The Construction Services Division of the City of Tampa provides this brochure as a listing of some of the more common code violations of the various construction codes that our inspection staff typically find in the field. The list is intended to be a useful guideline to help our customers avoid the most common mistakes and errors made during the construction process, thus avoiding, costly errors and delays. If you would like more information, please contact the Construction Services Division at (813) 274-3100 ext. 8230.

**SITE INSPECTION VIOLATIONS:**

1. Site grubbing, clearing underbrush, striping, tree removal or foundation excavation started prior to the required (06) Initial Erosion and Sediment Control (ESC) inspection. Any required tree barricades, silt screen, inlets, drainage ditch, or waterway protection must be in place before inspection. You needed to call for an (06) initial site inspection under your 001 Site permit after you pick up your permits "but" before you start any work.

2. A permit box containing the most current City stamped plans, permits and site check list was not on site for each inspection.

3. Final inspections not called for on pool and driveway permits. Code requires that all permits receive a final inspection.

4. Trees removed without a permit. Code requires a permit for the removal of any protected tree over five (5) inches diameter, measurement taken at breast height.

5. Sites filled without permits. Code requires that any grading or filling of a site be permitted.

6. Tree and silt barrier violations. Code requires that all tree barricades and silt barriers remain in place and functional until the completion of the job.

7. Driveway aprons not formed or located correctly. Driveways can only be located in certain areas, and any relocation from the approved plans may result in a code violation.

**NOTE:** Right-of-way concrete must be formed 6" thick. Do not install welded wire fabric in Right-of-way.

8. Your contractor pulls the site permit but permanently leaves your job. Another contractor cannot work under the original permit, it it must be canceled and a new permit must be issued to the new contractor.

**BUILDING INSPECTION VIOLATIONS:**

1. Work deviated from approved plans. The Code requires that the construction work be accomplished in accordance with all approved plans, applicable codes and manufactures specifications.

2. No access to inspection site. The Code requires that the overall jobsite and/or area of the inspection be unlocked and accessible as well as adequate means of access be provided, i.e., second story tie beams, roofs, etc.

3. Work not ready for inspection. The Code requires that the permit holder make sure that the work is ready for inspection before requesting the inspection. The purpose of this inspection is to verify compliance to the manufactures specifications, stamped plan and building code.

4. Insulation certificate not posted at final inspection. On a residential dwelling project, the Code requires a certificate of insulation be posted in a conspicuous location (attic or permit box) by the installer indicating the amount and R-value on the insulation installed.

5. Fence or screen enclosure not installed around swimming pool or spa. The Code requires every swimming pool or spa to be protected externally by a minimum 4 ft. height fence or screen enclosure with self-latching gates or doors. Latching devices must be 54" high. Additionally, door and window access to the pool from within the home must be guarded by using UL 2017 alarms or a child fence separation between the home and the pool per code.

6. City approved plans or permit are not on site. The Code requires that the complete set of approved plans be provided at the site and the engineered truss drawings and all permits must be provided to the inspector prior to the framing inspection.

7. Placement of footing steel too close to the ground. The Code requires at least three inches of clearance from the ground to the steel.
BUILDING INSPECTION VIOLATIONS:

8. Inadequate footing depth. The Code requires that footings extend at least 12 inches below undisturbed existing soil.

9. Improper clearing of clean-outs in masonry walls. At the tie beam inspection, a clean-out hole, which is completely free of dirt and debris, must be provided at the bottom of the wall at each down rod for steel inspection.

10. Wind uplift connectors not specified on plans and/or improperly sized. The Code requires a hurricane connector schedule on the plans and that they be sized properly to resist uplift loads.

11. Non-continuous wind anchorage. The Code requires that a continuously connected and properly sized series of connectors be provided from the foundation to the roof of all buildings to provide complete and adequate load path.

12. Improper placement of floor or roof trusses. The Code requires that joists and trusses are laid out, attached and braced per code and the truss manufactures engineering plan. The truss engineering plan must be on-site for the inspection.

13. Excessive cutting, notching, and bored holes. In bearing walls, bored hold diameters must not exceed 40 percent of the stud width, and notching must not exceed 25 percent of its width.


15. Non-approved glass in hazardous locations. The Code requires the use of tempered or laminated safety glazing in all doors, next to doors, within a tub or shower enclosure, and other potentially hazardous locations.

16. Lack of smoke detectors. In new construction or any remodeling, the Code requires an approved smoke detector inside each sleeping room, outside of sleeping rooms in vicinity of hallway or corridor and on each level of a dwelling unit.

17. Improperly sized stair treads and risers. For residential dwellings, the Code limits risers to 7 3/4 in maximum and treads must be a minimum of 9 inches in length plus one inch of nosing. For commercial buildings, the Code limits risers to a 7 inch maximum and treads must be a minimum of 11 inches.

18. A final inspection on a re-roof is called and the home owner or contractor has not filled the required Roof Mitigation Verification Affidavits. Available online at TampaGov.net. Fill out and file at the Construction Service Division before calling your final inspection.

19. Improper placement of roofing felt at eave drip. Roofing felt must lap over horizontal eave drip to prevent water intrusion.

ELECTRICAL INSPECTION VIOLATIONS:

1. Pool lights improperly bonded or covered prior to inspection. NEC Article 680.23 (B) (1) & 680.23 (B) (2) requires pool light fixtures and forming shells to be bonded. COT Chapter 5-182(h) (1) requires that work not be covered prior to the proper inspections being approved.

2. Pool equipotential bonding grid not properly installed. NEC Article 680.26 requires conductive pool shells, perimeter surfaces, metallic components, underwater lighting, metal fittings, and electrical equipment to be bonded together to eliminate stray currents and shock potential.

3. Improperly installed grounding electrode system at the building or structure service. NEC Article 250.50 requires that all electrodes listed in 250.52 (A) (1) through 250.52 (A) (7) that are present at each building or structure served be bonded together to form the grounding electrode system. Where none of these electrodes exist, one or more of the grounding electrodes specified in 250.52 (A) (4) through 250.52 (A) (8) shall be installed and used. The required electrodes include metal underground water pipe, metal framework, concrete-encased electrode, ground ring, rod and pipe electrodes, other listed electrodes, plate electrodes and other local metal underground systems or structures.

4. The main or system bonding jumper missing or improperly installed. NEC Article 250.28 (B) requires screw type main or system bonding jumpers to be identified with a green finish that shall be visible with the screw installed.

5. Improper working clearances around electrical equipment and panels. NEC Article 110.26 (A) requires equipment operating at 600 volts, nominal or less to ground and likely to require examination, adjustment, servicing or maintenance while energized to comply with the dimensions of 110.26 (A) (1), (A) (2), and (A) (3) or as required or permitted elsewhere in the Code.
ELECTRICAL INSPECTION VIOLATIONS:

6. Circuits not properly identified in panels or on the panel schedule. NEC Article 404.4 requires every circuit and circuit modification to be legibly identified as to its clear, evident, and specific purpose or use. The identification shall include sufficient detail to allow each circuit to be distinguished from all others.

7. Cooking units (stoves and ovens) and dryers are required to have and insulated grounded conductor. NEC Article 250.142 (B) prohibits the grounded circuit conductor to be used for grounding non-current carrying metal parts on the load side of the service disconnect. An uninsulated grounded conductor (not smaller than #10 copper or #8 aluminum) in an existing type SE service entrance cable originating at the service equipment maybe used for grounding by 250.142 (B) Exception # 1.

8. Metal boxes improperly grounded to cable clamps or cover screws. NEC Article 250.148 (C) requires the connection between one or more equipment grounding conductors and a metal box to be made by either a grounding screw that shall be used for no other purpose, equipment listed for grounding, or a listed grounding device.

9. Type NM cable (romex) not properly spaced or protected when installed parallel to framing members or through bored holes. NEC Article 300.4 (A) (1) and 300.4 (D) require cables to be not less than 1 ¼” inches from the nearest edge of the wood member or furring, where this distance cannot be maintained the cable shall be protected by a steel plate at least 1/16” inch thick and of appropriate length and width.

10. Sub panel grounded (neutral) conductor not isolated from panel enclosure (floated). NEC Article 250.142 (B) prohibits the grounded circuit conductor to be used for grounding non-current carrying metal parts on the load side of the service disconnect.

11. Insufficient number of receptacles to serve the kitchen countertops, peninsulas, and islands. NEC Article 210.52 (C) (1), (2), (3), (4), and (5) contain the requirements for receptacle placement for the kitchen areas.

12. Receptacles improperly spaced in residences. NEC Article 210.52 through 210.52 (H) contain the requirements for receptacle placement in dwelling units.

13. Lightning arrestors (if installed) not properly terminated. TECO requires that when a lightning arrester is installed it must be on the load side of the meter.

14. Improper wire and breaker size for Air Handler and Air Condenser branch circuits. NEC Articles 424.28 (A) and 440.4 (A) require AH and AC unit nameplates to provide minimum circuit ampacity and maximum overcurrent protection size information. The branch circuit conductors and overcurrent protection must meet the manufactures requirements.

15. Open wire connections or improper splicing of branch circuit conductors. NEC Article 300.15 requires an outlet box or conduit body to be installed at each conductor splice point, outlet point, switch point, or termination point.

16. Ground-fault protection not installed for bathrooms, kitchens, garages, and exterior outlets. NEC Article 210.8 contains the requirements for ground-fault protection for outlets.

17. Other trades supporting their materials and equipment from electrical equipment supports. NEC Article 300.11 contains the requirements for securing and supporting of electrical equipment.

18. Improper boxes used to support ceiling fans. NEC Article 314.27 (D) requires that outlet boxes used as the sole support of a ceiling fan shall be listed for the use.

MECHANICAL INSPECTION VIOLATIONS:

1. Dryer exhaust too long or too many elbows. The Code allows for 25 feet maximum duct length. Subtract 5 feet for every 90 degree elbow.

2. Dryer exhaust run using wrong material. Code requires smooth wall galvanized metal, not PVC or flexible aluminum.

3. Commercial hood or grease duct too close to combustibles. Code requires 18 inches of clearance to combustibles or protect the combustible material with a material with a 1 hour fire resistant rating.

4. Commercial grease duct does not have enough slope. The Code requires a 1 inch per 1 foot slope toward either the hood or an approved residue trap.

5. Commercial grease duct does not have enough cleanouts. The Code requires a cleanout for each change of direction.

6. On gas fired equipment, the gas flue must be tied into the equipment for a final inspection. The Mechanical and Gas Code required all gas fired appliances to be vented to the outside.
MECHANICAL INSPECTION VIOLATIONS:

7. Gas fired equipment located in confined spaces required 2 combustion air ducts for fresh air to be installed at the time of rough in. This includes equipment located in closets as well as attic mechanical rooms.

8. Combustion air ducts going to attic mechanical rooms must be insulated.

9. Missing smoke dampers and smoke detectors in exit access corridors, when corridor is used for return air. The Code forbids using corridors for return or exhaust air purposes unless smoke dampers and smoke detectors are installed in the corridor.

10. Angles missing on fire dampers. The Code requires all fire dampers to have retaining angles on all four sides.

11. Small boilers are mistakenly being installed as water heaters. Any water heater that exceeds any one of the following is considered a boiler: 120 gallons, 200,000 BTU’s, or 210 degrees Fahrenheit water temperature. (18)

12. A floor drain is not allowed in a mechanical room when the room is being used as a plenum. The Code prohibits floor drains in plenums.

13. Distance from outside make-up air to bathroom exhaust or hood exhaust is insufficient. Minimum Code requirement is 10 foot separation between any exhaust and fresh air intake.

14. 3 story single family residences are required to have the structural components protected with a 1 hour fire rating. This includes rated floor/ceiling assemblies that require ceiling fire dampers in most a/c grille penetrations.

15. Improper support of duct work. The duct must be supported by saddle of metal two inches wide or an approved fabric.

16. Use of non-approved duct work. The Energy Code requires new construction and additions to use duct material with an R-6 insulation value.

17. Improper termination of condensate drain lines. The Code requires that the condensate lines terminate 12” out from the foundation above the finish grade, and they must be trapped.

18. Improper installation of auxiliary air conditioning drainpans. Almost all air handlers are required to have auxiliary drain pans with an overflow drain or float switch to prevent water-damage to the building.

19. Improper placement of condensing units. The Code does not allow the placement of condensing units in residential setback areas, and adequate air space must be provided around the unit.

20. Improperly installed bathroom exhaust vents and ducts. The Code requires that bathrooms have an outside window or a vented exhaust duct to the outside (not into the attic).

PLUMBING INSPECTION VIOLATIONS:

1. The "job not ready" inspection comment could mean that the inspection was called for, but the Plumber was not able to complete the work for some reason. In this case, please call the Plumbing Bureau immediately so that we can phone the Inspector for cancellation.

2. Remodeling and fixture replacement projects are the jobs that typically receive an "unable to enter" inspection comment. When we have these situations it is best to call the Bureau the day before and ask that the area Inspector call you the next morning before he starts on his route, so that you can give him the proper information.

3. It is always best to test your domestic water piping at manufactures requirements and your drain, waste and vent piping with a 5 foot head of water with the low end of the system plugged. Standard test cannot always be achieved. When this happens, please communicate with the Bureau so other methods can be explored.

4. Properly venting a plumbing system can become complicated. Basically the vents in a system are for the air intake when water is flowing, and the prevention of p-trap siphoning. Good venting can only be achieved through proper use of fittings.

5. Straps, hangers, and supports of piping can become tedious. All horizontal plastic piping must be supported at no more than 4ft. intervals. For vertical plastic piping 2 inches and smaller, once again the support must be no more than mid story and every story intervals. It is different for each material. Know your maximums.

6. Whenever possible and time permits, check your plumbing system for leaks before calling for an inspection. If a leak occurs after the inspection has been scheduled, telephone the Bureau for cancellation of inspection.
PLUMBING INSPECTION VIOLATIONS:

7. Water heater inspections receive many disapprovals. When water heaters are replaced modifications are sometimes necessary to bring the new water heater into compliance.

8. If a plumbing contractor is hired to do a portion of the work, the person completing or doing the additional work should have an additional or separate permit.

9. Pressure test are different in many situations. Natural gas lines are 20 lbs. On a 30 lb. gauge, the Swimming Pool Code requires a 35 lb. test on pool piping, due to leakage of o-rings, 25 lbs. on a low increment gauge is acceptable.

10. House pressure is sometimes acceptable on minor construction projects. Never assume that line pressure is acceptable without discussing the project with the Plumbing Inspector.

11. Always be sure that the plumbing work has an approval before construction continues beyond that point. Check your inspection schedule sheet carefully. Sometimes the Inspector will leave comments about the inspection on that sheet.