What type of light fixtures can I install on my property?

These are types of light fixture designs that comply with many site applications, depending on mounting height limit, shielding requirements, lumen limits. This illustration courtesy of Bob Crelin / NELPAG

**Unacceptable / Discouraged**

Fixtures that produce glare and light trespass

- Unshielded Floodlights
- Unshielded Wallpacks
- Drop-Lens & Sag-Lens Fixtures w/ exposed bulb
- Unshielded Streetlight
- Unshielded Security Light
- Unshielded PAR Floodlights
- Drop-Lens Canopy Fixtures

**Acceptable**

Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night

- Fully Shielded Fixtures
- Fully Shielded Wallpack & Wall Mount Fixtures
- Full Cutoff Fixtures
- Full Cutoff Streetlight
- Fully Shielded Period Style Fixtures
- Fully Shielded Property-aimed PAR Floodlights
- Flush Mounted Canopy Fixtures
Lighting Best Practices

While it is important to have adequate lighting in the city to ensure that people can go out after dark, excessive lighting can also have negative impacts such as light trespass, glare, light pollution and energy waste. Sensible lighting practices can make good lighting AND good neighbors! Good lighting achieves the following:

- Promotes safety.
- Preserves and enhances neighborhood character.
- Reduces or prevents light from spilling onto neighboring properties.
- Promotes energy conservation.
- Saves money.
- Enhances the night-sky beauty.
- Respects the need for safety and security in our neighborhoods.
- Improves the quality of life for people and wildlife.

Easy Steps for Existing Lights

Meeting the new requirements might be as easy as changing your light bulb. Use the lowest watt bulb necessary to safely illuminate the space. This helps to eliminate light pollution and glare that might make it harder to see what is in front of you AND saves you money from energy costs. Look at the Lighting Facts Label (example below) that is on all light bulb packages to determine if it meets the City standards.

Pay attention to Brightness, which indicates the lumen level for each bulb, and Mounting Height of light fixture. These simple rules cover most lights:

Facing the Street – A light bulb that is partially or not shielded can be 630 lumens and mounted up to 12’ above the surface to be illuminated. Examples of typical bulbs are 40 watt incandescent / 10 watt CFL / 5 watt LED.

Lighting Entrances, Walkways & Open Spaces – A light bulb that is shielded can be 1,050 lumens and mounted up to 12’ above the surface to be illuminated. Examples of typical bulbs are 60 watt incandescent / 13 watt CFL / 10 watt LED.

Facing the Neighbors – A light bulb that is partially or not shielded can be 390 lumens and mounted 12’ above the surface to be illuminated. Examples of typical bulbs are 25 watt incandescent / 7 watt CFL / 4 watt LED.

Parking Areas & Driveways – A light bulb that is shielded can be 1,260 lumens and mounted 14’ above the surface to be illuminated. Examples of typical bulbs are 75 watt incandescent / 18 watt CFL / 15 watt LED.

Other Circumstances include:

- The light appearance, which indicates the color temperature, should be as low as possible. The color temperature limit is 4000 K.
- Redirect fixtures to only illuminate your property and not spill over to neighboring property.
- Add shielding to existing fixtures that will direct light where it needs to go.
- Create a lighting plan by sketching locations of existing fixtures and compare light levels. Proper spacing with lower light levels will make the area safer while decreasing light pollution and light trespass.

What about neighbors with problematic lighting?

Please provide your neighbor with a copy of this brochure and share with them the easy steps for existing lights. If you are unable to resolve the issue after a friendly conversation, please feel free to contact ISD to file a formal complaint.

Easy Steps for New Lights

1. Before installing any fixture, always consult with the Cambridge Inspectational Services Department (ISD) about the applicable electrical and energy codes and proper permitting process. A licensed electrician needs to pull an approved permit from ISD before work can begin.

2. Review the light level requirements listed in the Prescriptive Standards outlining the lumen limits, fixture shielding limits, mounting height limits and recommended bulb limits. Make sure the new fixtures comply with the latest requirements.

3. A licensed electrician must complete and submit an Electrical Permit Application to the Inspectional Services Department for review. Only fixtures that meet current standards will be approved.

Where can I find more details?

The full text of the Outdoor Lighting Ordinance can be found in Section 15.22.010 in the Cambridge Municipal Code. Complete Prescriptive and Performance Standards and Application Requirements are outlined in this code, along with exemptions and enforcement rules.

For more information, please contact:
Inspectional Services Department
831 Massachusetts Avenue, Cambridge, MA 02139
Phone: 617-349-6100  TDD: 617-349-6112

Hours:
Monday: 8:00am-8:00pm
Tuesday-Thursday: 8:00am-5:00pm
Friday: 8:00am-1:00pm

Counter Hours:
Monday: 8:00-9:30am & 4:30-6:30pm
Tuesday-Thursday: 8:00-9:30am & 3:30-4:30pm
Friday: 8:00-9:30am