

# 2018 Code Changes

## IFGC

310.2 CSST – This section applies to corrugated stainless steel tubing (CSST) that is not listed with an arc-resistant jacket or coating system in accordance with ANSI LC 1/ CSA 6.26. CSST gas piping systems and piping systems containing one or more segments of CSST shall be electrically continuous and bonded to the electrical service grounding electrode system or, where provided, the lightning protection electrode system.

310.2.1 Point of Connection – The bonding jumper shall connect to a metallic pipe, pipe fitting or CSST fitting.

310.2.2 Size and Material of Jumper – The bonding jumper shall not be smaller than 6 AWG copper wire or equivalent.

310.2.3 Bonding Jumper Length – The length of the bonding jumper between the connection to a gas piping system shall not exceed 75 feet. Any additional grounding electrodes installed to meet the requirement shall be bonded to the electrical service grounding electrode system or, where provided, the lightning protection grounding electrode system.

310.2.4 Bonding Connections – Bonding connection shall be in accordance with NFPA 70.

310.2.5 Connection Devices – Devices used for making the bonding connections shall be listed for the application in accordance with UL- 467.

310.3 Arc-resistant CSST – This section applies to corrugated stainless steel tubing (CSST) that is listed with an arc-resistant jacket or coating system in accordance with ANSI LC 1/ CSA 6.26. The CSST shall be electrically continuous and bonded to an effective ground fault current path. Where any CSST component of a piping system does not have an arc- resistant jacket or coating system, the bonding requirements of Section 310.2 shall apply. Arc- resistant- jacketed CSST shall be considered to be bonded where it is connected to an appliance that is connected to the appliance grounding conductor of the circuit that supplies that appliance.

404.11.1 Protection against Corrosion – Steel pipe tubing or tubing exposed to corrosive action, such as oil conditions or moisture, shall be protected in accordance Sections 404.11.1 through 404.11.5.

404.11.1 Galvanizing – Zinc coating shall not be deemed adequate protection for underground piping.

404.11.2 Protection Methods – Underground piping shall comply with one or more of the following:

1. The piping shall be made of corrosion-resistant material that is suitable for the environment in which it will be installed.
2. Pipe shall have a factory-applied, electrically-insulating coating. Fittings and joints between sections of coated pipe shall be coated in accordance with the coating manufacturer's instructions.
3. The piping shall have a cathodic protection system installed and the system shall be monitored and maintained in accordance with an approved program.

404.11.3 Dissimilar Metals – Where dissimilar metals are joined underground, an insulating coupling or fitting shall be used.

404.11.4 Protection of Risers – Steel risers connected to plastic piping shall be cathodically protected by means of a welded anode, except where such risers are anodeless risers.

409.5 Appliance Shutoff Valve – Shutoff valves serving movable appliances, such as cooking appliances and clothes dryers, shall be considered to be provided with access where installed behind such appliances.

409.7 Shutoff Valves in Tubing Systems – Shutoff valves installed in tubing systems shall be rigidly and securely supported independently of the tubing.

503.5.11 Insulation Shield – Where a factory-built chimney passes through insulated assemblies, an insulation shield constructed of steel having a thickness of not less than 0.0187 inch shall be installed to provide clearance between the chimney and the insulation material. The clearance shall be not less than the clearance to combustibles specified by the chimney manufacturer's installation instructions. Where chimneys pass through attic space, the shield shall terminate not less than 2 inches above the installation materials and shall be secured in place to prevent displacement. Insulation shields provided as part of a listed chimney system shall be installed in accordance with the manufacturer's installation instructions.

Table 503.8 Through- the- Wall Direct- Vent Termination Clearances

Direct- Vent Appliance-Input Rating (Btu/hr)	Clearance from any air Opening into the Building (inches)
<10,000	6
>10,000 <50,000	9
>50,000 <150,000	12
>150,000	In accordance with the appliance manufacturer's instructions and not less than the clearances specified in section 503.8 item 2

## IMC

307.2.4 Traps – Condensate drains shall be trapped as required by the equipment or appliance manufacturer.

307.2.4.1 Ductless Mini- Split System Traps – Ductless mini- split equipment that produces condensate shall be provided with an incline check valve located in the drain line, or a trap.

307.2.5 Drain Line Maintenance – Condensate drain lines shall be configured to permit the clearing of blockages and performance of maintenance without requiring the drain line to be out.

307.3 Condensate Pumps – Condensate pumps located in uninhabitable spaces, such as attics and crawl spaces, shall be connected to the appliance or equipment served in such that when the pump fails, the appliance or equipment will be prevented from operating. Pumps shall be installed in accordance with the manufacturers' instructions.

404.1 Enclosed Parking Garages – Mechanical ventilation systems for enclosed parking garages shall operate continuously or shall be automatically operated by means of carbon monoxide detectors applied in conjunction with nitrogen dioxide detectors. Such detectors shall be listed in accordance with UL 275 and installed in accordance with their listing and the manufacturers' instructions. Automatic operation shall cycle the ventilation system between the following two modes of operation:

1. Full- on at airflow rate not less than 0.75 cfm per square foot of the floor area served.

2. Standby at an airflow rate of not less than 0.05 cfm per square foot of the floor area served.

502.20 Manicure and Pedicure Stations – Manicure and pedicure stations shall be provided with an exhaust system in accordance with Table 403.1.1, Note h. Manicure tables and pedicure stations not provided with factory- installed exhaust inlets shall be provided with exhaust inlets located not more than 12 inches horizontally and vertically from the point of chemical application.

## Clothes Dryer Exhaust

504.8.2 Duct Installation – Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

506.3.8 Grease Duct Cleanouts and Openings – Note 2: Sections of grease ducts that are inaccessible from the hood or discharge openings shall be provided with cleanout openings spaced not more than 20 feet apart and not more than 10 feet from changes in direction greater than 45 degrees.

506.5.2 Pollution- Control Units – The installation of pollution- control units shall be in accordance with the manufacturer’s installation instructions and all of the following:

1. Pollution- control units shall be listed and labeled in accordance with UL 1978.
2. Fans serving pollution- control units shall be listed and labeled in accordance with UL 762.
3. Pollution- control units shall be mounted and secured in accordance with the manufacturer’s installation instructions and the International Building Code.
4. Pollution- control units located indoors shall be listed and labeled for such use. Where enclosed duct systems, as required by Section 506.3.11, are connected to a pollution- control unit such unit shall be located in a room or space having the same fire- resistance rating as the duct enclosure. Access shall be provided for serving and cleaning of the unit. The space or enclosure shall be ventilated in accordance with the manufacturer’s installation instructions.
5. A clearance of not less than 18 inches shall be maintained between pollution- control unit and combustible material.
6. Roof- mounted pollution- control units shall be listed for outdoor installation and shall be mounted not less than 18 inches above the roof.

7. Exhaust outlets for pollution- control units shall be in accordance with Section 506.3.13.

8. An airflow differential pressure control shall be provided to monitor the pressure drop across the filter sections of a pollution- control unit. When the airflow is reduced below the design velocity, the airflow differential pressure control shall activate a visual alarm located in the area where cooking operation occur.

9. Pollution- control units shall be provided with a factory- installed fire suppression system.

10. Service space shall be provided in accordance with the manufacturer's instructions for the pollution- control unit and the requirements of Section 306.

11. Wash- down drains shall discharge through a grease interceptor and shall be sized for the flow. Drains, shall be sealed with a trap or other approved means to prevent air bypass. Where a trap is utilized it shall have a seal depth that accounts for the system pressurization and evaporation between cleanings.

12. Protection from freezing shall be provided for the water supply and fire suppression systems where such systems are subject to freezing.

13. Duct connections to pollution- control units shall be in accordance with Section 506.3.2.3. Where water splash or carryover can occur in the transition duct as a result of washing operation, the transition duct shall slope downward toward the cabinet drain pan for a length not less than 18 inches. Ducts shall transition to the full size of the unit's inlet and outlet openings.

14. Extra- heavy- duty appliance exhaust systems shall not be connected to pollution- control units except where such units are specifically designed and listed for use with solid fuels.

15. Pollution- control units shall be maintained in accordance with the manufacturer's instructions.

#### Commercial Kitchen Hoods

507.1.1 Operation – Commercial kitchen exhaust hood systems shall operate during the cooking operation. The hood exhaust rate shall comply with the listing of the hood or shall comply with Section 507.5. The exhaust fan serving a Type 1 hood shall have automatic controls that will activate the fan when any appliance that requires such Type 1 hood is turned on, or a means of interlock shall be provided that will prevent operation of such appliances when the exhaust fan

is not turned on. Where one or more temperature or radiant energy sensors are used to activate a Type 1 hood exhaust fan the fan shall activate not more than 15 minutes after the first appliance served by that hood has been turned on. A method of interlock between exhaust hood system and appliances equipped with standing pilot burners shall not cause the pilot burners to be extinguished. A method of interlock between an exhaust hood system and cooking appliance shall not involve or depend on any component of the fire extinguishing system.

The net exhaust volumes for hoods shall be permitted to be reduced during part-load cooking conditions, where engineered or listed multi-speed or variable speed controls automatically operate the exhaust system to maintain capture and removal of cooking effluents as required by this section. Reduced volume shall not be below that required to maintain capture and removal of effluents from the idle cooking appliances that are operating in a standby mode.

507.1.1.1 Multiple Hood Utilizing a Single Exhaust System – Where heat or radiant energy sensors are utilized in hood systems consisting of multiple hoods served by a single exhaust system, such as sensors shall be provided in each hood. Sensors shall be capable of being accessed from the hood outlet or from a cleanout location.

601.5 Return Air Openings – Return air openings for heating, ventilation and air- conditioning systems shall comply with all of the following:

1. Openings shall not be located less than 10 feet measured in any direction from an open combustion chamber or draft hood of another appliance located in the same room or space.
2. Return air shall not be taken from a hazardous or insanitary location of a refrigeration room as identified in this code.
3. The amount of return air taken from any room or space shall be not greater than the flow rate of supply air delivered to such room or space.
4. Return and transfer openings shall be sized in accordance with the appliance or equipment manufacturer's installation instructions, ACCA Manual D or the design professional.
5. Return air taken from one dwelling unit shall not be discharged into another dwelling unit.
6. Taking return air from a crawl space shall not be accomplished through a direct connection to the return side of a forced air furnace. Transfer openings in the crawl space enclosure shall not be prohibited.

7. Return air shall not be taken from a closet, bathroom, toilet room, kitchen, garage, boiler room, furnace room or unconditioned attic.

8. Return air shall not be taken from indoor swimming pool enclosures and associated deck areas.

## IPC

308.10 Thermal Expansion Tank Support – A thermal expansion tank cannot be supported by the piping connected to the tank.

Table 403.1 – Occupancy (Group) column has been deleted from table 403.1.

403.2 Separate Facilities – New exception number 4; Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.

405.3.1 Clearance of Plumbing Fixtures to Obstructions – The minimum distances from fixture's centerline to other fixtures or obstructions in clarified.

411.3 Water Supply – Where hot and cold water is supplied to an emergency shower or eye wash station the temperature of the water supply shall be controlled by a temperature actuated mixing valve complying with ASSE 1071.

412.10 Head Shampoo Sink Faucets – Head shampoo sink faucets shall be supplied with hot water that is limited to not more than 120 degrees by a water- temperature limiting device.

423.3 Footbaths and Pedicure Baths – The water supplied to specialty plumbing fixtures, such as pedicure chairs having an integral foot bathtub and footbaths, shall be limited to not greater than 120 degrees by a water- temperature device.

802.4.3.1 Laundry Tub Connection to Clothes Washer Standpipe – An alternative method for connecting a laundry tub drain, without a fixture trap, to a clothes washer standpipe is added to the code.

**2018 Plumbing Code Changes  
Supplemental Meeting Notes  
8/1/2018**

- 310.2 CSST – Offers different ways to be bonded and provides instructions on how to bond.
- 404.11.1 – Specifies steel tubing rather than just “metallic piping”.
- 503.5.11 – Insulation shield must be assembled around factory-built chimney so that it’s fastened down and can’t move.
- 601.5 – New section created specifically for Return Air Openings so that everything is listed under one section.
- IPC 308.10 – Thermal Expansion Tank Support. Must be secured to the wall, can’t be supported onto the heater itself.
- IPC 405.3.1 – Clearance of Plumbing Fixtures to Obstructions - Must have 30 inches between every fixture. 30 inches from centerline of one fixture to the centerline of another other fixture.