

Structural Inspection Checklist Wood-framed Residential Structures (2017 ORSC)



Building and Safety Division/Permit Application Center

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If you need the following translated in Spanish, please call 503-588-6256

Si usted necesita lo siguiente traducido en español, por favor llame 503-588-6256

The checklists are developed cooperatively within the inspection and the plan review bodies and are related directly with the current codes as adopted by the state of Oregon. They are intended to:

- Be used as guides to assist the inspectors and plans examiners to perform efficient inspections and reviews.
- Promote consistency in the application of the building code and standard practices within the city of Salem.
- Be used by the contractors and the general public to prepare for the inspections and the construction documents.

These checklists are applicable for wood frame Residential Structures. They do not include all code requirements. Therefore, they do not waive any specific code requirements not listed or allow for the decrease in the requirements of an engineered design. It also does not add requirements where the minimum of the code has been met.

Responsibility of the permit applicant

Contractors and/or permit holders are responsible to provide the following:

1. All approved plans, documents and revisions to plans must be maintained on site and available for review at all times the building is under construction (**ORSC R106.3.1**)
2. Establish safe access to perform all inspections (**ORSC R109.1**)
3. Permit posted on site (**ORSC R105.7**)
4. Inspection Sign-off Card posted (**ORSC R117.1**)
5. Address posted on site (**ORSC R105.3, R110.3.3**)
6. If ladders or equipment are necessary to perform inspections, all ladders and equipment shall meet minimum OSHA standards. Inspectors are not responsible for setting up or moving ladders from one location to another, within or to other buildings or structures (**ORSC R109.1**)
7. All works shall be completed prior the time of the inspection (**ORSC R109.1**)

Footing/Setback Inspection (ORSC R109.1.1)

- All property corner pins located and exposed & string lines in place on at least two sides of the property (**Site plan**) (**ORSC 109.1.5, R106.2**)
- Underlying ground suitable to support loads (fill compacted, free of debris, etc.) (**ORSC R403.1**)
- If Geotechnical Report or sub grade inspection is required, verify compliance with its recommendations (**ORSC R401.4**)
- Forms set-depth & width to plans (**per approved plans, ORSC R106.11, R403.1.1, R403.1.2, R403.1.3**)
- Verify the location of interior footings (**per approved plans, ORSC 1061.1, R403.1.3.4**)
- Reinforcing placed and secured per approved plans for footings and walls (**ORSC R404.1.3.2, R403.1.3.5.2**)

- Hold down anchors installed as per approved plans and manufacturers installation instructions **(per approved plans, ORSC R403.1.6)**
- Grounding rod installed and secured per code **(ORSC R403.1.8)**
- Verify size and length of anchor bolts on site **(ORSC R403.1.6, R\$03.1.6.1)**

Underfloor/foundation/rain drains and foundation drain inspection

- Mechanical, Plumbing and Electrical groundwork approved prior or at the time of structural inspection
- Engineered wood flooring layout or joist layout on site **(per approved plans, R106.1.2)**
- Floor joists and Beams: verify sizes, spacing and clearances per approved plans **(ORSC R317.1)**
- Floor joists/Girder: verify connections; check for over notching and boring **(ORSC R502.8, Fig 502.8)**
- Posts: Verify locations, connections and clearances **(per approved plans and ORSC R502.9, Fig R502.9)**
- Load Path: verify blocking under point loads, holdowns ... etc **(ORSC R301.2.2.2.5, R502.2.1)**
- All mud sill in place with sill sealer and bolted **(ORSC R317.1, part 3)**
- Locate the underfloor access: verify size **(ORSC R408.4)**
- Crawl space areas graded to drain & pipe installed **(ORSC R408.6, R405.1)**
- Moisture barrier in place and per code **(ORSC R408.1)**
- If required: Perimeter foundation drain in place **(ORSC R405.1)**

Framing Inspection

General

- The building is to be enclosed with roof and windows and exterior weatherproof barrier installed. **(ORSC R109.1.4)**
- Engineered truss shop drawings and details **(ORSC R802.10)**
- Engineered wood flooring layout or joist layout. **(ORSC R502.1.2 thru R502.1.7)**
- The electrical and plumbing are approved prior or at the time of the structural inspection or the structural inspection issue a structural approval with the following comment: Approved pending approval of electrical and plumbing systems**

Load Path

- Locate point loads: truss girder, columns, beams, posts, etc. **(per approved plans, ORSC R301.1, R802.10.1)**
- Verify the supports of point loads and connections **(per approved plans, ORSC R301.1, R802.10.1)**

Floor and Roof framing systems

- Verify sizes and spacing per approved plans **(per approved plans)**
- Verify supports and connections (truss clips, hangers, bracing, and nailing per approved plans or engineering) **(ORSC R802.10)**
- Check for over notching and boring **(ORSC R502.8)**
- Verify fire blocking/draft stop **(ORSC R302.11 through R302.12.1)**

Shear walls

- Verify nailing, spacing, straps, ties per approved plans and engineering **(per approved plans, ORSC R106.3 and ORSC R602.10)**
- Verify holdowns' sizes, size of structural member attached to holdowns, and connections to the framing systems per Manufactures installation instructions and engineering **(ORSC R106.4)**

- Verify the framing size at windows (**per approved plans and ORSC R310.2**)
- Check for over notching and boring (**ORSC R502.8**)
- Verify joint and fire blocking/draft stop (**ORSC R302.11 through R302.12.1**)

Wall Construction

- Locate bearing walls: check support system (**ORSC R106.1.1 – R106.3.1**)
- Verify studs' sizes and spacing (**per approved plans, ORSC R106.1.1 – R106.3.1**)
- Verify headers' sizes and support system (**per approved plans, ORSC R106.1.1 – R106.3.1**)
- Check for over notching and boring (**ORSC R502.8**)
- Verify fire blocking/draft stop (**ORSC R302.11 through R302.12.1**)

Glazing

- Egress Windows: check sizes and sill height (**ORSC R310**)
- Safety glazing (**ORSC R308.4**)

Miscellaneous

- Stairs: Verify head room, width, rises and runs (**ORSC R311.7**)
- Attic Access (**ORSC R807.1**)
- Smoke alarm and carbon monoxide alarm locations (**ORSC R314 and R315**)

Insulation Inspection

- Material meets the required r-value (**per approved plans, Table N1101.1(1), N1101.1(2)**)
- Vapor barrier installed where required (**ORSC N1104.9.2, R408**)
- Vent baffles installed to code (**ORSC N1104.2.5**)
- Fire Smoke Barrier behind the tubs, shower enclosure and other concealed spaces (**ORSC R302.11 through R302.12**)
- Rodent proofing

Sheetrock Inspection

- Interior brace panel: verify fasteners' size and spacing (**per approved plans, ORSC 2008 R106, R602.10.11; ORSC 2017 R602.10.5**)
- 5/8" type X sheetrock on lid of garage with living space above (**ORSC R302.5 through R302.6**)
- Fire Wall, Exterior fire-rated wall, Party Wall (**per approved plans, ORSC 302.1, R302.2**)
- Under stairs sheathing for storage space (**ORSC R302.7**)

Final Inspection

- Structural, plumbing, mechanical, and electrical to be ready prior to requesting inspection (**ORSC R110.5**)
- Installation instructions for any listed equipment shall be available on site and remain attached to equipment (**ORSC M1307.1 and G2408.1**)
- Working smoke detectors (All covers remove and working) (**ORSC R314 and R315**)
- Egress window operation (**ORSC R310 and R408.3**)
- Fire door between the dwelling and the garage (**ORSC R302.6 and Table 302.6**)
- Check attic & crawl accesses (**ORSC R408.4, R807**)
- Attic & underfloor insulation (**ORSC Tables N1101.1(1) and N1101.1 (2)**)
- Driveways poured
- Porches, decks, guardrails and handrails in place (**ORSC R311 and R312**)
- Weather strip on all exterior doors
- Address numbers as required and installed. (**ORSC R319**)
- Grade sloped away from building (**ORSC R401.3**)

- Landscape walls and exterior retaining walls per approved plans or per code (**per approved plans, ORSC R109.1.6**)
- Landscaping trees per planning requirements (**per approved plans, ORSC R109.1.6**)
- Final Special Inspection Letter if Special Inspection is required (**per approved plans, ORSC R109.1.6**)