

Wall-Mounted

Wall-mounted luminaires are mounted directly to a wall surface. This type includes sconces, diffusers, and vanity lights. Track lighting can be also be mounted to the wall. Refer to Ceiling-Mounted Track or Adjustable Heads for more information.

Wall-mounted luminaires are commonly used in homes because they are easy to install, are available in a wide variety of styles, and accommodate many lamp types. They can be used for most lighting techniques, particularly ambient, indirect, task, and special purposes. Purchase them from lighting stores, electrical suppliers, and building supply stores.

Energy and Lamps

Select wall-mounted luminaires with fluorescent lamps for energy savings.

Installation

Wall-mounted luminaires are an appropriate choice for rooms with low ceilings. Direct glare potential is increased since wall-mounted luminaires are often directly in the field of view. Consider mounting heights, aiming angles, and shielding of the luminaire. Also, wall-mounted luminaires can limit the wall space that is available for furniture and artwork, so plan accordingly.

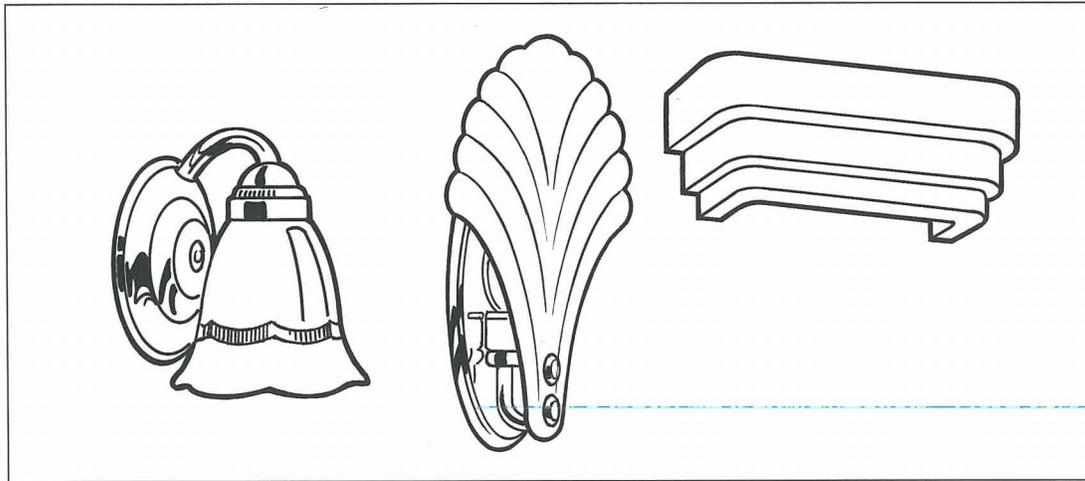
Use wall-mounted luminaires when plenum space is limited or structural elements, pipes, or ducts prohibit installing recessed luminaires.

For high-rise multi-family housing, wall-mounted luminaires can be used where electrical distribution through the ceiling is limited or not available, such as in hallways and stairwells. Also, for public spaces such as multi-family corridors, note that the Americans with Disabilities Act limits the outward extension of wall-mounted luminaires that are mounted below 80 inches (6 feet, 8 inches) above the floor. They may not extend beyond 4 inches from the wall; make sure that the luminaire does not protrude beyond this limit. If a landing or balcony overlooks a room with wall-mounted luminaires, shield the lamps from view from above.

Cautions

Be careful with mounting heights and location to avoid physical contact. Surfaces may be hot and some luminaires can be damaged.

Wall-Mounted: Sconces or Diffusers



Wall-mounted sconces or diffusers typically are decorative as well as functional. Some sconces are referred to as wall brackets. They may contain exposed lamps, or the lamps may be concealed by opaque or translucent glass or plastics, or other opaque materials. Light distribution varies according to type and style. Wall sconces can provide indirect lighting and/or downlighting or general, diffuse lighting.

Energy and Lamps

Many wall sconces and diffusers contain incandescent lamps, but also may accommodate compact fluorescent lamps. For maximum efficiency, select sconces and diffusers that use fluorescent lamps. Luminaires designed solely for compact fluorescent lamps are available, too. Avoid the excessive brightness that may occur when high-wattage lamps are used. Direct glare occurs when lamps are poorly shielded.

Installation

Luminaires that provide diffuse light are appropriate for use in hallways, dining rooms, living rooms, and bedrooms, but they cannot be relied upon to light areas where people sit to read or sew. Avoid using sconces or diffusers near visual tasks such as television viewing and the use of computers because these shiny screens may reflect the image of the luminaire.

Mounting height is critical: for sconces with an indirect lighting component, mounting height should always be high enough that the lamp is concealed from view to prevent direct glare. Install the outlet box for the luminaire at least 5.5 feet above the floor.

Controls

Switch sconces or diffusers separately to provide flexibility, create visual interest, and achieve energy savings. Use dimmers for luminaires that contain incandescent lamps.

Cautions

Heat from incandescent lamps may damage or ignite sensitive wall coverings.

For more information refer to

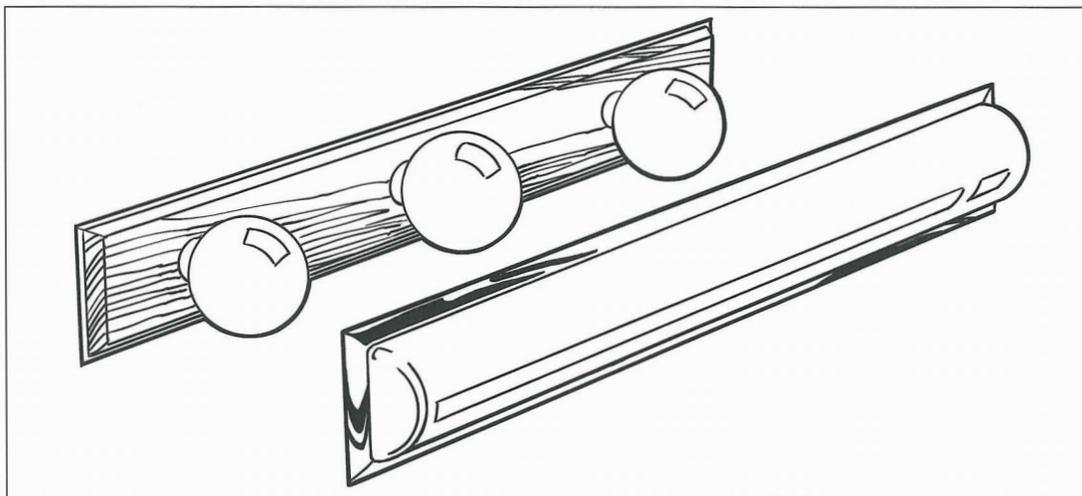
Techniques: Ambient, Indirect, Special Purpose

Lamps: Incandescent, Compact Fluorescent

Designs: Dining Room, Medium Bath 2, Large Bedroom, Foyer with Open Stair, Hallway, Multi-Family Lobby, Multi-Family Corridor, Multi-Family Fire Stair 2

Other luminaires: Ceiling-Mounted Diffusers, Architectural, Vanity Lights, Night Lights

Wall-Mounted: Vanity Lights



The two most common types of wall-mounted vanity lights are “Hollywood lights” and translucent diffusers. Hollywood lights are strips of globe lamps next to the mirror on one, two, or three sides. The globe lamps vary in wattage from 15 to 60 watts. The translucent diffusers are also located above or beside the mirror. They are available in several lengths and typically use incandescent A-lamps or linear fluorescent lamps.

Energy and Lamps

For luminaires that are on for many hours a day, fluorescent lamps are a good choice. Install a plug-in night light with a photocell to discourage the use of the vanity lights for night-time orientation.

Lamp color and color rendering are critical for vanity lights because people are sensitive to the appearance of their skin and clothing. If using fluorescent lamps, choose those that have a CCT of 2700 to 3500 K and contain rare-earth phosphors. To reduce glare when using incandescent lamps, use frosted or coated lamps instead of clear lamps and also use more lamps of lower wattage rather than a few high-wattage lamps. Consider compact fluorescent globe lamps as replacements for incandescent lamps; note that the compact fluorescent lamps are more costly to replace, but they should last much longer than the incandescent lamps.

Installation

Locate luminaires to the sides of the mirror to help eliminate facial shadows, and use light colors on countertops for maximum light reflectance to the underside of the chin. If installed above the mirror, locate vanity lights 6.5 feet above the floor.

Controls

Switch vanity lights separately from other luminaires in the room. If incandescent vanity lights are the sole light source, consider a dimmer to increase comfort when residents enter from a dark room, such as during the middle of the night. Consider installing an interval timer.

For more information refer to

Techniques: Special Purpose

Lamps: Incandescent, Linear Fluorescent, Long Twin-Tube Fluorescent, Compact Fluorescent

Designs: Half Bath, Small Bath, Large Bath

Other luminaires: Soffits, Valances, Wall-Mounted Sconces or Diffusers, Medicine Cabinet, Night Lights