

Outdoor Spaces

Exterior lighting is used for safety, security, and decoration. Lighting outdoor spaces can also make them usable spaces for relaxation, recreation, and work at night. Light objects and the landscape to provide an attractive outdoor view from inside the home at night. Light pathways to prevent accidents. Light the back and sides of a home to give residents a sense of security, but avoid creating large, harsh shadows where intruders might hide. For instance, supplement entry lighting with exterior flood lamps to eliminate dark corners. If the entry is visible to neighbors, intruders may be discouraged. Use ceiling-mounted or recessed luminaires for porches and entries with an overhang; also consider using wall-mounted sconces on either side of the door.

Entry 1

Typical

Two sconces, each containing one 60-watt incandescent A-lamp, provide ambient lighting. They are controlled by a wall-mounted switch inside the building.

Replace lamps

Replace each A-lamp with a 52-watt halogen A-lamp.

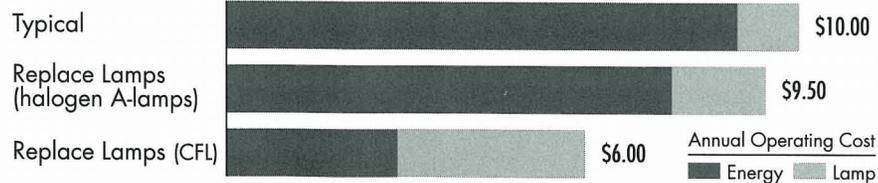
Replace lamps

If the lamp is protected by an enclosed luminaire, and the temperature does not fall below 0° Fahrenheit (-18° Celsius), install an electronically ballasted 20-watt screwbase compact fluorescent lamp if the luminaire is large enough to hold the lamp. If the temperature does not fall below 32° Fahrenheit (0° Celsius), a magnetically ballasted screwbase lamp could be used.

CONTINUED



Annual Operating Cost at \$0.10 per kWh



CFL = compact fluorescent lamp
For all of the lamps, assume 2 hours of use per day and 2 hours per start.

Entry 2

Typical

Two sconces, each containing one 60-watt incandescent A-lamp, provide ambient lighting. They are controlled by a wall-mounted switch inside the building.

Replace lamps

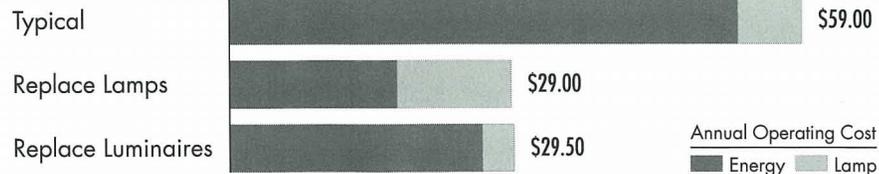
If the lamp is protected by an enclosed luminaire and the temperature does not fall below 0° Fahrenheit (-18° Celsius), install an electronically ballasted 20-watt screwbase compact fluorescent lamp if the luminaire is large enough to hold the lamp. If the temperature does not fall below 32° Fahrenheit (0° Celsius), a magnetically ballasted screwbase lamp could be used.

Replace luminaires

Install one luminaire that contains two 60-watt incandescent A-lamps and a motion detector or, optionally, a photocell. The motion detector switches the lamps on when motion is detected, regardless of light levels. The photocell switches the lamps on when outdoor light levels fall below normal daylight levels. Thus, luminaires with a motion detector must be switched off during the daytime, either manually or by an automatic timer or a photocell. Also, take care to adjust the sensitivity of the motion detector to avoid false starts. Note that frequent switching on and off of luminaires by a motion detector in a busy area may be annoying or alarming to some residents.



Annual Operating Cost at \$0.10 per kWh



For all of the lamps, assume 12 hours of use per day and 12 hours per start. The motion detector factor is 50 percent.

Floodlight 1



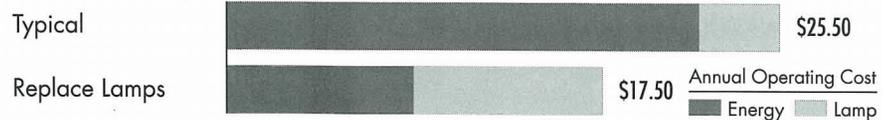
Typical

One wall-mounted luminaire containing two 150-watt PAR38 lamps provides ambient lighting for an area adjacent to the home.

Replace lamps

If slightly lower light output is acceptable, replace each 150-watt lamp with a 60-watt IR PAR38 lamp or optionally with a 90-watt halogen PAR38 lamp.

Annual Operating Cost at \$0.10 per kWh



For all of the lamps, assume 2 hours of use per day and 2 hours per start.

Floodlight 2



Typical

One wall-mounted luminaire containing two 150-watt PAR38 lamps provides ambient lighting for an area adjacent to the home.

Replace lamp

If slightly lower light output is acceptable, replace each 150-watt lamp with a 60-watt IR PAR38 lamp or optionally with a 90-watt halogen PAR38 lamp.

Replace luminaire

If the lamps usually burn all night, or night and day, and if slightly lower light output is acceptable, install one luminaire that contains two 60-watt IR PAR38 lamps and a photocell and a motion detector. The lamps are switched on when both motion is detected and the photocell indicates that outdoor light levels have fallen below normal daylight levels. Also, take care to adjust the sensitivity of the motion detector to avoid false starts.

Annual Operating Cost at \$0.10 per kWh



For all of the lamps, assume 12 hours of use per day and 12 hours per start. The motion detector factor is 25 percent.

Pole-Mounted Light



Typical

One pole-mounted luminaire containing one 75-watt A-lamp provides ambient lighting for a small area close to the home or along a walkway.

Replace lamps

If the lamp is protected by an enclosed luminaire and the temperature does not fall below 0° Fahrenheit (-18° Celsius), install an electronically ballasted 18-watt screwbase compact fluorescent lamp if the luminaire is large enough to hold the lamp. If the temperature does not fall below 32° Fahrenheit (0° Celsius), a magnetically ballasted screwbase lamp could be used.

Annual Operating Cost at \$0.10 per kWh

Typical



Replace Lamps



Annual Operating Cost

■ Energy ■ Lamp

For all of the lamps, assume 2 hours of use per day and 2 hours per start.

