

# QUALITY ASSURANCE PROGRAM INSPECTION CHECKLIST

#### **BUILDING DIVISION**

COMMUNITY DEVELOPMENT DEPARTMENT 333 Broadalbin Street SW, PO Box 490, Albany, Oregon 97321-0144 | 541-917-7553

## 2021 OREGON ELECTRICAL SPECIALTY CODE

This checklist is applicable for electrical work installed or altered under the Oregon Electrical Specialty Code (OESC). This checklist includes the requirements that are generally applicable to most projects. As this checklist is not all inclusive, please refer to the <u>adopted code</u> for all applicable requirements.

This checklist is intended to:

- Promote consistency in the application of the building code and standard practices.
- Provide customers a tool to prepare for required inspections.
- Provide guidance for inspectors to verify code requirements are achieved in an efficient manner.

### Responsibility of the Permit Applicant

The permit holder is responsible for the following:

- Have the address posted on site (AMC 18.08.010)
- Provide safe access to perform all inspections (AMC 18.08.010)
- Work remains exposed and open for inspection until approved. (AMC 18.08.080, OAR 918-271-0020)
- All works shall be completed prior to the requested inspection (AMC 18.08.010, OAR 918-271-0010)
- Request all inspections online through <u>www.cityofalbany.net/inspections</u> (AMC 18.08.020)
- Where plan review is required, all plans, documents, and revisions to plans must be maintained on site and available for review at all times the building is under construction (**OAR 918-311-0010 to 0060**)
- All work shall be installed in accordance with the approved plans. Any changes from the approved plans shall be resubmitted for review and approved prior to proceeding (AMC 18.06.040)
- 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 (AMC 18.08.020)

#### **Required Inspections**

The following are the required inspections for a typical project. **(AMC 18.08.030)** Additional inspection could be required based on the individual design **(AMC 18.08.060)**:

#### Electrical:

- Electrical Service
- Electrical underground, when applicable
- Rough Electrical
- Electrical Final

If only a portion of the work for an inspection is complete and needs to be inspected for cover, request the appropriate inspection and in the request comments, request a partial inspection and staff will inspect only that element.

#### **Inspection Results**

Inspection results are provided via email to the applicant on record and can be also reviewed at <a href="http://www.cityofalbany.net/permits">http://www.cityofalbany.net/permits</a> by searching the permit number.

The following are the common inspection results and the required actions needed:

**Approved**- The inspection passed and is approved to cover the scope of the inspection and proceed to the next phase.

**Conditionally Approved**- This result is an approval, with corrections that are required. In this result, read the notes as there may be specific instructions to proceed, and we will verify at a future inspection. When this result is used, you do not need to request a reinspection.

**Partial Approval**- This result is for when only a portion of the project is ready for the requested inspection and was inspected. In this case, only the portion noted in the inspection is approved and can be covered. The remaining portion will need to be inspected when ready and approved prior to cover.

**Corrections Required**- This result is a disapproval and will be accompanied with a list of elements that need to be corrected prior to requesting the next inspection. Unless otherwise stated in the inspection result, all work must stay exposed until the reinspection is completed and approved.

**Not Ready-** The scope of the inspection is not ready at the time of inspection. For example, service entrance conductors or grounding are not terminated for a service inspection.

No Access- This result is used when access to the property or building is not granted or no one is home.

**Cancelled**- Generally, this result is when the inspection is cancelled by the applicant's request or administratively in our office.

**Information**- This result is used rarely for information about a future inspection, such as during the service inspection branch circuits or feeder terminations are not yet complete in the panel at the time-of-service inspection. An informational result may be entered for the next required inspection to ensure the element is verified.

It is important to review all emailed inspection results for corrections required and/or approvals prior to proceeding. Any result, other than approved or conditionally approved, will require the work to remain open and a new inspection requested as discussed above. Work covered prior to approval will be required to be exposed to conduct required inspections, as specified in **AMC 18.08.100**.

# **Electrical Inspections**

	(References are to the <u>2021 Oregon Electrical Specialty Code</u> unless otherwise noted)	
<u>Underground Inspection</u>		
	Is material rated for installation and use in a damp or wet location? (110.3, 110.11, 300.6, 300.9)	
	Does burial depth meet requirements of Table 300.5 or utility requirements if on utility side of meter?	
	Raceways exposed to different temperatures or emerging from below grade must be sealed. (300.5, 300.7)	
	Are conduit runs continuous and connected by approved means? (110.3, 300.12, chap. 3 materials)	
	Backfill materials must not be capable of damaging cables or raceway being covered. (300.5(F))	
	Are cables or raceways emerging from grade protected from physical damage? (300.4, 300.10, 300.12)	
Service Inspection		
	Panel and meter shall be the same size - 100amp, 125amp, 150amp, 200amp (310.15)	
	Verify meter working height (110.26)	
	All conductors of a circuit are installed in the same raceway. (300.3)	
	Terminations meeting manufacturers specs. (110.3, 110.14)	
	Service conductor size. Verify conductor is sized for the load (310.15, 230.31, 230.42, 230.79)	
	Grounding electrode, grounding electrode conductor, and bonding jumper size and installation (250.50 thru 250.70, 250.66 Tables)	
	Proper conductor size to the "concrete encased electrode" (#4 solid copper min.) (250.66 B)	
	Proper attachment to "concrete encased electrode" and accessible (250.52 (3))	
	Ground rods, Physical protection required of grounding conductor (250.52(5), 250.64B)	
	Bonding conductor size. Is bonding required? Water needed? (250.66)	
	All applications of "Grounding" fulfilled? (Article 250)	
	Riser pipe size or Overhead raceway properly sized and supported (230.28)	
	Service Provider's requirements standards and OESC Clearance (230.9, 230.24)	
Rough Electrical Inspection		
_	Verify the number of required circuits and 20-amp circuits. Range, Dryer, AC, Kitchen circuits, Laundry circuits, Bathroom circuit, porches/decks, proper number of bedroom circuits (210.52 A-I, 250.52(e))	
	Wiring protected? 1-1/4" from face of framing (300.4)	
	NM below 8' protected from damage by framing or sheathing?; NM entering panel and below 8' protected by 1/2" plywood or gypsum board. (OESC 334.15)	
	NM secured/supported every 4-1/2 feet and within 12" of every box. (300.11, 334.30)	
	NM uses permitted/not permitted. (OESC 334.10, 334.12)	
	NM cable protected when within 6' of the attic access (334.23)	
	Connector installed at box (besides plastic with stab in tabs for NM) for transition from raceway/cable. (300.15, 300.16, 334.40)	
	Minimum 6" of conductor at each junction box. (300.14)	
	Raceways or cable continuous between boxes. (300.10, 300.12, 300.13)	
	Water heater circuit, Sump pump (210.11)	
	Location of device boxes. Verify proper spacing of receptacles and switches. Is there 5 or more steps? Is a 3-way required for staircase? (210.52 A1 & A2, 210.70 A2)	

☐ All wiring made up? Switches and outlets to be stripped out and grounds made up (250.148)

☐ Are all of the required lighting devices or boxes installed? (210.70 A-C)

□ Solar Ready provisions of the **ORSC N1107.4** are installed.

Final inspection	
	Check panel for identification (408.4)
	Check all GFCI's including hydro-massage tub (minimum ampacity of circuit and breaker met?) (210.8A-8C)
	Verify receptacles in wet or damp locations are WR rated. (406.9(B))
	Check all Arc Fault devices and verify correct sizing of breakers (210.12A, 240.4)
	Verify all smoke detectors are installed and working, battery tabs removed (ORSC R314& 315)
	All appliances installed and working. If not, are all wires or devices properly terminated? (110.27)
	All remaining boxes closed off properly (314.20, 314.21, 110.27)
	Spread of fire or products of combustion (300.21)
	Tamper Resistant receptacles required. 406.12
	Connect receptacle grounding terminal to box or circuit equipment grounding conductor. (250.146, 406.10, 406.11)
	All exterior devices in and working properly, weatherproof outlets, AC disconnects, lights (110.11, 210.8, 300.6, 404.4, 406.9)
	Verify extension rings are installed on devices in cabinets (300.21)