

Permits and Plans

- Job address is clearly shown on site.
- Permit and approved plans in permit box.
- Approved plans show what is being built and remove multiple options that are not relevant.
- Floor engineered systems (I-Joists) plans and manufacturer's data sheets in permit box.
- Truss plans and manufacturer's data sheets for floor trusses in permit box.

General

- Exterior moisture resistant barriers are installed and lapped or taped correctly. [NCRC R703.1] The penetrations at top and bottom plates, fire blocks, soffits, ceiling lines, etc. are sealed and installed where required for specific locations and approved materials. [NCRC R302.11, R602.8]
- Plumbing, mechanical, electrical rough-in work has not damaged the wall framing, floor joists or roof framing. [NCRC R502.8, R602.6]
- Provide attic access to areas exceeding 400 sq.ft. and vertical height of 60" or greater. The rough framed opening is a minimum 20" x 30" with a minimum 30" of unobstructed headroom above the access. [NCRC R807]
- 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. [NCRC R310]
- Operable windows with openings more than 72" above grade or surface below, where the lowest part of the clear opening is less than 24" above interior finished floor are fixed or have openings through which a 4" sphere cannot pass. See section for exceptions. [NCRC R312.2]

Stairs

- Floor or 36" deep landing at top and bottom of stairways. Landings of shapes other than square or rectangular are permitted provided they meet the Code requirements. [NCRC 311.7.6]
- Stairway headroom clearance is minimum 6' 8" measured vertically from the sloped line adjoining the stairway tread nosing or the floor surface of the landings and platforms. See Code for exceptions. [NCRC 311.7.2]
- All stairways are provided with illumination.

[NCRC 311.7.9, R303.7]

- Winder stairs framing should meet Code. [NCRC R311.7.5.2.1]
- Maximum riser height is 8 1/4 inches. [NCRC R311.7.5.1]
- Radius of curvature at the leading edge of the tread is not over 9/16". [NCRC 311.7.5.3]
- Stair riser/tread maximum dimension doesn't exceed smallest by >3/8". [NCRC 311.7.5.1]

Hold-downs and Hardware

- The required special inspections have been completed and reports are available to inspector (epoxy or wedge anchor bolting into concrete, structural welding, moment frames, etc.)
- The proper type and size of fasteners are used for each application. [NCRC 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. [NCRC R317.3.1]
- Decks shall be of preservative treated lumber or wood that is naturally resistant to decay. [NCRC R317.1.4]
- Full height studs are installed at all hold-downs, strapping, etc. Nailing into studs at hold-downs and straps per drawings or details.
- 1/2-inch diameter anchor bolts are to be installed per the shear wall schedule when specified and at a minimum of 2 per plate, maximum 6' O.C., maximum 12" from plate ends.
- Properly sized nut and washer (minimum 3"x 3" x 0.229" tightened on each bolt) unless in the high wind zones. High wind zones anchor bolts shall meet Chapter 45 in the NCRC. [NCRC 403.1.6]

Walls

- The sheathing panel end joints occur over framing and fastener installation is consistent with requirements noted on approved plan and in the Code. [NCRC Chapter 6]
- Nailing patterns for structural wall sheathing is 12 inches on center in the field and 6 inches on center along the edges unless otherwise stated

in the NCRC, high wind chapter 45 or Engineered design. Adjust the air pressure to avoid penetrating the skin of the sheathing with nail heads. [NCRC Chapter 6]

- The fastener types and sizes are per approved plans and schedules. [NCRC Chapters 4,5,6]
- Top plate splices < 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. Exception: When the entire side of the wall with the notch or cut is covered by wood structural panel sheathing. [NCRC R602.3.2, R602.6.1] The plans have been checked for installation and securing of blocking unless in the high wind zones. [NCRC Chapters 4,5,6]
- All point loads continue to the foundation. [NCRC R301]
- Girders and headers shall be installed per the tables in the Code. [NCRC Table 602.7(1), Table R602.7(2)]
- The wall studs are sized per plan & per code unless in the high wind zone. See Chapter 45 in the NCRC for high wind zone requirements. [NCRC Table R602.3(5)]
- All vertical and horizontal framing members that have been notched or bored will need to meet NCRC. Add specially designed metal plates to reinforce the bored-out or notched studs where required. [NCRC R602.6]
- Install fire blocking in walls, floors, and ceilings to prevent creation of concealed space more than 10 feet long shown in the Code. [NCRC R302.11]
- Brick lintels are to be installed per Code. [NCRC R703.8.2, R703.8.2.1]

Floor Joists

- Bearing at floor joists to be 1½" at wood or steel bearing and minimum 3" at masonry or concrete. [NCRC R502.6]
- Joisting lapped at least 3" where framed from opposite sides of bearing support and nailed together with three 10d face nails or strapped together in an approved manner. [NCRC R502.6.1]
- I-joists installed per manufacturer's specifications and installation guidelines are on site for use by the inspector. [NCRC R802.7.2] Floor crawl access 18" x 24". [NCRC R409.11]

Roof

- The ridges, hips, and valleys have shall be
- designed as beams for roof slopes < 3 ft. in 12 ft. [NCRC R802.3]

- The rafters at the ridge are framed opposite each other and must align at the ridges. Regularly spaced hip and valley rafters need not align. [NCRC R802.3]
- Notches on the ends of rafters don't exceed ¼ the nominal joist depth. [NCRC R502.8.1]
- Notches in the top or bottom of rafters don't exceed 1/6 of the nominal depth and are not located in the middle 1/3 of the span. [NCRC R802.7.1, R502.8.1]
- For I-joist installation including notching, bored holes, cutting, etc., refer to manufacturer's specifications. [NCRC R802.7.2]
- Rafter and collar ties are to be spaced no more than 4 feet. [NCRC R802.3.1]
- Collar ties are to be not less than 1" x 4". [NCRC R802.3.1] Purlins and struts are installed as required. [NCRC 802.5.1]

Trusses

- The truss specifications have been stamped and signed by an engineer. [NCRC R106.1, R802.10.2]
- The truss configuration meets the design drawings. [NCRC R802.10.1 #1]
- The roofing material has not changed since the original design.
- Trusses have bearing as noted on truss specifications. [NCRC R802.10.1 #3]
- The lumber grade marks and sizes match the design specifications. [NCRC R802.10.1 #8]
- Required hangers installed per specifications. [NCRC R802.10]
- The connection plate sizes, gauges and locations are per specifications. [NCRC R802.10.1 #9] The truss bracing has been completed as noted and shown on the truss engineers plans. [NCRC

Common Residential Building Framing Violations Checklist September

2018 – per the 2018 NCRC – version 1.0

SECTION 107 – NCACP Building framing inspection

Not ready.	[NCRC R602.3]
Previous violations not corrected.	Stud columns or walls not nailed per Code.
Jobsite not safe to inspect.	[NCRC Table R602.3(1)]
Started work without prior approval of past inspections or acceptance of designer's letter on a footing, foundation or slab. [NCACP Section 107.3]	Over spanned framing members.
No plans on site.	[NCRC Chapters 4,6,8 and tables]
[NCACP Section 106]	Portal frame at garage not installed correctly.
<i>Changes to the approved plans.</i>	[NCRC Figure R602.10.1 or [NCACP Section 105]
[NCACP Section 105]	<i>Over notching, drilling and cutting of framing members.</i>
No manufacturer's truss plans and details on site.	[NCRC Figure R602.3(1) and R602.6(1)]
[NCACP Section 106]	<i>Missing bracing on trusses.</i>
Engineering fixes not done.	[NCRC R802.10.3]
[NCACP Section 105 – Engineering Design]	Cut or damaged truss with no engineering fix.
Straps and clips not installed or missing per plans or wrong gage material.	[NCRC R802.10]
[NCACP Section 105]	Fire blocking and draft stopping not installed or missed.
Layout of I-Joists text too small to read or missing.	[NCRC R302.11, R302.12, R502.12, R602.8]
[NCACP Section 105]	Fire blocking at the Chimney or Fireplace not installed.
<i>Anchor bolts missing, incorrect and/or without nuts.</i>	[NCRC R1003.19 and R1001.12]
[NCRC R403.1.6 or R4504 for High Wind]	Air barriers not installed or missing.
Studs exceed the O.C. spacing allowed.	[NCECC R402.4 and Table R402.4.2]
[NCRC Table R602.3(5)]	Sheathing has holes in it, damaged, or not taped or lapped correctly.
Missing nails in LVL.	[NCECC R402.4 and R402.4.1]
[NCRC R602.1.3]	Insulation baffles not installed.
LVL or headers not installed.	[NCECC R402.2.3]
[NCRC R602.3]	Energy caulking missing in crawl space.
Missing truss hangers or gussets.	[NCECC R402.4 and Table R402.4.2]
[NCRC R802.10]	<i>Missing header or headers covered over.</i>
<i>Trusses and joists not blocked adequately.</i>	[NCRC Table R602.7(1) and R602.7(2)]
[NCRC 802.10.]	Missing king studs.
<i>Missing nails in hangers, plates, clips, straps and gussets.</i>	[NCRC Table R602.7.5]
[NCRC Chapters 4, 5, 6, 8]	Rim boards not installed or blocked correctly.
Exterior wall sheathing needs to extend to top plates.	[NCRC R502.1.7]
[NCRC R602.10.4.5]	Interior braced walls not nailed or blocked correctly. [NCRC Chapter 6]
Top plate slicing less than 24" apart or not nailed.	Porch columns not installed.
[NCRC R602.3.2]	[Could be inspected later]
Not full bearing for trusses, LVL, beams, joists or rafters.	Handrails or safety rails not attached or missing.
[NCRC Chapters 5,6,7 and R802.6]	[OSHA Residential Guideline STD 03-11-002]
<i>I-Joists flanges cut or bored in the wrong place.</i>	Missing flashing around windows, etc.
[NCRC R502.8.2]	[NCRC R703.4]
Load path does not continue to foundation.	Brick lintels not installed correctly.
[NCRC R301]	[NCRC R703.8.2.1]
<i>Wall or post not bearing on foundation.</i>	<i>Stair clearance does not include adjacent wall and ceiling finish thicknesses.</i>
[NCRC R502.6]	[NCRC R311.7]
Not a positive connection on all post and beams.	Missing soffit protection when required.
	[NCRC R302]
	No termite treatment documentation.
	[NCRC R318.2]
	Fireplace or chimney clearances not met. [NCRC M1803.3.4]