

Evaluating Exterior Lighting Fixtures and Bulbs

1. Fully shielded light fixtures are required by the Outdoor Lighting Ordinance (Article 35.3, Santa Ynez Valley Community Plan Area) and by the Cities of Buellton and Solvang. Fully shielded fixtures do not emit any light above the horizontal angle (90 degrees). Such fixtures' walls are either a solid, non-translucent material or the bulb is completely housed in the fixture's cap.

If the building is on a **hillside**, fixtures' bulbs need to be additionally recessed to prevent light trespass on properties below (**full cutoff -80 degree angle**). They are needed if fixtures will be higher than windows of the project itself or neighbor windows. If window coverings are not used in buildings on hillsides and elsewhere, non-controlled interior lighting and skylights can cause light pollution and neighbor problems.

2. If there is **parking lot or walkway lighting**, the poles need to be minimum height (12 feet or less), which may mean the number needs to be increased. Bollard and other pedestrian lighting needs to be fully shielded or full cut-off and as short as possible.

3. Landscape lighting, including that on posts at the entrance to driveways, needs to be evaluated for compliance. Trees and walls need to be downlighted rather than uplighted.

4. Remodels need to have lighting evaluated. This is a good time to replace or retrofit existing lighting to make it dark sky compliant. Retrofitting solutions include: Dark sky cups which surround the bulbs and Parshields, which fit on some security lights.

5. Increasingly light fixtures use **LED bulbs**. The issues with LEDs are intensity and color. Lumens measure the intensity of the light. Watts measure the energy used. LEDs are more intense than incandescents, which means lumens need to be much lower. Blue-white color is very intense and negatively affects nocturnal animals so the **color measure needs to be 2700 Kelvin** You can substitute 3000 Kelvin if it is the warmest available.

Save Our Stars Committee, WE Watch, 7/12/22

Fully Shielded and Full Cut Off Light Fixture Angles

