City of Vacaville
Community Development
Building Division

Residential Framing Checklist

<u>This is to be used as a general checklist; it is not inclusive of all code requirements and inspection criteria.</u>

Per 2019 California Residential Code (CRC)

- Approved plans and inspection record to be on the job site. R105.7
- Review floor plans and verify all wall placement according to the plans.
- All revisions must be approved by city plan check per R106.4
- Review structural plans to:
  - Locate shear schedule, and locate structural notes and details
  - Review foundation plans to verify anchor bolt size and spacing
  - Verify location and length of shear walls on the structural plans
- All areas to be inspected shall be free of stockpiled materials, trash or other equipment or debris which preclude access for said inspection
- Cripple walls shall be framed of studs not smaller than the studding above. R602.9
- Verify under floor ventilation of 1 Sq. ft. per 150 sq. feet of under floor area. R408
- Ventilation of attic spaces per R806.
- Attic access openings 22”x30” min. R807
- 18”x24” minimum access to crawl spaces. R408.4
- Field treat cuts and holes in treated lumber per R402.1.2.
- 3"x3"x 3/16" plate washers at all anchor bolts in shear and/or bearing walls R602.11.1
  Wood plates or sills shall be bolted to the foundation or the foundation wall. Steel anchor bolts shall be minimum ½” minimum if not galvanized
- Verify clearance from earth to untreated wood: Joists 18”, beams 12”, posts and all others including walls 8”. R317.1
- For fastening requirements see Table R602.3 (1).
- Verify sawn lumber size and grade per the structural specifications for the shear walls
  Note: This includes sill plates, boundary members at hold-downs, and members at adjoining panel edges.
- Verify shear panel to sill connection including:
  - Fastener size and spacing to floor framing below
  - Verify solid member (4X or PSL) under shear wall for proper load and shear transfers at second floor to first floor framing (no web joists as rim joists)
  - At shear wall located on concrete, check foundation anchors for size and spacing.
  - Hot dipped galvanized fasteners into treated lumber
- Check all structural details for special connections
- Verify shear transfer at the top of wall to the diaphragm above per structural details and shear schedule, including:
  - Framing clips and shear transfer hardware spacing
  - Rim joist or joist block-nailing requirements
  - Blocks at 4’ o.c. at parallel joists
  - Shear wall extends to roof sheathing (nailed to rafter)
  - Locations per the floor plans, structural plans, and foundation plans

- Verify hold down hardware installations, including:
  - Hold downs on posts at each end of shear walls
  - Size of posts included at each end of shear panel (per HD manufacturer)
  - Strap type hold-downs are nailed with listed fasteners. Note: If green sinkers are used; there is a reduction in the hold down capacity
  - Verify that holes drilled through posts are no greater than I/16" larger than the bolt diameter
  - Verify all nuts and bolts are tight
  - Check hold-down manufacturer specifications for installation requirements (for example: SSTB anchors in stem wall require minimum 1 ¾" edge distance (sides) and must be minimum 4 ¼" from the end of wall, thus 8" wide stem wall required for all SSTB >5/8")
  - Check for through floor uplift transfers from shear walls above, including:
    - Straps, threaded rods, FTA twisted straps, etc.
    - Boundary nailing through plates, rim joists, etc… above and below
    - All through floor transfers shall connect to a post or built up member below
    - Note: Additional HD's or PA's to foundations may occur at these locations
- Check plans for drag straps (ex: WB's or ST's) and collector lines (verify nailing)
- Notched, drilled or cut engineered lumber shall be in accordance with R602.6.
- Pipe penetrations or other elements that break wall plates require strapping per R602.6.1.
- Verify rafter ties or collar ties or continuous ceiling joists if no structural ridge
- Verify size and grade for all headers with approved plans
- Headers shall be supported on each end with one or more jack studs or with approved framing anchors in accordance with Table R602.7(1) or R602.7(2) and R602.7.5.
- Verify size, grade and placement of all beams and built up members in floors or ceilings. Verify full bearing under all beams and built up members per the approved plans (including 'crush' blocks between floors and in subfloor spaces)
- Check details for positive connections at bearing points of all beams and built up members.
- Check connections at high to low wall transitions. (typically require strapping)
- Floor, ceiling and roof openings 4 foot wide or larger require double joists and head outs.
- Provide backing for tub enclosures, grab bars, towel bars, toilet paper holder, drywall
- Check for cabinet backing for upper cabinets (I 2" centerline from back wall) Verify support for drop ceilings from structure above. No flat framing
- All windows and doors installed and flashed (after shear nail inspection).
- Check windows in bedrooms for egress requirements. Maximum 44" sill height, minimum 5.7 sq. ft. opening, minimum 20" wide, minimum 24" high. 5.0 sq. ft. acceptable at grade level only. R310.2.
- Fire blocking at drop-ceiling areas, furred walls, stairs and concealed locations. R302.11
- Verify all duct chases are fire-stopped at each floor level.
- No roof penetrations within 4 feet of rated wall assembly without parapet CBC 706.6
- Verify STC ratings will be maintained in common walls