

Residential Construction - Site and Building Plan

Topics Covered

- ◆ Permit Information
- ◆ Trade Permits
- ◆ Job Site Requirements
- ◆ List of Adopted Building Codes
- ◆ Required Building Inspections
- ◆ Site Plan Checklist
- ◆ Building Plan Checklist

What requires a permit?

An owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change the occupancy of a **building** or structure. Erecting, installing, enlarging, altering, repairing, removing, converting, or replacing any **electrical, gas, mechanical, or plumbing system**. The installation or alteration of fire extinguishing systems. Moving, changing or constructing an access to or from any public street from a **driveway** including repair, removal or installation of curbs or culverts.

permits be obtained for certain types of work as listed above.

- ◆ Permits **protect** you, your family, home, and financial investment.
- ◆ Inspections **ensure that work is done safely** and meets the minimum code requirements. Incorrect installations can result in house fires, flood damage and/or structural problems.
- ◆ **Minor problems** that could lead to **costly repairs**, liability and life safety issues can also be detected during inspections and brought to your attention before the situation worsens.
- ◆ When **selling a property**, the buyer, realtor or lender

may require that unpermitted work be properly permitted, corrected and inspected before closing. This leaves you in the position of scrambling to get unpermitted work permitted.

Where to get a permit?

Permits can be obtained at the **City Service Center** located at 448 SH 75 N. Customers are welcome to come in with preliminary drawings and questions before applying for the permits.

Who can obtain a permit?

If the property is an owner occupied homestead, the **property owner** may obtain the required permits. Otherwise, a licensed electrical, mechanical and/or plumbing **contractor** will need to obtain the trade permits.

Why get a Permit?

- ◆ The Adopted Residential Building Code and Texas Licensing Laws require that

Overview:

The permitting process is divided into two parts- plan review and inspections. The first part includes applying for the permit, plan review and approval, and obtaining the permit. The second part includes construction and inspections. A permit is not complete until it receives final inspection approval.

Building Permits

A building permit is required to build a new structure, or to alter or add on to an existing structure.

How to obtain a permit

Permit applications and plans may be submitted in person or be mailed in. The plans will then be submitted to the Building Official and/or Planner for review. When you are ready to apply for a building permit, please include the following:

- ◆ Completed Building Permit Application
- ◆ One set of drawn-to-scale plans showing all of the work on the building and the property and a digital copy of the building plans (i.e. thumb drive, cd, etc.)
- ◆ A design plan of all mechanical, electrical and plumbing work you will be doing

- ◆ Development Permit Application for new structures or additions to existing structures, and a letter size site plan

Online Permitting

- ◆ Visit development.huntsvilletx.gov/ portal, once on the page you can use Sign In/Register to log in or create a portal account. Once signed in go to My Account to link to your company. Contact permitting office with questions.
- ◆ Apply for permits through the website and request and track your inspections

Contact us:

Permitting/Inspections

448 SH 75 N

Huntsville, TX 77340

Phone: 936-294-5717

Fax: 936-294-5701

permits@huntsvilletx.gov

Trade Permits

Mechanical Permits

Required for new or replacement of heating, cooling and ventilation systems.

Plan submittal required if involving:

- ◆ New system installation
- ◆ Replacement of air handler and/or ducts

Electrical Permits

Required for all new electrical system installation, electrical system/equipment replacement and major repairs

Plumbing Permits

Required for all new plumbing systems, water and/or waste piping replacements and/or additions or remodels (including showers)



Job Site Requirements



- ◆ The building address and permit **must be posted** on site and must be visible from the street
- ◆ City of Huntsville **stamped plans** (contractor set) must be kept on site and maintained in a dry and good condition
- ◆ The site must have **erosion control** installed and maintained before the lot is cleared
- ◆ A portable restroom must be placed and maintained on site from the beginning of the project until the final plumbing inspection is approved
- ◆ The jobsite must be kept clean of trash and debris that may be blown or washed off the site by weather and streets must be kept clean from mud that is tracked by vehicles and machinery
- ◆ **Safety**, in accordance with OSHA standards, must be maintained at all times

Building Codes (for one and two family dwellings)

The City of Huntsville has adopted the following documents related to building and construction (see chapter 12, **City of Huntsville Code of Ordinances** for the latest additions and amendments to these codes):

EFFECTIVE: OCTOBER 1, 2021

- ◆ International Residential Building Code 2021
- ◆ International Building Code Appendix J-Grading 2021
- ◆ International Swimming Pool & Spa Code 2021
- ◆ National Electrical Code 2020



Required Building Inspections (all permitted work requires inspection)

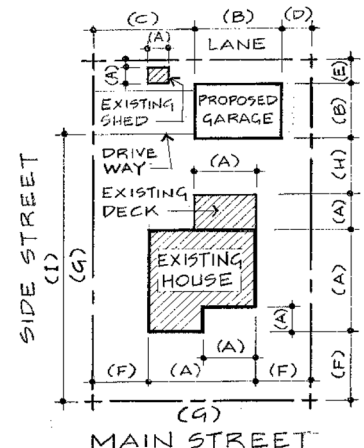


- ◆ Setback inspection (to be performed simultaneously with ground plumbing or pier inspection). Form Survey
- ◆ Temporary electrical pole
- ◆ Pier, foundation, and ground plumbing
- ◆ Framing, electrical rough-in, plumbing top-out, HVAC duct, energy
- ⇒ **NOTE:** duct seal test by 3rd party required
- ◆ Drive approach, grading
- (performed simultaneously with the building final)
- ◆ Final building, plumbing, electrical, HVAC, energy
- ⇒ **NOTE:** Air tightness test on finished home required by a 3rd party
- ⇒ Job check inspections will be performed by an inspector to verify compliance of codes that the contractor is not required to call specific inspections for. Include but not limited to:
 - ⇒ Erosion control
 - ⇒ Brick-ties
 - ⇒ Portable restroom
 - ⇒ Posting of permits
 - ⇒ Address posting
 - ⇒ Site cleanliness and safety
- ◆ **NOTE:** this is a list of minimum inspections required for standard construction. The contractor must arrange special inspections with a building inspector.

Site Plan Information Checklist- 2 copies required

The following checklist includes items that must be incorporated on your site plan

- Plans must be drawn to scale of not smaller than 1" = 50 ft
- Plans must show dimensions, bearing of all property lines and total square footage or acreage of site
- North direction arrow must be provided
- All existing and proposed structures must be shown with building dimensions and distances from property lines (setbacks)
- Access (driveways) must be shown with dimensions, shape and location
- All recorded public easements (sewer, water, gas, electrical, etc.) must be shown and properly dimensioned
- Public streets shall be shown with pavement width, curb or ditch location, sidewalk location and width, and right-of-way width
- Septic system and/or water well must be shown with size and location. A design by an engineer or registered sanitarian will be required before septic system location is approved
- Site topography, grading and drainage requirements for Standard Single Family and Duplex Residential constructions
- ⇒ Show existing ground elevation at all property corners, building corners, top of adjacent curb and ditch flowlines, as a minimum
- ⇒ Show proposed finished floor elevations for house and garage, proposed lot drainage patterns and drainage improvements
- ⇒ Show total cut and fill quantities for earth work if applicable
- Parking areas must be clearly shown and dimensioned. Two parking spaces per residential structure (18' X 19')
- Culvert application required if site is located on a non-curbed street
- Subdivision Plat or Boundary Line Adjustment required (if tract proposed for this development was created in its current size and shape after June 27, 1972, and was not properly subdivided)



Building Plan Checklist - 2 sets of construction drawings required

The following checklist includes items that must be incorporated into the construction drawings

□ **Foundation Drawings**

- ⇒ Layout showing beam locations and pier (if applicable) locations
- ⇒ Beam details showing cross-sectional view with beam widths and depths
- ⇒ Show reinforcement type, size and placement for beams and piers
- ⇒ Details for the slab which include depth and reinforcement
- ⇒ **NOTE:** beams must rest a minimum of 12 inches into undisturbed soil, rest on piers, or the building pad must be tested by a testing laboratory to verify 95% modified compaction has been met
- ⇒ If a post tension type foundation is proposed. The design must be

sealed by an engineer registered with the State of Texas

- **Floor Plan:** must include dimensions of all rooms with notation of what each room will be used for

□ **Framing Plan**

- ⇒ Show details of roof framing that includes size, grade, and proposed spans
- ⇒ Ceiling and floor joist size, grade and proposed spans must be shown
- ⇒ If trusses are used, engineered sealed truss drawings with placement plan is required

□ **Electrical Plan**

- ⇒ Show location of all fixtures and panels
- ⇒ Show size of service

- **Mechanical HVAC:** must include size, type, location of equipment

and size, type and layout of ducts. Plans must include design criteria used to size equipment and must be registered per ACCA Manuals D, J, & S.

- **Elevation Drawings:** front, rear, left, and right side elevations of house must be shown

- **Energy Requirements:** energy compliance report must be submitted

□ **Plumbing**

- ⇒ Show location of all plumbing fixtures (i.e. sinks, water, closets, water heaters tub/shower, etc.)
- ⇒ Homes containing gas appliances, provide gas pipeline sizing and calculations

