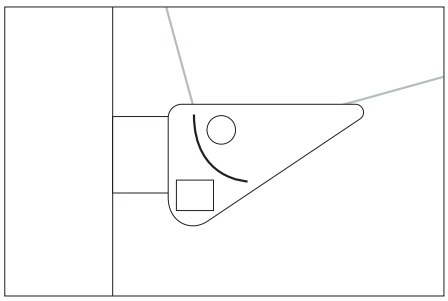
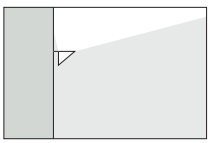
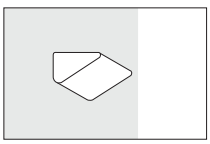
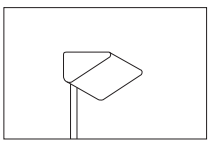
Ceiling washlights are designed for brightening or lighting ceilings and for indirect ambient lighting. They are installed above eye height on the wall or suspended from the ceiling. Ceiling washlights are generally equipped with tungsten halogen lamps for mains voltage or with high-pressure discharge lamps.

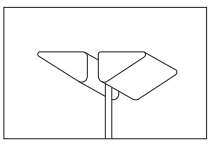


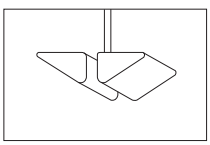


Wall-mounted ceiling washlight. The reflector contours produce uniform ceiling lighting.



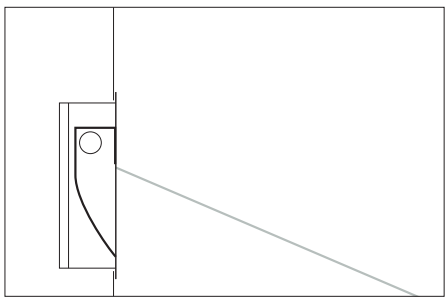


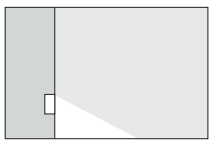




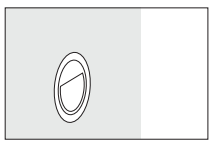
Different versions of ceiling washlights: wall-mounted, free-standing luminaire or pairs of luminaires mounted on a stand and suspended version.

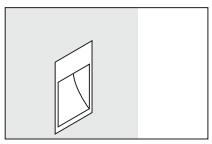
Floor washlights are mainly used for lighting hallways and other circulation zones. Floor washlights are mounted in or on the wall at relatively low levels.

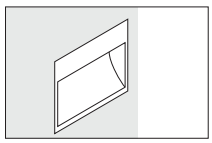




Wall-mounted floor washlight. The direct light component is restricted, the reflector shape produces uniform lighting of the floor.





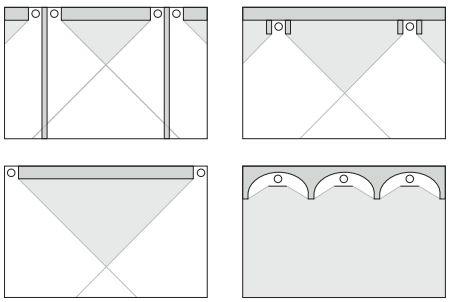


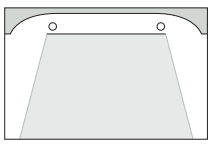
Different versions of floor washlights: round and square versions for incandescent lamps or compact fluorescent lamps, rectangular version for fluorescent lamps.

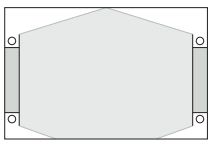
2.7.1.5 Integral luminaires

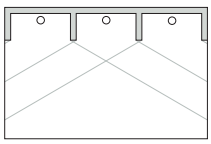
Some forms of lighting use the architectural elements as controlling components of the lighting. Typical examples are luminous ceilings, cove lighting or concealed cornice lighting. Standard luminaires, e.g. for fluorescent lamps or high-voltage tubular lamps can be used for such applications.

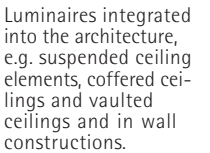
As a rule, lighting that is integrated into the architecture is inefficient and, from a lighting engineering point of view, difficult to control. For this reason it does not play a significant role in the effective lighting of spaces. Luminaires can be integrated into the architecture in order to accentuate architectural elements, e.g. to reveal contours. For this purpose they are excellent.











Luminaires integrated into the architecture, e.g. suspended ceiling elements, coffered ceilings and vaulted ceilings and in wall constructions.

2.7.2 Movable luminaires

In contrast to stationary luminaires movable luminaires can be used in a variety of locations; they are generally used in track systems or in light structures. Movable luminaires usually also allow changes in light direction, they are not confined to a fixed position, but can be adjusted and repositioned as required.

2.7.2.1 Spotlights

Spotlights are the most common form of movable luminaires. They illuminate a limited area, with the result that they are rarely used for ambient lighting but predominantly for accent lighting. In view of their flexibility with regard to mounting position and light direction, they can be adjusted to meet changing requirements.

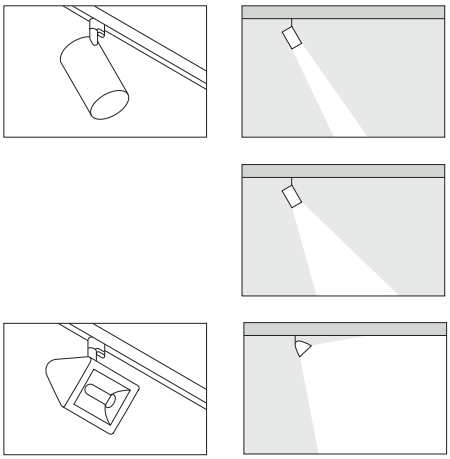
Spotlights are available in a variety of beam angles. Their narrow-beam light distribution provides for the lighting of small areas from considerable distances, whereas the wider light distribution inherent in wide-beam spotlights means that a larger area can be illuminated using a single spotlight.

Spotlights are available for a wide range of light sources. Since the aim is generally to produce a clearly defined, narrow beam, designers tend to opt for compact light sources such as incandescent lamps, halogen lamps and high-pressure discharge lamps, occasionally also compact fluorescent lamps. Wide-beam spotlights are mainly designed for larger lamps, such as double-ended halogen lamps and high-pressure discharge lamps or compact fluorescent lamps, whereas point sources, such as low-voltage halogen lamps or metal halide lamps provide an especially concentrated beam of light.

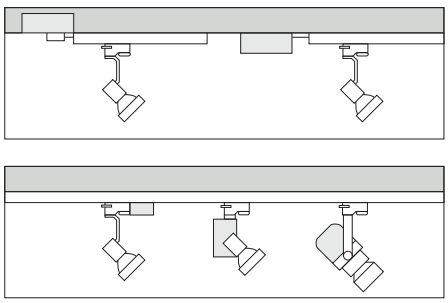
Spotlights can be equipped with reflectors or reflector lamps. Some models can be equipped with converging lenses or Fresnel lenses to vary the beam angle. Spotlights with projecting systems allow a variety of different beam contours by the use of projection of masks or templates (gobos).

Another characteristic of spotlights is that they can be equipped with a wide range of accessories or attachments, such as flood or sculpture lenses, colour filters, UV or infrared filters and a range of anti-dazzle attachments, such as barn doors, anti-dazzle cylinders, multigroove baffles or honeycomb anti-dazzle screens.

In the case of spotlights designed for accent lighting the beam angle can be varied by selecting from a range of reflectors or reflector lamps. A distinction is made between narrow beam angles of approx. 10° (spot) and wide-beam angles of approx. 30° (flood).



An especially wide beam angle of approx. 90° is characteristic for floodlights designed for the lighting of wall surfaces.



Spotlights for low-voltage halogen lamps can be operated on low-voltage tracks; the transformer can be mounted on the ceiling or be in an exposed position on the track (above). When operating on mains voltage tracks the transformer is usually integrated into the adapter or mounted on the luminaire (below).