



## Residential Inspection Checklist – Framing

The intended use of this checklist is for the preparation of an inspection. This is only a general list and is not intended to address all circumstances. Please refer to the latest adopted International Residential Code (IRC) and the City of Austin Land Development Code (LDC) for code sections listed below.

- IRC: <http://www.iccsafe.org/codes-tech-support/codes/the-i-codes/>
- LDC: [https://www2.municode.com/library/tx/austin/codes/land\\_development\\_code?nodeId=TIT25LADE](https://www2.municode.com/library/tx/austin/codes/land_development_code?nodeId=TIT25LADE)

**Please verify the following before calling for the Framing Inspection – all items must be complete:**

### Permits and Plans

- Prior to scheduling the framing inspection, the contractor or person doing the work has reviewed the approved plans and can assure that the construction being inspected is consistent and complete.
- Building is safe and accessible.
- Job address is posted in a visible location per IRC section R319.1.
- Permit, Residential Framing Checklist, approved city stamped plans, roof specifications, and engineered floor system information is on site and accessible to inspector.
- For all new construction:** the framing, mechanical, plumbing, and fire sprinkler (if applicable) rough inspections are to be called in for the same day – this is referred to as a frame group inspection. The electrical rough inspection is required to be inspected prior to.

### General

- The roof is complete with radiant barrier (if required) and exterior moisture barriers are installed. [R703.1]
- Window and roof flashings are complete. [R703.8]
- There is no significant moisture remaining in the wood framing.
- Plate anchorage is installed to code.
- Required fire blocking is installed and approved fire blocking materials are in place. The penetrations at top and bottom plates, soffits, ceiling lines, etc. are sealed with fireblocking installed where required. [R302.11]
- Penetrations through a fire-rated assembly have been fire caulked per the UL Through-penetration detail.
- The installation of plumbing, mechanical, electrical, or fire sprinkler system rough-in work has not damaged the wall framing, floor joists, or roof framing. [R502.8, R602.6]
- Plumbing openings to crawl spaces and to living space above are protected by secured metal screens or collars with no openings greater than 1/2". [UPC 312.12]
- Smoke alarm and carbon monoxide wiring is installed at all required. [R314, R315]
- Tempered glazing is installed at all the required areas. [R308.4]
- Provide attic access to areas exceeding 30 square feet and vertical height of 30" or greater. The rough framed opening is a minimum 22" x 30" with a minimum 30" of unobstructed headroom above the access. [R807]
- Verify insulation dams at garages, porches, and pulldown attic stairs have been installed.
- Verify air barriers at dropped ceilings and hot walls have been installed.
- Verify insulation baffles if applicable.
- Verify recessed light cans are airtight and IC rated.
- Verify dampers on bath, utility, and kitchen exhaust fans/ducts.
- Verify fireplace installation when applicable.
- Visitable route matches approved plans for new construction only.
- At least one first floor bathroom or half-bath meets the visitability requirements for new construction only.
- Adequate attic ventilation has been provided.

## Construction Tips – Fireblocking & Draftstopping

- Fireblocking is required:
  - in stud walls and furred spaces, vertically at the ceiling and floor levels, and horizontally at intervals not exceeding 10'.
  - at interconnections between concealed vertical and horizontal spaces such as soffits and drop ceilings.
  - in openings around vents, pipes, ducts, chases, tub traps, and similar openings at ceiling and floor levels.
  - at the underside of the stairs and stair stringers.
- Draftstopping is required in floor-ceiling assemblies for every 1,000 square feet.

## Walls

- Wall studs are sized per plan and per code. [Table R602.3(5), Table R602.3.1]
- All framing members have been nailed per IRC nailing schedule. [Table R602.3(1), R602.3(2)]
- All vertical and horizontal framing members that have been notched or bored meet R602.6; Figure R502.8, Figure R602.6(1), Figure R602.6(2), Figure R802.7.1.1, Figure R802.7.1.2.
- Verify wall bracing has been installed to code per plan.
- All point loads continue to the foundation.
- Correct number of jack studs has been installed under headers, lintels and beams. [Table R602.7(1), R602.7(2)]
- All point loads continue to the foundation.
- Top plate splices less than 24", or plates over-notched or over-bored, are strapped with a minimum 16 gage x 1.5 inch wide metal tie with 8-16d nails per side. [R602.3.2, R602.6.1]
- The plans have been checked for installation and securing of special blocking – i.e. handrail or guardrail blocking, blocking for visitable future grab bars.
- The fastener types and sizes are per code.
- The sheathing panel end joints occur over framing. [R602.10.10]
- When cripple wall studs exceed 48", the studs are the size required for an additional story. [R602.9]

## Windows

- Verify all glazing complies with IECC requirements.
- Verify glazing is tempered per R308.4 as applicable.
- Verify egress windows are in place and installed to code. [R310.1]
- Sill heights at emergency escape and rescue openings are framed to allow 44" maximum distance from finished floor to the bottom of the clear opening. [R310]
- Window fall protection has been provided for operable windows with openings more than 6' above grade or the surface below, where the lowest part of the clear opening is less than 24" above the interior finished floor and has openings through which a 4" sphere can pass. [R312.2]

## Stairs – R311.7 (see code for any allowed exceptions)

- Verify stair head height, width, rises and runs have been installed to code. [R311.7]
- Minimum clear width is 36" at all points above handrail and below required headroom. [R311.7.1]
- Stairway headroom clearance is 6'8" minimum measured vertically from the sloped line adjoining the tread nosing or from the floor surface of the landing or platform on that portion of the stairway. [R311.7.2]
- Maximum vertical rise is 12' between floor levels or landings. [R311.7.3]
- Maximum riser height is 7-3/4". Greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8". [R311.7.5.1]
- Minimum tread depth is 10". Greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8". [R311.7.5.2]
- 3/4" to 1-1/4" stair nosing required at all solid risers except when tread depth is at least 11". Radius of curvature at nosing shall not be greater than 9/16". [R311.7.5.3]
- Floor or 36" deep landing at top and bottom of each stair run or stairways. Landings of shapes other than square or rectangular are permitted provided the depth at the walk like and total area is not less than that of a quarter circle with a radius equal to the landing width. [R311.7.6]
- Handrail(s) is provided per R311.7.8.
- Illumination to be provided per R303.7.

## Hold-downs and Hardware

- The proper type and size of fasteners are used for each application. [Table R602.3(1)]
- The mechanical connectors, straps, hold-downs, clips, hangers, are installed per plan and per manufacturer's specifications.
- Fasteners and hardware for pressure preservative and fire-retardant-treated wood shall be of hot-dipped galvanized steel, stainless steel, silicon bronze, or copper. [R317.3 or manufacturer's requirements]
- Joisting at decks shall be of preservative treated lumber unless approved weatherproof decking membrane is used. [R317.1.3]
- Full height studs are installed at all hold-downs, strapping, etc. Nailing into all studs at hold-downs and straps are complete. [See manufacturer's specifications]
- Anchor bolting is installed per shearwall schedule when specified and at a minimum of 2 per plate, maximum 6' o.c., maximum 12" from plate ends and not less than seven bolt diameters from end of each piece. [R403.1.6]

## Floor

- Floor crawl space access of 18" x 24" has been provided if applicable. [R408.4]
- Crawl space venting requirements have been met at 1 square foot for each 150' of under-floor space. [R408.1]
- Review floor plan for joists, beams, and posts.
- Dimensional joist bearing to be minimum 3" on concrete or masonry and 1-1/2" on wood. [R502.6]
- Hangers are installed at headouts, cantilevers, etc. [R502.6.2]
- Joists bearing and beams are supported laterally at ends and at bearing points by solid blocking. [R502.7]
- Nailing of joists, double joists, rims, etc. are per plan and code. [Table R602.3(1)]
- If wood I-joists are being used, verify layout and installation guides are onsite. Check that blocking detail, bearing requirements, etc. are per manufacturer's specifications.
- Check areas where plumbing may cause problems, such as toilet flanges centered on joists, plumbing walls, etc.

## Trusses

- The truss specifications and drawings, stamped and signed by an engineer registered in the State of Texas, are on site. [R106.1, R802.10.1]
- The truss configuration meets the design drawings; no trusses or TJIs have been flipped.
- The roofing material has not changed since the original design.
- Trusses have bearing as noted on truss specifications. [R802.10.1 #3]
- The lumber grade marks and sizes match the design specifications. [R802.10.1 #8]
- The connection plate sizes, gauges, and locations are per specifications. [R802.10.1 #9: 9.1, 9.2, 9.3]
- The truss bracing has been completed as noted and shown on the truss engineers plans. [R802.10.3]
- Any cut or damaged truss will require a letter of approval from the Engineer of Record.

## Boring & Notching

- Boring and/or notching conform to R502.8, R602.6, R602.6.1, R802.7.1, or per the manufacture's recommendations.

## Roof

- The ridges, hips, and valleys have been designed as beams for roof slopes less than 3' in 12'. [R802.3]
- The rafters are framed opposite each other at the ridges. [R802.3]
- Notches on the ends of rafters do not exceed 1/4 the nominal joist depth. [R802.7.1]
- Notches in the top or bottom of rafters do not exceed 1/6 of the nominal depth and are not located in the middle 1/3 of the span. [R802.7.1, R502.8.1]  
*NOTE:* Notching that is not longer than 1/3 of the nominal depth is permitted in the top of the rafter, if not located in the middle third of the rafter.
- Holes are not within 2" of the top or bottom of the rafter and the diameter is not greater than 1/3 the nominal depth. For I-joists, refer to manufacturer's specifications. [R802.7.1, R502.8.1]
- Rafter ties are completed if required. [R802.3.1]
- Purlins and struts are installed as required. [R802.5.1]