

Community and Economic Development

Use this checklist to help gather all the information and documents required to submit a complete Electrical permit application. This form may be submitted with the application materials at the Permit Center at SeaTac City Hall.

SUBMITTAL DOCUMENTS

- Electrical Permit Application (*completely filled out*)
- For **residential roof-mounted solar panels**, use the Electrical Permit Checklist for Residential Solar Photovoltaic Systems instead of this checklist.
- Where **outdoor mechanical equipment** is being installed, and a separate mechanical permit has not yet been obtained, provide 2 copies of the following:
 - Site plan** showing location of outdoor equipment, in relation to property lines.
 - Roof plan** showing location of roof-mounted mechanical equipment.
 - Building elevations** showing size and height of roof-mounted or building-mounted mechanical equipment.
- Electrical plans** (*not required for one and two-family dwellings*) See backside of the Electrical Permit Application for when electrical plans are required. Provide 2 copies of the plans showing the following items (as applicable):
 - Floor plan** or site layout to show the area where the electrical work is to occur
 - North arrow** indicating the direction north
 - The **proposed use or occupancy** of the various portions of the building in which the electrical work is to occur
 - A complete **riser diagram**
 - The calculated **load schedule and demand factor** selected for each branch circuit, feeder, sub-feeder, main feeder, service panel, and circuit schedules shown
 - Fault current calculations** and the **listed interrupting rating** for each service and/or feeder
 - Legend** or key to any symbols used
 - Letters and numbers** designating mains, feeders, branch circuits, and distribution panels
 - Wattage (vA), number of sockets and types of **luminaire(s)**
 - Wattage (vA) and purpose of **all other outlets**
 - Voltage** at which any equipment will operate
 - Identification** of size of wires, type of insulation, and all conduit sizes
- Lighting Budget Calculations** (*not required for one and two-family dwellings*) Compliance forms and related information may be found at the **Northwest Energy Efficiency Council (NEEC)**.
- Any other information** pertinent to the project, or as required by the plans examiner
- Engineer's stamp and signature** on the electrical plans in the following cases:
 - Educational facilities, hospitals and nursing homes
 - Services or feeders rated 1600 amperes or larger
 - Installations identified in the NEC as requiring engineering supervision
 - When required by the Building Official for installations which by their nature are complex, hazardous or -pose unique design problems
- Owner/Renter/Lessee Affidavit** to be provided when the property owner, renter or lessee chooses to purchase a permit to do an electrical installation on his/her own or qualified leased property under the conditions as described in **RCW 19.28.261**.

COMMERCIAL AND MULTI-FAMILY EXTERIOR LIGHTING REQUIREMENTS

An electrical permit application must be submitted and approved for any proposed changes to existing or new exterior lighting. The permit application must include a completed application form and the plans as noted below. In addition, the submitted plans must demonstrate compliance with SeaTac Municipal Code (SMC) Chapter 17, Crime Prevention Through Environmental Design (CPTED). See the next section for a summary CPTED standards.

SUBMITTAL DOCUMENTS

- Lighting Plan.** A lighting plan showing all proposed exterior lighting fixtures, and their relationship to buildings, landscaping, and parking areas and including the following information:
 - Isolux or point-by-point photometric calculations at intervals of not more than ten (10) feet, at ground level.
 - the area covered by the photometric shall extend twenty feet (20') beyond the edge of the subject property, to show the effect of the lighting on adjacent properties.
 - the photometric shall include a summary data table, showing:
 - maximum light level ratios;
 - minimum light level ratios;
 - maximum to minimum light level ratios, and;
 - average to minimum light level ratios.
 - Specifications for all proposed lighting fixtures including designation as IESNA "cut-off" fixtures, Color Rendering Index (CRI) of all lamps (bulbs), and other descriptive information on the fixtures.
- Luminaire Cut Sheets.** Manufacturer's "cut sheets" showing the height and type of lighting fixtures.

In addition to complying with the requirements of the National Electrical Code, all installed or altered exterior lighting will be reviewed and approved by the City of SeaTac Police Department for compliance with SMC Chapter 17.20. The items below represent a few of the common requirements but do not represent the full code text.

LIGHTING STANDARDS

- Lighting Levels.** Exterior lighting levels shall be designed in strict conformance with IESNA (Illuminating Engineering Society of North America) standards, as periodically revised and updated. Any increase or decrease in lighting levels above or below the minimum IESNA levels shall be approved by the Police Department and Department of Community and Economic Development
- Light Standard Height.** Light standards shall be limited in height as follows:
 - a. no greater than 16 feet in height in the City Center;
 - b. no greater than 25 feet in height in all other cases.
- Exterior Glare Shields.** All new exterior lighting adjacent to a noncompatible use (such as any commercial or multi-family use adjacent to single family residential) shall have external shields of sufficient length to shield light and prevent glare from reaching adjacent properties.
- Pedestrian Lighting.** In addition to parking lot lighting, pedestrian-level lighting shall be provided for all **retail, office, and housing uses** and for **other uses with substantial pedestrian activity**. Such lighting may include bollards, pedestrian-height fixtures, building façade lighting, path lighting and landscaping/accent lighting. To prevent glare, all light fixtures shall be selected and oriented so that the luminaire source is not visible or is shielded from view.
- Canopy Lighting.** Any lighting under canopies (such as gas station service areas, or covered parking drop off areas) shall be recessed into the canopy structure.

The full text of the Exterior Lighting Standard can be found at:

<http://www.codepublishing.com/WA/SeaTac/>

Click on Title 17; pick 17.20 from the drop down menu.

