

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF CODES AND STANDARDS

MOBILEHOME PARK UTILITY UPGRADE PROGRAM



INSTALLATION AND INSPECTION GUIDELINES

The following installation and inspection guidelines have been developed as part of the Mobilehome Park Utility Upgrade Program (Program). These utility installations must be completed in accordance with federal and state laws and regulations. The following list includes the most relevant standards:

- [Title 24 of the Code of Federal Regulations \(24 CFR\), part 3280](#): alterations to the manufactured home/mobilehome, available at:

<http://www.ecfr.gov/cgi-bin/text-idx?SID=d2883f7985936101ae79fa4d492a28df&mc=true&node=pt24.5.3280&rgn=div5>

- [California Code of Regulations \(CCR\), title 24, parts 3 \(electrical\) and 5 \(plumbing\)](#), available at:

<https://www.dgs.ca.gov/BSC/Codes>

- CCR, title 25, chapters 2 and 3, available at:

[CCR, title 25, chapter 2](#):

[https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I425862604C8611ECB533000D3A7C4BC3&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I425862604C8611ECB533000D3A7C4BC3&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default))

[CCR, title 25, chapter 3](#):

[https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I4E20E4F04C8611ECB533000D3A7C4BC3&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I4E20E4F04C8611ECB533000D3A7C4BC3&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default))

NOTE: Installation and inspection guidelines provided in this guide are intended to assist contractors as a supplemental resource and are not all inclusive.

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OBTAINING A PERMIT

The California Department of Housing and Community Development (HCD) has enforcement jurisdiction for approximately 80 percent of the mobilehome parks in California.

Additionally, there are approximately 70 active local enforcement agencies (LEAs) enforcing the Mobilehome Parks Act (MPA) and the associated regulations within their respective jurisdictions.

Prior to requesting a Mobilehome Park Utility Upgrade Program (Program) permit, please identify the enforcement agency with authority to grant your permit requests by visiting HCD's online services [park search](https://cahcd.my.site.com/s/park-search) at: <https://cahcd.my.site.com/s/>

NOTE: HCD is the only authority with jurisdiction for alterations or conversions to manufactured homes/mobilehomes (MH-units) (e.g., gas installations/piping upgrades). MH-unit alterations require form HCD MH 415, which under the Program, authorizes upgrades to all MH-units within an individual mobilehome park. LEAs are not authorized to issue permits for gas meter installations/inspections.

PERMITS: PARK UNDER HCD ENFORCEMENT

Only one applicant is allowed for each HCD MP 50 permit.

Permit applications and fees may be submitted to the appropriate HCD Area Office (Northern or Southern) in person or via conventional mail. Permit applications may also be submitted via email. Please visit HCD's [Permits & Inspections website](https://www.hcd.ca.gov/building-standards/permits-and-inspections) (<https://www.hcd.ca.gov/building-standards/permits-and-inspections>) for additional information and detailed instructions.

The application may include other minor mobilehome park construction, including, but not limited to, reconnecting service to a clubhouse, well pumps, minor street lighting, utility boring, etc.

A separate HCD MP 50 permit will be required for any extensive work, such as rewiring the entire mobilehome park's lighting systems. Please contact the appropriate HCD area office if you are unsure what work will require a separate permit application.

Items not under the Program's purview may require additional permits from the appropriate enforcement agency.

HCD MP 50—Mobilehome Park

For beyond-the-meter (BTM) lot construction, one form HCD MP 50 is required for the entire mobilehome park. The application shall:

- Indicate the number of lots being upgraded
- Be signed by the mobilehome park owner
- Be submitted along with the appropriate fees

Example of HCD MP 50 fee calculation for a 20-lot mobilehome park:

Permit fee for first lot:	\$196 per lot x 1 lot = \$196
Fee for all other lots:	\$178 per lot x 19 lots = \$3,382
Total fees for the park:	[\$196 x 1] + [\$178 x 19] = \$3,578

HCD MH 415—Mobilehome Unit

For work conducted to the MH-unit, one form HCD MH 415 is required for all units within the mobilehome park. The application shall:

- Indicate the number of lots being upgraded, and indicate (by lot number) which lots are to be inspected
- Indicate any/all common areas requested to be upgraded and inspected (e.g., laundry area, manager’s quarters, clubhouse, etc.)
- Include the appropriate fees

Example of HCD MH 415 fee calculation for a 20-lot mobilehome park:

Permit fee for each lot:	\$196 per lot
Total fees for the park:	\$196 x 20 lots = \$3,920

HCD MP 50—Legacy System Removal

For work conducted to remove the legacy utility system, one form HCD MP 50 is required for the entire mobilehome park, accompanied by a flat fee of \$196. The additional legacy utility system removal permit (HCD MP 50) must be obtained at the same time as the previously mentioned BTM HCD MP 50 permit.

Example of HCD MP 50 legacy fee calculation for a 20-lot mobilehome park:

Total fees for the park:	\$196 x 1 = \$196
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Once all utility upgrade construction has been completed, inspected, and approved by HCD, removal of the aboveground remnants of the legacy system must occur **within**

30 days. HCD MP 50 permits for legacy system removal expire six (6) months from the day the park upgrade is completed. Once the permit expires, a new application and accompanying fee must be submitted. The mobilehome park is responsible for this fee and it is not reimbursable through the Program.

Permit applications can be found on [HCD's website](http://www.hcd.ca.gov): www.hcd.ca.gov

[Form HCD MP 50: Application for Permit to Construct](https://www.hcd.ca.gov/building-standards/manufactured-modular-factory-built/docs/hcdmp50.pdf) (<https://www.hcd.ca.gov/building-standards/manufactured-modular-factory-built/docs/hcdmp50.pdf>)

[Form HCD MH 415: Manufactured Home Application for: Alteration, Addition or Conversion, Alternate Approval, Technical Services, or Inspection to Obtain Insignia](https://www.hcd.ca.gov/building-standards/permits-inspections/docs/hcdmh415.pdf) (<https://www.hcd.ca.gov/building-standards/permits-inspections/docs/hcdmh415.pdf>)

NOTE: Permits must be obtained before work begins. Any person commencing construction without a valid permit is subject to double the fees prescribed for the permit (CCR, title 25, section 1050; Health and Safety Code (HSC) section 18029(b)).

PERMITS: PARKS UNDER JOINT ENFORCEMENT—HCD AND LEA COMBINED

Where jurisdiction is shared, the LEA is responsible for inspections related to reconnection of common areas of the **mobilehome park** and for verifying the aboveground portions of the abandoned legacy system have been removed.

Please contact the LEA for the necessary mobilehome park permits required for pedestals, any on-ground or underground work, and for legacy system removal.

HCD is the only authority with jurisdiction for alterations or conversions to MH-units (e.g., gas installations/piping upgrades). MH-unit alterations under the Program require one form HCD MH 415, which authorizes upgrades to all MH-units within an individual mobilehome park. Please see form HCD MH 415 permit instructions in the previous section of this guide: *Permits: Parks Under HCD Enforcement*.

INSTALLATION OF EQUIPMENT: GAS SERVICE

Acceptable Materials

- Polyethylene (PE) pipe meeting ASTM D2513 - 09a standard with an 18GA copper tracer line
- Anode-less risers to transition from subsurface pipe
- Subsurface gas pipeline facilities may not be located under structures or MH-unit
- Other approved materials deemed acceptable by HCD

Size

- Aboveground use only:
 - Steel: 1-inch or by design (calculations are required if less than 1-inch).
 - Corrugated Stainless Steel Tubing (CSST) of 1-inch nominal diameter may be used for the extension of the MH-unit when closely routed against the underfloor of the MH-unit, without additional calculations.
- Underground use only:
 - PE: 1-inch or by design (calculations are required if less than 1-inch).
- **CSST cannot be used as the required flexible connector or in any location outside of the unit (unless approved by the manufacturer).**
- Existing copper pipe must be replaced with approved gas pipe. Any copper pipe that does not have an internal corrosion resistant lining may not be used to carry gas that has an average hydrogen sulfide content of more than .03 grains/100 feet³ (6.9/meters³) under standard conditions. Standard conditions refer to 60 degrees Fahrenheit and 14.7 psia (15.6 degrees Celsius and one atmosphere) of gas (24 CFR § 192.125).

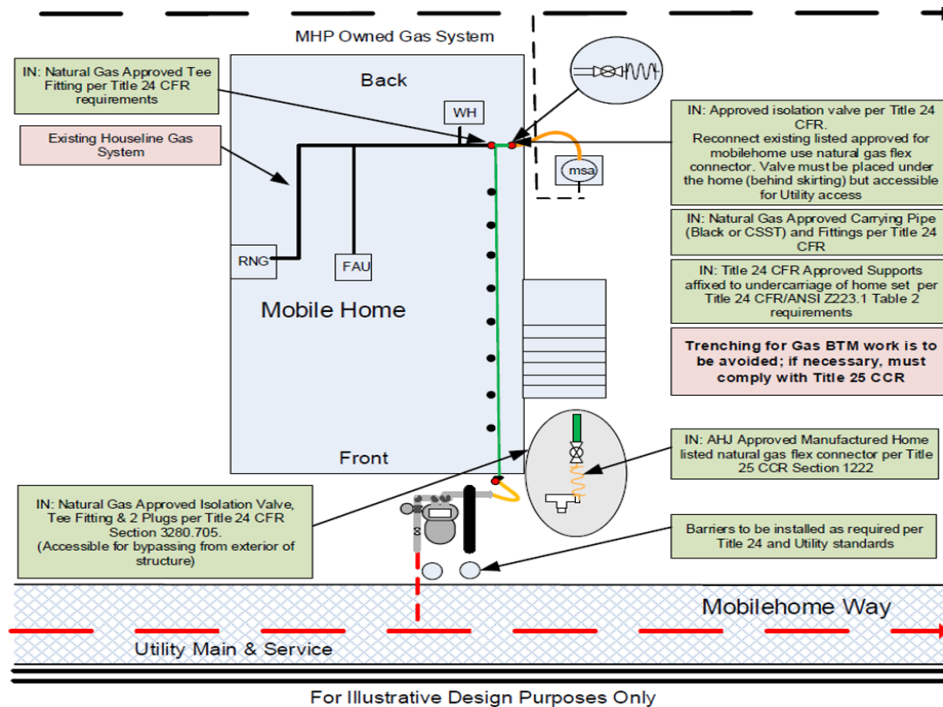
Installation Guidelines

- Lot riser must be located outside the exterior wall, and within 4 feet of the MH-unit. The 4-foot range starts at the MH-unit exterior wall, not the outer projections of the structure. The use of CSST may be installed on the MH-unit provided it is closely routed against the frame or underfloor. It is not to be used in lieu of the approved flex connector. CSST is to be installed and supported in accordance with the manufacturer's installation instructions.
- When it is necessary for the gas system piping to be underground, as it relates to BTM work, the riser shall be protected from vehicular damage in a manner that meets that approved by the enforcement agency (CCR, title 25, section 1228). The installation of the riser and any necessary bollards cannot impede reasonable working clearance, ingress/egress, stairways, or driveway parking.

NOTE: Neither HCD nor any LEA may issue permits or perform inspections for work to the meter. This authority falls with the serving utility and is under the California Public Utilities Commission's (CPUC's) jurisdiction.

Piping installed on piers to extend the gas system, when necessary, must be made of steel approved for natural gas use.

Unless otherwise specified in the code, the manufacturer's installation instructions must be followed. Manufacturer's installation instructions are required to be onsite at the time of inspection for the inspector.



INSTALLATION OF EQUIPMENT: ELECTRICAL SERVICE (PEDESTALS)

Acceptable Materials

- Conductors: Reference California Electrical Code (CEC) for proper sizes for a given wire type.
- Sch. 80 PVC conduit, with appropriately sized conductors, may be installed on the MH-unit for the extension of the electrical conductors.
- If a supply cord is used for MH-units with 50 amps or less, the cord must be approved for MH-unit use and the total length cannot be less than 21 feet nor greater than 36-1/2 feet (24 CFR § 3280.803).
 - Supply cord must be plugged in at pedestal; cannot be hardwired.

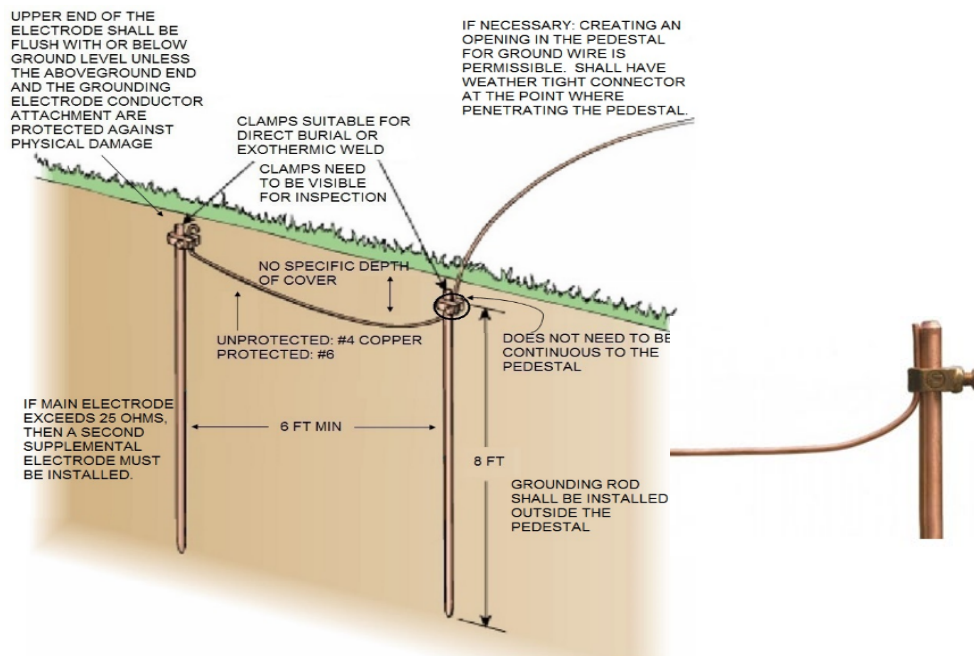
Size

- The conductor and conduit shall be sized appropriately for the application.
- Lot electrical service equipment must have a minimum of 100 amps rating. However, the overcurrent protection may be less (e.g., 50 amps) to match the rating of the MH-unit.
- Extensions of the electrical conduit to the new location of the pedestal may carry additional wiring, (e.g., AC units previously attached to the existing pedestal or approved other loads), provided the conduit fill is not exceeded.

Installation Guidelines

- Units with 30 amps cords must remain 30 amps.
- 100-amp MH-units must be hardwired all the way to the distribution panel.
 - If the MH-unit is rated 50 amps or less, it cannot be hardwired.
- RVs on MH lots **must be cord plug connected.**
- Lot service disconnects shall be located within 4 feet of the exterior wall of the MH-unit (CCR, title 25, section 1184). The 4-foot range starts at the MH-unit exterior wall.
- With an HCD alternate approval (See: *Alternate Approvals*), resident-owned mobilehome parks consisting of subdivided, fee-simple lots (a deed for the actual land under the MH-unit) may have electrical panels installed on the exterior wall of the MH-unit. These installations may cause the mobilehome park/resident to incur additional costs for installation by the contractor. A form HCD MH 415 is needed.
- BTM equipment subject to vehicular damage shall be protected by means of a bollard or other methods approved by the enforcement agency. The required working clearance from electrical equipment must be observed (CCR, title 25, section 1178). The installation of the riser and any necessary bollards cannot impede reasonable ingress/egress, stairways, or driveway parking.
- Lot service equipment shall have a clear working space for examination, servicing, adjustment, and maintenance. The working space shall not be less than 30 inches wide and 36 inches deep and must have a clear height of 78 inches in front of any panel opening on the service equipment (CCR, title 25, section 1183).
- Self-supporting pedestals shall have a concrete encasement at its base. Concrete shall be 3-1/2 inches thick and extend 6 inches around the base of the pedestal (CCR, title 25, section 1182).
 - **Asphalt is not an acceptable material for use as pedestal encasement as it has no rating and is not as resilient as concrete.**
- Pedestals shall be labeled with the corresponding lot number. Each circuit breaker shall be clearly labeled (CCR, title 25, section 1151).
- If the BTM extensions are on or above ground, the utilities' minimum radial clearances are not required. However, subsurface installations shall maintain a minimum 12-inch separation (CCR, title 25, section 1184; CEC Article 110.26).
- Lot service equipment shall be installed outside the pedestal and grounded by an approved grounding system in accordance with the CEC. The electrode conductor is to be installed as close as possible to the newly installed lot service electrical pedestal and may be installed as part of the support pad (CCR, title 25, section 1162; CEC Article 250.53(A)(2)).
- Grounding conductors must be installed in an approved conduit or must be #4 copper (CCR, title 25, section 1166).
- When a single ground source cannot be utilized, two grounding electrodes are required. The conductors between grounding electrodes must be either #4 copper or, if smaller, be encased in protective coverings approved for direct ground contact. Copper piping cannot be coated.

- There is no minimum depth of cover for the wiring between the grounding electrodes.
- If an impedance of 25 ohms or less can be achieved, a single ground source may be utilized; otherwise, a supplemental grounding electrode is required pursuant to CEC Article 250.53(A)(2).
 - If resistance testing is used to qualify for this exception:
 - Random testing may be completed for the resistance of the general soil. The test locations should not exceed 100 feet from a previous test location. If any location tests above 25 ohms, testing of each site is required.
 - A resistance testing log is required. The testing log must include the name of the individual who conducted the test, and identify the lots tested. The testing log must be provided to the inspector at the time of inspection and a copy sent to the utility upgrade email address.
 - The log and ohm tester need to be onsite on the day of inspection.
 - The enforcement agency reserves the right to retest any location during inspection to verify the results.



NOTE: This process applies to HCD-enforced mobilehome parks only. Please work with the LEA for LEA-enforced parks regarding their processes.

AC DISCONNECT

- The AC wiring may be installed in the same conduit as the extended line, provided the conduit fill is not exceeded.
- If the AC unit was connected to the MH-unit's distribution panel and exceeded the MH-unit's rating (e.g., the AC is 50 amp and the MH-unit is 50 amp), it is not allowed and cannot be reconnected. However, it may be connected under a separate permit.
- If a legally installed AC unit does not have a positive disconnect switch because it was originally installed in line-of-sight to the pedestal, it does not require a positive disconnect switch if connection to the new pedestal is maintained in the line-of-sight.
 - If line-of-sight no longer exists due to the **new** pedestal location, then the Program will cover the costs of a positive disconnect switch near the AC unit.
- If an AC, or other load, is fed off the existing legacy pedestal, it must be reattached to the new system provided the AC, or other load, was originally installed legally and is safe to reconnect (i.e., it meets the usual requirements, and the load does not exceed the supply).
- Any code corrections are the responsibility of the homeowner and/or mobilehome park owner and are not reimbursable through the Program.

ALTERNATE APPROVALS

- An alternate approval is required if the proposed installation does not meet the guidelines set forth by regulation.
- If an alternate approval is requested for an installation, it must be approved prior to installation. An alternate approval is only granted on a rare exception—when there are no other alternatives.

To obtain an alternate approval, please submit the following via email to the local area inspector:

- One [Application for Alternate Approval \(form HCD MP 511\)](https://www.hcd.ca.gov/building-standards/manufactured-modular-factory-built/docs/hcdmp511.pdf) (<https://www.hcd.ca.gov/building-standards/manufactured-modular-factory-built/docs/hcdmp511.pdf>) for each lot
- The lot plan for each lot
- Photos (or diagram, if necessary) of the lot, demonstrating:
 - The obstruction, etc. that impedes regulation-compliant installation
 - The proposed installation location (marked Location A)
 - Two additional “backup” installation locations marked Locations B and C

NOTE: Installations that do not meet regulations and have not received an alternate approval in advance of the inspection date will not pass inspection and may require relocation of the equipment to meet regulations.

TRENCHING

Gas

BTM Trenching *When Necessary* (CCR, title 25, section 1216):

- The minimum cover required for gas piping laterals underground is 18 inches in depth, unless otherwise noted.
- The trench bedding must consist of a minimum of 3 inches of clean granulated soil or sand.
- Trench backfills must consist of 6 inches of clean, compacted granulated soil or sand over the piping before the trench is backfilled with native soil.
- Piping BTM subjected to a pressure test with all shut-off valves on the MH-unit in the open position (excluding, if applicable, a range with pilot lights).

Electrical

BTM Trenching *When Necessary* (CCR, title 25, section 1216):

- The minimum cover over direct buried conductors shall be 24 inches (type USE conductors and type UF cable).
- The minimum cover over non-metallic conduit shall be 18 inches.
- Electrical trench bedding shall be installed based upon type pursuant to the California Electrical Code (CEC).
- Electrical trench backfill shall be installed based upon type pursuant to the CEC.
- **If the cable is in good condition**, a junction box may be used with a receptacle on the side or underside of the MH-unit to avoid extending the conduit on the ground. A junction box that is attached under the MH-unit behind the skirting can be a NEMA 1 because it is not subject to weather conditions. It is preferable that this is metal and not PVC.
 - The junction box may be located below the MH-unit provided it's located within 12 to 18 inches from the MH-unit sidewall and accessible via an access cover located directly in front of the junction box.
 - Access cover must be labeled to indicate location of the junction box.
 - Residents will not need to use special tools or take extraordinary measures in an emergency situation to reach or access the shutoff.

NOTE: Trenching BTM is discouraged and shall be avoided unless necessary.

PREPARING FOR INSPECTION: GAS, ELECTRIC, AND/OR FINAL CONTINUITY

Inspectors will inspect approximately 40 lots per inspection date, and the park will be allotted two (2) follow-up inspections per permit.

Example of HCD allotment for a 200-lot mobilehome park:

Allotted inspections: 20 lots / 40 lots per inspection = 5 allotted inspection dates

Two follow-ups: 5 inspection dates + 2 follow-ups = 7 total inspection dates

Example of HCD allotment for a 60-lot mobilehome park:

Allotted inspections: 60 lots / 40 lots per inspection = 2 allotted inspection dates

Two follow-ups: 2 inspection dates + 2 follow-ups = 4 total inspection dates

NOTE: In the event of cancellation of inspections, parks will not lose their allotted inspection dates when cancellation is due to weather, HCD inspector-initiated cancellation, or when cancelling 72 hours in advance of the scheduled inspection. Cancellation requests must be submitted to the local area inspector via text or voicemail.

- **All inspection requests must be submitted to the local area inspector via text or voicemail.**
- **Only the primary BTM contractor/permit applicant may request an inspection.**
- Inspections shall be scheduled with the local inspector in advance. Additional lead time may be needed based on HCD workload.
- When scheduling an inspection, the requestor **must** provide:
 - Park name
 - Six-digit HCD ID number for the park
 - Number of lots requested to be inspected
 - Type(s) of inspection(s) requested: gas, electric, pedestal, or final continuity
- HCD will notify the contractor once the date and time of the inspection is confirmed.
- The contractor is responsible for notifying the local area inspector 72 hours in advance of the scheduled inspection in the event there are changes to the details of the inspection.
- A binder of all materials used by the contractor, including manufacturer's installation instructions, needs to be onsite during the inspection.
- **BE READY!** Have the estimated inspections ready for immediate inspection.
- **NO** partial inspections will be performed or scheduled without prior approval.
- **NO** spot checking is allowed.

- Pre-testing gas pressure and continuity prior to inspection is highly recommended.
- Have enough siding removed for the inspector to perform the inspection.
- **Reinspection fees of \$196 may be applied if the installation does not pass inspection within the allotted number of inspections.**

DAY OF INSPECTION: GAS SYSTEM

Inspection

Please have multiple gas gauges set up to stay ahead of the inspector.

- The newly installed gas line will be tested only when it is connected to the existing system of the MH-unit. The approved MH-unit gas flex line needs to be in place when the test is conducted.
- Skirting must be removed sufficiently to be able to perform the inspection of the extensions on the home. Only enough skirting to visually inspect the pipe/conduit and supports needs to be removed; therefore, all of the skirting on one side is not required to be removed. Necessary skirting removal/repairs are part of the Program; excessive damage and full replacements are not covered.
 - Prior to any skirting repairs performed, discuss with the utility companies the documentation of existing damage (prior to work) and expenditures for repairs of damages resulting from the work.
- Only the newly installed gas piping system BTM shall be subjected to a pressure test. A second isolation valve shall be installed at the intersection of existing MH unit piping and new. This valve shall be in the closed position when conducting the test and upon approval shall be opened.
- On homes where existing steel piping (manufacturer's original installation) extends to the front of the home and pressure testing can be conducted without additional CSST and without an isolation valve, the pressure testing will involve only the "flex assembly," which includes the gas valve, flex connector, and associated steel fittings. Therefore, the pressure test will be limited to all gas components visible on the outside of the skirting.
- The test will be conducted with a manometer, slope gauge, or gauge (calibrated in inches of water or pounds per square inch (psi)). The test shall have consistent pressure, between 10- and 14-inch water column (6 ounces to a maximum 8 ounces), for not less than 2 minutes without perceptible leakage.
 - If necessary, testing may include a non-corrosive soapy water or bubble solution while pressure is remaining in the piping system (CCR, title 25, section 1362(c)(1)).
 - If BTM trenching cannot be avoided when extending underground for gas runs, and the distance exceeds 50 feet, then it will be tested for no less than 10 to 15 minutes. (See: *Trenching*)

NOTE: The fuel-gas piping system of the MH-unit shall not be over-pressurized. If pressurization is beyond the maximum specified, the valves, regulators, and appliances, etc. may be damaged.

- All steel gas piping shall be adequately supported by galvanized or equivalently protected metal straps, hangers, structural members, or other approved means at intervals of not more than 4 feet. Plumber's tape is an acceptable support strapping. If it is necessary for the extension to be on piers, the piers shall be located at no more than 4-foot intervals.
- When CSST is used, it shall be supported at intervals specified in the tubing manufacturer's installation instructions.
- When CSST is used, a steel pipe is required at the termination of the gas line inlet. It must be rigidly mounted to the MH-unit within 6 inches of its termination. There must be a transition to steel pipe in order to rigidly anchor the termination of the MH-unit's piping. (The CSST manufacturer's termination flange often provides this anchoring.)
- Steel piping extensions shall be rigidly anchored to the MH-unit within 6 inches of the gas inlet termination (24 CFR § 3280.705(l)(7)).
- Where the extension of the gas piping is supported by the MH-unit and crosses the centerline of the MH-unit, a flexible connector is not required at the centerline provided the piping is not rigidly mounted to the MH-unit.
- Each MH-unit shall be connected by a listed flexible gas connector approved for use on an MH-unit.
- If the rigid gas pipe connected to the flex line is exposed, the exposed portion of the pipe should be painted to avoid corrosion prior installing the gas meter.
- CSST shall not be used to connect the service outlet to the MH-unit inlet.
- No additional bonding or grounding for Wardflex; black or yellow CSST is required when added to sections of an existing black iron pipe that is already properly grounded and bonded.
- Any new sections of CSST added to the system must maintain metal-to-metal contact with the existing system.
- If the contractor has not bonded the CSST by the method above, the bonding of the CSST needs to be completed and made readily accessible to the inspector during inspection.
- **Always perform a continuity test between the CSST and ground.** (A continuity test at the end of the flex connector would suffice.)
- When the MH-unit successfully completes the gas test and is transferred to the new system, the previous gas inlet shall be permanently capped or plugged **under the MH-unit.**
- The serving utility is responsible for purging the legacy gas system after the mobilehome park's new system has been installed, approved, and cutover.

Approval and Certification

Once HCD approves the installation of the gas meter, the lot equipment is approved for service connection and an HCD-approval label is affixed to the tested equipment in a visible location.

DAY OF INSPECTION: ELECTRICAL SYSTEM (PEDESTALS)

Inspection

Please have covers off prior to inspector being onsite. Grounding rods need to be accessible. Please have a torque wrench ready.

- A single disconnecting switch or circuit breaker shall be provided in the lot service equipment for disconnecting the power supply to the MH-unit. The disconnecting switch, circuit breaker, or its individual enclosure shall be clearly marked to identify the lot serviced and shall not exceed the rated load of the MH-unit or its conductors.
- System grounding conductors and equipment grounding conductors shall be connected as required by CEC Article 250.53. The connection of a grounding conductor to a grounding electrode shall be exposed and readily accessible. All electrical equipment located in damp or wet locations, or outside of a unit shall be constructed of, or installed in, equipment approved for damp or wet locations (CCR, title 25, section 1170).
- Aluminum wiring terminations must have an oxide inhibitor applied to conductors prior to attachment to termination fittings.
- Lugs shall be torqued to the service panel manufacturer's specifications.
- In the event that electrical must be more than 4 feet away from the MH-unit, a lot service disconnect must be placed within 4 feet of the MH-unit.
- Only one power supply connection shall be made to an MH-unit. Room additions and enclosed porches are not part of the MH-unit and may legally be supplied from the pedestal. If an AC, room addition, porch or other connection is fed off the existing legacy pedestal, it may be reattached to the new system provided that the existing connection was installed legally and is safe to reconnect. (See *AC Disconnect*)
- Wall and rooftop AC or evaporative units are part of the MH-unit and must be supplied by the MH-unit. They may not be attached to the pedestal.

Approval and Certification

Once HCD approves the installation of the pedestal, the lot equipment is approved for service connection and an HCD-approval label is affixed to the tested equipment in a visible location.

NOTE: LEAs may utilize approval method(s) acceptable to their agency.

DAY OF INSPECTION: FINAL CONTINUITY TESTING

Inspection

Please have a continuity tester/tilt meter on hand and be prepared to perform the final continuity test. Final continuity testing must be observed by the inspector.

- An electrical feeder extension is **only** tested when it is directly connected to the MH-unit.
- When a supply cable is used, a listed clamp, or the equivalent, shall be provided at the distribution panel board knockout to afford strain relief for the cord in order to prevent strain from being transmitted to the terminals. A strain relief is also required if the supply cable is spliced in a junction box.
- The connection of the feeder assembly conduit to the lot service equipment shall be made using flexible conduit at least 36 inches in length. The flexible conduit does not need to be watertight.
- The feeder assembly shall be kept from direct contact with the earth.
- The electrical wiring and power supply feeder assembly of the MH-unit's electrical service shall be tested for continuity and grounding by the contractor and witnessed by HCD staff during inspection. The test only looks for direct shorts to ground. The entire circuit (from the service panel through the MH-unit) needs to be tested, but the pedestal does not need to be energized for the continuity test.
- The test will be performed by the contractor and witnessed by HCD during inspection.
- The test shall be made by connecting one lead of the test instrument to the grounding conductor and applying the other lead to each of the supply conductors, including the neutral conductor. There shall be no evidence of any connection between any of the supply conductors and the grounding conductor. Some older MH-units have a bonded neutral and ground; in this case, testing will only be performed between the supply conductor and the ground. No test will be performed between the neutral and the supply conductors, as the neutral and ground are bonded.
- An AC unit being reconnected to the new service must have connection tested after the electrical continuity test is completed on the MH-unit.
- Non-current-carrying metal parts of electrical equipment shall be tested to determine continuity for bonding between such equipment and the equipment grounding conductor (i.e., metallic gas line, chassis, metal siding).
- **Hardwired or with a junction box:** Test the entire extension and MH-unit. The MH-unit and the extension should not be tested separately as it would exclude the connection in the junction box. Typically, this test will occur at cutover. All tie-ins can be completed in advance; however, this is not the recommended method as it leaves homeowners without power for a longer period of time.
 - Hardwiring is not the preferred method.
- **50 or 30 amp plug with receptacle under the unit (i.e., P54):** The test will occur by unplugging the MH-unit and testing it. Reconnect the MH-unit after the

test has been performed. A test will also be performed from the receptacle to the service panel. These may be tested separately.

Additional Information, Continuity Testers/Tilt Meters

The test shall be made by connecting one lead of the test instrument to the grounding conductor (Green) and applying the other lead to each of the other supply conductors, which consist of the L1 (Black) supply conductor and the L2 (Red) supply conductor. There shall be no continuity between any of these conductors and the grounding conductor (Green).

No test shall be performed between the neutral conductor (White) and either of the supply conductors L1 (Black) or L2 (Red) regardless of the age of the MH-unit.

Results

- An “OK” light is a **PASS** in regard to the grounding conductor (Green) to L1 (Black) or L2 (Red) continuity test as this could be reading a coil in the system on either leg of the supply conductors.
- An “Open” light is a **PASS** in regard to the grounding conductor (Green) to neutral (White) conductor due to there being effectively no continuity between the two.
- A “Short” light is a **FAIL** in regard to any of the tests between the grounding conductor (Green) and either L1 (Black), L2 (Red) or the neutral conductor (White) and must be investigated/cleared.

Approval and Certification

Once HCD tests and approves the electrical continuity, the lot equipment is approved for the service connection and an HCD-approval label is affixed to the side of the mobilehome in a visible location.

DOCUMENTED RESULTS OF INSPECTION(S)

HCD’s local area inspector will enter data and complete internal processes. The local area inspector will then provide the BTM contractor with an Activity Report, form HCD CS 61/63, detailing the inspection results via email.

The BTM contractor shall act as the point of contact for distribution of results, including delivery of results to the public utility company (if requested/required). The public utility company may also request the Activity Report from the local area inspector.

Please send ALL questions and inquiries regarding documentation to the local area inspector.

PERMANENT BUILDINGS: COMMON AREA INSPECTIONS

HCD issues permits and performs utility inspections on common area buildings such as clubhouses, public bathrooms, laundry rooms, park offices, etc. (CCR, title 25, section 18304).

HCD does not inspect hotels, motels, houses, or apartment units located within a mobilehome park, unless such unit is used to house park staff involved in the operation or maintenance of the park (HSC section 18304).

Common areas must be noted on the original form HCD MP 50 application in order to be inspected.

RECREATIONAL VEHICLES (RVs) AND PARK TRAILERS

RVs are defined in HSC section 18010. RV sections and RV lots within mobilehome parks are not included in the Program. If the mobilehome park owner chooses to upgrade those systems, additional permit fees and inspections (not associated with the Program) will apply. Additionally, associated costs to the utility will be assessed and will not be reimbursable under the Program.

If the mobilehome park wishes to convert RV lots into MH lots, it will need to submit written approval from the local planning department and an amended permit to operate. RVs—including park trailers (defined as RVs in HSC section 18009.3)—sited on an MH lot will have the lot utilities upgraded. BTM service will be extended within reach of the RV connections being served by the gas and/or electric master-meter system existing at the time of the upgrade.

When the extensions are on or in the ground and not attached to the RV, only the extension will be tested and inspected by the enforcement agency, not the RV. If the extension is installed on the RV, HCD does not have authority to inspect.

For electrical, the RV must be able to be plugged into a receptacle. It cannot be hardwired, and no RV shall be equipped with more than one electrical supply cord.

CPUC CONTACT INFORMATION

For more information on the Program's applicability, please contact the CPUC:

Phone: (800) 755-1447

Email: MHPUtilityUpgradeProgram@cpuc.ca.gov

Website: <http://www.cpuc.ca.gov/mhpupgrade>

INSPECTION GUIDELINES

The Mobilehome Park Utility Upgrade Program inspection guidelines are not all-inclusive and may not include all the requirements for the particular installation. The items below are to be reviewed for completion by the contractor/owner prior to scheduling an inspection. Additional fees may be applied if reinspection is required due to not meeting regulations. Unless otherwise specified in the code, the manufacturer's installation instructions must be followed. Manufacturer's installation instructions are required to be onsite at the time of inspection for the inspector.

GAS INSPECTIONS

Inspection Requirement	Code
<input type="checkbox"/> Supporting documentation has been provided, when applicable.	CCR, title 25, section 1200
<input type="checkbox"/> Acceptable materials are being used and plastic pipe/components comply with ASTM.	CCR, title 25, section 1208
<input type="checkbox"/> Extensions are installed in an approved trench or horizontal bore with tracer wire, when applicable.	CCR, title 25, section 1216
<input type="checkbox"/> The gas riser outlet shall terminate within 4 feet of the unit, or proposed location of the unit, on the lot. Each unit connected to the gas riser outlet shall be connected by a listed flexible gas connector.	CCR, title 25, section 1222
<input type="checkbox"/> Materials are the proper size and type for the application.	CCR, title 25, section 1232
<input type="checkbox"/> Each MH-unit shall be connected to the lot outlet by an approved flexible gas connector, listed for its intended use, not more than 6 feet in length and of adequate size to supply the MH-unit gas appliance demand.	CCR, title 25, section 1354
<input type="checkbox"/> The service equipment is protected from vehicle damage.	CCR, title 25, section 1228
<input type="checkbox"/> Gas system has successfully undergone a low pressure test.	CCR, title 25, section 1362(c)
<input type="checkbox"/> Extensions are installed with the proper support and hangers, when applicable.	24 CFR § 3280.705(I)(7)
<input type="checkbox"/> Subsurface extensions are installed with the required minimum radial clearance.	49 CFR § 192.325

ELECTRICAL INSPECTIONS

Inspection Requirement	Code
<input type="checkbox"/> Supporting documentation has been provided, if applicable.	CCR, title 25, section 1130
<input type="checkbox"/> Extensions are installed with the proper support and hangers, when applicable.	24 CFR § 3280.808
<input type="checkbox"/> If a supply cord is to be used for MH-units 50 amps or less, the cord must be approved for MH-unit use and the total length cannot be less than 21 feet, nor greater than 36-1/2 feet.	24 CFR § 3282.803
<input type="checkbox"/> BTM extensions on or aboveground do not require minimum radial clearances. Subsurface installations require 12-inch separation.	CEC Article 110.26
<input type="checkbox"/> Materials are the proper size and type for the application.	CCR, title 25, sections 1136 and 1140
<input type="checkbox"/> Materials are installed in an acceptable location.	CCR, title 25, sections 1183 and 1184
<input type="checkbox"/> The electrode conductor is to be protected from physical damage and the connection to the grounding electrode is to be accessible.	CCR, title 25, section 1162
<input type="checkbox"/> Only copper grounding conductors shall be used to connect electrical systems to a grounding electrode. Grounding conductors shall be protected from physical damage.	CCR, title 25, section 1166
<input type="checkbox"/> Lot service equipment shall be grounded by an approved grounding system and be installed outside the pedestal. Electrode conductor is to be installed as close as possible to the pedestal. If an impedance of 25 ohms or less can be achieved, a single ground source may be utilized.	CEC Article 250.53(A)(2)
<input type="checkbox"/> Self-supporting pedestals shall have a concrete encasement at its base of three and one-half (3-1/2) inches thick and extend six (6) inches around the base of the pedestal.	CCR, title 25, section 1182

<input type="checkbox"/> Pedestals shall be labeled with the corresponding lot number. Each circuit breaker shall be clearly labeled.	CCR, title 25, section 1151
<input type="checkbox"/> The service equipment is protected from vehicular damage.	CCR, title 25, section 1178
<input type="checkbox"/> Equipment is installed per the manufacturer's installation instructions and HCD regulations with proper support.	CCR, title 25, section 1185
<input type="checkbox"/> When the park electrical service is supplied by a grounded system operated at 600 volts or less, a grounding conductor with the feeders off the primary electrical system to all equipment supplied by the system is required.	CCR, title 25, section 2154
<input type="checkbox"/> A mobilehome with a branch circuit to energize outside heating or air conditioning, other than room air conditioners, must have branch-circuit conductors terminate in a listed outlet box, or disconnecting means, located outside of the mobilehome.	24 CFR § 3280.813
<input type="checkbox"/> Extensions are installed in an approved trench or horizontal bore, if applicable.	CCR, title 25, section 1134
<input type="checkbox"/> Electrical equipment has successfully undergone a continuity/polarity test.	CCR, title 25, section 1362(d)(1)



ADDENDUM

This addendum serves as a shortcut to all the changes that have occurred within the CPUC program—specifically: inspections, expectations, and implementation.

PERMITS: PARKS UNDER HCD ENFORCEMENT — *Page 1*

- Only one applicant allowed for each HCD MP 50 permit.

HCD MH 415—Mobilehome Unit — *Page 2*

- Indicate (by lot number) which lots are to be inspected.
- Indicate any/all common areas requested to be upgraded and inspected (e.g., laundry area, manager’s quarters, clubhouse, etc.)

HCD MP 50—Legacy System Removal — *Page 2*

- The legacy system removal permit must be obtained at the same time as the HCD MP 50 permit.
- Legacy system removal permits expire six (6) months from the day the park upgrade is completed. Once the permit expires, a new application and accompanying fee must be submitted.

TRENCHING: Electrical — *Page 9*

- The junction box may be located below the MH-unit provided it’s located within 12 to 18 inches from the MH-unit sidewall and accessible via an access cover located directly in front of the junction box.
- Access cover must be labeled to indicate location of the junction box.
- Residents will not need to use special tools or take extraordinary measures in an emergency situation to reach or access the shutoff.

PREPARING FOR INSPECTION — *Page 10*

Inspectors will inspect approximately 40 lots per inspection date, and the park will be allotted two follow up inspections per permit.

Example of HCD allotment for a 200-lot mobilehome park:

Allotted inspections: 20 lots / 40 lots per inspection = 5 allotted inspection dates

Two follow-ups: 5 inspection dates + 2 follow-ups = 7 total inspection dates

Example of HCD allotment for a 60-lot mobilehome park:

Allotted inspections: 60 lots / 40 lots per inspection = 2 allotted inspection dates

Two follow-ups: 2 inspection dates + 2 follow-ups = 4 total inspection dates

NOTE: In the event of cancellation of inspections, parks will not lose their allotted inspection dates when cancellation is due to weather, HCD inspector-initiated cancellation, or when cancelling 72 hours in advance of the scheduled inspection. Cancellation requests must be submitted to the local area inspector via text or voicemail.

Inspections Submitted Criteria — Page 10

When scheduling an inspection, the requestor **must** provide:

- Park name
- Six-digit HCD ID number for the park
- Number of lots requested to be inspected
- Type(s) of inspection(s) requested: gas, electric, pedestal, or final continuity

DAY OF INSPECTION: FINAL CONTINUITY TESTING — Page 14

Please have a continuity tester/tilt meter on hand and be prepared to perform the final continuity test. Final continuity testing must be observed by the inspector.

Additional Information, Continuity Testers/Tilt Meters — Page 15

- The test shall be made by connecting one lead of the test instrument to the grounding conductor (Green) and applying the other lead to each of the other supply conductors, which consist of the L1 (Black) supply conductor and the L2 (Red) supply conductor, and the neutral conductor (White). There shall be no continuity between any of these conductors and the grounding conductor (Green).
- No test shall be performed between the neutral conductor (White) and either of the supply conductors L1 (Black) or L2 (Red) regardless of the age of the MH-unit.

Results — Page 15

- An “OK” light is a **PASS** in regard to the grounding conductor (Green) to L1 (Black) or L2 (Red) continuity test as this could be reading a coil in the system on either leg of the supply conductors.

- An “Open” light is a **PASS** in regard to the grounding conductor (Green) to neutral (White) conductor due to there being effectively no continuity between the two.
- A “Short” light is a **FAIL** in regard to any of the tests between the grounding conductor (Green) and either L1 (Black), L2 (Red) or the neutral conductor (White) and must be investigated/cleared.

Approval and Certification — *Page 15*

Once HCD tests and approves the electrical continuity, the lot equipment is approved for the service connection and an HCD approval label is affixed to the side of the mobilehome in a visible location.