



When is Electrical Plan Review Required for Complex Structures

Complex structures are defined by the State as an installation involving one or more of the following:

1. **A. A SERVICE OR FEEDER** beginning at 400 amps where the available fault current exceeds 10,000 Amps at 150 Volts or less to ground or exceeding 14,000 Amps for all other installations.
 - B. A SERVICE OR FEEDER** rated 600 Amps or over.
 - C. A SERVICE OR FEEDER** more than 600 supply volts nominal.
2. **INSTALLATION OF A 150 KVA** or larger separately derived system (transformer or generator) as defined in Art. 100 of the NEC.
3. **ADDITION OF A NEW MOTOR LOAD OF 100 HP** or more.
4. **INSTALLATION of a FIRE PUMP** as defined in Art. 695 of the NEC
5. **EMERGENCY SYSTEMS INSTALLATIONS** as defined in Art. 700 of the NEC.
6. **HEIGHT:** More than three stories.
7. **OCCUPANCY:**
 - A.** Six or more residential units in one structure.
 - B.** An "A" (Assembly) occupancy, "E" (Educational) occupancy, or an "I-2" or "I-3" occupancy as defined in the adopted Oregon Structural Specialty Code. (description below).
 - C.** Any special occupancies as described in chapter 5 of the NEC adopted by the board in OAR 918-305-0100 (None are currently described by the Board)
 - D.** Hazardous (Classified) location as defined in Articles 500 to 516;
 - E.** Installations in patient care areas of health care of facilities as defined in Article 517;
 - F.** Agricultural buildings used for commercial purposes; (Equine facilities for 10 or more persons)
 - G.** Floating buildings as defined in Article 553;
 - H.** Marinas and boat yards as defined in Article 555.
 - I.** A new recreational vehicle park, or any addition, alterations to an existing park.

(over)

Items under “D” include but are not limited to: Where fire or explosion hazards may exist due to flammable gases, vapors, dusts, fibers, or liquids Bulk Storage Plants Auto repair shops Commercial garages Aircraft hangers Gasoline dispensing and service stations Spray/dip coating applications Intrinsically Safe Systems

When Plans are submitted a file number is issued. The number is reserved for your project. While plans are in for review your permit will be placed in “partial” status (provided all permit fee’s have been paid and enough information is provided showing compliance with pertinent portions of the Code. However, the permittee proceeds at his or her own risk, without assurance that the permit for the entire installation will be granted, or that corrections will be required. This allows work to begin under this permit, obtain inspections but excludes service or final inspection. The permit status will change to “approved” once all fees are paid and plan review is completed. When your permit status is changed to approved, you may receive any of the required inspections upon request.

TWO sets of electrical plans, separate from those submitted for structural, plumbing or mechanical review are required for review. One set will be returned to the Electrical Contractor after approval. The approved plans are **required to be on the job site** and available to the Electrical Inspector at the time of each inspection. Any sets of plans in addition to the required two sets that the contractor wishes to be “stamped as approved” by Washington County will be charged \$45.00 per set.

The Electrical contractor’s signing supervisor is personally required to sign the permit application prior to receiving the approved permit and approved plans (except as allowed by ORS 479.560(1)(b)). The signing supervisor or Electrical Engineer who is responsible for creating the plans must provide their license or registration number on the plans.

The checklist for required information for plan review is available in the document of:

“EPR SUBMITTAL REQUIREMENTS”

The following is for informational use only – wording is general in nature:

“A-1” assembly use, usually with fixed seating, intended for the production and viewing of the performing arts of motion pictures including, but not limited to: Motion picture theaters, Symphony and concert halls, Television and radio studios admitting and audience, Theaters.

“A-2” Assembly uses intended for food and/or drink consumption including, but not limited to: Banquet halls, Nightclubs, Restaurants, Taverns and bars.

“A-3” Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A including, but not limited to: Amusement arcades, art galleries, Bowling alleys, Churches, Community halls, Courtrooms, Dance halls, Exhibition halls, Funeral parlors, Gymnasiums (without spectator seating), indoor swimming pools (no spectator seating), Lecture halls, Libraries, Museums, waiting area in transportation terminals, Pool and billiard parlors.

“A-4” Assembly areas intended for viewing of indoor sporting events and activities with spectator seating including, but not limited to: Arenas, skating rinks, Swimming pools, Tennis courts.

“A-5” Assemblies intended for participation in or viewing outdoor activities including, but not limited to: Amusement park structures, Bleachers, Grandstands, Stadiums.

“E” Educational Group occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade. Also, the use of a building or structure or portion thereof, for educational, supervision or personal care services for more than five children older than 2 ½ years

“I-2” occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing, health or custodial care on a 24-hr basis of more than five persons who are not capable of self-preservation including: Hospitals, Nursing homes, Mental hospitals, Detoxification facilities, Outpatient clinics (where patients are incapable of self preservation),

“I-3” occupancy shall include buildings and structures that are inhabited by more than five persons who are under restraint or security. Occupancy is by persons who are generally incapable of self-preservation due to security measures not under the occupant’s control. This group shall include, but are not limited to: Prisons, Jails, Reformatories, Detention centers, Correctional centers, Prerelease centers.

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