

## ATTACHMENT B

### Abbreviated Summary of Changes to the 2023 Oregon Residential Specialty Code (ORSC), 2023 Oregon Plumbing Specialty Code (OPSC), 2023 Oregon Electrical Specialty Code (OESC)

#### ORSC

- Membrane structures: Non-habitable membrane structures (RV Covers) not more than 500 square feet, not greater than 1-story, and not less than 3-feet to a property line – are exempt from permits.
- Digital construction documents: Allows the Building Official to accept digital construction documents – provides alignment with industry practice.
- Shipping containers: Repurposed shipping containers used as housing must be designed per the Oregon Structural Specialty Code (OSSC) (commercial) structural provisions.
- Wind design criteria: Lowers the wind design criteria for special wind design regions like the Columbia Gorge in favor of a site specific design tool in standard ASCE 7. Oregon BCD commissioned studies on wind design which resulted in these changes which are expected to potentially reduce the cost of housing.
- Water heater anchorage: Moved seismic water heater anchorage requirements to the Plumbing Code.
- Emergency escape and rescue openings (EERO): Sleeping room EERO's must provide a 36 inch access to a yard, court, or public way. Clarification includes EERO's that exit under a deck to provide passage. New section allows for reduction in EERO size in height from 24 inches to 22 inches for existing buildings.
- Stairway treads and risers: Minimum stairway tread depth is 9 inches from previous 10 inches. Minimum stairway riser height is 8 inches from 7 ¾ inches.
- Smoke alarms: Additional requirements for smoke alarms installed near cooking appliances. New location requirement for smoke alarms within 21 feet of a sleeping room rather than "immediate vicinity".
- Carbon monoxide alarms: New requirement for carbon monoxide alarms in existing buildings if a structural permit is required – regardless if a gas heat source is in the home. Exception provided for certain exterior work like decks, siding, roofs, or replacement windows.
- Protection of wood from decay: Two additional or clarified locations of where pressure treated wood is required for exterior decks, balconies, overhangs where the wood is exposed to the weather, and for basement locations. Intention is to clarify locations where decay is prevalent and requires treated wood.
- Address: Removed minimum 4 inch address numbers. Numbers must be visible from street and contrasting.
- Solar and solar-ready provisions: The technical solar installation standards of the OSSC have now been incorporated into the residential code for consistency. Provides clarification on solar panel layout to allow for firefighter access. The solar-ready provisions have been brought forward from the 2021 Oregon Residential Reach Code which was previously optional for designers. Requires reservation of space in an electrical service panel for dual circuit breakers to accommodate future solar. Requires a junction box near the electrical panel and near the solar panel for future accommodation.
- Wildfire hazard mitigation: For wildfire hazard areas, provides reference standards for jurisdictions with wildfire hazards and for fire hardening.
- Accessory structures: The definition of accessory structure now aligns with national model code and removes a maximum size of 3,000 square feet as regulated under the residential code.
- Energy Storage Systems (ESS): Provides clarification around ESS systems for location, spacing, fire detection, and temporary use of an electric vehicle to provide building power in the event of a power outage.
- HVAC efficiency ratings: The SEER rating for air source heat pumps was changed from a SEER rating of 14 to 16. This is reported to provide approximately 13% efficiency. Gas fired furnaces remain at 94% AFUE.

- Additional energy compliance measures: Energy code design now requires two additional “optional” compliance measures to be chosen and installed if the entire HVAC system is not located within the building thermal envelope. This is in addition to prescriptive measures already in place.
- Deeply buried ducts: New standards have been added for deeply buried ducts in attic insulation along with markers for the ducts every 10 feet.
- Energy Rating Index (ERI) alternative: An ERI performance alternative has been added. Essentially this provides the option to design to an index and demonstrate compliance at the time of building final. This results in an ERI score for homes similar to MPG for automobiles.
- New Appendix AU, Cobb Construction: Provides reference standards for regulating the construction of homes built with cob (monolithic adobe).
- New Appendix AW, 3D Printed Construction: Provides reference to construction standards in UL 3401 for approval of 3D printed homes as an Alternate Method and Material of construction (AM&M).

## OPSC

- Definitions: Added new definitions for On-site Treated Nonpotable Water and Rainwater Diverter Valves. Also Gray Water Diverter Valve. As sustainable and off-grid systems are becoming more common in areas of the state, additional definitions help to clarify plumbing systems.
- Dead legs: Dead legs are essentially sections of piping that have stagnant water because of the piping configuration. New code language requires a method for flushing dead legs where accessible.
- Showerheads: Previously showerheads were limited to 2.0 GPM. New provisions set the maximum limit at 1.8 GPM. This aligns with the EPA and HB 2062 (2021).
- ABS to PVC transition joints: Clarifies the only location permitted for completing a transition joint with glue between the two materials is outside a building.
- Bottle filling stations: Provides an additional NSF 61 drinking water standard for compliance.
- Pre-rinse spray valves in commercial food service: Reduces the water flow GPM requirement from 1.6 GPM at 60 PSI, to 1.28 GPM without a PSI limit.

## OESC

- Definitions: Provides new definitions for Alcoves, Critical Data Operation Systems, and Dormitory Unit.
- New products: Code language was added to clarify the acceptance and use of new products by the jurisdiction. Clarification was also added to include product acceptance when located in the floodplain, and what constitutes a certified electrical product in accordance with ORS 479.
- Alternate Methods approvals: Specifies that Alternate Methods approvals must be made in writing to the jurisdiction and approval granted before installation of the Alternative Method.
- Ground-fault circuit-interrupter (GFCI) installation: Adds clarification on GFCI installation locations in unfinished basements and in kitchens with receptacles that serve countertops surfaces. Provides exceptions for security system receptacles and certain appliance circuits. Requires GFCI protection for outlets in crawlspaces and all outdoor outlets rated at 150 volts or less and 50 amps or less.
- Existing metallic piping used at grounding electrode: Excluding exceptions, prohibits use of existing piping when an electrical service is being changed or upgraded.
- Cable requirements: Additional provisions for the protection of nonmetallic-sheathed cable in securing, supporting, bending and stapling.
- Damp locations: Clarification on where receptacles must be rated as suitable for damp or wet locations and the type of protection that is required.