Building Code Department Inspection Check List

The following check lists are provided as a tool to assist contractors in preparing for inspection and are not meant to be the only items required to pass an inspection.

Plumbing Inspection Check List - Underground

Drains & Vents

1. ____ Trenching and bedding -
   Pipes shall be placed on firm bedding, bell holes shall be made for couplings and fittings, and blocks shall not be used for support. The bedding material shall be earth with no rocks, lumps or other foreign material that may damage the pipe. A graded stone such as #56 or smaller is acceptable.
2 ____ Pipes Passing through footings-
   Pipes passing through a footing shall be sleeved to protect the pipe. Sleeves shall be two pipe sizes larger than the pipe and must filled with an approved water proof material (caulk or similar material).
3. ____ Materials -
   Materials comply with Tables 703.1 through 703.3 for sanitary and Table 703.3 for storm drains. (Typically cast iron in buildings, ductile iron or PVC pipe outside of buildings).
4. ____ Joints-
   Joints comply with Section 706 of the IPC (Cast iron and ductile iron pipe have bell and spigot fittings. Bell must be on the upstream side. PVC pipe will be glued or bell and spigot fittings).
5. ____ Pipe size -
   Minimum size pipe is 2" for drainage installed under ground. Installed pipe sizes match approved drawings.
6. ____ Slope-
   Minimum slope is 1/8 " per foot 3" through 6", 1/4" per foot for 2" and 2 ½ “and 1/16" per foot for 8" and larger.
7. ____ Test-
   Hydrostatic or air test performed in accordance with Section 313 prior to concealment. Hydrostatic test is a minimum of 10 feet of head. Air test is 5 psi minimum.

Water Service & Distribution

1. ____ Materials-
   Materials shall comply with Table 606.4 & 606.5 (Typically ductile iron, copper or PVC).
2. ____Joints-
   Joints comply with Table 606.6 9 (bell & spigot, soldered or cleaned & glued for PVC).
3. ____Bedding-
   Ditches free from rocks and debris and below frost line (30inches) if outside the building.
4. ____Pipe size -
   Minimum pipe size shall be 3/4". Installed pipe matches approved drawings.
5. ____ Clearances -
   Water service pipe not installed within 10 ft. of sewer line unless the sewer line is 18" below water service.
6. ____ Pipes passing through footings-
   Pipes passing through a footing shall be sleeved to protect the pipe. Sleeves shall be two pipe sizes larger than the pipe and must filled with an approved water proof material (caulk or similar material).
7. ____ Test-
   Hydrostatic or air test performed in accordance with Section 313 prior to concealment (1 ½ times the operating pressure or as required by specifications).

Plumbing Inspection Check List - Above Ground

Drains & Vents

1. ____ Materials -
   Materials comply with Tables 703.1 through 703.3 for sanitary and Table 703.3 for storm drains. Typically pipe will be cast iron, copper. PVC may be used if not exposed in a plenum ceiling.
2. ____ Joints-
   Joints comply with Section 706 of the IPC. Cast iron joints will be no-hub and PVC will be glued.
3. ____ Slope-
   Minimum slope is 1/8 " per foot 3" through 6", 1/4" per foot for 2" and 2 ½ "and 1/16" per foot for 8" and larger.
4. ____ Supports -
   Supports shall be an approved type that will not cause Galvanic Action (no dissimilar metals). Spacing of supports as required by Section 309 of the IPC (copper 1 ¼ & smaller 6 ft. 1 ½ & larger 10 ft., cast iron 5 ft.).
5. ____ Fixtures -
   Fixture carriers installed, supported, spaced in accordance with the approved plans and as required by accessibility standards (16 to 18 in. from side wall).
6. ____ Test-
   Hydrostatic or air test performed in accordance with Section 313 prior to concealment (10 ft. head or 5 psi).

Water Service & Distribution

1. ____ Materials-
   Materials shall comply with Table 606.4 & 606.5(typically copper).
2. ____Joints-
   Joints comply with Table 606.6 (soldered).
3. ____ Supports -
   Supports shall be an approved type that will not cause Galvanic Action (no dissimilar metals).
   Supports shall be spaced as required by Section 309 of the IPC (6 ft 1 ¼ & smaller 10 1 ½ & larger).
4. ____ Backflow Preventer-
   Backflow devices must be installed on main service and other locations as required by Section 609. Typically devices are required for soda machines, coffee machines, water filtration systems, dish washers, etc.
5. ____ Test-
   Hydrostatic or air test performed in accordance with Section 313 prior to concealment (1 ½ times operating pressure or as required by the specifications).

Plumbing Inspection Check List - Final Inspection

1. ____ Bacteriological test completed and approved.
2. ____ Backflow certificates completed and backflow preventers tagged.
3. ____ All faucets, drinking fountains, toilets, and urinals functional.
4. ____ All toilets caulked at the floor.
5. ____ All open site drains have an air gap twice the diameter of the drain line.
6. ____ Drain pans for water heater installed and piped to open site drain.
7. ____ Expansion tank installed on water heater.
8. ____ Bottom fed water heaters require an anti-siphon device.
9. ____ All exposed pipes below accessible sinks are insulated.
10. ____ Hot water does not exceed 140º F.
11. ____ Backflow devices are installed at all coffee machines, soda machines, drink dispensers, etc.
12. ____ Discharge water from appliances (dishwasher, steamers, cookers, etc.) shall not exceed 140º F.

Electrical Inspection Check List – Rough-in

Wall & Ceiling

1. ____ Boxes properly supported to framing member or to the structure (independent of other trades).

2. ____ Conduits supported within 3 feet of box and every 10 feet along run.

3. ____ MC cable, Flexible Metal Conduit (Greenfield), sealtight, etc. supported within 12 inches of box and every 4 feet along run. Exception: lengths 6 feet or less from a junction box directly to a light fixture.

4. ____ Device rings or plaster rings in place and proper depth to be flush with finished surface where walls and ceilings have drywall or other finish applied directly to the framing members.

5. ____ Switch boxes mounted not more than 48 inches to center.

6. ____ Floor penetrations fire sealed where required.

7. ____ Fixtures properly supported (lay-in type ceiling fixtures must be independently supported to the building structure by at least two opposite corners).

8. ____ All junction box covers in place (ceiling close-in).

9. ____ Light fixtures independently supported from the structure on at least two corners.

Electrical Inspection Check List - Underground

1. ____ Check depth of trench (AOA 18", Non-AOA 24" in areas subject to traffic and 18" in non traffic areas).
2. ____ Conduits are properly aligned, couplings are straight.
3. ____ Material type, size and number match approved plans.
4. ____ End bells are installed at all manholes and handholes.
5. ____ Conduits are securely mounted on suitable spacers for duct banks that will receive concrete.
6. ____ No more than 360 degrees of bends are allowed between junction boxes, manholes, or handholes.

Electrical Inspection Check List - Final Inspection

1. ____ Check to insure that all device plates are in place.

2. ____ Test receptacles for proper polarity (plug-in tester). Randomly check about 1/3 of installed receptacles.

3. ____ Check Panel directory to ensure all circuits are marked and type written

4. ____ Check the operation of all switches.

5. ____ Inspect all light fixtures to ensure all lamps are operational.

6. ____ Make sure all equipment is connected and operational.

7. ____ Check egress and exit lighting. Insure batteries are functional, and/or fixtures are connected to life safety circuits.

8. ____ All disconnect switches, transformers and equipment are labeled

9. ____ Check to ensure the color coding for each voltage is be posted at each branch circuit panel board and distribution center.

Gas Line - Inspection Check List (IFGC)*

1. ____ Black Steel or identified with yellow label.

2. ____ No pipe is allowed in solid walls. (plaster, concrete, block)

3. ____ No valves, unions, tubing fittings, bushings, compression couplings & swing fittings allowed in concealed locations such as under floors or in walls.

4. ____ All pipe ends must be capped.

5. ____ Sleeve through Foundation Wall.

6. ____ Sleeve through Slab.

7. ____Underground piping is minimum 12" below grade.

8. ____ Yellow insulated copper tracer required for underground no-metallic pipe.

9. ____ Steel pipes located below ground must be protected from corrosion (cathodic protection).

10. ____Outlets accessible must be accessible. A Minimum of 1" from wall 2" from floor.

11. ____Test 1 ½ times operating pressure no less that 3 psig for minimum of 30 min. or ½ hr. for each 500 CF gas. Joints must be exposed for testing.

12. ____ Proper gauge for test (10 psi or less increments of 0.01psi, 10 to 1000 psi increments of 1 psi & 100 psi or greater increments of 2 psi test pressure should be in the middle of the gauge).

13. ____ Supports for ½"pipe every 4ft., for ¾"pipe & 1"every 8ft for sizes above 1"every 10'.

14. ____All piping shall be sloped ¼" per 15' up to prevent traps.

15. ____ Meter valve on supply side of meter. Building service outside valve.

16. ____Shut off and drip leg at each appliance.

17. ____Regulator required where appliance is at lower pressure than distribution pressure.

Gas Line Inspection – Final

1. ____ Check to ensure all pilot lights are operational.

2. ____ Check operation of all main burners and or all appliances.

3. ____ All main valves are identified for each tenant.

4. ____ All appliances have readily accessible valves.

5. ____ Check movable equipment for installation of approved flexible connections and appliance restraints (deep fryers, cook tops, griddles).

* (All gas piping of the line side of meter by an approved Third Party inspector)

Wall Framing & Drywall - Inspection Check List

1. ____ Building must be water tight prior to the installation of any drywall.
2. ____ Approved drawings showing wall types are on site.
3. ____ Studs are gauge shown on approved drawings.
4. ____ Stud spacing is per approved drawings.
5. ____ Studs are fastened in place.
6. ____ Corner studs are in place.
7. ____ Header studs are installed over openings.
8. ____ Door and window openings are double studded unless otherwise shown on the approved drawings.
9. ____ Dry wall screw spacing as required by the specifications or manufacturer's recommendations whichever is more stringent.

Listed Assemblies Inspection - Check List

1. ____ UL Listing is on site (ask for listing).
2. ____ Studs are minimum gauge shown in Listing.
3. ____ Studs spacing is as shown on listing or approved drawing whichever is more stringent.
4. ____ Screws are spaced as shown in the listing (Typically 12" in the field & 8" on the joints).
5. ____ Free ends of the board is properly fastened.
6. ____ No tears, cracks, holes etc. are allowed and must be repaired.
7. ____ All penetrations must be protected with an approved method. (ask for UL listing).
8. ____ Joints between first and second layer of drywall must be staggered at least 24 inches.

Mechanical - Inspection Check List - Duct (prior to insulation)

1. ____ Duct type as shown on approved plans (slip & drive joints, companion flange joints, hard-cast joints, welded seams & joints).

2. ____ Ducts properly supported (10 feet or less, see specifications).

3. ____ All joints sealed.

4. ____ Fire dampers installed at all penetrations for assemblies rated two hours or more.

5. ____ Access doors at all fire dampers.

6. ____ Flexible duct limited to 14 feet and properly supported (as required by their listing typ. 4 feet with approved straps).

7. ____ Ducts penetrating rated assemblies must have "listed" through penetrations.

Mechanical - Inspection Check List – Hydronic Piping (prior to insulation)

1. ____ Piping properly supported (copper pipe 1 ¼" & smaller 6 ft., 1 ½" & larger 10ft., steel pipe 12ft.)

2. ____ Hydrostatically tested at 1 ½ times operating pressure but not less than 100 psi. for 30 minutes.

3. ____ Valves located on the supply & return lines at all equipment

4. ____ Pipes penetrating rated assemblies must have "listed" through penetrations.

5. ____ Dielectric fitting installed where dissimilar piping materials are joined.

6. ____ Condensate disposal shall be of approved piping, piped to an approved location (not roads or sidewalks), provided with a trap & be at least ¾" trade size.

7. ____ Dryer vents shall not be longer than 25 feet, not be installed in plenum ceilings, terminate outside the building, have a clean-out at the base of a riser, & not use screws of other fasteners that will obstruct the exhaust flow.

8. ____ Kitchen exhaust systems must be constructed of welded steel (a minimum of 16 Gauge), provided with a fire protection system & be enclosed with fire rated construction.

Sprinkler Inspection Check List (rough-in)

1. ____ Approved plans on site
2. ____ Control valves located as shown on drawings
3. ____ Alarm check valves installed where shown on drawings
4. ____ Backflow preventers installed as required
5. ____ Tamper switches on all control valves
6. ____ Flow switches installed as shown on drawings
7. ____ Sprinkler mains sized as shown on drawings
8. ____ Hose connections as shown on drawings
9. ____ Sprinkler heads located as shown on drawings
10. ____ Sprinkler type as shown on drawings (pendant, upright, concealed, semi-concealed)
11. ____ Temperature rating of head as shown on drawings
12. ____ Low point drains installed where required
13. _____ Inspector test installed as required and properly drained
14. ____ System drains installed as required to an approved location
15. ____ Hydrostatic test performed at a minimum of 200 psi but not less than 50 psi above operating pressure
16. ____ Hangars installed as required by NFPA 13 and as shown on drawings
17. ____ Seismic bracing installed as shown on approved drawings.

Sprinkler Inspection Check List – Final

1. ____ Check to insure all control valves are opened
2. ____ Check all control valves for tamper switches
3. ____ Check all sprinkler heads for correct temperature rating and installation of escutcheons, trims, guards etc. are installed.
4. ____ Check that all inspector's tests and main drains are piped into floor drains.
5. ____ Contractor shall provide piping certification forms for above ground and below ground piping
6. ____ Witness functional test on all flow switches
7. ____ All tamper switches shall send a trouble signal before two complete turns of the valve handle
8. ____ Check the FD connection, make sure the caps are installed and are connected to the valve via chain of other approved method
9. ____ Check spare stock of sprinkler heads are in designated location

Hood System Operation

1. ____ Exhaust Fan and make-up air operate together.

2. ____ Main gas burner does not operate unless exhaust fan is running.

3. ____ Type I hood requires a fire suppression system.

4. ____ Hood fire suppression system over rides the off switch for the exhaust fan.

5. ____ Hood fire suppression system turns off all sources of heat (gas and electric to cookers, ovens, griddles, etc.)

6. ____ Hood fire suppression system is monitored by the building fire alarm system.

7. ____ The functional test of the fire suppression system has been completed.

8. ____ All Equipment is operational.

9. ____ All lighting fixtures are operational.

10. ____ All filters are in place.