- DISCREPANCY IS FOUND TO EXIST, NOTIFY THE OWNER.

  2. THESE PLANS/SPECIFICATIONS AND ALL WORK SHALL COMPLY WITH CURRENT EDITION OF STATE OF CALIFORNIA TITLE 24 CCR
- AND CURRENT CPC, CMC AND CEC CODES.

  3. DETAILS ARE INTENDED TO SHOW METHOD AND MANNER OF ACCOMPLISHING WORK. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT THE JOB DIMENSIONS OR CONDITIONS AND IS TO BE REVIEWED AND APPROVED BY THE CITY
- 4. VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND STAKE OUT STRUCTURE FOR OWNER'S APPROVAL PRIOR TO STARTING ANY WORK.

OF SANTA ANA.

- 5. ALL WEATHER-EXPOSED SURFACES ARE TO HAVE A WEATHER-RESISTIVE BARRIER TO PROTECT THE INTERIOR WALL COVERING AND THAT EXTERIOR OPENINGS ARE TO BE FLASHED IN SUCH A MANNER AS TO MAKE THEM WEATHERPROOF.
- 6. SPECIFICATIONS FOR EQUIPMENT SHALL BE KEPT ON SITE TO PROVIDE TO THE CITY OF SANTA ANA BUILDING INSPECTOR
- 7. AN ENCROACHMENT PERMIT IS REQUIRED FOR ANY CONSTRUCTION, RECONSTRUCTION, OR CLOSURE OR THE ROADWAY, SIDEWALK OR RIGHT OF WAY. APPLICANT SHALL CONTACT ENGINEERING DEPARTMENT TO PROCESS.

## **ROOF NOTES**

- 1. FLASHINGS SHALL BE INSTALLED IN A MANNER THAT PREVENTS MOISTURE FROM ENTERING THE WALL AND ROOF THROUGH JOINTS IN COPINGS, THROUGH MOISTURE PERMEABLE MATERIALS AND AT INTERSECTIONS WITH PARAPET WALLS AND OTHER PENETRATIONS THROUGH THE ROOF PLANE.
- 2. UNLESS ROOFS ARE SLOPED TO DRAIN OVER ROOF EDGES, ROOF DRAINS SHALL BE INSTALLED AT EACH LOW POINT OF ROOF.
- 3. ROOF ASSEMBLIES SHALL BE OF MATERIALS THAT ARE COMPATIBLE WITH EACH OTHER AND WITH THE BUILDING OR STRUCTURE TO WHICH THE MATERIALS ARE APPLIED.
- 4. BUILDING-INTEGRATED PHOTOVOLTAIC PRODUCTS INSTALLED AS THE ROOF COVERING SHALL BE TESTED, LISTED AND LABELED FOR FIRE CLASSIFICATION IN ACCORDANCE WITH SECTION R902.1 THROUGH R902.1.4.
- 5. ASPHALT SHINGLES SHALL BE USED ONLY ON ROOF SLOPES OF TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (17-PERCENT SLOPE) OR GREATER. FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (17-PERCENT SLOPE) UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33-PERCENT SLOPE), DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED IN ACCORDANCE WITH SECTION R905.1.1.
- 6. CLAY AND CONCRETE ROOF TILE SHALL BE INSTALLED ON ROOF SLOPES OF TWO AND ONE-HALF UNITS VERTICAL IN 12 UNITS HORIZONTAL (25-PERCENT SLOPE) OR GREATER. FOR ROOF SLOPES FROM TWO AND ONE-HALF UNITS VERTICAL IN 12 UNITS HORIZONTAL (25-PERCENT SLOPE) TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33-PERCENT SLOPE), DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED IN ACCORDANCE WITH SECTION R905.3.3.
- 7. SLATE SHINGLES SHALL BE USED ONLY ON SLOPES OF FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33-PERCENT SLOPE) OR GREATER.
- 8. THE MINIMUM SLOPE FOR STANDING-SEAM ROOF SYSTEMS SHALL BE ONE-QUARTER UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE).
- 9. BUILT-UP ROOFS SHALL HAVE A DESIGN SLOPE OF NOT LESS THAN ONE-FOURTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE) FOR DRAINAGE, EXCEPT FOR COAL-TAR BUILT-UP ROOFS, WHICH SHALL HAVE A DESIGN SLOPE OF A MINIMUM ONE-EIGHTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (1-PERCENT SLOPE).
- 10. MINERAL-SURFACED ROLL ROOFING SHALL NOT BE APPLIED ON ROOF SLOPES BELOW ONE UNIT VERTICAL IN 12 UNITS HORIZONTAL (8-PERCENT SLOPE).
- 11. MODIFIED BITUMEN ROOFING SHALL HAVE A DESIGN SLOPE OF NOT LESS THAN ONE-FOURTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE) FOR DRAINAGE.
- 12. SINGLE-PLY MEMBRANE ROOFS SHALL HAVE A DESIGN SLOPE OF NOT LESS THAN ONE-FOURTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE) FOR DRAINAGE.
- 13. A CLASS A ROOF ASSEMBLY SHALL BE INSTALLED. IF THE APPLICANT DEVIATES FROM THE ROOF SPECIFICATIONS ON SHEET T1.1 THE APPLICANT SHALL PROVIDE A COPY OF THE ICC/UL LISTING

### ROOF NOTES (CONT'D)

14. FOR PHOTOVOLTAIC ARRAYS OCCUPYING NOT MORE THAN 33
PERCENT OF THE PLAN VIEW TOTAL ROOF AREA, NOT LESS THAN
AN 18-INCH (457 MM) CLEAR SETBACK IS REQUIRED ON BOTH
SIDES OF A HORIZONTAL RIDGE. FOR PHOTOVOLTAIC ARRAYS
OCCUPYING MORE THAN 33 PERCENT OF THE PLAN VIEW TOTAL
ROOF AREA, NOT LESS THAN A 36-INCH (914 MM) CLEAR SETBACK
IS REQUIRED ON BOTH SIDES OF A HORIZONTAL RIDGE.

15. PER SECTION R806.5/EM3.9.6:
a. IF INSULATION IS AIR PERMEABLE AND IT IS INSTALLED
DIRECTLY BELOW THE ROOF SHEATHING WITH RIGID BOARD OR
SHEET INSULATION WITH A MINIMUM R-4 VALUE INSTALLED
ABOVE THE ROOM SHEATHING. (OR)
b. IF THE INSULATION IS AIR-IMPERMEABLE AND IS IN DIRECT
CONTACT WITH THE UNDERSIDE OF THE OF THE ROOF
SHEATHING. (OR)

ROOF SHEATHING:
AN AIR-IMPERMEABLE LAYER IN DIRECT CONTACT WITH THE UNDERSIDE OF THE ROOF SHEATHING AND AN ADDITIONAL LAYER OF AIR PERMEABLE INSULATION IS TO BE INSTALLED DIRECTLY UNDER THE AIR-IMPERMEABLE INSULATION.

c. IF TWO LAYERS OF INSULATION ARE INSTALLED BELOW THE

#### FLOOR PLAN NOTES

- ALL DIMENSIONS TO FACE OF STUD, U.N.O.
  ALL DOORS SHOULD BE 3 1/2" FROM NEAREST INTERSECTING
- 3. WRITTEN DIMENSIONS TO PREVAIL OVER SCALING OF DRAWINGS. CONTRACTOR TO VERIFY ALL DIM. PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY OWNER OF ANY DISCREPANCIES.
- 4. REFER TO FRAMING PLANS AND SECTIONS FOR CLARIFICATION AND DIM. NOT SHOWN.
- 5. ALL ROOF DRAIN PIPES TO BE MIN. 2" STORM DRAINAGE SYSTEM UNLESS LOCAL CODE REQUIRES LARGER DRAIN SIZES. ROOF GUTTERS:

STYLE A . INSTALLED AND DESIGNED IN ACCORDANCE WITH SMACNA MANUAL, PLATE #1,#2 & #3,GUTTER. PAGE 6 - 11, WIDTH AS REQUIRED TO HANDLE THE AMOUNT OF ROOF WATER FOR MAXIMUM STORMS, SMACNA CHART #2, PAGE #2. GUTTER: SIZE; PAGES 1,2, 3, 4, 5 &6, CHARTS#1,#2,#3,#4,#5#6 &

STYLE; PLATE #2, STYLE A, PAGE 9 EXPANSION; PLATE #6, PAGE 16 &17 HANGING; PLATE #19, FIG. C, PAGE 43. DOWN SPOUTS:

WALL AT HINGED SIDE, U.N.O.

PLAIN RECTANGULAR.AS REQUIRED BY SMACNA MANUAL CHART #3, PAGE #3. SEE ARCHITECT FOR LOCATIONS OF DOWN SPOUTS. ALL DOWN SPOUTS ARE TO BE DESIGNED TO HANDLE THE AMOUNT OF ROOF WATER FOR MAXIMUM STORMS, SMACNA CHART #2, PAGE #2. DOWN SPOUTS ARE TO DEPOSIT DIRECTLY OVER A NDS 6 INCH SQUARE, MODEL 641 OR APPROVED EQUAL.(SEE SECTION 02710 MORE INFORMATION)

- TRANSITION OF FLOOR MATERIALS OCCURRING IN OPENINGS WITH DOORS TO BE LOCATED UNDER THE CENTER OF THE DOOR IN THE CLOSED POSITION. TRANSITION OF FLOOR MATERIAL OCCURRING WITH NO DOOR TO BE LOCATED TO ALIGN WITH THE FACE OF THE PARTITION, U.O.N
- DIFFUSERS AND GRILLS TO MATCH COLOR OF SURFACE AT WHICH THEY ARE MOUNTED, U.O.N.
- FLOOR FINISH TO CONTINUE UNDER MILLWORK WHERE FLOOR IS VISIBLE (I.E. TRASH, RECYCLING, ECT.) 8. SILICON SEALANT AT GLAZING TO BE CLEAR, U.O.N.
- PLUMBING, ELECTRICAL, AND SPRINKLER EQUIPMENT, IF REQUIRED TO BE PAINTED TO MATCH COLOR OF ADJACENT SURFACE.
- ALL FINISH MATERIAL MUST MEET ALL APPLICATION FIRE, LIFE SAFETY, AND BUILDING CODES. 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH SPECIFIED VOC CRITERIA. PARTICLE BOARD, MDF AND PLYWOOD USED IN INTERIOR FINISH SYSTEMS SHALL COMPLY WITH LOW FORMALDEHYDE EMISSION STANDARDS.
- 11. OPERATION AND MAINTENANCE MANUAL: THE BUILDER IS TO PROVIDE AN OPERATION MANUAL (CONTAINING INFORMATION FOR MAINTAINING APPLIANCES, ETC.) FOR THE OWNER AT THE TIME OF FINAL INSPECTION.
- WEEP SCREED FOR STUCCO AT THE FOUNDATION PLATE LINE SHALL BE A MIN. OF 4" ABOVE THE EARTH OR 2" ABOVE PAVED AREAS. CRC R703.7.2.1, CBC 2512.1.2
- FASTENERS AND CONNECTIONS (NAILS, ANCHORS BOLTS ECT) IN CONTACT WITH PRESERVATIVE -TREATED WOOD SHALL BE OF HOT -DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. (CRC R317.3, CBC 2304.10.5.1)
- ANCHOR BOLTS SHALL INCLUDE STEEL PLATE WASHERS A MIN. OF 0.229" X 3" X 3" IN SIZE, BETWEEN SILL PLATE AND NUT. (CRC R602.11.1, CBC 2308.3.2 ACCEPTANCE ALTERNATIVE SDPWS 4.3.6.4.3)
- FUTURE WATER HEATERS AND PLUMBING FIXTURES SHALL MEET THE REQUIREMENTS OF SECTION 2-5314 AND TABLE 2-53G, TITLE 24, C.A.C.
- 15, 20 AND 30 AMP. RECEPTACLE OUTLETS SHALL BE INSTALLED NO MORE THAN 48" MEASURED FROM THE TOP OF OUTLET BOX AND NOT LESS THAN 15" FROM THE BOTTOM OF OUTLET BOX ABOVE THE FLOOR.
- SITE SHALL BE PLANNED AND DEVELOPED TO KEEP SURFACE WATER AWAY FROM BUILDINGS. PLANS SHALL BE PROVIDED AND APPROVED BY THE CITY ENGINEER THAT SHOW SITE GRADING AND PROVIDE FOR STORM WATER RETENTION AND DRAINAGE DURING CONSTRUCTION. BMP'S THAT ARE CURRENTLY ENFORCED BY THE CITY ENGINEER MUST BE IMPLEMENTED PRIOR TO INITIAL INSPECTION BY THE BUILDING DEPT.
- 65 % OF CONSTRUCTION WASTE IS TO BE RECYCLED AND 100% OF INERT MATERIALS ARE RECYCLED SALVAGED, COMPOSTED .

## FLOOR PLAN NOTES (CONT'D)

- VOC'S MUST COMPLY WITH THE LIMITATION LISTED IN SECTION 4.504.3 AND TABLES 4.504.1, 4.504.2, 4.504.3, AND 4.504.4 FOR: ADHESIVES, PAINTS, STAINS, CAULKS AND COATINGS, CARPET AND COMPOSITION WOOD PRODUCTS.DOCUMENTATION SHALL BE PROVIDED TO VERIFY THAT COMPLIANT VOC LIMIT FINISHED MATERIALS HAVE BEEN USED.
- 20. INTERIOR MOISTURE CONTROL AT SLAB ON GRADE FLOORS SHALL BE PROVIDED BY THE SOIL ENGINEER. IF A SOIL ENGINEER HAS NOT PREPARED A SOIL REPORT FOR THIS PROJECT, THE FOLLOWING IS REQUIRED: A 4" THICK BASE OF 1/2" OR LARGER CLEAN AGGREGATE SHALL BE PROVIDED WITH A VAPOR BARRIER IN DIRECT CONTACT WITH CONCRETE, WITH A CONCRETE MIX DESIGN WHICH WILL ADDRESS BLEEDING, SHRINKAGE AND CURLING SHALL BE USED.
- 1. MOISTURE CONTENT OF WOOD SHALL NOT EXCEED 19% BEFORE IT IS ENCLOSED IN CONSTRUCTION. THE MOISTURE CONTENT NEEDS TO BE CERTIFIED BY ONE OF 3 METHODS SPECIFIED. BUILDING MATERIAL WITH VISIBLE SIGNS OF WATER DAMAGE SHOULD NOT BE USED IN CONSTRUCTION. THE MOISTURE CONTENT MUST BE DETERMINED BY THE CONTRACTOR BY ONE OF THE LISTED METHODS LISTED IN CGC SECTION 4.503.3

  2. PRIOR TO FINAL APPROVAL OF THE BUILDING THE LICENSED CONTRACTOR, ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE OF THE OVERALL CONSTRUCTION MUST COMPLETE AND SIGN THE GREEN BUILDING STANDARDS CERTIFICATION FORM AND GIVEN TO THE BUILDING DEPT OFFICIAL TO BE FILED WITH THE APPROVED PLANS
- 23. LANDSCAPE IRRIGATION WATER USE SHALL HAVE WEATHER BASED CONTROLLERS.
- PROJECTS WHICH DISTURB LESS THAN ONE ACRE OF SOIL SHALL MANAGE STORM WATER DRAINAGE DURING CONSTRUCTION BY ONE OF THE FOLLOWING: A. RETENTION BASIN. B. WHERE STORM WATER IS CONVEYED TO A PUBLIC DRAINAGE SYSTEM, WATER SHALL BE FILTERED BY USE OF A BARRIER SYSTEM, WATTLE OR OTHER APPROVED METHOD. CGC 4.106.2.
- THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION WASTE MANAGEMENT PLAN TO THE JURISDICTION AGENCY THAT REGULATES WASTE MANAGEMENT, PER CGC 4.408.2.
- THE BUILDER IS TO PROVIDE AN OPERATION MANUAL (CONTAINING INFORMATION FORM MAINTAINING APPLIANCES, ETC.) FOR THE OWNER AT THE TIME OF FINAL INSPECTION. CGC 4.410.0
- 7. DURING CONSTRUCTION, ENDS OF DUCT OPENINGS ARE TO BE SEALED, AND MECHANICAL EQUIPMENT IS TO BE COVERED. CGC 4.504.1
- BATHROOM FANS SHALL BE ENERGY STAR RATED, VENTED DIRECTLY TO THE OUTSIDE AND CONTROLLED BY A HUMIDISTAT.
- SPECIAL INSPECTORS EMPLOYED BY THE ENFORCING AGENCY MUST BE QUALIFIED AND ABEL TO DEMONSTRATE COMPETENCE IN THE DISCIPLINE THEY ARE INSPECTING.
- VERIFICATION OF COMPLIANCE WITH THIS CODE MAY INCLUDE CONSTRUCTION DOC. PLANS, SPECIFICATION BUILDER OR INSTALLER CERTIFICATIONS, INSPECTIONS REPORTS, OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY WHICH TO SHOW SUBSTANTIAL CONFORMATION.
- 31. NEW SINGLE FAMILY RESIDENTIAL CONSTRUCTION SHALL BE DESIGNED FOR AGING-IN-PLACE DESIGN AND FALL PREVENTION PER R327
  - A) AT LEAST ONE BATHROOM ON THE ENTRY LEVEL SHALL BE PROVIDED WITH REINFORCEMENT INSTALLED. WHERE THERE IS NO BATHROOM ON THE ENTRY LEVEL, AT LEAST ONE BATHROOM ON THE SECOND OR THIRD FLOOR OF THE DWELLING SHALL COMPLY WITH THIS SECTION.

    B) PEINEOPCEMENT SHALL BE SOUR LUMBER OR OTHER

B) REINFORCEMENT SHALL BE SOLID LUMBER OR OTHER CONSTRUCTION MATERIALS APPROVED BY THE ENFORCING AGENCY.

C) REINFORCEMENT SHALL NOT BE LESS THAN 2 BY 8 INCH NOMINAL LUMBER. REINFORCEMENT SHALL BE LOCATED BETWEEN 32 INCHES AND 39-1/4 INCHES ABOVE THE FINISHED FLOOR FLUSH WITH THE WALL FRAMING.
D) WATER CLOSET REINFORCEMENT SHALL BE INSTALLED ON BOTH SIDE WALLS OF THE FIXTURE, OR ONE SIDE WALL AND THE

BACK WALL.

E) SHOWER REINFORCEMENT SHALL BE CONTINUOUS WHERE WALL FRAMING IS PROVIDED.

F) BATHTUB AND COMBINATION BATHTUB/SHOWER REINFORCEMENT SHALL BE CONTINUOUS ON EACH END OF THE BATHTUB AND THE BACK WALL. ADDITIONALLY, BACK WALL REINFORCEMENT FOR A LOWER GRAB BAR SHALL BE PROVIDED WITH THE BOTTOM EDGE LOCATED NO MORE THAN 6 INCHES ABOVE THE BATHTUB RIM.

### **MECHANICAL NOTES**

- SMOKE DETECTORS MUST BE PERMANENTLY WIRED. IN NEW CONSTRUCTION, REQUIRED SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACK-UP. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVER CURRENT PROTECTION.
- WHERE WATER CLOSET COMPARTMENT IS INDEPENDENT OF THE BATHROOM OR SHOWER AREA, A FAN WILL BE REQ. IN EACH AREA. BATHROOMS SHALL HAVE AN EXHAUST FAN WITH HUMIDITY CONTROL SENSOR, MIN. 50 CFM CAPACITY. (CRC R303.3.)
- ROOMS CONTAINING BATHTUBS, SHOWERS, SPAS AND SIMILAR FIXTURES SHALL BE PROVIDED WITH AN EXHAUST FAN WITH HUMIDITY CONTROL SENSOR HAVING A MIN. CAPACITY OF 50 CFM DUCTED TO TERMINATE OUTSIDE THE BLDG. ( CRC R303.3, CAL GREEN 4.505.1, CBC 1203 .5.2.1, CMC 402.5
- SUPPLY AND RETURN AIR DUCTS TO BE INSULATED AT A MIN. OF R-6. (CAL ENERGY CODE TABLE 150.1-A)

## MECHANICAL NOTES (CONT'D)

- WHERE WHOLE HOUSE FANS ARE USED IN BATHROOM AREAS, THE FAN MUST RUN CONTINUOUSLY AND SHALL NOT BE TIED TO HUMIDITY CONTROL SENSOR. (CAL GREEN 4.506.1)
- ENVIRONMENTAL AIR DUCTS SHALL TERMINATE MIN. 3 FEET FROM PROPERTY LINE OR OPENINGS INTO BLDG., AND 10' FROM A FORCED AIR INLET. (CMC 502.2.1)
- ALL HOSE BIBS ARE TO HAVE VACUUM BREAKERS. (CPC603.5.7)
- THE MAX. AMOUNT OF WATER CLOSETS ON A 3"
  HORIZONTAL DRAINAGE SYSTEM LINE IS 3 (CPC TABLE 703.2)
  THE MAX. AMOUNT OF WATER CLOSETS ON A 3" VERTICAL
- DRAINAGE LINE IS 4. (CPC TABLE 703.2)

  PROVIDE GAS LINES WITH A MN. CAPACITY OF 200,000BTU FOR WATER HEATER. (CAL ENERGY CODE 150.0(N)).
- PROVIDE A CONDENSATE DRAIN NO MORE THAN 2" ABOVE THE BASE OF THE WATER HEATER SPACE. (CAL ENERGY CODE 150.0
- INSULATE ALL HOT WATER PIPES. CAL ENERGY CODE 150.0(j) (2), and CPC 609.11)
- ISOLATION VALVES ARE REQ. FOR TANKLESS WATER HEATERS
  ON THE HOT AND COLD SUPPLY LINES WITH HOSE BIBS ON
  EACH VALVE, TO FLUSH THE HEAT EXCHANGER. (CAL ENERGY
  CODE 110.3(7).
- EXHAUST DUCTS AND DRYER VENTS SHALL BE EQUIPPED WITH BACK DRAFT DAMPERS
- 5. ALL EXHAUST FANS SHALL BE SWITCHED SEPARATELY FROM LIGHTING SYSTEMS. (CENC 150(K) 2B)
- PLUMBING FIXTURES AND FITTINGS INSTALLED IN RESIDENTIAL BUILDINGS SHALL COMPLY WITH THE PRESCRIPTIVE REQ. OF SECTIONS 4.303.1.1 THROUGH 4.303.1.4.4.
- PLUMBING FIXTURES AND FITTINGS REQ. IN SECTION 4.303.1 SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE AND SHALL MEET THE THE APPLICABLE REFERENCE STANDARDS.

## **ELECTRICAL NOTES**

- RECEPTACLE OUTLET LOCATIONS WILL COMPLY WITH CEC ARTICLE 210.52. & CRC SECTION R327.1.2. TAMPER RESISTANT RECEPTACLE OUTLET LOCATIONS SHALL COMPLY W/ NEC ART. 210-52 AND 550.13 (I.E. ALL RECEPTACLES IN A DWELLING).
- ARC-FAULT PROTECTION FOR ALL OUTLETS (NOT JUST RECEPTACLES) LOCATED IN ROOMS DESCRIBED IN NEC 210.12(A): KITCHENS, LAUNDRY AREAS, FAMILY, LIVING, BEDROOMS, DINING, HALLS, ETC. ALL BRANCH CIRCUITS WILL BE ARC FAULT CIRCUIT PROTECTED PER NEC ART. 210-12(B). THERE ARE TO BE A MINIMUM OF 2 SMALL APPLIANCE BRANCH CIRCUITS WITHIN THESE AREAS CEC 210.11(C)1
- CIRCUITS WITHIN THESE AREAS CEC 210.11(C)1

  BATHROOM CIRCUITING SHALL BE EITHER: a) A 20 AMPERE
  CIRCUIT DEDICATED TO EACH BATHROOM.
  b) AT LEAST ONE 20 AMPERE CIRCUIT SUPPLYING ONLY
- BATHROOM RECEPTACLE OUTLETS PER NEC ART. 210-11(c)3.

  ALL 125-VOLT, SINGLE-PHASE, 15- AND 20- AMPERE
  RECEPTACLES INSTALLED IN BATHROOMS, GARAGES,
  BASEMENTS, OUTDOORS, LAUNDRY AREA, KITCHEN
  DISHWASHERS, KITCHEN COUNTERS AND AT WET BAR SINKS,
  WITHIN 6' OF A SINK, SHALL BE GFCI PROTECTED PER NEC ART.
- WEATHER RESISTANT TYPE FOR RECEPTACLES INSTALLED IN DAMP OR WET LOCATIONS (OUTSIDE) NEC 406.4(D)(6)

  PER LIGHTING MEASURES 150(K)4 N T-24, THE BEDROOMS, HALLWAY, LIVING ROOM AND OFFICE ARE REQUIRED TO HAVE ANY INSTALLED FIXTURE TO

210-8(A).

BE HIGH EFFICACY.

OUTDOOR LIGHTING FIXTURES ARE REQUIRED TO BE HIGH EFFICACY OR CONTROLLED BY A COMBINATION PHOTOCONTROL / MOTION SENSOR.

BE ON A DIMMER SWITCH OR THE FIXTURE NEEDS TO

- A RECEPTACLE OUTLET MUST BE INSTALLED IN EVERY ROOM SO THAT NO POINT ALONG THE WALL SPACE IS MORE THAN 6 FEET, MEASURED HORIZONTALLY ALONG THE FLOOR LINE FROM A RECEPTACLE OUTLET CEC 210.52(A)
- SMOKE DETECTORS MUST BE PERMANENTLY WIRED. IN NEW CONSTRUCTION, REQUIRED SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACK-UP. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION.
- WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED, THE SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL THE ALARMS IN THE INDIVIDUAL DWELLING UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.
- ALL EXHAUST FANS SHALL BE SWITCHED SEPARATELY FROM LIGHTING SYSTEMS. (CENC 150(K) 2B)
- A MINIMUM OF ONE LUMINAIRE SHALL BE INSTALLED IN BATHROOM CONTROLLED BY AN OCCUPANT OR VACANCY SENSOR PROVIDING AUTOMATIC -OFF FUNCTIONALLY (CENC 150 .0(K)21)
- LAUNDRY AREA SHALL AT LEAST 1-20 AMP DEDICATED BRANCH CIRCUIT (CEC 210 .11 (C)(2)
- PROVIDE A DEDICATED CIRCUIT FOR THE A.C./FAU (CEC 422.12)

  A DEDICATED 125V, 20AMP ELECTRICAL RECEPTACLE THAT IS

  CONNECTED TO THE ELECTRICAL PANEL WITH A 120/240 -VOLT 3

  CONDUCTOR, 10 AWG COPPER BRANCH CIRCUIT, WITHIN 3 FEET

  FROM THE WATER HEATER AND ACCESSIBLE TO THE WATER

  HEATER WITH NO OBSTRUCTIONS (CENC 150.0(N)1A)

## ELECTRICAL NOTES (CONT'D)

- PER CEC 2022 150.0(N).1.A.:

  IF THE DESIGNATED SPACE IS WITHIN 3 FEET FROM THE WATER HEATER, THEN THIS SPACE SHALL INCLUDE THE FOLLOWING:A DEDICATED 125 VOLT, 20 AMP ELECTRICAL RECEPTACLE THAT IS CONNECTED TO THE ELECTRIC PANEL WITH A 120/240 VOLT 3 CONDUCTOR, 10 AWG COPPER BRANCH CIRCUIT, WITHIN 3 FEET FROM THE WATER HEATER AND ACCESSIBLE TO THE WATER HEATER WITH NO OBSTRUCTIONS; AND
- BOTH ENDS OF THE UNUSED CONDUCTOR SHALL BE LABELED WITH THE WORD "SPARE" AND BE ELECTRICALLY ISOLATED; AND
- A RESERVED SINGLE POLE CIRCUIT BREAKER SPACE IN THE ELECTRICAL PANEL ADJACENT TO THE CIRCUIT BREAKER FOR THE BRANCH CIRCUIT IN A ABOVE AND LABELED WITH THE WORDS "FUTURE 240V USE"; AND
- A CONDENSATE DRAIN THAT IS NO MORE THAN 2 INCHES HIGHER THAN THE BASE OF THE INSTALLED WATER HEATER, AND ALLOWS NATURAL DRAINING WITHOUT PUMP ASSISTANCE.
- ELECTRICAL RECEPTACLE OUTLETS IN BATHROOM MUST BE NO MORE THAN 48 INCHES OR LESS THAN 15-INCHES MEASURE FROM THE FINISHED FLOOR.
- DOORBELL BUTTON MUST BE INSTALLED NO MORE THAN 48 INCHES FROM EXTERIOR FLOOR.
- 2). LUMINAIRE EFFICACY ALL INSTALLED LUMINAIRES SHALL MEET THE REQUIREMENTS OF 2022 BUILDING ENERGY EFFICIENCY STANDARDS TABLE 150.0-A PER SECTION 150.0(K).

# ELECTRIC READY NOTES: 2022 ENERGY EFFICIENCY STANDARDS 150.0

(S) ENERGY STORAGE SYSTEMS (ESS) READY. ALL SINGLE-FAMILY RESIDENCES THAT INCLUDE ONE OR TWO DWELLING UNITS SHALL MEET THE FOLLOWING. ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE:

- 1. AT LEAST ONE OF THE FOLLOWING SHALL BE PROVIDED:
  A. ESS READY INTERCONNECTION EQUIPMENT WITH A
  MINIMUM BACKED-UP CAPACITY OF 60 AMPS AND A
  MINIMUM OF FOUR ESS-SUPPLIED BRANCH CIRCUITS, OR
  B. A DEDICATED RACEWAY FROM THE MAIN SERVICE TO A
  PANELBOARD (SUBPANEL) THAT SUPPLIES THE BRANCH
  CIRCUITS IN SECTION 150.0(S)(2). ALL BRANCH CIRCUITS
  ARE PERMITTED TO BE SUPPLIED BY THE MAIN SERVICE
  PANEL PRIOR TO THE INSTALLATION OF AN ESS. THE
  TRADE SIZE OF THE RACEWAY SHALL BE NOT LESS THAN ONE
  INCH. THE PANELBOARD THAT SUPPLIES THE BRANCH CIRCUITS
  (SUBPANEL) MUST BE LABELED "SUBPANEL SHALL INCLUDE ALL
  BACKED-UP LOAD CIRCUITS."
- 2. A MINIMUM OF FOUR BRANCH CIRCUITS SHALL BE
  IDENTIFIED AND HAVE THEIR SOURCE OF SUPPLY
  COLLOCATED AT A SINGLE PANELBOARD SUITABLE TO BE
  SUPPLIED BY THE ESS. AT LEAST ONE CIRCUIT SHALL SUPPLY
  THE REFRIGERATOR, ONE LIGHTING CIRCUIT SHALL BE LOCATED
  NEAR THE PRIMARY EGRESS, AND AT LEAST ONE CIRCUIT SHALL
  SUPPLY A SLEEPING ROOM RECEPTACLE OUTLET.
- 3. THE MAIN PANELBOARD SHALL HAVE A MINIMUM BUSBAR RATING OF 225 AMPS.

  4. SUFFICIENT SPACE SHALL BE RESERVED TO ALLOW
- FUTURE INSTALLATION OF A SYSTEM ISOLATION
  EQUIPMENT/TRANSFER SWITCH WITHIN 3 FEET OF THE
  MAIN PANELBOARD. RACEWAYS SHALL BE INSTALLED
  BETWEEN THE PANELBOARD AND THE SYSTEM ISOLATION
  EQUIPMENT/TRANSFER SWITCH LOCATION TO ALLOW THE
  CONNECTION OF BACKUP POWER SOURCE.

(T) HEAT PUMP SPACE HEATER READY. SYSTEMS USING GAS OR PROPANE FURNACE TO SERVE INDIVIDUAL DWELLING UNITS SHALL INCLUDE THE FOLLOWING:

- 1. A DEDICATED 240 VOLT BRANCH CIRCUIT WIRING SHALL BE INSTALLED WITHIN 3 FEET FROM THE FURNACE AND ACCESSIBLE TO THE FURNACE WITH NO OBSTRUCTIONS. THE BRANCH CIRCUIT CONDUCTORS SHALL BE RATED AT 30 AMPS MINIMUM. THE BLANK COVER SHALL BE IDENTIFIED AS "240V READY." ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN
- ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

  2. THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR A FUTURE HEAT PUMP SPACE HEATER INSTALLATION. THE RESERVED SPACE SHALL BE PERMANENTLY MARKED AS "FOR FUTURE 240V USE."

(U) ELECTRIC COOKTOP READY. SYSTEMS USING GAS OR PROPANE COOKTOP TO SERVE INDIVIDUAL DWELLING UNITS SHALL INCLUDE THE FOLLOWING:

- 1. A DEDICATED 240 VOLT BRANCH CIRCUIT WIRING SHALL BE INSTALLED WITHIN 3 FEET FROM THE COOKTOP AND ACCESSIBLE TO THE COOKTOP WITH NO OBSTRUCTIONS. THE BRANCH CIRCUIT CONDUCTORS SHALL BE RATED AT 50 AMPS MINIMUM. THE BLANK COVER SHALL BE IDENTIFIED AS "240V READY." ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALLEDRING ELECTRICAL CODE.
- IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

  2. THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A
  RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A
  DOUBLE POLE CIRCUIT BREAKER FOR A FUTURE ELECTRIC
  COOKTOP INSTALLATION. THE RESERVED SPACE SHALL BE
  PERMANENTLY MARKED AS "FOR FUTURE 240V USE."

(V) ELECTRIC CLOTHES DRYER READY. CLOTHES DRYER LOCATIONS WITH GAS OR PROPANE PLUMBING TO SERVE INDIVIDUAL DWELLING UNITS SHALL INCLUDE THE FOLLOWING:

- 1. A DEDICATED 240 VOLT BRANCH CIRCUIT WIRING SHALL BE INSTALLED WITHIN 3 FEET FROM THE CLOTHES DRYER LOCATION AND ACCESSIBLE TO THE CLOTHES DRYER LOCATION WITH NO OBSTRUCTIONS. THE BRANCH CIRCUIT CONDUCTORS SHALL BE RATED AT 30 AMPS MINIMUM. THE BLANK COVER SHALL BE IDENTIFIED AS "240V READY." ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.
- 2. THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR A FUTURE ELECTRIC CLOTHES DRYER INSTALLATION. THE RESERVED SPACE SHALL BE PERMANENTLY MARKED AS "FOR FUTURE 240V USE."

architecture + planning

BY USING THESE PERMIT READY CONSTRUCTION

OCUMENTS, THE RECIPIENT ACKNOWLEDGES,

ACCEPTS AND VOLUNTARILY AFFIRMS THE

. THE USE OF THIS INFORMATION IS

 $\triangleleft$ 

Z

(1)

FOLLOWING CONDITIONS:

RESTRICTED TO THE ORIGINAL PROJECT FOR WHICH IT WAS PREPARED FOR THE PERMIT READY ACCESSORY DWELLING UNIT (ADU) PROGRAM FOR HE CITY OF **SANTA ANA** ONLY. THIS IS A LIMITED SET OF STANDARDIZED ADU PLANS AND SPECIFICATIONS APPROVED BY THE CITY OF SAN1 ANA BUILDING DEPARTMENT. BUILDING CODES DO CHANGE OVER TIME AND RECIPIENT SHALL ENSUR FULL COMPLIANCE UNDER ALL CODES THEN IN THIS DOES NOT ELIMINATE OR REDUCE THE RECIPIENT'S RESPONSIBILITY TO VERIFY ANY AND ALL INFORMATION RELEVANT TO THE RECIPIENT'S ORK AND RESPONSIBILITY ON THIS PROJECT. DESIGN PATH STUDIO SHALL NOT BE RESPONSIBLE FOR TRANSLATION ERRORS. DO NOT USE THESE CONSTRUCTION DOCUMENTS IF THE PERMIT HAS EXPIRED OR IS REVOKED AT ALL. . THE RECIPIENT RECOGNIZES AND ACKNOWLEDGES HAT THE USE OF THIS INFORMATION WILL BE AT THEIR SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL EXPOSURE TO DESIGN PATH STUDIO. NO WARRANTIES OF ANY NATURE, WHETHER EXPRESS OR IMPLIED. SHALL ATTACH TO THESE DOCUMENT AND THE INFORMATION CONTAINED THEREON. AN' USE, REUSE, OR ALTERATION OF THESE OCUMENTS BY THE RECIPIENT OR BY OTHERS WILL BE AT THE RECIPIENT'S RISK AND FULL EGAL RESPONSIBILITY. FURTHERMORE, THE RECIPIENT WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, DEFEND, INDEMNIFY AND HOL DESIGN PATH STUDIO AND ITS ARCHITECTS HARMLESS FROM ANY AND ALL CLAIMS, SUITS LIABILITY, DEMANDS, JUDGMENTS, OR COSTS ARISING OUT OF OR RESULTING THERE FROM ANY USE OF THESE CONSTRUCTION DOCUMENTS FOR OR ON ACCOUNT OF ANY INJURY, DEATH, DAMAG OR LOSS TO PERSONS OR PROPERTY, DIRECT OR CONSEQUENTIAL DAMAGES IN ANY AMOUNT. THIS NDEMNITY DOES NOT APPLY TO THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF DESIGN PATH STUDIO OR ITS ARCHITECTS. 3. THE DESIGNS REPRESENTED BY THESE PLANS ARE COPYRIGHTED AND ARE SUBJECT TO COPYRIGHT PROTECTION. 4. IF THE RECIPIENT DOES NOT AGREE WITH THE ABOVE CONDITIONS, DO NOT PROCEED WITH

CONSTRUCTION OF AN ADU OR OTHER

IMPROVEMENT UNDER THESE PLANS AT ALL.

project Santa Ana

address

ADU

revisions

description

## General Notes

late MAY 2023

drawn by

project no. 2022\_SANTA\_ANA\_ADU

ino 🔵

DESIGN PATH STUDIO

sheet no. G0.2