

GLA Jewelry and Cash for Gold Knowledgeable Staff

VICINITY MAP NTS

COBBLE RIDGE

PROJECT CONTACTS

OWNERS:

DESIGNER:

CARROLLYNN BROWN

(916) 798-5896

VITALIY LESCHIK

(916) 390-2724 noveldd@gmail.com

PROJECT DESCRIPTION & SCOPE OF WORK

SCOPE OF WORK:

ADDITION TO EXISTING SINGLE FAMILY DWELLING OF 399 SF OF LIVING SPACE AND 264 SF SUNROOM (UNCONDITIONED SPACE)

SQUARE FOOTAGE BREAKDOWN			
	EXISTING (SF)	NEW / ADDITION (SF)	TOTAL (SF)
LIVING SPACE	1105	399	1504
SUNROOM	0	264	264
EXISTING COVERED PATIO	431	-431 (DEMOLISHED)	0
GARAGE	500	0	500

GENERAL INFO.

APN	071-0103-018-0000
OCCUPANCY GROUP	R-3
CONSTRUCTION TYPE	VB
NUMBER OF STORIES	1
BUILDING HEIGHT	15'-9"
LOT AREA	0.206 ACRES / (8,990 SF)
LOT COVERAGE	25.00%
FIRE SPRINKLERS	NO
SOLAR PANELS	NO

GENERAL NOTES

- 1. CONSTRUCTION SHALL CONFORM TO THE 2022 CALIFORNIA BUILDING CODE (CBC), 2022 CALIFORNIA MECHANICAL CODE (CMC), 2022 CALIFORNIA PLUMBING CODE (CPC), 2022 CALIFORNIA ELECTRICAL CODE (CEC), 2022 CALIFORNIA ENERGY STANDARDS (CES), 2022 CALIFORNIA RESIDENTIAL CODE (CRC), 2022 CALIFORNIA GREEN STANDARDS CODE(CGSC), AND 2022 CALIFORNIA FIRE CODE WITH CITY AMENDMENTS
- 2. NOTES AND DETAILS ON TYPICAL SHEETS SHALL APPLY UNLESS OTHERWISE SHOWN OR NOTED ON PLANS.
- 3. DETAILS OF CONSTRUCTION NOT FULLY SHOWN SHALL BE OF THE SAME NATURE AS SHOWN FOR SIMILAR CONDITION.
- 4. SAFETY NOTE:
- (A) IT IS THE CONTRACTOR'S RESPONSIBILTY TO COMPLY WITH THE PERTINENT SECTIONS OF THE "CONSTRUCTION SAFETY ORDERS" ISSUED BY THE STATE OF CALIFORNIA, LATEST EDITION, AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT
- (B) THE DESIGNER, ENGINEER, AND THE OWNER DO NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH THESE REQUUIREMENTS.
- FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH THESE REQUUIREMENTS

 (C) THE CONTRACTOR SHALL BE RESPNSIBLE FOR ADEQUATE DESIGN AND

 CONSTRUCTION OF ALL FORMS AND SHORING REQUIRED.
- 5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, MINIMUM CLEARANCES, ELEVATIONS, PROPERTY LINES, SETBACKS, ETC. ON THE JOB. CONTRACTOR TO NOTIFY DESIGNER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION
- 6. CONTRACTOR SHALL VERIFY ROOF AND/OR FLOOR TRUSSES SPANS AS WELL AS ROOF PITCH AND HEEL HEIGHT PRIOR TO ORDERING TRUSSES IF APPLICABLE.
- 7. CONTRACTOR SHALL NOTIFY THE DESIGNER AND ENGINEER OF RECORD WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DRAWINGS OR DOCUMENTS. CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE BUILDING THAT IS IN CONFLICT BEFORE CONFLICT IS RESOLVED WITH THE AFFECTED PARTIES.

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T-24	TITLE 24
CG-1	CAL GREEN BUILDING STANDARDS CODE
CG-1	CAL GREEN BUILDING STANDARDS CODE

DESIGNED BY:

NOVEL DESIGN & DRAFTING VITALIY N. LESCHIK (916) 390-2724 noveldd@gmail.com

REVISIONS	DATE
	REVISIONS

BROWN REG. ADDITION 170 GLENN DR. FOLSOM, CA 95630

COVER PAGE

09/09/2024



GENERAL NOTES:

- 1. ON SITE VERIFICATION OF ALL DIMENSIONS AND CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE SUB-CONTRACTORS. NOTED DIMENSIONS TAKE PRECEDENT OVER SCALE. EACH CONTRACTOR OR SUB-CONTRACTOR SHALL REPORT TO ENGINEER/DESIGNER ALL CONDITIONS WHICH PREVENT THE PROPER EXECUTION OF THEIR WORK.
- 2. ENGINEER/DESIGNER TO BE NOTIFIED IMMEDIATELY BY CONTRACTOR OR SUB-CONTRACTOR SHOULD ANY DISCREPANCY OR OTHER QUESTION ARISE PERTAINING TO THE WORKING DRAWINGS AND /OR SPECIFICATIONS. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY ERRORS, DISCREPANCIES, OR OMISSIONS WHICH THE CONTRACTOR FAILED TO NOTIFY THE ENGINEER/DESIGNER OF BEFORE CONSTRUCTION AND/OR FABRICATION OF THE
- 3. ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST CALIFORNIA BUILDING
- 4. THE CONTRACTOR SHALL BE RESPONSIBLEFOR THE SAFETY OF THE BUILDING DURING CONSTRUCTION AND SHALL PROVIDE ADEQUATE SHORING AND BRACING DURING CONTRUCTION. CONTRACTOR SHALL COMPLY WITH APPLICABLE SAFETY REGULATIONS.
- 5. DETAILS NOT SPECIFICALLY SHOWN SHALL BE SIMILAR TO DETAILS FOR SIMILAR CONSTRUCTION SHOWN ON THESE DRAWINGS.

WALL LEGEND

EXISTING WALL 2X4 @ 16" O.C.

EXISTING WALLS TO BE DEMOLISHED ---- FOOTPRINT OF PROPOSED ADDITION ----- EXISTING ROOF OUTLINE



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NOVEL DESIGN

& DRAFTING

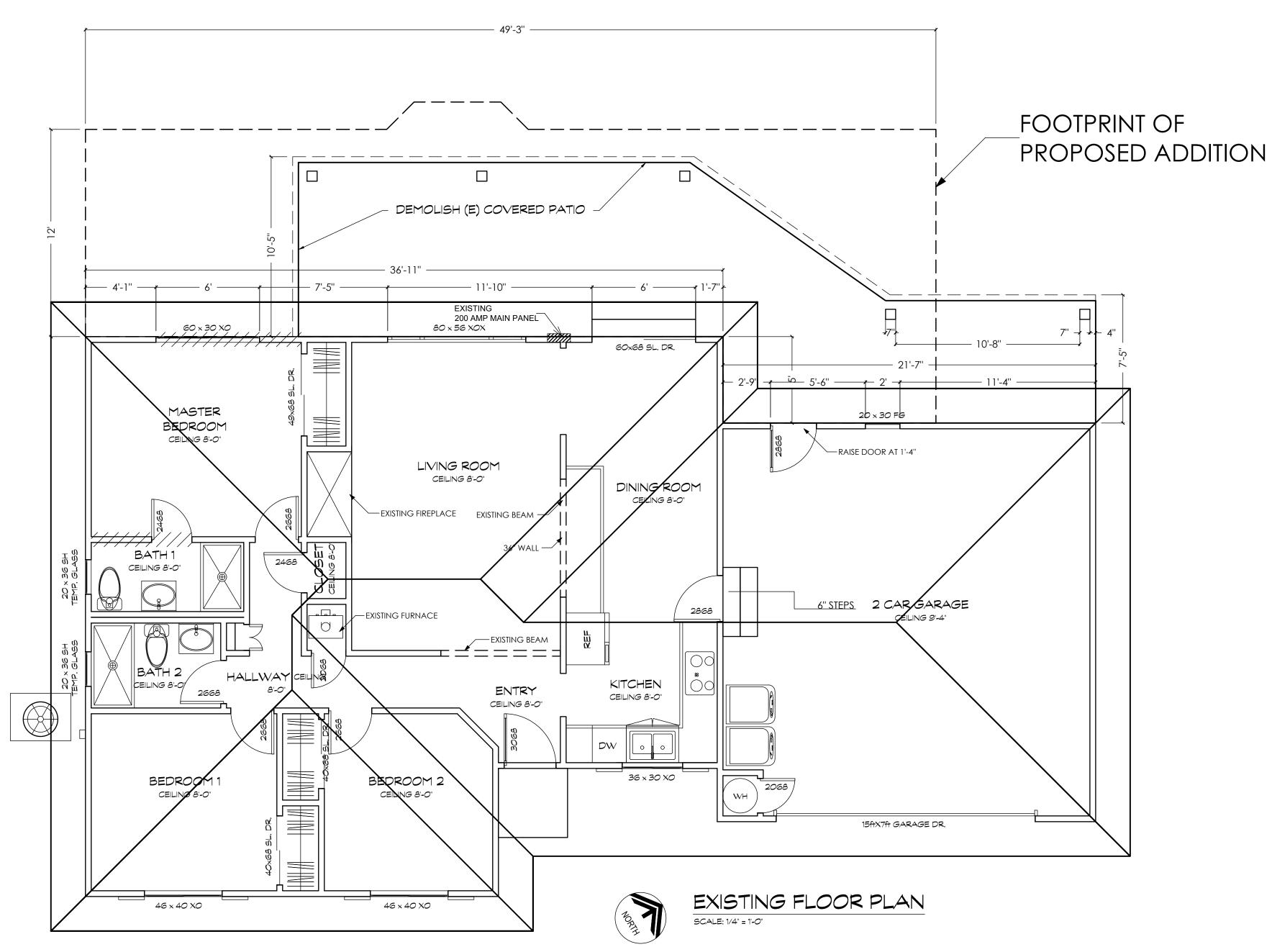
VITALIY N. LESCHIK

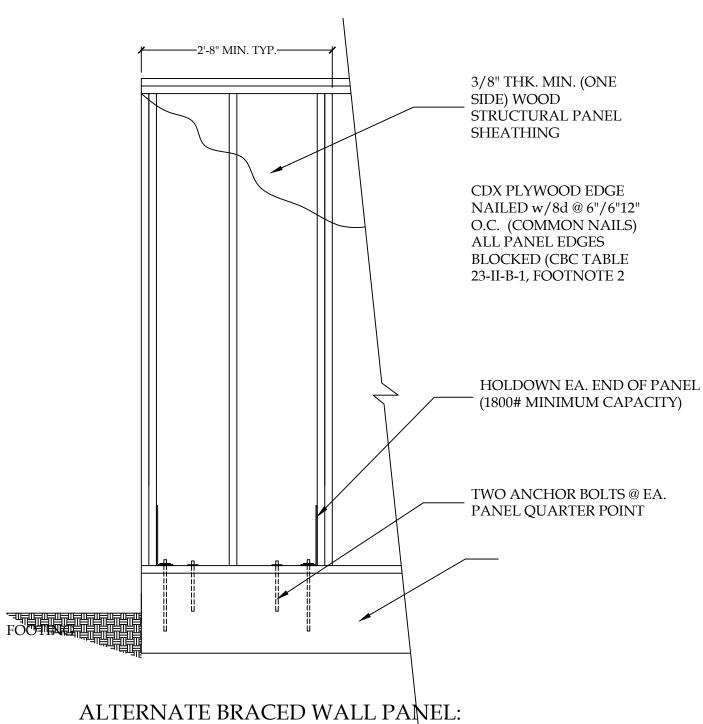
(916) 390-2724

noveldd@gmail.com

EXISTING FLOOR & ROOF

09/09/2024





BRACED WALL PANELS

3/8" OSB 8d COMMON NAILS AT 6" O.C. EDGES AND 12" O.C. FIELD 2-1/2X10 AB W/3X3X.229 SQUARE WASHERS

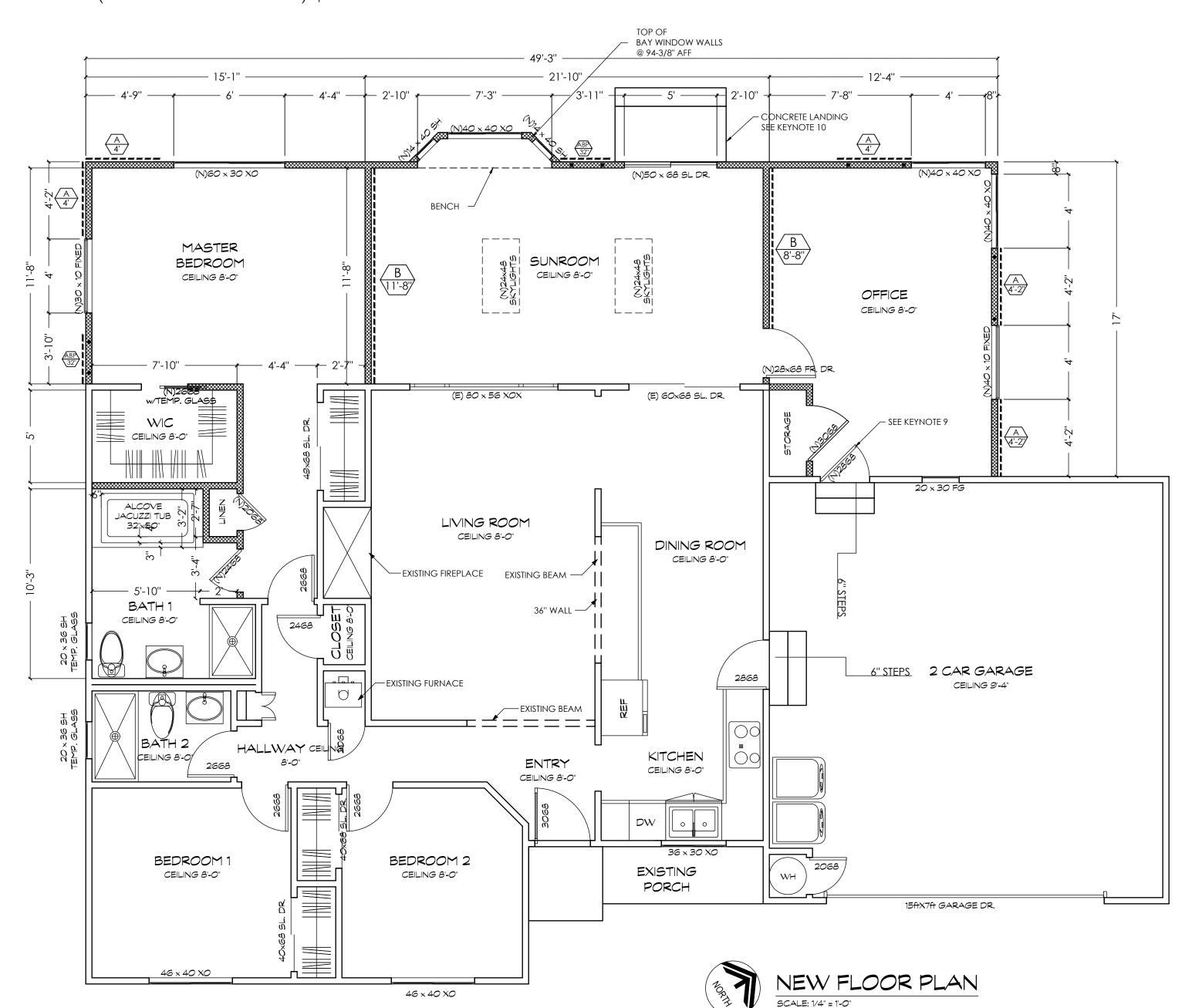
1/2" GYPSUM BD. W/5d COOLER NAILS AT 7" O.C. 1/2X10 AB @ 32" O.C.

4ft OF GYPSUM BOARD APPLIED TO BOTH SIDES 1/2" GYPSUM BD. W/5d COOLER NAILS AT 7" O.C. 1/2X10 AB @ 32" O.C.

ALTERNATE BRACED WALL PANELS. SEE DETAIL, THIS SHEET

DTT2 HOLDOWNS OR APPROVED EQUIVALENT

(ONE STORY ELEVATION)



GENERAL KEYNOTES:

CONSTRUCTION.

- 1. CONTRACTOR TO VERIFY ALL DIMENSIONS & EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION
- 2. DOORS & WINDOW SIZES ARE GIVEN IN FEET AND INCHES IN WIDTH & HEIGHT RESPECTIVELY.
- 2.1. DOOR EXAMPLE: 3068 = 3'-0" WIDE BY 6'-8" TALL.
- 2.2. WINDOW EXAMPLE: 2840 = 2'-8" WIDE BY 4'-0" TALL.
- 3. DOORS ARE NOTED WITHOUT FRAME. CONTRACTOR TO VERIFY WITH MANUFACTURER FOR DOOR FRAME SIZE PRIOR TO FRAMING DOOR OPENINGS. 4. CONTRACTOR SHALL VERIFY ALL INTERIOR FINISHES, FLOOR COVERINGS, AND TRIM SIZES, MATERIAL, & CONFIGURATION WITH OWNER PRIOR TO
- 5. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY CLEARANCES OF THE ITEMS MENTIONED ABOVE PRIOR TO CONSTRUCTION.
- 6. DO NOT SCALE OFF PLANS.
- 7. ALL DIMENSIONS ARE TO FACE OF FRAMING. UNO
- 8. WALL INSULATION TO BE A MINIMUM OF R-13 BATTING AND ATTIC INSULATION TO BE R-38 BLOWN IN OR BATT. SEE TITLE 24 REPORT FOR REQUIREMENTS.
- 9. DOOR OPENINGS BETWEEN A PRIVATE GARAGE AND THE DWELLING UNIT SHALL BE EQUIPPED WITH EITHER SOLID WOOD DOORS OR SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8 in. THICK OR 20-MINUTE FIRE -RATED DOORS. DOORS SHALL BE SELF-CLOSING AND
- SELF-LATCHING. 10. FLOORS AND LANDINGS AT EXTERIOR DOORS.
- 10.1. THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL NOT BE LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A DIMENSION OF NOT LESS THAN 36 INCHES MEASURED IN THE DIRECTION OF TRAVEL. THE SLOPE AT EXTERIOR LANDINGS SHALL NOT EXCEED 1/4" UNIT VERTICAL IN 12 UNITS VERTICAL.
- 10.2. FLOOR ELEVATIONS AT THE REQUIRED EGRESS DOORS. LANDINGS OR FINISHED FLOORS AT THE REQUIRED DOOR SHALL NOT BE MORE THAN 1 ½ INCHES LOWER THAN THE TOP OF THE THRESHOLD. EXCEPTION: THE LANDING OR FLOOR ON THE EXTERIOR SIDE SHALL NOT BE MORE THAN $7\frac{3}{4}$ " INCHES BELOW THE TOP OF THE THRESHOLD PROVIDED THE DOOR DOES NOT SWING OVER THE LANDING OR FLOOR.

WINDOWS - GENERAL NOTES

- 1. EVERY SLEEPING ROOM MUST HAVE AT LEAST ONE OPENABLE WINDOW OR DOOR APPROVED FOR EMERGENCY RESCUE WITH A MINIMUM NEW CLEAR OPENING OF 5.7 SQ.FT., EXCEPT THAT WINDOWS AT THE GRADE FLOOR SHALL HAVE A MINIMUM NET OPENING OF 5 SQ. FT. THE MINIMUM NET CLEAR OPENING HEIGHT DIMENSION SHALL BE 24". THE MINIMUM NET CLEAR OPENING WIDTH DIMENSION SHALL BE 20". THE BOTTOM OF THE CLEAR OPPENING SHALL BE NO MORE THAN 44" FROM THE FLOOR.
- 2. ALL WINDOWS WITHIN 5FT OF SHOWER/TUB ENCLOSURES AND WITHIN 2FT OF DOORS (LESS THAN 60 INCHES ABOVE THE FLOOR) TO BE TEMPERED GLAZING.
- 3. WINDOW ABBREVIATIONS: SH = SINGLE HUNG
- XO = SLIDER
- FG = FIXED GLASS 4. TEMPERED GLASS SHALL BE PROVIDED AT HAZARDOUS LOCATIONS AND LOCATIONS
- SUBJECT TO HUMAN IMPACT LOADS PER CRC R308.3. THESE INCLUDE 4.1. GLAZING IN ALL FIXED AND OPERABLE PANELS SWINGING, SLIDING AND BI-FOLD DOORS 4.2. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR, WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE FLOOR OR WALKING
- SURFACE AND MEETS EITHER OF THE FOLLOWING CONDITIONS: 4.2.1. WHERE THE GLAZING IS WITHIN 24" OF EITHER SIDE OF THE DOOR IN THE PLANE OF DOOR IN THE CLOSED POSITION
- 4.2.2. WHERE THE GLAZING IS ON A WALL PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24" OF THE HINGE SIDE OF AN INSWING 4.3. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE
- FOLLOWING CONDITIONS: THE EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 9 SQUARE FEET
- THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18" ABOVE FLOOR
- 4.3.3. THE TOP EDGE OF THE GLAZING IS MORE THAN 36" ABOVE FLOOR 4.3.4. ONE OR MORE WALKING SURFACES ARE WITHIN 36" OF THE GLAZING AS MEASURED HORIZONTALLY

BATHROOM NOTES:

1. SURFACES IN TUB & SHOWER COMPARTMENTS SHALL HAVE TILE OR EQUAL NONABSORBENT SURFACESF FOR NOT LESS THAN 72" ABOVE DRAIN. 2. THE BASE FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL AND CEILING PANELS IN SHOWER AREAS SHALL BE GLASS MAT GYPSUM PANEL, FIBER-REINFORCED GYPSUM PANELS, NON-ASBESTOS FIBER-CEMENT BACKER BOARD, NON-ASBESTOS FIBER-CEMENT REINFORCED CEMENTITIOUS BACKER BOARD. INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. 3. SHATTER-RESISTANT MATERIAL TO BE USED FOR SHOWER ENCLOSURE.

WALL LEGEND

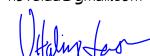
EXISTING WALL 2X4 @ 16" O.C.

************** NEW WALL 2X4 @ 16" O.C.

DESIGNED BY:

NOVEL DESIGN & DRAFTING

VITALIY N. LESCHIK (916) 390-2724 noveldd@gmail.com

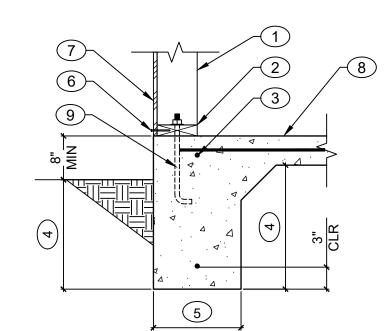


NO.	REVISIONS	DATE

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NEW FLOOR PLAN

09/09/2024



-8 <u>KEYNO</u>TES

1. 2x STUD WALL, SEE PLAN.

2. CONT. BOTTOM PLAT, w/ 5/8" ANCHORS @ 48".C.

3. #4 BAR CONTINUOUS, TOP & BOTTOM

4. MIN EMBEDMENT 12"

5. CONT FOOTING, 12" WIDE X 12" DEEP

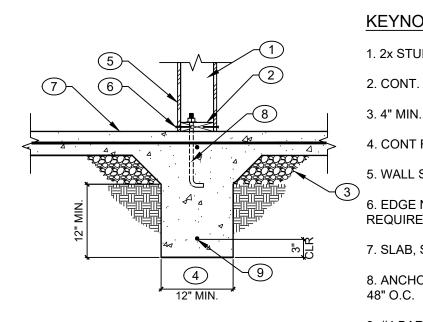
6. EDGE NAILING, SEE BRACED WALL REQUIREMENTS

7. WALL SHEATHING AS OCCURS

8. SLAB, SEE PLAN FOR THICKNESS & REINFORCING. 9. ANCHOR BOLTS, 5/8" Ø, w/MIN. 7" EMBEDMENT @ 48"

STRIP FOOTING AT WOOD STUD WALL

SCALE: NO SCALE



KEYNOTES

1. 2x STUD WALL, SEE PLAN.

2. CONT. BOTTOM PLAT, w/ 5/8" ANCHORS @ 48".C.

3. 4" MIN. ROCK FILL.

4. CONT FOOTING, 12" WIDE X 12" DEEP

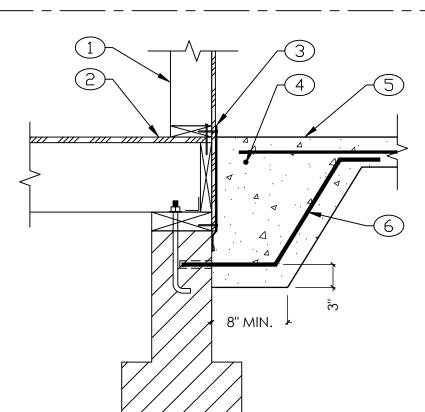
5. WALL SHEATHING AS OCCURS

6. EDGE NAILING, SEE BRACED WALL REQUIREMENTS. (6" O.C. MAX)

7. SLAB, SEE PLAN FOR THICKNESS & REINFORCING. 8. ANCHOR BOLTS, 5/8" Ø, w/MIN. 7" EMBEDMENT @

9. #4 BAR CONTINUOUS, TOP & BOTTOM

SCALE: NO SCALE



KEYNOTES

1. EXISTING 2x STUD WALL

2. EXISTING FLOOR STRUCTURE

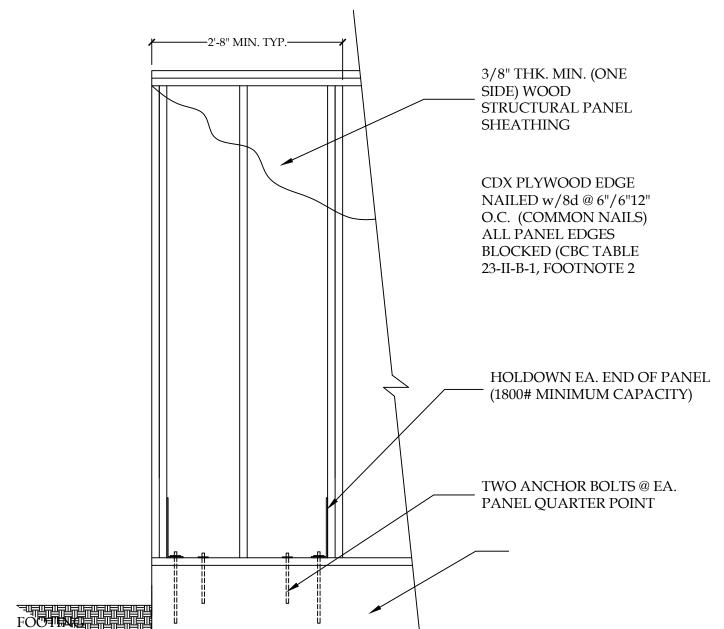
3. ADHESIVE WATER PROOF MEMBRANE (W.R. GRACE ICE & WATER SHEILD OR EQUIV)

4. #4 BAR CONT 5. MATCH SLAB ELEVATION TO WOOD FLOOR

6. #4 'Z' BAR @ 24" O.C. EPOXY SET INTO (E) STEM WALL. (3" MIN EMBEDMENT)

(N) SLAB AT (E) RAISED FLOOR

SCALE: NO SCALE



ALTERNATE BRACED WALL PANEL:

BRACED WALL PANELS

3/8" OSB 8d COMMON NAILS AT 6" O.C. EDGES AND 12" O.C. FIELD 2-1/2X10 AB W/3X3X.229 SQUARE WASHERS



1/2" GYPSUM BD. W/5d COOLER NAILS AT 7" O.C. 1/2X10 AB @ 32" O.C.



4ft OF GYPSUM BOARD APPLIED TO BOTH SIDES 1/2" GYPSUM BD. W/5d COOLER NAILS AT 7" O.C. 1/2X10 AB @ 32" O.C.



ALTERNATE BRACED WALL PANELS. SEE DETAIL, THIS SHEET

DTT2 HOLDOWNS OR APPROVED EQUIVALENT

A. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO START OF CONSTRUCTION. DISCREPANCIES SHALL BE RESOLVED WITH

B. ALL 9'-0" EXTERIOR WALLS SHALL BE 2x4 DF #2 STUDS @ 16" O.C. W/ THE FOLLOWING TRIMMER/KING STUDS:

C. ALL SLABS SHALL BE 4" THICK SLABS W/ #3 BARS @ 18" O.C. EACH WAY, ALT 6X6 WWF OVER 10 MIL VAPOR BARRIER OVER 4" CLEAN CRUSHED STONE

D. ALL FOOTINGS SHALL BE EMBEDDED 12" MIN BELOW LOWEST ADJACENT GRADE W/IN 6'-0" HORIZONTAL MEASUREMENT OF THE NEW CONSTRUCTION.

G. DEEPEN FOOTINGS AS REQUIRED AT HOLD DOWNS TO ALLOW FOR INSTALLATION OF SIMPSON SSTB ANCHORS

STRUCTURAL PLAN KEYNOTES

FOUNDATION PLAN NOTES

DESIGNER PRIOR TO CONSTRUCTION.

REVISIONS

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NOVEL DESIGN

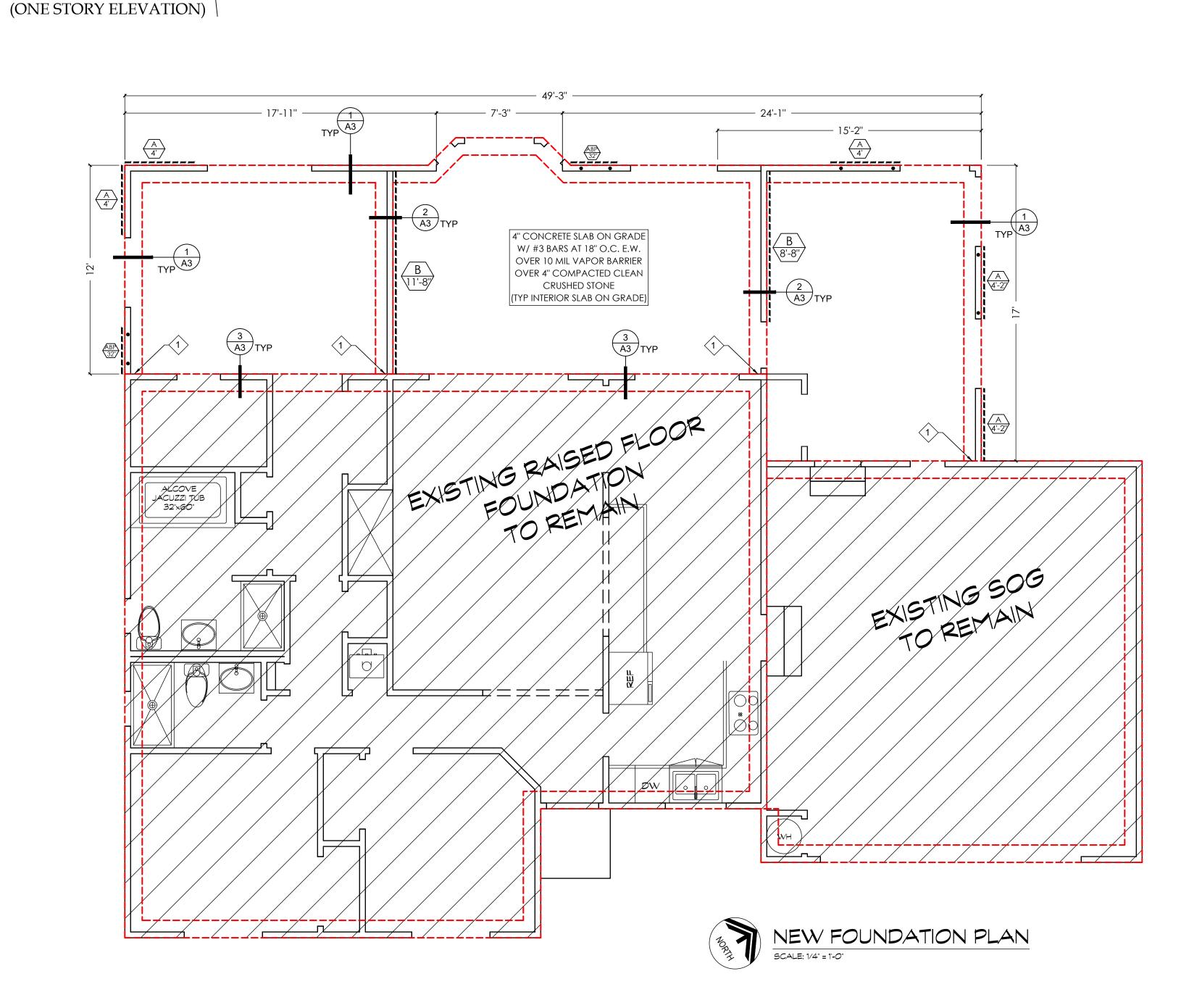
E DRAFTING

VITALIY N. LESCHIK

(916) 390-2724

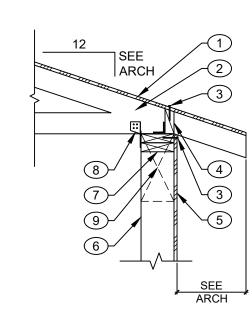
noveldd@gmail.com

EPOXY NEW FOOTING/STEM WALL REINFORCEMENT 4" MIN W/ SIMPSON SET-XP EPOXY.



FOUNDATION PLAN

09/09/2024



KEYNOTES:

1. ROOF SHEATHING, SEE PLAN

2. PREFAB ROOF TRUSS (OR WOOD JOIST, WHERE OCCURS)

3. EDGE NAILING

4. 2x BLOCKING W/ SIMPSON A35 CLIP @ 24"

5. WALL SHEATHING AS OCCURS, SEE PLAN

6. 2x STUD WALL, SEE PLAN

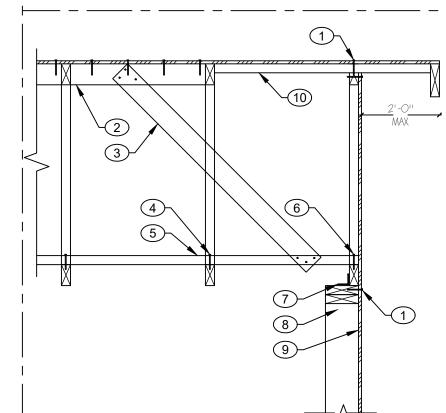
7. DOUBLE TOP PLATE, SPLICE PER TYPICAL

8. SIMPSON H5 CLIP EACH TRUSS

9. BEAM, WHERE OCCURS

ROOF TRUSS AT BEARING WALL

SCALE: NO SCALE



KEYNOTES:

1. EDGE NAILING

2. 2x4 BLOCK TO RECIEVE EDGE NAILING

3. 2x4 KICKER BRACE @ 48" O.C. W/ (3)16d NAILS EACH END

4. (3) 16d NAILS INTO EA TRUSS

5. 2x6x4'-0" (MIN) BRACE @ 48" O.C. 6. (4) 16d NAILS INTO TRUSS CHORD

7. SIMPSON A35 @ 24" O.C.

8. DOUBLE 2x TOP PLATE, SPLICE PER TYPICAL DETAILS

9. WALL SHEATHING, SEE PLAN

10. 2x4 OUTRIGGER @ 24" O.C. NOTCH END TRUSS TOP CHORD PER TRUSS MANUFACTURER

2 ROOF TRUSS AT GABLE END

SCALE: NO SCALE

ROOFING NOTES:

1. ROOF UNDERLAYMENT: PROVIDE ONE LAYER OF No. 30 ASPHALT FELT. UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES FASTENED SUFFICIENTLY TO HOLD IN PLACE. END LAPS SHALL BE OFFSET BY 6 FEET. CRC R905.2.7

2. ALL ROOF FLASHING TO BE 26 GAUGE GALVANIZED IRON, COPPER OR ALUMINUM

3. CONTRACTOR TO VERIFY LOCATION AND SIZE OF ALL ROOF OPENINGS AND

EQUIPMENT PLATFORMS WITH MECHANICAL CONTRACTOR. 4. ROOFING MATERIAL SHALL BE CLASS A MINIMUM

5. INSTALL VALLEY LININGS PER CRC R905.2.8.2

ATTIC VENTILATION

ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES SHALL HAVE CROSS VENTILATION FOR EACH SEPERATE SPACE BY VENTILATION OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN AND SNOW. THE NET FREE VENTILATING AREA (NFA) SHALL BE NOT LESS THANK 1/150 OF THE AREA OF THE SPACE VENTILATED, PROVIDE 50 PERCENT OF THE REQUIRED VENTILATING AREA BY VENTILATORS LACATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. THE OPENINGS SHALL BE COVERED WITH CORROSION-RESISTANT METAL MESH WITH OPENINGS OF 1/4 INCH IN DIMENSION. DO NOT BLOCK VENTS WITH INSULATION.

PROVIDE APPROVED DAMS OR BAFFLES BETWEEN ROOF FRAMING MEMBERS (TRUSSES/RAFTERS) TO PREVENT VENT HOLES BEING BLOCKED BY INSULATION.

ROOF TOTAL 510 SQ.FT:

663 sq.ft. /150 = 4.4 NFA X 144 = 637 sq.in. /2 = 318 sq.in INTAKE & 318 sq.in EXHAUST

PROPER ATTIC VENTILATION:

LOWER VENTS MIN. NFA = 318 SQ.IN. NSTALL MIN. 7 VENT BLOCKS UPPER VENTS MIN. NFA = 318 SQ.IN. NSTALL MIN. 4 LOW PROFILE DORMER VENTS

1. MANUFACTURED GALVANIZED SCREENED VENT

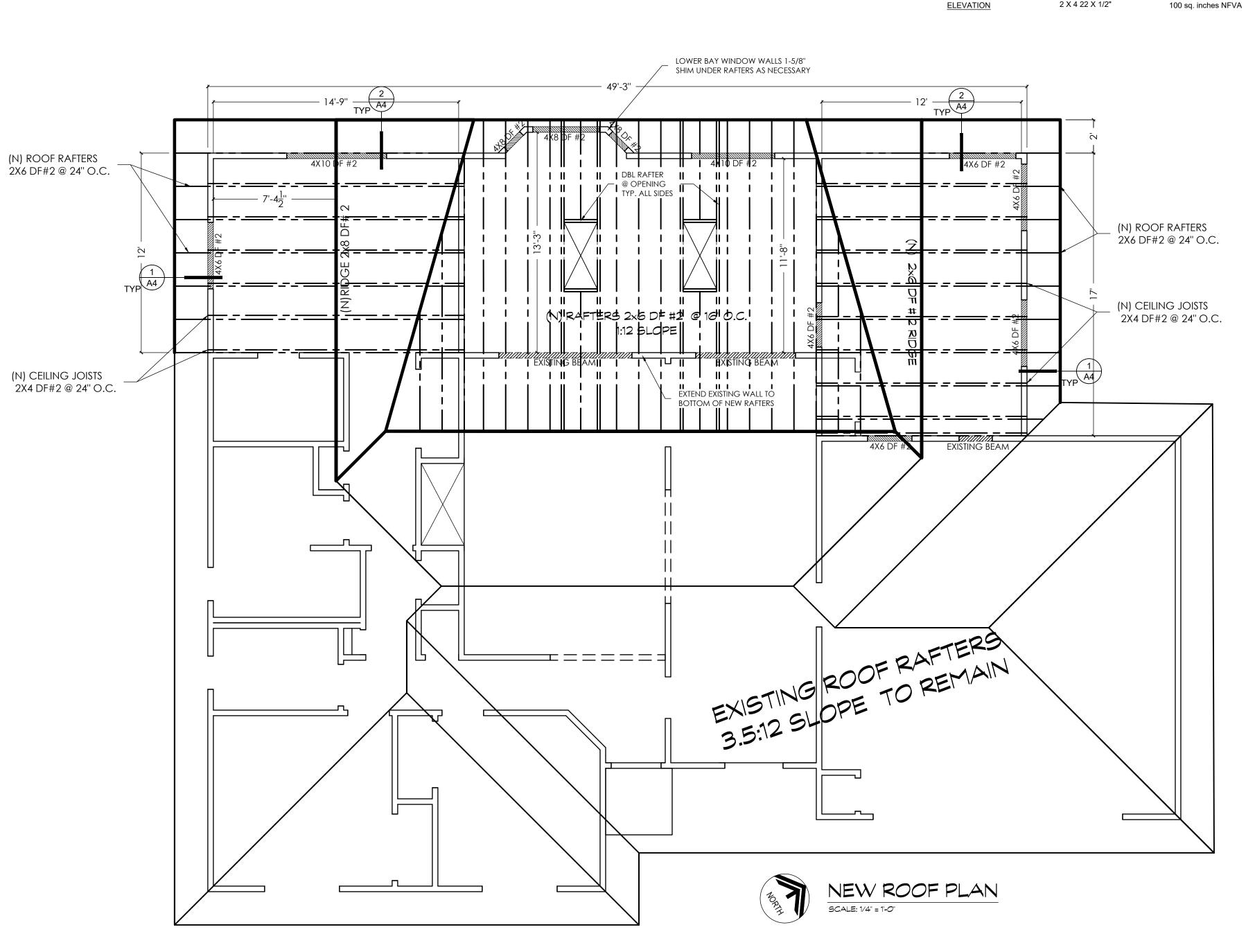
TYPICAL ATTIC - 1 VENT BLOCK AT EVERY THIRD BAY. PROVIDES APPROX. 47

INCHES VENT AREA PER BLOCK

VENT BLOCK SIZE 2 X 4 22 X 1/2"

LOW PROFILE DORMER <u>VENTS</u>

> BY GIBRALTAR INDUSTRIES OR EQUAL **GALVANIZED STEEL** 30 INCH SUBBASE ROUGH OPENING SIZE 22" x 10" 100 sq. inches NFVA



DESIGNED BY:

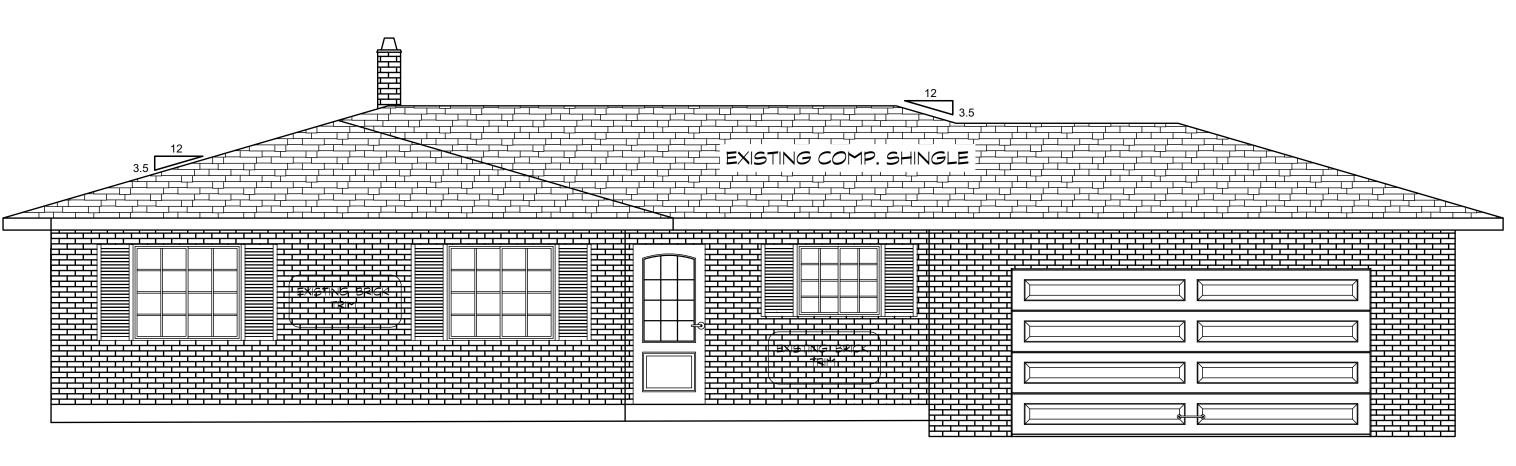
NOVEL DESIGN & DRAFTING

VITALIY N. LESCHIK (916) 390-2724 noveldd@gmail.com

NO.	REVISIONS	DATE

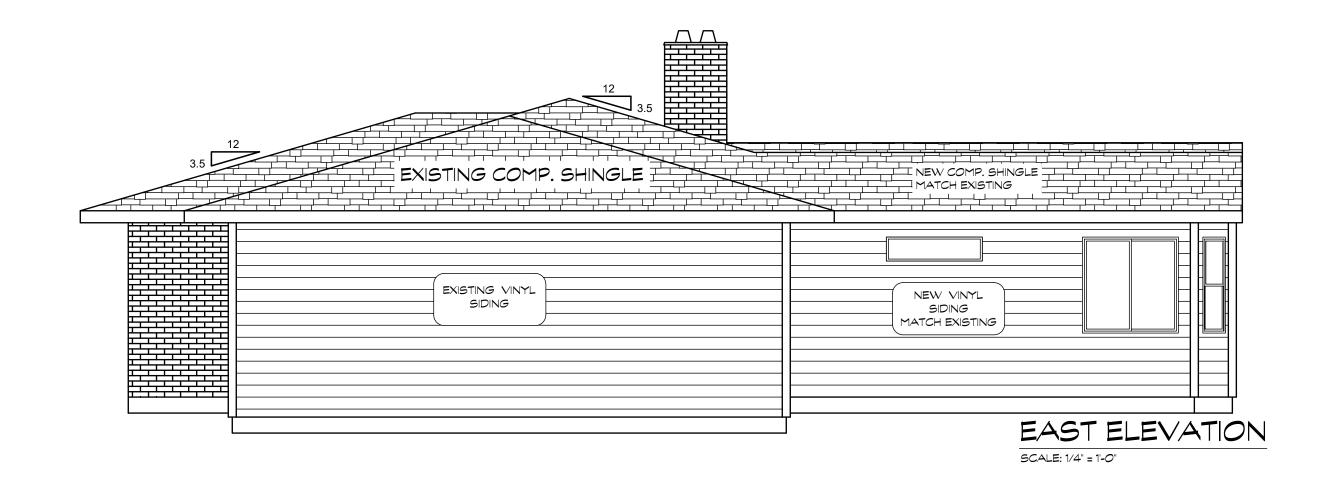
ROOF PLAN

09/09/2024



SOUTH ELEVATION

SCALE: 1/4" = 1-0"



WATER-RESISTIVE BARRRIER

1. PROVIDE ONE LAYER OF No. 15 ASPHALT FELT, FREE FROM HOLES AND BREAKS, COMPLYING WITH ASTM D226 FOR TYPE 1 FELT OR OTHER APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES. WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6 INCHES. CRCR703.2

2. AN APPROVED CORROSION-RESISTANT FLASHING SHALL BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS (CRC R703):

2.1. EXTERIOR WINDOW AND DOOR OPENINGS

2.2. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS

2.3. UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS

2.4. CONTINUOUSLY ABOVER ALL PROJECTING WOOD TRIM

2.5. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION

2.6. AT WALL AND ROOF INTERSECTIONS

ROOFING NOTES:

- 1. ROOF UNDERLAYMENT: PROVIDE ONE LAYER OF No. 30 ASPHALT FELT. UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES FASTENED SUFFICIENTLY TO HOLD IN PLACE. END LAPS SHALL BE OFFSET BY 6 FEET. CRC R905.2.7
- 2. ALL ROOF FLASHING TO BE 26 GAUGE GALVANIZED IRON, COPPER OR ALUMINUM
- 3. CONTRACTOR TO VERIFY LOCATION AND SIZE OF ALL ROOF OPENINGS AND EQUIPMENT PLATFORMS WITH MECHANICAL CONTRACTOR.
- 4. ROOFING MATERIAL SHALL BE CLASS A MINIMUM

BROWN RES. ADDITION
170 GLENN DR. FOLSOM, CA 95630

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& DRAFTING

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noveldd@gmail.com

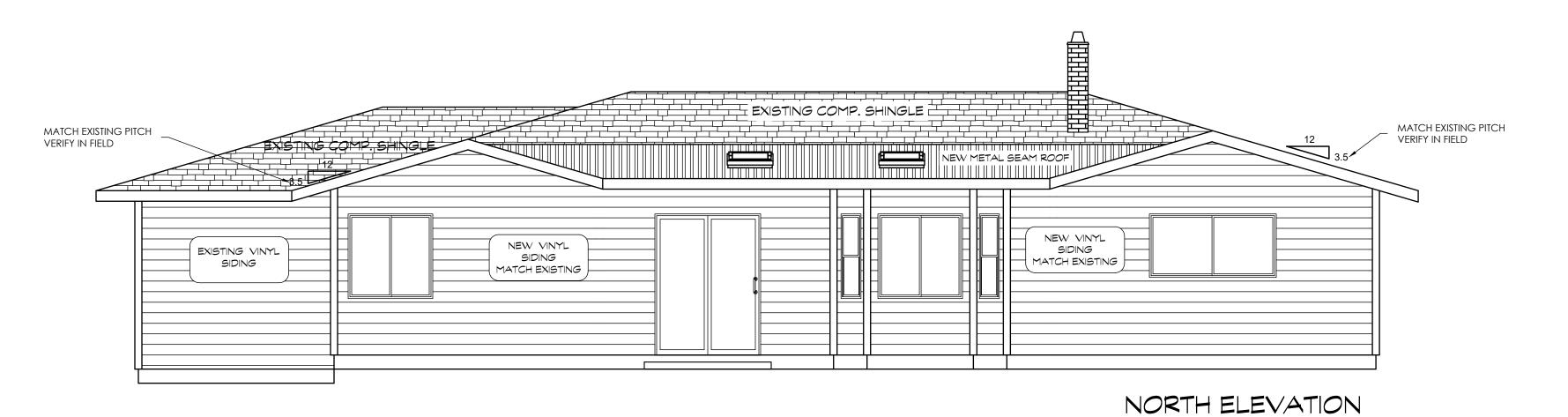
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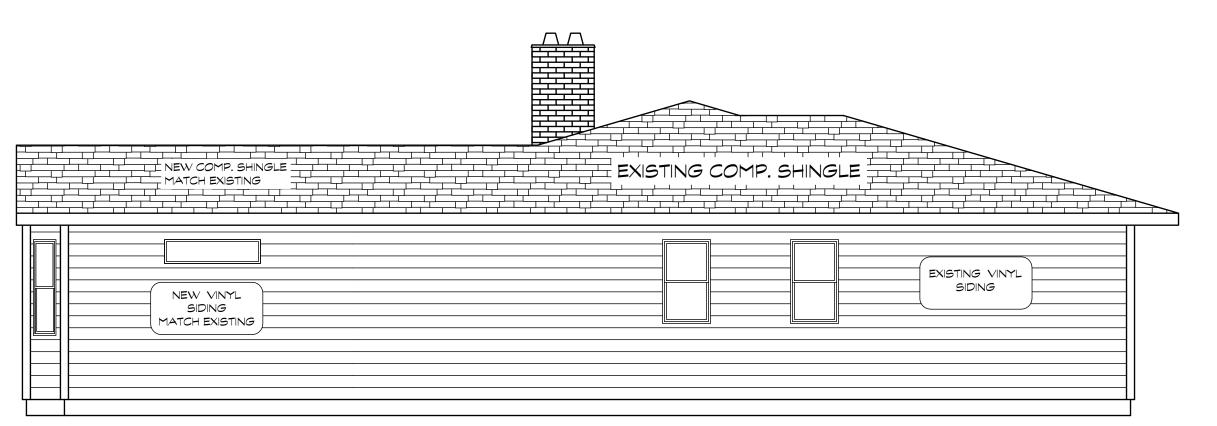
ELEVATIONS

09/09/2024

SHEET NO.

A-5





WEST ELEVATION

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

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

ELECTRICAL SYMBOLS

- S switch
- S₂ SWITCH 3 WAY
- Sy Manual on Vacancy Sensor
- □ DUPLEX RECEPTACLE
- USB DUPLEX RECEPTACLE
 WITH BUILT IN USB PORT
- ===_WP WEATHER PROOF GFCI
- 120V, GROUND FAULT
 CIRCUIT-INTERUPTER (GFCI)
 DUPLEX RECEPTACLE

WALL MOUNTED LIGHT

CARBON MONOXIDE ALARM

SMOKE DETECTOR

FAN WITH LIGHTS

- EXTERIOR GRADE WALL
 MOUNTED LIGHT FIXTURE.
 RATED FOR WET
 LOCATIONS
- CEILING MOUNTED LIGHT FIXTURE
- RECESSED-HIGH EFFICACY (LED) LIGHT FIXTURE
- EXAUST VENT:
 EXHAUST FANS SHALL HAVE INTEGRATED
 HUMIDISTAT AND BE CAPABLE OF PRODUCING
 50 CFM MINIMUM.

SMOKE DETECTOR/ALARM NOTES:

- CARBON MONOXIDE ALARMS TO BE INSTALLED:
 OUTSIDE OF EACH SEPERATE DWELLING UNIT SLEEPING AREA IN THE

 OUTSIDE OF EACH SEPERATE DWELLING UNIT SLEEPING AREA IN THE

 OUTSIDE OF EACH SEPERATE DWELLING UNIT SLEEPING AREA IN THE

 OUTSIDE OF EACH SEPERATE DWELLING UNIT SLEEPING AREA IN THE
- IMMEDIATE VICINITYOF THE BEDROOM(S), AND

 1.2. ON EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS
- 2. SMOKE ALARMS TO BE INSTALLED:
- 2.1. IN EACH SLEEPING ROOM,
 2.2. OUTSIDE EACH SEPERATE SLEEPING AREA IN THE IMMEDIATE VICINITYOF THE BEDROOM(S) AND
- 2.3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND HABITABLE ATTICS, BUT NOT INCLUDING CRAWL SPACES AND UNIHABITABLE ATTICS. IN DWELLINGS OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AND INTERVENING DOOR BETWEEN THE ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.
- 3. SMOKE ALARMS AND CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND SHALL BE EQUIPPED WITH A BATTERY BACKUP (SMOKE ALARMS/CARBON MONOXIDE ALARMS SHALL HAVE A 10-YEAR SEALED BATTERY). WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION (CRC R314.6)
- WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUALT DWELLING OR SLEEPING UNIT, THE SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED. (CRC R314.4)
- 5. SMOKE AND CARBON MONOXIDE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT (CRC R314.4 & R315.5)

GENERAL ELECTRICAL NOTES:

- 1. ALL ELECTRICAL INSTALLATION SHALL COMPLY WITH 2022 CALIFORNIA ELECTRICAL CODE & 2022 ENERGY CODE.
- AFCI-ARC-FAULT CIRCUIT INTERRUPTER IN DWELLING UNITS
 ALL 120-volts, SINGLE PHASE, 15 AND 20-AMPERE BRANCH CIRCUITS
 SUPPLYING OUTLETS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING
 ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS,
 SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS
 OR AREAS SHALL BE PROVIDED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER,
 COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH
- 3. TAMPER RESISTANT RECEPTACLES IN DWELLING UNITS CEC 406.11, CEC 210.52
 3.1. IN ALL AREAS SPECIFIED IN 210.52 EVERY KITCHEN, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, BATHROOM, GARAGE, BASEMENT, LAUNDRY AND OUTDOOR AREA, ALL 125-VOLT, 15- AND 20 AMPERE RECEPTACLES SHALL BE LISTED TAMPER RESISTANT RECEPTACLES.
- 4. ALL PERMANENTLY INSTALLED LUMINARIES SHALL BE HIGH-EFFICACY IN ACCORDANCE WITH 2019 CEC TABLE 150.0A PER 2019 CEC § 150.0(k). NO LOW-EFFICACY LIGHTING PERMITTED.
- 5. ALL LIGHT FIXTURES RECESSED INTO INSULATED CEILINGS SHALL BE APPROVED FOR ZERO-CLEARANCE INSULATION COVER (I.C.) BY U.L.
- 6. GFCI OUTLETS ARE REQUIRED: FOR ALL KITCHEN RECEPTACLES THAT ARE DESIGNED TO SERVE COUNTERTOP SURFACES, DISHWASHERS, BATHROOMS, IN UNDER-FLOOR SPACES OR BELOW GRADE LEVEL, IN UNFINISHED BASEMENTS, CRAWL SPACE LIGHTING OUTLETS, IN EXTERIOR OUTLETS, WITHIN 6' OF A LAUNDRY/UTILITY/WET BAR SINKS, LAUNDRY AREAS, AND IN ALL GARAGE OUTLETS INCLUDING OUTLETS DEDICATED TO A SINGLE DEVICE OR GARAGE DOOR OPENER. (CEC 210.8)
- 7. THE RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6FT FROM A RECEPTACLE. ANY WALL SPACE 2FT OR MORE IN WIDTH AND UNBROKEN ALONG THE FLOOR LINE BY DOORWYS AND SIMILAR OPENINGS SHALL HAVE A RECEPTACLE

BATHROOM ELECTRICAL NOTES:

- IN ALL BATHROOMS PROVIDE AN OUTLET ON A DEDICATED 20 AMP CIRCUIT.
 LIGHT FIXTURES IN DAMP SPACED I.E. OVER THE TUB/SHOWER ARE TO BE SUITABLE FOR
- DAMP SPACES.

 3. BATHROOM EXHAUST FANS MUST BE CONTROLLED BY A HUMIDISTAT CONTROL CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF 50% TO

TITLE-24 NOTES:

- 1. LIGHTING IN BATHROOMS, GARAGES, LAUNDRY ROOMS AND UTILITY ROOMS SHALL BE HIGH EFFICACY. AT LEAST ONE INSTALLED LUMINARE SHALL BE CONTROLLED BY AN OCCUPANCY OR VACANCY SENSOR PROVIDING AUTOMATIC-OFF FUNCTIONALITY
- 2. OTHER ROOMS LUMINARIES (HALLWAYS, DINING ROOMS, FAMILY ROOMS AND BEDROOMS), SHALL BE HIGH EFFICACY OR SHALL BE CONTROLLED BY AN MANUAL-ON OCCUPANT SENSOR OR DIMMER
- 2.1. PERMANENTLY INSTALLED FIXTURES THAT ARE NOT HIGH EFFICACY ARE ALLOWED IN CLOSETS LESS THAN 70 SQUARE FEET. THESE FIXTURES MAY BE CONTROLLED BY A SIMPLE TOGGLE SWITCH, MANUAL-ON OCCUPANT SENSOR, OR AN AUTOMATIC-ON OCCUPANT SENSOR
- 3. ALL EXTERIOR OUTDOOR LIGHTS SHALL BE HIGH-EFFICACY LUMINARIES OR BE CONTROLLED BY A MANUAL-ON/OFF SWITCH THAT DOES NOT OVERRIDE TO ON, CONTROLLED BY A PHOTOCELL AND MOTION SENSOR.
- 4. LUMINARIES THAT ARE RECESSED INTO INSULATED CEILINGS ARE REQUIRED TO BE RATED FOR INSULATION CONTACT ("IC-RATED") SO THAT INSULATION CAN BE PLACED OVER THEM. THE HOUSING OF THE LUMINARIES SHALL BE AIRTIGHT TO PREVENT CONDITIONED AIR ESCAPING INTO THE CEILING CAVITY OR ATTIC, UNCONDITIONED AIR INFILTRATING FROM THE CEILING OR ATTIC INTO THE CONDITIONED SPACE.

EXTERIOR LIGHTING:

- ALL OUTDOOR LIGHTING SHALL BE HIGH EFFICACY
 WALL MOUNTED LIGHTING SHALL BE CONTROLLED BY ONE OF THE FOLLOWING
- COMBINATIONS:
- 2.1. PHOTOCELL AND MOTION SENSOR
 2.2. PHOTOCELL AND TIME SWITCH
- .2. PHOTOCELL AND TIME SWITCH

 .3. ASTRONOMICAL TIME CLOCK
- 4. EMCS WITH FEATURES OF ASTRONOMICAL TIME CLOCK, DOES NOT ALLOW THE LUMINAIRE TO BE ON DURING THE DAY AND MAY BE PROGRAMMED TO
- AUTOMATICALLY TURN LIGHTING OFF AT NIGHT

 3. ALL EXTERIOR 120-VOLT, 15 AND 20 AMP RECEPTACLES TO BE LISTED AS
- WEATHER-RESISTANT, TAMPER RESISTANT AND GFCI PROTECTED.

 4. WATER PROOF GFCI REQUIRED AT ALL OUTDOOR ELECTRICAL OUTLETS

DESIGNED BY:

NOVEL DESIGN & DRAFTING VITALIY N. LESCHIK (916) 390-2724



NO.	REVISIONS	DATE

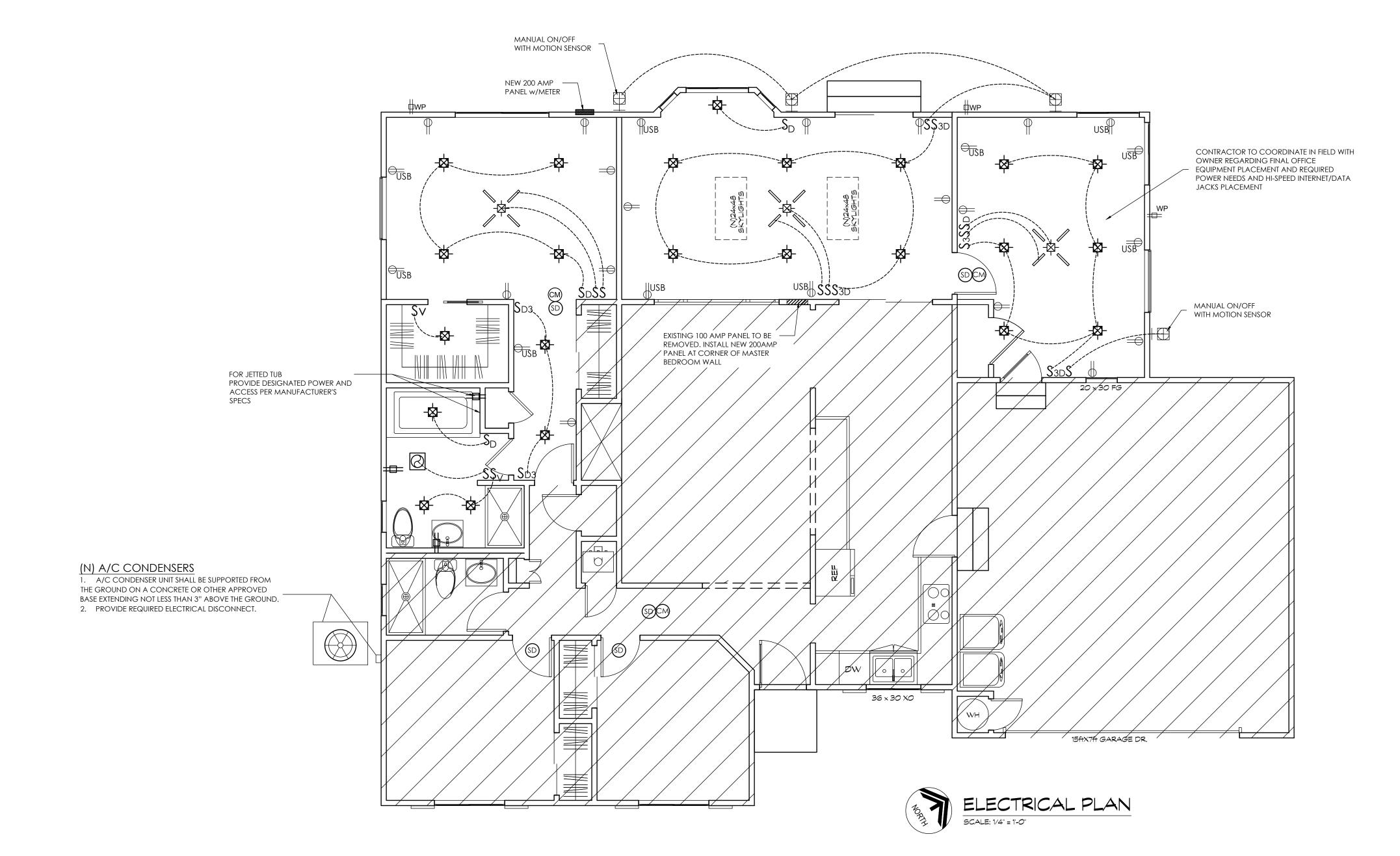
BROWN REG. ADDITION 170 GIENN DR FOLGON CA 95630

ELECTRICA PLAN

09/09/2024

SHEET NO.

E-1



SHEET NUMBER

T-24A

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: 170 Glenn Dr Addition Calculation Date/Time: 2024-09-17109:03:39-07:00 (Page 1 of 11) Input File Name: 170 Glenn Dr Addition.ribd22 GENERAL INFORMATION OI Project Name: 170 Glenn Dr Addition OI Project Location 170 Glenn Dr O4 City Folson, CA O5 Standards Version 2022 O6 Zip code 05530 O7 Software Version 2022 O8 Climate Zone: 19 Gleng Family 10 Building Type Single family 11 Number of Dwelling Units 1 12 Project Scape Addition and/or Alteration 13' Number of Bortoms 3 14 Addition Cond. Floor Area (1t ²) 399 15 Number of Stories 1 15 Esisting Cond. Floor Area (1t ²) 1504 19 Glazing Percentage (%) 14.20% 10 ADU Bedroom Count No. 22 (ADU Conditioned Floor Area (1t ²) 1504 19 Glazing Percentage (%) 14.20% 10 Building Complies with Computer Performance O2 Building Complies with Computer Performance O3 This building incorporates one or more Spacial Features shown below	CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: 170 Glenn Dr Addition Calculation Description: Input File Name: 170 Glenn Dr Addition.ribd22	CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: 170 Glenn Dr Addition Calculation Description: Input File Name: 170 Glenn Dr Addition.ribd22 Project Name: 170 Glenn Dr Addition.ribd22	CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: 170 Glenn Dr Addition Project Name: 170 Glenn Dr Addition Project Name: 170 Glenn Dr Addition Project Name: 170 Glenn Dr Addition.ribd22	IMPORTANT: ALL PLANS MUST BE APPROVED BY THE CITY, COUNTY, OR THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT PRIOR TO CONSTRUCTION. THE DRAFTSMAN ASSUMES NO RESPONSIBILITY FOR ANY UNAPPROVED PLANS.
Registration Number: 424-P010215359A-000-00000000-0000 Registration Date/Time: 09/17/2024 09:06 HERS Provider: CHEERS NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2024-09-17 09:04:56 Schema Version: rev 20220901	Registration Number: 424-P010215359A-000-000-00000000 Registration Date/Time: 09/17/2024 09:06 HERS Provider: CHEERS NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2024-09-17 09:04:56 Schema Version: rev 20220901	Registration Number: 424-P010215359A-000-00000000-0000 Registration Date/Time: 09/17/2024 09:06 NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901	Registration Number: 424-P010215359A-000-00000000-0000 Registration Date/Time: 09/17/2024 09:06 HERS Provider: CHEERS NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2024-09-17 09:04:56 Schema Version: rev 20220901	REVISIONS
CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: 170 Glenn Dr Addition Calculation Date/Time: 2024-09-17109;03:39-07:00 (Page 5 of 11)	CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: 170 Glenn Dr Addition Calculation Date/Time: 2024-09-17109:03:39-07-00 (Page 6 of 13) Input File Name: 170 Glenn Dr Addition.ribd22 FINSTINATION / GAZING	CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: 170 Glenn Dr Addition Calculation Description: Input File Name: 170 Glenn Dr Addition.ribd22 OPAQUE SURFACE CONSTRUCTIONS 0.1 0.2 0.3 0.5 0.6 0.7 0.8 Construction Name Surface Type Construction Typis Framing Framing Total Covity Revulue Tota	CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: 170 Glenn Dr Addition Calculation Description: Input File Name: 170 Glenn Dr Addition.ribd22 ONQUE SUBRACE CONSTRUCTIONS 0	PROJECT LOCATION: 170 GLENN DR FOLSOM, CA 95630
CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: 170 Glenn Dr Addition Calculation Date/Time: 2024-09-1709-03:39-07-00 (Page 9 of 11) Input File Name: 170 Glenn Dr Addition.ribd22 WATER NEATURE - HERE VERHICATION 0.1 0.2 0.3 0.5 0.5 0.5 0.6 0.07 Name Pige Insulation Parallel Pigling Compact Distribution Type DHW System 1-1/1. Not Required Name System Type Heating Unit Name Failing Unit Name System Type Heating Unit Name Required Count Name Country Types 1	CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: 170 Glenn Dr Addition Calculation Date/Time: 2024-09-17109.03:39-07.00 (Page 10 of 11) Input File Name: 170 Glenn Dr Addition.ribd22 HNAC- DATRIBUTION SYSTEMS OI 02 03 04 05 06 07 08 09 10 11 1 12 13 14 15 16 Name Type Design Type Design Type Supplificator Supplificator Supplificator Supplification Supplication Supplification Supplication Supplication Supplication Supplication Supplication Supplication Supplication Supplic	CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: 170 Glenn Dr Addition Calculation Description: Input File Name: 170 Glenn Dr Addition.ribd22 DOUMENTATION AUTHOR'S DECLARATION STATEMENT 1.1 centry that this Certificate of Compliance documentation is accurate and complete. Documentation Author Statement (Iduated To Tigerina Corpany: Green Solutions Address: 7600 Weedgarch Hwy CRYSWAP/IRE Datacerfield, CA 93307 AREPOINDELE PERSON'S DECLARATION STATEMENT Level Intelligence of Compliance of Comp		TITLE 24: ENERGY CALCULATIONS DATE: 09/17/2024



2022 Single-Family Residential Mandatory Requirements Summary

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

§ 110.6(a)1:	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or
	less when tested per NFRC-400, ASTM E283, or AAMA/WDMA/CSA 101/I.S.2/A440-2011. *
§ 110.6(a)5:	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a). Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from
110.6(b):	Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped. * Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be
110.7:	caulked, gasketed, or weather stripped.
110.8(a):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
110.8(g):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
} 110.8(i):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	Roof Deck, Ceiling and Rafter Roof Insulation. Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling; or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.*
§ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102
	Masonry walls must meet Tables 150.1-A or B. *
§ 150.0(d):	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. *
§ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	Vapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45; or area-weighted average U-factor of all fenestration must not exceed 0.45.
replaces, Decor	ative Gas Appliances, and Gas Log:
§ 110.5(e)	Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	Combustion Intake. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.
§ 150.0(e)3:	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *
pace Conditioni	ng, Water Heating, and Plumbing System:
§ 110.0-§ 110.3:	Certification. Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.
§ 110.2(a):	HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.
§ 110.2(c):	Thermostats. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *
§ 110.3(c)3:	Insulation. Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with

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§ 110.3(c)6:

2022 Single-Family Residential Mandatory Requirements Summary

hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

TANDET COMMITTEE	2022 Single-Family Residential Mandatory Requirements Summary
§ 150.0(k)1G:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
§ 150.0(k)1H:	Light Sources in Enclosed or Recessed Luminaires . Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A:	Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B:	Multiple Controls . Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)2C:	Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E:	Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F:	Dimmers. Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150.0(k)2K:	Independent controls. Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
§ 150.0(k)3A:	Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
§ 150.0(k)4:	Internally illuminated address signs. Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.
Solar Readiness	
	Single-family Residences. Single-family residences located in subdivisions with 10 or more single-family residences and where the

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§ 110.10(a)1:	Single-family Residences. Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).
§110.10(b)1A:	Minimum Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 16 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet.
§ 110.10(b)2:	Azimuth. All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A:	Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and remounted equipment. *

Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.*

Structural Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.

Interconnection Pathways. The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.

Documentation. A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.

§ 110.10(e)1: Main Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps.

Main Electrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

6

2022 Single-Family Residential Mandatory Requirements Summary

Pilot Lights. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances

§ 110.5:	110.5: (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and	
	spa heaters. *	
§ 150.0(h)1:	Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.	
§ 150.0(h)3A:	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.	
§ 150.0(h)3B: Liquid Line Drier. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by manufacturer's instructions.		
Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation. All domestic I § 150.0(j)1: piping must be insulated as specified in § 609.11 of the California Plumbing Code. *		
§ 150.0(j)2:	Insulation Protection. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment	
§ 150.0(n)1:	Gas or Propane Water Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location; and a condensate drain no more than 2" higher than the base of the water heater	
§ 150.0(n)3:	Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.	
ucts and Fans:		
§ 110.8(d)3:	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.	
	CMC Compliance. All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC	

contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.

CMC Compliance. All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than 1/4", If mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed.*

Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction,

Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.

Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes,

§ 150.0(m)3: mastics, sealants, and other requirements specified for duct construction.

§ 150.0(m)7: Backdraft Damper. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.

Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.

Protection of Insulation. Insulation must be protected from damage due tosunlight, moisture, equipment maintenance, and wind.

Protection of Insulation. Insulation must be protected from damage due tosunlight, moisture, equipment maintenance, and wind.

§ 150.0(m)9: Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.

§ 150.0(m)10: Porous Inner Core Flex Duct. Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.

Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an

§ 150.0(m)11:

State System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.

Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A.

Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter.*

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2022 Single-Family Residential Mandatory Requirements Summary

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

*Exceptions may apply.



2022 Single-Family Residential Mandatory Requirements Summary

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

Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.*

Ventilation and Indoor Air Quality:

	3 · · · · · · · · · · · · · · · · · · ·
§ 150.0(o)1B:	Central Fan Integrated (CFI) Ventilation Systems. Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and controlled per §150.0(o)1Biii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.
§ 150.0(o)1C:	Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses. Single-family detached dwelling units and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1Ci-iii.
§ 150.0(o)1G:	Local Mechanical Exhaust. Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand controlled exhaust system meeting requirements of §150.0(o)1Giii,enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Giii-iv. Airflow must be measured by the installer per §150.0(o)1Gv, and rated for sound per §150.0(o)1Gvi. *
§ 150.0(o)1H&I:	Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems. The airflow required per § 150.0(o)1C mube measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than minimum airflow rate required by §150.0(o)1C.
§ 150.0(o)2:	Field Verification and Diagnostic Testing. Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o)1G

Pool and Spa Systems and Equipment:

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

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

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Green Solutions catitle24reports@gmail.com (661) 800-9702

IMPORTANT:
ALL PLANS MUST BE APPROVED BY THE
CITY, COUNTY, OR THE DEPARTMENT OF
HOUSING AND COMMUNITY DEVELOPMENT
PRIOR TO CONSTRUCTION. THE DRAFTSMAN
ASSUMES NO RESPONSIBILITY FOR ANY
UNAPPROVED PLANS.

REVISIONS

PROJECT LOCATION:

170 GLENN DR FOLSOM, CA 95630

TITLE 24: MANDATORY MEASURES
SUMMARY

DATE: 09/17/2024

SHEET NUMBER

T-24B

5/6/22

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

installed in close proximity to the location or the proposed location of the EV space, at the time of original

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

construction in accordance with the California Electrical Code.

concealed areas and spaces shall be installed at the time of original construction.

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"

RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, 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 **CHAPTER 3** construction in accordance with the California Electrical Code. 4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities. **GREEN BUILDING** 4.304 OUTDOOR WATER USE When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the 4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with requirements of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest **SECTION 301 GENERAL** The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. Efficient Landscape Ordinance (MWELO), whichever is more stringent. space shall count as at least one standard automobile parking space only for the purpose of complying with any 301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 4.106.4.2.5 Electric Vehicle Ready Space Signage. the application checklists contained in this code. Voluntary green building measures are also included in the Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans application checklists and may be included in the design and construction of structures covered by this code Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its 1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7. 4.106.4.2.1Multifamily development projects with less than 20 dwelling units; and hotels and motels with less successor(s) Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are than 20 sleeping units or guest rooms. available at: https://www.water.ca.gov/ 301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to 4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing 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 DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or specific area of the addition or alteration. 1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or **EFFICIENCY** of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all MID OWNER 4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in 4.106.4.3 for application. EVs at all required EV spaces at a minimum of 40 amperes. sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such 1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved lighting fixtures are not considered alterations for the purpose of this section. for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. 2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use. Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or 4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING Exceptions: 4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. **DIVISION 4.2 ENERGY EFFICIENCY** Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate percent of the non-hazardous construction and demolition waste in accordance with either Section 1. When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and management ordinance. **4.201.1 SCOPE.** For the purposes of mandatory energy efficiency standards in this code, the California Energy other important enactment dates Commission will continue to adopt mandatory standards. 2.When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable Exceptions: spaces, the number of EV capable spaces required may be reduced by a number equal to the number of 301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION Excavated soil and land-clearing debris. individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential Alternate waste reduction methods developed by working with local agencies if diversion or 4.303 INDOOR WATER USE buildings, or both. Individual sections will be designated by banners to indicate where the section applies recycle facilities capable of compliance with this item do not exist or are not located reasonably specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and 4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and a.Construction documents are intended to demonstrate the project's capability and capacity for facilitating urinals) and fittings (faucets and showerheads) shall comply with the sections 4,303,1,1, 4,303,1,2, 4,303,1,3, high-rise buildings, no banner will be used. 3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility. b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving **SECTION 302 MIXED OCCUPANCY BUILDINGS** 4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final in conformance with Items 1 through 5. The construction waste management plan shall be updated as **302.1 MIXED OCCUPANCY BUILDINGS.** In mixed occupancy buildings, each portion of a building completion, certificate of occupancy, or final permit approval by the local building department. See Civil necessary and shall be available during construction for examination by the enforcing agency. 2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential shall comply with the specific green building measures applicable to each specific occupancy. Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per buildings affected and other important enactment dates. 1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, dwelling unit when more than one parking space is provided for use by a single dwelling unit. 1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall reuse on the project or salvage for future use or sale. 4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per comply with Chapter 4 and Appendix A4, as applicable. Specify if construction and demolition waste materials will be sorted on-site (source separated) or Exception: Areas of parking facilities served by parking lifts. 2. [HCD] For purposes of CALGreen, live/work units, complying with Section 419 of the California flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense bulk mixed (single stream). Building Code, shall not be considered mixed occupancies. Live/Work units shall comply with Specification for Tank-type Toilets. 3. Identify diversion facilities where the construction and demolition waste material collected will be 4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more Chapter 4 and Appendix A4, as applicable. Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume 4. Identify construction methods employed to reduce the amount of construction and demolition waste **DIVISION 4.1 PLANNING AND DESIGN** The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to of two reduced flushes and one full flush. this section. Specify that the amount of construction and demolition waste materials diverted shall be calculated **ABBREVIATION DEFINITIONS:** 4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. by weight or volume, but not by both. Department of Housing and Community Development 1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush. of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 California Building Standards Commission ☐ OWNER 4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical Division of the State Architect, Structural Safety enforcing agency, which can provide verifiable documentation that the percentage of construction and system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all OSHPD Office of Statewide Health Planning and Development demolition waste material diverted from the landfill complies with Section 4.408.1. EVs at all required EV spaces at a minimum of 40 amperes. **4.303.1.3.1 Single Showerhead.** Showerheads shall have a maximum flow rate of not more than 1.8 High Rise gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA Note: The owner or contractor may make the determination if the construction and demolition waste The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved Additions and Alterations WaterSense Specification for Showerheads. materials will be diverted by a waste management company. for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. **4.303.1.3.2 Multiple showerheads serving one shower**. When a shower is served by more than one OWNER 4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of **CHAPTER 4** showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in RESIDENTIAL MANDATORY MEASURES reduced by a number equal to the number of EV chargers installed over the five (5) percent required. allow one shower outlet to be in operation at a time Note: A hand-held shower shall be considered a showerhead. 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 **SECTION 4.102 DEFINITIONS** a. Construction documents shall show locations of future EV spaces per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4 408.1 The following terms are defined in Chapter 2 (and are included here for reference) b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or 4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall OWNER 4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar not be less than 0.8 gallons per minute at 20 psi. compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4... 2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power pervious material used to collect or channel drainage or runoff water. Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per 4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials dwelling unit when more than one parking space is provided for use by a single dwelling unit. faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also buildings shall not exceed 0.5 gallons per minute at 60 psi. 1. Sample forms found in "A Guide to the California Green Building Standards Code Exception: Areas of parking facilities served by parking lifts. (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in **4.303.1.4.3 Metering Faucets.** Metering faucets when installed in residential buildings shall not deliver documenting compliance with this section **4.106 SITE DEVELOPMENT** 3.EV Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. 2. Mixed construction and demolition debris (C & D) processors can be located at the California more than 0.2 gallons per cycle. OWNER 4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation Where common use parking is provided, at least one EV charger shall be located in the common use parking Department of Resources Recycling and Recovery (CalRecycle). and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, area and shall be available for use by all residents or guests. 4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons management of storm water drainage and erosion controls shall comply with this section. 4.410 BUILDING MAINTENANCE AND OPERATION per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per default to a maximum flow rate of 1.8 gallo M OWNER 4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less an automatic load management system (ALMS) may be used to reduce the maximum required electrical disc, web-based reference or other media acceptable to the enforcing agency which includes all of the capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre following shall be placed in the building: or more, shall manage storm water drainage during construction. In order to manage storm water drainage shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) Note: Where complying faucets are unavailable, aerators or other means may be used to achieve during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall 1. Directions to the owner or occupant that the manual shall remain with the building throughout the have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical property, prevent erosion and retain soil runoff on the site. life cycle of the structure. capacity to the required EV capable spaces. 4.303.1.4.5 Pre-rinse spray valves. 2. Operation and maintenance instructions for the following: 1. Retention basins of sufficient size shall be utilized to retain storm water on the site. When installed, shall meet the requirements in the California Code of Regulations, Title 20 (Appliance a. Equipment and appliances, including water-saving devices and systems, HVAC systems, 2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar 4.106.4.2.2.1 Electric vehicle charging stations (EVCS). Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 photovoltaic systems, electric vehicle chargers, water-heating systems and other major disposal method, water shall be filtered by use of a barrier system, wattle or other method approved Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1 (d)(7) and shall be equipped with an integral automatic shutoff. appliances and equipment. by the enforcing agency b. Roof and yard drainage, including gutters and downspouts. 3. Compliance with a lawfully enacted storm water management ordinance. Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels FOR REFERENCE ONLY: The following table and code section have been reprinted from the California Space conditioning systems, including condensers and air filters. shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section Landscape irrigation systems. Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or e. Water reuse systems. are part of a larger common plan of development which in total disturbs one acre or more of soil. Information from local utility, water and waste recovery providers on methods to further reduce 4.106.4.2.2.1.1 Location. resource consumption, including recycle programs and locations. (Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html) EVCS shall comply with at least one of the following options: 4. Public transportation and/or carpool options available in the area. 5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent ■ OWNER 4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will 1.The charging space shall be located adjacent to an accessible parking space meeting the requirements of and what methods an occupant may use to maintain the relative humidity level in that range. manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space. STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY 6. Information about water-conserving landscape and irrigation design and controllers which conserve water include, but are not limited to, the following: VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019 2. The charging space shall be located on an accessible route, as defined in the California Building Code, 7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation 2. Water collection and disposal systems MAXIMUM FLOW RATE (gpm) 8. Information on required routine maintenance measures, including, but not limited to, caulking, 3. French drains Exception: Electric vehicle charging stations designed and constructed in compliance with the California [spray force in ounce force (ozf)] painting, grading around the building, etc. 4. Water retention gardens Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section 9. Information about state solar energy and incentive programs available. 5. Other water measures which keep surface water away from buildings and aid in groundwater 4.106.4.2.2.1.2. Item 3. 10. A copy of all special inspections verifications required by the enforcing agency or this code. Product Class 1 (≤ 5.0 ozf) 1.00 11. Information from the Department of Forestry and Fire Protection on maintenance of defensible 4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) dimensions. space around residential structures **Exception**: Additions and alterations not altering the drainage path. Product Class 2 (> 5.0 ozf and \leq 8.0 ozf) The charging spaces shall be designed to comply with the following: 1.20 12. Information and/or drawings identifying the location of grab bar reinforcements. Product Class 3 (> 8.0 ozf) 1.28 M □ OWNER 4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 1. The minimum length of each EV space shall be 18 feet (5486 mm). **4.410.2 RECYCLING BY OCCUPANTS.** Where 5 or more multifamily dwelling units are constructed on a 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625. 2. The minimum width of each EV space shall be 9 feet (2743 mm). 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)] depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling 3.One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum 4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial ordinance, if more restrictive. 1. On a case-by-case basis, where the local enforcing agency has determined EV charging and aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is infrastructure are not feasible based upon one or more of the following conditions: Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the **Exception:** Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 1.1 Where there is no local utility power supply or the local utility is unable to supply adequate California Plumbing Code. a.Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of 1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional percent slope) in any direction. **4.303.3 Standards for plumbing fixtures and fittings.** Plumbing fixtures and fittings shall be installed in local utility infrastructure design requirements, directly related to the implementation of Section accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 4.106.4, may adversely impact the construction cost of the project. 4.106.4.2.2.1.3 Accessible EV spaces. 1701.1 of the California Plumbing Code. 2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional 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 **DIVISION 4.5 ENVIRONMENTAL QUALITY** comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready parking facilities. spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section **SECTION 4.501 GENERAL** THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER. 4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway 4.106.4.2.3 EV space requirements. TABLE - MAXIMUM FIXTURE WATER USE irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors. shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main 1. Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall FIXTURE TYPE FLOW RATE SECTION 4.502 DEFINITIONS originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or 5.102.1 DEFINITIONS concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere proximity to the location or the proposed location of the EV space. Construction documents shall identify the SHOWER HEADS (RESIDENTIAL) 1.8 GMP @ 80 PSI The following terms are defined in Chapter 2 (and are included here for reference) 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit 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 overcurrent protective device. **AGRIFIBER PRODUCTS.** Agrifiber products include wheatboard, strawboard, panel substrates and door MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device. LAVATORY FAUCETS (RESIDENTIAL) cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements. 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 Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and

LAVATORY FAUCETS IN COMMON & PUBLIC

USE AREAS

KITCHEN FAUCETS

WATER CLOSET

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN B

METERING FAUCETS

0.5 GPM @ 60 PSI

1.8 GPM @ 60 PSI

0.2 GAL/CYCLE

1.28 GAL/FLUSH

0.125 GAL/FLUSH

DESIGNED BY:

NOT APPLICABLE

NOVEL DESIGN & DRAFTING VITALIY N. LESCHIK (916) 390-2724

noveldd@gmail.com

REVISIONS

CA GREEN STANDARDS

09/09/2024

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 atmosphere.

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

ANDATORY MEASURES, SHEET 2 (January 2023)

			RESIDENTIAL	MA
	Y N/A	RESPON. PARTY		Y N/A RES
			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 O³/g ROC). Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701. MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood. PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging). Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a). REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere. VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).	
-		OWNER	4 503 FIREPLACES	
-		OWNER	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.	
-		OWNER	4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.	
-		OWNER	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

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

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

TABLE 4.504.1 - ADHESIVE VOC LIMIT	,2
Less Water and Less Exempt Compounds in Grams po	er Liter)
ARCHITECTURAL APPLICATIONS	VOC LIMIT
NDOOR 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
/CT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

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

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

(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

ARCHITECTURAL COATINGS_{2,3}

COMPOUNDS

COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS 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

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

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

	TABLE 4.504.5 - FORMALDEHYDE LIMITS	
	MAXIMUM FORMALDEHYDE EMISSIONS IN PA	RTS 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 BY THE CALIF. AIR RESOURCES BOARD, AIR MEASURE FOR COMPOSITE WOOD AS TESTE WITH ASTM E 1333. FOR ADDITIONAL INFORM	TOXICS CONTROL D IN ACCORDANCE

CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH

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

VNER	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 Emission
	from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for
	California Specification 01350)

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

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

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

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

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

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

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

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not 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.

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

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

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

1. Product certifications and specifications.

2. Chain of custody certifications. 3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see

CCR. Title 17. Section 93120, et sea. 4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered

Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards. 5. Other methods acceptable to the enforcing agency.

4.505 INTERIOR MOISTURE CONTROL

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

M □ OWNER **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 provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute,

2. Other equivalent methods approved by the enforcing agency. 3. A slab design specified by a licensed design professional.

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

> 1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code. 2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end

of each piece verified. 3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

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

4.506 INDOOR AIR QUALITY AND EXHAUST | ☑ OWNER | **4.506.1 Bathroom exhaust fans.** Each bathroom shall be mechanically ventilated and shall comply with the

recommendations prior to enclosure.

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

equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of

a. Humidity controls shall be capable of adjustment between a relative humidity range less than or

b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

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 ENVIRONMENTAL COMFORT

☐ OWNER 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 acceptable.

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

RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER

INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

 M □ HVAC
 TO2.1 INSTALLER TRAINING.
 HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or

 certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

State certified apprenticeship programs.

CHAPTER 7

- 3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
- 4. Programs sponsored by manufacturing organizations. 5. Other programs acceptable to the enforcing agency.

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

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

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

project they are inspecting for compliance with this code. 2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

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

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

703 VERIFICATIONS

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.

DESIGNED BY:

NOVEL DESIGN & DRAFTING VITALIY N. LESCHIK (916) 390-2724 noveldd@gmail.com

NO.	REVISIONS	DATE

CA GREEN STANDARDS 09/09/2024

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