



RESIDENTIAL ENGINEERING DESIGN SUBMITTAL CHECKLIST

As a step towards reducing structural engineering review time for residential buildings which do not satisfy Oregon Residential Specialty Code (ORSC) prescriptive requirements, and to verify submittal completeness the checklist is recommended.

A-DESIGN NARRATIVE:

1. Y N N/A Code Used: Oregon Structural Specialty Code (OSSC-14) and/or Oregon Residential Specialty Code (ORSC-11).
2. Y N N/A Scope of Design: Complete Lateral and Gravity Design, Lateral Only Design, Partial Design.
3. Y N N/A Structural Configuration: (Regular or Irregular) ASCE 7-10, Section 12.3.

B-DESIGN LOADS AND PARAMETERS (OSSC 1603 to 1613):

1. Y N N/A Roof and Floor Dead Load, Design Snow Load per Site Elevation, Floor Live Load.
2. Y N N/A Retaining wall loading, and design criteria. (Copy of geotechnical report required)
3. Y N N/A Wind Loads (Speed, Exposure, Importance Factor, etc.).
4. Y N N/A Seismic Load (S_{DS} , S_{D1} , R, I, etc.) Dead load take-off required if in less than 12 psf.

C-STRUCTURAL ANALYSIS:

Vertical lateral force resisting system proposed: (Shear Walls, Frames, Cantilever Columns, etc.)

1. Y N N/A Plan view for each load path in each direction, wind and seismic, ASCE 7-10, Section 12.5.
2. Y N N/A Base shear, V per: ASCE 7-10, Section 12.8, seismic redundancy factor "p", and vertical distribution of base shear to each level.
3. Y N N/A Unit shear (plf) for each load path.

Roof and Floor Diaphragms Design Proposed, ASCE 7-10, Section 12.10; Provide the following:

1. Y N N/A Diaphragm loading for both directions.
2. Y N N/A All the drag struts, collectors on the floor and roof framing drawings as required.
3. Y N N/A Chord force design at reentrant corners as required.
4. Y N N/A Provide all the necessary structural details on the drawings. These details should be referenced and made part the drawings i.e., building framing plans and sections.

D-STRUCTURAL DETAILING AND COMPLETE LOAD PATH ISSUES; ASCE 7-10, Section 12.14.2:

1. Y N N/A Discontinuous element.
2. Y N N/A Special requirements, OSSC section 2305: a) washer plate b) nominal 3x- member.
3. Y N N/A Deck lateral bracing/handrail/guardrail design calculations & details, OSSC, Section 1607.0.1.
4. Y N N/A Holdown anchorage design per ACI 318-11 Appendix D or per ICC-ES.

E-QUALITY CONTROL AND QUALITY ASSURANCE PROGRAM, OSSC-17, Section 1704 and 1710

1. Y N N/A Special Inspection requirements (steel frames, special concrete shear walls, etc.).
2. Y N N/A Structural observation/Geotechnical Engineer observation.

Mission Statement

"Partnering to promote completeness of design calculations and drawings for all structural engineering review. Partial or incomplete engineering design submittal have been found to create an unnecessary protracted review period."