



Residential Construction Guidelines for New Dwellings

These guidelines are for informational purposes only. Not every item listed below will apply to every project. If you have questions in this regard, contact the Building Inspections Department. The contractor is obligated to comply with all adopted codes and ordinances

BUILDING INSPECTIONS
1400 Main St., Ste. 250 – Southlake, Texas 76092
(817) 748-8237 or 8236

SWPPP – A SWPPP must be approved by Public Works Department webpage *prior to submitting for a building permit* or an earth disturbance permit. Upload the approval letter with the new residential permit.

TREE PROTECTION – A Tree Protection Permit is required for construction sites where trees exist. When submitting online for a building permit, a tree protection permit must be applied for also and must include a tree survey. 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 20' apart on the orange fencing and are available in the city office. Once tree protection fencing is installed with proper signage, request a tree protection inspection online. All tree protection must be installed prior to conducting any grading or construction activity. The tree inspection must be approved in order to release a building permit. All inspections will be cancelled or citations issued until the required tree protection is installed. If removing trees not in the pad site, a Tree Removal may be required.

DEED RESTRICTIONS/ HOMEOWNER ASSOCIATION

Deed restrictions and Homeowner Association regulations are considered a private agreement between property owners. The City of Southlake is not a party to such agreements and does not have any standing in the enforcement. It is each property owner's responsibility to be aware of and comply with such agreements.

- Projects located in the **Carillon** will need an **approval stamp** from Carillon HOA prior to building permit submittal.

SEPTIC SYSTEMS

Houses are required to be connected to sewer if available. If no sewer is available, the site plan must show the location of the lateral lines or aerobic system and must show setbacks from all structures as required by the Tarrant County or Denton Health Department. A permit is required from County prior to installation.

WELLS

Houses with an alternative water source (well water) have the potential for a cross connection of the municipal water supply. Any alternative water supply not regulated by the TCEQ is considered a high health hazard. The water department is obligated to protect the municipal water system and the customer from any health hazards due to cross connections. Thus, the water department shall require any water customer with an alternative water source to create two physical separations from the alternative water sources, where appropriate. The two acceptable physical separations are either a reduced pressure principal assembly (RPZ) or an air gap. When adding a RPZ, a closed loop plumbing system is created. At that time, an expansion tank will be required to be added to all water heaters on site. This is not required for tankless water heaters. A permit will be required for adding a RPZ and for any expansion tanks.

SITE PREPARATION work shall not commence until a Tree Protection Permit is issued and tree inspection has been approved OR a building permit or earth disturbance permit is obtained and posted on the site. Work includes setting of form boards, lot grading, soil removal, soil dumping, brush clearing, tree trimming or site demolition. **Work without a permit is subject to an investigation fee equal to that of the permit fee.**

PLAN REVIEW The established goal is to complete plan reviews within ten (10) working days, excluding day of submittal. The ten 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 permitting and review. Any plans not picked up within 45 days after notification will be considered abandoned and will be expired.

SEPARATE PERMIT REQUIRED: A separate permit shall be required for the items below. See separate guidelines for walls, fences and irrigation.

- Masonry fences and/or masonry columns for fences or gates
- Retaining walls more than 48 inches from the bottom of the footing
- Detached structures such as garages or shade structures that are more than 120 square feet.
- Outdoor kitchens, fireplaces and living areas that are not part of the main structure.
- Fountains, pools and spas.
- Irrigation systems that are tied to city water.

RESIDENTIAL PERMIT SUBMITTAL REQUIREMENTS

The following items must be included with the application form. Incomplete plans, submittals, and/or applications may create delays.

- A. **A plan review fee** will be due at permit submittal. The plan review fee is calculated at 40% of the permit fee and the remaining 60% will be paid at permit issuance.
- B. **Prior to permit submittal the SWPPP must be approved by the Public Works Engineering.** A letter from PW must be uploaded with the building permit application.
- C. **Building Permit submitted online.** All information must be filled in or the application cannot be submitted. All MEP subcontractors must be current in the software prior to submittal.
- D. **Tree Protection Permit** A separate permit is required for new construction on lots where trees exist or improved lots where dedicated tree preservation areas exist. This permit must be approved and inspected prior to release of building permit.
 - **Tree Conservation Plans overlaid with Footprint of the House, Driveway, Pools, Decks and Utilities.** Clearly indicate all existing trees to be saved and to be removed. Include tree size (trunk diameter) and species. A separate permit for Tree Protection may be required. See Tree Preservation Ordinance No. 585-D
- E. **Plot Plan** showing:
 - Construction access from public street or alley
 - Street address
 - Location and dimensions of new structure with all building setbacks with distance from all property lines
 - Drainage arrows to conform with engineered drainage plan
 - Septic system if not connected to city sewer.
 - Scale of drawing (appropriate for sheet size)
 - North arrow

F. Complete Set of Plans in pdf format, to scale including the following:

- Floor plan
- Electrical plan
- Elevation plan
- Roof plan
- Engineered floor truss layout
- Engineered framing plans including flooring details for any future finish out space, wall bracing plans demonstrating compliance with 2018 IRC Section 602.10, etc.
- Foundation Plans with State of Texas Engineer seal and signature along with an engineer's cover letter referencing the current code and soil report.
- Drainage/grading plan with arrows showing the directional flow of drainage and must match the subdivision grading plan. For sites that are single lots or lots in subdivisions without an engineered drainage plan, an engineered drainage study and plan must be submitted. If a pond is planned for the site, it must be shown on the drainage/grading plan.

G. Energy Code Analysis. Acceptable programs:

- ICC 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 – from the 2018 IECC

Energy code documents must include the following:

1. Insulation R-values
2. Fenestration U-Factors & SHGC calculations
3. Area – weighted U-factor
4. Mechanical System design criteria
5. Mechanical and service water heating; type, size & efficiencies
6. Equipment system controls
7. Duct sealing, duct & pipe insulation and location
8. Air sealing details.

Additional submittal information may be required based on project and subdivision requirements.

AUTOMATIC FIRE SPRINKLER SYSTEMS - Required when the enclosed area, including the garage and habitable attic space, with sloped ceilings 5-ft or higher with a minimum of 70 square feet of 7' ceiling height, and accessible by a stairway, exceeds 6,000 square feet. If a ceiling design in a residential structure exceeds an 8/12 pitch, special requirements must be accomplished to ensure proper fire protection coverage. It is the responsibility of the fire sprinkler system designer of record to verify that all products used meet UL listing and provide documentation from the manufacturer if an alternative design is used, due to the possibility that more than two sprinklers may need to be calculated if the ceiling feature is outside of the UL listing for the sprinkler head used. Sprinkler plans are submitted by the Licensed Fire Protection Contractor to directly to one of the following: **Reed Fire Protection**, 14135 Midway Rd. Suite G260, Addison, TX. 75001, 214-638-7599; **Green Tag Engineering**, 4221 Wilson Lane, Carrollton, TX 75010, 682-214-4824; **Coker Engineering LLC**, 1540 Keller Pkwy, Ste. 108, Keller TX 76248, 817-742-2409. Applicant is responsible for fees charged for their review. Approved plan will be forwarded to the Fire Marshal's office.

SIDEWALKS – Sidewalks are required on both sides of all streets in new platted or re-platted developments. Sidewalks must be construction at the development stage for Common Areas and at the construction of the building for the building lot. All non-residential sidewalks in the right-of-way shall be at least 5 feet wide or in conformance with the Trail System Master Plan/Pathways Plan, whichever is greater.

FORM SURVEY 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 must be uploaded to the permit and a form survey inspection scheduled at least 48 hours prior to foundation inspection.

CONTRACTOR REGISTRATION

The General Contractor must be currently registered with the City of Southlake prior to application of the building permit. Registration is \$105.00 annually. Permits are multi-trade and include MEP work. Subcontractors listed must registered with the city. There is no fee for state license holder registration.

PERMIT FEES

- A plan review fee is due at permit submittal. The plan review fee is calculated at 40% of the permit fee and the remaining 60% will be paid at permit issuance.
- Combination building permit fee for a new house is \$50.00 plus \$0.80 per square foot of living area. Attached garages, carports, and porches are not counted when included in original construction.
- All applicable water, sewer and road impact fees, Ft Worth impact fee and park fees will be assessed in addition to a new residential permit fee.
- An additional tap fee may be required.
- Manufactured homes shall be calculated at the remodel rate of \$50 base fee plus \$0.25 per square foot.

FENCE OR RETAINING WALL

Fences and retaining walls meeting the criteria listed below require a separate fence permit:

- A non-masonry fence greater than seven (7) feet in height. Fences over eight (8) feet in height from grade require a variance to the zoning ordinance.
- Any fence that is all or part of a swimming pool barrier.
- A masonry fence or retaining wall 48 inches or greater from the bottom of the footing to the top of the wall. (Requires engineering)

CODE ADOPTION

The following model codes have been adopted by ordinance:

- 2018 International Residential Code with amendments as adopted in Ordinance 1210
- 2020 National Electrical Code – State of Texas requirements
- 2018 International Fire Code – Ordinance 1211
- 2018 International Energy Conservation Code – Ordinance 1208

STAFF OFFICE HOURS:

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

PLANS EXAMINERS are 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 To contact an inspector either leave a message on voice mail and calls will be returned as soon as time is available or send an email. To contact inspectors please call 817-748-8226 or 817-748-8969.

INSPECTION REQUESTS: All Inspection Requests are required to be requested **online** through the permit software. *Inspection requests for am/pm are reserved for water heater or HVAC change outs in an occupied residence only. **This is strictly reserved as a courtesy to homeowners.***

- It is the General Contractor’s responsibility to request all inspections online.
- The City stamped set of plans **MUST** be on the jobsite for ALL inspections.

- Inspection must be requested online prior to 7:00 a.m. for same day inspection.
- All inspections held back because of cold weather or rain MUST be re-scheduled by the general contractor online.
- No concrete or plumbing rough inspections will be made if it is too wet. No concrete inspections will be made unless the temperature is 38 degrees and rising. Do not lay brick when it will be below 40 degrees before mortar setting.
- Inspections hours in the field are 8:00 am– 5:00 pm.
- To cancel an inspection call 817-748-8236 or 8237 **before 8:30 am.**
- Form Surveys, engineered framing letters, drainage letters, etc. can be uploaded to the permit online under Attachments. When uploaded, request the inspection for that item.
- Reasonable efforts are made to complete inspections on the 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

\$100.00 RE-INSPECTION FEE may be charged when:

- Work called for inspection is incomplete;
- Building address and/or permit card is not clearly posted;
- City approved plans are not on the job site available to the inspector;
- The building is locked or work otherwise not available for inspection when called;
- Items noted for correction on initial inspection and not corrected upon re-inspection.
- The original red tag has been removed from the job site and/or,
- Violations exist on the property including failure to maintain erosion control, trash control or tree protection.
- If the meter box is not accessible for final inspection.

\$200.00 RE-INSPECTION FEE may be assessed for second and subsequent violations of the above.

Any re-inspection fees assessed shall be paid prior to any additional inspections on that job site.

UNAUTHORIZED COVER UP FEE

Any work concealed without first obtaining the required inspection in violation of Section 109 shall be assessed a fee of \$350.00 as established by the city fee resolution.

JOB SITE POSTING REQUIREMENTS:

All permit cards shall be posted on a FREE STANDING SIGN located at the front property line of a location that is obvious and visible to a public street, R.O.W., or private access drive. The sign is to remain in place until final building inspection is approved. Sign is to be minimum 6 square feet and maximum 32 square feet constructed of material similar to a real estate sign. The following documents must be posted as required by permit type.

- Permit card
- Address – minimum 8 inch numbers must be visible from street.
- N.O.I. Document (SWPPP/erosion control) – when required
- Any additional permit cards such as pool, fence, etc.

If tree protection is required, the following documentation must also be posted.

- Tree protection plan
- Tree protections signs

- Tree protection specifications

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. A fee of \$50.00 per hour may be charged for additional plan review time.

CONSTRUCTION HOURS

The Southlake code regulates noise construction that is considered a nuisance. By ordinance, construction is allowed from 7:00 a.m. to 9:00 p.m., Monday through Saturday. On Sundays, only work that does not create noise audible at the property line is permitted. Variances to this ordinance are handled by the Police Department at 817-748-8114.

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 Southlake franchise agreement requires Republic Waste Services must be contracted for that service. Contact 817-317-2424. www.republicservices.com
- There may be other commercial waste vendors available through licensing agreements. Please contact Building Inspections office for more information.

RESTROOM FACILITIES

- Provide a portable restroom facility on job sites unless an indoor toilet is available on the same site.
- Inspections may be withheld if a restroom facility is not provided.
- Adjacent sites may share grouped facilities with a plan approved by the Building Official.

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

- Erosion control must be maintained at all times throughout the project.
- All activity on a site shall comply with City, State, and Federal statutes for storm water pollution control.
- Storm water inspections are conducted in conjunction with every building inspection requested, after a rainfall event, and randomly during construction.
- The city has adopted the NCTCOG iSWM Manual for control methods. Refer to this guideline along with the site SWPPP
 - http://iswm.nctcog.org/Documents/technical_manual/Construction_Controls_4-2010b.pdf

CONSTRUCTION OFFICE/TRAILER

A separate permit is required for any construction trailer. Requirements for submittal: application, site plan, engineered anchor plan, floor plan, water/sewer tie in. Sales trailer requirements also include TAS accessibility requirements and landscape.

ADDRESS NUMBERS Shall be posted on the building and/or mailbox to meet the following:

- Be clearly visible from the street near the main entrance (numbers may need to be larger due to distance).
- If the numbers at the front door cannot be seen from the street, an additional set of numbers shall be posted at or near the driveway entrance.

Building Address Numbers from *Ordinance 441*

Distance to Public Street	Size of Numbers	Width of Stroke
0-50 feet	3 inches	½ inch
51-100 feet	5 inches	¾ inch
101 feet and over	6 inches	1 inch

FIRE SPRINKLER AND ALARM INSPECTIONS Fire Sprinkler and Alarm tests are scheduled directly with the Fire Marshal’s office and do not go through the inspection request line. Contact the Fire Marshal’s office at 817-748-8909 or 817-748-8671. Schedule Fire Final inspections online along with contacting the Fire Marshal for a time.

INSPECTIONS REQUIRED Each of the following inspections must be done in the **proper order**. If an inspection is requested out of order, no inspection will be made. The list is not all-inclusive and there may be circumstances where additional or special inspections are required. Consult with a Building Inspector to determine when/if such inspections are necessary. City approved plans must be on job site at the time of the inspection. Inspections may be cancelled for failure to comply with the tree or erosion requirements.

1. **TEMPORARY POLE** Address shall be posted and pole properly braced.
2. **FIRST LOT GRADING** Tree protection and erosion control shall be in place.
3. **PLUMBING ROUGH**
 - Pipe shall be bedded in sand.
 - Hot water lines must have minimum ½” insulation.
 - Fire sprinkled structures shall have a minimum of 1 ½” uninterrupted water service from tap to fire line riser. Valves are prohibited within service line to fire line riser.
 - 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.
 - See last page for water meter information.
4. **FORM SURVEY** 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 must be uploaded to the permit and a form survey inspection scheduled at least 48 hours prior to foundation inspection.

5. **ELECTRICAL INSTALLATION IN FOUNDATION** Materials and methods must comply with the 2020 NEC. This inspection may be performed concurrently with the foundation inspection provided the installation is visible for the inspector.

6. **FOUNDATION** *A form survey must be uploaded to the permit and approved by a Plans Examiner at least 48 hours before the day of the inspection request.*
 - A grounding electrode conductor of bare copper of a least 20ft and not smaller than 4 AWG shall be located horizontally within the bottom portion on the foundation footing that is in direct contact with earth, per 250.52 of the 2020 National Electrical Code
 - Structural Steel reinforcing bars shall when used shall be made available for connecting to the electrical grounding electrode system, per 250.52 of the 2020 National Electrical Code
 - All foundations must comply with Chapter 4 of the 2018 IRC.
 - Foundation plates or sill shall be treated against subterranean termites 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.
 - Engineer letter for the piers and foundation shall be uploaded to the permit software.

7. **FIRE SPRINKLER SYSTEM** (where applicable) Sprinkled structures shall have fire sprinkler system installed, inspected and approved by Fire Marshall’s Office prior to seconds inspection.

8. **SECONDS** 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.

FRAMING

- Engineered framing systems including wall bracing 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 2018 IRC (whichever is more restrictive). Installation manual shall be provided at each unit.
- Stairways shall comply with the 2018 IRC Section R311.
- Attics containing appliances requiring access shall be provided clear access opening dimensions a minimum of 20 inches by 30 inches, or larger and large enough to allow removal of the largest appliance. A walkway to an appliance shall be rated as a floor. As a minimum, for access to the attic space, provide one of the following: a permanent stair, pull down stair with a minimum 300 lb capacity, an access door from an upper floor level.
- 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.
- Window flashing must be able to be inspected.

ELECTRIC ROUGH IN Materials and methods shall comply with 2020 NEC.

- All splicing of conductors shall be complete at boxes.
- Ground and neutral conductors shall be made up in all indoor panels at rough-in stage. Bonding screws (where required) must also be installed at this time.
- A grounding electrode conductor must connect to any metallic cold water piping with a supplemental grounding rod or to any approved grounding electrode.
- Recessed luminaires installed in the building thermal envelope shall be IC-rated and sealed to limit air leakage between conditioned and unconditioned spaces.
- 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.

PLUMBING TOP-OUT

- Notching, boring, and cutting of framing shall comply with Section R602
- Hot water lines must have minimum ½ inch insulation.
- T & P drain lines and pan drain lines cannot be combined, must run separately to the outside, and cannot be installed in the slab.
- All water heaters must have a metal drip pan with drain.
- Removable, self-draining, frost-proof hose bibs must be installed.
- Combustion air inlets and grills must be installed at water heater closets.
- 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
- Roof drains that are concealed within the construction must be installed and tested.

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 (5) five lb. diaphragm 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 and identified.

MECHANICAL ROUGH IN

- Supply ducts 3 inches or greater in diameter in attics shall be insulated to a minimum of R-8. Smaller ducts shall be insulated to a minimum R-6. Exception: Ducts located completely within the building thermal envelope.
- Ducts shall be sealed with approved tapes or mastics; duct tape is not permitted.
- If duct testing is done at this time submit written report from the third party inspector.
- 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.
- Combustion air vents must be installed in closets enclosing gas appliances the top and bottom portion of closets enclosing gas appliances and comply with Chapter 18, IRC.
- Provide draft stop at each ceiling level around chimneys of factory built fireplaces unless more restrictive in manufacturers listing requirements.
- Makeup air shall be provided for all exhaust hood systems capable of exhausting in excess of 400 cfm at approximately equal to the difference between the exhaust rate and 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. Kitchen exhaust makeup air shall be discharged into the same room.
- Direct vent appliances with two-pipe systems shall be installed in attic spaces where spray-applied foam is used to create a building thermal envelope.

9. MASONRY AND FACTORY-BUILT FIREPLACE AND CHIMNEY shall comply with Chapter 10 of the 2018 IRC.

- 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
- Factory-built Chimneys shall be listed and labeled and installed and terminated in accordance with the manufacturer's instructions. Installation manual shall be provided at each unit

10. ENERGY CONSERVATION COMPLIANCE

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 with the City of Southlake 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 2018 IECC **OR**
- At building final utilizing a blower door test. A separate insulation inspection shall be required at rough in and final if this option is chosen.

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 as per company chosen by the applicant.
- 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 uploaded to the permit.

11. 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 every 16" high) unless structural engineer or architect specifies more. Moisture barrier must be applied before inspection.

12. STUCCO/EIFS INSPECTIONS – Installer's certificate shall be on file with the City of Southlake. **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 sooner than 2 days after the first coat. The third coat shall not be applied sooner 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 R703.7 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.

13. TUB ENCLOSURE Pump motor electrical bonding (where required), wiring, and tub seal inspection is required for any whirlpool or garden tub. Access shall be provided to circulation pumps in accordance with the fixture or pump manufacturer's installation instructions. Where the manufacturer's instructions do not specify the location and minimum size of field-fabricated access openings, a 12-inch by 12-inch minimum

size opening shall be installed for access to the circulation pump. Where pumps are located more than 2 feet from the access opening, an 18-inch by 18-inch minimum size opening shall be installed. A door or panel shall be permitted to close the opening. In all cases, the access opening shall be unobstructed and be of the size necessary to permit the removal and replacement of the circulation pump. IRC P2720.

14. **APPROACHES, SIDEWALKS AND PAVING**

These inspections are conducted by Public Works and scheduled online in the permit software. Approaches and pavement in right-of-way must be approved before any concrete pour is initiated.

- Approaches must have a depth of 6 inches and be reinforced with Number 3 bars, 18 inches on center each way.
- A turn radius of 5 feet is required unless greater and is shown on plans.
- For streets with curb and gutter, dowel 6 inches into gutter with Number 3 bars, 18 inches on center each way.
- Where public walks are provided, they shall be 4 inches thick and reinforced with Number 3 bars, 24 inches on center each way. Expansion joints shall be installed every 20 feet. Smooth dowel bars shall be installed through all expansion joints.
- For sites with bar ditches, a culvert may be needed which requires a separate culvert permit.

15. **UTILITIES INSPECTION** – Permanent electric and gas meters must be installed before requesting building final.

ELECTRIC METER RELEASE

- Torque Report
- Electrical system must be complete with all switches and receptacle outlets installed.
- All Electrical fixtures must be installed and trimmed out. Electrical equipment not installed shall require conductors be capped off with wire nuts and blank cover plates shall be placed over the outlet boxes. Cover plates are required on any fixture or receptacle not installed over 8 feet high.
- Overcurrent protection devices shall not be installed for equipment that is not installed. Blank covers shall be installed at such openings at electric panel.
- All circuits shall be specifically labeled at the electric panel with permanent marker.
- Service grounding electrode conductor(s) shall be accessible for inspection of connection to grounding electrode.
- Receptacles and switches shall be secured within approved boxes with cover plates attached. Extension of devices from walls for tile work, cabinetry, etc. is prohibited.
- Pull-down attic access stairs that serve equipment shall be installed and secured properly with lag bolts.
- HVAC equipment shall be identified by number at each unit as well as electric panel. Overcurrent protection sizing shall be in accordance with manufacturer's nameplate rating.
- Smoke and carbon monoxide detectors shall be installed at the time of inspection.

GAS METER RELEASE

- All gas appliances shall be installed. *EXCEPTION:* Kitchen range/oven/cooktop.

- All gas appliance vents shall be installed with proper clearance from combustibles.
- Gas system must be complete.
- Sediment traps shall be installed where required.
- Install gas valves on all gas outlets. Systems utilizing CSST shall have valves installed for each outlet at the manifold. Each outlet shall be identified using permanent marker.
- Three (3) lb. air test on gas system using a five (5) lb. diaphragm gauge.
- Gas outlets installed for future use shall have valves installed with a threaded plug.
- Log lighters shall be capped with key installed for testing past valve.
- Pull-down attic access stairs serving equipment shall be installed and secured properly with lag bolts.

16. LANDSCAPE FINAL INSPECTION Where specific landscape plantings are required by statute in a residential subdivision, a Landscape Final Inspection must be obtained **PRIOR** to calling for Building Final.

- **Irrigation** is a separate permit and must be finalized at or before the scheduling a building final. See separate guideline for irrigation requirements.

17. FINAL LOT GRADING INSPECTION (concurrent with building final)

- Permanent vegetation (sod or hydro mulch) 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.

18. BUILDING FINAL -

- Lot drainage survey or sealed engineer letter stating that the drainage matches the subdivision or lot engineered drainage plan is required to be uploaded, a drainage inspection requested and approved at least 24 hours prior to final requesting final inspection.
- Certificates of energy compliance for the building envelope and duct leakage from HERS certified inspectors must be on uploaded, a Final Energy Report inspection requested and approved at least 24 hours prior to requesting final inspection.
- Electric and gas meters must be installed before requesting a building final.
- The permanent address must be posted on the house or mailbox.
- The water meter box and water cut-off valve box at must be set at final grade with dirt removed. *See last page for additional information.*
- Access doors from conditioned spaces to unconditioned spaces shall be weather stripped and insulated to a level equivalent to the insulation of the surrounding surfaces. 2018 IECC R402.2.4.
- All light fixtures must be installed.
- A minimum of 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps (typically CFL or LED)
- All plumbing fixtures must be installed.

- Sewer clean-outs must be 2” above grade.
- Street, alley, and all flatwork must be clean and clear of mud and debris.
- Yard and garage must be clear of debris and trash.
- All Backflow test reports shall be submitted online with VEPO www.vepollc.com prior to requesting final inspection.
- Fire sprinkled structures shall be inspected and approved by the Fire Marshal’s office prior to final building inspection.
- Landscape inspection may be required based on the subdivision requirements.

EXPIRED PERMITS

It is the responsibility of the permit holder to obtain final inspection prior to the expiration of the permit. If there are circumstances beyond your control such that this cannot be done, provide a written explanation to the Building Official prior to the expiration date. We will try to work with you on these issues when possible. *Your Contractor Registration can be revoked for allowing permits to expire.* Permits expire after 180 days of no inspection or activity. A re-instatement fee of \$100.00 will be assessed to reactivate the permit.

TEMPORARY CERTIFICATE OF OCCUPANCY (TCO): The City of Southlake maintains a philosophy that temporary certificates of occupancy are not generally issued except in the most extreme exigent circumstances and then only on the recommendation of the inspector for the site and the written approval of the Building Official. Absolutely No Temporary Certificate of Occupancy will be issued when life safety or hazardous conditions exist. **A TCO request requires a deposit of \$3,000 and a fee of \$250.00 for each 30 calendar days with a maximum of 90 calendar days.**

Requirements for all Builders/Developers on Water Utility Accounts:

- **New Meter Sets:** To request a water meter set send an email to swucustomerservice@ci.southlake.tx.us with the following information:
 - Address of meter
 - Water meter size
 - Responsible party for the water bill
 - Billing address
 - The address must be posted in a visible location prior to scheduling the meter set.
 - All Meter Boxes must be “dug up” by the builder and ready.
 - For questions please call Water Utilities at 817-748-8051
- **Meter Boxes Damaged** during construction:
 - Shall be replaced by the builder with a **city approved** meter box.
 - Utility Supply House for City approved meter boxes:
 - 1” Meter – DFW Alliance Model# DFW #16 AMR.SB
 - 2” Meter – DFW Alliance Model# D1730-18-BDSAMR
 - Meter boxes purchased from the City of Southlake (charged to the builder’s water utility account) can be picked up between 8 am and 4 pm at:
 - 1950 E. Continental Blvd.
 - Southlake, TX 76092
 - 817-748-8082

- A non-approved box installed when a Building Final inspection is inspected will result in a \$100 trip fee and red tag for the building final until this is corrected.
- **Water Meters and Cellular Read Transmitters Damaged** during construction:
 - Shall be replaced by City of Southlake staff at the point of meter set, inspection, monthly reading and/or building final.
 - All costs will be charged to the builder's water utility account.

Fees Charged for Meter Equipment:

1" Meter	\$300	2" Turbo Meter	\$850
Transmitter	\$200	2" Compound Meter	\$2000
Register	\$200	Relocate Water Service	\$500
1" Meter Box	\$40	2" Meter Box	\$175
1" Meter Box Lid	\$20	2" Meter Box Lid	\$75