Kitsap County Department of Community Development



Residential Sheathing and Shear Wall Inspection

This checklist reflects code requirements of the 2018 International Residential Code (IRC), Washington State Amendments as adopted by the State Building Code Council (SBCC), and Title 14 of the Kitsap County Code. It incorporates most inspected items for the inspection type, but it does not include every possible condition or code requirement. The intended users of this checklist are Kitsap County Building Inspectors, but it may also serve as a guide to contractors and permit holders.

Permits and Plans

□ Job address shall be posted in a visible location. (R319.1)

□ Permit and approved plans are on site and accessible to the inspector. All documentation must be legible. (R105.7, R106.1.1, R106.3.1)

□ Note corrections left from current or prior inspections which need to be addressed at this time.

□ Check the approved plans for identification of flood hazard area and associated requirements for construction. (R109.1.3, R322)

□ Check approved plans for Manchester or Illahee building height restrictions. If so, then a height survey will be required. The Height Survey must be completed after the underfloor inspection approval and prior to sheathing/shear inspection. A survey certificate must be provided giving the height of the finished floor system and the anticipated design height of the home. The certificate must be uploaded to the permit portal and reviewed in the office. No site inspection is required.

Sheathing and Shear Components

□ The sheathing and shear inspection is required before Appling code required water resistive barriers, cladding, window/door flashing, and pre-insulation and vapor barrier installation. (R109.4)

□ Verify the sheathing is the grade and thickness specified on the approved plans and/or engineering. (R604.1, R604.2, R604.3)

□ Verify the sheathing is nailed per the shear wall/braced wall panel schedule on the approved plan. As a rule, all nails for vertical or horizontal diaphragms are required to be common nail sizes rather than box or sinker (IRC Tables R602.3(1), R602.3(2), and R602.3(3)).

□ Sheathing edges and end joints must be blocked or occur over horizontal or vertical framing members. (R602.10.4.4)

□ Plate dimensions are per shear wall schedule/approved plans. (R404.3, R403.1.6, R602.11)

□ Plates are fastened per shear wall schedule/approved plans. (R404.3, R403.1.6, R602.11)

□ Check for nailing/attachment requirements for required double 2x's or 3x's as shown on approved plan and shear wall schedule. (R602.3.1)

□ Confirm stud size, height, grade, and spacing. (IRC Table R602.3(5)).

Kitsap County Department of Community Development



 \Box Check framing member requirements for double 2x's or 3x's and header sizes for openings as shown on approved plan and shear wall schedule. (R602.3.1)

□ Ensure that no more than 20% of fasteners are overdriven. Overdriven fasteners are as described in APA Technical Topic TT-012C (<u>https://www.apawood.org/publication-search?q=overdriven&tid=1</u>). The addition of fasteners to correct overdriven fasteners shall conform to TT-012C, <u>EXCEPT</u> the use of staples in item #2 will require approval from a Professional Engineer.

□ Fasteners for preservative-treated wood shall be of hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper. Staples shall be of stainless steel. Coating types and weights for connectors in contact with preservative-treated wood shall be in accordance with the connector manufacturer's recommendations. In the absence of manufacturer's recommendations, a minimum of ASTM A 653 type G185 zinc-coated galvanized steel, or equivalent, shall be used. (R317.3.1) Exceptions:

o One-half-inch diameter or greater steel bolts.

o Fasteners other than nails, staples and timber rivets shall be permitted to be of mechanically deposited zinc coated steel with coating weights in accordance with ASTM B 695, Class 55 minimum.

o Plain carbon steel fasteners in SBX/DOT and Zinc Borate preservative treated wood in a dry environment shall be permitted.

□ Pressure-treated materials or impervious moisture barrier installed wherever concrete is being poured against wood construction. (R317.1.2)

□ Check plans for lateral restraint or alternate braced panels and confirm that the construction meets the approved engineering or the prescriptive design. (R602.10.6.2)

□ Verify roof eave rafter tails/sheathing does not project into fire separation distance at the property line. (IRC Tables R302.1(1), R302.1(2))

□ Continuity is maintained when exterior wall (1-hour-rated) is within 5-foot fire separation. Distance should also be verified at time of foundation and framing inspections. (R302.2.1, WA Amendment)

□ Cripple wall bracing, exterior and interior, per requirements of R602.9. (WA Amendment)

Hold Downs & Hardware

□ Confirm that all floor-to-floor, wall-to-floor, and lateral straps and transfer connections are installed per the approved plans. (R301.1.2, R602.10, R602.11)

□ Hold-downs are not over-spalled beyond manufacturer's maximum allowance. Spalling greater than that allowed will cause a reduction in load capacities. See manufacturer's installation instructions (MII) and/or engineering that is provided.

□ Hold-downs and straps are attached properly per approved plans and/or manufacturer's installation instructions (MII).

□ Full height studs are required at strapping and hold-downs. (MII)

Kitsap County Department of Community Development



□ Multiple studs are installed at strapping and hold-downs as required per approved plan or manufacturer's installation instructions (MII).

□ Check anchor bolts at garage walls and other areas not inspected during the underfloor inspection. (R403.1.6)

□ Anchor bolt size and spacing is per the shear wall schedule in the approved plans. (R301.1.2, R403.1.6).

□ Wall anchorage - Plate washers, not less than 0.229 inch by 3 inches by 3 inches in size, shall be installed between the foundation sill plate and the nut except where approved anchor straps are used. The hole in the plate washer can be diagonally slotted with a width of up to 3/16 inch larger than the bolt diameter and a slot length not to exceed 1 ¾ inches, provided a standard cut washer is placed between the plate washer and the nut. Plate washers shall be hot-dipped galvanized when installed at pressure treated plates. (R602.11.1)