

## Building Inspection Checklist

### Slab

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- Per ACI Manual of Concrete and Post Tension Institute Practices and International Residential Code
- Engineer/Third Party approval needs to be on-site at time of arrival. Correct and proceed not allowed. COF
- Slab and beam (Place of Deposit) area shall be clean and Standing water removed. ACI Manual and ACI 318-19.
- Drilled Piers Installed, if included, per plan and previously approved. R109.1.1
- String lines installed for measurement purposes R109.1.1
- Verify proper beam depth and width per Approved Plans. R403.1.4.
- Plumbing sleeved and wrapped. P2603.4 and PTI
- All vertical pipes and tubes must be separated by 1" clear through the slab area. COF
- Vapor Barrier installed on slab, not beams. PTI Manual
- Plastic Sheeting should be placed off of cables and reinforcing PTI DC-10 4.3.
- Top slab reinforcing should be placed 2" down from the top of slab. (Assume 4" thick slab as designed)
- Re-entrant corner reinforcing should be placed mid-depth of slab(s).
- Chairs and cables tied in place and supported against displacement. R403.5.3.1.3, R404.1.3.3.7.4 and PTI 5.2.16.
- Chair/ tie-up cables at recessed slab areas per standard details and Figure 5.16 of PTI DC-10
- Cables and Mild Steel Reinforcing placed per approved plans and tolerances. R403.1.3.1.3, ACI 318 for clearances and PTI
- Cable ends secured and Dead-Ends provided with clearance. PTI 5.2.13
- Cables chaired off plumbing 3" and block-outs (tub boxes, etc) with 6" straight on either side. PTI 5.2.15
- Cables (tendons) shall be supported from floating at transition areas of less than or equal to 12". Transition should be max 1:6. PTI 5.19
- Cables properly routed (12" horizontal variance allowed) and spaced off beam bottoms 3" or as specified in LDP drawings.
- Live-end bare strand 1" and Dead-end bare strand 12" without repair. PTI Fig 5.5 and 5.8.
- Embedded items must be installed prior to placement—HD's (this could also include AB's) ACI 318
- Concrete encased electrode (Ufer) correctly installed. E3608.1.2
- Verify initial slope for driveway to COF requirements - Form board survey (Max 12%).
- Brick ledge installed.
- Tub boxes installed.

### 2NDS FRAMING

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- Building Inspections does not accept '*correct & proceed*' Engineer tags of structural items.
- Verify build line compliance.
- Verify zoning masonry compliance-R109.1.4
- Passed Plumbing Top Out / Mechanical inspections-R109.1.4
- Windows / construction doors installed per manufacturer's instructions Manufacturers Specifications
- Poly on brick ledge R703.8
- Kick-out flashings installed R401.3
- Exterior sheathing sealed R703.1.1
- Holes between floors fire blocked R302.11
- Shear walls installed per engineered plans R602.10, Engineered design
- Penetrations through slab sealed / no foam permitted R318.3 – R318.4
- Brick on wood properly supported R703.8.2
- Interior plates anchored per R403.1.6
- Glass block 1-hour rated on zero side R302 & R308.6.3
- Fire blocking installed R302.11
- Chases fire blocked out of attic / floor space R302.11
- Attic access as required R807.1 and ORD.
- Double studs under double joist R602.3
- Add support under water heaters R501.2
- Proper thickness and support at attic decking Min. ¾" R501.2 & R503.2
- Roll block floating beam with flush-cut brace R802.8
- Lateral restraint of joists R802.8
- Treated wood on slab R317.
- Tempered glass at hazardous locations R308.4
- Vaulted ceilings baffled R806.3
- Adequate attic ventilation / soffit vents R806.1-R806.2
- Boring and notching per code R502.8 and R602.6
- Penetrations on '0' side must comply with fire resistive rating R302.4
- Slab bolts, nuts and washers installed correctly R403.1.6
- OSB both sides of rafter splice / properly brace rafter after splice R802.4.4

- Stair rise / runs to code R311.7
- 7 ½" under attic decking / fur vaulted ceilings, R22 insulation required R402 IECC
- Window ledges >7' above grade proper height
- Proper joist and rafter spans Table 802
- Joist properly supported, j-hanger / pressure block (hangers properly web stiffened on LPI / TJI R502
- Floor joist installed per manufacturer's specifications.

## INSULATION

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- A house built as performance based or ERI methods shall conform to the energy summaries included with permit.
- Verify third part inspection report onsite R402.4.1.2 IECC.
- Check for voids at electrical boxes, wires, and pipes Table n1102.4.1.1
- Batt insulation cut to fit cavity Table R402.4.1.1 IECC.
- Secure insulation in cavities that will not be sheet rocked Table N1102.4.1.1
- Six-sided backing in place N1102.4.1.1
- Thermal envelope complete N1102
- Insulation installed in dwellings other than performance based or ERI methods shall conform to Tables 502.2.4 (1) to 502.2.4 (9) IRC N1101.4.1, N1102.1 (Higher factors are better.)
- Vapor retarder installed on warm side during winter. Vapor retarder is optional N1102.1.1
- No vapor retarder in wet areas N1102.1.1
- Secure insulation in floor assemblies to subfloor surface N1102.2.8
- Attic baffles installed N1102.2.3
- Vaulted ceilings and under attic decks require a minimum R-30 insulation (max 500 sq ft) or as specified by energy code summary. N1102.2.2
- Unvented attic and enclosed rafter assembly's insulation to eliminate condensation of underside of roof deck. N1102.4.1.1

## DRYWALL

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- 5/8" type X installed on Patio Home zero side walls R302.1
- Correct nail / screw spacing R702.3.5
- Ceiling board (Sag Resistant) required for ½" thickness applied to 24" on center framing R702.3.5 Note D
- Excessive gaps /broken drywall and all edges should occur over framing members except edges perpendicular to framing R702.3.5
- 5/8" type X on garage walls that adjoin any living space ORD 302.6
- 5/8" type X on garage walls and ceiling supporting living space above ORD 302.6
- 5/8" type X on underside of stairs and walls in usable spaces under stairs ORD 302.6
- Properly rated sheetrock or tile backer and fasteners in wet areas R702.3.7 & R702.4.2

## BRICK / WALL TIES

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- Clean mortar from behind brick Figure 703.8 (1&2) (1" nominal air gap)
- Remove every 3rd brick bottom row R703.8.6
- Moisture barrier for OSB R703.1.1
- Protect Romex E3802.3.2
- Poly under brick Figure 703.8(1)
- Brick ties properly spaced R703.8.4.1
- Brick to be at 4' height for inspection R109.1.5
- Fasteners should be rust resistant R703.8.4 (1) Note A
- Brick overhand should not be more than 1 ¾" on 4" brick R606.6.2

## FLATWORK

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- Verify sidewalk location as required by thoroughfare detail.
- Sidewalk slope ¼: per foot from property line to curb
- Street and alley expansion joint continued through approach.
- Subgrade shall be compacted - Engineering Standards
- Sidewalk reinforcement with #3 rebar at 18 inches on center (each way)
- Rebar chaired above grade.
- Smooth dowels installed at expansion boards and leveled out (Greased and Caped)
- No meter boxes in sidewalk / driveway
- Minimum 5-foot driveway turning radius.
- Flatwork area dry; no standing water
- Do not dowel lead walk to curb / Expansion board required.
- Handicapped ramps installed per Americans with Disabilities Act (ADA) requirements.
- Expansion joints at abutting concrete & every 20 feet of sidewalk
- Entire driveway approach including sidewalk within R.O.W. must be 6" in depth.
- Driveway approach with #4 rebar doweled and epoxied into existing concrete on 18-inch centers placed on compacted sub-grade (no expansion joint at street or alley)
- Driveway approach to be constructed per COF Standard Construction Detail (P19)
- Max Driveway width 22' at property line, approach to match width. May flare out wider with curved or 1:1 transition onto property.

ACI MANUAL AND ENGINEERING STANDARDS

## BUILDING FINAL / CERTIFICATE OF OCCUPANCY

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- Requires all field documents to be submitted through the 'Submit Field Documents' tab on our website. Field documents include Framing Final Acceptance Letter from Engineer, Foundation Final Acceptance Letter from Engineer, Stamped Final Grade Survey, and Frisco Residential Energy Compliance Certificate.
- All outstanding fees paid R108.1
- Irrigation Final, Utilities and Plumbing Mechanical Final inspection approved R109.1.5
- Clean street(s)/ sidewalk(s)/ alley(s) ORD 89-04-02
- Final grade survey/ positive drainage from foundation R401.3 & ORD
- Landscape / erosion control ORD
- Trees installed per approved list - Planning and development.
- Expose gutter pop-up drains at grade level R401.3
- Rain gutters installed at all practical locations & downspouts extended 5' from slab R801.3
- Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection R401.3
- Slope at any spot on any residential lot shall not exceed 1 vertical unit in 3-unit horizontal units or 33% slope ORD R401.3
- Final grade 4" below brick and stucco (2" if paved for stucco) R404.1.6 & R703.7.2.1
- Seal penetrations in brick R703.1
- Plumbing / exhaust vents painted, and caps removed R2609.2
- Caulk brick expansion joints per engineer requirements R703.1
- Weep holes at brick ledge above flashing R703.8.6
- Address numbers (contrasting colors) installed at front and rear (alley-Driveway gates must have on gate and building) Min. 4" tall ½" stroke R319 (ordinance)
- Front / rear entry lights working R3903.3
- 3-way switch at stairway lighting R3903.3.1
- GFCI receptacles operable and at all required locations R3902
- AFCI protection is provided R3902
- Garage overhead door & safety sensor operable R309.4 & Manufacturer Spec
- Exterior/ garage/ attic doors weather-stripped R402.2.4.1 (IECC)
- Energy certificate posted in electrical panel R401.3 (IECC)
- Self-closing and latching door from house to garage R302.5.1
- Smoke and carbon monoxide detectors installed R314 & R315
- Emergency escape and rescue openings shall be operable from the inside without keys, tools, or special knowledge. R310.1.1
- Means of egress shall be provided R311.
- Safety glazing at hazardous locations R308.4
- Stairway handrail / guardrail to code R311.7.8
- Blown insulation certificate at attic N1101.10.1
- Closet light clearance from shelves to code R4003.12
- Exit doors openable from inside without key(s) R310.1.1

# Electrical Inspection Checklist

## T-POLE

## 2021 IRC

## 2020 NEC

<input type="checkbox"/>	Proper bracing		110.13
<input type="checkbox"/>	Address posted on t-pole.		
<input type="checkbox"/>	Properly grounded		590.4(A), 250.24(C)
<input type="checkbox"/>	220 and 110 receptacles GFI protected		590.6
<input type="checkbox"/>	Enclosure weatherproof		590.4(D)(2)
<input type="checkbox"/>	Insure rusted, burnt, loose wires/clamps in meter can are not present		110.12(B)
<input type="checkbox"/>	Receptacles are listed weather resistant		590.4(D)(2)

## ELECTRICAL ROUGH

<input type="checkbox"/>	No more than 3 cables (Romex) through bored hole in top plate	E3705.4.4	334.80
<input type="checkbox"/>	2–20-amp circuits in kitchen	E3703.2	210.11(C)(1)
<input type="checkbox"/>	Check box fill	E3905.12.2	314.16(B)
<input type="checkbox"/>	Romex properly stapled	TBL E3802.1	334.30
<input type="checkbox"/>	Nail plates installed if Romex is less than 1 ¼ inch from edge of stud	TBL E3802.1	300.4(A)(1)
<input type="checkbox"/>	Check required receptacle outlets	E3901.1	210.52
<input type="checkbox"/>	Sleeve Romex through brick	TBL E3801.4	334.12(B)
<input type="checkbox"/>	Verify concrete encased electrode connection	E3611.2	250.68(A)
<input type="checkbox"/>	No aluminum wire	E3406.2 <b>A</b>	310.106 <b>A</b>
<input type="checkbox"/>	Minimum 12-2 with ground	E3406.3 <b>A</b>	310.106 <b>A</b>
<input type="checkbox"/>	Check arc fault circuits	E3902.12	210.12
<input type="checkbox"/>	Ground all metal boxes	E3905.2	314.4
<input type="checkbox"/>	Laundry circuit cannot leave laundry room	E3703.3	210.11(C)(2)
<input type="checkbox"/>	I.C. rated cans	E4004.8	410.116(A)(2)
<input type="checkbox"/>	Fan rated boxes installed	E3905.8	314.27(C)
<input type="checkbox"/>	Correct attic lighting	E3903.1	210.70(A)(3)
<input type="checkbox"/>	Protect cabling on attic decking and within 6' of attic entrances across joist.	E3802.2.1	320.23(A)
<input type="checkbox"/>	Verify bonding of all other metal piping systems	E3609.7	250.104(B)
<input type="checkbox"/>	Smoke & carbon monoxide detector outlets installed	R314, R315 <b>A</b>	
<input type="checkbox"/>	Correct receptacle spacing	E3901.2.1	210.52(A)&(B)
<input type="checkbox"/>	Receptacle outlet installed for each car space at garage	E3901.9	210.52(G)(1)

## ELECTRICAL FINAL

<input type="checkbox"/>	Receptacles properly plated	E4002.4	406.5
<input type="checkbox"/>	Panel cover removed	E3404.7	110.12
<input type="checkbox"/>	Identify neutral service conductor with white phase tape	E3407.1	200.6
<input type="checkbox"/>	Neutrals not to be double lugged	E3706.4	408.41
<input type="checkbox"/>	Emergency Disconnect installed	E3601.8	230.85
<input type="checkbox"/>	Main bonding jumper installed	E3607.5	250.28, 250.102
<input type="checkbox"/>	Bonding bushing installed if service entrance conduit is metal	E3609.2	250.92, 250.102
<input type="checkbox"/>	Grounding and neutral conductors are isolated in sub-panel(s)	E3607.2	250.24(A)(5)
<input type="checkbox"/>	Connections properly torqued in panel	E3406.12	110.14(D)
<input type="checkbox"/>	Required Kitchen counter and island receptacles installed	E3901.4	210.52(B)
<input type="checkbox"/>	Required Smoke and Carbon monoxide detectors installed	R314, R315 <b>A</b>	
<input type="checkbox"/>	Required workspace / clearance is provided	E3405.1	110.26
<input type="checkbox"/>	A/C condenser fusing correct	E3702.11	440.22(C)
<input type="checkbox"/>	Correct conductor termination at meter	E3406	110.14
<input type="checkbox"/>	CWG within 5 feet of slab	E3608.1.1.1	250.68(C)
<input type="checkbox"/>	Clean panel / busses	E3404.7	110.12(B)
<input type="checkbox"/>	Proper connector installed on conduit/sleeve at A/C disconnect	E3905.1	300.15
<input type="checkbox"/>	#8 bonding jumper on jacuzzi motor if metal water pipe within 5 feet of tub	E4209.4	680.74
<input type="checkbox"/>	GFCI protection installed on all receptacles requiring GFCI	E3902.1-18	210.8
<input type="checkbox"/>	AFCI protection installed on all branch circuits requiring AFCI	E3902.19-20	210.12

**A:** Amendment to code requirement

# Plumbing / Mechanical Inspection Checklist

## PLUMBING ROUGH

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- Form survey / building setback encroachments / finished floor street and alley elevation. (Form survey requires elevation at alley / street and anticipated driveway slope; maximum slope is twelve (12%) percent.)
- Plumbing exposure for inspection P2503.2
- Gas tracer wire / size / color G2415.17.3
- Gas union properly wrapped G2415.11
- CT adapter at change in material P3003.13
- Minimum depth of services 12" P2603.5, P2603.5.1
- Sanitary not properly vented P3101.2.1
- Back fall / no fall on sanitary sewer P3005.3
- Water service minimum ¾" P2903.7
- Minimum building sewer size 4" P3005.4 (amended)
- Valve not installed / not full port P2903.9.1
- Yard / double clean-outs not installed P3005.2
- Hot water not insulated IPC 607.5
- No plastic in water service P2904.4.2 (amended)
- Trap arm too long / excessive fall P3105.1
- Incorrect sanitary sewer fitting used P3005.1
- Flux used does not comply with ASTM B 813 P2904.15
- Under slab joints in copper properly brazed P2904.15
- PRV when located outside with valve to service P2903.3.2 (amended)
- Plumbing water, gas, sanitary systems on test P2503
- Water service not sleeved over sanitary ditch P2006.4.1
- Island / foot vent not properly installed P3112.2, P3112.3 (amended)
- Gas / sanitary / water lines properly bedded P2604.1, P2605.1 (2)
- Proper building setbacks, top of form elevation, street / alley elevations, driveway slopes information located within the City of Frisco Comprehensive Zoning Ordinance & Subdivision Regulation Ordinance.

## PLUMBING TOP OUT

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- The plumbing top out inspection includes flue pipes on gas-fired appliances.
- Waste / vent not properly supported P2605.1
- Leak free on waste / vent with 10' of head P2503.5.1
- Trap arm too long / excessive grade P3105.1
- Accessibility to clean outs P3005.2.9
- Proper grade on waste/vent P3005.3, P3104.2
- C/O on island & foot vent P3112.3 (amended)
- No low dry venting P3104.3
- Test entire system, hot & cold tied together P2503.7
- Reaming of gas piping G2414.6
- PRV not acceptable in dwelling P2903.3.1 (amended)
- Minimum 5' rise on gas vents M1804.2.3
- Gas pressure test required on all piping installations G2417.1
- Identification of CSST piping (med pressure warning tag) G2412.5 (amended)
- Approved shower pans must be water tested P2503.6
- Water heater ignition source not less than 18" P2801.6
- B-vent horizontal not greater than 75% of vertical rise G2427.10.9
- Proper clearance from combustibles and B-vents G2427.10.5
- Pan drain required at water heater P2801.6
- Gas vents shall terminate no less than 8' of vertical wall or 2' above roof G2427.6.4

## MECHANICAL ROUGH

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- Return plenum properly sealed M1601.1, IECC 403.3.4
- Restricted A/C ducts M1601.1
- Fresh air intake / gravity & volume damper R1006.2
- Chimney capped R1005.1
- Exhaust vent terminations 48" minimum from openings into building M1804.2.6
- Refrigerant suction line 1" size or less shall be insulated with ½" minimum insulation, except when length exceed 5' exposed to outdoor air, then it shall be a minimum 1" thickness outdoors NCTCOG amendments Table 503.3.3.1 IRC N1103.5
- Minimum duct insulation shall be in compliance with one (1) of the State of Texas ESL Residential Duct Trade Offs effective 01/23/06 or IRC N1103.3, Energy Star / Green Building will be R-6 insulation
- Flex duct shall be supported every 4' horizontally and 6' vertically, bending radius must not restrict air flow, splice collars are required at duct splices (manufacturer's specifications) M1601.1
- Seal all seams and connections of duct work and equipment M1601.4.1 IECC 403.3.4

- Main condensate drains shall be tied into a wet drain. Secondary drains must discharge to an obvious location (over doors, windows, patios, etc.) M1411.3.1
- All exhaust fans shall be vented outside of the building with metal duct work M1504.1, M1505.1
- Where dryer vent length exceeds 35 feet, the length shall be on permanent label at the exhaust duct connection. The maximum developed length shall be reduced 2.5 feet for each 45-degree bend and 5 feet for each 90-degree bend M1502.4.7. (amended)
- A minimum 22 inch wide x 30 inch high unobstructed, solid catwalk is required from the point of attic entry to the attic furnace service panels and filters M1305.1.2
- Attic insulation shields on fireplace flue pipe where required R1005.8
- The 'line of travel' distance between the attic entry point and the attic furnace access panels shall not exceed 20 feet M1305.1.2
- A 30" x 30" level, work platform and 30" clear work area are required in front of the attic furnace access and filters M1305.1.2
- A/C condensers must be level and firmly supported 3" above adjoining grade M1305.1.3.1
- Self-closing dampers are required in Green Building furnace fresh air takes N1103.6, IECC R403.6
- Green Building supply plenums shall not have insulation in the air stream, insulation must be on the exterior of the plenums – Green Building Ordinance
- Gas flue pipes (B-vent) shall not terminate within 8 feet of any vertical wall or similar structure on the roof G2427.6.4
- Environmental exhaust ducts shall not terminate within 36 inches of building openings M1502.3
- Only materials with a flame spread index greater than 200 shall be allowed in the return air duct system (protect all wiring, electric boxes, PCV, OSB, etc) M1601.1 #6
- The Mechanical Start-Up Checklist shall be completed by the A/C company and presented to the Building Inspector at CO inspection M1401.1.1 (amended)

## **PLUMBING FINAL / GAS FINAL**

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- The plumbing and gas final inspection is required for meters.
- Caulk all fixtures P2705.1 (3)
- Hard pipe gas through cabinet / partition G2422.1.2.3
- Slip joints at tub concealed P2704.1
- Leak at fixtures / missing fixtures P2705.1, P2503.5.2
- Trap seal protection on floor drain P3201.2.1
- Exterior plumbing protected from freeze P2603.5
- No test master bath tub P2503.5.2
- Plumbing vents too close to intake air P3103.5, R303.5.1
- Improper combustion air G2407
- Dishwasher air gap P2717.1, P2717.2
- Extend clean-outs past masonry P3005.2.10
- Fixture cross connect / improper air gap P2902.
- Island fixture venting / clean-outs P3112.1, P3112.3 (amended)
- Appliance vent clearance(s) manufacturer's listing
- T & P / pan drain lines P2801.6.1, P2801.6.2, P2804
- Mil-wrap / paint exposed gas piping G2415.11
- No gas pressure warning tags at both service ends G2412.5 (amended)
- Fire caulk fireplace at log liter manufacture require re-factory to be sealed at log liter penetration appliance vents to short G2427.6.5
- Gas valves to appliances, missing / plug / not accessible gas completed to appliances G2417.6.2,
- G2420.1.2, G2420.1.3