# GENERAL NOTES

- CONTRACTOR SHALL STUDY THE DRAWINGS, SPECIFICATIONS AND FIELD CONDITIONS BEFORE COMMENCING WITH THE WORK INVOLVED, ANY DISCREPANCIES FOUND SHALL
- BE REPORTED TO THE OWNER IN WRITING FOR CORRECTIONS OR CLARIFICATION. PROVIDE SHORING AT ALL TIMES WHEN ALTERING VERTICAL MEMBERS. CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS AND REPORT IN WRITING TO THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH THE WORK.
- THE AREA OF GLASS IN WINDOWS LIMITED TO 20% OF THE FLOOR ADDITION PLUS THE AREA OF ANY GLASS THAT WAS ELIMINATED IN THE ORIGINAL RESIDENCE WALL AREA WHERE THE NEW ADDITION IS ATTACHED. ALL NEW WINDOWS SHALL BE DUAL-GLAZED.
- ALL WINDOWS ARE TO BE WEATHER STRIPPED. SMOKE DETECTORS SHALL BE INSTALLED IN AREAS GIVING ACCESS TO SLEEPING ROOMS ON OR NEAR THE CEILING, IN EACH SLEEPING ROOM (CBC 310.9.1-4).
- ATTIC VENTILATION, EQUAL TO 1/150 OF SPACE VENTILATED, SHALL BE PROVIDED OR AS REQUIRED FOR FORCED AIR UNIT.
- UTILITY LINES AND ACCESSORIES FOUND AT THE SITE THAT INTERFERE WITH THE NEW CONSTRUCTION SHALL BE RELOCATED AS NECESSARY. THE CONTRACTOR SHALL OBTAIN ANY BUILDING PERMIT REQUIRED
- ALL WOOD IN CONTACT WITH CONCRETE AND FOUNDATION SILLS SHALL BE PRESSURE
- PROVIDE CORROSION RESISTED WEEP SCREED AT FOUNDATION PLATE LINE WHICH WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. 4" MINIMUM HEIGHT ABOVE GRADE.
- WALLS CONTAINING 3" OR 4" DIAMETER DRAIN/WASTE/VENT PIPING SHALL BE SIZED TO
- ALLOW CUTTING/NOTCHING/BORING (2 X 6 MIN.) CAULK/SEAL ALL PENETRATIONS TO TOP AND BOTTOM PLATES.
- CAULK/SEAL ALL EXTERIOR BOTTOM PLATES.
- INSULATION: WALLS R-15 / CEILING R-30 / FLOOR R-19 ALL EXTERIOR FINISH MATERIAL TO MATCH EXISTING IN TYPE AND COLOR.
- ALL NEW ELECTRICAL WIRING SHALL BE COPPER PROVIDE SEPARATE INSPECTION FOR EACH PHASE OF EXTERIOR PLASTER AS
- FOLLOWS: SCRATCH COAT, BROWN COAT, COLOR COAT [ STAPLES ARE NOT PERMITTED FOR ATTACHING WIRE ]. BUILDING PAPER TO BE USED # 60 FOR STUCCO THAT DOES NOT HAVE PLYWOOD
- BACKING. DUCTS SHALL BE SIZED PER CHAPTER 6 OF THE MECHANICAL CODE.
- DISTANCE FROM FACE OF THE FOUNDATION TO PROPERTY LINE TO BE ZONING SETBACK PLUS WALL FINISH THICKNESS (MINIMUM). . THE DISCHARGE OF POLLUTANTS TO ANY STORM DRAINAGE SYSTEM IS PROHIBITED. NO SOLID WASTE MATERIALS, OR WASTEWATER GENERATED ON CONSTRUCTION SITES OR
- BY CONSTRUCTION ACTIVITIES SHALL BE PLACED, CONVEYED OR DISCHARGED INTO THE STREET, GUTTER OR STORM DRAIN SYSTEM. THE INSULATION INSTALLER AND THE CONTRACTOR SHALL POST A SIGNED CERTIFICATE OF COMPLIANCE IN A CONSPICUOUS LOCATION IN THE BUILDING. THIS CERTIFICATE SHALL STATE THAT THE INSTALLATIONS AND MATERIALS CONFORM TO THE APPROPRIATE SECTIONS OF THE CALIFORNIA ADMINISTRATIVE CODE, TITLES 20 AND 24 AND SHALL SPECIFY THE MANUFACTURE'S NAME AND MATERIAL IDENTIFICATION, THE INSTALLED R-VALUE, AND WHEN LOOSE FILL IS INSTALLED, SHALL STATE THE MINIMUM
- INSTALLED WEIGHT PER SQUARE FOOT CONSISTENT WITH THE MANUFACTURE'S LABELED DENSITY FOR THE DESIRED R-VALUE. ALL INTERIOR DOORS TO BE HOLLOW CORE 1 3/8" THICK U.N.O., (SEE PLAN FOR SIZE). AT DOUBLE INTERIOR DOOR CONDITIONS PROVIDE DEADBOLT AT TOP OF INACTIVE DOOR. . ALL EXTERIOR FRENCH DOORS TO BE SOLID CORE 1 3/4" THICK. (SEE PLAN FOR SIZE). AT

DOUBLE FRENCH DOORS PROVIDE DEADBOLT AT TOP AND BOTTOM OF INACTIVE DOOR

- 4. CONTRACTOR SHALL VERIFY WITH WINDOW MANUFACTURER THAT ALL ESCAPE OR RESCUE WINDOWS HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET, GRADE FLOOR OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5 FT. THE MIN. NET CLEAR OPENING HEIGHT SHALL BE 24". THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20" AND THE BOTTOM OF THE CLEAR OPENING NO GREATER THAN 44" ABOVE THE FLOOR (C.R.C. R310.1). WINDOWS NOT MEETING THESE REQUIREMENTS SHALL BE
- BROUGHT TO THE IMMEDIATE ATTENTION OF THE DESIGNER. DUCTS PENETRATING WALL OR CEILING PENETRATIONS BETWEEN GARAGE AND DWELLING UNIT SHALL BE CONSTRUCTED OF 26 GAGE MIN. SHEET METAL AND SHALL HAVE NO OPENING INTO GARAGE -PER SEC R302.5.2
- THE CONSTRUCTION SHALL NOT RESTRICT A FIVE FOOT CLEAR AND AN OBSTRUCTED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES.PULL BOXES, TRANSFORMERS, VAULTS, PUMPS, VALVES, METERS, APPURTENANCE ETC.) OR THE LOCATION OF THE HOOK UPS.
- THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER LINES WHEATHER OR NOT THE LINES ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/ OR ADDITIONAL EXPENSES
- PROVIDE ULTRA LOW FLUSH WATER CLOSETS FOR ALL NEW CONSTRUCTION.EXISTING SHOWER HEADS AND TOILETS MUST BE ADAPTED FOR LOW WATER CONSUMPTION.
- WATER HEATER MUST BE STRAPPED TO WALL (SEC.5013 LAPC) SMOKE DETECTORS SHALL BE PROVIDED FOR ALL DWELLING UNITS INTENDED FOR HUMAN OCCUPANCY, UPON THE OWNER'S APPLICATION FOR A PERMIT FOR ALTERATIONS, REPAIRS, OR ADDITIONS EXCEEDING ONE THOUSAND DOLLARS (\$1,000)
- WHERE A PERMIT IS REQUIRED FOR ALTERATIONS, REPAIRS OR ADDITIONS EXCEEDING ONE THOUSAND DOLLARS (\$1,000) EXISTING DWELLING OR SLEEPING UNITS THAT HAVE ATTACHED GARAGES OR FUEL BURNING APPLIANCES SHALL BE PROVIDED WITH A CARBON MONOXIDE ALARM IN ACCORDANCE WITH SECTION R3151.CARBON MONOXIDE ALARMS SHALL ONLY BE REQUIRED IN THE SPECIFIC DWELLING UNIT OR SLEEPING
- UNITS FOR WHICH THE PERMIT WAS OBTAINED (R315.2). EVERY SPACE INTENDED FOR HUMAN OCCUPANCY SHALL BE PROVIDED WITH NATURAL LIGHT BY MEANS OF EXTERIOR GLAZED OPENING IN ACCORDANCE WITH SECTION 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)

# GENERAL REQUIREMENTS

- ALL CONSTRUCTION SHALL COMPLY WITH THE 2022 EDITION OF THE CBC, CRC, CMC, CPC, AND CEC AS ADOPTED AND AMENDED BY THE STATE OF CALIFORNIA IN TITLE 24 CCR AND HIS JURISDICTION.
- SEPARATE PERMITS MAY BE REQUIRED FOR MECHANICAL, ELECTRICAL, PLUMBING, SHORING, GRADING, AND DEMOLITION.
- ALL PROPERTY LINES, EASEMENTS, AND EXISTING BUILDINGS HAVE BEEN INDICATED ON THIS SITE PLAN.
- A SECURITY FENCE SHALL BE PROVIDED AROUND THE CONSTRUCTION AREA THAT
- SHALL BE INSTALLED PRIOR TO EXCAVATION AND OR F FOUNDATION TRENCHING. (BMC
- 9-1-13302.31 WATER SHALL BE PROVIDED ON THE SITE AND USES TO CONTROL DUST.
- TEMPORARY TOILET FACILITIES SHALL BE PROVIDED ON SITE. (BMC 9-1-1-3305) THE FINISH GRADE SHALL SLOPE A MIN. OF 5%, OR 6", TO A POINT 10 FEET FROM BUILDING
- FOUNDATION,OR TO AN APPROVED ALTERNATE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. SWALES SHALL SLOPE A MINIMUM OF 2%. (CRC R401.3) THE TOP OF THE EXTERIOR FOUNDATION SHALL EXTEND ABOVE THE ELEVATION OF THE STREET GUTTER A MINIMUM 12" OR PLUS 2 % (CRC R403.1.7.3)

# FIRE PROTECTION

- AN APPROVED SMOKE ALARMS SHALL BE INSTALLED IN EACH SLEEPING ROOM AND HALLWAY OR AREA GIVING ACCESS TO A SLEEOING ROOM, AND EACH STORY AND BASEMENT FOR DWELLING WITH MORE THAN ONE STORY, SMOKE ALARMS SHALL BE INTERCONNECTED SO THAT ACTUATION OF A ONE ALARM WILL ACTIVATE ALL THE ALARMS WITHIN THE INDIVIDUAL DWELLING UNIT.IN NEW CONSTRUCTION SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER SOURCE FROM THE BUILDING WIRING AND SHALL BE EQUIPPED WITH BATTERY BACK UP AND LOW BATTERY SIGNAL (R314).
- AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND IN SLEEPING UNITS. WITHIN WHICH FEL-BURNING APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES, CARBON MONOXIDE ALARM SHALL BE PROVIDED OUTSIDE OF EACH SEPARATE DWELLING UNITS SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AND ON EVERY LEVEL OF A DWELLING UNIT **INCLUDING BASEMENT (R315)**

# **SCOPE OF WORK**

PROPOSED POOL HOUSE 469 SQ.FT.

### ALL WORK SHALL COMPLY WITH THE FOLLOWING CODES

- 2022 CALIFORNIA RESIDENTIAL CODE
- 2022 CALIFORNIA ELECTRICAL CODE INTERNATIONAL CODE COUNCIL
- 2022 CALIFORNIA BUILDING CODE (C.B.C.)
- 2022 CALIFORNIA BUILDING ENERGY STANDARDS 2022 CALIFORNIA RESIDENTIAL CODE (C.R.C.)
- 2023 LA FIRE CODE (LAFC) 2022 CALIFORNIA MECHANICAL CODE
- 2022 CALIFORNIA PLUMBING CODE
- CITY MUNICIPAL CODE

# PROPERTY INFORMATION

## PROPERTY INFORMATION

ASSESSOR'S ID NO:

ADDRESS: PROPERTY TYPE:

UNITS

STORIES

19910 SUNSET DRIVE LOS GATOS, CA 95030 SINGLE FAMILY RESIDENTIAL

# PROPERTY BOUNDARY DESCRIPTION

LOT

**BUILDING DESCRIPTION** YEAR BUILD / EFFECTIVE YEAR BUILT: BEDROOMS / BATHROOMS 3/2

1924/1964

# **SQUARE FOOTAGE**

LOT AREA 38,768 SQ.FT 2,863 SQ.FT. EXISTING SFD: Garage/Parking 750 SQ.FT. 469 SQ.FT. **NEW POOL HOUSE** 10.52% RATIO

# INDEX

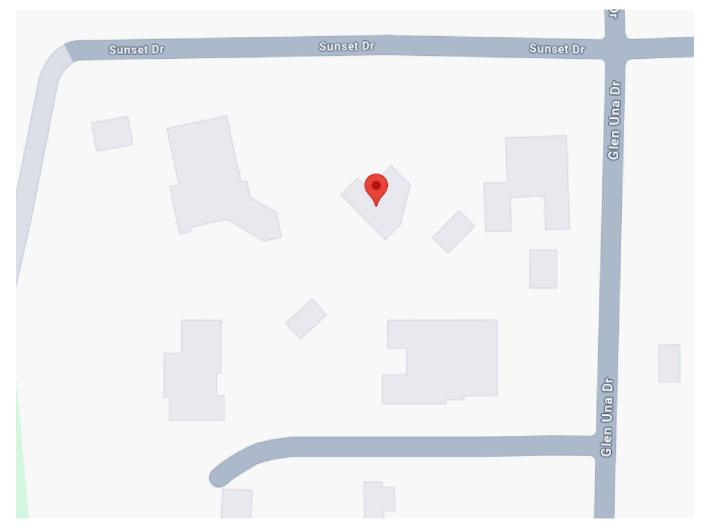
PAGE	DESCRIPTION
A1	SITE PLAN & PROJECT INFO
A1.1	SITE PLAN
A2	FLOOR AND ELECTRICAL PLAN
A2.1	ROOF PLAN, FRAMING PLAN
	FOUNDATION & FLOOR FRAMING
A3	ELEVATIONS AND SECTIONS
A4	FOUNDATION & FRAMING DETAILS
A5	TYPE-V SHEET
G1	GREEN CODE
G2	GREEN CODE

# RESIDENTIAL GENERAL REQUIREMENTS CHECK LIST

- CONCRETE STRENGTH: 2,500 P.S.I. PER 2022 CRC R404,1,2,3,1, @ 28 DAYS. USE TYPE II OR V CEMENT. SPECIAL INSPECTION IS NOT REQ'D. 2. STEEL REINFORCEMENT: GRADE 60, DEFORMED. PER CRC R404.1.2.3.7.1
- 3. ANCHOR BOLTS: A-307.
- 4. LUMBER: USE DOUGLAS FIR, LARCH No. 2 OR BETTER UNLESS OTHERWISE NOCOTED ON FRAMING PLANS.
- 5. USE 2-15# FELT BACKING WHEN STUCCO IS APPLIED OVER PLYWOOD, UBC SEC. 2501.4.
- 6. ALL WORK SHALL COMPLY WITH THE FOLLOWING CODES INCLUDING LOCAL AMENDMENTS.

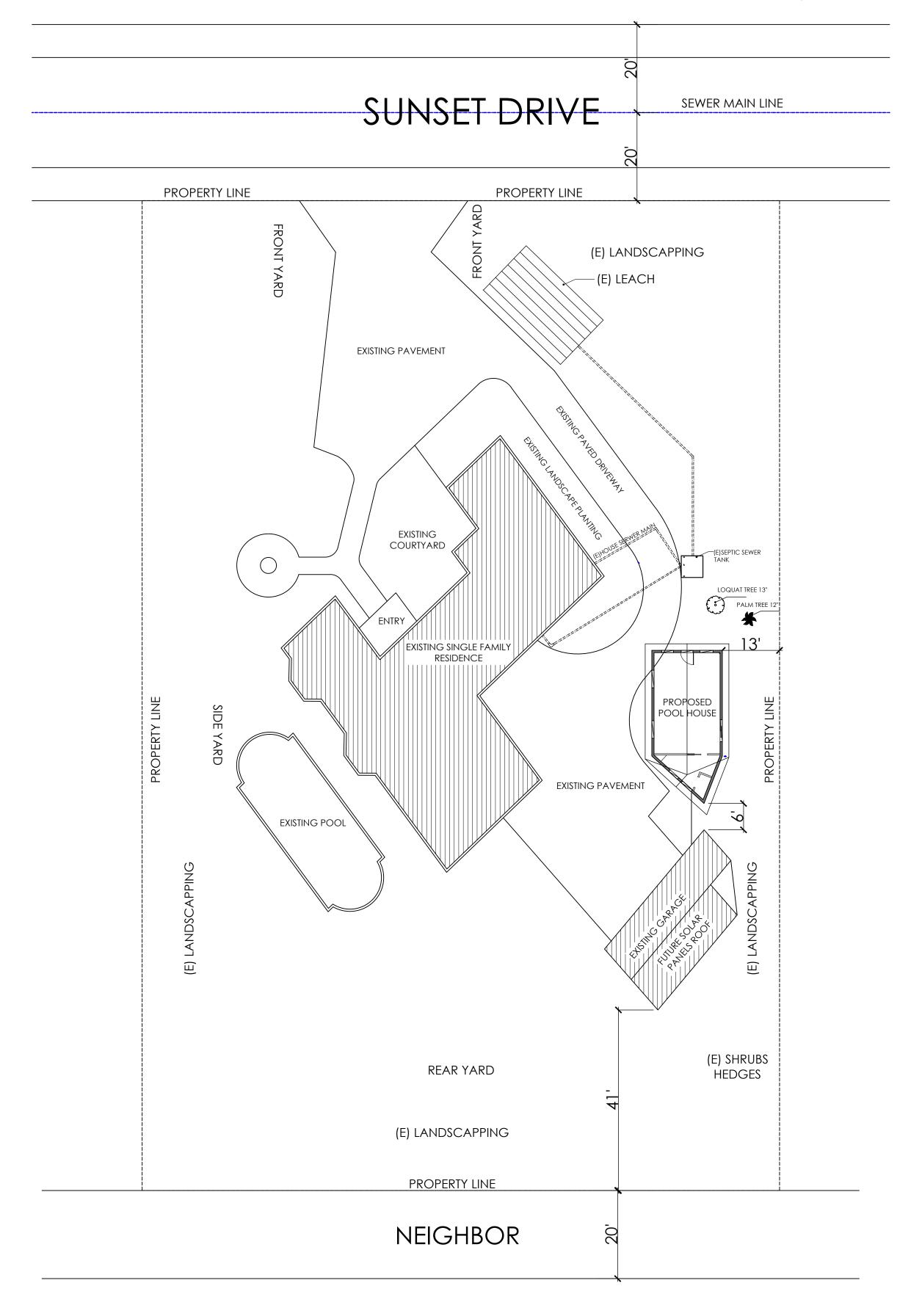
# RESIDENTIAL GENERAL REQUIREMENTS CHECK LIST

- THE FOLLOWING IS INTENDED AS AN ATTACHMENT FOR CONSTRUCTION AND GRADING PLANS AND REPRESENT THE MINIMUM STANDARDS OF HOUSEKEEPING WHICH MUST BE IMPLEMENTED ON ALL CONSTRUCTION SITESREGARDLESS OF SIZE.
- 2. ERODED SEDIMENTS AND OTHER POLLUTANTSMUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE OR WIND.
- STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW,
- SWALES, AREA DRAINS, NATURAL DRAINAGE OR WIND. 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 PROTECTED FROM THE WEATHER. SPILLS MUST BE CLAENED UP IMMEDIATELY AND DISPOSED OF IN A PROPER
- MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO HE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIAN CONCRETE
- WASTES ON SITE UNTIL THEY CAN BE DIPOSED 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.
- 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.
- ANY SLOPES WITH DISTURBED SOILSOR DENUDED OF VEGITATION MUST BE STABILIZED SO AS TO INHIBIT EROSIOP EROSION BY WIND AND WATER. 9. AS PER AMC SEC. 18.38.015 ADU LESS THAN 800 SF DO NOT GET INCLUDED IN THE LOT COVERAGE CALCULATIO. THE LOT COVERAGE SHALL BE LIMITED TO MAIN HOME AND ADDITION.



**VICINITY MAP** 







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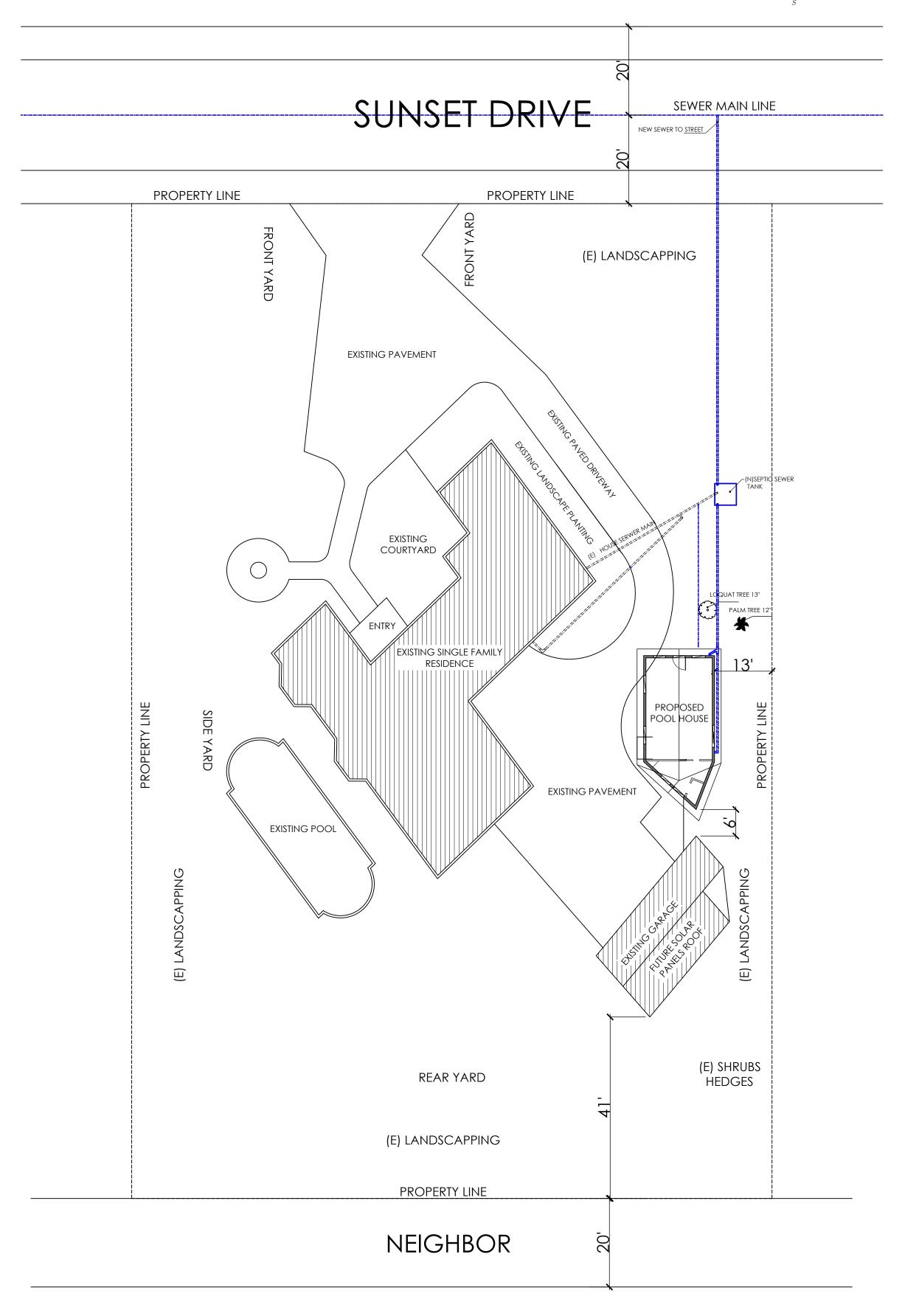
CHECKED BY DESIGN BY

JOSE ZAMBRANO

SIGNATURE

PROJECT DATA, VICINITY MAP & SITE PLAN





PROPOSED UTILITY
SITE PLAN

SCALE:1/16" = 1'-0"

REVISION B

PROJECT:
PROPOSED POOL HOUSE

ADDRESS:

CHECKED BY

DESIGN BY JOSE ZAMBRANO

SIGNATURE

PROJECT DATA, VICINITY MAP & SITE PLAN

A1.1

# ARCHITECTURAL NOTES

- PROVIDE 72" HIGH NON ABSORBENT WALL ADJACENT TO SHOWER AND APPROVED SHATTER resistant materials for shower enclosure. Materials other than structural ELEMENTS TO BE MOISTURE RESISTANT.
- SIZE OF SHOWER STALL TO COMPLY WITH CPC 412.7, 1024 SQ. IN. MINIMUM INTERIOR AND ENCOMPASSING 30" CIRCLE. DOOR SHALL SWING TO THE OUTSIDE. LOW FLOW TOILETS (1.28 GALLON/FLUSH) -SHOWERHEADS (2.0 GPM @ 80 PSI)-FAUCETS (2.0
- GPM @ 60 PSI) PROVIDE INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC
- MIXING VALVE TYPE FOR SHOWERS AND TUB SHOWERS. PROVIDE WEEP SCREED FOR STUCCO AT THE FOUNDATION PLATE LINE A MINIMUM OF4" ABOVE THE EARTH OR 2" ABOVE PAVED AREAS.
- DUCTS SHALL BE SIZED PER CHAPTER 6 OF THE MECHANICAL CODE. CLOTHES DRYER MOISTURE EXHAUST DUCT IS LIMITED TO 14 FEET WITH 2 ELBOWS FROM THE CLOTHES DRYER TO POINT OF TERMINATION REDUCE THIS LENGTH BY 2 FEET FOR EVERY
- ELBOW IN EXCESS OF 2. UNIT SKYLIGHTS SHALL BE LABELED BY L.A CITY APPROVED LABELING AGENCY.SUCH LABEL SHALL STATE THE APPROVED LABELING AGENCY NAME, PRODUCT DESIGNATION AND
- PERFORMANCE GRADE RATING. PROVIDE ULTRA LOW FLUSH WATER CLOSETS FOR ALL NEW CONSTRUCTION. EXISTING
- SHOWER HEADS AND TOILETS MUST BE UPDATED FOR LOW WATER CONSUMPTION. 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. AN APPROVED SEISMIC GAS SHUTOFF VALVE WILL BE INSTALLED ON THE FUEL GAS 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. NEW OR REPLACEMENT WATER HEATERS SHALL BE STRAPPED TO THE WALL IN TWO ONE IN THE UPPER 1/3 OF THE TANK AND ONE IN THE LOWER 1/3 OF THE TANK. THE LOWER POINT
- SHALL BE A MINIMUM OF 4" ABOVE THE CONTROLS.(P.C.510.5) LOW IN EXCESS OF 2. PLUMBING FIXTURES ARE REQUIRED TO BE CONNECTED TO A SANITARY SEWER OR TO AN APPROVED SEWAGE DISPOSAL SYSTEM (R306.3).
- KITCHEN SINK LAVATORIES, BATHTUBS, SHOWER'S, BIDETS, LAUNDRY TUBS AND WASHING MACHINE OUTLETS SHALL BE PROVIDED WITH HOT AND COLD WATER AND CONNECTED TO AN APPROVED WATER SUPPLY (R306.4). BATHTUB AND SHOWER FLOORS, WALL ABOVE BATHTUBS WITH A SHOWERHEAD, AND
- SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6' ABOVE THE FLOOR (R307.2). EVERY SPACE INTENDED FOR HUMAN OCCUPANCY SHALL BE PROVIDED WITH NATURAL
- LIGHT BY MEANS OF EXTERIOR GLAZED OPENINGS IN ACCORDANCE WITH SECTION R303.1 OR SHALL BR PROVIDED WITH ARTIFICIAL LIGHT THAT IS ADEQUATE TO PROVIDE AN AVERAGE ILLUMINATION OF 6' CANDLES OVER THE AREA OF THE ROOM AT A HEIGHT OF 30" ABOVE THE FLOOR LEVEL. (R303.1)
- A COPY OF THE EVALUATION REPORT AND/ OR CONDITIONS OF LISTING SHALL BE MADE AVAILABLE AT THE JOB SITE. HEATER SHALL BE CAPABLE OF MAINTAINING A MINIMUM ROOM TEMP' OF 68°F AT A POINT
- 3' ABOVE THE FLOOR AND 2' FROM EXTERIOR WALLS IN ALL HABITABLE ROOMS AT THE DESIGN TEMPERATURE PROTECTION OF WOOD AND WOOD BASED PRODUCTS FROM DECAY SHALL BE PROVIDED IN THE LOCATIONS SPECIFIED PER SECTION R317.1 BY THE USE OF NATURALLY DURABLE WOOD OR WOOD THAT IS PRESERVATIVE TREATED IN ACCORDANCE WITH AWPA U1 FOR
- SECTION 4 OF AWPA U1. PROVIDE ANTI-GRAFFITI FINISH WITHIN THE FIRST 9 FEET, MEASURED FROM GRADE, AT EXTERIOR WALLS AND DOORS .EXCEPTION:MAINTENANCE OF BUILDING AFFIDAVIT IS RECORDED BY THE OWNER TO COVENANT AND AGREE WITH THE CITY OF LOS ANGELES TO REMOVE ANY GRAFFITI WITHIN 7 DAYS OF THE GRAFFITI BEING APPLIED.(6306)

THE SPECIES, PRODUCT, PRESERVATIVE AND END USE.PRESERVATIVES SHALL BE LISTED IN

# ADDITIONAL NOTES

- HABITABLE SPACES SHALL HAVE CEILING HEIGHT OF NO LESS THAN 7'-6". KITCHENS, LAUNDRY ROOM, CORRIDORS AND BATHROOMS SHALL HAVE CEILING HEIGHT NOT LESS
- PROVIDE 1 ESCAPE WINDOW IN EACH BEDROOM MEETING ALL OF THE FOLLOWING: AN OPENABLE AREA NOT LESS THAN 5.7 SQ.FT. MIN. CLEAR 24" HEIGHT AND 20" WIDTH AND SILL NOT OVER 44" ABOVE FLOOR
- SHOWER WALLS MUST BE FINISHED TO A HEIGHT OF 72" ABOVE DRAIN W/ MOISTURE RESISTIVE TILE OR APPROVED EQUAL
- MAX. FLOW RATE STANDARDS SET BY THE CALIFORNIA ENERGY COMMISSION: WATER CLOSETS 1.28 GPF, SHOWERHEADS 2.0 GPM, LAUNDRY FAUCETS 1.5 GPM, SINK FAUCETS 1.5 GPM, AND KITCHEN FAUCETS 1.8 GPM
- EXTERIOR WALLS WITHIN 3 FEET OF PROPERTY LINE (SPRINKLERS) OR 5 FEET OF PROPERTY LINE (WITHOUT SPRINKLERS) REQUIRE 1-HOUR FIRE RATING FOR EXPOSURE TO BOTH SIDES PROJECTIONS: -PROHIBITED WITHIN 2 FEET OF PROPERTY LINE -1-HOUR FIRE RATING ON THE UNDERSIDE WITHIN 3FT OF PROPERTY LINE (SPRINKLERS) -1-HOUR FIRE RATING ON THE
- UNDERSIDE WITHIN 5FT OF PROPERTY LINE (WITHOUT SPRINKLERS) WITHIN 5 FEET OF PROPERTY LINE (WITHOUT SPRINKLERS)
- PENETRATIONS: -1-HOUR FIRE-RATED PENETRATIONS OF WALLS WITHIN 3FT OF PROPERTY LINE (SPRINKLERS) -1-HOUR FIRE-RATED PENETRATIONS OF WALLS WITHIN 5FT OF PROPERTY LINE (WITHOUT SPRINKLERS)

# UTILITY NOTES

- ALL BRANCH CIRCUITS SUPPLYING RECEPTACLES SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER (AFCI)
- ALL 120-VOLT, SINGLE PHASE 15 AND 20 AMP BRANCH CIRCUIT SUPPLYING OUTLETS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY ROOMS OR SIMILAR ROOMS OR AREAS SHALL BE AFCI PROTECTED BY ANY OF THE MEANS DESCRIBED IN 210.12 (A)(1). AT KITCHEN COUNTER SPACE, RECEPTACLES SHALL BE
- INDICATED AS COMBINATION AFCDI/GFCI. TAMPER RESISTANT RECEPTACLES IN ALL AREAS SPECIFIED IN SECTION 210.52ALL 125-VOLT, 15 AND 20 AMP RECEPTACLES SHALL BE LISTED TAMPER RESISTANT RECEPTACLES
- NEW BOXES USED AT LUMINAIRES OR LAMP HOLDER OUTLETS IN A CEILING SHALL BE REQUIRED TO SUPPORT A LUMINAIRIE WEIGHING A MINIMUM OF 50 LB. BOXES USED AT LUMINARIE OUTLETS IN WALL SHALL BE DESIGNED FOR THE PURPOSE AND SHALL BE MARKED ON THE INTERIOR INDICATING THE MAXIMUM WEIGHT OF LUMINAIRE PERMITTED, IF OTHER THAN 50 LBS. OUTLET BOXES OR SYSTEMS USED AS THE SOLE SUPPORT OF CEILING FANS SHALL BE LISTED AND MARKED BY THE MANUFACTURE AS SUITABLE FOR THIS PURPOSE.
- (314.27 CEC) ALL LEAD LUMINAIRES ARE REQUIRED TO BE CONTROLLED BY NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) SSL-7A-COMPLIANT DIMMER UNLESS THEY ARE CONTROLLED BY A VACANCY SENSOR OR AN OCCUPANCY SENSOR. THE COMBINED USE OF NEMA SSL-7A-COMPLIANT DIMMER WITH LED LUMINAIRES CANENSURE FLICKER FREE OPERATION WHEN THE LUMINAIRE IS DIMMED. (2019 RESIDENTIAL COMPLIANCE MANUAL
- IN BATHROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THIS SPACES MUST BE CONTROLLED BY AN OCCUPANT SENSOR OR A VACANCY SENSOR PROVIDING AUTOMATIC-OFF FUNCTIONALITY. IF A OCCUPANT SENSOR IS INSTALLED, IT MUST BE INITIALLY CONFIGURED TO MANUAL-ON OPERATION USING THE MANUAL CONTROL REQUIRED UNDER SECTION 150.0(k)2C.

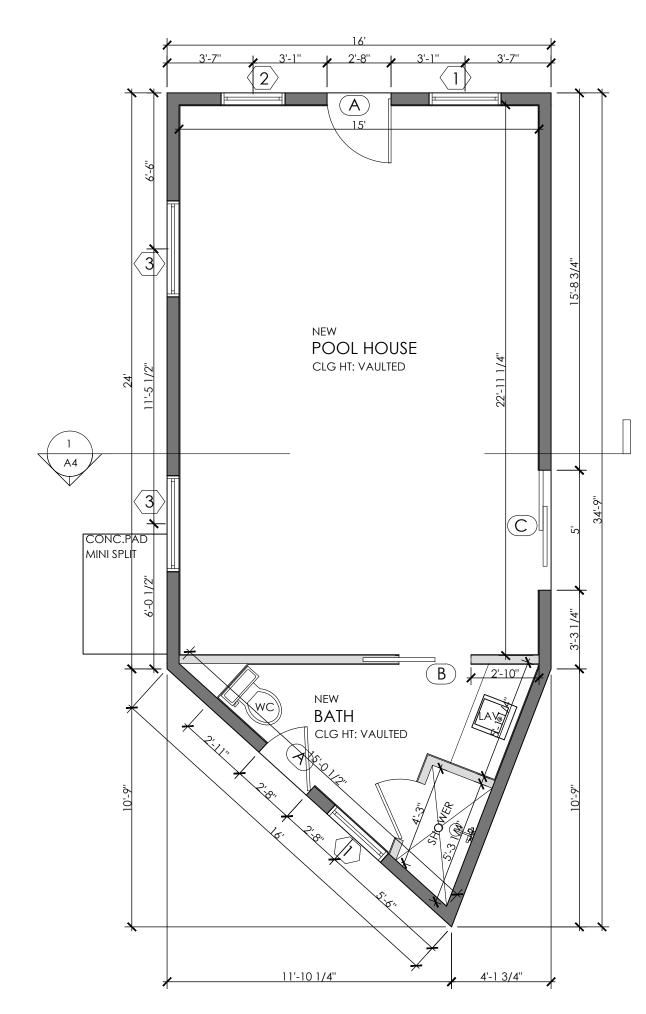
# ADDITIONAL NOTES

- PROVIDE A MINIMUM OF (2) 20 AMP SMALL APPLIANCE CIRCUITS FOR THE KITCHEN COUNTER TOPS. SUCH CIRCUIT SHALL HAVE NO OTHER OUTLETS. LOADS SHALL BE BALANCED. CEC 210-52(B) (2)
- PROVIDE A MINIMUM OF (1) 20 AMP LAUNDRY BRANCH CIRCUIT. SUCH CIRCUIT SHALL HAVE NO OTHER OUTLETS. CEC 210-23(A). A MINIMUM OF (1) 20-AMP CIRCUIT FOR BATHROOM(S) OUTLET. SUCH CIRCUIT SHALL HAVE
- NO OTHER OUTLETS. THIS CIRCUIT MAY SERVE MORE THAN ONE BATHROOM CEC 210-23 IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES MUST BE CONTROLLED BY A VACANCY SENSOR. OUTDOOR LIGHTING PERMANENTLY MOUNTED TO A RESIDENTIAL BUILDING, OR TO OTHER
- BUILDING ON THE SAME LOT, MUST MEET THE REQUIREMENT IN ITEM 150.0(K)3AI (ON AND OFF SWITCH) AND THE REQUIREMENTS IN EITHER ITEM 150.0(K)3AII (PHOTOCELL AND MOTION SENSOR) OR ITEM 150.0(K)3AIII (PHOTO CONTROL AND AUTOMATIC TIME SWITCH CONTROL, ASTRONOMICAL TIME CLOCK, OR EMCS
- ALL LIMINAIRES SHALL BE HIGH EFFICACY -PER SECTION 150.0(K)1A. CIRCUIT SHALL HAVE NO OTHER OUTLETS. CEC 210-23(A).

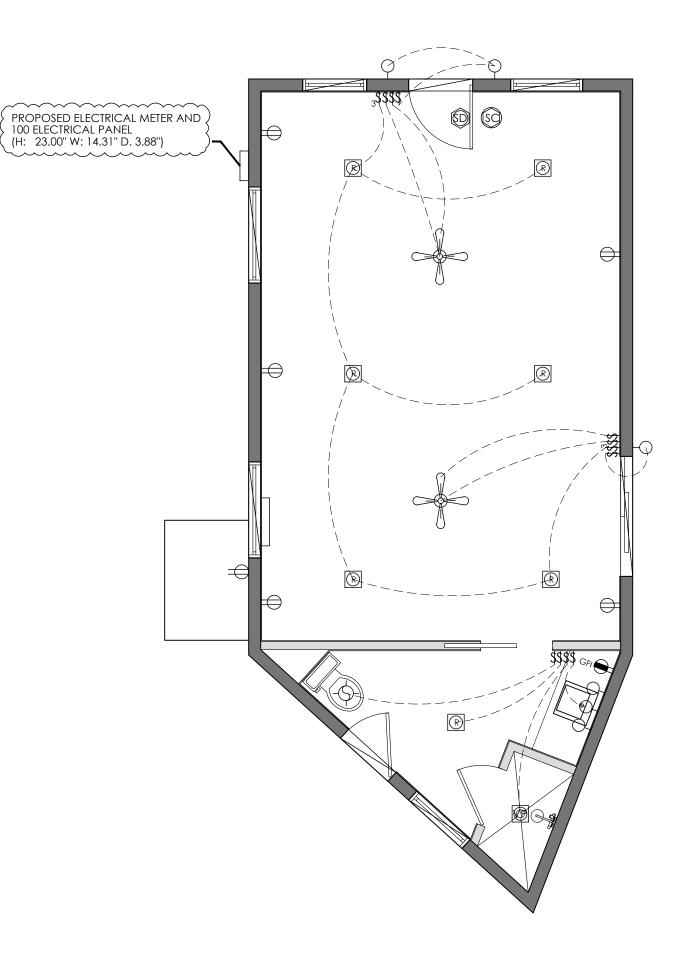
# ELECTRICAL KEY:

- DUPLEX OUTLET DUPLEX OUTLET ABOVE COUNTER
- DUPLEX OUTLET BELOW COUNTER
- SPLIT SWITCHED OUTLET
- CEILING OUTLET
- FLOOR OUTLET
- SPLIT SWITCHED FLOOR OUTLET
- 4 GANG FLOOR OUTLET GFI GROUND FAULT OUTLET GFI/WP WEATHER PROOF OUTLET
- € 220v OUTLET
- S EXAUST FAN
- -(S)- EXAUST FAN / LIGHT RECESSED CAN LIGHT
- RECESSED FLUORESCENT
- EYEBALL LIGHT
- VAPOR PROTECTED LIGHT
- RECESSED WALL OUTLET
- RECESSED MR15
- CEILING LIGHT
- PENDANT LIGHT ○→ WALL LIGHT
- WALL LIGHT
- SINGLE SWITCH 3-WAY SWITCH
- 4-WAY SWITCH DIMMER SWITCH
- RHEOSTAT CABLE T.V. JACK
- HIGH SPEED INTERNET BUTTON
- PHONE JACK SMOKE DETECTOR
- SMOKE/CARBON DETECTOR (DIRECT WIRE W/ BATT)
- ⇒ INTERCOM DISCONNECT SWITCH
- ELECTRIC METER DIRECT WIRE 1 BULB FLUORESCENT
- 2 BULB FLUORESCENT YANITY LIGHTS
- (JB) JB FOR CEILING FAN
- OOO CHIMES FLOOD LIGHT
- (JB) JUNCTION BOX SPEAKER HARD WIRE
- CENTRAL VACUUM ACCESS
- GS GAS STUB
- (G) 1-#5 GROUND FOR ELEC
- CENTRAL VAC GAS APP W/H
- 300 300 AMP ELEC PANEL 200 225 AMP ELEC PANEL
- 100 100 AMP ELEC PANEL

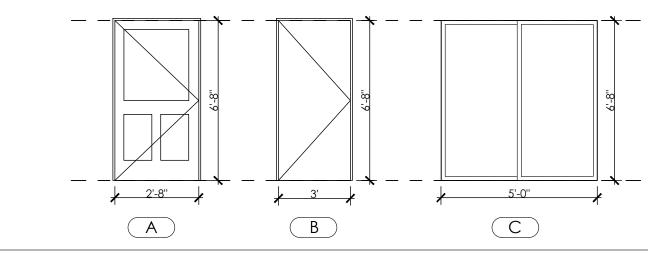








DOOR SCHEDULE								
		=				T		
	QTY	MARK	OPENING SIZE	TICK	DOOR TYPE	SCREEN FRAM		
			0' 0"\\\ \ \' 0"	1.0/4	EVIEDIOD DOOD	WOOD WOO		
	2	(A)	2'-8"W X 6'-8" H	1 3/4"	EXTERIOR DOOR	WOOD WOO		
	1	В	3'-0"W X 6'-8" H	1 3/8"	INT. BATH POCKET DOOR	WOOD WOO		
	I	(D)	0 0 11 11 11	1 3/0	INTERVITO CRET BOOK	WOOD WOO		
	1	C	5'-0"W X 6'-8" H	1 3/8"	ext. Sliding door	GLASS ALUMIN		
		1		1	1			
					<del>                                     </del>	<b>—</b>		



WINDOW SCHEDULE

QTY	MARK	SIZE	TYPE	FRAME	SCREEN	SHGC	U-FACTOR
2	1	3'-0"W X 4'-6"H	SINGLE HUNG WINDOW	WOOD	Υ	0.23	0.3
1	2	2'-8"W X 4'-6"H	SINGLE HUNG WINDOW	WOOD	Y	0.23	0.3
2	3	4'-0"W X 1'-0"H	SINGLE HUNG WINDOW	WOOD	Y	0.23	0.3
		3, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	2'-8"		4'		89

1. BEDROOM EGRESS WINDOWS HAVE A MINIMUM CLEAR OPENING AREA OF 5.7 SF. ABOVE THE GRADE FLOOR AND 5 SQ.FT. ON THE GRADE FLOOR, A MIN. NET HEIGHT OF 24" AND MIN. NET WIDTH OF 20", AND SILL HEIGHT NOT MORE THAN 44" MAX. ABOVE FINISH 2. THE NFRC TEMPORARY LABEL DISPLAYED ON WINDOWS AND SKYLIGHTS (INCL. TUBULAR) MUST REMAIN ON THE UNIT UNTIL FINAL INSPECTION HAS BEEN COMPLETED.

3. SHOWER AND TUB ENCLOSURES SHALL BE TEMPERED (CBC 2406.4) WINDOWS AT

SHOWERS AND TUBS SHALL BE TEMPERED.

WATER FIXTURE					
WATER CLOSET	1.28 GALLONS/FLUSH				
URINALS	0.5 GALLONS/FLUSH				
SINGLE SHOWERHEADS	2 GPM @ 80 PSI				
MULTIPLE SHOWERHEADS /	2 GPM @ 80 PSI				
COMBINATED SHOWERHEADS	FOR ALL				
LAVATORY FAUCETS, RESIDENTIAL	1.2 GPM @ 60 PSI				
LAVATORY FAUCETS, NORESIDENTIAL	0.5 GPM @ 60 PSI				
METERING FAUCETS	0.25 GALLONS PER CYCLE				
KITCHEN FAUCETS	1.8 GALLONS/FLUSH AT 60 PSI				

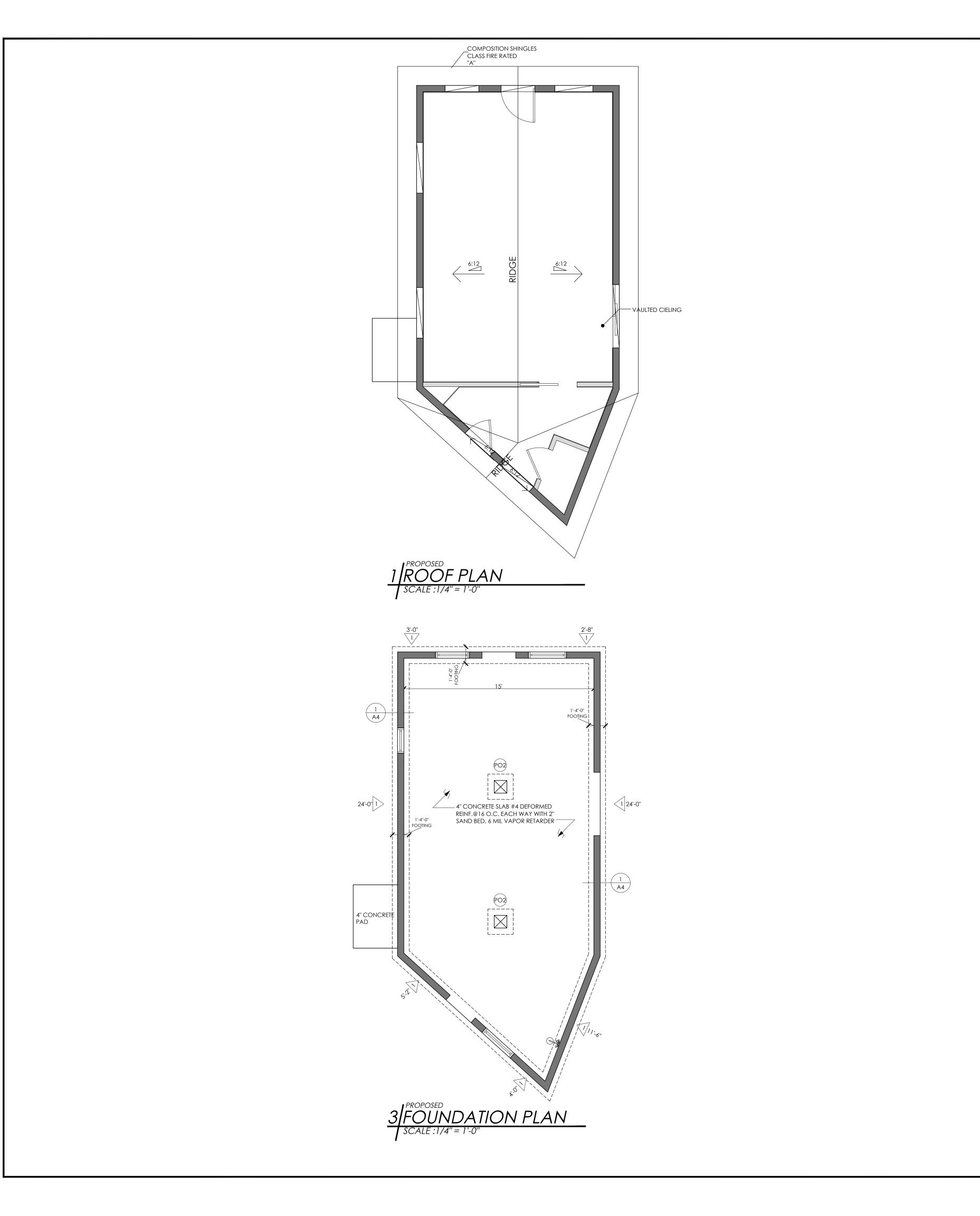
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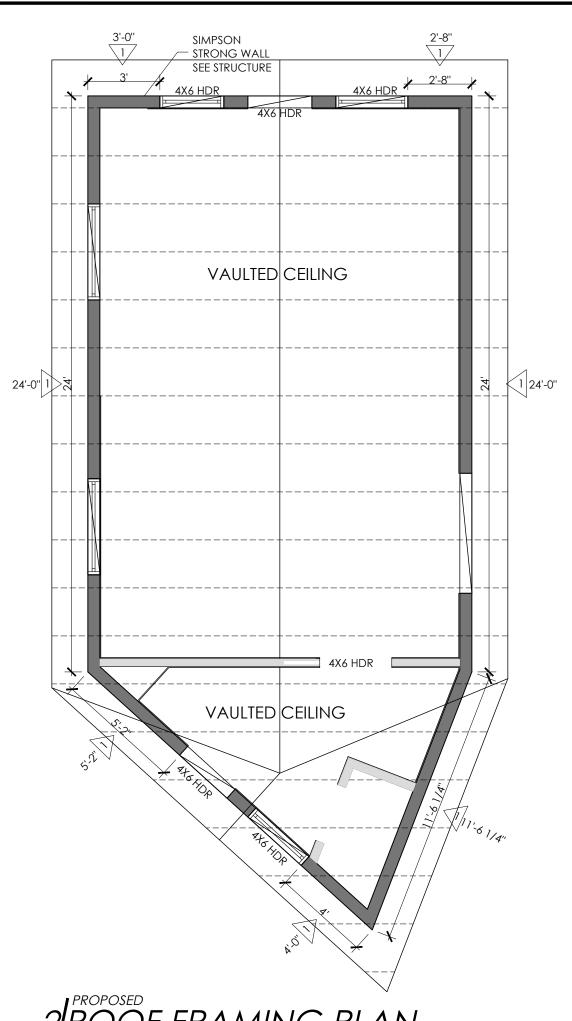
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DESIGN BY JOSE ZAMBRANO

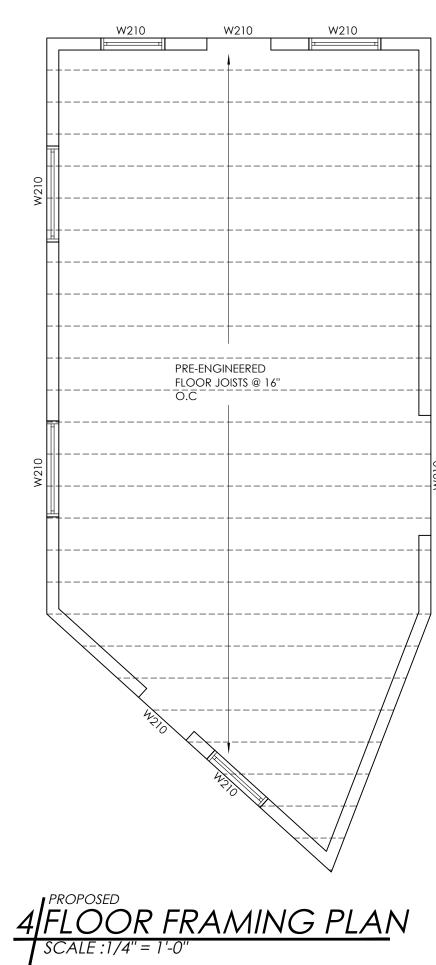
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FLOOR PLANS & ELECTRICAL PLAN





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



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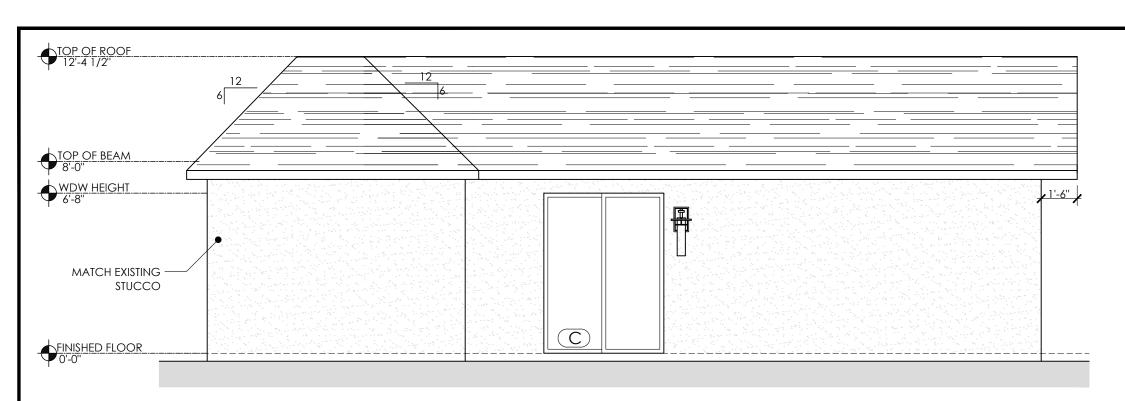
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PROPOSED DRAWN BY

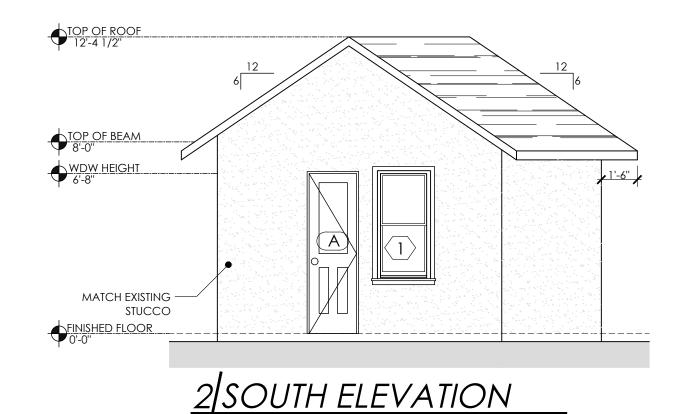
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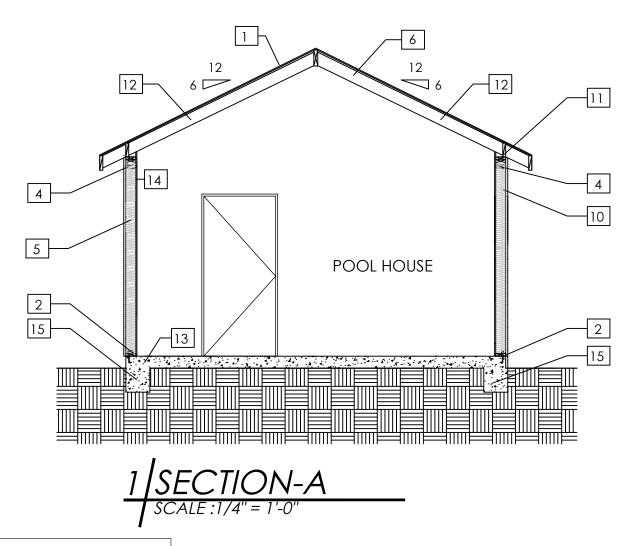
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ROOF, FOUNDATION & FRAMING PLAN



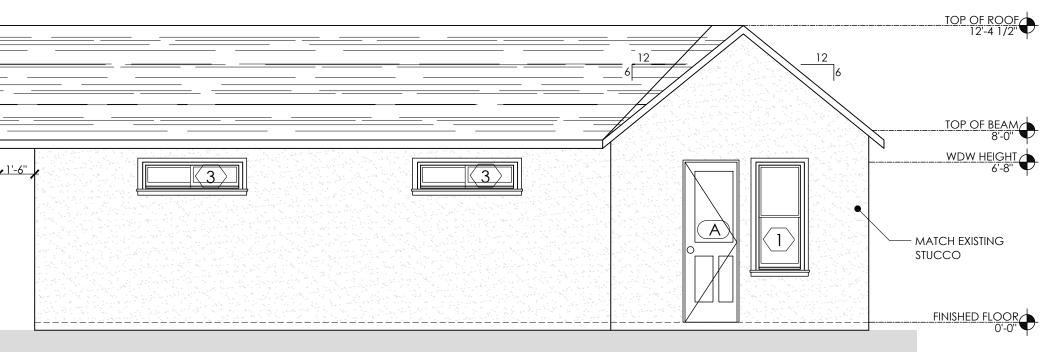
# 1 EAST ELEVATION SCALE: 1/4" = 1'-0"



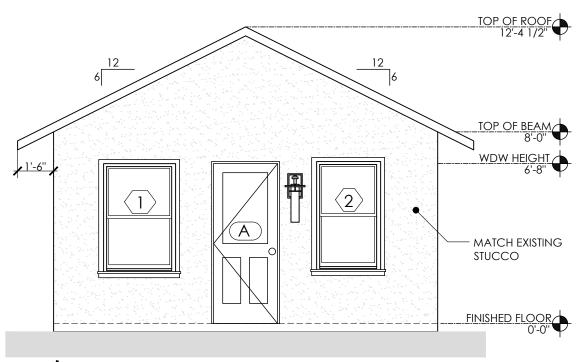


	Section Keynotes
MARK	DESCRIPTION
1	COMPOSITION SHINGLES OVER #15 FELT CLASS "A" (TYP) CERTAINTED OR SIMILAR ESR-1389, 3537 ICC-ES
2	3"x4" SILL PLATE W/ 5/8" DIA ANCHOR BOLTS
4	DOUBLE 2x4 TOP PLATE AT EXTERIOR & BEARING WALLS TYPE DOUGLAS FIR GRADE #2
5	R-13 FIBERBATT INSULATION SEE ENERGY CALCS
6	R-30 FIBERBATT INSULATION SEE ENERGY CALCS
7	2"x6" R.R. @ 16" O.C. TYPE DOUGLAS FIR GRADE #2
8	2"x8" C.J. @ 16" O.C. TYPE DOUGLAS FIR GRADE #2 SEE STRUCTURAL
10	4"x6" HEADER TYPE DOUGLAS FIR GRADE #1
11	2"X SOLID BLOCK W/ FRAMING ANCHOR EA. BLOCK TYPE DOUGLAS FIR GRADE #2
12	2"X RIDGE TYPE DOUGLAS FIR GRADE #2
13	26 GA. CORROSION- RESISTANT WEEP SCREED
14	1/2" GYP BOARD
15	12" FOOTING

	Section Keynotes			
MARK	DESCRIPTION			
18	HORIZONTAL GRAB BAR			
19	FLIP UP GRAB BAR			
20	HAND-HELD SHOWER HEAD			
	Elevation Keynotes			
MARK	Keynote text			
A-1	COMPOSITION SHINGLES			
	OVER #15 FELT CLASS "A"			
A-7	MINI SPLIT CONDENSER (SEE T-24)			
A-8	WATER HEATER (SEE T-24)			
A-9	EXTERIOR WALL LAMP			
A-16 WATER GUTTER				



# 3 WEST ELEVATION SCALE: 1/4" = 1'-0"



4NORTH ELEVATION

# **ROOF PLAN NOTES** INDICATES ROOF SLOPE AND DIRECTION, U.N.O. INDICATES STANDARD ROOF PITCH, U.N.O.

ATTIC VENT CALCULATION PROVIDE 1 SQ. IN. OF VENTILATION PER 150 SQ. IN. OF ATTIC SPACE. PROVIDE THAT 50% OF THE REQ. VENTILATION AREA IS PROVIDED BY VENTILATORS IN THE UPPER PORTION OF THE ATTIC, (HIGH VENTING) AT 3'-0"

12 (INCHES) TYPICAL ROOF OVERHANG AT EAVE, UNLESS NOTED OTHERWISE

ABOVE EAVE VENT WITH THE BALANCE BEING PROVIDED BY EAVE VENTS, (LOW VENTING) PER I.R.C. R806, (U.B.C.1505.3).

# AREA-2 PROPOSED ADDITION

VENTILATION REQUIRED: ATTIC AREA

616 SQFT. /150 = 4.10 SQ FT. 4.10X 144 = 591.36 SQIN.

591.36 SQ IN.

VENTILATION PROVIDED:

(3) O'HAGIN EXHAUST VENT 72 SQIN. EA.= 216 SQ IN.

(3) 14X6 INTAKE VENT

65 SQIN. EA. = 195 SQ IN.

SUBTOTAL HIGH VENTILATION: TOTAL VENTILATION PROVIDED: TABLE R602.3(1)
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS NUMBER AND TYPE OF a,b,c FASTENER

DESCRIPTION OF BUILDING ELEMENTS

SPACING OF FASTENERS

	ROOF		
1	Blocking between joist or rafters to top plate, toe nail	3-8d (2 1/2"x0.113")	-
2	Ceiling joists to plate, toe nail	3-8d (2 1/2"x0.113")	-
3	Ceiling joists not attached to parallel rafter, laps over partitions, face	3-10d	-
4	Collar tie rafter, face nail or 1 1/4"x20 gage ridge strap	3-10d (3"x0.128")	-
5	Rafter to plate, toe nail	2-16d(3 1/2"x 0.135")	
6	Roof rafters to ridge, valley or hip rafters: toe nail face nail	4-16d(3 1/2"x0.135") 3-16d(3 1/2"x0.135")	-
	WALL	3-10d(3 1/2 x0.133 )	
7	Built-up corner studs	10d (3"x0.128")	24" o.c.
8	Built-up header, two pieces with 1/2" spacer	16d (3 1/2"x0.135")	16" o.c. along each edge
9	Continued header, two pieces	16d (3 1/2"x0.135")	16" o.c. along each edge
10	Continued header to stud, toe nail	4-8d (2 1/2"x0.113")	
11	Double studs, face nail	10d (3"x0.128")	24" o.c.
12	Double top plate, face nail	10d (3"x0.128")	24" o.c.
13	Double top plate, minimum 48-inch offset of end joints, face nail in lapped area	8-16d (3 1/2"x0.135")	-
14	Sole plate to joist or blocking, face nail	16d (3 1/2"x0.135")	16" o.c.
15	Sole plate to joist or blocking at baced wall panels	3-16d (3 1/2"x0.135")	16" o.c.
16	stud to sole plate, toe nail	3-8d ( 2 1/2"x0.113")	-
17	Top or sole plae to stud, end nail	2-16d (3 1/2"x0.135")	-
18	Top plates, laps at corners and intersections, face nail	2-10d (3 "x0.128")	-
19	1" brace to each stud and plate, face nail	2-8d (2 1/2"x0.113") 2 staples 1 3/4"	
20	1"x6" sheathing to each bearing, face nail	2-8d (2 1/2"x0.113") 2 staples 1 3/4"	
21	1"x8" sheathing to each bearing, face nail	2-8d (2 1/2"x0.113") 3 staples 1 3/4"	:
22	Wider than 1"x8" shearing to each bearing, face nail	3-8d (2 1/2"x0.113") 4 staples 1 3/4"	-
	FLOOR		
23	Joist to sill or girder, toe nail	3-8d (2 1/2"x0.113")	-
24	1"x6" subfloor or less to each joist, face nail	2-8d (2 1/2"x0.113") 2 staples 1 3/4"	-
25	2" subfloor to joist or girder, blind and face nail	2-16d (3 1/2"x0.135")	
26	Rim joist to top plate, toe nail (roof applications also)	8d (2 1/2"x0.113")	6" o.c.
27	2" planks (planks & beam-floor & roof)	2-16d (3 1/2"x0.135")	at each bearing
28	Built-up girders and beams, 2-inch lumber layers	10d ( 3"x0.128")	Nail each layer as follows: 32" o.c. at top and bottom and staggered. Two nails at ends and at each splice
29	Ledger strip supporting joists or rafters	3-16d (3 1/2"x0.135")	At each joist or rafter
	TABLE R602.3(1)continued FASTENER SCHEDULE FOR STRUCTURAL	MEMBERS	
			SPACING OF FASTENERS

		FASTENER SCHEDULE FOR STRUCTURAL MEMBERS		
			SPACIN	G OF FASTENERS
ITEM	DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER b,c,e	EDGES (INCHES)	INTERMEDIATE c,e SU
Wood st	tructural panels, subfloor, roof and in	terior wall sheathing to framing and particleboard wall sheathing to fro	aming	
30	3/8" - 1/2"	6d common (2"x0.113") nail (subfloor wall) 8d common (2"x0.131") nail (roof)	6	12 <sup>g</sup>
31	5/16" - 1/2"	6d common (2"x0.113") nail (subfloor wall) 8d common (2"x0.131") nail (roof)	6	12 <sup>g</sup>
32	19/32" - 1"	8d common (2"x0.131")	6	12 <sup>g</sup>
33	1 1/8" - 1 1/4"	10d common (3"x0.148") nail or 8d (2 1/2"x0.131") deformed nail	6	12
	·	Other wall sheathing		
34	1/2" structural cellulosic fiberboard sheathing	1/2" galvanized roofing nail. 7/16" crown or 1" crown staple 16 ga. 1 1/4" long	3	6
35	25/32" structural cellulosic fiberboard sheathing	1 3/4" galvanized roofing nail. 7/16" crown or 1" crown staple 16 ga. 1 1/2" long	3	6
36	1/2" gypsum sheathing	1 1/2" galvanized roofing nail : staple galvanized, 1 1/2" long; 1 5/8" screws. Type W or S	7	7
37	5/8" gypsum sheathing d	1 3/4" galvanized roofing nail ; staple galvanized, 1 5/8" long; 1 5/8" screws. Type W or S	7	7
	Wood structur	al panels, combination subfloor underlayment to framing		
38	3/4" and less	6d deformed (2"x0.120") nail or 8d common (2 1/2"x 0.131") nail	6	12
39	7/8" - 1"	8d deformed (2 1/2"x0.131") nail or 8d deformed (2 1/2"x 0.120") nail	6	12
40	1 1/8"- 1"	10d common (3"x0.148") nail or 8d deformed (2 1/2"x 0.120") nail	6	12

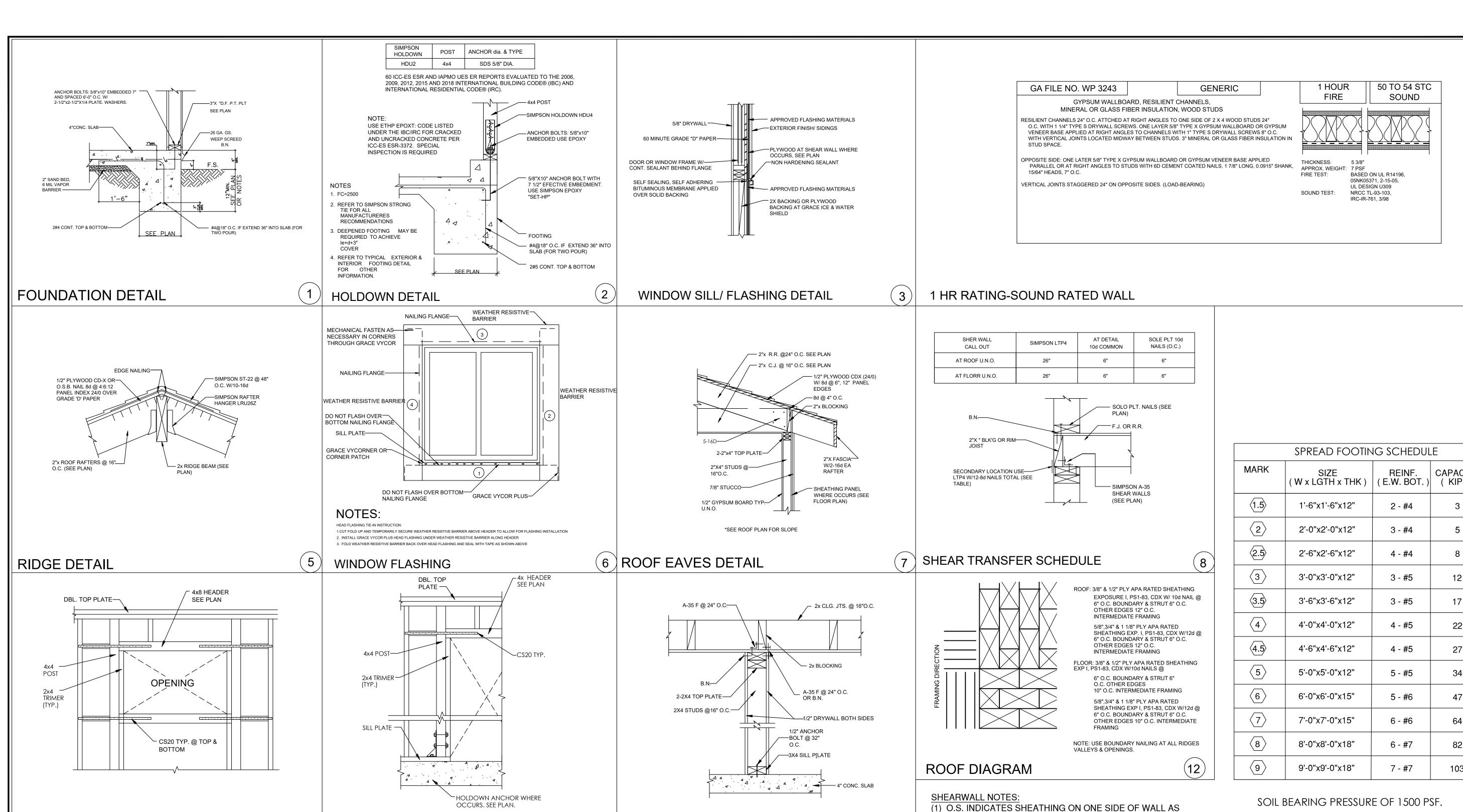
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REVISION

DESIGN BY JOSE ZAMBRANO

SIGNATURE

ELEVATIONS AND SECTIONS



(10)INTERIOR NON-BEARING WALL

HEADER SCHEDULE							
BEARING AND	EXTERIOR WALLS	NON - BEAF	RING WALLS				
OPENING WIDTH	HEADER SIZE	OPENING WIDTH	HEADER SIZE				
6'-0" OR LESS	4X6	8'-0" OR LESS	4X6				
6'-1" TO 8'-0"	4X8	8'-1" TO 12'-0"	4X8				
8'-1" TO 10'-0"	4X10						

# NOTE: USE 6X LINTEL MEMBERS IN 2X6 STUDS WALLS

STRAP @ OPENING

	NUMBER OF FULL - HEIGHT STUDS					
OPENING WIDTH	ALL EXTERIOR WALLS	INTERIOR BRG. WALLS	INTERIOR NO – BEARING WALLS			
7'-0" OR LESS	2	2	1			
7'-1" TO 10'-0"	3	2	1			
OVER 10'-0"	4	2	1			

NOTE: OMIT FULL-HT. STUDS WHERE POST FOR HOLDDOWN ANCHOR OCCURS. SEE PLAN AND TYPICAL HOLDDOWN DETAIL.

# TYPICAL CEILING JOIST DETAILS AND CEILING JOIST SCHEDULE

(9) SHEAR WALL ELEVATION

CEILING JO	IST SCHEDULE
CLEAR SPAN "L"	JOIST SIZE & SPACING
8'-9" OR LESS	2X4 @ 16"
8'-9" TO 12'-10"	2X6 @ 16"
12'-10" TO 16'-3"	2X8 @ 16"
16'-3" TO 19'-10"	2X10 @ 16"

SHEARWALL SCHEDULE								
MARK	SHEATHING (1)	NAIL SIZE (2)	EDGE NAIL SPACING	FIELD NAIL SPACING	SILL TO WOOD CONN. (1)	SILL TO CONC. CONN. (1)	ALLOW SHEAR (PLF)	SHEAR WALL TYPE (3)
<u>6</u>	15/32 STRI .I O.S.	10d	6"	12"	SDS1/4"x6" @ 16"	2x: 5/8" Ø A.B. @ 33x2:" 5/8" Ø A.B. @ 48"	340	I
4	15/32 STRI .I O.S.	10d	4"	12"	SDS1/4"x6" @ 12"	3x: 5/8" Ø A.B. @ 32"	510	II
<u> </u>	15/32 STRI .I O.S.	10d	3" STGR (4)	12"	SDS1/4"x6" @ 9"	3x: 5/8" Ø A.B. @ 24"	665	II
<u>^2</u>	15/32 STRI .I O.S.	10d	2" STGR (4)	12"	SDS1/4"x6" @ 6"	3x: 5/8" Ø A.B. @ 16"	870	II
40	15/32 STRI .I D.S.	10d	4"	12"	SDS1/4"x6" @ 6"	3x: 5/8" Ø A.B. @ 16"	1020	Ш
30	15/32 STRI .I D.S.	10d	3" STGR (4)	12"	SDS1/4"x6" @ 4"	3x: 5/8" Ø A.B. @ 12"	1330	IV
20	15/32 STRI .I D.S.	10d	2" STGR (4)	12"	SDS1/4"x6" @ 3"	3x: 5/8" Ø A.B. @ 8"	1740	IV

SHOWN ON PLANS. D.S. INDICATES DOUBLE SIDED

(2) USE COMMON WIRE NAILS FOR ALL STRUCT-1 SHEATHING.

SHEARWALL: SHEATHING ON BOTH SIDES OF WALL.

MARK	SIZE (WxLGTHxTHK)	REINF. (E.W. BOT.)	CAPACITY ( KIPS)
(1.5)	1'-6"x1'-6"x12"	2 - #4	3
2	2'-0"x2'-0"x12"	3 - #4	5
2.5	2'-6"x2'-6"x12"	4 - #4	8
3	3'-0"x3'-0"x12"	3 - #5	12
3.5	3'-6"x3'-6"x12"	3 - #5	17
4	4'-0"x4'-0"x12"	4 - #5	22
4.5	4'-6"x4'-6"x12"	4 - #5	27
5	5'-0"x5'-0"x12"	5 - #5	34
6	6'-0"x6'-0"x15"	5 - #6	47
7	7'-0"x7'-0"x15"	6 - #6	64
8	8'-0"x8'-0"x18"	6 - #7	82
9	9'-0"x9'-0"x18"	7 - #7	103

CHECKED BY

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REVISION

DESIGN BY **JOSE ZAMBRANO** 

DRAWN BY

SIGNATURE

FOUNDATION & FRAMING DETAILS

INFORMATION BULLETIN / PUBLIC - BUILDING CODE REFERENCE NO.: LARC Effective: 01-01-2017 DOCUMENT NO. P/BC 2023-004 Revised: 01-01-2023 Previously Issued As: P/BC 2013-004

# WOOD FRAME PRESCRIPTIVE PROVISIONS ONE STORY RESIDENTIAL CONSTRUCTION ONLY

(Formerly known as Type V Sheet) The wood frame prescriptive provisions are for one and two family dwellings and townhouses of wood frame construction, not exceeding one story in height. This Information Bulletin is for information and reference only and is not a substitute for accurate drawings prepared for each proposed construction

LARC refers to the Los Angeles City Residential Code. The number following R references the code section within the Los Angeles City Residential Code.

### All buildings erected using provisions detailed herein must comply with restrictions listed below:

a) Roof and floor boundary elements shall not cantilever past exterior wall line(s) below. b) This prescriptive provisions shall not be used for irregular structures located in Seismic Design Categories C, D0, D1, and D2 per 2023 LARC Section R301.2.2.2.5.

# FOOTINGS ON EXPANSIVE SOILS

Footing systems on expansive soil shall be constructed in a manner that will minimize damage to the structure from movement of the soil. All soil in the City of Los Angeles is considered expansive unless proven otherwise by an approved soils report.

- 1. Depth of footings below the natural and finished grades shall not be less than 24 inches for exterior and 18 inches for interior footings.
- 2. Exterior walls and interior bearing walls shall be supported on continuous footings.
- 3. Footings shall be reinforced with four ½-inch diameter deformed reinforcing bars. Two bars shall be placed 4 inches from the bottom of the footing and two bars within 4 inches from the top of the footing. Reinforcement shall have a minimum 3-inch concrete cover for concrete cast against earth and reinforcement not exceeding 5/8-inch shall have minimum 1-1/2-inch concrete cover when not cast against earth.
- 4. Concrete floor slabs on grade shall be placed on a 4-inch fill of coarse aggregate or on a 2-inch sand bed covered with a minimum 6 mil moisture barrier membrane. The slabs shall be at least 3-1/2 inches thick and shall be reinforced with ½" diameter deformed reinforcing bars. Reinforcing bars shall be spaced at intervals not exceeding 16 inches each way.
- 5. The soil below an interior concrete slab shall be saturated with moisture to a depth of 18 inches prior to placing the concrete.
- 6. All drainage adjacent to footings shall be conducted away from the structure by a 3-ft wide sloped apron draining into an approved non-erosive device.

## **ENERGY REQUIREMENTS**

All work must comply with the State of California Title 24 Energy Requirements.

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities. Page 1 of 9

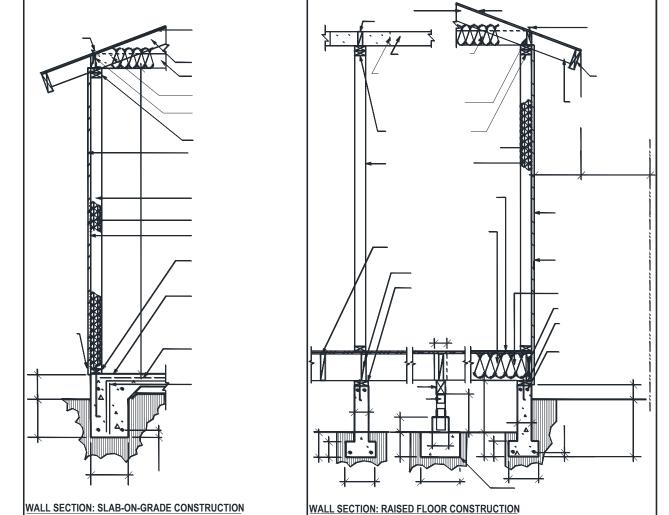
# P/BC 2023-004

	GRADES		ROOF			FLOOR	
PANEL SPAN RATING		MAXIMUM S	PAN (INCHES)	LOADS	(PSF)	MAX. SPAN (INCHES)	
Roof/Floor Span				TOTAL LOAD	LIVE LOAD	Panel edges with tongue and groove	
	(INCHES)		SUPPORT			joints or with blocking	
24/0	3/8	24	20	40	30		
24/16	7/16	24	24	50	40	16	
32/16	15/32, 1/2	32	28	40	30	16	
40/20	19/32, 5/8	40	32	40	30	20	
48/24	23/32, 3/4	48	36	45	35	24	
.0,2.	,						
	CONNECTION		FASTENII	NG	F	REMARKS	
			Roof				
Blocking between joists	or rafters to top plate		4-8d box (2-1/2" x 0.		Toe nail		
Ceiling joist to plate			4-8d box (2-1/2" x 0.	113")	Toe nail		
Ceiling Joist not attache	ed to parallel rafter, lap	s over partitions	4-10d box (3" x 0.128	3")	Face nail		
Collar tie rafter, face na			4-10d box (3" x 0.128	3")	Face nail		
Rafter or roof truss to pl			3-16d box nails (3-1/2	2" x 0.135") or	2 toe nails on	one side and 1 toe nail	
·			3-10d common nails (			de of each rafter or	
Roof rafters to ridge, va	lley or hip rafters or ro	of rafter to minimum	4-16d box (3-1/2" x 0 3-10d common (3-1/2		Toe nail		
2" ridge beam:	, , , ,		3-16d box (3-1/2" x 0.		Fast 9		
J			2-16d common (3-1/2)		End nail		
			Wall	·			
04	-l II I - \		16d common (3-1/2" x	0.162")	24" o.c. face n	ail	
Stud to Stud (not brace	a waii paneis)		10d box (3" x 0.128")	,	16" o.c. face n		
Stud to stud and abuttin	a studs at intersecting	wall corners (at	16d box (3-1/2" x 0.13	5")	12" o.c. face n	ail	
braced wall panels)	3	`	16d common (3-1/2" x		16" o.c. face n		
Abutting Studs at inters	ecting wall corners, fac	ce nail	16d (3-1/2" x 0.135)"	,	12" o.c.		
	-		16d common (3-1/2" x	0.162")	16" o.c. each edge face nail		
Built –up header (2" to 2	2" header with ½" spac	er)	16d box (3-1/2" x 0.13		12" o.c. each edge face nail		
Continuous header to s	tud		5-8d box (2-1/2" x 0.1		Toe nail		
Continuous neader to s	luu		4 8d common (2-1/2")		Toe nail		
			16 common (3-1/2 " x		16" o.c. face r	a ail	
Top plate to top plate			10d box (3" x 0.128")	0.102 )			
			100 DOX (3 X 0.126 )		12" o.c. face n	aıı ach side of end joint	
Double top plate splice			8-16d (3-1/2" x 0.135	")		lap splice length each	
Bottom plate to joist, rim	injet hand injet or blo	cking (not at braced	16d common (3-1/2" x	0.162"\	16" o.c. face n	oil	
wall panels)	i joist, baria joist of bic	cking (not at braced	16d box (3-1/2" x 0.13		12" o.c. face n		
Bottom plate to joist, rim	ioist band joist or bla	oking (at braced	3-16d box (3-1/2" x 0.13				
	i joist, band joist or bid	cking (at braced	2-16d box (3-1/2 x 0.2)		3 each 16" o.c		
wall panel)			4-8d box (2-1/2" x 0.1	X U. 102 )	2 each 16" o.c	. tace nali	
					4		
			3-16d box (3-1/2"x 0. 4-8d common (2-1/2")		toe nail		
Ton or bottom plate to a	etud		3-16d box (3-1/2" x 0.				
Top or bottom plate to stud			2-16d box (3-1/2 x 0.2)		End noil		
				x 0.135 ), or r	End nail		
					End nail		
			3-10d box (3" x 0.128' 3-10d box (3" x 0.128				
			,	, <sub>j</sub> , oi	Face nail		
	rs and intersections		2-16d common (3 1/2)	' x 0 162"\	i acc nan		
	rs and intersections		2-16d common (3 1/2)	x 0.162")			
	rs and intersections		Floor	<u> </u>	T doo Hall		
Top plates, lap at corne			Floor 4-8d box (2-1/2" x 0.	113"), or			
Top plates, lap at corne			Floor 4-8d box (2-1/2" x 0. 3-8d common (2-1/2" :	113"), or x 0.131), or	Toenail		
Top plates, lap at corne			Floor 4-8d box (2-1/2" x 0. 3-8d common (2-1/2" x 3-10d box (3" x 0.128"	113"), or x 0.131), or ')	Toenail		
Top plates, lap at corne	girder	late (roof	Floor 4-8d box (2-1/2" x 0. 3-8d common (2-1/2" : 3-10d box (3" x 0.128' 8d box (2-1/2" x 0.11	113"), or x 0.131), or ') 3")	Toenail 4" o.c.		
Top plates, lap at corne  Joist to sill, top plate or  Rim Joist, band joist or	girder	late (roof	Floor 4-8d box (2-1/2" x 0. 3-8d common (2-1/2" : 3-10d box (3" x 0.128' 8d box (2-1/2" x 0.11 8d common (2-1/2" x 0	113"), or x 0.131), or ') 3")	Toenail		
Top plates, lap at corne  Joist to sill, top plate or  Rim Joist, band joist or  applications also)	girder blocking to sill or top p	late (roof	Floor 4-8d box (2-1/2" x 0. 3-8d common (2-1/2" 3-10d box (3" x 0.128") 8d box (2-1/2" x 0.118 8d common (2-1/2" x (10d box (3" x 0.128"))	113"), or x 0.131), or ') 3") 0.131"), or	Toenail 4" o.c.		
Top plates, lap at corne  Joist to sill, top plate or  Rim Joist, band joist or  applications also)	girder blocking to sill or top p	late (roof	Floor 4-8d box (2-1/2" x 0. 3-8d common (2-1/2" 3-10d box (3" x 0.128") 8d box (2-1/2" x 0.118 8d common (2-1/2" x 0.11 8d common (2-1/2" x 0.128") 3-16d common (3-1/2"	113"), or x 0.131), or ') 3") 0.131"), or	Toenail 4" o.c.		
Top plates, lap at corne  Joist to sill, top plate or  Rim Joist, band joist or  applications also)	girder blocking to sill or top p	late (roof	Floor 4-8d box (2-1/2" x 0. 3-8d common (2-1/2" 3-10d box (3" x 0.128") 8d box (2-1/2" x 0.118 8d common (2-1/2" x (10d box (3" x 0.128"))	113"), or x 0.131), or ') 3") 0.131"), or "x 0.162"), or	Toenail 4" o.c. 6" o.c. End nail Nail each laye	r as follows: 32" o.c. at	
Top plates, lap at corne  Joist to sill, top plate or  Rim Joist, band joist or applications also)  Band or rim joist to joist	girder blocking to sill or top p	`	Floor  4-8d box (2-1/2" x 0. 3-8d common (2-1/2" : 3-10d box (3" x 0.128' 8d box (2-1/2" x 0.11 8d common (2-1/2" x 0.10 box (3" x 0.128") 3-16d common (3-1/2' 4-10d box (3" x 0.128')	113"), or x 0.131), or ') 3") 0.131"), or " x 0.162"), or ")	Toenail 4" o.c. 6" o.c. End nail Nail each laye top and botton 24" o.c. face n	n and staggered. ail at top and bottom	
Top plates, lap at corne  Joist to sill, top plate or  Rim Joist, band joist or applications also)  Band or rim joist to joist	girder blocking to sill or top p	`	Floor  4-8d box (2-1/2" x 0. 3-8d common (2-1/2" ; 3-10d box (3" x 0.128" 8d box (2-1/2" x 0.11 8d common (2-1/2" x 0.10d box (3" x 0.128") 3-16d common (3-1/2" 4-10d box (3" x 0.128") 20d common (4" x 0.1  10d box (3" x 0.128"),	113"), or x 0.131), or ') 3") 0.131"), or " x 0.162"), or ")	Toenail 4" o.c. 6" o.c. End nail Nail each laye top and botton 24" o.c. face n	n and staggered.	
Top plates, lap at corne  Joist to sill, top plate or  Rim Joist, band joist or applications also)  Band or rim joist to joist	girder blocking to sill or top p	`	Floor 4-8d box (2-1/2" x 0. 3-8d common (2-1/2" 3-10d box (3" x 0.128" 8d box (2-1/2" x 0.118" 10d box (3" x 0.128") 3-16d common (3-1/2" x 0.128") 4-10d box (3" x 0.128") 20d common (4" x 0.1 10d box (3" x 0.128"), AND:	113"), or x 0.131), or ') 3") 0.131"), or " x 0.162"), or ") 92"), or	Toenail 4" o.c. 6" o.c. End nail Nail each laye top and botton 24" o.c. face n staggered on	n and staggered. ail at top and bottom opposite sides	
Top plates, lap at corne  Joist to sill, top plate or  Rim Joist, band joist or applications also)	girder blocking to sill or top p	`	Floor 4-8d box (2-1/2" x 0. 3-8d common (2-1/2" 3-10d box (3" x 0.128") 8d box (2-1/2" x 0.118 8d common (2-1/2" x 0.118 8d common (2-1/2" x 0.1128") 3-16d common (3-1/2" 4-10d box (3" x 0.128") 20d common (4" x 0.1 10d box (3" x 0.128"), AND: 2-20d common (4" x 0.1	113"), or x 0.131), or ') 3") 0.131"), or " x 0.162"), or ") 92"), or	Toenail 4" o.c. 6" o.c. End nail Nail each laye top and botton 24" o.c. face n staggered on	n and staggered. ail at top and bottom	
Top plates, lap at corne  Joist to sill, top plate or  Rim Joist, band joist or applications also)  Band or rim joist to joist	girder blocking to sill or top p	`	Floor 4-8d box (2-1/2" x 0. 3-8d common (2-1/2" 3-10d box (3" x 0.128" dbox (2-1/2" x 0.1 8d box (2-1/2" x 0.1 10d box (3" x 0.128") 3-16d common (3-1/2" x 0.128") 4-10d box (3" x 0.128") 20d common (4" x 0.1 10d box (3" x 0.128"), AND: 2-20d common (4" x 0.3-10d box (3" x 0.128"), AND: 3-10d box (3" x 0.128"),	113"), or x 0.131), or ') 3") 0.131"), or " x 0.162"), or ") 92"), or or	Toenail 4" o.c. 6" o.c. End nail Nail each laye top and botton 24" o.c. face n staggered on	n and staggered. ail at top and bottom opposite sides	
Top plates, lap at corne  Joist to sill, top plate or  Rim Joist, band joist or  applications also)  Band or rim joist to joist	girder blocking to sill or top p	`	Floor 4-8d box (2-1/2" x 0. 3-8d common (2-1/2" 3-10d box (3" x 0.128") 8d box (2-1/2" x 0.118 8d common (2-1/2" x 0.118 8d common (2-1/2" x 0.1128") 3-16d common (3-1/2" 4-10d box (3" x 0.128") 20d common (4" x 0.1 10d box (3" x 0.128"), AND: 2-20d common (4" x 0.1	113"), or x 0.131), or ') 3") 0.131"), or " x 0.162"), or ") 92"), or or 1.192"), or '), 1.35"), or	Toenail  4" o.c. 6" o.c. End nail  Nail each laye top and botton 24" o.c. face n staggered on	n and staggered. ail at top and bottom opposite sides	

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Page 5 of 9

P/BC 2020-004



Anchor bolts ½" x 10" embedded 7" and spaced maximum 6'with 0.229" x 3" x 3"" plate washers, minimum 2 anchor bolts per piece located not more than 12" or less than 7 bolt diameters from each end of the piece. All foundation plates or sills and sleepers on a concrete or masonry slab, which is in direct contact with earth, and sills that rest on concrete or

masonry foundations shall be preservative treated wood(AWPA U1) and field cut ends, notches, and drilled holes shall be field treated in accordance

with AWPA M4. Fasteners (other than anchor bolts) in preservative treated wood or fire retardant treated wood shall be of hot dipped zinc coated galvanized steel or stainless steel. Minimum concrete strength 2,500-psi.

4.Exterior walls, bearing walls and braced wall panels require continuous footings.R403.1 . 23/32" plywood required for 24" joist spacing.

Where interior walls are shear walls, wall framing and sheathing shall extend to the roof sheathing. Footings on or adjacent to slopes shall meet the requirements of Section R403.1.7.

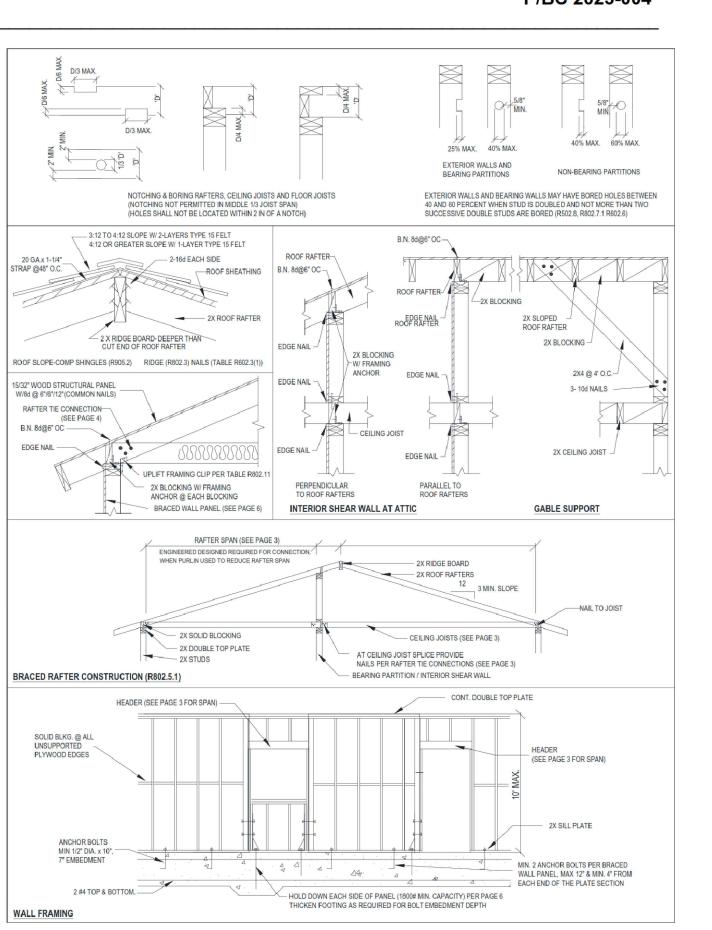
- . Walls separating units in townhuses shall be provided with parapet in accordance with R302.2.2 Projects located in the Very High Fire Hazard Severity Zone (VHFHSZ) must also incorporate the requirements of Section R337 into the design. 10. Exterior walls of dwellings and accessory structures closer than 5-ft. (non-sprinklered) / 3-ft. (sprinklered) to the property line shall be 1-hr
- No openings other than approved foundation vents shall be permitted in the exterior walls of dwellings and accessory buildings where the exterior wall is less than 3-ft. to the property line.
- 2. The area of exterior wall openings of non-sprinklered dwellings and accessory buildings located = 3-ft. and < 5-ft. to the property line shall be limited to 25% of the wall area. Exterior wall openings are unlimited when exterior walls are located = 5-ft. for non-sprinklered buildings and =3-ft.for
- B. Eaves shall be of 1-hr fire-resistive construction on the underside when located between 2-ft. and 5-ft. from the property line for non-sprinklered buildings and between 2-ft. and 3-ft. from the property line for sprinklered buildings. Detached garages within 2-ft of a property line may have a maximum 4-inch eave, provided the eave does not extend over the property line and is allowed by the Zoning Code. 4. Eaves shall not project more than 4" for each one foot of required side yard, and shall provide a minimum 30" clear space between the eave and

Exterior plaster (stucco) walls shall be provided with a corrosion resistant weep screed complying with Section R703.7.2.1

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Page 2 of 9

# P/BC 2023-004



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	Table 1			Table 2		
RAFTERS (I	E SPANS FOR D DF-LARCH) (T-R	802.4.1(1))	RAFTERS	E SPANS FOR (DF-LARCH) (T-	R802.4.1(1))	
Minimum Ro	ttached to rafters of Slope: 3:12 0 psf (asphalt sh	,	Minimum R	attached to rafte oof Slope: 3:12 20 psf (2" clay til 20 psf	,	
RAFTER SIZE	SPACING	ALLOWABLE SPAN1	RAFTER SIZE	SPACING	ALLOWABLE SPAN1	Characteristics and enhanced size from Control and Con
2x6	24" 16" 12"	11'-11" 14'-7" 16'-10"	2x6	24" 16" 12"	10'-4" 12'-7" 14'-7"	
2x8	24" 16" 12"	13'-6" 18'-5" 21'-4"	2x8	24" 16" 12"	13'-0" 16'-0" 18'-5"	
2x10	24" 16" 12"	18'-5" 22'-6" 26'-0"	2x10	24" 16" 12"	15'-11" 19'-6" 22'-6"	Design as a truss system Minimum 3:12 slope
2x12	24" 16" 12"	21'-4" 26'-0" 26'-0"	2x12	24" 16" 12"	18'-6" 22'-7" 26'-0"	

	Table 3			Table 4		
RAFTERS (C Ceiling attach	E SPANS FOR DF DF-LARCH) (T-R8 ned to rafters, L/Δ 0 psf (asphalt shi	02.4.1(2)) = 240	RAFTERS ( Ceiling attac	LE SPANS FOR DF-LARCH) (T- ched to rafters, L 20 psf (2" clay ti	R802.4.1(2) $\Delta = 240$	
includes dryw Live Load: 2	vall and insulation 0 psf	)	includes dry Live Load:	wall and insulati 20 psf	ion)	
RAFTER SIZE	SPACING	ALLOWABLE SPAN1	JOIST SIZE	SPACING	ALLOWABLE SPAN1	Cincumstance and alteraption (in Project (class 1,537 (scilibility-basels, pl. 1,537 schildels/97F regar-broughs massless-people-base) 3,535 (jith marketing
2x6	24" 16" 12"	11'-11" 14'-1" 15'-6"	2x6	24" 16" 12"	10'-4" 12'-7" 14'-7"	
2x8	24" 16" 12"	15'-1" 18'-5" 20-5"	2x8	24" 16" 12"	13'-0" 16'-0" 18'-5"	
2x10	24" 16" 12"	20-5 18'-5" 22'-6" 26'-0"	2x10	24" 16" 12"	15'-11" 19'-6" 22'-6"	Design as a post and beam
2x12	24" 16" 12"	21'-4" 26'-0" 26'-0"	2x12	24" 16" 12"	18'-6" 22'-7" 26'-0"	

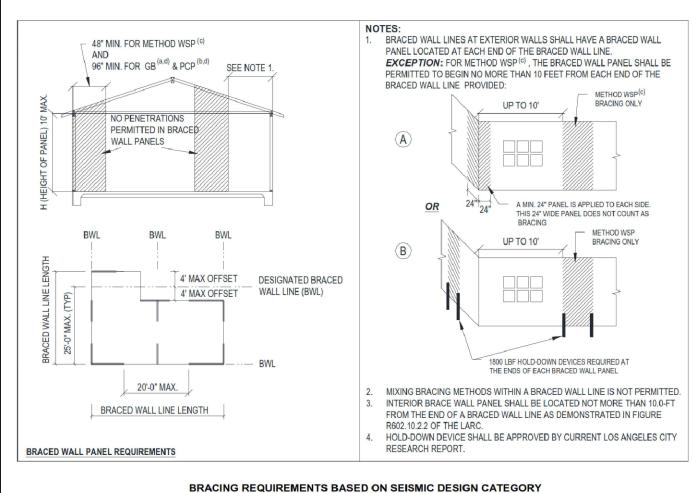
### 1. Rafter spans shall be measured along the horizontal projection of the rafter.

	Table 5			Table	6		
	E SPANS FOR DI LARCH) (T-R802			RAFTER TIE CO LOAD 20-psf [T			]*
Live Load: 20 $L/\Delta = 240$			Minimum n	umber of 16d co		ails at ra	fter tie
JOIST	SPACING	ALLOWABLE	RAFTER	TIE	ROOF	SPAN	(FT)
SIZE		SPAN	SLOPE	SPACING	12	24	36
2x4	24" 16"	7'-3" 8'-11"	3:12	16"	4	7	10
284	12"	9'-10"	3.12	24"	5	10	15
2x6	24" 16"	10'-8" 13'-0"	4:12	16"	3	5	8
2X0	12"	15'-0"	4.12	24"	4	8	11
0.40	24" 16"	13'-6"	5:12	16"	3	4	6
2x8	12"	16'-6" 19'-1"	5:12	24"	3	6	9
040	24"	16'-5"	7.40	16"	3	3	5
2x10	16" 12"	20'-2" 23'-3"	7:12	24"	3	5	7
		*	1 When nails	are clinched nail	ing may b	e reduce	d 25%

 When nails are clinched, nailing may be reduced 25%. 2. The refer ties shall be minimum 2 x 4

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# P/BC 2023-004



Minimum Total Length of Braced Wall Panels Required

Roof/Ceiling Dead Load Wall Height = 10-ft Floor Dead Load = 10-ps Braced Wall Line Spacin	sf		Minimum Total Length of Braced Wall Panels Required Along each Braced Wall Line (ft)			
Seismic Design Category (SDC)	Story Location	Braced Wall Line Length	Methods GB a, d and PCP b, d	Method WSP °		
		10	8	4		
	^	20	16	5		
SDC D <sub>2</sub>	$\rightarrow$	30	24	7.5		
		40	32	10		
		50	40	12.5		

a). Method GB (Gypsum Board) = ½-in. minimum thickness gypsum board with 1-1/2-in. galvanized roofing nail, or 1-1/4-in. screws, Type W or S. for exterior sheathing, or 5d cooler nail, 0.086-in. diameter, 1-5/8-in. long, 15/64-in head for interior gypsum board. Maximum fastener spacing shall be 7-in. o.c. at panel edges, including top and bottom plates, and along intermediate supports. When method GB panels are applied to only one face of a braced wall panel, the minimum total length in the table shall be doubled. (b). Method PCP (Portland Cement Plaster) = 7/8-in. minimum thickness Portland cement plaster with 1-1/2-in., 11-gage, 7/16-in. head nails at 6-in. spacing (16-in stud spacing required). ½-in. minimum gypsum wallboard shall be installed on the side of the wall opposite the bracing material, except when the minimum total length of braced wall panel in the Table is multiplied by a factor of 1.5.

(c). Method WSP (Wood Structural Panel) = 15/32-in. minimum thickness wood structural panel with 8d common (2-1/2-in x 0.131-in.) nails at 6-in. spacing along panel edges, 12-in. spacing at intermediate supports, and 3/8-in. distance to panel edge. ½-in. minimum thickness gypsum wall board shall be installed on the side of the wall opposite the bracing material, except when the minimum total length of braced wall panel in the Table is multiplied by a factor of 1.5.

(d). Method GB and PCP braced wall panel height to width ratio (h/w) shall not exceed 1:1. (e). Multiply required braced wall panel lengths specified in the table by 1.2 when combined Roof Ceiling Dead load is between 15 psf and 25 psf.

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P/BC 2023-004 P/BC 2023-004

			Table 7				Table 8						
Α	Max. R	TERIOF loof/Cei	S FOR DF # R BEARING Iling Dead Lo 20 psf (T-Re	WALLS oad: 20	psf		А	INT Max. F	ERIOR Roof/Ce	S FOR DF #2 BEARING V iling Dead Lo 20 psf (T-R6	VALLS ad: 20	psf	
SIZE	12-ft Building Width 6-ft Tributary Width	NJ	24-ft Building Width 12-ft Tributary Width	NJ	36-ft Building Width 18-ft Tributary Width	· NJ	SIZE	12-ft Building Width 6-ft Tributary Width	NJ	24-ft Building Width 12-ft Tributary Width	NJ	36-ft Building Width 18-ft Tributary Width	N
2-2x6	6'- 0"	1	4'- 7"	1	3'- 10"	1	2-2x6	6'- 1"	1	4'-4"	1	3'- 6"	1
2-2x8	7'- 7"	1	5'- 9"	1	4'- 10"	2	2-2x8	7'- 9"	1	5'- 5"	1	4'- 5"	2
2-2x10	9'-0"	1	6'- 10"	2	5'- 9"	2	2-2x10	9'- 2"	1	6'- 6"	2	5'- 5"	2
2-2x12	10'- 7"	2	8'- 1"	2	6'- 10"	2	2-2x12	10'- 9"	1	7'- 7"	2	6'- 3"	2
3-2x8	9'- 5"	1	7'- 3"	1	6'- 1"	1	3-2x8	9'- 8"	1	6'- 10"	1	5'- 7"	1
3-2x10	11'- 3"	1	8'- 7"	1	7'-3"	2	3-2x10	11'- 5"	1	8'-1"	1	6'-7"	2
3-2x12	13'- 2"	1	10'-1"	2	8-6"	2	3-2x12	13'- 6"	1	9'-6"	2	7-9"	2

Building width is perpendicular to ridge measured to exterior walls NJ- Number of Jack Studs required to support each end of a header Tributary width is the effective length that the member supports

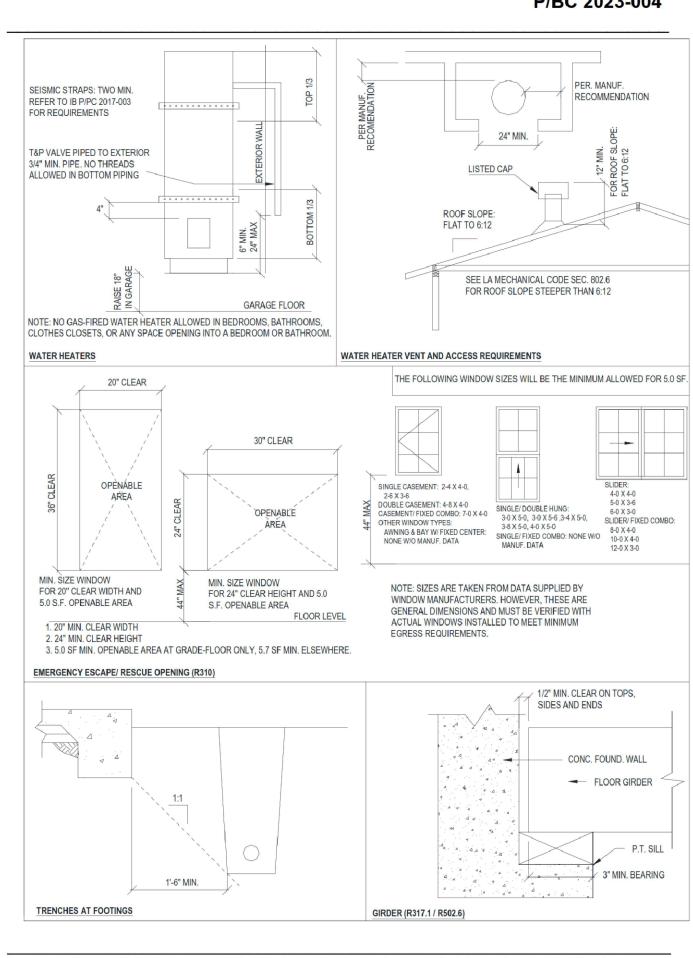
	Table 9	9					
ALLOWABLE SPANS FOR DF #2 FLOOR JOISTS (DF-LARCH) (T-R502.3.1(2)) Light Dead Load: 10 psf Live Load: 40 psf L/Δ = 360							
JOIST SIZE	SPACING	ALLOWABLE SPAN					
2x6	24" 16" 12"	8'-3" 9'-9" 10'-9"					
2x8	24" 16" 12"	10'-5" 12'-9" 14'-2"					
2x10	24" 16" 12"	12'-9" 15'-7" 18'-0"					
2x12	24" 16" 12"	14'-9" 18'-1" 20'-11"					

	Tal	ble 10	
SUPPORTI	LE SPANS FOR D NG ONE FLOOR Dead Load: 15 psf	ONLY (T-R602.7)	
SIZE	12-ft Building Width 6-ft Tributary	24-ft Building Width 12-ft Tributary	36-ft Building Width 18-ft Tributary
	Width	Width	Width
2-2x6	6'- 1"	4'- 4"	3'- 6"
2-2x8	7'- 9"	5'- 5"	4'- 5"
2-2x10	9'- 2"	6'- 6"	5'- 3"
2-2x12	10'- 9"	7'- 7"	6'- 3"
3-2x8	9'- 8"	6'- 10"	5'- 7"
3-2x10	11'- 5"	8'- 1"	6'- 7"
3-2x12	13'- 6"	9'- 6"	7-9" <sup>3</sup>

Building width is perpendicular to ridge measured to exterior walls Minimum 4x post Minimum 4x6 post for 36' building width and 3-2x12 member.

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# P/BC 2023-004



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REVISION

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DRAWN BY

CHECKED BY DESIGN BY

JOSE ZAMBRANO

SIGNATURE

TYPE-V SHEET

# Y N/A RESPON. 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.

lighting fixtures are not considered alterations for the purpose of this section.

**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

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.

> 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:** 

Department of Housing and Community Development 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

# 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.

- 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:

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

**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.

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

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

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

**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.

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

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.

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

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 quest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to

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.

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

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.

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

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

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

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

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.

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING VERIFICATION WITH THE FULL CODE.

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

4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing 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.

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

DIVISION 4.2 remember Regress to be obtained for use.

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

4.303.1 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 plumbing fixtures. Plumbing fixture replacement is required prior to issuance of water-conserving completion, certificate of occupancy, or final permit approval by the a certificate of final 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 flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA Specification for Tank-type Toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush 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 The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3 Showerheads.

Y N/A RESPON. PARTY

**4.303.1.3.1 Single Showerhead.** Showerheads shall have a maximum flow rate of not more than 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 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 not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory not be less than 0.8 gallons per minute at 20 psi. faucets shall

4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of 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 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 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

4.303.1.4.5 Pre-rinse spray valves.

When installed, shall meet the requirements in the California Code of Regulations, Title 20 Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and (Appliance 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 Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h) (4) and Section

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES 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 $\leq$ 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 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

Submeters shall be installed to measure water usage of individual rental dwelling units in accordance 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

NOTE: 1701.1 of the California Plumbing Code. THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR

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 0.5 GPM @ 60 PSI KITCHEN FAUCETS 1.8 GPM @ 60 PSI 0.2 GAL/CYCLE METERING FAUCETS 1.28 GAL/FLUSH WATER CLOSET 0.125 GAL/FLUSH URINALS

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.

1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including 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.

. Excavated soil and land-clearing debris. 2. Alternate waste reduction methods developed by working with local agencies if diversion

separated) or bulk mixed (single stream).

recycle facilities capable of compliance with this item do not exist or are not located close to the jobsite reasonably 3. The enforcing agency may make exceptions to the requirements of this section when 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

3. Identify diversion facilities where the construction and demolition waste material collected 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 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

(Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to documenting compliance with this section. 2. Mixed construction and demolition debris (C & D) processors can be located at the Department of Resources Recycling and Recovery (CalRecycle).

1. Sample forms found in "A Guide to the California Green Buildina Standards Code

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 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

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 and what methods an occupant may use to maintain the relative humidity level in that range.

3. Information from local utility, water and waste recovery providers on methods to further

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.

11. Information from the Department of Forestry and Fire Protection on maintenance of

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

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,

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

including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals,

PACTION 14.5 42649.82 (a) (2) (A) et sea, are note required to comply with the organic 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

**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

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REVISION

CHECKED BY

JOSE ZAMBRANO

SIGNATURE

**GREEN CODE** 



# 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

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

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

**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

94700 and 94701.

**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:

Manufacturer's product specification.

ABLE 4.504.1 - ADHESIVE VOC LIMIT $_{1,2}$	2
Less Water and Less Exempt Compounds in Grar	ms 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

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

(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

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

**VOC LIMIT** 

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ARCHITECTURAL COATINGS<sub>2,3</sub>

COMPOUNDS

**FLAT COATINGS** 

**COATING CATEGORY** 

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 COATINGS1	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

TABLE 4.504.5 - FORMALDEHYDE LIM	MTS <sub>1</sub>
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS	S 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 FIBERBOARD2	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 Testina and Evaluation of Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, Volatile Organic (Emission testing method for California Specification 01350) January 2017

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

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

hhtps://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 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.

5. Other methods acceptable to the enforcing agency.

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.

Specification 01350)

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

1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be a vapor barrier in direct contact with concrete and a concrete mix design, which 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

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

integral (i.e., built-in)

4.507 ENVIRONMENTAL COMFORT

enclose the wall and floor framing.

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

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 controls shall be capable of adjustment between a relative humidity range less equal to 50% to a maximum of 80%. A humidity control may utilize manual or than or automatic means of adjustment. b. A humidity control may be a separate component to the exhaust fan and is not required to

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1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or

2. Lighting integral to bathroom exhaust fans shall comply with the *California Energy Code*.

### 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

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

Equipment Selection), or other equivalent design software or methods.

CHAPTER 7

Y N/A RESPON

# **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.
- Public utility training programs.
- 3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.

NOT APPLICABLE

RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER

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:

- . 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.
- Successful completion of a third party apprentice training program in the appropriate trade.

Special inspectors shall be independent entities with no financial interest in the materials or the

[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

**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.

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REVISION

4. Other programs acceptable to the enforcing agency.

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).

project they are inspecting for compliance with this code. **703 VERIFICATIONS** 

S

SIGNATURE

S S

DESIGN BY JOSE ZAMBRANO

CHECKED BY

GREEN CODE

DRAWN BY

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

<sup>2.</sup> THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

<sup>3.</sup> 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.