B INSPECTION GUIDELINES: RESIDENTIAL BATHROOM REMODEL

CITY OF STOCKTON

COMMUNITY DEVELOPMENT DEPARTMENT – BUILDING & LIFE SAFETY DIVISION
501 W WEBER AV BLDG 2, STOCKTON, CA 95203 • (209) 937-8561 • www.stocktonca.gov/building

INSPECTION CODE: 007, 008, 009, 012, 022

SCOPE: RESIDENTIAL

CODES ENFORCED: CRC, CPC, CFC, CMC, CEC, CEnC, CALGreen, CEBC, CHC, and SMC

The information provided in this document is general and intended as a guide only. Each project is unique and additional requirements may be enforced as deemed appropriate.

☐ Approved plans and inspection card shall be on job site. (CRC 106.3.1)

MECHANICAL

☐ Each bathroom containing a bathtub, shower or tub/shower combination shall be mechanically ventilated for purposes of humidity control. Window operation is not a permissible method of providing bathroom exhaust for humidity control. (CRC R303.3.1)

☐ Environmental duct exhaust shall terminate not less than 3’ from a property line, 10’ from a forced air inlet, and 3’ from openings into the building. Environmental exhaust ducts shall not discharge onto a public walkway. (CMC 502.2.1)

☐ Exhaust fans shall be switched separately from the lighting system (CEnC 150.0(k)2.B)

☐ An exhaust fan shall be installed in each bathroom with the capacity to exhaust 50 cfm for demand-controlled or 20 cfm for continuous ventilation. (ASHRAE 62.2-2013)

ELECTRICAL

☐ Luminaires and exhaust fans provided over a bathtub or in a shower shall be of the enclosed and gasketed type and listed for the type of installation and it shall be ground-fault circuit-interrupted protected. The switch for shower luminaires and exhaust fans, located over a tub or shower, shall be located outside the tub or shower. (CEC 410.11(D)) Nail plates 1/16” thick minimum shall be used for protection of wiring that is less than 1-1/4” from the edge of framing. (CEC 300.4(A)(1))

☐ At least (1) 120-volt, 20-ampere branch circuit shall be provided at a bathroom receptacle. (CEC 210.11(C)(3))

☐ At least (1) receptacle shall be installed in bathrooms within 3’ of the outside edge of each basin. It shall be located on a wall or partition that is adjacent to the basin or basin countertop, located on the countertop, or installed on the side or face of the basin cabinet. (CEC 210.52(D))

☐ Install ground-fault circuit-interrupter (GFCI) protection on all receptacles. GFCIs shall be installed in readily accessible locations. (CEC 210.8(A)(1), CEC 210.8(A)(9))

☐ All 120-volt, 15- and 20-ampere receptacles shall be listed tamper-resistant. (CEC 406.12(A))

☐ Hydromassage bathtubs and their associated electrical components shall be on an individual branch circuit and protected by a readily accessible GFCI (CEC 424.44 (G), CEC 690.71)

- ☐ Hydromassage electrical equipment shall be accessible without damaging the building structure or building finish. Where the hydromassage bathtub is cord- and plug-connected with the supply receptacle accessible only through a service access opening, the receptacle shall be installed so that its face is within direct view and not more than 12" of the opening. (CEC 680.73)

- ☐ Bond metal piping systems and grounded metal parts in contact with the circulating water using a solid copper bonding jumper, insulated, covered, or bare conductor not smaller than 8 AWG. (CEC 680.73)

PLUMBING

- ☐ Drain, waste, and vent (DWV) piping shall be tested at the time of inspection (CPC 712.2, CPC 712.3):
  - Fill with water with no less than a 10' head of water for not less than 15 minutes; the system shall be tight at all points.
  - Except for plastic piping, fill the pipe with 5 psi for not less than 15 minutes (CPC 723.1)

- ☐ Each vent shall extend through the roof vertically not less than 6" above the roof and not less than 12" from a vertical surface. They shall be not less than 10' from, or not less than 3' above, an openable window, door, opening, air intake, or vent shaft. Furthermore, they shall not be less than 3' from any direction from a lot line, alley, and street. (CPC 906.1)

- ☐ Verify that each vent rises 6" above the flood-level rim of the fixture; where vents connect to a horizontal drainage pipe; the vent connection must be above the centerline of the drainage piping. (CPC 905.2, CPC 905.3)

- ☐ The maximum hot water temperature discharging from the bathtub and whirlpool bathtub filler shall be limited to 120 °F. by a device that is in accordance with ASSE 1070 or CSA B125.3 and the water supply shall be protected by an air gap. (CPC 409.4, CPC 409.5)

- ☐ Use listed fittings only (e.g., water supply hoses). (CPC 604.1)

- ☐ Accessible full way control valve shall be installed at each sink. (CPC 606.2)

- ☐ Clean outs for sinks shall be accessible for cleaning. (CPC 719.4)

- ☐ Fixtures having concealed slip joint connections shall be provided with an access panel not less than 12" in its least dimension. (CPC 402.10)

- ☐ Provide caulking at the bottom of all water closets and all fixtures that come in contact with the wall or floor. (CPC 402.2)

- ☐ Water closets shall be no closer than 15" from its center to a side wall or obstruction nor closer than 30" center to center to a similar fixture. The clear space in front of the water closet shall be not less than 24". (CPC 402.5)

- ☐ Vacuum breakers are required for handheld showerheads. (CPC 603.0)

- ☐ Where two separate handles control the hot and cold water, the left-hand faucet shall control the hot water. (CPC 417.5)

- ☐ A minimum 1" airgap separation is required between the flood level sink, tub and water supply outlet. (CPC 603.3.1, CPC Table 603.3.1)

FRAMING

- ☐ Bathrooms shall have a ceiling height of not less than 6'-8". (CRC R305.1)
- ☐ Use 2x6 studs when installing plumbing pipes 3" or larger. For a 2x6, the maximum hole is 3-5/8"; for a 2x4, the maximum whole is 2-1/8".
- ☐ When piping or ductwork necessitates cutting, notching, or drilling the top plate, a 0.054-inch (16 ga), 1-1/2" wide, galvanized metal tie shall be fastened across at each side with not less than (8) 10d nails; see Figure R602.6.1. (CRC R602.6.1)

LIGHTING

- ☐ Recessed downlight luminaires in ceilings shall be listed for zero clearance insulation contact (IC) and be certified as airtight (AT). (CEnC 150.0(k)1C)
- ☐ Luminaires installed in wet locations shall be marked, "Suitable for Wet Locations"; luminaires in damp locations shall be marked, "Suitable for Wet Locations" or "Suitable for Damp Locations." (CEC 410.10(A))
- ☐ No parts of cord-connected luminaries, chain-, cable-, or cord-suspended luminaries, lighting track, pendants, or ceiling-suspended (paddle fans) shall be locate within 3' horizontally and 8' vertically from the bathtub rim or shower stall threshold. (CEC 410.10(D))
- ☐ In bathrooms, at least one luminaire shall be controlled by a vacancy sensor. (CEnC 150.0(k)2J)
- ☐ Vacancy sensors shall control all luminaires required to have light sources compliant with Reference Joint Appendix JA8. ((CEnC 150.0(k)2K)
- ☐ All installed luminaires shall be high efficacy in accordance with Table 150.0-A. (CEnC 150.0(k)1A)

INSULATION

- ☐ Where a T-24 page is not present, insulation with the following R-values shall be used (CEnC 150.0(b), (c), CEnC 150.1(c)):
  - R-13 for 2x4 walls
  - R-19 for 2x6 walls
  - R-13 for opaque non-framed assemblies
  - R-19 for raised floors separating conditioned spaced from unconditioned space.
  - R-38 for ceiling and rafters
  - R-8 for supply/return ducts and plenums

TILE LATH

- ☐ Water-resistant gypsum board (e.g., "Green Board", "Purple Board", etc.) shall not be used in the following locations (CBC 2509.3, CRC R702.3.7):
  - Over a vapor retarder in shower or bathtub compartments.
  - Where there will be direct exposure to water or in areas subject to continuous high humidity.
- ☐ Backer boards for bathtub/shower areas and other areas subject to direct water exposure shall be glass mat gypsum panels, fiber-reinforced gypsum panels, or fiber cement backer board.

- ☐ Fix for “Green Board”/”Purple Board”/mold-resistant board in tub and shower compartments:
  - Remove non-compliant materials and replace with approved materials
  - Schedule a re-inspection (fee may apply).

- ☐ Interior walls covered with tile or similar material shall be protected with an approved moisture barrier such as a one layer of grade “B” paper (e.g., Aquabar “B”) or better. Install the moisture barrier per the manufacturer’s recommendations. (CBC 2511.5)

- ☐ Fasteners such as Durock screws or hot-dipped galvanized shall be user per the manufacturer’s specifications. (CBC 2507.1)

- ☐ Metal lath and attachments shall be corrosion resistant in tub and shower compartments. (CBC 2510.4)

- ☐ Metal lath and attachments shall be made to the framing members and shall be spaced 8” on center vertically and 16” on center horizontally. Staples may be used at 8” on center with self-furring lath only, otherwise, at 6” on center. (CBC 2504.1.1, CRC R702.2.3, CRC R703.7.2)

- ☐ Metal lath shall be installed as required by the manufacturer’s specifications or at a minimum, lapped not less than 1/2" at sides and 1” at ends. Wire lath shall be lapped not less than one mesh at sides and ends, but not less than 1”. Overlap round corners 12”. (CBC 2707.2)

- ☐ Metal and wire lath shall be furred out away from vertical supports at least 1/4". Self-furring lath shall meet furring requirements. (CBC 2707.2)

- ☐ Caulk or foam seal around plumbing fixture penetrations.

- ☐ Caulk transition between bathtub and shower pan.

- ☐ Bathtub and shower floors and walls above bathtubs with installed shower heads and in shower compartments shall be finished with a nonabsorbent surface. Such wall surfaces shall extend to a height of not less than 6’ above the floor. (CRC R307.2)

SHOWERS & TUBS

- ☐ Showers shall have a waste outlet and fixture tailpiece not less than 2” in diameter. (CPC 408.4)
  - Exception: For a bathtub to shower retrofit, a 1.5” trap and trap arm shall be permitted with a maximum shower size of 36” width and 60” length. (CPC 408.5, 408.6)

- ☐ Bathtubs shall have a waste outlet and fixture not less than 1-1/2” in diameter. (CPC 409.2)

- ☐ Where a shower receptor has a finished dam, curb, or threshold, it shall not be less than 1” lower than the sides and back of such receptor. In no case shall the dam or threshold be less than 2” or exceed 9” in depth where measured from the top of the dam or threshold to the top of the drain. (CPC 408.5)

- ☐ For on-site built shower receptors lined with hot-mop or other approved materials, the finished floor of the receptor shall slope not less than 1/4" per foot and not more than 1/2" per foot. The receptor shall be adequately reinforced, provided with an approved flanged floor drain designed to make a watertight joint in the floor, and shall have smooth, impervious, and durable surfaces. Shower receptors shall have the subfloor and rough side of walls lined with watertight materials not less than 3” above the top of the finished dam or threshold. (CPC 408.5, CPC 408.7)

- ☐ Lining materials shall be pitched 1/4" per foot to weep holes in the sub drain or a smooth and solidly

formed subbase. Such lining shall extend upward on the rough jambs of the shower opening to a point of not less than 3” above the horizontal. (CPC 408.7)

- ☐ Thresholds shall accommodate a 22” door and the door shall open as to maintain not less than 22” unobstructed opening for egress and swing outwards. (CPC 408.5)

- ☐ Spaces in showers without thresholds shall be considered wet locations and shall have the entire bathroom waterproofed. (CPC 408.5)

- ☐ Shower compartments shall have a minimum finished interior of 1024 square inches and be capable of encompassing a 30” circle; maintain 70” above the shower drain. (CPC 408.5)
  - Exception: Shower receptors having overall dimensions of not less than 30” in width and 60” in length.

- ☐ Showers with a built-in place, permanent seat shall be first lined with sheet plastic, lead, copper or shall be lined with other durable and watertight materials that extend not less than 3” above horizontal surfaces of the seat or the seating area. (CPC 408.7)

- ☐ Shower door or rod shall be installed prior to final.

- ☐ Shower receptors shall be tested for water tightness by filling with water to the level of the rough threshold for 24 hours. Install the test plug as shown in the figure that follows. At time of inspection, a qualified person with proper tools shall remove the test plug and demonstrate weep hole function. (CPC 408.7.5)