D BOX (3"X0.135"); OR 3"X0.131" NAILS 16d COMMONS (3 1/2"X0.162")	12" O.C. FACE NAIL 16" O.C. FACE NAIL
10	BUILT-UP HEADER (2" TO 2" HEADER WITH 1/2" SPACER)	16d COMMONS (3 1/2"X0.162") 16d BOX (3 1/2"X0.135")	16" O.C. EACH EDGE FACE NAIL 12" O.C. EACH EDGE FACE NAIL
11	CONTINOUS HEADER TO STUD	5-8d BOX (2 1/2"X0.113"); OR 4-8d COMMON (2 1/2"X0.131"); OR 4-10d BOX (3"X0.128"); OR	TOE NAIL
12	TOP PLATE TO TOP PLATE	16d COMMON (3 1/2"X0.162") 10d BOX (3"X0.128"); OR 3"X0.131" NAILS.	16" O.C. FACE NAIL 12" O.C. FACE NAIL
13	DOUBLE TOP PLATE SPLICE FOR SDCs A-D2 WITH SEISMIC BRACED WALL LINE SPACING <25' DOUBLE TOP PLATE SPLCIE SDCs D0, D1, OR D2; AND BRACED WALL SPACING >= 25'	3-16d COMMON (3 1/2"X0.162"); OR 2-16d BOX (3 1/2"X0.135"); OR 12-10d BOX (3"X0.128"); OR 12-3"X0.131" NAILS 12-16d (3 1/2"X0.135")	FACE NAIL ON EACH SIDE OF END JOINT (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
14	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2"X0.162") 16d BOX (3 1/2"X0.135") OR 3"X0.131 NAILS	16" O.C. FACE NAIL 12" O.C. FACE NAIL
15	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (AT BRACED WALL PANELS)	3-16d BOX (3 1/2"X0.135"); OR 2-16d COMMON (3 1/2"X0.162"); OR 4-3"X0.131" NAILS	3 EACH 16" O.C. FACE NAIL 2 EACH 16" O.C. FACE NAIL 4 EACH 16" O.C. FACE NAIL
16	TOP OR BOTTOM PLATE TO STUD	4-8d BOX (2 1/2"X0.113) OR 3-16d BOX (3 1/2"X0.135") OR 4-8d COMMON (2 1/2"X0.131") OR 4-10d BOX (3"X0.128") OR 4-3"x0.131" NAILS 3-16d BOX (3 1/2"X0.135") OR 2-16d COMMON (3 1/2"X0.162") OR 3-10d BOX (3"X0.128") OR 3-3"X0.131" NAILS	TOE NAIL END NAIL
17	TOP PLATES, LAPS AT CORNERS AND INSTERSECTIONS	3-10d BOX (3"X0.128") OR 2-16 d COMMON (3 1/2"X0.162") OR 3-3"X0.131" NAILS	FACE NAIL
18	1" BRACE TO EACH STUD AND PLATE	2-8d BOX (2 1/2"X0.128") OR 2-8d COMMON (2 1/2"X0.162") OR 2-10d BOX (3" X 0.128")	FACE NAIL
19	1" X 6" SHEATHIGN TO EACH BEARING	2-8d BOX (2 1/2"X0.128") OR 2-8d COMMON (2 1/2"X0.162") OR 2-10d BOX (3" X 0.128")	FACE NAIL
20	1"X8" AND WIDER SHEATHIGN TO EACH BEARING	2-8d BOX (2 1/2"X0.128") OR 3-8d COMMON (2 1/2"X0.162") OR 3-10d BOX (3" X 0.128")	FACE NAIL
	FLOOR		
21	JOIST TO SILL, TOP PLATE OR GIRDER	4-8d BOX (2 1/2"X0.113) OR 3-8d COMMON (2 1/2"X0.131") OR 3-10d BOX (3"X0.128") OR 3-3"X0.131" NAILS	TOE NAIL
22	RIM JOIST, BAND JOIST OR BLOCKING TO SILL OR TOP PLATE (ROOF APPLICATION ALSO)	8d COMMON (2 1/2"X0.113") 8d COMMON (2 1/2"X0.113") OR 10d BOX (3"X0.128") OR 3"X0.131" NAILS	4" OC TOE NAIL 6" OC TOE NAIL
23	1" X 6" SUBFLOOR OR LESS TO EACH JOIST	3-8d BOX (2 1/2"X0.113") OR 2-8d COMMON (2 1/2"X0.131") OR 3-10d BOX (3"X0.128") OR	FACE NAIL
24	2" SUBFLOOR TO JOIST OR GIRDER	3-16d BOX (3 1/2"X 0.135") OR 2-16d COMMON (3 1/2"X0.162")	BLIND AND FACE NAIL
25	2" PLANKS (PLAN & BEAM - FLOOR & ROOF)	3-16d BOX (3 1/2"X 0.135") OR 2-16d COMMON (3 1/2"X0.162")	AT EACH BEARING, FACE NAIL
26	BAND OR RIM JOIST TO JOIST	3-16d COMMON (3 1/2"X0.162) 4-10d BOX (3"X0.128") OR 4-3"X0.131" NAILS	END NAIL
27	BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS	20d COMMON (4"X0.192") OR 10d BOX (3"X0.128") OR 3"X0.131" NAILS, 10d BOX (3"X0.128") OR 3"X0.131 NAILS AND: 2-20d COMMON (4"X0.192") OR 3-10d BOX (3"X0.128") OR 3-3"X0.131" NAILS	NAIL EACH LAYER AS FOLLOWS: 32" OC AT TOP AND BOTTOM AND STAGGEERED. 24" OC FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES FACE NAIL AT ENDS ADN AT EACH SPLICE
28	LEDGER STRIP SUPPORTING JOIST OR RAFTER	4-16d BOX (3 1/2"X0.135) OR 3-16d COMMON (3 1/2"X0.162") OR 4-10d BOX (3"X0.128") OR 4-3"x0.131" NAILS	AT EACH JOIST OR RAFTER, FACE NAIL
29	BRIDGING TO JOIST	2-10d (3"X0.128")	EACH END, TOE NAIL

a. NAILS ARE SMOOTH-COMMON, BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR FRAMIGN AND SHEATHING CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWN: 80KSI FOR SHANK DIAMERER OF 0.192" (20d COMMON NAILS), 90KSI FOR SHANK DIAMETER LARGER THAN 0.142; BUT NOT LARGER THAN 0.177" AND 100KSI FOR SHANK DIAMETERS OF 0.142 " OR LESS.

b. STAPLES ARE 16 GAGE WIRE AND HAVE A MINIMUM 7/16" ON DIAMETER CROWN WIDTH.

c. NAILS SHALL BE SPACED AT NO MORE THAN 6" OC AT ALL SUPORTS WHERE SPANS ARE 48" OR GREATER.

d. FOUR-FOOT BY 8-FOOT OR 4-FOOT BY 9-FOOT PANESL ASHALL BE APPLIED VERTICALLY.

e. SPACING OF FASTENERS NOT INCLUDED IN THIS TABLE SHALL BE BASED ON TABLE R602.3(2).

f. WHERE THE ULTIMATE DESIGN WIND SPEED IS 130MHP OR LESS, NAILS FOR ATTACHIGN WOOD STRUCTURAL PANEL ROOF SHEATHING TO GABLE END WALL FRAMIGN SHALL BE SPACED 6" O.C. WHERE THE ULTIMATE DESIGN WIND SPEED IS GREATER THAN 130MPH, NAILS FOR ATTACHING PANEL ROOF SHEATHING TO INTERMIDIATE SUPPORTS SHALL BE SPACED 6" OC.. FOR MINIMUM 48" DISTANCE FROM RIDGES, EAVES ADN GALBE END WALLS; AND 4" O.C. TO GABLE END WALL FRAMING.

g. GYPSUM SHEATHING SHALL CONFROM TO ASTM C1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH GA 253. FIBERBOARD SHEATHING SHALL CONFORM TO ASTM C208.

h. SPACING OF FASTENERS ON FLOOR SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMEBER SAND REQURIED BLOCKING AND AT FLOOR PERIMETERS ONLY SPACING ON ROOF SHETAHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUREIS BLOCKING. BLOCKING OF ROOF OR FLOOR SHEATHIGN PANELS EDGES PERMIDEICULAR TO THE FRAMIGN MEMBERS NEED TO NO BE PROVIDED EXCEPT AS REQURIED B OTHER PROVISION OF THIS CODE. FLOOR PERIMETER SHALL BE SUPPORTED BY FRAMIGN MEMBERS OR SOLID BLOCKING.

i. WEHRE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE, PROVIDE TWO TOE NAILS ON ONE SIDE OF THE RAFTER AND TOE NAILS FROM THE CEILING JOIST TO TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE. THE TOE NAIL ON THE OPPOSITE SIDE OF THE RAFTER SHALL NOT BE REQURIED.

SOILS & FOUNDATION

1. THE FOUNDATION DESIGN IS BASED ON MINIMUM BEARING CAPACITY AS PER CBC 2022 EQUAL TO 1500 PSF.
2. THE ENGINEER OF RECORD MUST BE INFORMED OF ANY CHANGES IN DESIGN CRITERIA MADE BY THE SOIL ENGINEER IN THE COURSE OF CONSTRUCTION.
3. ALL FOOTINGS AND SLABS SHALL BE FOUNDED ON FIRM UNDISTURBED NATURAL SOILS OR COMPACTED FILL.
4. ALL COMPACTED FILL SHALL BE PLACED IN AN APPROVED MANNER WITH A MINIMUM DENSITY OF 90% OF THE MAXIMUM OBTAINABLE IN ACCORDANCE WITH ASTM D 1557.
5. SYSTEM AND ALL DRAINAGE SHALL BE CONDUCTED TO THE STREET IN AN ACCEPTABLE MANNER AND IN A NON-EROSIVE DEVICE.
6. REFER TO FOUNDATION PLANS, NOTES & DETAILS FOR ADDITIONAL INFORMATION.
7. ALLOWABLE SOIL BEARING PRESSURE: 1500 PSF INTO UNDISTURBED

CONCRETE NOTES

1. ALL CONCRETE, UNLESS NOTED OTHERWISE, SHALL BE REGULAR WEIGHT, HARD ROCK TYPE (150 PCF). AGGREGATES SHALL CONFORM TO ASTM C33 WITH PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN 0.05%
2. CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150 - TYPE II.
3. MINIMUM 28-DAY ULTIMATE COMPRESSIVE STRENGTH 2,500 PSI., U.N.O. CONTINUOUS INSPECTION BY A DEPUTY INSPECTION IS NOT REQUIRED.
4. CONCRETE COVERAGE OF REINFORCING STEEL:
   SLABS-ON-GRADE — AT C.L. SLAB
   CONCRETE CAST AGAINST PERMANENTLY EXPOSED EARTH — 3 INCHES
   FORMED AND/OR FINISHED SURFACES EXPOSED TO EARTH OR WEATHER.
   #5 BAR AND SMALLER — 1-1/2 INCHES
   #6 BAR AND LARGER — 2 INCHES
5. FORMS AND SHORING SHALL REMAIN UNDISTURBED AS FOLLOWS:
   VERTICAL SURFACES — 7 DAYS
   STRUCTURAL SLAB — 10 DAYS
6. ALL REINFORCING STEEL, DOWEL, EMBEDDED HARDWARE, HOLD DOWN BOLTS, STRAPS, AND POST BASES MUST BE WELL SECURED IN PROPER LOCATIONS PRIOR TO PLACING CONCRETE.
7. MAXIMUM IN-PLACE DENSITY OF NONSTRUCTURAL LIGHTWEIGHT CONCRETE FLOOR TOPPING IS TO BE 100#/CUBIC FT.
8. REFER TO SLAB PLAN NOTES FOR ADDITIONAL INFORMATION, U.N.O.

REINFORCING STEEL

1. ALL REINFORCING STEEL:
   NOTE: #3 AND SMALLER — ASTM A-615, GRADE 40
   #4 AND LARGER — ASTM A-615, GRADE 60
2. WELDED WIRE FABRIC — ASTM A-185
3. REINFORCING MARKED CONT. (CONTINUOUS) MAY BE SPLICED WITH LAPS. AS SPECIFIED IN THE CODE, UNLESS OTHERWISE SPECIFIED.

HARDWARE AND WOOD CONNECTORS

1. ALL WOOD FRAMING CONNECTORS SHALL BE SIMPSON "STRONG-TIE". INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH SIMPSON'S PRODUCT AND INSTRUCTION MANUAL/CATALOG C-2013. OR EQUAL OR BETTER. ALL THE NAILS / SCREWS / BOLTS LISTED ON THE CATALOG APPLY UNLESS SPECIFICALLY NOTED OTHERWISE.
2. ALL HOLD DOWN ANCHOR NUTS SHALL BE TIGHTENED JUST PRIOR TO COVERING WALL FRAMING. (LEAVE ENOUGH SPACE BETWEEN THE SILL AND THE HD TO ALLOW FOR SOME SLIP AT POST CONNECTION WHEN TIGHTENING.

ICC ESR REFERENCE LIST

MANUFACTURER	PRODUCT	DESCRIPTION	ICC#	LARR#
SIMPSON	A34/A35/LTP4	MISC. FRAMING CLIPS	ESR-2606	25716
SIMPSON	HTT	TENSION TIE	ES-130	25818
SIMPSON	HDU	HOLDOWNS	ESR-2330	25720
SIMPSON	IUS/IUT	HANGERS	ESR-2552	25801
SIMPSON	LUS/HUS	HANGERS	ESR-2549	25807
SIMPSON	MST/ST/ST/CS/CMST	STRAPS	ESR-2105	25713
SIMPSON	SDS/SDWS	WOOD SCREWS	ESR-2236	25711
W.R. GRACE	BITUTHENE	WATERPROOFING	---	24386
SIMPSON	PC/CC	COLUMN CAP	ESR-2604	24386
SIMPSON	GLB	BEAM SEAT	ESR-2877	25806
HILTI	X-C	SHOT PIN	ESR-1663	25646
CR LAURENCE	GR5	GUARDRAIL SHOE	ESR-3269	---
HARDY FRAME	HFX	MANUFACTURED SHEAR WALL	ESR-2089	25759
BOISE CASCADE	BCI	I-JOISTS	ESR-1336	24999
SIMPSON	GLB	BEAM SEAT	ESR-2877	25806
HILTI	HIT-HY 70	EPOXY FOR MASONRY	ESR-3342	25947
HILTI	HIT-RE 500 SD	EPOXY	ESR-2322	25700
HILTI	KWIKBOLT 3	WEDGE ANCHOR	ESR-1385	25577

WOOD ROUGH FRAMING

1. ALL LUMBER USED FOR STRUCTURAL PURPOSES SHALL BE DOUGLAS FIR-LARCH, GRADED IN ACCORDANCE WITH THE WEST COAST LUMBER INSPECTION BUREAU. ALL LUMBER SHALL BE LESS THAN 19% MOISTURE CONTENT FOR ALL CONSTRUCTION. CONTRACTOR SHALL TEST AND MAINAGE MOISTURE CONTENT TO ENSURE PROPER MOISTURE CONTENT DURING ALL STORAGE AND HANDLING OPERATIONS.
2. THE MINIMUM GRADES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON PLANS (ALL WOOD MUST BE GRADE MARKED):

   HORIZONTAL FRAMING MEMBERS (JOIST AND BEAMS)
   2X — D.F. #2
   4X12 OR SMALLER — D.F. #2
   4X14 OR LARGER — D.F. #1
   6X — D.F. #1
   8X — D.F. #1

   VERTICAL FRAMING MEMBERS (STUD AND POST)
   2X4 — STANDARD OR STUD GRADE
   3X4 — D.F. #2
   2X6 — D.F. #2
   4X4, 4X6 — D.F. #2
   6X6 OR LARGER — D.F. #1

   MISCELLANEOUS
   SILL PLATE (GROUND FLOOR) — P.T. D.F. #2
   SOLE PL. (UPPER FLOORS) — D.F. #2
   2X TOP PLATE — D.F. #2
   SHEAR BLOCKING — D.F. #2

   NON-STRUCTURAL
   BLOCKING & BRIDGING — UTILITY
3. ALL BLOCKING SHALL BE CUT TO FIT FLUSH AGAINST SHEATHING AND OTHER FRAMING MEMBER.
4. ALL SILL PLATES BEARING ON MASONRY OR CONCRETE FOUNDATION WALL OR SLAB ON GRADE SHALL BE PRESSURE TREATED. IN ACCORDANCE WITH CBC 2304.8.4 SILL PLATES SHALL BE BOLTED TO THE FOUNDATION WITH 5/8 INCH DIAMETER BOLTS AT 4'-0" ON-CENTER MAXIMUM, U.N.O. ON SHEAR WALL SCHED. EMBEDDED 7 INCH MINIMUM IN CONCRETE. BOLTS SHALL HAVE PLATE WASHERS (SEE S.W. SCHEDULE) AND PROPERLY SIZED NUTS. MINIMUM 2 BOLTS PER PLATE. ONE BOLT WITHIN 12 INCHES BUT NO LESS THAN 7 BOLT DIAMETERS, OF PLATE END AND CORNERS.
5. WALL FRAMING TO BE 2X STUDS AT 16 INCHES ON-CENTER ON EXTERIOR WALLS AND 2X STUDS AT 16 INCHES ON-CENTER AT INTERIOR WALLS. U.N.O. PROVIDE DOUBLE TOP PLATE ON ALL WALLS WITH MINIMUM 48 INCH LAP SPLICE, UNLESS SPECIFICALLY NOTED ON PLANS. THE MAXIMUM STUD HEIGHT FOR 2X4 EXTERIOR WALL IS 10 FEET. FOR 2X4 INTERIOR WALL IS 14 FEET. MAXIMUM NON-BEARING STUD HEIGHT FOR 2X6 STUDS IS 20 FEET, U.N.O.
6. PROVIDE 0.058" X I-I /2" WIDE STEEL TIE STRAPS WITH 6-16D NAILS AT EACH SIDE WHERE PLATES ARE INTERRUPTED BY UTILITY PENETRATIONS @ NON-SHEARWALLS. IF PENETRATIONS WILL OCCUR @ SHEAR WALL NOTIFY THE ENGINEER PRIOR TO STARTING WORK.
7. PROVIDE 1X6 LET-IN DIAGONAL BRACES AT EACH 25 LINEAR FEET OF NON-SHEAR WALL EACH CORNER, AND ALL MAIN CROSS STUD PARTITIONS. LET-IN TO CROSS 4 STUD SPACES AT 45 DEGREES WHERE POSSIBLE. SOLID BLOCKING SHALL BE PROVIDED AT ALL HORIZONTAL JOINTS OCCURRING IN BRACED WALLS.
8. PROVIDE SINGLE ONE ADDITIONAL JOIST UNDER NON-BEARING PARTITION WHEN WALL PARALLEL W/ JOISTS.
9. ROOF SHEATHING SHALL BE INSPECTED PRIOR TO PLACING INSULATION AND ROOFING.
10. ALL RATED SHEATHING SHALL BE IDENTIFIED WITH THE GRADE TRADEMARK OF APA- THE ENGINEERED WOOD ASSOCIATION AND SHALL MEET THE REQUIREMENTS OF PRODUCTS STANDARD PS 1-09, PS2-10 OR APA PRP 108 ALL APA RATED SHEATHING WHICH HAS ANY EDGE OR SURFACE PERMANENTLY EXPOSED TO THE WEATHER SHALL BE OF THE EXTERIOR TYPE. APA RATED SHEATHING SHEET LESS THAN 24 INCHES IN ANY DIMENSION SHALL NOT BE USED IN SHEAR WALLS, FLOOR, OR ROOF DIAPHRAGM.
11. FLOOR JOIST ARE NOT DESIGNED TO SUPPORT WATER BEDS. ENGINEER OF RECORD TO BE NOTIFIED IF WATER BEDS ARE TO BE USED.
12. STRUCTURAL MEMBERS SHALL NOT BE CUT OR NOTCHED UNLESS SPECIFICALLY DETAILED BY THE ENGINEER OF RECORD.
13. FRAMING FOR PRE-FABRICATED FIREPLACE FLUES SHALL BE BALLOON FRAMED FULL HEIGHT USING 2X4 STUDS AT 16" O.C. BRACED AT MID-HEIGHT AND AT THE PLATE HEIGHTS. U.N.O. ON PLAN MAXIMUM UN-BRACED LENGTH IS 14'.
14. ALL BEAMS TO BE SUPPORTED WITH FULL BEARING MULTISTUD OR POST, U.N.O.
15. CARRY ALL MULTIPLE STUDS OR POSTS FROM FLOOR ABOVE DOWN TO FLOOR OR BEAM BELOW. PROVIDE 4X SOLID BLOCKING AT FLOOR LEVEL TO TRANSFER LOAD FROM UPPER POST TO LOWER POST.
16. INTERIOR NON-BEARING HEADERS MAY BE 2X4 FLAT. INSTALL 4X4 AT 6' AND 8'.
17. DECK / BALCONY SHEATHING: DO NOT USE OSB UNLESS APPROVED BY EOR./ARCH.
18. FOR LAG BOLTS: PROVIDE LEAD HOLES 65% TO 75% OF SHANK DIA. AND FULL DIA. FOR SHANK PORTION. SOAP, PARAFFINOR OR OTHER APPROVED LUBRICANT SHALL BE USED ON THREADS. INSTALLATION SHALL BE BY SCREWING, NO HAMMERING. CARE SHALL BE TAKEN TO AVOID OVER TORQUING OF THE BOLT.
19. ALL MUTI-STUDS ARE TO BE LAMINATED WITH 16D AT 12" O.C.
20. ALL BALLOON FRAMED WALLS SHALL BE BRACED TO CONFORM TO CBC 2022 TABLE 2308.5.1
21. PROVIDE PRE-DRILLING WHERE NECESSARY TO AVOID SPLITTING.
22. ONLY COMMON NAILS SHALL BE USED FOR ALL WOOD SHEAR WALLS AND SHEAR TRANSFER CONNECTIONS. NAIL GUNS USING "CLIPPED HEADS" OR "SINKER" NAILS ARE NOT ACCEPTABLE.
23. PROVIDE MINIMUM OF 1/2" EDGE DISTANCE FOR ALL PLYWOOD BOUNDARY NAILING IN SHEAR WALLS. ALL PLYWOOD EDGES SHALL BE BLOCKED. MIN. WIDTH OF BLOCKING TO RECEIVE PLYWOOD NAILING MUST NOT BE LESS THAN THE THICKNESS OF BOUNDARY MEMBER AS SPECIFIED ON SHEAR WALL SCHEDULE.
24. OMIT SHEATHING B.N. UNDER CMST STRAP. INSTALL CMST OVER SHEATHING, U.N.O.
25. HOLDOWN ANCHORS MUST BE TIED IN PLACE PRIOR TO FOUND. INSPECTION.
26. DIAPHRAGM SHEATHING NAILS OR OTHER APPROVED SHEATHING CONNECTORS SHALL BE DRIVEN SO THAT THEIR HEAD OR CROWN IS FLUSH WITH THE SURFACE OF THE SHEATHING.
27. NO UTILITY LINE PENETRATION IS ALLOWED AT SHEAR WALLS.

FOUNDATION & FRAMING NOTES

1. HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRES APPROVED WASHERS: AND HOLD-DOWNS SHALL BE FINGER TIGHT AND 1/3 WRENCH TURN JUST PRIOR TO COVERING THE WOOD FRAMING. 2305.5 OF THE BUILDING CODE.
2. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED EDGES. PLYWOOD SPAN SHALL CONFORM WITH TABLE 2304.7
3. ALL DIAPHRAGM AND SHEA WALL NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX.
4. ALL BOLT HOLES SHALL BE DRILLED 1/32" TO 1/16" OVERSIZED.
5. HOLD-DOWN HARDWARE MUST BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION.
6. FASTENERS FOR PRESERVATIVE-TREATED OR FIRE-RETARDANT TREATED WOOD SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL IN ACCORDANCE WITH ASTM A15.

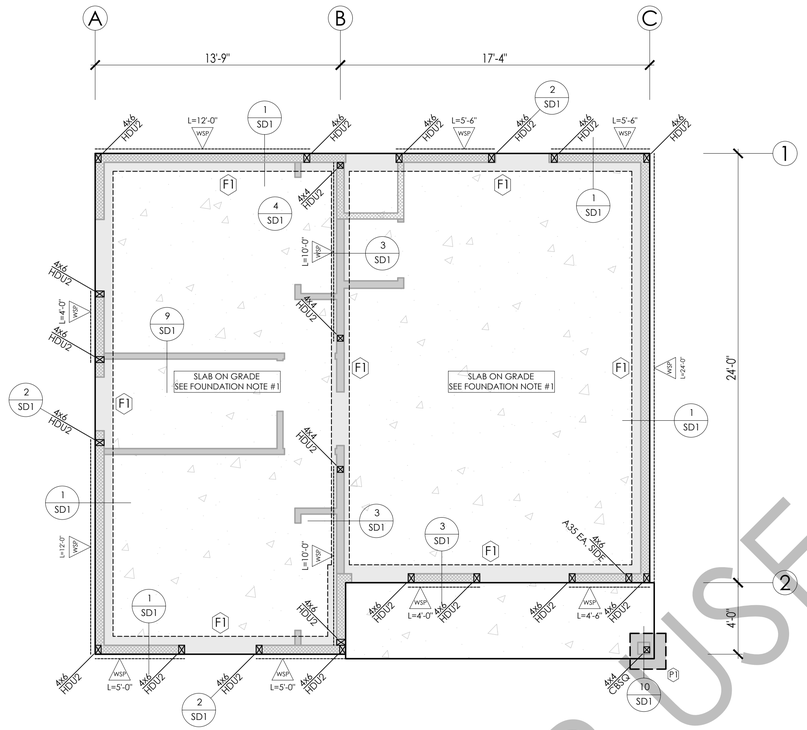
STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLT	EWB	ENGINEERED WOOD BEAM
ABV	ABOVE	EXT	EXTERIOR
ADD'L	ADDITIONAL	FA	FROM ABOVE
ALT	ALTERNATE	FDN	FOUNDATION
BEW	BOTTOM EACH WAY	FH	FULL HEIGHT
BLK	BLOCK	FJ	FLOOR JOIST
BLKG	BLOCKING	FL	FLUSH
BLW	BELOW	FLR	FLOOR
BM	BEAM	FNGR	FINGER
BN	BOUNDARY NAILING	FRMG	FRAMING
BO	BOTTOM OF	FT	FEET
BOB	BOTTOM OF BEAM	GA	GAGE
BOW	BOTTOM OF WALL	GLB	GLU-LAM BEAM
BRG	BEARING	GT	GIRDER TRUSS
BTM	BOTTOM	HDR	HEADER
BTWN	BETWEEN	HGR	HANGER
BTR	BETTER	HT	HIP TRUSS
CBC	CALIFORNIA BUILDING CODE	IBC	INTERNATIONAL BUILDING CODE
CENT./ Ç	CENTER LINE	IN	INCH
CLG	CEILING	INFO	INFORMATION
CONC	CONCRETE	INT	INTERIOR
DBL	DOUBLE	JST	JOIST
DF	DOUGLAS FIR	KS	KING STUD
DIA	DIAMETER	LSL	LAMINATED STRAND LUMBER
DJ	DECK JOIST	LVL	LAMINATED VENEER LUMBER
DP	DEEP	MAX	MAXIMUM
DR	DROP	MFR	MANUFACTURER
EA	EACH	MIN	MINIMUM
EI	EXPANSION INDEX	MPH	MILES PER HOUR
EMBED	EMBEDMENT	MULT	MULTIPLE
EN	EDGE NAILING	O/	OVER
EW	EACH WAY	OC	ON CENTER
		PI	PLASTICITY INDEX
		PLT/ P	PLATE
		PLYWD	PLYWOOD
		PNL	PANEL
		PSF	POUNDS PER SQUARE FOOT
		PSI	POUNDS PER SQUARE INCH
		PSL	PARALLEL STRAND LUMBER
		PT	POST TENSION
		REV	REVISION
		RF	ROOF
		RR	ROOF RAFTER
		SHTG	SHEATHING
		SIM	SIMILAR
		SNK(S)	SINKER(S)
		SPN	SOLE PLATE NAILING
		SQ	SQUARE
		SQSH	SQUASH
		STD	STANDARD
		SW	SHEAR WALL
		TO	TOP OF
		TOB	TOP OF BEAM
		TOW	TOP OF WALL
		TP	TOP PLATE
		TR	TRIMMER
		TRS	TRUSS
		TSL	TRIANGULAR STRAND LUMBER
		TYP	TYPICAL
		UBC	UNIFORM BUILDING CODE
		UNO	UNLESS NOTED OTHERWISE
		WWM	WELDED WIRE MESH
		W/	WITH
		W/O	WITHOUT

GENERAL NOTES

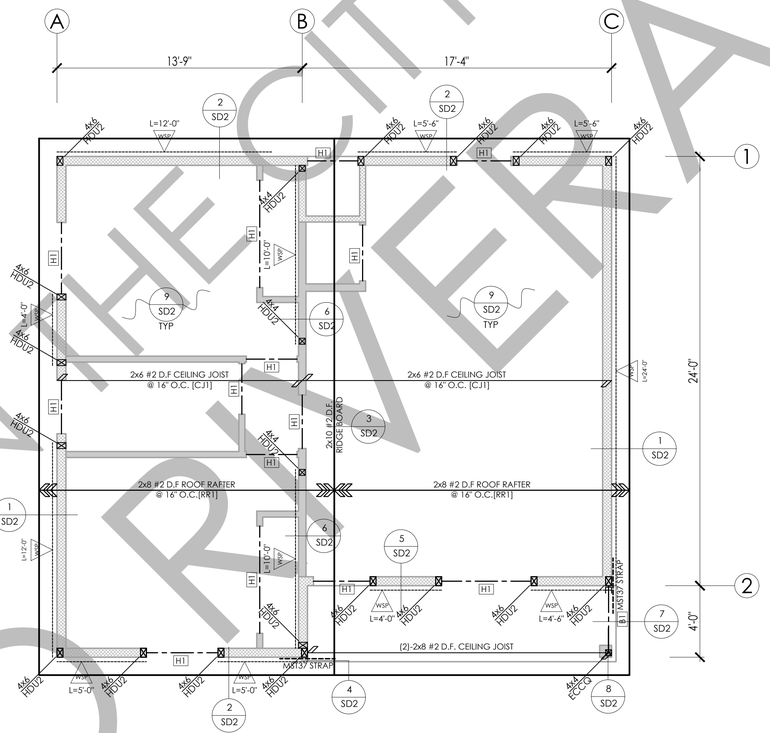
ALL WORK TO CONFORM TO THE 2022 CBC, 2022 CRC AND CITY OF PICO RIVERA AMENDMENTS.

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS, CONDITIONS AT THE JOBSITE, AND TO CROSS CHECK ALL DETAILS AND DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH RELATED REQUIREMENTS ON THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND/OR CIVIL DRAWINGS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
2. FLOOR AND WALL OPENINGS, SLEEVES, VARIATIONS IN STRUCTURAL SLAB ELEVATIONS, DEPRESSED AREAS AND ALL OTHER ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND/OR CIVIL REQUIREMENTS MUST BE COORDINATED BEFORE THE CONTRACTOR PROCEEDS WITH CONSTRUCTION.
3. IN ALL CASES WHERE A CONFLICT MAY OCCUR SUCH AS BETWEEN ITEMS INCLUDED IN THE SPECIFICATIONS AND NOTES ON THE DRAWINGS OR BETWEEN GENERAL NOTES AND SPECIFIC DETAILS, THE ENGINEER SHALL BE NOTIFIED AND WILL INTERPRET THE INTENT OF THE CONTRACT DOCUMENT.
4. DETAIL MARKED "TYPICAL" SHALL APPLY IN ALL SIMILAR CASES UNLESS SPECIFICALLY INDICATED OTHERWISE.
5. WHERE NO SPECIFIC DETAIL IS SHOWN, THE FRAMING OR CONSTRUCTION SHALL BE IDENTICAL OR SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION.
6. EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE NOTED OR SHOWN IN THE PLANS OR SPECIFICATIONS, ALL PHASES OF WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE, LATEST EDITION, AS WELL AS ALL APPLICABLE STATE AND LOCAL ORDINANCES.
7. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON THE STRUCTURAL DRAWINGS.
8. THE PRECISE DIMENSIONS AND LOCATIONS OF ALL DOOR AND WINDOW OPENINGS SHALL BE DETERMINED FROM THE ARCHITECTURAL DRAWINGS; OTHER FLOOR, WALL AND ROOF OPENINGS AS REQUIRED BY MECHANICAL ELECTRICAL OR SIMILAR REQUIREMENTS SHALL BE VERIFIED FROM SHOP DRAWINGS, EQUIPMENT DATA, ETC., AS REQUIRED.
9. THE CONSTRUCTION DOCUMENT REPRESENTS A FINISHED PRODUCT, UNLESS NOTED OTHERWISE, IT DOES NOT INDICATE THE METHOD OF CONSTRUCTION, TEMPORARY BRACING, SHORING AND TEMPORARY SUPPORT FOR ANY STRUCTURAL COMPONENTS AND FOR CONSTRUCTION LOAD IMPOSED BY CONSTRUCION EQUIPMENT AND / OR ARISEN DUE TO THE WEIGHT OF THE STORED CONSTRUCTION MATERIALS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS AND PROCEDURES.
10. ALL WORK OF THE CONTRACTOR, SUB-CONTRACTORS, AND BUILDER SHALL CONFORM TO CURRENT GOOD PRACTICES. NOT ALL ASPECTS OF GOOD PRACTICES ARE SHOWN ON THE CONTRACT DRAWINGS.
11. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATION AND CONSTRUCTION OF DRAFTSTOPS, FIRE BLOCKING, DAMPERS AND OTHERS ITEMS NECESSARY FOR FIRE PROTECTION. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATION AND CONSTRUCTION OF FLASHING, BLOCKING, EXTERIOR FINISHES, TREATMENTS OR OTHER MATERIAL REQUIRED FOR, DAMPPROOFING OR MOISTURE CONTROL.
12. FOR ANY PRE-MANUFACTURED PRODUCTS OR MATERIALS OF CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR BEING FAMILIAR WITH AND FOR PROPER EXECUTION OF MANUFACTURER'S INSTRUCTIONS. REQUIREMENTS AND C



A FOUNDATION PLAN

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



B FRAMING PLAN

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

FOUNDATION & FRAMING LEGEND

- FOOTING PER PLAN
- SPAN AND DIRECTION OF ROOF RAFTERS
- SPAN AND DIRECTION OF CEILING JOISTS
- BRACED WALL TYPE - REFER TO B.W. SCHEDULE (L=4'-0", WSP)
- POST TYP. U.N.O. (POST)
- BEAM PER PLAN

FOUNDATION NOTES

1. SLAB ON GRADE: 4" THICK CONCRETE SLAB W/ #4 REBAR @ 16" O.C. EA. WAY AT MID-DEPTH O/ 10-MIL VAPOR BARRIER O/ 4" BASE OF $\frac{3}{4}$" OR LARGER CLEAN AGGREGATE.
2. ALL HOLDOWNS & ANCHOR BOLTS SHALL BE SET IN PLACE BY TEMPLATE PRIOR TO FOUNDATION INSPECTION.
3. ALL FOOTINGS SHALL HAVE F'c = 2500 PSI U.N.O.
4. PLATE WASHER ARE REQUIRED FOR ALL HOLDOWN BRACKETS.

ROOF FRAMING NOTES

1. ROOF SHEATHING SHALL BE $\frac{15}{32}$" PLYWOOD, CD-X P11 $\frac{32}{16}$, WITH 8d COMMON NAILS @ 6" O.C. AT EDGES AND BOUNDARIS, 12" O.C. AT FIELD.
2. ALL BRACED WALL PANELS ARE FULL HEIGHT TO THE ROOF.
3. ALL POSTS SHALL BE CONNECTED TO SILL PLATE WITH A35 AT EA. SIDE TYP. U.N.O.
4. ALL EXTERIOR WALLS TO BE 2X6 @ 16" O.C. DFL STUDS. ALL INTERIOR WALLS TO BE 2X4 @ 16" O.C. DLF STUDS.
5. ALL DIAPHRAGM AND BRACED WALL NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX.
6. FASTENERS IN PRESERVATIVE TREATED WOOD OR FIRE RETARDANT TREATED WOOD SHALL BE OF HOT ZINC COATED GALVANIZED STEEL OR STAINLESS STEEL.
7. ALL WOOD HEADERS SHALL BE CONNECTED TO POST OR 2-2X TRIMMERS WITH EPCZ POST CAP U.N.O.

CONT. FOOTING SCHEDULE

ID	SIZE	REBAR	CONCRETE STRENGTH
F1	12"W x 24"D	(2) - #4 TOP & BOTTOM	2500 PSI

PAD FOOTING SCHEDULE

ID	SIZE	REBAR	CONCRETE STRENGTH
P1	18"SQ. X 18"D	(3) - #4 EA. WAY	2500 PSI

BRACED WALL SCHEDULE
2022 CRC TABLE R602.10.4

ID	BRACED WALL TYPE	DESCRIPTION	FNDN. SILL PLATE & A.B. SPACING	A35/LTP4 FRAMING CLIP O.C. SPACING
WSP	WSP	$\frac{3}{8}$" WOOD STRUCTURAL PANEL W/ 8d NAILS @ 16" O.C. BOUNDARY W/ 8d NAILS @ 12" O.C. FIELD	2x PLATE $\frac{5}{8}$" DIAM. A.B. AT 48" O.C.	16"

1. PROVIDE SQUARE PLATE WASHERS 3"x3"x$\frac{5}{32}$" THK. FOR $\frac{5}{8}$" DIAMETER BOLTS
2. ALL PANEL EDGES TO BE BACKED WITH 2X OR WIDER FRAMING MEMBER. ALL TOP PLATE NAILING TO BE INTO "UPPER" TOP PLATE ONLY.
3. WOOD STRUCTURAL PANEL SHALL MEET THE REQUIREMENTS OF STANDARD 23-2 OR 23-3. THESE VAULES ARE FOR DOUGLAS FIR-LARCH AND STUD SPACING OF 16" O.C.
4. ALL SILL PLATES SHALL BE PRESSURE TREATED DOUGLAS FIR-LARCH.

ROOF RAFTER SCHEDULE
2022 CRC TABLE R802.4.1(2)

ID	RAFTER SIZE & SPACING	SPECIES AND GRADE	ALLOWABLE SPAN
RR1	2x8 @ 16" O.C.	DOUGLAS FIR-LARCH #2	18'-5"

CEILING JOIST SCHEDULE
2022 CRC TABLE R802.5.1(1)

ID	RAFTER SIZE & SPACING	SPECIES AND GRADE	ALLOWABLE SPAN
CJ1	2x6 @ 16" O.C.	DOUGLAS FIR-LARCH #2	17'-8"

HEADER SCHEDULE
2022 CRC TABLE R602.7(1)
EXTERIOR LOAD BEARING WALLS

ID	HEADER SIZE	SPECIES AND GRADE	ALLOWABLE SPAN
H1	4 x 6 FLAT	DOUGLAS FIR-LARCH #1	3'-1"
H2	4 x 6	DOUGLAS FIR-LARCH #1	4'-7"

HEADER SCHEDULE
2022 CRC TABLE R602.7(3)
OPEN PORCHES

ID	BEAM SIZE	SPECIES AND GRADE	ALLOWABLE SPAN
B1	4 x 6	DOUGLAS FIR-LARCH #1	7'-6"

PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC
DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

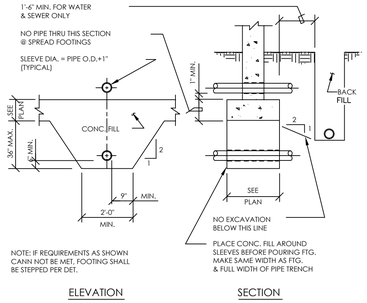
- FOR USE IN THE CITY OF PICO RIVERA ONLY -
THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

SHEET DESCRIPTION

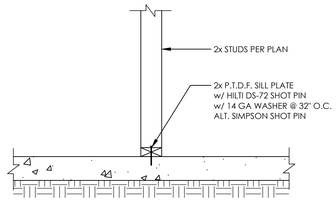
FRAMING PLAN
& FOUNDATION PLAN

SHEET NO.

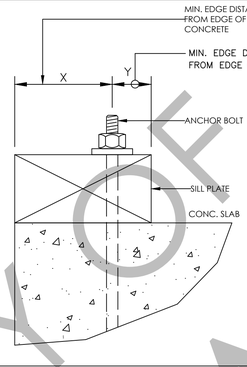
S-1.0



17 **PIPE AND TRENCH LOCATION**
SCALE: NTS



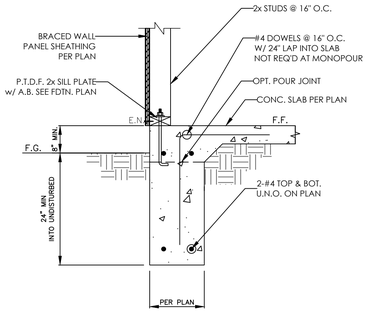
13 **NON-BEARING/NON-SHEAR WALL FT'G**
SCALE: NTS



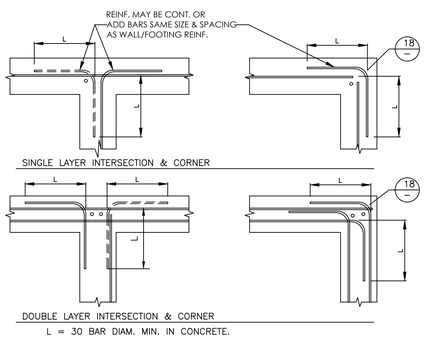
2X4 SILLS		
DIAM.	X	Y
5/8"	1.7/8"	1"
3/4"	2.1/4"	1.1/8"
7/8"	N.A.	N.A.

2X6 SILLS		
DIAM.	X	Y
5/8"	1.7/8"	1"
3/4"	2.1/4"	1.1/8"
7/8"	2.5/8"	1.5/16"

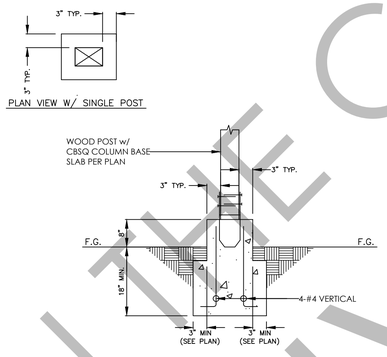
9 **MIN. A.B. EDGE DISTANCE AT SILL PLATE**
SCALE: NTS



5 **EXTERIOR FOOTING DETAIL**
SCALE: NTS



18 **REINFORCE @ INTERIOR CORNER**
SCALE: NTS

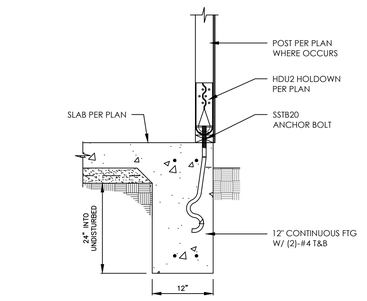


14 **ISOLATED POST FOOTING**
SCALE: NTS

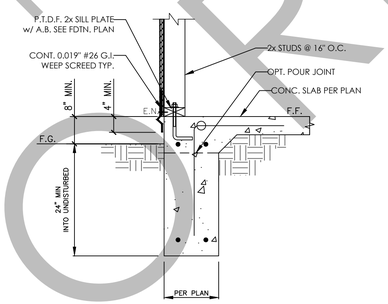
ANCHOR BOLT LOCATIONS:		EXTERIOR WALLS	INTERIOR WALLS	
			BEARING	NON-BEARING
ANCHOR BOLT DIAMETER:		5/8" DIA.	5/8" DIA.	SHOT PINS PER 9/SD1
BOLT LENGTH AT MONOPOUR:	W/ 2x SILL	10"	10"	--
	W/ 3x SILL	12"	12"	--
BOLT LENGTH AT DUALPOUR	W/ 2x SILL	14"	14"	--
	W/ 3x SILL	16"	16"	--
MAX. ANCHOR BOLT SPACING: U.N.O. PER SHEAR WALL SCH.		4'-0" O.C.	4'-0" O.C.	PER 9/SD1

1. ALL ANCHOR BOLTS SHALL ACHEIVE 7" EMBEDMENT INTO CONCRETE. EMBEDMENT SHALL BE FROM TOP OF SLAB AT MONOPOUR CONDITION OR BELOW COLD JOINT AT DUAL POUR CONDITION. AT CURB/WALL CONDITION, EMBEDMENT SHALL BE FROM TOP OF CURB/WALL.
2. THE ANCHOR BOLTS SHALL SECURE THE SILL PLATE IN PLACE WITH A PROPERLY SIZED NUT &3"SQ.x3/16" THK WASHER W/ DIAGONALLY SLOTTED HOLE.
3. MINIMUM (2) ANCHOR BOLTS PER PIECE OF SILL PLATE. THE ANCHOR BOLTS SHALL BE LOCATED WITHIN 7" MIN OR 12" MAX FROM THE END OF ANY SILL PLATE BREAK.
4. BOLTSHALL MAINTAIN 1-3/4" EDGE OF CONCRETE DISTANCE & 1" EDGE OF SILL PLATE DISTANCE.

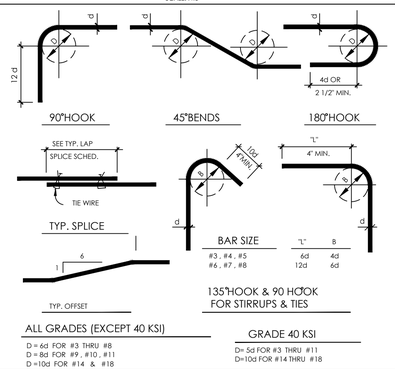
10 **ANCHOR BOLT SPECIFICATION**
SCALE: NTS



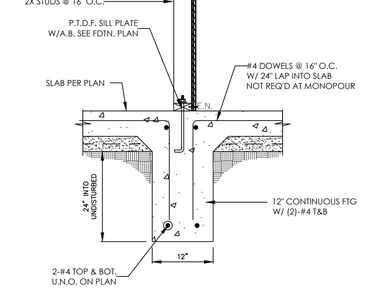
6 **HOLDOWN DETAIL**
SCALE: NTS



15 **TYP. WEEP SCREED AT FOUNDATION**
SCALE: NTS

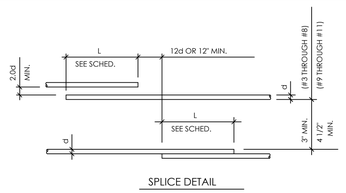


11 **REINFORCE HOOKS & BEND**
SCALE: NTS



7 **INTERIOR FOOTING DETAIL**
SCALE: NTS

LAP SPLICE (L) SCHEDULE fy = 60 KSI								
CONCRETE STRENGTH	* f'c = 2500 PSI (NORMAL WEIGHT CONCRETE)				* f'c = 4000 PSI (NORMAL WEIGHT CONCRETE)			
CLASS OF LAP SPLICE	CLASS 'A'		CLASS 'B'		CLASS 'A'		CLASS 'B'	
BAR SIZE	BASIC	TENSION BAR	BASIC	TENSION BAR	BASIC	TENSION BAR	BASIC	TENSION BAR
#3	13"	17"	17"	22"	12"	16"	14"	19"
#4	17"	22"	22"	29"	15"	20"	19"	25"
#5	21"	28"	28"	36"	18"	24"	24"	32"
#6	27"	36"	36"	48"	24"	32"	31"	41"
#7	37"	49"	49"	64"	32"	42"	42"	55"
#8	49"	64"	64"	83"	42"	55"	55"	72"
#9	62"	81"	81"	105"	53"	69"	69"	90"
#10	78"	102"	102"	132"	68"	88"	88"	115"
#11	96"	125"	125"	163"	83"	108"	108"	141"

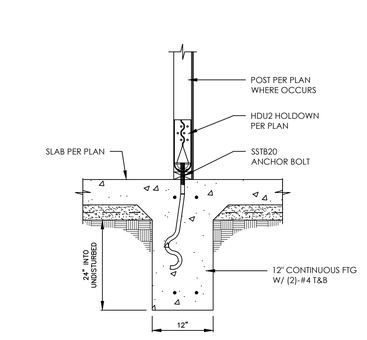


NOTES:

1. USE CLASS 'B' SPLICES FOR VERTICAL & HORIZONTAL BARS TYP. U.N.O.
2. TENSION BARS ARE HORIZONTAL BARS WITH 12" OR MORE OF CONCRETE CAST BELOW THEM. MULTIPLE HORIZONTAL BARS IN SINGLE VERT. PLANE SUCH AS COLUMN TIES OR HORIZ. BARS IN WALLS NEED NOT BE CONSIDERED TOP BARS.

* 3. VALUES SHOWN ARE FOR GRADE 60 BARS IN NORMAL WEIGHT CONCRETE. FOR LIGHT WEIGHT CONCRETE MULTIPLY VALUES OF TABLE BY 1.3

8 **CONCRETE REINFORCED MINIMUM LAP SPLICE**



4 **HOLDOWN DETAIL**
SCALE: NTS

PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -
THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

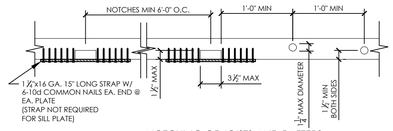
SHEET DESCRIPTION

STRUCTURAL DETAILS

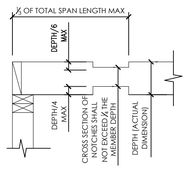
SHEET NO.

SD1

2x4 DBL. TOP PLATE, 2x4 OR 3x4 SILL PLATE



NOTCHING OF JOISTS AND RAFTERS

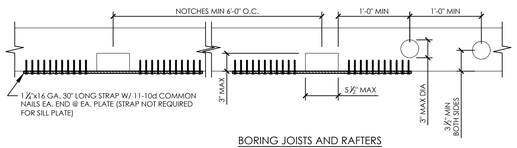


NOTCHING AT ENDS			
MEMBER	DEPTH/4 MAX	DEPTH/6 MAX	MAX TOTAL NOTCH
2x6	1 3/8"	1 5/16"	1 3/8"
2x8	1 13/16"	1 3/16"	1 13/16"
2x10	2 5/16"	1 9/16"	2 5/16"
2x12	2 13/16"	1 7/8"	2 13/16"

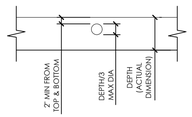
NOTCHING IS NOT PERMITTED IN THE MIDDLE 1/3 SPAN.

TYPICAL NOTCHING OF JOISTS AND TOP PLATES | 13

2x8 DBL. TOP PLATE, 2x8 OR 3x8 SILL PLATE



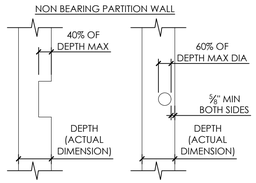
BORING JOISTS AND RAFTERS



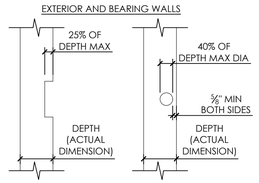
BOTTOM NOTCHING AT ENDS	
MEMBER	D/3 MAX
2x6	1 13/16"
2x8	2 7/16"
2x10	3 1/16"
2x12	3 3/4"

TYPICAL NOTCHING OF JOISTS AND TOP PLATES | 14

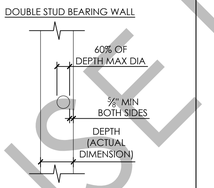
NON BEARING PARTITION WALL



EXTERIOR AND BEARING WALLS



DOUBLE STUD BEARING WALL

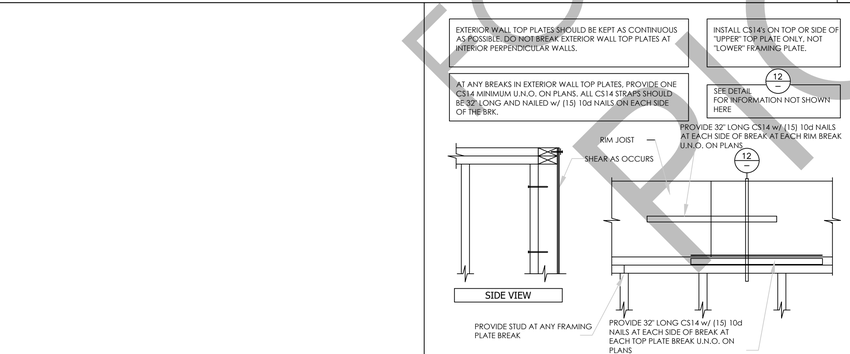


MAY BE USED, PROVIDED NOT MORE THAN TWO SUCH SUCCESSIVE DOUBLED STUDS ARE SO BORED.

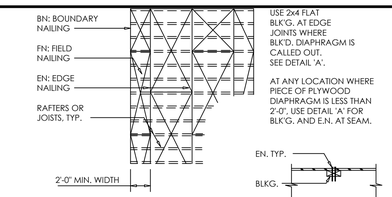
BOTTOM NOTCHING AT ENDS		
MEMBER	2x4	2x6
25%	7/8"	1 3/8"
40%	1 3/8"	2 1/8"
60%	2"	3 1/4"

HOLES SHALL NOT BE BORED IN THE SAME CROSS SECTION AS A NOTCH OR CUT IN A STUD.

TYPICAL NOTCHING / BORING OF STUDS | 15

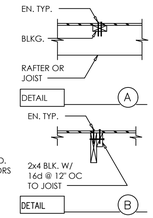


20



USE 2x4 FLAT BLK'G. AT EDGE JOINTS WHERE BLK'D. DIAPHRAGM IS CALLED OUT. SEE DETAIL 'A'.

AT ANY LOCATION WHERE PIECE OF PLYWOOD DIAPHRAGM IS LESS THAN 2'-0", USE DETAIL 'A' FOR BLK'G. AND E.N. AT SEAM.



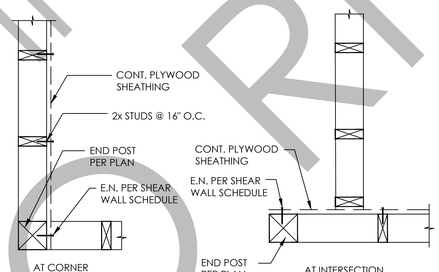
1. RUN LONG DIMENSION OF PLYWOOD ACROSS (PERPENDICULAR TO) JOIST AND RAFTERS.
2. STAGGER END JOINTS 2'-0" MINIMUM.
3. BOUNDARY NAILING APPLIES TO PERIMETER PLATE LINES, CHORDS, TIES, AND AS CALLED FOR ON DRAWINGS.
4. SEE PLANS FOR NAILING.
5. NAILS SHALL HAVE MIN. 3/8" EDGE DISTANCE.
6. ALL JOISTS AND RAFTERS SHALL BE LAYED OUT IN A 4'-0" MODULE TO COINCIDE WITH PLYWOOD.
7. USE TONGUE-AND-GROOVE PLYWOOD AT FLOORS UNLESS NOTED OTHERWISE.
8. SEE DETAIL 'B' FOR FRAMING WHERE PLYWOOD JOINTS ARE OFFSET DUE TO RAFTER OR JOIST LAP SPLICES.

PLYWOOD DIAPHRAGM DETAIL | 9

TRIMMER SCHEDULE - OPENING HT. UP TO 11'-0" MAX			
HDR SIZE	TRIMMERS REQ'D	HDR. SIZE	TRIMMER REQ'D
4x6	1-2x4	6x6	1-2x6
4x8	2-2x4	6x8	1-2x6
4x10	2-2x4	6x10	2-2x6
4x12	2-2x4	6x12	2-2x6

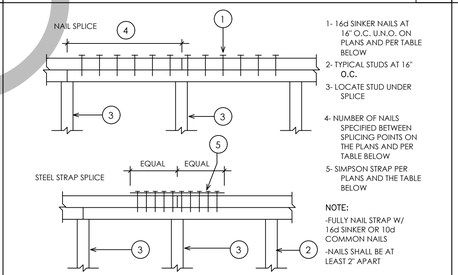
KING STUD TABLE		
STUDS/ POST	MAX. ALLOW OPN'G	
	TOP PL HT. 10'-1" MAX.	TOP PL HT. 11'-1" MAX.
(1) 2x6	4'-0"	3'-0"
(2) 2x6/4x6	10'-0"	7'-0"
(3) 2x6/6x6	16'-0"	12'-0"
(4) 2x6/8x6	22'-0"	15'-0"

TRIMMER & KIND STUD SCHEDULE | 10



NOTE:
SEE PLANS FOR LOCATIONS OF PLYWOOD SHEATHING.

SHEAR WALL INTERSECTION DETAIL | 11

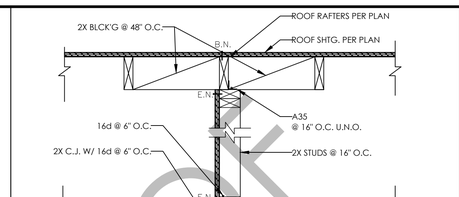


1- 16d SINKER NAILS AT 16" O.C. U.N.O. ON PLANS AND PER TABLE BELOW
2- TYPICAL STUDS AT 16" O.C.
3- LOCATE STUD UNDER SPLICE
4- NUMBER OF NAILS SPECIFIED BETWEEN SPLICING POINTS ON THE PLANS AND PER TABLE BELOW
5- SIMPSON STRAP PER PLANS AND THE TABLE BELOW

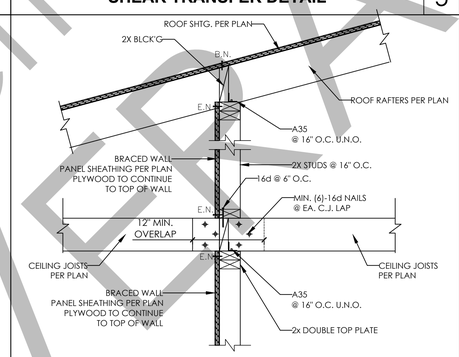
NOTE:
-FULLY NAIL STRAP W/ 16d SINKER OR 10d COMMON NAILS
-NAILS SHALL BE AT LEAST 2" APART

	A	B	C	D	E	F
# OF 16d SINKER	12	18	24	30	36	42
MIN. PLATE LAP	4 FT.	4 FT.	4 FT.	6 FT.	8 FT.	8 FT.
ALT STRAP W/ 16d SINKER	ST22	ST6224	ST6236	MST37	MST48	MST60

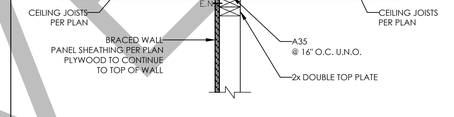
TOP PLATE SPLICE | 12



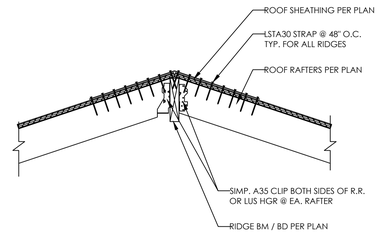
SHEAR TRANSFER DETAIL | 5



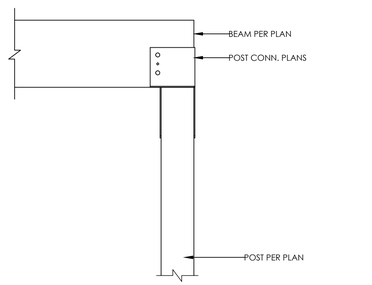
SHEAR TRANSFER DETAIL | 6



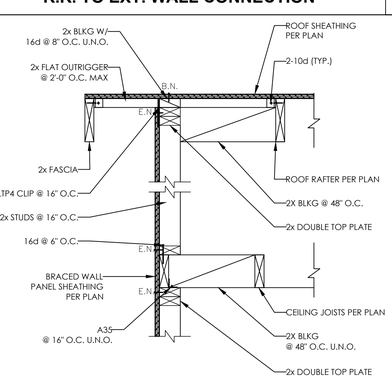
R.R. TO BEAM CONNECTION | 7



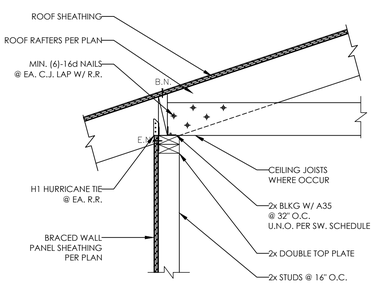
RIDGE CONNECTION | 3



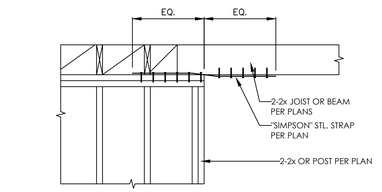
BEAM TO POST CONNECTION | 8



R.R. TO EXT. WALL CONNECTION | 1



R.R. TO EXT. WALL CONNECTION | 2



BEAM TO WALL DRAG CONNECTION | 4

PICO RIVERA
CITY OF PICO RIVERA
COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT
6615 PASSONS BLVD.
PICO RIVERA, CA 90660
PHONE: (562) 801-4332

DATE: 1 / 1 / 2025

PICO RIVERA PRE - APPROVED ADU
PICO-RIVERA, CA

- FOR USE IN THE CITY OF PICO RIVERA ONLY -

THE PLANS ARE PRE-APPROVED FOR AN ADU IN CITY OF PICO RIVERA ONLY. HOWEVER, THE PRE-APPROVED ADU PLAN WILL STILL NEED TO BE SUBMITTED TO THE CITY FOR PLAN CHECK REVIEW FOR EACH INDIVIDUAL PROPERTY WHERE THE ADU WILL BE BUILT.

SHEET DESCRIPTION

STRUCTURAL DETAILS

SHEET NO.

SD2

CITY OF PICO RIVERA PRE-APPROVED ADU, DATE: 1/1/2025