CITY OF
BROKEN ARROW
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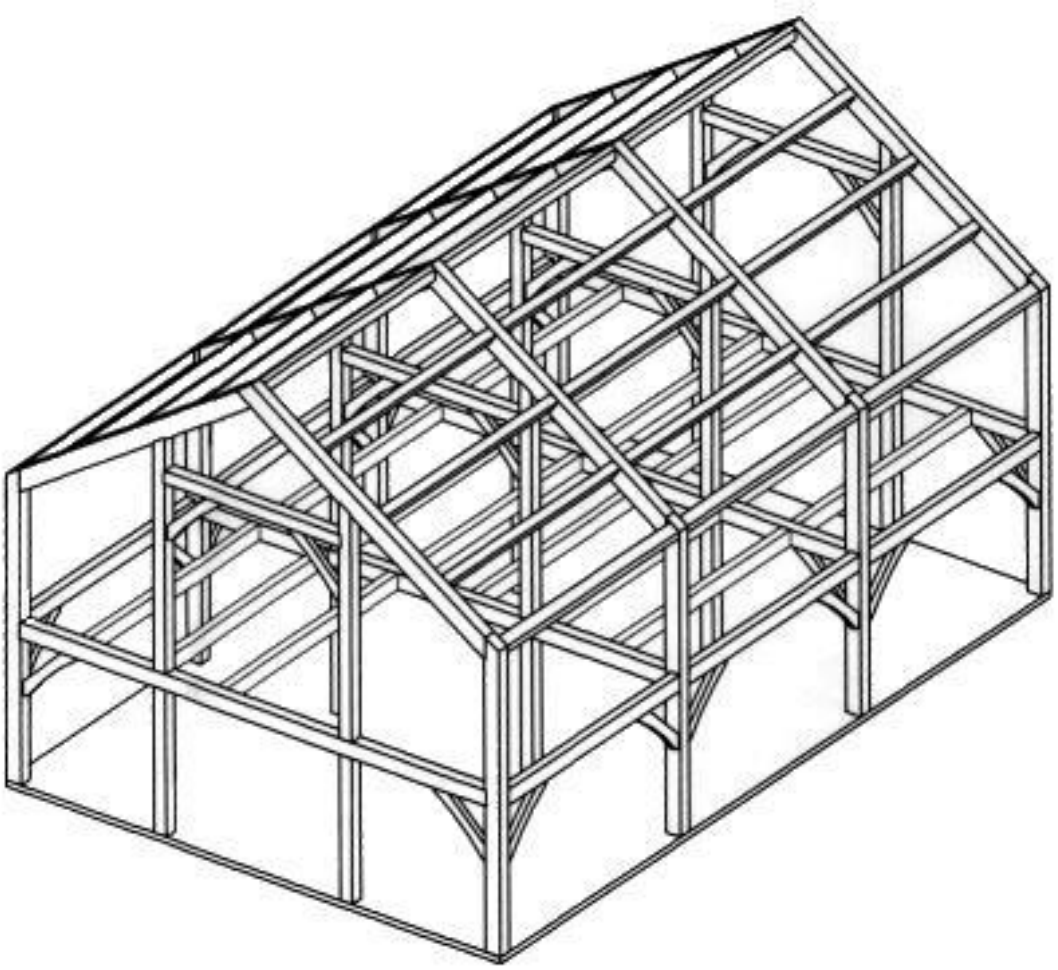
GENERAL INFORMATION AND INSPECTION CHECKLISTS FOR ONE & TWO FAMILY RESIDENTIAL CONSTRUCTION



Based on the 2009 International Residential Code and the Broken Arrow City Codes

September 6, 2011

TABLE OF CONTENTS

Miscellaneous Requirements

TABLE OF CONTENTS CONTINUED

RESIDENTIAL INSPECTION CHECKLISTS

STANDARD COMMENTS CODES LISTINGS (*CORRECTION CODES*)

This informational handout is based on the IRC one and two family dwelling code, and other Broken Arrow City Ordinances.

The purpose of this handout is to better present and clarify code interpretation and enforcement for construction of a one or two family dwelling; however, it by no means attempts to address every code item.

The Building Inspection Division's mission is to work with the Contractors and the public so that the consumer may purchase a quality home that meets or exceeds the requirements of the codes adopted by the City of Broken Arrow.

REQUIRED INSPECTIONS

For on-site construction, the building inspectors, upon notification from the permit holder or his agent, will make all necessary inspections and will either approve that portion of the construction as completed or disapprove that same portion, state why on an inspection slip and post the inspection slip in a conspicuous place. Inspections consist of but are not limited to the following items.

1. **Footing:** Commonly made after areas are excavated required steel is in place prior to the placing of concrete. **(*Building permit and site plan must be on site at time of inspection*.)**
2. **Foundation (Stem Wall):** Commonly made after footing concrete has been placed, forms erected and required steel is in place prior to placing of concrete; or during and upon completion of laying concrete block foundation.
3. **Steel Slab/Post-tension Inspection:** Inspection required prior to the placing of concrete.
4. **Saw-pole:** Usually at footing-foundation stage prior to framing.
5. **Plumbing Rough:** Inspection required before any concealment and before slab inspection
6. **Plumbing, Top-out Inspections:** Inspection required before any concealment
7. **Water Service Line Inspection:** Inspection required prior to any concealment.
8. **Building Sewer Line and Tap Inspection:** Inspection required prior to any concealment.
9. **Mechanical Duct Overhead Inspection:** Inspection required before any concealment.
10. **Gas Line and/or Gas Meter Inspection:** Gas line inspection required before any concealment gas meter inspection required prior to gas meter being installed.
11. **Electrical Rough-in Inspections:** Inspection required before any concealment.
12. **Framing/ Wall Sheathing Inspection:** Required after the roof, all framing, fire stopping, draft stopping and bracing are in place. **(*Plumbing top-out, Mechanical duct overhead and Electrical rough-in inspections shall be approved prior to framing inspection*.)**
13. **Dwelling Unit Separation (*Fire Walls*) Inspection:** Required after each layer of sheetrock is installed.
14. **Temp Electric:** After all rough-in inspections are approved, usually at drywall stage
15. **Final Electrical, Plumbing and Mechanical Inspections:** Made after all work is completed.
16. **Final Building Inspection:** Made after building is complete and yard and driveway are completed. **(*Final Electrical, Plumbing and Mechanical Inspections shall be approved prior to building final*.)**

OCCUPANCY: No building shall be occupied until a final building inspection is approved.

FOOTINGS

The minimum dimensions for footings are based on loading and an assumed allowable soil pressure of 2000 pounds per square foot. Footing widths or the depth of footings below natural grade may have to be increased if the supporting soil is of a type not having an allowable bearing pressure of at least 2000 pounds per square foot.

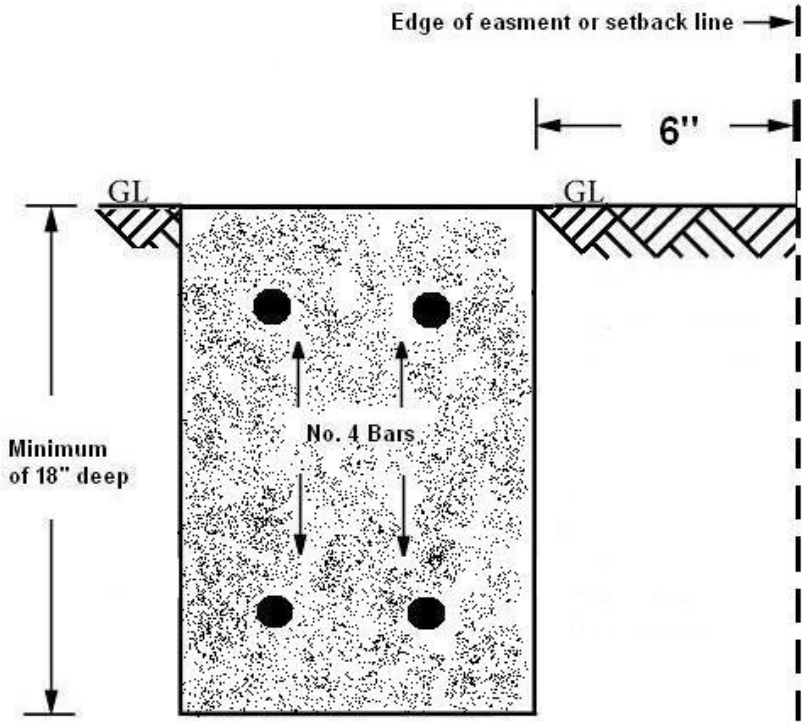
THE FOLLOWING ARE MINIMUM REQUIREMENTS FOR FOOTINGS

Foundations with stem walls: Foundations with stem walls shall have installed a minimum of two No. 4 bars within 12" of the top of the wall and two No. 4 bars located 3 inches to 4 inches from the bottom of the footing.

Slabs on ground with turned-down footings: Slab on ground with turned-down footings shall have a minimum of two No. 4 bars at the top and bottom of the footing.

Trench footings: Trench footings shall have a minimum of two No. 4 bars at the top and two No. 4 bars located 3 inches to 4 inches from the bottom of the footing.

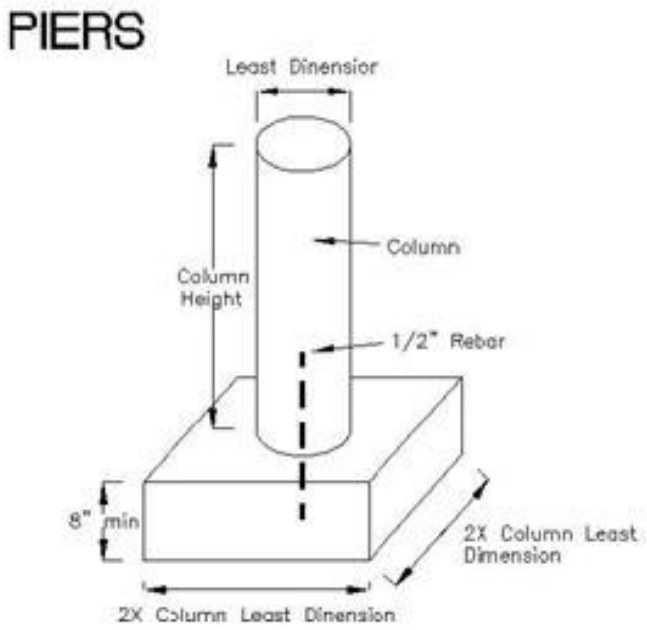
Survey submittal inspections: The Chief Building Official may require a survey submittal inspection when the structure foundation (edge of ditch) is found to be less than six inches (6") from all easements, street rights-of-ways or required setbacks at the time of the foundation inspection. The submitted survey shall be prepared and signed by a registered professional engineer or land surveyor licensed in the State of Oklahoma, containing the location of the foundation, easements, street rights-of-ways, required setbacks and property lines. The survey shall be submitted to the Chief Building Inspector for review and approval.



PIERS AND COLUMNS

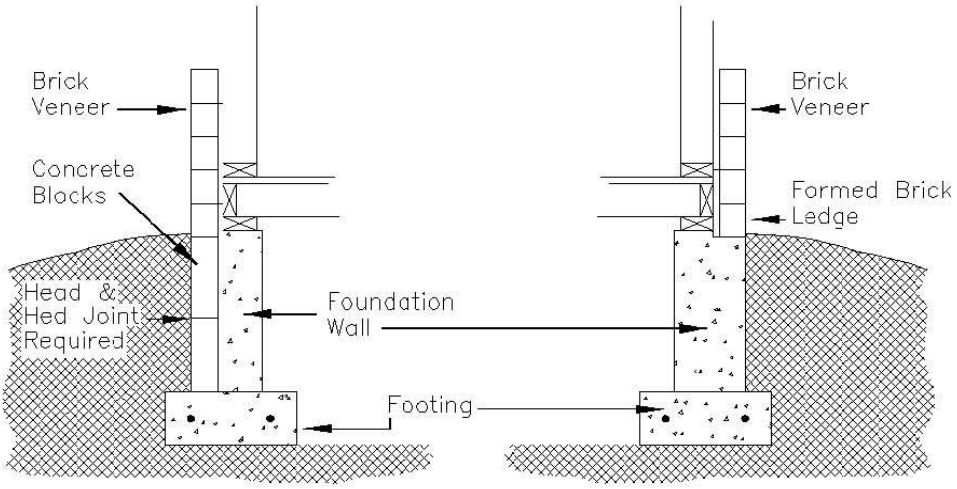
Piers and columns are vertical members usually made of concrete, brick, block, steel, or wood and are used to support the floor system. Piers and columns may be used to support the complete structure or they may be used in conjunction with the foundation wall and provide intermediate support between riders and beams.

- The unsupported height of columns shall not exceed ten (10) times their least dimension. Block or hollow masonry unit columns are required to have the cells filled with concrete when their unsupported height exceeds four times their least dimension.
- Hollow columns shall be capped with four (4) inches thick solid masonry.
- Pier column to be at least eight (8) inches thick.
- Shims for floor joist or girders shall be of hardwood or steel plates. Shim width shall not be less than girder width.
- Piers and Columns may require an engineered design.



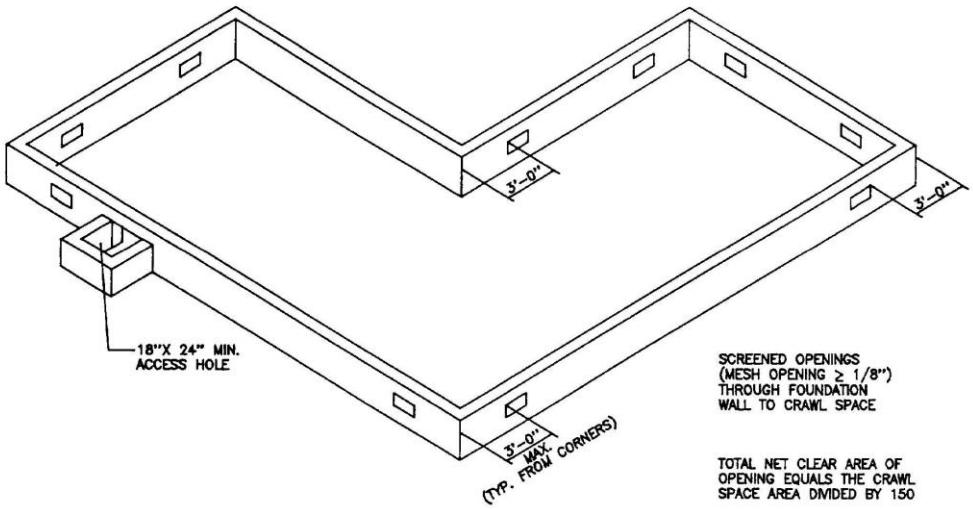
BRICK LEDGE

- Brick or masonry veneers must be supported by the foundation and footings
- The brick ledge can be formed in the foundation wall or by concrete units bearing on the footing, head and bed joints are required.
- Plywood under brick is required to be covered with a vapor barrier.
- Wall ties to be spaced a minimum of 18 inches horizontal and 18 inches vertical
- Stem walls 24" or greater in height shall have wall ties spaced a minimum of 18 inches horizontal and 18 inches vertical
- Base flashing and weep holes are required



CRAWL SPACE

- Minimum height of crawl space to bottom of floor joist is 18 inches.
- Minimum access hole required is 18"X24".
- Ventilation openings may be omitted on one side
- Ventilation opening is 1 square foot for each 150 square feet of crawl space



FOUNDATION

- All foundation walls shall be a minimum of sixteen inches (16") in height.
- Foundation walls made of concrete or block of habitable rooms located below grade shall be water proofed.
- Drain lines shall be provided around all foundations enclosing usable or habitable space below grade, Drain lines shall discharge by natural means.
- All bottom sill plates in contact with concrete and are less than 8 inches from exposed ground shall be treated wood or wood naturally resistant to decay.

DRAINAGE

Lots shall be provided with adequate drainage and shall be graded so as to drain surface water away from foundation walls. The grade away from foundation walls shall fall a minimum of six (6) inches within the first ten (10) feet.

FRAMING

GIRDERS

- Girders are the main horizontal support members upon which the floor system is laid. They are supported by posts, beam pockets, and piers.
- The arrangement of the girders under the floor system is dependent on the design of the floor system itself and the load it is expected to carry. Some girders are positioned to carry only floor load while others will have to support floors, walls and roof structures. This can result in girders of various size and spacing. The most common method of laying out girders is to determine the size of the largest girder required and use girders of like size in all locations where they will be needed. This results in a uniform design and makes the job of framing easier.

FLOORS

- All lumber for joists, beams and girders shall be grade marked by an approved agency
- The ends of each joist, beam, or girder shall have not less than 1 1/2 inches bearing on wood or metal and not less than three (3) inches on concrete or masonry.
- Joists attached into the sides of a wood girder shall be supported by approved framing anchors.
- Notches in the top or bottom of joist shall not exceed 1/6th the depth of the joist and can not be located in the middle 1/3 of the span.
- Holes bored in joists shall not be larger in diameter than 1/3rd the depth of the joist.
- Joists under bearing walls shall be doubled. Double joists which are separated to permit installation of piping or vents shall be solid blocked at maximum spacing of four (4) feet on center.
- The clear span of floor joist shall not exceed the values set forth in the IRC.
- Openings over four (4) feet shall be framed with a header and double trimmer joists.
- Floor trusses shall be designed and installed in accordance with approved engineering practices. Floor trusses shall not be drilled, cut notched, or altered in any manner unless so designed.

WALLS

- Load-bearing dimension lumber for studs and plates and headers shall be grade-marked by an approved agency.
- Studs are to be a minimum grade 3#.
- A stud can not be cut or notched more than 25% of its width.
- Drilling and notching. Where top plates are cut, drilled or notched due to piping or duct work more than 50% of its width, the plates shall be reinforced with 24 gauge steel angle or equivalent support.
- Fire stopping shall be provided to cut off all concealed draft openings both horizontal and vertical. In concealed spaces of stud walls and partitions including furred spaces, at the ceiling and floor level. At all soffits, drop ceilings, cove ceilings and in concealed spaces between stair stringers at the top of bottom of the run.
- Draft stop at openings around vents, pipes, ducts, chimneys and fireplaces at ceiling and floor level.
- Wall bracing every 25 feet of wall length by 1X4 let in, metal straps or structural sheathing.
- Cripple walls shall be framed of studs not less in size with studding above, with a minimum length of 14 inches or shall be framed of solid blocking. When exceeding four (4) feet, studs will be sized for an additional story.

CEILING AND ROOF

- New concepts in ceiling design have brought about new configurations in framing methods and introduced assemblies such as stiffbacks, A-frames and trusses to enable the new concepts in ceiling design to be accomplished. Some of these designs are so complex that it is necessary to consult with an engineer to insure structural integrity.
- All load-bearing dimension lumber for ceiling joists shall be grade marked by an approved agency and shall be a minimum of grade #3.
- Dimension lumber used for the fabrication of stiffback, A-frames, truss assemblies or other load-bearing assemblies shall be a minimum grade #3.
- Load-bearing dimension lumber used in roof framing shall be grade marked and shall be a minimum of grade #3. This would include all rafters, purlins, purlin bracing and all hip and valley rafters and ridge boards.
- Beams used to support raised ceilings shall have solid support to bottom plate.
- Rafters shall be nailed to ceiling joists to form a continuous tie between exterior walls. Where rafters are not parallel, they shall be tied with rafter ties, located as near the plate as practical. Rafter ties shall not be spaced more than four (4) feet on center
- Bearing: The ends of each rafter or joist shall not have less than 1 1/2 inch bearing on wood or metal and three (3) inches on concrete.
- Cutting and notching: Notching at the ends of the rafters or ceiling joists shall not exceed 1/4 the depth. Notches in the top or bottom of the joists shall not exceed 1/6 of the depth and shall not be located in the middle 1/3 of the span.
- Bored Holes: Holes bored in rafter and ceiling joists shall not be within two (2) inches of the top and bottom. Their diameter shall not exceed 1/3 the depth of the member.
- Ridge boards shall be at least one (1) inch nominal thickness and depth shall not be less than the cut at end of the rafter.
- Hips and valley rafters: There shall be a hip or valley rafter not less than two (2) inches nominal thickness and not less in depth than the cut at the end of the rafter at every hip and valley. All hip and valley rafters shall be supported at the ridge by a brace to a bearing partition or be designed to carry and distribute the specific load at that point.
- Lateral support and bridging: Rafter and ceiling joists shall be provided with lateral support at points of bearing to prevent rotation. Rafters and ceiling joists having a depth-to-thickness ratio exceeding 6 to 1 (based on nominal dimensions of 2”X12” or wider) shall be supported laterally by solid blocking, diagonal wood or metal bridging or a 1” X 3” bridging nailed to the rafter or ceiling joist at intervals not exceeding ten (10) feet.

DWELLING UNIT SEPERATION (*FIRE WALLS*)

- **Two Family Dwellings:** Dwelling units in two-family dwellings shall be separated from each other by a wall and/or ceiling and floor assemblies of not less than two-hour fire-resistance rating when tested in accordance with ASTM E 119. Fire-resistance rated floors, ceilings and wall assemblies shall extend to and be tied against the exterior wall, and wall assemblies shall extend to the underside of the roof sheathing. Roof decking or sheathing shall be of noncombustible materials or approved fire-retardant-treated wood for a distance of four feet (4') (1219 mm) on each side of the fire rated wall assembly, or two (2) layers of five-eighths inch (5/8") (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing for a distance of four feet (4') (1219 mm) on each side of the fire rated wall assembly.

    (1) *Exception:* A fire resistance rating of one (1) hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13.

- **Townhouses:** Townhouses shall be separated from each other by a wall of not less than two-hour fire-resistance rating when tested in accordance with ASTM E 119.

- **Parapets:** Parapets shall be provided for townhouses as an extension of the common wall in accordance with the following:

    (a) Where roof surfaces adjacent to the wall are at the same elevation, the parapet shall extend not less than thirty inches (30") (762 mm) above the roof surfaces.

    (b) Where roof surfaces adjacent to the wall are at different elevations and the higher roof is not more than thirty inches (30") (762 mm) above the lower roof, the parapet shall extend not less than thirty inches (30") (762 mm) above the lower roof surface.

        1. Exception: A parapet is not required in the two cases above when the roof is covered with a minimum C roof covering, and the roof decking or sheathing is of noncombustible materials or approved fire-retardant-treated wood for a distance of four feet (4') (1219 mm) on each side of the wall, or two (2) layers of five-eighths-inch (5/8") (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing for a distance of four feet (4') (1219 mm) on each side of the wall.

    (c) A parapet is not required where roof surfaces adjacent to the wall are at different elevations and the higher roof is more than thirty inches (30") (762 mm) above the lower roof. The wall construction from the lower roof to the underside of the higher roof deck shall not have less than a two-hour (2 hr) fire-resistive rating. The fire-resistive rating shall be rated from exposure from both sides.

MISCELLANEOUS REQUIREMENTS

ATTIC VENTILATION

- Enclosed attics and rafter spaces where ceilings are applied directly to the under side of roof rafters shall have cross ventilation for each separate space.
- The net free ventilating area shall not be less than 1 to 150 of the area of the space ventilated except that the area may be 1 to 300, provided at least 50% of the required ventilating area has ventilators located in the upper portion of the space to be ventilated, at least 3' above eave or cornice vents.

ATTIC ACCESS

- Buildings with combustible ceiling or roof construction shall have an attic access opening to attic areas that exceed 30 square feet and have a vertical height of 30 inches or more.
- The rough framed opening shall not be less than 22 inches by 30 inches accessible by pull down ladder and located in the hallway or other readily accessible location. 30 inch minimum unobstructed headroom in the attic space shall be provided at some point above the access opening. Where mechanical equipment is located in attics the rough framed opening shall be large enough to get the largest piece of equipment out of the attic.

ATTACHED GARAGES

- Openings from a garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with either solid wood doors, not less than 1 3/8" thickness or 20-minute fire rated doors or equivalent. No window is allowed in the door.
- The garage shall be completely separated from the residence and its attic area by means of 1/2" gypsum board or equivalent applied to the garage side.

LANDINGS

- A minimum 3'X3' landing shall be required on each side of an egress door. The floor or landing shall not be more than 1 1/2" lower than the top of the threshold. EXCEPTION: The landing at the exterior of an exterior doorway shall not be more than 7 3/4" below the top of the threshold.

STAIRS

- Stairways shall not be less than 3 feet in clear width and the minimum headroom shall not be less than 6' 8". The maximum riser height shall not be more than 7 3/4" and the minimum tread width shall not be less than 10". The greatest riser height in any set of stairs shall not exceed the smallest by more than 3/8".

HAND RAILS

- Hand rails shall be provided on all stairs having 4 or more risers. Handrails shall be continuous the full length of the stairs, without interruption. The end shall be returned or terminate in newel posts or safety terminals.
- Handrails are to be provided on at least one side of the stair and on the outside radius of spiral or wider stairs. Hand rails projecting from a wall shall have a space of not less than 1 1/2" between the hand rail and the wall. A 34” minimum and a 38” maximum height are required.

GUARD RAILS

- Guard rails shall be provided on porches, balconies or raised floor surfaces located more than 30" above the floor or grade below and shall be at least 34” in height. Openings in vertical and horizontal members shall be such that a 4" sphere cannot pass through.

BATHROOM VENTILATION

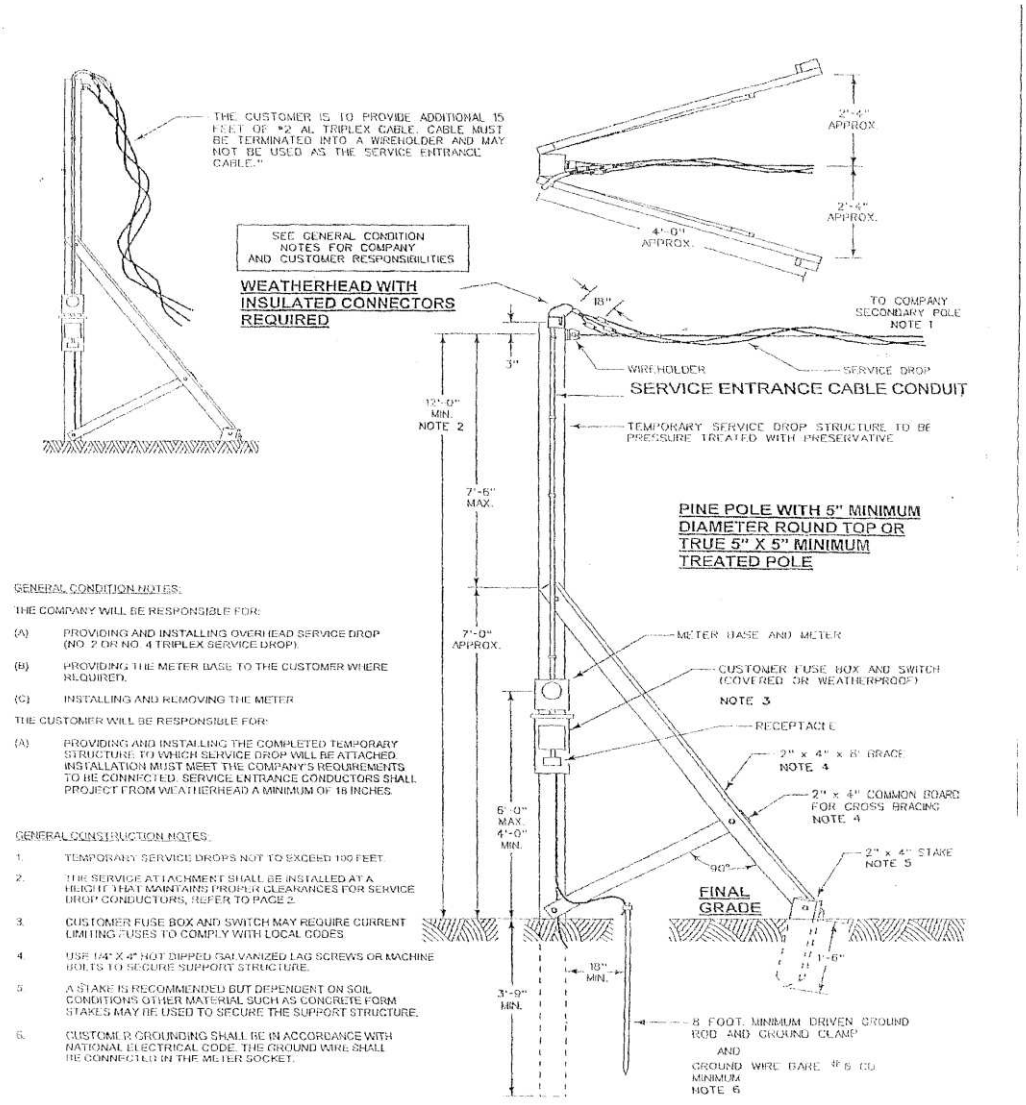
- Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet, one-half of which must be open able. Exception: The glazed areas shall not be required where artificial light and an approved mechanical ventilation system are provided.
- Bathroom exhausts shall be discharged to the outdoors and shall not be exhausted into an attic, soffit, ridge vent or crawl space.

CLOTHES DRYER EXHAUST

- The maximum length of a 4 inch diameter exhaust vent shall not exceed 25 feet from the dryer location to wall termination. There shall be a reduction in maximum length of 2.5 feet for each 45 degree bend and 5 feet for each 90 degree bend shall apply, where length is exceeded.
- Dryer vent systems shall be independent of all other systems and shall convey the products of combustion and moisture to the outdoors.
- Dryer vent systems shall terminate not less than 3 feet in any direction from openings into buildings.
- Dryer vent systems shall terminate not less than 3 feet in any direction from a condensing unit.
- Dryer vent systems shall terminate not less than 8 inches from finished ground level.
- Dryer vent systems terminations shall be equipped with a backdraft damper.
- Screens shall not be installed at the duct termination.

SAW-POLE REQUIREMENTS

- Copper ground from meter base to grounding rod
- G.F.I. protected receptacles
- Service disconnect with weather-proof enclosure
- Interior cover around breaker
- Receptacle boxes listed for outdoors
- See illustration below if supplied by overhead conductors



AEP TEMPORARY SERVICE INSTALLATION
FROM EXISTING OVERHEAD SECONDARY

APRIL 28, 2000
PAGE 1 OF 2

ELECTRICAL

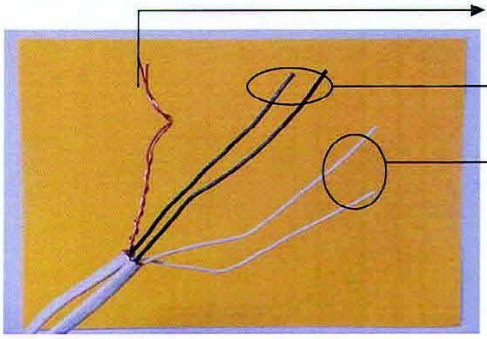
- All 125 volt, single phase, 15 & 20 amp receptacles in these areas shall be GFCI protected: Bathrooms, garages, crawl spaces, unfinished basements, kitchen where the receptacles are installed to serve the countertop surfaces, laundry, utility, wet bar sinks where the receptacles are within 6' of the outside edge of the sink and boathouses. *Exception:* Outdoor receptacles not readily accessible.
- All 120 volt, single phase, 15 & 20 amp branch circuits supplying outlets installed in family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreations rooms, closets hallways and similar areas shall be protected by a combination type arc-fault circuit interrupter.
- All 125 volt, single phase, 15 & 20 amp receptacles shall be listed tamper-resistant receptacles except in the following locations:
  (1) Receptacles located more than 5 1/2 feet (1.7m) above the floor.
  (2) Receptacles that are part of a luminaire or appliance.
  (3) A single receptacle or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and-plug connected.
  (4) Non-grounding receptacles used for replacement.
- One 20 AMP (12-2 wire) branch circuit shall be provided to supply the laundry circuit. This circuit shall have no other outlet.
- Large appliance grounding must have 4 conductors, including an insulated neutral.
- All electrical wiring must have nail protection (shield plates) across all studs, top and bottom plates where wires pass within one and one quarter inch of the edge.

SMOKE DETECTORS

Smoke detectors shall be installed and maintained in the following locations. (1)In all sleeping areas. (2) In every room in the path of the means of egress from the sleeping area to the door leading from the guestroom or suite. (3) In each story, including basements. Smoke detectors shall be interconnected in such a manner that actuation of one alarm will actuate all of the alarms. Battery backup is required in addition to AC primary source. AC power shall be on a dedicated circuit.

Box Fill

All ground wires are counted once . Based on largest conductor in the box Table –370-16(b) shows allowance #'s



All other conductors individually are added together with devices, and ground wires for Box Fill calculation Table 370-16(b) shows allowances for sizes of wire

Table 370-16(b). Volume Allowance Required per Conductor

Size of Conductor (AWG)	Free Space Within Box for Each Conductor (in.3)
18	1.50
16	1.75
14	2.00
12	2.25
10	2.50
8	3.00
6	5.00

(This is an example) This box contains three 12/2wg's and three 14/2wg's in a 32cu in box. There are six #12's in this box, the allowance for #12 is 2.25. There are six #14's, the allowance for this size of wire is 2.00. All of the ground wires are counted as one allowance, based on the largest conductor in the box which is #12 (2.25),one allowance for all grounds is 2.25. This is a 2-gang box for two devices. A double volume allowance is applied to the devices (NEC 370-16)(4) based on the largest conductor in the box which is #12 the allowance is 2.25x 2 for each device in the box.
The total box fill is calculated here.

The allowance for devices is doubled based on each yoke or strap. The Code uses this rule for box fill to be of sufficient size to provide free space for all enclosed conductors. Each yoke or strap applies to each screw on each device based on largest conductor in the box. NEC (370-16) (4)

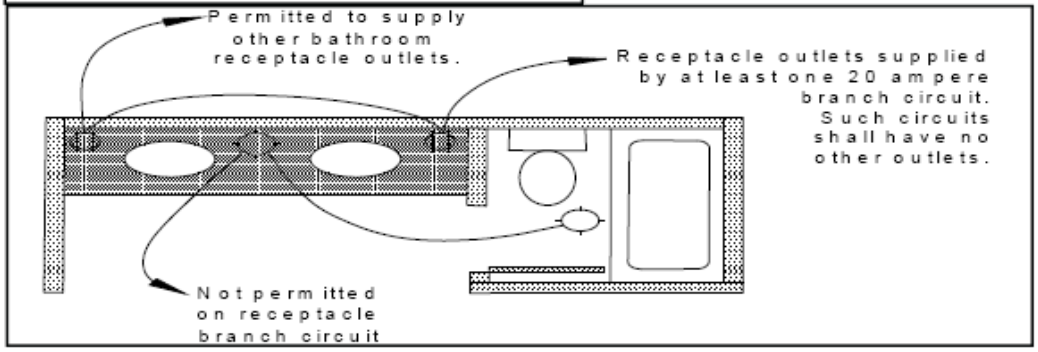
6 # 12's X 2.25 = 13.5
6 # 14's X 2.00 = 12
Grounds X 2.25 = 2.25
Each device 4.5 = 9

36.75"

The total box fill exceeds the boxes' specification by 4.75 inches.

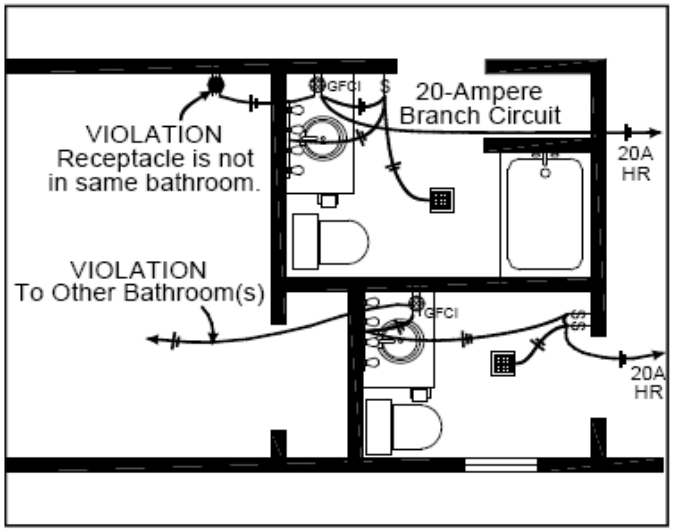
ELECTRICAL

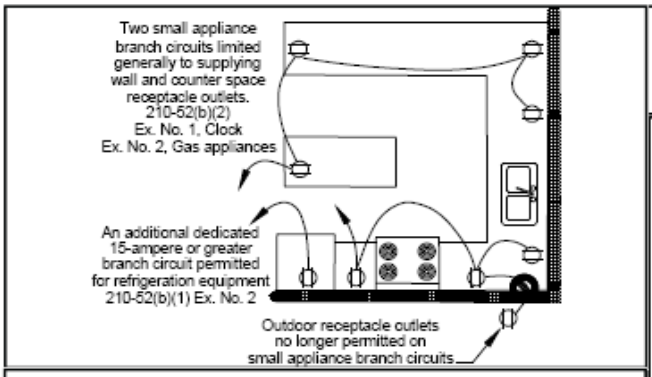
BATHROOM BRANCH CIRCUIT



BATHROOM RECEPTACLE CIRCUIT(S)-Dwelling
Section 210-11(C)(3) Exception

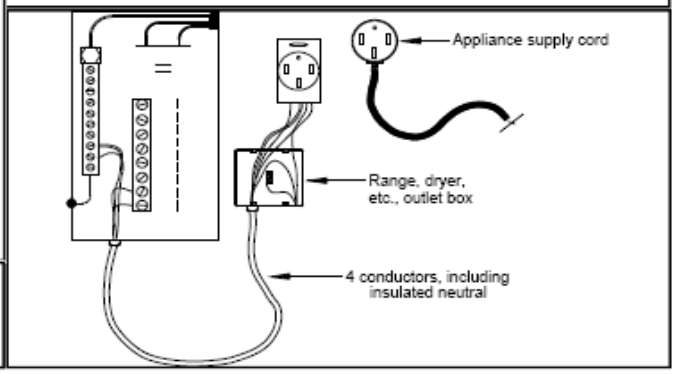
Where a 20-ampere circuit supplies a single bathroom, outlets for other equipment within the same bathroom can be supplied in accordance with Section 210-23(a)





SMALL APPLIANCE GROUNDING

LARGE APPLIANCE GROUNDING



PLUMBING CONSIDERATIONS

Inspection required: New plumbing work and parts of existing systems affected by new work or alterations shall be inspected by the building inspector to ensure compliance with the requirements of this code.

Concealment: A plumbing or drainage system or part thereof shall not be covered, concealed or put into use until it has been tested, inspected and approved by the Building Inspector.

Size: The water service pipe shall be of sufficient size to furnish water to the dwelling in required quantities and pressures, but in no case shall it be less than 3/4 inch nominal diameter.

Service Valve: Each dwelling unit shall be provided with an accessible main shut off valve near the entrance of the water service. The valve shall be of a full way type.

Relief valve: Equipment used for heating or storing hot water shall be protected by a relief valve and shall have a discharge tube on relief valve down to within 6" of the floor.

Clean-out: There shall be a Clean-out near the junction of the building drain and building sewer. Such clean-outs may be installed outside of the building within 5 feet of the building wall; the accessible, minimum clearance in front shall be 18 inches on 3 inch on larger pipes and 12 inches on smaller pipes.

Horizontal drainage piping slope: Horizontal drainage piping shall be installed in uniform alignment at uniform slopes not less than 1/4 inch per foot for 3 inch diameter and less, and not less than 1/8 inch per foot for diameters of 4 inches or more.

Required drain and vent stack: Building shall have at least one soil stack running from the building drain up through the building, with the stack terminating outdoors above the topmost branch.

Vent stack connection at base: Vent stacks shall connect full size at their base to the drainage system, below the lowest fixture branch.

Vent slope: All vent pipes shall be sloped and connected so as to drain back to the soil or waste pipe by gravity. All drain waist-vent piping must have nail protection (shield plates) across all studs, top and bottom plates where these pipes pass through within one and one half inch of the edges (IPC305.8)

Drain waste vent: All drain waste-vent piping must have nail protection (shield plates) across all studs, top and bottom plates where these pipes pass through within one and one-half inches of the edges. All water supply piping must have the same protection described above. IPC305.8. All pipes going under the footing should be incased in gravel and all pipes going through the footing should be in a sleeve

Shower and bathtub control valves: All bath tubs and showers shall be equipped with control valves of the pressure balance, the thermostatic mixing or the combination pressure balance/thermostatic mixing valve types with high limit stops, set to a maximum temperature of 120 degree F.

Floor Drains: Floor drains shall have a waste outlet not less than 2 inches in diameter with removable strainer.

Whirlpool Bathtubs: Access panel, a door or panel of sufficient size shall be installed to provide access to the pump for repair and/or replacement.

MECHANICAL CONSIDERATIONS

The installation of all HVAC appliances shall conform to the conditions of their label and the manufacturer's installation instructions. The manufacturer's installation and operating instructions shall remain attached to the appliances.

Equipment Located in Garages

- Appliances that generate a glow, spark or flame capable of igniting flammable vapors and located in a garage or basement shall be installed with the burners, burner ignition devices or heating elements and switches at least 18 inches above the floor level.
- These appliances shall have combustion air taken from and the products of combustion discharged to, the exterior of the garage.
- Doors from garage to living area shall be solid core wood minimum 1 3/8 or steel door with a minimum 20 minute rating.
- Doors on furnace rooms that open into the garage shall have a threshold or a sweep.

Equipment Located in Attic or Crawl Space

- When equipment is located in attic or crawl space on opening or passageway of 20 inches wide and 30 inches long minimum is required for access and servicing.
- Flooring shall extend a minimum 30 inches in width along the control side of equipment with a 30 inch high clear working space on all sides.
- A permanent electric outlet and lighting fixture shall be provided near the equipment which shall be controlled by a switch located at the passageway opening.

Appliance and Gas Connection

- Gas appliances and equipment shall be connected by rigid pipe, tubing or flexible connectors. A union shall be installed between the appliance and the appliance shut off valve. Every gas outlet shall have an individual shut off valve.

Fireplaces

- Zero clearance fireplaces shall be installed according to manufacturers' installation instructions.

Chimneys and Vents

- Termination chimneys shall extend at least 2 feet higher than any portion of the building within 10 ft. but shall not be less than 3 ft.
- The horizontal run of an un-insulated connector to a natural draft chimney shall not exceed 75% of the height of the vertical portion of the chimney above the connector. Insulated connector not to exceed 100% of vertical portion.

Combustion Air

- Volume of space where furnace is located must be greater than 50 cubic feet per 1,000 BTU/h.
- If space does not meet requirement; two openings (one within 12" of the top and one within 12" of the bottom) are required. Each will have an area equal to 1 square inch for each 1000 BTU/h.

Locking Access Port Caps

- Refrigerant access ports located outside shall be fitted with locking-type tamper-resistant caps.

Policy for installation of Corrugated Stainless Steel Tubing (CSST)

Effective: January 1, 2010

1. **Purpose:** This policy establishes the installation requirements for Corrugated Stainless Steel Tubing generally called CSST. The following requirements are in addition to the requirements listed in the most recent adopted Fuel Gas Code and International Residential Code. The manufactures installation requirements shall be followed when more restrictive.

2. **Background:** Many months have been spent determining the most effective approach to establish an effective installation policy that is cost effective and safe as can be achieved. Several cases have been reviewed along with meeting with local installers, manufacture representatives, and home owners. These meetings resulted in the same conclusion that a change in the installation of this product was needed.

3. **Policy:**

    a. Corrugated Stainless Steel Tubing shall be permitted to be used as approved in the most recent codes that have been adopted. Current CSST approval codes are 2006 Fuel Gas Code Section 403.5.4 and 2006 International Residential Code G2414.5.3.

    b. Corrugated Stainless Steel Tubing shall be installed to meet the installation requirements of sections G 2415 and Fuel Gas Code section 404.1. The following installation requirements shall be used in addition to the requirements listed in the adopted codes.

    c. CSST shall not be allowed within the space between roof rafters.

    d. CSST shall not be allowed on the roof deck side of insulation installed between rafters.

    e. CSST shall not enter the attic by passing through the top plate of an exterior wall.

    f. CSST shall be installed with approved change in direction fittings per the manufactures instructions.

    g. CSST shall not be installed by lying on the top side of ceiling Joist.

    h. CSST installed in the attic shall be allowed only where it can be supported by manufactures recommended supports attaching it to the roof rafters.

    i. CSST manifolds and regulators shall be installed within 36 inches of the attic access for service. The attic access shall be installed as modified by city amendment. The manifold and regulator installation shall be a minimum of 36 inches above a service platform sized to meet all requirements for appliances in attics Section 306.3 of the 2006 International Mechanical Code. The installation shall be substantially supported. A light for service as required by Section 306.3.1 of the 2006 International Mechanical Code.

Policy for installation of Corrugated Stainless Steel Tubing (CSST) Continued

j. CSST shall be installed with a minimum of 6 inches separation from HVAC ductwork, Electrical wiring, Communication wiring, Metal electrical fixture boxes and their supports, or any other material that may create a path to ground.

k. A minimum of 6 inches shall be maintained between the CSST and house wiring located within a wall cavity.

l. CSST shall be bonded by a minimum bare number 6 solid copper wire. The bonding wire shall be attached to a lug added for that purpose in the main load center.

m. CSST bonding wire shall be attached to a brass nut located on the CSST manifold, with the other end connecting to the lug added in the main load center.

n. CSST bonding shall be installed by a licensed electrical contractor that is registered with the City of Broken Arrow.

o. CSST with damaged outer covering shall be replaced.

p. CSST shall not be spliced.

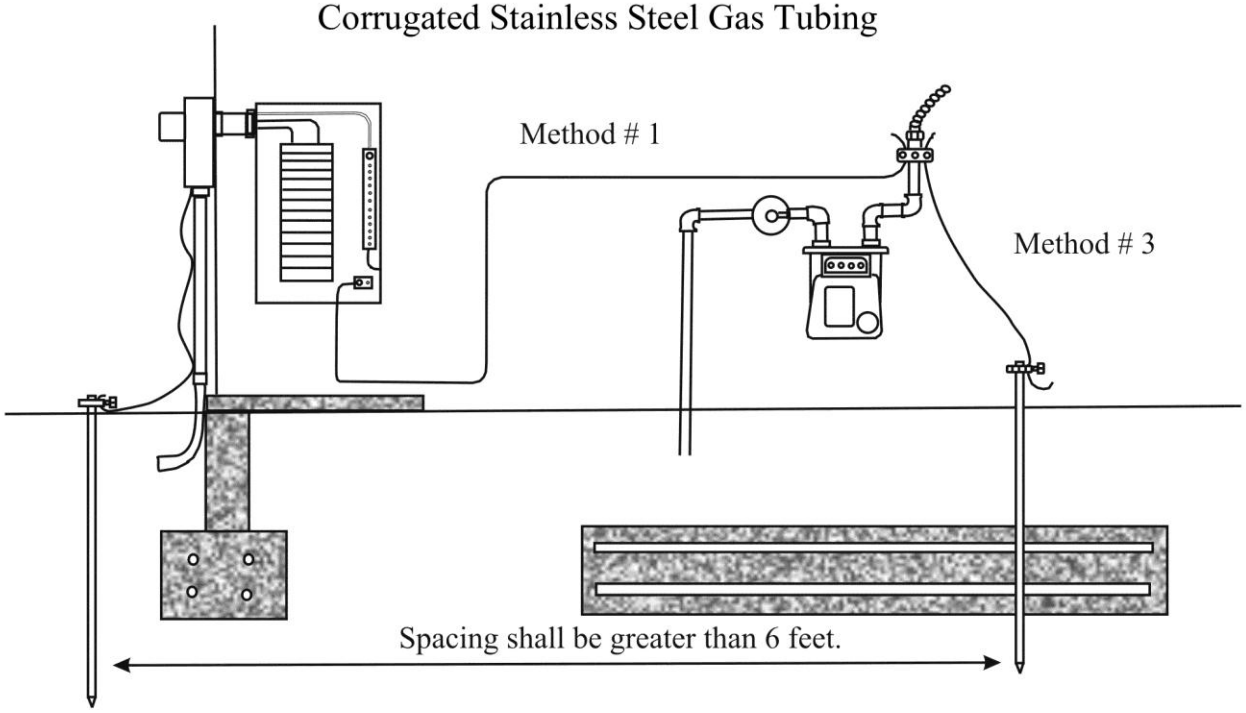
q. In Hybrid systems CSST shall not pass through walls.

r. CSST used to repair an existing black pipe system shall be installed to meet the connector requirements as stated in Section 411 of the 2006 International Mechanical Code.

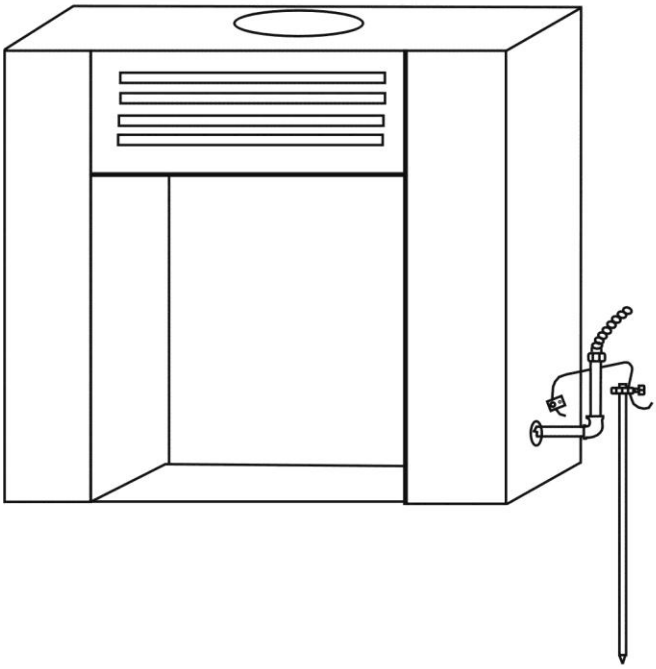
s. When a CSST system is repaired or when equipment supplied by a CSST system is replaced the system shall be bonded to meet the current bonding requirements in place at the time of replacement.

CSST GAS TUBING BONDING

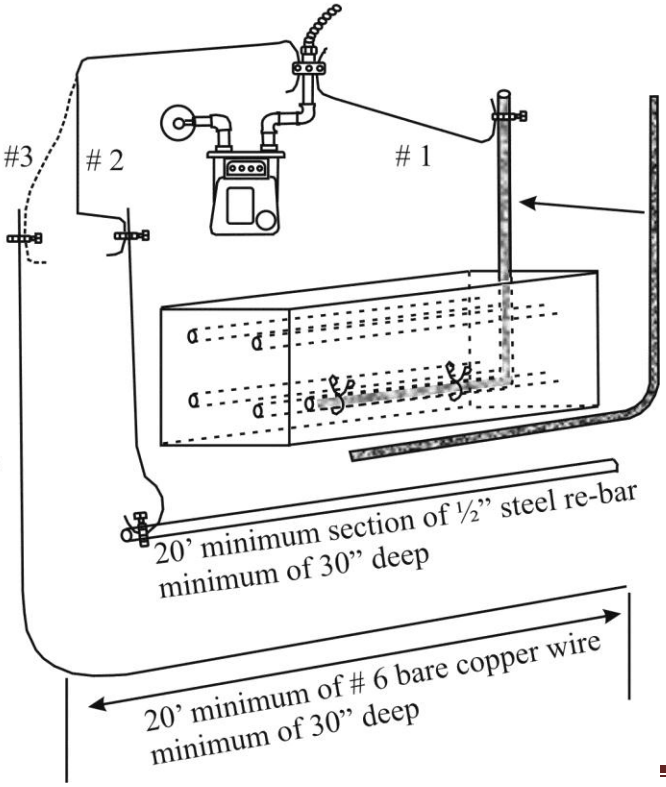
Corrugated Stainless Steel Gas Tubing



Required # 1



Method # 2



CONTRACTOR/BUILDER RESPONSIBILITIES

- All houses shall have address posted on property during construction. Permanent address must be posted before occupancy.
- Permit and approved site plan shall be posted on site.
- Construction debris.
    (a) Construction debris shall not be allowed to blow off the site of origin.
    (b) Trash containers of sufficient size and number to contain trash that may be blown about shall be maintained and used at construction sites at all times.
    (c) Trash containers shall not less than four feet (4') wide by four feet (4') deep by four feet long by four feet (4') high, shall be located on each construction site no later than the time the rough plumbing is ready for inspection. Openings within the sides of the containers shall not pass a four inch (4") ball.
    (d) Construction material and debris shall be kept on the construction site and maintained in a safe condition and manner.
    (e) Erosion control and sediment control shall be maintained in good condition to prevent runoff from depositing soil and other debris in the streets and storm sewers, in accordance with the City of Broken Arrow Codes and Standard Specifications.
- Toilet Facilities for Workers.
    (a) *General.* Toilet facilities shall be provided for construction workers and such facilities shall be maintained in a stationary condition. Construction workers toilet facilities of non-sewer type shall conform to ANSI 24.3 and the requirements set forth by the supplier. When the facility is found to be out of compliance, the project is subject to suspension of inspections.
    (b) *Location.* Toilet facilities shall be provided when construction starts. A minimum of one (1) toilet shall be provided for a single site, with a ratio of not more than three (3) houses per one (1) toilet facility or a distance of not more than five hundred feet (500') between the toilet facilities and the construction site. Construction site measurement shall be made along the same side of the street.

- Excess mud, dirt, and rock on the street shall be cleaned up by contractor.
- The builder is responsible for making sure landscaper does not cover water meters with dirt or sod during final grade.
- All holes that penetrate the top plates (wires, piping, etc.) must have draft stopping.

Oklahoma Uniformed Building Code Committee amendments to the 2009 IRC

748:20-5-1. Adoption of IRC 2009

The Uniform Building Code Commission hereby adopts the International Residential Code (IRC) 2009 as amended and modified in this Subchapter to be the minimum standards for residential construction within the State of Oklahoma for one and two family dwellings and townhouses pursuant to 59 O.S. § 1000.23.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-2. Effect of Adoption

The International Residential Code (IRC) 2009, as amended and revised by these rules, are hereby established and adopted as the statewide minimum standards for residential building construction for one and two family dwellings and townhouses in Oklahoma pursuant to 59 O.S. § 1000.23, and may only be amended or altered by other jurisdictions pursuant to Oklahoma law and the administrative rules of the Oklahoma Uniform Building Code Commission as set forth in Title 748, Chapter 15 of the Oklahoma Administrative Code.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-3. IRC 2009 Appendices

(a) None of the appendices of the IRC 2009 have been adopted by the Commission for inclusion in the minimum standards for residential construction in the State of Oklahoma.
(b) The Commission hereby creates "Appendix R Automatic Fire Systems".
(c) The Commission hereby creates "Appendix S Energy Efficiency".
(d) The Commission has removed IRC 2009 R313.2 and R313.2.1 from Chapter 3 of the IRC 2009 and relocated those sections to Appendix R Automatic Fire Systems.
(e) The Commission has removed IRC 2009 N1101.9 from Chapter 11 of the IRC 2009 and relocated this section to Appendix S Energy Efficiency
(f) Appendices A through S are not adopted as the minimum standards for residential construction within the State of Oklahoma. However, other jurisdictions within this State may adopt any or all of said appendices in accordance with 59 O.S. § 1000.29.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-4. IRC 2009 Provisions Adopted and Modified

All chapters and provisions within chapters, including exceptions, of the IRC 2009 not specifically addressed within these rules as being modified, deleted, moved or removed are hereby adopted without modification as the minimum standards for residential construction within the State of Oklahoma for one and two family dwellings and townhouses pursuant to 59 O.S. § 1000.23. Chapters and provisions within chapters, including exceptions adopted with modifications are specifically addressed in these rules.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-5. IRC 2009 Chapter 1 Scope and Administration

Chapter 1of the Oklahoma adopted IRC 2009, with the following Preamble at the very beginning of the chapter:

(1) Pursuant to 59 O.S. § 1000.23, the Uniform Building Code Commission has adopted the 2009 International Residential Code as amended and revised by the Commission (IRC 2009), as the minimum

standards to be used by all entities for residential construction in jurisdictions throughout the State of Oklahoma. However, the Commission's adoption of Chapter 1 "Scope and Administration" of the 2009 IRC is for continuity purposes and the Commission's adoption of Chapter 1 recognizes the methods of best practice in fully implementing the minimum standards for residential construction.

(2) All provisions of the adopted IRC 2009, including Chapter 1, as amended and revised by the Commission, are hereby established and adopted as the statewide minimum standards for residential building construction for one and two family dwellings and townhouses in Oklahoma pursuant to 59 O.S. § 1000.23, which may only be amended or altered pursuant to Oklahoma law and the administrative rules of the Oklahoma Uniform Building Code Commission as set forth in Title 748, Chapter 15 of the Oklahoma Administrative Code. However, the provisions of Chapter 1 adopted herein are only intended to be in force and effect to the extent that the respective provisions do not conflict with State law or the lawful exercise of code administration and enforcement jurisdiction by entities empowered to do so pursuant to applicable law.

(3) The Commission's adoption of Chapter 1 in this manner is made with the recognition that the legal authority granting state and local code administration and enforcement jurisdictions the power and discretion to administer and enforce codes arises from Oklahoma laws governing those jurisdictions. Furthermore, the Commission also recognizes that many state and local code administration and enforcement jurisdictions have already created, or have the lawful authority to create, departments, offices and administrative policies pursuant to various applicable laws and other adopted model codes with "Scope and Administration" provisions similar to Chapter 1 of the adopted IRC 2009.

(4) This limited adoption of Chapter 1 is made in recognition of the authority and discretion possessed by jurisdictions to administer and enforce building codes. Exercising such authority and jurisdiction in a manner inconsistent with Chapter 1 must be supported by Oklahoma law. Code administration and enforcement jurisdictions shall not use the Commission's limited adoption of Chapter 1 to circumvent the remainder of the requirements established by the Oklahoma adopted IRC 2009 and the Commission will strongly oppose any such practice.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-6. IRC 2009 Chapter 3 Building Plans

Chapter 3 is adopted with modifications as follows:

(1) Section R302.1 Table R302.1 Exterior Walls has been modified for minimum fire separation distance for walls and projections. Walls have been changed from 5 feet to 3 feet. Projections have been changed from greater than or equal to 2 feet to 5 feet to greater than or equal to 2 feet to 3 feet.

(2) Section R311.7.4.1 Riser Heights. This section has been modified and now requires initial measurements to take place at rough-in and allows for a top and bottom riser height variance at the final inspection. This section shall read: The maximum riser height shall be 7 3/4 inches (196 mm). The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more then 3/8 inch (9.5 mm) at rough-in. Top and bottom riser may vary by 3/4 inch at final inspection, not to exceed 7 3/4 of an inch (196mm).

(3) Section R313.2 One- and two-family dwellings automatic fire systems. This section has been moved to Appendix R, Automatic Fire Systems of the IRC 2009 and is not adopted as a minimum standard for residential construction within the State of Oklahoma.

(4) Section R313.2.1 Design and installation. This section has been moved to Appendix R, Automatic Fire Systems of the IRC 2009 and is not adopted as a minimum standard for residential construction within the State of Oklahoma.

(5) Section R315.1 Carbon monoxide alarms. This section has been modified to include the following exception: If a residence with an attached garage has a sealed door between the residence and the garage;

and no fuel burning appliances in the residence, then carbon monoxide detection is not required within the residence.

(6) Section R323.1 General. This section has been modified to provide for more than one standard to be utilized to build a storm shelter. This section has been modified to read: This section applies to the construction of storm shelters when constructed as separate detached buildings or when constructed as safe rooms within buildings for the purpose of providing safe refuge from storms that produce high winds, such as tornados and hurricanes. In addition to other applicable requirements in this code, storm shelters shall be constructed in accordance with one of the following: ICC/NSSA 500 or FEMA 320 or other equivalent engineered system.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-7. IRC 2009 Chapter 4 Foundations

Chapter 4 is adopted with modifications as follows:

(1) Section R402.2 Concrete. This section has been modified to include the following exception: Interior concrete slabs on grade and enclosed garage slabs are not required to be air entrained.

(2) Section R403.1.6 Foundation anchorage. This section has been modified to include the following exception: Wood sole plates of braced wall panels at building interiors on monolithic slabs may be anchored using connector(s) with a shear capacity of 2300 pounds and a tensile capacity of 800 pounds over a maximum span of 6 feet.

(3) Section R406.2 Concrete and masonry foundation waterproofing. This section has been modified to include an additional option for waterproofing: Bentonite.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-8. IRC 2009 Chapter 5 Floors

Chapter 5 is adopted with modifications as follows: Section R506.2.3 Vapor retarder. This section has been modified to allow for other industry accepted vapor retarders installed according to the manufacture's specifications. This section has been modified to read: A 6 mil (0.006 inch; 152 micrometers) polyethylene sheeting, other industry accepted vapor retarder products installed per manufacturer specifications or approved vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where no base course exists. The remainder of this section, including exceptions, is adopted without modification.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-9. IRC 2009 Chapter 6 Wall Construction

Chapter 6 is adopted with modifications as follows:

(1) Section R602.4 Interior load-bearing walls. This section has been modified to clarify that the section is limited to stud spacing and heights per tables R602.3 (5) and R602.3.1. This section has been modified to read: Interior load-bearing walls shall be constructed, framed and fireblocked as specified for exterior walls. Table R602.3(5) shall be used to establish stud spacing of walls up to 10 feet (3048 mm) high, and Table R602.3.1shall apply to walls over 10 feet (3048 mm) high.

(2) Section R602.10.6 Braced wall panel connections. This section has been modified to include the following addition: Wood sole plates of braced wall panels at building interiors on monolithic slabs may be anchored using connector(s) with a shear capacity of 2300 pounds and a tensile capacity of 800 pounds over a maximum span of 6 feet.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-10. IRC 2009 Chapter 7 Wall Covering

Chapter 7 is adopted with modifications as follows: Section 703.8 Flashing. This section has been modified to clarify that 6-mil polyethylene sheeting is an approved corrosion-resistant flashing in certain circumstances. The first paragraph of this section has been modified to read: Approved corrosion-resistant flashing shall be applied shingle-fashion in a manner to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. 6-mil polyethylene sheeting is an approved corrosion-resistant flashing when not exposed to UV rays. Self-adhered membranes used as flashing shall comply with AAMA 711. The flashing shall extend to the surface of the exterior wall finish. Approved corrosion-resistant flashings shall be installed at all of the locations listed in IRC 2009, Section 703.8 Flashing. The remainder of this section is adopted without modification.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-11. IRC 2009 Chapter 8 Roof-Ceiling Construction

Chapter 8 is adopted with modifications as follows:

(1) Section 801.3 Roof drainage. This section has been stricken from the code.

(2) Section 802.3 Framing details. This section has been modified to provide a definition of a brace and provide an exception to the section. It has been modified to read: Rafters shall be framed to ridge board or to each other with a gusset plate as a tie. Ridge board shall be at least 1-inch (25 mm) nominal thickness and not less in depth than the cut end of the rafter. At all valleys and hips there shall be a valley or hip rafter not less than 2-inch (51 mm) nominal thickness and not less in depth than the cut end of the rafter. Hip and valley rafters shall be supported at the ridge by a brace to a bearing partition or be designed to carry and distribute the specific load at that point. Definition of brace includes: 1. a triangular configuration of framing members with a horizontal tie and rafter members, 2. king post or similar. Where the roof pitch is less than three units vertical in 12 units horizontal (25-percent slope), structural members that support rafters and ceiling joists, such as ridge beams, hips and valleys, shall be designed as beams. Exception: This exception helps address many situations where due to the design, building bracing is not achievable. This exception shall read: The use of a "Blind Valley", also known as a "Farmers Valley" or "California Valley" will be allowed. In this type of valley the main roof is framed as usual, it may or may not be sheathed, and the intersecting roof is framed on top of the main roof. The two valley plates or sleeps lie on top of the main roof rafters or sheathing and provide a nailing base for the jack rafters and ridge board of the intersecting roof.

(3) Section 802.5.1 Purlins. This section has been modified to include the following exception: Braces may be spaced not more than 6 feet (1829 mm) on center if: 1. the purlin brace is 2-inch by 6-inch (51 mm by 153 mm) 2. Purlins shall be sized one nominal size larger than the rafter they support, and 3. un-braced length of braces shall not exceed 8 feet (2438 mm).

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-12. IRC 2009 Chapter 11 Energy Efficiency

Chapter 11 is adopted with modifications as follows:

(1) Section N1101.9 Certificate. This section has been moved to the Appendix S of the IRC 2009 and is not adopted as a minimum standard of residential construction within the State of Oklahoma.

(2) Section N1102.4.3. Fireplaces. This section has been modified to remove the requirement of gasketed doors and will now read: New wood-burning fireplaces shall have outdoor combustion air.

(3) Section N1103.1.1 Programmable thermostat. This section has been stricken from the code.

(4) Section N1103.2.2 Sealing. This section has been modified to include the following exception: Visual inspection may be used instead of the rough-in test and post construction test.
(5) Section N1103.8.3 Pool covers. This section has been modified to remove the requirement for heated pools to have a vapor retardant pool cover on or at the water surface. This section will now read: Pools heated to more than 90 degrees Fahrenheit (32 degrees Celsius) shall have a pool cover with a minimum insulation value of R-12.
(6) Section N1104.1 Lighting equipment. This section has been modified to include the following exception: Can or recessed lights are exempt from this section of the code.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-13. IRC 2009 Chapter 15 Exhaust Systems

Chapter 15 is adopted with modifications as follows: Section M1502.3 Duct termination. This section has been modified and a requirement that exhaust ducts not terminate within 3 feet of condensing units has been added. This section has been modified to read: Exhaust ducts shall terminate on the outside of the building. Exhaust duct terminations shall be in accordance with the dryer manufacturer's installation instructions. If the manufacturer's instructions do not specify a termination location, the exhaust duct shall terminate not less than 3 feet (914 mm) in any direction from the openings into buildings. Exhaust duct terminations shall be equipped with a backdraft damper. Additionally, exhaust shall not terminate within 3 feet (914 mm) of condensing units. Screens shall not be installed at the duct termination.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-14. IRC 2009 Chapter 24 Fuel Gas

Chapter 24 is adopted with modifications as follows:
(1) Section G2406.3 (303.6) Outdoor locations. This section has been modified to require protection for outdoor appliances be approved. This section has been modified to read: Appliances installed in outdoor locations shall be either listed for outdoor installation or provided with approved protection from outdoor environmental factors that influence the operability, durability and safety of the appliance.
(2) Tables G2413.4 (3), G2413.4 (4). These tables have been stricken from the code.
(3) Section G2414.5.2 Copper tubing. This section has been modified to read: Copper tubing shall be prohibited for natural gas installations, but shall be allowed for liquefied petroleum gas installations.
(4) The International Code Council Emergency Amendment dated September 27, 2010 has been adopted. This amendment replaces in their entirety Sections 406.7 of the IFGC and G2417.7 of the IRC 2009.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-15. IRC 2009 Chapter 25 Plumbing Administration

Chapter 25 is adopted with modifications as follows:
(1) P2503.4 Building sewer test. This section has been modified to note that the building sewer test is only necessary when the local authority having jurisdiction requires the testing to be done. This section has been modified to read: When required by local authority having jurisdiction, the building sewer shall be tested by insertion of a test plug at the point of connection with the public sewer and filling the building sewer with water, testing with not less than 10-foot (3048 mm) head of water and be able to maintain such pressure for 15 minutes.
(2) P2503.6 Shower liner test. This section has been modified to require this test at plumbing final. This section has been modified to read: Where shower floors and receptors are made water tight by the application of materials required by Section P2709.2, the completed liner installation shall be tested at

plumbing final. The pipe from the shower drain shall be plugged water tight for the test. The floor and receptor area shall be filled with potable water to a depth of not less than 2 inches (51 mm) measured at the threshold. Where a threshold of at least 2 inches high does not exist, a temporary threshold shall be constructed to retain the test water in the lined floor or receptor area to a level not less than 2 inches deep measured at the threshold. The water shall be retained for a test period of not less than 15 minutes and there shall be no evidence of leakage.

(3) P2503.7 Water-supply system testing. This section has been modified to delete the word "plastic" and replace it with the terms "PVC" and "CPVC." This section shall read: Upon completion of the water-supply system or a section of it, the system or portion completed shall be tested and proved tight under a water pressure of not less than the working pressure of the system or, for piping systems other than PVC or CPVC, by an air test of not less than 50 psi (345 kPa). This pressure shall be held for not less than 15 minutes. The water used for tests shall be obtained from a potable water source.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-16. IRC 2009 Chapter 26 General Plumbing Requirements

Chapter 26 is adopted with modifications as follows: Section P2603.6.1 Sewer depth. This section has been modified to include a depth for the septic tank connection unless otherwise approved by the authority having jurisdiction. This section has been modified to read: Building sewers that connect to private sewage disposal systems shall be a minimum of 12 inches (305 mm) or as approved by the authority having jurisdiction below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 12 inches (305 mm) below grade.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-17. IRC 2009 Chapter 27 Plumbing Fixtures

Chapter 27 is adopted with modifications as follows:

(1) Section P2704.1 General. This section has been modified to allow installation of slip joints anywhere between the fixture and trap outlet. It has been modified to read: Slip joints shall be made with an approved elastomeric gasket and shall be installed from fixture to trap outlet. Fixtures with concealed slip-joint connections shall be provided with an access panel or utility space at least 12 inches (305 mm) in its smallest dimension or other approved arrangement so as to provide access to the slip connections for inspection and repair.

(2) Section P2709.2 Lining required. This section has been modified and it has been noted that it is only effective where required. The first paragraph of this section has been modified to read: Where required, the adjoining walls and floor framing enclosed on-site built-up shower receptors shall be lined with one of the materials listed in IRC 2009, Section P2709.2 Lining required. The remainder of this section is adopted without modification.

(3) Section P2715.1 Laundry tray waste outlet. This section has been modified and the word tub has been replaced with the word tray. This section has been modified to read: Each compartment of a laundry tray shall be provided with a waste outlet not less than 1 1/2 inches (38 mm) in diameter and a strainer or crossbar to restrict the clear opening of the waste outlet.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-18. IRC 2009 Chapter 28 Water Heaters

Chapter 28 is adopted with modifications as follows:

(1) Section P2801.5 Required pan. This section has been modified to specify that a pan is required for tank type water heaters or hot water storage tanks only. This section has been modified to read: Where tank type water heaters or hot water storage tanks are installed in locations where leakage of the tanks or connections will cause damage, the tank or water heater shall be installed in a galvanized steel pan having a material thickness of not less than 0.0236 inch (0.6010 mm) (No 24 gage), or other pans approved for such use. Listed pans shall comply with CSA LC3.
(2) Section P2803.1 Relief valves required. This section has been modified to specify the relief valve requirements and specifications in this section are for tank type appliances and equipment only. The first paragraph of this section has been modified to read: Tank type appliances and equipment used for heating water or storing hot water shall be protected utilizing the options listed in IRC 2009, Section P2803.1. The remainder of this section is adopted without modification.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-19. IRC 2009 Chapter 29 Water Supply and Distribution

Chapter 29 is adopted with modifications as follows:
(1) Section P2902.5.3 Lawn irrigation systems. This section has been modified to add a spill resistant backflow preventer as an option for protection. This section has been modified to read: The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker or a spill resistant backflow preventer. A valve shall not be installed down-stream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.
(2) Section P2903.8.6 Hose bibb bleed. This section has been modified to specify it is only pertinent when the authority having jurisdiction requires it. This section has been modified to read: Where authority having jurisdiction requires a readily accessible air bleed shall be installed in hose bibb supplies at the manifold or at the hose bibb exit point.
(3) Section P2903.9.1 Service valve. This section has been modified to strike the provision for drainage such as a bleed orifice or installation of a separate drain valve. This section shall now read: Each dwelling unit shall be provided with an accessible main shutoff valve near the entrance of the water service. The valve shall be of a full-open type having nominal restriction to flow. Additionally, the water service shall be valved at the curb or property line in accordance with local requirements.
(4) Section P2903.10 Hose bibb. This section has been modified to strike the requirement of a stop and waste type valve and the exception. This section has been modified to read: Hose bibs subject to freezing, including the "frost-proof" type, shall be equipped with an accessible valve inside the building so that they can be controlled and/or drained during cold periods.
(5) Section P2904.1 General. This section has been modified to read: Where installed, residential fire sprinkler systems, or portions thereof, shall be in accordance with NFPA 13D.
(6) Sections P2904.1.1 - Section P2904.8.2 Dwelling Unit Fire Sprinkler System Provisions and Certain Tables Stricken. Sections P2904.1.1 through Section P2904.8.2 and tables P2904.6.2 (1) through P2904.6.2 (9) have been stricken from the code.
(7) Section P2905.4 Water service pipe. This section has been modified to require piping materials not third-party certified for water distribution to terminate at least 30 inches outside of the exterior wall. It has also been modified to strike the requirement of the termination to be before the full open valve located at the entrance to the structure. This section has been modified to read: Water service pipe shall conform to NSF 61 and shall conform to one of the standards listed in Table P2905.4. Water service pipe or tubing, installed underground and outside of the structure shall have a minimum working pressure rating of 160 pounds per square inch at 73 degrees Fahrenheit (1103 kPa at 23 degrees Celsius). Where the water pressure exceeds

160 pounds per square inch, (1103 kPa), piping material shall have a rated working pressure equal to or greater than the highest available pressure. Water service piping materials not third-party certified for water distribution shall terminate at least 30 inches outside the exterior wall. Ductile iron water service piping shall be cement mortar lined in accordance with AWWA C104.

(8) Table P2905.4 Water service pipe. This table has been modified. Asbestos-cement pipe has been stricken from the code.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-20. IRC 2009 Chapter 30 Sanitary Drainage

Chapter 30 is adopted with modifications as follows:

(1) Section P3003.2 Prohibited joints. This section has been modified to include the following exception: Saddle-type fittings may be used to connect the building sewer to a public sewer.

(2) Section P3008.1 Sewage backflow. This section has been modified by striking the requirements of plumbing fixtures having flood level rims above the elevation of the next upstream manhole cover in the public sewer system. It has been modified to read: Where the flood level rims of plumbing fixtures are below the elevation of the manhole cover of the next upstream manhole in the public sewer, the fixtures shall be protected by a backwater valve installed in the building drain, branch of the building drain or horizontal branch servicing such fixtures.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-21. IRC 2009 Chapter 31 Vents

Chapter 31 is adopted with modifications as follows: Section P3103.4 Prohibited used. This section has been modified and the exception has been deleted. It has been modified to read: Vent terminals shall not be used as a flag pole or to support flag poles, TV aerials, or similar items.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-22. IRC 2009 Chapter 34 General Requirements (Electrical)

Chapter 34 is adopted with modifications as follows:

(1) Section E3402.2 Penetrations of fire-resistance-rated assemblies. This section has been modified to correct the reference section cited from R317.3 to R302.4.1. It has been modified to read: Electrical installations in hollow spaces, vertical shafts and ventilation or air-handling ducts shall be made so that the possible spread of fire products of combustion will not be substantially increased. Electrical penetrations through fire-resistance rated walls, partitions, floors or ceilings shall be protected by approved methods to maintain the fire-resistance-rating of the element penetrated. Penetrations of fire-resistance-rated walls shall be limited as specified in Section R302.4.1.

(2) Section 3403.3 Listing and labeling. This section has been modified to comply with NFPA 70. It has been modified to read: Electrical materials, components, devices, fixtures and equipment shall be listed for the application, in accordance with NFPA 70, shall bear the label of an approved agency and shall be installed, and used, or both, in accordance with the manufacturer's installation instructions.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

748:20-5-23. IRC 2009 Chapter 40 Devices and Luminaries

Chapter 40 is adopted with modifications as follows: Section E4002.14 Tamper-resistant receptacles. This section has been modified to include the following exceptions: Receptacles in the following locations shall not be required to be tamper-resistant:

(1) Receptacles located more than 5 1/2 feet (1.7m) above the floor.

(2) Receptacles that are part of a luminaire or appliance.

(3) A single receptacle or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and-plug connected.

(4) Non-grounding receptacles used for replacement.

[**Source:** Added at 28 Ok Reg 2122, eff 7-15-11]

CITY OF BROKEN ARROW AMENDMENTS TO THE 2009 (IRC)

ARTICLE III.5. - INTERNATIONAL RESIDENTIAL CODE (IRC)

Sec. 6-36. - Adopted; conflict with other regulations.

(a) That a certain document, one copy of which is on file in the office of the city clerk, being marked and designated as the 2009 International Residential Code as adopted and amended by the Oklahoma Uniform Building Code Commission on July 15, 2011, including Appendix A, Appendix B, Appendix C, Appendix D, Appendix E, Appendix G, Appendix H, Appendix I, Appendix J, Appendix K, , Appendix M, Appendix N, Appendix O, Appendix P, and Appendix Q are hereby adopted as the One- and Two-Family Residential Dwelling Code of the city to the same extent as if set out herein at length, with the amendments prescribed in section 6-37

(b) In the event of any conflict between any provision of the dwelling code adopted by this section and any other provisions of the Code of Ordinances, the latter provision shall control. In the event of any conflict between any provision of the dwelling code adopted by this section and any other building code adopted by reference or other fire or life safety codes adopted by reference within the Code of Ordinances, the latter provision shall control.

Sec. 6-37. - Amendments.

The International Residential Code adopted in section 6-36 is hereby amended as set forth in the following paragraphs:

(a) Subsection R101.1 Title. "City of Broken Arrow, Oklahoma," in lieu of the phrase, "[name of jurisdiction]".

(b) Section R109 Inspections shall be amended by adding the following subsections:

(1) R109.1.1.1 Survey submittal inspection. The Chief Building Official may require a survey submittal inspection when the structure foundation (edge of ditch) is found to be less than six inches (6") from all easements, street rights-of-ways or required setbacks at the time of the foundation inspection. The submitted survey shall be prepared and signed by a registered professional engineer or land surveyor licensed in the State of Oklahoma, containing the location of the foundation, easements, street rights-of-ways, required setbacks and property lines. The survey shall be submitted to the Chief Building Inspector for review and approval.

(2) R109.1.1.2 Post tension cable and/or steel inspection. Inspection of the post tension cables and/or steel shall be made after the backfill has been properly placed over any plumbing piping, mechanical ducts or electrical conduit that is installed under the slab.

(c) Subsection R112.1 General. All persons shall have the right to appeal the Building Official's decision to the City Council.

(d) *Subsection R113.4 Violation penalties.* Any person, firm or corporation violating any of the provisions of this Code shall be guilty of a Class B offense. It shall be deemed a separate offense for each day or a portion thereof during which any violation of any of the provisions of this Code is committed, continued or permitted.

(e) *Table R301.2 (1)* entitled, Climatic and Geographic Design Criteria is amended to read as follows:

Live Roof Load = 20 lbs. per square foot

Snow Roof Load = 10 lbs. per square foot

Wind pressure = 90 mph;

Seismic design category B

Frost line depth is Eighteen inches (18")

Subject to damage from termites: Moderate to Heavy

Subject to damage from decay: Slight to Moderate

Radon test: Not required at this time

(f) *Subsection R302.2.2* is amended to state: Parapets. Parapets shall be provided for townhouses as an extension of the common wall in accordance with the following:

(1) Where roof surfaces adjacent to the wall are at the same elevation, the parapet shall extend not less than thirty inches (30") (762 mm) above the roof surfaces.

(2) Where roof surfaces adjacent to the wall are at different elevations and the higher roof is not more than thirty inches (30") (762 mm) above the lower roof, the parapet shall extend not less than thirty inches (30") (762 mm) above the lower roof surface.

(a) Exception: A parapet is not required in the two cases above when the roof is covered with a minimum C roof covering, and the roof decking or sheathing is of noncombustible materials or approved fire-retardant-treated wood for a distance of four feet (4') (1219 mm) on each side of the wall, or two (2) layers of five-eighths-inch (5/8") (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing for a distance of four feet (4') (1219 mm) on each side of the wall.

(3) A parapet is not required where roof surfaces adjacent to the wall are at different elevations and the higher roof is more than thirty inches (30") (762 mm) above the lower roof. The wall construction from the lower roof to the underside of the higher roof deck shall not have less than a two-hour (2 hr) fire-resistive rating. The fire-resistive rating shall be rated from exposure from both sides.

(g) Subsection R302.3 Two-family dwellings is amended to state: Dwelling units in two-family dwellings shall be separated from each other by a wall and/or ceiling and floor assemblies of not less than two-hour fire-resistance rating when tested in accordance with ASTM E 119. Fire-resistance rated floors, ceilings and wall assemblies shall extend to and be tied against the exterior wall, and wall assemblies shall extend to the underside of the roof sheathing. Roof decking or sheathing shall be of noncombustible materials or approved fire-retardant-treated wood for a distance of four feet (4') (1219 mm) on each side of the fire rated wall assembly, or two (2) layers of five-eighths inch (5/8") (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing for a distance of four feet (4') (1219 mm) on each side of the fire rated wall assembly.

(1) *Exception:* A fire resistance rating of one (1) hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13.

(h) Section R314 Smoke Alarms shall be amended by adding the following subsection.

(1) Subsection R314.4.1 Dedicated circuit. Smoke alarms shall be on a dedicated circuit.

(i) Subsection R403.1.3 is amended to state: Reinforcing. Concrete footings shall have minimum reinforcement. Bottom reinforcement shall be located a minimum of three inches (3") clear from the bottom of the footing.

Where a construction joint is created between a concrete footing and a stem wall, a minimum of one (1) No. 4 bar shall be installed not more than four feet (4') on center. The vertical bar shall extend to three inches (3") clear from the bottom of the footing, have a standard hook and extend a minimum of fourteen inches (14") into the stem wall.

Where a grouted masonry stem wall is supported on a concrete footing and a stem wall, a minimum of one (1) No. 4 bar shall be installed not more than four feet (4') on center. The vertical bar shall extend to three inches (3") clear from the bottom of the footing and have a standard hook.

(j) *Subsection R403.1.3.1 Foundations with stem walls.* Foundations with stem walls shall have installed a minimum of two (2) No. 4 bars within twelve inches (12") of the top of the wall and two (2) No. 4 bars located 3 inches (3") to 4 inches (4") from the bottom of the footing.

(k) *Subsection R406.1.3.2 Slabs on ground with turned-down footings.* Slab on ground with turned-down footings shall have a minimum of two (2) No. 4 bars at the top and bottom of the footing. Where the slab is not cast monolithically with the footing, No. 3 or larger vertical dowels with standard hooks on each end shall be provided in accordance with Figure R403.1.3.2. Standard hooks shall comply with R611.5.4.5.

(l) *Subsection R404.1.6* is amended as follows: Height above finished grade. Concrete and masonry foundation walls shall extend above the finished grade adjacent to the foundation at all points a minimum of sixteen inches (16").

(m) Subsection R506.1 General. Concrete slab-on-ground floors shall be a minimum of four inches (4") thick (for expansive soils, see Section R403.1.1) and have a thickened edge a minimum of sixteen inches (16") thick and eight inches (8") wide, thickened edge shall be in contact with the foundation. The specified compressive strength of concrete shall be as set forth in Section R402.2.

(n) Subsection R807.1 Attic access. Buildings with combustible ceiling or roof construction shall have an attic access opening to attic areas that exceed thirty (30) square feet and have a vertical height of thirty inches (30") or greater. The vertical height shall be measured from the top of the ceiling framing members to the underside of the roof framing members.

The rough framed opening shall not be less than twenty-two inches (22") by thirty inches (30") accessible by pull down ladder and located in the hallway or other readily accessible location. When located in a wall, the opening shall be a minimum of twenty-two inches (22") wide by thirty inches (30") high. When the access is located in a ceiling, minimum unobstructed headroom in the attic space shall be thirty inches (30") at some point above the access measured vertically from the bottom of ceiling framing members. Where mechanical equipment is located in attics; the size of the rough framed opening shall comply with Section M1305.1.3.

(o) Subsection G2415.10 Minimum burial depth. Underground piping systems shall be installed a

minimum depth of eighteen inches (18") below grade.

(p) Section P2602 Individual Water Supply and Sewage Disposal shall be amended by adding the following subsection:

(1) Subsection P2602.1.1 Public sewer. Public sewer shall be considered available to a building when the building is located within three hundred feet (300') of the public sewer.

(q) Subsection P2603.6.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a minimum of eighteen inches (18") below finished grade at the point of septic tank connection. Building sewers shall be a minimum of eighteen inches (18") below finished grade.

(r) Subsection P2603.6.1 Lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by a pressure-type vacuum breaker or a reduced pressure principle backflow preventer. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

(s) Section P2905 Materials, Joints and Connections shall be amended as follows:

(1) Subsection Table P2905.4 shall be amended by deleting "copper alloy tubing (type M)"

(2) Subsection P2905.5 shall be amended by adding the following subsection:

(a) Subsection 2905.5.1 Inaccessible water service piping. Inaccessible water service piping installed under concrete slabs shall be installed with no joints under slab. Any material subject to corrosion shall be protected when used in corrosive soils.

(t) Section P3002 Materials shall be amended as follows:

(1) Subsection P3002.1. Piping within buildings. When ABS or PVC pipe is used for above ground, soil and waste pipe, it shall be schedule 40.

(2) Subsection P3002.1. Piping within buildings, shall be amended by adding the following subsection:

(a) Subsection P3002.1.1 Underground building sanitary drainage and vent pipe. Underground building sanitary drainage and vent pipe shall conform to one of the standards listed in Table 3002.1(2). When ABS or PVC pipe is used for underground building drainage and vent pipe, it shall be schedule 40.

(3) Subsection P3002.2 is amended to state: Building sewer. Building sewer pipe shall conform to one of the standards listed in Table P3002.2. When ABS or PVC pipe less than six inches (6") in diameter is used it shall be schedule 40. When PVC pipe six inches (6") or larger is used in an engineered system, designed, sealed and signed by an engineer registered in the State of Oklahoma, it may be schedule 35. Lines less than six inches (6") in diameter, shall not exceed three hundred feet (300') in length. Lines six inches (6") in diameter or larger shall have manholes installed and spaced no further apart than three hundred feet (300'). All sewers shall meet all requirements of Oklahoma Department of Health Engineering Bulletin 0587 and the requirements of the City of Broken Arrow.

(u) Subsection E3406.3 is amended to state: Minimum size of conductors. The minimum size of conductors for feeders and branch circuits shall be 12 AWG copper. The minimum size of service conductors shall be as specified in Chapter 36. The minimum size of Class 2 remote control, signaling and power-limited

circuits conductors shall be as specified in Chapter 43.

(v) Section E3604 Overhead Service-Drop and Service Conductor Installation shall be amended by adding the following:

(1) Subsection E3604.7 Bracketing prohibited. There shall be no bracketing of wires to the exterior of buildings. Weather heads shall be so located that bracketing will not be necessary. "Bracketing" for the purpose of this section, is defined as the running of open wires along or across the exterior of buildings supported by metal or wood brackets. This provision shall not apply to wires belonging to public utility companies to provide service to buildings existing on the effective date of Ordinance No. 318, from which this section is derived.

(w) Section E3702 Branch Circuit Ratings shall be amended by adding the following subsection:

(1) Subsection E3702.14 Special circuits and independent fusing for applicants. The following electrical appliances or devices shall be on special circuits fused independently: Electric ranges, electric dryers, electric bathroom heaters, air conditioners and water heaters. Ovens and surface-mounted cooking units may be placed on the same circuit, but this circuit must be fused independently. Attic fans and furnaces may be placed on the same circuit, but this circuit shall also be fused independently. Disposals and dishwashers may be placed on the same circuit, but this circuit must be fused independently.

(x) Section E3703 Required Branch Circuits shall be amended by adding the following subsection:

(1) Subsection E3703.7 Receptacle and light fixture loading. Branch circuit distribution shall be limited to no more than ten (10) receptacles to a circuit placed not over twelve feet (12') apart, except in kitchens, utility rooms, breakfast rooms and garages, in which there shall be no more than two (2) receptacles to a circuit. There shall be no more than nine (9) light fixtures to a circuit.

Secs. 6-38—6-42. - Reserved.

SINGLE FAMILY DWELLING INSPECTION CHECKLIST

The following list is to serve as a general guideline for inspectors, contractors and home owners to assure that important code issues are not overlooked and to provide uniformity in the inspection process. **This list is only a general guideline and is not intended to include all code related items looked at during the course of an inspection.**

FOOTING, STEEL SLAB/POST TENSION AND BUILDING SET BACKS	Correction Code(s)
1. Check the building set backs from property lines.	501, 503, 505 or 519
2. Check for footing size, depth 18 inches and into undisturbed soil.	525, 531 or 545
3. Footings free of loose dirt, organic materials and debris.	531
4. Reinforcing steel size, placement, lap splice, clearances from earth.	527
5. Approved grounding system.	233
6. Check fire place location, footing size and steel (masonry only).	550
7. Check pier footing requirements and locations.	527, 529 or 531
8. Check for under slab vapor barrier	520 or 541
9. Check for proper slab thickness, which may require installing string lines across the forms. Verify that the slab supporting material has been reasonably compacted and no loose material is present.	531, 533, 539, 545 or 547
10. Check that slab reinforcement (where present) is supported properly. Post-tension cables shall be installed as per the design and layout provided.	575

SAW-POLE INSPECTION	Correction Code(s)
1. Support and bracing	241
2. All conductors terminated properly	219, 215, 223, 225 or 229
3. Service disconnecting means	235, 237, 255 or 257
4. Wet location enclosures required to be waterproof	211
5. Open knockouts shall be filled not taped	202
6. Missing twist-outs shall have fill plates not taped	204
7. Grounding electrode conductor connections	225, 227, 233, 243 or 245
8. Metal boxes shall be grounded	233
9. Boxes shall be secured and supported properly	209
10. Receptacles shall have ground-fault circuit-interrupter protection	251 or 239

PLUMBING ROUGH-IN	Correction Code(s)
1. Plumbing piping sleeved at all footing penetration and wrapped at slab penetrations.	305 or 353
2. Minimum ¼ inch slope toward the sewer line on D.W.V. system.	303
3. Check all D.W.V. and water piping for size.	309 or 349
4. Check for proper location and size of cleanouts.	309
5. Check for proper trap sizes.	319 or 349
6. Check for use of approved materials.	327
7. Size of under slab water lines.	349
8. Under slab water lines shall have no joints under the slab.	306

ELECTRICAL ROUGH-IN	Correction Code(s)
1. Check wire size (# 12 minimum)	215
2. Check boxes for wire fill	221
3. Check space of wire from CSST (if used) 6" minimum	258
4. Check distance of wiring from edge of stud (1 ¼" minimum)	259
5. Check distance of wall-space of general use receptacles	260
6. Wiring should be stapled and secure	209
7. Check garage, attics and crawl spaces with equipment, and unfinished basements, at entrance for lighting, switch, and receptacles	239
8. Check habitable rooms for switch and light	261
9. Check for protection of wiring if needed (wall plates)	259
10. Check smoke alarm placement and dedicated wiring	249
11. Check for dedicated laundry circuit	262
12. Check wire size for dryer	263
13. Check for 2 circuits for kitchen receptacles (minimum)	264
14. Check for 2 receptacles per kitchen circuit	265
15. Check for 2 receptacles per circuit in Breakfast Room	266
16. Check for dedicated bathroom circuit	267
17. Check size of air conditioner wiring	268
18. Check placement of outside boxes.	269

PLUMBING TOP-OUT	Correction Code(s)
1. Check that vent flashing is in place.	309
2. Check access to fixtures with concealed slip joint connections.	302
3. Check water line sizing, pressure test for leaks.	349
4. Verify Water Closet rings are properly installed.	304
5. Verify horizontal DWV piping slopes ¼" per foot toward the drain.	303
6. Check for protection of piping where required. (nail plates)	321
7. Check for proper sizing and installation of island sink and wet venting.	308
8. Verify that only approved materials have been installed.	327
9. Check height and location of vent termination above the roof.	315
10. Verify vents are properly sized for each fixture and the sewer line.	349
11. Check location of Air-admittance valves.	309
12. Check water pipe attachment and support.	349

WATER SERVICE LINE INSPECTION	Correction Code(s)
1. Verify that only approved materials have been installed. (PEX shall not enter meter can)	327
2. Check for proper sizing (¾ inch minimum).	349
3. Check for proper depth (18 inches minimum).	337
4. Check for water service shutoff valve. (may be located inside or out side of structure)	359
5. Check for Pressure Reducing Valve. (may be checked on final)	353

BUILDING SEWER LINE AND TAP INSPECTION	Correction Code(s)
1. Verify that only approved materials have been installed. (SCH 40 PVC)	327
2. Check for proper sizing.	349
3. Solid and continuous support provided under pipe.	305
4. Check for proper fall or slope.	303
5. Cleanouts provided within 3 feet of structure and every 100 feet.	319
6. Check for Backwater Valve (required only if flood level rim of any plumbing fixture is below the elevation of the next upstream manhole.	317
7. Taping saddle properly installed.	353
8. Tap made at 45 degree angle.	353
9. Tap made proper distance from manhole.	353

GAS PIPING AND/OR GAS METER INSPECTION	Correction Code(s)
1. Check gas piping size, material, location and support.	349
2. Verify CSST gas piping is installed and bonded per City policy.	310
3. Check underground installation for depth of burial and tracer wire.	312 or 431
4. Check for concealed unions.	314
5. Verify the pipe is properly pressure tested at 11 psi (if requesting a gas meter gas stops and caps/plugs shall be in place).	316

MECHANICAL OVERHEAD DUCT	Correction Code(s)
1. Check duct support and, for flexible duct, sag and attachment to outlets per code or listing.	457 or 534
2. Verify the furnace supply and return air ducts are properly sized, located, fastened and insulated. (to include flex duct)	457 or 119
3. Verify ducts penetrating fire walls have been properly installed and are of approved materials.	457 or 502
4. Verify that furnace's installed in compartments will be properly located per the installation instructions and the code.	441
5. Check bathroom exhaust fan and ducts for proper installation and termination.	455
6. Check clothes dryer vents for proper installation and termination.	119 or 405
7. Verify that kitchen hood and range exhaust ducts are properly installed.	119 or 534
8. Verify that fire places have been installed per the manufactures installation instructions, including combustion air requirements.	119, 447, 451 or 502
9. Review appliance listing requirements and verify all appliances have been installed per their listing or minimum code requirements.	119

FRAMING AND DWELLING UNIT SEPARATION (*FIRE WALLS*)	Correction Code(s)
1. Verify that the manufactured trusses are installed properly.	119, 589 or 595
2. Check bottom plates for full bearing on the foundation, treated wood per the code, bolts or shot pins are approved and spaced properly, etc.	559 or 565
3. Check floor joists, girders and beams for size, spacing, span, bearing, rim joist continuity, double joists under bearing walls and partitions.	561, 591 or 593
4. Check stair framing for proper size material, rise, run and head clearance.	597
5. Check double top plate for continuity.	524

6. Check the installation of rafter ties, collar ties, ceiling joists and rafters for conventional framing.	535 or 599
7. Verify all cutting and notching of framing members is per code or support is provided in an approved manner.	325
8. Verify fire blocking or draft stopping is of approved materials in required locations, including at ceiling and floor levels, and horizontally at ten (10) feet in concealed stud spaces, at furred ceilings, stairways, penetrations of vents, pipes, etc.	502 or 587
9. Verify that all ceilings are of proper height.	534
10. Verify the attic access is properly located and sized.	568
11. Check attic ventilation for proper size and location.	553 or 566
12. Verify that laminated beams have been properly installed.	515, 528, 589 or 593
13. Factory built fire place and chimney framing per listing.	502
14. Check placement of wall bracing (within 12 ½ feet of corner and 25 feet on center).	585
15. Check installation and placement of exterior vapor barrier and flashing as required by code.	541 or 573
16. Exterior wood, plywood, hard board siding installed properly with corrosion resistant fasteners.	510
17. Check 1st layer for 5/8" fire rated sheetrock and proper fastening.	594
18. Check 2nd layer for 5/8" fire rated sheetrock and proper fastening.	594
19. Fire-resistance rated floors, ceilings and wall assemblies extend to and tied against the exterior wall, and wall assemblies extended to the underside of the roof sheathing.	594
20. Check fire fating of roof decking when required being fire rated by approved fire wall plan. Should extend 4 feet on each side of fire rated wall assembly. (*Two Family Dwellings*)	598
21. Check height of parapet (*townhouses*)	596
22. Check fire fating of roof decking if there is no parapet. Should extend 4 feet on each side of fire rated wall assembly. (*townhouses*)	598

TEMP ELECTRIC	**Correction Code(s)**
1. Meter box anchored and correct height	209
2. Check down-pipe secured and correct height	231
3. Riser pipe secured and correct height	231
4. Ground rod and ground wire in place	225, 227 or 229
5. Meter box bonded to panel	212
6. Check height of panel enclosure and clearance	210
7. Check bonding wire and neutrals terminated in panel	214
8. Meter Box and Panel: open knockouts shall be filled	202
9. Check load wires from meter box to panel	255
10. Neutral wire marked	237
11. Cables entering panel enclosure shall be secured	217
12. Panels will not be located in Bathroom or Closets	210
13. CSST is to be bonded to panel enclosure by lug	310
14. Rebar ground should be tied to neutral bar	225

FINAL INSPECTION (***Plumbing, Mechanical, Electrical and Building***)	**Correction Code(s)**
EXTERIOR	
1. House numbers or address plainly visible from the street or road.	115
2. Check final grade of lot.	
3. Electrical service completed, breakers identified.	237
4. Electrical service properly grounded.	225
5. Landings provided at all doors.	579
6. A/C compressor unit minimum of 3 inches off of ground.	402
7. A/C compressor unit disconnect properly located, fused correctly and properly wired.	211, 215 or 237
8. Sewer clean out to grade, accessible, and caps removable.	319, 347 or 353
9. Water heater T & P valve drain line properly terminated.	309 or 353
10. A/C condensate line properly terminated.	423
11. Exterior electrical receptacles GFI and weather proof.	270
12. Exterior lighting located at all exterior doors.	206
13. Clothes dryer vent properly terminated.	405
14. Exterior siding penetrations properly sealed and flashed.	595
15. Flashing and counter flashing properly installed on roof at penetrations, intersections and edges.	445
16. Flue vents and chimney's properly terminated at proper height.	445
17. Attic eave and gable vents not blocked.	524
18. Exterior electrical receptacles at front and back of dwelling.	219, 237 or 239
ATTACHED GARAGE	
1. No duct openings in the garage.	457
2. Door between house and garage of approved materials properly installed.	506
3. Furnace and Water heater properly installed.	353
4. Furnace and Water heater vents type and clearances to combustibles.	445
5. Water heater T&P Valve operational and properly plumbed, terminates in an approved location.	357
6. Undedicated accessible receptacles on GFI.	239
7. Appliances subject to physical damage suitably guarded.	404
INTERIOR	
1. Plumbing fixture traps not leaking, hot water faucet located on the left, water supply valve properly installed.	301
2. Range hood vented to exterior or listed un-vented type. Duct properly installed.	445
3. Garbage disposal, dishwasher and trash compactors properly installed and grounded.	225 or 353
4. Attic access provided (with pull down ladder as required by city code).	555 or 568
5. Verify that furnace attic installations have proper clearances from combustibles and that access is provided as required in the code.	119, 439 or 445
6. Check gas appliance vent size, clearances from combustibles and termination.	121
7. Check condensate lines and overflow drains for proper size, material and termination.	423 or 539

8. Review appliance listing requirements and verify all appliances have been installed per their listing or minimum code requirements.	119
9. Smoke detectors installed and operational.	249
10. Bathroom receptacles and kitchen receptacles on GFI.	251
11. Switched outlet or light in each bedroom.	253
12. Guard rails and hand rails properly installed.	564
13. Combustion air provided to water heater and/or furnace within an enclosure.	447
14. Combustion air provided to fire place per listing requirements. Manufacturer's Installation Instructions.	447
15. All electrical receptacles properly wired. All installed switches, lights, fans and appliances properly functioning.	221, 239, 249, 251 or 253
16. Bathroom receptacles on separate circuit of their own.	239
17. Bathroom receptacle adjacent to each lavatory location.	239
18. Electrical receptacles installed in laundry are.	239 or 251
19. Check operation of all GFCI's	251
20. Check operation of Arc Faults	253
21. Check placement of Kitchen Counter receptacles	239
22. Check for Island Receptacles	251
23. Check Air Conditioner Breaker size and wiring of outside units	257

GENERAL CORRECTION CODE LISTING		
103	GENERAL – NOT READY FOR INSPECTION	Upon arrival, Inspector found the inspection was not ready.
105	GENERAL – NO ACCESS	Upon arrival the Inspector could not access the property or building. Make corrections and recall the inspection
107	GENERAL – LOCKED	Upon arrival the Inspector found the property or building locked. Make corrections and recall the inspection.
115	GENERAL – ADDRESS NOT POSTED	Address must be posted on home/property prior to building final inspection. Please correct and recall inspection. Address must be posted prior to inspection.
117	GENERAL – FIRE MARSHAL/INSPECTION REPORT	Fire Marshal Inspection Report is required. Make corrections and recall the inspection.
119	GENERAL – MANUFACTURER'S INSTRUCTIONS	Inspector needs to review the Manufacturer's instructions. Provide this information and recall the inspection.
121	GENERAL – WORK INCOMPLETE/SEE RED TAG	Inspector found the work to be incomplete – see the red tag, make corrections and recall the inspection.
123	GENERAL – NO PERMIT POSTED	Inspector found no permit posted. Prior to inspections being performed, the permit must be posted. Make corrections and recall the inspection.
129	GENERAL – NO TRASH CONTAINER ON LOT	Trash container must be on the lot for the inspection to be done. All trash must be within the trash container. Make corrections and recall the inspection.
131	GENERAL – NO PORTA-JOHN ON LOCATION	Locate Porta-Johns on location per City Ordinance. Make corrections and recall the inspection.
133	GENERAL – EROSION CONTROL MAINTENANCE	Erosion control must be in place and properly maintained.
135	GENERAL – EROSION CONTROL	Contact your Inspector at 259-8333 for details on erosion control requirements, make corrections and recall the inspection.
137	GENERAL – TRASH ON LOT	Trash must be held in a proper container on the lot. Clean the lot of all trash; make corrections and recall the inspection.
ELECTRICAL CORRECTION CODE LISTING		
201	ELECTRICAL – FINAL NOT CALLED IN	The electrical final was not called in or requested. Request the inspection.
202	ELECTRICAL – OPEN KNOCKOUTS	Open knockout shall be filled not taped.
203	ELECTRICAL – DITCH NOT DEEP ENOUGH	Ditch is not deep enough. Make corrections and recall the inspection.
204	ELECTRICAL – MISSING TWIST-OUTS	Missing twist-outs shall have fill plates not taped.
205	ELECTRICAL – DITCH COVERED UP	Ditch was covered. Make corrections and recall the inspection.
206	ELECTRICAL – EXTERIOR LIGHTING	Exterior lighting must be installed at all doors
209	ELECTRICAL – BOX NOT SECURED/SUPPORTED	Electrical box was not properly secured or supported. Make corrections and recall the inspection.

210	ELECTRICAL – PANEL BOARD HEIGHT/LOCATION	Panel board (breaker box) height doesn't meet code. Board Height or location does not meet code.
211	ELECTRICAL - NOT SUITABLE FOR LOCATION	Electrical was not suitable for location. Make corrections and recall the inspection.
212	ELECTRICAL – METER BOX BONDING	Meter box not bonded correctly.
213	ELECTRICAL – 14 GUAGE WIRE NOT ALLOWED	14 gauge wire is prohibited for house wiring. Make corrections and recall the inspection.
214	ELECTRICAL – PANEL BOARD NOT BONDED	Panel board (meter box) not bonded properly.
215	ELECTRICAL – WRONG SIZE WIRE, FUSE, BOX OR GROUND ROD	Service does not meet code. Wrong size wire, fuse, and box or ground rod. Make corrections and recall the inspection.
217	ELECTRICAL – WIRING NOT SUPPORTED/SECURE	Wiring is not properly secured or supported. Make corrections and recall the inspection.
219	ELECTRICAL – WIRING IS INCOMPLETE	Wiring is incomplete. Make corrections and recall the inspection.
221	ELECTRICAL - BOX FILL EXCEEDED	Box fill was exceeded. Make corrections and recall the inspection.
223	ELECTRICAL – NEUTRAL NOT BONDED	Neutral was not bonded. Make corrections and recall the inspection.
225	ELECTRICAL – SERVICE NOT GROUNDED	Electrical service was not properly grounded. Make corrections and recall the inspection.
227	ELECTRICAL – GROUND ROD CONNECTION COVERED	The ground rod connection was covered. Make corrections and recall the inspection.
229	ELECTRICAL – GROUND ROD THE WRONG LENGTH	The ground rod was the incorrect length. Make corrections and recall the inspection.
231	ELECTRICAL – SERVICE CONDUIT NOT SECURED	The electrical service conduit was not properly secured or supported. Make corrections and recall the inspection.
233	ELECTRICAL – NO GROUND CONNECTION	There was no electrical service ground connection. Make corrections and recall the inspection.
235	ELECTRICAL – PANEL/METER COVER MISSING	The electrical panel or meter cover was missing. Make corrections and recall the inspection.
237	ELECTRICAL – ILLEGAL WIRING	Electrical wiring does not conform to the adopted code. Make corrections and recall the inspection.
239	ELECTRICAL – MISSING GFI RECEPTACLE	Required GFI receptacles are missing. Make corrections and recall inspection.
241	ELECTRICAL – POLE NOT PROPERLY SUPPORTED	Electrical pole is not properly supported. Make corrections and recall the inspection.
243	ELECTRICAL – LIGHT/SHELL NOT GROUNDED	The light/shell was not grounded. Make corrections and recall the inspection.
245	ELECTRICAL – DECK NOT GROUNDED	The deck is not grounded. Make corrections and recall the inspection.
249	ELECTRICAL – SMOKE DETECTOR/CIRCUIT	The smoke detector was not on an isolated circuit. Make corrections and recall the inspection.

251	ELECTRICAL – GFI RECEPTACLE NOT WORKING	The GFI receptacle was not working. Make corrections and recall the inspection.
253	ELECTRICAL – NO ARC FAULT IN BEDROOMS	There was no ARC fault in bedrooms. Make corrections and recall the inspection.
255	ELECTRICAL – SERVICE OVERLOAD/LOAD WIRES	The service is overloaded. Load wires not properly sized.
257	ELECTRICAL – FUSE/SERVICE BREAKER	The fuse or service breaker is the incorrect size. Make corrections and recall the inspection.
258	ELECTRICAL – WIRE/CSST	Wire too close to CSST. 6" minimum space required.
259	ELECTRICAL – NAIL PLATES	Wiring must be located 1 ¼" from stud. Nail plates required.
260	ELECTRICAL – RECEPTICAL/PLACEMENT	Wall receptacle placement does not meet code requirements.
261	ELECTRICAL – WALL SWITCH IN ROOMS	In all habitable rooms, light and switch required.
262	ELECTRICAL – LAUNDRY CIRCUIT	Laundry room shall be supplied with dedicated circuit.
263	ELECTRICAL – DRYER CONDUCTORS	Dry conductors not properly sized.
264	ELECTRICAL – KITCHEN CIRCUIT/MINIMUM	Kitchen small appliance circuits – minimum of 2 required
265	ELECTRICAL – KITCHEN/RECEPT/MAXIMUM	2 receptacles per kitchen circuit
266	ELECTRICAL – BREAKFAST ROOM/RECEPT LIMIT	In breakfast room a maximum of two receptacles allowed per circuit
267	ELECTRICAL – BATHROOM CIRCUIT	Bathroom circuit is required to be a dedicated circuit
268	ELECTRICAL – AC WIRING OUTSIDE	AC condenser conductor not properly sized
269	ELECTRICAL – OUTSIDE RECEPTICALS (BOX)	Placement of outside receptacle boxes do not meet code requirements
270	ELECTRICAL – OUTSIDE RECEPTICALS/GFI	Outside receptacles must be water proof and GFI
PLUMBING CORRECTION CODE LISTING		
301	PLUMBING – FINAL NOT CALLED IN	The final plumbing was not called in. Call in the final plumbing inspection.
302	PLUMBING – ACCESS TO FIXTURES	Need access to fixtures with concealed slip joint connections.
303	PLUMBING – LACK OF FALL/SLOPE ON DRAINS	The fall or slope on drains is incorrect. Make corrections and recall the inspection.
304	PLUMBING – WATER CLOSET RINGS/FLANGE	Water closet rings not properly installed (stool flange)
305	PLUMBING – BEDDING UNDER PIPE	There is improper fill, or bedding under the pipe. Make corrections and recall the inspection.

306	PLUMBING – WATER LINES/JOINTS UNDER SLAB	Under-slab water lines shall have no joints under the slab.
307	PLUMBING – LEAKS ON PIPING	There were leaks on the piping. Make corrections and recall the inspection.
308	PLUMBING – ISLAND SINK VENT	Island sink not properly vented or size of piping doesn't meet code.
309	PLUMBING – VENTING/SIZE/CLEANOUT	The plumbing does not meet code for venting, sizing, or cleanouts. Make corrections and recall the inspection.
310	PLUMBING – CSST GAS PIPING	CSST gas piping is not installed and bonded per City policy.
311	PLUMBING – BACKFLOW PREVENTER	The plumbing backflow preventer is not installed according to the code. Make corrections and recall the inspection.
312	PLUMBING – TRACER WIRE (GAS PIPING)	Gas piping tracer wire missing.
313	PLUMBING - BRASS BALL VALVE	The brass ball valve is not installed. Make corrections and recall the inspection.
314	PLUMBING – SEDIMENT TRAP	Sediment trap not installed where required.
315	PLUMBING – VENT TERMINATION	The vent termination is too close to the house opening or is not terminated properly above the roof.
316	PLUMBING – LOW AIR PRESSURE (GAS)	Gas piping system had low air pressure.
317	PLUMBING – BACK WATER VALVE	The plumbing back water valve is not at grade. Make corrections and recall the inspection.
319	PLUMBING – CLEANOUTS	Plumbing cleanouts are required, but are missing. Make corrections and recall the inspection.
321	PLUMBING – NAIL PLATES/INSULATION/BACKING	There are missing nail plates, insulation or backing. Make corrections and recall the inspection.
325	PLUMBING – CUTTING/NOTCHING	There is incorrect plumbing cutting and notching. Make corrections and recall the inspection.
327	PLUMBING – IMPROPER MATERIAL	There was improper material used. Make corrections and recall the inspection.
329	PLUMBING –TOO CLOSE TO SEWER/SEPTIC	Plumbing is too close to sewer or septic. Make corrections and recall the inspection.
331	PLUMBING - APPROVED PLANS NOT ON SITE	Approved plans were not on site. Make corrections and recall the inspection.
335	PLUMBING – SYSTEM TOO DEEP	Plumbing system is too deep. Make corrections and recall the inspection.
337	PLUMBING – TOO SHALLOW	Plumbing system is too shallow. Make corrections and recall the inspection.
339	PLUMBING – PUMP SYSTEM NOT COMPLETE	Plumbing pump system was not complete. Make corrections and recall the inspection.
341	PLUMBING – LOW AIR PRESSURE	Plumbing system had low air pressure. Make corrections and recall the inspection.
343	PLUMBING – BAD GUAGE	Plumbing system had bad gauge. Make corrections and recall the inspection.

345	PLUMBING – SEAL /GROUT /PLUMBING FIXTURES	Need to seal or grout around plumbing fixtures. Make corrections and recall the inspection.
347	PLUMBING – LOCATE CLEANOUT	Contractor must locate cleanout (raise or lower). Make corrections and recall the inspection.
349	PLUMBING – IMPROPER SIZING ON PIPE	There was improper sizing on pipe. Make corrections and recall the inspection.
353	PLUMBING – DOES NOT MEET CODE	Plumbing does not meet code. Make corrections and recall the inspection.
355	PLUMBING – IMPROPER PAN OR DRAIN	Plumbing has improper pan or drain. Make corrections and recall the inspection.
357	PLUMBING – IMPROPER POP-OFF	Plumbing has improper pop-off. Make corrections and recall the inspection.
359	PLUMBING – NO CUT-OFF	Plumbing has no cut-off. Make corrections and recall the inspection.

MECHANICAL CORRECTION CODE LISTING

401	MECHANICAL – MEETING WITH BUILDING OWNER	The Inspector needs to meet with the building owner. Please call to schedule a meeting.
402	MECHANICAL – CONDENSER HEIGHT	Condenser height must be a minimum of 3” above ground.
403	MECHANICAL – FINAL NOT CALLED IN	The mechanical final was not called in. Call and schedule the final.
404	MECHANICAL – APPLIANCE GUARDING	Applicants subject to physical damage must be suitably guarded.
405	MECHANICAL – DRYER VENT NOT COMPLIANT	The dryer vent is not code compliant. Make corrections and recall the inspection.
407	MECHANICAL – DAY CARE NEEDS STATE PLANS	Day care needs state plans. Obtain these plans and recall the inspection.
409	MECHANICAL – PERMIT REQUIRED	Inspector found ongoing work that requires a permit and no permit was issued. Obtain correct permits for construction and recall the inspection.
411	MECHANICAL – UNDERGROUND NOT COMPLETE	The mechanical underground was not complete. Make corrections and recall the inspection.
413	MECHANICAL – MECHANICAL COVERED UP	The mechanical was covered up. Make corrections and recall the inspection.
414	MECHANICAL – SEDIMENT TRAP	Sediment trap not installed properly.
415	MECHANICAL – FIRE MARSHAL SIGNOFF	The project needs the Fire Marshal signoff inspection report. Arrange for this and recall the inspection.
417	MECHANICAL – MECHANICAL GREASE DUCT	The mechanical grease duct is not correct. Make corrections and recall the inspection.
419	MECHANICAL – MECHANICAL MAKEUP AIR	The mechanical makeup air is not correct. Make corrections and recall the inspection.
421	MECHANICAL – HOOD CLEARANCE	The mechanical hood clearance is not correct. Make corrections and recall the inspection.
423	MECHANICAL – CONDENSATION DRAIN	Mechanical condensation drain is not correct. Make corrections and recall the inspection.

425	MECHANICAL – MECHANICAL AIR TEST	Mechanical air test failure. See tag, make corrections and recall the inspection.
427	MECHANICAL –PIPING PLAN FOR LOAD	Mechanical piping plan needed for pipe size load. Make corrections and recall the inspection.
429	MECHANICAL –PIPE NOT DEEP ENOUGH	Mechanical pipe is not deep enough or is covered up. Make corrections and recall the inspection.
431	MECHANICAL – MECHANICAL TRACER WIRE	Mechanical tracer wire missing. Make corrections and recall the inspection.
433	MECHANICAL –PIPE IDENTIFICATION	Mechanical pipe needs to be identified. Make corrections and recall the inspection.
435	MECHANICAL – NO ACCESS TO ATTIC AREA	There is no access to the attic area for mechanical inspection. Make corrections and recall the inspection.
437	MECHANICAL – SEISMIC SIGNOFF	A seismic signoff is required. Make corrections and recall the inspection.
439	MECHANICAL – FURNACE WORK/ACCESS AREA	The furnace work and access area needs work. Make corrections and recall the inspection.
441	MECHANICAL – FURNACE CLEARANCE	The furnace clearance is not correct. Make corrections and recall the inspection.
443	MECHANICAL – AIR LEAKS	Air leaks in the mechanical system need to be sealed. Make corrections and recall the inspection.
445	MECHANICAL – VENT NOT TO CODE	The mechanical vent does not meet code; see red tag. Make corrections and recall the inspection.
447	MECHANICAL – COMBUSTION AIR	Combustion air. Make corrections and recall the inspection.
449	MECHANICAL – RETURN AIR	The return air does not meet code. Make corrections and recall the inspection.
451	MECHANICAL – GAS PIPING INCOMPLETE	The mechanical gas piping was incomplete. Make corrections and recall the inspection.
453	MECHANICAL – CSST	The CSST is not installed according to the manufacturer's specifications. Make corrections and recall the inspection.
455	MECHANICAL – BATH FANS/VENT	The bath fan is not vented to the exterior. Make corrections and recall the inspection.
457	MECHANICAL – DUCT WORK	The duct work is not complete or not to code. Make corrections and recall the inspection.

BUILDING CORRECTION CODE LISTING

501	BUILDING – FRONT SETBACK	The front setback does not conform to the code and/or plat. Make corrections and recall the inspection.
502	BUILDING – FIRE BLOCKING/FIREPLACE	Fireblocking is required by code. Make corrections and recall the inspection.
503	BUILDING – SIDE SETBACK	The side setback does not conform to the code and/or plat. Make corrections and recall the inspection.
504	BUILDING – LOAD BEARING WALLS	Interior load-bearing walls must be anchored. Make corrections and recall the inspection.
505	BUILDING – REAR SETBACK	The rear setback does not conform to the code and/or plat. Make corrections and recall the inspection.
506	BUILDING – GLASS	Glass is in a hazardous location. Make corrections and recall the inspection.

507	BUILDING – EASEMENT	The building or part of the building is located on an easement. Make corrections and recall the inspection.
508	BUILDING – EMERGENCY EGRESS	Emergency egress is required for bedroom. Make corrections and recall the inspection.
509	BUILDING – EXISTING STRUCTURE	There is an existing building on the lot.
510	BUILDING – NAILING SCHEDULE	Nailing schedule must be in compliance. Make corrections and recall the inspection.
511	BUILDING – IMPROPER ZONING	There is improper zoning for the intended purpose/building.
512	BUILDING – SHEAR PANEL SPACING	Shear panel spacing must be code compliant. Make corrections and recall the inspection.
513	BUILDING – ELECTRIC OVER POOL	There are electrical wires over pool water. Make corrections and recall the inspection.
514	BUILDING – MASONRY LOAD	Masonry loading is on wood. Make corrections and recall the inspection.
515	BUILDING – ENGINEER FIX REQUIRED	An engineer fix is required. Make corrections and recall the inspection.
516	BUILDING – ROOF IS INCOMPLETE	The roof was incomplete. Make corrections and recall the inspection.
517	BUILDING – PROPERTY NOT STRUNG	The property line is not strung or staked. Make corrections and recall the inspection.
518	BUILDING – NO OTHER FINALS	Electrical, mechanical and plumbing finals are required. Make corrections and recall the inspection.
519	BUILDING – PROPER PINS	Property pins have not been located. Make corrections and recall the inspection.
520	BUILDING – VAPOR BARRIER	Vapor barrier is required. Make corrections and recall the inspection.
521	BUILDING – RADIUS PIN	The radius pin was not located. Make corrections and recall the inspection.
522	BUILDING – FOUNDATION	Foundation requires more work. Make corrections and recall the inspection.
524	BUILDING –FRAMING WORK	Framing requires more work. Make corrections and recall the inspection.
525	BUILDING – FOOTING NOT WIDE ENOUGH	Footing width does not meet code. Make corrections and recall the inspection.
526	BUILDING – I JOIST	The I-joist must be installed according to the Manufacturer's specifications. Make corrections and recall the inspection.
527	BUILDING – REBAR	The rebar was not in place. Make corrections and recall the inspection.
528	BUILDING – LVL BEAM	The LVL Beam must be nailed according to the manufacturer's specification. Make corrections and recall the inspection.
529	BUILDING – PIERS	The building piers were not properly located. Make corrections and recall the inspection.
530	BUILDING – PREVIOUS RED-TAG ITEMS	Previous red-tag items must be corrected prior to doing this inspection. Make corrections and recall the inspection.
531	BUILDING – MUD AND WATER	Clean out mud and water and recall the inspection.
532	BUILDING – BUILDING FINAL	Building final is not ready. Make corrections and recall the inspection.

533	BUILDING – GRADE STAKES	The grade stakes were not in place. Make corrections and recall the inspection.
534	BUILDING – CEILINGS HEIGHT	Ceiling does not meet minimum height requirements.
535	BUILDING – RAFTER TIES	Rafter ties are required every 4 feet. Make corrections and recall the inspection.
537	BUILDING – RAFTERS AND CEILING JOISTS	Rafters and ceiling joists are required to be connected every 4 feet. Make corrections and recall the inspection.
538	BUILDING – LANDSCAPING	The landscape must be completed per ordinance. Make corrections and recall the inspection.
539	BUILDING – TERMITE TREATMENT	Termite treatment is required. Make corrections and recall the inspection.
540	BUILDING – GRADE/SLOPE	The grade/slope must be code compliant. Make corrections and recall the inspection.
541	BUILDING – VAPOR BARRIER	Vapor barrier is required. Make corrections and recall the inspection.
542	BUILDING – HOLDING WATER	Property is holding water. Make corrections and recall the inspection.
543	BUILDING – WIRE MESH	Wire mesh is required. Make corrections and recall the inspection.
544	BUILDING – SEWER CLEANOUT	The sewer cleanout is too low. Make corrections and recall the inspection.
545	BUILDING – INCORRECT THICKNESS	Slab is incorrect thickness. Make corrections and recall the inspection.
546	BUILDING – DEMOLITION	The demolition was not complete. Make corrections and recall the inspection.
547	BUILDING – SLAB ELEVATION	Slab elevation is too low. Make corrections and recall the inspection.
548	BUILDING – ELECTRICAL ROUGH	An electrical rough inspection is required. Make corrections and recall the inspection.
549	BUILDING – JOIST SPAN	Joist span is greater than allowed. Make corrections and recall the inspection.
550	BUILDING – FIREPLACE LOCATION/SIZE	Check fireplace location, footing size and steel (Masonry only).
551	BUILDING – NAILING/SECURING	Nailing and securing is required. Make corrections and recall the inspection.
552	BUILDING – PLUMBING ROUGH	The rough plumbing inspection is required. Make corrections and recall the inspection.
553	BUILDING – VENTILATION	Ventilation is required. Make corrections and recall the inspection.
554	BUILDING – FIRE DEPARTMENT INSPECTION	The Fire Department must perform an inspection. Make corrections and recall the inspection.
555	BUILDING – ACCESS DOOR	Access door is the incorrect size. Make corrections and recall the inspection.
556	BUILDING – DRAINAGE	The drainage from the structure must be code compliant. Make corrections and recall the inspection.
557	BUILDING – CRAWL SPACE	Crawl space must be 18 inches. Make corrections and recall the inspection.
558	BUILDING – SMOKE DETECTOR	The smoke detector failed to operate. Make corrections and recall the inspection.

559	BUILDING – TREATED MATERIAL	Treated materials are required. Make corrections and recall the inspection.
560	BUILDING – INSULATION	Insulation is required in the attic and/or walls. Make corrections and recall the inspection.
561	BUILDING – GIRDER/SILLS	Girder and/or sills are required. Make corrections and recall the inspection.
562	BUILDING – WEEP HOLES	Weep holes must be code compliant. Make corrections and recall the inspection.
564	BUILDING – HAND/GUARD RAILS	Hand and/or guard rails are required and/or must be code compliant. Make corrections and recall the inspection.
565	BUILDING – SILL PLATE	Sill plate was not anchored or incorrectly spaced. Sill places not correctly anchored or spaced. Make corrections and recall the inspection.
566	BUILDING – ATTIC VENTILATION	Attic ventilation must be code compliant. Make corrections and recall the inspection.
567	BUILDING – WOOD IN BRICK LEDGE	There was wood in the brick ledge. Make corrections and recall the inspection.
568	BUILDING – ATTIC ACCESS	Attic access is required. Make corrections and recall the inspection.
569	BUILDING – NO BRICK LEDGE	There was no brick ledge. Make corrections and recall the inspection.
573	BUILDING – BRICK FLASHING	Brick flashing is required. Make corrections and recall the inspection.
575	BUILDING – POST TENSION	Post tension must be installed in accordance with the plans. Make corrections and recall the inspection.
579	BUILDING – LANDINGS	Landings are not provided at all doors.
583	BUILDING – BRICK TIE	Brick tie gauge must meet code requirements. Make corrections and recall the inspection.
585	BUILDING – CORNER PANELS/ SHEAR/ SHEATHING	Corner panels, shear and/or sheathing must be nailed. Make corrections and recall the inspection.
587	BUILDING – BLOCKING	Blocking is required. Make corrections and recall the inspection.
589	BUILDING – ENGINEERS LETTER	An Engineer's letter for the foundation must be submitted and on file. Make corrections and recall the inspection.
591	BUILDING – JOIST/CEILING/RAFTERS	Floor and/or ceiling joists and/or rafters are over spanned. Make corrections and recall the inspection.
593	BUILDING – BEAMS AND HEADERS	Beams and/or headers are over spanned. Make corrections and recall the inspection.
594	BUILDING – DWELLING UNIT SEPERATION	Fire wall does not comply with approved fire wall plan or City code.
595	BUILDING – EXTERIOR PENETRATIONS	Exterior penetrations not properly sealed or flashed.
596	BUILDING – PARAPET	Parapet does not comply with City code.
597	BUILDING – STAIR RISE/RUN AND HEADROOM	The stair rise and run/headroom must be redone to meet code. Make corrections and recall the inspection.
598	BUILDING – FIRE RATED ROOF DECKING	Fire rated roof decking is required. Fire rated roof decking not installed correctly
599	BUILDING – COLLAR TIES	Install collar ties. Make corrections and recall the inspection.