



NEW RESIDENTIAL BUILDERS PACKAGE

CITY OF PRINCETON

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INSPECTION REQUEST

972-736-6169 X4 by 12:00pm for next day inspection

This document is not meant to modify any Federal or State laws or City Ordinances. It is intended to be informative and to be used as a guideline. Where circumstances of a particular job differ from these procedures, the decision of the Building Official will prevail.

BUILDING CODES

All Federal, State and local requirements are applicable to projects constructed within the City's jurisdiction whether specifically listed herein or not. The City of Princeton has adopted the following codes regulating building construction with city amendments.

2009 International Building Code
2009 International Residential Code
2009 International Fire Code
2009 International Plumbing Code
2009 International Mechanical Code
2009 International Energy Conservation Code
2009 International Fuel and Gas Code
2011 National Electrical Code
City of Princeton Zoning Ordinance 2009-06-09

BUILDING PERMIT

To apply for a permit, provide **three (3) sets** of plans with diagrams, computations, specifications, and other data as may be required by the Building Official. Before a building permit will be issued, all plans and documents related to the permit application must be submitted to the City of Princeton and all applicable fees paid to the City. All applications must be legible and completely filled out, dated, signed by the builder and all the builders MEP contractors must be listed on the application. Verified address with lot, block, subdivision and phase is required on all applications.

All Contractors performing work within the City's jurisdiction must be registered with the City and provide proof of liability insurance. (i.e.: HVAC, Electric, Plumbing, Irrigator)

Construction or building without a permit is subject to a fine double the permit fee.

Properties with drive access onto a U.S. Highway (380) or a Farm to Market Road (FM) will require a Texas Department of Transportation (TXDOT) Driveway Permit. A \$150.00 Residential Permit Fee is required for filing the TXDOT Application through our Engineering Staff with TXDOT's permit system.

PLAN SUBMITTAL

(3) Site Plans to include: (no larger than 8½" X 14")

Complete address with legal description (lot, block, subdivision, and phase)

Property lines and lot dimensions

North arrow

Proposed structure and all existing buildings

Finished floor and finished pad elevations (if applicable)

All easements, Utility locations

Driveway, sidewalk and fence locations

Setbacks – approved setbacks for front, rear and sides of house must be shown. (No patios can encroach on building setbacks.) *See City of Princeton Zoning Ordinance 2009-06-09*

(3) Residential Energy Code Compliance Report (2009 IECC) Energy report must include Builder's name, Plan number, Address, and Certification Number. Acceptable energy reports include IC3 report, Energy Guage and RemRate.

(3) Engineered Foundation Plans (no larger than 8½" X 14")

Must state foundation was designed for the soil conditions on that particular lot and the design criteria of the 2009 IRC. If letter is provided, original signature and engineer stamp must be on one of the letters submitted. If stated on plans, must have engineer stamp and original signature of engineer on plans.

(3) Sets of house plans to include: floor plan, exterior elevations, framing, roof design, construction details, window/door schedule, masonry on wood details and plans for sheer wall bracing/design. Options reflecting additional buildable space must be identified by the actual square footage area and included in the permit values for total A/C area and/or construction area under roof. Other options shown but red lined will be included within the permit value. Elevation drawings must clearly state that the structure meets the exterior requirements set forth by the City of Princeton. A Brick Calculation Chart must be included showing the percentage (%) of brick coverage for front, right, left and rear elevations including a Total Brick Coverage Percentage (%). All drawings must be legible and show proper square footage for A/C and total building areas.

(3) **Sets of Fire Sprinkler System plans** for all residential structures 5,000 sq. ft. and over.

Homeowners Association (HOA) approval (if applicable, no larger than 8½” X 14”)

Letter of intent for termite protection

CONSTRUCTION SITE STANDARDS

These guidelines have been created in order to establish uniform standards for the installation and maintenance of required systems. This is to be considered the standard for all residential building sites in the city. City ordinance requires that these systems remain in place and in good repair for the duration of the project. (Reference exceptions below). Due to differences in site elevations or grade, some sites may have modified standards in order to meet the requirements of established ordinances. Modifications, if any, will be reviewed and approved by the Chief Building Official on a case-by-case basis.

The following items are required to be in place for the Plumbing Rough inspection:

1. **PORTA-LET:** All residential sites are required to have one porta-let per lot.
Exception 1: if two lots are side by side on the same side of the street, one porta-let may serve the two lots.
Exception 2: the porta-let may be removed from the lot only when a *working* toilet is properly installed in the structure for the use of the workers. On commercial sites, one porta-let for every 10 persons on the site is required.
2. **TRASH BIN:** Trash bins are required on all construction sites. On residential lots, the minimum requirements are 3-sided OSB or plywood bins, well nailed, OR 3-4 sided chain link fence panels properly secured. Chain link material will be no larger than 2” X 2” square. We will no longer accept welded wire fabric trash bins.
Exception: trash bin will not be required after the brick package is completed. The garage may be used for storage of excess materials and refuse until final inspection, in which case it must be empty. NO debris will be allowed on the lot.
3. **DEBRIS FENCE/BARRIERS:** All lots and sites are required to set up debris fence barriers to help contain lightweight materials and debris to the project site. On residential lots, debris fence is required when an occupied residence is within one lot of the project. For all sites: debris fence may be removed when project is ready for final inspection.
4. **ADDRESS AND SIGN:** All lots must have a company/builder sign located at the front of the lot facing the street. The lot address must be clearly posted and be easily seen from the street. Addresses painted on curb are not acceptable. It is highly recommended that independent and private builders include a contact phone number on their sign.
5. **EROSION CONTROL SYSTEMS:** All residential lots must maintain properly installed silt fence and/or curlex for the duration of land disturbing activities, i.e. grading, excavation, and primary construction etc. Only silt fence may be used when installed directly behind curb. Silt fence and Kerlex may be moved out of the way for excavation and other activities such as final grade but **MUST** be replaced until sod or other approved soil stabilization devices are in place. Lots must now have a minimum of 70% vegetation at the front and back of lot to remove erosion controls and to obtain a C.O.

CONCRETE WASHOUT SITES

- Each builder will install and maintain their own washout site.
- The washout site will be surrounded completely with silt fence.
- A rock entry will be installed on the entrance of the washout site. The rock entry will be designed so no runoff from site will occur.

- Each site will have a builder's sign posted.
- If builders in the same sub-division agree to share a washout site, EACH builder will post a builder's sign on that site.
- A letter will be sent to the City of Princeton stating it is a shared site, by whom, and which builder is responsible for clean-up and maintenance.
- Washout site shall be removed at completion of project.

EROSION CONTROL VIOLATION NOTICE BOXES

Each builder in each sub-division must post a box to contain the erosion control violation notices.

SILT FENCE

- Steel posts, which support the silt fence, shall be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of one (1) foot.
- The toe of the silt fence shall be trenched in with a spade or mechanical trencher so that the downslope face of the trench is flat and perpendicular to the line of flow. Where the fence cannot be trenched in (e.g., pavement), weight the fabric flap with rock on the uphill side to prevent flow from seeping under the fence.
- The trench must be a minimum of six (6) inches deep and six (6) inches wide to allow the silt fence fabric to be laid in the ground and backfilled with compacted material.
- Silt fence should be securely fastened to each steel support post or to woven wire, which is in turn attached to the steel fence post. There shall be a three (3) foot overlap that is securely fastened where ends of fabric meet.
- Inspection shall be made weekly and after each rainfall. Repair or replacement shall be made promptly as needed.
- Silt fence shall be removed when the site is completely stabilized so as not to block or impede storm flow or drainage.
- Accumulated silt shall be removed when it reaches a depth of half the height of the fence. The silt shall be disposed of at an approved site and in such a manner as to not contribute to additional siltation.

ROCK BERM

- Use only open graded rock four to eight (4-8) inches in diameter for stream flow condition. Use open graded rock three to five (3-5) inches in diameter for other conditions.
- The rock berm shall be secured with a woven wire sheathing having a maximum opening of one (1) inch and a minimum wire size of twenty (20) gauge and shall be buried in a trench approximately three to four (3-4) inches deep.
- The rock berm shall be inspected weekly or after each rain event and shall be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout construction traffic damage, etc.
- When silt reaches a depth equal to one-third (1/3) of the height of the berm or the height of one foot, whichever is less, the silt shall be removed and disposed of properly.
- When the site is completely stabilized, the berm and accumulated silt shall be removed and disposed of in an approved manner.
- Rock berm should be used as check dams for concentrated flow and are not intended for use in perimeter protection.

INSPECTIONS

We have developed the following lists of standard inspection points in an effort to assist the builders in assuring readiness for inspections, preventing time delays, and reducing the likelihood of re-inspections. These are, of course, only the most basic expectations and are not intended to supplement the code; nor shall they imply approval. The following information is for reference only.

REQUESTS: The General Contractor should call in inspection requests for work done on private property at 972-736-6169 x 4. Any inspection properly called in before Midnight will be scheduled for the next business workday.

CANCELLATIONS: All cancellations must be called in to 972-736-6169 x 4.

RE-INSPECTION POLICY: There will be no re-inspection fee for the first failed inspection. A re-inspection fee of \$50.00 per failed inspection may result thereafter. Re-inspection fees must be paid before the re-inspection will be performed.

PLACEMENT OF INSPECTION APPROVALS:

- At the time the permit is issued the builder will be provided with a Site Inspection Card which will show the required inspections the Inspector will approve all inspections on this Site Card.

REQUIRED RESIDENTIAL INSPECTIONS:

- Trash bin and Port o Pot must be on site at time of first inspection.
- Temporary Pole, Plumbing Rough (Ground) with form survey on site, Water Service and Yard Sewer.
- Foundation inspection from City Inspector
- Framing (i.e., Brick ties, Building Frame/Electric Rough and HVAC Rough/Plumbing Top Out) must be called all together. (Sheer wall plans to be onsite.)
- Insulation Pre-drywall - approval or report from certified third party tester.
- Flatwork (Walks/Drives/Patio). (#3 rebar 24" centers) required.
- Final inspection (required before building is occupied) Residential final inspections includes final Building, Electric, Plumbing and HVAC Inspection. Final drainage survey, backflow test form (if applicable), final approved energy inspection/test report from third party, termite affidavit, and all permits pertinent to the address must be present at the time of the Final Inspection. Irrigation system must be installed front and both sides. Sod and trees planted where required. Proper site drainage, all required fence in place and all site debris removed.

REMEMBER: *Erosion controls, debris control, trash bins, and port-a-potties are always inspection points*

PLUMBING ROUGH INSPECTION

- An address visible from the street
- The permit package containing:
 - ✓ Building Permit
 - ✓ Building Permit Application
 - ✓ Plumbing Permit
 - ✓ Signed Water Meter Release Form
 - ✓ The approved site plan (with setback stamp)
 - ✓ A form board survey (with an original seal and signature)
 - ✓ The building plans (with stamped as Builders Copy)
- A visible sewer tap connection

- A city clean-out at the property line
- A test tee in the sewer line (above the city clean out, not at the bottom of the hole)
- Water line material per code
- All fittings and piping exposed for inspection
- Proper drainage fittings
- Proper fall on all drainage piping
- Proper bedding for all drainage piping
- Minimum five foot plumbing stack tested to the point of overflow
- All sanitary piping to be wrapped through beams and at penetrations through slab.
- Yard PE gas line (if applicable)
 - ✓ Minimum 18 inches deep
 - ✓ Approved gas wrap material on pre-bent risers
 - ✓ Tracer wire in the trench

WATER METER

- Meter must be set between 12” and 14” from top of meter can.
- Meter must be set with min. 6” gravel under meter.
- Meter can must be set level with paving or curb
- Must have clear access to City Stop
- Must have additional in-line valve between meter and building/house.
- Meter and meter can must be installed correctly at the time of the Plumbing Rough inspection.
- Meters are not to be set in driveway, access or sidewalk.

PLUMBING TOP-OUT INSPECTION

Gas Piping - *To be bonded per IRC and NEC requirements. (an attic ladder is required for this inspection)*

- Gas pipe
 - ✓ Wrapped through brick
 - ✓ Sized per code
 - ✓ Tested to a min 7.5 PSI on diaphragm gauge; set indicator to test pressure

Drain, Waste, and Vent Piping

- Trap arms (length, fall, size, and bends)
- Closet bends centered 15 1/2” (minimum) to framed walls
- Built up showers blocked and tested
- Tub boxes sealed
- 1st and 2nd floor rough tested to above lavatory arms
- 2nd floor drains maximum horizontal bends of 135° (degrees) before a clean-out is required
- Vents through roof and flashed

Water

- City pressure on hot and cold water (or 50 PSI on 100 PSI gauge)
- Insulated in garage walls, outside walls, and in attic
- Water heater T&P line roughed in
- Water heater vent roughed, flashed, and secured min. 1” to combustibles
- Frost proof hose bibs secured to building frame
- Proper temperature control devices

HVAC ROUGH INSPECTION - This inspection is combined with the plumbing top out and is to be ready at the same time.

- All heating/cooling ductwork complete
- All exhaust fans installed and ducts complete to termination
- Heating/cooling unit installed
- Furnace vent installed, secured, and clear min. "1 to combustibles
- Duct and vent chases and furs framed:
 - ✓ When chases and/or furs are used as duct work
 - ✓ When seal return/supply air from unconditioned air
 - ✓ When seal vertical wires out of return air
- All duct work insulated from unconditioned spaces
- Primary and secondary drains installed to approved locations (supported for 1/8" fall)
- Fire place installed and cleared to combustibles
 - ✓ Installed per code and manufacturer specs.
 - ✓ Manufacturer specs must be onsite
- Chimney installed through the roof
 - ✓ Fire stops installed
 - ✓ Chimney secured from combustibles by required distances approved termination cap
- Locking caps on A/C line sets at condensing units
- Maximum length of dryer vent to be per 2009 IMC

FRAME & ELECTRICAL ROUGH INSPECTION - This inspection is combined with the plumbing top out and is to be ready at the same time.

- Over/Under bent wires in device boxes
- Provide anchor bolts per code
- Mount device boxes to manufactures specifications
- Bad or missing wind bracing
- Wires not stapled properly
- Properly support beams
- Spa tub electrical must be 4" above finished floor
- Missing flashing at gables
- Remodel boxes used in new construction
- Firestop chimney chase
- Receptacles not within 24" of kitchen sink
- Missing tempered windows
- Switches located behind doors that are not convenient
- Tighten or replace headers
- Rafters not full bearing with Ridges, Hips, and Valleys
- Support Roof framing members
- Missing joist hangers or hangers not fully nailed
- Draftstop dead air spaces, double walls, and chases
- Joist & Rafter spans
- Brick Ties
- Fire blocking (if required)
- Arc fault devices installed per 2011 NEC
- Tamper proof receptacles per 2011 NEC
- Sheer wall details to be onsite
- CO2 detectors required per 2009 IRC

ENERGY PRE-DRYWALL INSPECTION – The third party inspector must leave verification of compliance on site in Builder Packet for city inspector. Inspection to include:

- Insulation R-Value Installed
- Window Values
- Proper Sealing of Building Envelope
- Thermal Bypass Enclosure installed in appropriate locations
- Inspection of Duct System Connections for proper sealing techniques

DRIVE APPROACH & SIDEWALK INSPECTIONS GUIDELINES

- Check for valve boxes, water meters, and sewer cleanouts in proposed paving locations
- If applicable, remove concrete pad from valve box and adjust to grade; pour new pad with sidewalk if valve is in walk
- Expansion joints on sidewalks every 20 feet and/or equally spaced
- At a storm drain inlet, move driveways as far from them as possible. Car will drag due to increased curb height
- Sewer service needs to be compacted before sidewalk is poured. Install traffic-bearing cleanout if in right of way
- Install smooth dowels with proper caps at property line on sidewalks. Dowel into street at wheelchair ramps. Dowel into redwood expansion between drive approach and driveway and epoxy seal dowels into street
- Provide expansion material at curb for jump walk
- No exposed aggregate permitted
- Be aware of potential differential settling on sidewalk
- Drive approach slope must end at face of gutter – not at end of blockout
- In bar-ditch sections, check downstream culvert size, where applicable, to assure sufficient size to pass the flow
- No wooden stakes allowed below grade
- #3 RE-BAR AT 24 INCH CENTERS REQUIRED IN ALL DRIVEWAYS.

- City sidewalks and approach Required on sidewalk 3/8 rebar
 - ✓ 18” center
- Truncated dome platforms for all ADA ramps as per section 705 TAS standards

TEMPORARY METERS INSPECTION

- Address Posted
- House Bricked And Sheet Rocked
- Second’s Inspections Shall Be Completed
- Panel Readiness:
 - If House is complete:
 - ✓ All breakers marked
 - ✓ No exposed wires anywhere in the house
 - ✓ Front panel cover to be removed (to be reinstalled after passing inspection)
 - For temporary heating and AC only:
 - ✓ Breaker for 220 V plug in laundry
 - ✓ Breaker for 110 V, GFCI circuit in laundry
 - ✓ Breaker for furnace
 - ✓ No other openings in panel
 - ✓ Front panel cover to be removed (to be reinstalled after passing inspection)
- Panel Ground Connected To Rod

- Cold Water Ground Connected And Exposed (at 1st floor water heater or not more than 5 ft. above slab level)
- Access To Attic Units as per code
- Gas Valved and Capped OR Valved and Connected
- Master tub installed
 - **Note:** If the tub is a spa tub, then the spa motor and cold water ground must be exposed for inspection

PLUMBING AND HVAC FINAL

- Permanent address posted
- Water meter complete
- City clean-out
- House clean outs with PVC caps
- PVC vents above the roof painted
- Sprinkler permit, sprinkler test form at kitchen counter
- All plumbing and fixtures completed Water closet secured rigidly to the floor, proper temperature control devices
- All gas appliances connected correctly
- All attic catwalks and work platforms solid, secure, and unobstructed
- Combustion air for gas appliances
- Condensate lines connected and with fall

ENERGY FINAL – Building final will not be approved unless all required documentation is received.

- Attic Insulation Installed R-Value and Quality
- Space Heating and Cooling Equipment Efficiencies
- Water Heating Equipment Efficiency
- Weather Stripping of all Doors (and Attic Access located within Conditioned Space)
- Duct Leakage Testing
- Blower Door Testing

TERMITE PROTECTION – Notarized affidavit is required at time of final inspection. (See form attached)

IRC SECTION R324 PROTECTION AGAINST TERMITES:

R324.1 Subterranean termite control. In areas favorable to termite damage as established by Table R301.2 (1), methods of protection shall be by chemical soil treatment, pressure preservatively treated wood in accordance with the AWPA standards listed in Section R323.1, naturally termite-resistant wood or physical barriers (such as metal or plastic termite shields), or any combination of these methods.

R324.2 Chemical soil treatment. The concentration, rate of application, and treatment method of the termiticide shall be consistent with and never less than the termiticide label.

R324.3 Pressure preservatively treated and naturally resistant wood. Heartwood of redwood and eastern red cedar shall be considered termite resistant. Pressure preservatively treated wood and naturally termite-resistant wood shall not be used as a physical barrier unless a barrier can be inspected for any termite shelter tubes around the inside and outside edges and joints of a barrier.

R324.3.1 Field treatment. Field cut ends, notches, and drilled holes of pressure preservatively treated wood shall be retreated in the field in accordance with AWPA M4.

R324.4 Foam plastic protection. In areas where the probability of termite infestation is “very heavy” as indicated in Figure R301.2(6), extruded and expanded polystyrene, polyisocyanurate and other foam plastics shall not be installed on the exterior face or under interior or exterior foundation walls or slab foundations located below grade. The clearance between foam plastics installed above grade and exposed earth shall be at least six (6) inches (152 cm).

Exceptions:

1. Buildings where the structural members of walls, floors, ceilings, and roofs are entirely of noncombustible materials or pressure preservatively treated wood.
2. When in addition to the requirements of R324.1, an approved method of protecting the foam plastic and structure from subterranean termite damage is provided.
3. On the interior side of basement walls.

ELECTRICAL & BUILDING FINAL INSPECTION

- Debris and construction materials in empty/adjoining lots
- Spilled concrete on street, approach, and walks removed
- Broken or cracked city walks
- Device boxes behind Formica not flush with combustibles
- Ground rod not connected or missing
- AC units over/underfused
- Garbage disposal not operable
- GFCI’s not working or wired wrong
- Smoke detector not in loop
- Stair handrails not to code
- Missing tempered glass
- GFCI for a second floor bath located on first floor
- Receptacles behind sink or range top
- Fireplace installed per manufacturer specs
- Receptacle within 5’ of deep sink not GFCI protected
- Paperwork missing or incomplete/outdated
- Missing sod where required. Sod or Kerlex to be placed on city easement, bar ditches, etc.
- Drainage does not match survey
- House insulated
- Six Foot (6 ft.) wooden fence with steel posts
- Required landscaping per subdivision (grass, trees, shrubs, etc.)
- Automatic underground irrigations system outfitted with a Rain and Freeze Detector
- Irrigation Backflow Report from licensed backflow contractor registered in Princeton as a contractor.
- Proper Site Drainage



CITY OF PRINCETON

PROTECTION AGAINST TERMITES FORM

Permit N°: _____ Address: _____

Builder: _____

The residence addressed above meets or exceeds the requirements for protection against termites set forth in Section R324 of the International Residential code.

Name of Protection Provider (Company): _____

Address: _____

Phone: _____

State License No.: _____

STATE OF TEXAS
COUNTY OF COLLIN

I, _____, being duly sworn doth depose and say that the information contained in the above application is true and correct to the best of my knowledge and belief.

And further this deponent says not.

Signature

Date

Subscribed and sworn to before me this _____ day of _____ 20____, A.D.

Notary Public in and for the State of Texas