

## Exterior Lighting for Residential Structures

### Zoning Requirements in Powhatan County

Powhatan County's zoning ordinance establishes standards that new development must adhere to, helping protect residents' health, safety, and quality of life. To minimize glare onto neighboring properties, the zoning ordinance has requirements regarding the design of exterior lighting.

New single-family homes, duplexes, and manufactured homes must have exterior light fixtures that are *fully shielded*. A *fully-shielded fixture* directs light downward, so it does not shine into the sky or onto adjacent homes. All lighting must be directed below a horizontal plane extending from the lowest light-emitting part of the fixture.

Exterior lighting must also meet the following requirements:

- *Spillover Light*  
Spillover light, whether vertical or horizontal, cannot exceed 0.5 foot-candle at the property line.  
Note: *Foot-candles* is used to measure lighting levels in an area.
- *Intensity*  
Exterior lighting is limited to lamps with a maximum flux of 1,800 lumens per luminaire.  
Note: *Lumens* indicate how much light is coming from a bulb. The greater the number of lumens, the brighter the light is.

Not only do these requirements apply to new construction, but changes to existing homes. If changes are made to the use, location, height, or features of exterior lighting at existing residences, fixtures must adhere to current standards.

These regulations can be found on Sec. 83-469(d) of Powhatan County's zoning ordinance. The zoning ordinance is available online at [www.municode.com/library/va/powhatan\\_county](http://www.municode.com/library/va/powhatan_county).

To help builders and homeowners find lighting that minimizes glare onto surrounding properties, the International Dark-Sky Association (IDA) certifies outdoor lighting as being *Dark Sky Friendly*. For information about the program, visit [www.darksky.org/fsa/](http://www.darksky.org/fsa/). The back of this information sheet includes a diagram produced by the IDA that provides more examples of fully-shielded light fixtures.

### Examples of Appropriate Exterior Lighting



Exterior Light Fixture Attached to a Building



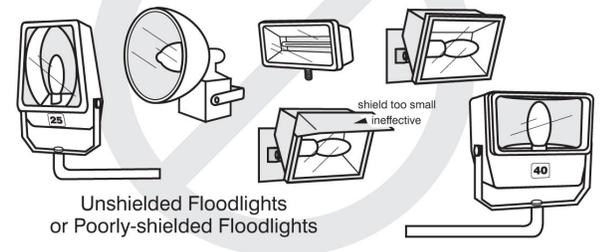
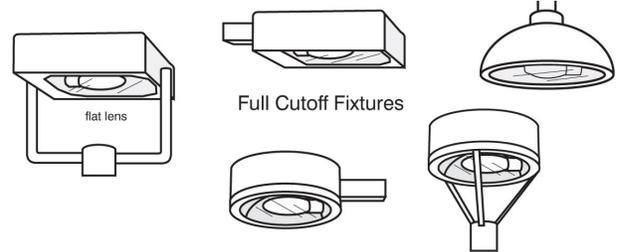
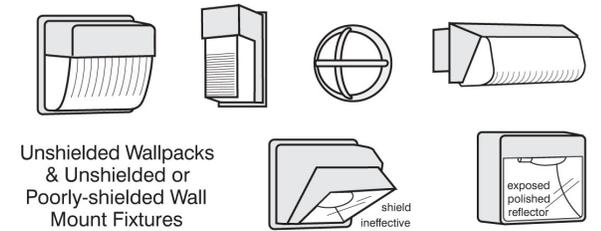
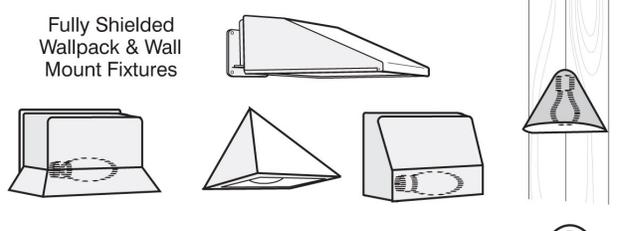
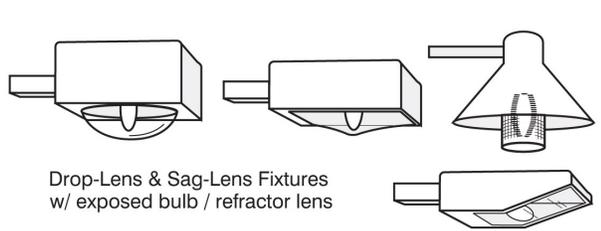
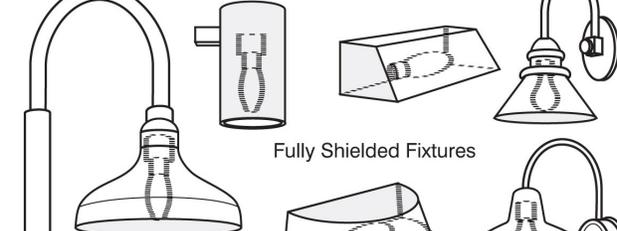
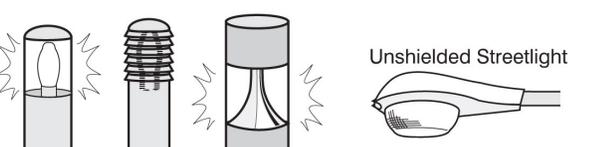
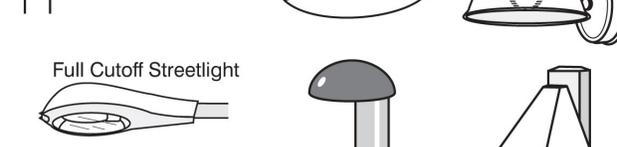
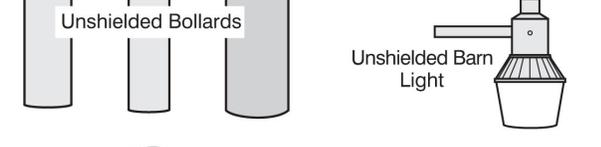
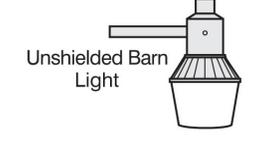
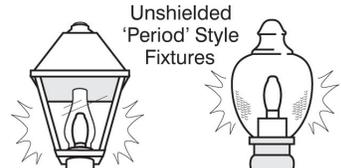
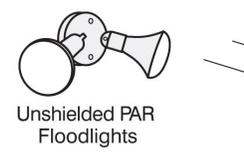
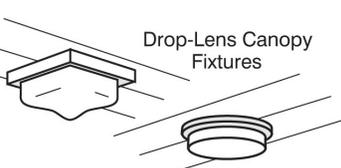
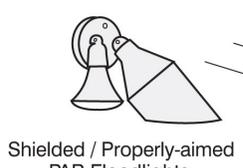
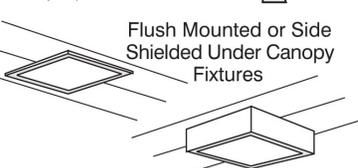
Exterior Light Fixture on a Post



Exterior Lighting Recessed into a Porch Ceiling

## Exterior Lighting for Residential Structures

The diagram below shows examples of acceptable fully-shielded light fixtures, along with examples of inappropriate light fixtures that may produce unnecessary glare on surrounding properties.

<h3 style="margin: 0;">Unacceptable</h3> <p style="margin: 0;">Fixtures that produce glare and light trespass</p>	<h3 style="margin: 0;">Acceptable</h3> <p style="margin: 0;">Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night</p>		
 <p style="text-align: center; margin-top: 10px;">Unshielded Floodlights or Poorly-shielded Floodlights</p>	 <p style="text-align: center; margin-top: 10px;">Full Cutoff Fixtures</p>		
 <p style="text-align: center; margin-top: 10px;">Unshielded Wallpacks &amp; Unshielded or Poorly-shielded Wall Mount Fixtures</p>	 <p style="text-align: center; margin-top: 10px;">Fully Shielded Wallpack &amp; Wall Mount Fixtures</p>		
 <p style="text-align: center; margin-top: 10px;">Drop-Lens &amp; Sag-Lens Fixtures w/ exposed bulb / refractor lens</p>	 <p style="text-align: center; margin-top: 10px;">Fully Shielded Fixtures</p>		
 <p style="text-align: center; margin-top: 10px;">Unshielded Streetlight</p>	 <p style="text-align: center; margin-top: 10px;">Full Cutoff Streetlight</p>		
 <p style="text-align: center; margin-top: 10px;">Unshielded Bollards</p>	 <p style="text-align: center; margin-top: 10px;">Unshielded Barn Light</p>	 <p style="text-align: center; margin-top: 10px;">Fully Shielded Barn Light</p>	 <p style="text-align: center; margin-top: 10px;">Fully Shielded Walkway Bollards</p>
 <p style="text-align: center; margin-top: 10px;">Louvered 'Marine' style Fixtures</p>	 <p style="text-align: center; margin-top: 10px;">Unshielded 'Period' Style Fixtures</p>	 <p style="text-align: center; margin-top: 10px;">Fully Shielded Decorative Fixtures <small>bulb shielded in opaque top</small></p>	 <p style="text-align: center; margin-top: 10px;">Fully Shielded 'Period' Style Fixtures <small>bulb shielded in opaque top</small></p>
 <p style="text-align: center; margin-top: 10px;">Unshielded PAR Floodlights</p>	 <p style="text-align: center; margin-top: 10px;">Drop-Lens Canopy Fixtures</p>	 <p style="text-align: center; margin-top: 10px;">Shielded / Properly-aimed PAR Floodlights</p>	 <p style="text-align: center; margin-top: 10px;">Flush Mounted or Side Shielded Under Canopy Fixtures</p>

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