

# CONSTRUCTION INFORMATION PACKET

October 19, 2016

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#### A. PLAN REVIEW / PERMIT SUBMITTAL

The requirements for permit submittal are:

1. Plans must be submitted electronically as Adobe Acrobat (.pdf) documents along with completed a completed permit application:

**HAS Permit Application** 

In addition to the application, you must submit a completed HAS Code Design Checklist: HAS Code Design Checklist

A copy of the HAS Permit Application Submittal Procedure can be found here:

**HAS Application Submittal Procedure** 

A copy of the Proof of Plan Submittal must be completed and submitted:

**Proof of Plan Submittal** 

**Note:** Drawings containing wording such as: "not for construction" or "for pricing only" will not be accepted.

- 3. Firewalls Firewalls, fire barriers and fire partitions must be marked as one of the above and clearly identified and outlined on the plans. Additionally, the fire assembly tested and approved by UL, FM or other approved testing lab must be included in the plans and referenced on the floor plan where the fire assembly is shown.
- 4. Electrical plans must include the following information:
  - a. Information indicating how the electrical service will be grounded.
  - Electrical fault current calculations.
  - c. Electrical short circuit calculations.
  - Electrical load calculations.
- 4. A site plan indicating all proposed structures and where those structures are to be placed in relation to property lines.
- 5. A complete floor plan of the structure(s).
- 6. Elevation drawings showing exterior wall construction.
- 7. If the construction is adjacent to another tenant or use, provide the use of the adjacent space.
- 8. If a foundation or paving will be a part of the project, all foundation and pavement drawings must be sealed by a professional engineer licensed by the State of Texas.
- 8. A letter from the design engineer that sealed the foundation plans stating that the foundation was designed for the soil conditions on that particular lot. The letter must also state that the foundation design criteria complies with the minimum standards required by the 2012 International Building Code.
- A COMCheck verifying compliance with the 2012 International Energy Conservation Code. The COMCheck must include: Envelope, Lighting and Mechanical sections. Please see this page for more information: <u>HAS Energy Code Review Sheet</u> To access the US Department of Energy COMCheck website: www.energycodes.gov/comcheck
- 10. Verification from TDLR that the project has been registered for review of compliance with Architectural Barriers regulations. A copy of the comments from the reviewer must be included. <a href="https://www.license.state.tx.us">www.license.state.tx.us</a>
- 11. Asbestos Survey If the project involves the remodel or demolition of an existing space, you must submit an asbestos survey indicating that no asbestos was found or, if asbestos was found, you must submit a report indicating that all found asbestos was abated. www.tshs.texas.gov

# B. GENERAL INSPECTION NOTES

1. All inspections must be requested by emailing the request to: <a href="mailto:BSG-Inspections@houstontx.gov">BSG-Inspections@houstontx.gov</a>. Inspections requested prior to 4:00 pm will be performed the following business day morning. Inspections requested after 4:00 pm and before 10:30 am will be made that afternoon. For general questions only and for permit information, you may call the office at (281) 233-1051. A copy of the HAS Permit Scheduling Procedure can be found here:

HAS Permit Scheduling Procedure

- 2. **Cancellations.** Inspections should not be requested until the contractor has verified that the work is complete and ready for inspection.
- No construction, other than setting form boards and lot grading, may begin until a building permit has been issued.
- 4. The building permit must be displayed in an obvious place that can be seen by the public.

# C. INSPECTIONS REQUIRED

Inspections required for building construction types are outlined below:

# 1. Free-standing buildings

# <u>Inspections</u>

- **a. Temporary Pole** (can be done at any time)
- b. Concrete Paving or walkways
- c. Plumbing Rough
- **d. Grease Trap** (only for restaurant occupancies)
- e. Tilt Wall (if applicable)
- f. Retaining Wall (If applicable)
- g. Electrical Underground
- h. Foundation
- i. Structural Steel Report (if applicable) before the wall inspection.
- j. Electrical Wall
- k. Plumbing Wall or Top-Out
- I. Gas Rough
- m. Framing Wall
- n. Fireproofing/Firewall
- o. Masonry
- i. Insulation Inspection Building Envelope Only (prior to installing sheetrock)
- j. Mechanical Duct Rough
- k. Mechanical Duct Insulation
- I. Electrical Ceiling
- m. Framing Ceiling
- k. Grease Duct (for Type I Hoods)
- **I. Hood Inspection** (for Type I or Type II Hoods)
- m. Electrical Service/Meter Release
- n. Gas Meter Release/Gas Final
- o. Mechanical Final
- p. Electrical Final
- g. Plumbing Final
- r. Energy Final
- s. Accessibility Final
- t. Building Final

# 2. Shell Buildings

#### Inspections

- **a.** Temporary Pole (can be done at any time)
- b. Concrete Paving or walkways
- c. Plumbing Rough
- d. Grease Trap (if applicable)
- e. Tilt Wall (if applicable)
- f. Foundation
- g. Structural Steel Report (if applicable), before the wall inspection.
- h. Electrical Wall
- i. Plumbing Wall or Top-Out
- j. Gas Rough

- k. Framing Wall
- I. Fireproofing/Firewall
- m. Masonry
- n. Insulation Inspection Building Envelope Only (prior to installing sheetrock)
- o. Mechanical Duct Rough
- p. Mechanical Duct Insulation
- i. Electrical Ceiling
- j. Framing Ceiling
- k. Electrical Service/Meter Release
- I. Gas Meter Release/Gas Final
- k. Mechanical Final
- I. Electrical Final
- m. Plumbing Final
- n. Energy Final
- o. Accessibility Final
- p. Building Final

#### 3. Interior Finish-Out

# **Inspections**

- a. Plumbing Rough
- b. Grease Trap
- c. Leave Out
- d. Electrical Wall
- e. Plumbing Wall or Top-Out
- f. Framing Wall
- g. Fireproofing/Firewall
- **h. Insulation Inspection** (must be done prior to installing sheetrock)
- i. Insulation Inspection Building Envelope Only (prior to installing sheetrock)
- j. Mechanical Duct Rough
- k. Mechanical Duct Insulation
- I. Electrical Ceiling
- m. Framing Ceiling
- **n. Grease Duct** (For Type I Hoods)
- o. Kitchen Hood (For Type I or Type II Hoods)
- p. Electrical Service/Meter Release
- g. Gas Meter Release/Gas Final
- r. Mechanical Final
- s. Electrical Final
- t. Plumbing Final
- u. Energy Final
- v. Accessibility Final
- w. Building Final

# 4. Special Inspections

Certain types of special inspections will also be required. Special inspection can be performed by a qualified testing lab or professional engineer. Reports from the special inspector must be submitted to the Building Inspector for review. Additional reports or testing may be necessary before the special inspection reports can be approved by the Building Inspector.

Items *requiring* special inspection include:

<u>Structural Steel</u> - reports must verify that the structural steel has been installed in accordance with the engineered design. Also, the reports must verify that all connections

have been made correctly (i.e. welds, bolts, etc.)

<u>Structural Fireproofing</u> – reports must verify that any fireproofing required for the structural members of the building meet the minimum requirements to comply with the building code.

Items that *may* utilize a special inspector in place of a Building Standards Group inspector include (Provided that prior approval is received from the Building Official to use the services of the special inspector):

**Piers** - reports must verify the depth, diameter and conditions of the pier hole.

Other special inspections or engineered plans or documents may be required by the Building Official as outlined in the International Building Code.

#### D. INSPECTION REQUIREMENTS

#### 1. TEMPORARY POWER POLE

- a. Double pole breaker installed for 220 volt plug with GFCI protection.
- b. Single pole breaker installed for 120 volt plug with GFCI protection on all 120 volt receptacles.
- c. Box is to be secured to the pole and NEMA 3 (raintight) rated.
- d. Pole is to be braced.
- e. A full length eight foot (8') ground rod must be installed.

#### 2. CONRETE PAVING OR WALKWAYS

All work is to be done per approved, engineered plans.

#### 3. PLUMBING ROUGH

# a. Water Lines

- 1. One hose bibb with a non-removable vacuum breaker must be installed in the water line to check the pressure on the copper.
- 2. All hose bibbs must have non-removable vacuum breakers installed at all times.
- 3. Copper lines will not be allowed to touch each other.
- 4. Copper lines must be sleeved or taped with approved materials. Painting of the copper will not be accepted.
- 5. Lead solder and fluxes containing lead cannot be used to join potable water lines.
- 6. T & P (pop-off) lines for water heaters cannot be run in the slab.
- 7. All copper lines under the slab must be type "L" copper or thicker.
- 8. All piping located under the slab must be continuous with no joints.
- 9. The water meter must be in place with all valves open to allow for testing of the lines at City water pressure. If City water is not available, a 50 p.s.i. air test can be substituted for the water test. A valid air test will not have any water in the lines
- 10. Lines extending through concrete beams must be sleeved.

# b. Sanitary Sewer

- 1. The plumbing rough must be tested with a ten-foot (10') head of water measured at the last stack in the building. The ten-foot measurement will be taken from the top of the ninety (90) degree fitting. The contractor must provide access to the filled stack for the inspector.
- 2. The water test must include the sewer yard line. A test tee must be installed at the sewer tap.
- 3. The main objective of a water test is to allow the inspector to look for wet spots along the plumbing piping. Overfilling the stacks to the point that the ground is wet around sewer piping will cause the inspection to fail.

- 4. No flat venting will be allowed unless the flat portion is washed by a minor fixture such as a lavatory.
- 5. Full size double clean outs must be installed.
- 6. The sewer tap must be exposed one foot (1') from either side of the sewer connection. (This means that one foot (1') of the City's green lateral line adjacent to the tie in must be exposed at the time of inspection).
- 7. Holes dug for sewer taps that are deeper than four feet (4'), must be protected by a temporary construction fence.
- 8. The Building Sewer must be connected to the City's sanitary sewer system.
- Sewer tap holes must be filled immediately after approval of the Plumbing Rough inspection. All lines must rest on a two inch (2") bed of sand and all lines, traps and fittings must be completely exposed.
- 10. Lines extending through concrete beams must be sleeved.

#### c. Gas Line

- 1. Where a gas piping system is utilized that contains a working pressure greater than ½ p.s.i., an air test of at least ten pounds per square inch (10 p.s.i) on a diaphragm gauge that has a set hand and has a maximum range of twenty (20) p.s.i. For portions of gas piping that are regulated to a working pressure of less than ½ p.s.i, a 3 psi test with a diaphragm gauge that has a set hand and has a maximum range of six (6) p.s.i. is acceptable.
- 2. All gas lines must be buried. The top of the line must be located at least eighteen inches (18") below grade.
- 3. Where poly gas lines are utilized, a number eighteen (18) AWG copper tracer wire must be buried along side of the line for its complete length.
- 4. Black pipe gas lines installed in the ground must be factory mill wrapped pipe and all fittings must be properly field wrapped.

#### 4. GREASE TRAP

- Grease trap must be full of water and not leaking.
- b. All drain lines to and from the trap must be installed.
- c. All trap vents must be installed per manufacturer's specifications.

# 5. TILT WALL

All steel is to be in place per approved BSG and the wall must be ready for concrete to be placed.

# 6. ELECTRICAL UNDERGROUND

- a. All conduit must be installed and properly joined.
- b. Burial depths must comply with Table 300.5 of the NEC.

# 7. RETAINING WALL

All work is to comply with approved BSG plans. Call for inspections prior to placing concrete and prior to backfilling behind the wall.

# 8. ELECTRICAL GROUNDING

- a. Article 250.50 of the NEC requires all grounding electrodes that are present at each building or structure to be bonded together to form the grounding electrode system. Concrete encased electrodes (Ufer Grounds) are required whenever new concrete foundations are placed. All grounding electrodes must be inspected while exposed and not covered until approved.
- b. All mechanical connectors connecting the grounding electrode conductor to the grounding electrode require permanent accessibility.
- c. Concrete encased electrodes (Ufer Grounds) must be a bare copper conductor not

- smaller than 4 AWG, or zinc coated or other electrically conductive coated steel bars or rods not less than one-half inch (1/2") in diameter.
- d. Concrete encased electrodes (Ufer Grounds) must be at least twenty feet (20') in length.
- e. Concrete encased electrodes (Ufer Grounds) must be encased in at least two inches (2") of concrete.
- f. Concrete encased electrodes (Ufer Grounds) must be located within a portion of the concrete foundation that is in direct contact with the earth.

#### 9. FOUNDATION

(All foundation plans must be sealed by a structural engineer)

- a. If piers were installed and inspected by a special inspector, a pier report must be submitted at least 24 hours prior to requesting a foundation inspection
- b. Everything must conform with the engineered sealed plans approved by BSG.
- c. If the foundation is for a new building, you must submit a form board survey stamped by a licensed Texas surveyor. If no form survey is available, no inspection will be done and a reinspection fee will be assessed.
- d. All cables must be straight.
- e. All copper must be sleeved or taped, painting will not be accepted.
- f. The foundation drawing must be on the job with the detail sheet and the plot plan (both must be BSG stamped approved).
- g. Poly must cover all pad areas only. Poly is to be cut or not installed in beams.
- h. Electrical conduit located in the foundation must be installed.
- i. All gas line sleeves must be installed.
- j. No changes can be made to the foundation after inspection approval without requesting another foundation inspection.
- k. All plumbing drain lines must run through beams at a ninety degree (90°) angle to the beam.
- I. A concrete encased electrode must be installed (see Electrical Grounding above). Concrete encased electrodes must extend at least 20 feet through the concrete.

# **10. LEAVE-OUT INSPECTION** (Interior finish-out construction only)

- The plumbing rough must be inspected and approved.
- b. Rebar must be drilled into existing concrete per City approved plans.
- c. Moisture barrier must be installed.
- d. Any underfloor electrical component must be installed.

#### 11. ELECTRICAL WALL

- a. A grounding electrode system must be installed per the city approved drawings and Article 250 of the National Electrical Code.
- b. HAS specifications prohibit the use of MC and BX wiring to be used.
- c. Where a panel or disconnect device is tapped more than one time, approved lugs must be provided.
- d. If service entrance conductors are more than three feet (3') in length, a disconnect must be provided at the outside of the structure and next to the electrical meter.
- e. Electrical conduit and wiring shall be strapped per the NEC.
- f. All metal boxes must be bonded.
- g. Branch circuits must be grouped together with a wire tie or similar device at least at one point in the electrical panel.
- h. Circuits installed in or under a concrete foundation must meet the requirements for wet locations.

# 12. PLUMBING WALL

a. All fixtures must be stack vented and all vents must extend through the roof with flashings installed at the roof.

- b. No vents may be less than 45 degrees from the horizontal until they are at least six inches (6") above the flood rim of the fixture.
- c. All copper lines must be braced.
- d. Pop-off lines cannot be PVC and cannot be installed in slab.
- e. All water heaters must have a drip pan with a drain line to the outside.
- f. Plumbing vents must be at least ten feet (10') from or two feet (2') above any window that can be opened.
- g. Frost proof hose bibbs with integral vacuum breakers must be installed.
- h. For wood frame construction, plumbing straps must be nailed on top and bottom plates. Straps must be .038 inches thick.
- i. Lead solder and fluxes containing lead are prohibited materials to be used in potable water pipes.

# 13. GAS ROUGH

- a. Where a gas piping system is utilized that contains a working pressure greater than one-half (½) p.s.i., an air test of at least ten pounds per square inch (10 p.s.i) on a diaphragm gauge that has a set hand and has a maximum range of twenty (20) p.s.i. For portions of gas piping that are regulated to a working pressure of less than one-half (½) p.s.i, a 3 psi test with a diaphragm gauge that has a set hand and has a maximum range of six (6) p.s.i. is acceptable.
- b. For wood frame construction, holes cut for gas lines may only be large enough for the line to penetrate.
- c. Gas lines must be properly supported.
- d. Gas lines located between bricks and studs must be mill wrapped.
- e. Gas appliance vents must be at least four feet (4') away from or two feet (2') above windows that can be opened.

#### 14. FRAMING WALL

# a. Wood Stud Framing

- 1. Wood rafter and joist spans must conform to the International Building Code.
- 2. Treated wood exterior bottom plates must be secured to the foundation by L-bolts or ICC approved ramsets. Ramsets must be shot every eighteen inches (18") and within six inches (6") of every end of each exterior plate. Ramsets must include a metal washer. Other installation requirements will be considered if the contractor submits the manufacturer's installation instructions or an ICC ES report.
- 3. Wood top plate splices must be offset a minimum of twenty-four inches (24").
- 4. Rafters must be framed directly opposite each other at the ridge.
- 5. Valleys, and hip rafters must not be less than two inches (2") nominal thickness and not less in depth than the cut end of the rafter.
- 6. Purlins must be the same size as the rafter. Braces must be installed every four feet (4') from the purlin to the wall or beam.
- 7. Any joist over four feet (4') in length must be pressure blocked on both sides -- or a joist hanger must be used.
- 8. Furr downs, ceilings of different heights, and vertical wall spaces over ten feet (10') must be fire blocked.
- 9. Load bearing studs must be sixteen inches (16") on center or the rafter must be within five inches (5") of the stud. Studs with masonry veneer wall ties attached can not exceed spacings of sixteen inches (16") on center.
- 10. All lumber must be grade stamped. Unstamped lumber is unacceptable as a framing structural framing member.
- 11. Where air handling units are supported by ceiling joists, those joists will be calculated as floor joists. Where air handling units are supported by rafters, those rafters will be calculated as rafters supporting a drywall ceiling.
- 12. Brick wall ties must be installed.

# b. Metal Stud Framing

(A structural steel report must be turned in at least 24 hours prior to requesting the inspection)

- 1. Studs must be screwed to the top and bottom track on all four sides of the stud.
- 2. Required fire rated wall assemblies (fire walls) must exactly match the specifications of the UL, FM or other testing agency.

# 15. FIREPROOFING/FIREWALL

All rated wall, ceiling and floor assemblies must be inspected to verify that all specifications of the testing lab are met. For example, if a wall is referencing UL U408 as the assembly, all portions of the assembly listed in UL U408 must be met exactly. No deviation is allowed from the referenced listing.

#### 16. MASONRY

- a. Wall ties must be spaced no more than eighteen inches (18") horizontally and vertically.
- b. Wall ties are required within twelve inches (12") of any opening greater than sixteen inches (16").

#### 17. ENERGY INSULATION

- a. All wall insulation must be installed per the COMCheck.
- b. All windows and doors must meet the minimum requirements contained in the COMCheck document. (U-factors for windows must be determined by utilizing chapter 1 of the International Energy Conservation Code.
- c. Ceiling insulation must comply with the minimum requirements contained in the COMCheck document.

# 18. MECHANICAL DUCT ROUGH

- a. Metal ducts must be screwed and taped or sealed with an approved mastic material.
- b. Flex duct must be sealed with tape or mastic at the register. Only zip tying at the register is not an approved method.
- c. Flexible ducts must be supported and turns made in such a way that the air flow is not deterred.
- d. A minimum one inch (1") clearance from combustible materials must be maintained around gas appliance vents.
- e. Air conditioning condensate drains must be tied into a wet trap.
- f. Where air-conditioning condensate drain pans are located in an attic, a secondary drain must be installed with the condensate line discharging over a window, door, patio or other approved location.
- g. Condensate drain lines must be a minimum of three-fourth (3/4") inch in diameter.
- Condensate drain lines located on a roof must be copper. Traps located on the roof must be protected from freezing.
- i. Bath fan exhaust ducts must terminate at the outside of the building.
- j. Horizontal runs on gravity type water heater and furnace flue vents must not exceed seventy-five percent (75%) of the height of the vent. One offset can be a maximum of sixty (60) degrees. All other offsets are limited to a maximum of forty-five (45) degrees.
- k. Nylon duct straps are not an approved material for strapping duct.

#### 19. MECHANICAL DUCT INSULATION

All ducts are to be insulated per the requirements of the COMCheck document.

#### 20. ELECTRICAL CEILING

- a. All boxes must have covers.
- b. All boxes must be properly bonded.
- c. All penetrations in fire rated assemblies must be properly sealed.
- d. All light fixtures must be installed and properly supported

# 21. FRAMING CEILING

- a. All ceiling grid must be properly supported.
- b. All penetrations in fire assemblies must be properly sealed.

#### 22. GREASE DUCT

- a. Grease ducts are required to be liquid tight. The contractor is required to supply a bright light that has three hundred sixty degree (360°) coverage at the time of inspection to verify the joints are tight and no pinholes exist. Lights in the space must be turned off during the light test of the hood.
- b. Grease ducts must be located at least eighteen inches (18") from any combustible materials. Ducts may be closer if listed by the manufacturer or protected by a fire assembly or fire wrap. The fire assembly must comply with an assembly tested by UL or other nationally recognized testing lab. Fire wrap must be installed in accordance with the manufacturer's installation standards.
- Grease ducts must be constructed of carbon steel not less than 0.054 inches in thickness (No. 16 MSG) or stainless steel not less than 0.043 inches in thickness (No. 18 MSG).
- d. All joints must be welded or sealed by a listed means.
- e. Rooftop terminations must comply with section 510.8 of the 2012 Uniform Mechanical Code.

#### 23. HOODS

- Type I Hoods must be constructed of steel with a thickness not less than 0.043 inches (No. 18 MSG) or stainless steel not less than 0.037 inches in thickness (No. 20 MSG).
- b. Type II Hoods must be constructed of steel not less than 0.024 inches in thickness (No. 24 gauge). Hoods constructed of copper must be constructed of copper sheets weighing not less than 0.17 ounces per square inch.
- c. Joints in the hood must be welded or sealed by a listed sealant. All joints must be liquid tight.
- d. Hoods must extend not less than six inches (6") beyond the edge of the cooking surface on open sides and the vertical distance between the top of the hood and the cooking surface shall not exceed four feet (4').
- e. Any penetration into the hood must be listed in accordance with UL 1978 and all penetrations must be sealed devices.

# 24. ELECTRICAL SERVICE/METER RELEASE

(Inspection approval allows for release of electric meter)

- a. Cover must be off of main panel box.
- b. Grounding electrode system must be complete.
- c. All connections between the grounding electrode conductor and the grounding

- electrode must be accessible.
- d. Neutral and ground conductors must be properly coded and identified.
- e. Required fixtures and equipment installed and wired.
- f. Required receptacles switches and fixtures installed and wired.
- g. All items which could result in a difference in potential must be bonded. This includes building steel, metal water pipes, gas lines, etc.

#### 25. GAS SERVICE RELEASE/GAS FINAL

(Inspection approval allows for release of gas meter)

- a. Where a gas piping system is utilized that contains a working pressure greater than one-half (½) p.s.i., an air test of at least ten pounds per square inch (10 p.s.i) on a diaphragm gauge that has a set hand and has a maximum range of twenty (20) p.s.i. For portions of gas piping that are regulated to a working pressure of less than one-half (½) p.s.i, a 3 psi test with a diaphragm gauge that has a set hand and has a maximum range of six (6) p.s.i. is acceptable.
- b. All open gas lines and shut-off valves must be capped. A shut-off valve does not eliminate the requirement to cap the line.

#### 26. MECHANICAL FINAL

- a. All mechanical equipment must be installed per code and manufacturer's installation instructions.
- b. Combustion air vents must be installed in the top and bottom portion of closets enclosing gas appliances. Each vent must total 100 square inches.
- c. All mechanical must be installed with all connections complete.
- d. Controls and devices in the system must be operational.
- e. All boilers (including water heaters) exceeding 199,000 BTU's must be inspected and approved by the Boiler Division of TDLR.

# 27. ELECTRICAL FINAL

- a. All electrical must be complete and electrical meter must be installed.
- b. All receptacles and light fixtures must be installed, wired and working properly.
- c. Circuits must be labeled with ink or typewriter in the breaker box.
- d. All temporary power (lighting and t-pole) must be removed.
- e. All receptacles in the following locations must have GFCI protection:
  - 1. Bathrooms
  - 2. Kitchens
  - 3. Rooftops
  - 4. Outdoors
  - Locker rooms with showering facilities
  - 6. Garages, service bays and similar areas
- f. The calculated short circuit rating must be marked on industrial control panels, motor controls, HVAC equipment and machinery.
- g. Receptacles less than 5.5' off the floor installed in hotels, motels and child care facilities must be tamper resistant.

# 28. PLUMBING FINAL

- a. Gas meter must be installed.
- b. All gas lines must be connected. Gas stops and caps must be installed on any gas line installed for future use.
- c. All plumbing fixtures must be installed. Accessible toilets must have a clearance of at least 18" from any side wall or partition to the center of the toilet.
- d. All non-accessible toilets must have a clearance of at least 15" from any side wall or partition to the center of the toilet and a clearance of at least 21" in front of the toilet.
- e. All hose bibbs must be frost proof with integral vacuum breakers.

- f. Sewer cleanouts must be cut to grade.
- g. PVC vent stacks must be painted with latex paint.
- h. Hot water must correspond to the left side of fittings on plumbing fixtures.
- i. All public hand sinks must have tempered water.

# 29. ENERGY FINAL

The Lighting portion of the COMCheck must be available for the inspector to verify compliance with the energy code.

#### 30. ACCESSIBILITY FINAL

All items must comply with Chapter 11 of the IBC as well as TAS review comments.

#### 31. BUILDING FINAL

- a. All equipment must be installed, wired and working properly.
- b. A permanent address must be installed on the front of the building with numbers of contrasting color to background. The address must also be installed on the back door (if there is a back door)
- Knox box must be installed.
- d. Street, alley, and all flatwork must be clean and clear of mud and debris.
- e. Parking areas must be properly striped. Fire lanes must be properly striped. Accessible parking spaces must be properly marked with signs and painting.
- f. All landscape work must conform with the approved landscape plan. Trees and shrubs must not be damaged or dead.
- g. The site must conform to the approved site plan.
- h. Yard must be clear of debris and final grade completed.
- i. Exit signs must clearly identify the exit path from the building.
- j. All panic hardware must be installed. Exit doors must be openable from the inside of the building without the use of a key or any special knowledge.
- k. All wall surfaces adjacent to toilets and urinals must be composed of a hard, smooth easily cleanable surface. Painting the surface only will not comply with this requirement.

# E. ADOPTED CODES

The above requirements are only a general list of building, electrical, plumbing, and mechanical code regulations. For a complete list of building requirements refer to:

2012 International Building Code

2012 Uniform Mechanical Code

2012 Uniform Plumbing Code

2012 International Energy Conservation Code

2014 National Electrical Code

For a copy of City of Houston amendments to the above codes, please see: City of Houston Code Amendments Page