

CITY OF HOUSTON

RESIDENTIAL PERMITTING 101

**Houston Public Works
Houston Permitting Center**

A general overview of the residential building permit process. This presentation outlines the basic steps involved in submitting plans for review, obtaining permits, and scheduling inspections for one- and two-family dwellings.

**HOUSTON
PERMITTING CENTER**

Topics Covered In This Presentation

- Project Planning
- Design Requirements
- Building Permit Exemptions
- Licensing & Registration
- Application Process
- Required Reviews by Project Type
- Plan Submittal
- Planning Requirements
- Utility Analysis
- Flood Plain Management
- Traffic
- Storm Water
- Required Inspections
- Basic Code Requirements
- Other Services & Options
- Resources & Other Information
- Website Highlights
- Contact Us

Project Planning

Consider the following when planning the project. These items can save time and money.

- ❑ Make sure you can financially and legally build your proposed project
- ❑ Legal – Deed restrictions and property liens
- ❑ Survey and property lines (Ensure that your structure can be built in the proposed location)
- ❑ Utility availability (Assess if water, storm and sanitary capacity and utilities are available or if additional fees may be required)
- ❑ Platting (May be required if there is a change in use on the property)
- ❑ Verify Setback requirements
- ❑ Floodplain (Refer to Chapter 19 of the Code of Ordinances)

Design Requirements

Defining the Scope of Work

- New Construction – Ground up construction, Foundation Move-In
- Addition – Square footage added
- Remodel – Alteration of the existing building
- Repair – Replacement of materials; “like for like”

Applicable Codes

- 2012 International Residential Code - Amendments
- 2015 International Energy Conservation Code- Amendments
- 2017 National Electrical Code – Amendments
- Various Code of Ordinance Chapters

Plans Required

- Two (2) sets of plans are typically required for review. For detailed requirements please see “Plan Submittal”.

Building Permit Exemptions

If your project consists of only the following, you do **NOT** need a building permit.

- Painting, papering, tiling, carpeting, flooring, cabinets*, countertops and similar finish work. (*While cabinets do not require a permit, replacement of plumbing or electrical fixtures will require permitting.)
- Interior trim & similar work
- Wood or metal fences up to 8 feet tall
- Siding that does not exceed 128 square feet
- Uncovered wood decks up to 30 inches high
- Storage sheds 200 square feet or less
- Repair of exterior wood fascia, trim & soffits
- Roof covering that does not exceed 100 sq. feet

Important Notes:

- ! Exemption from permit requirements shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of the code or any other laws or ordinances of this jurisdiction.
- ! Properties located in the floodplain may need a floodplain development permit even if a building permit is not required. To obtain more information, please contact the Floodplain Management Office at 832-394-8854 or fmo@houstontx.gov

Licensing & Registration

Who can purchase what permits and when?

- ◆ The building permit may be purchased by the owner, agent, contractor. General Contractors are not required to be licensed.
- ◆ Licensed contractors can purchase trade permits after the building permit has been sold. In some cases, a homeowner may purchase certain trade permits. For more information please contact us at 832-394-9494.
 - Electrical
 - Mechanical
 - Plumbing
 - Sprinklers
 - Fire Alarms
 - Sidewalk/Driveway

Electrical

Master Electrician must be licensed by the [Texas Department of Licensing and Regulation](#) (TDLR) and be registered with the City of Houston.

Mechanical

Air Conditioning Contractor must have a type A or B license from the [Texas Department of Licensing and Regulation](#) and be registered with the City of Houston. In some instances, a homeowner may obtain this permit.

Plumbing

Master Plumber must be licensed by the [Texas State Board of Plumbing Examiners](#) and be registered with the City of Houston. In some instances, a homeowner may obtain this permit.

Sidewalk/Driveway

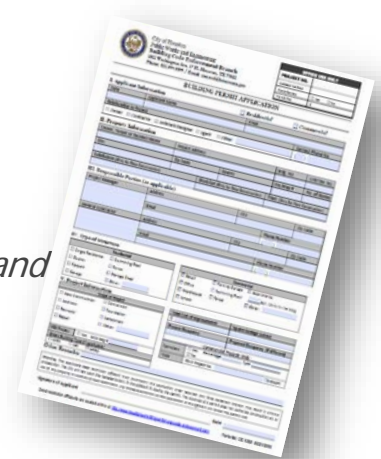
Only a bonded contractor with a \$2,000 surety bond may pull this permit, although the homeowner may purchase permits in instances where a curb cut is not required.

Application Process

- ❑ **Building Permit Application (paper or electronic)** Application for new construction must be done online. For electronic submittal instructions, visit www.hpcservices.org.

The application must include the valuation of the project. *Valuation is defined as the total cost of construction to the end user, excluding the land purchase costs and attributed to the land purchase. The value of donated goods and services is included.*

Note: Correction products, such as Wite-Out liquid corrector or correction tape, cannot be used on the building permit application and supporting documents

A sample of a Building Permit Application form from the City of Houston. The form is titled "BUILDING PERMIT APPLICATION" and includes sections for "Project Information", "Owner Information", "Permit Information", and "Fees". It contains various fields for text entry, checkboxes, and a table for listing items. The form is tilted slightly to the right.

- ❑ **Declaration In Support of Application For City of Houston Building Permit (Individual Owner or Corporate/Other Business Entity Owners)** – Verify if the property has Deed Restrictions and whether this project would be in violation. For more information [click here](#) or contact the Harris County Clerk's office at 713-755-6405.
- ❑ **Addresses** are critical and must be verified at the Building Code Enforcement Office for new construction. When completing the application online, there will be an address validation request button that will need to be selected prior to finalizing the application.
- ❑ A **Project Number** will be assigned by the City of Houston Permits Office or iPermits.

Required Reviews by Project Type

The following chart indicates the various department reviews required depending on the scope of work.

Project Type	Planning	Taps & Meters ²	One Stop ³	Flood ⁴	Traffic	Storm ⁵
New construction ¹	✓	✓		✓	✓	✓
Addition	✓	✓	✓	✓		✓
Remodel		✓	✓	✓		
Garage/Carport (new)	✓	✓	✓	✓		✓
Repair			✓	✓		
Fence	✓		✓	✓		
Driveway/Sidewalk(new)	✓		✓	✓	✓	✓
Driveway/Sidewalk (existing)			✓	✓		

Footnotes

¹ Plans must be submitted electronically for review. [Click here](#) for more information.

² Taps & Meters applicable if plumbing is added

³ **Plans must be reviewable in 30 minutes or less to qualify**

⁴ Flood applicable if project is in a flood plain

⁵ Storm review required if the residential lot is > 15,000 sq. ft. or if lot ≤ 15,000 sq. ft. with more than 65% impervious area

Plan Submittal

The Plan Review Department is responsible for ensuring that plans comply with all applicable building codes. All new construction projects, most renovations, repairs, or addition projects require plan approval before purchasing a permit. The following depicts the minimum plan submittal requirements for various scopes of work.

New Construction / Remodels / Additions/ Garages & Carports



Note: Application and plans for new construction must be submitted electronically. For more information, visit <https://www.hpceservices.org/>

- Two (2) complete sets of plans - All dimensions and materials clearly indicated
 - Survey by Texas Registered surveyor or a complete site plan with dimensions showing: Existing property lines, Easements, Building Setback Line and Proposed Building
 - Foundation plans: needed if a project includes a foundation. Dimensions shall include beams and steel bars with foundation conditions noted on plans.
 - Floor plans. For additions indicate footprint of existing building and show in detail new addition/affected area with location of partitions, windows and doors.
 - Elevation plans
 - Door and window schedule shown on plans
 - Wall section details
 - Roofing and framing plan indicating purlins, ceiling joist and rafters
 - Trusses (when applicable)
- Plans must show prescriptive compliance with the 2015 International Energy Conservation Code or include ResCheck or IC3 Compliance Report (if applicable)
- Residential Prerequisite Checklist (Form 1301; New construction only)
- Grading and Fill Worksheet
- Calculation of Impervious Percentage Form
- Windstrapping information (indicated for 110 mph wind load)

Plan Submittal (continued)

Remodels

Two sets of plans which include:

- Floor plan of existing building and show in detail affected area
- Materials used
- Wall section details to determine bearing and non-load bearing walls
- Plans must show prescriptive compliance with the 2015 International Energy Conservation Code or include ResCheck or IC3 Compliance Report.
- Demolition of any load bearing walls will need additional requirements to determine direction of ceiling joists, and the location of header and beam

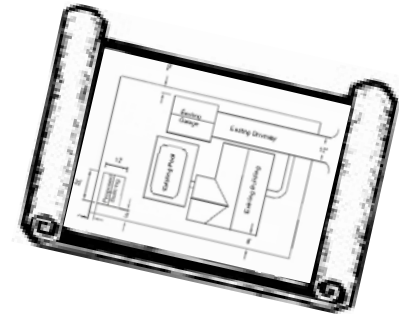
Repairs - Permits are required for repairs that involve only replacement of existing structural members and other building elements. A **Repair Spec list** must be submitted indicating the following:

- Replace siding/doors/windows / trim / stairs / porch / fireplace
- Replace roof covering / ceiling / wall covering / insulation
- Re-frame walls and /or ceiling

Planning Requirements

The Planning & Development Department reviews development site plans, (new construction and additions) for compliance with the City Code of Ordinances (Chapter 42), parking regulations (Chapter 26), tree and shrub regulations (Chapter 33); determine property use and setbacks (Chapter 42).

- Site plan
 - Drawn to scale
 - Show building setback lines
 - Show all existing and proposed structures
- Survey (one copy)
- Landscape analysis form**
- Trees (1 required on lots < 5000 sq. ft. and 2 on lots > 5000 sq. ft.)
- Protected trees
- Recorded subdivision plat (one copy)



Utility Analysis

The Utility Analysis (Water/Waste Water) group is responsible for managing wastewater flows through wastewater capacity reservations (WCR), managing water demands through water/storm drainage commitment letters, review process which provides information on water, wastewater and storm drainage requirements for new development or for existing development that will require additional water and/or wastewater capacity. (New construction and projects that only include plumbing.)

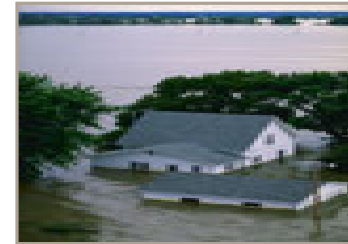
- ❑ Impact fee receipt (or exemption form)
- ❑ **Waste Water Capacity Reservation Letter**¹ (WCR)
- ❑ Point of connection
- ❑ For Impact Fee / WCR Credit
 - Demolition project number or
 - Previous water account or
 - HCAD tax statement

¹ Applicable for: a.) New development or for existing development that will require additional water and/or wastewater capacity, b.) If the main water line is $\leq 6''$ or $\geq 20''$ and c.) If the sewer line is $< 8''$.

Flood Plain Management

The Flood Plain Section manages all development in the flood plain by reviewing plans, monitoring and inspecting construction activities as required by the Code of Ordinances. An archive of historic Flood Insurance Rate Map (FIRM) panels that are no longer “effective” as determined by FEMA are maintained by this office.

- Elevation Certificates** (must be signed & sealed)
 - When plans are submitted
 - Prior to Framing Inspection
 - Prior to Final Inspection
- Mitigation Plan
- Site Topography Survey
- Finish floor elevations of all slabs
- Cut and fill areas (must be shaded)
- Appliances (mechanical, electrical & plumbing) must be 2 foot above the 500-year BFE (Base Flood Elevation)
- Water resistant material (for areas below the DFE)
- Flood vents (for areas below the BFE)



Note: No permit shall be issued for development in the floodway except as stipulated in the City of Houston Ordinance Chap. 19-43 sec (b) & (c).

Traffic

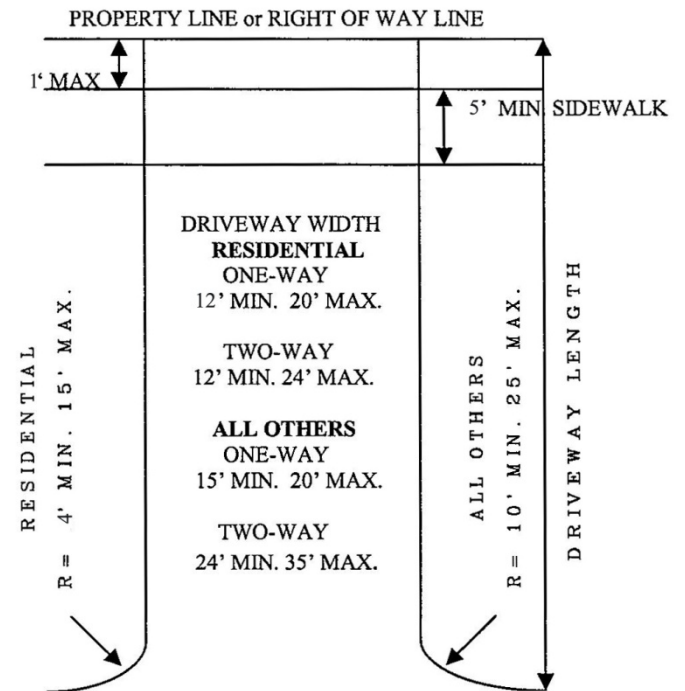
The Traffic Department reviews plans for driveways, sidewalks, and culvert parking lots, issues permits for private street paving work, and addresses right-of-way issues.

Driveways, Sidewalks & Culverts

- ❑ Plans or drawings drawn to scale are required and must show:
 - Existing and proposed driveways
 - Location of driveway to nearest neighbor common property line
 - Widths of Sidewalks, Ditches, Culverts
 - Existing trees, storm inlets and location of edge of pavement
 - Center line of ditch & radii or taper of the driveway

- ❑ Requires \$2,000 bonded contractor

Note: Minimum culvert size is 24" RCP (reinforced concrete pipe) X width of driveway



Storm Water

The Storm Water review ensures that site drainage complies with all mandated policies directing runoff to the city right-of-way and may not overflow to an adjacent property.

Minimum Requirements For Residential Drainage

- Detailed site drainage plan
- Single family residences on lots 15,000 sq. ft. or more or over 65% impervious cover require a Storm Water Information Form.
- Some sites require Detention/Storage plans by a Professional Engineer per the Letter of Storm Availability.



Required Inspections

Once the appropriate permit is purchased, work may begin. Approved plans and permits must be on the job site for inspections. Be sure to schedule an inspection after the permit has been purchased and the work completed. Inspections may be scheduled online or by calling the Interactive Voice Response (IVR) System at 713-222-9922.

Electrical Inspections

- Ditch Cover - Schedule when underground conduit is put in
- Rough-in - Schedule when walls and ceiling are wired
- TCI - Schedule when temporary power is needed to check wiring
- Meter Loop Services/Final - Schedule after all work is completed



Plumbing Inspections

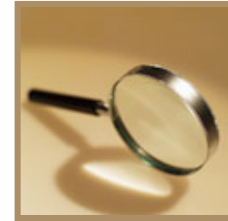
- Ground, Sewer, Water Service, Storm Drainage, Lawn Sprinklers - Schedule before pipes are covered
- Rough-in - Schedule before sheetrock is installed
- Gas/Final - Schedule when work is complete



Required Inspections (continued)

Mechanical Inspections

- Duct Seal - Schedule before insulation and sheetrock is installed
- Cover - Schedule before insulation and sheetrock is installed
- Grille Seal - Schedule before insulation and sheetrock is installed
- Final - Schedule after work is complete



Structural Inspections

- Pier / Foundation - Schedule before placement of concrete
- Windstorm - Schedule prior to exterior sheathing installation to verify fasteners/straps
- Frame - Schedule after MEP rough-ins and prior to installing insulation and sheetrock.
Note: Truss plans should be approved at this time.
- Lath/Brick Tie - Schedule after frame inspection has been approved
- Insulation - Schedule after frame inspection has been approved
- Building Final - Schedule after the entire project has been completed to verify that all life safety and grading items have been installed and are working properly

Basic Code Requirements

Some of the basic code requirements that are reviewed upon submittal are as follows.

- Location on property – 3' typical unless rated construction
- Minimum 1 door 3'0 wide and 6'8 tall
- Egress windows required out of bedrooms
- Stairs – Tread max. 7 ¾ inch rise and 10" min. depth; Headroom 6' 8" min. typical
- Smoke Detectors – Required in each bedroom and hallways near bedrooms; interconnection required
- Sidewalks required on Major Thoroughfares, Inside 610 Loop, and lots over 125' street frontage
- Handrails – between 34 -38"
- Guardrails – 36" in height minimum and 4" openings max
- Lighting and ventilation are required
- Sanitation facilities are required
- Windows/Insulation/Equipment efficiencies must meet Energy Code Requirements

For more information please see the [Single Family Residential Checklist – 2012 IRC](#) or call 832-394-8820.

Other Services & Options

- **One-Stop Program** simplifies the permit process. In most cases, other than new buildings, your building and improvement plans can be reviewed and a building permit issued within just a few hours when the following criteria are met:
 - Applicable Plan Review Requirements
 - Completed Residential Building Permit Application and project number
 - Review can be done in 30 minutes

Note: Plans for new construction must be submitted electronically.

- **Multi-Discipline Inspection Program (MDI)** is a voluntary program for new one- or two-family residential home builders/remodelers administered by Structural Inspections. The objective is to reduce the number of inspections by scheduling inspections as seven (7) specific construction phases are completed. Call the Structural Inspection Section at (832) 394-8840 for more information.
- **New Residence Model Home Program**
 - Designed for builders who build 10 or more units of the same repeat home over a 12 month period.
 - For subsequent identical units built, plan reviews are performed in an expedited manner and permit fees are known in advance.
 - Repeat homes require submittal of a Grading and Fill Worksheet (CE-1094), site plan and landscape form to the New Residence Office.

TEMPORARILY
SUSPENDED

Resources & Other Information

- **Building Permit Fees:** www.houstonpermittingcenter.org/code-enforcement/permit-fee-schedule.html
- **Water & Sewer Rates:** www.publicworks.houstontx.gov/pds/development.html
- **City of Houston Comprehensive Drainage Plan:** www.swmp.org/swprojects/cdp.htm
- **Open Records:** The Open Records Section provides permit records and residential plans beginning in 1988 to the present.
 - A **Public Information Request Form**, e-mail or faxed request must be submitted.
 - Lost Plans may be requested with an original letter of consent from the Architect and/or Engineer(s) on the plans, before the plans will be released.
- **Lost Permits** (Job Cards) may be duplicated and purchased from the Permits Office.
- **Tax Increment Redevelopment Zone (TIRZ):** TIRZs are special districts created by City Council to attract new investments to an area. TIRZs help finance the cost of redeveloping or encouraging infill development in an area that would otherwise not attract sufficient market development in a timely manner. Taxes attributable to new improvements (tax increment) are set-aside in a fund to finance public improvements in the zone.
- **Historic Designation**
 - As a designated City of Houston historic building, your property will be exempt from compliance with Energy Code requirements in the Building Code.
 - You are eligible for a 50% discount on building permit fees if the Houston Archeological and Historical Commission (HAHC) issued a Certificate Of Appropriateness (COA) for the approved work.
 - Historical Preservation Ordinance regulates exterior alteration, new construction, relocation or demolition of any historic structure, object or site.

Resources & Other Information

- **Searching for Issued Building Permits**

The City of Houston Building Code Enforcement (BCE) Group has a tool available online that allows users to search for permits sold by BCE in the last three years using different search criteria, such as: job address, applicant name, permit type, zip code, building use.

To access the Sold Permit Search tool, visit

http://www.cohtora.houstontx.gov/approot/soldpermits/online_permit.htm

- **Permit e-Report**

Customers can subscribe to receive the Permit e-Report. The report provides information regarding any new construction, remodeling, or change-of-use permits by zip-code and is emailed every Monday.

To sign up to receive the Permit e-Report, please visit:

http://www.houstontx.gov/planning/Publications/listsrv/subscribe_eneletters.htm

- **Reporting Unpermitted Work**

An anonymous complaint can be submitted to the City of Houston 311 Help & Information Section for work without a permit. A tracking number will be assigned and can be used to follow up with their office regarding the concern.

An investigator will conduct a site visit and inform the responsible party of the required actions and time frame.

The complaint can be submitted via phone by contacting the City of Houston 311 Help & Information Section at 713.837.0311 or online at: <http://hfdapp.houstontx.gov/311/index.php>

Online Permits Page

Welcome to the City of Houston's Online Permits Website

iPermits - Customer / Contractor Portal

[First Time User](#)

[Login](#)

For questions, please contact us at rmcagd@houstontx.gov

Building Fee Estimator

[Fee Estimator](#)

To download the Building Code Enforcement's Permit Fee Schedule, [Click Here](#)

Schedule Building Code Enforcement Inspections

[Schedule Inspections and View Inspections History](#)

To register for the Building Code Enforcement's Inspection Notification System to receive inspection results by e-mail or cell phone [Click Here](#).

Check Permit Status

Plan Review

[Plan Review Status \(Real Time Pages\)](#)

Permits Sold

[Search for Sold Permits \(sold permits for the last 3 years\)](#)

Other Information

[Building Code Enforcement Main Page](#)

**Purchase Permits
(Certain restrictions apply)**

**Estimate Building
Permit Fee**


Schedule Inspections

Check the Status of Plans

**Search for Permits Sold
(In the last 3 years)**

**Code Enforcement
Home Page**


eSERVICES Page



HPC eServices hpcservices.org

Welcome to the Houston Permitting Center's eServices Web Portal

Convenience with a click!



eSERVICES is the Houston Permitting Center's self-service portal—designed to make it easier for you to achieve your goals while complying with the City's regulations.

Click on the tabs below to learn about our available eServices. More convenient self-service options will be added in the near future as we continue working to improve your customer experience.

NOW AVAILABLE: Electronic Plan Review

Electronic Plan Review (EPR) is currently available for:

- > Residential building construction projects (except One-Stop)
- > Commercial building construction projects (except One-Stop)
- > Projects within the City's right-of-way or tying to City utilities (Office of the City Engineer)

Use of EPR is voluntary, but a project must be submitted entirely online or entirely by paper. The two submission methods cannot be mixed.

Two online systems — **iPermits** and **ProjectDox** — are used to complete specific functions in the plan review process. Separate logins are required for each system; however, the same email address and password may be used to set up each system account.


- > iPermits Portal
- > Online Queuing Service
- > ProjectDox Portal
- > eServices Support

Resources

- Commercial EPR User Guide
- Office of the City Engineer EPR User Guide
- ProjectDox Installation Guide
- Residential EPR User Guide

Quick Links

- iPermits Portal
- ProjectDox Portal
- Online Permits Website
- Customer Satisfaction Survey



CHAT NOW!

December 2016						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17

EPR User Guides and ProjectDox Installation Guide

Quick Links to iPermits, ProjectDox, and Online Permits Page

Introduction to iPermits and ProjectDox Portals

Online Queuing Service (Schedule Appointment)

Contact Us...

Please Call Us:

- **General Information**
832-394-9494
- **Residential Plan Review**
832-394-8820
- **Planning**
832-394-9091
- **Taps and Meters**
832-394-8888
- **Inspections**
713-222-9922
- **Open Records**
832-394-8800



Or Visit Us Online:

- **Building Code Enforcement:**
www.houstonpermittingcenter.org/building-code-enforcement.html
- **Permits/Inspections/Plan Review**
www.houstonpermittingcenter.org/city-of-houston-permits/online-permits.html
- **Planning & Development**
www.houstontx.gov/planning
- **Houston Fire Department**
www.houstontx.gov/fire
- **General Information**
www.houstontx.gov/311
- **Flood Maps**
www.tsarp.org
- **Houston Public Works Main Webpage**
www.publicworks.houstontx.gov/home
- **City of Houston Main Webpage**
www.houstontx.gov



Or Email Us at

Residential.Planreview@houstontx.gov



This presentation can be found online at
houstonpermittingcenter.org/code-enforcement/publications.html