



CITY OF DIXON
600 EAST A ST.
DIXON, CA 95620-3697
PHONE (707) 678-7000

Building Info Building@cityofdixonca.gov

Residential Sewer, Gas, Plumbing and Electrical Alteration/Remodel/Repair

This submittal checklist outlines the minimum requirements to help prepare you for a complete permit submission for various types of residential permits. Each project is unique and additional requirements may be needed. All applications, plans, and supporting documents are to be submitted electronically through our Dixon Civic Access Portal (DCAP) [City of Dixon, CA](http://CityofDixon.CA) or emailed to Building Division buildingdivision@cityofdixonca.gov Please see our website Welcome to the Official Website of the City of Dixon, CA - Forms, Fees, and Permits for instructions on how to submit your application.

INTERIOR SEWER OR DRAIN PIPE REPAIR/REPLACEMENT/ALTERATION/ADDITION

- **PERMIT REQUIREMENTS**

- House/ADU floor plan
- Pipe size and material approved by California Plumbing Code
- Identify locations of pipe repairs or replacements (fixtures, devices, etc.)
- No saw-cut allowed if home has a post tension slab

- **INSPECTIONS REQUIRED**

- Underground Plumbing (Rough) *Common failures below*
 - Pipes in concrete to be wrapped CPC 312.2
 - ¼ inch per foot min CPC 708.1
 - Hangers per manu CPC 313.2, CPC 313.4& T313.3
- Test (10 foot head – 15 Mins) CPC 712.2
- Final (backfill) Smoke/CO

EXTERIOR SEWER OR WATER PIPE REPAIR/REPLACEMENT/ALTERATION/ADDITION

- **PERMIT REQUIREMENTS**

- Site Plan showing the house and property lines
- Identify locations of pipe repairs or replacements and cleanouts
- Open trench or trenchless replacement
- Any large trees on the property and distance from the scope of work
- Apply for encroachment permit at Welcome to the Official Website of the City of Dixon, CA - Applications, Permits & Fees if city connection is involved

- **INSPECTIONS REQUIRED**

- Underground Plumbing (Rough) *Common failures below*
 - Water pipe min 12 inch above sewer if waste pipe material not allowed within building (clay, etc.) otherwise same trench OK. CPC 609.2

- Water pipe (thermoplastic) trench min 12 inch depth below grade and 16 inch plus pipe O.D. width or AMI CPC 314.4.1. Density of backfill not less than 85%.
- Plastic water pipe requires #14 blue tracer wire visible at ends CPC 604.10.1
- Trench may not undermine footing CPC 314.1. Not located less than 45 degrees below.
- Cleanout at drain/sewer junction CPC 719.1
- Cleanouts per CPC 707 and CPC 719
- Cleanout 2 feet from building terminate at grade CPC 719.1 and CPC 719.2
- Cleanouts required at P/L, end of line, horizontal change of direction greater than 135 degrees, and intervals not exceeding 100 feet. CPC 719.1
- Two-way ABS or Kelly fittings prohibited
- Listed/labelled fittings required
- Unlisted fittings for dissimilar materials prohibited
- Backwater valves are required (upstream of the cleanout) when fixtures are installed on a floor level that is lower than the next upstream manhole cover of the public, or private sewer shall be protected from backflow of sewage and cleanouts shall be labelled "backwater valve downstream" CPC 710.1
- Test (10 foot head – 15 mins) CPC 712.2 or (Running water test for spot repairs, etc.)
- Test (air ok for non plastic 5 psi for 15 mins) CPC 723.1 or
- Test (Building sewer may be tested by plugging the end of the building sewer at its point of connection with the public sewer and completely filling the building sewer with water from its lowest to highest point) CPC 723.0
- Final (backfill, cleanout covers, rated boxes) Smoke/CO

INTERIOR WATER SYSTEM REPAIR/REPLACEMENT/ALTERATION/ADDITION

• PERMIT REQUIREMENTS

- House/ADU floor plan
- Identify new fixture locations

• INSPECTIONS REQUIRED

- Rough Plumbing (Nail plates, secured, listed fittings, etc.) *Common failures below*
 - Polyethylene and PVC not allowed for water supply CPC 604.1
 - Pex supported per Manu CPC 313.3
 - Copper water line Type L below building CPC 604.3
 - Copper or copper alloy tubing (under slab) shall be installed without joints. CPC 609.3
 - Fixture flow per CalGREEN 4.303
 - Water closet 1.28 gallons per flush max
 - Showerhead 1.8 gallons per minute max
 - Lavatory faucet 1.2 gallons per minute
 - Kitchen faucet 1.8 gallons per minute at 60 psi
- Test (15 mins water test at working pressure or greater for plastic) (Air test 50 psi for 15 mins/per manu for non plastic) CPCX 609.4 Air test not allowed for plastic CPC 723.1
- Final Smoke/CO

GAS LINE REPAIR/REPLACEMENT/ALTERATION/ADDITION AND STAND-ALONE PERMITS

• PERMIT REQUIREMENTS

- Site Plan showing the main house, ADU, accessory buildings and structures
- Gas meter location and size if available
- Pipe size and material
- Calculations per CPC 1215 when adding to existing system
- Dedicated new line from meter does not require calculations

- Identify locations of pipe repairs, replacements and additions

• INSPECTIONS REQUIRED

- Underground plumbing (If applicable) #14 Tracer Wire, Min 12 inch (18 inch w/ heavy load)
- Rough Plumbing/Gas (Nail plates, secured AMI, etc.) **Common failures below**
 - CSST per AMI CPC 1208.5.3.5 and bonded to GES min #6 wire max 75 feet with L/L UL 467 fitting CPC 1211.2, CPC 1211.2.2, and CPC 1211.3. All other metal pipe bond per CPC 1211.1
 - Sediment traps required on appliances between shut-off and flex connection. H2O heaters, Furnace. Not required on dryer, range, fireplace and gas lights. CPC 1212.9
 - No gas appliance in bedroom, bathroom or closet except direct vent or closet with exterior combustion air and gasketed self closing door. CPC 904.1, CPC 904.1(1) and CPC 904.1(2)
- Gas Test (15 Mins-10lbs)

ELECTRICAL SYSTEM REPAIR/REPLACEMENT/ALTERATION/ADDITION AND STAND-ALONE PERMITS – SERVICE/PANEL CHANGE IS A SEPARATE PERMIT

• PERMIT REQUIREMENTS

- House/ADU floor plans
- Electrical panel/subpanel size and location
- Identify locations of electrical fixtures and/or wires that will be repaired, altered or replaced

• INSPECTIONS REQUIRED

- Rough Electrical (fan box(s), nail plates, secured cable, materials, listings, etc)
- Final Smoke/CO

LIGHTING COMMON CODE REQUIREMENTS

- If changing or adding interior lighting, please provide AFCI protection for the new circuit and/or wire. CEC 212.10A
- Neutral (grounded conductor) required at box in habitable rooms, stairways, hallways and bathrooms or if switch requires line-to-neutral voltage CEC 404.2(C)
- New fixtures shall be high efficacy (and/or JA-8 compliant) lighting including a manual-on switch with either a dimmer, vacancy/occupancy sensor or astronomical time clock or (Energy Management Control System) when the area of work is in a habitable location. **NOTE:** Paddle (ceiling) fan remote control is acceptable for lighting controls. Energy Code T150.0-A and CEnergyC 150(k)2A-G
- Wall-switch lighting controls (manual ON w/dimmer) required in habitable spaces, bedrooms, living rooms, dining rooms and kitchens placed near the entrance to the room. Switch controlled receptacle OK for other than kitchens and bathrooms (dimmer not approveable for any wall switch controlled receptacle) CEnergyC 150.0(k)2F
- Paddle (ceiling fan) requires independent listed box. CEC 422.18 (70lb rating if fixture greater than 35lb) CEC 314.27C
- No pendant, track, suspended or paddle fan less than 8 feet above or 3 feet to side of tub rim or shower threshold. Luminaires less than 8 feet from footprint of tub/shower shall be listed/labelled for "damp or wet location" if subject to shower spray. CEC 410.10D (1) & (2)
- No incandescent fixtures in closets CEC 416.16B and min 6 inch (Recessed LED) horizontally from shelves/rod and min 12 inch (Enclosed LED) horizontally from shelves/rod. CEC 410.2
- Recessed can lights shall be IC/AT rated. CEnergyC 150.0(k)1Ci-iv.

- Automatic-off controls required for bathrooms, garages, laundry rooms, utility rooms and walk-in closets (at least one fixture in these locations with vacancy/occupancy control) CEnergyC150.02Ei
- Independent controls for undercabinet lighting, undershelf lighting, interior lighting of display cabinets and switched outlets CEnergyC150.02Gi-iv
- If changing or adding exterior lighting, (permanently mounted to a residential building or other buildings on the same lot) please provide fixtures “suitable for wet location” CEC410.10 with CenergyC150.03Ai-iii
 - i. Manual ON/OFF control switch (AND either ii OR iii below)
 - ii. Controlled by a photocell AND motion sensor OR automatic time switch
 - iii. Controlled by an astronomical time clock control

COMMON RECEPTACLE CODE REQUIREMENTS

- All new/replacement interior receptacles shall be TR/AFCI protected (circuit serving) CEC406.4(D)(4)&(5)
- All new/replacement kitchen and bathroom receptacles shall be TR/GFCI/AFCI protected CEC406.4(D)(3)(4)&(5)
- All new/replacement exterior receptacles shall be WR/TR/GFCI protected with wet location in-use covers rated “extra duty” CEC 406.9(A)&9(B)&9(B)(1)
- All new garage receptacles shall be 20A GFCI protected. CEC 210.11(C)(4) & CEC210.8(A)(2)
- 15A circuit/receptacle minimum 14CU/12AL wire and 20A circuit/receptacle minimum 12CU/10AL wire per CEC 310.15
- 15A receptacle OK on 15A or 20A circuit. 20A only on 20A circuit. CEC210.21(B)3
- Cover requirements (trenching) CEC T300.5 - to top of cable/conduit in inches

Location	UF Cable	Rigid Metal	PVC	GFCI 15A/20A	30V or less
General	24	6	18	12	6
Below 2” concrete	18	6	12	6	6
Raceway below blg	0	0	0	0	0
Under 4-in slab	18	4	4	6	6
Street (w/traffic)	24	24	24	24	24
Driveway	18	18	18	12	18

FOR FURTHER ELECTRICAL REQUIREMENTS FOR KITCHENS AND BATHROOM

- See residential kitchen and bathroom remodel handouts located at [Welcome to the Official Website of the City of Dixon, CA - Forms, Fees, and Permits](#) for further information

DEFINITIONS/ACRONYMS

- **TR**=Tamper resistant
- **WR**=Weather resistant
- **AFCI**=Arc-Fault Circuit Interrupter
- **GFCI**=Ground-Fault Circuit Interrupter
- **AT**=Air Tight
- **IC**=Insulation Contact
- **Outlet**=Box, Device, Receptacle, Smoke Detector, etc. A point in the wiring system at which current is taken to supply utilization equipment. (any equipment that utilizes electric energy for electronic, electromechanical, chemical, heating, lighting or similar purposes)
- **GES**=Grounding electrode system
- **L/L**=Listed and Labelled
- **AMI**=According to manufacturers Instructions