JAN 2018

# Residential Alteration / Addition or Accessory Bldg. Guidelines

## Building Inspections Staff

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|---|---|---|---|
| Eddie Wilson | Building Official | 817-503-1057 | ewilson@colleyville.com |
| Kelly Minor | Permit Technician | 817-503-1031 | kminor@colleyville.com |
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| VACANT | Plans Examiner | 817-503-1034 | vacant@colleyville.com |

## Development-Related Staff

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| Ben Bryner | Comm. Dev Director | 817-503-1052 | bbryner@colleyville.com |
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***For Water Meters contact UTILITY BILLING at 817-503-1020*

BUILDING INSPECTIONS
100 Main Street, Colleyville, TX 76034
OFFICE 817-503-1030 __ FAX 817-503-1039
Inspection Request Line 817-350-6321

**SITE PREPARATION** *Work* shall not commence until a building permit or earth disturbance permit is obtained and posted on the site. *Work* includes setting of forms or batter boards, lot grading, soil removal, soil dumping, brush clearing, tree trimming or site demolition. Work without a permit is subject to an investigation fee.

**PLAN REVIEW** The established goal is to complete plan reviews within seven (7) working days, excluding day of submittal. The seven day period begins when all submittal requirements are met. Once the permit is processed and released, the contractor will be notified of all applicable fees and can obtain the permit. Accessory structures and uses included on plans for new homes require separate review and permitting.

**ACCESSORY BUILDING, ADDITION, & REMODEL PERMIT SUBMITTAL REQUIREMENTS**

The type of project being constructed determines which of the following submittals must be included with the application form. Consult with a Plans Examiner to determine those requirements. Incomplete plans, submittals, and/or applications may create delays.

A. Building Permit Application Form. All MEP subcontractors shall be listed along with contractor license number, name of license holder, name of company and phone number. All information must be filled in or application will be classified as incomplete and returned.-

B. (1) Copy of Plot Plan (maximum sheet size 11" x 17") showing:
   - Shade or hatch area to show addition on existing house
   - All building setbacks
   - Street address
   - Lot, Block, and Subdivision
   - Scale of drawing (appropriate for sheet size)
   - North arrow
   - Dimension location of house

C. (1) Complete Set of Folded Plans (maximum sheet size 11" x 17") including the following:
   - Floor plan, 1/4" or 1/8" scale
   - Elevation plan
   - Electrical plan (only if electrical included in project)
   - Plumbing/Gas plan (only if plumbing/gas included in project)
   - Framing plan including detail for connections to existing house
   - Roof plan
   - Floor truss layout (for two story structures)
   - Wall bracing plans demonstrating compliance with 2012 IRC Section 602.10 or solid sheathing (OSB)
   - Foundation, Footing, Pier Plans with State of Texas Engineer seal and signature along with an engineer's cover letter referencing the current code and soil report (for structures 500 s.f. and greater).
   - Drainage/grading plan. Submittal must show the directional flow of drainage and must match the subdivision grading plan.

D. (1) Complete Set of Plans on CD in PDF

E. (1) Copies of Energy Code Analysis (for new conditioned area) Acceptable programs by the Texas Energy Systems Lab:
   - ICCC E-CALC certification - available from Texas Energy Systems Lab at iccc.tamu.edu
   - REScheck - available from the US Department of Energy at energycodes.gov

- Energy Star Certification – available from U.S. EPA at energystar.gov
- Prescriptive Method - Table 402.1.2 from the 2015 IECC

**AUTOMATIC FIRE SPRINKLER SYSTEMS** – An approved automatic fire sprinkler system shall be installed in existing dwellings when the existing dwelling plus the proposed addition equals 6,000 square feet or greater enclosed space (living area plus garages and any other enclosed spaces but not open porches or patios) OR when the existing dwelling plus the proposed addition exceeds 7,500 square feet total under roof (living area plus garages and any other spaces covered spaces including open porches or patios).

**FORM SURVEY** **Form Surveys are required on all accessory structures and additions located within two feet (2') of a building line or unless deemed unnecessary by the Building Official. S**ubmittal is required a minimum 24 hours before requesting foundation inspection. The survey shall verify the location of the building on the lot and elevation in cases where a minimum finish floor elevation is specified. Form surveys may be faxed to 817-503-1039 or emailed to the permit tech and plans examines (see contact list on page 1).

**CONTRACTOR REGISTRATION**
The General Contractor must be currently registered with the City of Colleyville prior to issuance of the building permit.

**PERMIT FEES**
- In accordance with the fee adoption schedule.

**CODE ADOPTION**
The following model codes and local amendments have been adopted by ordinance:
- 2012 International Residential Code - Ordinance
- 2014 National Electrical Code
- 2012 International Fire Code
- 2015 International Energy Conservation Code

**STAFF OFFICE HOURS:**
Office hours are 8:00 a.m. to 5:00 p.m. Monday through Friday, excluding holidays.

**PLANS EXAMINER** is generally available during 8:00 a.m. to 5:00 p.m. Monday through Friday, excluding holidays. Appointments are encouraged to meet with a specific person.

**INSPECTORS** will take phone calls from 7:00 a.m. to 8:00 a.m. daily or may be contacted on their cell phones during the work day. At other times, messages may be left on voice mail and calls will be returned as soon as time is available.

**INSPECTION REQUESTS:** Inspection Requests are accepted 24 hours daily at 817-350-6321.

- The General Contractor is responsible for scheduling all inspections.
- The City stamped set of plans must be on the jobsite for all inspections.
- Inspection must be called in **prior to 7:00 a.m.** for same day inspection.
- If a re-inspection fee is assessed, no inspections will be performed until all re-inspections fees have been paid.
- All inspections held back because of cold weather or rain **MUST** be re-scheduled by calling the inspection line.
- No concrete or plumbing rough inspections will be made if it is too wet.

**SAME DAY INSPECTIONS** Reasonable efforts are made to complete inspections on the same day requested (when requests are received by the 7 a.m. cut-off time). Circumstances sometimes require some inspections to

be moved forward to the next day. The expectation exists that the inspection is ready when the request is made – not when work is *anticipated* to be ready.

**RE-INSPECTION FEE**

$75.00 RE-INSPECTION FEE may be charged when:

- The inspection called for is not ready when the inspector arrives.
- The temporary electrical pole does not have a building address clearly posted.
- No building address is clearly posted.
- City approved plans are not on the job site.
- The building is locked or work is otherwise not available for inspection when called.
- The job site is red-tagged twice for the same item.
- The original re-tag has been removed from the job site.
- Violations exist on the property including erosion control, trash control or tree protection.

$125.00 RE-INSPECTION FEE may be assessed for second and subsequent violations of the above.

**CONSTRUCTION HOURS**

The Colleyville code regulates noise construction that is considered a nuisance. By ordinance, construction is allowed from 7:00 a.m. to 6:00 p.m., Monday through Saturday. Construction work is prohibited on Sundays. Variances to this ordinance are authorized through a public hearing by City Council.

**PLANS ON SITE**

City approved building plans must be available on the job site when inspections are conducted. If the approved plans are lost, an additional set must be submitted to the city to be stamped. After the first re-stamp, a fee of $50.00 per hour will be charged for additional plan review time.

**LITTER**

- Provide a litter container of sufficient size on the job site at all times.
- Verify each day that all lightweight materials, including food wrappers and drink containers are contained within the trash enclosure on the job site.
- Litter container shall be emptied when reaching half of capacity.
- Inspections may be cancelled and re-inspection fees assessed if trash is uncontained on the job site or adjacent properties.
- If a commercial container (dumpster) is used, the City of Colleyville franchise agreement requires Progressive Waste Solutions must be contracted for that service. Contact 817-222-2221.

**RESTROOM FACILITIES** - Provide a portable restroom facility on job sites unless an indoor toilet is available on the same site.

**CONSTRUCTION ACCESS/STAGING** - The use of an adjacent lot for construction access or storage of materials is prohibited unless an earth disturbance permit has been obtained and erosion control is in place.

**EROSION CONTROL**

- Storm water inspections are conducted in conjunction with every building inspection requested, after a rainfall event, and randomly during construction.
- Erosion control must be maintained at all times throughout the project.
- All inspections may be cancelled and re-inspection fees assessed at any time erosion control conditions are inadequate.

- All activity on a site shall comply with City, State, and Federal statutes for storm water pollution control.

**TREE PROTECTON**

- A Tree Protection Permit is required on sites with designated tree conservation/preservation areas.
- Trees required to be protected shall be fenced at the outer limit of the drip line in accordance with the Tree Preservation Ordinance.
- Tree preservation signs shall be posted if protected trees are present.
- All tree protection must be installed prior to conducting any grading or construction activity.
- All inspections will be cancelled or citations issued until required protection is installed.

**CONSTRUCTION INSPECTIONS REQUIRED (where applicable)** The following list represents typical inspections for residential accessory buildings, additions, and remodels. The list is not all-inclusive and there may be circumstances where certain inspections are not applicable. Consult with a Building Inspector to determine when/if such inspections are necessary. Permit card must be posted on a sign at the front property line and City approved (stamped) plans must be on the job site at the time of the inspection.

1. **PLUMBING ROUGH**
   - Pipe shall be bedded in sand.
   - Hot water lines must have minimum ½" insulation.
   - Pipes passing through concrete shall allow for movement utilizing material with a minimum wall thickness of 0.025 inches.
   - Pipes passing under a footing or through a foundation wall shall be sleeved with material that is at least two pipe sizes larger than the pipe passing through the wall.

2. **ELECTRICAL UNDERGROUND –** Inspection of conduit pipe or direct burial conductors installed in a trench of sufficient burial depth.

3. **GAS LINE UNDERGROUND –** Gas piping installations shall installed in a trench with a minimum burial depth of 18 inches measured from the top of the pipe to existing grade.

4. **ELECTRICAL INSTALLATION IN FOUNDATION** Materials and methods must comply with the 2014 NEC. This inspection may be performed concurrently with the foundation inspection provided the installation is visible for the inspector.

5. **FOUNDATION** ***A form survey, when required, must be approved by a Plans Examiner at least 24 hours before the day of the inspection request.***
   - All foundations must comply with Chapter 4 of the 2012 IRC. Foundation plates or sill shall be treated per IRC section R318.
   - Foundation plates or sills must be bolted to the foundation or foundation wall with no less than ½" nominal diameter steel bolts embedded at least 7" into the concrete or masonry and spaced no more than 6' apart.
   - A minimum of one bolt shall be located within 12" of each end of each section of sill plate. A properly sized nut and washer must be tightened on each bolt to the plate.

6. **SECONDS** Request for 2NDS includes framing, electric, plumbing, and mechanical trades which are inspected simultaneously. It is the general contractor's responsibility to call for the inspection when all trades are

ready. The house shall be enclosed, roof covering installed, temporary doors set, and all windows installed with fenestration stickers attached. The house shall be free of scrap building materials and swept clean before an inspection. CITY STAMPED APPROVED PLANS MUST BE ON SITE FOR THE BUILDING INSPECTION TO OCCUR.

## FRAMING

- Floor framing for upper story construction shall be inspected before cover up of insulation and decking.
- Engineered wall bracing systems shall require the design engineer's letter of compliance.
- Factory-built metal fireplaces and chimneys shall be installed at the time of framing inspection and shall comply with the manufacturer's installation requirements and/or Chapter 10 of the 2009 IRC (whichever is more restrictive). Installation manual shall be provided at each unit.
- Stairways shall comply with IRC section R311.
- One layer of No.15 asphalt felt or other approved water-resistive barrier shall be installed over all exterior walls in accordance with IRC 703.2. Approved barriers shall comply with manufacturer's installation requirements.
- Operable windows located more than 72 inches above finished grade or surface below shall require the lowest part of the clear opening to be a minimum 24 inches above the finished floor of the room in which the window is located.
- All framing shall conform to the maximum allowed for cutting, notching, and boring.

## ELECTRIC ROUGH IN

- Electrical conduit piping installations that are to be concealed within masonry shall be inspected before cover up.
- All splicing of conductors shall be complete at boxes.
- Recessed luminaires installed in the building thermal envelope shall be IC-rated and sealed to limit air leakage between conditioned and unconditioned spaces.

## PLUMBING TOP-OUT

- Notching, boring, and cutting of framing shall comply with Section R602
- Hot water lines must have minimum ½ inch insulation.
- All vents must extend through the roof with flashings installed.
- Air Admittance Valves are permitted for limited use for islands and bar sinks only. Building Official approval is required for any other locations before installation.

## GAS SYSTEM ROUGH IN

- Gas system must be complete.
- A pressure test must be performed consisting of a three (3) lb. air test utilizing a (6) six lb. gauge.
- All log lighter valves must have the key installed for testing past the valve.
- All gas lines must be properly secured and supported.
- Air gauges must be located inside the house, preferably in a fireplace or utility room.
- Gas pipe in contact with any masonry must be galvanized or wrapped.
- CSST systems shall be bonded to the electrical service grounding electrode system at the point where the gas service enters the building. The bonding jumper shall not be smaller than 6 AWG copper wiring or equivalent.
- CSST systems shall have a shut-off valve for each outlet at the manifold.

## MECHANICAL ROUGH IN

- Supply ducts in attics shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum R-6. Exception: Ducts located completely within the building thermal envelope (spray-foamed attics) OR duct requirements as part of an approved performance plan.
- Ducts shall be sealed with approved tapes or mastics; duct tape not permitted.
- A/C condenser lines require piping insulation of ¾ inch minimum or R-3.
- Flexible ducts must be supported and turns must be made in such a way that the air flow is not restricted. See duct manufacturer's specifications.
- Makeup air shall be provided for all exhaust hood systems capable of exhausting in excess of 400 cfm. Such makeup air system shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system. Intake openings shall be located at least 10 feet horizontally from any hazardous or noxious contaminate source OR at least 3 feet below contaminate sources where such sources are located within 10 feet of the opening. Opening sizes in louvers, grilles, and screens protecting air intake openings shall be not <1/4 inch and not >1 inch.

## 7. MASONRY FIREPLACE AND CHIMNEY

- Inspection required when firebox, damper, and first flue tile are in place. Do not lay face brick before inspection.
- Minimum 2" gap must be maintained between masonry fireplace walls and wood studs or any other combustible material. This includes ISOKERN and FIREROCK fireplace systems

## 8. ENERGY CONSERVATION COMPLIANCE (where required)

**LEAKAGE TESTING** ***Required for building thermal envelope and duct systems*****.**

- Code compliance shall be demonstrated by utilizing third party RESNET certified HERS Raters. The insulation installer cannot inspect his own work. Certificates of compliance shall be on file before requesting a final inspection.

  **The RESNET certified HERS Rater shall determine compliance of building thermal envelope:**
- At the rough in stage by performing a visual test in accordance with the 2012 IRC/IECC **OR**
- At building final utilizing a blower door test.

  **The RESNET certified HERS Rater shall test ducts, air handlers, filter boxes, and plenums for leakage:**
- At the rough in stage where leakage tolerances are greatest **OR**
- At building final where leakage tolerances are less
- New and/or existing air handlers, ducts, filter boxes, and plenums that serve additions and remodel projects shall be tested for leakage.

## INSULATION INSPECTION

- Performed by RESNET certified HERS Rater
- All penetrations and openings in building envelope must be sealed.
- Seal attic and floor penetrations where MEP installations penetrate building envelope.
- Seal fireplace cavities where adjacent to building envelope.
- All windows must be installed with NFRC label attached.
- All batt insulation must be labeled and legible.
- Insulation batts installed in walls shall be totally surrounded by an enclosure on all sides consisting of framing lumber, gypsum, sheathing, wood structural paneling, or other equivalent material approved by the Building Official.

- Spray-foam applied insulation shall require an installer's certificate that demonstrates approved R-values for the installation.

**9.** **WALL-TIES** Wall ties may be requested concurrently with 2NDS or may be called separately afterwards. For brick veneer provide one tie per 3 ¼ square feet (for 16" framing one every 24" high or for 24" framing one very 16" high) unless structural engineer or architect specifies more. Moisture barrier must be applied before inspection.

**10.** **STUCCO/EIFS INSPECTIONS –** Installer's certificate shall be on file.

**Curing Requirements -** the finish coat for two-coat cement plaster shall not be applied sooner than 7 days after application of the first coat. For three-coat cement plaster, the second coat shall not be applied soon than 2 days after the first coat. The third coat shall not be applied soon than 7 days after the second coat. Inspections required are:

- **Paper Inspection -** at framing inspection, inspector will verify two layers of Kraft grade D building paper per Section R703.6 or other approved material. Upper layer shall overlap lower layer a minimum of 2 inches. Horizontal joints shall overlap minimum 6 inches. Window frames shall be properly sealed and flashed.
- **Insulation (EIFS) Inspection –** mechanical fasteners installation shall be as required by the ICC report.
- **Lath Inspection** – lath and lath fasteners shall be corrosive resistant. Staples shall be spaced a maximum of 6 inches or as otherwise approved. Weep screeds shall be installed a minimum of 4 inches above grade or 2 inches above an impervious surface.

**11.** **BUILDING FINAL**

Includes inspections for finals on Electrical, Plumbing, and/or Mechanical where applicable.

**12.** **FINAL LOT GRADING INSPECTION (concurrent with building final)**

- Permanent vegetation (sod or hydromulch) shall be established on at least 70% of the site with even distribution throughout.
- During adverse weather conditions such as drought, floods, extreme heat/cold, etc., the Building Official may authorize the installation of temporary stabilization until such time as permanent measures can be established.
- Temporary stabilization shall include BMP's listed in the iSWM manual produced by NCTCOG.