

# BATH & KITCHEN REMODEL EXAMPLE



City of  
**SAN PABLO**  
Building Services

LAST UPDATED: 07 JULY 2023

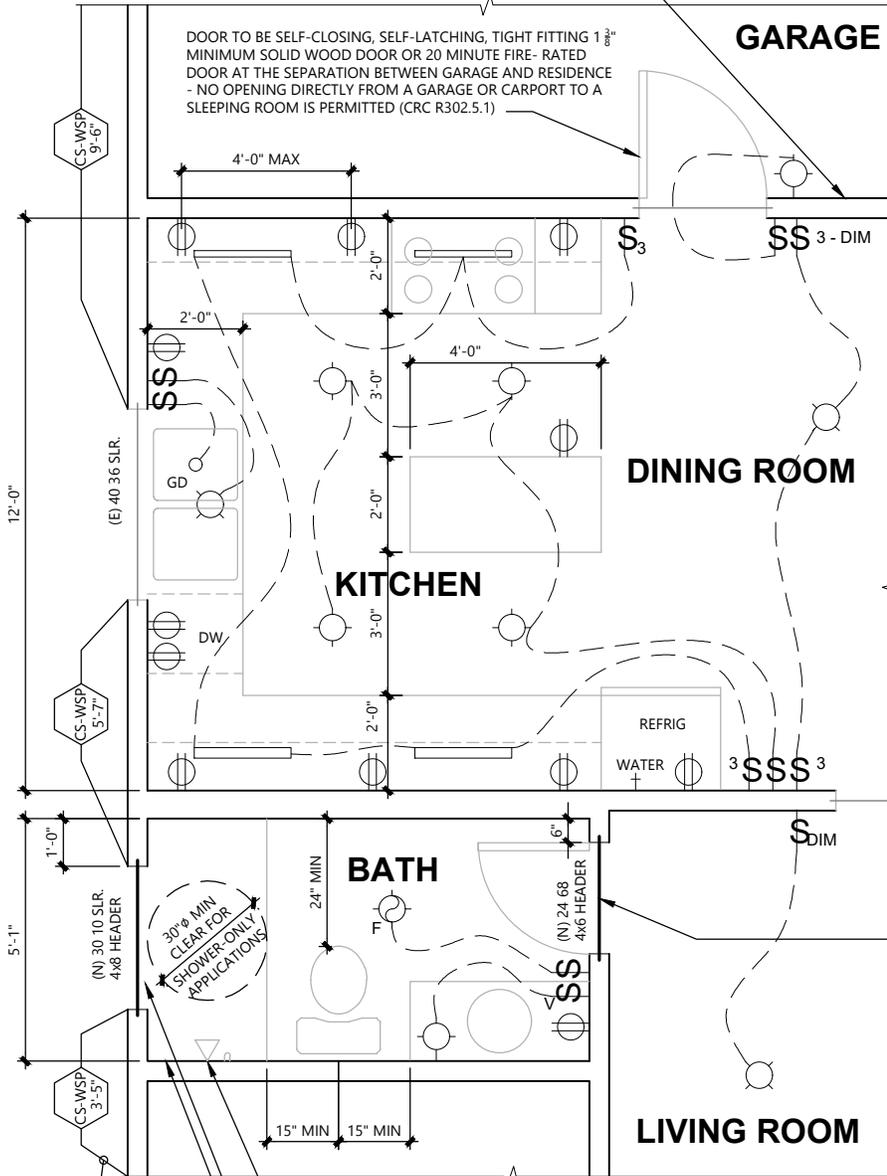
THIS DRAWING DEPICTS MINIMUM CODE REQUIREMENTS PER THE 2022 CALIFORNIA CODE CYCLE - INFORMATION IS FOR REFERENCE ONLY AND IS NOT A SUBSTITUTE FOR ACCURATE DRAWINGS PREPARED FOR EACH PROPOSED CONSTRUCTION PROJECT

**YOUR ADDRESS , SAN PABLO, CA 94806**

OCCUPANCY CLASS: R3 (SINGLE FAMILY RESIDENTIAL)  
CONSTRUCTION TYPE: VB (CONSTRUCTION OF ANY MATERIAL)  
FIRE SPRINKLERED: YES OR NO  
PLANS BY: DESIGNER'S NAME

THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ATTIC BY NOT LESS THAN ½" GYPSUM BOARD OR EQUIVALENT APPLIED TO THE GARAGE SIDE - ½" TYPE "X" GYPSUM BOARD IS REQUIRED AT THE CEILING OF GARAGES WITH HABITABLE ROOMS ABOVE THE GARAGE.

DOOR TO BE SELF-CLOSING, SELF-LATCHING, TIGHT FITTING 1 3/8" MINIMUM SOLID WOOD DOOR OR 20 MINUTE FIRE- RATED DOOR AT THE SEPARATION BETWEEN GARAGE AND RESIDENCE - NO OPENING DIRECTLY FROM A GARAGE OR CARPORT TO A SLEEPING ROOM IS PERMITTED (CRC R302.5.1)



## FLOOR PLAN

LEGEND: FOR LARGER PROJECTS, PROVIDE A COMPLETE LEGEND FOR ALL SYMBOLS.

SHOWER CONTROL VALVES AND SHOWER HEADS MUST BE ARRANGED SO THAT THE SHOWER HEAD DOES NOT DISCHARGE DIRECTLY AT THE ENTRANCE TO THE COMPARTMENT AND THE BATHER CAN ADJUST THE VALVES PRIOR TO STEPPING INTO THE SHOWER SPRAY (CPC 408.9) - ALSO SPECIFY ENCLOSURE TYPE (CURTAIN, TEMPERED SLIDER DOOR, ETC.)

GLASS TO BE TEMPERED IF WITHIN 60" OF DRAIN LEVEL (CRC R308.4.5)

PROVIDE WATER RESISTANT BACKER BOARD AND NON-ABSORBENT SURFACES AT THE TUB/SHOWER ENCLOSURES TO A HEIGHT OF 6' MINIMUM ABOVE FINISHED FLOOR (CRC R307.2)

\*\*\* IF ADDING OR EXPANDING OPENINGS IN BRACED WALL LINES, SPECIFY SUFFICIENT INFORMATION TO SHOW THE REMAINING LATERAL RESISTING SYSTEM IS SUFFICIENT PER THE CONVENTIONAL FRAMING SPECIFICATIONS OF CRC R602.10 (EXAMPLES: BRACED WALL TYPE AND MINIMUM LENGTH), AND/OR HIRE A CALIFORNIA LICENSED ENGINEER OR ARCHITECT TO PROVIDE CALCULATIONS & SPECIFICATIONS (CRC R301.1, R301.1.3)

### PLUMBING FIXTURE EFFICIENCY NOTES:

- MAXIMUM FLOW RATES FOR NEW FIXTURES:  
WATER CLOSETS (TOILETS) < 1.28 GALLONS PER FLUSH  
SHOWERHEADS < 1.8 GALLONS PER MINUTE  
KITCHEN FAUCETS < 1.8 GALLONS PER MINUTE  
LAVATORY FAUCETS < 1.2 GALLONS PER MINUTE
- WHEN THE ADDITION/ALTERATION INCREASES THE BUILDING'S CONDITIONED AREA, VOLUME, OR SIZE: REPLACE ALL NON-COMPLIANT PLUMBING FIXTURES IN THE RESIDENCE PER CALGREEN SECTION 301.1.1. NON-COMPLIANT FIXTURES:  
WATER CLOSETS (TOILETS) > 1.6 GALLONS PER FLUSH  
SHOWERHEADS > 2.5 GALLONS PER MINUTE  
INTERIOR FAUCETS > 2.2 GALLONS PER MINUTE  
URINALS > 1 GALLONS PER FLUSH

REFERENCES: (CPC 401.3, CALGREEN 301.1.1, CIVIL CODE 1101.1, CPC 411.2, CPC 408.2, CPC 420.2.2, CPC 407.2.2)

### ELECTRICAL NOTES:

- GROUND FAULT CIRCUIT INTERRUPTER PROTECTION SHALL BE PROVIDED AT ELECTRICAL OUTLETS IN BATHROOMS, GARAGES, OUTDOORS, CRAWL SPACES, UNFINISHED AREAS, KITCHENS, LAUNDRY ROOMS, AND WITHIN 6'-0" OF BATHTUBS, SHOWER STALLS, OR SINKS (CEC 210.8(A))
- ARC FAULT CIRCUIT INTERRUPTER PROTECTION SHALL BE PROVIDED IN A READILY ACCESSIBLE LOCATION AT ELECTRICAL OUTLETS IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, AND SIMILAR ROOMS/AREAS (CEC 210.12 (A))
- AT LEAST ONE ELECTRICAL RECEPTACLE SHALL BE PROVIDED FOR THE FIRST 9 ft<sup>2</sup> OF EACH ISLAND OR PENINSULAR COUNTERTOP SPACE, AND FOR EVERY ADDITIONAL 18ft<sup>2</sup>, OR FRACTION THEREOF, OF THE PENINSULA/ISLAND COUNTERTOP BEYOND. AT LEAST ONE ELECTRICAL RECEPTACLE SHALL BE LOCATED WITHIN 2 ft OF THE OUTER END OF A PENINSULAR COUNTERTOP OR WORK SURFACE. (CEC 210.52(C)(2))
- ELECTRICAL OUTLETS SERVING KITCHEN COUNTERTOPS SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 2'-0" FROM AN OUTLET (CEC 210.52(C)(1))
- PROVIDE A MINIMUM OF (1) SEPARATE 20A CIRCUIT TO SUPPLY LAUNDRY RECEPTACLE OUTLET(S) (CEC 210.11(C)(2))
- PROVIDE A MINIMUM OF (1) SEPARATE 120V, 20A CIRCUIT TO SUPPLY BATHROOM RECEPTACLE OUTLETS (CEC 210.11(C)(3))
- PROVIDE A MINIMUM OF (1) SEPARATE 120V, 20A CIRCUIT TO SUPPLY GARAGE RECEPTACLE OUTLETS (CEC 210.11(C)(4))
- PROVIDE A MINIMUM OF (2) 20A CIRCUITS FOR OUTLET RECEPTACLES NOT LISTED IN ITEMS 5-7 (CEC 210.11(C)(1))
- EACH BATHROOM (WITH A SHOWER AND/OR BATH) SHALL BE MECHANICALLY VENTILATED - BATHROOM FANS MUST HAVE A CAPACITY OF 50CFM MINIMUM IF CONTROLLED, & 25CFM IF CONTINUOUS, BE ENERGY STAR COMPLIANT, & HAVE HUMIDITY CONTROL (HUMIDITY CONTROL NOT REQUIRED IF FAN IS CONTINUOUS) (CALGreen 4.506, ANSI/ASHRAE TABLES 5-1 & 5-2, CMC TABLE 403.7, CEnC 150.0(o)(1)(G))
- A LOCAL MECHANICAL EXHAUST SYSTEM SHALL BE INSTALLED IN EACH KITCHEN. SYSTEMS SHALL BE RATED FOR AIRFLOW IN ACCORDANCE WITH ASHRAE 62.2 SECTION 7.1 AND HAVE MINIMUM FLOW RATES OR CAPTURE EFFICIENCIES AS SPECIFIED IN CEnC TABLES 150.0-E & 150.0-G (CEnC 150.0(o)(1)(G))

IF ALTERING WALLS - PROVIDE INFORMATION ON HEADER SIZES, WALL FRAMING SIZES AND SPACING, CONNECTION AT TOP AND BOTTOM OF WALL, & TYPICAL FASTENERS/CONNECTIONS\*\* - IF INTERIOR WALLS SUPPORT LOAD FROM ABOVE OR ARE PART OF A BRACED WALL LINE, PROVIDE INFORMATION FOR THE FRAMING SUPPORTED (ABOVE), THE FRAMING/FOUNDATION SUPPORTING (BELOW), & INFORMATION PER \*\*\*

\*\* PROVIDING A TYPICAL FASTENER LIST OR TABLE SIMILAR TO CRC TABLE R602.3(1) IS A GOOD WAY TO REPRESENT MUCH OF THE NECESSARY INFORMATION

### LIGHTING NOTES:

- ALL LIGHTING MUST BE HIGH EFFICACY\* (CEnC 150.0(k)(1))
- EXHAUST FANS SHALL BE CONTROLLED SEPARATELY FROM LIGHTING SYSTEMS (CEnC 150.0(k) (2)(G))
- LIGHTING SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED CONTROLS THAT ALLOW THE LIGHTING TO BE MANUALLY TURNED ON AND OFF (CEnC 150.0(k)(2)(A))
- UNDER-CABINET, UNDER-SHELF, AND INTERIOR LIGHTING OF DISPLAY CABINETS, AS WELL AS SWITCHED OUTLETS SHALL BE CONTROLLED SEPARATELY FROM CEILING-INSTALLED LIGHTING (CEnC 150.0(k)(2)(G))
- IN BATHROOMS, GARAGES, LAUNDRY ROOMS, UTILITY ROOMS, AND WALK-IN CLOSETS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES SHALL BE CONTROLLED BY AN OCCUPANT OR VACANCY SENSOR PROVIDING AUTOMATIC-OFF FUNCTIONALITY (CEnC 150.0(k)(2)(E))

\* HIGH EFFICACY REFERS TO LUMINAIRES THAT COMPLY WITH CEnC TABLE 150.0-A

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## NOTE: MINIMUM UNCALCULATED KITCHEN EXHAUST IS 100 CFM

### CEnC TABLE 150.0-E DEMAND-CONTROLLED LOCAL VENTILATION EXHAUST AIRFLOW RATES AND CAPTURE EFFICIENCY

APPLICATION	COMPLIANCE CRITERIA
ENCLOSED KITCHEN OR NON-ENCLOSED KITCHEN	VENTED RANGE HOOD, INCLUDING APPLIANCE-RANGE HOOD COMBINATIONS, SHALL MEET EITHER THE CAPTURE EFFICIENCY (CE) OR THE AIRFLOW RATE SPECIFIED IN TABLE 150.0G
ENCLOSED KITCHEN	OTHER KITCHEN EXHAUST FANS, INCLUDING DOWNDRAFT: 300 CFM* OR A CAPACITY OF 5 ACH* (BASED ON KITCHEN VOLUME)
NON-ENCLOSED KITCHEN	OTHER KITCHEN EXHAUST FANS, INCLUDING DOWNDRAFT: 300 CFM
BATHROOM	50 CFM

\* CFM = CUBIC FEET PER MINUTE, ACH = AIR CHANGES PER HOUR:  
ACH = (CFM OF FAN \* 60minutes/hr) / (VOLUME OF SPACE TO BE VENTED {IN CUBIC FEET})

### CEnC TABLE 150.0-F CONTINUOUS LOCAL VENTILATION EXHAUST AIRFLOW RATES

APPLICATION	COMPLIANCE CRITERIA
ENCLOSED KITCHEN	5 ACH, BASED ON KITCHEN VOLUME
NON-ENCLOSED KITCHEN	OTHER KITCHEN EXHAUST FANS, INCLUDING DOWNDRAFT: 300 CFM
BATHROOM	25 CFM <sup>1</sup>

<sup>1</sup> CMC TABLE 403.7 IS MORE RESTRICTIVE THAN THE TYPICAL TABLE FOR THIS VALUE, SO THE 20 CFM IN CEnC TABLE 150.0-F HAS BEEN CHANGED TO 25 CFM.

### CEnC TABLE 150.0-G KITCHEN RANGE HOOD AIRFLOW RATES (CFM) AND ASTM E3087 CAPTURE EFFICIENCY (CE) RATINGS ACCORDING TO DWELLING UNIT FLOOR AREA AND KITCHEN RANGE FUEL TYPE

DWELLING UNIT FLOOR AREA (ft <sup>2</sup> )	HOOD OVER ELECTRIC RANGE	HOOD OVER NATURAL GAS RANGE
>1500	50% CE OR 110 CFM	70% CE OR 180 CFM
>1000 to 1500	50% CE OR 110 CFM	80% CE OR 250 CFM
750 to 1000	55% CE OR 130 CFM	85% CE OR 280 CFM
<750	65% CE OR 160 CFM	85% CE OR 280 CFM